PHASE I ENVIRONMENTAL SITE ASSESSMENT
METRO DIVISION 20 PORTAL WIDENING AND TURNBACK FACILITY
COMMERCIAL STREET/CENTER STREET
LOS ANGELES, CALIFORNIA
METRO PROJECT NO. PS3274-01-30

PART 2

CITY OF LOS ANGELES, DEPARTMENT OF BUILDING AND SAFETY

DEPARTMENT OF BUILDING AND SAFETY

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Metro	Van Nuys
201, N. Figueroa St. 1st Floor, Room 110 Record Counter Los Angeles,CA 90012	6262 Van Nuys Blvd Record Counter Van Nuys,CA 91401

Address: 826 E COMMERCIAL ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-NEW	12/5/1910	1910LA10069	HIST: P1018 001 2725	

3

APPLICATION TO ALTER, REPAIR OR DEMOLISH AND FOR A Certificate of Occupancy

CITY OF LOS ANGELES DEPARTMENT OF BUILDING AND SAFETY BUILDING DIVISION

Lot No. 6 Block K

Tract Alvin Tract

Location of Building 830 E Commercial St. (House Number and Street)

Between what cross streets LA River + CENTER ST.

Approved by City Engineer ____ Deputy.

USE INK OR INDELIBLE PENCIL

1. Present use of building Storage (Store, Dwelling, Apartment House, Hotel or other purpose) Families — Rooms —
2. State how long building has been used for present occupancy Under Construction
3. Use of building AFTER alteration or moving Storage Families Rooms
4. Owner Schwin Investment Co (Print Name) Phone
5. Owner's Address 830 E P. O.
6. Certificated Architect State License No. Phone
7. Licensed Engineer F. A. Saylor State License No. 5661 Phone
8. Contractor Owner State License No. Phone
9. Contractor's Address
10. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon) $ 57
11. State how many buildings NOW on lot and give use of each. Under Construction (Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building 44x100 Number of stories high 1 Height to highest point 20
13. Material Exterior Walls Fabricated Steel (Wood, Steel or Masonry) Exterior framework Steel (Wood or Steel)
14. Describe briefly all proposed construction and work:
Revised End details for 6" Sills Add additional frames to conform to Eng. Stresses Revision of Bldg. Under Construction Permit

NEW CONSTRUCTION

15. Size of Addition x Size of Lot x Number of Stories when complete
16. Footings Width Depth in Ground Width of Wall Size of Floor Joists x
17. Size of Studs x Material of Floor Size of Rafters x Type of Roofing

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

Sign here Schwin Investment Co (Owner or Authorized Agent)

By F. A. Saylor

FOR DEPARTMENT USE ONLY

PLAN CHECKING
Date
Receipt No.
Valuation $ 1000
Fee Paid $ 2.00

REINFORCED CONCRETE
Bbls. Cement
Tons of Reinforcing Steel

FEES
Bldg. Per. 1.50
Cert. of Occupancy
Total 1.50

TYPE IV GROUP 6

PERMIT No. 15382

Zone M3

Fire District 2

District Map No. 5514

Inspector McIntyre

Filed with 11882-47

JUN 23

9199

DEPARTMENT OF BUILDING AND SAFETY

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Address: 840 E COMMERCIAL ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	ALTERATION	3/10/1965	1965LA80833	HIST: P1736 001 2188	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/13/1914	1914LA05286	HIST: P1037 002 2152	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/11/1938	1938LA00993	HIST: P1283 001 2067	
BUILDING PERMIT	BLDG-NEW	4/28/1916	1916LA02661	HIST: P1052 001 1347	
PARAPET FILE		10/11/1965		HIST: M0055 009 0145	
RANGE FILE	MISCELLANEOUS	7/1/1949		HIST: R0041 007 0080	

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Record Counter	Van Nuys,CA 91401
Los Angeles,CA 90012	

Assessor Number: BOOK NUMBER: 5173 PAGE NUMBER: 020 PARCEL NUMBER: 902

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT		7/28/1927	1927LA21428	HIST: P1175 001 0985	
BUILDING PERMIT		7/28/1927	1927LA21429	HIST: P1175 001 0987	
BUILDING PERMIT		10/10/1928	1928LA28304	HIST: P1190 002 2409	
BUILDING PERMIT		1/14/1974	1974LA83475	HIST: 00000 000 0000 HIST: P1813 001 1092	
BUILDING PERMIT		5/1/1986	1986LA35959	HIST: P0114 005 0325	
BUILDING PERMIT		6/25/1986	1986LA40050	HIST: P0119 006 0164	
BUILDING PERMIT	ALTERATION	3/10/1965	1965LA90483	HIST: P1736 001 0025	
BUILDING PERMIT	BLDG-DEMOLITION	12/16/1983	1983LA78977	HIST: P0042 010 0051	
BUILDING PERMIT	BLDG-NEW	12/10/1964	1964LA83387	HIST: P1732 002 2354	
BUILDING PERMIT	BLDG-NEW	12/10/1964	1964LA84343	HIST: P1733 001 1354	
BUILDING PERMIT	NEW CONSTRUCTION	6/10/1963	1963LA39535	HIST: P1715 001 1525	
REPT OF COMPLIANCE		1/3/1984	1985LA78977	HIST: M0093 028 0062	

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Los Angeles,CA 90012	

Assessor Number: BOOK NUMBER: 5173 PAGE NUMBER: 020 PARCEL NUMBER: 910

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	9/18/2000		HIST: B0293 005 0350	
BUILDING PERMIT	BLDG-NEW	9/23/1911	1911LA08806	HIST: P1022 001 1389	
BUILDING PERMIT	NEW CONSTRUCTION	1/25/1985	1985LA04774	HIST: P0077 005 0131	
BUILDING PERMIT	NEW CONSTRUCTION	9/18/1997	1997LA67668		
CERTIFICATE OF OCCUPANCY		11/13/1986		HIST: M0216 007 0336	
CERTIFICATE OF OCCUPANCY		3/17/1987		HIST: M0230 004 0370	
ELECTRICAL PERMIT		12/5/1988	1288A6812	HIST: T0158 002 0425	
ZONING ADMINISTRATOR CASE		11/3/1978	ZV 78361	HIST: Z0003 011 0001	

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1st Floor, Room 110	Record Counter
Record Counter	Van Nuys,CA 91401
Los Angeles,CA 90012	

Address: 810 E DUCOMMUN ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/18/1925	1925LA14009	HIST: P1145 002 2445	
BUILDING PERMIT	BLDG-NEW	10/29/1920	1920LA20937	HIST: P1071 001 1525	

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Address: 811 E DUCOMMUN ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-NEW	9/23/1911	1911LA08806	HIST: P1022 001 1389	

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Address: 830 E DUCOMMUN ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/24/1940	1940LA02960	HIST: P1317 002 2842	
BUILDING PERMIT	BLDG-ALTER/REPAIR	5/2/1941	1941 11053	HIST: P1340 001 0156	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/19/1953	1953LA75358	HIST: P1489 001 1955	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/25/1954	1954LA78493	HIST: P1503 001 2682	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/15/1954	1954LA79981	HIST: P1503 002 2809	
CERTIFICATE OF OCCUPANCY		5/2/1949		HIST: O145 1 0240	

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Address: 836 E DUCOMMUN ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/6/1907	1907LA04550	HIST: P1007 002 0229	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/2/1914	1914LA04176	HIST: P1037 001 2914	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/11/1922	1922LA12051	HIST: P1090 001 2593	

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Address: 837 E DUCOMMUN ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT		10/10/1928	1928LA28304	HIST: P1190 002 2409	

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Address: 841 E DUCOMMUN ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT		7/28/1927	1927LA21428	HIST: P1175 001 0985	
BUILDING PERMIT		7/28/1927	1927LA21429	HIST: P1175 001 0987	
BUILDING PERMIT		1/14/1974	1974LA83475	HIST: 00000 000 0000 HIST: P1813 001 1092	
BUILDING PERMIT		5/1/1986	1986LA35959	HIST: P0114 005 0325	
BUILDING PERMIT		6/25/1986	1986LA40050	HIST: P0119 006 0164	
BUILDING PERMIT	ALTERATION	3/10/1965	1965LA90483	HIST: P1736 001 0025	
BUILDING PERMIT	BLDG-DEMOLITION	1/14/1974	1974LA83475	IDIS: P5944 00540 0000 thru P5944 0001 HIST: P1813 001 1092	
BUILDING PERMIT	BLDG-DEMOLITION	12/16/1983	1983LA78977	HIST: P0042 010 0051	
BUILDING PERMIT	BLDG-DEMOLITION	12/16/1983	1983LA78977	IDIS: P6060 02838 0000 thru P6060 0001 HIST: P0042 010 0051	
BUILDING PERMIT	BLDG-NEW	12/10/1964	1964LA83387	HIST: P1732 002 2354	
BUILDING PERMIT	BLDG-NEW	12/10/1964	1964LA84343	HIST: P1733 001 1354	
BUILDING PERMIT	NEW CONSTRUCTION	6/10/1963	1963LA39535	HIST: P1715 001 1525	
REPT OF COMPLIANCE		1/3/1984	1985LA78977	HIST: M0093 028 0062	

3 **APPLICATION TO ADD-ALTER-REPAIR-DEMOLISH** B&S B-3—R.1-73

CITY OF LOS ANGELES **AND FOR CERTIFICATE OF OCCUPANCY** DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. — LOT: 3 — BLK.: K — TRACT: sub of the Aliso Tr
2. PRESENT USE OF BUILDING: (23) 2 Cement Holders — NEW USE OF BUILDING: ( ) Demo
3. JOB ADDRESS: 841 E. Ducommon St.
4. BETWEEN CROSS STREETS: Center AND Term
5. OWNER'S NAME — PHONE
6. OWNER'S ADDRESS: 841 E. Ducommon St. — CITY: LA — ZIP
7. ENGINEER: / — STATE LICENSE No — PHONE
8. ARCHITECT OR DESIGNER: / — STATE LICENSE No. — PHONE
9. CONTRACTOR: Donovan Walston — STATE LICENSE No. — PHONE
10. BRANCH LENDER — ADDRESS — CITY
11. SIZE OF EXISTING BLDG. WIDTH 12 LENGTH — STORIES — HEIGHT 32 — NO. OF EXISTING BUILDINGS ON LOT AND USE: 2. cement Holders
12. CONST. MATERIAL OF EXISTING BLDG. — EXT. WALLS: METAL — ROOF: METAL — FLOOR: METAL
13. JOB ADDRESS: 841 E. Ducommon St.
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING: $ 1500—
15. NEW WORK: (Describe) Demolish

NO Plumbing

DIST. MAP	129-217
CENSUS TR	2061.00
ZONE	M3-3
FIRE DIST.	2
LOT (TYPE)	int
LOT SIZE	50X138.50
ALLEY	/
BLDG. LINE	/
AFFIDAVITS	CCPAJF ZI 223
DIST. OFFICE	LA
CRIT. SOIL	/
GRADING	/
HIGHWAY DED.	/
FLOOD	/
CONS.	/
ZONED BY	flores
FILE WITH	
INSPECTOR	
TYPIST	sj

NEW USE OF BUILDING: Clear lot	SIZE OF ADDITION	STORIES	HEIGHT
TYPE: IV	GROUP OCC.: G1	PLANS CHECKED	
BLDG. AREA: 144	MAX OCC. — TOTAL	PLANS APPROVED	
DWELL. UNITS: 0	GUEST ROOMS — PARKING REQ'D — PROVIDED	APPLICATION APPROVED: Duenas	
SPRINKLERS REQ'D SPECIFIED	CONT. INSP.	INSPECTION ACTIVITY: COMB — GEN X — MAJ. S. — CONS	

P.C.	S.P.C.	B.P. 1400	I.F. /	G.P.I.	O.S.	C/O

P.C. No. — PLAN CHECK EXPIRES SIX MONTHS AFTER FEE IS PAID. PERMIT EXPIRES ONE YEAR AFTER FEE IS PAID OR SIX MONTHS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

CASHIER'S USE ONLY

JAN-14-74 45535 E •83475 V — 1 CS 14.00

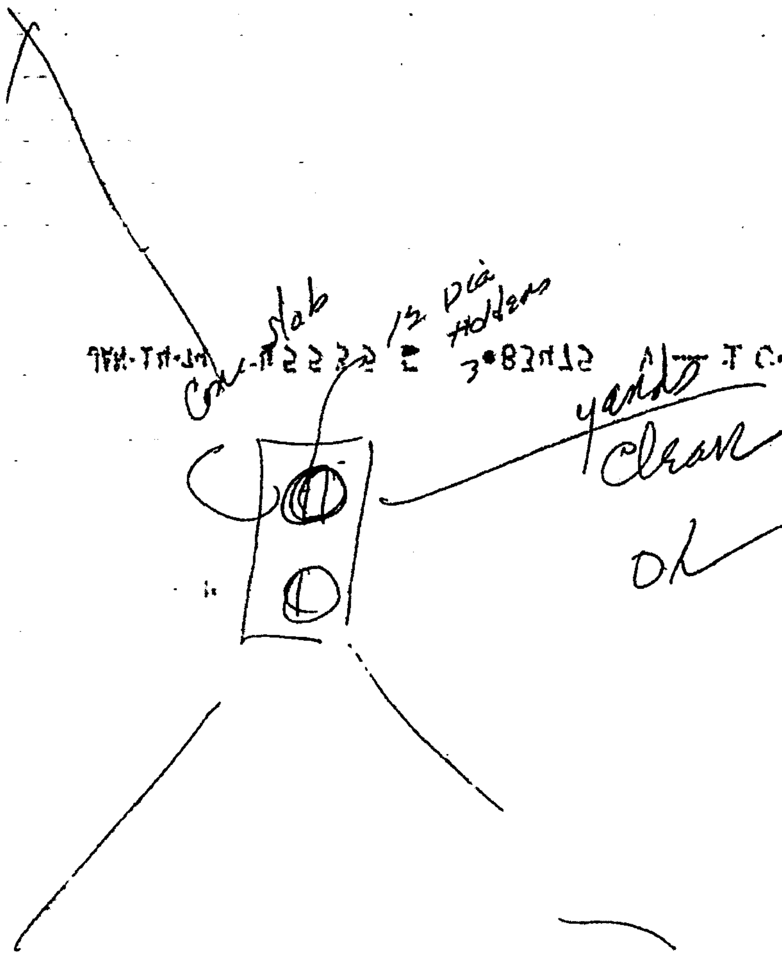
STATEMENT OF RESPONSIBILITY

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance.

"This permit is an application for inspection, the issuance of which is not an approval or an authorization of the work specified herein. This permit does not authorize or permit, nor shall it be construed as authorizing or permitting the violation or failure to comply with any applicable law. Neither the City of Los Angeles, nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein, or the condition of the property or soil upon which such work is performed." (See Sec. 91.0202 L.A.M.C.)

Signed [signature] (Owner or Agent)

		Signature/Date
Bureau of Engineering	ADDRESS APPROVED	RJA 1-14-74
	SEWERS — NO SEWER/PLUMBING REQ'D.	
	SFC NOT APPLICABLE	
	SFC PAID	
	SFC DUE	
	DRIVEWAY	
	HIGHWAY DEDICATION — REQUIRED	
	COMPLETED	
	FLOOD CLEARANCE	
Conservation	APPROVED FOR ISSUE ☐ NO FILE ☐	
Fire	APPROVED (TITLE 19) (L.A.M.C.-5700)	
Plumbing	PRIVATE SEWAGE SYSTEM APPROVED	
Planning	APPROVED UNDER CASE #	
Traffic	APPROVED FOR	


Conc slab
1/2 Dia Holders
yards
Clean
OK

3 APPLICATION FOR INSPECTION

CITY OF LOS ANGELES DEPT OF BUILDING AND SAFETY

0 4 2 0 1 0 0 0 0

TO ADD-ALTER-REPAIR-DEMO AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR.	LOT 3 / BLOCK K / TRACT Sub'div of the ALISO Tract / COUNCIL DISTRICT NO. 9	DIST. MAP 129-217 / CENSUS TRACT 2061
2. PRESENT USE OF BUILDING	(Commercial Metal Bldg ( ) / NEW USE OF BUILDING DEMO	ZONE M3-3
3. JOB ADDRESS	841 E. Ducommun St.	FIRE DIST. two
4. BETWEEN CROSS STREETS	Center St. AND LA River	LOT TYPE inter
5. OWNER'S NAME	Viertel's Automative Serv. PHONE 250-0143	LOT SIZE 50x138.5
6. OWNER'S ADDRESS	1153 W. Temple St. CITY LA ZIP 90012	
7. ENGINEER	BUS. LIC. NO. ACTIVE STATE LIC. NO. PHONE	ALLEY /
8. ARCHITECT OR DESIGNER	BUS. LIC. NO. ACTIVE STATE LIC. NO. PHONE	BLDG. LINE /
9. ARCHITECT OR ENGINEER'S ADDRESS	CITY ZIP	AFFIDAVITS ZI 223
10. CONTRACTOR	Coliman Land Clearing BUS. LIC. NO. 279112 ACTIVE STATE LIC. NO. C21 PHONE 629-2389	CCPD
11. SIZE OF EXISTING BLDG.	WIDTH 100 LENGTH 100 STORIES 1 HEIGHT 20 NO. OF EXISTING BUILDINGS ON LOT AND USE ~~one~~ two	
12. CONST. MATERIAL OF EXISTING BLDG.	EXT. WALLS metal thin ROOF comp FLOOR wood	
13. JOB ADDRESS	841 E. Ducommun St. STREET GUIDE	DISTRICT OFFICE LA
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING	$ 20,000.00	SEISMIC STUDY ZONE /
15. NEW WORK (Describe)	DEMO-handwreck.	GRADING / FLOOD
	SC B4184	HWY. DED. CONS. collector
NEW USE OF BUILDING ~~Same~~ DEMO	SIZE OF ADDITION STORIES HEIGHT	ZONED BY Hogan
TYPE / GROUP OCC. / FLOOR AREA	PLANS CHECKED [signature]	FILE WITH
DWELL UNITS / MAX OCC. / TOTAL	APPLICATION APPROVED [signature]	TYPIST bm
GUEST ROOMS / PARKING REQ'D / PARKING PROVIDED STD. COMP.	INSPECTION ACTIVITY COMB. / GEN. / MAJ. S. / CONS.	INSPECTOR

B&SB-3 (R 1.83)

P.C. 107.95	O.P.I.	CONT. INSP.
S.P.C.	P.M.	
I.P. 127.00	E.I. 1.40	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.
I.F.	O.S.S. 4.73	
O/S	S.O.S.S.	
DIST. OFFICE LA	C/O	SPRINKLERS REQ'D SPEC.
P.C. NO. A8481		ENERGY

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

CASHIER'S USE ONLY

C 107.95 B-PC
C 127.00 BP-R
C 1.40 E.I.
C 4.73 OSS
78977 ODAI
84185 C 12/16/83 241.08 CHTD

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 12/16/83 Lic. Class C-21 Lic. Number 279112 Contractor By Coliman Jorge Perez (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ________, B. & P. C. for this reason ________ N/A

Date ________ Owner's Signature ________

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. 61746983 Insurance Company ST. FUND (5-1-84) SP.

☐ Certified copy is hereby furnished.

☑ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date 12/16/83 Applicant's Signature COLIMAN LAND CLEARING Co. Jorge Perez

Applicant's Mailing Address 545 STANFORD AV. L.A. CAL. 90013

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date ________ Applicant's Signature ________ N/A

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

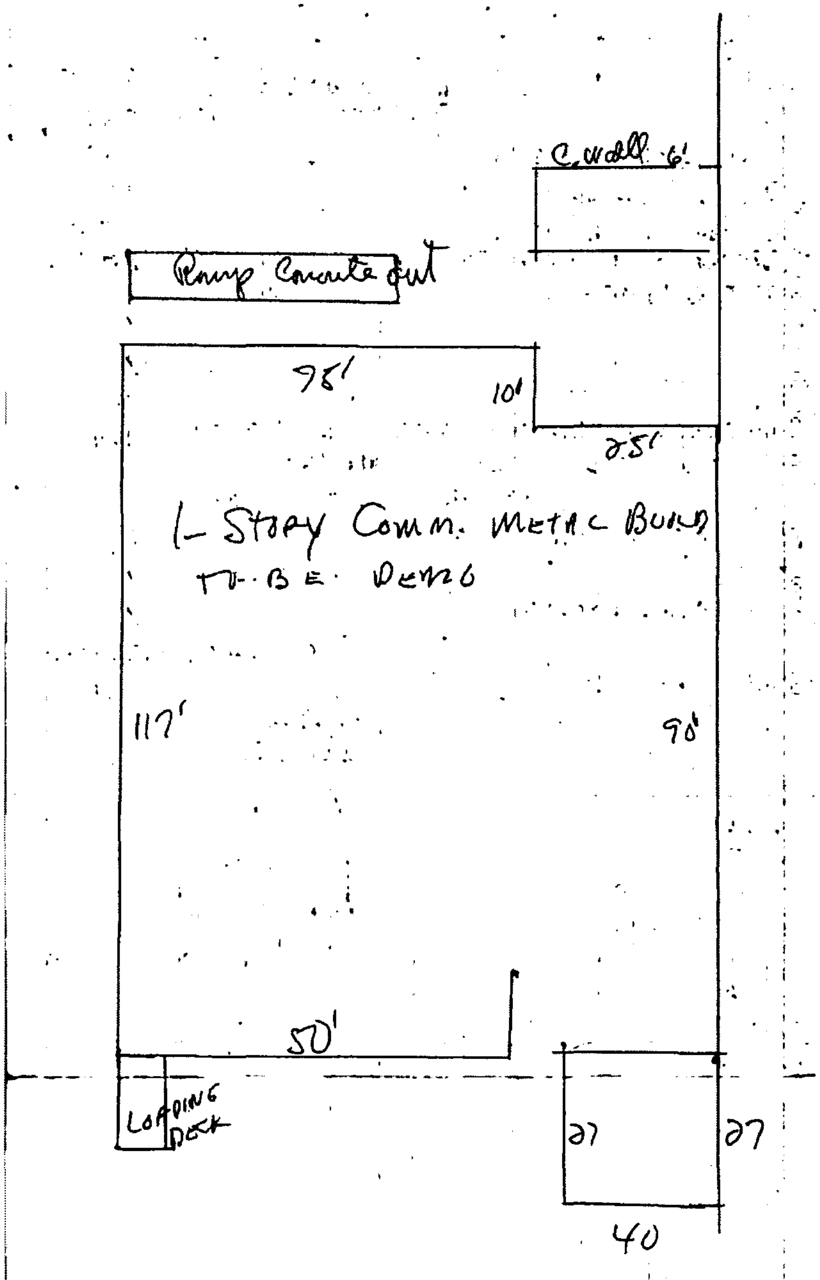
20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ________ Lender's Address ________ N/A

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed Jorge B. Perez (Owner or agent having property owner's consent) Presid. Position 12/16/83 Date


C. wall 6'
Ramp Concrete out
98'
10'
25'
1-Story Comm. Metal Build
TO BE DEMO
117'
90'
50'
LOADING DECK
27
27
40

There are two ways to request a copy of the document image.
1) By fax using the request form. Click on the following link
http://ladbs.org/LADBSWeb/LADBS_Forms/Administrative/AD-Form.01.pdf to download the request form.
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1st Floor, Room 110	Record Counter
Record Counter	Van Nuys,CA 91401
Los Angeles,CA 90012	

Address: 815 E JACKSON ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-DEMOLITION	10/10/2008	08019-10000-01800		

815 E Jackson St

Permit #: **08019 - 10000 - 01800**
Plan Check #: B08LA09229 Printed: 10/10/08 10:02 AM
Event Code:

Bldg-Demolition
Commercial
Plan Check at Counter
Plan Check

City of Los Angeles - Department of Building and Safety

APPLICATION FOR INSPECTION TO DEMOLISH BUILDING OR STRUCTURE

Last Status: Ready to Issue
Status Date: 10/10/2008

1. TRACT	BLOCK	LOT(s)	ARB	COUNTY MAP REF #	PARCEL ID # (PIN #)	2. ASSESSOR PARCEL #
P M 4255		A		BK 112-21/22	130-5A217 319	5173 - 021 - 003

3. PARCEL INFORMATION

Area Planning Commission - Central
LADBS Branch Office - LA
Council District - 9
Certified Neighborhood Council - Historic Cultural
Community Plan Area - Central City North

Census Tract - 2060.30
District Map - 130-5A217
Energy Zone - 9
Fire District - 2
Earthquake-Induced Liquefaction Area - Yes

Methane Hazard Site - Methane Zone
Near Source Zone Distance - 7.5
Parking Dist - CCPD
Thomas Brothers Map Grid - 634-H4

ZONE(S): M3-1 /

4. DOCUMENTS

ZI - ZI-1117 MTA Project
ZI - ZI-2129 Eastside State Enterprise Zo
ZI - ZI-2358 LA River Revitilization Ma
ORD - ORD-164855-SA1610
CPC - CPC-1986-607-GPC
CPC - CPC-1995-352-CPU
CPC - CPC-2006-48-ICO
CDBG - FEZ-Los Angeles
CDBG - LARZ-Central City
CDBG - SEZ-Eastside State Enterprise Z

5. CHECKLIST ITEMS

Sewer Cap - Permit Required

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION

Owner(s)
Greenwald, Bennet Tr Bennett Greewald Trus 2929 Canon St # A SAN DIEGO CA 92106

Tenant
Applicant (Relationship: Architect)
Barry Segal - P.O. Box 6108 ALTADENA, CA 91005 (626) 345-9765

7. EXISTING USE **PROPOSED USE**
(23) Miscellaneous Bldg/Structu

8. DESCRIPTION OF WORK
DEMOLISH A 44' X 200' ONE STORY STEEL FRAMED INDUSTRIAL BUILDING.

9. # Bldgs on Site & Use:

For inspection requests, call toll-free **(888) LA4BUILD** (524-2845). Outside LA County, call (213) 482-0000 or request Inspections via **www.ladbs.org**. To speak to a Call Center agent, call **311** or (866) 4LACITY (452-2489). Outside LA County, call (213) 473-3231.

10. APPLICATION PROCESSING INFORMATION

BLDG. PC By: Kesete Haregot DAS PC By:
OK for Cashier: Tung Vo Coord. OK:
Signature: [signature] Date: 10/10/08

11. PROJECT VALUATION & FEE INFORMATION Final Fee Period

Permit Valuation: $50,400 PC Valuation:

FINAL TOTAL Bldg-Demolition	558.49
Permit Fee Subtotal Bldg-Demolitio	475.50
Plan Check Subtotal Bldg-Demolitic	0.00
E.O. Instrumentation	10.58
O.S. Surcharge	9.72
Sys. Surcharge	29.16
Planning Surcharge	28.53
Planning Surcharge Misc Fee	5.00
Permit Issuing Fee	0.00

Sewer Cap ID: Total Bond(s) Due:

For Cashier's Use Only 26 225125 10/10/08 81901800
LA Department of Building and Safety

DEMO PERMIT	$475.50
EI COMMERCIAL	$10.58
ONE STOP SURCH	$9.72
SYSTEMS DEVT FEE	$29.16
CITY PLANNING SURCH	$28.53
MISCELLANEOUS	$5.00
BUILDING PLAN CHECK	$0.00
BUILDING PLAN CHECK	$0.00

P08019100000001800FN

Total Due:	$558.49
Credit Card:	$558.49

2008LA30201

12. ATTACHMENTS

Demo Pre-Inspection
Plot Plan T.V.

P08019100000001800FN

10210162000878271

13. STRUCTURE INVENTORY (Note: Numeric measurement data in the format "number / number" implies "change in numeric value / total resulting numeric value") **08019 - 10000 - 01800**

(P) Floor Area (ZC): -8800 Sqft / 0 Sqft
Height (BC): -40 Feet / 0 Feet
Height (ZC): -40 Feet / 0 Feet
, Length: -200 Feet / 0 Feet
(P) Stories: -1 Stories / 0 Stories
(P) Width: -44 Feet / 0 Feet
(P) S1 Occ Group: -8800 Sqft / 0 Sqft

14. APPLICATION COMMENTS

In the event that any box (i.e. 1-16) is filled to capacity, it is possible that additional information has been captured electronically and could not be printed due to space restrictions. Nevertheless, the information printed exceeds that required by Section 19825 of the Health and Safety Code of the State of California.

15. Building Relocated From:

16. CONTRACTOR, ARCHITECT, & ENGINEER NAME

NAME	ADDRESS		CLASS	LICENSE#	PHONE #
(C) Essence Company	3904 Groton Street Ste 202,	San Diego, CA 92110	B	872365	

PERMIT EXPIRATION/REFUNDS: This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inspection within 60 days of receiving a request for final inspection (HS 17951).

17. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. The following applies to B contractors only: I understand the limitations of Section 7057 of the Business and Professional Code related to my ability to take prime contracts or subcontracts involving specialty trades.

License Class: B Lic. No.: 872365 Contractor: ESSENCE COMPANY

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations:

(__) I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

(✓) I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: State Fund Policy Number: 1825752

(__) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

19. ASBESTOS REMOVAL DECLARATION / LEAD HAZARD WARNING

I certify that notification of asbestos removal is either not applicable or has been submitted to the AQMD or EPA as per section 19827.5 of the Health and Safety Code. Information is available at (909) 396-2336 and the notification form at www.aqmd.gov. Lead safe construction practices are required when doing repairs that disturb paint in pre-1978 buildings due to the presence of lead per section 6716 and 6717 of the Labor Code. Information is available at Health Services for LA County at (800) 524-5323 or the State of California at (800) 597-5323 or www.dhs.ca.gov/childlead

20. CONSTRUCTION LENDING AGENCY DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code).
Lender's name (if any): __________ Lender's address: __________

21. FINAL DECLARATION

I certify that I have read this application **INCLUDING THE ABOVE DECLARATIONS** and state that the above information **INCLUDING THE ABOVE DECLARATIONS** is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not authorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

By signing below, I certify that:

(1) I accept all the declarations above namely the Licensed Contractor's Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration / Lead Hazard Warning, Construction Lending Agency Declaration and Final Declaration; and
(2) This permit is being obtained with the consent of the legal owner of the property.

Print Name: Bruce Boswell Sign: [signature] Date: 10-10-08 ☐ Contractor ☑ Authorized Agent

815 E Jackson St Permit Application #: **08019 - 10000 - 01800**

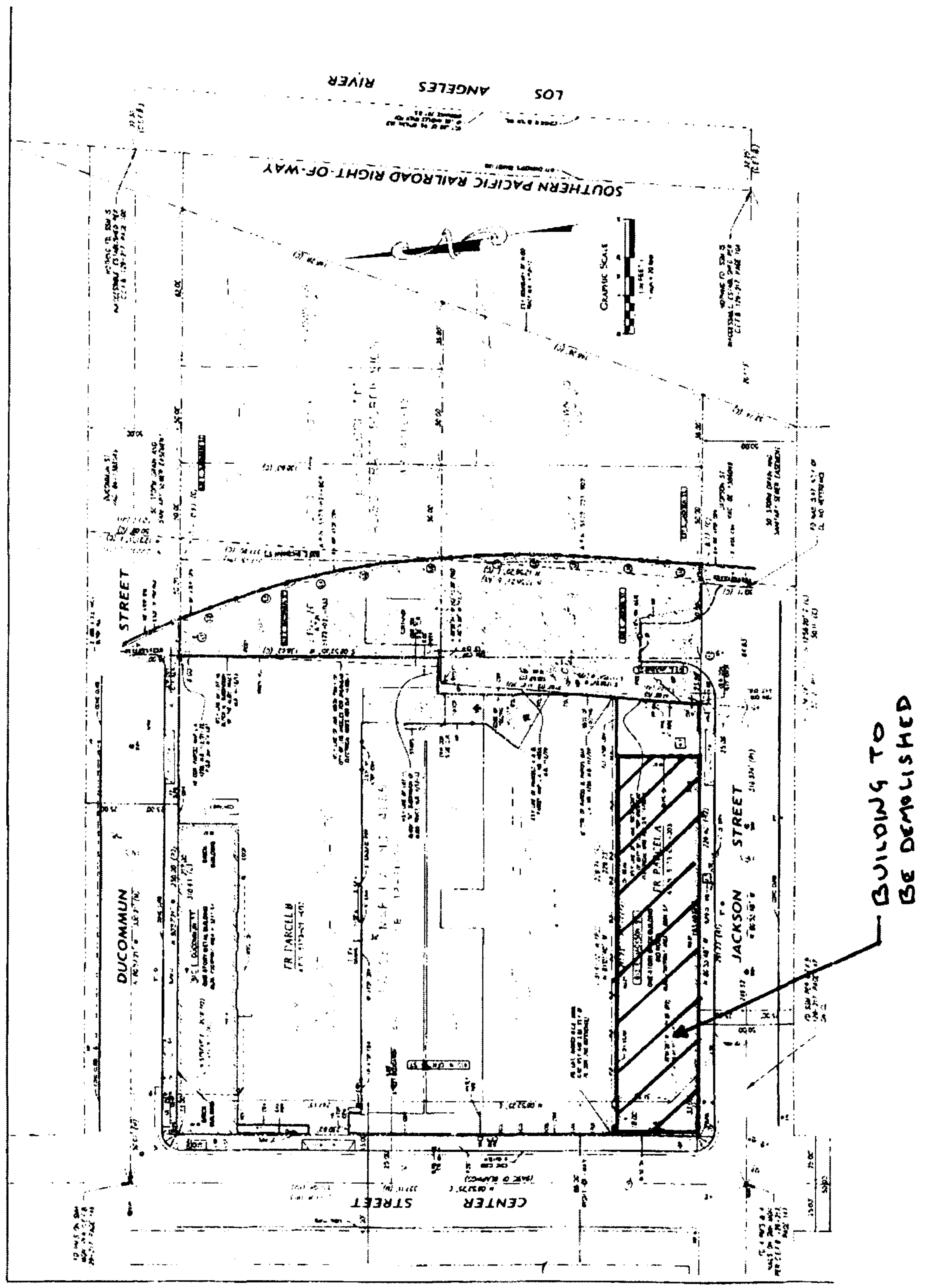
Bldg-Demolition
Commercial
Plan Check

City of Los Angeles - Department of Building and Safety

PLOT PLAN ATTACHMENT

Plan Check #: B08LA09229
Initiating Office: METRO
Printed on: 09/24/08 11:39:41

(DO NOT DRAW, WRITE, OR PASTE ATTACHMENTS OUTSIDE BORDER)



COUNCIL DISTRICT: 9 INSPECTION DISTRICT: BIMSM1

PLOT PLAN ATTACHMENT

1021010200072271

City of Los Angeles
Department of Building and Safety
Current Version 1

Demolition Pre-Inspection Report

Address: **410 N CENTER ST**
Council District: **9** Permit Application: **08019-10000-01731**

Work Description:
DEMOLITION OF A 40' X 180' ONE STORY STEEL FRAMED INDUSTRIAL BUILDING **** DPI ONLY *********

Inspector/Telephone: **STEVE WEIS, (213) 482-0363**
Inspection District: **LA**
Inspection Date: **09/19/2008**

Description of Work: **DEMOLITION OF A 40' X 180' ONE STORY STEEL FRAMED INDUSTRIAL BUILDING ****** DPI ONLY *********
Number of Building(s) to Demo: **1**
Is Address Correct? **yes** If No, Enter Correct Address:
Plot Plan: **OK as provided** If Not Accurate, Why?
SEWER INFORMATION: **Public**
SEWER CAP: **Required**
PEDESTRIAN PROTECTION: **Fence & Canopy**

Building	Basement	Exterior Wall Construction	No. of Stories	Height (Feet)	Type of Consturction
Building 1	Unknown	Other: concrete w/brick infills, steel roof & parapits, siding	1	40+-	I

ADJACENT BLDG INFO	
Nly Side:	none
Sly Side:	none
Ely Side:	none
Wly Side:	none

Comments:

Field form completed by **STEVE WEIS**

Signature ______________________________ **Date** __/__/____

Back to Pre-Inspection Work List

DEPARTMENT OF BUILDING AND SAFETY

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Metro	Van Nuys
201, N. Figueroa St.	6262 Van Nuys Blvd
1st Floor, Room 110	Record Counter
Record Counter	Van Nuys,CA 91401
Los Angeles,CA 90012	

Address: 837 E JACKSON ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT		9/6/1928	1928LA24834	HIST: P1189 002 1197	
BUILDING PERMIT		9/22/1928	1928LA26459	HIST: P1190 001 1360	
BUILDING PERMIT		3/25/1929	1929LA07964	HIST: P1196 002 1705	
BUILDING PERMIT	ALTERATION	7/19/1978	1978LA67048	HIST: 00000 000 0000 HIST: P1848 001 0423	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/13/1923	1923LA16557	HIST: P1108 002 0651	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/26/1935	1935LA04945	HIST: P1247 002 1579	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/22/1935	1935LA06647	HIST: P1248 001 1783	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/30/1937	1937LA41668	HIST: P1282 003 1433	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/7/1938	1938LA03539	HIST: P1284 001 1373	
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/5/1938	1938LA20516	HIST: P1290 001 0927	
BUILDING PERMIT	BLDG-NEW	1/13/1946	1946 05424	HIST: P1410 001 0350	
CERTIFICATE OF OCCUPANCY		5/2/1949		HIST: O174 1 0891	

DEPARTMENT OF BUILDING AND SAFETY

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Metro	Van Nuys
201, N. Figueroa St. 1st Floor, Room 110 Record Counter Los Angeles,CA 90012	6262 Van Nuys Blvd Record Counter Van Nuys,CA 91401

Address: 815 E TEMPLE ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/18/1982	1982LA53922	IDIS: P6045 01077 0000 thru P6045 0001 HIST: P0011 008 0006	

PUBLIC RECORD

3. APPLICATION FOR INSPECTION —TO ADD-ALTER-REPAIR-DEMOLISH — CITY OF LOS ANGELES AND FOR CERTIFICATE OF OCCUPANCY — B & S B-3 (R 12.80) DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

Item	Entry
1. LEGAL DESCR. — LOT	2
BLOCK	
TRACT	20223
COUNCIL DISTRICT NO.	9
DIST. MAP	129-B-217
CENSUS TRACT	2061.00
2. PRESENT USE OF BUILDING	( ) Food Processing
NEW USE OF BUILDING	( ) same
ZONE	M3-3
3. JOB ADDRESS	815 E. Temple St.
FIRE DIST.	two
4. BETWEEEN CROSS STREETS	Center St. AND Terminus
LOT TYPE	corner
5. OWNER'S NAME	Poppy Foods
PHONE	
LOT SIZE	Irreg. see map
6. OWNER'S ADDRESS	815 E. Temple
CITY	Los Angeles
ZIP	
7. ENGINEER	Brown & Caldwull
BUS. LIC. NO.	C. Pao
ACTIVE STATE LIC. NO.	2167
PHONE	
ALLEY	—
8. ARCHITECT OR DESIGNER	
BUS. LIC. NO.	
ACTIVE STATE LIC. NO.	
PHONE	
BLDG. LINE	—
9. ARCHITECT OR ENGINEER'S ADDRESS	Brown & Caldwell
CITY	Walnut Greek
ZIP	
AFFIDAVITS	C.G.P.D. PUE Varia/
10. CONTRACTOR	Sheldon Plokin Co.
BUS. LIC. NO.	
ACTIVE STATE LIC. NO.	248634
PHONE	666-4320
11. SIZE OF EXISTING BLDG.	WIDTH 20 LENGTH 50
STORIES	1
HEIGHT	20
NO. OF EXISTING BUILDINGS ON LOT AND USE	1/ Food Processing
12. CONST. MATERIAL OF EXISTING BLDG.	EXT. WALLS conc. / ROOF compo. / FLOOR conc.
13. JOB ADDRESS	815 E. Temple St.'
STREET GUIDE	
DISTRICT OFFICE	LA
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING	$30,000
SEISMIC STUDY ZONE	—
15. NEW WORK (Describe)	Install one 10,000 lb. heat exchanger
GRADING	—
FLOOD	—
HWY. DED.	Yes
CONS.	—
NEW USE OF BUILDING	same
SIZE OF ADDITION	
STORIES	
HEIGHT	
ZONED BY	Alipio
TYPE	III-A
GROUP OCC.	G-2
BLDG. AREA	N/C
PLANS CHECKED	[signature]
FILE WITH	
DWELL UNITS	
MAX OCC.	
TOTAL	
APPLICATION APPROVED	[signature]
TYPIST	
GUEST ROOMS	
PARKING REQ'D	
PARKING PROVIDED STD. / COMP.	
INSPECTION ACTIVITY	COMB / P. GEN. / MAJ. S. / CONS.
INSPECTOR	

Fees	
SPRINKLERS REQ'D SPEC.	E/172.10
CONT. INSP.	WELDING
P.C.	146.20
P.M.	5
S.P.C.	
I.F.	
B.P.	172
O.S.	
G.P.I.	
C/O	
DIST. OFFICE	LA
ENERGY:	NONE
P.C. NO	92770

Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

CASHIER'S USE ONLY

C 146.20 B-PC
J7746 4 10/18/82 146.20 CHTD
C ~~2.10~~ 2.10 E.I.
C 5.00 PL/M
C 172.00 BP-R
539 22 DCE1
A5652 1 11/18/82 ~~182.10~~ 179.10 CHTD

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 11/4/82 Lic. Class C-20 Lic. Number 248634 Contractor Sheldon Plotkin Co. [signature] (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

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Date ______ Owner's Signature ______

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. WCN-20-4741 Company Allianz

☐ Certified copy is hereby furnished.

☑ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date 11/4/82 Applicant Sheldon Plotkin Co.

Applicant's Mailing Address 1863 Blake Ave Los Angeles

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date ______ Applicant ______

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

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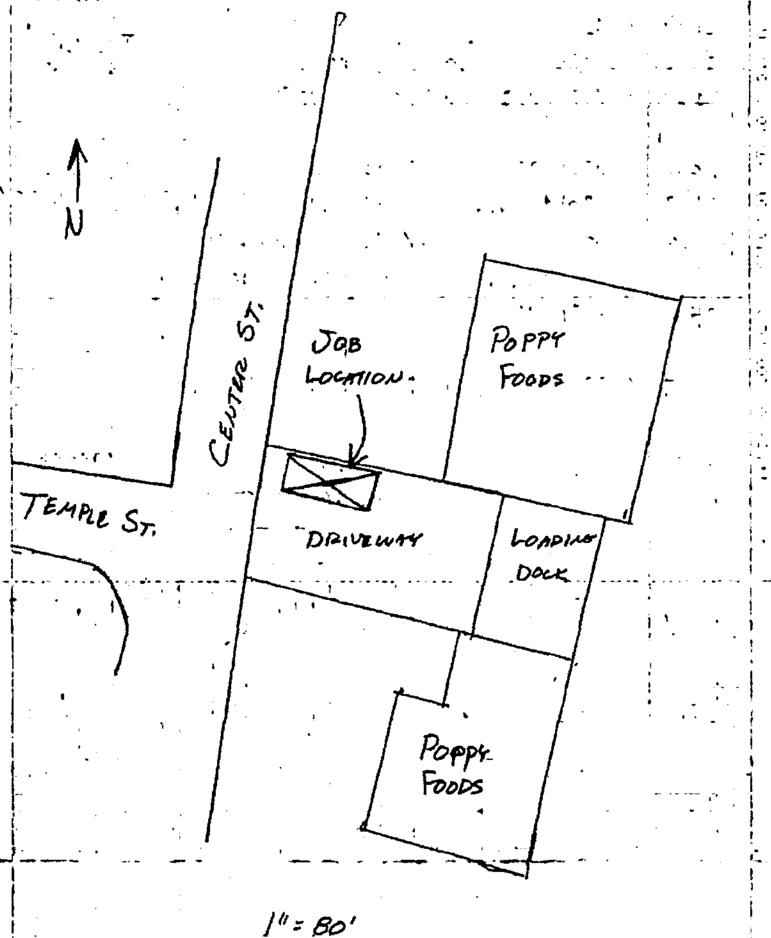
20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed [signature] (Owner or agent having property owner's consent) Proj Mgr. Position 11/4/82 Date



0 1 1 0 0 1 0 0 0 0 0 7

No CONST WITHIN
50' of ℄ of Center
St. Hwy Dept Not Req'd
R. Kelleher 10.28.82

Alipiom9-29-82

Lauer 10/19/82

J. Hill 10/24/82

DEPARTMENT OF BUILDING AND SAFETY

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1st Floor, Room 110	Record Counter
Record Counter	Van Nuys,CA 91401
Los Angeles,CA 90012	

Address: 809 E BANNING ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/8/1911	1911LA11817	HIST: P1023 001 1373	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/5/1937	1937LA36600	HIST: P1281 001 2759	
BUILDING PERMIT	BLDG-NEW	10/7/1937	1937LA33274	HIST: P1280 001 2013	

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Address: 813 E BANNING ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/2/1913	1913LA00095	HIST: P1030 001 0189	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/2/1920	1920LA14672	HIST: P1069 001 0626	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/2/1920	1920LA14672	IDIS: P5095 00312 0000 thru P5095 0001 HIST: P1069 001 0626	
BUILDING PERMIT	BLDG-DEMOLITION	2/18/1982	1982LA38936	HIST: 00000 000 0000	

All Applications must be filled out by Applicant

Bldg. Form 3

3

PLANS AND SPECIFICATIONS and other data must also be filed

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

Application to Alter, Repair or Demolish

To the Board of Public Works of the City of Los Angeles:

Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

	~~REMOVED FROM~~	REMOVED TO	
TAKE TO ROOM No. 6 FIRST FLOOR	Lot (All) Block 7	Lot .... Block	O. K. City Clerk By .... Deputy.
CITY CLERK PLEASE VERIFY	Tract Aliso Tract	Tract	
TAKE TO ROOM No. 405 SOUTH ANNEX	Book ...... Page ...... F. B. Page	Book ...... Page ...... F. B. Page	O. K. City Engineer By .... Deputy.
ENGINEER PLEASE VERIFY	From No. 813 E. Banning St. (Rear) Street		
	~~To No.~~ National Ice & Cold Stor Co Street		

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building used for? Ice Storage Room
2. Owner's name National Ice & Cold Stor Co Phone Broadw 4623
3. Owner's address Center & Banning Sts
4. Architect's name .... Phone ....
5. Contractor's name Same Phone ....
6. Contractor's address ....
7. ENTIRE COST OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, etc.) - $ 1000
8. Class of Present Building Frame No. of Rooms at present one
9. Number of stories in height. One Size of present building 72 x 100
10. State how many buildings are on this lot One
11. State purpose buildings on lot are used for Ice Storage (Tenement, Store, Hotel, Residence, or any other purpose.)

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING: Replacing old floor for new (only)

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER

(Sign here) F. J. Cummings (Owner or Authorized Agent)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	Stamp here when permit is issued
14672	Plan Examiner.	9-2-20 B Clerk.	SEP 2 1920

C. S. Jones (1) 3

12. Size of new addition .... x .... No. of Stories in height ....

13. Material of foundation Brick Size footings 4 ft Size wall 17" Depth below ground 4 ft

14. Size of Redwood Mudsills 3 x 12 Size of interior bearing studs 2 x 8

15. Size of exterior studs 2 x 8 Size of interior non-bearing studs .... x ....

16. Size of first floor joists 2 x 14 Second floor joists .... x ....

17. Will all provisions of State Dwelling House Act be complied with? Yes

I have carefully examined and read the above blank and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

(Sign here) F. J. Cummings Jr.
(Owner or Authorized Agent.)

DEPARTMENT OF BUILDING AND SAFETY

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Address: 1001 E 1ST ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	10/27/1982		HIST: M0002 013 0023	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	1/13/1983		HIST: M0025 005 0294	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	4/12/1985		HIST: M0093 015 0001	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	4/28/1989		HIST: B0159 008 0093	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	4/28/1989		HIST: B0159 008 0093	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	11/8/1989		HIST: B0164 009 0336	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/8/1989		HIST: B0166 003 0455	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/31/1991		HIST: B0192 001 0292	
AFFIDAVIT	MAINTENANCE OF BUILDING	6/16/1983	AFF 55760	HIST: M0041 003 0247	
BUILDING PERMIT		5/22/1905	1905LA02986	HIST: P1000 002 2943	
BUILDING PERMIT		7/19/1905	1905LA04316	HIST: P1001 002 0737	
BUILDING PERMIT		3/20/1928	1928LA08161	HIST: P1183 002 2463	
BUILDING PERMIT		6/27/1928	1928LA18201	HIST: P1187 001 1911	
BUILDING PERMIT		7/9/1928	1928LA19161	HIST: P1187 002 1397	
BUILDING PERMIT		3/3/1993	1992HO16085	HIST: P0357 002 0339	
BUILDING PERMIT	ALTERATION	12/10/1963	1963LA54723	HIST: P1720 001 2117	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	ALTERATION	2/15/1980	1980LA98144	HIST: 00000 000 0000 HIST: P1868 001 0330	
BUILDING PERMIT	ALTERATION	2/14/1983	1983LA58492	HIST: P0017 004 0031	
BUILDING PERMIT	ALTERATION	1/31/1984	1984LA81435	HIST: P0046 010 0156	
BUILDING PERMIT	ALTERATION	5/29/1985	1985LA13039	HIST: P0088 002 0140	
BUILDING PERMIT	ALTERATION	10/23/1985	1985LA22892	HIST: P0099 007 0086	
BUILDING PERMIT	ALTERATION	11/20/1986	1986LA51295	HIST: P0133 005 0065	
BUILDING PERMIT	ALTERATION	12/26/1986	1986LA53835	HIST: P0137 001 0431	
BUILDING PERMIT	ALTERATION	1/22/1987	1987LA55650	HIST: P0139 003 0132	
BUILDING PERMIT	ALTERATION	2/20/1987	1987LA58040	HIST: P0142 001 0048	
BUILDING PERMIT	ALTERATION	10/26/1987	1987LA79127	HIST: P0167 005 0011	
BUILDING PERMIT	ALTERATION	5/8/1990	1990HO06150	HIST: P0284 001 0329	
BUILDING PERMIT	ALTERATION	12/23/1991	1991HO15375	HIST: P0351 002 0473	
BUILDING PERMIT	ALTERATION	12/31/1991	1991LA86045	HIST: P0351 005 0403	
BUILDING PERMIT	ALTERATION	1/9/1992	1992HO15501	HIST: P0352 003 0023	
BUILDING PERMIT	ALTERATION	3/3/1992	1992HO16085		
BUILDING PERMIT	ALTERATION	9/10/1993	1993HO23927	HIST: P0417 002 0291	
BUILDING PERMIT	ALTERATION	2/17/1994	1994HO26130	HIST: P0432 005 0282	
BUILDING PERMIT	BLDG-ADDITION	12/24/1908	1908LA07256	IDIS: P5012 02163 0000 thru P5012 0001 HIST: P1011 002 1688	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/24/1908	1908LA07256	HIST: P1011 002 1688	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/24/1908	1908LA07256	HIST: P1011 002 1688	
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/10/1912	1912LA06750	HIST: P1026 001 2357	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/1/1912	1912LA09083	HIST: P1027 001 1115	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/28/1912	1912LA10438	HIST: P1027 002 0817	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/28/1912	1912LA13504	HIST: P1028 002 1056	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/28/1912	1912LA13504	HIST: P1028 002 1063	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/29/1913	1913LA16373	HIST: P1035 002 1685	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/18/1914	1914LA08317	HIST: P1038 002 2444	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/18/1914	1914LA08317	IDIS: P5063 02661 0000 thru P5063 0001 HIST: P1038 002 2444	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/27/1915	1915LA12505	HIST: P1049 002 1322	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/27/1915	1915LA12505	HIST: P1049 002 1322	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/27/1915	1915LA12505	IDIS: P5075 02005 0000 thru P5075 0001 HIST: P1049 002 1322	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/24/1917	1917LA04928	HIST: P1055 002 1255	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/24/1917	1917LA04928	IDIS: P5081 02128 0000 thru P5081 0001 HIST: P1055 002 1255	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/20/1917	1917LA06005	HIST: P1055 003 0744	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/13/1920	1920LA05545	HIST: P1065 002 2123	
BUILDING PERMIT	BLDG-ALTER/REPAIR	5/13/1920	1920LA07051	HIST: P1066 001 2680	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/4/1922	1922LA34845	HIST: P1098 001 1907	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/21/1925	1925LA36142	HIST: P1153 001 2871	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/21/1925	1925LA36142	IDIS: P5033 01434 0000 thru P5033 0001 HIST: P1153 001 2871	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/6/1925	1925LA38233	HIST: P1154 001 0986	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/6/1925	1925LA38233	IDIS: P5034 00493 0000 thru P5034 0001 HIST: P1154 001 0986	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/17/1925	1925LA39588	HIST: P1154 002 0475	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/24/1925	1925LA40478	HIST: P1154 002 2255	
BUILDING PERMIT	BLDG-ALTER/REPAIR	5/28/1926	1926LA16071	HIST: P1161 001 1758	
BUILDING PERMIT	BLDG-ALTER/REPAIR	5/28/1926	1926LA16071	IDIS: P5041 02295 0000 thru P5041 0001 HIST: P1161 001 1758	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/20/1928	1928LA08161	IDIS: P5187 02561 0000 thru P5187 0001 HIST: P1183 002 2463	
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/27/1928	1928LA18201	IDIS: P5191 00956 0000 thru P5191 0001 HIST: P1187 001 1911	
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/9/1928	1928LA19161	IDIS: P5191 01916 0000 thru P5191 0001 HIST: P1187 002 1397	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/15/1932	1932LA19876	HIST: P1232 003 0291	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/15/1932	1932LA19876	IDIS: P5237 00146 0000 thru P5237 0001 HIST: P1232 003 0291	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/5/1934	1934LA01811	HIST: P1240 002 0611	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/5/1934	1934LA01811	IDIS: P5244 01811 0000 thru P5244 0001 HIST: P1240 002 0611	
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/28/1938	1938LA19599	HIST: P1289 002 2102	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/3/1940	1940LA00273	HIST: P1317 001 0546	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/3/1940	1940LA00273	IDIS: P5322 01296 0000 thru P5322 0001 HIST: P1317 001 0546	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/22/1949	1949 12779	HIST: P1425 002 0064	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/22/1949	1949LA12779	IDIS: P5476 00064 0000 thru P5476 0001 HIST: P1425 002 0064	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/23/1949	1949 28107	HIST: P1428 001 1860	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/23/1949	1949LA28107	IDIS: P5481 01855 0000 thru P5481 0001 HIST: P1428 001 1860	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/10/1950	1950 21616	HIST: P1441 002 1716	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/19/1950	1950LA21616	IDIS: P5503 02070 0000 thru P5503 0001 HIST: P1441 002 1716	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/19/1963	1963LA54723	IDIS: P5830 02555 0000 thru P5830 0001 HIST: P1720 001 2117	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/15/1980	1980LA98144	IDIS: P5982 01220 0000 thru P5982 0001 HIST: P1868 001 0330	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/14/1983	1983LA58492	IDIS: P6048 00425 0000 thru P6048 0001 HIST: P0017 004 0031	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/31/1984	1984LA81435	IDIS: P6062 01432 0000 thru P6062 0001 HIST: P0046 010 0156	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/23/1985	1985LA22892	IDIS: P6088 03319 0000 thru P6088 0001 HIST: P0099 007 0086	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/20/1986	1986LA51295	IDIS: P6105 02624 0000 thru P6105 0002 HIST: P0133 005 0065	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/26/1986	1986LA53835	IDIS: P6107 01941 0000 thru P6107 0001 HIST: P0137 001 0431	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/22/1987	1987LA55650	IDIS: P6108 02319 0000 thru P6108 0001 HIST: P0139 003 0132	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/20/1987	1987LA58040	HIST: P0142 001 0048 IDIS: P6110 00024 0000 thru P6110 0001	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/26/1987	1987LA79127	IDIS: P6122 00991 0000 thru P6122 0001 HIST: P0167 005 0011	
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BUILDING PERMIT	BLDG-ALTER/REPAIR	12/23/1991	1991HO15375	IDIS: P6212 00352 0000 thru P6212 0001 HIST: P0351 002 0473	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/31/1991	1991LA86045	IDIS: P6212 01037 0000 thru P6212 0001 HIST: P0351 005 0403	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/9/1992	1992HO15501	IDIS: P6212 01822 0000 thru P6212 0001 HIST: P0352 003 0023	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/3/1992	1992HO16085	IDIS: P6214 01727 0000 thru P6214 0001 HIST: P0357 002 0339	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/10/1993	1993HO23927	IDIS: P6234 01289 0000 thru P6234 0001 HIST: P0417 002 0291	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/17/1994	1994HO26130	IDIS: P6239 02355 0000 thru P6239 0001 HIST: P0432 005 0282	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/29/2008	07016-10000-23765		

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-NEW	8/7/1912	1912LA09400	HIST: P1027 001 1749	
BUILDING PERMIT	NEW CONSTRUCTION	12/29/1913	1913LA16373	IDIS: P5061 02366 0000 thru P5061 0001 HIST: P1035 002 1685	
BUILDING PERMIT	NEW CONSTRUCTION	11/17/1925	1925LA39588	IDIS: P5034 01848 0000 thru P5034 0001 HIST: P1154 002 0475	
CERTIFICATE OF OCCUPANCY		5/7/1992	1990HO06150	IDIS: O0584 03262 0000 HIST: M0772 001 0203	
CERTIFICATE OF OCCUPANCY		5/7/1992	1991HO15375	IDIS: O0584 03262 0000 HIST: M0772 001 0203	
CERTIFICATE OF OCCUPANCY		5/7/1992	1992HO16085	IDIS: O0584 03262 0000 HIST: M0772 001 0203	
CERTIFICATE OF OCCUPANCY		11/18/1992	1990HO06150	IDIS: O0585 03576 0000 HIST: M0806 007 0465	
COMMISSION	BAAB BOARD FILE	12/31/1983	BF 830636	HIST: B0083 007 0487	
COMMISSION	BAAB BOARD FILE	5/24/1984	BF 830636	HIST: M0092 003 0102	
COMMISSION	BAAB BOARD FILE	12/31/1985	BF 851378	HIST: B0134 005 0260	
COMMISSION	BAAB BOARD FILE	12/31/1985	BF 851653	HIST: B0134 005 0260	
COMMISSION	BAAB BOARD FILE	12/31/1986	BF 860876	HIST: B0157 006 0052	
DISASTER INSPECTION FILE	EARTHQUAKE	1/27/1994		IDIS: E0077 2 1443 thru E0077 2 1445	
ELECTRICAL PERMIT		9/20/1985	0985E6840	HIST: T0032 003 0282	
ELECTRICAL PERMIT		9/20/2012	12041-90000-22482		
EQ-COMPLIANCE CERT		8/3/1988		HIST: M0312 001 0008	
GRADING	SOILS & GEOLOGY FILE	8/19/2008		IDIS: G500 00138 0000 thru G500 00138 0038	
GRADING	SOILS & GEOLOGY FILE	11/12/2008			
MECHANICAL PERMIT	PLUMBING	2/1/1985	0285C6860	HIST: T0004 001 0204	
MECHANICAL PERMIT	PLUMBING	4/25/1985	0485G6413	HIST: T0013 009 0096	
MECHANICAL PERMIT	PLUMBING	10/26/1988	1088A1248	HIST: T0154 003 0199	
PLAN MAINTENANCE		10/23/1985	1985LA22892	HIST: H0336 001 0089	
PLAN MAINTENANCE		11/20/1986	1986LA51295	HIST: H0816 001 0288	
PLAN MAINTENANCE		11/20/1986	1986LA51295	HIST: H1104 001 0467	
PLAN MAINTENANCE		1/22/1987	1986LA51295	HIST: H0852 001 0436	
PLAN MAINTENANCE		1/22/1987	1987LA55650	HIST: H0852 001 0436	
PLAN MAINTENANCE		2/20/1987	1986LA51295	HIST: H0978 001 0185	
PLAN MAINTENANCE		2/20/1987	1987LA58040	HIST: H0978 001 0185	
PLAN MAINTENANCE		4/28/1987	1986LA51295	HIST: H0982 001 0316	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
PLAN MAINTENANCE		10/26/1987	1987LA79127	HIST: H1232 001 0332	
PLAN MAINTENANCE		5/8/1990	1990HO06150	HIST: J0335 001 0140	
PLAN MAINTENANCE		12/23/1991	1991HO15375	HIST: J0626 002 0165	
PLAN MAINTENANCE		3/3/1992	1990HO06150	HIST: J0628 001 0364	
PLAN MAINTENANCE		3/3/1992	1992HO16085	HIST: J0628 001 0364	
PLAN MAINTENANCE		3/21/1992	1990HO06150	HIST: J0626 002 0016	
RANGE FILE	MISCELLANEOUS	9/17/1980		HIST: R0165 002 0300	
RANGE FILE	MISCELLANEOUS	8/27/1982		HIST: R0016 001 0125	
RANGE FILE	MISCELLANEOUS	1/10/1983		HIST: M0281 007 0204	
RANGE FILE	MISCELLANEOUS	8/13/1983		HIST: R0141 005 0201	
RANGE FILE	MISCELLANEOUS	10/28/1983		HIST: R0146 012 0038	
RANGE FILE	MISCELLANEOUS	8/19/1985		HIST: M0119 002 0085	
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RANGE FILE	MISCELLANEOUS	8/19/1985		HIST: M0119 002 0085	
RANGE FILE	MISCELLANEOUS	8/19/1985		HIST: M0119 002 0085	
RANGE FILE	MISCELLANEOUS	8/28/1985		HIST: M0121 009 0013	
RANGE FILE	MISCELLANEOUS	9/19/1985		HIST: M0129 004 0407	
RANGE FILE	MISCELLANEOUS	9/20/1985		HIST: M0128 004 0394	
RANGE FILE	MISCELLANEOUS	9/25/1985		HIST: M0127 011 0021	
RANGE FILE	MISCELLANEOUS	2/26/1988		HIST: M0298 004 0411	
RANGE FILE	MISCELLANEOUS	2/26/1988		HIST: M0298 008 0411	
RANGE FILE	MISCELLANEOUS	2/24/1992		HIST: M0724 002 0290	
ZONING ADMINISTRATOR CASE		11/12/1982	CUZ 82292	HIST: Z0015 030 0135	

BLDG. DEPT. FORM 9

All applications must be filled out by applicant

WARD 8

PLANS AND SPECIFICATIONS and other data must also be filed

BOARD OF PUBLIC WORKS
DEPARTMENT OF BUILDINGS

3

Application to Alter, Repair or Demolish

To the Board of Public Works of the City of Los Angeles:
Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.
Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 FIRST FLOOR

ASSESSOR PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot .... Block	Lot .... Block ....
Tract	Tract ....
Book .... Page .... F. B. Page	Book .... Page .... F. B. Page ....

O. K. City Assessor By .... Deputy

TAKE TO ROOM No. 34 THIRD FLOOR

ENGINEER PLEASE VERIFY

~~From~~ No. 1001 - 1007 East 1st St. Street

To No. .... Street

O. K. City Engineer By .... Deputy.

(USE INK OR INDELIBLE PENCIL)

1. What Purpose is the present Building used for? offices & warehouse
2. Owner's name a. Brownstein and Co. Phone A3841
3. Owner's address 1001-1007 East 1st St.
4. Architect's name Frank H Peters Phone 60608
5. Contractor's name Los Angeles show Case Co. Phone F6767
6. Contractor's address Coly ton St.
7. ENTIRE COST OF PROPOSED WORK {Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, etc.} $ 1200.00
8. Class of Present Building C No. of Rooms at present ....
9. No. of stories in height two Size of present building 50 x 150

STATE ON FOLLOWING LINES JUST WHAT YOU WANT TO DO.

Close up and Open window and door openings in present Brick walls also move and reset and provide and set new Panel and glass partitions in 1st floor offices

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Building Ordinances will be complied with, whether herein specified or not.

OVER

(Sign here) Frank H Peters
(Owner or Authorized Agent).

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and specifications checked and found to conform to Ordinances, State Laws, etc. (Use ink)	Application checked and found O. K. (Use Rubber Stamp)	Stamp here when permit is issued
10775	J. M. Plan Examiner.	AUG 27 1915 R.B. Clerk	ISSUED AUG 27 1915 ISSUED L.A. Bldg. Dept.

1 PLANS le S. Jones (1) 3 40

FILL IN ALL BLANKS THAT APPLY TO WORK PROPOSED TO BE DONE, OR TO ASCERTAIN IF SAME CAN BE DONE.

10. Size of new addition ✓ x ✓ No. of Stories in height ✓

11. Material of foundation — Size footings ✓ Size wall ✓ Depth below ground

12. Size of Redwood Mudsills ✓ x ✓ Size of exterior studs ✓ x ✓

13. Size of interior bearing studs ✓ x ✓ Size of interior non-bearing studs ✓ x ✓

14. Size of first floor joist 2 x 14 Second floor joist 2 x 14

[redacted]

(No cesspools allowed where there is a street sewer)

[redacted]

I have carefully examined and read the above blank and know the same is true and correct, and that all provisions of the Building Ordinance will be complied with, whether herein specified or not.

(Sign here) Frank A. Peters
(Owner or Authorized Agent.)

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

3 APPLICATION FOR INSPECTION 3 EARTHQUAKE SAFETY DIVISION — TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

Item	Field	Entry
1. LEGAL DESCR.	LOT / BLOCK / TRACT	A / / 3187
	CITY CLERK REF. NO.	MP29-100
	DIST. MAP	129B 217
	CENSUS TRACT	2061.00
2.	PRESENT USE OF BUILDING	(22 Artist in residence
	NEW USE OF BUILDING	(22 same
	ZONE	M3-3
3.	JOB ADDRESS	1001 E. 1st St.
	SUITE/UNIT NO.	
	FIRE DIST. / COUN DIST.	II / 9
4.	BETWEEN CROSS STREETS … AND	Meyer St. / Center St.
	LOT TYPE	cor/thru
5.	OWNER'S NAME ( ) TENANT (X) BUILDING	1ST St. & Center Ltd
	PHONE	687-9600
	LOT SIZE	irregular
6.	OWNER'S ADDRESS / CITY / ZIP	929 E. 2nd St. #101 L.A.
7.	ENGINEER / BUS. LIC. NO. / ACTIVE STATE LIC. NO. / PHONE	====
	ALLEY	====
8.	ARCHITECT OR DESIGNER / BUS LIC. NO. / ACTIVE STATE LIC. NO. / PHONE	====
	BLDG. LINE	====
9.	ARCHITECT OR ENGINEER'S ADDRESS / CITY / ZIP	====
	DOCUMENTS/EASEMENTS	AFF 55760; ZA83-829; ZA82-292; CCPD; ZI 1572
10.	CONTRACTOR / BUS. LIC. NO. / ACTIVE STATE LIC. NO. / PHONE	ns
11.	SIZE OF EXISTING BLDG WIDTH / LENGTH	159 / 268'
	STORIES / HEIGHT	2 / 32'
	NO. OF EXISTING BUILDINGS ON LOT AND USE	1 AIR/warehouse
12.	FRAMING MATERIAL OF EXISTING BLDG.	
	EXT. WALLS / ROOF / FLOOR	urm / wood / wood
13.	JOB ADDRESS	1001 E. 1st St.
	SUITE/UNIT NO	
14.	VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING	$ 9,500.00
	DIST. OFF. / P.C. REQ'D	LA / no(a)
15.	NEW WORK (Describe)	add interior stair (non-req. exit)
	GRADING / SEISMIC	==== / ====
	HWY. DED. / FLOOD	yes / ====

NEW USE OF BUILDING | SIZE OF ADDITION | STORIES | HEIGHT: BUILDING / ZONING | FILE WITH

TYPE | GROUP OCC. | MAX. OCC. | PLANS CHECKED | ZONED BY Peter

DWELL UNITS | BUILDING AREA | ZONING AREA | APPLICATION APPROVED | TYPIST cd 12/23/91

GUEST ROOMS | PARKING REQ'D | PARKING PROVIDED S C HC. | INSPECTION ACTIVITY: CS GEN MAJ. S. (EQ.) | INSPECTOR

B & S 00-B-3 (R 7/90)

P.C. 75.43	G.P.I. + NP	CONT. INSP.
S P.C.	P.M.	
B.P. 88.75	E.I. 2.00	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee, or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC
I.F.	F.H.	
S D	O.S.S. 3.32	
ISS. OFF. HO	S O.S.S.	SPRINKLERS REQ'D SPEC.
P.C. NO. F5246	C/O	ENERGY — / DAS —

SYS 9.97 | SSYS

Unless a shorter period of time has been established by an official action, plan check approval expires one year after the fee is paid and this permit expires two years after the fee is paid or 180 days after the fee is paid if construction is not commenced.

CASHIERS USE ONLY

12/23/91 11:03AM F.01 T-0347 C 26

E Q PLAN CHECK	75.43
EQ PERMIT	88.75
EI COMMERCIAL	2.00
SYS DEV	9.97
ONE STOP	3.32
TOTAL	179.47
CHECK	179.47

91HO 15375

NEW AFFIDAVITS

PLAN CHECK EXTENDED TO ______________ PER

ADMINISTRATIVE APPROVAL DATED ______________

BY ______________

D.A.D. PLANS CHECKED

HOUSING MITIGATION FEE ORDINANCE

☐ REQUIRED ☐ EXEMPT

ASBESTOS NOTIFICATION

Check Box: ☐ Notification letter sent to AQMD or EPA.

☒ I declare that notification of asbestos removal is not applicable to addressed project.

Signature ______________ Date 12/23/91

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date ______ Lic. Class ______ Lic. Number ______ Contractor ______ (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☒ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ______ B. & P. C. for this reason ______

Date 12/23/91 Owner's Signature ______

WORKERS' COMPENSATION DECLARATION

GARY COHEN

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

DRV LIC, N7962715

Policy No. ______ Insurance Company ______

☐ Certified copy is hereby furnished.

☐ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety. Exp. 11-92

Date ______ Applicant's Signature ______

Applicant's Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date 12-23-91 Applicant's Signature ______

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed ______ (Owner or agent having property owner's consent) | Owner. (Position) | 12/23/91 (Date)

3 5 1 3 0 2 0 0 4 7 4

Bureau of Engineering		ADDRESS APPROVED	
		DRIVEWAY	
		HIGHWAY DEDICATION — REQUIRED	
		HIGHWAY DEDICATION — COMPLETED	
		FLOOD CLEARANCE	
Public Works Improvement	Required YES ☐ NO ☐ PERMIT	#	
SEWERS		SEWERS AVAILABLE	
RES. NO.		NOT AVAILABLE	
CERT. NO.		SFC PAID	
	SFC NOT APPLICABLE	SFC DUE	
Grading	PRIVATE SEWAGE SYSTEM APPROVED		
Comm. Safety	APPROVED FOR ISSUE ☐ NO FILE ☐ FILE CLOSED ☐		
CEQA			
Fire	APPROVED (TITLE 19) (L.A.M.C.-5700)		834 23 DEC 91
	APPROVED - HYDRANT UNIT, ROOM 920 CHE		
CRA	APPROVED PER REDEV. PROJECT		
Transportation	APPROVED FOR DRIVEWAY LOCATION		
	APPROVED FOR ORD. #		
Planning	WORK SHEET #		
	APPROVED UNDER CASE #		
	LANDSCAPE / XERISCAPE		
	SIGHT PLAN REVIEW		
Housing	HOUSING AUTHORITY AFFIDAVIT NO.		
Construction Tax	RECEIPT NO. DWELLING UNITS		
Cultural Affairs			
Rent Stabilization Division			

LEGAL DESCRIPTION

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH

← ATTACHED PLOT PLANS SHALL NOT EXTEND ABOVE THIS LINE

N/C

3 APPLICATION FOR INSPECTION — CITY OF LOS ANGELES DEPT. OF BUILDING AND SAFETY — Earthquake Safety Division — TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR.	LOT A; BLOCK /; TRACT 3187; CITY CLERK REF. NO. ---	DIST. MAP 1250217; CENSUS TRACT 2061.00
2. PRESENT USE OF BUILDING	(22) WAREHOUSE; NEW USE OF BUILDING (22) WAREHOUSE	ZONE M3-3
3. JOB ADDRESS	1001 E. 1ST ST.; SUITE/UNIT NO.	FIRE DIST. II; COUN. DIST. 9
4. BETWEEN CROSS STREETS	MEYER ST. AND CENTER ST.	LOT TYPE COR./THRU
5. OWNER'S NAME	1ST ST. & CENTER LTD.; PHONE 687-9600	LOT SIZE IRREG.
6. OWNER'S ADDRESS	929 E. 2ND ST. #101; CITY L.A.; ZIP CA	
7. ENGINEER	JIM PAJUHESH; BUS. LIC. NO. NONE; ACTIVE STATE LIC. NO. SE1860; PHONE 213-391-7159	ALLEY --
8. ARCHITECT OR DESIGNER	BUS. LIC. NO.; ACTIVE STATE LIC. NO.; PHONE	BLDG. LINE --
9. ARCHITECT OR ENGINEER'S ADDRESS	3261 SAWTELLE BL. #205; CITY L.A.; ZIP 90066	DOCUMENTS/EASEMENTS
10. CONTRACTOR	N/S; BUS. LIC. NO.; ACTIVE STATE LIC. NO.; PHONE	AFF 55760
11. SIZE OF EXISTING BLDG.	WIDTH 159 LENGTH 268; STORIES 2; HEIGHT 32; NO. OF EXISTING BUILDINGS ON LOT AND USE WAREHOUSE	ZA 83-829; ZA 82-292
12. FRAMING MATERIAL OF EXISTING BLDG.	EXT. WALLS URM; ROOF WOOD; FLOOR WOOD	CCPD
13. JOB ADDRESS	1001 E. 1ST ST.; SUITE/UNIT NO.	ZI 1572 FL
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING	$ 2,000.00	DIST. OFF. L.A.; P.C. REQ'D NO(a)
15. NEW WORK (Describe)	ADD PLYWOOD WALLS IN BASEMENT PER 4 ON PLANS. (OVER)	GRADING -; SEISMIC -; HWY. DED. YES; FLOOD --

NEW USE OF BUILDING (22) WAREHOUSE	SIZE OF ADDITION NONE	STORIES 2	HEIGHT BUILDING 32' ZONING 32'
TYPE III-N	GROUP OCC B2	MAX OCC. NC	PLANS CHECKED F. Rojas
DWELL UNITS 0	BUILDING AREA NC	ZONING AREA NC	APPLICATION APPROVED
GUEST ROOMS 0	PARKING REQ'D NC	PARKING PROVIDED S NC C HC	INSPECTION ACTIVITY: CS / GEN. / MAJ.S. / EQ.

FILE WITH ---; ZONED BY 1/9/92; TYPIST E.S. CAUDILLO; INSPECTOR --

B & S 08-B-3 (R 7/90)

P.C. 27.62	G.P.I. + NP	CONT. INSP. NO
S.P.C. —	P.M. 7.00	
B.P. 32.50	E.I. 0.50	
I.F. —	F.H. —	
S.D. —	O.S.S. 1.35	
ISS. OFF. HO	S.O.S.S —	SPRINKLERS REQ'D SPEC. NO
P.C. NO. CC	C/O —	ENERGY NO; GAS NO

SYS 4.06; SSYS

Claims for refund of fees paid on permits must be filed 1. Within one year from date of payment of fee, or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.

Unless a shorter period of time has been established by an official action, plan check approval expires one year after the fee is paid and the permit expires two years after the fee is paid or 180 days after the fee is paid if construction is not commenced.

CASHIER'S USE ONLY

01/09/92 01:07:15PM H001 T-1508 C 26

E Q PLAN CHECK	27.62
EQ PERMIT	32.50
PLAN MAINTENAN	7.00
EI COMMERCIAL	0.50
SYS DEV	4.06
ONE STOP	1.35
TOTAL	73.03
CHECK	73.03

92HO 15501

NEW AFFIDAVITS NONE

PLAN CHECK EXTENDED TO ______ PER

ADMINISTRATIVE APPROVAL DATED N/A

BY

D.A.D. PLANS CHECKED N/A

HOUSING MITIGATION FEE ORDINANCE
☐ REQUIRED ☒ EXEMPT

ASBESTOS NOTIFICATION
Check Box: ☐ Notification letter sent to AQMD or EPA
☒ I declare that notification of asbestos removal is not applicable to addressed project.

Signature [signature] date 1/9/92

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date ______ Lic. Class ______ Lic. Number ______ Contractor ______ (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ______, B. & P. C. for this reason ______

Date 1/9/92 Owner's Signature [signature]

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. ______ Insurance Company ______

☐ Certified copy is hereby furnished.
☐ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date ______ Applicant's Signature ______

Applicant's Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date 1/9/92 Applicant's Signature [signature]

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed [signature] (Owner or agent having property owner's consent) — OWNER (Position) — 1/9/92 (Date)

3 2 2 0 3 0 0 9 2 1

Bureau of Engineering		ADDRESS APPROVED	
		DRIVEWAY	
		HIGHWAY DEDICATION	REQUIRED
			COMPLETED
		FLOOD CLEARANCE	
Public Works Improvement	Required YES ☐ NO ☐ PERMIT	#	
SEWERS			SEWERS AVAILABLE
RES. NO.			NOT AVAILABLE
CERT. NO.			SFC PAID
	SFC NOT APPLICABLE		SFC DUE
Grading	PRIVATE SEWAGE SYSTEM APPROVED		
Comm. Safety	APPROVED FOR ISSUE ☐ NO FILE ☐ FILE CLOSED ☐		
CEQA			
Fire	APPROVED (TITLE 19) (L.A.M.C.-5700)		
	APPROVED - HYDRANT UNIT, ROOM 920 CHE		
CRA	APPROVED PER REDEV. PROJECT		
Transportation	APPROVED FOR DRIVEWAY LOCATION		
	APPROVED FOR ORD. #		
Planning	WORK SHEET #		
	APPROVED UNDER CASE #		
	LANDSCAPE / XERISCAPE		
	SIGHT PLAN REVIEW		
Housing	HOUSING AUTHORITY AFFIDAVIT NO.		
Construction Tax	RECEIPT NO. DWELLING UNITS		
Cultural Affairs			
Rent Stabilization Division			

LEGAL DESCRIPTION

LINE 15 CONTINUED:
DIVISION 88 FULL COMPLIANCE
WORK WAS DONE IN '87, CROSS
WALLS WERE NOT REQUIRED TO
CONTINUE TO GRADE.

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH

THIS PERMIT IS TO ADD
CROSSWALLS AT BASEMENT TO
MAKE A CONTINUATION OF
CROSSWALL ON FLOORS ABOVE.

ATTACHED PLOT PLANS SHALL NOT EXTEND ABOVE THIS LINE

3

ELECT. DIV.
Plns. not req'd.
Appv. Pls req'd. before bldg. permit
Plns. fixed
ELVIN F. VONKOW
ELECTRICAL INSPECTOR

APPLICATION TO ALTER, REPAIR, OR DEMOLISH AND FOR A Certificate of Occupancy

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Lot No.

Tract

Location of Building 1001 E. First St. (House Number and Street)

Approved by City Engineer

Between what cross streets Center & Santa Fe R.R.

Deputy.

USE INK OR INDELIBLE PENCIL

1. Present use of building Warehouse (Store, Dwelling, Apartment House, Hotel or other purpose) Families Rooms
2. State how long building has been used for present occupancy 25 Years
3. Use of building AFTER alteration or moving Same Families Rooms
4. Owner Citizens Warehouse (Print Name) Phone TR 2128
5. Owner's Address 1001 E. First St. P.O.
6. Certificated Architect State License No. Phone
7. Licensed Engineer State License No. Phone
8. Contractor Owner State License No. Phone
9. Contractor's Address
10. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $ 100.00
11. State how many buildings NOW on lot and give use of each. 1 (Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building 120 x 136 Number of stories high 2 Height to highest point 32 ft
13. Material Exterior Walls Masonry (Wood, Steel or Masonry) Exterior framework Masonry (Wood or Steel)
14. Describe briefly all proposed construction and work:

Additional Office Space on 2nd floor 20' x 33' of movable panel partitions

MAINTENANCE - ROOM M-10

NEW CONSTRUCTION

15. Size of Addition x Size of Lot x Number of Stories when complete
16. Footing: Width Depth in Ground Width of Wall Size of Floor Joists x
17. Size of Studs x Material of Floor Size of Rafters x Type of Roofing

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workman's Compensation Insurance.

Sign here (Owner or Authorized Agent)

DISTRICT OFFICE

By B.P. Hull

FOR DEPARTMENT USE ONLY

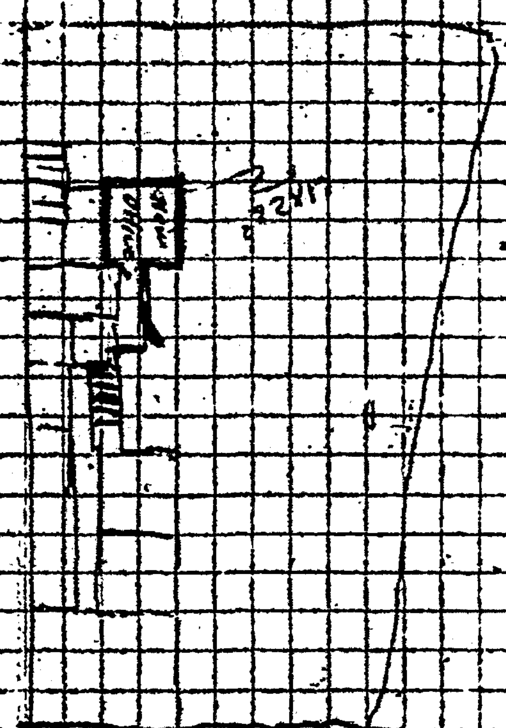
PLAN CHECKING	CHANGE OF OCCUPANCY	FEES	
Date NOV 10 1949	Area of Bldg. Sq. Ft.		Bldg. Per. 4.50
Receipt No. 18757	Date		Cert. of Occupancy
Valuation $ 6	Receipt No.		
Fee Paid $ 2.00	Fee Paid $		Total 4.50

Type II-A; Group F-1; Maximum No. Occupants; Inside Lot; Key Lot; Lot Size; Ft. rear alley; Ft. side alley; Clerk
REINFORCED CONCRETE; Corner Lot; Corner Lot Keyed
Std. Cement; Tons of Reinforcing Steel

PERMIT No. LA28107

Plans and Specifications checked Allen
Zone M-3
Fire District No. 2
District Map No. 5514
Bldg. Line Ft.
Street Widening Ft.
Correction Verified Allen
Application checked and approved NOV 8 1949
Plans, Specifications and Application rechecked and approved Pearman
Stamp here when permit is issued NOV 1950
Commence Inspection
SPRINKLER Specified-Required Valuation Included Yes-No
For Plans See Filed with
Inspector
PLAN
Sect. 3

APPROVED FOR DRIVEWAYS H.D.T. NOV 14 1949 No new driveway to be built.



3

APPLICATION TO ALTER - REPAIR - DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — B&S Form B-3 — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR. — LOT: A — BLK.: — TRACT: 3187
2. BUILDING ADDRESS: 1001-07 E. 1st St. (110-24 N. Center St.)
3. BETWEEN CROSS STREETS: Center St. AND L. A. River
4. PRESENT USE OF BUILDING: Warehouses — NEW USE OF BUILDING: Same
5. OWNER'S NAME: Mr. Walter S. Lysle — PHONE:
6. OWNER'S ADDRESS: 8 Richland Place — P.O.: Pasadena — ZONE:
7. CERT. ARCH. — STATE LICENSE — PHONE
8. LIC. ENGR. — STATE LICENSE — PHONE
9. CONTRACTOR: Williams Waterproofing — STATE LICENSE — PHONE: CL 78191
10. CONTRACTOR'S ADDRESS: 3107 Fletcher Drive — P.O.: L. A. 65 — ZONE:
11. SIZE OF EXISTING BLDG.: 268'6"x156' — STORIES: 2 — HEIGHT: 30' — NO. OF EXISTING BUILDINGS ON LOT AND USE: 3 - Warehouse Bldgs.

ADDRESS APPROVED — DIST. MAP — ZONE — FIRE DIST. — INSIDE — KEY — COR. LOT — REV. COR. — LOT SIZE — REAR ALLEY — SIDE ALLEY — BLDG. LINE — BLDG. AREA

SEWER (Available) (Not Available)

3 1001-07 E. 1st St.(110-24 N. Center St.) — DISTRICT OFFICE: L.A.

12. MATERIAL EXT. WALLS: ☐ WOOD ☐ METAL ☐ CONC. BLOCK ☐ STUCCO ☒ BRICK ☐ CONCRETE — ROOF CONST.: ☒ WOOD ☐ STEEL ☐ CONC. ☐ OTHER — ROOFING: Comp — SPRINKLERS REQ'D. SPECIFIED
13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $3500.00 — VALUATION APPROVED — AFFIDAVITS
14. SIZE OF ADDITION — STORIES — HEIGHT — APPLICATION CHECKED
15. NEW WORK: (Describe) — EXT. WALLS — ROOFING — PLANS CHECKED — DWELL. UNITS

Alter parapet walls along Center St. and Banning St.

CORRECTIONS VERIFIED — SPACES PARKING — PLANS APPROVED — GUEST ROOMS — APPLICATION APPROVED — FILE WITH: PARAPETS RM. 225 — INSPECTOR — CONT. INSP.

CRITICAL SOIL

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance, and I have read reverse side of Application.

Signed [signature]

This Form When Properly Validated is a Permit to Do the Work Described.

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O
III-A	G-1	N.C.	10.40			16.00			

CASHIER'S USE ONLY

DEC-19-63 63143 •54723 W — 2 CS 10.40
DEC-19-63 63144 •54723 W — 1 CS 16.00

P.C. No. — GRADING — CRIT. SOIL — CONS.

All applications must be filled out by applicant

WARD 1

PLANS AND SPECIFICATIONS and other data must also be filed

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

3

Application to Alter, Repair or Demolish

To the Board of Public Works of the City of Los Angeles:

Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 FIRST FLOOR

ASSESSOR PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot ______ Block ______	Lot ______ Block ______
Tract ______	Tract ______
Book ______ Page ______ F. B. Page ______	Book ______ Page ______ F. B. Page ______

O. K. City Assessor By ______ Deputy

TAKE TO ROOM No. 34 THIRD FLOOR

ENGINEER PLEASE VERIFY

From No. 1001 E 1st Street City Street

To No. ______ Street

O. K. City Engineer By ______ Deputy.

(USE INK OR INDELIBLE PENCIL)

1. What Purpose is the present Building used for? Warehouse
2. Owner's name Walter S. Gyale Phone ______
3. Owner's address 1409 St. Andrews Place.
4. Architect's name Morgan & Morgan Phone Main 6621
5. Contractor's name Morgan & Morgan Phone Main 6621
6. Contractor's address 800 Central Building Los Angeles.
7. ENTIRE COST OF PROPOSED WORK {Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, etc.} $400.00
8. Class of Present Building "C" No. of Rooms at present ______
9. No. of stories in height 2 Size of present building ______ x ______

STATE ON FOLLOWING LINES JUST WHAT YOU WANT TO DO.

Lower the grade of a portion of existing basement, build wall around same, and refloor over the portion altered.

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Building Ordinances will be complied with, whether herein specified or not.

OVER

(Sign here) Paul Morgan (Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and specifications checked and found to conform to Ordinances, State Laws, etc. (Use Ink)	Application checked and found O. K. (Use Rubber Stamp)	Stamp here when permit is issued.
8317	W F Gow Plan Examiner.	APR 18 1914 G.K. Clerk.	APR 18 1914

E S Jones

FILL IN ALL BLANKS THAT APPLY TO WORK PROPOSED TO BE DONE, OR TO ASCERTAIN IF SAME CAN BE DONE.

10 Size of new addition ______ x ______ No. of Stories in height ______

11 Material of foundation ______ Size footings ______ Size wall ______ Depth below ground ______

12 Size of Redwood Mudsills ______ x ______ Size of exterior studs ______ x ______

13 Size of interior bearing studs ______ x ______ Size of interior non-bearing studs ______ x ______

14 Size of first floor joist ______ x ______ Second floor joist ______ x ______

15 Specify Number of Plumbing Fixtures to be installed None Number of gas outlets None

16 Specify if there is a sewer or cesspool to be constructed on this lot? ______
(No cesspools allowed where there is a street sewer)

17 Plumbing and gas fitting contractor's name ______

I have carefully examined and read the above blank and know the same is true and correct, and that all provisions of the Building Ordinance will be complied with, whether herein specify or not.

(Sign here) Paul Murray
(Owner or Authorized Agent.)

Address of Building: 1001 E. 1st ST.

CITY OF LOS ANGELES
CERTIFICATE OF OCCUPANCY

Note: Any change of use of occupancy must be approved by the Department of Building and Safety.

☐ This certifies that, so far as ascertained or made known to the undersigned, the vacant land, building or portion of building described below and located at the address complies with the applicable construction requirements (Chapter 9) and/or the applicable zoning requirements (Chapter 1) of the Los Angeles Municipal Code for the use, or occupancy group in which it is classified.* (Non-Residential Uses)

☒ This certifies that, so far as ascertained by or made known to the undersigned, the building or portion of building described below and located at the above address complies with the applicable requirements of the Municipal Code, as follows Ch. 1, as to permitted uses, Ch 9, Arts. 1, 3, 4, and 5; and with applicable requirements of State Housing Law-for following occupancies:* (Residential Uses)

Permit No. and Year: 90HO06150 91HO15375 92HO16085

Two story, a type III, size 159' x 268' change of use of an existing two story, and basement warehouse to 25 artist in residence.

R1/B2 occupancy.

77200100203

5000320200600003335

Total Parking Required ____________ ☐ No Change in Parking requirement.

Total Parking Provided ____________ = Standard ________ + Compact ________ + Disabled ________

* ALSO SUBJECT TO ANY AFFIDAVITS OR BUILDING AND ZONING CODE MODIFICATIONS WHETHER LISTED ABOVE OR NOT.

Issued By / Office: LA-VN-WLA-SP-C.D. # 9

Bureau: BLDG-BCS

Division. GI-MS-MSS-EQ-BMI-COMM

Owner: 1st Street and Center LTD.

Owner's Address: 929 E. 2nd St. #101
Los Angeles, CA 90012

Issued: 5-7-92 By: Al Garcia, Prin. Insp.

08—B-95A (R 11/89)

Address of Building: 1001 E. 1st ST.

CITY OF LOS ANGELES

CERTIFICATE OF OCCUPANCY

Note: Any change of use of occupancy must be approved by the Department of Building and Safety.

☐ This certifies that, so far as ascertained or made known to the undersigned, the vacant land, building or portion of building described below and located at the address complies with the applicable construction requirements (Chapter 9) and/or the applicable zoning requirements (Chapter 1) of the Los Angeles Municipal Code for the use, or occupancy group in which it is classified.* (Non-Residential Uses)

☒ This certifies that, so far as ascertained by or made known to the undersigned, the building or portion of building described below and located at the above address complies with the applicable requirements of the Municipal Code, as follows Ch. 1, as to permitted uses, Ch 9, Arts. 1, 3, 4, and 5; and with applicable requirements of State Housing Law-for following occupancies:* (Residential Uses)

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5000320200600003335

Total Parking Required ________ ☐ No Change in Parking requirement.

Total Parking Provided ________ = Standard ________ + Compact ________ + Disabled ________

* ALSO SUBJECT TO ANY AFFIDAVITS OR BUILDING AND ZONING CODE MODIFICATIONS WHETHER LISTED ABOVE OR NOT.

Issued By / Office: LA-VN-WLA-SP-C.D. # 9

Bureau: BLDG-BCS

Division. GI-MS-MSS-EQ-BMI-COMM

Owner: 1st Street and Center LTD.

Owner's Address: 929 E. 2nd St. #101
Los Angeles, CA 90012

Issued: 5-7-92 By: Al Garcia, Prin. Insp.

08—B-95A (R 11/89)

Address of Building 1001 E. 1st St.

CITY OF LOS ANGELES
CERTIFICATE OF OCCUPANCY

Note: Any change of use of occupancy must be approved by the Department of Building and Safety.

[X] This certifies that, so far as ascertained or made known to the undersigned, the vacant land, building or portion of building described below and located at the address complies with the applicable construction requirements (Chapter 9) and/or the applicable zoning requirements (Chapter 1) of the Los Angeles Municipal Code for the use, or occupancy group in which it is classified.* (Non-Residential Uses)

[ ] This certifies that, so far as ascertained by or made known to the undersigned, the building or portion of building described below and located at the above address complies with the applicable requirements of the Municipal Code, as follows: Ch. 1, as to permitted uses, Ch. 9, Arts. 1, 3, 4, and 5; and with applicable requirements of State Housing Law-for following occupancies:* (Residential Uses)

Permit No. and Year 90HO06150

A 159'x268' two story, type III-N, warehouse converted to 25 Artist-In-Residence units and convert basement to storage.
R1/B2 Occupancy.

THIS CERTIFICATE ISSUED TO CORRECT WORDING ON CERTIFICATE ISSUED 5-7-92.

M 772.1.203

S0003212006000002722

Total Parking Required 19 [ ] No Change in Parking requirement.

Total Parking Provided 19 = Standard 19 + Compact ______ + Disabled ______

* ALSO SUBJECT TO ANY AFFIDAVITS OR BUILDING AND ZONING CODE MODIFICATIONS WHETHER LISTED ABOVE OR NOT.

Issued By / Office: LA-VN-WLA-SP-C.D. # 9

Bureau: BLDG - BCS

Division: GI-MS-MSS-EQ-BMI-COMM

Owner 1st Street & Center, LTD

Owner's Address 929 E. 2nd St., #101
Los Angeles, CA 90012

Issued: 11-18-92 By: A. GARCIA/ja

08—B-95A (R.11/89)

Bldg. Form 3

USE INK OR INDELIBLE PENCIL

3

CITY OF LOS ANGELES

DEPARTMENT OF BUILDING AND SAFETY

BUILDING DIVISION

Application to Alter, Repair, Move or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

REMOVED FROM	REMOVED TO
Lot	Lot
Tract	Tract

Present location of building: 1001 East First Street (House Number and Street)

New location of building: (House Number and Street)

Between what cross streets: N. E. Corner of Center Street

Approved by City Engineer.

Deputy.

1. Purpose of PRESENT building: Warehouse (Store, Residence, Apartment House, or any other purpose.) Families ..... Rooms .....
2. Use of building AFTER alteration or moving: Warehouse Families ..... Rooms .....
3. Owner (Print Name): Walter S. Lysle Phone: TR-7178
4. Owner's address: 1001 East First St., Los Angeles.
5. Certificated Architect: none State License No. ..... Phone .....
6. Licensed Engineer: ..... State License No. ..... Phone .....
7. Contractor: Richards-Neustadt Construction Co. State License No. 592 Phone: YA-3929
8. Contractor's address: 117 W. Ninth Street, Room 524.
9. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and/or elevator, equipment therein or thereon.) $ 250.
10. State how many buildings NOW on lot and give use of each: one building (Residence, Hotel, Apartment House, or any other purpose.)
11. Size of existing building ..... x ..... Number of stories high: 2 Height to highest point: 30'
12. Class of building: C Material of existing walls: brick Exterior framework: brick (Wood or Steel)

Describe briefly and fully all proposed construction and work:

Change main entrance as per plans. No structural changes involved.

1-3-40

Fill in Application on other Side and Sign Statement (OVER)

FOR DEPARTMENT USE ONLY 5514

PERMIT NO.	Plans and Specifications checked	Zone	Fire District	Fee
273	H. F. Muller	M3	No. #1	2.50
	Corrections verified: H. F. Muller	Bldg. Line: No Ft.	Street Widening: No Ft.	Stamp here when Permit is issued
	Plans, Specifications and Applications rechecked and approved:	Application checked and approved: 1/3/40 Clerk.		JAN -3 1940
PLANS Ref'd. 1/3/40	For Plans See / Filed with	SPRINKLER Required / Valves Included	Specified Yes—No	Inspector: F. J. Hild

PLANS, SPECIFICATIONS, and other data must be filed if required.

NEW CONSTRUCTION

~~Size of Addition .... x .... Size of Lot .... x .... Number of Stories when complete ....~~

~~Material of Foundation .... Width of Footing .... Depth of footing below ground ....~~

~~Width Foundation Wall .... Size of Redwood Sill .... x .... Material Exterior Walls ....~~

~~Size of Exterior Studs .... x .... Size of Interior Bearing Studs .... x ....~~

~~Joists: First Floor .... x .... Second Floor .... x .... Rafters .... x .... Roofing Material ....~~

I have carefully examined and read both sides of this completed Application and know the same is true and correct and hereby certify and agree, if a Permit is issued, that all the provisions of the Building Ordinances and State Laws will be complied with whether herein specified or not; also certify that plans and specifications, if required to be filed, will conform to all of the provisions of the Building Ordinances and State laws.

Sign Here RICHARDS-NEUSTADT CONSTRUCTION CO.
(Owner or Authorized Agent)

By Chas. E. Richards

FOR DEPARTMENT USE ONLY			
Application	Fire District	Bldg. Line	Termite Inspection ....
Construction	Zoning	Street Widening	Forced Draft Ventil. ....

(1)
REINFORCED CONCRETE

Barrels of Cement ....

Tons of Reinforcing Steel ....

(2)
The building (and, or, addition) referred to in this Application is, or will be when moved, more than 100 feet from

.... Street

Sign Here ....
(Owner or Authorized Agent)

(3)
No required windows will be obstructed.

Sign Here ....
Owner or Authorized Agent.

(4)
There will be an unobstructed passageway at least ten (10) feet wide, extending from any dwelling on lot to a Public Street or Public Alley at least 10 feet in width.

Sign Here ....
(Owner or Authorized Agent)

REMARKS: ....

ALL WOOD AND LUMBER BELOW THE FIRST FLOOR BOARDS WILL BE TREATED AGAINST TERMITE INFESTATION AS REQUIRED BY SEC. 106 OF BUILDING ORDINANCE

....
OWNER OR AUTHORIZED

PUBLIC RECORD [redacted] RET. TO CONS

3 APPLICATION FOR INSPECTION TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY — B & S B-3 (R 12.80)

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR.	LOT A	BLOCK	TRACT 3187
COUNCIL DISTRICT NO. 9	DIST. MAP 129-B-217	CENSUS TRACT 2061.00	
2. PRESENT USE OF BUILDING	(22) LIGHT MANUF.	NEW USE OF BUILDING	(05) Artist in Res. 1-Story
ZONE	M3-3		
3. JOB ADDRESS	1001 East 1st Street	FIRE DIST.	Two
4. BETWEEN CROSS STREETS	Center Street AND Myers Street	LOT TYPE	Cor/thru
5. OWNER'S NAME	Joel Bass	PHONE	625-0879
6. OWNER'S ADDRESS	239 South Los Angeles	CITY / ZIP	Los Angeles 90012
LOT SIZE	Irreg		
7. ENGINEER		BUS. LIC. NO. / ACTIVE STATE LIC. NO. / PHONE	
8. ARCHITECT OR DESIGNER		BUS. LIC. NO. / ACTIVE STATE LIC. NO. / PHONE	
9. ARCHITECT OR ENGINEER'S ADDRESS		CITY / ZIP	
AFFIDAVITS	83-80838		
10. CONTRACTOR	To Be Selected	BUS. LIC. NO. / ACTIVE STATE LIC. NO. / PHONE	
11. SIZE OF EXISTING BLDG.	WIDTH 159 LENGTH 268	STORIES 2 / HEIGHT	NO. OF EXISTING BUILDINGS ON LOT AND USE: One-Commercial Bldg.
12. CONST. MATERIAL OF EXISTING BLDG.	EXT. WALLS Brick	ROOF Wood	FLOOR Wood
	CCPD		
13. JOB ADDRESS	1001 East 1st Street	STREET GUIDE	DISTRICT OFFICE LA
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING	$240,000 —	SEISMIC STUDY ZONE	
15. NEW WORK (Describe)	Change occupancy of first & 2nd stories to A.I.R. G-1/H-2	GRADING / FLOOD	
HWY. DED. Yes	CONS Yes		
NEW USE OF BUILDING	Artist in Residence	SIZE OF ADDITION / STORIES / HEIGHT	ZONED BY
TYPE IIIA	GROUP OCC. G-1/H-2	BLDG. AREA	PLANS CHECKED Kendig
FILE WITH			
DWELL. UNITS	MAX. OCC. Dwelling units 24* TOTAL	APPLICATION APPROVED Kendig	TYPIST jm
GUEST ROOMS	PARKING REQ'D	PARKING PROVIDED STD. / COMP.	INSPECTION ACTIVITY: COMB / GEN. / MAJ. S. / CONS.
INSPECTOR	Marbanen		
SPRINKLERS REQ'D SPEC.	Throughout incl. basement	CONT. INSP.	
P.C. 677.45	P.M.	None	
S.P.C.	E.I. 16.80		
B.P. 797—	O.S.S. 16.28		
G.P.I.	C/O		
DIST. OFFICE L.A.	ENERGY: None		
P.C. NO. A-4529			

extended by admin. approv.

Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.

CASHIER'S USE ONLY

C 67.45 B-PC
0302 3 01/07/83 677.45 CHTD

C 797.00 BP-C
C 16.80 E.I.
C 16.28 OSS
81435 DOO1
03749 4 01/31/84 830.08 CHTD

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date ______ Lic. Class ______ Lic. Number ______ Contractor ______ (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☑ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☑ I am exempt under Sec. ______ B. & P. C. for this reason ______

Date 8-9-83 Owner's Signature ______

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. ______ Company ______

☐ Certified copy is hereby furnished.

☐ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date ______ Applicant ______

Applicant's Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date 8-9-83 Applicant ______

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein, nor the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed ______ (Owner or agent having property owner's consent) Owner (Position) 8-9-83 (Date)

0 4 5 0 1 0 0 0 [illegible] 9/12/83
Not Approved [illegible] 9/12/83 [illegible] 1-11-84

No record of [illegible] Connection [illegible]
Dye Test needed

Owens
R. [illegible] 9-1-83
C 8451802
$ 1615.63

[illegible] 08/30/83

CUZ 82-292 / CUZ 83-319

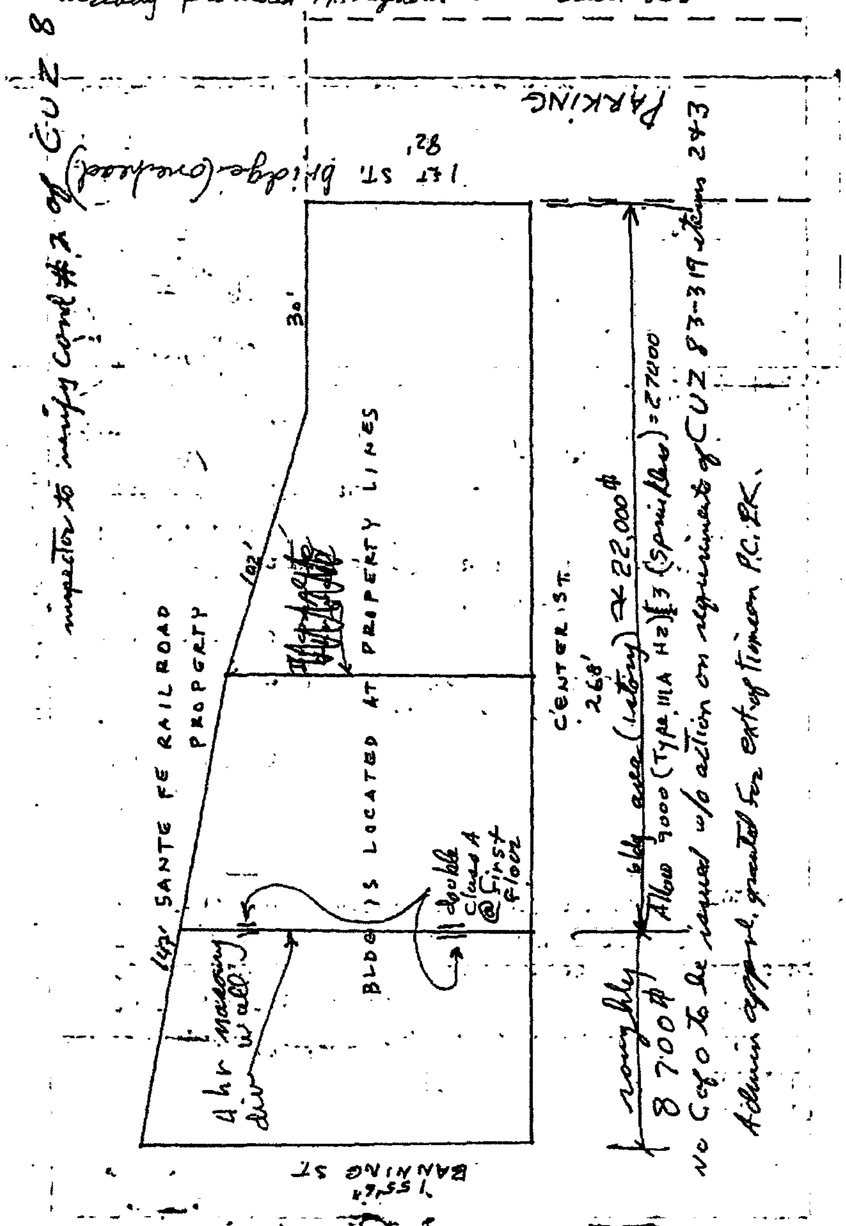
G120802

25 [illegible] 1/11/84

~~[illegible]~~

* unit 18 is not AIR (No windows)

\# Sprinklers reqd because right hand Division wall is considered omitted for exit purposes. That portion of bldg, hence, is one area @ 21,210 # (Greater than prorated area for H-2/G-1 (AIR) of allowable 15000 (2/3 of H-2/G-1 is G-1 or 2/3 of way from 9000 to 18000). So — sprinklers already provided throughout are needed now.



3 APPLICATION FOR INSPECTION — CITY OF LOS ANGELES DEPT. OF BUILDING AND SAFETY — Earthquake Safety Division — TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. LOT: A | BLOCK: / | TRACT: 3187 | COUNTY REF. NO.: MP 29-100 | DIST. MAP: 129 B 217 | CENSUS TRACT: 2061.00
2. PRESENT USE OF BUILDING: (22) Warehouse | NEW USE OF BUILDING: (22) Artist-In-Residence/Storage | ZONE: M3-3
3. JOB ADDRESS: 1001 E. 1'st St. | FIRE DIST.: II | COUN. DIST.: 9
4. BETWEEN CROSS STREETS: Meyer St. AND Center St. | LOT TYPE: Cor/Thru
5. OWNER'S NAME: 1'st St. & Center Ltd. | PHONE: 687-9600 | LOT SIZE: Irreg.
6. OWNER'S ADDRESS: 929 E. 2'nd St. #101 | CITY: L.A. | ZIP
7. ENGINEER: JIM PAJUHESH | BUS. LIC. NO. | ACTIVE STATE LIC. NO.: SE | PHONE: 395-9964 | ALLEY: /
8. ARCHITECT OR DESIGNER: RALPH MECHUR | ACTIVE STATE LIC. NO.: C11683 | PHONE: 399-9386 | BLDG. LINE: /
9. ARCHITECT OR ENGINEER'S ADDRESS: 1351 OCEAN FRONT WALK #105 | CITY: S.M. | ZIP: 90401 | AFFIDAVITS: AFF 55760, ZA 83-319, ZA 82-292, CCPD, ZI 1572 3,9, CUZ 83-319
10. CONTRACTOR: ~~N/O~~ NOT YET SELECTED
11. SIZE OF EXISTING BLDG.: WIDTH 159 LENGTH 268 | STORIES: 2 | HEIGHT: 32 | NO. OF EXISTING BUILDINGS ON LOT AND USE: 1 - Warehouse
12. FRAMING MATERIAL OF EXISTING BLDG.: | EXT. WALLS: URM | ROOF: WD. | FLOOR: WD. | STREET GUIDE
13. JOB ADDRESS: 1001 E. 1'st St.
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING: $ P.C. 1,360,000.00 / B.P. 1,000,000.00 | DIST. OFF.: L.A. | P.C. REQ'D: No(a)
15. NEW WORK (Describe): Change use to 25 Art-In-Res-Units on 1st & 2ND FLOORS ONLY | GRADING | SEISMIC | HWY. DED.: Yes | FLOOD

NEW USE OF BUILDING: Art-In-Res | SIZE OF ADDITION: None | STORIES | HEIGHT | FILE WITH

TYPE: III-N | GROUP OCC.: R1/B2 | FLOOR AREA: N/C | PLANS CHECKED: Peter Kim | ZONED BY: Peter Kim

DWELL UNITS: 25 | MAX OCC.: 25 A.I.R. UNITS | TOTAL | APPLICATION APPROVED | TYPIST: Dawn Lucia

GUEST ROOMS: — | PARKING REQ'D: 19 | PARKING PROVIDED STD. 19 COMP. | INSPECTION ACTIVITY: CS, GEN., MAJ.S., EQ. | INSPECTOR

B & S B-3 (R.7/80)

P.C. 2995.74	G.P.I. + NP
S.P.C. 182.64	P.M. 60.39
B.P. 3019.50	E.I. 72.80
I.F. —	F.H. 2,288.00
S.D. 12525.24	O.S.S. 59.92
ISS. OFF. HO	S.O.S.S. 112.48
P.C. NO. B6860	C/O

CONT. INSP. | SPRINKLERS REQ'D SPEC.: THROUGHOUT | ENERGY: 1-NO | DAS: Yes

Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.

Unless a shorter period of time has been established by an official action, plan check approval expires one year after the fee is paid and this permit expires two years after the fee is paid or 180 days after the fee is paid if construction is not commenced.

18,261.24

CASHIER'S USE ONLY

C 171.27 B-PC
C 3.43 OSS
A7901 2 05/13/88 174.70 CHTD
C 2824.47 EQPC -
C 56.49 OSS
W4611 3 10/27/89 2880.96 CHTD

05/08/90 03:50:10PM H001 T-9103 C 10
E.Q. PLAN CHEC
E.Q. PERMITS 3,019.50
PLAN MAINTENAN 60.39
EI RESIDENTIAL 72.80
FIRE HYDRANT I 2,288.00
ONE STOP 112.47
SCHOOL - RESID 12,525.24
TOTAL 18,261.24
CHECK 18,291.20
CRDSLP 29.96

90HO 06150

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date ______ Lic. Class ______ Lic. Number ______ Contractor ______ (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☑ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law).

☐ I am exempt under Sec. ______ B. & P. C. for this reason ______

Date 12/21/88 Owner's Signature 1st & Center Ltd. by [signature] general partner

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. ______ Insurance Company ______

☐ Certified copy is hereby furnished.
☐ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date ______ Applicant's Signature ______

Applicant's Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date 12/21/88 Applicant's Signature 1st & Center Ltd. by [signature] general partner

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed 1st & Center Ltd. by [signature] (Owner or agent having property owner's consent) | general partner (Position) | 12/21/88 (Date)

Bureau of Engineering — NO NEW DRIVEWAYS TO BE BUILT; NO DEDICATION; BUILDINGS TO PROPERTY LINE; IMP TO BE DETERMINED	ADDRESS APPROVED		
	DRIVEWAY		8-11-88
	HIGHWAY	X REQUIRED	CAF 8-11-88
	DEDICATION	X COMPLETED	Ken Ale 4/26/90
	FLOOD CLEARANCE		
SEWERS 129-217 C R88510023	X	SEWERS AVAILABLE	Scott 12/1/89
		NOT AVAILABLE X	Ken Redd 5-12-88
	X	SFC PAID C895117361	Scott 12/1/89
SFC NOT APPLICABLE		SFC DUE X	
Grading	PRIVATE SEWAGE SYSTEM APPROVED		
Conservation	APPROVED FOR ISSUE ☐ NO FILE ☐ FILE CLOSED ☐		
Fire	APPROVED (TITLE 19) (L.A.M.C.-5700)		E. Spruce 10-20-89
Housing	HOUSING AUTHORITY APPROVAL		
Planning K	APPROVED UNDER CASE # CUZ 83-319		Jim Persica 5/1/90
Traffic	APPROVED FOR		
Construction Tax	RECEIPT NO. G 158795	DWELLING UNITS 25	5-8-90

SD = RES 8029 × 1.56 = 12 525.24

LEGAL DESCRIPTION

* FIRE SPRINKLER TO PROVIDE EQUIV. FOR 1HR THROUGHOUT (I.E. TYPE III-1HR CONSTR.)

DIV. 88 RC-III WAREHOUSE (500#/occ.) TO A.I.R. (750#/occ.) – O.K.

BDM MODIF FOR PC-TIME EXT. PER P. WONG UNTIL 11/13/89

G. TAKAKI 5/1/90

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH

CUZ 83-319 TIME EXT. NOT REQ'D PER LETTER DATED 2-25-87 BY FRANK EBERHARD

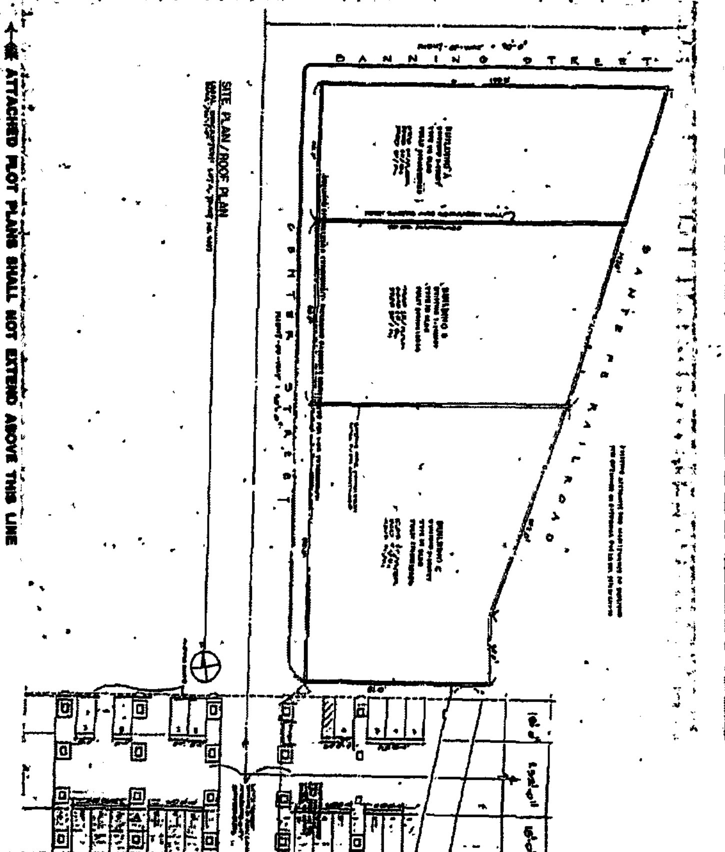
MAINTENANCE OF BLDG (AFF 55760) FOR OPENINGS @ EASEMENT PER.

INTERIOR PARTITION LAYOUT O.K. PER K. DEPPE 3-27-90

HANDICAP EXPENDITURE APPROVED BY Q. DIAZ 3-6-90

OK TO FIGURE VALUATION @ $12.00/□'

WHICH IS 80% OF ORIGINAL COST ESTIMATE ($15.00/□') K. Deppe 3-19-90



ATTACHED PLOT PLANS SHALL NOT EXTEND ABOVE THIS LINE

STATE OF CALIFORNIA, 2 4 0 0 1 6/5 0 3 5 1

COUNTY OF Los Angeles } ss.

On December 21, 1988 before me, the undersigned, a Notary Public in and for said State, personally appeared Norman S. Solomon

personally known to me or proved to me on the basis of satisfactory evidence to be the person___ who executed the within instrument as the general partner ~~[illegible]~~ of the partnership that executed the within instrument, and acknowledged to me that such partnership executed the same.

WITNESS my hand and official seal.

Signature Ellen I. Bressler

OFFICIAL SEAL
ELLEN I. BRESSLER
NOTARY PUBLIC - CALIFORNIA
LOS ANGELES COUNTY
My Comm. Expires Nov. 3, 1989

(This area for official notarial seal)

3 APPLICATION FOR INSPECTION — CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY — Earthquake Safety Division 0 0 3 6 — 460-Y

TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. LOT 'A' | BLOCK | TRACT 3187 | COUNCIL DISTRICT NO. 9 | DIST. MAP 129-B217 | CENSUS TRACT 2061.00

2. PRESENT USE OF BUILDING (22) Warehouse | NEW USE OF BUILDING ( ) same | ZONE M3-3

3. JOB ADDRESS 1001 E. 1st St. | FIRE DIST. Two

4. BETWEEN CROSS STREETS Center AND Railroad Tr. (L.A. River) | LOT TYPE Cor-thru

5. OWNER'S NAME Joel Bass, et al | PHONE 621-2579 | LOT SIZE Irreg

6. OWNER'S ADDRESS same | CITY | ZIP

7. ENGINEER | BUS. LIC. NO. | ACTIVE STATE LIC. NO. | PHONE | ALLEY

8. ARCHITECT OR DESIGNER Phillip R. Bates | BUS. LIC. NO. | ACTIVE STATE LIC. NO. C-2815 | PHONE 209 266-5636 | BLDG. LINE

9. ARCHITECT OR ENGINEER'S ADDRESS 270 N. First St., | CITY Fresno | ZIP 93702 | AFFIDAVITS ZI 223

10. CONTRACTOR Not Selected | BUS. LIC. NO. | ACTIVE STATE LIC. NO. | PHONE | AFF 55760

11. SIZE OF EXISTING BLDG. WIDTH 155 LENGTH 268 | STORIES 2 | HEIGHT 30 | NO. OF EXISTING BUILDINGS ON LOT AND USE 1-A.I.R. | ZA 82-292

12. CONST. MATERIAL OF EXISTING BLDG. | EXT. WALLS U.B.M. | ROOF Compos. | FLOOR Wood | ZA 83-319

13. JOB ADDRESS 1001 E. 1st St. | STREET GUIDE | DISTRICT OFFICE LA

14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING $ 268,000 | SEISMIC STUDY ZONE

15. NEW WORK (Describe) full compliance with Division 88 Rating Class III | GRADING | FLOOD | HWY. DED. | CONS.

NEW USE OF BUILDING SAME | SIZE OF ADDITION NONE | STORIES 2 | HEIGHT 30' | ZONED BY Collee Massabki

TYPE III-N | GROUP OCC. B-2 | FLOOR AREA | PLANS CHECKED Bill Humphreville | FILE WITH

DWELL UNITS | MAX OCC. N/C | TOTAL | APPLICATION APPROVED Bill Humphreville | TYPIST

GUEST ROOMS | PARKING REQ'D | PARKING PROVIDED STD. COMP. | INSPECTION ACTIVITY COMB. GEN. MAJ. S. CONS. | INSPECTOR

P.C. 736.95	G.P.I.	CONT. INSP. gunnite	J8190 2 12/10/84 751.69 CHTD
S.P.C.	P.M. 17.48	torque test	17.48 PLZM
B.P. 874.00	E.I. 18.76	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.	18.76 E.I.
I.F.	O.S.S. 14.74		30.00 OSS
O/S	S.D.S.S. 30.00		589.60 FIRE
DIST. OFFICE	Fire 589.60	SPRINKLERS REQ'D SPEC. N/C	874.00 ECB2
P.C. NO. B3362		ENERGY N/C	23892.DCR1
			47567 2 10/23/85 1529.84 CHTD

CASHIER'S USE ONLY

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date ______ Lic. Class ______ Lic. Number ______ Contractor ______ (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☒ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ______ B. & P. C. for this reason ______

Date 10/22/85 Owner's Signature X

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. ______ Insurance Company ______

☐ Certified copy is hereby furnished.

☐ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date ______ Applicant's Signature ______

Applicant's Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date 10/22/85 Applicant's Signature X

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

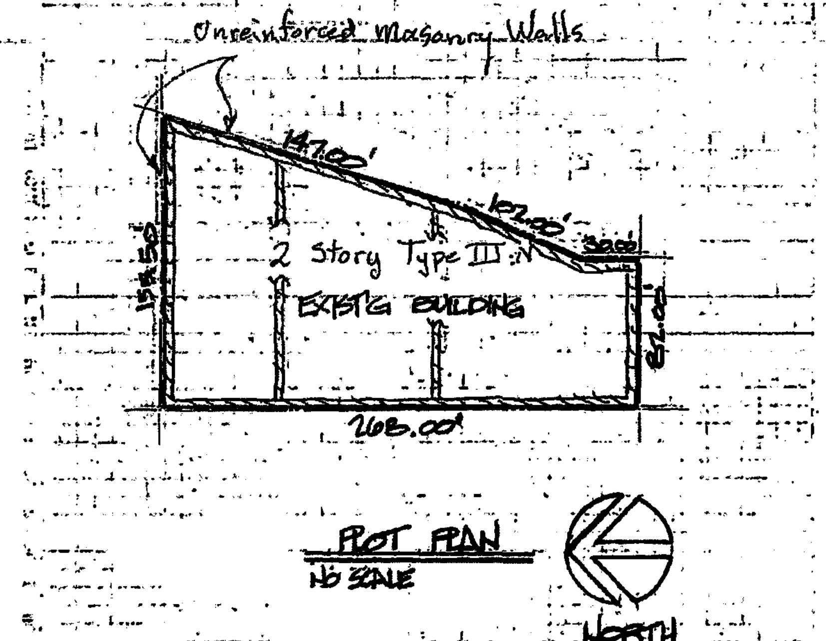
Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed X ______ (Owner or agent having property owner's consent) | Owner (Position) | 10/22/85 (Date)

0 9 9 0 0 7 0 0 0 8 7



3 APPLICATION FOR INSPECTION 1 3 Earthquake Safety Loan 460-Y 0 0 0 6 5 CITY OF LOS ANGELES DEPT. OF BUILDING AND SAFETY

TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR.	LOT A; BLOCK /; TRACT 3187; COUNCIL DISTRICT NO. 9	DIST. MAP 129-217; CENSUS TRACT 2061
2. PRESENT USE OF BUILDING	(22) Warehouse; NEW USE OF BUILDING (22) No change	ZONE M3-3
3. JOB ADDRESS	1001 E. 1st St.	FIRE DIST. TWO
4. BETWEEN CROSS STREETS	Center Street AND La River Bed	LOT TYPE Corner
5. OWNER'S NAME	Norm Solomon; PHONE 687-9600	LOT SIZE Irreg.
6. OWNER'S ADDRESS	921 E. 2nd St. #101; CITY LA; ZIP 90015	
7. ENGINEER	Jim Pajuhesh; BUS. LIC. NO.; ACTIVE STATE LIC. NO. SE 1860; PHONE 559-9930	ALLEY /
8. ARCHITECT OR DESIGNER	BUS. LIC. NO.; ACTIVE STATE LIC. NO.; PHONE	BLDG. LINE /
9. ARCHITECT OR ENGINEER'S ADDRESS	9430 Washington Blvd.#5; CITY C.C; ZIP 90230	AFFIDAVITS CCPD 55760
10. CONTRACTOR	NS; BUS. LIC. NO.; ACTIVE STATE LIC. NO.; PHONE	
11. SIZE OF EXISTING BLDG.	WIDTH 156 LENGTH 268; STORIES 2; HEIGHT 25; NO. OF EXISTING BUILDINGS ON LOT AND USE 1 - Warehouse	P.C. REQ'D No
12. CONST. MATERIAL OF EXISTING BLDG.	EXT. WALLS URM; ROOF Wood; FLOOR Slab/Wood	
13. JOB ADDRESS	1001 E. 1st St.; STREET GUIDE	DISTRICT OFFICE LA
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING	$500,000.00	SEISMIC STUDY ZONE –
15. NEW WORK (Describe)	FULL COMPLIANCE WITH DIV. 88, Risk Class III A (X WALLS). No additional floor area	GRADING /; FLOOD /; HWY. DED. Yes; CONS. /

NEW USE OF BUILDING No change	SIZE OF ADDITION –	STORIES / HEIGHT 25'	ZONED BY J.H.
TYPE III N; GROUP OCC. B2	FLOOR AREA 77000 sf. TOTAL	PLANS CHECKED C. Kumabe	FILE WITH /
DWELL UNITS; MAX OCC. /		APPLICATION APPROVED [signature]	TYPIST
GUEST ROOMS /; PARKING REQ'D /	PARKING PROVIDED STD. / COMP. /	INSPECTION ACTIVITY COMB / GEN. / MAJ.S. / CONS. / E.Q.	INSPECTOR

B&S B-3 (R 5.85)

P.C. 1,235.90	G.P.I. /	CONT. INSP. Conc. f'c 2000; Brique test anchor bolts	
S.P.C. –	P.M. 29.08		
1454.00	E.I. 35.00	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.	
I.F. /	F.H. 1100.00		
O/S /	O.S.S. 24.72		
DIST. OFFICE LA	S.O.S.S. 52.36	SPRINKLERS REQ'D SPEC. No	
P.C. NO. C 2356	C/O /	ENERGY No	

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

CASHIER'S USE ONLY:
C 1235.90 EQPC
C 24.72 OSS
E3986 3 08/06/86 1260.62 CHTD
1454.00 EQBB
A6202 8.11 1/20/86 2670.44 CHTD
29.08 P/M LA51295
35.00 E.I.
52.36 OSS
1100.00 FIRE

DECLARATIONS AND CERTIFICATIONS

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Date ______ Lic. Class ______ Lic. Number ______ Contractor ______ (Signature)

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☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☒ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ______, B. & P. C. for this reason ______

Date 11/20/86 Owner's Signature X [signature] for the partnership

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. ______ Insurance Company ______

☐ Certified copy is hereby furnished.

☐ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date ______ Applicant's Signature ______

Applicant's Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date 11/20/86 Applicant's Signature X [signature] for the partnership

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

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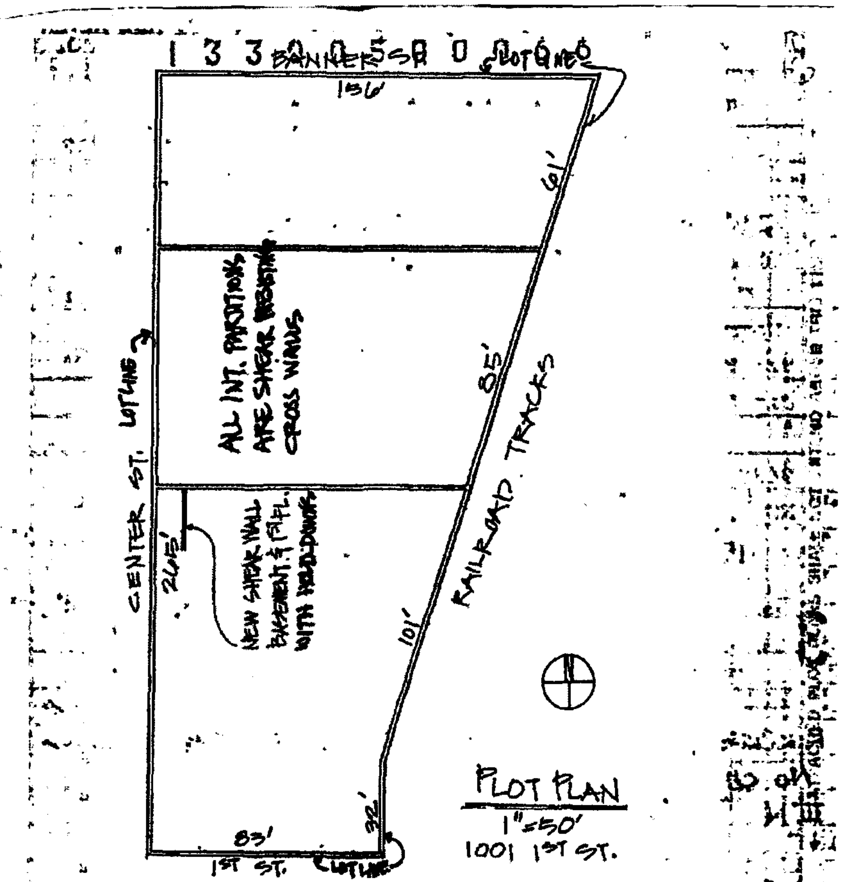
Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer, or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein, or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed X [signature] (Owner or agent having property owner's consent) — for the partnership (Position) — 11/20/86 (Date)



BANNER
LOT LINE
156'
61'
85'
101'
32'
83'
ALL INT. PARTITIONS ARE SHEAR RESISTING CROSS WALLS
NEW SHEAR WALL BASEMENT & 1ST FL. WITH HOLDDOWNS
24'6"
CENTER ST. LOT LINE
RAILROAD TRACKS
1ST ST. LOT LINE
PLOT PLAN
1"=50'
1001 1ST ST.

1 3 3 0 0 5 0 0 0 6 7

STATE OF CALIFORNIA
COUNTY OF Los Angeles } SS.

On November 20, 1986 before me, the undersigned, a Notary Public in and for said County and State, personally appeared Norman S. Solomon, known to me to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same.

Ellen I. Bressler

SAFECO

FOR NOTARY SEAL OR STAMP

OFFICIAL SEAL
ELLEN I. BRESSLER
NOTARY PUBLIC - CALIFORNIA
LOS ANGELES COUNTY
My Comm. Expires Nov. 3, 1989

Misc.-166 (G.S.) Ack. Individual (Rev. 9-68)

Staple

Staple

3 APPLICATION FOR INSPECTION — CITY OF LOS ANGELES — DEPT OF BUILDING AND SAFETY — TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR.	LOT: A; BLOCK: /; TRACT: 3187; COUNCIL DISTRICT NO: 1
DIST MAP	129-217
CENSUS TRACT	2061
2. PRESENT USE OF BUILDING	(22 Warehouse
NEW USE OF BUILDING	( ) no change
ZONE	M3-3
3. JOB ADDRESS	1001 E 1st St
FIRE DIST	Two
4. BETWEEN CROSS STREETS	Center St AND LA River bed
LOT TYPE	corner
5. OWNER'S NAME	Norm Solomon Partnership
LOT SIZE	Irreg
6. OWNER'S ADDRESS	921 E. 2nd St #101; CITY: LA
7. ENGINEER	Jim Pajuhesh; ACTIVE STATE LIC NO: SE 1860; PHONE: 550-9930
ALLEY	/
8. ARCHITECT OR DESIGNER	~~9430~~; ACTIVE STATE LIC NO: same
BLDG. LINE	/
9. ARCHITECT OR ENGINEER'S ADDRESS	9430 Washington Bl-Culver; ZIP: 90230
AFFIDAVITS	CCPD 55760
10. CONTRACTOR	KING WIRE; BUS LIC NO: 410475; PHONE: (213)256-4848
11. SIZE OF EXISTING BLDG	WIDTH 156 LENGTH 268; STORIES 2; HEIGHT 25; NO OF EXISTING BUILDINGS ON LOT AND USE: 1 — Warehouse
PC REQ'D	No (e)
12. CONST MATERIAL OF EXISTING BLDG	EXT WALLS: URM; ROOF: wood; FLOOR: slab/wood
13. JOB ADDRESS	1001 E. 1st St
STREET GUIDE	
DISTRICT OFFICE	LA
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING	$ ~~500,000.00~~
SEISMIC STUDY ZONE	—
15. NEW WORK (Describe)	Full Compliance with Div. 88 Risk Class IIIA (X wall) ~~No additional~~ record; change contractor
GRADING / FLOOD	— / —
HWY DED. / CONS.	Yes / —
NEW USE OF BUILDING	no change
SIZE OF ADDITION	—
STORIES / HEIGHT	1 / 25
ZONED BY	J.H.
TYPE	IIIN
GROUP OCC	B-2
FLOOR AREA	77,000 Sf
PLANS CHECKED	C. Rumabe
FILE WITH	FWFWLA51295
DWELL UNITS	0
MAX OCC	
APPLICATION APPROVED	[signature]
TYPIST	
GUEST ROOMS	0
PARKING REQ'D	N/C
PARKING PROVIDED	STD N/C COMP
INSPECTION ACTIVITY	COMB / CEN / MAJS / CONS / EQ
INSPECTOR	

PC: 0	GPI: /	CONT INSP: 46 ZCCO torque test	
SPC: /	PM: 6.00		
BP: 20.00	EI: .50	Claims for refund of fees paid on permits must be filed 1. Within one year from date of payment of fee or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B & S SECTIONS 22.12 & 22.13 LAMC	
IF: /	FH: /		
O/S: /	OSS: 1.00		
DIST OFFICE: LA	SOSS	SPRINKLERS REQ'D SPEC: No	
PC NO: 610297	CO: /	ENERGY: No	

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED

CASHIER'S USE ONLY: 20.00 BP-E; 6.00 PL/M; .50 EI; 0 796 [illegible] 27.50 CHTD; 1.00 OSS; 0796 (5) 12-26-86; LA 53835

B&S B-3 (R 5.86)

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 12/12/86 Lic. Class C23 C5/ Lic. Number 410475 Contractor KING WIRE (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code. Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code. The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code. The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ______, B. & P. C. for this reason ______

Date ______ Owner's Signature ______

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.)

Policy No 674456-86 Insurance Company STATE COMP. INSURANCE FUND

☑ Certified copy is hereby furnished.

☐ Certified copy is filed with the Los Angeles City Dept. of Bldg & Safety.

Date 12/12/86 Applicant's Signature [signature] exp 2/1/87

Applicant's Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date ______ Applicant's Signature ______

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed [signature] (Owner or agent having property owner's consent) Contractor Position 12/12/86 Date

3 APPLICATION FOR INSPECTION | 3 CITY OF LOS ANGELES DEPT. OF BUILDING AND SAFETY Earthquake Safety Division 460-Y | 3 TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. LOT A | BLOCK -- | TRACT 3187 | COUNCIL DISTRICT NO. 1 | DIST. MAP 129-217 | CENSUS TRACT 2061

2. PRESENT USE OF BUILDING (22) Warehouse | NEW USE OF BUILDING (22) same | ZONE M3-3

3. JOB ADDRESS 1001 E. 1st St. | FIRE DIST. TWO

4. BETWEEN CROSS STREETS Centre St. AND La River Bed | LOT TYPE Corner

5. OWNER'S NAME Norm Solomon PHONE 687-9600 | LOT SIZE Irreg.

6. OWNER'S ADDRESS 921 E. 2nd St.#101 CITY LA ZIP 90012

7. ENGINEER J. Pajuhesh BUS. LIC. NO. ACTIVE STATE LIC. NO. SE 1860 PHONE 559-9930 | ALLEY --

8. ARCHITECT OR DESIGNER BUS. LIC. NO. ACTIVE STATE LIC. NO. PHONE | BLDG. LINE --

9. ARCHITECT OR ENGINEER'S ADDRESS 9430 Washington Blvd.#5, CITY Culver City ZIP 90230 | AFFIDAVITS CCPD 55760

10. CONTRACTOR King Wire BUS. LIC. NO. 410475 ACTIVE STATE LIC. NO. PHONE 256-4848

11. SIZE OF EXISTING BLDG. WIDTH 156 LENGTH 268 | STORIES 2 | HEIGHT 25' | NO. OF EXISTING BUILDINGS ON LOT AND USE 1 warehouse | P.C. REQ'D No (E)

12. CONST. MATERIAL OF EXISTING BLDG. → EXT. WALLS URM | ROOF Wood | FLOOR Wood/Conc.

3 13. JOB ADDRESS 1001 E. 1st St. | STREET GUIDE | DISTRICT OFFICE LA

14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING PC - $30,000.00 BP - $ 201.00 | SEISMIC STUDY ZONE

15. NEW WORK (Describe) Detail change for full compliance on permit #86/LA51295 | GRADING | FLOOD | HWY. DED. Yes | CONS.

NEW USE OF BUILDING nochange | SIZE OF ADDITION None | STORIES 2 | HEIGHT 25' | ZONED BY J.H.

TYPE III-N | GROUP OCC. B-2 | FLOOR AREA 77,000 | PLANS CHECKED C. Kumabe | FILE WITH 86LA51295

DWELL UNITS -- | MAX OCC. -- | TOTAL | APPLICATION APPROVED | TYPIST

GUEST ROOMS -- | PARKING REQ'D -- | PARKING PROVIDED STD. -- COMP. | INSPECTION ACTIVITY COMB | GEN. | MAJS. | CONS. | (ED) | INSPECTOR

B&S B-3 (R 8.85)

P.C. 152.15	S.P.I.	CONT. INSP. --
S.P.C. --	P.M. 6.00	
B.P. 20.00	E.I. .50	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.
50	F.H.	
O/S	O.S.S. 3.57	
DIST. OFFICE LA	S.D.S.S.	SPRINKLERS REQ'D SPEC. No
P.C. NO. C 6443	C/O	ENERGY No

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

CASHIER'S USE ONLY

C 152.15 EQPC
C 20.00 EQBP
C 6.00 PL/M
C .50 E.I.
C 3.57 OSS.
556 50 DOal
K2863 3 01/22/87 182:22 CATO

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 1/21/87 Lic. Class ______ Lic. Number 410475 Contractor ______ (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ______, B. & P. C. for this reason ______

Date ______ Owner's Signature ______

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. 714456-86 Insurance Company State Compensation Ins. Fund

☐ Certified copy is hereby furnished.

☑ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date 1/21/87 Applicant's Signature ______

Applicant's Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date ______ Applicant's Signature ______

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed ______ (Owner or agent having property owner's consent) Contractor (Position) 1/21/87 (Date)

All Applications Must be Filled Out by Applicant

Bldg.Form 3

BUILDING DIVISION

PLANS AND SPECIFICATIONS and other data must also be filed

3

DEPARTMENT OF BUILDING AND SAFETY

Application to Alter, Repair or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:
Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.
Second: That the permit does not grant any right of privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or preclude any claim of title to, or right of possession in, the property described in such permit.

	REMOVED FROM	REMOVED TO
TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor	Lot A portion of Block V	Lot ... Block ...
	Tract "Aliso"	Tract
	Book 4 - Pages 12 and 13	
CITY CLERK PLEASE VERIFY	Misc. Records	
TAKE TO FIRST FLOOR 242 SO. BROADWAY	Book 10 Page 12&13 F. B. Page Misc.	Book ... Page ... F. B. Page ...
ENGINEER PLEASE VERIFY	From No. 1001 East First Street-NE Corner of Center Street	
	To No. ... Street	

O. K. City Clerk By ... Deputy

O. K. City Engineer By ... Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Warehouse
2. What purpose will Building be used for hereafter? Warehouse
3. Owner's name Walter S. Lysle Phone TR 7178
4. Owner's address 1001 East First Street
5. Architect's name Richards-Neustadt Construction Company Phone TU 8964
6. Contractor's name Richards-Neustadt Construction Co. Phone TU 8964
7. Contractor's address 701 W. M. Garland Building
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 46.00
9. Class of present Building "C" No. of rooms at present 4
10. Number of stories in height 2 Size of present Building 80 x 150
11. State how many buildings are on this lot One
12. State purpose buildings on lot are used for Warehouse (Apartment House, Hotel, Residence, or any other purpose.)

What Zone is Property In? C

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

Brick up door opening on First Street side of Building

First Floor Exterior opening

No Structural changes

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER

(Sign here) W. S. Lysle (Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	Stamp here when permit is issued
19161	Plan Examiner	Clerk	ISSUED JUL 5 1928

No Plans Over

13. Size of new addition ..... None ..... No. of Stories in height .....

14. Material of foundation ..... Size footings ..... Size wall ..... Depth below ground .....

15. Size of Redwood Mudsills ..... x ..... Size of interior bearing studs ..... x .....

16. Size of exterior studs ..... x ..... Size of interior non-bearing studs ..... x .....

17. Size of first floor joists ..... x ..... Second floor joists ..... x .....

18. Will all provisions of State Housing Act be complied with? .....

I have carefully examined and read the above blank and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

(Sign here) ..... (Owner or Authorized Agent)

FOR DEPARTMENT USE ONLY

APPLICATION	O. K.
CONSTRUCTION	O. K.
ZONING	O. K.
SET-BACK LINE	O. K.
ORD. 33761 (N. S.)	O. K.
FIRE DISTRICT	O. K.

REMARKS

OK for permit

J R Limer

All Applications Must be Filled Out by Applicant

Bldg. Form 3

PLANS AND SPECIFICATIONS and other data must also be filed

3

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

Application to Alter, Repair or Demolish

To the Board of Public Works of the City of Los Angeles:
Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.
Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor CITY CLERK PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot A Block	Lot 4 Block
Tract 3187	Tract 3187
Book 4 Pages 12 & 13	
Misc. Records	
Book 5 Page 6-5 F. B. Page 43	Book 5 Page 6-5 F. B. Page 43

O. K. City Clerk By Swanson Deputy

TAKE TO ROOM No. 405 SOUTH ANNEX ENGINEER PLEASE VERIFY

TAKE TO FIRST FLOOR 242 SO. BROADWAY

From No. 1001 East 1st Street corner Center Street

To No. N. E. Cor Center Street

O. K. City Engineer By [illegible] Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? ~~Not being used~~ Lt Mfg—
2. What purpose will Building be used for hereafter? light manufacturing
3. Owner's name Walter S. Lysle Phone Tr. 8651
4. Owner's address University Club
5. Architect's name Richards-Neustadt Construction Co. Phone Main 5140
6. Contractor's name " " " " Phone " "
7. Contractor's address 519 National City Bank Bldg.
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 8500.00
9. Class of present Building C No. of rooms at present 4
10. Number of stories in height 2 Size of present Building 268 x 82 to 156
11. State how many buildings are on this lot 1
12. State purpose buildings on lot are used for
(Apartment House, Hotel, Residence, or any other purpose.)

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

1xC all sub floor & Factory Maple new floor. 2 stories only
tear off old wood flooring - ~~put on a new double floor with 2 layers of asbestos between.~~ Resurface old concrete floor. Modernize the electric lighting system - install new plumbing - ~~move elevator.~~
No structural changes. Elevator to remain same
a.s.l.

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER

RICHARDS-NEUSTADT CONSTRUCTION CO.

(Sign here) D W Mc
(Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	Stamp here when permit is issued.
36142 ~~36418~~ ~~[illegible]~~ 36142	S V Finley 10/21/25 Plan Examiner	10/21/25 ZE 11050 Price Clerk	OCT 21 1925

So Remey 1 A 1700

13. Size of new addition..............x..............No. of Stories in height..............

14. Material of foundation..............Size footings..............Size wall..............Depth below ground..............

15. Size of Redwood Mudsills..............x..............Size of interior bearing studs..............x..............

16. Size of exterior studs..............x..............Size of interior non-bearing studs..............x..............

17. Size of first floor joists..............x..............Second floor joists..............x..............

18. Will all provisions of State Housing Act be complied with?..............

I have carefully examined and read the above blank and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

RICHARDS-NEUSTADT CONSTRUCTION CO.

(Sign here)..............
(Owner or Authorized Agent)

FOR DEPARTMENT USE ONLY

APPLICATION	O. K. SWF
CONSTRUCTION	O. K.
ZONING	O. K.
SET-BACK LINE	O. K.
ORD. 33761 (N. S.)	O. K.
FIRE DISTRICT	O. K. SWF

REMARKS

1001 E 1st St

Permit #: **12041 - 90000 - 22482**

Plan Check #: Printed: 09/20/12 01:53 PM

Event Code:

Electrical
Special Equipment
Express Permit
No Plan Check

City of Los Angeles - Department of Building and Safety

APPLICATION FOR ELECTRICAL PLAN CHECK AND INSPECTION

Issued On: 09/20/2012
Last Status: Issued
Status Date: 09/20/2012

1. PROPERTY OWNER

L A CITY · 1149 BROADWAY 610 LOS ANGELES CA 90012

2. APPLICANT INFORMATION (Relationship: Not Applicant)

JILL PAULOS 4462 CORPORATE CENTER LOS ALAMITOS, CA 90720 (714) 828-7000

3. TENANT INFORMATION

4. CONTRACTOR, ARCHITECT, & ENGINEER NAME	ADDRESS	CLASS	LICENSE #	PHONE #
(C) K D C INC	4462 CORPORATE LOS ALAMITOS, CA 90720	C10	550173	(714) 828-7000

5. APPLICATION COMMENTS

E-Permit paid by credit card, fax number-> (714)484-2394.

6. DESCRIPTION OF WORK

Temporary 100amp service pole for jobsite trailer.

7. CHECKLIST ITEMS:

8. COUNCIL DISTRICT: 9

For inspection requests, call toll-free **(888) LA4BUILD (524-2845)**. Outside LA County, call (213) 482-0000 or request inspections via **www. ladbs.org.** To speak to a Call Center agent, call **311** or (866) 4LACITY (452-2489). Outside LA County, call (213) 473-3231.

9. APPLICATION PROCESSING INFORMATION

Plan Check By:

OK for Cashier:

Signature:______________________ Date:____________

For Cashier's Use Only **W/O #: 24122482**

NOTICE:
The work included in this permit shall not be construed as establishing the legal number of dwelling units or guest rooms. That number is established by a Building Permit or a Certificate of Occupancy. In the event that any box (i.e. 1-10) is filled to its capacity, it is possible that additional information has been captured electronically and could not be printed due to space restrictions. Nevertheless, the information printed exceeds that required by Section 19825 of the Health and Safety Code of the State of California

1001 E 1st St
12041 - 90000 - 22482

10. FEE INFORMATION **Inspection Fee Period**

Permit Fee: **59.40**

INSPECTION TOTAL Electrical	59.40
Permit Total	59.40
Permit Fee Subtotal Electrical	55.00
Permit One Stop Surcharge	1.10
Permit Sys. Development Surcharge	3.30
Permit Issuing Fee	0.00

Payment Date: 09/20/12
Receipt No: ON2700
Amount: $59.40

11. FEE ITEM INFORMATION

SERVICES

Services 0-200 Amp	(1)	16.00

PERMIT EXPIRATION/REFUNDS : This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inspection within 60 days of receiving a request for final inspection (HS 17951).

12. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. The following applies to B contractors only: I understand the limitations of Section 7057 of the Business and Professional Code related to my ability to take prime contracts or subcontracts involving specialty trades.

License Class: **C10** License No.: **550173** Contractor: **K D C INC**

13. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations

( ) I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

(X) I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: **AMERICAN CSLTY. CO. OF READING** Policy Number: **WC2095786618**

(_) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

14. ASBESTOS REMOVAL DECLARATION / LEAD HAZARD WARNING

I certify that notification of asbestos removal is either not applicable or has been submitted to the AQMD or EPA as per section 19827.5 of the Health and Safety Code. Information is available at Lead safe construction practices are required when doing repairs that disturb paint in pre-1978 buildings due to the presence of lead www.aqmd.gov (909) 396-2336 and the notification form at per section 6716 and 6717 of the Labor Code. Information is available at Health Services for LA County at (800) 524-5323 or the State of California at (800) 597-5323 or www.dhs.ca.gov/childlead

15. CONSTRUCTION LENDING AGENCY DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code).

Lender's Name (If Any): ________ Lender's Address: ________

16. FINAL DECLARATION

I certify that I have read this application **INCLUDING THE ABOVE DECLARATIONS** and state that the above information **INCLUDING THE ABOVE DECLARATIONS** is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not authorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

By signing below, I certify that:

(1) I accept all the declarations above namely the Licensed Contractor's Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration / Lead Hazard Warning, Construction Lending Agency Declaration, and Final Declaration; and

(2) This permit is being obtained with the consent of the legal owner of the property

Print Name: **JILL PAULOS** Sign: **Internet e-Permit System Declaration** Date: **09/20/2012** [X] Contractor [ ] Authorized Agent

EXPRESS PERMIT INSPECTION RECORD

CITY LA DBS
DEPARTMENT OF BUILDING AND SAFETY

Your feedback is important. Please visit our website to complete a Customer Survey at **www.ladbs.org/LADBSWeb/customer-survey.jsf**. If you would like to provide additional feedback, need clarification, or have any questions regarding plan check or inspection matters, please call our Customer Hotline at (213) 482-0056.

For use by cashier only

Payment Date: 09/20/12
Receipt No: ON2700
Amount: $59.40
Method: Credit Card

PERMIT #: 12041 - 90000 - 22482
ADDRESS: 1001 E 1st St
OWNER: L A CITY
1149 BROADWAY 610
LOS ANGELES CA 90012

Electrical
Special Equipment
Express Permit
No Plan Check

JOB DESCRIPTION: Temporary 100amp service pole for jobsite trailer.

INSPECTION RECORDS AND PLANS MUST BE AVAILABLE DURING INSPECTION

GRADING INSPECTIONS		
TYPE	DATE	INSPECTOR
Initial Grading		
Toe or Bottom		
Soils Report Approved		
DO NOT PLACE FILL UNTIL ABOVE IS SIGNED		
Backfill		
Fill		
Excavation		
Drainage Devices		
Rough Grading		
Approved Compaction Report		
FOOTING INSPECTIONS		
Footing Excavation		
Forms		
Reinforcing Steel		
OK to Place Concrete		
GROUNDWORK INSPECTIONS		
Electrical		
Plumbing		
Plumbing Methane		
Gas Piping		
Heating & Refrigeration		
Fire Sprinklers		
Disabled Access		
Methane		
OK to Place Floor		
DO NOT PLACE FLOOR UNTIL ABOVE IS SIGNED		
ROUGH INSPECTIONS		
Green Code		
Electrical		
Plumbing		
Fire Sprinkler		
Heating & Refrigeration		
Roof Sheathing		
Disabled Access		
Framing		
Insulation		
Suspended Ceiling		
OK to Cover		

DO NOT COVER UNTIL PREVIOUS IS SIGNED		
TYPE	DATE	INSPECTOR
Exterior Lathing		
Interior Lathing		
Drywall		
DO NOT COVER UNTIL ABOVE IS SIGNED		
WORK OUTSIDE OF THE BUILDING		
Electrical Underground		
Gas		
Heating & Refrigeration		
Sewer		
Disabled Access		
POOL INSPECTIONS		
Excavation		
Reinforcing Steel		
Bonding		
Piping		
Pre-Gunite		
Deck		
Enclosure/Fence		
Pool/Spa Cover		
DO NOT FILL POOL UNTIL ABOVE IS SIGNED		
FINAL INSPECTIONS		
Grading		
Electrical		
Plumbing		
Gas Test		
Gas		
Heating & Refrigeration		
Pressure Vessels		
Elevator		
Fire Sprinkler		
Disabled Access		
Green Building		
LAFD (Title 19 only)		
LAFD Fire Life Safety		
Pool Final		
AQMD Sign-off Provided		
Public Works		
Building		
PROJECT FINAL		

FOR INSPECTION REQUESTS, PLEASE CALL
3-1-1 OR OUTSIDE CITY OF LOS ANGELES
888-LA4-BUILD (888)524-2845 or www.ladbs.org

Certificate of Occupancy Required ☐ YES ☐ NO

B-8 Card rev 042011 RO

SUPPLEMENTAL NOTES:

IMPORTANT NOTICE

- **Prior to the start of any construction work adjacent to any public way, pedestrian protection shall be provided (Sec. 91.3303 L.A.M.C.).**
- Inspection(s) may be requested anytime via the internet or touch tone phone. To request an inspection via the internet, go to www.ladbs.org and click on "Request an Inspection" under Online Services. To request an inspection via touch tone phone, call toll free (888) LA4BUILD (888-524-2845) and select option 1 for Automated Request System. To request an inspection via the Customer Call Center, call 3-1-1 within the City of Los Angeles or (213) 473-3231 outside the City of Los Angeles between 7:00 a.m. and 10:00 p.m. When requesting an inspection, the following are required: (1)The job address, (2)Type of inspection, (3)Use of building, (4)Permit number, (5)Phone number of a contact person should the department need to reach someone.
- Inspection requests received before 4:00 p.m. Monday through Friday (excluding holidays) will normally be made the next business day. Requests received after 4:00 p.m. will be made following the next business day. The Automated Inspection Call Back System (AICBS) will attempt to telephone the contact phone number to confirm the Inspection.
- Permit fees provide for a limited number of inspections. A reinspection fee may be assessed when the work for which an inspection was requested is not complete, when the inspection record or plans are not available, or when there is failure to provide site access to department staff.
- No person shall perform any construction or repair work between the hours of 9:00 p.m.(6:00 p.m. grading) and 7:00 a.m. the following day which results in loud noises to the disturbance of persons occupying sleeping quarters in any dwelling , hotel, motel, apartment, or other place of residence (Sec. 41.40 L.A. M.C.).
- No person, other than an individual homeowner engaged in the repair or construction of his/her single-family dwelling, shall perform any construction or repair work of any kind upon any building or structure located on land developed with residential buildings or perform work within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on any Saturday or at any time on Sunday (Sec. 41.40 L.A M.C.).
- Dust control measures to prevent dust from being blown or deposited over or upon any private property in any residential area must be implemented during any excavation or earth-moving phase of construction, sand blasting , or demolition.
- A separate permit from the State of California Division of Industrial Safety is required prior to starting certain work involving substantial risk to workers such as: construction or demolition exceeding 3 stories or 36 feet in height, or excavations or trenches over 5 feet in depth involving entry by workers.
- Building permits are valid for two years or expire on the 180th day from the date of issuance if the work permitted has not commenced. The department reserves the right to expire any permit where work has been suspended for a period of 180 days or more.
- Inspection services will not be provided when there is an unleashed dog on the premises.

BUILDING AND SAFETY PERMIT AND PLAN CHECK OFFICE LOCATIONS

Downtown Los Angeles
201 N. Figueroa St., 4th Fl.
Los Angeles, CA 90012

Van Nuys
6262 Van Nuys Blvd., 2nd Fl.
Van Nuys, CA 91401

West Los Angeles
1828 Sawtelle Blvd., 2nd Fl.
Los Angeles, CA 90025

San Pedro
638 S. Beacon St., 2nd Fl.
San Pedro, CA 90731

South Los Angeles
8475 S. Vermont Ave., 2nd Fl.
Los Angeles, CA 90044

3

APPLICATION TO ALTER, REPAIR OR DEMOLISH AND FOR A Certificate of Occupancy

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Lot No.

Tract

Location of Building 1001 East First St.
(House Number and Street)

Approved by City Engineer

Between what cross streets Center St. & Santa Fe Tracks

Deputy.

USE INK OR INDELIBLE PENCIL

1. Present use of building Warehouse (Store, Dwelling, Apartment House, Hotel or other purpose) Families — Rooms
2. State how long building has been used for present occupancy at least 20 years
3. Use of building AFTER alteration ~~or moving~~ same Families Rooms
4. Owner Walter S. Lysle (Print Name) Phone
5. Owner's Address 1001 E. 1st St. P. O. L. A.
6. Certificated Architect L. A. Parker State License No. B-453 Phone MU-6050
7. Licensed Engineer Same State License No. Phone
8. Contractor Owner State License No. Phone
9. Contractor's Address
10. VALUATION OF PROPOSED WORK. (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein, or thereon.) $ 600 00
11. State how many buildings NOW on lot and give use of each. One Warehouse (Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building 125 x 150 Number of stories high 2 Height to highest point 31
13. Material Exterior Walls Brick (Wood, Steel or Masonry) Exterior framework Brick (Wood or Steel)
14. Describe briefly all proposed construction and work:
    Increase size of present door to new size shown.
    EXISTING OPENING 1 12

NEW CONSTRUCTION

15. Size of Addition x Size of Lot x Number of Stories when complete
16. Footing: Width Depth in Ground Width of Wall Size of Floor Joists x
17. Size of Studs x Material of Floor Size of Rafters x Type of Roofing

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

Sign here Walter S. Lysle (Owner or Authorized Agent)

By [signature]

FOR DEPARTMENT USE ONLY

PLAN CHECKING	REINFORCED CONCRETE	FEES	
Date MAR 22 1949 Receipt No. 6653 Valuation $ 600 Fee Paid $ 2 00	Bbls. Cement Tons of Reinforcing Steel		Bldg Per. Cert. of Occupancy Total 4.00

TYPE	GROUP	Maximum No. Occupants	Inside Lot / Corner Lot	Key Lot / Corner Lot Keyed	Lot size	Feet setback / Ft. side yard / Cash
I-A	G-1					

PERMIT No. 1A12779	Plans and Specifications checked Correction Verified [signature]	Zone M-3 Bldg. Line Ft. Application checked and approved [signature]	Fire District No. 2 Street Widening Ft.	District Map No. Stamp here when Permit is Issued
PLANS	Plans, Specifications and Application rechecked and approved [signature]	Clerk	SPRINKLER Specified—Required Valuation Included Yes — No	MAR 22 1949
Bond	Arr Plans Rec. X	Filed with X		Inspector Katz

3 APPLICATION FOR INSPECTION 1 7 7 0 2 0 0 2 9 1

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR.	LOT: A; BLOCK: ; TRACT: 3187; CITY CLERK REF. NO.:	DIST. MAP 129-217; CENSUS TRACT 2061
2. PRESENT USE OF BUILDING	(05) AIR (Mark in Zonder) ; NEW USE OF BUILDING (05) same	ZONE M3-3
3. JOB ADDRESS	1001 E 1st Street ; SUITE/UNIT NO.	FIRE DIST. 2; COUN. DIST. 9
4. BETWEEN CROSS STREETS	Center Street AND L.A. River Bed	LOT TYPE corner
5. OWNER'S NAME	Norm Solomon ; BUILDING 213 687 9600 ; PHONE	LOT SIZE irreg
6. OWNER'S ADDRESS	921 E 2nd st L.A. ; CITY ; ZIP	
7. ENGINEER	Jim Pajuhesh ; BUS. LIC. NO. None ; ACTIVE STATE LIC. NO. SE1860 ; PHONE	ALLEY —
8. ARCHITECT OR DESIGNER	—— ; BUS. LIC. NO. ; ACTIVE STATE LIC. NO. ; PHONE	BLDG. LINE
9. ARCHITECT OR ENGINEER'S ADDRESS	9430 Washington ; CITY ; ZIP	DOCUMENTS/EASEMENTS
10. CONTRACTOR	owner ; BUS. LIC. NO. N/A ; ACTIVE STATE LIC. NO. ; PHONE	CCPD
11. SIZE OF EXISTING BLDG.	WIDTH 156 LENGTH 268 ; STORIES 2 ; HEIGHT ; NO. OF EXISTING BUILDINGS ON LOT AND USE: One AIR	55760; Z0117 FR; Z1724 FR
12. FRAMING MATERIAL OF EXISTING BLDG.	EXT. WALLS URM ; ROOF WOOD ; FLOOR CONC	
13. JOB ADDRESS	1001 E. 1st Street ; SUITE/UNIT NO.	
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING	$ 2,000	DIST. OFF. L.A.; P.C. REQ'D
15. NEW WORK (Describe)	Convert existing window opening into door opening/add roll up door @ west elevation.	GRADING; SEISMIC; HWY. DED. yes; FLOOD

NEW USE OF BUILDING (05) AIR	SIZE OF ADDITION	STORIES	HEIGHT	FILE WITH
TYPE	GROUP OCC.	MAX OCC.	BUILDING / ZONING PLANS CHECKED: Frank Rosas	ISSUED BY 9/10/93
DWELL UNITS	BUILDING AREA	ZONING AREA	APPLICATION APPROVED: Frank Rosas 99660	TYPIST Ldr
GUEST ROOMS	PARKING REQ'D	PARKING PROVIDED S C NC	INSPECTION ACTIVITY: CS / GEN. / MAJ. S. / EQ.	INSPECTOR

P.C. 35.70	G.P.I. + NP —	CONT. INSP. No
S.P.C.	P.M. —	
B.P. 42.00	850	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.
I.F. —	F.H. —	
S.D. —	O.S.S. yes	
ISS. OFF. HO	S.O.S.S. —	SPRINKLERS REQ'D SPEC. No
P.C. NO. CC	C/O —	ENERGY No ; GAS No

SYS yes ; SSYS

B & S 08-B-3 (R.7/90)

CASHIER'S USE ONLY

9/10/93 01:47:50PM W031 T-2008 C 26
BLDG PLAN CHEC 35.70
BLDG PERMIT CO 42.00
INVOICE # 0099660 BB
EI COMMERCIAL 0.50
SYS DEV 4.69
ONE STOP 1.56
TOTAL 84.45
CHECK 84.45

Unless a shorter period of time has been established by an official action, plan check approval expires one year after the fee is paid and this permit expires two years after the fee is paid or 180 days after the fee is paid if construction is not commenced

NEW AFFIDAVITS None

PLAN CHECK EXTENDED TO ______ PER

ADMINISTRATIVE APPROVAL DATED N/A

BY ______

D.A.D. PLANS CHECKED N/A

HOUSING MITIGATION FEE ORDINANCE

☐ REQUIRED ☒ EXEMPT

93H0 23927

ASBESTOS NOTIFICATION

Check Box: ☐ Notification letter sent to AQMD or EPA.

☒ I declare that notification of asbestos removal is not applicable to addressed project.

Signature [signature] For FHC LTD Date 9/10/93

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date ______ Lic. Class ______ Lic. Number ______ Contractor ______ (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☒ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ______, B. & P. C. for this reason ______

Date 9-10-93 Owner's Signature [signature] For FHC LTD

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. ______ Insurance Company ______

☐ Certified copy is hereby furnished.

☐ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date ______ Applicant's Signature ______

Applicant's Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date 9/10/93 Applicant's Signature [signature] For FHC LTD

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202, LAMC)

Signed [signature] For FHC LTD (Owner or agent having property owner's consent) — Bldg. mgr (Position) — 9/10/93 (Date)

1001 E 1st St

Permit #: **07016 - 10000 - 23765**
Plan Check #: B07LA12670 Printed: 08/29/08 03:32 PM
Event Code:

dg-Alter/Repair
ent
ar Plan Check
Plan Check

City of Los Angeles - Department of Building and Safety

APPLICATION FOR BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY

Last Status: Ready to Issue
Status Date: 08/21/2008

1. TRACT	BLOCK	LOT(s)	ARB	COUNTY MAP REF #	PARCEL ID # (PIN #)	2. ASSESSOR PARCEL #
TR 3187		LT A		M B 29-100	129A217 58	5173 - 023 - 001

3. PARCEL INFORMATION

Area Planning Commission - Central
LADBS Branch Office - LA
Council District - 9
Certified Neighborhood Council - Historic Cultural
Community Plan Area - Central City North
Census Tract - 2060.30
District Map - 129A217
Energy Zone - 9
Fire District - 2
Methane Hazard Site - Methane Zone
Near Source Zone Distance - 7.8
Parking Dist. - CCPD
Thomas Brothers Map Grid - 634-H4

ZONE(S): M3-1 /

4. DOCUMENTS

ZI - ZI-1117 MTA Project
ZI - ZI-2129 Eastside State Enterprise Z
ZI - ZI-223 Site Plan OK for Legal Desc
ZA - ZA-1983-319
ORD - ORD-164855-SA1610
CUZ - CUZ-1982-292
CUZ - CUZ-1983-319
CPC - CPC-1986-607-GPC
CPC - CPC-1995-352-CPU
CPC - CPC-2006-48-ICO
CDBG - FEZ-Los Angeles
CDBG - LARZ-Central City
CDBG - SEZ-Eastside State Enterprise Z
AFF - AFF-55760

5. CHECKLIST ITEMS

Special Inspect - Masonry

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION

Owner(s):
City Of Los Angeles 1149 Broadway LOS ANGELES, CA 90012

Tenant:
Applicant: (Relationship: Engineer)
Dung Tran - Public Works Engineering 221 N Figueroa St 3rd Floor LOS ANGELES, CA 90012 (213) 202-5572

7. EXISTING USE **PROPOSED USE**
(05) Apartment

8. DESCRIPTION OF WORK
Remove a 75'x99' portion of an existing URM artist-in-residence building. A 200'x150' portion to remain. Tenant Improvement will be under separate permit and is required prior to building occupancy. No Impact Tools to be Used.

9. # Bldgs on Site & Use: 1-URM

10. APPLICATION PROCESSING INFORMATION
BLDG. PC By: Martin Fragoso DAS PC By:
OK for Cashier: Charmie Huynh Coord. OK:
Signature: Charmie T. Huynh Date: 8/21/08

For inspection requests, call toll-free (888) LA4BUILD (524-2845). Outside LA County, call (213) 482-0000 or request Inspections via www.ladbs.org. To speak to a Call Center agent, call 311 or (866) 4LACITY (452-2489). Outside LA County, call (213) 473-3231.

For Cashier's Use Only W/O #: 71623765

BUILDING PERMIT COMM	$635.00
EI RESIDENTIAL	$0.00
ONE STOP SURCH	$12.86
SYSTEMS DEVT FEE	$38.58
CITY PLANNING SURCH	$38.10
MISCELLANEOUS	$5.00
BUILDING PLAN CHECK	$0.00
BUILDING PLAN CHECK	$0.00
BUILDING PLAN CHECK	$0.00

F07016100002376 5FN

Total Due: $737.54
Deferred Fee: $737.54

DEFERRED FEE DEFERRED
Name: DUNG TRAN
Addr: 1001 E 1ST ST
Auth: IDO #94-09-655008
Dept: TRANSPORTATION

2008LA28505

11. PROJECT VALUATION & FEE INFORMATION Final Fee Period
Permit Valuation: $80,000 PC Valuation:

FINAL TOTAL Bldg-Alter/Repair	737.54
Permit Fee Subtotal Bldg-Alter/Repa	635.00
Plan Check Subtotal Bldg-Alter/Rep	0.00
Off-hour Plan Check	0.00
Fire Hydrant Refuse-To-Pay	
E.O. Instrumentation	8.00
O.S. Surcharge	12.86
Sys. Surcharge	38.58
Planning Surcharge	38.10
Planning Surcharge Misc Fee	5.00
P ssing Fee	0.00

Sewer Cap ID: Total Bond(s) Due:

12. ATTACHMENTS
Plot Plan

P07016100002376 5FN

13. STRUCTURE INVENTORY (Note: Numeric measurement data in the format "number / number" implies "change in numeric value / total resulting numeric value")

07016 - 10000 - 23765

(P) Basement: 0 Levels / 1 Levels
(P) Height (ZC): 0 Feet / Feet
(P) Length: -99 Feet / 200 Feet
(P) Stories: 0 Stories / 2 Stories
(P) Width: -75 Feet / 150 Feet
(P) Dwelling Unit: -7 Units / 18 Units
(P) Concrete Shearwall
(P) URM Shearwall
(P) R1 Occ. Group: 0 Sqft / Sqft
(P) Parking Req'd for Bldg (Auto+Bicycle): 0 Stalls / 19 :
(P) Provided Standard for Bldg: 0 Stalls / 19 Stalls
(P) Parking Req'd for Site (Bicycle only): 0 Spaces / 19 S
(P) Provided Standard for Site: 0 Stalls / 19 Stalls
(P) Total Provided Parking for Site: 0 Stalls / 19 Stalls
(P) Type III-N Construction

14. APPLICATION COMMENTS

** Approved Seismic Gas Shut-Off Valve may be required. ** 1. Plans reassigned to Charmie Huynh per Jameson Lee (8/7/08) 2. Permit 90HO06150 is for the conversion of a Type IIIN Warehouse to 25 Artist-in-Residence Units, and convert basement to storage. (CH) 3. Removed ZI-223 Clearance for "Site Plan Acceptable for Legal Description (Santa Fe Railroad)". (CH)

In the event that any box (i.e. 1-16) is filled to capacity, it is possible that additional information has been captured electronically and could not be printed due to space restrictions. Nevertheless, the information printed exceeds that required by Section 19825 of the Health and Safety Code of the State of California.

15. Building Relocated From:

16. CONTRACTOR, ARCHITECT, & ENGINEER NAME	ADDRESS		CLASS	LICENSE#	PHONE #
(E) Mistry, Shirishchandra V	2020 Crown Circle,	La Verne, CA 91750		S3413	213-485-5325
(O) , Owner-Builder	,	,		0	

PERMIT EXPIRATION/REFUNDS: This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inspection within 60 days of receiving a request for final inspection (HS 17951).

17. OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the Contractors' State License Law for the following reason (Section 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

( ) I, as the owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business & Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year from completion, the owner-builder will have the burden of proving that he or she did not build or improve for the purpose of sale).

OR

(✓) I, as the owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business & Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.)

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations:

( ) I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

( ) I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: ______________________ Policy Number: ______________________

(✓) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

19. ASBESTOS REMOVAL DECLARATION / LEAD HAZARD WARNING

I certify that notification of asbestos removal is either not applicable or has been submitted to the AQMD or EPA as per section 19827.5 of the Health and Safety Code. Information is available at (909) 396-2336 and the notification form at www.aqmd.gov. Lead safe construction practices are required when doing repairs that disturb paint in pre-1978 buildings due to the presence of lead per section 6716 and 6717 of the Labor Code. Information is avaiable at Health Services for LA County at (800) 524-5323 or the State of California at (800) 597-5323 or www.dhs.ca.gov/childlead.

20. FINAL DECLARATION

I certify that I have read this application **INCLUDING THE ABOVE DECLARATIONS** and state that the above information **INCLUDING THE ABOVE DECLARATIONS** is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not authorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

By signing below, I certify that:

(1) I accept all the declarations above namely the Owner-Builder Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration / Lead Hazard Warning and Final Declaration; and

(2) This permit is being obtained with the consent of the legal owner of the property.

Print Name: DUNG D. TRAN Sign: Date: 8/29/08 ( ) Owner (✓) Authorized Agent

DEPARTMENT OF BUILDING AND SAFETY

There are two ways to request a copy of the document image.
1) By fax using the request form. Click on the following link
http://ladbs.org/LADBSWeb/LADBS_Forms/Administrative/AD-Form.01.pdf to download the request form.
2) In person. Bring the following summary to one of the following Records counters.
3) If you have any questions, please visit one of our Records Counters.

RECORDS COUNTER HOURS
MONDAY, TUESDAY, THURSDAY, FRIDAY: 7:30 AM to 4:30 PM
WEDNESDAY: 9:00 AM to 4:30 PM

Metro	Van Nuys
201, N. Figueroa St.	6262 Van Nuys Blvd
1st Floor, Room 110	Record Counter
Record Counter	Van Nuys,CA 91401
Los Angeles,CA 90012	

Assessor Number: BOOK NUMBER: 5173 PAGE NUMBER: 020 PARCEL NUMBER: 907

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-NEW	12/5/1910	1910LA10069	HIST: P1018 001 2725	

DEPARTMENT OF BUILDING AND SAFETY

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http://ladbs.org/LADBSWeb/LADBS_Forms/Administrative/AD-Form.01.pdf to download the request form.
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WEDNESDAY: 9:00 AM to 4:30 PM

Metro	Van Nuys
201, N. Figueroa St. 1st Floor, Room 110 Record Counter Los Angeles,CA 90012	6262 Van Nuys Blvd Record Counter Van Nuys,CA 91401

Address: 830 E COMMERCIAL ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	ALTERATION	6/24/1947	1947LA15382	IDIS: P5421 01594 0000 thru P5421 0001 HIST: P1397 002 1591	
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/24/1947	1947 15382	HIST: P1397 002 1591	
CERTIFICATE OF OCCUPANCY		3/23/1949		HIST: O135 1 0296	
CERTIFICATE OF OCCUPANCY		3/23/1949		HIST: O135 1 0296	

1001 E 1st St

Permit Application #: **07016 - 10000 - 23765**

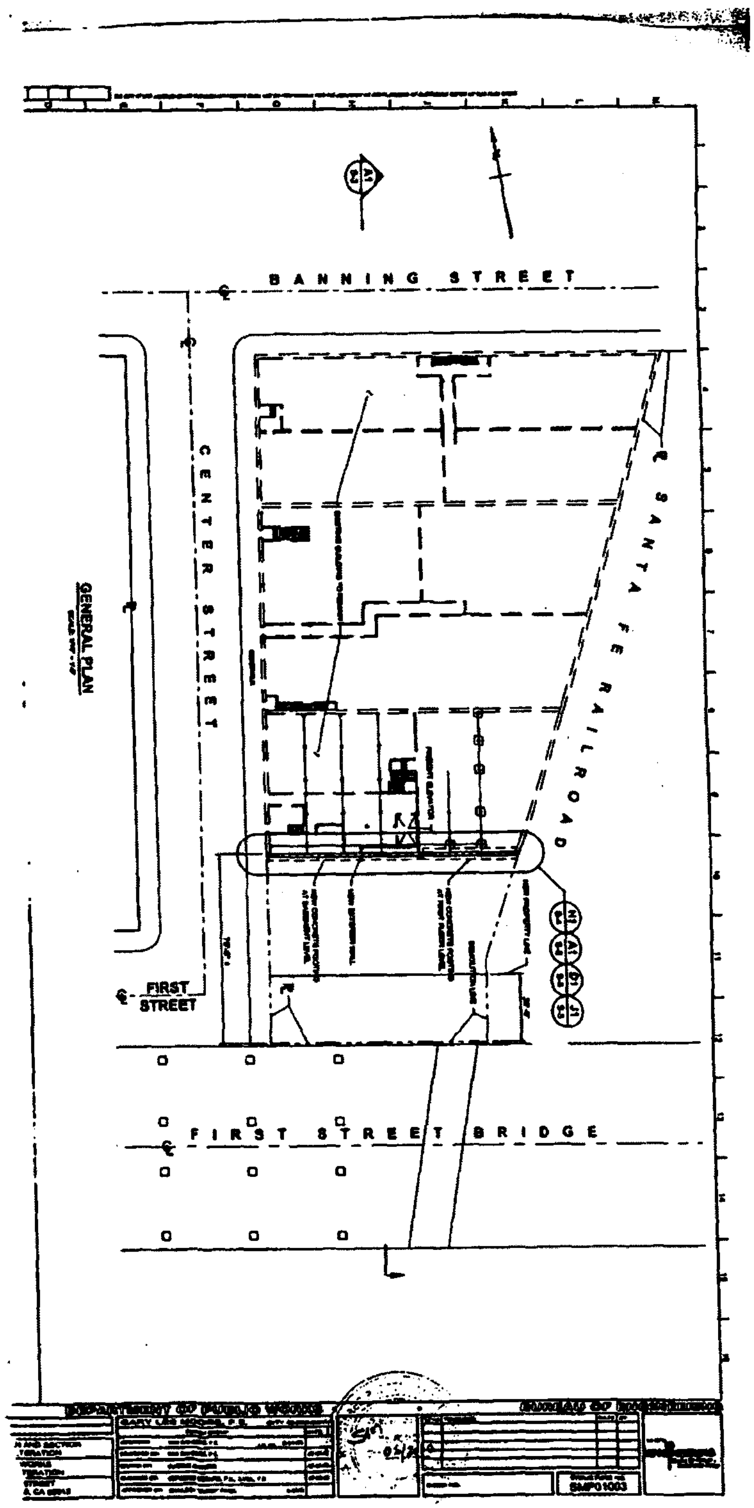
Bldg-Alter/Repair
Apartment
Plan Check

City of Los Angeles - Department of Building and Safety

PLOT PLAN ATTACHMENT

Plan Check #: B07LA12670FO
Initiating Office: METRO
Printed on: 08/21/08 14:01:18

(DO NOT DRAW, WRITE, OR PASTE ATTACHMENTS OUTSIDE BORDER)



1020909200876304

COUNCIL DISTRICT: 9 INSPECTION DISTRICT: BIGIM1 PLOT PLAN ATTACHMENT

3 APPLICATION FOR INSPECTION 7

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

Earthquake Safety Division 3 9

TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. — LOT: A — BLOCK: / — TRACT: 3187 — CITY CLERK REF. NO.: ---

DIST. MAP: 129B217
CENSUS TRACT: 2061.00

2. PRESENT USE OF BUILDING: 05 [redacted] A.I.R/STORAGE — NEW USE OF BUILDING: [redacted] SAME

ZONE: M3-1

3. JOB ADDRESS: 1001 E. 1ST ST. (AKA 112 Center St) — SUITE/UNIT NO.

FIRE DIST.: II — COUN. DIST.: 9

4. BETWEEN CROSS STREETS: MEYER ST. AND CENTER ST.

LOT TYPE: COR/THRU

5. OWNER'S NAME ( ) TENANT ( ) BUILDING: 1ST STREET & CENTER LTD. — PHONE: 687-9600

LOT SIZE: IRREG.

6. OWNER'S ADDRESS: 929 E. 2ND ST. #101 — CITY: L.A. — ZIP

7. ENGINEER: -JIM PAJUHESH, PH.D. — BUS. LIC. NO. — ACTIVE STATE LIC. NO.: SE1860 — PHONE: 8394260

ALLEY: -

8. ARCHITECT OR DESIGNER: -APPLETON, MECHUR — BUS. LIC. NO. — ACTIVE STATE LIC. NO.: C 11683 — PHONE: 399-9386

BLDG. LINE: -

9. ARCHITECT OR ENGINEER'S ADDRESS: -221-B HAMPTON DR. — CITY: VENICE, CA — ZIP: 90291

DOCUMENTS/EASEMENTS: 3/1/92
ZI 1117
AFF 55760
ZA 82-292
CCPD
ZI 1572
ZA83-319(CUZ)
ZI 1726

10. CONTRACTOR: N/S — BUS. LIC. NO. — ACTIVE STATE LIC. NO. — PHONE

11. SIZE OF EXISTING BLDG.: WIDTH 159 LENGTH 268 — STORIES: 2 — HEIGHT: 32 — NO. OF EXISTING BUILDINGS ON LOT AND USE: 1-A.I.R./STORAGE

12. FRAMING MATERIAL OF EXISTING BLDG. — EXT. WALLS: URM — ROOF: WOOD — FLOOR: WOOD

3

13. JOB ADDRESS: 1001 E. 1ST. ST. (AKA 112 Center St) — SUITE/UNIT NO.

14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING: $ 4,000.00 BP / 35,000.00 PC

DIST. OFF.: L.A. — P.C. REQ'D: NO(a)

15. NEW WORK (Describe): NEW CORRIDOR IN BASEMENT. (See over)

GRADING — SEISMIC: -
HWY. DED.: YES — FLOOD: -

NEW USE OF BUILDING	SIZE OF ADDITION	STORIES	HEIGHT	FILE WITH
A.I.R/Storage	NC	NC	BUILDING NC ZONING NC	90HO 06150

TYPE	GROUP OCC.	MAX. OCC.	PLANS CHECKED	ZONED BY
III-1hr	B1/B2	NC	P. Sanchez	P.S. 3/3/92

DWELL UNITS	BUILDING AREA	ZONING AREA	APPLICATION APPROVED	TYPIST
NC	NC	NC	P. Sanchez 76089	E.S. CAUDILLO

GUEST ROOMS	PARKING REQ'D	PARKING PROVIDED	INSPECTION ACTIVITY	INSPECTOR
0	NC	S C HC.	CB GEN. MAJ.S. EQ.	---

B & S 08-B-3 (R.7/90)

P.C. 239.66	G.P.I. + NP	CONT. INSP.
S.P.C.	P.M. 7.00	
B.R. 53.44	E.I. 0.84	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.
I.F.	F.H.	
S.D. NA	O.S.S. Yes	
ISS. OFF. HO	S.O.S.S. Yes	SPRINKLERS REQ'D SPEC. * throughout (existing)
P.C. NO. F5318	C/O	ENERGY — DAS Yes

SYS: Yes — SEVS: Yes

CASHIERS USE ONLY

02/05/92 02:37:20PM H001 T-3302 C 07
E Q PLAN CHECK 239.06
SYS DEV 14.34
ONE STOP 4.78
TOTAL 258.18
CHECK 258.18
1001 E 1ST STREET

03/03/92 11:00:10AM H001 T-5053 C 26
EQ PERMIT 53.44
PLAN MAINTENAN 7.00
EI COMMERCIAL 0.84
SYS DEV 3.68
ONE STOP 1.23
TOTAL 66.19
CHECK 66.19

92HO 16085

Unless a shorter period of time has been established by an official action, plan check approval expires one year after the fee is paid and this permit expires two years after the fee is paid or 180 days after the fee is paid if construction is not commenced.

* See over

NEW AFFIDAVITS

PLAN CHECK EXTENDED TO ______________ PER

ADMINISTRATIVE APPROVAL DATED ______________

BY ______________

D.A.D. PLANS CHECKED

HOUSING MITIGATION FEE ORDINANCE
☐ REQUIRED ☒ EXEMPT

ASBESTOS NOTIFICATION
Check Box: ☐ Notification letter sent to AQMD or EPA.
☐ I declare that notification of asbestos removal is not applicable to addressed project.

Signature ______________ Date ______________

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date ______ Lic. Class ______ Lic. Number ______ Contractor ______ (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☒ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ______ B. & P. C. for this reason ______

Date Feb 27, 1992 Owner's Signature ______ gen. partner

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. ______ Insurance Company ______

☐ Certified copy is hereby furnished.
☐ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date ______ Applicant's Signature ______

Applicant's Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date Feb 27, 1992 Applicant's Signature ______ gen. partner

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed ______ (Owner or agent having property owner's consent) — gen. partner (Position) — Feb 27, 1992 (Date)

57002203

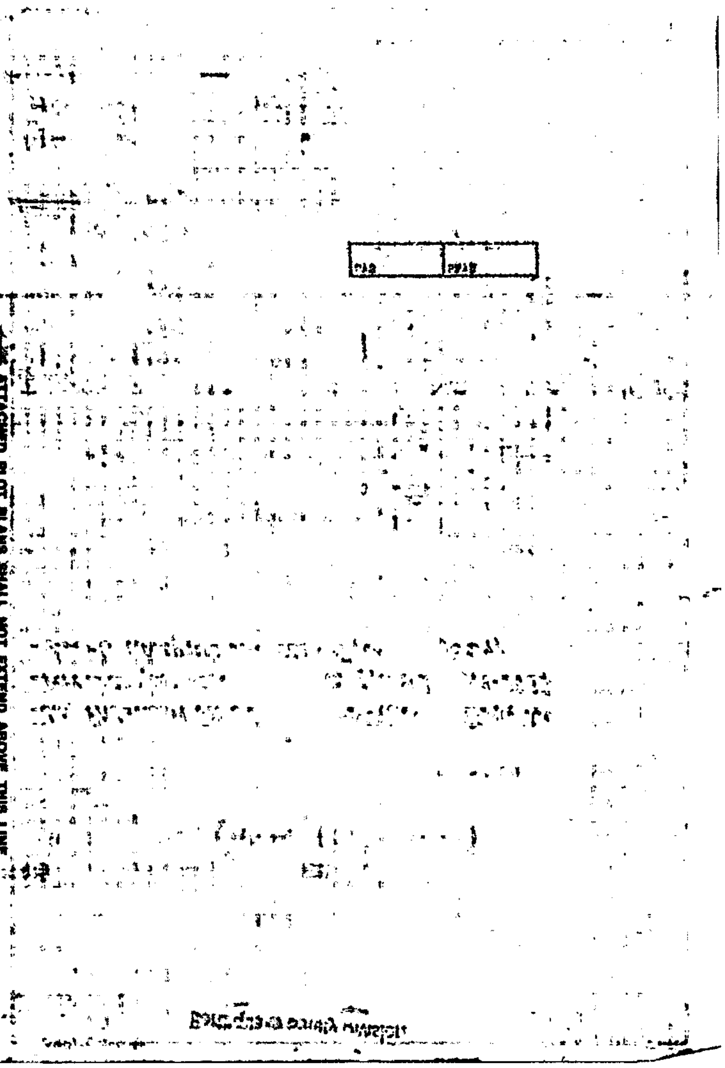
Bureau of Engineering		ADDRESS APPROVED	
		DRIVEWAY	
		HIGHWAY DEDICATION — REQUIRED / COMPLETED	
		FLOOD CLEARANCE	
Public Works Improvement	Required YES ☐ NO ☐ PERMIT	#	
SEWERS	Y129-217C No change	SEWERS AVAILABLE	
		NOT AVAILABLE	VTABIRARA 2/28/92
		SFC PAID	VTABIRARA 2/28/92
	SFC NOT APPLICABLE	SFC DUE	VTABIRARA 2/28/92
Grading	PRIVATE SEWAGE SYSTEM APPROVED		
Comm. Safety	APPROVED FOR ISSUE ☐ NO FILE ☐ FILE CLOSED ☐		
CEQA			
Fire	APPROVED (TITLE 19) (L.A.M.C.-5780)		2-26-92
	APPROVED - HYDRANT UNIT, ROOM 920 CHE		
CRA	APPROVED PER REDEV. PROJECT		
Transportation	APPROVED FOR DRIVEWAY LOCATION		
	APPROVED FOR ORD. #		
Planning	WORK SHEET #		
	APPROVED UNDER CASE #		
	LANDSCAPE / XERISCAPE		
	SIGHT PLAN REVIEW		
Housing	HOUSING AUTHORITY AFFIDAVIT NO.		
Construction Tax	RECEIPT NO. DWELLING UNITS		
Cultural Affairs			
Rent Stabilization Division			

LEGAL DESCRIPTION

New Work: (Cont'd.) At basement only — increase workspace for units #12, 21, 22 & 24.

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH

Sprinkler system throughout was provided to substitute for 1-hr construction throughout (see 90HO 06150)



ATTACHED PLOT PLANS SHALL NOT EXTEND ABOVE THIS LINE

3 APPLICATION FOR INSPECTION 7

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

Earthquake Safety Division 3 9

TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. — LOT: A — BLOCK: / — TRACT: 3187 — CITY CLERK REF. NO.: --- — DIST. MAP: 129B217 — CENSUS TRACT: 2061.00

2. PRESENT USE OF BUILDING: 05 [redacted] A.I.R/STORAGE — NEW USE OF BUILDING: [redacted] SAME — ZONE: M3-1

3. JOB ADDRESS: 1001 E. 1ST ST. (AKA 112 Center St) — SUITE/UNIT NO. — FIRE DIST.: II — COUN. DIST.: 9

4. BETWEEN CROSS STREETS: MEYER ST. AND CENTER ST. — LOT TYPE: COR/THRU

5. OWNER'S NAME ( ) TENANT ( ) BUILDING: 1ST STREET & CENTER LTD. — PHONE: 687-9600 — LOT SIZE: IRREG.

6. OWNER'S ADDRESS: 929 E. 2ND ST. #101 — CITY: L.A. — ZIP

7. ENGINEER: -JIM PAJUHESH, PH.D. — BUS. LIC. NO. — ACTIVE STATE LIC. NO.: SE1860 — PHONE: 8394260 — ALLEY: -

8. ARCHITECT OR DESIGNER: -APPLETON, MECHUR — BUS. LIC. NO. — ACTIVE STATE LIC. NO.: C 11683 — PHONE: 399-9386 — BLDG. LINE

9. ARCHITECT OR ENGINEER'S ADDRESS: -221-B HAMPTON DR. — CITY: VENICE, CA — ZIP: 90291 — DOCUMENTS/EASEMENTS: ZI 1117 — AFF 55760 — ZA 82-292 — CCPD — ZI 1572 — ZA83-319(CUZ) — ZI 1726

10. CONTRACTOR: N/S — BUS. LIC. NO. — ACTIVE STATE LIC. NO. — PHONE

11. SIZE OF EXISTING BLDG.: WIDTH 159 LENGTH 268 — STORIES: 2 — HEIGHT: 32 — NO. OF EXISTING BUILDINGS ON LOT AND USE: 1-A.I.R./STORAGE

12. FRAMING MATERIAL OF EXISTING BLDG. — EXT. WALLS: URM — ROOF: WOOD — FLOOR: WOOD

3 13. JOB ADDRESS: 1001 E. 1ST. ST. (AKA 112 Center St) — SUITE/UNIT NO.

14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING: $ 4,000.00 BP / 35,000.00 PC — DIST. OFF.: L.A. — P.C. REQ'D: NO(a)

15. NEW WORK (Describe): NEW CORRIDOR IN BASEMENT. (See over) — GRADING: - — SEISMIC — HWY. DED.: YES — FLOOD: -

NEW USE OF BUILDING: A.I.R/Storage	SIZE OF ADDITION: NC	STORIES: NC	HEIGHT — BUILDING: NC — ZONING: NC
TYPE: III-1hr	GROUP OCC.: R1/B2	MAX. OCC.: NC	PLANS CHECKED: F. Sanchez
DWELL UNITS: NC	BUILDING AREA: NC	ZONING AREA: NC	APPLICATION APPROVED: F. Sanchez 76089
GUEST ROOMS: -	PARKING REQ'D: NC	PARKING PROVIDED S C HC	INSPECTION ACTIVITY: CB / GEN. / MAJ.S. / EQ

FILE WITH: 90HO 06150 — ZONED BY: E.S. 3/3/92 — TYPIST: E.S. CAUDILLO — INSPECTOR: --

P.C.: 239.66	G.P.I. + NP	CONT. INSP.
S.P.C.	P.M.: 7.00	
B.P.: 53.44	E.I.: 0.84	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.
I.F.	F.H.	
S.D.: NA	O.S.S.: Yes	
ISS. OFF.: HO	S.O.S.S.: Yes	SPRINKLERS REQ'D SPEC.: Throughout (existing)
P.C. NO.: F531B	C/O	ENERGY: — — DAS: Yes

SYS: Yes — SOSS: Yes

Unless a shorter period of time has been established by an official action, plan check approval expires one year after the fee is paid and this permit expires two years after the fee is paid or 180 days after the fee is paid if construction is not commenced.

* see over

NEW AFFIDAVITS

PLAN CHECK EXTENDED TO ______ PER

ADMINISTRATIVE APPROVAL DATED

BY

D.A.D. PLANS CHECKED

HOUSING MITIGATION FEE ORDINANCE
☐ REQUIRED ☒ EXEMPT

ASBESTOS NOTIFICATION
Check Box: ☐ Notification letter sent to AQMD or EPA.
☐ I declare that notification of asbestos removal is not applicable to addressed project.

Signature ______ Date ______

CASHIER'S USE ONLY

02/05/92 02:37:20PM H001 T-3302 C 07

E Q PLAN CHECK	239.06
SYS DEV	14.34
ONE STOP	4.78
TOTAL	258.18
CHECK	258.18

1 E 1ST STREET

03/03/92 11:00:10AM H001 T-5053 C 26

EQ PERMIT	53.44
PLAN MAINTENAN	7.00
EI COMMERCIAL	0.84
SYS DEV	3.68
ONE STOP	1.23
TOTAL	66.19
CHECK	66.19

92HO 16085

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date ______ Lic. Class ______ Lic. Number ______ Contractor ______ (Signature)

OWNER-BUILDER DECLARATION

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☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

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☐ I am exempt under Sec. ______ B. & P. C. for this reason ______

Date Feb 27, 1992 Owner's Signature [signature] gen partner

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. ______ Insurance Company ______

☐ Certified copy is hereby furnished.
☐ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date ______ Applicant's Signature ______

Applicant's Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date Feb 27, 1992 Applicant's Signature [signature] gen partner

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed [signature] (Owner or agent having property owner's consent) — gen partner (Position) — Feb 27, 1992 (Date)

B & S 00-B-3 (R.7/90)

5 7 0 3 2 0 3

Bureau of Engineering		ADDRESS APPROVED	
		DRIVEWAY	
		HIGHWAY DEDICATION — REQUIRED / COMPLETED	
		FLOOD CLEARANCE	
Public Works Improvement	Required YES ☐ NO ☐ PERMIT	#	
SEWERS	Y129-217C No change	SEWERS AVAILABLE	
CERT		NOT AVAILABLE	VTABIRANA 2/28/92
		SFC PAID	VTABIRANA 2/28/92
X	SFC NOT APPLICABLE	SFC DUE	VTABIRANA 2/28/92
Grading	PRIVATE SEWAGE SYSTEM APPROVED		
Comm. Safety	APPROVED FOR ISSUE ☐ NO FILE ☐ FILE CLOSED ☐		
CEQA			
Fire	APPROVED (TITLE 19) (L.A.M.C.-5780)		2-26-92
	APPROVED - HYDRANT UNIT, ROOM 920 CHE		
CRA	APPROVED PER REDEV. PROJECT		
Transportation	APPROVED FOR DRIVEWAY LOCATION		
	APPROVED FOR ORD. #		
Planning	WORK SHEET #		
	APPROVED UNDER CASE #		
	LANDSCAPE / XERISCAPE		
	SIGHT PLAN REVIEW		
Housing	HOUSING AUTHORITY AFFIDAVIT NO.		
Construction Tax	RECEIPT NO. DWELLING UNITS		
Cultural Affairs			
Rent Stabilization Division			

LEGAL DESCRIPTION

New Work: (Cont'd.) At basement only — increase workspace for units #12, 21, 22 & 24

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH

Sprinkler system throughout was provided to substitute for 1-hr construction throughout (see 90HO 06150)

SEE ATTACHED

PLOT PLANS SHALL NOT EXTEND ABOVE THIS LINE

3

PUBLIC RECORD

APPLICATION FOR INSPECTION — TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES

B & S B3 (R 12/80) DEPT. OF BUILDING AND SAFETY

Return

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. LOT A	BLOCK	TRACT 3187	COUNCIL DISTRICT NO. 9	DIST. MAP 129-217 / CENSUS TRACT 2061
2. PRESENT USE OF BUILDING (22) Warehouse & Mfg. ~~Artist Studios~~		NEW USE OF BUILDING ( ) same		ZONE M3-3
3. JOB ADDRESS 1001 E. 1st St.				FIRE DIST. two
4. BETWEEN CROSS STREETS Center St. AND Myers ST.				LOT TYPE cor thru
5. OWNER'S NAME ~~Jose Baca~~ JOEL BAOS		PHONE 559-0629		LOT SIZE irreg
6. OWNER'S ADDRESS 239 S. Los Angeles		CITY LA	ZIP	
7. ENGINEER Peter Einik	BUS. LIC. NO. 10211	ACTIVE STATE LIC. NO. 559-0622	PHONE	ALLEY
8. ARCHITECT OR DESIGNER Forum Assoc.	BUS. LIC. NO.	ACTIVE STATE LIC. NO. 559-0622	PHONE	BLDG. LINE
9. ARCHITECT OR ENGINEER'S ADDRESS 5969 Washington Blvd.		CITY Culver City	ZIP 90230	AFFIDAVITS
10. CONTRACTOR SBI	BUS. LIC. NO. 355514	ACTIVE STATE LIC. NO. 559-0629	PHONE	
11. SIZE OF EXISTING BLDG. WIDTH 155 LENGTH 268	STORIES 2 HEIGHT 27	NO. OF EXISTING BUILDINGS ON LOT AND USE one artist studios		
12. CONST. MATERIAL OF EXISTING BLDG. EXT. WALLS URM		ROOF wood	FLOOR wood	
13. JOB ADDRESS 1001 E. 1st St.			STREET GUIDE	DISTRICT OFFICE LA
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING		$ 91,000		SEISMIC STUDY ZONE
15. NEW WORK (Describe) [wa]ll anchors only Alt. II Class II				GRADING / FLOOD / HWY. DED. yes / CONS. UM

E.Q.

NEW USE OF BUILDING (22) Warehouse & Mfg.	SIZE OF ADDITION None	STORIES —	HEIGHT —	ZONED BY
TYPE III-A	GROUP OCC. G-1	BLDG. AREA NC	PLANS CHECKED J. Guzman	FILE WITH
DWELL. UNITS —	MAX OCC. NC	TOTAL	APPLICATION APPROVED J. Guzman	TYPIST
GUEST ROOMS —	PARKING REQ'D NC	PARKING PROVIDED STD. COMP.	INSPECTION ACTIVITY CONS. GEN. MAJ. S. CONS.	INSPECTOR

SPRINKLERS REQ'D SPEC. Yes	CONT. INSP. Lic Fab. welds Torque test grouted anchors	CASHIER'S USE ONLY
P.C. 351.64	P.M. 8.27	C 351.64 EQPC / C5661 2 01/21/83 / 425.07 / 331.64 CHTD
S.P.C. —	I.F.	C 6.27 S.I. / C 8.27 PL/M / 6.37 / 16
S.P. 413.70	~~6.27~~ 6.37	C 413.70 EQBP / 584.92 DDSI
G.P.I. —	C/O	E1077 2 02/14/83 / ~~428.24~~ CHTD / 428.34
DIST. OFFICE LA.	ENERGY: None	
P.C. NO. R4160		

Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 11 FEB 83 Lic. Class B Lic. Number 355514 Contractor [signature] (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ________, B. & P. C. for this reason ________

Date N/A Owner's Signature ________

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. 1927 68271 Company I.C.O.W.

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date 11 FEB 83 Applicant [signature]

Applicant's Mailing Address ________

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date N/A Applicant ________

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name N/A Lender's Address ________

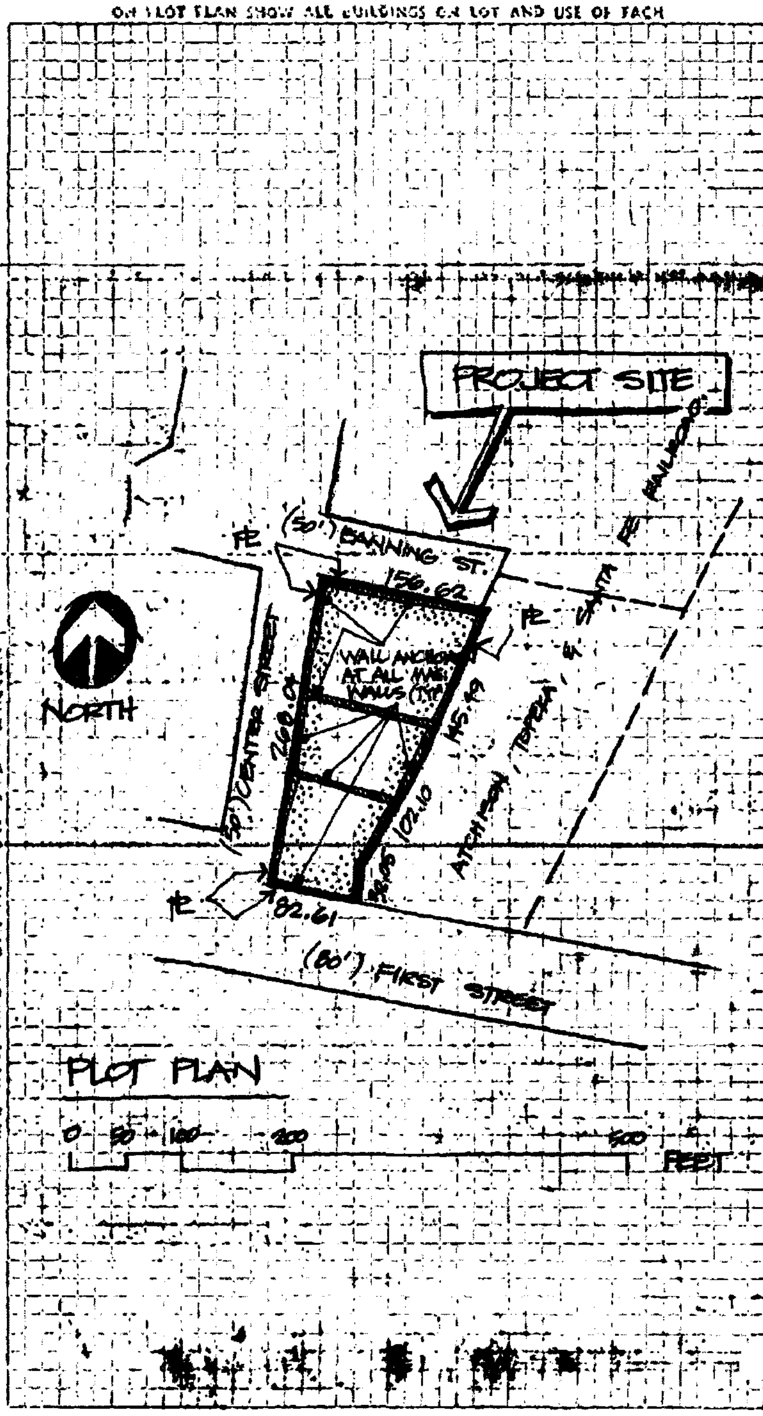
21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed [signature] (Owner or agent having property owner's consent) PRESIDENT (Position) 11 FEB 83 (Date)

0 1 7 0 0 4 0 0 0 3 2

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH



Bldg. Form 4

USE INK OR INDELIBLE PENCIL

3

CITY OF LOS ANGELES

DEPARTMENT OF BUILDING AND SAFETY

BUILDING DIVISION

Application to Alter, Repair, Move or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

REMOVED FROM	REMOVED TO
Lot	Lot
Tract	Tract

Present location of building: 1001 E 1st Sts (House Number and Street)

New location of building: off Santa Fe ave (House Number and Street)

Between what cross streets:

Approved by City Engineer. Deputy.

1. Purpose of PRESENT building: Warehouse for merchandise (Store, Residence, Apartment House, or any other purpose) Families Rooms
2. Use of building AFTER alteration or moving: Same Families Rooms
3. Owner (Print Name): Watts & Lyle Phone
4. Owner's address: 1001 E 1st
5. Certificated Architect State License No. Phone
6. Licensed Engineer State License No. Phone
7. Contractor: Self State License No. Phone
8. Contractor's address
9. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and/or elevator equipment therein or thereon.) $ 50.00
10. State how many buildings NOW on lot and give use of each: Warehouse (Residence, Hotel, Apartment House, or any other purpose)
11. Size of existing building: 400 x 160 Number of stories high: 2 Height to highest point
12. Class of building: C Material of existing walls: Brick Exterior framework: Wood (Wood or Steel)

Describe briefly and fully all proposed construction and work:

non bearing

altering temporary partitions on 1st floor - same tenants 25% glass

Fill in Application on other Side and Sign Statement (OVER)

PERMIT NO. 1811	FOR DEPARTMENT USE ONLY			Fee 1.00
	Plans and Specifications checked	Zone M2	Fire District No. 1	Stamp here when Permit is issued: FEB -5 1934
	Corrections verified	Bldg. Line — Ft.	Street Widening — Ft.	
	Plans, Specifications and Applications rechecked and approved	Application checked and approved, Clerk		
PLANS Sets: x	For Plans See: x / Filed with: x	Sprinkler: Required / Specified / Valuation Included Yes-No		Inspector

PLANS, SPECIFICATIONS, and other data must be filed if required.

NEW CONSTRUCTION

Size of Addition......x......Size of Lot......x......Number of Stories when complete..........

Material of Foundation..........Width of Footing..........Depth of footing below ground..........

Width Foundation Wall..........Size of Redwood Sill......x......Material Exterior Walls..........

Size of Exterior Studs......x......Size of Interior Bearing Studs......x..........

Joists: First Floor......x......Second Floor......x......Rafters......x......Roofing Material..........

No

I have carefully examined and read both sides of this completed Application and know the same is true and correct and hereby certify and agree, if a Permit is issued, that all the provisions of the Building Ordinances and State Laws will be complied with whether herein specified or not; also certify that plans and specifications, if required to be filed, will conform to all of the provisions of the Building Ordinances and State laws.

Sign Here First St Warehouse Co
(Owner or Authorized Agent)

By H B Johnston Jr

FOR DEPARTMENT USE ONLY			
Application	Fire District	Bldg. Line	Termite Inspection
Construction	Zoning	Street Widening	Forced Draft Ventil.

(1)
REINFORCED CONCRETE

Barrels of Cement..........

Tons of Reinforcing Steel..........

(2)
The building (and, or, addition) referred to in this Application is, or will be when moved, more than 100 feet from

.... Street

Sign Here..........
(Owner or Authorized Agent)

(3)
No required windows will be obstructed.

Sign Here..........
Owner or Authorized Agent.

(4)
There will be an unobstructed passageway at least ten (10) feet wide, extending from any dwelling on lot to a Public Street or Public Alley at least 10 feet in width.

Sign Here..........
(Owner or Authorized Agent)

REMARKS: ....

All Applications Must be Filled Out by Applicant

Bldg. Form 3 — BUILDING DIVISION — ...ANS AND SPECIFICATIONS ...l other data must also be filed

3

DEPARTMENT OF BUILDING AND SAFETY

Application to Alter, Repair or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

	REMOVED FROM	REMOVED TO
TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor	Lot a portion of Block W	Lot Block
	Tract Aliso	Tract
	Book 4 - Pages 12 & 13	
CITY CLERK PLEASE VERIFY	Misc. Records	
TAKE TO FIRST FLOOR 242 SO. BROADWAY	Book 4 Page 12&13 F. B. Page Mis. Rec.	Book Page F. B. Page
ENGINEER PLEASE VERIFY	From No. 1001 East First Street corner Center Street	
	To No. Street	

O. K. City Clerk By Deputy

O. K. City Engineer By Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Warehouse
2. What purpose will Building be used for hereafter? Same
3. Owner's name W. S. Lysle Phone TR 8651
4. Owner's address 1001 E 1st St.
5. Architect's name Richards-Neustadt Construction Co. Phone TU 8964
6. Contractor's name Richards-Neustadt Construction Co. Phone TU 8964
7. Contractor's address 701 W. M. Garland Bldg.
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 280.00
9. Class of present Building "C" No. of rooms at present 2
10. Number of stories in height 2 Story & Basement Size of present Building Approx. 268 x 82 to 156
11. State how many buildings are on this lot One
12. State purpose buildings on lot are used for ---- (Apartment House, Hotel, Residence, or any other purpose.)

Property in? Yes

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

Cutting through Center Street front for new loading door.

Brick work to be carried on steel lintel as shown

Blue print accompanys.

This is 100 ft South of 1st Street — Chas S Richards

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER 6/27/28

(Sign here) Chas S Richards (Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O.K.	
18201	Plan Examiner	6/27/28 Clerk	ISSUED JUN 27 1928 L. A. Bldg. Dept.

PLANS

13. Size of new addition.................x.................No. of Stories in height.................

14. Material of foundation.................Size footings.................Size wall.................Depth below ground.................

15. Size of Redwood Mudsills.................x.................Size of interior bearing studs.................x.................

16. Size of exterior studs.................x.................Size of interior non-bearing studs.................x.................

17. Size of first floor joists.................x.................Second floor joists.................x.................

18. Will all provisions of State Housing Act be complied with?.................

I have carefully examined and read the above blank and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

(Sign here) Geo E. Richards
(Owner or Authorized Agent)

FOR DEPARTMENT USE ONLY

APPLICATION	O. K.
CONSTRUCTION	O. K.
ZONING	O. K.
SET-BACK LINE	O. K.
ORD. 33761 (N. S.)	O. K.
FIRE DISTRICT #1	O. K.

REMARKS

3 APPLICATION FOR INSPECTION 4 3 2 Earthquake Safety Division 8 2

CITY OF LOS ANGELES DEPT. OF BUILDING AND SAFETY

TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. E01-94 - NONE

1. LEGAL DESCR.	LOT A; BLOCK --; TRACT 3187; CITY CLERK REF. NO. ---	DIST. MAP 129A217; CENSUS TRACT 2061
2. PRESENT USE OF BUILDING	(05) AIR; NEW USE OF BUILDING (05) Same	ZONE M3-1
3. JOB ADDRESS	1001 E. 1ST ST.; SUITE/UNIT NO.	FIRE DIST. TWO; COUN. DIST. 9
4. BETWEEN CROSS STREETS	CENTER ST. AND LA RIVER BED	LOT TYPE CORNER/THRU
5. OWNER'S NAME ( ) TENANT (X) BUILDING	NORM SOLOMON; PHONE ---	LOT SIZE IRREG.
6. OWNER'S ADDRESS	921 E. 2ND ST. #101; CITY L.A. CA; ZIP 90012	
7. ENGINEER	JIM PAJUHESH; BUS. LIC. NO. NONE; ACTIVE STATE LIC. NO. SE1860; PHONE 818-992-1316	ALLEY -
8. ARCHITECT OR DESIGNER	-; BUS. LIC. NO.; ACTIVE STATE LIC. NO.; PHONE	BLDG. LINE
9. ARCHITECT OR ENGINEER'S ADDRESS	5530 OWENSMOUTH AVE.; CITY W.H.; ZIP 91367	DOCUMENTS/EASEMENTS CCPD
10. CONTRACTOR	KING WIRE; BUS. LIC. NO. 144343-62; ACTIVE STATE LIC. NO. 410475; PHONE 256-4348	55760 FR; ZI 1726 FR
11. SIZE OF EXISTING BLDG.	WIDTH 156 LENGTH 268; STORIES 3; HEIGHT 40; NO. OF EXISTING BUILDINGS ON LOT AND USE 1 - AIR	ZI 1572 FR
12. FRAMING MATERIAL OF EXISTING BLDG.	EXT. WALLS URM; ROOF WOOD; FLOOR SLAB/WOOD	ZI 1117 FR

3 13. JOB ADDRESS 1001 E. 1ST ST. SUITE/UNIT NO.

14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING $ 5000

15. NEW WORK (Describe) EARTHQUAKE DAMAGE ~~[illegible]~~ REPAIR (N-EK) ~~[illegible]~~ URM CRACK REPAIR (walls)

DIST. OFF. L.A.	P.C. REQ'D -
GRADING -	SEISMIC EQ
HWY. DED. YES	FLOOD --
FILE WITH -	
ZONED BY [illegible] 2/17	
TYPIST E.S. CAUDILLO	
INSPECTOR --	

NEW USE OF BUILDING (05) AIR; SIZE OF ADDITION; STORIES; HEIGHT

TYPE; GROUP OCC.; MAX. OCC.; BUILDING PLANS CHECKED Frank Rowe; ZONING

DWELL UNITS; BUILDING AREA; ZONING AREA; APPLICATION APPROVED Frank Rowe 9466

GUEST ROOMS; PARKING REQ'D; PARKING PROVIDED S C HC; INSPECTION ACTIVITY CS GEN. MAJ. S. EQ.

B & S 08-B-3 (R.7/90)

P.C. 5610	G.P.I. + NP	CONT. INSP.
S.P.C.	P.M. 10.00	NO
B.P. 66.00	E.I. 1.05	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.
I.F.	F.H.	
S.D.	O.S.S. YES	
ISS. OFF. HO	S.O.S.S.	SPRINKLERS REQ'D SPEC. NO
P.C. NO. F6253	C/O	ENERGY NO; D.A.S. NO

Unless a shorter period of time has been established by an official action, plan check approval expires one year after the fee is paid and this permit expires two years after the fee is paid or 180 days after the fee is paid if construction is not commenced.

CASHIER'S USE ONLY

02/02/94 11:58:35AM H001 T-6539 C 26
E Q PLAN CHECK 56.10
SYS DEV 3.37
ONE STOP 1.12
FROM TRAN 6538 TO 6539
TOTAL 99.43
CASH 100.45
CHANGE 1.02

02/17/94 04:28:10PM H001 T-8012 C 26
EQ PERMIT 66.00
INVOICE # 0099660 88
PLAN MAINTENAN 10.00
EI COMMERCIAL 1.05
SYS DEV 4.62
ONE STOP 1.54
TOTAL 83.21
CHECK 83.21

94HO 26130

NEW AFFIDAVITS N/A

PLAN CHECK EXTENDED TO ____ PER ____

ADMINISTRATIVE APPROVAL DATED ____

BY ____

D.A.D. PLANS CHECKED N/A

HOUSING MITIGATION FEE ORDINANCE
☐ REQUIRED ☑ EXEMPT

ASBESTOS NOTIFICATION
Check Box: ☐ Notification letter sent to AQMD or EPA.
☑ I declare that notification of asbestos removal is not applicable to addressed project.

Signature [signature] Date 2/17/94

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 2/17/94 Lic. Class B Lic. Number 410475 Contr. [signature] (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ____, B. & P. C. for this reason ____

Date ____ Owner's Signature ____

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. WD369717 Insurance Company ZENITH INSURANCE Corp

☐ Certified copy is hereby furnished.
☑ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date 2/17/94 Applicant's Signature [signature]

Applicant's Mailing Address ____

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date ____ Applicant's Signature ____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ____ Lender's Address ____

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed [signature] (Owner or agent having property owner's consent) CONTRACTOR Position 2/17/94 Date

Bureau of Engineering		ADDRESS APPROVED
		DRIVEWAY
		HIGHWAY DEDICATION — REQUIRED / COMPLETED
		FLOOD CLEARANCE
Public Works Improvement	Required YES ☐ NO ☐ PERMIT	#
SEWERS	RES NO	SEWERS AVAILABLE
	CERT NO	NOT AVAILABLE
		SFC PAID
	SFC NOT APPLICABLE	SFC DUE
Grading	PRIVATE SEWAGE SYSTEM APPROVED	
Comm. Safety	APPROVED FOR ISSUE ☐ NO FILE ☐ FILE CLOSED ☐	
CEQA		
Fire	APPROVED (TITLE 19) (L.A.M.C.-5700)	
	APPROVED - HYDRANT UNIT ROOM 920 CHE	
CRA	APPROVED PER REDEV PROJECT	
Transportation	APPROVED FOR DRIVEWAY LOCATION	
	APPROVED FOR ORD #	
Planning	WORK SHEET #	
	APPROVED UNDER CASE #	
	LANDSCAPE / XERISCAPE	
	SIGHT PLAN REVIEW	
Housing	HOUSING AUTHORITY AFFIDAVIT NO	
Construction Tax	RECEIPT NO DWELLING UNITS	
Cultural Affairs		
Rent Stabilization Division		

LEGAL DESCRIPTION

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH

No change in plot plan

URM crack repair at North & West walls only.

ATTACHED PLOT PLANS SHALL NOT EXTEND ABOVE THIS LINE

3 APPLICATION FOR INSPECTION — CITY OF LOS ANGELES, DEPT. OF BUILDING AND SAFETY — Earthquake Safety Division — 463Y — TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

Item	Entry	Office use
1. LEGAL DESCR.	LOT: A; BLOCK: ; TRACT: 3187; COUNCIL DISTRICT NO.: 9	DIST. MAP: 129-217; CENSUS TRACT: 2061
2. PRESENT USE OF BUILDING	( ) Warehouse; NEW USE OF BUILDING: ( ) same	ZONE: M3-3
3. JOB ADDRESS	1001 E. 1st St.	FIRE DIST.: Two
4. BETWEEN CROSS STREETS	Center St. AND La River Bed	LOT TYPE: Corner
5. OWNER'S NAME	Norm Solomon; PHONE: 687-9000	LOT SIZE:
6. OWNER'S ADDRESS	921 E. 2nd St. #101; CITY: LA; ZIP: 90015	Irreg.
7. ENGINEER	Jim Pajuhesh; BUS. LIC. NO.: ; ACTIVE STATE LIC. NO.: SE 1860; PHONE: 395-5964	ALLEY:
8. ARCHITECT OR DESIGNER	BUS. LIC. NO.: ; ACTIVE STATE LIC. NO.: ; PHONE:	BLDG. LINE:
9. ARCHITECT OR ENGINEER'S ADDRESS	940 Washington Blvd. #5; CITY: ; ZIP: 90230	AFFIDAVITS: CCPD 55760
10. CONTRACTOR	BUS. LIC. NO.: ; ACTIVE STATE LIC. NO.: ; PHONE:	
11. SIZE OF EXISTING BLDG.	WIDTH 156; LENGTH 265; STORIES 3; HEIGHT 40'; NO. OF EXISTING BUILDINGS ON LOT AND USE: 1- Warehouse	P.C. REQ'D:
12. CONST. MATERIAL OF EXISTING BLDG.	EXT. WALLS: URM; ROOF: wood; FLOOR: slab/wood	no
13. JOB ADDRESS	1001 E. 1st St.; STREET SIZE:	DISTRICT OFFICE: LA
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING	$ ~~2,000~~ 6000	SEISMIC STUDY ZONE:
15. NEW WORK (Describe)	Repair of 10/87 Quake Damage- Wall Failure of North and Interior(URM) Roof Level. Full Comp. completed Permit #51295/86	GRADING: ; FLOOD: ; HWY. DED.: ; CONS.:

NEW USE OF BUILDING	SIZE OF ADDITION	STORIES	HEIGHT	ZONED BY
No Change		1	25'	J.H.

TYPE	GROUP OCC.	FLOOR AREA	PLANS CHECKED	FILE WITH
III-N	B2		Sam Ostovari	

DWELL. UNITS: ; MAX OCC.: ; TOTAL: ; APPLICATION APPROVED: [signature]; TYPIST:

GUEST ROOMS: ; PARKING REQ'D: ; PARKING PROVIDED: STD. ; COMP. ; INSPECTION ACTIVITY: CONS / INS. / MAIN. / CONE / EQ ; INSPECTOR:

P.C. 22.10	E.P.I.	CONT INSP
S.P.C. 22.40	E.M. 6.00	
B.P. 50.00	E.E. 50	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee, or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B & S. Sections 22.12 & 22.13 LAAC.
I.F.	F.H.	
S.S. N/A	O.S.S. 7.00	
DIST. OFFICE LA	S.D.S.S.F. .18	SPRINKLERS RES'D SPEC. N/e
P.C. NO. D1402	C.D.	ENERGY N/A

Unless a shorter period of time has been established by an official action, plan check approval expires one year after the fee is paid and this permit expires two years after the fee is paid or 180 days after the fee is paid if construction is not commenced.

CASHIER'S USE ONLY: BASE-SELECT

C 22.10 ESPC
53 23.10 CHTO
C .98 DSS
79.27 CCPT
C2765 2 10/26/87 77.88 CATD

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date ______ Lic. Class ______ Lic. Number ______ Contractor ______ (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☑ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law).

☐ I am exempt under Sec. ______, B. & P. C. for this reason ______

Date 10/2/87 Owner's Signature [signature] for the partnership

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. ______ Insurance Company ______

☐ Certified copy is hereby furnished.

☐ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date ______ Applicant's Signature ______

Applicant's Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date 10/2/87 Applicant's Signature [signature] for the partnership

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed [signature] for the partnership, partner — 10/2/87

(Owner or agent having property owner's consent) Position Date

All applications must be filled out by applicant
USE INK OR INDELIBLE PENCIL

PLANS AND SPECIFICATIONS and other data must also be filed

WARD 9

3

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

Application to Alter, Repair or Demolish

To the Board of Public Works of the City of Los Angeles:

Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be, prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

(SIGN HERE) Pioneer Paper Co (Applicant)

CITY ASSESSOR: PLEASE VERIFY.

TAKE TO ROOM NO. 6 FIRST FLOOR

REMOVED FROM	REMOVED TO
Lot .... Block	Lot .... Block ....
Tract	Tract ....
Book ...... Page ...... F. B. Page	Book ...... Page ...... F. B. Page ......

O. K. City Assessor By .... Deputy

TAKE TO ROOM NO 34 THIRD FLOOR

CITY ENGINEER, PLEASE VERIFY STREET NUMBER

No. 1001 E 1st St

To No. ....

O.K. City Engineer By .... Deputy

1. Owner's name Estate of Addison Lysle
2. Owner's address 827 Central Bldg
3. Architect's name ....
4. Contractor's name Pioneer Paper Co
5. Contractor's address 247 So LA
6. Entire cost of the proposed improvements, $ 200.00
7. Purpose of the building Warehouse
8. Class of building Brick .... No. of rooms at present ....
9. No. of stories in height 2 .... Size of present building .... x ....
10. Size of new addition .... x .... No. Stories in height ....
11. Material of foundation .... Size footing .... Size of wall .... Depth below ground ....
12. Size of Redwood Mudsills .... x .... Size of exterior studs .... x ....
13. Size of interior bearing studs .... x .... Size of interior non-bearing studs .... x ....
14. Size of first floor joist .... x .... Second floor joist .... x ....
15. STATE ON FOLLOWING LINES JUST WHAT YOU WANT TO DO.

re roof with composition roofing

PERMIT NO. 16373 Date issued DEC 29 1913 1913

5

Application Received W. J. McPhail

OVER

All Applications Must be Filled Out by Applicant

Bldg. Form 3

PLANS AND SPECIFICATIONS and other data must also be filed

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

3

Application to Alter, Repair or Demolish

To the Board of Public Works of the City of Los Angeles:

Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor CITY CLERK PLEASE VERIFY

REMOVED FROM:	REMOVED TO
Lot 4 Block	Lot Block
Tract 3187	Tract
Book 5 Page 65 F. B. Page 43	Book Page F. B. Page

O. K. City Clerk By Deputy

TAKE TO ROOM No. 405 SOUTH ANNEX ENGINEER PLEASE VERIFY

From No. 1001 E. First St. Street

To No. N.E. Cor. 1st & Center Street

O. K. City Engineer By Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Light Manufacturing
2. What purpose will Building be used for hereafter? Same
3. Owner's name Mrs. W. S. Lysle Phone
4. Owner's address Bel-Air, Calif.
5. Architect's name Phone
6. Contractor's name Richards-Neustadt Construction Co. Phone MA 5140
7. Contractor's address 519 National City Bank Bldg.
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 6000.
9. Class of present Building C No. of rooms at present 3
10. Number of stories in height 2 Size of present Building 80 x 130
11. State how many buildings are on this lot One
12. State purpose buildings on lot are used for Light Manufacturing (Apartment House, Hotel, Residence, or any other purpose.)

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

Replace roof structure as given on plans attached. Roof destroyed by fire. Columns supporting roof to be replaced. Structure below second floor level not harmed by fire.

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER 5/26 9 7

(Sign here) RICHARDS-NEUSTADT CONSTRUCTION CO. (Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	
16071	5/28/26 Plan Examiner	5/26 Clerk	ISSUED MAY 28 1926

PLANS 80 Penny 18

13. Size of new addition.......................No. of Stories in height.......................

14. Material of foundation.................Size footings.................Size wall...........Depth below ground...........

15. Size of Redwood Mudsills.................x.................Size of interior bearing studs.................x.................

16. Size of exterior studs.................x.................Size of interior non-bearing studs.................x.................

17. Size of first floor joists.................x.................Second floor joists.................x.................

18. Will all provisions of State Housing Act be complied with?.......................

I have carefully examined and read the above blank and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

(Sign here).......................
(Owner or Authorized Agent)

FOR DEPARTMENT USE ONLY

APPLICATION	O. K.
CONSTRUCTION	O. K.
ZONING	O. K.
SET-BACK LINE	O. K.
ORD. 33761 (N. S.)	O. K.
FIRE DISTRICT #1	O. K.

REMARKS

3 APPLICATION FOR INSPECTION — TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY — B&S B-3 (R7.77)

INSTRUCTIONS: Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. — LOT: A — BLK: — TRACT: 3187 CD9 Maps 29-100
2. PRESENT USE OF BUILDING: ( ) Commercial — NEW USE OF BUILDING: ( ) same
3. JOB ADDRESS: 1001 E. 1st Street
4. BETWEEN CROSS STREETS: Center St. AND Myers St.
5. OWNER'S NAME: George Rollins — PHONE: 852-1522
6. OWNER'S ADDRESS: — CITY: — ZIP:
7. ENGINEER — BUS. LIC. NO. — ACTIVE STATE LIC. NO. — PHONE
8. ARCHITECT OR DESIGNER — BUS. LIC. NO. — ACTIVE STATE LIC. NO. — PHONE
9. CONTRACTOR: Airway Sandblasting Co. — BUS. LIC. NO. — ACTIVE STATE LIC. NO.: 170384 — PHONE: 636-0604
10. BRANCH LENDER — ADDRESS — CITY
11. SIZE OF EXISTING BLDG. WIDTH 100 LENGTH 100 — STORIES 1 — HEIGHT 14 — NO. OF EXISTING BUILDINGS ON LOT AND USE
12. CONST. MATERIAL OF EXISTING BLDG. — EXT. WALLS — ROOF — FLOOR

3

13. JOB ADDRESS: 1001 E. 1st St.
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING: $ 500.00
15. NEW WORK: (Describe) Sandblast walls and wood ceiling

DIST. MAP	729-217
CENSUS TRACT	2061.00
ZONE	M3-3
FIRE DIST.	TWO
LOT (TYPE)	COR-THRU
LOT SIZE	IRR
ALLEY	—
BLDG. LINE	—
AFFIDAVITS	C.C.P.D.
SEISMIC STUDY ZONE	
DIST. OFFICE	L.A.
CRIT. SOIL	—
GRADING	—
HIGHWAY DED.	YES
FLOOD	—
CONS.	—
ZONED BY	CASTRO
FILE WITH	
INSPECTOR	Ramsay
TYPIST	

NEW USE OF BUILDING: Commercial — SIZE OF ADDITION: NONE — STORIES: N/C — HEIGHT: N/C

TYPE: N/C — GROUP OCC.: N/C — BLDG. AREA: N/C — PLANS CHECKED

DWELL. UNITS: 0 — MAX OCC.: N/C — TOTAL — PLANS APPROVED

GUEST ROOMS: 0 — PARKING REQ'D: N/C — PARKING PROVIDED STD. COMP. — APPLICATION APPROVED

SPRINKLERS REQ'D SPECIFIED: 0 — CONT. INSP.: 0 — INSPECTION ACTIVITY: COMB GEN MAJ. S. CONS

P.C. — S.P.C. — B.P. 9.00 — T.I. — P.M. — I.F. — G.P.I. — C/O — O.S.

P.C. NO. — WORKER'S COMPENSATION INSURANCE CERTIFICATE ON FILE — EXEMPT — None

PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

CASHIER'S USE ONLY

FEB-15-80 58957 C •98144 V — 1 CK

9.00
~~19.00~~

LIMIT OF PERMIT

"This permit is an application for inspection, the issuance of which is not an approval or an authorization of the work specified herein. This permit does not authorize or permit, nor shall it be construed as authorizing or permitting the violation or failure to comply with any applicable law. Neither the City of Los Angeles, nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein, or the condition of the property or soil upon which such work is performed." (See Sec. 91.0202 L.A.M.C.)

Signed John Adamson
(Owner or Agent having Property Owner's Consent) ALSO, sign statement on reverse side, if applicable.

			Signature/Date
Bureau of Engineering	ADDRESS APPROVED		
	DRIVEWAY		
	HIGHWAY DEDICATION	REQUIRED	
		COMPLETED	
	FLOOD CLEARANCE		
	SEWERS	SEWERS AVAILABLE	
		NOT AVAILABLE	
		SFC PAID	
	SFC NOT APPLICABLE	SFC DUE	
Conservation	APPROVED FOR ISSUE ☐ NO FILE ☐ FILE CLOSED ☐		
Fire	APPROVED (TITLE 19) (L.A.M.C.-5700)		
Housing	HOUSING AUTHORITY APPROVAL		
Planning	APPROVED UNDER CASE #		
Traffic	APPROVED FOR		
Construction Tax	RECEIPT NO.	DWELLING UNITS	

All Applications Must be Filled Out by Applicant

Bldg. Form 3

PLANS AND SPECIFICATIONS and other data must also be filed

3

DEPARTMENT OF BUILDING AND SAFETY

Application to Alter, Repair or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

	REMOVED FROM	REMOVED TO
TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st FLOOR CITY CLERK PLEASE VERIFY	Lot A Block Tract Tr 3187	Lot Block Tract
TAKE TO FIRST FLOOR 242 SO. BROADWAY ENGINEER PLEASE VERIFY	Book 5 Page 56 F. B. Page 45	Book Page F. B. Page
	From No. 1001 E 1st Street Street	
	To No. N.E. Corner 1st + Center Street	

O.K. City Clerk By Deputy

O.K. City Engineer By Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Not Used
2. What purpose will Building be used for hereafter? Light Manufacturing
3. Owner's name W. S. Lysle Phone Ox4063
4. Owner's address University Club
5. Architect's name ~~Richards Neustadt Const. Co~~ Phone MA5140
6. Contractor's name Same Phone
7. Contractor's address 519 National City Bank Bldg
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 300.00
9. Class of present Building C No. of rooms at present 3
10. Number of stories in height 2 Size of present Building 80 x 128
11. State how many buildings are on this lot One
12. State purpose buildings on lot are used for Light Manufacturing (Apartment House, Hotel, Residence, or any other purpose.)

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

Build sawtooth skylight in one bay in place of flat roof.

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

Richards-Neustadt Const Co

OVER 11/14 T (Sign here) [signature] (Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O.K.	Stamp here when permit is issued.
39588	[signature] Plan Examiner	11/17/25 ZE [signature] Clerk	NOV 17 1925

En Renney 1A 175

~~PLANS~~

All Applications Must be Filled Out by Applicant

Bldg. Form 3

PLANS AND SPECIFICATIONS and other data must also be filed

3

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

Application to Alter, Repair or Demolish

To the Board of Public Works of the City of Los Angeles:

Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor CITY CLERK PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot A Block	Lot Block
Tract 3187	Tract
Book 5 Page 56 F. B. Page 43	Book Page F. B. Page

O.K. City Clerk By S Deputy

TAKE TO ROOM No. 405 SOUTH ANNEX ENGINEER PLEASE VERIFY

TAKE TO FIRST FLOOR 242 SO.

From No. 1001 E. First St. Street

To No. N.E. Corner 1st & Center Street

O.K. City Engineer By Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Warehouse
2. What purpose will Building be used for hereafter? Warehouse
3. Owner's name W. S. Lyale Phone OX 4063
4. Owner's address University Club
5. Architect's name Richards-Neustadt Construction Co. Phone MA 5140
6. Contractor's name Richards-Neustadt Construction Co. Phone
7. Contractor's address 619 National City Bank Bldg.
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 200.00
9. Class of present Building D No. of rooms at present 3
10. Number of stories in height 2 Size of present Building 80 x 128
11. State how many buildings are on this lot One
12. State purpose buildings on lot are used for Warehouse (Apartment House, Hotel, Residence, or any other purpose.)

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

Build one sawtooth skylight in one bay of present roof as shown by plans accompanying.

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER 1/3 T

(Sign here) RICHARDS-NEUSTADT CONSTRUCTION CO. (Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O.K.	Stamp here when permit is issued.
38233	S W Finley 11/6/25 Plan Examiner	11/6/25 8 Clerk	NOV 6 1925

Ed Ramsey 1A 1.50

PLANS

13. Size of new addition..........x..........No. of Stories in height..........

14. Material of foundation..........Size footings..........Size wall..........Depth below ground..........

15. Size of Redwood Mudsills..........x..........Size of interior bearing studs..........x..........

16. Size of exterior studs..........x..........Size of interior non-bearing studs..........x..........

17. Size of first floor joists..........x..........Second floor joists..........x..........

18. Will all provisions of State Housing Act be complied with?..........

I have carefully examined and read the above blank and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

RICHARDS-NEUSTADT CONSTRUCTION CO.

(Sign here) Same
(Owner or Authorized Agent)

FOR DEPARTMENT USE ONLY

APPLICATION	O. K. SWF
CONSTRUCTION	O. K.
ZONING	O. K.
SET-BACK LINE	O. K.
ORD. 33761 (N. S.)	O. K.
FIRE DISTRICT	O. K. SWF

REMARKS

3 APPLICATION FOR INSPECTION

CITY OF LOS ANGELES — DEPT OF BUILDING AND SAFETY

3 5 1 0 0 5 0 0 4

TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. — LOT: A — BLOCK: — TRACT: 3187 — CITY CLERK REF. NO.: MP29-100

DIST. MAP: 129A217 — CENSUS TRACT: 2060 — ZONE: M3-1

2. PRESENT USE OF BUILDING: ( ) artist in res — NEW USE OF BUILDING: ( ) temp chg in assem use

3. JOB ADDRESS: 1001 E. 1st street — SUITE/UNIT NO.: 13

FIRE DIST.: 2 — COUN. DIST.: 9

4. BETWEEN CROSS STREETS: Center AND Myers st

LOT TYPE: corner

5. OWNER'S NAME (X) TENANT ( ) BUILDING: Jason Walker — PHONE: 213 613-0539

LOT SIZE: irreg

6. OWNER'S ADDRESS: same as #3 L A — CITY — ZIP: 90013

7. ENGINEER — BUS. LIC. NO. — ACTIVE STATE LIC. NO. — PHONE

ALLEY: --

8. ARCHITECT OR DESIGNER — BUS. LIC. NO. — ACTIVE STATE LIC. NO. — PHONE

BLDG. LINE: ---

9. ARCHITECT OR ENGINEER'S ADDRESS — CITY — ZIP

DOCUMENTS/EASEMENTS: ZI 1117; ZI 1426; ZI 1872

10. CONTRACTOR: owner — BUS. LIC. NO.: not req'd — ACTIVE STATE LIC. NO. — PHONE

11. SIZE OF EXISTING BLDG. WIDTH — LENGTH — STORIES — HEIGHT — NO. OF EXISTING BUILDINGS ON LOT AND USE

12. FRAMING MATERIAL OF EXISTING BLDG. — EXT. WALLS — ROOF — FLOOR

3

13. JOB ADDRESS: 1001 E. 1st street — SUITE/UNIT NO.: 13

14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING: $ 1,000 — NO ADMISSION FEE

ISS OFF.: LA — P.C. REQD: NOT — GRADING — SEISMIC — HWY DED.: yes — FLOOD — FILE WITH

15. NEW WORK (Describe): temp change of use to party (assemb) on 12/31/91 (Start 7pm.) to 1/1/92 (end 7 a.m.)

NEW USE OF BUILDING: Art. party — SIZE OF ADDITION: — — STORIES: — — HEIGHT

TYPE —	GROUP OCC. —	MAX OCC. 150	BUILDING — ZONING — PLANS CHECKED: David Park
DWELL UNITS —	BUILDING AREA —	ZONING AREA —	APPLICATION APPROVED
GUEST ROOMS —	PARKING REQ'D —	PARKING PROVIDED S C HC	INSPECTION ACTIVITY: BS GEN. MAJ.S. EQ.

ZONED BY: DP 12/31/91 — TYPIST — INSPECTOR

B & S 05-B-3 (R.7/90)

PC 21.25	G.P.I. + NP	CONT. INSP.	
SPC.	PM		
BP 25.00	EI 0.50	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept of B & S SECTIONS 22.12 & 22.13 LAMC.	
IF.	F.H.		
SD.	OSS. 1.00		
ISS OFF. LA	S.O.S.S.	SPRINKLERS REQ'D SPEC.	
P.C. NO. CC	C/O	ENERGY —	OAS —

SYS DEV 2.81

CASHIER'S USE ONLY

12/31/91 04:02:25PM LA03 T-1240 C 06
BLDG PLAN CHEC 21.25
BLDG PERMITS R 25.00
EI RESIDENTIAL 0.50
SYS DEV 2.81
ONE STOP SURCH 1.00
FROM TRAN 1237 TO 1240
TOTAL 72.56
CASH 80.00
CHANGE 7.44

Unless a shorter period of time has been established by an official action, plan check approval expires one year after the fee is paid and this permit expires two years after the fee is paid or 180 days after the fee is paid if construction is not commenced.

SYS. yes

NEW AFFIDAVITS

PLAN CHECK EXTENDED TO ______ PER

ADMINISTRATIVE APPROVAL DATED

BY

D.A.D. PLANS CHECKED

HOUSING MITIGATION FEE ORDINANCE

☐ REQUIRED ☒ EXEMPT

ASBESTOS NOTIFICATION

Check Box: ☐ Notification letter sent to AQMD or EPA.

☒ I declare that notification of asbestos removal is not applicable to addressed project.

Signature: Jason Walker — Date: Dec 3/91

91LA 86045

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect

Date ______ Lic. Class ______ Lic. Number ______ Contractor ______ (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☒ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ______, B. & P. C. for this reason ______

Date Dec 3/91 Owner's Signature Jason Walker

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C).

Policy No ______ Insurance Company ______

☐ Certified copy is hereby furnished.

☐ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date ______ Applicant's Signature ______

Applicant's Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date 12/31/91 Applicant's Signature J. Jason Walker

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed Jason Walker (Owner or agent having property owner's consent) — Position: Tenant — Date: Dec 3/91

3 5 1 9 0 5 0 0 1 0 4

Bureau of Engineering		ADDRESS APPROVED	
		DRIVEWAY	
		HIGHWAY — REQUIRED	
		DEDICATION — COMPLETED	
		FLOOD CLEARANCE	
Public Works Improvement	Required YES ☐ NO ☐ PERMIT	#	
SEWERS		SEWERS AVAILABLE	
RES. NO.		NOT AVAILABLE	
CERT. NO.		SFC PAID	
	SFC NOT APPLICABLE	SFC DUE	
Grading	PRIVATE SEWAGE SYSTEM APPROVED		
Comm. Safety	APPROVED FOR ISSUE ☐ NO FILE ☐ FILE CLOSED ☐		
CEQA			
Fire	APPROVED (TITLE 19) (L.A.M.C.-5700) (Title 19 N/A) 12/31/91		
	APPROVED - HYDRANT UNIT, ROOM 900-CHE Set Special Permit		
CRA	APPROVED PER REDEV PROJECT		
Transportation	APPROVED FOR DRIVEWAY LOCATION		
	APPROVED FOR ORD. #		
Planning	WORK SHEET #		
	APPROVED UNDER CASE #		
	LANDSCAPE / XERISCAPE		
	SIGHT PLAN REVIEW		
Housing	HOUSING AUTHORITY AFFIDAVIT NO.		
Construction Tax	RECEIPT NO. DWELLING UNITS		
Cultural Affairs			
Rent Stabilization Division			

per Steve Kim City Planning okay's count at temp. 12/31/91

LEGAL DESCRIPTION

per modification dated on 12/31/91 change of use to assembly okayed. LAFD temporary approval concurring with Dept. of Building & Safety 12/31/91

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH

N/A

← ATTACHED PLOT PLANS SHALL NOT EXTEND ABOVE THIS LINE

All Applications Must be Filled Out by Applicant

Bldg. Form 3 — BUILDING DIVISION — PLANS AND SPECIFICATIONS and other data must also be filed

3 DEPARTMENT OF BUILDING AND SAFETY

Application to Alter, Repair or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:
Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.
Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or preclude any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor
CITY CLERK PLEASE VERIFY
TAKE TO FIRST FLOOR 242 SO. BROADWAY
ENGINEER PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot 4 Block	Lot Block
Tract 3187	Tract
Book 5 Page 5 F. B. Page 49	Book Page F. B. Page

From No. 1001 E First St. Street
To No. N.E. Corner First + Center Streets Street

O. K. City Clerk By Deputy
O. K. City Engineer By Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Warehouse
2. What purpose will Building be used for hereafter? Same
3. Owner's name Walter S Lysle Phone TR8651
4. Owner's address University Club
5. Architect's name Phone
6. Contractor's name Richards-Neustadt Const Co Phone TU8964
7. Contractor's address 701 W.M. Garland Bldg
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $300.00
9. Class of present Building C No. of rooms at present 3
10. Number of stories in height 2 Size of present Building 80 x 100
11. State how many buildings are on this lot One
12. State purpose buildings on lot are used for Warehouse (Apartment House, Hotel, Residence, or any other purpose.)

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

Underpinning wall on south side of building next to excavation for bridge pier - Hard burned brick + cement mortar.

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

RICHARDS-NEUSTADT CONSTRUCTION CO.

OVER

(Sign here) [illegible] (Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	Stamp here when permit is issued.
8161	[illegible] Plan Examiner	3/20/28 [illegible]	ISSUED MAR 20 1928

PLANS

over

13. Size of new addition .... x .... No. of Stories in height ....

14. Material of foundation .... Size footings .... Size wall .... Depth below ground ....

15. Size of Redwood Mudsills .... x .... Size of interior bearing studs .... x ....

16. Size of exterior studs .... x .... Size of interior non-bearing studs .... x ....

17. Size of first floor joists .... x .... Second floor joists .... x ....

18. Will all provisions of State Housing Act be complied with? ....

I have carefully examined and read the above blank and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

RICHARDS-NEUSTADT CONSTRUCTION CO.

(Sign here) .... (Owner or Authorized Agent)

FOR DEPARTMENT USE ONLY

APPLICATION	O. K.
CONSTRUCTION	O. K.
ZONING	O. K.
SET-BACK LINE	O. K.
ORD. 33761 (N. S.)	O. K.
FIRE DISTRICT	O. K.

REMARKS

3/20/28 No widening on 1st St. at NE Cor of Center St.

Bldg. Form 3

3

USE INK OR INDELIBLE PENCIL

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Application to Alter, Repair, Move or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:
Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.
Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

REMOVED FROM	REMOVED TO
Lot	Lot
Tract	Tract

Present location of building: 1001 E First Street (House Number and Street)
New location of building: Same (House Number and Street)
Between what cross streets: ~~First & Banning~~

Approved by City Engineer.
Deputy.

1. Purpose of PRESENT building Warehouse (Store, Residence, Apartment House, or any other purpose.) Families — Rooms —
2. Use of building AFTER alteration or moving Same Families — Rooms —
3. Owner (Print Name) Walter Lysle Phone TR 7178
4. Owner's address 1001 E First street
5. Certificated Architect State License No. Phone
6. Licensed Engineer Geo Hull McCreery State License No. 1733 Phone TU 8464
7. Contractor K[illegible] Const Co State License No. 582 Phone TU 8464
8. Contractor's address 117 W 9th St
9. VALUATION OF PROPOSED WORK {Including all Material, Labor, Finishing, Equipment and Appliances in Completed Building} $300.00
10. State how many buildings NOW on lot and give use of each. One - warehouse (Residence, Hotel, Apartment House, or any other purpose.)
11. Size of existing building 150 x 100 Number of stories high 2 Height to highest point 25'
12. Class of building C Material of existing walls Brick Exterior framework (Wood or Steel)

Describe briefly and fully all proposed construction and work:

install windows doors and partitions ~~[illegible]~~
~~[illegible]~~

Fill in Application on other Side and Sign Statement (OVER)

PERMIT NO. 19876	FOR DEPARTMENT USE ONLY			Fee
	Plans and Specifications checked [illegible]	Zone M3	Fire District No. 1	Stamp here when Permit is issued: DEC 15 1932
	Corrections verified	Set Back N/Ft.	Street Widening Ft.	
PLANS	Plans, Specifications and Applications rechecked and approved [illegible]	Application checked and approved [illegible] 12-15-32		
Rec'd [illegible]	For Plans See / Filed with	Required Valuation Included	Specified Yes—No	Inspector [illegible]

PLANS DESTROYED

PLANS, SPECIFICATIONS, and other data must be filed if required.

NEW CONSTRUCTION

Size of Addition None x ...... Size of Lot............x.............Number of Stories when complete....................

Material of Foundation..........................Width of Footing................Depth of footing below ground..............

Width Foundation Wall.............. ......Size of Redwood Sill...........x............Material Exterior Walls.............

Size of Exterior Studs.....................x......................Size of Interior Bearing Studs...................x....................

Joists: First Floor........x........Second Floor........x........Rafters........x........Roofing Material.............................

I have carefully examined and read both sides of this completed Application and know the same is true and correct and hereby certify and agree, if a Permit is issued, that all the provisions of the Building Ordinances and State Laws will be complied with whether herein specified or not; also certify that plans and specifications, if required to be filed, will conform to all of the provisions of the Building Ordinances and State laws.

Sign Here.... Don Neil McCreery ....
(Owner or Authorized Agent)

By..

FOR DEPARTMENT USE ONLY			
Application	Fire District..........	Set back..................................	Termite Inspection ....
Construction............................	Zoning	Street Widening..........................	Forced Draft Ventil..................

(1)
REINFORCED CONCRETE

Barrels of Cement.................................

Tons of Reinforcing Steel....................

(2)
The building (and, or, addition) referred to in this Application is, or will be when moved, more than 100 feet from

....Street

Sign Here..
(Owner or Authorized Agent)

(3)
No required windows will be obstructed.

Sign Here ....
Owner or Authorized Agent.

(4)
There will be an unobstructed passageway at least ten (10) feet wide, extending from any dwelling on lot to a Public Street or Public Alley at least 10 feet in width.

Sign Here ....
(Owner or Authorized Agent)

REMARKS: ....

All applications must be filled out by applicant

Ward 8

Applicant must indicate the Building Line or Lines clearly and distinctly on the Drawings.

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

Application to Alter, Repair or Demolish

Application is hereby made to the Chief Inspector of Buildings of the City of Los Angeles, for the approval of the detailed statement of the specifications herewith submitted for the alteration, repair or demolition of the building herein described. All provisions of the Building Ordinances shall be complied with in the alteration, repair or demolition of said building, whether specified or not.

(Sign Here) W J Hatton

Los Angeles, Cal., DEC 24 1908 ....190 8

6/17/19

CITY ASSESSOR: Please Verify

REMOVED FROM	REMOVED TO
Lot 6, Block W	Lot ......, Block ......
Tract Aliso L	Tract
	O K Mallord, Dep.
Book 5 Page 5 F. B. Page 51	Book ...... Page ...... F. B. Page ......

TAKE TO ROOM NO. 6 FIRST FLOOR

TAKE TO ROOM NO. 34 THIRD FLOOR

CITY ENGINEER: Please Verify Street Number

From No. 1001-1007 E. 1st St. To No. ......

1. Owner's name Addison L ~~Ghw.~~
2. Owner's address 2618 W Seventh
3. Architect's name none
4. Builder's name W J Hatton
5. Builder's address 2822 N Griffin ave
6. Entire cost of the Proposed Improvements, $ 758.00
7. Purpose of building Offices
8. Class of Building Brick ...... No. of rooms at present ......
9. No. of stories in height 2 ...... Size of building ...... X ......
10. Size of addition ...... X ......
11. Material of foundation Brick ...... Size Footing ...... Size of wall ......
12. Size of exterior studs ...... X ...... Interior studs ...... X ......
13. Size of mud sills ...... X ...... Bearing studs ...... X ......
14. Size of first floor joist ...... X ...... Second floor joist ...... X ......
15. State on following lines just what you want to do:

Put three new windows in front larger than those in now cut Brick out for same put iron lintels on top Put cement step in front to replace wood steps there now Paint inside and wainscot offices with wood add 1 toilet + 1 wash bowls

Permit No. 7256

BLDG. DEPT. FORM 3

All applications must be filled out by applicant

PLANS AND SPECIFICATIONS and other data must also be filed

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

3

Application to Alter, Repair or Demolish

To the Board of Public Works of the City of Los Angeles:

Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 FIRST FLOOR ASSESSOR PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot........ Block........	Lot........ Block........
Tract........	Tract........
Book........ Page........ F. B. Page........	Book........ Page........ F. B. Page........

O. K. City Assessor By........ Deputy.

TAKE TO ROOM No. 405 SOUTH ANNEX ENGINEER PLEASE VERIFY

From No. 1001 E. First St corner Center Street

To No. extending to Center and Banning Street

O. K. City Engineer By........ Deputy.

(USE INK OR INDELIBLE PENCIL)

1. What Purpose is the present Building used for? Storage of Hides
2. Owner's name Walter S. Lyle Phone........
3. Owner's address 472 Pac. Electric Bldg.
4. Architect's name Mayberry & Parker Phone........
5. Contractor's name Allen Knight Const Co Phone........
6. Contractor's address Stoy Bldg
7. ENTIRE COST OF PROPOSED WORK { Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, etc. } $ 200.00
8. Class of Present Building C No. of Rooms at present 3 - Lofts.
9. No. of stories in height 2 + ~~Basement~~ Size of present building........x........
10. State how many Buildings are on this lot One
11. State purpose Buildings on lot are used for Hides etc. (Tenement House, Hotel, Residence, or any other purpose.)

STATE ON FOLLOWING LINES JUST WHAT YOU WANT TO DO:

Cut opening from one basement to another.
Close up two openings from 2nd basement
to 3rd basement
Cut 2 openings on 1st floor from one loft to
another and closing two openings 2nd loft
to 3rd loft.

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER

(Sign here) Mayberry & Parker Agent
(Owner or Authorized Agent)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and specifications checked and found to conform to Ordinances, State Laws, etc. (Use Ink)	Application checked and found O. K. (Use Rubber Stamp)	
4928	W. F. Gow. Plan Examiner.	SEP 24 1917 Clerk.	SEP 24 1917

DEPARTMENT OF BUILDING AND SAFETY

There are two ways to request a copy of the document image.
1) By fax using the request form. Click on the following link
http://ladbs.org/LADBSWeb/LADBS_Forms/Administrative/AD-Form.01.pdf to download the request form.
2) In person. Bring the following summary to one of the following Records counters.
3) If you have any questions, please visit one of our Records Counters.

RECORDS COUNTER HOURS

MONDAY, TUESDAY, THURSDAY, FRIDAY: 7:30 AM to 4:30 PM
WEDNESDAY: 9:00 AM to 4:30 PM

Metro	Van Nuys
201, N. Figueroa St.	6262 Van Nuys Blvd
1st Floor, Room 110	Record Counter
Record Counter	Van Nuys,CA 91401
Los Angeles,CA 90012	

Address: 200 N CENTER ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	4/12/1982		HIST: G0106 017 0102	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/21/1987		HIST: B0139 009 0132	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/21/1987		HIST: B0139 009 0132	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/21/1987		HIST: B0139 009 0132	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/21/1987		HIST: B0139 009 0132	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/23/1987		HIST: B0146 005 0053	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/23/1987		HIST: B0146 005 0053	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/16/1988		HIST: B0148 004 0159	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	9/1/1988		HIST: B0151 007 0361	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/12/1990		HIST: B0172 009 0467	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/12/1990		HIST: B0172 009 0467	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/24/1991		HIST: B0177 008 0301	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/24/1991		HIST: B0177 008 0301	
AFFIDAVIT	PARKING	7/3/1956	AFF 919	HIST: M0026 004 0169	
BUILDING PERMIT	ALTERATION	1/10/1962	1962LA01968	HIST: P1701 002 1644	
BUILDING PERMIT	ALTERATION	9/2/1988	1988LA09316	HIST: P0205 002 0132	
BUILDING PERMIT	ALTERATION	10/18/1993	1993HO24521	HIST: P0421 002 0305	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ADDITION	3/9/1982	1982LA39839	HIST: 00000 000 0000	
BUILDING PERMIT	BLDG-ADDITION	10/18/1993	1993HO24521	IDIS: P6235 02953 0000 thru P6235 0001 HIST: P0421 002 0305	
BUILDING PERMIT	BLDG-ALTER/REPAIR		1945 10311	HIST: P1371 001 0434	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/12/1922	1922LA31430	HIST: P1097 001 1433	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/11/1926	1926LA07497	HIST: P1158 001 2960	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/17/1928	1928LA07923	HIST: P1183 002 1987	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/25/1931	1931LA17228	HIST: P1222 001 2459	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/12/1931	1931LA24105	HIST: P1224 002 2045	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/12/1931	1931LA24105	IDIS: P5228 02244 0000 thru P5228 0001 HIST: P1224 002 2045	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/9/1932	1932LA00484	HIST: P1226 001 0969	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/9/1932	1932LA00484	IDIS: P5230 00484 0000 thru P5230 0001 HIST: P1226 001 0969	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/15/1933	1933LA16414	HIST: P1238 002 2680	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/28/1935	1935LA19782	HIST: P1252 002 2851	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/6/1935	1935LA23104	HIST: P1254 001 0607	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/13/1935	1935LA23609	HIST: P1254 001 1617	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/6/1936	1936LA00376	HIST: P1255 001 0751	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/6/1936	1936LA00376	IDIS: P5259 01031 0000 thru P5259 0001 HIST: P1255 001 0751	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/2/1940	1940LA00155	HIST: P1317 001 0309	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/8/1940	1940LA04869	HIST: P1318 002 1025	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/10/1940	1940LA49696	HIST: P1335 001 0382	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/11/1946	1946 29482	HIST: P1386 001 1825	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/11/1949	1949 20620	HIST: P1426 002 2284	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/2/1955	1955LA28865	HIST: P1638 001 1514	
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/12/1956	1956LA47942	HIST: P1647 001 0823	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/14/1956	1956LA50601	HIST: P1647 001 0821	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/2/1956	1956LA57031	HIST: P1647 001 0818	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/22/1958	1958LA10746	HIST: P1666 001 1593	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/2/1964	1964LA62778	IDIS: P5838 01621 0000 thru P5838 0001 HIST: P	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/9/1982	1982LA39839	IDIS: P6034 02786 0000 thru P6034 0001 HIST: P	
BUILDING PERMIT	BLDG-DEMOLITION	6/4/1981	1981LA25093	HIST: 00000 000 0000 HIST: P1876 001 1223	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-DEMOLITION	6/4/1981	1981LA25093	IDIS: P6024 01194 0000 thru P6024 0001 HIST: P1876 001 1223	
BUILDING PERMIT	BLDG-NEW	4/14/1943	1943 02697	HIST: P1360 001 2705	
BUILDING PERMIT	BLDG-NEW	4/20/1943	1943LA02697	IDIS: P5365 02935 0000 thru P5365 0001 HIST: P1360 001 2705	
BUILDING PERMIT	BLDG-NEW	11/22/1950	1950LA27767	HIST: P1443 001 0323	
BUILDING PERMIT	GRADING	6/4/1981	1981LA25094	HIST: 00000 000 0000 HIST: P1876 001 1225	
BUILDING PERMIT	GRADING	6/4/1981	1981LA25094	IDIS: P6024 01195 0000 thru P6024 0001 HIST: P1876 001 1225	
CERTIFICATE OF OCCUPANCY		1/31/1950		HIST: O128 1 2816	
COMMISSION	BAAB BOARD FILE	12/31/1980	BF 801154	HIST: B0013 006 0369	
COMMISSION	BAAB BOARD FILE	12/31/1982	BF 824121	HIST: B0072 002 0281	
EQ-COMPLIANCE CERT		9/19/1989	1988LA09316	HIST: M0425 009 0370	
GRADING	COMPACTION FILE	3/11/1982		HIST: G0106 017 0093	
GRADING	COMPACTION FILE	4/13/1982		HIST: G0106 017 0092	
GRADING	DEPARTMENT LETTER	4/12/1982		HIST: G0092 012 0212	
GRADING	DEPARTMENT LETTER	4/12/1982		HIST: G0106 017 0105	
GRADING	DEPARTMENT LETTER	2/2/1988		HIST: M0293 002 0131	
GRADING	FOUNDATION INVESTIGATION REPOR	3/11/1982		HIST: G0092 012 0213	
GRADING	FOUNDATION INVESTIGATION REPOR	12/8/1987		HIST: M0293 002 0136	
GRADING	GRADING PRE-INSP REPT	7/8/1991		HIST: M0770 003 0004	
GRADING	SOILS & GEOLOGY FILE	8/16/1990		HIST: M0673 001 0388	
MECHANICAL PERMIT	HVAC	12/13/1989	1289T5356	HIST: T0196 007 0052	
PLAN MAINTENANCE		10/18/1993	1993HO24521	HIST: J0716 001 0447	
RANGE FILE	MISCELLANEOUS	2/11/1982		HIST: R0034 006 0089	
RANGE FILE	MISCELLANEOUS	9/20/1984		HIST: M0048 015 0113	
RANGE FILE	MISCELLANEOUS	7/29/1988		HIST: M0322 003 0472	
RANGE FILE	MISCELLANEOUS	9/10/1992		HIST: M0798 005 0095	

LA DBS
DEPARTMENT OF BUILDING AND SAFETY

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2) In person. Bring the following summary to one of the following Records counters.
3) If you have any questions, please visit one of our Records Counters.

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Metro	Van Nuys
201, N. Figueroa St. 1st Floor, Room 110 Record Counter Los Angeles,CA 90012	6262 Van Nuys Blvd Record Counter Van Nuys,CA 91401

Address: 210 N CENTER ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	4/12/1982		HIST: G0106 017 0102	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/21/1987		HIST: B0139 009 0132	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/21/1987		HIST: B0139 009 0132	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/21/1987		HIST: B0139 009 0132	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/21/1987		HIST: B0139 009 0132	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/23/1987		HIST: B0146 005 0053	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/23/1987		HIST: B0146 005 0053	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/16/1988		HIST: B0148 004 0159	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	9/1/1988		HIST: B0151 007 0361	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/12/1990		HIST: B0172 009 0467	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/12/1990		HIST: B0172 009 0467	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/24/1991		HIST: B0177 008 0301	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/24/1991		HIST: B0177 008 0301	
AFFIDAVIT	PARKING	7/3/1956	AFF 919	HIST: M0026 004 0169	
BUILDING PERMIT		9/12/1929	1929LA23390	HIST: P1201 002 3082	
BUILDING PERMIT	ALTERATION	1/10/1962	1962LA01968	HIST: P1701 002 1644	
BUILDING PERMIT	ALTERATION	9/2/1988	1988LA09316	HIST: P0205 002 0132	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	ALTERATION	10/18/1993	1993HO24521	HIST: P0421 002 0305	
BUILDING PERMIT	BLDG-ADDITION	12/22/1927	1927LA37946	IDIS: P5184 01943 0000 thru P5184 0001 HIST: P1180 002 1175	
BUILDING PERMIT	BLDG-ADDITION	8/7/1979	1979LA87593	HIST: 00000 000 0000 HIST: P1855 002 0808	
BUILDING PERMIT	BLDG-ADDITION	3/9/1982	1982LA39839	HIST: 00000 000 0000	
BUILDING PERMIT	BLDG-ADDITION	10/18/1993	1993HO24521	IDIS: P6235 02953 0000 thru P6235 0001 HIST: P0421 002 0305	
BUILDING PERMIT	BLDG-ALTER/REPAIR		1945 10311	HIST: P1371 001 0434	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/12/1922	1922LA31430	HIST: P1097 001 1433	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/11/1926	1926LA07497	HIST: P1158 001 2960	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/17/1928	1928LA07923	HIST: P1183 002 1987	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/25/1931	1931LA17228	HIST: P1222 001 2459	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/12/1931	1931LA24105	HIST: P1224 002 2045	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/12/1931	1931LA24105	IDIS: P5228 02244 0000 thru P5228 0001 HIST: P1224 002 2045	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/9/1932	1932LA00484	HIST: P1226 001 0969	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/9/1932	1932LA00484	IDIS: P5230 00484 0000 thru P5230 0001 HIST: P1226 001 0969	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/15/1933	1933LA16414	HIST: P1238 002 2680	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/28/1935	1935LA19782	HIST: P1252 002 2851	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/6/1935	1935LA23104	HIST: P1254 001 0607	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/13/1935	1935LA23609	HIST: P1254 001 1617	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/6/1936	1936LA00376	HIST: P1255 001 0751	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/6/1936	1936LA00376	IDIS: P5259 01031 0000 thru P5259 0001 HIST: P1255 001 0751	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/16/1936	1936LA24839	HIST: P1263 002 1467	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/16/1936	1936LA24839	IDIS: P5268 00734 0000 thru P5268 0001 HIST: P1263 002 1467	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/2/1940	1940LA00155	HIST: P1317 001 0309	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/8/1940	1940LA04869	HIST: P1318 002 1025	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/10/1940	1940LA49696	HIST: P1335 001 0382	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/11/1946	1946 29482	HIST: P1386 001 1825	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/11/1949	1949 20620	HIST: P1426 002 2284	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/5/1951	1951 08229	HIST: P1447 002 2104	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/2/1955	1955LA28865	HIST: P1638 001 1514	
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/12/1956	1956LA47942	HIST: P1647 001 0823	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/14/1956	1956LA50601	HIST: P1647 001 0821	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/2/1956	1956LA57031	HIST: P1647 001 0818	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/22/1958	1958LA10746	HIST: P1666 001 1593	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/2/1964	1964LA62778	IDIS: P5838 01621 0000 thru P5838 0001 HIST: P	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/9/1982	1982LA39839	IDIS: P6034 02786 0000 thru P6034 0001 HIST: P	
BUILDING PERMIT	BLDG-DEMOLITION	6/4/1981	1981LA25093	HIST: 00000 000 0000 HIST: P1876 001 1223	
BUILDING PERMIT	BLDG-DEMOLITION	6/4/1981	1981LA25093	IDIS: P6024 01194 0000 thru P6024 0001 HIST: P1876 001 1223	
BUILDING PERMIT	BLDG-NEW	6/22/1918	1918LA03245	HIST: P1057 001 2518	
BUILDING PERMIT	BLDG-NEW	6/5/1923	1923LA25433	HIST: P1111 002 0087	
BUILDING PERMIT	BLDG-NEW	3/11/1924	1924LA12623	HIST: P1128 001 0902	
BUILDING PERMIT	BLDG-NEW	3/11/1924	1924LA12623	IDIS: P5157 00451 0000 thru P5157 0001 HIST: P1128 001 0902	
BUILDING PERMIT	BLDG-NEW	4/14/1943	1943 02697	HIST: P1360 001 2705	
BUILDING PERMIT	BLDG-NEW	4/20/1943	1943LA02697	IDIS: P5365 02935 0000 thru P5365 0001 HIST: P1360 001 2705	
BUILDING PERMIT	BLDG-NEW	11/22/1950	1950LA27767	HIST: P1443 001 0323	
BUILDING PERMIT	GRADING	6/4/1981	1981LA25094	HIST: 00000 000 0000 HIST: P1876 001 1225	
BUILDING PERMIT	GRADING	6/4/1981	1981LA25094	IDIS: P6024 01195 0000 thru P6024 0001 HIST: P1876 001 1225	
BUILDING PERMIT	NEW CONSTRUCTION	6/5/1923	1923LA25433	IDIS: P5140 01465 0000 thru P5140 0001 HIST: P1111 002 0087	
CERTIFICATE OF OCCUPANCY		1/31/1950		HIST: O128 1 2816	
CERTIFICATE OF OCCUPANCY		3/10/1967	1961SP25700	HIST: O128 1 2819	
COMMISSION	BAAB BOARD FILE	12/31/1980	BF 801154	HIST: B0013 006 0369	
COMMISSION	BAAB BOARD FILE	12/31/1982	BF 824121	HIST: B0072 002 0281	
EQ-COMPLIANCE CERT		9/19/1989	1988LA09316	HIST: M0425 009 0370	
GRADING	COMPACTION FILE	3/11/1982		HIST: G0106 017 0093	
GRADING	COMPACTION FILE	4/13/1982		HIST: G0106 017 0092	
GRADING	DEPARTMENT LETTER	4/12/1982		HIST: G0092 012 0212	
GRADING	DEPARTMENT LETTER	4/12/1982		HIST: G0106 017 0105	
GRADING	DEPARTMENT LETTER	2/2/1988		HIST: M0293 002 0131	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
GRADING	FOUNDATION INVESTIGATION REPOR	3/11/1982		HIST: G0092 012 0213	
GRADING	FOUNDATION INVESTIGATION REPOR	12/8/1987		HIST: M0293 002 0136	
GRADING	GRADING PRE-INSP REPT	7/8/1991		HIST: M0770 003 0004	
GRADING	SOILS & GEOLOGY FILE	8/16/1990		HIST: M0673 001 0388	
MECHANICAL PERMIT	HVAC	12/13/1989	1289T5356	HIST: T0196 007 0052	
PLAN MAINTENANCE		10/18/1993	1993HO24521	HIST: J0716 001 0447	
RANGE FILE	MISCELLANEOUS	2/11/1982		HIST: R0034 006 0089	
RANGE FILE	MISCELLANEOUS	9/20/1984		HIST: M0048 015 0113	
RANGE FILE	MISCELLANEOUS	7/29/1988		HIST: M0322 003 0472	
RANGE FILE	MISCELLANEOUS	9/10/1992		HIST: M0798 005 0095	

Bldg. Form 3

USE INK OR INDELIBLE PENCIL

3

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Application to Alter, Repair, Move or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

REVOCABLE PERMIT

REMOVED FROM	REMOVED TO
Lot	Lot
Tract	Tract

Present location of building .... (House Number and Street)

New location of building: 200 N. Center St. (House Number and Street)

Between what cross streets: Banning & Turner

Approved by City Engineer. .... Deputy.

1. Purpose of PRESENT building: Cold Storage Bldg (Store, Residence, Apartment House, or any other purpose.) Families .... Rooms 1
2. Use of building AFTER alteration or moving: Cold Storage Bldg. Families .... Rooms 1
3. Owner (Print Name): National Ice & Cold Storage Co. Phone ....
4. Owner's address: 200 N. Center St.
5. Certificated Architect: —— State License No. .... Phone ....
6. Licensed Engineer: REVOCABLE PERMIT State License No. .... Phone ....
7. Contractor: R. L. Nelson State License No. 7883 Phone We. 1967
8. Contractor's address: 787 E. Pico St.
9. VALUATION OF PROPOSED WORK (Including all Material, Labor, Finishing, Equipment and Appliances in Completed Building.) $ 75.00
10. State how many buildings NOW on lot and give use of each: One (Residence, Hotel, Apartment House, or any other purpose.)
11. Size of existing building 50 x 100 Number of stories high 3 Height to highest point 50'
12. Class of building D Material of existing walls Wood Exterior framework Wood (Wood or Steel)

Describe briefly and fully all proposed construction and work:

Covering exterior exposed area of present cold storage building with corrugated iron as approved by letter dated Nov 9, 1931, from Bd of Bldg & Safety Commissioners

Permit revocable.

Fill in Application on other Side and Sign Statement (OVER)

REVOCABLE PERMIT

PERMIT NO. 24105	FOR DEPARTMENT USE ONLY				Fee 1.00
	Zone: M-3	Fire District No. 1	Set Back: no Ft.	Street Widening: no Ft.	Stamp here when Permit is Issued: ISSUED NOV 12 1931
	Plans and Specifications checked	Application checked and approved: 11/12/31 Hht Clerk.			
	Corrections verified	Per Plans See	Filed with		
PLANS Rec'd.	Plans, Specifications and Application rechecked and approved	SPRINKLER Required Valuation Included	Specified Yes—No		Inspector: [illegible]

OK 1315 11/13 Feet.

PLANS, SPECIFICATIONS, and other data must be filed if required.

NEW CONSTRUCTION

None

Size of Addition..........x..........Size of Lot..........x..........Number of Stories when complete..........

Material of Foundation..........Size of Redwood Sill..........x..........Width of Footing..........

Depth Footing below ground..........Width Foundation Wall..........Material Exterior Walls..........

Size of Exterior Studs..........x..........Size of Interior Bearing Studs..........x..........

Material of Floor..........Joists: First Floor..........x..........Second Floor..........x..........

Material of Roof..........Size of Rafters..........x..........Spacing..........on center

I have carefully examined and read both sides of this completed Application and know the same is true and correct and hereby certify and agree, if a Permit is issued, that all of the provisions of the Building Ordinances and State Laws will be complied with whether herein specified or not; also certify that plans and specifications, if required to be filed, will conform to all of the provisions of the Building Ordinances and State Laws.

Sign Here.....Al Nelson.....
(Owner or Authorized Agent)

By.....J. Altmans.....

FOR DEPARTMENT USE ONLY			
Application..... 72	Fire District..... 72	Set back..... OV	Termite Inspection.....
Construction..... 72	Zoning..... OV	Street Widening..... OV	Forced Draft Ventil.....

(1)
REINFORCED CONCRETE

Barrels of Cement..........

Tons of Reinforcing Steel..........

(2)
The building (and, or, addition) referred to in this Application is, or will be when moved, more than 100 feet from

..........Street

Sign Here..........
(Owner or Authorized Agent)

(3)
There will be an unobstructed passageway at least ten (10) feet wide, extending from any dwelling on lot to a Public Street or Public Alley at least 10 feet in width.

Sign Here..........
(Owner or Authorized Agent)

REMARKS ....

Revocable

OK B&S 11/9/31 H.W.G.

1

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Application for the Erection of a Building
OF
CLASS ~~"A", "B" OR "C"~~ 5 - Masonry

To the Board of Building and Safety Commissioners of the City of Los Angeles:
Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.
Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

Lot No.

Tract

Location of building (House Number and Street) | Approved by City Engineer

Between what cross streets | Deputy

USE INK OR INDELIBLE PENCIL

1. Purpose of building Incinerator (Store, Residence, Apartment House, Hotel, or any other purpose) Families Rooms
2. Owner (Print Name) Mary Ice + Cold Storage Co. Phone
3. Owner's address 200 N. Center St
4. Certificated Architect State License No. Phone
5. Licensed Engineer State License No. Phone
6. Contractor Acme Incinerator Co. State License No. 52290 Phone Wa 5717
7. Contractor's address 3020 S. Orange Dr
8. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and/or elevator equipment therein or thereon) $ 285.00
9. State how many buildings NOW on lot and give use of each (Store, Residence, Apartment House, Hotel or any other purpose)
10. Size of new building x No. Stories Height to highest point
11. Size of lot x Type of soil
12. Foundation (Material) Depth in ground
13. Material Exterior Walls Skeleton framework (Structural Steel, Reinforced Concrete)
14. Material of floors Roofing material

I have carefully examined and read the above completed Application and know the same is true and correct and hereby certify and agree that if a permit is issued all the provisions of the Building Ordinances and State Laws will be complied with, whether herein specified or not. I also certify that plans and specifications filed will conform to all the Building Ordinances and State Laws.

Sign here Acme Incinerator Co. (Owner or Authorized Agent)

By R. H. Towsley

Plans, Specifications and other data must be filed.

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked	Zone	Fire District	Fee
2697		M-2	No. 1C	Stamp here when Permit is issued
	Corrections verified	Bldg. Line Ft.	Street Widening Ft.	
PLANS	Plans, Specifications and Application rechecked and approved.	Application checked and approved 4-20-48 Clerk		
	For Plans See / Filed with	SPRINKLER Required / Valuation Included	Specified Yes-No	Inspector

FOR DEPARTMENT USE ONLY

Application	Fire District	Bldg. Line	Forced Draft Ventil
Construction	Zoning	Street widening	

(1)
REINFORCED CONCRETE

Barrels of Cement

Tons of Reinforcing Steel

(2)
The building referred to in this Application will be more than 100 feet from

Street

Sign here
(Owner or Authorized Agent)

(3) This building will be not less than 10 feet from any other building used for residential purposes on this lot.

Sign here
(Owner or Authorized Agent)

(4)
There will be an unobstructed passageway at least 10 feet wide, extending from any dwelling on lot to a Public Street or Public Alley at least 10 feet in width.

Sign here
(Owner or Authorized Agent)

REMARKS:

WORKMEN'S COMPENSATION INSURANCE

Date

I hereby certify that I am the applicant for this permit, and that in doing the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

PLAN CHECKING 5040

RECEIPT NO. 854

VALUATION $ 285—

FEE PAID $ 1—

R. H. Gourley
Signature of Applicant

Bldg. Form 3

USE INK OR INDELIBLE PENCIL

3

CITY OF LOS ANGELES

DEPARTMENT OF BUILDING AND SAFETY

BUILDING DIVISION

Application to Alter, Repair, Move or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

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Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

REMOVED FROM	REMOVED TO
Lot	Lot
Tract	Tract

Present location of building: 200 N. Center St. (House Number and Street)

New location of building: (House Number and Street)

Between what cross streets: Banning & Turner Sts.

Approved by City Engineer.

Deputy.

1. Purpose of PRESENT building: Engine Room (Store, Residence, Apartment House, or any other purpose.) Families ... Rooms ...
2. Use of building AFTER alteration or moving: Engine Room Families ... Rooms ...
3. Owner (Print Name): National Ice & Cold Storage Co. Phone ...
4. Owner's address: 200 N. Center St.
5. Certificated Architect ... State License No. ... Phone ...
6. Licensed Engineer ... State License No. ... Phone ...
7. Contractor: Al. Nelson State License No. 7883 Phone Pr. 1967
8. Contractor's address: 787 E. Pico St.
9. VALUATION OF PROPOSED WORK {Including all Material, Labor, Finishing, Equipment and Appliances in Completed Building.} $ 200.00
10. State how many buildings NOW on lot and give use of each: One — (Residence, Hotel, Apartment House, or any other purpose.)
11. Size of existing building 46 x 60 Number of stories high 1 Height to highest point 40'
12. Class of building C Material of existing walls Brick Exterior framework Brick (Wood or Steel)

Describe briefly and fully all proposed construction and work:

Remove Wood framing on Roof - Used in connection with Cooling System - now abandoned. Brick up openings in Exterior wall - now abandoned. Same thickness of wall - Mortar mix 1 cement to three. No Structural Changes. [Puts lime mortar Bond into old wall]

Fill in Application on other Side and Sign Statement (OVER)

FOR DEPARTMENT USE ONLY

PERMIT NO. 484	Plans and Specifications checked	Zone: M3	Fire District No. 1	Fee: 2.00
	Corrections verified	Set Back: No Ft.	Street Widening: No Ft.	Stamp here when Permit is issued: JAN 9 1932
PLANS	Plans, Specifications and Applications rechecked and approved	Application checked and approved 1-9-32 Clerk.		
Rec'd.	For Plans See / Filed with	SPRINKLER Required Valuation Included	Specified Yes—No	Inspector

1/9/32

PLANS, SPECIFICATIONS, and other data must be filed if required.

NEW CONSTRUCTION

Size of Addition..........x..........Size of Lot..........x..........Number of Stories when complete..........

Material of Foundation..........Width of Footing..........Depth of footing below ground..........

Width Foundation Wall..........Size of Redwood Sill..........x..........Material Exterior Walls..........

Size of Exterior Studs..........x..........Size of Interior Bearing Studs..........x..........

Joists: First Floor.......x.......Second Floor.......x.......Rafters.......x.......Material of Roof..........

I have carefully examined and read both sides of this completed Application and know the same is true and correct and hereby certify and agree, if a Permit is issued, that all the provisions of the Building Ordinances and State Laws will be complied with whether herein specified or not; also certify that plans and specifications, if required to be filed, will conform to all of the provisions of the Building Ordinances and State laws.

Sign Here..........Al Wilson by J. O. Williams
(Owner or Authorized Agent)

By..........J. O. Williams..........

FOR DEPARTMENT USE ONLY			
Application..........	Fire District..........	Set back..........	Termite Inspection..........
Construction..........	Zoning..........	Street Widening..........	Forced Draft Ventil..........

(1)
REINFORCED CONCRETE

Barrels of Cement..........

Tons of Reinforcing Steel..........

(2)
The building (and, or, addition) referred to in this Application is, or will be when moved, more than 100 feet from

..........Street

Sign Here..........
(Owner or Authorized Agent)

(3)
No required windows will be obstructed.

Sign Here..........
Owner or Authorized Agent.

(4)
There will be an unobstructed passageway at least ten (10) feet wide, extending from any dwelling on lot to a Public Street or Public Alley at least 10 feet in width.

Sign Here..........
(Owner or Authorized Agent)

REMARKS: ....

Bldg. Form 8

USE INK OR INDELIBLE PENCIL

3

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Application to Alter, Repair, Move or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:
Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley or other public place or portion thereof.
Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

REMOVED FROM	REMOVED TO
Lot	Lot
Tract	Tract

Present location of building: 200 N. Center St. (House Number and Street)
New location of building: (House Number and Street)
Between what cross streets: 1st & Turner

Approved by City Engineer. .... Deputy.

1. Purpose of PRESENT building: Cold Storage Whse (Store, Residence, Apartment House, Hotel, or any other purpose) Families ..... Rooms .....
2. Use of building AFTER alteration or moving: C.S. Whse. Families ..... Rooms .....
3. Owner (Print Name): National Ice & C.S. Co. Phone .....
4. Owner's Address: 200 N. Center St.
5. Certificated Architect: None State License No. ..... Phone .....
6. Licensed Engineer: None State License No. ..... Phone .....
7. Contractor: J. O. Oltmans State License No. 12587 Phone PR. 5642
8. Contractor's Address: 2407 So. Main St.
9. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and/or elevator equipment therein or thereon.) $ ~~25~~ 21.00
10. State how many buildings NOW on lot and give use of each. One – Cold Storage – (Residence, Hotel, Apartment House, or any other purpose)
11. Size of existing building 40 x 60 Number of stories high 1 Height to highest point 20
12. Class of building C Material of existing walls Brick Exterior framework Concrete (Wood or Steel)

Describe briefly and fully all proposed construction and work:
Enclose space on loading platform 6x8 with Wood Partition – Under Present Roof
Approval – Letter from Bd. of Bldg & Safety Comms. Dec. 30, 1935
Flu.

Fill in Application on other Side and Sign Statement (OVER)

PERMIT NO.	FOR DEPARTMENT USE ONLY			Fee
376	Plans and Specifications checked	Zone M3	Fire District No. #1	Stamp here when Permit is Issued
	Corrections verified	Bldg. Line None Ft.	Street Widening Ft.	JAN 6 1936
PLANS	Plans, Specifications and Applications rechecked and approved Makosky	Application checked and approved 1/6/36 A. Mueller Clerk		
Rec'd.	For Plans See / Filed with	SPRINKLER Required / Valuation Included	Specified Yes—No	Inspector C. P. Starr

702

PLANS, SPECIFICATIONS, and other data must be filed if required.

NEW CONSTRUCTION

Size of Addition ....x........ Size of Lot ....x........ Number of Stories when complete ....

Material of Foundation .... Width of Footing .... Depth of footing below ground ....

Width Foundation Wall .... Size of Redwood Sill ....x........ Material Exterior Walls ....

Size of Exterior Studs ....x........ Size of Interior Bearing Studs ....x........

Joists: First Floor ....x.... Second Floor ....x.... Rafters ....x.... Roofing Material ....

I have carefully examined and read both sides of this completed Application and know the same is true and correct and hereby certify and agree, if a Permit is issued, that all the provisions of the Building Ordinances and State Laws will be complied with whether herein specified or not; also certify that plans and specifications, if required to be filed, will conform to all of the provisions of the Building Ordinances and State laws.

Sign Here ....
(Owner or Authorized Agent)

By ....

FOR DEPARTMENT USE ONLY

Application	Fire District	Bldg. Line	Termite Inspection ....
Construction	Zoning	Street Widening	Forced Draft Ventil. ....

(1)
REINFORCED CONCRETE

Barrels of Cement ....

Tons of Reinforcing Steel ....

(2)
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Sign Here ....
(Owner or Authorized Agent)

(3)
No required windows will be obstructed.

Sign Here ....
(Owner or Authorized Agent)

(4)
There will be an unobstructed passageway at least ten (10) feet wide, extending from any dwelling on lot to a Public Street or Public Alley at least 10 feet in width.

Sign Here ....
(Owner or Authorized Agent)

REMARKS: ....

3 APPLICATION FOR INSPECTION

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

Earthquake Safety Division

2 1 1 1 2 1 0 3 0 5

TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. — LOT: 3 — BLOCK: T — TRACT: SUBDIV. OF THE ALISO TRACT — CITY CLERK REF. NO.: MR 4-12/13
2. PRESENT USE OF BUILDING: (23) STORAGE — NEW USE OF BUILDING: (23/13 STORAGE/OFFICE
3. JOB ADDRESS: 200 N. CENTER ST — SUITE/UNIT NO.:
4. BETWEEN CROSS STREETS: TEMPLE ST AND BANNING ST.
5. OWNER'S NAME ( ) TENANT (X) BUILDING: NATIONAL COLD STORAGE — PHONE: (213)620-0396
6. OWNER'S ADDRESS: 210 N. CENTER ST. — CITY: L.A. CA — ZIP: 90012
7. ENGINEER: B. BEYZAEE — BUS. LIC. NO.: 008265-55 — ACTIVE STATE LIC. NO.: C34349 — PHONE: 500-9081
8. ARCHITECT OR DESIGNER: --- — BUS. LIC. NO. — ACTIVE STATE LIC. NO. — PHONE
9. ARCHITECT OR ENGINEER'S ADDRESS: 111 N. JACKSON ST. STE 111 — CITY: GLENDALE — ZIP: 91206
10. CONTRACTOR: MARK GRIGORIAN & ASSOC. — BUS. LIC. NO.: 008265-55 — ACTIVE STATE LIC. NO.: 452165 — PHONE: 500-9081
11. SIZE OF EXISTING BLDG. WIDTH 28 LENGTH 126 — STORIES: 1 — HEIGHT: 25.5 — NO. OF EXISTING BUILDINGS ON LOT AND USE: 2 — STORAGE
12. FRAMING MATERIAL OF EXISTING BLDG. → EXT. WALLS: URM — ROOF: WOOD — FLOOR: SLAB

3

13. JOB ADDRESS: 200 N. CENTER ST. — SUITE/UNIT NO.:
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING: $ 59,000.00
15. NEW WORK (Describe): DIV. 88 FC RC IIIC AND SECOND FLOOR ADDITION WITHIN EXG. BLDG.

DIST. MAP	130.5A217
CENSUS TRACT	2060
ZONE	M3-1
FIRE DIST.	II
COUN. DIST.	9
LOT TYPE	INT.
LOT SIZE	IRREG.?
ALLEY	-
BLDG. LINE	-
DOCUMENTS/EASEMENTS	ZI 1572, ZI 1117, ZI 1726, CCPD
DIST. OFF.	L.A.
P.C. REQ'D	NO
GRADING	-
SEISMIC	
HIGHWAY DED.	YES
FLOOD	-
FILE WITH	-
ZONED BY	FR 10/ /93
DISTRICT	E.S. CAUDILLO
INSPECTOR	-

NEW USE OF BUILDING: (22/13)STORAGE/OFFICE — SIZE OF ADDITION: 26'X29' — STORIES: 2 — HEIGHT: NC

TYPE: III-N — GROUP OCC.: B-2 — MAX. OCC.: 22 OCC

DWELL UNITS: 0 — BUILDING AREA: +754 — ZONING AREA: +754

GUEST ROOMS: 0 — PARKING REQ'D: +1/5 — PARKING PROVIDED: S 4 C HC.

BUILDING / ZONING — PLANS CHECKED: Frank Rojas — APPLICATION APPROVED

INSPECTION ACTIVITY: CS / GEN. / MAJOR / (EQ.)

P.C. 239.91 ✓	G.P.I. + NP -	CONT. INSP. TORQUE TEST
S.P.C. 149.80	P.M. 10.00	
B.P. 458.49	E.I. 12.39	
I.F. -	F.H. ~~189.00~~	
S.D. 203.58	O.S.S. YES	
ISS. OFF. HO	S.O.S.S. YES	SPRINKLERS REQ'D SPEC. NO
P.C. NO. F8107	C/O —	ENERGY O — DAS YES

Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.

Unless a shorter period of time has been established by an official action, plan check approval expires one year after the fee is paid and this permit expires two years after the fee is paid or 180 days after the fee is paid if construction is not commenced.

B & S 08-B-3 (R.7/90)

CASHIER'S USE ONLY

SYS YES 3898

07/22/93 03:39:10PM H001 T-6795 C 26
E Q PLAN CHECK 239.91
SYS DEV 14.39
ONE STOP 4.80
TOTAL 259.10
CHECK 259.10

200 N CENTER ST

10/18/93 02:45:20PM H001 T-6209 C 25
BLDG PLAN CHEC 149.80
BLDG PERMIT CO 458.49
INVOICE # 0099660 BB
PLAN MAINTENAN 10.00
EI COMMERCIAL 12.39
ONE STOP 12.61
SYS DEV 37.24
SCHOOL DEV COM 203.58
TOTAL 884.71
CHECK 884.71

93HO 24521

NEW AFFIDAVITS

PLAN CHECK EXTENDED TO ______ PER

ADMINISTRATIVE APPROVAL DATED N/A

BY

D.A.D. PLANS CHECKED 10/6/93

HOUSING MITIGATION FEE ORDINANCE
☐ REQUIRED ☒ EXEMPT

ASBESTOS NOTIFICATION
Check Box: ☐ Notification letter sent to AQMD or EPA.
☒ I declare that notification of asbestos removal is not applicable to addressed project.

Signature ______ Date 10-6-93

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 10-6-93 Lic. Class B Lic. Number 452165 Contractor ______ (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ______ B. & P. C. for this reason ______

Date ______ Owner's Signature ______

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. 1250816-93 Insurance Company State Fund Exp 7/1/94

☐ Certified copy is hereby furnished.
☑ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date 10-6-93 Applicant's Signature ______

Applicant's Mailing Address 111 N. Jackson #111 Glendale

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date ______ Applicant's Signature ______

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed ______ (Owner or agent having property owner's consent) — Contractor (Position) — 10-6-93 (Date)

12100220306

Bureau of Engineering		ADDRESS APPROVED
		DRIVEWAY
		HIGHWAY DEDICATION — REQUIRED / COMPLETED
		FLOOD CLEARANCE
Public Works Improvement	Required YES ☐ NO ☐ PERMIT	#
SEWERS RES. NO. CERT. NO.		SEWERS AVAILABLE
		NOT AVAILABLE
		SFC PAID
	SFC NOT APPLICABLE	SFC DUE
Grading	PRIVATE SEWAGE SYSTEM APPROVED	
Comm. Safety	APPROVED FOR ISSUE ☐ NO FILE ☐ FILE CLOSED ☐	
CEQA		
Fire	APPROVED (TITLE 19) (LA M.C.-5700)	
	APPROVED - HYDRANT UNIT, ROOM 920 CHE	
CRA	APPROVED PER REDEV. PROJECT	
Transportation	APPROVED FOR DRIVEWAY LOCATION	
	APPROVED FOR ORD. #	
Planning	WORK SHEET #	
	APPROVED UNDER CASE #	
	LANDSCAPE / XERISCAPE	
	SIGHT PLAN REVIEW	
Housing	HOUSING AUTHORITY AFFIDAVIT NO.	
Construction Tax	RECEIPT NO. DWELLING UNITS	
Cultural Affairs		
Rent Stabilization Division		

LEGAL DESCRIPTION ZI MM Cleared by M. Loller for MTA/RCC 8/26/93

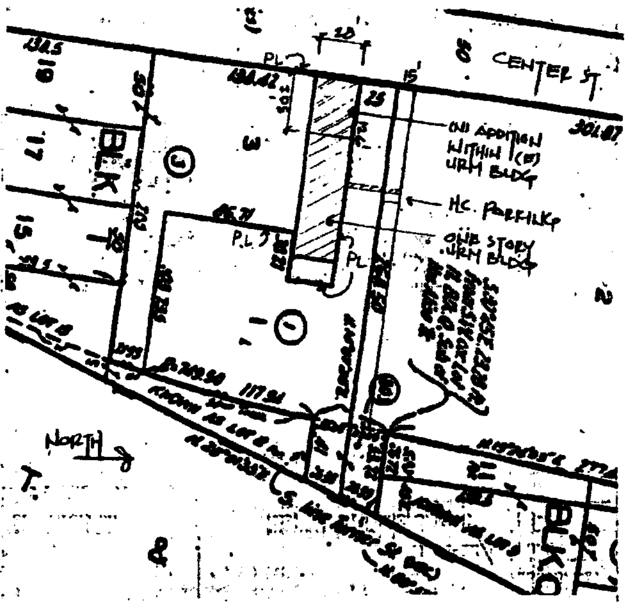
SD = (.27)(754) = 203.58

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH

* REFUSE TO PAY

FIRE HYDRANT FEE NOTICE: THE CITY OF LOS ANGELES MAY AMEND THE FIRE HYDRANT FEE ORDINANCE. (LAMC SECTION 91.0304 (b) 6). THE OWNER OF THE PROJECT DESIGNATED IN THIS PERMIT SHALL BE OBLIGATED TO PAY TO THE DEPARTMENT A FIRE HYDRANT FEE IN THE AMOUNT TO BE CALCULATED PURSUANT TO ANY AMENDMENT TO THE FIRE HYDRANT FEE ORDINANCE. THIS FEE WILL BE USED TO PROVIDE ADEQUATE FIRE SAFETY FACILITIES AND SERVICES FOR NEW DEVELOPMENT. EXCEPTION: THIS PARAGRAPH NUMBER 6 SHALL NOT APPLY TO ANY PERMIT FOR DEMOLITION OF A BUILDING OR STRUCTURE.

← ATTACHED PLOT PLANS SHALL NOT EXTEND ABOVE THIS LINE



Bldg. Form 3

3

USE INK OR INDELIBLE PENCIL

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Application to Alter, Repair, Move or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

REMOVED FROM	REMOVED TO
Lot	Lot
Tract	Tract

Present location of building: 200 N. Center St. (House Number and Street)

New location of building: (House Number and Street)

Between what cross streets: Banning & Turner Sts.

Approved by City Engineer. Deputy.

1. Purpose of PRESENT building: Engine Room (Store, Residence, Apartment House, or any other purpose.) Families Rooms
2. Use of building AFTER alteration or moving: Engine Room Families Rooms
3. Owner (Print Name): National Ice & Cold Storage Co. Phone
4. Owner's address: 200 N. Center St.
5. Certificated Architect State License No. Phone
6. Licensed Engineer State License No. Phone
7. Contractor: Al. Nelson State License No. 7883 Phone Pr. 1967
8. Contractor's address: 787 E. Pico St.
9. VALUATION OF PROPOSED WORK {Including all Material, Labor, Finishing, Equipment and Appliances in Completed Building.} $ 200.00
10. State how many buildings NOW on lot and give use of each: One - (Residence, Hotel, Apartment House, or any other purpose.)
11. Size of existing building 46 x 60 Number of stories high 1 Height to highest point 40'
12. Class of building C Material of existing walls Brick Exterior framework Brick (Wood or Steel)

Describe briefly and fully all proposed construction and work:

Remove Wood framing on Roof - Used
in connection with Cooling System - now abandoned.
Brick up openings in Exterior wall - now abandoned.
Same thickness of wall - Mortar mix 1 cement to three
No Structural Changes. [puts lime mortar
Bond into old wall]

Fill in Application on other Side and Sign Statement (OVER)

PERMIT NO.	FOR DEPARTMENT USE ONLY 1/9/32			Fee 2.00
484	Plans and Specifications checked	Zone M3	Fire District No. 1	Stamp here when Permit is issued
	Corrections verified	Set Back No Ft.	Street Widening No Ft.	JAN 9 1932
PLANS	Plans, Specifications and Applications rechecked and approved [illegible]	Application checked and approved 1-9-32 Clerk.		
Rec'd	For Plans See / Filed with	SPRINKLER Required Valuation Included	Specified Yes—No	Inspector [illegible]

PLANS, SPECIFICATIONS, and other data must be filed if required.

NEW CONSTRUCTION

Size of Addition..........x..........Size of Lot..........x..........Number of Stories when complete..........

Material of Foundation..........Width of Footing..........Depth of footing below ground..........

Width Foundation Wall..........Size of ~~Redwood Sill~~..........x..........Material Exterior Walls..........

Size of Exterior Studs..........x..........Size of Interior Bearing Studs..........x..........

Joists: First Floor.....x.....Second Floor.....x.....Rafters.....x.....Material of Roof..........

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Sign Here.....Al Jolson by J. Oltmans
(Owner or Authorized Agent)

By.....J. Oltmans.....

FOR DEPARTMENT USE ONLY

Application.....	Fire District.....	Set back.....	Termite Inspection.....
Construction.....	Zoning.....	Street Widening.....	Forced Draft Ventil.....

(1)
REINFORCED CONCRETE

Barrels of Cement..........

Tons of Reinforcing Steel..........

(2)
The building (and, or, addition) referred to in this Application is, or will be when moved, more than 100 feet from

..........Street

Sign Here..........
(Owner or Authorized Agent)

(3)
No required windows will be obstructed.

Sign Here..........
Owner or Authorized Agent.

(4)
There will be an unobstructed passageway at least ten (10) feet wide, extending from any dwelling on lot to a Public Street or Public Alley at least 10 feet in width.

Sign Here..........
(Owner or Authorized Agent)

REMARKS: ....

Bldg. Form 8

USE INK OR INDELIBLE PENCIL

3

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

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Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

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Tract	Tract

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(House Number and Street)

New location of building:
(House Number and Street)

Between what cross streets: 1st & Turner

Approved by City Engineer.

Deputy.

1. Purpose of PRESENT building Cold Storage Whse Families Rooms
(Store, Residence, Apartment House, Hotel, or any other purpose)
2. Use of building AFTER alteration or moving C.S. Whse Families Rooms
3. Owner (Print Name) National Ice & C.S. Co Phone
4. Owner's Address 200 N. Center St.
5. Certificated Architect — State License No. Phone
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7. Contractor J. O. Oltmans State License No. 12587 Phone PR. 5642
8. Contractor's Address 2407 So. Main St.
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(Residence, Hotel, Apartment House, or any other purpose)
11. Size of existing building 40 x 60 Number of stories high 1 Height to highest point 20
12. Class of building C Material of existing walls Brick Exterior framework Concrete
(Wood or Steel)

Describe briefly and fully all proposed construction and work:

Enclose space on loading platform
6x8 with Wood Partition — Under Present Roof
Approval —
Letter from Bd of Bldg & Safety Comms. Dec. 30, 1935
Flu

Fill in Application on other Side and Sign Statement (OVER)

PERMIT NO.	FOR DEPARTMENT USE ONLY		Fee
.376	Plans and Specifications checked	Zone M3 / Fire District No. #1	Stamp here when Permit is issued
	Corrections verified	Bldg. Line None Ft. / Street Widening Ft.	
PLANS	Plans, Specifications and Applications rechecked and approved Makosky	Application checked and approved 1/6/36 A. Muller Clerk	
Rec'd	For Plans See / Filed with	SPRINKLER Required / Valuation Included / Specified Yes—No	Inspector C. P. Starn

702

PLANS, SPECIFICATIONS, and other data must be filed if required.

NEW CONSTRUCTION

None

Size of Addition ....x........ Size of Lot ....x........ Number of Stories when complete ....

Material of Foundation .... Width of Footing .... Depth of footing below ground ....

Width Foundation Wall .... Size of Redwood Sill ....x........ Material Exterior Walls ....

Size of Exterior Studs ....x........ Size of Interior Bearing Studs ....x........

Joists: First Floor ....x.... Second Floor ....x.... Rafters ....x.... Roofing Material ....

I have carefully examined and read both sides of this completed Application and know the same is true and correct and hereby certify and agree, if a Permit is issued, that all the provisions of the Building Ordinances and State Laws will be complied with whether herein specified or not; also certify that plans and specifications, if required to be filed, will conform to all of the provisions of the Building Ordinances and State laws.

Sign Here ....
(Owner or Authorized Agent)

By ....

FOR DEPARTMENT USE ONLY

Application	Fire District	Bldg. Line	Termite Inspection ....
Construction	Zoning	Street Widening	Forced Draft Ventil. ....

(1)
REINFORCED CONCRETE

Barrels of Cement ....

Tons of Reinforcing Steel ....

(2)
The building (and, or, addition) referred to in this Application is, or will be when moved, more than 100 feet from

.... Street

Sign Here ....
(Owner or Authorized Agent)

(3)
No required windows will be obstructed.

Sign Here ....
(Owner or Authorized Agent)

(4)
There will be an unobstructed passageway at least ten (10) feet wide, extending from any dwelling on lot to a Public Street or Public Alley at least 10 feet in width.

Sign Here ....
(Owner or Authorized Agent)

REMARKS: ....

3 APPLICATION FOR INSPECTION 2 1 [illegible] 2 [illegible] 3 0 5

CITY OF LOS ANGELES DEPT. OF BUILDING AND SAFETY

Earthquake Safety Division

TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. — LOT: 3 — BLOCK: T — TRACT: SUBDIV. OF THE ALISO TRACT — CITY CLERK REF. NO.: MR 4-12/13
2. PRESENT USE OF BUILDING: (23) STORAGE — NEW USE OF BUILDING: (23/13 STORAGE/OFFICE
3. JOB ADDRESS: 200 N. CENTER ST — SUITE/UNIT NO.:
4. BETWEEN CROSS STREETS: TEMPLE ST AND BANNING ST.
5. OWNER'S NAME ( ) TENANT (X) BUILDING: NATIONAL COLD STORAGE — PHONE: (213)620-0396
6. OWNER'S ADDRESS: 210 N. CENTER ST. — CITY: L.A. CA — ZIP: 90012
7. ENGINEER: B. BEYZAEE — BUS. LIC. NO.: 008265-55 — ACTIVE STATE LIC. NO.: C34349 — PHONE: 500-9081
8. ARCHITECT OR DESIGNER: --- — BUS. LIC. NO. — ACTIVE STATE LIC. NO. — PHONE
9. ARCHITECT OR ENGINEER'S ADDRESS: 111 N. JACKSON ST. STE 111 — CITY: GLENDALE — ZIP: 91206
10. CONTRACTOR: MARK GRIGORIAN & ASSOC. — BUS. LIC. NO.: 008265-55 — ACTIVE STATE LIC. NO.: 452165 — PHONE: 500-9081
11. SIZE OF EXISTING BLDG. WIDTH 28 LENGTH 126 — STORIES: 1 — HEIGHT: 25.5 — NO. OF EXISTING BUILDINGS ON LOT AND USE: 2 — STORAGE
12. FRAMING MATERIAL OF EXISTING BLDG. → EXT. WALLS: URM — ROOF: WOOD — FLOOR: SLAB

DIST. MAP	CENSUS TRACT
130.5A217	2060

ZONE: M3-1 — FIRE DIST.: II — COUN. DIST.: 9 — LOT TYPE: INT. — LOT SIZE: IRREG.? — ALLEY: - — BLDG. LINE: -

DOCUMENTS/EASEMENTS: ZI 1572 — ZI 1117 — ZI 1726 — CCPD

3

13. JOB ADDRESS: 200 N. CENTER ST. — SUITE/UNIT NO.:
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING: $ 59,000.00
15. NEW WORK (Describe): DIV. 88 FC RC IIIC AND SECOND FLOOR ADDITION WITHIN EXG. BLDG.

DIST. OFF.: L.A. — P.C. REQ'D: NO — GRADING: - — SEISMIC — HWY DED.: YES — FLOOD: - — FILE WITH: -

NEW USE OF BUILDING: (22/13)STORAGE/OFFICE — SIZE OF ADDITION: 26'X29' — STORIES: 2 — HEIGHT: NC

TYPE: III-N	GROUP OCC.: B-2	MAX. OCC: 22 OCC
DWELL UNITS: 0	BUILDING AREA: +754	ZONING AREA: +754
GUEST ROOMS: 0	PARKING REQ'D: +1/5	PARKING PROVIDED: S 4 C HC.

BUILDING / ZONING — PLANS CHECKED: FRANK BOJAS — APPLICATION APPROVED — ZONED BY: FR 10/ /93 — DISTRICT: E.S. CAUDILLO — INSPECTOR: -

INSPECTION ACTIVITY: CS — GEN. — MAJOR — (EQ.) — SYS. YES — SAVE

B & S 08-B-3 (R.7/90)

P.C.: 239.91	G.P.I. + NP: -	CONT. INSP.: TORQUE TEST
S.P.C.: 149.80	P.M.: 10.00	
B.P.: 458.49	E.I.: 12.39	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.
I.F.: -	F.H.: ~~109.00~~	
S.D.: 203.58	O.S.S.: YES	
ISS. OFF.: HO	S.O.S.S.: YES	SPRINKLERS REQ'D SPEC.: NO
P.C. NO.: F8107	C/O:	ENERGY: O — GAS: YES

Unless a shorter period of time has been established by an official action, plan check approval expires one year after the fee is paid and this permit expires two years after the fee is paid or 180 days after the fee is paid if construction is not commenced.

CASHIERS USE ONLY

```
07/22/93 03:39:10PM H001 T-6795 C 26
  E Q PLAN CHECK        239.91
  SYS DEV                14.39
  ONE STOP                4.80
     TOTAL              259.10
     CHECK              259.10
200 N CENTER ST

10/18/93 02:45:20PM H001 T-6209 C 25
  BLDG PLAN CHEC        149.80
  BLDG PERMIT CO        458.49
  INVOICE # 0099660 EB
  PLAN MAINTENAN         10.00
  EI COMMERCIAL          12.39
  ONE STOP               12.61
  SYS DEV                37.24
  SCHOOL DEV COM        203.58
     TOTAL              884.71
     CHECK              884.71
```

93HO 24521

NEW AFFIDAVITS

PLAN CHECK EXTENDED TO ______ PER

ADMINISTRATIVE APPROVAL DATED N/A

BY ______

D.A.D. PLANS CHECKED 10/6/93

HOUSING MITIGATION FEE ORDINANCE ☐ REQUIRED ☒ EXEMPT

ASBESTOS NOTIFICATION

Check Box: ☐ Notification letter sent to AQMD or EPA.

☒ I declare that notification of asbestos removal is not applicable to addressed project.

Signature ______ Date 10-6-93

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 10-6-93 Lic. Class B Lic. Number 452165 Contractor ______ (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ______ B. & P. C. for this reason ______

Date ______ Owner's Signature ______

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. 1250816-93 Insurance Company State Fund Exp 7/1/94

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date 10-6-93 Applicant's Signature ______

Applicant's Mailing Address 111 N. Jackson #111 Glendale

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date ______ Applicant's Signature ______

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed ______ (Owner or agent having property owner's consent) — Contractor (Position) — 10-6-93 (Date)

1 2 1 0 0 2 0 0 3 0 6

Bureau of Engineering		ADDRESS APPROVED	
		DRIVEWAY	
		HIGHWAY DEDICATION	REQUIRED / COMPLETED
		FLOOD CLEARANCE	
Public Works Improvement	Required YES ☐ NO ☐ PERMIT	#	
SEWERS	RES. NO. / CERT. NO.	SEWERS AVAILABLE	
		NOT AVAILABLE	
		SFC PAID	
	SFC NOT APPLICABLE	SFC DUE	
Grading	PRIVATE SEWAGE SYSTEM APPROVED		
Comm. Safety	APPROVED FOR ISSUE ☐ NO FILE ☐ FILE CLOSED ☐		
CEQA			
Fire	APPROVED (TITLE 19) (L.A.M.C.-5700)		
	APPROVED - HYDRANT UNIT, ROOM 920 CHE		
CRA	APPROVED PER REDEV. PROJECT		
Transportation	APPROVED FOR DRIVEWAY LOCATION		
	APPROVED FOR ORD. #		
Planning	WORK SHEET #		
	APPROVED UNDER CASE #		
	LANDSCAPE / XERISCAPE		
	SIGHT PLAN REVIEW		
Housing	HOUSING AUTHORITY AFFIDAVIT NO.		
Construction Tax	RECEIPT NO. DWELLING UNITS		
Cultural Affairs			
Rent Stabilization Division			

LEGAL DESCRIPTION 2 HTT closed by M. Keller for MTA/RCC 8/26/93

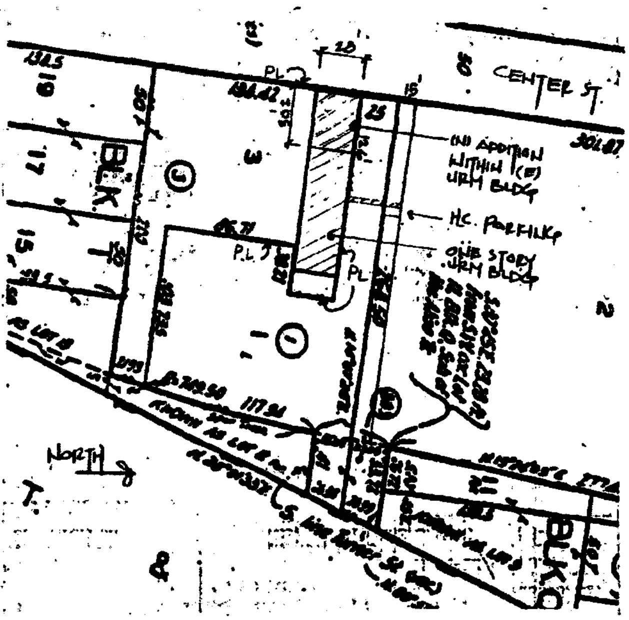
SD = (.27) (754) = 203.58

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH

* REFUSE TO PAY

FIRE HYDRANT FEE NOTICE: THE CITY OF LOS ANGELES MAY AMEND THE FIRE HYDRANT FEE ORDINANCE. (LAMC SECTION 91.0304 (b) 8). THE OWNER OF THE PROJECT DESIGNATED IN THIS PERMIT SHALL BE OBLIGATED TO PAY TO THE DEPARTMENT A FIRE HYDRANT FEE IN THE AMOUNT TO BE CALCULATED PURSUANT TO ANY AMENDMENT TO THE FIRE HYDRANT FEE ORDINANCE. THIS FEE WILL BE USED TO PROVIDE ADEQUATE FIRE SAFETY FACILITIES AND SERVICES FOR NEW DEVELOPMENT. EXCEPTION: THIS PARAGRAPH NUMBER 8 SHALL NOT APPLY TO ANY PERMIT FOR DEMOLITION OF A BUILDING OR STRUCTURE.

ATTACHED PLOT PLANS SHALL NOT EXTEND ABOVE THIS LINE



Bldg. Form 3

USE INK OR INDELIBLE PENCIL

3

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Application to Alter, Repair, Move or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

REVOCABLE PERMIT

REMOVED FROM	REMOVED TO
Lot	Lot
Tract	Tract

Present location of building .... (House Number and Street)

New location of building: 200 N. Center St. (House Number and Street)

Between what cross streets: Banning & Turner

Approved by City Engineer. .... Deputy.

1. Purpose of PRESENT building: Cold Storage Bldg (Store, Residence, Apartment House, or any other purpose.) Families ...... Rooms 1
2. Use of building AFTER alteration or moving: Cold Storage Bldg. Families ...... Rooms 1
3. Owner (Print Name): National Ice & Cold Storage Co Phone ......
4. Owner's address: 200 N. Center St.
5. Certificated Architect ——— State License No. ...... Phone ......
6. Licensed Engineer ...... State License No. ...... Phone ......

REVOCABLE PERMIT

7. Contractor: A. L. Nelson State License No. 7883 Phone We. 1967
8. Contractor's address: 787 E. Pico St.
9. VALUATION OF PROPOSED WORK (Including all Material, Labor, Finishing, Equipment and Appliances in Completed Building.) $ 75.00
10. State how many buildings NOW on lot and give use of each. One (Residence, Hotel, Apartment House, or any other purpose.)
11. Size of existing building 50 x 100 Number of stories high 3 Height to highest point 50'
12. Class of building D Material of existing walls Wood Exterior framework Wood (Wood or Steel)

Describe briefly and fully all proposed construction and work:

Covering exterior exposed area of present cold storage building with corrugated iron as approved by letter dated Nov 9, 1931, from Bd of Bldg & Safety Commissioners

Granted revocable.

Fill in Application on other Side and Sign Statement (OVER)

REVOCABLE PERMIT

FOR DEPARTMENT USE ONLY

PERMIT NO.	Zone	Fire District	Set Back	Street Widening	Fee
24105	M-3	No. 1	Yes Ft.	No Ft.	1.00
	Plans and Specifications checked		Application checked and approved 11/12/31 [illegible] Clerk.		Stamp here when Permit is issued: ISSUED NOV 12 1931
	Corrections verified		For Plans See	Filed with	
PLANS Rec'd.	Plans, Specifications and Application rechecked and approved		SPRINKLER Required / Valuation Included	Specified Yes—No	Inspector [signature]

UC [illegible] BTS 11/13 Tech.

PLANS, SPECIFICATIONS, and other data must be filed if required.

NEW CONSTRUCTION

Size of Addition..........x..........Size of Lot..........x..........Number of Stories when complete..........

Material of Foundation..........Size of Redwood Sill..........x..........Width of Footing..........

Depth Footing below ground..........Width Foundation Wall..........Material Exterior Walls..........

Size of Exterior Studs..........x..........Size of Interior Bearing Studs..........x..........

Material of Floor..........Joists: First Floor..........x..........Second Floor..........x..........

Material of Roof..........Size of Rafters..........x..........Spacing..........on center

I have carefully examined and read both sides of this completed Application and know the same is true and correct and hereby certify and agree, if a Permit is issued, that all of the provisions of the Building Ordinances and State Laws will be complied with whether herein specified or not; also certify that plans and specifications, if required to be filed, will conform to all of the provisions of the Building Ordinances and State Laws.

Sign Here..........Al Nelson..........
(Owner or Authorized Agent)

By..........J O Altmann..........

FOR DEPARTMENT USE ONLY			
Application 74	Fire District 74	Set back OK	Termite Inspection
Construction 74	Zoning OK	Street Widening OK	Forced Draft Ventil.

(1)
REINFORCED CONCRETE

Barrels of Cement..........

Tons of Reinforcing Steel..........

(2)
The building (and, or, addition) referred to in this Application is, or will be when moved, more than 100 feet from

..........Street

Sign Here..........
(Owner or Authorized Agent)

(3)
There will be an unobstructed passageway at least ten (10) feet wide, extending from any dwelling on lot to a Public Street or Public Alley at least 10 feet in width.

Sign Here..........
(Owner or Authorized Agent)

REMARKS

Revocable

OK BF 5 11/9/31 HWG

Bldg. Form 3

3

USE INK OR INDELIBLE PENCIL

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Application to Alter, Repair, Move or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:
Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley or other public place or portion thereof.
Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

REMOVED FROM	REMOVED TO
Lot	Lot
Tract	Tract

Present location of building: 230 N. Center St. (Center)
(House Number and Street)

New location of building: ✓ ✓
(House Number and Street)

Between what cross streets: Banning & Turner.

Approved by City Engineer
Deputy.

1. Purpose of PRESENT building Refrigerated Storage Bldg Families ... Rooms ...
(Store, Residence, Apartment House, Hotel, or any other purpose)
2. Use of building AFTER alteration or moving Same Families ... Rooms ...
3. Owner (Print Name) National Ice & Cold Storage Co Phone Mo. 1236
4. Owner's Address 200 N. Center St.
5. Certificated Architect none State License No. ... Phone ...
6. Licensed Engineer S. B. Barnes State License No. 601 Phone Tr-7231
7. Contractor J. O. Oltmans State License No. 12587 Phone PR. 5642
8. Contractor's Address 2407 So. Main St.
9. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and/or elevator equipment therein or thereon.) $ 9000.00
10. State how many buildings NOW on lot and give use of each. None (Residence, Hotel, Apartment House, or any other purpose)
11. Size of existing building 52 x 99 Number of stories high 1 Height to highest point 16
12. Class of building C Material of existing walls Brick Exterior framework Brick (Wood or Steel)

Describe briefly and fully all proposed construction and work:
Brick Bldg. - Insulated for Refrigeration.

9/1/36

Fill in Application on other Side and Sign Statement (OVER)

FOR DEPARTMENT USE ONLY 5514

PERMIT NO. 24839	Plans and Specifications checked: [signature]	Zone: M-3	Fire District No. 1	Fee 30.00 Stamp here when Permit is issued
	Corrections verified: [signature]	Bldg. Line: No Ft.	Street Widening: No Ft.	SEP 16 1936
PLANS 9/1/?	Plans, Specifications and Applications rechecked and approved: [signature]	Application checked and approved: 9/15/36 [signature] Clerk		
	For Plans See / Filed with	SPRINKLER Required / Valuation Included	Specified Yes—No	Inspector [signature]

PLANS, SPECIFICATIONS, and other data must be filed if required.

NEW CONSTRUCTION

Size of Addition 52 x 99 Size of Lot ....x.... Number of Stories when complete 1

Material of Foundation Concrete Width of Footing 1 9 Depth of footing below ground 1 6

Width Foundation Wall 13" Size of Redwood Sill —x.... Material Exterior Walls Brick

Size of Exterior Studs —x.... Size of Interior Bearing Studs 2 x 4

Joists: First Floor 2 x 6 Second Floor —x— Rafters 2 x 8 Roofing Material Composition

I have carefully examined and read both sides of this completed Application and know the same is true and correct and hereby certify and agree, if a Permit is issued, that all the provisions of the Building Ordinances and State Laws will be complied with whether herein specified or not; also certify that plans and specifications, if required to be filed, will conform to all of the provisions of the Building Ordinances and State Laws.

Sign Here J.E. Altmann (Owner or Authorized Agent)

By ....

FOR DEPARTMENT USE ONLY			
Application [initials]	Fire District [initials]	Bldg. Line	Termite Inspection ....
Construction	Zoning	Street Widening	Forced Draft Ventil. ....

(1)
REINFORCED CONCRETE

Barrels of Cement ....

Tons of Reinforcing Steel ....

(2)
The building (and, or, addition) referred to in this Application is, or will be when moved, more than 100 feet from

.... Street

Sign Here .... (Owner or Authorized Agent)

(3)
No required windows will be obstructed.

Sign Here .... (Owner or Authorized Agent)

(4)
There will be an unobstructed passageway at least ten (10) feet wide, extending from any dwelling on lot to a Public Street or Public Alley at least 10 feet in width.

Sign Here .... (Owner or Authorized Agent)

REMARKS:
PLAN CHECKING
RECEIPT NO. 9464
VALUATION $ 9000 00
FEE PAID $ 20 00

Only Male Sex to be employed in this building.

1

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION
Application for the Erection of a Building
of
CLASS ~~"A", "B" OR "C"~~ 5 - Masonry

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

Lot No.

Tract

Location of building (House Number and Street)

Approved by City Engineer

Between what cross streets

Deputy

USE INK OR INDELIBLE PENCIL

1. Purpose of building Incinerator (Store, Residence, Apartment House, Hotel, or any other purpose) Families Rooms
2. Owner (Print Name) Nat'l Ice + Cold Storage Co. Phone
3. Owner's address 200 N. Center St
4. Certificated Architect State License No. Phone
5. Licensed Engineer State License No. Phone
6. Contractor Acme Incinerator Co. State License No. 52299 Phone WA 5717
7. Contractor's address 3020 S. Orange Dr
8. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and/or elevator equipment therein or thereon) $ 285.00
9. State how many buildings NOW on lot and give use of each (Store, Residence, Apartment House, Hotel or any other purpose)
10. Size of new building x No. Stories Height to highest point
11. Size of lot x Type of soil
12. Foundation (Material) Depth in ground
13. Material Exterior Walls Skeleton framework (Structural Steel, Reinforced Concrete)
14. Material of floors Roofing material

I have carefully examined and read the above completed Application and know the same is true and correct and hereby certify and agree that if a permit is issued all the provisions of the Building Ordinances and State Laws will be complied with, whether herein specified or not; I also certify that plans and specifications filed will conform to all the Building Ordinances and State Laws.

Sign here Acme Incinerator Co (Owner or Authorized Agent)

By R. H. Towsley

Plans, Specifications and other data must be filed.

PERMIT NO.	FOR DEPARTMENT USE ONLY				Fee
2697	Plans and Specifications checked	Zone M-2	Fire District No. 2		Stamp here when Permit is issued
	Corrections verified	Bldg. Line	Street Widening		
PLANS	Plans, Specifications and Application rechecked and approved.	Application checked and approved 4-20-48 Clerk			Inspector
	For Plans See / Filed with	SPRINKLER Required / Valuation Included	Specified Yes No		

FOR DEPARTMENT USE ONLY

Application	Fire District	Bldg. Line	Forced Draft Ventil
Construction	Zoning	Street widening	

(1) **REINFORCED CONCRETE**

Barrels of Cement ....

Tons of Reinforcing Steel ....

(2) The building referred to in this Application will be more than 100 feet from

.... Street

Sign here .... (Owner or Authorized Agent)

(3) This building will be not less than 10 feet from any other building used for residential purposes on this lot.

Sign here .... (Owner or Authorized Agent)

(4) There will be an unobstructed passageway at least 10 feet wide, extending from any dwelling on lot to a Public Street or Public Alley at least 10 feet in width.

Sign here .... (Owner or Authorized Agent)

REMARKS: ....

WORKMEN'S COMPENSATION INSURANCE

Date ....

I hereby certify that I am the applicant for this permit, and that in doing the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

PLAN CHECKING 5040

RECEIPT NO. 854

VALUATION $ 285 —

FEE PAID $ 1 —

R. W. Gourley

Signature of Applicant

3

APPLICATION TO ALTER - REPAIR - DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — B&S Form B-3 — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR. LOT 1-3 13,15,17,19 BLK. TRACT 20223 Sub of Aliso Tract — ADDRESS APPROVED
2. BUILDING ADDRESS 200-10 North Center Street Bldg. "A","C","E" — DIST. MAP
3. BETWEEN CROSS STREETS Turner AND Banning — ZONE
4. PRESENT USE OF BUILDING Apartment & Stores — NEW USE OF BUILDING Same 33 — FIRE DIST.
5. OWNER'S NAME National Storage Company PHONE MA 6-8641 — INSIDE KEY
6. OWNER'S ADDRESS 200-10 North Center Street P. O. ZONE — COR. LOT REV. COR.
7. CERT. ARCH. STATE LICENSE PHONE — LOT SIZE
8. LIC. ENGR. STATE LICENSE PHONE
9. CONTRACTOR Owner STATE LICENSE PHONE — REAR ALLEY SIDE ALLEY
10. CONTRACTOR'S ADDRESS Same as above P. O. ZONE — BLDG. LINE
11. SIZE OF EXISTING BLDG. 120' x 50' STORIES 1,2,5 HEIGHT 16'&60' NO. OF EXISTING BUILDINGS ON LOT AND USE — BLDG. AREA

SEWER (Available) (Not Available)

3 200-10 North Center Street Bldg. "A","C","E" — DISTRICT OFFICE L.A.

12. MATERIAL EXT. WALLS: ☐ WOOD ☐ METAL ☐ CONC. BLOCK ☐ STUCCO ☒ BRICK ☐ CONCRETE — ROOF CONST. ☒ WOOD ☐ STEEL ☐ CONC. ☐ OTHER — ROOFING — SPRINKLERS REQ'D. SPECIFIED
13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 4600.00 — VALUATION APPROVED — AFFIDAVITS
14. SIZE OF ADDITION STORIES HEIGHT — APPLICATION CHECKED
15. NEW WORK: (Describe) EXT. WALLS ROOFING — PLANS CHECKED — DWELL. UNITS

Parapet correction as per plans and Dept. File. — CORRECTIONS VERIFIED — SPACES PARKING

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance, and I have read reverse side of Application. — PLANS APPROVED — GUEST ROOMS

APPLICATION APPROVED — FILE WITH PARAPETS RM. 225

Signed [signature] — INSPECTOR — CONT. INSP.

This Form When Properly Validated is a Permit to Do the Work Described.

CRITICAL SOIL

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O
III-A	G1,H2	N.C.	13.26			20.40			

CASHIER'S USE ONLY

APR-2-64 16033 S •62778 Z—2 CK 13.26

APR-2-64 16034 S •62778 Z—1 CK 20.40

P.C. No. ______ GRADING ______ CRIT. SOIL ______ CONS. ______

PUBLIC RECORD

G CITY OF LOS ANGELES

APPLICATION FOR INSPECTION OF GRADING AND FOR GRADING CERTIFICATE

B & S B-100 R 9.80

DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR. — LOT: Aliso Tract Lots 17 & 19 — BLK.: T — TRACT: Subdivision Aliso Tract MR4-12-13 — COUNCIL DIST. NO.: 9
2. PURPOSE OF GRADING: ( ) To fill basement of demolished building
3. JOB ADDRESS: 200-210 North Center Street
4. BETWEEN CROSS STREETS: Jackson AND Banning
5. OWNER'S NAME: Poppy Food Co. — PHONE: 626-8641
6. OWNER'S ADDRESS: 814 E. Temple — CITY: Los Angeles — ZIP: 90012
7. PLANS BY CIVIL ENGR.: McLean & Schultz — BUS. LIC. NO. — ACTIVE STATE LIC. NO.: S930 — PHONE: 714/871-7370
8. CIVIL ENGR. ADDRESS: 2000 E. Chapman Ave — CITY: Fullerton — ZIP: 92631
9. ENGR. GEOLOGIST — BUS. LIC. NO. — ACTIVE STATE LIC. NO./CERT. NO. — PHONE
10. SOIL ENGR.—TESTING AGENCY — BUS. LIC. NO. — ACTIVE STATE LIC. NO. — PHONE
11. CONTRACTOR: Three D Service Co — BUS. LIC. NO. — ACTIVE STATE LIC. NO.: 252618 — PHONE: 443-0505
12. CONTRACTOR'S ADDRESS: 4300 Alderson — CITY: Baldwin Park — ZIP: 91706
13. JOB ADDRESS: 200-210 North Center Street — STREET GUIDE
14. NUMBER OF CUBIC YARDS — CUT: 0 — FILL: 1400 cu yd
15. MAXIMUM SLOPE — CUT — FILL

RETAINING WALL REQUIRED: YES / NO (NO circled)

BOARD FILE NO.

FILL DENSITY TESTS & CERTIFICATION: ☒ REQUIRED ☐ NOT REQUIRED

IMPORT/EXPORT REQ.: None

CALIF. ENVIRONMENTAL QUALITY ACT REQUIREMENTS — EXEMPT: [signature] — COMPLETED

YARDAGE APPROVED: [signature]

PLANS CHECKED: [signature]

APPLICATION APPROVED: [signature]

BOND — AMOUNT — ☐ CASH — ☐ SURETY: None — DATE POSTED — CA #

Field	Value
DIST. MAP	129-217
CENSUS TRACT	2061.00
ZONE	M3-3
FIRE DIST.	two
LOT (TYPE)	cor
LOT SIZE	100x138.5
ALLEY	/
BLDG. LINE	/
AFFIDAVITS	CCPD
SEISMIC STUDY ZONE	
DIST. OFFICE	LA
GRADING	/
FLOOD	/
HWY. DED.	Yes
CONS.	/
ZONED BY	Calabrese
FILE WITH	
TYPIST	Jkt
G.P.I. INSPECTOR	
INSPECTOR	

P.C. 464.75	I.F.	Claims for refund of fees paid on permits may be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC
S.P.C.	G.P.I.	
G.P. 715.00		
DIST. OFFICE LA		
P.C. NO. 22345		

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

CASHIER'S USE ONLY

C 464.75 G-PC
C 715.00 GR-P
25094 0001
J8304 2 06/04/81 1179.75 CHTD

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 6-4-81 Lic. Class C-21 Lic. No. 252618 Contractor [signature] (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ______, B. & P. C. for this reason ______

Date ______ Owner's Signature ______

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. 467204-80 Company STATE Fund

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety

Date 6-4-81 Applicant [signature] EXPIRES 7-1-81

Applicants Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date ______ Applicant ______

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (See Sec. 91.0202 LAMC)

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the City of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein, or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed [signature] (Owner or agent having property owner's consent) — Contractor (Position) — 6-4-81 (Date)

22. I certify that all of the land included in the Tentative Tract Map is under my ownership or land on which offsite rights have been granted.

Signed ______ (Owner or agent having property owner's consent) ______ Position ______ Date

PUBLIC RECORD

3 APPLICATION FOR INSPECTION —TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — B & S B-3 (R 12.80) DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. LOT: ALISO TR. 17 & 19 | BLOCK: T | TRACT: SUBDIVISION ALISO TR. MR4-12-13 | COUNCIL DISTRICT NO. 9 | DIST. MAP 129-217 | CENSUS TRACT 2061.00

2. PRESENT USE OF BUILDING (23) FREEZER BLDG. | NEW USE OF BUILDING (23) SAME | ZONE M3-3

3. JOB ADDRESS 200-210 NO. CENTER ST. | FIRE DIST. TWO

4. BETWEEN CROSS STREETS JACKSON AND BANNING | LOT TYPE COR.

5. OWNER'S NAME POPPY FOODS | PHONE 626-8641 | LOT SIZE 100x138.5

6. OWNER'S ADDRESS 814 E. TEMPLE | CITY LOS ANGELES | ZIP 90012

7. ENGINEER MCLEAN & SCHULTZ | BUS. LIC. NO. S930 | ACTIVE STATE LIC. NO. | PHONE 714/871-7370 | ALLEY

8. ARCHITECT OR DESIGNER MCLEAN & SCHULTZ | BUS. LIC. NO. S930 | ACTIVE STATE LIC. NO. | PHONE 714/871-7370 | BLDG. LINE

9. ARCHITECT OR ENGINEER'S ADDRESS CHALLENGE ENGINEERING INC. | CITY | ZIP | AFFIDAVITS CCPD

10. CONTRACTOR ~~THREE D SERVICE CO.~~ | BUS. LIC. NO. | ACTIVE STATE LIC. NO. ~~252618 C-21~~ | PHONE ~~443-0505~~

11. SIZE OF EXISTING BLDG. WIDTH 100 LENGTH 190 | STORIES 1 | HEIGHT | NO. OF EXISTING BUILDINGS ON LOT AND USE

12. CONST. MATERIAL OF EXISTING BLDG. → EXT. WALLS UNREIF. MASONRY | ROOF WOOD | FLOOR WOOD

CORRECTION

3 13. JOB ADDRESS 200-210 NO. CENTER ST. | STREET GUIDE | DISTRICT OFFICE L.A.

14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING $1500.00 | SEISMIC STUDY ZONE

15. NEW WORK (Describe) REPAIR PORTION OF EXTERIOR WALL WHICH WAS DAMAGED BY SKIPLOADER. | GRADING | FLOOD | HWY. DED. YES | CONS. YES

NEW USE OF BUILDING (23) FREEZER | SIZE OF ADDITION | STORIES | HEIGHT | ZONED BY TELLES

TYPE III-A | GROUP OCC. | BLDG. AREA | PLANS CHECKED [signature] | FILE WITH

DWELL UNITS | MAX OCC. | TOTAL | APPLICATION APPROVED [signature] | TYPIST

GUEST ROOMS | PARKING REQ'D | PARKING PROVIDED STD. COMP. | INSPECTION ACTIVITY ~~CMB~~ ~~GEN~~ ~~MAJ.S~~ CONS. | INSPECTOR

SPRINKLERS REQ'D SPEC.		CONT. INSP.
P.C. 13.60	P.M.	
S.P.C.	I.F.	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.
B.P. 16.00	O.S.	
G.P.I.	C/O	
DIST. OFFICE	ENERGY:	
P.C. NO. A 1391		

CASHIER'S USE ONLY

C 13.60 C-PC
C 16.00 BP-C
39839 0001
A5597 2 03/09/82 29.60 CHTD.

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 3/9/82 Lic. Class B Lic. Number 386754 Contractor [signature] (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ________, B. & P. C. for this reason ________

Date ________ Owner's Signature ________

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. 527260-81 Company STATE COMPENSATION INS. FUND

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Los Angeles City Dep. of Bldg. & Safety.

Date 3/9/82 Applicant [signature]

Applicant's Mailing Address 4761 Lincoln Cypress 90630

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date ________ Applicant ________

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ________ Lender's Address ________

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein, or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed [signature] (Owner or agent having property owner's consent) | Foreman (Position) | 3/9/82 (Date)

3

PUBLIC RECORD

APPLICATION FOR INSPECTION — TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — B & S B-3 (R 12.80) DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. — LOT: Aliso Tract Lots 17 & 19 — BLOCK: T — TRACT: Subdivision Aliso Tract MR4-12-13 — COUNCIL DISTRICT NO.: 9
2. PRESENT USE OF BUILDING: ( ) Freezer Stg. — NEW USE OF BUILDING: ( ) Demo
3. JOB ADDRESS: 200-210 North Center Street
4. BETWEEN CROSS STREETS: Jackson AND Banning
5. OWNER'S NAME: /Poppy Food Co. — PHONE: 628-8641
6. OWNER'S ADDRESS: 814 E. Temple — CITY: Los Angeles — ZIP: 90012
7. ENGINEER: McLean & Schultz — BUS. LIC. NO.: S930 — ACTIVE STATE LIC. NO. — PHONE: 714/871-8641
8. ARCHITECT OR DESIGNER: McLean & Schultz — BUS. LIC. NO.: S930 — ACTIVE STATE LIC. NO. — PHONE: 714/871-8641
9. ARCHITECT OR ENGINEER'S ADDRESS: 2000 E. Chapman Ave. — CITY: Fullerton — ZIP: 92631
10. CONTRACTOR: Three D Service Co. — BUS. LIC. NO. — ACTIVE STATE LIC. NO.: 252618 C-21 — PHONE: 443-0505
11. SIZE OF EXISTING BLDG.: WIDTH 100 LENGTH 190 — STORIES: 5 — HEIGHT: 75 — NO. OF EXISTING BUILDINGS ON LOT AND USE: SEE OVER.
12. CONST. MATERIAL OF EXISTING BLDG. — EXT. WALLS: Unreinf masonry — ROOF: wd — FLOOR: wd
13. JOB ADDRESS: 200-210 North Center Street — STREET GUIDE
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING: $ 116,000
15. NEW WORK (Describe): Demolition of Building
    Handwreck — No Sewers

DIST. MAP	129-217
CENSUS TRACT	2061.00
ZONE	M3-3
FIRE DIST.	two
LOT TYPE	cor.
LOT SIZE	200x138.5
ALLEY	/
BLDG. LINE	/
AFFIDAVITS	CCPD
DISTRICT OFFICE	L.A.
SEISMIC STUDY ZONE	/
GRADING	/
FLOOD	/
HWY. DED.	/Yes
CONS.	/
ZONED BY	Calabrese
FILE WITH	
TYPIST	jkt
INSPECTOR	

NEW USE OF BUILDING: Demo — SIZE OF ADDITION — STORIES — HEIGHT

TYPE — GROUP OCC. — BLDG. AREA — PLANS CHECKED

DWELL UNITS — MAX OCC. — TOTAL — APPLICATION APPROVED

GUEST ROOMS — PARKING REQ'D — PARKING PROVIDED STD. COMP. — INSPECTION ACTIVITY: COMB. GEN. MAS. S. CONS.

SPRINKLERS REQ'D SPEC. — CONT. INSP.

P.C. 413.95	P.M.
S.P.C.	I.F. /
B.P. 487.00	O.S.
G.P.I.	C/O
DIST. OFFICE L.A.	ENERGY: None
P.C. NO. ZZ1345	

Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.

CASHIER'S USE ONLY

C 413.95 B-PC
C 487.00 BP-R
250 93 0001
J8303 2 06/04/81 900.95 CHTO

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 6-4-81 Lic. Class C-21 Lic. Number 252618 Contractor X [signature] (Signature) 2/C

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ______, B. & P. C. for this reason ______

Date ______ Owner's Signature ______

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. 467204-80 Company State Fund. EXPIRES 7-1-81

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date 6-4-81 Applicant X [signature]

Applicant's Mailing Address ______

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date ______ Applicant ______

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

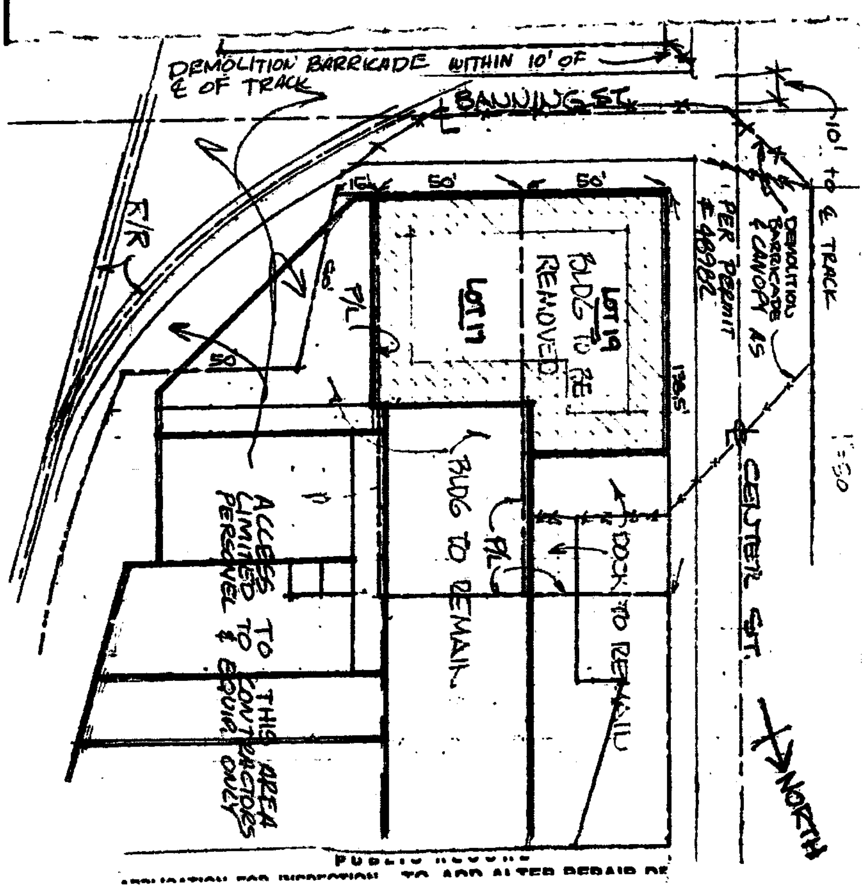
Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed X [signature] (Owner or agent having property owner's consent) — Contractor (Position) — 6-4-81 (Date)

Morning 9/23/80



3

APPLICATION TO ALTER - REPAIR - DEMOLISH
AND FOR CERTIFICATE OF OCCUPANCY

B&S Form B-3

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR. LOT 1-3 13,15,17,19 BLK. TRACT 20223 Sub of Aliso Tract
2. BUILDING ADDRESS 200-10 North Center Street Bldg. "A", "B", "E"
3. BETWEEN CROSS STREETS Turner AND Banning
4. PRESENT USE OF BUILDING Apartment & Stores — NEW USE OF BUILDING Same 33
5. OWNER'S NAME National Storage Company PHONE MA 6-8641
6. OWNER'S ADDRESS 200-10 North Center Street P.O. ZONE
7. CERT. ARCH. STATE LICENSE PHONE
8. LIC. ENGR. STATE LICENSE PHONE
9. CONTRACTOR Owner STATE LICENSE PHONE
10. CONTRACTOR'S ADDRESS Same as above P.O. ZONE
11. SIZE OF EXISTING BLDG. 120' x 50' STORIES 1,2,5 HEIGHT 16'&60' NO. OF EXISTING BUILDINGS ON LOT AND USE

ADDRESS APPROVED | DIST. MAP | ZONE | FIRE DIST. | INSIDE KEY | COR. LOT REV. COR. | LOT SIZE | REAR ALLEY SIDE ALLEY | BLDG. LINE | BLDG. AREA

SEWER (Available) (Not Available)

3 200-10 North Center Street Bldg. "A", "B", "E" — DISTRICT OFFICE L.A.

12. MATERIAL EXT. WALLS: ☐ WOOD ☐ METAL ☐ CONC. BLOCK ☐ STUCCO ☒ BRICK ☐ CONCRETE — ROOF CONST. ☒ WOOD ☐ STEEL ☐ CONC. ☐ OTHER — ROOFING — SPRINKLERS REQ'D. SPECIFIED
13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 4600.00
14. SIZE OF ADDITION STORIES HEIGHT
15. NEW WORK: (Describe) EXT. WALLS ROOFING

Parapet correction as per plans and Dept. File.

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance, and I have read reverse side of Application.

Signed [signature]

This Form When Properly Validated is a Permit to Do the Work Described.

VALUATION APPROVED | APPLICATION CHECKED | PLANS CHECKED | CORRECTIONS VERIFIED | PLANS APPROVED | APPLICATION APPROVED | INSPECTOR

AFFIDAVITS | DWELL. UNITS | SPACES PARKING | GUEST ROOMS | FILE WITH PARAPETS RM. 225 | CONT. INSP.

CRITICAL SOIL

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O
III-A	G1,H2	N.C.	13.26			20.40			

CASHIER'S USE ONLY

APR-2-64 16033 S •62778 Z — 2 CK 13.26

APR-2-64 16034 S •62778 Z — 1 CK 20.40

P.C. No. GRADING CRIT. SOIL CONS.

3

APPLICATION TO ALTER - REPAIR - DEMOLISH
AND FOR CERTIFICATE OF OCCUPANCY

B&S Form B-3

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR. LOT 1-3 13,15,17,19 BLK. TRACT 20223 Sub of Aliso Tract — ADDRESS APPROVED
2. BUILDING ADDRESS 200-10 North Center Street Bldg. "A", ~~C~~, E — DIST. MAP
3. BETWEEN CROSS STREETS Turner AND Banning — ZONE
4. PRESENT USE OF BUILDING Apartment & Stores — NEW USE OF BUILDING Same 33 — FIRE DIST.
5. OWNER'S NAME National Storage Company — PHONE MA 6-8641 — INSIDE KEY
6. OWNER'S ADDRESS 200-10 North Center Street — P.O. ZONE — COR. LOT REV. COR.
7. CERT. ARCH. — STATE LICENSE — PHONE — LOT SIZE
8. LIC. ENGR. — STATE LICENSE — PHONE
9. CONTRACTOR Owner — STATE LICENSE — PHONE — REAR ALLEY SIDE ALLEY
10. CONTRACTOR'S ADDRESS Same as above — P.O. ZONE — BLDG. LINE
11. SIZE OF EXISTING BLDG. 120' x 50' — STORIES 1,2,5 — HEIGHT 16' & 60' — NO. OF EXISTING BUILDINGS ON LOT AND USE — BLDG. AREA

3 200-10 North Center Street Bldg. "A", ~~C~~, E — DISTRICT OFFICE L.A.

12. MATERIAL EXT. WALLS: ☐ WOOD ☐ METAL ☐ CONC. BLOCK ☐ STUCCO ☒ BRICK ☐ CONCRETE — ROOF CONST. ☒ WOOD ☐ STEEL ☐ CONC. ☐ OTHER — ROOFING — SPRINKLERS REQ'D. SPECIFIED
13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 4600.00 — VALUATION APPROVED — AFFIDAVITS
14. SIZE OF ADDITION — STORIES — HEIGHT — APPLICATION CHECKED
15. NEW WORK: (Describe) EXT. WALLS — ROOFING — PLANS CHECKED — DWELL. UNITS

Parapet correction as per plans and Dept. File.

CORRECTIONS VERIFIED — SPACES PARKING

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance, and I have read reverse side of Application.

PLANS APPROVED — GUEST ROOMS

APPLICATION APPROVED — FILE WITH PARAPETS RM 225

Signed [signature]

INSPECTOR — CONT. INSP.

This Form When Properly Validated is a Permit to Do the Work Described.

CRITICAL SOIL — SEWER (Available) (Not Available)

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O
III-A	G1,H2	N.C.	13.26			20.40			

CASHIER'S USE ONLY

APR-2-64 16033 S •62778 Z — 2 CK 13.26

APR-2-64 16034 S •62778 Z — 1 CK 20.40

P.C. No. ____ GRADING ____ CRIT. SOIL ____ CONS. ____

PUBLIC RECORD

G CITY OF LOS ANGELES — APPLICATION FOR INSPECTION OF GRADING AND FOR GRADING CERTIFICATE — B & S B-100 R 9.80 — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR.	LOT Aliso Tract Lots 17 & 19	BLK. T	TRACT Subdivision Aliso Tract MR4-12-13
COUNCIL DIST. NO. 9			DIST. MAP 129-217; CENSUS TRACT 2061.00

2. PURPOSE OF GRADING ( ) To fill basement of demolished building — ZONE M3-3
3. JOB ADDRESS 200-210 North Center Street — FIRE DIST. two
4. BETWEEN CROSS STREETS Jackson AND Banning — LOT (TYPE) cor
5. OWNER'S NAME Poppy Food Co. PHONE 626-8641 — LOT SIZE 100x138.5
6. OWNER'S ADDRESS 814 E. Temple CITY Los Angeles ZIP 90012
7. PLANS BY CIVIL ENGR. McLean & Schultz BUS. LIC. NO. ACTIVE STATE LIC. NO. S930 PHONE 714/871-7370 — ALLEY /
8. CIVIL ENGR. ADDRESS 2000 E. Chapman Ave CITY Fullerton ZIP 92631 — BLDG. LINE /
9. ENGR. GEOLOGIST BUS. LIC. NO. ACTIVE STATE LIC. NO./CERT. NO. PHONE — AFFIDAVITS CCPD
10. SOIL ENGR.—TESTING AGENCY BUS. LIC. NO. ACTIVE STATE LIC. NO. PHONE
11. CONTRACTOR Three D Service Co BUS. LIC. NO. ACTIVE STATE LIC. NO. 252618 PHONE 443-0505 — SEISMIC STUDY ZONE
12. CONTRACTOR'S ADDRESS 4300 Alderson CITY Baldwin Park ZIP 91706 — DIST. OFFICE LA
13. JOB ADDRESS 200-210 North Center Street STREET GUIDE
14. NUMBER OF CUBIC YARDS CUT 0 FILL 1400 cu yd — GRADING / FLOOD /
15. MAXIMUM SLOPE CUT FILL — RETAINING WALL REQUIRED YES NO — BOARD FILE NO. — HWY. DED. Yes CONS. /

FILL DENSITY TESTS & CERTIFICATION ☒ REQUIRED ☐ NOT REQUIRED — ZONED BY Calabrese

IMPORT/EXPORT REQ. None — FILE WITH

CALIF. ENVIRONMENTAL QUALITY ACT REQUIREMENTS EXEMPT CCPD COMPLETED — YARDAGE APPROVED — TYPIST Jkt

PLANS CHECKED — G.P.I. INSPECTOR

BOND AMOUNT None ☐ CASH DATE POSTED ☐ SURETY CA # — APPLICATION APPROVED — INSPECTOR

P.C. 464.75 — I.F. — S.P.C. — G.P.I. — G.P. 715.00 — DIST. OFFICE LA — P.C. NO. 22E1345

Claims for refund of fees paid on permits may be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC

CASHIER'S USE ONLY: C 464.75 G-PC; C 715.00 GR-P; 25094 0001; J8304 2 06/04/81 1179.75 CHTD

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.
Date 6-4-81 Lic. Class C-21 Lic. No. 252618 Contractor [signature] (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ________, B. & P. C. for this reason________

Date ________ Owner's Signature ________

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).
Policy No. 467204-80 Company STATE FUND EXPIRES 7-1-81
☐ Certified copy is hereby furnished.
☒ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.
Date 6-4-81 Applicant [signature]
Applicants Mailing Address

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.
Date ________ Applicant ________
NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (See Sec. 91.0202 LAMC)
Lender's Name ________ Lender's Address ________

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.
I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the City of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein, or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)
Signed [signature] (Owner or agent having property owner's consent) Contractor Position 6-4-81 Date

22. I certify that all of the land included in the Tentative Tract Map is under my ownership or land on which offsite rights have been granted.
Signed ________ (Owner or agent having property owner's consent) ________ Position ________ Date

PUBLIC RECORD

3 APPLICATION FOR INSPECTION —TO ADD-ALTER-REPAIR-DEMOLISH

CITY OF LOS ANGELES AND FOR CERTIFICATE OF OCCUPANCY B & S B-3 (R 12.80) DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. LOT ALISO TR. 17 & 19 | BLOCK T | TRACT SUBDIVISION ALISO TR. MR4-12-13 | COUNCIL DISTRICT NO. 9 | DIST. MAP 129-217 | CENSUS TRACT 2061.00

2. PRESENT USE OF BUILDING (23) FREEZER BLDG. | NEW USE OF BUILDING (23) SAME | ZONE M3-3

3. JOB ADDRESS 200-210 NO. CENTER ST. | FIRE DIST. TWO

4. BETWEEN CROSS STREETS JACKSON AND BANNING | LOT TYPE COR.

5. OWNER'S NAME POPPY FOODS PHONE 626-8641 | LOT SIZE 100x138.5

6. OWNER'S ADDRESS 814 E. TEMPLE CITY LOS ANGELES ZIP 90012

7. ENGINEER MCLEAN & SCHULTZ BUS. LIC. NO. S930 ACTIVE STATE LIC. NO. PHONE 714/871-7370 | ALLEY

8. ARCHITECT OR DESIGNER MCLEAN & SCHULTZ BUS. LIC. NO. S930 ACTIVE STATE LIC. NO. PHONE 714/871-7370 | BLDG. LINE

9. ARCHITECT OR ENGINEER'S ADDRESS CHALLENGE ENGINEERING INC. CITY ZIP | AFFIDAVITS CCPD

10. CONTRACTOR ~~THREE D SERVICE CO.~~ BUS. LIC. NO. ACTIVE STATE LIC. NO. ~~252618 C-21~~ PHONE ~~443-0505~~

CORRECTION

11. SIZE OF EXISTING BLDG. WIDTH 100 LENGTH 190 | STORIES 1 | HEIGHT | NO. OF EXISTING BUILDINGS ON LOT AND USE

12. CONST. MATERIAL OF EXISTING BLDG. → EXT. WALLS UNREIF. MASONRY | ROOF WOOD | FLOOR WOOD

3

13. JOB ADDRESS 200-210 NO. CENTER ST. | STREET GUIDE | DISTRICT OFFICE L.A.

14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING $1500.00 | SEISMIC STUDY ZONE

15. NEW WORK (Describe) REPAIR PORTION OF EXTERIOR WALL WHICH WAS DAMAGED BY SKIPLOADER. | GRADING | FLOOD | HWY. DED. YES | CONS. YES

NEW USE OF BUILDING (23) FREEZER	SIZE OF ADDITION	STORIES	HEIGHT	ZONED BY TELLES
TYPE III-A	GROUP OCC.	BLDG. AREA	PLANS CHECKED	FILE WITH
DWELL UNITS	MAX OCC.	TOTAL	APPLICATION APPROVED	TYPIST
GUEST ROOMS	PARKING REQ'D	PARKING PROVIDED STD. COMP.	INSPECTION ACTIVITY ~~CMB~~ — ~~GEN.~~ — ~~MAJ. S.~~ — CONS.	INSPECTOR

SPRINKLERS REQ'D SPEC.		CONT. INSP.
P.C. 13.60	P.M.	
S.P.C.	I.F.	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.
B.P. 16.00	O.S.	
G.P.I.	C/O	
DIST. OFFICE	ENERGY:	
P.C. NO. A 1391		

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

CASHIER'S USE ONLY

C 13.60 C-PC
C 16.00 BP-C
39839 0001
A6597 2 03/09/82 29.60 CHTO.

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 3/9/82 Lic. Class B Lic. Number 386754 Contractor [signature] (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ______, B. & P. C. for this reason ______

Date ______ Owner's Signature ______

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. 522260-81 Company STATE COMPENSATION INS. FUND

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date 3/9/82 Applicant [signature]

Applicant's Mailing Address 5761 Lincoln Cypress 90630

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date ______ Applicant ______

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ______ Lender's Address ______

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein, or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed [signature] (Owner or agent having property owner's consent) Foreman Position 3/9/82 Date

3

PUBLIC RECORD

APPLICATION FOR INSPECTION —TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — B & S B-3 (R 12.80) DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. — LOT: Aliso Tract Lots 17 & 19 — BLOCK: T — TRACT: Subdivision Aliso Tract MB4-12-13 — COUNCIL DISTRICT NO.: 9
2. PRESENT USE OF BUILDING: ( ) Freezer Stg. — NEW USE OF BUILDING: ( ) Demo
3. JOB ADDRESS: 200-210 North Center Street
4. BETWEEN CROSS STREETS: Jackson AND Banning
5. OWNER'S NAME: /Poppy Food Co. — PHONE: 628-8641
6. OWNER'S ADDRESS: 814 E. Temple — CITY: Los Angeles — ZIP: 90012
7. ENGINEER: McLean & Schultz — BUS. LIC. NO.: S930 — ACTIVE STATE LIC. NO. — PHONE: 714/871-8641
8. ARCHITECT OR DESIGNER: McLean & Schultz — BUS. LIC. NO.: S930 — ACTIVE STATE LIC. NO. — PHONE: 714/871-8641
9. ARCHITECT OR ENGINEER'S ADDRESS: 2000 E. Chapman Ave. — CITY: Fullerton — ZIP: 92631
10. CONTRACTOR: Three D Service Co. — BUS. LIC. NO. — ACTIVE STATE LIC. NO.: 252618 C-21 — PHONE: 443-0505
11. SIZE OF EXISTING BLDG.: WIDTH 100 LENGTH 190 — STORIES 5 — HEIGHT 75 — NO. OF EXISTING BUILDINGS ON LOT AND USE: SEE OVER.
12. CONST. MATERIAL OF EXISTING BLDG. → EXT. WALLS: Unreinf masonry — ROOF: wd — FLOOR: wd
13. JOB ADDRESS: 200-210 North Center Street
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING: $ 116,000
15. NEW WORK (Describe): Demolition of Building Handwreck No Sewers

NEW USE OF BUILDING: Demo — SIZE OF ADDITION — STORIES — HEIGHT

Field	Entry
DIST. MAP	129-217
CENSUS TRACT	2061.00
ZONE	M3-3
FIRE DIST.	two
LOT TYPE	cor
LOT SIZE	200x138.5
ALLEY	/
BLDG. LINE	/
AFFIDAVITS	CCPD
DISTRICT OFFICE	L.A.
SEISMIC STUDY ZONE	/
GRADING	/
FLOOD	/
HWY. DED.	/Yes
CONS.	/
ZONED BY	Calabrese
FILE WITH	
TYPIST	lkt
INSPECTOR	

TYPE — GROUP OCC. — BLDG. AREA — PLANS CHECKED [signature]

DWELL UNITS — MAX OCC. — TOTAL — APPLICATION APPROVED [signature]

GUEST ROOMS — PARKING REQ'D — PARKING PROVIDED STD. COMP. — INSPECTION ACTIVITY: COMB | GEN. | MAS. | CONS.

SPRINKLERS REQ'D SPEC. — CONT. INSP.

P.C. 413.95	P.M.
S.P.C.	I.F.
B.P. 487.00	O.S.
G.P.I.	C/O
DIST. OFFICE L.A.	ENERGY: None
P.C. NO. ZZ1345	

Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.

CASHIER'S USE ONLY

C 413.95 B-PC
C 487.00 BP-R
25093 0001
J8303 2 06/04/81 900.95 CHTO

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 6-4-81 Lic. Class C-21 Lic. Number 252618 Contractor [signature] (Signature) 2/C

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ________, B. & P. C. for this reason ________

Date ________ Owner's Signature ________

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. 467204-80 Company State Fund. Expires 7-1-81

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date 6-4-81 Applicant [signature]

Applicant's Mailing Address ________

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date ________ Applicant ________

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

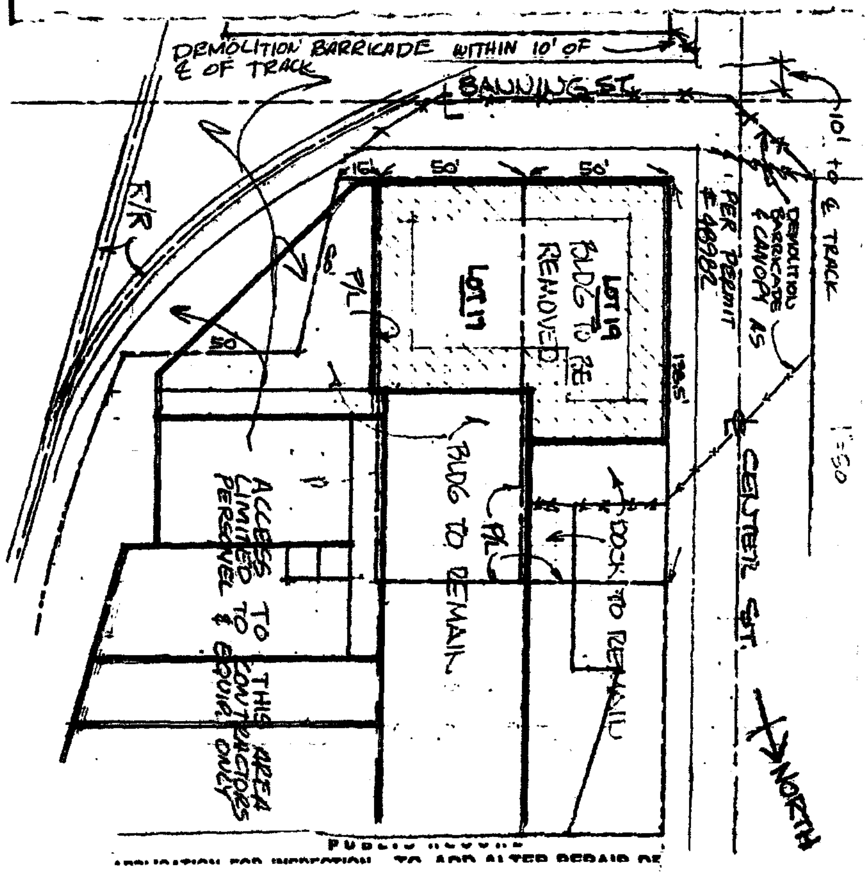
20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ________ Lender's Address ________

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed [signature] (Owner or agent having property owner's consent) — Contractor (Position) — 6-4-81 (Date)


DEMOLITION BARRICADE WITHIN 10' OF ℄ OF TRACK
BANNING ST.
R/R
50'
50'
P/L
LOT 19
LOT 17
BLDG TO BE REMOVED
BLDG TO REMAIN
DOCK TO REMAIN
ACCESS TO THIS AREA LIMITED TO CONTRACTORS PERSONEL & EQUIP. ONLY
DEMOLITION BARRICADE & CANOPY AS PER PERMIT
10' to ℄ TRACK
CENTER ST.
NORTH

PUBLIC RECORD

3 APPLICATION FOR INSPECTION —TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — B & S B-3 (R 12.80) DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. LOT: ALISO TR. 17 & 19 | BLOCK: T | TRACT: SUBDIVISION ALISO TR. MR4-12-13 | COUNCIL DISTRICT NO. 9 | DIST. MAP 129-217 | CENSUS TRACT 2061.00

2. PRESENT USE OF BUILDING (23) FREEZER BLDG. | NEW USE OF BUILDING (23) SAME | ZONE M3-3

3. JOB ADDRESS 200-210 NO. CENTER ST. | FIRE DIST. TWO

4. BETWEEN CROSS STREETS JACKSON AND BANNING | LOT TYPE COR.

5. OWNER'S NAME POPPY FOODS | PHONE 626-8641 | LOT SIZE 100x138.5

6. OWNER'S ADDRESS 814 E. TEMPLE | CITY LOS ANGELES | ZIP 90012

7. ENGINEER MCLEAN & SCHULTZ S930 | BUS. LIC. NO. | ACTIVE STATE LIC. NO. | PHONE 714/871-7370 | ALLEY

8. ARCHITECT OR DESIGNER MCLEAN & SCHULTZ S930 | BUS. LIC. NO. | ACTIVE STATE LIC. NO. | PHONE 714/871-7370 | BLDG. LINE

9. ARCHITECT OR ENGINEER'S ADDRESS CHALLENGE ENGINEERING INC. | CITY | ZIP | AFFIDAVITS CCPD

10. CONTRACTOR ~~THREE D SERVICE CO.~~ | BUS. LIC. NO. | ACTIVE STATE LIC. NO. ~~252618 C-21~~ | PHONE ~~413-0595~~

11. SIZE OF EXISTING BLDG. WIDTH 100 LENGTH 190 | STORIES 1 | HEIGHT | NO. OF EXISTING BUILDINGS ON LOT AND USE

12. CONST. MATERIAL OF EXISTING BLDG. → EXT. WALLS UNREIF. MASONRY | ROOF WOOD | FLOOR WOOD

SURVEY SECTION

3 13. JOB ADDRESS 200-210 NO. CENTER ST. | STREET GUIDE | DISTRICT OFFICE L.A.

14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING $1500.00 | SEISMIC STUDY ZONE

15. NEW WORK (Describe) REPAIR PORTION OF EXTERIOR WALL WHICH WAS DAMAGED BY SKIPLOADER. | GRADING | FLOOD | HWY. DED. YES | CONS. YES

NEW USE OF BUILDING (23) FREEZER | SIZE OF ADDITION | STORIES | HEIGHT | ZONED BY TELLES

TYPE III-A | GROUP OCC. | BLDG. AREA | PLANS CHECKED | FILE WITH

DWELL UNITS | MAX OCC. | TOTAL | APPLICATION APPROVED | TYPIST

GUEST ROOMS | PARKING REQ'D | PARKING PROVIDED STD. COMP. | INSPECTION ACTIVITY ~~COMB~~ ~~GEN.~~ ~~MAJ.S.~~ CONS. | INSPECTOR

SPRINKLERS REQ'D SPEC. | CONT. INSP.

P.C. 13.60 | P.M.

S.P.C. | I.F.

B.P. 16.00 | O.S.

G.P.I. | C/O

DIST. OFFICE | ENERGY:

P.C. NO. A 1391

Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.

CASHIER'S USE ONLY

C 13.60 C-PC
C 16.00 BP-C
39839 0001
A5597 2 03/09/82 29.60 CHTD.

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 3/9/82 Lic. Class B Lic. Number 366754 Contractor [signature] (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ________, B. & P. C. for this reason________

Date ________ Owner's Signature ________

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. 527260-81 Company STATE COMPENSATION INS. FUND

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date 3/9/82 Applicant [signature]

Applicant's Mailing Address 4761 LINCOLN CYPRESS 90630

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date ________ Applicant ________

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name ________ Lender's Address ________

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein, or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed [signature] (Owner or agent having property owner's consent) | FOREMAN (Position) | 3/9/82 (Date)

PUBLIC RECORD

3

APPLICATION FOR INSPECTION —TO ADD-ALTER-REPAIR-DEMOLISH

AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — B & S B-3 (R 12.80) DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. — LOT	Aliso Tract Lots 17 & 19
BLOCK	T
TRACT	Subdivision Aliso Tract MR4-12-13
COUNCIL DISTRICT NO.	9
DIST. MAP	129-217
CENSUS TRACT	2061.00
2. PRESENT USE OF BUILDING	( ) Freezer Stg.
NEW USE OF BUILDING	( ) Demo
ZONE	M3-3
3. JOB ADDRESS	200-210 North Center Street
FIRE DIST.	two
4. BETWEEN CROSS STREETS	Jackson AND Banning
LOT TYPE	cor
5. OWNER'S NAME	/Poppy Food Co.
PHONE	628-8641
LOT SIZE	200x138.5
6. OWNER'S ADDRESS	814 E. Temple
CITY	Los Angeles
ZIP	90012
7. ENGINEER	McLean & Schultz; BUS. LIC. NO. S930; PHONE 714/871-8641
ALLEY	/
8. ARCHITECT OR DESIGNER	McLean & Schultz; BUS. LIC. NO. S930; PHONE 714/871-8641
BLDG. LINE	/
9. ARCHITECT OR ENGINEER'S ADDRESS	2000 E. Chapman Ave.; CITY Fullerton; ZIP 92631
AFFIDAVITS	CCPD
10. CONTRACTOR	Three D Service Co.; BUS. LIC. NO. 252618; ACTIVE STATE LIC. NO. C-21; PHONE 443-0505
11. SIZE OF EXISTING BLDG.	WIDTH 100 LENGTH 190; STORIES 5; HEIGHT 75
NO. OF EXISTING BUILDINGS ON LOT AND USE	See over.
12. CONST. MATERIAL OF EXISTING BLDG.	EXT. WALLS Unreinf masonry; ROOF wd; FLOOR wd
STREET GUIDE	
13. JOB ADDRESS	200-210 North Center Street
DISTRICT OFFICE	L.A.
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING	$ 116,000
SEISMIC STUDY ZONE	/
15. NEW WORK (Describe)	Demolition of Building Handwreck No Sewers
GRADING	/
FLOOD	/
HWY. DED.	/Yes
CONS.	/
NEW USE OF BUILDING	Demo
SIZE OF ADDITION	
STORIES	
HEIGHT	
ZONED BY	Calabrese
TYPE / GROUP OCC. / BLDG. AREA	
PLANS CHECKED	[signature]
FILE WITH	
DWELL UNITS / MAX OCC. / TOTAL	
APPLICATION APPROVED	[signature]
TYPIST	lkt
GUEST ROOMS / PARKING REQ'D / PARKING PROVIDED STD. COMP.	
INSPECTION ACTIVITY	COMB. GEN. MAJ. S. CONS.
INSPECTOR	

SPRINKLERS REQ'D SPEC.	
CONT. INSP.	
P.C.	413.95
P.M.	
S.P.C.	
I.F.	/
B.P.	487.00
O.S.	
G.P.I.	
C/O	
DIST. OFFICE	L.A.
ENERGY:	None
P.C. NO.	221345

Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.

CASHIER'S USE ONLY

C 413.95 B-PC
C 487.00 BP-R
25093 00J1
J8303 2 06/04/81 900.95 CHTO

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 6-4-81 Lic. Class C-21 Lic. Number 252618 Contractor [signature] (Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. ________ B. & P. C. for this reason ________

Date ________ Owner's Signature ________

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. 467204-80 Company State Fund. Expires 7-1-81

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date 6-4-81 Applicant [signature]

Applicant's Mailing Address ________

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date ________ Applicant ________

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

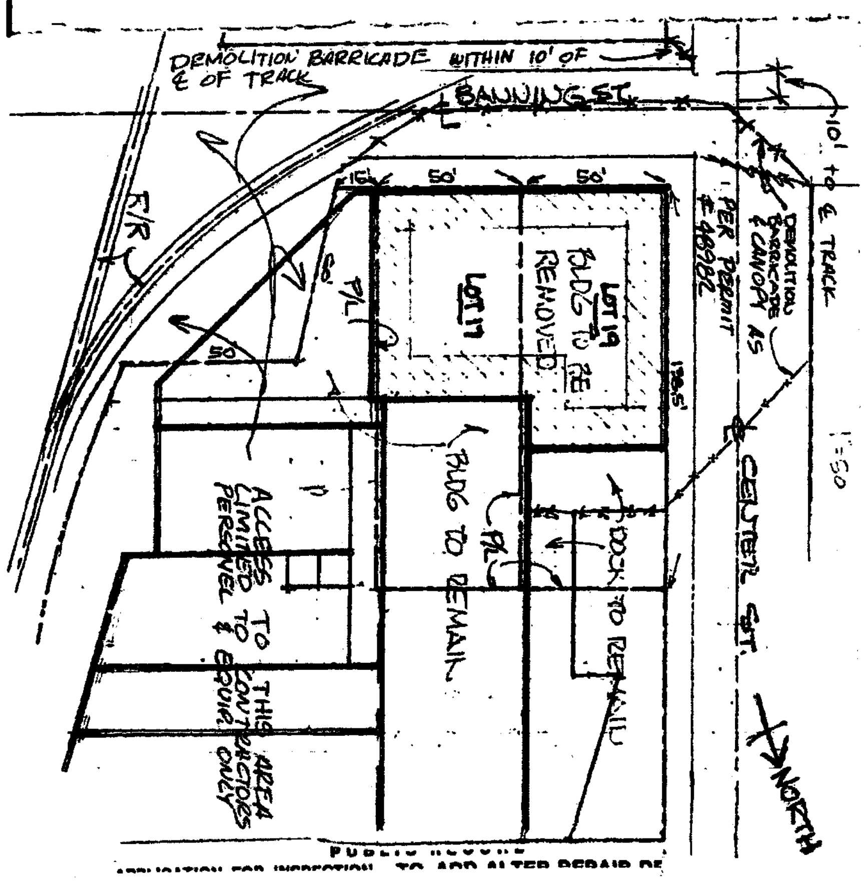
Lender's Name ________ Lender's Address ________

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed [signature] (Owner or agent having property owner's consent) — Contractor (Position) — 6-4-81 (Date)

Morning 9/23/80



LADBS DEPARTMENT OF BUILDING AND SAFETY

There are two ways to request a copy of the document image.
1) By fax using the request form. Click on the following link
http://ladbs.org/LADBSWeb/LADBS_Forms/Administrative/AD-Form.01.pdf to download the request form.
2) In person. Bring the following summary to one of the following Records counters.
3) If you have any questions, please visit one of our Records Counters.

RECORDS COUNTER HOURS
MONDAY, TUESDAY, THURSDAY, FRIDAY: 7:30 AM to 4:30 PM
WEDNESDAY: 9:00 AM to 4:30 PM

Metro	Van Nuys
201, N. Figueroa St.	6262 Van Nuys Blvd
1st Floor, Room 110	Record Counter
Record Counter	Van Nuys,CA 91401
Los Angeles,CA 90012	

Address: 224 N CENTER ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/23/1987		HIST: B0146 005 0053	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/23/1987		HIST: B0146 005 0053	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/16/1988		HIST: B0148 004 0159	
AFFIDAVIT	PARKING	7/3/1956	AFF 919	HIST: M0026 004 0169	
BUILDING PERMIT		9/12/1929	1929LA23390	HIST: P1201 002 3082	
BUILDING PERMIT	ALTERATION	1/10/1962	1962LA01968	HIST: P1701 002 1644	
BUILDING PERMIT	ALTERATION	9/2/1988	1988LA09316	HIST: P0205 002 0132	
BUILDING PERMIT	BLDG-ADDITION	12/22/1927	1927LA37946	IDIS: P5184 01943 0000 thru P5184 0001 HIST: P1180 002 1175	
BUILDING PERMIT	BLDG-ADDITION	8/7/1979	1979LA87593	HIST: 00000 000 0000 HIST: P1855 002 0808	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/16/1936	1936LA24839	HIST: P1263 002 1467	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/16/1936	1936LA24839	IDIS: P5268 00734 0000 thru P5268 0001 HIST: P1263 002 1467	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/11/1949	1949 20620	HIST: P1426 002 2284	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/5/1951	1951 08229	HIST: P1447 002 2104	
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/2/1955	1955LA28865	HIST: P1638 001 1514	
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/12/1956	1956LA47942	HIST: P1647 001 0823	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/14/1956	1956LA50601	HIST: P1647 001 0821	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/22/1958	1958LA10746	HIST: P1666 001 1593	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/2/1964	1964LA62778	IDIS: P5838 01621 0000 thru P5838 0001 HIST: P	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/9/1982	1982LA39839	IDIS: P6034 02786 0000 thru P6034 0001 HIST: P	
BUILDING PERMIT	BLDG-DEMOLITION	6/4/1981	1981LA25093	IDIS: P6024 01194 0000 thru P6024 0001 HIST: P1876 001 1223	
BUILDING PERMIT	BLDG-NEW	6/22/1918	1918LA03245	HIST: P1057 001 2518	
BUILDING PERMIT	BLDG-NEW	6/5/1923	1923LA25433	HIST: P1111 002 0087	
BUILDING PERMIT	BLDG-NEW	3/11/1924	1924LA12623	HIST: P1128 001 0902	
BUILDING PERMIT	BLDG-NEW	3/11/1924	1924LA12623	IDIS: P5157 00451 0000 thru P5157 0001 HIST: P1128 001 0902	
BUILDING PERMIT	GRADING	6/4/1981	1981LA25094	IDIS: P6024 01195 0000 thru P6024 0001 HIST: P1876 001 1225	
BUILDING PERMIT	NEW CONSTRUCTION	6/5/1923	1923LA25433	IDIS: P5140 01465 0000 thru P5140 0001 HIST: P1111 002 0087	
CERTIFICATE OF OCCUPANCY		1/31/1950		HIST: O128 1 2816	
CERTIFICATE OF OCCUPANCY		3/10/1967	1961SP25700	HIST: O128 1 2819	
COMMISSION	BAAB BOARD FILE	12/31/1980	BF 801154	HIST: B0013 006 0369	
RANGE FILE	MISCELLANEOUS	7/29/1988		HIST: M0322 003 0472	

All Applications must be filled out by Applicant

PLANS AND SPECIFICATIONS and other data must also be filed

Bldg. Form 2

2

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

Application for the Erection of Frame Buildings

CLASS "D"

To the Board of Public Works of the City of Los Angeles:

Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO REAR OF NORTH ANNEX 1st FLOOR

CITY CLERK PLEASE VERIFY

Lot No. 1 Block 3

(Description of Property)

Palos Verdes Tract

District No. .... M. B. Page .... F. B. Page ....

O. K. City Clerk .... By .... Deputy

TAKE TO ROOM No. 405 SOUTH ANNEX

ENGINEER PLEASE VERIFY

No. 228 .... Street

(Location of Job) SAN PEDRO

N. Center St.

O. K. City Engineer .... By .... Deputy

(USE INK OR INDELIBLE PENCIL)

1. Purpose of Building Residence No. of Rooms .... No. of Families 1
2. Owner's name G. Drummond Phone ....
3. Owner's address 211 Palos Verdes
4. Architect's name .... Phone ....
5. Contractor's name .... Phone ....
6. Contractor's address Self
7. VALUATION OF PROPOSED WORK {Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.} $ 700
8. Is there any existing (old) building on lot? No .... How used? ....
9. Size of proposed building 10 x 40 Height to highest point 15 feet
10. Number of Stories in height 1 Character of ground Level
11. Material of foundation Red W. Size of footings 2 x 6 Size of wall 1" Depth below ground ....
12. Material of chimneys None Number of inlets to flue None Interior size of flues No x No
13. Give sizes of following materials: REDWOOD MUDSILLS 2 x 6 Girders 2 x 6
EXTERIOR studs No 1 x 12 INTERIOR BEARING studs No 2 x 4 No Interior Non-Bearing studs 1 x 12 Ceiling joists 2 x 3 Roof rafters 2 x 3 FIRST FLOOR JOISTS 2 x 6
Second floor joists No x .... Specify material of roof Paper
14. Will all provisions of State Dwelling House Act be complied with? Yes

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER

(Sign here) C. W. Bragg
(Owner or Authorized Agent)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	Stamp here when permit is issued
25433	Plan Examiner	Clerk	ISSUED JUN 5 1923 L. A. Bldg. Dept.

270

FOR DEPARTMENT USE ONLY

APPLICATION	O. K.
CONSTRUCTION	O. K.
ZONING	O. K.
SET-BACK LINE	O. K.
ORD. 33761 (N. S.)	O. K.
FIRE DISTRICT	O. K.

REMARKS

I hereby agree to locate and erect this building or structure and every portion thereof, except unenclosed porches, back a distance from the front property line equal to the set-back line of the nearest building now erected on any lot in this block in Zone "A" or "B" on the same side of the street.

....
Owner.

All Applications Must be Filled Out by Applicant

Bldg. Form 3

BUILDING DIVISION

PLANS AND SPECIFICATIONS and other data must also be filed

3 DEPARTMENT OF BUILDING AND SAFETY

Application to Alter, Repair or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit

	REMOVED FROM	REMOVED TO	
TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor	Lot..........Block..........	Lot..........Block..........	O. K. City Clerk By..........Deputy
	Tract..........	Tract..........	
CITY CLERK PLEASE VERIFY			
TAKE TO FIRST FLOOR 242 SO. BROADWAY	Book.....Page.....F. B. Page.....	Book.....Page.....F. B. Page..... SAN PEDRO	O. K. City Engineer By..........Deputy
ENGINEER PLEASE VERIFY	From No.......... Street		
	To No. 230 Mother Centre St Street		

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Residence
2. What purpose will Building be used for hereafter? Same
3. Owner's name J. Dominici Phone ✓
4. Owner's address 230 Mother Centre St
5. Architect's name ✓ Phone
6. Contractor's name Voorhees and Augusto Phone 247 J
7. Contractor's address 349 13th St San Pedro Calif
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 200.00
9. Class of present Building D No. of rooms at present 3
10. Number of stories in height 1 Size of present Building 18 x 24
11. State how many buildings are on this lot One
12. State purpose buildings on lot are used for Residence (Apartment House, Hotel, Residence, or any other purpose.)

What Zone is Property In? X

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

Add one room 12 x 12
with change roof and windows
to comply with law
No plaster

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER

(Sign here) [illegible signature] (Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	Stamp here when permit is issued.
37946	Plan Examiner	D 12/20/27 [illegible] Clerk	[illegible]

C-4 24507 2.00

13. Size of new addition 12 x 12 No. of Stories in height one

14. Material of foundation Redwood Size footings ✓ Size wall — Depth below ground 6"

15. Size of Redwood Mudsills 2 x 6 Size of interior bearing studs 2 x 4

16. Size of exterior studs 2 x 4 Size of interior non-bearing studs x

17. Size of first floor joists 2 x 6 Second floor joists x

18. Will all provisions of State Housing Act be complied with? yes

I have carefully examined and read the above blank and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

(Sign here) John Argento
(Owner or Authorized Agent)

FOR DEPARTMENT USE ONLY

APPLICATION	O. K.
CONSTRUCTION	O. K.
ZONING	O. K.
SET-BACK LINE	O. K.
ORD. 33761 (N. S.)	O. K.
FIRE DISTRICT	O. K.

REMARKS

All Applications must be filled out by Applicant

PLANS AND SPECIFICATIONS and other data must also be filed

Bldg. Form 2

2

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

Application for the Erection of Frame Buildings

CLASS "D"

To the Board of Public Works of the City of Los Angeles:

Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st FLOOR

CITY CLERK PLEASE VERIFY

Lot No. 1 Block 3

(Description of Property) Peck's Subdivision of Block 3 Palos Verdes Tract

O. K. City Clerk .... Deputy

District No. .... M. B. Page .... F. B. Page ....

TAKE TO ROOM No. 405 SOUTH ANNEX

ENGINEER PLEASE VERIFY

No. 230 North Center Street

(Location of Job)

O. K. City Engineer .... Deputy

(USE INK OR INDELIBLE PENCIL) SAN PEDRO

1. Purpose of Building Residence No. of Rooms four No. of Families one
2. Owner's name James Dominic Phone —
3. Owner's address 211 Palos Verdes
4. Architect's name myself Phone —
5. Contractor's name myself Phone —
6. Contractor's address 211 Palos Verdes – San Pedro
7. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $800.00
8. Is there any existing (old) building on lot? one How used? Residence
9. Size of proposed building 12 x 36 Height to highest point 18 feet
10. Number of Stories in height one Character of ground adobe
11. Material of foundation Redwood Size of footings — Size of wall — Depth below ground —
12. Material of chimneys — Number of inlets to flue — Interior size of flues — x
13. Give sizes of following materials: REDWOOD MUDSILLS 3 x 6 Girders 4 x 4

    EXTERIOR studs 1 x 12 INTERIOR BEARING studs 1 x 12 Interior Non-Bearing studs — x — Ceiling joists 2 x 4 Roof rafters 2 x 3 FIRST FLOOR JOISTS 2 x 6

    Second floor joists — x — Specify material of roof Shingles
14. Will all provisions of State Housing Act be complied with? yes

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER

(Sign here) James Dominic

(Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	Stamp here when permit is issued.
12623	Plan Examiner	Clerk	MAR 11 1924 ISSUED

FOR DEPARTMENT USE ONLY

APPLICATION	O. K.
CONSTRUCTION	O. K.
ZONING	O. K.
SET-BACK LINE	O. K.
ORD. 33761 (N. S.)	O. K.
FIRE DISTRICT	O. K.

REMARKS

I hereby agree to locate and erect this building or structure and every portion thereof, except unenclosed porches, back a distance from the front property line equal to the set-back line of the nearest building now erected on any lot in this block in Zone "A" on the same side of the street.

James Dominic
Owner.

~~There will be an unobstructed passageway, at least 10~~ feet wide, extending from any dwelling or lot to a public street, or to a public alley at least 10 feet in width.

[illegible]

Bldg. Form 3

USE INK OR INDELIBLE PENCIL

3

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Application to Alter, Repair, Move or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:
Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley or other public place or portion thereof.
Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

REMOVED FROM	REMOVED TO
Lot	Lot
Tract	Tract

Present location of building: 230 N. Center St. (Center)
(House Number and Street)

New location of building: ✓ ✓
(House Number and Street)

Between what cross streets: Banning & Turner.

Approved by City Engineer ______ Deputy.

1. Purpose of PRESENT building: Refrigerated Storage Bldg (Store, Residence, Apartment House, Hotel, or any other purpose) Families ______ Rooms ______
2. Use of building AFTER alteration or moving: Same Families ______ Rooms ______
3. Owner (Print Name): National Ice & Cold Storage Co. Phone: Mu 1236
4. Owner's Address: 200 N. Center St.
5. Certificated Architect: none State License No. ______ Phone ______
6. Licensed Engineer: S. B. Barnes State License No. 604 Phone: Tr 7231
7. Contractor: J. O. Oltmans State License No. 12587 Phone: PR 5642
8. Contractor's Address: 2407 So. Main St.
9. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and/or elevator equipment therein or thereon.) $ 9000.00
10. State how many buildings NOW on lot and give use of each: None (Residence, Hotel, Apartment House, or any other purpose)
11. Size of existing building: 52 x 99 Number of stories high: 1 Height to highest point: 16
12. Class of building: C Material of existing walls: Brick Exterior framework: Brick (Wood or Steel)

Describe briefly and fully all proposed construction and work:
Brick Bldg. - Insulated for Refrigeration.

9/1/36

Fill in Application on other Side and Sign Statement (OVER)

FOR DEPARTMENT USE ONLY 5514

PERMIT NO.			Fee
24839	Plans and Specifications checked: [signature]	Zone: M-3 / Fire District No. 1	30.00
	Corrections verified: [signature]	Bldg. Line: No Ft. / Street Widening: No Ft.	Stamp here when Permit is issued: SEP 16 1936
PLANS 9/1/36	Plans, Specifications and Applications rechecked and approved: [signature]	Application checked and approved: 9/15/36 [signature] Clerk	
	For Plans See / Filed with	SPRINKLER Required / Valuation Included / Specified Yes—No	Inspector: [signature]

PLANS, SPECIFICATIONS, and other data must be filed if required.

NEW CONSTRUCTION

Size of Addition 52 x 99 Size of Lot ... x ... Number of Stories when complete 1

Material of Foundation Concrete Width of Footing 1 9 Depth of footing below ground 1 6

Width Foundation Wall 12" Size of Redwood Sill — x ... Material Exterior Walls Brick

Size of Exterior Studs — x ... Size of Interior Bearing Studs 2 x 4

Joists: First Floor 2 x 6 Second Floor — x — Rafters 2 x 8 Roofing Material Composition

I have carefully examined and read both sides of this completed Application and know the same is true and correct and hereby certify and agree, if a Permit is issued, that all the provisions of the Building Ordinances and State Laws will be complied with whether herein specified or not; also certify that plans and specifications, if required to be filed, will conform to all of the provisions of the Building Ordinances and State Laws.

Sign Here J. O. Oltman (Owner or Authorized Agent)

By ...

FOR DEPARTMENT USE ONLY

Application [illegible]	Fire District [illegible]	Bldg. Line ...	Termite Inspection ...
Construction ...	Zoning ...	Street Widening ...	Forced Draft Ventil ...

(1)
REINFORCED CONCRETE

Barrels of Cement ...

Tons of Reinforcing Steel ...

(2)
The building (and, or, addition) referred to in this Application is, or will be when moved, more than 100 feet from ... Street

Sign Here ... (Owner or Authorized Agent)

(3)
No required windows will be obstructed.

Sign Here ... (Owner or Authorized Agent)

(4)
There will be an unobstructed passageway at least ten (10) feet wide, extending from any dwelling on lot to a Public Street or Public Alley at least 10 feet in width.

Sign Here ... (Owner or Authorized Agent)

REMARKS:
PLAN CHECKING
RECEIPT NO. 9464
VALUATION $ 9000 00
FEE PAID $ 20 00

Only Male Sex to be employed in this building.

LA DBS
DEPARTMENT OF BUILDING AND SAFETY

There are two ways to request a copy of the document image.
1) By fax using the request form. Click on the following link
http://ladbs.org/LADBSWeb/LADBS_Forms/Administrative/AD-Form.01.pdf to download the request form.
2) In person. Bring the following summary to one of the following Records counters.
3) If you have any questions, please visit one of our Records Counters.

RECORDS COUNTER HOURS
MONDAY, TUESDAY, THURSDAY, FRIDAY: 7:30 AM to 4:30 PM
WEDNESDAY: 9:00 AM to 4:30 PM

Metro	Van Nuys
201, N. Figueroa St.	6262 Van Nuys Blvd
1st Floor, Room 110	Record Counter
Record Counter	Van Nuys,CA 91401
Los Angeles,CA 90012	

Address: 410 N CENTER ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/9/2005			
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	4/27/2009	NONE		
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/29/2009		IDIS: B505 00534 0000 thru B505 00534 0001	
AFFIDAVIT	MISCELLANEOUS	5/20/2005	AF 051195639	IDIS: Z502 00453 0000 thru Z502 00453 0003	
AFFIDAVIT	MISCELLANEOUS	5/22/2009	AF 090760816	IDIS: Z502 00452 0000 thru Z502 00452 0006	
BUILDING PERMIT	ALTERATION	5/10/1966	1966LA24616	HIST: P1747 002 0714	
BUILDING PERMIT	ALTERATION	12/7/1978	1978LA74351	HIST: 00000 000 0000 HIST: P1850 002 1771	
BUILDING PERMIT	BLDG-ADDITION	6/10/1972	1972LA52471	HIST: P1802 001 0700	
BUILDING PERMIT	BLDG-ALTER/REPAIR		1944 19703	HIST: P1366 002 0036	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/30/1944	1944 19356	HIST: P1366 001 2279	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/19/1946	1946LA04604	HIST: P1376 002 1911	
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/18/1951	1951 14292	HIST: P1449 001 0406	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/10/1954	1954LA14828	HIST: P1506 001 0001	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/10/1954	1954LA85772	HIST: P1506 001 0001	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ALTER/REPAIR	5/10/1954	1954LA85772	IDIS: P5583 00001 0000 thru P5583 0001 HIST: P1506 001 0001	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/10/1954	1954LA95035	HIST: P1509 002 0581	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/10/1954	1954LA95035	IDIS: P5586 01524 0000 thru P5586 0001 HIST: P1509 002 0581	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/12/1956	1956LA37514	HIST: P1647 001 0832	
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/7/1956	1956LA45056	HIST: P1647 001 0838	
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/22/1956	1956LA46437	HIST: P1647 001 0844	
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/22/1956	1956LA46441	HIST: P1647 001 0854	
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/5/1956	1956LA47365	HIST: P1647 001 0840	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/1/1956	1956LA49586	HIST: P1647 001 0842	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/30/1956	1956LA51977	HIST: P1647 001 0856	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/23/1956	1956LA56080	HIST: P1647 001 0858	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/26/1956	1956LA56482	HIST: P1647 001 0848	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/8/2009	08016-10000-20347		
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/27/2009	09016-10000-04260		
BUILDING PERMIT	BLDG-DEMOLITION	6/10/1972	1972LA52472	HIST: P1802 001 0702 HIST: P1832 001 0230	
BUILDING PERMIT	BLDG-DEMOLITION	11/10/1972	1972LA61119	HIST: P1805 001 1627 HIST: P1832 001 0240	
BUILDING PERMIT	BLDG-DEMOLITION	11/10/1972	1972LA61120	HIST: P1805 001 1629 HIST: P1832 001 0242	
BUILDING PERMIT	BLDG-DEMOLITION	3/20/1973	1973LA67560	HIST: 00000 000 0000 HIST: P1807 002 0698	
BUILDING PERMIT	BLDG-NEW	7/8/1955	1955LA19863	HIST: P1638 001 1520	
BUILDING PERMIT	BLDG-NEW	2/29/1956	1956LA36671	HIST: P1647 001 0834	
BUILDING PERMIT	BLDG-NEW	4/24/1956	1956LA41267	HIST: P1647 001 0836	
BUILDING PERMIT	BLDG-NEW	6/22/1956	1956LA46438	HIST: P1647 001 0852	
BUILDING PERMIT	BLDG-NEW	6/22/1956	1956LA46439	HIST: P1647 001 0850	
BUILDING PERMIT	BLDG-NEW	6/22/1956	1956LA46440	HIST: P1647 001 0846	
BUILDING PERMIT	BLDG-NEW	6/10/1957	1957LA73967	HIST: P1656 001 1715	
BUILDING PERMIT	GRADING	6/10/1972	1972LA52470	HIST: P1802 001 0698	
BUILDING PERMIT	GRADING	11/10/1972	1972LA61118	HIST: P1805 001 1625	
BUILDING PERMIT	GRADING	3/20/1973	1973LA67559	HIST: 00000 000 0000 HIST: P1807 002 0696	
BUILDING PERMIT	GRADING	5/26/2005	05030-10000-01227		
BUILDING PERMIT	GRADING	3/26/2009	08030-10000-05055		

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	NEW CONSTRUCTION	5/17/1984	1984LA88366	HIST: P0056 003 0001	
BUILDING PERMIT	NONBLDG-NEW	1/8/2009	08020-10000-03625		
CERTIFICATE OF OCCUPANCY			1956LA46441	HIST: O128 1 2897	
CERTIFICATE OF OCCUPANCY			1956LA49586	HIST: O128 1 2897	
CERTIFICATE OF OCCUPANCY			1956LA51977	HIST: O128 1 2897	
CERTIFICATE OF OCCUPANCY		6/19/1945		HIST: O128 1 2828	
CERTIFICATE OF OCCUPANCY		6/19/1945		HIST: O128 1 2828	
ELECTRICAL PERMIT		2/19/1985	0285C9732	HIST: T0005 009 0168	
ELECTRICAL PERMIT		4/18/1985	0485K706	HIST: T0013 002 0468	
ELECTRICAL PERMIT		4/14/1987	0487F4999	HIST: T0092 005 0012	
GRADING	COMPACTION FILE	12/19/2005		IDIS: G545 00070 0000 thru G545 00070 0019	
GRADING	COMPACTION FILE	1/3/2006		IDIS: G545 00071 0000 thru G545 00071 0010	
GRADING	COMPACTION FILE	4/16/2009		IDIS: G545 00068 0000 thru G545 00068 0007	
GRADING	GRADING PRE-INSP REPT	12/1/2004		IDIS: G545 00067 0000 thru G545 00067 0000	
GRADING	GRADING PRE-INSP REPT	1/28/2009	09030-10000-00230	IDIS: G545 00072 0000 thru G545 00072 0001	
GRADING	SOILS & GEOLOGY FILE	12/28/2004		IDIS: G545 00066 0000 thru G545 00066 0032	
GRADING	SOILS & GEOLOGY FILE	3/21/2005		IDIS: G545 00069 0000 thru G545 00069 0031	
GRADING	SOILS & GEOLOGY FILE	10/1/2008			
GRADING	SOILS & GEOLOGY FILE	2/2/2009			
GRADING	SOILS & GEOLOGY FILE	3/13/2009			
MECHANICAL PERMIT	HVAC	4/18/1985	0485K705	HIST: T0013 003 0031	
PLAN MAINTENANCE		5/26/2005	05030-10000-01227	HIST: J2426 1 451	
PLAN MAINTENANCE		1/8/2009	08016-10000-20347	HIST: J4659 1 354	
RANGE FILE	MISCELLANEOUS	8/26/1963		HIST: R0034 006 0144	

410 N Center St

Permit #: **05030 - 10000 - 01227**
Plan Check #: G05LA0077F Printed: 05/26/05 09:21 AM
Event Code:

Grading
Commercial
Regular Plan Check
Plan Check Submittal

City of Los Angeles - Department of Building and Safety

APPLICATION FOR GRADING PERMIT AND GRADING CERTIFICATE

Last Status: Ready to Issue
Status Date: 05/26/2005

1. TRACT	BLOCK	LOT(s)	ARB	COUNTY MAP REF #	PARCEL ID # (PIN #)	2. ASSESSOR PARCEL #
P M 4255		B		BK 112-21/22	130-5A217 280	5173 - 021 - 002

3. PARCEL INFORMATION

Area Planning Commission - Central
LADBS Branch Office - LA
Council District - 9
Certified Neighborhood Council - Historic Cultural
Community Plan Area - Central City North
Census Tract - 2060.30
District Map - 130-5A217
Energy Zone - 9
Fire District - 2
Earthquake-Induced Liquefaction Area - Yes
Methane Hazard Site - Methane Zone
Near Source Zone Distance - 7.5
Parking Dist. - CCPD
Thomas Brothers Map Grid - 634-H4

ZONE(S): M3-1 /

4. DOCUMENTS

ZI - ZI-1117 MTA Project
ZI - ZI-2129 Eastside State Enterprise Z
ORD - ORD-164855-SA1610
CPC - CPC-1986-607
CPC - CPC-1995-352-CPU
CDBG - FEZ-Los Angeles
CDBG - LARZ-Central City
CDBG - SEZ-Eastside State Enterprise Z

5. CHECKLIST ITEMS

Storm Water - NOI/SWPPP-Not Req'd
Storm Water - SUSMP-Not Req'd

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION

Owner(s):
North Center Street Development Company L 520 Ash St STE 200 SAN DIEGO CA 92101

Tenant:
Applicant: (Relationship: Engineer)
- Geotechnical Solutions, Inc. 501 S. Fairfax Ave. LOS ANGELES, CA 90036 (323) 937-1097

7. EXISTING USE **PROPOSED USE**
(60) Grading - Non-Hillside

8. DESCRIPTION OF WORK
ENVIRONMENTAL CLEAN-UP OF SOIL OF FORMER GAS COMPANY. EXCAVATION OF CONTAMINATED SOILS AND BACKFILL WITH CLEAN SOIL & SLURRY. CUT = 761 CU YDS., FILL = 263 CU. YDS., SLURRY = 498 CU. YDS.

9. # Bldgs on Site & Use:

For information and/or inspection requests originating within LA County,
Call toll-free (888) LA4BUILD
Outside LA County, call (213) 482-0000. (LA4BUILD = 524-2845)

10. APPLICATION PROCESSING INFORMATION

BLDG. PC By: Fred Wong DAS PC By:
OK for Cashier: Fred Wong Coord. OK:
Signature: Date: 5/26/05

For Cashier's Use Only W/O #: **53001227**

LA Department of Building and Safety
LA 03 08 138462 05/26/05 09:27AM

GRADING PERMIT	$1,105.00
PLAN MAINTENANCE	$22.10
ONE STOP SURCH	$22.54
SYSTEMS DEVT FEE	$67.63
CITY PLANNING SURCH	$67.63
MISCELLANEOUS	$5.00
Total Due:	$1,289.90
Credit Card:	$1,289.90

05LA 75419

11. PROJECT VALUATION & FEE INFORMATION Final Fee Period

Permit Valuation: 761 cu yd PC Valuation:

FINAL TOTAL Grading	1,289.90
Permit Fee Subtotal Grading	1,105.00
Plan Check Subtotal Grading	0.00
Off-hour Plan Check	0.00
Plan Maintenance	22.10
O.S. Surcharge	22.54
Sys. Surcharge	67.63
Planning Surcharge	67.63
Planning Surcharge Misc Fee	5.00
Permit Issuing Fee	0.00

Sewer Cap ID: Total Bond(s) Due:

12. ATTACHMENTS
Plot Plan

* P 0 5 0 3 0 1 0 0 0 0 0 1 2 2 7 F N *

13. STRUCTURE INVENTORY (Note: Numeric measurement data in the format "number / number" implies "change in numeric value / total resulting numeric value")

05030 - 10000 - 01227

14. APPLICATION COMMENTS

In the event that any box (i.e. 1-16) is filled to capacity, it is possible that additional information has been captured electronically and could not be printed due to space restrictions. Nevertheless, the information printed exceeds that required by Section 19825 of the Health and Safety Code of the State of California.

15. Building Relocated From:

16. CONTRACTOR, ARCHITECT, & ENGINEER NAME	ADDRESS		CLASS	LICENSE#	PHONE #
(C) El Capitan Environmental Services	11080 Tuxford Street,	Sun Valley, CA 91352	HAZ	640045	
(E) Mesrop, Mesrop Aram	7608 Clinton St,	Los Angeles, CA 90036		GE2561	

PERMIT EXPIRATION/REFUNDS: This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inspection within 60 days of receiving a request for final inspection (HS 17951).

17. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. The following applies to B contractors only: I understand the limitations of Section 7057 of the Business and Professional Code related to my ability to take prime contracts or subcontracts involving specialty trades.

License Class: A Lic. No.: 640045 Contractor: El Capitan Environmental Services

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations:

( ) I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

(✓) I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: State Fund Policy Number: 6009616-2005

( ) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

19. ASBESTOS REMOVAL DECLARATION / LEAD HAZARD WARNING

I certify that notification of asbestos removal is either not applicable or was sent to the AQMD or EPA as per section 19827.5 of the Health and Safety Code. Due to the possible presence of lead-based paint, lead safe work practices are required on all repairs in pre-1979 buildings that disturb paint. Failure to do so could create lead hazards that violate California Health and Safety Code Section 17920.10 and Section 105256 and may be subject to a $1000 fine or criminal prosecution. For more information call LA County's Department of Health Services at (800)524-5323. In order to locate a Lead Certified Professional and obtain additional information, call California DHS at (800)597-5323 or go to the DHS Website at http://www.dhs.ca.gov/childlead/html/GENclist.html.

20. CONSTRUCTION LENDING AGENCY DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code).

Lender's name (if any):______ Lender's address:______

21. FINAL DECLARATION

I certify that I have read this application INCLUDING THE ABOVE DECLARATIONS and state that the above information INCLUDING THE ABOVE DECLARATIONS is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not authorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

By signing below, I certify that:

(1) I accept all the declarations above namely the Licensed Contractor's Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration / Lead Hazard Warning, Construction Lending Agency Declaration and Final Declaration: and
(2) This permit is being obtained with the consent of the legal owner of the property.

Print Name: Al Marino Sign: [signature] Date: 5/26/05 ☒ Contractor ☐ Authorized Agent

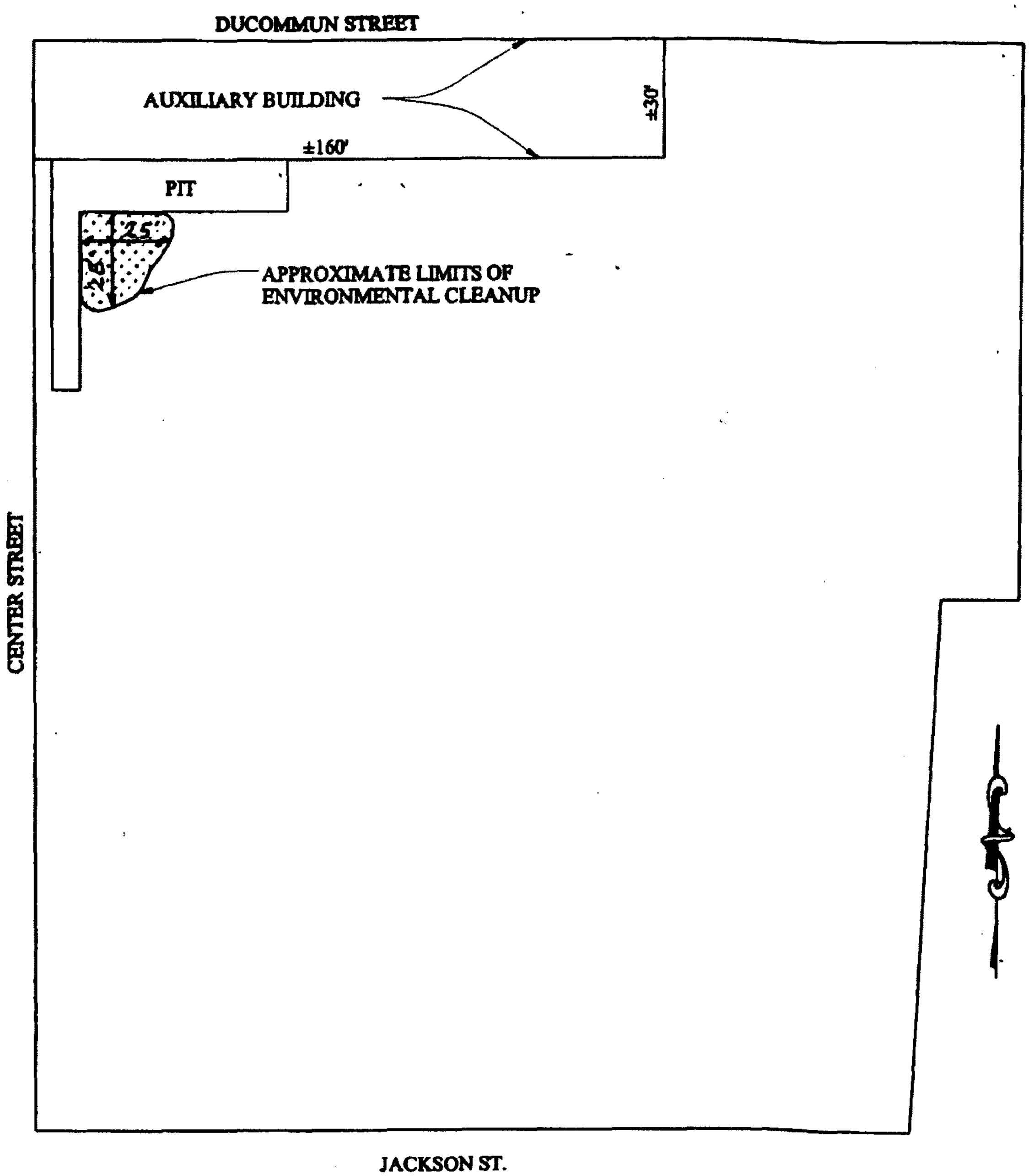
410 N Center St

Permit Application #: **05030 - 10000 - 01227**

Grading Commercial Plan Check Submittal	City of Los Angeles - Department of Building and Safety **PLOT PLAN ATTACHMENT**	Plan Check #: G05LA0077F Initiating Office: METRO Printed on: 04/28/05 07:52:53

1010614200518548

(DO NOT DRAW, WRITE, OR PASTE ATTACHMENTS OUTSIDE BORDER)



SITE PLAN
SCALE: 1"=40'

410 N Center St

Permit #: **08030 - 10000 - 05055**
Plan Check #: G08LA00226 Printed: 03/26/09 10:42 AM
Event Code:

ading
ommercial
Regular Plan Check
Plan Check

City of Los Angeles - Department of Building and Safety

APPLICATION FOR GRADING PERMIT AND GRADING CERTIFICATE

Last Status: Ready to Issue
Status Date: 03/26/2009

1. TRACT	BLOCK	LOT(s)	ARB	COUNTY MAP REF #	PARCEL ID # (PIN #)	2. ASSESSOR PARCEL #
P M 4255		B		BK 112-21/22	130-5A217 280	5173 - 021 - 002

3. PARCEL INFORMATION

Area Planning Commission - Central
LADBS Branch Office - LA
Council District - 9
Certified Neighborhood Council - Historic Cultural
Community Plan Area - Central City North
Census Tract - 2060.30
District Map - 130-5A217
Energy Zone - 9
Fire District - 2
Earthquake-Induced Liquefaction Area - Yes
Methane Hazard Site - Methane Zone
Near Source Zone Distance - 7.5
Parking Dist - CCPD
Thomas Brothers Map Grid - 634-H4

ZONE(S): M3-1 /

4. DOCUMENTS

ZI - ZI-1117 MTA Project
ZI - ZI-2129 East Los Angeles State Ent
ZI - ZI-2358 LA River Revitilization Ma
ORD - ORD-164855-SA1610
CPC - CPC-1986-607-GPC
CPC - CPC-1995-352-CPU
CPC - CPC-2006-48-ICO
CDBG - FEZ-Los Angeles
CDBG - LARZ-Central City
CDBG - SEZ-East Los Angeles State En

5. CHECKLIST ITEMS

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION

Owner(s)
Greenwald, Bennet Tr Bennett Greewald Trus 2929 Canon St # A SAN DIEGO CA 92106

Tenant
Applicant (Relationship: Architect)
Barry Segal - Po Box 6108 ALTADENA 91003 (626) 345-9765

7. EXISTING USE **PROPOSED USE**
(60) Grading - Non-Hillside

8. DESCRIPTION OF WORK
SITE GRADING - FILL & COMPACT. CUT = 280 CY., FILL = 4895 CY.

9. # Bldgs on Site & Use:

For inspection requests, call toll-free (888) LA4BUILD (524-2845). Outside LA County, call (213) 482-0000 or request Inspections via www.ladbs.org. To speak to a Call Center agent, call 311 or (866) 4LACITY (452-2489). Outside LA County, call (213) 473-3231

10. APPLICATION PROCESSING INFORMATION

BLDG. PC By: Fred Wong DAS PC By:
OK for Cashier: Fred Wong Coord. OK:
Signature: Date: 3/26/09

For Cashier's Use Only W/O #: 83005055

LA 03 22 231257 03/26/09

GRADING PERMIT	$1,975.00
ONE STOP SURCH	$39.50
SYSTEMS DEVT FEE	$118.50
CITY PLANNING SURCH	$118.50
MISCELLANEOUS	$5.00
GRADING PLAN CHECK	$0.00
GRADING PLAN CHECK	$0.00
GRADING PLAN CHECK	$0.00

P08030100000005055FN

Total Due:	$2,256.50
Credit Card:	$2,256.50

4894

2009LA35770

11. PROJECT VALUATION & FEE INFORMATION Final Fee Period

Permit Valuation: 4,895 cu yd PC Valuation:

FINAL TOTAL Grading	2,256.50
Permit Fee Subtotal Grading	1,975.00
Plan Check Subtotal Grading	0.00
Off-hour Plan Check	0.00
O.S. Surcharge	39.50
Sys. Surcharge	118.50
Planning Surcharge	118.50
Planning Surcharge Misc Fee	5.00
Permit Issuing Fee	0.00

wer Cap ID: Total Bond(s) Due:

12. ATTACHMENTS
Plot Plan

* P 0 8 0 3 0 1 0 0 0 0 0 5 0 5 5 F N *

13. STRUCTURE INVENTORY (Note: Numeric measurement data in the format "number / number" implies "change in numeric value / total resulting numeric value")

08030 - 10000 - 05055

14. APPLICATION COMMENTS

In the event that any box (i.e. 1-16) is filled to capacity, it is possible that additional information has been captured electronically and could not be printed due to space restrictions. Nevertheless, the information printed exceeds that required by Section 19825 of the Health and Safety Code of the State of California.

15. Building Relocated From:

16. CONTRACTOR, ARCHITECT, & ENGINEER NAME	ADDRESS		CLASS	LICENSE#	PHONE #
(A) Segal, Barry William	P O Box 6108,	Altadena, CA 91003		C17861	
(C) Essence Company	2929 Canon Street Suite A,	San Diego, CA 92106	B	872365	

PERMIT EXPIRATION/REFUNDS: This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inspection within 60 days of receiving a request for final inspection (HS 17951).

17. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. The following applies to B contractors only: I understand the limitations of Section 7057 of the Business and Professional Code related to my ability to take prime contracts or subcontracts involving specialty trades.

License Class: **B** Lic. No.: **872365** Contractor: **ESSENCE COMPANY**

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations:

( ) I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

(✓) I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: **State Comp. Ins. Fund** Policy Number: **713-0022001**

( ) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

19. ASBESTOS REMOVAL DECLARATION / LEAD HAZARD WARNING

I certify that notification of asbestos removal is either not applicable or has been submitted to the AQMD or EPA as per section 19827.5 of the Health and Safety Code. Information is available at (909) 396-2336 and the notification form at www.aqmd.gov. Lead safe construction practices are required when doing repairs that disturb paint in pre-1978 buildings due to the presence of lead per section 6716 and 6717 of the Labor Code. Information is avaiable at Health Services for LA County at (800) 524-5323 or the State of California at (800) 597-5323 or www.dhs.ca.gov/childlead

20. CONSTRUCTION LENDING AGENCY DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code).

Lender's name (if any): ______ Lender's address: ______

21. FINAL DECLARATION

I certify that I have read this application **INCLUDING THE ABOVE DECLARATIONS** and state that the above information **INCLUDING THE ABOVE DECLARATIONS** is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not authorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

By signing below, I certify that:

(1) I accept all the declarations above namely the Licensed Contractor's Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration / Lead Hazard Warning, Construction Lending Agency Declaration and Final Declaration; and

(2) This permit is being obtained with the consent of the legal owner of the property.

Print Name: x Jason S. Talbot Sign: x Date: 3/26/09 ☑ Contractor ☐ Authorized Agent

410 N Center St

Permit Application #: **08030 - 10000 - 05055**

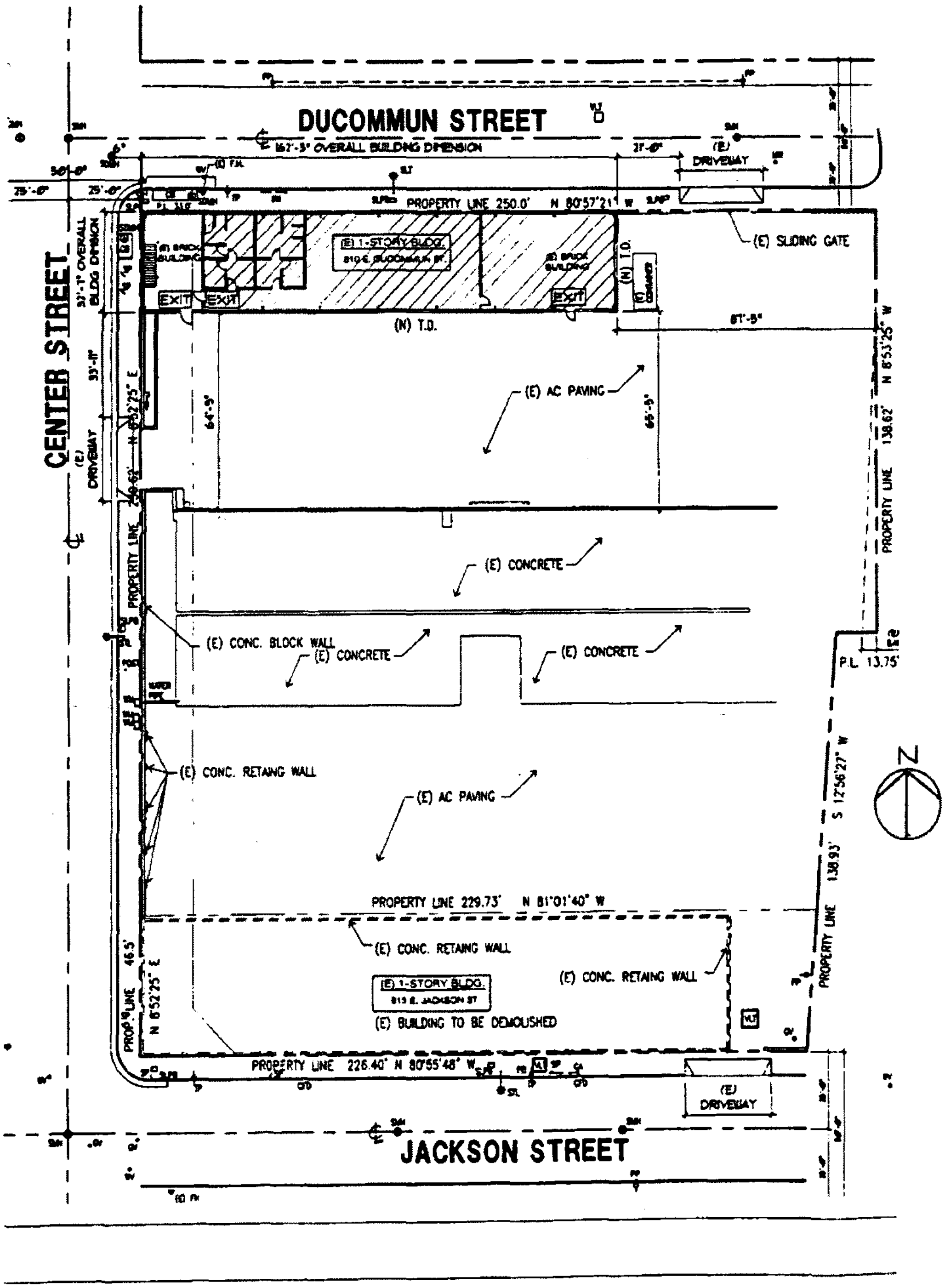
Grading
Commercial
Plan Check

City of Los Angeles - Department of Building and Safety

PLOT PLAN ATTACHMENT

Plan Check #: G08LA00226FO
Initiating Office: METRO
Printed on: 12/15/08 11:45:29

(DO NOT DRAW, WRITE, OR PASTE ATTACHMENTS OUTSIDE BORDER)



COUNCIL DISTRICT: 9 INSPECTION DISTRICT: STGRDM5 PLOT PLAN ATTACHMENT

1020410200965881

410 N Center St

Permit #: **08016 - 10000 - 20347**
Plan Check #: B08LA11870 Printed: 01/08/09 09:38 AM
Event Code:

Bldg-Alter/Repair
Commercial
Appointment Plan Check
Plan Check

City of Los Angeles - Department of Building and Safety

APPLICATION FOR BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY

Last Status: Ready to Issue
Status Date: 01/08/2009

1. TRACT	BLOCK	LOT(s)	ARB	COUNTY MAP REF #	PARCEL ID # (PIN #)	2. ASSESSOR PARCEL #
P M 4255		B		BK 112-21/22	130-5A217 280	5173 - 021 - 002

3. PARCEL INFORMATION

Area Planning Commission - Central
LADBS Branch Office - LA
Council District - 9
Certified Neighborhood Council - Historic Cultural
Community Plan Area - Central City North
Census Tract - 2060.30
District Map - 130-5A217
Energy Zone - 9
Fire District - 2
Earthquake-Induced Liquefaction Area - Yes
Methane Hazard Site - Methane Zone
Near Source Zone Distance - 7.5
Parking Dist. - CCPD
Thomas Brothers Map Grid - 634-H4

ZONE(S): M3-1 /

4. DOCUMENTS

ZI - ZI-1117 MTA Project
ZI - ZI-2129 East Los Angeles State Ent
ZI - ZI-2358 LA River Revitilization Ma
ORD - ORD-164855-SA1610
CPC - CPC-1986-607-GPC
CPC - CPC-1995-352-CPU
CPC - CPC-2006-48-ICO
CDBG - FEZ-Los Angeles
CDBG - LARZ-Central City
CDBG - SEZ-East Los Angeles State En

5. CHECKLIST ITEMS

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION

Owner(s)
Greenwald, Bennet Tr Bennett Greewald Trus 2929 Canon St # A SAN DIEGO CA 92106

Tenant
Applicant (Relationship Architect)
Barry Segal - Po Box 6108 ALTADENA 91003 (626) 345-9765

7. EXISTING USE / **PROPOSED USE**
(22) Warehouse

8. DESCRIPTION OF WORK
NEW RESTROOMS, NEW DEMISING WALL, NEW SIDING, REPLACE EXISTING WINDOWS.

9. # Bldgs on Site & Use:

For inspection requests, call toll-free **(888) LA4BUILD** (524-2845). Outside LA County, call (213) 482-0000 or request Inspections via **www.ladbs.org** To speak to a Call Center agent, call **311** or (866) 4LACITY (452-2489). Outside LA County, call (213) 473-3231.

10. APPLICATION PROCESSING INFORMATION

BLDG. PC By: Albert Servin DAS PC By:
OK for Cashier: Shine Lin Coord. OK: S. L.
Signature: S Lin Date: 1/8/09

For Cashier's Use Only W/O #: 81620347

LA Department of Building and Safety
LA 01 26 231181 01/08/09 10:21AM

BUILDING PERMIT COMM	$461.25
PLAN MAINTENANCE	$10.00
EI COMMERCIAL	$8.40
ONE STOP SURCH	$9.59
SYSTEMS DEVT FEE	$28.78
CITY PLANNING SURCH	$28.28
MISCELLANEOUS	$5.00
GREEN BUILDING FEE	$2.00
BUILDING PLAN CHECK	$0.00
BUILDING PLAN CHECK	$0.00

P08016100002034?FN

Subtotal:	$553.30
Carry Over FROM Tran# 231180	$239.79
Total Due:	$793.
Credit Card:	$793.

P08016100002034 7FN

09LA 33111

11. PROJECT VALUATION & FEE INFORMATION Final Fee Period

Permit Valuation: $40,000 PC Valuation:

FINAL TOTAL Bldg-Alter/Repair	553.30
Permit Fee Subtotal Bldg-Alter/Rep	461.25
Handicapped Access	
Plan Check Subtotal Bldg-Alter/Rep	0.00
Plan Maintenance	10.00
Fire Hydrant Refuse-To-Pay	
E.Q. Instrumentation	8.40
O.S. Surcharge	9.59
Sys. Surcharge	28.78
Planning Surcharge	28.28
Planning Surcharge Misc Fee	5.00
Green Building Fee	2.00
Permit Issuing Fee	0.00

Sewer Cap ID: Total Bond(s) Due:

12. ATTACHMENTS
Plot Plan Sn

1026112200302607

13. STRUCTURE INVENTORY (Note: Numeric measurement data in the format "number / number" implies "change in numeric value / total resulting numeric value")

08016 - 10000 - 20347

14. APPLICATION COMMENTS

** Approved Seismic Gas Shut-Off Valve may be required. **

In the event that any box (i.e. 1-16) is filled to capacity, it is possible that additional information has been captured electronically and could not be printed due to space restrictions. Nevertheless, the information printed exceeds that required by Section 19825 of the Health and Safety Code of the State of California.

15. Building Relocated From:

16. CONTRACTOR, ARCHITECT, & ENGINEER NAME

CONTRACTOR, ARCHITECT, & ENGINEER NAME	ADDRESS		CLASS	LICENSE#	PHONE #
(A) Segal, Barry William	P O Box 6108,	Altadena, CA 91003		C17861	
(C) Essence Company	3904 Groton Street Ste 202,	San Diego, CA 92110	B	872365	619-808-2264

PERMIT EXPIRATION/REFUNDS: This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inspection within 60 days of receiving a request for final inspection (HS 17951).

17. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. The following applies to B contractors only: I understand the limitations of Section 7057 of the Business and Professional Code related to my ability to take prime contracts or subcontracts involving specialty trades

License Class **B** Lic. No. **872365** Contractor **ESSENCE COMPANY**

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations:

(✓) I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

(X) I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: **State Comp. Ins. Fund** Policy Number: **713-0022001**

(X) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

19. ASBESTOS REMOVAL DECLARATION / LEAD HAZARD WARNING

I certify that notification of asbestos removal is either not applicable or has been submitted to the AQMD or EPA as per section 19827.5 of the Health and Safety Code. Information is available at (909) 396-2336 and the notification form at www.aqmd.gov. Lead safe construction practices are required when doing repairs that disturb paint in pre-1978 buildings due to the presence of lead per section 6716 and 6717 of the Labor Code. Information is avaiable at Health Services for LA County at (800) 524-5323 or the State of California at (800) 597-5323 or www.dhs.ca.gov/childlead

20. CONSTRUCTION LENDING AGENCY DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code).

Lender's name (if any) ____________ Lender's address ____________

21. FINAL DECLARATION

I certify that I have read this application **INCLUDING THE ABOVE DECLARATIONS** and state that the above information **INCLUDING THE ABOVE DECLARATIONS** is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not authorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

By signing below, I certify that:

(1) I accept all the declarations above namely the Licensed Contractor's Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration / Lead Hazard Warning, Construction Lending Agency Declaration and Final Declaration; and

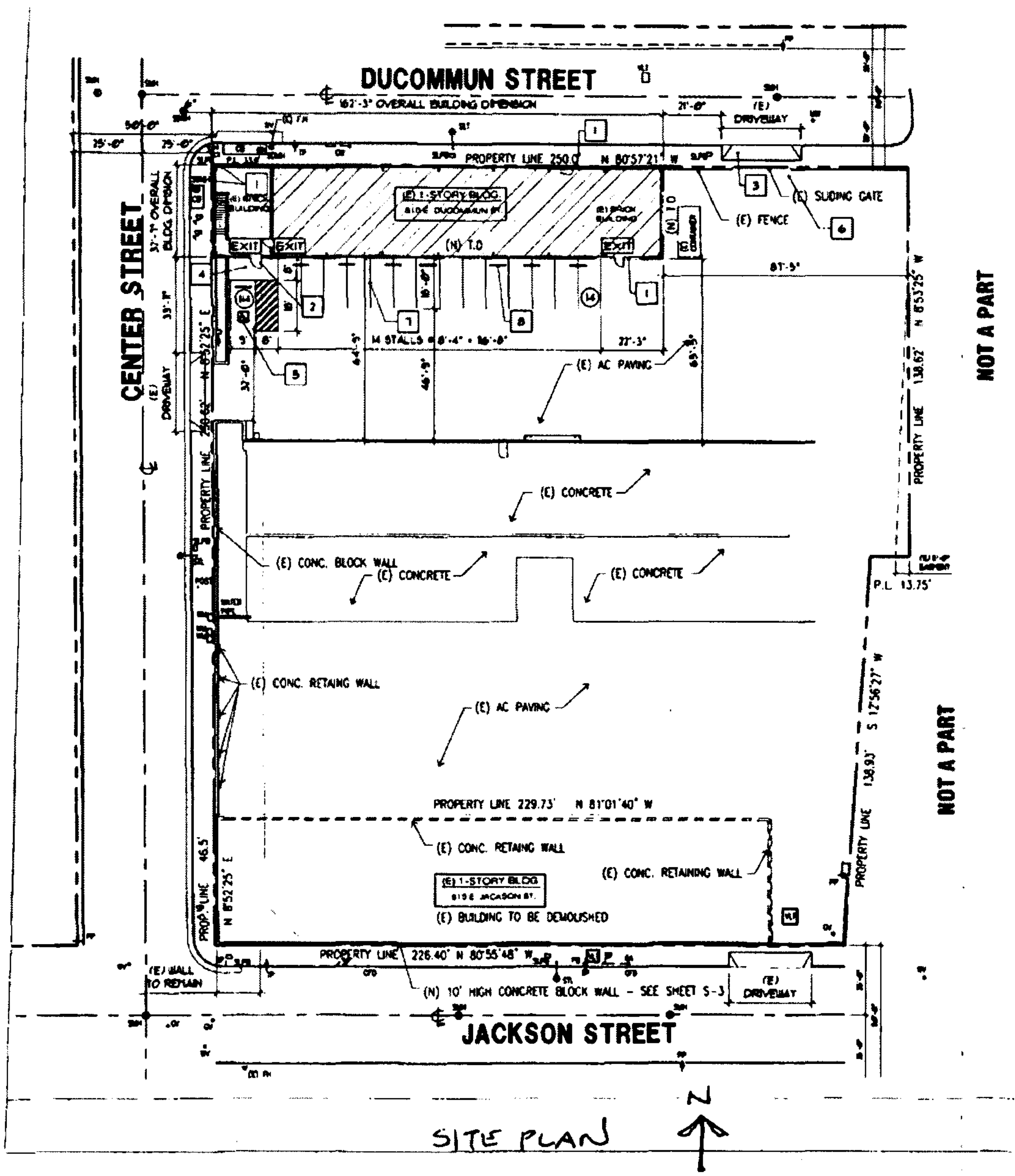
(2) This permit is being obtained with the consent of the legal owner of the property.

Print Name: Jason S. Talbot Sign: ____________ Date: 1-8-09 [X] Contractor [ ] Authorized Agent

410 N Center St Permit Application #: **08016 - 10000 - 20347**

Bldg-Alter/Repair	City of Los Angeles - Department of Building and Safety	Plan Check #: B08LA11870
Commercial		Initiating Office: METRO
Plan Check	**PLOT PLAN ATTACHMENT**	Printed on: 12/12/08 07:50:18

(DO NOT DRAW, WRITE, OR PASTE ATTACHMENTS OUTSIDE BORDER)



RTI AS 12/30/08

COUNCIL DISTRICT: 9 INSPECTION DISTRICT: BIGIMI PLOT PLAN ATTACHMENT

1020112200602037

410 N Center St

Permit # **09016 - 10000 - 04260**
Plan Check #: X09LA04654 Printed: 03/27/09 11:00 AM
Event Code:

dg-Alter/Repair
Commercial
Express Permit
No Plan Check

City of Los Angeles - Department of Building and Safety

APPLICATION FOR BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY

Last Status: Ready to Issue
Status Date: 03/27/2009

1. TRACT	BLOCK	LOT(s)	ARB	COUNTY MAP REF #	PARCEL ID # (PIN #)	2. ASSESSOR PARCEL #
P M 4255		B		BK 112-21/22	130-5A217 280	5173 - 021 - 002

3. PARCEL INFORMATION

Area Planning Commission - Central
LADBS Branch Office - LA
Council District - 9
Certified Neighborhood Council - Historic Cultural
Community Plan Area - Central City North
Census Tract - 2060.30
District Map - 130-5A217
Energy Zone - 9
Fire District - 2
Earthquake-Induced Liquefaction Area - Yes
Methane Hazard Site - Methane Zone
Near Source Zone Distance - 1.2
Parking Dist. - CCPD
Thomas Brothers Map Grid - 634-H4

ZONE(S): M3-1/

4. DOCUMENTS

ZI - ZI-1117 MTA Project
ZI - ZI-2129 East Los Angeles State Ent
ZI - ZI-2358 LA River Revitilization Ma
ORD - ORD-164855-SA1610
CPC - CPC-1986-607-GPC
CPC - CPC-1995-352-CPU
CPC - CPC-2006-48-ICO
CDBG - BID-Arts District
CDBG - FEZ-Los Angeles
CDBG - LARZ-Central City
CDBG - SEZ-East Los Angeles State En

5. CHECKLIST ITEMS

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION

Owner(s)
Greenwald, Bennet Tr Bennett Greewald Trus 2929 Canon St # A SAN DIEGO CA 92106

Tenant
Applicant (Relationship: Agent for Contractor)
David Dry - (714) 300-5759

7. EXISTING USE **PROPOSED USE**
(13) Office

8. DESCRIPTION OF WORK
Re-roof with Class A or B material weighing less than 6 pound per sq. ft.

9. # Bldgs on Site & Use:

For inspection requests, call toll-free **(888) LA4BUILD** (524-2845). Outside LA County, call (213) 482-0000 or request inspections via **www.ladbs.org**. To speak to a Call Center agent, call **311** or (866) 4LACITY (452-2489). Outside LA County, call (213) 473-3231

10. APPLICATION PROCESSING INFORMATION
BLDG PC By:
OK for Cashier: Vincent Lou
Signature:
DAS PC By:
Coord. OK:
Date: 3/27/09

For Cashier's Use Only W/O #: 91604260
17 280699 03/27/09

11. PROJECT VALUATION & FEE INFORMATION Final Fee Period

Permit Valuation: $25,000 PC Valuation:

FINAL TOTAL Bldg-Alter/Repair	407.13
Permit Fee Subtotal Bldg-Alter/Repa	326.00
Fire Hydrant Refuse-To-Pay	
E.Q. Instrumentation	5.26
O.S. Surcharge	7.03
Sys. Surcharge	21.08
Planning Surcharge	20.76
Planning Surcharge Misc Fee	5.00
Green Building Fee	2.00
Permit Issuing Fee	20.00

BUILDING PERMIT COMM	$326.00
EI COMMERCIAL	$5.26
ONE STOP SURCH	$7.03
SYSTEMS DEVT FEE	$21.08
CITY PLANNING SURCH	$20.76
MISCELLANEOUS	$5.00
GREEN BUILDING FEE	$2.00
BUILDING PLAN CHECK	$20.00

P09016100000004260FN

Total Due: $407.13
Check: $407.13

2009LA35849

Sewer Cap ID: Total Bond(s) Due:

12. ATTACHMENTS

P09016100000004260FN

13. STRUCTURE INVENTORY (Note: Numeric measurement data in the format "number / number" implies "change in numeric value / total resulting numeric value")

09016 - 10000 - 04260

14. APPLICATION COMMENTS

** Approved Seismic Gas Shut-Off Valve may be required. **

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15. Building Relocated From:

16. CONTRACTOR, ARCHITECT, & ENGINEER NAME

CONTRACTOR, ARCHITECT, & ENGINEER NAME	ADDRESS		CLASS	LICENSE#	PHONE #
(C) Conex Trading Company Inc	2011 North Batavia,	Orange, CA 92865	C39	753053	714.520.5207

PERMIT EXPIRATION/REFUNDS: This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inspection within 60 days of receiving a request for final inspection (HS 17951).

17. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. The following applies to B contractors only: I understand the limitations of Section 7057 of the Business and Professional Code related to my ability to take prime contracts or subcontracts involving specialty trades.

License Class: C39 Lic. No.: 753053 Contractor: **CONEX TRADING COMPANY INC**

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm under penalty of perjury, one of the following declarations:

(__) I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

(__) I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: **Ntl. Un. Fire Ins. Co. Pttsbrg** Policy Number: **3427619**

(__) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

19. ASBESTOS REMOVAL DECLARATION / LEAD HAZARD WARNING

I certify that notification of asbestos removal is either not applicable or has been submitted to the AQMD or EPA as per section 19827.5 of the Health and Safety Code. Information is available at (909) 396-2336 and the notification form at www.aqmd.gov. Lead safe construction practices are required when doing repairs that disturb paint in pre-1978 buildings due to the presence of lead per section 6716 and 6717 of the Labor Code. Information is available at Health Services for LA County at (800) 524-5323 or the State of California at (800) 597-5323 or www.dhs.ca.gov/childlead

20. CONSTRUCTION LENDING AGENCY DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code).

Lender's name (if any): ________ Lender's address: ________

21. FINAL DECLARATION

I certify that I have read this application **INCLUDING THE ABOVE DECLARATIONS** and state that the above information **INCLUDING THE ABOVE DECLARATIONS** is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not authorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

By signing below, I certify that:

(1) I accept all the declarations above namely the Licensed Contractor's Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration / Lead Hazard Warning, Construction Lending Agency Declaration and Final Declaration; and

(2) This permit is being obtained with the consent of the legal owner of the property.

Print Name: Daniel Dorey Sign: [signature] Date: 3-22-09 ☐ Contractor ☑ Authorized Agent

410 N Center St

Permit #: **08020 - 10000 - 03625**
Plan Check #: B08LA11871 Printed: 01/08/09 09:37 AM
Event Code:

Nonbldg-New
Commercial
Plan Check at Counter
Plan Check

City of Los Angeles - Department of Building and Safety

APPLICATION FOR BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY

Last Status: Ready to Issue
Status Date: 01/08/2009

1. TRACT	BLOCK	LOT(s)	ARB	COUNTY MAP REF #	PARCEL ID # (PIN #)	2. ASSESSOR PARCEL #
P M 4255		B		BK 112-21/22	130-5A217 280	5173 - 021 - 002

3. PARCEL INFORMATION

Area Planning Commission - Central
LADBS Branch Office - LA
Council District - 9
Certified Neighborhood Council - Historic Cultural
Community Plan Area - Central City North
Census Tract - 2060.30
District Map - 130-5A217
Energy Zone - 9
Fire District - 2
Earthquake-Induced Liquefaction Area - Yes
Methane Hazard Site - Methane Zone
Near Source Zone Distance - 7.5
Parking Dist. - CCPD
Thomas Brothers Map Grid - 634-H4

ZONE(S): M3-1 /

4. DOCUMENTS

ZI - ZI-1117 MTA Project
ZI - ZI-2129 East Los Angeles State Ent
ZI - ZI-2358 LA River Revitilization Ma
ORD - ORD-164855-SA1610
CPC - CPC-1986-607-GPC
CPC - CPC-1995-352-CPU
CPC - CPC-2006-48-ICO
CDBG - FEZ-Los Angeles
CDBG - LARZ-Central City
CDBG - SEZ-East Los Angeles State En

5. CHECKLIST ITEMS

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION

Owner(s)
Greenwald, Bennet Tr Bennett Greewald Trus 2929 Canon St # A SAN DIEGO CA 92106

Tenant
Applicant (Relationship Architect)
Barry Segal - Po Box 6108 ALTADENA 91003 (626) 345-9765

7. EXISTING USE **PROPOSED USE**
(23) Fence Wall

8. DESCRIPTION OF WORK
10' HT CONC BLOCK WALL ~225' LONG.

9. # Bldgs on Site & Use:

For inspection requests, call toll-free **(888) LA4BUILD** (524-2845). Outside LA County, call (213) 482-0000 or request Inspections via **www.ladbs.org**. To speak to a Call Center agent, call **311** or (866) 4LACITY (452-2489). Outside LA County, call (213) 473-3231.

10. APPLICATION PROCESSING INFORMATION

BLDG. PC By: Albert Servin
OK for Cashier: Shine Lin
Signature: S Lin
DAS PC By:
Coord. OK: S L
Date: 1/8/09

For Cashier's Use Only 26 231180 01/08/09 82003625
LA Department of Building and Safety

BUILDING PERMIT COMM	$202.50
EI COMMERCIAL	$2.73
ONE STOP SURCH	$4.10
SYSTEMS DEVT FEE	$12.31
CITY PLANNING SURCH	$12.15
MISCELLANEOUS	$5.00
GREEN BUILDING FEE	$1.00
BUILDING PLAN CHECK	$0.00
BUILDING PLAN CHECK	$0.00

P080201000003625FN

Total Due: $239.79
Carry Over TO Tran# 231181: $239.79

2009LA33110

11. PROJECT VALUATION & FEE INFORMATION Final Fee Period

Permit Valuation: $13,000 PC Valuation:

FINAL TOTAL Nonbldg-New	239.79
Permit Fee Subtotal Nonbldg-New	202.50
Plan Check Subtotal Nonbldg-New	0.00
Fire Hydrant Refuse-To-Pay	
E.Q. Instrumentation	2.73
O.S. Surcharge	4.10
Sys. Surcharge	12.31
Planning Surcharge	12.15
Planning Surcharge Misc Fee	5.00
Green Building Fee	1.00
Permit Issuing Fee	0.00

Sewer Cap ID: Total Bond(s) Due:

12. ATTACHMENTS
Plot Plan

P080201000003625FN

10201122000902042

13. STRUCTURE INVENTORY (Note: Numeric measurement data in the format "number / number" implies "change in numeric value / total resulting numeric value") **08020 - 10000 - 03625**

14. APPLICATION COMMENTS

In the event that any box (i.e. 1-16) is filled to capacity, it is possible that additional information has been captured electronically and could not be printed due to space restrictions. Nevertheless, the information printed exceeds that required by Section 19825 of the Health and Safety Code of the State of California.

15. Building Relocated From:

16. CONTRACTOR, ARCHITECT, & ENGINEER NAME	ADDRESS		CLASS	LICENSE#	PHONE #
(A) Segal, Barry William	P O Box 6108,	Altadena, CA 91003		C17861	
(C) Essence Company	3904 Groton Street Ste 202,	San Diego, CA 92110	B	872365	619-808-2264
(E) Sawaya, Ramzy C	1960 Santa Anita Ave,	Sierra Madre, CA 91024		S3974	

PERMIT EXPIRATION/REFUNDS: This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inspection within 60 days of receiving a request for final inspection (HS 17951).

17. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. The following applies to B contractors only. I understand the limitations of Section 7057 of the Business and Professional Code related to my ability to take prime contracts or subcontracts involving specialty trades.

License Class: **B** Lic. No.: **872365** Contractor: **ESSENCE COMPANY**

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations:

(X) I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

(X) I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: **State Comp. Ins. Fund** Policy Number: **713-0022001**

(X) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

19. ASBESTOS REMOVAL DECLARATION / LEAD HAZARD WARNING

I certify that notification of asbestos removal is either not applicable or has been submitted to the AQMD or EPA as per section 19827.5 of the Health and Safety Code. Information is available at (909) 396-2336 and the notification form at www.aqmd.gov. Lead safe construction practices are required when doing repairs that disturb paint in pre-1978 buildings due to the presence of lead per section 6716 and 6717 of the Labor Code. Information is available at Health Services for LA County at (800) 524-5323 or the State of California at (800) 597-5323 or www.dhs.ca.gov/childlead

20. CONSTRUCTION LENDING AGENCY DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code).

Lender's name (if any): ______ Lender's address: ______

21. FINAL DECLARATION

I certify that I have read this application **INCLUDING THE ABOVE DECLARATIONS** and state that the above information **INCLUDING THE ABOVE DECLARATIONS** is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not authorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

By signing below, I certify that:

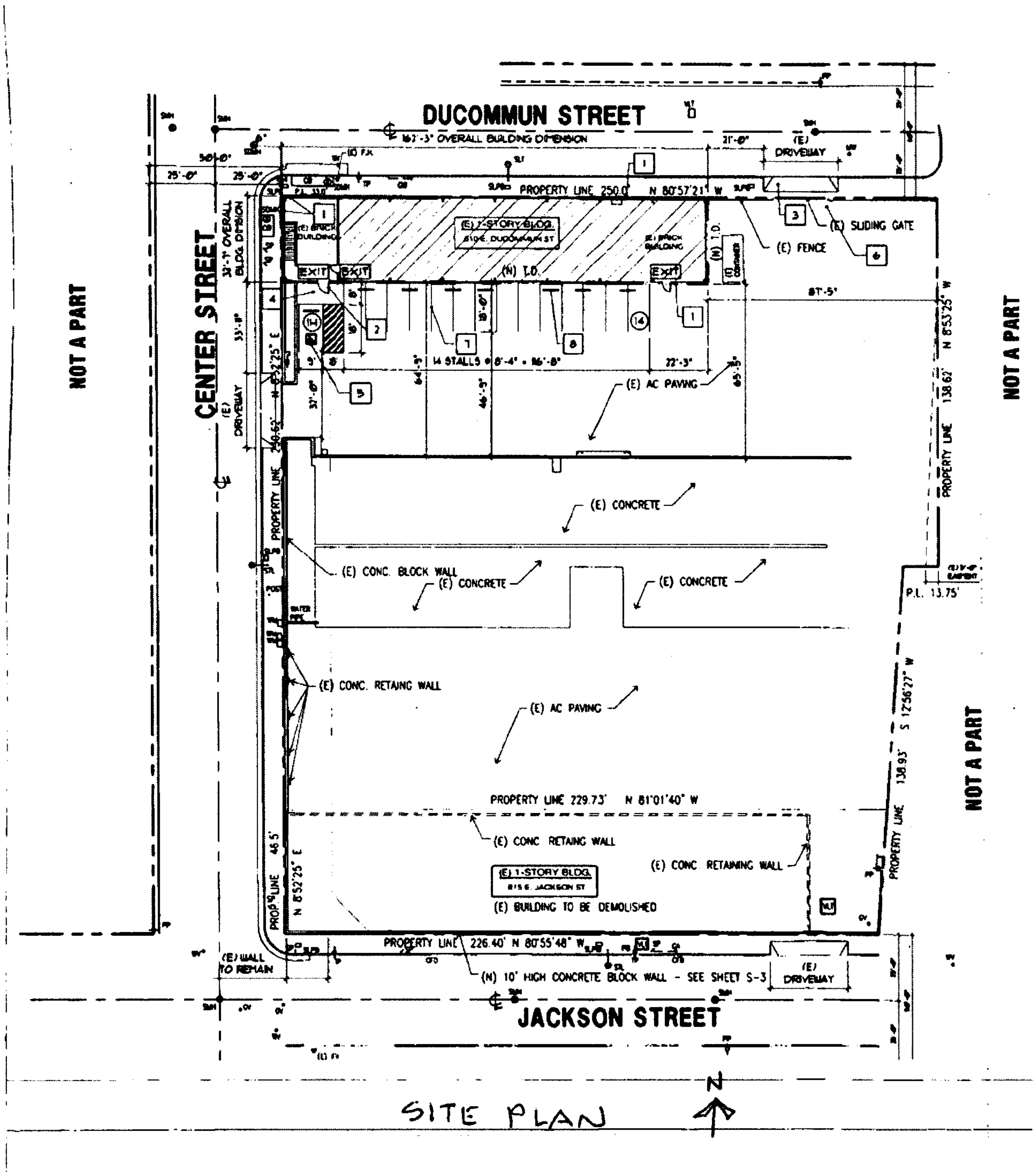
(1) I accept all the declarations above namely the Licensed Contractor's Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration / Lead Hazard Warning, Construction Lending Agency Declaration and Final Declaration; and
(2) This permit is being obtained with the consent of the legal owner of the property.

Print Name: Jason S. Talbut Sign: Date: 1-8-09 [X] Contractor [ ] Authorized Agent

410 N Center St Permit Application #: **08020 - 10000 - 03625**

Nonbldg-New Commercial Plan Check	City of Los Angeles - Department of Building and Safety **PLOT PLAN ATTACHMENT**	Plan Check #: B08LA11871 Initiating Office: METRO Printed on: 12/03/08 12:51:06

(DO NOT DRAW, WRITE, OR PASTE ATTACHMENTS OUTSIDE BORDER)



AH AS 12/12/08

COUNCIL DISTRICT: 9 INSPECTION DISTRICT: BIGIM1 PLOT PLAN ATTACHMENT

102011220090204?

3

ELECT. DIV	
Plns. not req'd.	
Appr. not req'd. before bldg. permit	
Plns. filed	

APPLICATION TO ALTER, REPAIR, or DEMOLISH AND FOR A Certificate of Occupancy

Form B-3

CITY OF LOS ANGELES
DEPARTMENT OF
BUILDING AND SAFETY
BUILDING DIVISION

Lot No. 4

Tract 11182

Location of Building 410 ~~South~~ NORTH Center Street (House Number and Street)

Approved by City Engineer

Deputy.

Between what cross streets? Jackson & Ducommun

USE INK OR INDELIBLE PENCIL

1. Present use of building Compressor & Measuring Station (Store, Dwelling, Apartment House, Hotel or other purpose) Families Rooms
2. State how long building has been used for present occupancy 40 years
3. Use of building AFTER alteration or moving Same Families Rooms
4. Owner Southern California Gas Company (Print Name) Phone MI 0171
5. Owner's Address 810 South Flower Street P. O. Los Angeles
6. Certificated Architect NONE State License No. Phone
7. Licensed Engineer E. E. Ellis State License No. 1504 Phone "
8. Contractor Owner State License No. Phone
9. Contractor's Address 810 South Flower Street
10. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $ 35,000 P. Fo
11. State how many buildings NOW on lot and give use of each. 3 COMPRESSOR BLDG (Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building 250' x 277' Number of stories high 1 Height to highest point 37'
13. Material Exterior Walls Masonry (Wood, Steel or Masonry) Exterior framework STEEL (Wood or Steel)
14. Describe briefly all proposed construction and work:

New basement wall and grating Sheet #18622-A. New pipe trenchs and walls Sheet #'s 18623-A & 18624-A. New mezzanine floor Sheet #18675-A. New building walls and foundations and crane rail extension Sheet #'s 18676-A, 18677-A, 18678-A, 18679-A, 18680-A.
Mezz. Fl. to be used for Gas Measurement Gauge Boards

MEZZANINE NEW CONSTRUCTION

15. Size of Addition 12' x 43' Size of Lot x Number of Stories when complete
16. Footing: Width Depth in Ground Width of Wall Size of Floor Joists x
17. Size of Studs x Material of Floor Size of Rafters x Type of Roofing

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

NO GRADING REQUIRED — James by Fretto

Sign here L. J. Stephen (Owner or Authorized Agent)

DISTRICT OFFICE G GRADING By

Certificate of Occupancy | Occupancy Survey | TYPE OF RECEIPT | DATE ISSUED | TRACER NO. (M) | RECEIPT NO. | CODE | FEE PAID

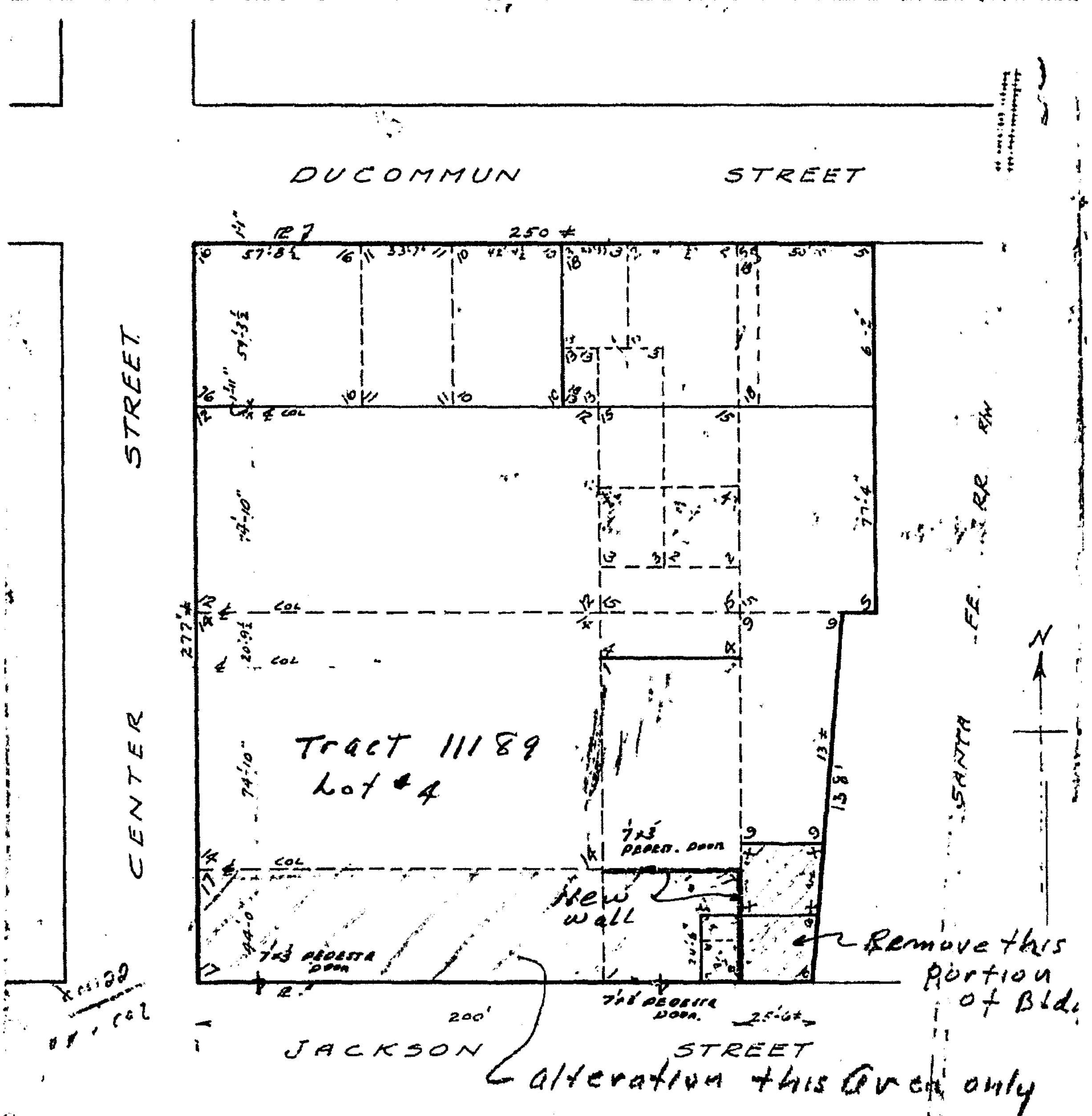
FOR DEPARTMENT USE ONLY

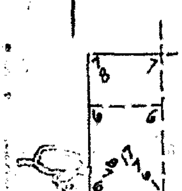
PLAN CHECKING		OCCUPANCY SURVEY		
Valuation $ 35,000		Area of Bldg. Sq. Ft.		Investigation Fee $ / Cert. of Occupancy Fee $ / Bldg. Permit Fee $93.12 / Total $
Fee $ 50		Fee $		
TYPE III A	Maximum No. Occupants	Inside Lot THRU Corner Lot	Key Lot — Corner Lot Keyed	Lot Size ACREAGE	Ft. rear alley / Ft. side alley	Clerk Swanson
GROUP G-1	Plans and Specifications checked Patrick Fretto	Zone M-3	Fire District No. 2	District Map No. 5514
For Plans See	Correction Verified Patrick Fretto	Bldg. Line Ft.	Street Widening Ft.	Application checked and approved MAY 10 1954 Clerk
Filed with	Plans, Specifications and Application rechecked and approved. [signature]	Continuous Inspection MASONRY & WELDING	SPRINKLER Specified—Required Valuation Included Yes—No	Inspector [signature]

DO NOT WRITE BELOW THIS LINE

TYPE OF RECEIPT	DATE ISSUED	TRACER NO. (M)	RECEIPT NO.	CODE	FEE PAID
Plan Checking	MAR 9 1954		LA14828		
Supplemental Plan Checking					✓
Building Permit	10 1954		LA85772		

SEE BOARD LETTER DTD 26 APR '57





KEY TO PLAT
1=CORNER OF ORIG BLDG; #6, 7, 8, & 17 ARE SUCESSIVE ALTERATIONS OR ADDITIONS.

NO	WORK	YEAR	JOB #	DWG. NO.	NO	WORK	YEAR	JOB #	DWG. NO
1	ORIGINAL BLDG.	1903		118-B, 4776	12	COMP. BLDG	1922	GW 203	3429-A, ETC
2	BOILER & COMP. BLDG	1907		865 A	13	FEED WATER HEATER PIT	1922	" 203	3917-A "
3	" " " "	1910		1057-A	14	COMP. BLDG	1923	" 316	
4	COMP. PIT & BLDG	1911		1213, 1214-A	15	" "	1923	" 309	
5	BOILER & COMP. BLDG	1912	GW 212	1292-A ETC.	16	BOILER RM. EXT.	1923	" 315	
6	TRANSFORMER ROOM	1914	" 418E	2245-A	17	L.P. BLOWER ROOM	1925	" 516	
7	" RM. ADDITION	1919	" 906	2272-B	18	BOILER RM ALTER'N	1925	" 513	
8	" " "	1921	ED. 123	3311-A					
9	COMP. BLDG.	1921	GW. 116	2962 A ETC.					
10	BOILER ROOM EXT	1921	" 136						
11	" " "	1922	" 204		X	WALL AND ROOF OVER OLD MACH. SHOP	?	?	

53/2.5 L.F.Cook

RETURN TO FRETTO

3

APPLICATION TO ALTER, REPAIR, or DEMOLISH AND FOR A Certificate of Occupancy

Form B-3
CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Lot No. 4

Tract 11189

Location of Building 410 NORTH CENTER STR (House Number and Street)

Between what cross streets? JACKSON + DUCOMMUN

Approved by City Engineer .... Deputy.

USE INK OR INDELIBLE PENCIL

1. Present use of building COMPRESSOR + MEASURING STA. (Store, Dwelling, Apartment House, Hotel or other purpose) Families ...... Rooms ......
2. State how long building has been used for present occupancy 40 YEARS
3. Use of building AFTER alteration or moving SAME Families ...... Rooms ......
4. Owner SO. CAL. GAS CO. (Print Name) Phone MI. 0171
5. Owner's Address 810 SO FLOWER ST. P. O. LOS ANGELES
6. Certificated Architect NONE State License No. ...... Phone ......
7. Licensed Engineer E. E. ELLIS State License No. 1504 Phone MI 0171
8. Contractor OWNER State License No. ...... Phone ......
9. Contractor's Address 810 SO. FLOWER ST.
10. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $ 51.00
11. State how many buildings NOW on lot and give use of each. 3 COMPRESSOR BLDGS. (Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building 250' x 271' Number of stories high 1 Height to highest point 37'
13. Material Exterior Walls MASONRY (Wood, Steel or Masonry) Exterior framework STEEL (Wood or Steel)
14. Describe briefly all proposed construction and work: ALTERATION OF COLUMN FOUNDATION AT SO-EAST CORNER OF BUILDING

NEW CONSTRUCTION

15. Size of Addition ...x... Size of Lot ...x... Number of Stories when complete ......
16. Footing: Width ...... Depth in Ground ...... Width of Wall ...... Size of Floor Joists ...x...
17. Size of Studs ...x... Material of Floor ...... Size of Rafters ...x... Type of Roofing ......

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

Sign here [signature] (Owner or Authorized Agent)

DISTRICT OFFICE G. GEDDING By ......

FOR DEPARTMENT USE ONLY

PLAN CHECKING		OCCUPANCY SURVEY	
Valuation $ 300.00		Area of Bldg. ...... Sq. Ft.	Investigation Fee $ ......
Fee $ 1.00		Fee $	Cert. of Occupancy Fee $ .50
			Bldg. Permit Fee $ 1
			Total $ ......

TYPE	Maximum No. Occupants	Inside Lot / Corner Lot	Key Lot / Corner Lot Keyed	Lot Size	Ft. rear alley / Ft. side alley	Clerk
III A		Corner Lot		ACREAGE		[signature]

GROUP	Plans and Specifications checked	Zone	Fire District	District Map No.
G-1	Patrick Fretto	M-3	No. 2	5514

For Plans See	Correction Verified	Bldg. Line	Street Widening	Application checked and approved
	Patrick Fretto	Ft.	Ft.	AUG 9 1954 Clerk

Filed with	Plans, Specifications and Application rechecked and approved.	Continuous Inspection	SPRINKLER Specified—Required Valuation Included Yes— —No	Inspector
K85772	[signature]			[signature]

DO NOT WRITE BELOW THIS LINE

TYPE OF RECEIPT	DATE ISSUED	TRACER NO. (M)	RECEIPT NO.	CODE	FEE PAID
Plan Checking	AUG 10 1954		LA55185		1
Supplemental Plan Checking					
Building Permit	AUG 10 1954		[redacted] LA95035		

NO PLOT PLAN NEEDED
SEE BLDG. PERMIT #
#85772-'54

DEPARTMENT OF BUILDING AND SAFETY

There are two ways to request a copy of the document image.
1) By fax using the request form. Click on the following link
http://ladbs.org/LADBSWeb/LADBS_Forms/Administrative/AD-Form.01.pdf to download the request form.
2) In person. Bring the following summary to one of the following Records counters.
3) If you have any questions, please visit one of our Records Counters.

RECORDS COUNTER HOURS
MONDAY, TUESDAY, THURSDAY, FRIDAY: 7:30 AM to 4:30 PM
WEDNESDAY: 9:00 AM to 4:30 PM

Metro	Van Nuys
201, N. Figueroa St. 1st Floor, Room 110 Record Counter Los Angeles,CA 90012	6262 Van Nuys Blvd Record Counter Van Nuys,CA 91401

Address: 500 N CENTER ST

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	9/18/2000		HIST: B0293 005 0350	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	8/29/2005			
BUILDING PERMIT	BLDG-NEW	9/18/1997	97010-10000-00533	HIST: P638 1 55	
BUILDING PERMIT	BLDG-NEW	9/21/2000	00010-20000-02252	HIST: P725 3 298	
BUILDING PERMIT	GRADING	10/19/2007	07030-10000-02034		
BUILDING PERMIT	NEW CONSTRUCTION	1/25/1985	1985LA04774	HIST: P0077 005 0131	
BUILDING PERMIT	NEW CONSTRUCTION	9/18/1997	1997LA67668		
BUILDING PERMIT	NONBLDG-NEW	8/7/2008	08020-10000-02502		
CERTIFICATE OF OCCUPANCY		11/13/1986		HIST: M0216 007 0336	
CERTIFICATE OF OCCUPANCY		11/13/1986		IDIS: O0567 01458 0000	
CERTIFICATE OF OCCUPANCY		3/17/1987		HIST: M0230 004 0370	
CERTIFICATE OF OCCUPANCY		3/17/1987		IDIS: O0567 03959 0000	
CERTIFICATE OF OCCUPANCY		8/30/2001	00010-20000-02252	IDIS: O0503 00515 0000 HIST: M1348 005 0388	
ELECTRICAL PERMIT		12/5/1988	1288A6812	HIST: T0158 002 0425	
GRADING	COMPACTION FILE	5/4/2009		IDIS: G545 00074 0000 thru G545 00074 0018	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
GRADING	SOILS & GEOLOGY FILE	11/9/2004		IDIS: G545 00073 0000 thru G545 00073 0021	
GRADING	SOILS & GEOLOGY FILE	4/6/2005		IDIS: G545 00075 0000 thru G545 00075 0003	
PLAN MAINTENANCE		9/18/1997	97010-10000-00533	HIST: J998 1 417	
PLAN MAINTENANCE		9/21/2000	00010-20000-02252	HIST: J1267 1 255	
ZONING ADMINISTRATOR CASE		11/3/1978	ZV 78361	HIST: Z0003 011 0001	

DEPARTMENT OF BUILDING AND SAFETY

There are two ways to request a copy of the document image.
1) By fax using the request form. Click on the following link
http://ladbs.org/LADBSWeb/LADBS_Forms/Administrative/AD-Form.01.pdf to download the request form.
2) In person. Bring the following summary to one of the following Records counters.
3) If you have any questions, please visit one of our Records Counters.

RECORDS COUNTER HOURS
MONDAY, TUESDAY, THURSDAY, FRIDAY: 7:30 AM to 4:30 PM
WEDNESDAY: 9:00 AM to 4:30 PM

Metro	Van Nuys
201, N. Figueroa St. 1st Floor, Room 110 Record Counter Los Angeles,CA 90012	6262 Van Nuys Blvd Record Counter Van Nuys,CA 91401

Assessor Number: BOOK NUMBER: 5173 PAGE NUMBER: 020 PARCEL NUMBER: 010

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	9/18/2000		HIST: B0293 005 0350	
BUILDING PERMIT	BLDG-NEW	9/23/1911	1911LA08806	HIST: P1022 001 1389	
BUILDING PERMIT	GRADING	10/19/2007	07030-10000-02034		
BUILDING PERMIT	NEW CONSTRUCTION	1/25/1985	1985LA04774	HIST: P0077 005 0131	
BUILDING PERMIT	NEW CONSTRUCTION	9/18/1997	1997LA67668		
BUILDING PERMIT	NONBLDG-NEW	8/7/2008	08020-10000-02502		
CERTIFICATE OF OCCUPANCY		11/13/1986		HIST: M0216 007 0336	
CERTIFICATE OF OCCUPANCY		3/17/1987		HIST: M0230 004 0370	
ELECTRICAL PERMIT		12/5/1988	1288A6812	HIST: T0158 002 0425	
GRADING	COMPACTION FILE	5/4/2009		IDIS: G545 00074 0000 thru G545 00074 0018	
GRADING	SOILS & GEOLOGY FILE	11/9/2004		IDIS: G545 00073 0000 thru G545 00073 0021	
GRADING	SOILS & GEOLOGY FILE	4/6/2005		IDIS: G545 00075 0000 thru G545 00075 0003	
ZONING ADMINISTRATOR CASE		11/3/1978	ZV 78361	HIST: Z0003 011 0001	

500 N Center St

Permit #: **07030 - 10000 - 02034**
Plan Check #: G07LA00101 Printed: 10/19/07 08:25 AM
Event Code:

Grading
Commercial
Regular Plan Check
Plan Check

City of Los Angeles - Department of Building and Safety

APPLICATION FOR GRADING PERMIT AND GRADING CERTIFICATE

Last Status: Ready to Issue
Status Date: 10/19/2007

1. TRACT	BLOCK	LOT(s)	ARB	COUNTY MAP REF #	PARCEL ID # (PIN #)	2. ASSESSOR PARCEL #
TR 11189		2		M B 201-1/2	130-5A217 215	5173 - 020 - 010

3. PARCEL INFORMATION

Area Planning Commission - Central
LADBS Branch Office - LA
Council District - 9
Certified Neighborhood Council - Historic Cultural
Community Plan Area - Central City North
Census Tract - 2060.30
District Map - 130-5A217
Energy Zone - 9
Fire District - 2
Earthquake-Induced Liquefaction Area - Yes
Methane Hazard Site - Methane Zone
Near Source Zone Distance - 7.4
Parking Dist. - CCPD
Thomas Brothers Map Grid - 634-H4

ZONE(S): M3-1 /

4. DOCUMENTS

ZI - ZI-1117 MTA Project
ZI - ZI-2129 Eastside State Enterprise Zc
ZA - ZA-1978-361
ORD - ORD-164855-SA1610
CPC - CPC-1986-607-GPC
CPC - CPC-1995-352-CPU
CPC - CPC-2006-48-ICO
CDBG - FEZ-Los Angeles
CDBG - LARZ-Central City
CDBG - SEZ-Eastside State Enterprise Z

5. CHECKLIST ITEMS

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION

Owner(s)
500 N Center Street Llc | 4875 Monaco St # 705 | DENVER CO 80237

Tenant
Applicant (Relationship Contractor)
Michael Voeltz Pivox - | 16 Technology | IRVINE, CA 92618 | (714) 356-5274

7. EXISTING USE

PROPOSED USE
(60) Grading - Non-Hillside

8. DESCRIPTION OF WORK
EXCAVATION TO REMOVE CONTAMINATED SOIL WITH TEMPORARY SHORING BOX PER SOILS ENGINEER'S RECOMMENDATIONS

9. # Bldgs on Site & Use: STORAGE YARD

For information and or inspection requests originating within LA County:
Call toll-free (888) LA4BUILD (524-2845)
Outside LA County, call (213) 482-0000 or visit www.ladbs.org

10. APPLICATION PROCESSING INFORMATION

BLDG. PC By: Fred Wong
OK for Cashier: Fred Wong
DAS PC By:
Coord. OK:
Signature: Date:

For Cashier's Use Only W/O #: 73002034

LA Department of Building and Safety
LA 01 35 204174 10/19/07 08:34AM

GRADING PERMIT	$835.00
ONE STOP SURCH	$16.70
SYSTEMS DEVT FEE	$50.10
CITY PLANNING SURCH	$50.10
MISCELLANEOUS	$5.00
GRADING PLAN CHECK	$0.00
GRADING PLAN CHECK	$0.00

F0703010000002034FN

Total Due:	$956.90
Credit Card:	$956.90

2007LA15698

11. PROJECT VALUATION & FEE INFORMATION Final Fee Period

Permit Valuation: 600 cu yd PC Valuation:

FINAL TOTAL Grading	956.90
Permit Fee Subtotal Grading	835.00
Plan Check Subtotal Grading	0.00
O.S. Surcharge	16.70
Sys. Surcharge	50.10
Planning Surcharge	50.10
Planning Surcharge Misc Fee	5.00
Permit Issuing Fee	0.00

Sewer Cap ID: Total Bond(s) Due:

12. ATTACHMENTS
Plot Plan

* P 0 7 0 3 0 1 0 0 0 0 0 2 0 3 4 F N *

13. STRUCTURE INVENTORY (Note: Numeric measurement data in the format "number / number" implies "change in numeric value / total resulting numeric value") **07030 - 10000 - 02034**

14. APPLICATION COMMENTS

In the event that any box (i.e. 1-16) is filled to capacity, it is possible that additional information has been captured electronically and could not be printed due to space restrictions. Nevertheless, the information printed exceeds that required by Section 19825 of the Health and Safety Code of the State of California

15. Building Relocated From:

16. CONTRACTOR, ARCHITECT, & ENGINEER NAME

NAME	ADDRESS		CLASS	LICENSE#	PHONE #
(C) Pivox Corporation	16 Technology Drive, Suite 154	Irvine, CA 92618	A	836736	
(E) Mesrop, Mesrop Aram	7608 Clinton St,	Los Angeles, CA 90036		GE2561	

PERMIT EXPIRATION/REFUNDS: This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inspection within 60 days of receiving a request for final inspection (HS 17951).

17. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. The following applies to B contractors only: I understand the limitations of Section 7057 of the Business and Professional Code related to my ability to take prime contracts or subcontracts involving specialty trades.

License Class: A Lic. No.: 836736 Contractor: PIVOX CORPORATION

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations:

( ) I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

(X) I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: State Comp. Ins. Fund Policy Number: 1776800

( ) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

19. ASBESTOS REMOVAL DECLARATION / LEAD HAZARD WARNING

I certify that notification of asbestos removal is either not applicable or has been submitted to the AQMD or EPA as per section 19827.5 of the Health and Safety Code. Information is available at (909) 396-2336 and the notification form at www.aqmd.gov. Lead safe construction practices are required when doing repairs that disturb paint in pre-1978 buildings due to the presence of lead per section 6716 and 6717 of the Labor Code. Information is available at Health Services for LA County at (800) 524-5323 or the State of California at (800) 597-5323 or www.dhs.ca.gov/childlead.

20. CONSTRUCTION LENDING AGENCY DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code).

Lender's name (if any): ____________ Lender's address: ____________

21. FINAL DECLARATION

I certify that I have read this application **INCLUDING THE ABOVE DECLARATIONS** and state that the above information **INCLUDING THE ABOVE DECLARATIONS** is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not authorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

By signing below, I certify that:

(1) I accept all the declarations above namely the Licensed Contractor's Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration / Lead Hazard Warning, Construction Lending Agency Declaration and Final Declaration; and

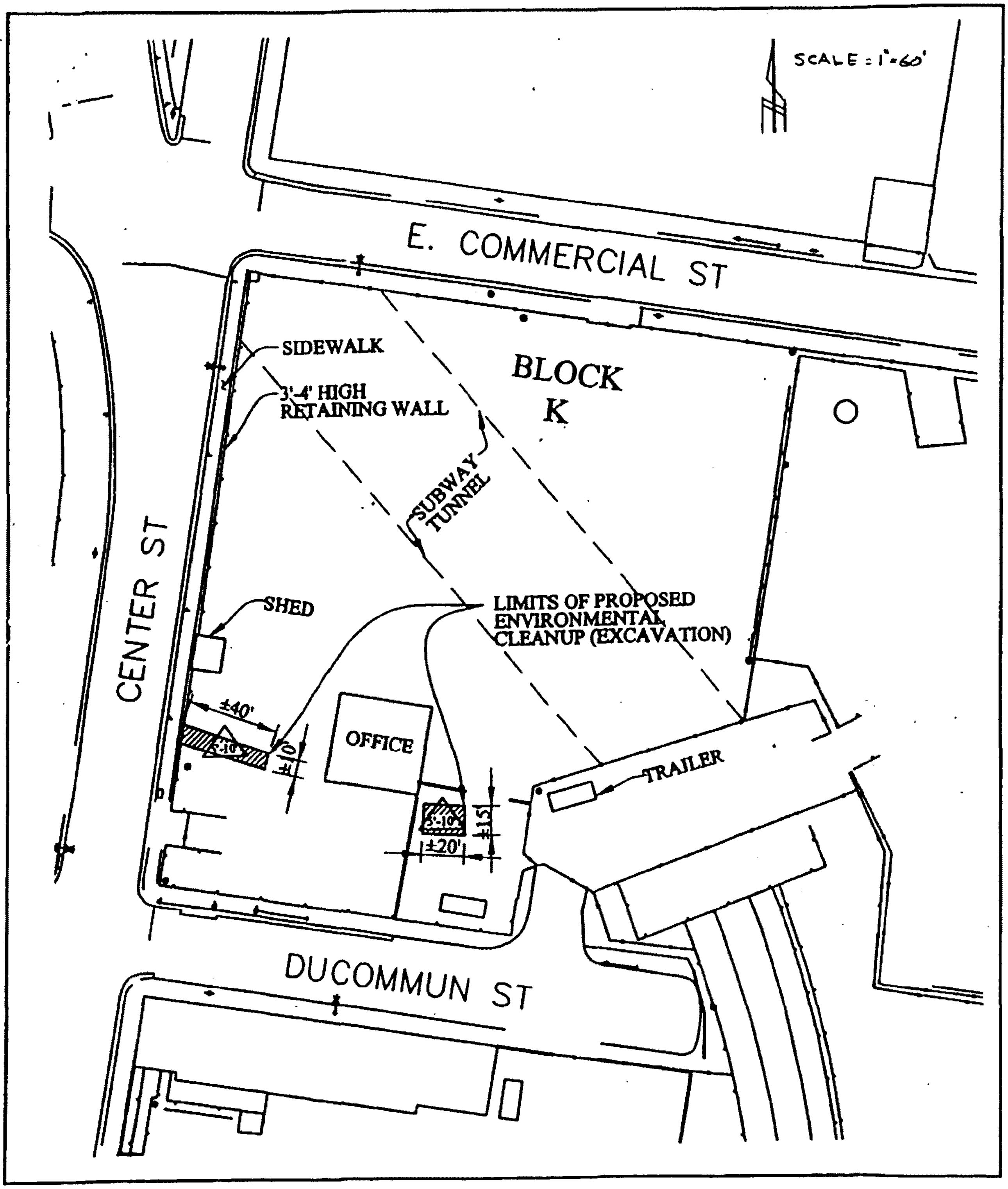
(2) This permit is being obtained with the consent of the legal owner of the property.

Print Name: Joe Flores Sign: Date: 10/19/07 (X) Contractor ( ) Authorized Agent

500 N Center St Permit Application #: **07030 - 10000 - 02034**

Grading Commercial Plan Check	City of Los Angeles - Department of Building and Safety **PLOT PLAN ATTACHMENT**	Plan Check #: G07LA00101 Initiating Office: METRO Printed on: 10/02/07 09:27:24

(DO NOT DRAW, WRITE, OR PASTE ATTACHMENTS OUTSIDE BORDER)



1021029208756568

500 N Center St

Permit #: **08020 - 10000 - 02502**
Plan Check #: G07LA00101 Printed: 08/07/08 07:52 AM
Event Code:

Nonbldg-New
Commercial
Express Permit
No Plan Check

City of Los Angeles - Department of Building and Safety

APPLICATION FOR BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY

Last Status: Ready to Issue
Status Date: 08/07/2008

1. TRACT	BLOCK	LOT(s)	ARB	COUNTY MAP REF #	PARCEL ID # (PIN #)	2. ASSESSOR PARCEL #
TR 11189		2		M B 201-1/2	130-5A217 215	5173 - 020 - 010

3. PARCEL INFORMATION

Area Planning Commission - Central
LADBS Branch Office - LA
Council District - 9
Certified Neighborhood Council - Historic Cultural
Community Plan Area - Central City North
Census Tract - 2060.30
District Map - 130-5A217
Energy Zone - 9
Fire District - 2
Earthquake-Induced Liquefaction Area - Yes
Methane Hazard Site - Methane Zone
Near Source Zone Distance - 7.4
Parking Dist. - CCPD
Thomas Brothers Map Grid - 634-H4

ZONE(S): M3-1 /

4. DOCUMENTS

ZI - ZI-1117 MTA Project
ZI - ZI-2129 Eastside State Enterprise Zc
ZA - ZA-1978-361
ORD - ORD-164855-SA1610
CPC - CPC-1986-607-GPC
CPC - CPC-1995-352-CPU
CPC - CPC-2006-48-ICO
CDBG - FEZ-Los Angeles
CDBG - LARZ-Central City
CDBG - SEZ-Eastside State Enterprise Z

5. CHECKLIST ITEMS

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION

Owner(s)
500 N Center Street Llc 4875 Monaco St # 705 DENVER CO 80237

Tenant
Applicant (Relationship: Contractor)
Michael Voeltz Pivox - 16 Technology IRVINE, CA 92618 (714) 356-5274

7. EXISTING USE **PROPOSED USE**
(23) Shoring (Temporary)

8. DESCRIPTION OF WORK
TEMPORARY SHORING BOX PER CIVIL ENGINEER'S RECOMMENDATIONS.

9. # Bldgs on Site & Use: STORAGE YARD

10. APPLICATION PROCESSING INFORMATION

BLDG. PC By: Fred Wong DAS PC By:
OK for Cashier: Fred Wong Coord. OK:
Signature: [signature] Date: 8/7/08

For inspection requests, call toll-free (888) LA4BUILD (524-2845).
Outside LA County, call (213) 482-0000 or request Inspections via www.ladbs.org. To speak to a Call Center agent, call 311 or (866) 4LACITY (452-2489). Outside LA County, call (213) 473-3231.

LA Department of Building and Safety
LA 01 02 08/07/2008 09:59AM

For Cashier's Use Only W/O #: 82002502

BUILDING PERMIT COMM	$130.00
EI COMMERCIAL	$0.50
ONE STOP SURCH	$3.01
SYSTEMS DEVT FEE	$9.03
CITY PLANNING SURCH	$9.00
MISCELLANEOUS	$5.00
BUILDING PLAN CHECK	$20.00

P08020100000025O2FN

Total Due:	$176.54
Credit Card:	$176.54

2008LA27604

11. PROJECT VALUATION & FEE INFORMATION Final Fee Period

Permit Valuation: $2,000 PC Valuation:

FINAL TOTAL Nonbldg-New	176.54
Permit Fee Subtotal Nonbldg-New	130.00
Fire Hydrant Refuse-To-Pay	
E.O. Instrumentation	0.50
O.S. Surcharge	3.01
Sys. Surcharge	9.03
Planning Surcharge	9.00
Planning Surcharge Misc Fee	5.00
Permit Issuing Fee	20.00

Sewer Cap ID: Total Bond(s) Due:

12. ATTACHMENTS
Plot Plan

* P 0 8 0 2 0 1 0 0 0 0 0 2 5 0 2 F N *

13. STRUCTURE INVENTORY (Note: Numeric measurement data in the format "number / number" implies "change in numeric value / total resulting numeric value")

08020 - 10000 - 02502

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15. Building Relocated From:

16. CONTRACTOR, ARCHITECT, & ENGINEER NAME	ADDRESS		CLASS	LICENSE#	PHONE #
(C) Pivox Corporation	16 Technology Drive, Suite 154	Irvine, CA 92618	A	836736	
(E) Ko, Robin Jay	7916 Valdosta Ave,	San Diego, CA 92126		C66951	

PERMIT EXPIRATION/REFUNDS: This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inspection within 60 days of receiving a request for final inspection (HS 17951).

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I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. The following applies to B contractors only: I understand the limitations of Section 7057 of the Business and Professional Code related to my ability to take prime contracts or subcontracts involving specialty trades.

License Class: A Lic. No.: 836736 Contractor: **PIVOX CORPORATION**

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations:

( ) I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

(✓) I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: **State Comp. Ins. Fund** Policy Number: **1776800**

( ) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

19. ASBESTOS REMOVAL DECLARATION / LEAD HAZARD WARNING

I certify that notification of asbestos removal is either not applicable or has been submitted to the AQMD or EPA as per section 19827.5 of the Health and Safety Code. Information is available at (909) 396-2336 and the notification form at www.aqmd.gov. Lead safe construction practices are required when doing repairs that disturb paint in pre-1978 buildings due to the presence of lead per section 6716 and 6717 of the Labor Code. Information is avaiable at Health Services for LA County at (800) 524-5323 or the State of California at (800) 597-5323 or www.dhs.ca.gov/childlead.

20. CONSTRUCTION LENDING AGENCY DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code).
Lender's name (if any): ____ Lender's address: ____

21. FINAL DECLARATION

I certify that I have read this application **INCLUDING THE ABOVE DECLARATIONS** and state that the above information **INCLUDING THE ABOVE DECLARATIONS** is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not authorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

By signing below, I certify that:

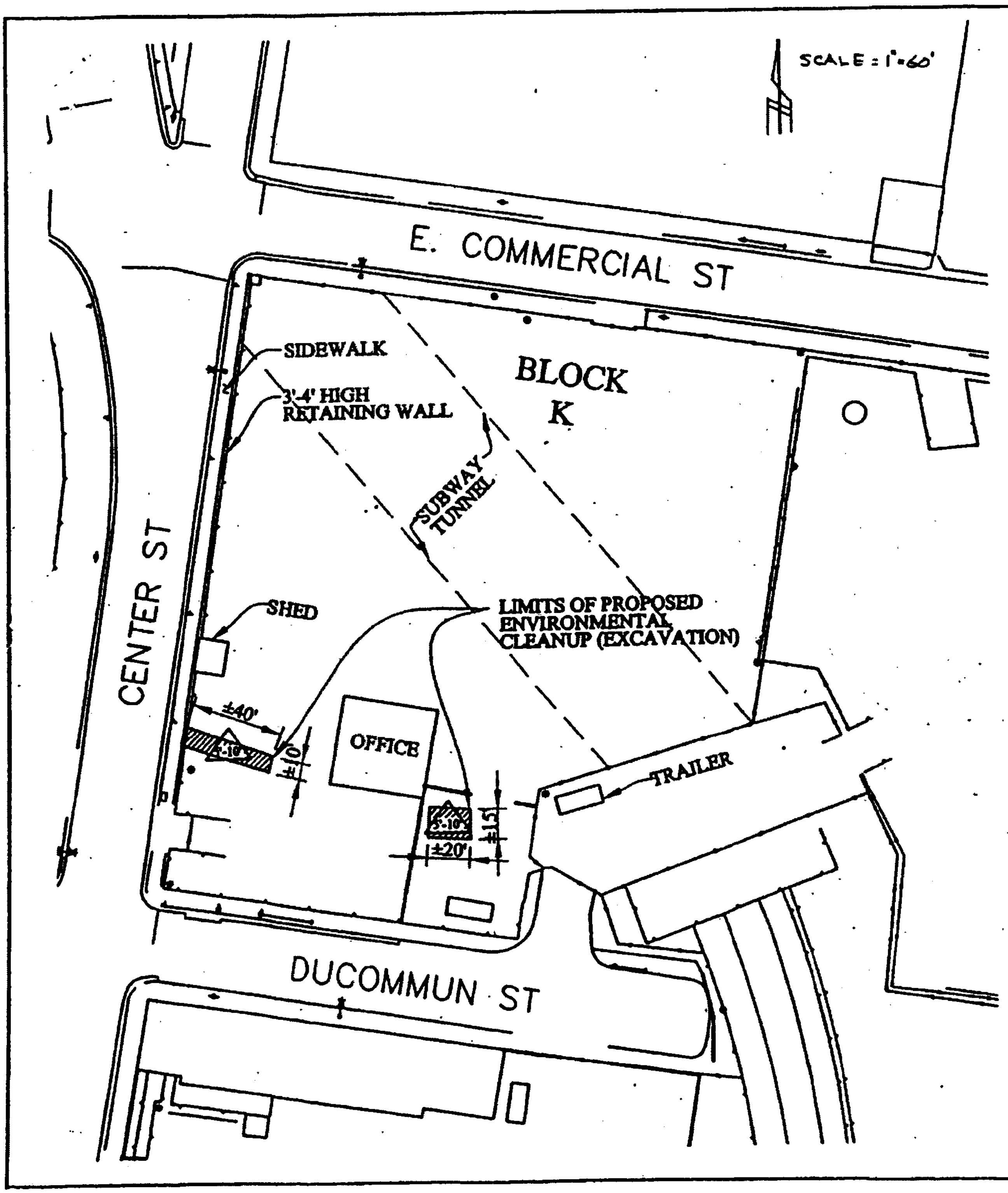
(1) I accept all the declarations above namely the Licensed Contractor's Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration / Lead Hazard Warning, Construction Lending Agency Declaration and Final Declaration; and
(2) This permit is being obtained with the consent of the legal owner of the property.

Print Name: Joe Flores Sign: Date: 8/7/08 ☒ Contractor ☐ Authorized Agent

500 N Center St Permit Application #: **08020 - 10000 - 02502**

Nonbldg-New	City of Los Angeles - Department of Building and Safety	Plan Check #: G07LA00101
Commercial		Initiating Office: METRO
No Plan Check	**PLOT PLAN ATTACHMENT**	Printed on: 08/07/08 07:52:29

(DO NOT DRAW, WRITE, OR PASTE ATTACHMENTS OUTSIDE BORDER)



Address of Building 500 NO. CENTER STREET

CITY OF LOS ANGELES

CERTIFICATE OF OCCUPANCY

Note: Any change of use or occupancy must be approved by the Department of Building and Safety.

This certifies that, so far as ascertained or made known to the undersigned, the vacant land, building or portion of a building described below and located at the above address complies with the applicable construction requirements (Chapter 9) and/or the applicable zoning requirements (Chapter 1) of the Los Angeles Municipal Code for the use, or occupancy group in which it is classified

Issued 11-13-86 Permit No. and Year ANNUAL INSPECTION 1986

USE OF LAND FOR JUNK YARD (AUTO IMPOUND)

Inspected per Section 12.26F

Six REQUIRED PAVED PARKING SPACES

M-3 ZONE

2 1 6 0 0 7 0 0 3 3 6

Owner Richard Viertel

Owner's Address 1155 W. Temple Street
Los Angeles, CA 90012

B&S 95a (R.1.77) 5000629200500001718 BY H. DeHOOG

CITY OF LOS ANGELES
CALIFORNIA

JAMES K HAHN
MAYOR

CERTIFICATE OF OCCUPANCY

ADDRESS OF BUILDING: 500 N. CENTER ST.

NOTE: Any change of use of occupancy must be approved by the Department of Building and Safety.

[X] This certifies that, so far as ascertained or made known to the undersigned, the vacant land, building or portion of building described below and located at the address complies with the applicable construction requirements (Chapter 9) and/or the applicable zoning requirements (Chapter 1) of the Los Angeles Municipal Code for the use, or occupancy group in which it is classified.* (Non-Residential Uses)

[] This certifies that, so far as ascertained by or make known to the undersigned, the building or portion of building described below and located at the above address complies with the applicable requirements of the Municipal Code, as follows: Ch. 1, as to permitted uses, Ch. 9, Arts. 1,3,4, and 5; and with applicable requirements of State Housing Law-for following occupancies:* (Residential uses)

Permit No. and Year:00010-20000-02252

NEW 1 STORY TYPE V-N 42'x40' AUTOMOBILE GARAGE / OFFICE

S-3/B OCCUPANCY

Total Parking Required: 3 [] No Change in Parking Requirement

Total Parking Provided: 4 = Standard: 3 + Compact: + Disabled: 1

* ALSO SUBJECT TO ANY AFFIDAVITS OR BUILDING AND ZONING CODE MODIFICATIONS WHETHER LISTED ABOVE OR NOT.

Issued By/Office: (**LA**)-VN-WLA-SP-C.D. #:

Bureau: (**BLDG**)-BCS:

Division: GI-(**MS**)-MSS-EQ-BMI-COMM:

OWNER: VIERTELS TOWING GARAGE
OWNER'S ADDRESS: 500 N. CENTER STREET
LOS ANGELES, CA 90012

Issued: 8/30/2001

BY:P. MISCHLICH/PH/TRW

08-B-95C (R 05/99)

LA DBS
DEPARTMENT OF BUILDING AND SAFETY

There are two ways to request a copy of the document image.
1) By fax using the request form. Click on the following link
http://ladbs.org/LADBSWeb/LADBS_Forms/Administrative/AD-Form.01.pdf to download the request form.
2) In person. Bring the following summary to one of the following Records counters.
3) If you have any questions, please visit one of our Records Counters.

RECORDS COUNTER HOURS
MONDAY, TUESDAY, THURSDAY, FRIDAY: 7:30 AM to 4:30 PM
WEDNESDAY: 9:00 AM to 4:30 PM

Metro	Van Nuys
201, N. Figueroa St. 1st Floor, Room 110 Record Counter Los Angeles,CA 90012	6262 Van Nuys Blvd Record Counter Van Nuys,CA 91401

Address: 100 SANTA FE AVE

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
ADMINISTRATIVE APPROVAL	ALTERNATE MATERIAL/CONSTR	7/14/2009			
ADMINISTRATIVE APPROVAL	ALTERNATE MATERIAL/CONSTR	7/15/2009			
ADMINISTRATIVE APPROVAL	ALTERNATE MATERIAL/CONSTR	12/7/2011	11010-10000-01774		
ADMINISTRATIVE APPROVAL	ALTERNATE MATERIAL/CONSTR	12/7/2011	11010-10000-01774		
ADMINISTRATIVE APPROVAL	ALTERNATE MATERIAL/CONSTR	12/7/2011	11010-10000-01774		
ADMINISTRATIVE APPROVAL	ALTERNATE MATERIAL/CONSTR	10/1/2012	11042-10000-22396		
ADMINISTRATIVE APPROVAL	ALTERNATE MATERIAL/CONSTR	3/26/2015	15042-20000-00036		
ADMINISTRATIVE APPROVAL	ALTERNATE MATERIAL/CONSTR	5/11/2016	15048-30000-03039		
ADMINISTRATIVE APPROVAL	DISABLED ACCESS	2/21/2008		IDIS: B521 00064 0000 thru B521 00064 0001	
ADMINISTRATIVE APPROVAL	DISABLED ACCESS	7/14/2009			

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
ADMINISTRATIVE APPROVAL	EXTENSION OF TIME	6/19/2009	07016-10000-24515	IDIS: B521 00065 0000 thru B521 00065 0001	
ADMINISTRATIVE APPROVAL	EXTENSION OF TIME	2/26/2015	11010-10008-01774		
ADMINISTRATIVE APPROVAL	MECHANICAL	12/7/2011	11010-10000-01774		
ADMINISTRATIVE APPROVAL	MECHANICAL	3/16/2012	11044-10000-14904		
ADMINISTRATIVE APPROVAL	MECHANICAL	5/7/2013	11042-10000-22396		
ADMINISTRATIVE APPROVAL	MECHANICAL	9/24/2013	11010-10000-01774		
ADMINISTRATIVE APPROVAL	MECHANICAL	8/8/2014	11042-10000-22396		
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	3/3/1994		HIST: B0238 005 0322	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	4/9/2008		IDIS: B521 00061 0000 thru B521 00061 0013	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	11/24/2008			
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/5/2008			
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	2/2/2009			
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	4/16/2009		IDIS: B521 00062 0000 thru B521 00062 0012	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	4/20/2009		IDIS: B521 00063 0000 thru B521 00063 0011	
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	4/14/2010			
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/7/2011	11010-10000-01774		
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/7/2011	11010-10000-01774		
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/7/2011	11010-10000-01774		
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/7/2011	11010-10000-01774		
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/7/2011	11010-10000-01774		
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/7/2011	11010-10000-01774		
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	12/7/2011	11010-10000-01774		
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	10/25/2012	12030-10000-03240		
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	5/31/2013	11010-10004-01774		
ADMINISTRATIVE APPROVAL	MISCELLANEOUS	7/14/2016	15016-10000-11650		
AFFIDAVIT	ATTENDANT PARKING	3/2/2012	AF 120337893		
AFFIDAVIT	LOT TIE	8/17/2005	AF 051982328	IDIS: Z507 00197 0000 thru Z507 00197 0003	
AFFIDAVIT	MAINTENANCE OF BUILDING	5/20/2013	AF 130755018		
AFFIDAVIT	MAINTENANCE OF BUILDING	5/20/2013	AF 130755018		
AFFIDAVIT	OVERSIZED BUILDING	10/5/1979	OB 14435	HIST: M0032 004 0349	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
AFFIDAVIT	UNITS FOR LEASE/SALE (15% ORD)	8/17/2005	AF 051982327		
BUILDING PERMIT		9/30/1927	1927LA28633	HIST: P1177 002 0823	
BUILDING PERMIT		12/7/1927	1927LA36656	HIST: P1180 001 1305	
BUILDING PERMIT		12/7/1927	1927LA36657	HIST: P1180 001 1307	
BUILDING PERMIT		12/7/1927	1927LA36658	HIST: P1180 001 1309	
BUILDING PERMIT		12/7/1927	1927LA36659	HIST: P1180 001 1311	
BUILDING PERMIT		12/7/1927	1927LA36660	HIST: P1180 001 1313	
BUILDING PERMIT		1/13/1928	1928LA01197	HIST: P1181 002 0633	
BUILDING PERMIT		1/16/1928	1928LA01376	HIST: P1181 002 0991	
BUILDING PERMIT		3/5/1928	1928LA06467	HIST: P1183 001 1735	
BUILDING PERMIT		10/18/1928	1928LA29081	HIST: P1191 001 0791	
BUILDING PERMIT		10/17/1997	1994LA15479	HIST: P0648 004 0061	
BUILDING PERMIT	2	6/9/1947	1947 14586	HIST: P1397 002 0796	
BUILDING PERMIT	4	11/12/1914	1914LA21998	HIST: P1043 002 1553	
BUILDING PERMIT	ALTERATION	1/10/1962	1962LA00896	HIST: P1701 001 2461	
BUILDING PERMIT	ALTERATION	6/10/1962	1962LA12534	HIST: P1705 001 1929	
BUILDING PERMIT	ALTERATION	3/10/1963	1963LA33110	HIST: P1713 001 0019	
BUILDING PERMIT	ALTERATION	1/10/1965	1965LA85244	HIST: P1734 001 0508	
BUILDING PERMIT	ALTERATION	1/10/1965	1965LA85245	HIST: P1734 001 0510	
BUILDING PERMIT	ALTERATION	7/10/1965	1965LA99950	HIST: P1739 001 2594	
BUILDING PERMIT	ALTERATION	8/10/1965	1965LA01364	HIST: P1739 002 2587	
BUILDING PERMIT	ALTERATION	9/10/1965	1965LA03475	HIST: P1741 001 0330	
BUILDING PERMIT	ALTERATION	2/10/1968	1968LA61479	HIST: P1762 002 0808	
BUILDING PERMIT	ALTERATION	4/10/1969	1969LA85535		
BUILDING PERMIT	ALTERATION	4/10/1969	1969LA85745	HIST: P1773 002 2125	
BUILDING PERMIT	ALTERATION	8/10/1972	1972LA56248	HIST: P1803 002 0390	
BUILDING PERMIT	ALTERATION	2/15/1980	1980LA98123	HIST: 00000 000 0000 HIST: P1864 001 1090	
BUILDING PERMIT	ALTERATION	2/22/1982	1982LA39076	HIST: 00000 000 0000	
BUILDING PERMIT	ALTERATION	3/22/1982	1982LA40340	HIST: 00000 000 0000	
BUILDING PERMIT	BLDG-ADDITION	8/27/1908	1908LA04692	IDIS: P5011 02291 0000 thru P5011 0001 HIST: P1010 002 1988	
BUILDING PERMIT	BLDG-ADDITION	10/22/1914	1914LA20809	IDIS: P5069 01043 0000 thru P5069 0001 HIST: P1043 001 2085	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ADDITION	10/28/1915	1915LA13829	IDIS: P5076 00470 0000 thru P5076 0001 HIST: P1050 001 0941	
BUILDING PERMIT	BLDG-ADDITION	8/29/1925	1925LA29733	IDIS: P5031 01092 0000 thru P5031 0001 HIST: P1151 001 2186	
BUILDING PERMIT	BLDG-ADDITION	10/18/1928	1928LA29081	IDIS: P5195 00396 0000 thru P5195 0001 HIST: P1191 001 0791	
BUILDING PERMIT	BLDG-ADDITION	4/29/1947	1947LA12860	IDIS: P5420 01836 0000 thru P5420 0001 HIST: P1397 001 1842	
BUILDING PERMIT	BLDG-ADDITION	1/30/1979	1979LA76899	HIST: 00000 000 0000 HIST: P1851 001 1744	
BUILDING PERMIT	BLDG-ADDITION	1/30/1979	1979LA76899	IDIS: P5961 00872 0000 thru P5961 0001 HIST: P1851 001 1744	
BUILDING PERMIT	BLDG-ADDITION	7/18/2006	05014-10000-05195	IDIS: P2321 01359 0000 thru P2321 01359 0002	
BUILDING PERMIT	BLDG-ADDITION	1/29/2015	14014-20000-05000		
BUILDING PERMIT	BLDG-ADDITION	7/17/2015	14014-10000-03609		
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/27/1907	1907LA05835	HIST: P1007 002 2803	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/27/1907	1907LA05835	IDIS: P5008 02903 0000 thru P5008 0001 HIST: P1007 002 2803	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/27/1908	1908LA04692	HIST: P1010 002 1988	
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/30/1909	1909LA03808	HIST: P1013 001 2082	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/4/1910	1910LA08116	HIST: P1017 002 1671	
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/10/1912	1912LA08065	HIST: P1026 002 1967	
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/10/1912	1912LA08065	IDIS: P5044 02494 0000 thru P5044 0001 HIST: P1026 002 1967	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/22/1914	1914LA20809	HIST: P1043 001 2085	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/15/1915	1915LA05721	HIST: P1047 001 2260	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/15/1915	1915LA05721	IDIS: P5073 01121 0000 thru P5073 0001 HIST: P1047 001 2260	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/28/1915	1915LA13829	HIST: P1050 001 0941	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/1/1922	1922LA06491	HIST: P1088 001 2585	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/17/1923	1923LA49282	HIST: P1119 001 2356	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/17/1923	1923LA49282	IDIS: P5148 01179 0000 thru P5148 0001 HIST: P1119 001 2356	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/29/1925	1925LA29733	HIST: P1151 001 2186	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/6/1925	1925LA34285	HIST: P1152 002 2007	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/13/1928	1928LA01197	IDIS: P5185 01196 0000 thru P5185 0001 HIST: P1181 002 0633	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/5/1928	1928LA06467	IDIS: P5187 00867 0000 thru P5187 0001 HIST: P1183 001 1735	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/20/1936	1936LA09192	HIST: P1258 001 1593	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/20/1936	1936LA09192	IDIS: P5262 02024 0000 thru P5262 0001 HIST: P1258 001 1593	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/28/1941	1941 08078	HIST: P1338 002 2462	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/28/1941	1941LA08078	IDIS: P5344 01226 0000 thru P5344 0001 HIST: P1338 002 2462	
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/4/1941	1941 27098	HIST: P1345 002 1893	
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/11/1943	1943LA09508	IDIS: P5368 01093 0000 thru P5368 0001 HIST: P1361 002 1094	
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/4/1945	1945 07822	HIST: P1370 002 0623	
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/4/1945	1945LA07822	IDIS: P5386 00622 0000 thru P5386 0001 HIST: P1370 002 0623	
BUILDING PERMIT	BLDG-ALTER/REPAIR	5/1/1946	1946LA12356	HIST: P1379 002 0711	
BUILDING PERMIT	BLDG-ALTER/REPAIR	5/1/1946	1946LA12356	IDIS: P5400 01684 0000 thru P5400 0001 HIST: P1379 002 0711	
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/3/1946	1946 15179	HIST: P1380 002 1204	
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/3/1946	1946LA15179	IDIS: P5401 01878 0000 thru P5401 0001 HIST: P1380 002 1204	
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/17/1946	1946 21587	HIST: P1383 001 1488	
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/17/1946	1946 21588	HIST: P1383 001 1490	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/9/1947	1947 08034	HIST: P1396 001 2555	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/14/1947	1947LA08034	IDIS: P5418 02547 0000 thru P5418 0001 HIST: P1396 001 2555	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/19/1947	1947 23677	HIST: P1399 001 1749	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/12/1947	1947 25015	HIST: P1399 002 0410	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/12/1947	1947LA25015	IDIS: P5425 00409 0000 thru P5425 0001 HIST: P1399 002 0410	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/28/1954	1954LA78880	HIST: P1503 002 0661	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/29/1954	1954LA78880	IDIS: P5580 01764 0000 thru P5580 0001 HIST: P1503 002 0661	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/22/1954	1954LA80949	HIST: P1504 001 1560	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/22/1954	1954LA80949	IDIS: P5581 00809 0000 thru P5581 0001 HIST: P1504 001 1560	
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/28/1958	1958LA99076	HIST: P1670 002 2470	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/15/1963	1963LA33110	IDIS: P5823 01644 0000 thru P5823 0001 HIST: P1713 001 0019	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/17/1964	1964LA58880	IDIS: P5837 01217 0000 thru P5837 0001 HIST: P	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/6/1965	1965LA85244	IDIS: P5848 02019 0000 thru P5848 0001 HIST: P1734 001 0508	
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/6/1965	1965LA85245	IDIS: P5848 02020 0000 thru P5848 0001 HIST: P1734 001 0510	
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/16/1965	1965LA99950	IDIS: P5853 02816 0000 thru P5853 0001 HIST: P1739 001 2594	
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/3/1965	1965LA03475	IDIS: P5855 00159 0000 thru P5855 0001 HIST: P1741 001 0330	
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/17/1972	1972LA56248	IDIS: P5923 02422 0000 thru P5923 0001 HIST: P1803 002 0390	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/6/1979	1979LA77247	IDIS: P5961 01220 0000 thru P5961 0001 HIST: P1851 001 2439	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/22/1982	1982LA39076	IDIS: P6034 02051 0000 thru P6034 0001 HIST: P	
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/21/2008	08016-10000-02474		
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/26/2012	11010-10001-01774		
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/18/2013	11010-10002-01774		
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/2/2013	11010-10006-01774		
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/24/2013	11010-10003-01774		
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/24/2013	11010-10005-01774		
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/15/2013	12016-10000-24023		
BUILDING PERMIT	BLDG-ALTER/REPAIR	5/23/2014	14016-10000-09368		
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/12/2014	13016-10000-25533		
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/16/2014	14016-10000-08846		
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/17/2014	11010-10009-01774		
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/17/2014	11020-10003-02500		
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/17/2014	12016-10001-24023		
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/17/2014	12030-10001-03240		
BUILDING PERMIT	BLDG-ALTER/REPAIR	8/5/2014	14016-10000-11292		
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/29/2014	14016-10000-18707		
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/9/2014	11010-10010-01774		
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/30/2014	14016-10000-18800		
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/7/2015	14016-10000-09782		
BUILDING PERMIT	BLDG-ALTER/REPAIR	1/9/2015	14016-10000-17415		
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/19/2015	14016-10000-25977		

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/2/2015	11010-10004-01774		
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/16/2015	14016-30001-18800		
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/27/2015	15016-10000-03886		
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/15/2015	11010-10008-01774		
BUILDING PERMIT	BLDG-ALTER/REPAIR	5/18/2015	15016-10001-03886		
BUILDING PERMIT	BLDG-ALTER/REPAIR	5/26/2015	15016-10000-10732		
BUILDING PERMIT	BLDG-ALTER/REPAIR	5/27/2015	15016-10000-07198		
BUILDING PERMIT	BLDG-ALTER/REPAIR	5/29/2015	15016-10000-08636		
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/21/2015	15016-10000-11546		
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/15/2015	15016-10000-10187		
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/15/2015	15016-10000-18064		
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/20/2015	15016-10000-13732		
BUILDING PERMIT	BLDG-ALTER/REPAIR	10/20/2015	15020-10000-01778		
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/12/2015	15016-10000-16480		
BUILDING PERMIT	BLDG-ALTER/REPAIR	11/13/2015	15016-10000-15406		
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/17/2015	15016-30000-24136		
BUILDING PERMIT	BLDG-ALTER/REPAIR	12/23/2015	15016-10000-25386		
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/8/2016	15016-10000-26492		
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/25/2016	15016-20000-23879		
BUILDING PERMIT	BLDG-ALTER/REPAIR	2/29/2016	16016-20000-03300		
BUILDING PERMIT	BLDG-ALTER/REPAIR	3/9/2016	15016-10000-19284		
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/1/2016	15016-10001-26492		
BUILDING PERMIT	BLDG-ALTER/REPAIR	4/28/2016	16016-10000-06078		
BUILDING PERMIT	BLDG-ALTER/REPAIR	5/11/2016	16016-20000-02278		
BUILDING PERMIT	BLDG-ALTER/REPAIR	6/10/2016	16016-10001-06078		
BUILDING PERMIT	BLDG-ALTER/REPAIR	7/20/2016	16016-10000-12729		
BUILDING PERMIT	BLDG-ALTER/REPAIR	9/23/2016	16016-10000-21081		
BUILDING PERMIT	BLDG-DEMOLITION	12/4/1941	1941LA27098	IDIS: P5351 00945 0000 thru P5351 0001 HIST: P1345 002 1893	
BUILDING PERMIT	BLDG-DEMOLITION	7/17/1946	1946LA21587	IDIS: P5404 00746 0000 thru P5404 0001 HIST: P1383 001 1488	
BUILDING PERMIT	BLDG-DEMOLITION	7/17/1946	1946LA21588	IDIS: P5404 00747 0000 thru P5404 0001 HIST: P1383 001 1490	
BUILDING PERMIT	BLDG-DEMOLITION	1/10/1963	1963LA28610	HIST: P1711 002 0003	
BUILDING PERMIT	BLDG-DEMOLITION	1/15/1963	1963LA28610	IDIS: P5822 00005 0000 thru P5822 0001 HIST: P1711 002 0003	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-DEMOLITION	8/10/1963	1963LA45088	HIST: P1717 001 0467	
BUILDING PERMIT	BLDG-DEMOLITION	8/12/1963	1963LA45080	IDIS: P5827 01782 0000 thru P5827 0002 HIST: P1717 001 0451	
BUILDING PERMIT	BLDG-DEMOLITION	6/2/1977	1977LA45760	HIST: 00000 000 0000 HIST: P1839 002 2449	
BUILDING PERMIT	BLDG-DEMOLITION	6/2/1977	1977LA45761	HIST: 00000 000 0000 HIST: P1839 002 2451	
BUILDING PERMIT	BLDG-NEW	6/30/1905	1905LA03937	HIST: P1001 001 1849	
BUILDING PERMIT	BLDG-NEW	12/4/1906	1906LA08627	HIST: P1005 003 0323	
BUILDING PERMIT	BLDG-NEW	4/23/1913	1913LA05633	HIST: P1032 001 2697	
BUILDING PERMIT	BLDG-NEW	9/26/1918	1918LA04987	HIST: P1058 001 0291	
BUILDING PERMIT	BLDG-NEW	5/15/1925	1925LA17522	HIST: P1146 002 3192	
BUILDING PERMIT	BLDG-NEW	2/3/1936	1936LA02456	HIST: P1255 002 1775	
BUILDING PERMIT	BLDG-NEW	2/13/1936	1936LA03137	HIST: P1256 001 0946	
BUILDING PERMIT	BLDG-NEW	2/13/1936	1936LA03137	IDIS: P5260 01567 0000 thru P5260 0001 HIST: P1256 001 0946	
BUILDING PERMIT	BLDG-NEW	6/28/1937	1937LA21464	HIST: P1276 001 0359	
BUILDING PERMIT	BLDG-NEW	11/9/1938	1938LA37668	HIST: P1296 001 1744	
BUILDING PERMIT	BLDG-NEW	11/9/1938	1938LA37668	HIST: P1296 001 1744	
BUILDING PERMIT	BLDG-NEW	11/9/1938	1938LA37668	IDIS: P5301 00868 0000 thru P5301 0001 HIST: P1296 001 1744	
BUILDING PERMIT	BLDG-NEW	1/20/1946	1946 05730	HIST: P1410 001 0718	
BUILDING PERMIT	BLDG-NEW	8/21/1946	1946 19610	HIST: P1382 001 2397	
BUILDING PERMIT	BLDG-NEW	12/4/1951	1951LA22585	HIST: P1450 002 0956	
BUILDING PERMIT	BLDG-NEW	12/4/1951	1951LA22585	IDIS: P5521 00952 0000 thru P5521 0001 HIST: P1450 002 0956	
BUILDING PERMIT	BLDG-NEW	10/11/1954	1954LA98209	HIST: P1510 002 1291	
BUILDING PERMIT	BLDG-NEW	10/11/1954	1954LA98209	IDIS: P5587 01898 0000 thru P5587 0001 HIST: P1510 002 1291	
BUILDING PERMIT	BLDG-NEW	8/13/1956	1956LA50572	HIST: P1651 001 2821	
BUILDING PERMIT	BLDG-NEW	8/13/1956	1956LA50574	HIST: P1651 001 2819	
BUILDING PERMIT	BLDG-NEW	3/4/1994	1994LA15479	IDIS: P6240 02443 0000 thru P6240 0002 HIST: P0435 005 0224	
BUILDING PERMIT	BLDG-NEW	12/21/2011	11010-10000-01774		
BUILDING PERMIT	BLDG-RELOCATION	10/4/1910	1910LA08116	IDIS: P5018 02316 0000 thru P5018 0001 HIST: P1017 002 1671	
BUILDING PERMIT	BLDG-RELOCATION	12/7/1927	1927LA36656	IDIS: P5184 00653 0000 thru P5184 0001 HIST: P1180 001 1305	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	BLDG-RELOCATION	12/7/1927	1927LA36657	IDIS: P5184 00654 0000 thru P5184 0001 HIST: P1180 001 1307	
BUILDING PERMIT	BLDG-RELOCATION	12/7/1927	1927LA36658	IDIS: P5184 00655 0000 thru P5184 0001 HIST: P1180 001 1309	
BUILDING PERMIT	BLDG-RELOCATION	12/7/1927	1927LA36659	IDIS: P5184 00656 0000 thru P5184 0001 HIST: P1180 001 1311	
BUILDING PERMIT	BLDG-RELOCATION	12/7/1927	1927LA36660	IDIS: P5184 00657 0000 thru P5184 0001 HIST: P1180 001 1313	
BUILDING PERMIT	BLDG-RELOCATION	1/16/1928	1928LA01376	IDIS: P5185 01375 0000 thru P5185 0001 HIST: P1181 002 0991	
BUILDING PERMIT	DEPT ERROR	2/6/1979	1979LA77247	HIST: 00000 000 0000 HIST: P1851 001 2439	
BUILDING PERMIT	GRADING	7/15/1977	1977LA48214	HIST: 00000 000 0000 HIST: P1840 001 2046	
BUILDING PERMIT	GRADING	7/15/1977	1977LA48214	IDIS: P5953 01015 0000 thru P5953 0001 HIST: P1840 001 2046	
BUILDING PERMIT	GRADING	8/8/1979	1979LA87614	HIST: 00000 000 0000 HIST: P1855 002 0850	
BUILDING PERMIT	GRADING	8/8/1979	1979LA87614	IDIS: P5964 01570 0000 thru P5964 0001 HIST: P1855 002 0850	
BUILDING PERMIT	GRADING	7/12/2012	12030-10000-03240		
BUILDING PERMIT	NEW CONSTRUCTION	12/3/1906	1906LA08627	IDIS: P5006 01586 0000 thru P5006 0001 HIST: P1005 003 0323	
BUILDING PERMIT	NEW CONSTRUCTION	6/30/1909	1909LA03808	IDIS: P5014 01041 0000 thru P5014 0001 HIST: P1013 001 2082	
BUILDING PERMIT	NEW CONSTRUCTION	4/23/1913	1913LA05633	IDIS: P5058 00063 0000 thru P5058 0001 HIST: P1032 001 2697	
BUILDING PERMIT	NEW CONSTRUCTION	3/12/1915	1915LA03873	IDIS: P5072 01878 0000 thru P5072 0001 HIST: P1046 002 1535	
BUILDING PERMIT	NEW CONSTRUCTION	12/28/1917	1917LA06665	IDIS: P5082 01030 0000 thru P5082 0001 HIST: P1055 003 2071	
BUILDING PERMIT	NEW CONSTRUCTION	9/26/1918	1918LA04987	IDIS: P5084 01577 0000 thru P5084 0001 HIST: P1058 001 0291	
BUILDING PERMIT	NEW CONSTRUCTION	2/3/1936	1936LA02456	IDIS: P5260 00886 0000 thru P5260 0001 HIST: P1255 002 1775	
BUILDING PERMIT	NEW CONSTRUCTION	6/28/1937	1937LA21464	IDIS: P5280 01464 0000 thru P5280 0001 HIST: P1276 001 0359	
BUILDING PERMIT	NEW CONSTRUCTION	8/21/1946	1946LA19610	IDIS: P5403 01198 0000 thru P5403 0001 HIST: P1382 001 2397	
BUILDING PERMIT	NEW CONSTRUCTION	8/13/1956	1956LA50572	IDIS: P5755 02280 0000 thru P5755 0001 HIST: P1651 001 2821	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
BUILDING PERMIT	NEW CONSTRUCTION	8/13/1956	1956LA50574	IDIS: P5755 02279 0000 thru P5755 0001 HIST: P1651 001 2819	
BUILDING PERMIT	NEW CONSTRUCTION	2/10/1963	1963LA29956	HIST: P1711 002 2721	
BUILDING PERMIT	NEW CONSTRUCTION	10/10/1979	1979LA91119	HIST: 00000 000 0000	
BUILDING PERMIT	NEW CONSTRUCTION	3/4/1994	1994LA15479	HIST: P0435 005 0224	
BUILDING PERMIT	NONBLDG-NEW	10/10/1979	1979LA91119	IDIS: P5965 00956 0000 thru P5965 0001 HIST: P	
BUILDING PERMIT	NONBLDG-NEW	7/13/2012	11020-10000-02500		
BUILDING PERMIT	SIGN	8/19/1947	1947LA23677	IDIS: P5424 01738 0000 thru P5424 0001 HIST: P1399 001 1749	
BUILDING PERMIT	SIGN	2/1/1980	1980LA97240	HIST: 00000 000 0000 HIST: P1864 001 1094	
BUILDING PERMIT	SIGN	2/1/1980	1980LA97240	IDIS: P5980 02850 0000 thru P5980 0001 HIST: P1864 001 1094	
BUILDING PERMIT	SIGN	3/26/1980	1980LA00267	HIST: 00000 000 0000 HIST: P1864 001 1092	
BUILDING PERMIT	SIGN	3/26/1980	1980LA00267	IDIS: P5980 02244 0000 thru P5980 0001 HIST: P1864 001 1092	
BUILDING PERMIT	SIGN	4/14/2015	15048-40000-00515		
BUILDING PERMIT	SIGN	4/28/2015	15048-10000-00804		
BUILDING PERMIT	SIGN	4/29/2015	15048-10000-00873		
BUILDING PERMIT	SIGN	5/13/2015	15048-10000-01018		
BUILDING PERMIT	SIGN	2/1/2016	16048-10000-00217		
BUILDING PERMIT	SIGN	5/9/2016	16048-20000-01137		
BUILDING PERMIT	SIGN	5/11/2016	15048-30000-03039		
BUILDING PERMIT	SWIMMING-POOL/SPA	9/18/2013	13047-20000-00344		
BUILDING PERMIT	SWIMMING-POOL/SPA	9/18/2013	13047-20000-00425		
BUILDING PERMIT	SWIMMING-POOL/SPA	9/18/2013	13047-20000-00426		
BUILDING PERMIT	SWIMMING-POOL/SPA	9/18/2013	13047-20000-00427		
CERTIFICATE OF OCCUPANCY			1948LA17850	HIST: O233 2 0637	
CERTIFICATE OF OCCUPANCY		12/5/1947	1946LA19610	IDIS: O0727 02380 0000 HIST: O524	
CERTIFICATE OF OCCUPANCY		9/26/1955	1954LA98209	IDIS: O0727 02381 0000 HIST: O524 HIST: O233 2 0639	
CERTIFICATE OF OCCUPANCY		11/21/1956	1956LA50572	IDIS: O0727 02378 0000 HIST: O524 HIST: O233 2 0636	
CERTIFICATE OF OCCUPANCY		2/6/1981	1979LA91119	IDIS: O0525 02957 0000 HIST: O0016 005 0500	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
CERTIFICATE OF OCCUPANCY		2/6/1981	1979LA91119	IDIS: O0749 01616 0000 HIST: O0160 00050 0500	
CERTIFICATE OF OCCUPANCY		2/9/2015	13047-20000-00344		
CERTIFICATE OF OCCUPANCY		2/9/2015	13047-20000-00425		
CERTIFICATE OF OCCUPANCY		2/9/2015	13047-20000-00426		
CERTIFICATE OF OCCUPANCY		2/9/2015	13047-20000-00427		
CERTIFICATE OF OCCUPANCY		2/9/2015	CERT 116701		
CERTIFICATE OF OCCUPANCY		2/9/2015	CERT 116702		
CERTIFICATE OF OCCUPANCY		2/9/2015	CERT 116703		
CERTIFICATE OF OCCUPANCY		2/9/2015	CERT 116706		
CERTIFICATE OF OCCUPANCY		3/12/2015	11010-10000-01774		
CERTIFICATE OF OCCUPANCY		3/12/2015	11010-10001-01774		
CERTIFICATE OF OCCUPANCY		3/12/2015	11010-10002-01774		
CERTIFICATE OF OCCUPANCY		3/12/2015	11010-10003-01774		
CERTIFICATE OF OCCUPANCY		3/12/2015	11010-10004-01774		
CERTIFICATE OF OCCUPANCY		3/12/2015	11010-10005-01774		
CERTIFICATE OF OCCUPANCY		3/12/2015	11010-10006-01774		
CERTIFICATE OF OCCUPANCY		3/12/2015	11010-10007-01774		
CERTIFICATE OF OCCUPANCY		3/12/2015	11010-10009-01774		
CERTIFICATE OF OCCUPANCY		3/12/2015	11010-10010-01774		
CERTIFICATE OF OCCUPANCY		3/12/2015	11020-10003-02500		
CERTIFICATE OF OCCUPANCY		3/12/2015	12016-10000-24023		
CERTIFICATE OF OCCUPANCY		3/12/2015	12016-10001-24023		
CERTIFICATE OF OCCUPANCY		3/12/2015	12030-10001-03240		
CERTIFICATE OF OCCUPANCY		3/12/2015	CERT 99485		
CERTIFICATE OF OCCUPANCY		9/30/2015	14014-10000-03609		
CERTIFICATE OF OCCUPANCY		9/30/2015	14016-10000-09782		
CERTIFICATE OF OCCUPANCY		9/30/2015	CERT 138056		
CERTIFICATE OF OCCUPANCY		10/29/2015	14016-10000-17415		
CERTIFICATE OF OCCUPANCY		10/29/2015	CERT 131493		
CERTIFICATE OF OCCUPANCY		3/14/2016	15016-30000-24136		
CERTIFICATE OF OCCUPANCY		3/14/2016	CERT 143654		
CERTIFICATE OF OCCUPANCY		4/13/2016	14016-10000-18800		
CERTIFICATE OF OCCUPANCY		4/13/2016	14016-30001-18800		
CERTIFICATE OF OCCUPANCY		4/13/2016	CERT 131249		

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
CERTIFICATE OF OCCUPANCY		7/14/2016	15016-10000-26492		
CERTIFICATE OF OCCUPANCY		7/14/2016	15016-10001-26492		
CERTIFICATE OF OCCUPANCY		7/14/2016	CERT 144741		
CERTIFICATE OF OCCUPANCY		8/2/2016	15016-10000-16480		
CERTIFICATE OF OCCUPANCY		8/2/2016	CERT 142378		
CERTIFICATE OF OCCUPANCY-TEMP		10/20/1989	1989LA38258	HIST: M0429 009 0491	
CERTIFICATE OF OCCUPANCY-TEMP		8/22/2014	11010-10000-01774		
CERTIFICATE OF OCCUPANCY-TEMP		8/22/2014	11010-10001-01774		
CERTIFICATE OF OCCUPANCY-TEMP		8/22/2014	11010-10002-01774		
CERTIFICATE OF OCCUPANCY-TEMP		8/22/2014	11010-10003-01774		
CERTIFICATE OF OCCUPANCY-TEMP		8/22/2014	11010-10005-01774		
CERTIFICATE OF OCCUPANCY-TEMP		8/22/2014	11010-10006-01774		
CERTIFICATE OF OCCUPANCY-TEMP		8/22/2014	11010-10007-01774		
CERTIFICATE OF OCCUPANCY-TEMP		8/22/2014	11010-10009-01774		
CERTIFICATE OF OCCUPANCY-TEMP		8/22/2014	CERT 99485-1		
CERTIFICATE OF OCCUPANCY-TEMP		10/8/2014	11010-10000-01774		
CERTIFICATE OF OCCUPANCY-TEMP		10/8/2014	11010-10001-01774		
CERTIFICATE OF OCCUPANCY-TEMP		10/8/2014	11010-10002-01774		
CERTIFICATE OF OCCUPANCY-TEMP		10/8/2014	11010-10003-01774		
CERTIFICATE OF OCCUPANCY-TEMP		10/8/2014	11010-10005-01774		
CERTIFICATE OF OCCUPANCY-TEMP		10/8/2014	11010-10006-01774		
CERTIFICATE OF OCCUPANCY-TEMP		10/8/2014	11010-10007-01774		

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
CERTIFICATE OF OCCUPANCY-TEMP		10/8/2014	11010-10009-01774		
CERTIFICATE OF OCCUPANCY-TEMP		10/8/2014	CERT 99485-2		
CERTIFICATE OF OCCUPANCY-TEMP		11/25/2014	11010-10000-01774		
CERTIFICATE OF OCCUPANCY-TEMP		11/25/2014	11010-10001-01774		
CERTIFICATE OF OCCUPANCY-TEMP		11/25/2014	11010-10002-01774		
CERTIFICATE OF OCCUPANCY-TEMP		11/25/2014	11010-10003-01774		
CERTIFICATE OF OCCUPANCY-TEMP		11/25/2014	11010-10005-01774		
CERTIFICATE OF OCCUPANCY-TEMP		11/25/2014	11010-10006-01774		
CERTIFICATE OF OCCUPANCY-TEMP		11/25/2014	11010-10007-01774		
CERTIFICATE OF OCCUPANCY-TEMP		11/25/2014	11010-10009-01774		
CERTIFICATE OF OCCUPANCY-TEMP		11/25/2014	11010-10010-01774		
CERTIFICATE OF OCCUPANCY-TEMP		11/25/2014	CERT 99485-3		
COMMISSION	BAAB BOARD FILE	12/31/1979	BF 796621	HIST: B0011 003 0502	
COMMISSION	BAAB BOARD FILE	12/31/1980	BF 800687	HIST: B0020 002 0001	
ELECTRICAL PERMIT		6/26/2012	12041-90000-14806		
ELECTRICAL PERMIT		7/18/2016	16041-90000-25059		
GRADING	COMPACTION FILE	3/8/1978		HIST: G0107 008 0226	
GRADING	COMPACTION FILE	10/10/1979		HIST: G0107 008 0234	
GRADING	COMPACTION FILE	10/15/1979		HIST: G0107 008 0224	
GRADING	COMPACTION FILE	10/15/1979		HIST: G0107 008 0232	
GRADING	COMPACTION FILE	11/2/2012			
GRADING	COMPACTION FILE	1/24/2014			
GRADING	GRADING PRE-INSP REPT	7/6/1977		HIST: G0107 008 0262	
GRADING	SEISMOLOGY FILE	10/11/2007			
GRADING	SOILS & GEOLOGY FILE	11/4/1997		IDIS: G565 00273 0000 thru G565 00273 0232	

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
GRADING	SOILS & GEOLOGY FILE	2/26/2008			
GRADING	SOILS & GEOLOGY FILE	6/24/2008			
GRADING	SOILS & GEOLOGY FILE	7/1/2008		IDIS: G500 00137 0000 thru G500 00137 0018	
GRADING	SOILS & GEOLOGY FILE	7/2/2012			
MECHANICAL PERMIT	FIRE SPRINKLER	6/17/2014	14043-90000-02326		
MECHANICAL PERMIT	FIRE SPRINKLER	7/9/2015	15043-90000-02986		
MECHANICAL PERMIT	FIRE SPRINKLER	6/2/2016	16043-90000-02552		
MECHANICAL PERMIT	HVAC	4/10/1990	0490LA048894	HIST: T0209 003 0466	
MECHANICAL PERMIT	HVAC	8/16/2011	11044-90000-09272		
MECHANICAL PERMIT	HVAC	10/1/2012	12044-90000-10390		
MECHANICAL PERMIT	HVAC	3/11/2015	15044-90000-02233		
MECHANICAL PERMIT	PLUMBING	11/12/1914	1914LA21998	IDIS: P5069 02232 0000 thru P5069 0001 HIST: P1043 002 1553	
MECHANICAL PERMIT	PLUMBING	2/19/2015	15042-90000-03550		
MECHANICAL PERMIT	PLUMBING	6/5/2015	15042-90000-11246		
MECHANICAL PERMIT	PLUMBING	7/2/2015	15042-90000-13358		
MECHANICAL PERMIT	PLUMBING	7/2/2015	15042-90000-13367		
MECHANICAL PERMIT	PLUMBING	9/29/2015	15042-90000-19707		
MECHANICAL PERMIT	PLUMBING	6/17/2016	16042-90000-12397		
MECHANICAL PERMIT	PLUMBING	6/29/2016	16042-90000-13224		
OVERSIZED DOCUMENT	GRADING	2/23/2007		HIST: J3432 1 515	
PARAPET FILE		12/16/1966		HIST: M0060 001 0001	
PARAPET FILE		12/16/1966		HIST: M0060 001 0021	
PERMIT ADDRESS CHANGE	BUILDING	7/10/2014	11010-10000-01774		
PERMIT ADDRESS CHANGE	BUILDING	7/10/2014	11010-10009-01774		
PERMIT ADDRESS CHANGE	BUILDING	7/10/2014	11020-10000-02500		
PERMIT ADDRESS CHANGE	BUILDING	7/10/2014	11020-10003-02500		
PERMIT ADDRESS CHANGE	BUILDING	7/10/2014	12016-10000-24023		
PERMIT ADDRESS CHANGE	BUILDING	7/10/2014	12016-10001-24023		
PERMIT ADDRESS CHANGE	BUILDING	7/10/2014	12030-10000-03240		
PERMIT ADDRESS CHANGE	BUILDING	7/10/2014	12030-10001-03240		
PERMIT ADDRESS CHANGE	BUILDING	12/30/2014	14016-10000-18800		

Document Type	Sub Type	Document Date	Document Number	Reel Batch Frame	
PERMIT ADDRESS CHANGE	BUILDING	12/30/2014	14016-30001-18800		
PERMIT ADDRESS CHANGE	BUILDING	7/15/2015	15016-10000-03886		
PERMIT ADDRESS CHANGE	BUILDING	7/15/2015	15016-10001-03886		
PERMIT ADDRESS CHANGE	MECHANICAL	3/20/2015	15044-90000-02233		
PERMIT ADDRESS CHANGE	MECHANICAL	7/15/2015	15041-10000-11855		
PLAN MAINTENANCE		7/18/2006	05014-10000-05195	HIST: J2757 1 20	
PLAN MAINTENANCE		11/21/2011	11010-10000-01774	HIST: J5573 1 1	
PLAN MAINTENANCE		12/21/2011	11010-10000-01774	HIST: J5383 1 1	
PLAN MAINTENANCE		12/21/2011	11010-10000-01774	HIST: J5471 1 75	
PLAN MAINTENANCE		6/26/2012	11010-10001-01774	HIST: J5525 1 208	
PLAN MAINTENANCE		7/13/2012	11020-10000-02500	HIST: J5539 1 415	
PLAN MAINTENANCE		4/18/2013	11010-10002-01774	HIST: J5752 1 276	
PLAN MAINTENANCE		6/25/2013	11010-10007-01774	HIST: J5813 1 125	
PLAN MAINTENANCE		7/2/2013	11010-10006-01774	HIST: J5818 1 338	
PLAN MAINTENANCE		7/24/2013	11010-10003-01774	HIST: J5840 1 300	
PLAN MAINTENANCE		7/24/2013	11010-10005-01774	HIST: J5840 1 326	
PLAN MAINTENANCE		8/15/2013	12016-10000-24023	HIST: J5862 1 161	
PLAN MAINTENANCE		10/9/2014	11010-10010-01774	HIST: J6282 1 362	
PLAN MAINTENANCE		1/7/2015	14016-10000-09782	HIST: J6671 1 478	
PLAN MAINTENANCE		1/29/2015	14015-20000-05000	HIST: J6402 1 480	
PLAN MAINTENANCE		3/2/2015	11010-10004-01774	HIST: J6443 1 495	
PLAN MAINTENANCE		4/15/2015	11010-10008-01774	HIST: J6494 1 31	
PLAN MAINTENANCE		7/17/2015	14014-10000-03609	HIST: J6616 1 380	
PLAN MAINTENANCE		10/20/2015	15016-10000-13732	HIST: J6731 1 12	
PLAN MAINTENANCE		10/20/2015	15020-10000-01778	HIST: J6731 1 12	
PLAN MAINTENANCE		11/13/2015	15016-10000-15406	HIST: J6759 1 379	
PLAN MAINTENANCE		2/25/2016	15016-20000-23879	HIST: J6885 1 92	
RANGE FILE	MISCELLANEOUS	12/1/1980		HIST: R0142 009 0247	

All applica ns must be filled out y applicant

Ward 7

Applicant must indicate the Building Line or Lines clearly and distinctly on the Drawings.

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

Application to Alter, Repair or Demolish

Application is hereby made to the Chief Inspector of Buildings of the City of Los Angeles, for the approval of the detailed statement of the specifications and plans herewith submitted for the alteration, repair or demolition of the building herein described. All provisions of the Building Ordinances shall be complied with in the alteration, repair or demolition of said building...., whether specified herein or not.

(Sign Here) Geo T Pratt

Los Angeles, Cal., SEP 27 1907 7 1907

LOCATION AND DESCRIPTION OF PRESENT BUILDING

CITY ASSESSOR: Please Verify

ROOM 6—FIRST FLOOR

REMOVED FROM	REMOVED TO
Lot ...... Block ...... Ward	Lot ...... Block ...... Ward ......
Tract	Tract Arb 147
	Santa Fe Depot Grounds
	OK Mallard Davis
Book ...... Page ...... F. B. Page	Book 5 Page 8 F. B. Page 106

ROOM 34—THIRD FLOOR

CITY ENGINEER: Please Verify Street Number

From Street No. ...... To Street No. 200 Santa Fe Ave

1. Owner's name Santa Fe R R Co

2. Owner's address

3. Architect's name

4. Builder's name Geo T Pratt

5. Builder's address 1317 - E - 7th

6. Estimated cost of the Proposed Improvements, $ 350.00

Repairs Partition Windows & Doors

two story frame Bldg

Permit No. 5S35

All applications must be filled out by applicant

Ward 7

Applicant must indicate the Building Line or Lines clearly and distinctly on the Drawings.

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

Application to Alter, Repair or Demolish

Application is hereby made to the Chief Inspector of Buildings of the City of Los Angeles, for the approval of the detailed statement of the specifications herewith submitted for the alteration, repair or demolition of the building herein described. All provisions of the Building Ordinances shall be complied with in the alteration, repair or demolition of said building, whether specified or not.

(Sign Here) A. T. & S. F. Ry. Co. per H. J. Bellis

Los Angeles, Cal., AUG 27 1908 190

CITY ASSESSOR: Please Verify

Arb 147

REMOVED FROM	REMOVED TO
Lot ... Block ...	Lot ... Block ...
Tract Depot Grounds	Tract
Bd N by 1st St. W by	
Santa Fe Ave	
E by River	OK Mallison
	for Mu...
Book 5 Page 9 F. B. Page 100	Book ... Page ... F. B. Page ...

TAKE TO ROOM NO. 6 FIRST FLOOR

TAKE TO ROOM NO. 34 THIRD FLOOR

CITY ENGINEER: Please Verify Street Number

From No. 200 Santa Fe Ave To No. OK

1. Owner's name A. T. & S. F. Ry. Co.
2. Owner's address Kerckhoff Bldg. corner 6th & Main Sts.
3. Architect's name H. C. Phillips Chief Engineer of the A. T. & S. F. Ry. Co
4. Builder's name C. A. Fellows
5. Builder's address #148 W. 46 St. L. A. Cal.
6. Entire cost of the Proposed Improvements, $ 5000.00
7. Purpose of building Lunch Room and News Stand
8. Class of Building Brick and wood No. of rooms at present 9
9. No. of stories in height one Size of building X
10. Size of addition X 12"
11. Material of foundation Concrete Size Footing 12" 16" Size of wall 12" x 14'0 high
12. Size of exterior studs X Interior studs X
13. Size of mud sills X Bearing studs X
14. Size of first floor joist X Second floor joist X
15. State on following lines just what you want to do: To make alterations to the interior of the North half of the present La Grande Depot of the A. T. & S. F. Ry. Co., also put an addition office room on the North East corner constructed of brick walls

Permit No. 4692

(1)

All applications must be filled out by applicant

(USE INK OR INDELIBLE PENCIL)

WARD 7

3

PLANS AND SPECIFICATIONS and other data must also be filed.

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

Application to Alter, Repair or Demolish

To the Board of Public Works of the City of Los Angeles:

Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be, prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

(SIGN HERE) C A Fellows (Applicant) by H. Worden

O.K. BY J.A.M.

CITY ASSESSOR: PLEASE VERIFY.

Ap 6 N 7

TAKE TO ROOM NO. 6 FIRST FLOOR

REMOVED FROM	REMOVED TO
Lot ...... Block	Lot ...... Block ......
Tract 40 ft Atchison Bldg ... line of ... S.E. ... W line of LA River ... E line of Santa Fe Ave ... E line of Lot 4 Aiken W T C	Tract
Book 5 Page 8 F. B. Page 61	Book ...... Page ...... F. B. Page ......

O. K. City Assessor By ...... Deputy

TAKE TO ROOM NO. 34 THIRD FLOOR

CITY ENGINEER: PLEASE VERIFY STREET NUMBER.

From No. 200 Santa Fe Ave

To No. ......

O.K. City Engineer By ...... Deputy

1. Owner's name A T & S F Ry Co.
2. Owner's address Herckhoff Bldg- Los Angeles
3. Architect's name ......
4. Contractor's name Chas. A. Fellows.
5. Contractor's address 500 Central Bldg- Los Angeles
6. Entire cost of the proposed improvements, $ 800.00
7. Purpose of the building Passenger Depot
8. Class of building "D" No. of rooms at present ......
9. No. of stories in height One & 2 Size of present building ...... x ......
10. Size of new addition ...... x ......
11. Material of foundation ...... Size footing ...... Size of wall ......
12. Size of exterior studs ...... x ...... Interior studs ...... x ......
13. Size of mud sills ...... x ...... Bearing studs ...... x ......
14. Size of first floor joist ...... x ...... Second floor joist ...... x ......
15. STATE ON FOLLOWING LINES JUST WHAT YOU WANT TO DO.

Remodel Ticket Office and Men's Waiting Room- Other minor changes such as changing doors etc. No structural changes of importance.

PERMIT NO. 8065 Date issued, JUL 10 1912 191...

Application Received ...

OVER

BLDG. DEPT. FORM 5

All applications must be filled out by applicant

WARD 7

PLANS AND SPECIFICATIONS and other data must also be filed

BOARD OF PUBLIC WORKS
DEPARTMENT OF BUILDINGS

3 Application to Alter, Repair or Demolish

To the Board of Public Works of the City of Los Angeles:

Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

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Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 FIRST FLOOR

ASSESSOR PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot Acc 147 Block [illegible]	Lot .... Block ....
Tract Property lying south of Redgt St bet Santa Fe Ave and River Bed	Tract ....
Book 5 Page 8 F. B. Page	Book .... Page .... F. B. Page ....

O.K. City Assessor [illegible] Deputy

TAKE TO ROOM No. 34 THIRD FLOOR

ENGINEER PLEASE VERIFY

From No. 210 Santa Fe Ave Street

To No. .... Street

O.K. City Engineer [illegible] Deputy

(USE INK OR INDELIBLE PENCIL)

1. What Purpose is the present Building used for? Santa Fe Depot
2. Owner's name A T & S F R R Phone
3. Owner's address La Grande Depot Los Angeles
4. Architect's name Chief Eng A T & S F Ry Phone
5. Contractor's name Ward & Nicholson Phone M 3026
6. Contractor's address 817 Trust & Sav Bldg
7. ENTIRE COST OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, etc.) $ 7500.00
8. Class of Present Building B No. of Rooms at present
9. No. of stories in height One Size of present building .... x ....

STATE ON FOLLOWING LINES JUST WHAT YOU WANT TO DO.

Build addition for new ticket window change news stand and reverse Ladies and Gents toilets

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Building Ordinances will be complied with, whether herein specified or not.

OVER

(Sign here) Ward & Nicholson (Owner or Authorized Agent).

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and specifications checked and found to conform to Ordinances, State Laws, etc. (Use Ink)	Application checked and found O. K. (Use Rubber Stamp)	Stamp here when permit is issued
20809	W F [illegible] Plan Examiner	OCT 22 1914 P.I. Clerk	ISSUED OCT 22 1914 ISSUED L.A.B.B. Dept.

1 V [illegible] [illegible] Zone 1 15 —

FILL IN ALL BLANKS THAT APPLY TO WORK PROPOSED TO BE DONE, OR TO ASCERTAIN IF SAME CAN BE DONE.

10. Size of new addition 25 X 54-6 / 18 X 13-0 / 18 x 42-0 No. of Stories in height One

11. Material of foundation Concrete Size footings 2-0 X 4" Size wall 13 Depth below ground 1-6

12. Size of Redwood Mudsills 2 x 6 Size of exterior studs Brick wall

13. Size of interior bearing studs 2 x 4 Size of interior non-bearing studs 2 x 4

14. Size of first floor joist 2 x 4 Second floor joist x

15. State Number of Plumbing Fixtures to be installed on Concrete four Number of gas outlets

16. State if there is a sewer or cesspool to be constructed on this lot? No (No cesspools allowed where there is a street sewer)

17. Plumbing and gas fitting contractor's name J. Haverty

I have carefully examined and read the above blank and know the same is true and correct, and that all provisions of the Building Ordinance will be complied with, whether herein specified or not.

(Sign here) Gard & Hickam (Owner or Authorized Agent.)

BLDG. DEPT. FORM 3

All applications must be filled out by applicant

WARD 7

PLANS AND SPECIFICATIONS and other data must also be filed

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

3 Application to Alter, Repair or Demolish

To the Board of Public Works of the City of Los Angeles:

Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

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Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 FIRST FLOOR

ASSESSOR PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot .... Block	Lot .... Block ....
Tract	Tract ....
Book .... Page .... F. B. Page	Book .... Page .... F. B. Page ....

O. K. City Assessor By .... Deputy

TAKE TO ROOM No. 34

ENGINEER PLEASE VERIFY

From No. 200 Santa Fe Ave Street

To No. .... Street

O.K. City Engineer By .... Deputy

(USE INK OR INDELIBLE PENCIL)

1. What Purpose is the present Building used for? Freight Depot
2. Owner's name Wells Fargo Co
3. Owner's address Central Bldg 6th & Main
4. Architect's name .... Phone ....
5. Contractor's name Alpeter Hull & Alpeter Co Phone Bdwy 4323
6. Contractor's address 704 Ferguson Bldg.
7. ENTIRE COST OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, etc.) $ 800.00
8. Class of Present Building C No. of Rooms at present 4
9. No. of stories in height One Size of present building 50 x 150

STATE ON FOLLOWING LINES JUST WHAT YOU WANT TO DO.

Repair Roof; Repaint; Fix Door Jambs; Put in Scale Pit. Repair Down Spouts & Gutters; Change Office Front; Build Small Room of 1"x2" Wire Mesh with Grill Doors for Money Dept; Put in Shelves;

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Building Ordinances will be complied with, whether herein specified or not.

OVER

(Sign here) J. P. Alpeter (Owner or Authorized Agent).

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and specifications checked and found to conform to Ordinances, State Laws, etc. (Use Ink)	Application checked and found O. K. (Use Rubber Stamp)	Stamp here when permit is issued
13829	K.S. Plan Examiner.	OCT 28 1915 Clerk	OCT 28 1915

5 Stiller

BLDG. DEPT. FORM 3

All applications must be filled out by applicant

PLANS AND SPECIFICATIONS and other data must also be filed

WARD 7

3

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

Application to Alter, Repair or Demolish

To the Board of Public Works of the City of Los Angeles:

Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be, prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

Wd 5

TAKE TO ROOM No. 6 FIRST FLOOR

ASSESSOR PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot 147 Block	Lot Block
Tract Santa Fe Depot Grounds	Tract
Book 5 Page 8 F. B. Page 110	Book Page F. B. Page

O. K. City Assessor By Deputy

TAKE TO ROOM No. 34 THIRD FLOOR

ENGINEER PLEASE VERIFY

From No. 300 Santa Fe Ave Street

To No. Street

O. K. City Engineer By Deputy

(USE INK OR INDELIBLE PENCIL)

1. What Purpose is the present Building used for? Railway Post Office
2. Owner's name A. T. & S. F. Ry. Co. Phone
3. Owner's address L.A.
4. Architect's name do Phone
5. Contractor's name Alta Planing Mill Co. Phone
6. Contractor's address L.A.
7. ENTIRE COST OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, etc.) $ 816.00
8. Class of Present Building D No. of Rooms at present 2
9. No. of stories in height 1 Size of present building x

STATE ON FOLLOWING LINES JUST WHAT YOU WANT TO DO.

Put in inspector's bridge & rearrange toilet room

all as shown by plans

Application to alter or make changes to plans of building for which building permit No. 3873 was obtained on 1915 said changes or alterations more particularly described as follows:

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Building Ordinances will be complied with, whether herein specified or not.

OVER

(Sign here) Alta Planing Mill Co.
(Owner or Authorized Agent).

4/14/15

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and specifications checked and found to conform to Ordinances, State Laws, etc. (Use Ink)	Application checked and found O. K. (Use Rubber Stamp)	Stamp here when permit is issued
5721	Plan Examiner.	APR 1 5 1915 Clerk	ISSUED APR 15 1915 ISSUED

alt 3873 3573 '71

5

Alden

75

All Applications must be filled out by Applicant

Bldg. Form 3

PLANS AND SPECIFICATIONS and other data must also be filed.

3

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

Application to Alter, Repair or Demolish

To the Board of Public Works of the City of Los Angeles:

Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO REAR OF NORTH ANNEX 1st FLOOR
CITY CLERK PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot ...... Block	Lot ...... Block ......
Tract	Tract ......
Book ...... Page ...... F. B. Page	Book ...... Page ...... F. B. Page ......

O. K. City Clerk By ______ Deputy

TAKE TO ROOM No. 405 SOUTH ANNEX ENGINEER PLEASE VERIFY

From No. ~~4th street~~ 218 Santa Fe Ave Street

To No. 1 4th ~~East Santa Fe Ave~~ Street

O.K. City Engineer By ______ Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Supplies
2. What purpose will Building be used for hereafter? Boiler Room
3. Owner's name A T & S F Ry Phone
4. Owner's address 6th & Main st L A
5. Architect's name Phone
6. Contractor's name Same Phone
7. Contractor's address
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 250.00
9. Class of present Building D No. of rooms at present
10. Number of stories in height One Size of present Building 14 x 24
11. State how many buildings are on this lot 1
12. State purpose buildings on lot are used for Boiler Room (Tenement House, Hotel, Residence, or any other purpose.)

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

Remove wood siding replace with corrugated Iron
remove Shingle Roof replace with corrugated Iron

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER

(Sign here) A T & S F Ry
(Owner or Authorized Agent) Haygwood

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	Stamp here when permit is issued
49282	Plan Examiner	3E 23	OCT 17 1923
		Clerk	L.A. Bldg. Dept.

125

All Applications Must be Filled Out by Applicant

Bldg. Form 3

PLANS AND SPECIFICATIONS and other data must also be filed

BOARD OF PUBLIC WORKS

3

DEPARTMENT OF BUILDINGS

Application to Alter, Repair or Demolish

To the Board of Public Works of the City of Los Angeles:
Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.
Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor CITY CLERK PLEASE VERIFY

TAKE TO ROOM No. 405 SOUTH ANNEX ENGINEER PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot ... Block ...	Lot ... Block ...
Tract ... No change of location property of Santa Fe Ave E side Santa Fe near 3rd Street Bd. H. Wkly ...	Tract ... No change of location
Book ... Page ... F. B. Page ...	Book 5 Page 8 F. B. Page ...
From No. 300 S. Santa Fe Ave Street	
To No. Opposite 3rd St Street	

O. K. City Clerk By ... Deputy
O. K. City Engineer By ... Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? U.S. Post Office Mail Handling
2. What purpose will Building be used for hereafter? Same purpose
3. Owner's name A.T.&S.F.Ry.Co. Phone Main 2980
4. Owner's address Kirckhoff Bldg 6th & Main Sts L.A. Station 96.
5. Architect's name W.H. Mohr Phone as Above
6. Contractor's name C.A.Fellows Phone VAndike 0159
7. Contractor's address 500 Central Bldg. 6th & Main Sts. L.A.
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 5000.00
9. Class of present Building C No. of rooms at present Two
10. Number of stories in height one Size of present Building 60 x 62
11. State how many buildings are on this lot Passenger Station Group
12. State purpose buildings on lot are used for Rail Road Station, Express, U.S. Mail (Apartment House, Hotel, Residence, or any other purpose.)

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

16' will be added to the South end of present Building making an addition 16' x 62'. This addition will be one Story in height the same as present Structure and of Same Class. See plans and Specifications herewith

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER 8/25 F (Sign here) C A Fellows Contractor
(Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O.K.	Stamp here when permit is issued.
29733	8/28 Kar Plan Examiner	8/27/25 3E Clerk	ISSUED AUG 29 1925

8th Reuiring 151 ... 4700 16

13. Size of new addition 16' x 62' No. of Stories in height One

14. Material of foundation Concrete Size footings 1' X 2' Size wall 12" Depth below ground 2'-3"

15. Size of Redwood Mudsills — x — Size of interior bearing studs 2 x 4

16. Size of exterior studs — x — Size of interior non-bearing studs 2 x 4

17. Size of first floor joists Concrete Mez. Second floor joists 2 x 8

18. Will all provisions of State Housing Act be complied with? Yes

I have carefully examined and read the above blank and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

(Sign here) C A Fellows per J A Holden
(Owner or Authorized Agent)

FOR DEPARTMENT USE ONLY

APPLICATION	O. K.
CONSTRUCTION	O. K.
ZONING	O. K.
SET-BACK LINE	O. K.
ORD. 33761 (N. S.)	O. K.
FIRE DISTRICT	O. K.

REMARKS

All Applications Must be Filled Out by Applicant

PLANS AND SPECIFICATIONS and other data must also be filed

Bldg. Form 3

BUILDING DIVISION

3

DEPARTMENT OF BUILDING AND SAFETY

Application to Alter, Repair or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:
Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
First: that the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.
Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

Arb 47

TAKE TO ROOM No. 248 (2ND FLOOR) CITY CLERK PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot Piece of land Block	Lot Block
Tract Bd N by 1st St E.	Tract
by L A River S by	
4th St & W by	
Santa Fe ave	Santa Fe

TAKE TO ROOM No. 5 (MAIN ST. FLOOR) ENGINEER PLEASE VERIFY

Book 5 Page X F. B. Page 84	Book Page F. B. Page
From No. 300 S Santa Fe Ave Street	
To No. E/S Sta Fe S of 3rd St Street	

O. K. City Engineer By Deputy

O. K. City Clerk By Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Terminal Railway Post Office
2. What purpose will Building be used for hereafter? Same
3. Owner's name A T & S F R R Co Phone Mu 0111
4. Owner's address Kerckhoff Bldg Los Angeles Calif
5. Architect's name H H Tillman Phone Mu 0111
6. Contractor's name S. C. Hickborn Phone Me 1184
7. Contractor's address 716 Delta Bldg
8. VALUATION OF PROPOSED WORK {Including all Material, Labor, Finishing, Equipment and Appliances in Completed Building. $10,500 00/100
9. Class of present Building Brick-Wood Bay No. of rooms at present One
10. Number of stories in height One Size present Building 68'0 x 62'0
11. State how many buildings are on this lot
12. State purpose buildings on lot are used for (Apartment House, Hotel, Residence, or any other purpose.)
13. What Zone is Property in? D

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

South addition 30 x 62 same construction as existing
North " 25 x 52 " " " "

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER 10/1/28 1140 (Sign here) S. C. Hickborn

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	Stamp here when permit is issued
29081	Plan Examiner	10/1/28	ISSUED OCT 18 1928 L. A. Bldg. Dept.

PLANS

2275

14. Size of new addition 25 X 50 x 30 X 62 No. of Stories in height one

15. Material of foundation Concrete Size footings 1'0 X 1'0 Size wall 13" Depth below ground 2' 3"

16. Size of Redwood Mudsills x Size of interior bearing studs x

17. Size of exterior studs x Size of interior non-bearing studs x

18. Size of first floor joists x Second floor joists x

19. Will all Lathing and Plastering Comply with Ordinance? Yes

20. Will all provisions of State Housing Act be complied with? Yes

I have carefully examined and read the above blank and know the same is true and correct, and that all provisions of the Ordinance and Laws governing Building Construction will be complied with, whether herein specified or not.

(Sign here) S. C. Hickborn
(Owner or Authorized Agent)
by Donald B. Hickborn

FOR DEPARTMENT USE ONLY

APPLICATION	O. K.
CONSTRUCTION	O. K.
ZONING	O. K.
SET-BACK LINE	O. K.
ORD. 33761 (N. S.)	O. K.
FIRE DISTRICT #1	O. K.

REMARKS

All Applications Must be Filled Out by Applicant

Bldg. Form 3

PLANS AND SPECIFICATIONS and other data must also be filed

BUILDING DIVISION

3 DEPARTMENT OF BUILDING AND SAFETY

Application to Alter, Repair or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:
Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.
Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor CITY CLERK PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot .... Block	Lot .... Block ....
Tract	Tract ....
120 Santa Fe Ave	

O. K. City Clerk By .... Deputy

TAKE TO FIRST FLOOR 242 SO. BROADWAY ENGINEER PLEASE VERIFY

Book .... Page .... F. B. Page .... | Book .... Page .... F. B. Page ....

~~From No.~~ Esplanade Santa Fe ave - Street

~~To No.~~ Between first and Third St. Street

O. K. City Engineer By .... Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Depot
2. What purpose will Building be used for hereafter? Depot
3. Owner's name Atchison Topeka and Santa Fe R.R. Phone
4. Owner's address 715 Kerckhoff Bldg.
5. Architect's name .... Phone
6. Contractor's name .... Phone
7. Contractor's address
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 2000.00
9. Class of present Building D No. of rooms at present
10. Number of stories in height one Size of present Building 28.5 Sq. x
11. State how many buildings are on this lot Four
12. State purpose buildings on ~~lot are~~ used for R.R. Depot Baggage Room (Apartment House, Hotel, Residence, or any other purpose.)

What Zone Is Property In?

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

Reroof over wood Shingles with Composition Shingles.

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

Standard Roof Co

☞ OVER

(Sign here) Chas .... (Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	
1197 ✓	[illegible] Plan Examiner	[illegible] Clerk	ISSUED JAN 13 1928 L.A. Bldg. Dept.

Ed Penney 575

All Applications Must be Filled Out by Applicant

PLANS AND SPECIFICATIONS and other data must also be filed

Bldg. Form 3

BUILDING DIVISION

3

DEPARTMENT OF BUILDING AND SAFETY

Application to Alter, Repair or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

	REMOVED FROM	REMOVED TO	
TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor CITY CLERK PLEASE VERIFY	Lot.......... Block..........	Lot.......... Block..........	O. K. City Clerk By........ Deputy
	Tract..........	Tract..........	
TAKE TO FIRST FLOOR 242 SO. BROADWAY ENGINEER PLEASE VERIFY	Book.... Page.... F. B. Page....	Book.... Page.... F. B. Page....	O. K. City Engineer By........ Deputy
	From No. 206 Santa Fe Ave Street		
	To No. Between E 1st and E. 3rd Street		

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Santa Fe Station
2. What purpose will Building be used for hereafter? Same
3. Owner's name Santa Fe Railway Phone
4. Owner's address 206 Santa Fe Avenue
5. Architect's name Phone
6. Contractor's name Electrical Products Corp Phone
7. Contractor's address 1128 West 16th St
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $200.00
9. Class of present Building D No. of rooms at present
10. Number of stories in height one Size of present Building Irregular
11. State how many buildings are on this lot This one only
12. State purpose buildings on lot are used for as above (Apartment House, Hotel, Residence, or any other purpose.)
13. What Zone is Property in? C

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

We want to put two little signs 3'-8" x 9'-10½" on the open shed which stands between the waiting room and the baggage room, and also between the tracks on the east and the cab stand on the west

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not. (over)

☞ OVER 2/23/28

(Sign here) Electrical Products Corp by J. Manington (Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	Stamp here when permit is issued
6467	A. H. Miller, Plan Examiner	3/5/28 ZE 11063 Clerk	MAR 5 1928

PLANS

Ed Penney

200

14. Size of new addition none x No. of Stories in height
15. Material of foundation Size footings Size wall Depth below ground
16. Size of Redwood Mudsills x Size of interior bearing studs x
17. Size of exterior studs x Size of interior non-bearing studs x
18. Size of first floor joists x Second floor joists x
19. Will all Lathing and Plastering Comply with Ordinance? yes
20. Will all provisions of State Housing Act be complied with? yes

I have carefully examined and read the above blank and know the same is true and correct, and that all provisions of the Ordinance and Laws governing Building Construction will be complied with, whether herein specified or not.

(Sign here) J A Manington
(Owner or Authorized Agent)

FOR DEPARTMENT USE ONLY

APPLICATION	O. K. Norm
CONSTRUCTION	O. K. Norm
ZONING	O. K. CP
SET-BACK LINE	O. K. CP
ORD. 33761 (N. S.)	O. K. CP
FIRE DISTRICT 1	O. K. Norm

REMARKS

Note: We are proposing to build these signs according to the fourth paragraph of Section 6 of the Sign ordinance
J A Manington

Bldg. Form 3

USE INK OR INDELIBLE PENCIL

3

CITY OF LOS ANGELES

DEPARTMENT OF BUILDING AND SAFETY

BUILDING DIVISION

Application to Alter, Repair, Move or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

REMOVED FROM	REMOVED TO
Lot	Lot
Tract	Tract

Present location of building: 300 So. Santa Fe Ave. (House Number and Street)

New location of building: Same (House Number and Street)

Between what cross streets: 3 & 4

Approved by City Engineer. .... Deputy.

1. Purpose of PRESENT building: Freight House (Store, Residence, Apartment House, Hotel, or any other purpose) Families ...... Rooms ......
2. Use of building AFTER alteration or moving: Same Families ...... Rooms ......
3. Owner (Print Name): Santa Fe R.R. Phone ......
4. Owner's Address: 300 So. Santa Fe Ave.
5. Certificated Architect: None State License No. ...... Phone ......
6. Licensed Engineer: Blaine Noice State License No. 97 Phone GL0367
7. Contractor: Cogar Bros State License No. ...... Phone PR3549
8. Contractor's Address: 1250 Santeeus
9. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and/or elevator equipment therein or thereon.) $ 1000.00
10. State how many buildings NOW on lot and give use of each: Freight House (Residence, Hotel, Apartment House, or any other purpose)
11. Size of existing building ...... x ...... Number of stories high One Height to highest point 25-0"
12. Class of building B Material of existing walls Concrete Exterior framework ...... (Wood or Steel)

Describe briefly and fully all proposed construction and work:

Add steel structure for roof sign

This permit does not include the sign.

Fill in Application on other Side and Sign Statement (OVER)

4/20/36

FOR DEPARTMENT USE ONLY

PERMIT NO.				Fee 6.00
9192	Plans and Specifications checked: J. Martin	Zone: E	Fire District No. 1	Stamp here when Permit is issued
	Corrections verified: [illegible]	Bldg. Line: 110 Ft.	Street Widening: 72 Ft.	
	Plans, Specifications and Applications rechecked and approved: [illegible]	Application checked and approved: [illegible] 4-20 Clerk		
PLANS 4/20/36 Rec'd	For Plans see	Filed with	SPRINKLERS Required Valuation Included / Specified Yes—No	Inspector: [illegible]

3

APPLICATION TO ALTER, REPAIR OR DEMOLISH AND FOR A Certificate of Occupancy

CITY OF LOS ANGELES DEPARTMENT OF BUILDING AND SAFETY BUILDING DIVISION

Lot No.

Tract Bigelow Tract

Location of Building 214 South Santa Fe Ave (House Number and Street)

Between what cross streets 1st & 2nd Streets

Approved by City Engineer

Deputy.

USE INK OR INDELIBLE PENCIL

1. Present use of building Freight Warehouse (Store, Dwelling, Apartment House, Hotel or other purpose) Families Rooms
2. State how long building has been used for present occupancy New under construction
3. Use of building AFTER alteration or moving same Families Rooms
4. Owner The A. T. & S. F. Railway Company Phone
5. Owner's Address 121 East Sixth St. P. O. Los Angeles, Calif.
6. Certificated Architect A. L. Gilman State License No. B 794 Phone MU 0111
7. Licensed Engineer M. C. Blanchard State License No. 2167 Phone MU 0111
8. Contractor The Utah Construction Co State License No. 1298 Phone MA 8314
9. Contractor's Address No. 1 Montgomery St., San Francisco, Calif.
10. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $ 51.00
11. State how many buildings NOW on lot and give use of each. One Warehouse under construction (Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building 60' x 480' Number of stories high 1 Height to highest point 17'
13. Material Exterior Walls Masonry (Wood, Steel or Masonry) Exterior framework (Wood or Steel)
14. Describe briefly all proposed construction and work:

alteration to Bldg Permit No. 8034/47

Alternation to building Permit No. 904

Rearrangement of partitions [illegible]

NEW CONSTRUCTION 16. partition walls set on 6" floor slab

15. Size of Addition x Size of Lot x Number of Stories when complete
16. Footing: Width * Depth in Ground Width of Wall Size of Floor Joists x
17. Size of Studs 2 x 4 Material of Floor Concrete Size of Rafters 2x10s Type of Roofing

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

Sign here THE UTAH CONSTRUCTION COMPANY (Owner or Authorized Agent)

By [signature]

FOR DEPARTMENT USE ONLY

PLAN CHECKING	REINFORCED CONCRETE	FEES	
Date	Bbls. Cement		Bldg. Per.
Receipt No. 6037	Tons of Reinforcing Steel		Cert. of Occupancy
Valuation			
Fee Paid $ 1.50			Total 1.50

TYPE	GROUP	Occupancy	Inside Lot / Corner Lot	Key Lot / Reverse Corner Lot Keyed	Lot Size	Feet rear alley / Ft. side alley	Cond.
III-A	G-1						

PERMIT No. 12160

Plans and Specifications checked [signature]

Correction Verified [signature]

Plans, Specifications and Application rechecked and approved [signature]

Zone M-1 / Bldg. Line / Application checked and approved [signature]

Fire District / Street Widening / Ft.

District Map No.

Stamp here when Permit is issued

APR 28 1947

For Plans See / Filed with 8034/47

Guidance / Inspection / INSPECTOR / Specified—Required / Valuation Included / Fee—Ok

Inspector [signature]

PLANS

3 CITY OF LOS ANGELES

APPLICATION FOR INSPECTION — TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

B&S B-3 (R8.78) DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: Applicant to Complete Numbered Items Only.

1. LEGAL DESCR. LOT: No # BLK: --- TRACT: Part of City Land of Los Angeles — DIST. MAP: 129 217 — CENSUS TRACT: 2065.00
2. PRESENT USE OF BUILDING: (24 Truck Terminal — NEW USE OF BUILDING: (22) same — ZONE: M3-3
3. JOB ADDRESS: 300 S. Santa Fe Ave. — FIRE DIST.: II
4. BETWEEN CROSS STREETS: 1st. St. AND 4th St. — LOT TYPE
5. OWNER'S NAME: Santa Fe ~~Axex~~ Trail-Trans. Co. PHONE: 628-0111 — LOT SIZE: inc.legal
6. OWNER'S ADDRESS: 300 S. Santa Fee Ave. CITY: LA ZIP: 90013
7. ENGINEER: R.W. Haussler BUS. LIC. NO. SE696 ACTIVE STATE LIC. NO. 997-0401 PHONE — ALLEY: /
8. ARCHITECT OR DESIGNER: / BUS. LIC. NO. ACTIVE STATE LIC. NO. PHONE — BLDG. LINE: /
9. CONTRACTOR: N/S BUS. LIC. NO. ACTIVE STATE LIC. NO PHONE — AFFIDAVITS: #ZI223 CCPD
10. BRANCH LENDER: / ADDRESS CITY
11. SIZE OF EXISTING BLDG. WIDTH 99 LENGTH 815 — STORIES 1 — HEIGHT — NO. OF EXISTING BUILDINGS ON LOT AND USE 1
12. CONST. MATERIAL OF EXISTING BLDG. → EXT. WALLS conc — ROOF truss — FLOOR conc

3

13. JOB ADDRESS: 300 S. Santa Fe Ave. — DISTRICT OFFICE: LA
14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING: $ 7,000 — SEISMIC STUDY ZONE
15. NEW WORK: (Describe) 8'x300' alum. canopy over loading dock STD#207 & 224. — GRADING: / — HIGHWAY DED.: yes

NEW USE OF BUILDING: 22-truck terminal	SIZE OF ADDITION: 8'x300'	STORIES: 1	HEIGHT: 14	FLOOD: /
TYPE: IV	GROUP OCC.: G1	BLDG. AREA: 2400sf	PLANS CHECKED: [signature]	CONS.: /
DWELL. UNITS: /	MAX OCC.: /	TOTAL	PLANS APPROVED: [signature]	ZONED BY: [signature]
GUEST ROOMS: /	PARKING REQ'D: NC	PARKING PROVIDED STD. NC COMP.	APPLICATION APPROVED: [signature]	FILE WITH
SPRINKLERS REQ'D SPECIFIED: /	CONT. INSP.: /		INSPECTION ACTIVITY: COMB / MAJ. S. / CONS	INSPECTOR

P.C.	S.P.C.	B.P.	P.M.	I.P.	G.P.I.	C/O	O.S.
41.65		49.00		/			

P.C. NO. — WORKER'S COMPENSATION INSURANCE CERTIFICATE ON FILE / EXEMPT [initials] — ENERGY: NONE — TYPIST: KCB

PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

CASHIER'S USE ONLY

JAN30-79 55590010 5 76899 SS 160K 41.65

Jan 30-79 55900 s - 6ck PK 41.65

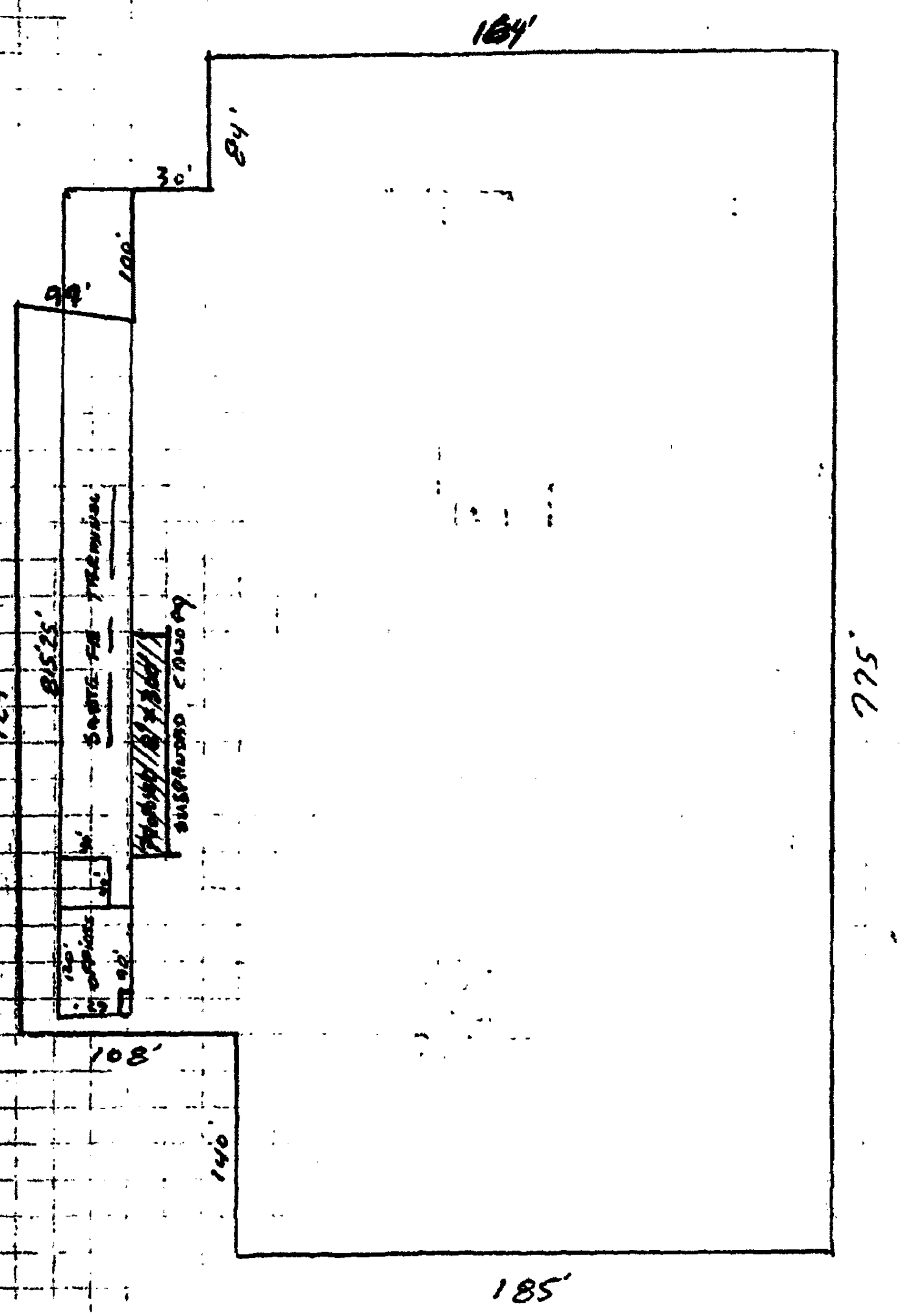
Jan 30-79 55901 76899 s - 1ck 49.00

LIMIT OF PERMIT

"This permit is an application for inspection, the issuance of which is not an approval or an authorization of the work specified herein. This permit does not authorize or permit, nor shall it be construed as authorizing or permitting the violation or failure to comply with any applicable law. Neither the City of Los Angeles, nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein, or the condition of the property or soil upon which such work is performed." (See Sec. 91.0202 L.A.M.C.)

Signed [signature]
(Owner or Agent having Property Owner's Consent). ALSO, sign statement on reverse side, if applicable.

			Signature/Date
Bureau of Engineering	ADDRESS APPROVED		Amaya 1-29-79
	DRIVEWAY		
	HIGHWAY DEDICATION	REQUIRED	
		COMPLETED	
	FLOOD CLEARANCE		
SEWERS		SEWERS AVAILABLE	
		NOT AVAILABLE	
		SFC PAID	
	SFC NOT APPLICABLE	SFC DUE	
Plumbing	PRIVATE SEWAGE SYSTEM APPROVED		
Conservation	APPROVED FOR ISSUE ☐ NO FILE ☐ FILE CLOSED ☐		
Fire	APPROVED (TITLE 19) (L.A.M.C.-5700)		
Housing	HOUSING AUTHORITY APPROVAL		
Planning	APPROVED UNDER CASE #		
Traffic	APPROVED FOR		
Construction Tax	RECEIPT NO.	DWELLING UNITS	



SANTE FE TRAILWAYS TERMINAL
300 S. SANTE FE
LOS ANGELES

BLDG. DEPT. FORM 2 *All applications must be filled out by applicant*

PLANS AND SPECIFICATIONS and other data must also be filed

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

2 Application for the Erection of Frame Building

CLASS "D"

To the Board of Public Works of the City of Los Angeles:
Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.
Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 FIRST FLOOR — CITY CLERK PLEASE VERIFY

Lot No. .... Block ....
(Description of Property)
Santa Fe Grounds
District No. .... M. B. Page .... F. B. Page ....

O. K. City Assessor By .... Deputy.

TAKE TO ROOM No. 405 SOUTH ANNEX — ENGINEER PLEASE VERIFY

No. ....
(Location of Job)
110 Santa Fe Ave Street

O. K. City Engineer By [illegible signature] Deputy.

(USE INK OR INDELIBLE PENCIL)

1. Purpose of Building Red Cross Canteen Hut No. of Rooms .... No of Families ....
2. Owner's name American Red Cross Soc. Phone ....
3. Owner's address 10th & Main Sts.
4. Architect's name .... Phone ....
5. Contractor's name Same Phone ....
6. Contractor's address ....
7. ENTIRE COST OF PROPOSED WORK (including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, etc.) $ 400.00
8. Any other buildings on the lot? Yes How used? ....
9. Size of the proposed building 14 x 30 Height to highest point .... feet
10. Number of stories in height one Character of ground ....
11. Material of foundation .... Size footings .... Size wall .... Depth below ground ....
12. Material of chimneys .... Number of inlets to flues .... Interior size of flues ...... x ......
13. Give sizes of following materials: REDWOOD MUDSILLS 2 x 6 Girders ...... x ......

EXTERIOR studs 2 x 3 INTERIOR BEARING studs ...... x ...... Interior Non-Bearing studs ...... x ...... Ceiling joists 2 x 3 Roof rafters 2 x 3 FIRST FLOOR JOISTS 2 x 6

Second floor joists ...... x ...... Third floor joists ...... x ...... Specify material of roof Comp.

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER

(Sign here) [illegible signature] Acting Manager Canteen A.R.C.
(Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and specifications checked and found to conform to Ordinances, State Laws, etc. (Use Ink)	Application checked and found O. K. (Use Rubber Stamp)	Stamp
4987	[illegible signature] Plan Examiner.	9-25-18 [illegible] Clerk.	SEP 26 1918 L.A. Bldg. Dept.

4 Thomas 1 [illegible]

3

APPLICATION TO ALTER - REPAIR - DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — B&S Form B-3 — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR. LOT / BLK. / TRACT: part of City Land of Los Angeles — ADDRESS APPROVED: RB
2. BUILDING ADDRESS: 110 S. Santa Fe Ave. — DIST. MAP: 129-217
3. BETWEEN CROSS STREETS: 1st St. AND 2nd St — ZONE: M-3-3
4. PRESENT USE OF BUILDING: yard office — NEW USE OF BUILDING: same — FIRE DIST.: II
5. OWNER'S NAME: A.T. & S.F. Ry Co. — PHONE: — INSIDE
6. OWNER'S ADDRESS: 121 E. 6th St. — P.O. — ZONE — KEY — COR. LOT — REV. COR.
7. CERT. ARCH.: B.A.Teel — STATE LICENSE: C671 — PHONE: MU80111 — LOT SIZE: acreage
8. LIC. ENGR. — STATE LICENSE — PHONE
9. CONTRACTOR: owner — STATE LICENSE — PHONE — REAR ALLEY — SIDE ALLEY
10. CONTRACTOR'S ADDRESS: above — P.O. — ZONE — BLDG. LINE: x
11. SIZE OF EXISTING BLDG.: 165x20 — STORIES: 1 — HEIGHT: 10 — NO. OF EXISTING BUILDINGS ON LOT AND USE: R.R. Bldgs. — BLDG. AREA: N.C.

3 110 S. Santa Fe Ave — DISTRICT OFFICE: LA

12. MATERIAL EXT. WALLS: [x] WOOD [ ] METAL [ ] CONC. BLOCK [ ] STUCCO [ ] BRICK [ ] CONCRETE — ROOF CONST.: [x] WOOD [ ] STEEL [ ] CONC. [ ] OTHER — ROOFING: comp — SPRINKLERS REQ'D. SPECIFIED
13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 4,000.00 — VALUATION APPROVED — AFFIDAVITS
14. SIZE OF ADDITION: NONE — STORIES — HEIGHT — Add 2 urinals — APPLICATION CHECKED: McCausland
15. NEW WORK: (Describe) — EXT. WALLS — ROOFING — basins — 3 toilets — PLANS CHECKED — DWELL. UNITS: —
install opening
add partitions (intr. non-brg) — CORRECTIONS VERIFIED — SPACES PARKING: N.C.

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance, and I have read reverse side of Application. — PLANS APPROVED — GUEST ROOMS: —

Signed XC Rosenstengel — APPLICATION APPROVED — FILE WITH: —

This Form When Properly Validated is a Permit to Do the Work Described. — INSPECTOR — CONT. INSP.: No

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O
V	G-1	N.C.	3—			600	x		

CASHIER'S USE ONLY

LA33110 — MAR-14-63 13245 B — 2 CS 3.00

~~MAR-14-63 13246 B — 1 CS 6.00~~

P.C. No. J-2840 — GRADING x — CRIT. SOIL x — CONS. x

SEWER (Available) (Not Available) — CRITICAL SOIL

Bldg. Form 1 1/505/

CITY OF LOS ANGELES

DEPARTMENT OF BUILDING AND SAFETY

BUILDING DIVISION

Application for the Erection of a Building

OF

CLASS "A", "B" OR "C"

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

Lot No. Block X, Sub-Division of Aliso Tract 1, 2, 3, 4 &

Map Book 4, Page 12-13

Tract Sub-Division of Aliso Tract

Location of building 110-114 North Santa Fe Avenue (House Number, and Street)

Between what cross streets Property bounded by Center, Santa Fe and First Streets

Approved by City Engineer (F) Deputy.

USE INK OR INDELIBLE PENCIL

1. Purpose of building Warehouse (Store, Residence, Apartment House, Hotel, or any other purpose) Families ---- Rooms
2. Owner (Print Name) E. H. Stevenson Phone Tr. 3367
3. Owner's address 1333 Willow Street
4. Certificated Architect Charles F. Plummer State License No. P-947 Phone Va. 2013
5. Licensed Engineer J. J. Rees State License No. 1100 Phone Tu. 2469
6. Contractor ~~Not awarded~~ Frank A Woodyard State License No. 37645 Phone BR21549
7. Contractor's address 9470 Santa Monica Blvd
8. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and/or elevator equipment therein or thereon.) $ 14,000.00 MC
9. State how many buildings NOW on lot and give use of each. One Warehouse & Office Building (Store, Residence, Apartment House, Hotel or any other purpose)
10. Size of new building 107 x 80 No. Stories One Height to highest point 17'
11. Size of lot 217 x 100 Type of soil Sandy Loam
12. Foundation (Material) Concrete Depth in ground 2'
13. Material Exterior Walls Reinforced Brick Skeleton framework Reinforced Brick (Structural Steel, Reinforced Concrete)
14. Material of floors Concrete Roofing material Composition

I have carefully examined and read the above completed Application and know the same is true and correct and hereby certify and agree that if a permit is issued all the provisions of the Building Ordinances and State Laws will be complied with, whether herein specified or not; I also certify that plans and specifications filed will conform to all the Building Ordinances and State Laws.

Sign here E. H. Stevenson (Owner or Authorized Agent)

By Charles F. Plummer

Plans, Specifications and other data must be filed.

FOR DEPARTMENT USE ONLY 3514

PERMIT NO.	Plans and Specifications checked	Zone	Fire District	Fee 4.50
37668	Parish	M-3	No. 1	Stamp here when Permit is Issued
	Corrections verified: Parish	Bldg. Line: no Ft.	Street Widening: no Ft.	NOV -9 1938
PLANS	Plans, Specifications and Application rechecked and approved.	Application checked and approved: 11/9/38		
	For Plans See / Filed with	SPRINKLER Required / Valuation Included	Specified Yes—No	Inspector E R Stam

201

Bldg. Form 1

1

(6-5)

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Application for the Erection of a Building

OF

CLASS ~~"A" "B"~~ OR "C"

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

Lot No. #2 & #4 Block X subdivision of Aliso Tract

Tract

Location of building 120 N Santa Fe Ave (House Number, and Street)

Between what cross streets 1st & Banning S.E. cor.

Approved by City Engineer: R.B. Jones, Deputy.

USE INK OR INDELIBLE PENCIL

1. Purpose of building Warehouse (Store, Residence, Apartment House, Hotel, or any other purpose) Families — Rooms —
2. Owner (Print Name) E H Stevenson Phone TR 3367
3. Owner's address 1333 Willow St.
4. Certificated Architect None State License No. Phone
5. Licensed Engineer Don Hall McCreery State License No. 1229 Phone TU 7307
6. Contractor McCreery & Skovmand State License No. 46402 Phone TU 7307
7. Contractor's address 210 W 7th St
8. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and/or elevator equipment therein or thereon.) $ 15000.00 R.P.C.
9. State how many buildings NOW on lot and give use of each. None (Store, Residence, Apartment House, Hotel or any other purpose)
10. Size of new building 100 x 120 No. Stories 1 Height to highest point 20'
11. Size of lot 100 x 210 Type of soil Hard Sandy Loam
12. Foundation (Material) Concrete Depth in ground 2'-0"
13. Material Exterior Walls Grouted Brick Skeleton framework — (Structural Steel, Reinforced Concrete)
14. Material of floors Concrete Roofing material Composition

I have carefully examined and read the above completed Application and know the same is true and correct and hereby certify and agree that if a permit is issued all the provisions of the Building Ordinances and State Laws will be complied with, whether herein specified or not; I also certify that plans and specifications filed will conform to all the Building Ordinances and State Laws.

Sign here: By Don Hall McCreery (Owner or Authorized Agent)

By

Plans, Specifications and other data must be filed.

FOR DEPARTMENT USE ONLY 5574				
PERMIT NO. 21464	Plans and Specifications checked:	Zone: M3	Fire District No. 1	Fee 48.00
	Corrections verified:	Bldg. Line: Non	Street Widening: no Ft.	Stamp here when Permit is issued: JUN 28 1937
	Plans, Specifications and Application rechecked and approved:	Application checked and approved: 6/28/37	Clerk	
PLANS	For Plans See:	Filed with:	SPRINKLER Required / Valuation included / Yes—No	Inspector

2018

3

APPLICATION TO ALTER - REPAIR - DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

B&S Form B-3

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR. LOT | BLK. | TRACT — ADDRESS APPROVED
2. BUILDING ADDRESS: 120 North Santa Fe Avenue — DIST. MAP
3. BETWEEN CROSS STREETS: First Street AND Aliso Street — ZONE
4. PRESENT USE OF BUILDING: Warehouse (22) — NEW USE OF BUILDING: (22) Same — FIRE DIST.
5. OWNER'S NAME: E.H. Stevenson — PHONE: F.R. 7- 6048 — INSIDE KEY
6. OWNER'S ADDRESS: 3948 Admirable Drive — P.O.: Portuguese Bend — ZONE — COR. LOT REV. COR.
7. CERT. ARCH. — STATE LICENSE — PHONE — LOT SIZE
8. LIC. ENGR. — STATE LICENSE — PHONE
9. CONTRACTOR: Strong Roofong & Insulating Co. — STATE LICENSE — PHONE: At. 2-1159 — REAR ALLEY — SIDE ALLEY
10. CONTRACTOR'S ADDRESS: 710 South Garfield Avenue — P.O.: Alhambra — ZONE — BLDG. LINE
11. SIZE OF EXISTING BLDG.: 100'x120' — STORIES: 1 — HEIGHT: 22' — NO. OF EXISTING BUILDINGS ON LOT AND USE: 1 — BLDG. AREA

SEWER (Available) (Not Available)

3 120 N. Santa Fe Ave — DISTRICT OFFICE: LA

12. MATERIAL EXT. WALLS: ☐ WOOD ☐ METAL ☐ CONC. BLOCK ☐ STUCCO ☒ BRICK ☐ CONCRETE — ROOF CONST.: ☒ WOOD ☒ STEEL ☒ CONC. ☐ OTHER — ROOFING — SPRINKLERS REQ'D. SPECIFIED
13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 1997.00 — VALUATION APPROVED — AFFIDAVITS
14. SIZE OF ADDITION — STORIES — HEIGHT — APPLICATION CHECKED
15. NEW WORK: (Describe) EXT. WALLS — ROOFING: reroofing — PLANS CHECKED — DWELL. UNITS

1-30# & 1-105#

CORRECTIONS VERIFIED — SPACES PARKING

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance, and I have read reverse side of Application.

PLANS APPROVED — GUEST ROOMS

APPLICATION APPROVED — FILE WITH

Signed

INSPECTOR — CONT. INSP.

This Form When Properly Validated is a Permit to Do the Work Described.

CRITICAL SOIL

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O
						10.60			

CASHIER'S USE ONLY

SEP-3-65 472745 • 3475 X — 1 CK 10.00

P.C. No. ______ GRADING ______ CRIT. SOIL ______ CONS. ______

S CITY OF LOS ANGELES

APPLICATION FOR INSPECTION OF SIGNS
PUBLIC RECORD

B & S B-5 — R 10.79
DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR. LOT: FR. 4 | BLOCK: | TRACT: Sub. of the Aliso Tract | COUNCIL DISTRICT NO. 9
DIST. MAP: 129-217
CENSUS TRACT: 2061.00

2. TYPE OF SIGN OR NEW WORK: 19) 3-Wall Sign(relocated) ☐ RESIDENTIAL ☐ COMMERCIAL
ZONE: M3-3

3. JOB ADDRESS: 120 N. Santa Fe Ave.
FIRE DIST.: II

4. BETWEEN CROSS STREETS: 1st AND Banning
LOT (TYPE): corner

5. OWNER'S NAME: Shipman/ward Inc. PHONE:
LOT SIZE: 40x138.50

6. OWNER'S ADDRESS: same CITY: LA ZIP: 90012

7. ARCHITECT OR ENGINEER: / BUS. LIC. NO. ACTIVE STATE LIC. NO. PHONE
ALLEY: /

8. QUALIFIED INSTALLER: owner BUS. LIC. NO. ACTIVE STATE LIC. NO. PHONE
BLDG. LINE: /

9. INSTALLER'S ADDRESS: / CITY ZIP
AFFIDAVITS: /

10. SIZE OF EXISTING BUILDING WIDTH 80 LENGTH 100 | TYPE | STORIES 1 | EXT. WALL CONST. renif.const. | ROOF CONST. wood

11. SIZE OF SIGN 6x18/4x4/4x10 | TOTAL COPY AREA 64 | OVERALL HEIGHT → | FROM GRADE | FROM ROOF

12. MATERIAL OF SIGN CONSTRUCTION → | SUPPORTING FRAME wood | FRAME OF COPY mtl | SURFACE OF SIGN mtl
HIGHWAY DED.: yes

13. JOB ADDRESS: 120 N. Santa Fe Ave.
DIST. OFFICE: LA.

14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED SIGN $ 201
GRADING: /

15. TYPE OF SIGN OR NEW WORK: 3-Wall Sign(Relocated) ☒ SINGLE FACE ☐ DOUBLE FACE
CONS.: /

16. ILLUMINATION ☒ NONE ☐ INTERNAL ☐ EXTERNAL ☐ FLASHING ☐ REVOLVING ☐ OTHER ☒ NONE
ZONED BY: Rosnefield

17. NO. OF SIGNS OR GAS TUBE SYSTEMS / | NO. OF ADDITIONAL BRANCH CIRCUITS / | NO. OF CONTROL DEVICES /
FREEWAY CLEARANCE: Cleared A.Flores
DATE 3/26/80

CLEARANCES AND/OR APPROVALS REQUIRED	Yes	No
FREEWAY SURVEY	☐	☒
TRAFFIC DEPT.	☐	☒
BOARD	☐	☒

PERMIT FEES		
SIGNS/G. T. SYSTEMS		
ADDITIONAL CIRCUITS		
ELECTRICAL SERVICE		
CONTROL DEVICES		
BLDG. PERMIT	7	40
ISSUING FEE	—	
S.P.C.	TOTAL 7	40

PLANS CHECKED
PLANS APPROVED
APPLICATION APPROVED
CONT. INSP. | INSP. ACTIVITY | BMI
I.F. / | G.P.I.
FILED WITH
INSPECTOR

P.C.
P.C. NO.
WORKER'S COMPENSATION INSURANCE CERTIFICATE ON FILE / EXEMPT
TYPIST: et

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

CASHIER'S USE ONLY

MAR-26-80 67999 S •00267 U — ~~1~~ 2 CS 7.40

LIMIT OF PERMIT

18. APPLICANT—Check the appropriate box: fill in the blanks, sign at the bottom.
☐ I hold State Contractor's License No. ______________ which is in full force and effect.
☐ I am exempt from the provisions of Chapter 9, Division 3, Business and Professions Code pursuant to the exemption specified therein on the basis that:

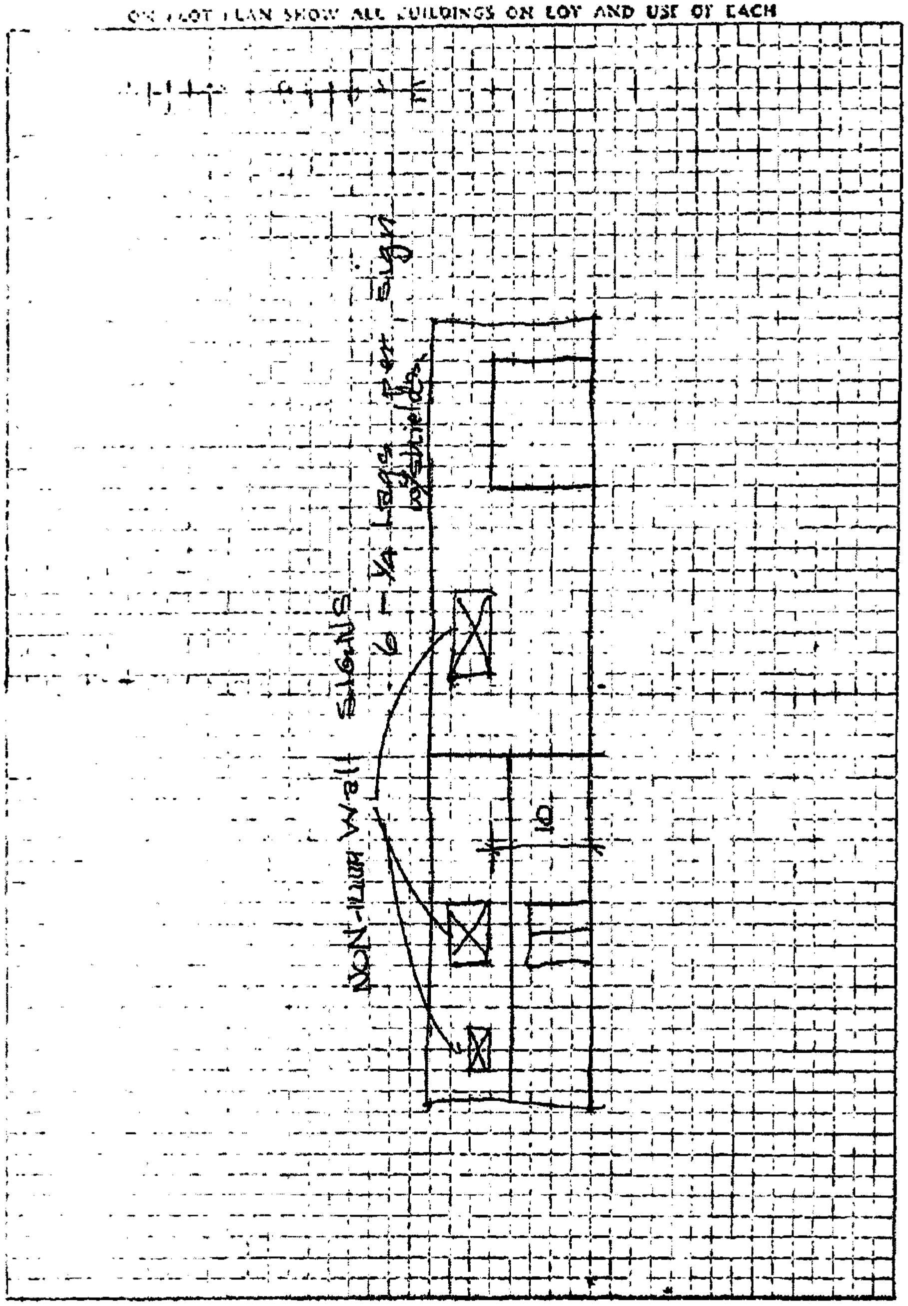
I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein; that it does not authorize or permit any violation or failure to comply with any applicable law; that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202-LAMC)

Signed ______ (Owner or agent having property owner's consent) Also sign statement on reverse side if applicable
Position: partner
Date: 3/26/80

		Signature/Date
Bureau of Engineering	ADDRESS APPROVED Bernard 3/25/80	
	HIGHWAY DEDICATION	
Conservation	APPROVED FOR ISSUE ☐ NO FILE ☐ FILE CLOSED ☐	
Traffic	APPROVED FOR ISSUE	
Municipal Arts	APPROVED FOR ISSUE	
Planning	APPROVED UNDER CASE #	
Board of Building and Safety Commissioners File #		

WORKER'S COMPENSATION CERTIFICATION

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH



All applications must be filled out by applicant.

WARD 7

Applicant must indicate the Building Line or Lines clearly and distinctly on the drawings.

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

Application to Alter, Repair or Demolish

Application is hereby made to the Chief Inspector of Buildings of the City of Los Angeles, for the approval of the detailed statement of the specifications herewith submitted for the alteration, repair or demolition of the building herein described. All provisions of the Building Ordinances shall be complied with in the alteration, repair or demolition of said building, whether specified or not.

(Sign here) O. H. Fellows

Los Angeles, Cal., JUN 30 1909, 190

CITY ASSESSOR: Please Verify

TAKE TO ROOM NO 6 FIRST FLOOR

REMOVED FROM	REMOVED TO
Lot ____, Block ____	Lot ____, Block ____
Tract Santa Fe Ry Co Depot	Tract
Ast 147	
	R. Mallard Dy
Book 5 Page 8 F. B. Page 100	Book ____ Page ____ F. B. Page ____

TAKE TO ROOM NO. 34 THIRD FLOOR

CITY ENGINEER; Please Verify Street Number

From No. 200 Santa Fe Ave To No.

1. Owner's name A. T. and S. F. Depot
2. Owner's address
3. Architect's name
4. Builder's name O. A. Fellows
5. Builder's address 307 Herckhoff Bldg
6. Entire cost of the Proposed Improvements, $ 900.
7. Purpose of building Brick
8. Class of building Depot No. of rooms at present
9. No. of stories in height 1 Size of building ____ X ____
10. Size of addition ____ X ____
11. Material of foundation Concrete Size Footing 2? X 18" Size of wall 13"
12. Size of exterior studs ____ X ____ Interior studs ____ X ____
13. Size of mud sills ____ X ____ Bearing studs ____ X ____
14. Size of first floor joist ____ X ____ Second floor joist ____ X ____
15. State on following lines just what you want to do: Will install 7 new

Regla Siphon Jet Closets —

Permit No. 3808

All applications must be filled out by applicant
USE INK OR INDELIBLE PENCIL

WARD /

PLANS AND SPECIFICATIONS and other data must also be filed

BOARD OF PUBLIC WORKS

2

DEPARTMENT OF BUILDINGS

Application for the Erection of Frame Building

CLASS "D"

To the Board of Public Works of the City of Los Angeles:

Application is hereby made to the Board of Public Works of the City of Los Angeles, through the office of the Chief Inspector of Buildings, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be, prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

(SIGN HERE) Fred Wilhite (Applicant)

O. K. BY

Lot No. 147 Block

Santa Fe Depot Grounds

TAKE TO ROOM NO. 6 FIRST FLOOR ASSESSOR PLEASE VERIFY

District No. 5 M. B. page 8 F. B. Page 107

O. K. City Assessor By Deputy

TAKE TO ROOM NO 34 THIRD FLOOR ENGINEER PLEASE VERIFY

No. Santa Fe R.W.

Rear of Santa Fe Depot

200 Santa Fe Ave Street

O. K. City Engineer By Deputy

1. PURPOSE OF BUILDING Warehouse Number of rooms one
2. OWNER'S NAME Santa Fe Railroad
3. Owner's address ~~same~~ 68 Main St
4. Architect's name same
5. CONTRACTOR'S NAME same
6. Contractor's address none
7. ENTIRE COST OF PROPOSED BUILDING, $ 750.00
8. Size of lot x Size of Building 18' x 25'
9. Will building be erected on front or rear of lot? rear
10. NUMBER OF STORIES IN HEIGHT one Height to highest point of roof 14'
11. Height of first floor joist above curb level, or surface level of curb
12. Character of ground; rock, clay, sand, filled, etc.
13. Of what material will FOUNDATION and cellar walls be built? Concrete
14. GIVE depth of FOUNDATION below the surface of ground 6"
15. GIVE dimensions of FOUNDATION and cellar wall FOOTINGS 12"
16. GIVE width of FOUNDATION and cellar wall at top 6"
17. NUMBER and KIND of chimneys none Number of flues none
18. Number of inlets to each flue none Interior size of flues none x
19. Give sizes of following materials: REDWOOD MUDSILLS 2" x 6" Girders x

EXTERIOR studs 2" x 4" INTERIOR BEARING studs none Interior Non-bearing studs x

Ceiling joist 2" x 4" Roof rafters 2" x 4" FIRST FLOOR JOISTS none

SECOND FLOOR JOIST x Third floor joist x Fourth floor joist x

Date issued APR 23 1913 191

PERMIT NO. 5633

(5)

Application Received W.G.

OVER

9c

1 APPLICATION TO ERECT A NEW BUILDING AND FOR A Certificate of Occupancy

CITY OF LOS ANGELES DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Lot No. Parcel 98 - That tract of land South of East 1st, and north of East 4th St. Bounded on the west by Santa Fe Ave. and on East by Los Angeles

Tract River

Location of Building 200 S. Santa Fe Ave.
(House Number and Street)

Between what cross streets? E of Santa Fe Ave, So. side of First St., Between 1st St and 4th St.

Approved by City Engineer
Deputy.

USE INK OR INDELIBLE PENCIL

1. Purpose of building Lavatory & Locker Building (Store, Dwelling, Apartment House, Hotel or other purpose) Families — Rooms 2-Locker 2-Toilet
2. Owner The A.T. & S.F. Ry. Co. (Print Name) Phone Michigan 0111
3. Owner's Address 121 E. 6th St. P. O. Los Angeles Calif.
4. Certificated Architect H.L. Gilman State License No. B-984 Phone MU-0111
5. Licensed Engineer ~~Owner~~ Norman W. Rimmer State License No. 7398 Phone MU-0111
6. Contractor Owner State License No. Phone MU-0111
7. Contractor's Address Owner's
8. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $ 26000.00
9. State how many buildings NOW on lot and give use of each. 15 — Railway Purposes (Store, Dwelling, Apartment House, Hotel or other purpose)
10. Size of new building 28' x 108' No. Stories 1 Height to highest point 14'6" Size lot x
11. Material Exterior Walls Metal Sheets - Butler Rigid Frame Bldg. Type of Roofing Same
12. For Accessory Buildings and Similar structures
    - (a) Footing: Width — Depth in Ground 1'6" Width of Wall 6"
    - (b) Size of Studs Variable I Beams Material of Floor 5" Conc. Slab
    - (c) Size of Floor Joists Conc. Slab Size of Rafters Variable I Beams Butler Rigid Frame

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

Sign here The A.T.&S.F.Ry.Co (Owner or Authorized Agent)

By R.L. Eastman

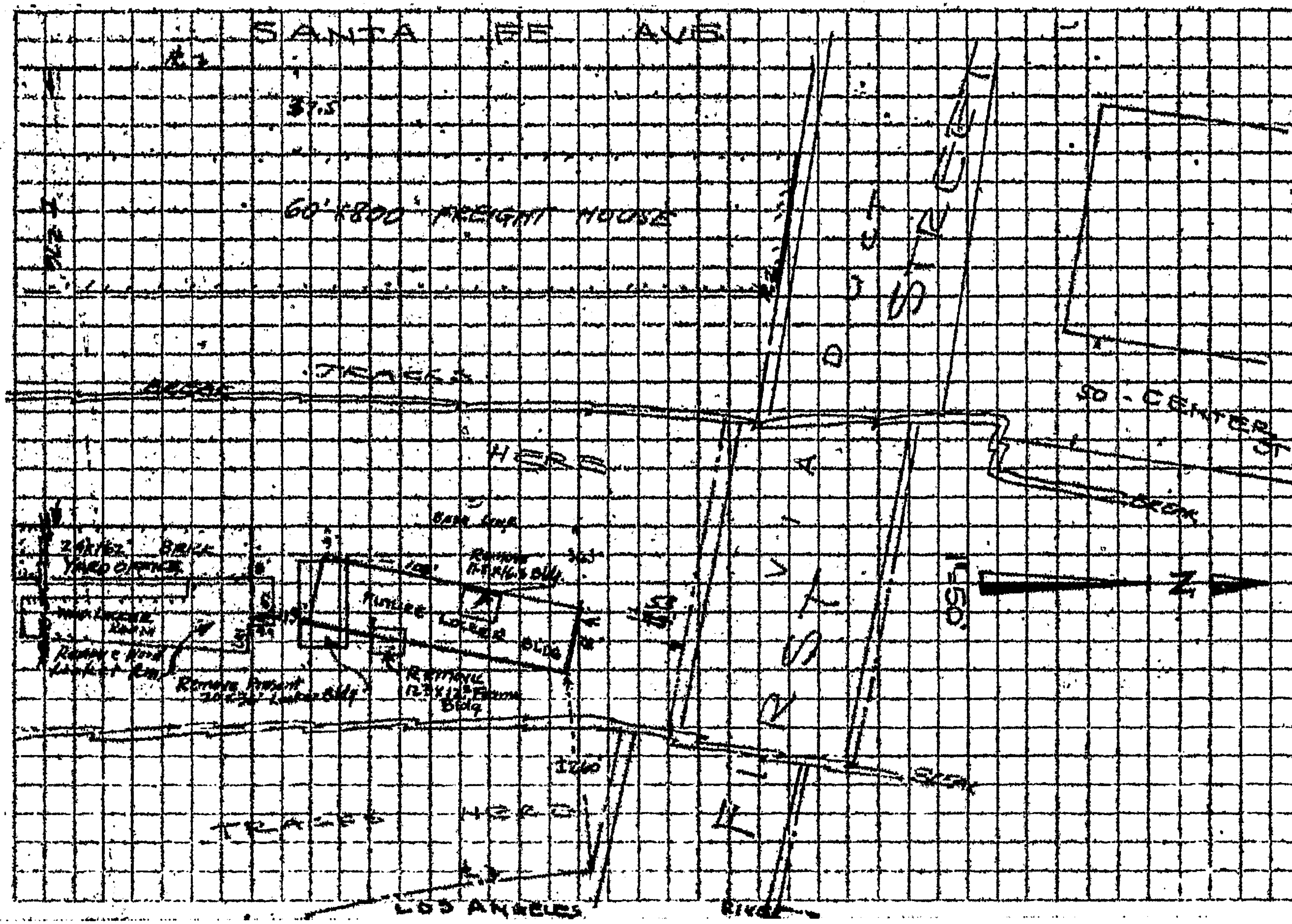
DISTRICT OFFICE

FOR DEPARTMENT USE ONLY

PLAN CHECKING				
Valuation $ 26000.00 Fee $ 40.00	$ $			Investigation Fee $ Bldg. Permit Fee $ Total $ 70.00
Type ~~V~~	Maximum No. Occupants	Inside Lot / Corner Lot: SEE	Key / Corner Lot Keyed: MAP	Lot Line: Legal description	~~Ft. from alley~~ Ft. side alley	Clerk: Parsons
Group G	Plans and specifications checked C.E. Saunders	Zone M-3	Fire District No. 1	District Map No. 5525
Fee Plans Fee ~~X~~	Corrections verified	Bldg. Line Ft.	Street Widening Ft.	Application checked and approved DEC 3 1951 Clerk
Filed with ~~X~~	Plans, Specifications and Applications rechecked and approved J. McGrath	Conformance Inspection	SPRINKLERS Required Valuation Included Yes No None	Inspector

DO NOT WRITE BELOW THIS LINE

TYPE OF RECEIPT	DATE ISSUED	TRACER NO. (M)	RECEIPT NO.	CODE	FEE PAID
Plan Checking	OCT 1951		LA 12458		
Supplemental Plan Checking					
Building Permit	DEC 4 — 1951		LA 22585		



SANTA FE AVE
60'x800' FREIGHT HOUSE
TRACKS HERE
TRACKS HERE
HERE
SO. CENTER ST.
1"=50'
N
1260
LOS ANGELES RIVER
BUNKER LOCKER BLDG.
24'x42' BRICK YARD OFFICE
Remove Present

Bldg. Form 3

All Applications Must be Filled Out by Applicant

PLANS AND SPECIFICATIONS and other data must also be filed

3

BUILDING DIVISION

DEPARTMENT OF BUILDING AND SAFETY

Application to Alter, Repair or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley, or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

	REMOVED FROM	REMOVED TO	
TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor	Lot A-147 Block	Lot A-147 Block	O. K. City Clerk By Deputy
CITY CLERK PLEASE VERIFY	Tract	Tract	
TAKE TO FIRST FLOOR 242 SO. BROADWAY ENGINEER PLEASE VERIFY	Book 5 Page 6 F. B. Page 84	Book 5 Page 6 F. B. Page 84	O. K. City Engineer By Deputy
	From No. 326 S. Santa Fe Ave Street		
	To No. 147 lot 58 & rectangular tract of land Street		

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Store room
2. What purpose will Building be used for hereafter? "
3. Owner's name The A.T. & S.F. Ry. Co. Phone MU. 0111
4. Owner's address Kerckoff Bldg. L.A.
5. Architect's name The A.T. & S.F. Ry. Co. Phone
6. Contractor's name " " " Phone
7. Contractor's address Kerckoff Bldg. L.A.
8. VALUATION OF PROPOSED WORK {Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.} $ 50
9. Class of present Building D No. of rooms at present 2
10. Number of stories in height 1 Size of present Building 12' x 30'
11. State how many buildings are on this lot
12. State purpose buildings on lot are used for Store room (Apartment House, Hotel, Residence, or any other purpose.)

Zone is Property line

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

Building to be moved 120'

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

☞ OVER

(Sign here) L. C. Post (Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	
36656	Plan Examiner	Clerk	DEC 7 1927

Building

Demolish

All Applications Must be Filled Out by Applicant

Bldg. Form 3

PLANS AND SPECIFICATIONS and other data must also be filed

BUILDING DIVISION

3

DEPARTMENT OF BUILDING AND SAFETY

Application to Alter, Repair or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

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Second: That the permit does not grant any right or privilege to use any building or structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor CITY CLERK PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot Ar (14) Block	Lot Ar (14) Block
Tract	Tract

O. K. City Clerk By Deputy

TAKE TO FIRST FLOOR 242 SO. BROADWAY ENGINEER PLEASE VERIFY

REMOVED FROM	REMOVED TO
Book 5 Page 8 F. B. Page 14	Book 5 Page 8 F. B. Page 7

From No. 206 Santa Fe Ave Street

To No. 80' [illegible] at 2nd Street

O. K. City Engineer By Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Tool Room
2. What purpose will Building be used for hereafter? " " "
3. Owner's name The A T & S F Ry Co. Phone MU 0111
4. Owner's address Kerckoff Bldg L.A
5. Architect's name The A.T. & S F Ry Co. Phone
6. Contractor's name " Phone
7. Contractor's address Kerckoff Bldg L.A.
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 25
9. Class of present Building D No. of rooms at present One
10. Number of stories in height One Size of present Building 12' x 18'
11. State how many buildings are on this lot
12. State purpose buildings on lot are used for Tool Room (Apartment House, Hotel, Residence, or any other purpose.)

What Zone is Property in?

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

Building is to be moved 200'

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER

(Sign here) L C Post (Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	Stamp here when permit is issued.
36657	Plan Examiner	12/7/27 Clerk	DEC 7 1927

E. Ramsey

All Applications Must be Filled Out by Applicant

Bldg. Form 3

PLANS AND SPECIFICATIONS and other data must also be filed

BUILDING DIVISION

3

DEPARTMENT OF BUILDING AND SAFETY

Application to Alter, Repair or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

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Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor CITY CLERK PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot Ark (147) Block	Lot Ark (147) Block
Tract	Tract

O. K. City Clerk By Deputy

TAKE TO FIRST FLOOR 242 SO. BROADWAY ENGINEER PLEASE VERIFY

Book 5 Page 8 F. B. Page 84	Book 5 Page 8 F. B. Page 84

From No. 206 Santa Fe Ave Street

To No. 84 pickington of 2nd + 1st Street

O. K. City Engineer By Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Locker Room
2. What purpose will Building be used for hereafter? " "
3. Owner's name The A.T.&S.F.Ry.Co. Phone MU 0111
4. Owner's address Kerckoff Building Los Angeles
5. Architect's name The A.T.&S.F.Ry.Co. Phone
6. Contractor's name " " " Phone
7. Contractor's address Kerckoff Bldg L.A.
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 50
9. Class of present Building D No. of rooms at present one
10. Number of stories in height one Size of present Building 20 x 36
11. State how many buildings are on this lot
12. State purpose buildings on lot are used for locker + wash rooms (Apartment House, Hotel, Residence, or any other purpose.)

What Zone is Property In? ______

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

Building is to be moved 200'

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER

(Sign here) L C Post (Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	Stamp here when permit is issued
36658	Plan Examiner	12/7/27 28 Clerk	DEC 7 1927

Board letter 12/6/27

All Applications Must be Filled Out by Applicant

Bldg. Form 3

PLANS AND SPECIFICATIONS and other data must also be filed

BUILDING DIVISION

3

DEPARTMENT OF BUILDING AND SAFETY

Application to Alter, Repair or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:
Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
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Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor
CITY CLERK PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot Arb (1V7) Block	Lot Arb (1V7) Block
Tract	Tract

O. K. City Clerk By Deputy

TAKE TO FIRST FLOOR 242 SO. BROADWAY
ENGINEER PLEASE VERIFY

REMOVED FROM	REMOVED TO
Book 5 Page 8 F. B. Page 84	Book 5 Page 8 F. B. Page 4

From No. 206 Santa Fe Ave Street
To No. 47 lot 5th Termination st land Street

O. K. City Engineer By Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Locker Room
2. What purpose will Building be used for hereafter? " "
3. Owner's name The A.T. & S.F. Ry. Co. Phone MU 0111
4. Owner's address Kerckoff Bldg LA.
5. Architect's name The A.T. & S.F. Ry. Co. Phone
6. Contractor's name " " " " Phone
7. Contractor's address Kerckoff Bldg LA.
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 25
9. Class of present Building D No. of rooms at present One
10. Number of stories in height One Size of present Building 8' x 10'
11. State how many buildings are on this lot
12. State purpose buildings on lot are used for Locker, Washrooms & store rooms (Apartment House, Hotel, Residence, or any other purpose.)

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

Building to be moved 40 feet

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

☞ OVER

(Sign here) L. C. Post
(Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O.K.	Stamp here when permit is issued.
36659	Plan Examiner	12/7/27 Clerk	DEC 7 1927

1.00

Moved letter 1/6

All Applications Must be Filled Out by Applicant

Bldg. Form 3

PLANS AND SPECIFICATIONS and other data must also be filed

BUILDING DIVISION

3

DEPARTMENT OF BUILDING AND SAFETY

Application to Alter, Repair or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:
Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
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Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor CITY CLERK PLEASE VERIFY

REMOVED FROM	REMOVED TO
Lot Ark (147) Block	Lot Ark (147) Block
Tract	Tract

O. K. City Clerk By Deputy

TAKE TO FIRST FLOOR 242 SO. BROADWAY ENGINEER PLEASE VERIFY

Book 5 Page 8 F. B. Page 4	Book 5 Page 8 F. B. Page 4

From No. 206 Santa Fe Ave Street
To No. Ict 1st St & Intersection of 2nd Street

O. K. City Engineer By Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Motor car storage room
2. What purpose will Building be used for hereafter? " " " "
3. Owner's name The A.T. & S.F. Ry. Co. Phone MU. 0111
4. Owner's address Kerckoff Bldg. LA
5. Architect's name The A.T. & S.F. Ry. Co. Phone
6. Contractor's name " " " Phone
7. Contractor's address Kerckoff Bldg. LA.
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 25
9. Class of present Building D No. of rooms at present One
10. Number of stories in height One Size of present Building 10' x 11'
11. State how many buildings are on this lot
12. State purpose buildings on lot are used for Locker, wash room, store rooms (Apartment House, Hotel, Residence, or any other purpose.)

What Zone is Property In?

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:

Building to be moved 250 ft.

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

☞ OVER

(Sign here) L. C. Post
(Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	Stamp here when permit is issued.
36660	Plan Examiner	12/7/27 ZD Clerk	

Eva Ramsay

Board Notice 14/2

All Applications Must be Filled Out by Applicant

Bldg. Form 3

PLANS AND SPECIFICATIONS and other data must also be filed

BUILDING DIVISION

3 DEPARTMENT OF BUILDING AND SAFETY

Application to Alter, Repair or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:
Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
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Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

TAKE TO ROOM No. 6 REAR OF NORTH ANNEX 1st Floor CITY CLERK PLEASE VERIFY

REMOVED FROM	REMOVED TO
(Ok) (147) Tract of land	Ord-71 Piece of land Bd.
Lot Block	Lot Block
Tract Bd. Nly by 1st St	Tract on W. by Aliso Tr.
W by Santa Fe Ave	S by 1st St
S by 4th St & E by	E by L A River
L A River	

O. K. City Clerk By [signature] Deputy

TAKE TO FIRST FLOOR 242 SO. BROADWAY ENGINEER PLEASE VERIFY

Book 5 Page 8 F. B. Page 84 Book 5 Page 5 F. B. Page
From No. 206 Santa Fe Ave. Street
To No. approximately 833 Banning St. if prolonged Street
about 1100 ft at center line

O. K. City Engineer By [signature] Deputy

(USE INK OR INDELIBLE PENCIL)

1. What purpose is the present Building now used for? Track Scale and House
2. What purpose will Building be used for hereafter? " " " "
3. Owner's name The A T & S F Ry. Co. Phone MU 0111 Sta 462
4. Owner's address Kerckhoff Bldg. L.A.
5. Architect's name The A T & S F Ry. Co. Phone " "
6. Contractor's name " " Phone " "
7. Contractor's address " " " "
8. VALUATION OF PROPOSED WORK (Including Plumbing, Gas Fitting, Sewers, Cesspools, Elevators, Painting, Finishing, all Labor, etc.) $ 4,000
9. Class of present Building D No. of rooms at present One
10. Number of stories in height One Size of present Building 7'-8" x 12'-8"
11. State how many buildings are on this lot One
12. State purpose buildings on lot are used for Scale & Scale House (Apartment House, Hotel, Residence, or any other purpose.)

STATE ON FOLLOWING LINES EXACTLY WHAT ALTERATIONS, ADDITIONS, ETC., WILL BE MADE TO THIS BUILDING:
What Zone is Property in? C

Scale & Scale House is to be moved from south of First street in Santa Fe yard to a point approximately 200 feet north of First Street and 200 feet west of westerly line of the Los Angeles River. Concrete Foundation of scale to be constructed.

I have carefully examined and read the above application and know the same is true and correct, and that all provisions of the Ordinances and Laws governing Building Construction will be complied with, whether herein specified or not.

OVER 1/10/28 1130

(Sign here) L. C. Post Asst. Engr. (Owner or Authorized Agent.)

FOR DEPARTMENT USE ONLY

PERMIT NO.	Plans and Specifications checked and found to conform to Ordinances, State Laws, etc.	Application checked and found O. K.	
1376	[signature] Plan Examiner	1/16/28 [signature] Clerk	JAN 16 1928

975

PLANS

Bldg. Form 1

USE INK OR INDELIBLE PENCIL

3

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Application to Alter, Repair, Move or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:
Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles, through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:
First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof, upon any street, alley or other public place or portion thereof.
Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.
Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

REMOVED FROM	REMOVED TO
Lot	Lot
Tract	Tract

Present location of building: 206 Sante Fe ave. (House Number and Street)

New location of building: (House Number and Street)

Between what cross streets:

Approved by City Engineer.

Deputy.

1. Purpose of PRESENT building R.R. Station Families Rooms (Store, Residence, Apartment House, Hotel, or any other purpose)
2. Use of building AFTER alteration or moving Families Rooms
3. Owner (Print Name) The A T & S Sante FE R R Co. Phone Mu 0111
4. Owner's Address 6 & Main Los Angeles (590 S Main)
5. Certificated Architect State License No. Phone
6. Licensed Engineer State License No. Phone
7. Contractor All-State Wrecking & Salvage Co State License No. City # 54 Phone Ca 11149
8. Contractor's Address 1831 Pasadena ave.
9. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and/or elevator equipment therein or thereon.) $ 300.00
10. State how many buildings NOW on lot and give use of each. (Residence, Hotel, Apartment House, or any other purpose)
11. Size of existing building 40 x 150 Number of stories high 1 Height to highest point 20'
12. Class of building C Material of existing walls Brick Exterior framework Brick (Wood or Steel)

Describe briefly and fully all proposed construction and work:

Demolish & remove

Fill in Application on other Side and Sign Statement (OVER)

PERMIT NO.	FOR DEPARTMENT USE ONLY			Fee 2.50 Stamp here when Permit is Issued
27098	Plans and Specifications checked: H. T. Miller	Zone	Fire District No.	
	Corrections verified: H. T. Miller	Bldg. Line Ft.	Street Widening Ft.	DEC -4 1941
PLANS	Plans, Specifications and Applications rechecked and approved: [illegible]	Application checked and approved: 12/3/41 Yorke Clerk		
Rec'd	For Plans See	Filed with	SPRINKLER Required Valuation Included Specified Yes—No	Inspector: H O Carr

3

APPLICATION TO ALTER - REPAIR - DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

B&S Form B-3

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS:
1. Applicant to Complete Numbered Items Only.
2. Plot Plan Required on Back of Original.

1. LEGAL DESCR. LOT / BLK. / TRACT: Pt. of the City lands of Los Angeles — ADDRESS APPROVED: ID
2. BUILDING ADDRESS: 206 No. Santa Fe Ave. — DIST. MAP: 129-217
3. BETWEEN CROSS STREETS: 2nd AND 3rd — ZONE: M-3-3
4. PRESENT USE OF BUILDING: Storage — NEW USE OF BUILDING: (50) demolish — FIRE DIST.: #2
5. OWNER'S NAME: The A.T. & S.F. Ry. Co. — PHONE: MA 80111 — INSIDE: XXX
6. OWNER'S ADDRESS: 121 E. 6th St. — P.O.: LA — ZONE: 5 — KEY / COR. LOT / REV. COR.
7. CERT. ARCH.: R.A. Teal — STATE LICENSE: C694 — PHONE: MA 80111 — LOT SIZE: Irreg.
8. LIC. ENGR. — STATE LICENSE — PHONE
9. CONTRACTOR: Owner — STATE LICENSE — PHONE — REAR ALLEY — SIDE ALLEY /
10. CONTRACTOR'S ADDRESS: Above — P.O. — ZONE — BLDG. LINE /
11. SIZE OF EXISTING BLDG.: ~~35~~ 16 x 20 — STORIES: 1 — HEIGHT: 11 — NO. OF EXISTING BUILDINGS ON LOT AND USE — BLDG. AREA

SEWER (Available) (Not Available)

3

206 S. Santa Fe Ave. — DISTRICT OFFICE: LA

12. MATERIAL EXT. WALLS: ☐ WOOD ☐ METAL ☐ CONC. BLOCK ☐ STUCCO ☐ BRICK ☐ CONCRETE — ROOF CONST.: ☐ WOOD ☐ STEEL ☐ CONC. ☐ OTHER — ROOFING — SPRINKLERS REQ'D. SPECIFIED
13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 300.00 — VALUATION APPROVED: Skabik — AFFIDAVITS: None
14. SIZE OF ADDITION — STORIES — HEIGHT — APPLICATION CHECKED: Skabik
15. NEW WORK: (Describe) EXT. WALLS — ROOFING — PLANS CHECKED — DWELL. UNITS

Demolish Bldg. #261, SC#

CORRECTIONS VERIFIED — SPACES PARKING

PLANS APPROVED — GUEST ROOMS

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance, and I have read reverse side of Application.

APPLICATION APPROVED: Iamito — FILE WITH

Signed E. Roensteng[illegible] Authorized Agent

INSPECTOR — CONT. INSP.

This Form When Properly Validated is a Permit to Do the Work Described.

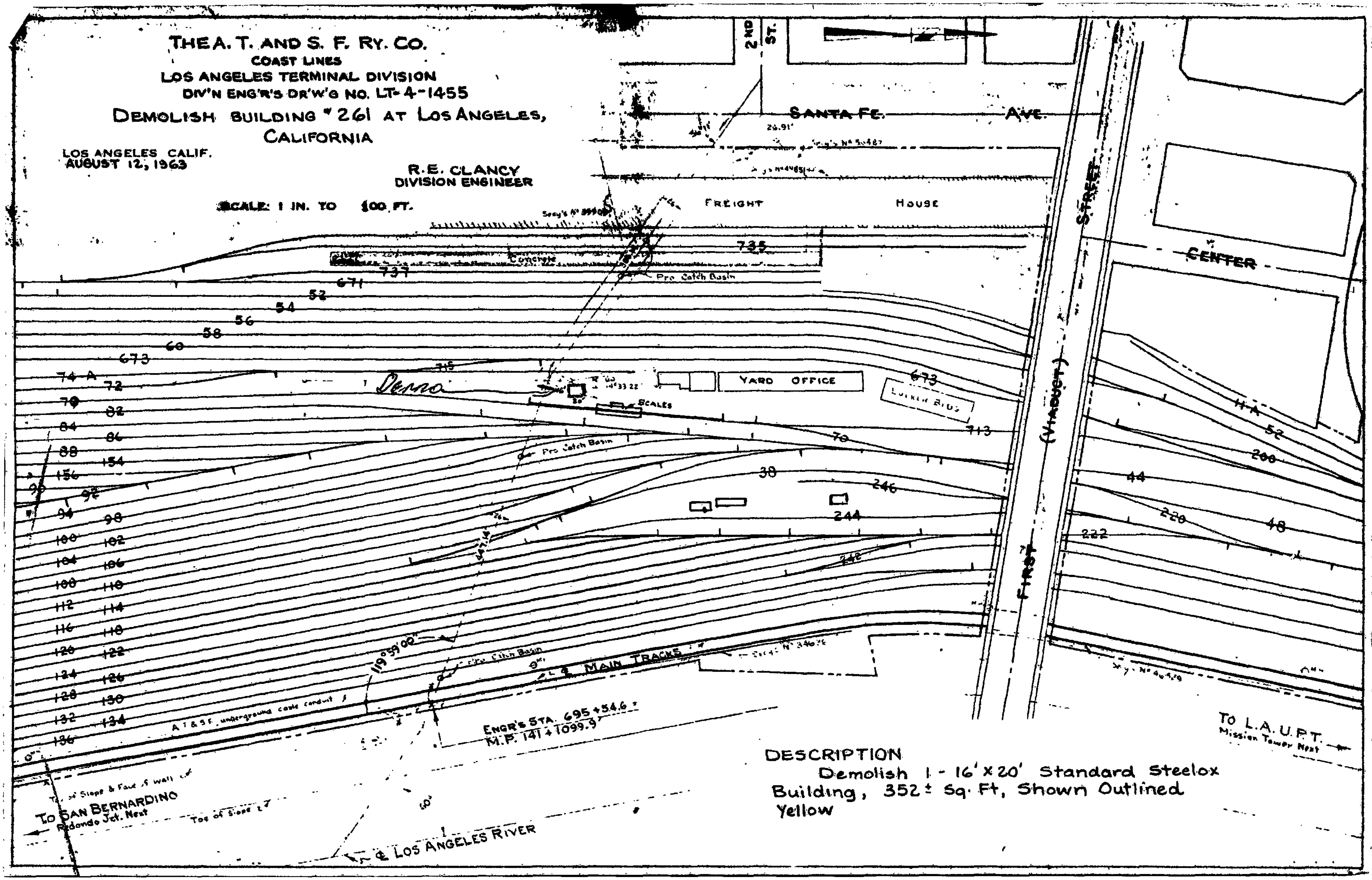
CRITICAL SOIL

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O
			—	—	—	2.50	/	—	—

CASHIER'S USE ONLY

AUG-12-63 40866 S •45080 W — 1 CS 2.50

P.C. No. .... GRADING .... / CRIT. SOIL ....../..... CONS./



THE A. T. AND S. F. RY. CO.
COAST LINES
LOS ANGELES TERMINAL DIVISION
DIV'N ENG'R'S DR'W'G NO. LT-4-1455
DEMOLISH BUILDING #261 AT LOS ANGELES, CALIFORNIA
LOS ANGELES CALIF.
AUGUST 12, 1963
R.E. CLANCY
DIVISION ENGINEER
SCALE: 1 IN. TO 100 FT.
2ND ST.
SANTA FE AVE.
FREIGHT HOUSE
CENTER
FIRST STREET (VIADUCT)
YARD OFFICE
SCALES
Pro. Catch Basin
MAIN TRACKS
ENGR'S STA. 695+54.6
M.P. 141+1099.9
TO SAN BERNARDINO
Redondo Jct. Next
TO L.A.U.P.T.
Mission Tower Next
LOS ANGELES RIVER
DESCRIPTION
Demolish 1 - 16' x 20' Standard Steelox Building, 352± Sq. Ft, Shown Outlined Yellow

Bldg. Form 3

3

USE INK OR INDELIBLE PENCIL

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Application to Alter, Repair, Move or Demolish

To the Board of Building and Safety Commissioners of the City of Los Angeles:

Application is hereby made to the Board of Building and Safety Commissioners of the City of Los Angeles through the office of the Superintendent of Building, for a building permit in accordance with the description and for the purpose hereinafter set forth. This application is made subject to the following conditions, which are hereby agreed to by the undersigned applicant and which shall be deemed conditions entering into the exercise of the permit:

First: That the permit does not grant any right or privilege to erect any building or other structure therein described, or any portion thereof upon any street, alley or other public place or portion thereof.

Second: That the permit does not grant any right or privilege to use any building or other structure therein described, or any portion thereof, for any purpose that is, or may hereafter be prohibited by ordinance of the City of Los Angeles.

Third: That the granting of the permit does not affect or prejudice any claim of title to, or right of possession in, the property described in such permit.

REMOVED FROM	REMOVED TO
Lot	Lot
Tract	Tract

Present location of building: 214 S. Santa Fe Ave (House Number and Street)

New location of building: (House Number and Street)

Between what cross streets:

Approved by City Engineer

Deputy.

1. Purpose of PRESENT building Warehouse (Store, Residence, Apartment House, Hotel, or any other purpose) Families Rooms
2. Use of building AFTER alteration or moving Warehouse Families Rooms
3. Owner (Print Name) ATCHISON, TOPEKA + SANTA FE RY. Phone MU. 0111
4. Owner's Address 560 S. Main St. Room 642
5. Certificated Architect State License No. Phone
6. Licensed Engineer State License No Phone
7. Contractor Company forces State License No Phone
8. Contractor's Address
9. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and or elevator equipment therein or thereon.) $ 300.00
10. State how many buildings NOW on lot and give use of each. one (Residence, Hotel, Apartment House, or any other purpose)
11. Size of existing building 35' x 102' Number of stories high one Height to highest point 33'
12. Class of building C 15' Material of existing walls Brick Exterior framework Wood (Wood or Steel)

Describe briefly and fully all proposed construction and work:

erect two plaster partitions one 23'2" x 9'9" and one 34' X 9'9" 2X4 studs and install metal door in present metal and glass sliding door

Fill in Application on other Side and Sign Statement (OVER)

PERMIT NO.	FOR DEPARTMENT USE ONLY			Fee 2.50
9508	Plans and Specifications checked	Zone M2	Fire District No. 1	Stamp here when Permit is issued OCT 1
	Corrections verified	Bldg. Line No	Street Widening	
	Plans, Specifications and Applications rechecked and approved	Application checked and approved Mullet Clerk		
PLANS OCT 1	For Plans See	Filed with	SPRINKLER Required Valuation Included / Specified Yes—No	Inspector

PLANS, SPECIFICATIONS, and other data must be filed if required.

NEW CONSTRUCTION

Size of Addition ....x........ Size of Lot ....x........ Number of Stories when complete ....

Material of Foundation .... Width of Footing .... Depth of footing below ground ....

Width Foundation Wall .... Size of Redwood Sill ....x........ Material Exterior Walls ....

Size of Exterior Studs ....x........ Size of Interior Bearing Studs ....x........

Joists: First Floor ....x........ Second Floor ....x........ Rafters ....x........ Roofing Material ....

I have carefully examined and read both sides of this completed Application and know the same is true and correct and hereby certify and agree, if a Permit is issued, that all the provisions of the Building Ordinances and State Laws will be complied with whether herein specified or not; also certify that plans and specifications, if required to be filed, will conform to all of the provisions of the Building Ordinances and State laws.

Sign Here Atchison Topeka and Santa Fe Ry
(Owner or Authorized Agent)

By S. D. Downs

FOR DEPARTMENT USE ONLY

Application	Fire District	Bldg. Line	Termite Inspection
Construction	Zoning	Street Widening	Forced Draft Ventil.

(1)
REINFORCED CONCRETE

Barrels of Cement ....

Tons of Reinforcing Steel ....

(2)
The building (and, or, addition) referred to in this Application is, or will be when moved, more than 100 feet from .... Street

Sign Here ....
(Owner or Authorized Agent)

(3)
No required windows will be obstructed.

Sign Here ....
(Owner or Authorized Agent)

(4)
There will be an unobstructed passageway at least ten (10) feet wide, extending from any dwelling on lot to a Public Street or Public Alley at least 10 feet in width.

Sign Here ....
(Owner or Authorized Agent)

REMARKS:
WORKMEN'S COMPENSATION INSURANCE

Date__________

I hereby certify that I am the applicant for this permit, and that in doing the work authorized thereby, I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

S. D. Downs
Signature of Applicant

PLAN CHECKING
RECEIPT NO. 2486
VALUATION $ 300
FEE PAID $ 1

3

APPLICATION TO ALTER, REPAIR MOVE OR DEMOLISH

CITY OF LOS ANGELES DEPARTMENT OF BUILDING AND SAFETY BUILDING DIVISION

APPLICATION FOR CERTIFICATE OF OCCUPANCY

From Lot ... Lot

Tract ... Tract

Present location of building: 214 So Santa Fe Ave (House Number and Street)

New location of building: (House Number and Street)

Between what cross streets: E 2nd E 3rd

Approved by City Engineer

Deputy:

USE INK OR INDELIBLE PENCIL

1. Present use of building: Store (Store, Dwelling, Apartment House, Hotel or other purpose) Families ... Rooms ...
2. State how long building has been used for present occupancy
3. Use of building AFTER alteration or moving: Store Families ... Rooms ...
4. Owner: At S Fe Ry Co (Print Name) Phone
5. Owner's Address: 126 W 6th St P. O.
6. Certificated Architect — State License No. — Phone
7. Licensed Engineer — State License No. — Phone
8. Contractor: United Tent & Awning Co — State License No. 81651 — Phone MI 6291
9. Contractor's Address: 759 No Spring
10. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $ 8900
11. State how many buildings NOW on lot and give use of each: 1 Warehouse (Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building 100 x 80 Number of stories high 1 Height to highest point 20
13. Material Exterior Walls: Brick (Wood, Steel or Masonry) Exterior framework: wood (Wood or Steel)
14. Describe briefly all proposed construction and work:

1 Tent top 40 x 50

REVOCABLE PERMIT

NEW CONSTRUCTION

15. Size of Addition ... x ... Size of Lot ... x ... Number of Stories when complete ...
16. Footing: Width ... Depth in Ground ... Width of Wall ... Size of Floor Joists ... x ...
17. Size of Studs ... x ... Material of Floor ... Size of Rafters ... x ... Type of Roofing ...

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

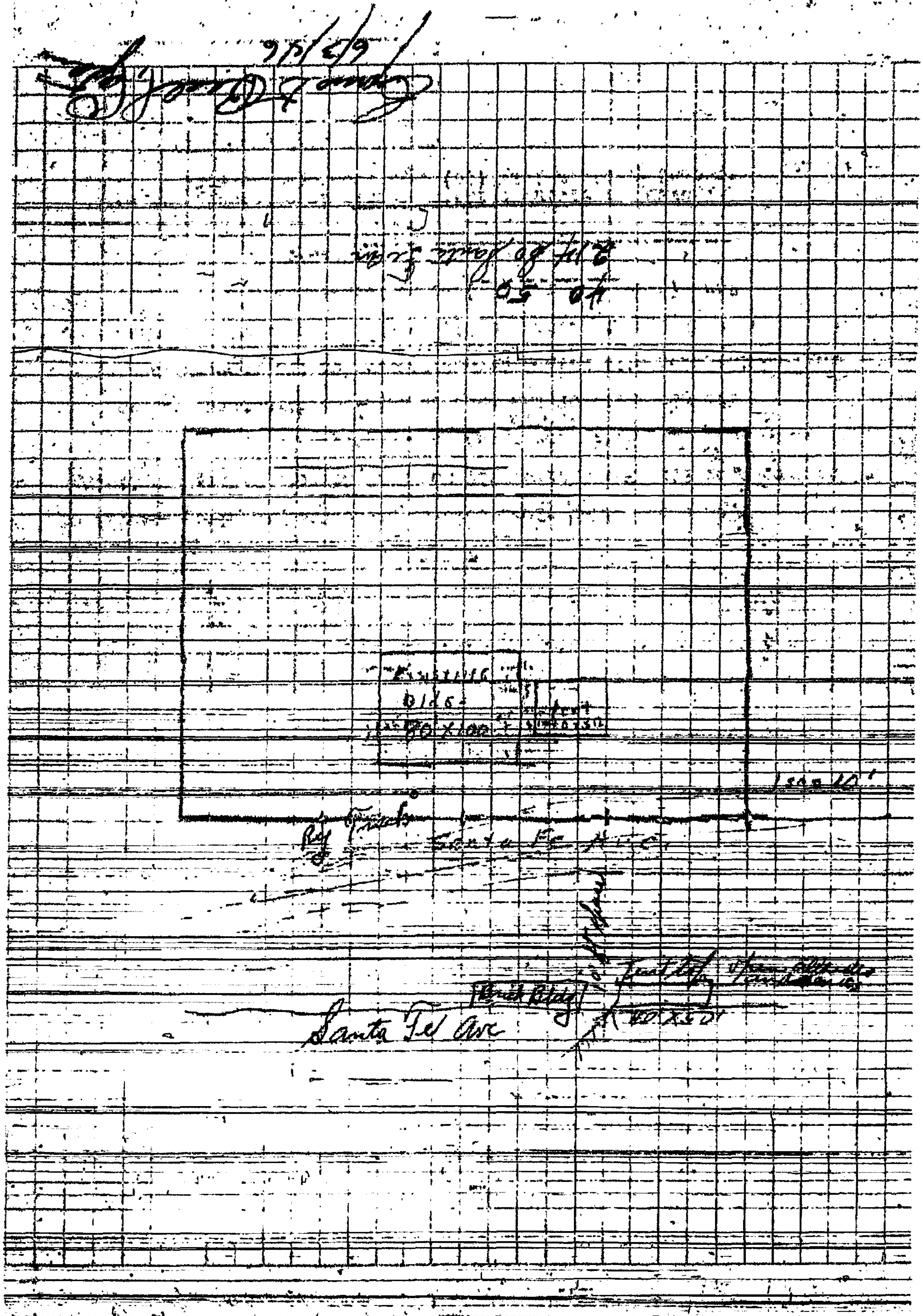
Sign here: At S Fe Ry Co (Owner or Authorized Agent)

By: B. L. Bowman

FOR DEPARTMENT USE ONLY

(1) PLAN CHECKING		(2) REINFORCED CONCRETE	(3) The building referred to in this Application will be more than 100 ft. from Street
Receipt No.		Bbls. Cement	
Valuation $			
Fee Paid $		Tons of Reinforcing Steel	Sign here ... Owner or Authorized Agent

TYPE	GROUP	Maximum No. Occupants	Inside Lot / Corner Lot	Key Lot / Corner Lot Keyed	Lot Size	Feet rear alley / Ft. side alley	Clerk: 27H
PERMIT No. 15179		Plan and Specifications checked	Zone M2	Fire District No.	District Map No.		
		Correction Verified	Bldg. Line ... Ft.	Street Widening ... Ft.	Fee 1.50		
			Application checked and approved: A. L. Hoag, Clerk		Permit Issued / Occupancy 2.00		
PLANS		Plans, Specifications and Application rechecked and approved	Continuous Inspection	SPRINKLER	Total 3.50		
		For Plans See / Filed with		Specified / Required / Valuation Included / Inspector			



Existing
Bldg
80 x 100
Rly Tracks
Santa Fe Ave
Brick Bldg
40 x 50
Santa Fe Ave

3

APPLICATION TO ALTER, REPAIR OR DEMOLISH

Form B-3

CITY OF LOS ANGELES
DEPARTMENT
OF
BUILDING AND SAFETY
BUILDING DIVISION

Lot No.

Tract Part of City Lands of Los Angeles

Location of Building 214 So Santa Fe ave (House Number and Street)

Approved by City Engineer
Deputy.

Between what cross streets 1st St & 4th St

USE INK OR INDELIBLE PENCIL

1. Present use of building Express office (Store, Dwelling, Apartment House, Hotel or other purpose) Families Rooms 2
2. State how long building has been used for present occupancy
3. Use of building AFTER alteration or moving Families Rooms
4. Owner A.T. & S.F. Railroad (Print Name) Phone
5. Owner's Address L.A. P.O.
6. Certificated Architect State License No. Phone
7. Licensed Engineer State License No. Phone
8. Contractor State License No. 13370 Phone
9. Contractor's Address 135
10. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $ 250.
11. State how many buildings NOW on lot and give use of each. (Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building 20 x 15 Number of stories high 1 Height to highest point 20
13. Material Exterior Walls Brick (Wood, Steel or Masonry) Exterior framework (Wood or Steel)
14. Describe briefly all proposed construction and work:

Demolish

NEW CONSTRUCTION

15. Size of Addition x Size of Lot x Number of Stories when complete
16. Footing: Width Depth in Ground Width of Wall Size of Floor Joists x
17. Size of Studs x Material of Floor Size of Rafters x Type of Roofing

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

Sign here (Owner or Authorized Agent)

By

FOR DEPARTMENT USE ONLY

(1) PLAN CHECKING
Receipt No.
Valuation $
Fee Paid $

(2) REINFORCED CONCRETE
Bbls. Cement
Tons of Reinforcing Steel

(3) The building referred to in this Application will be more than 100 ft. from Street
Sign here (Owner or Authorized Agent)

TYPE	GROUP	Maximum No. Occupants	Inside Lot / Corner Lot	Key Lot / Corner Lot Keyed	Lot Size	Feet rear alley / Ft. side alley	Clerk

PERMIT No. 21388

Plans and Specifications checked
Occupation Verified
Plans, Specifications and Application rechecked and approved

Zone
Bldg. Line
Application checked and approved
Clerk

Fire District No.
Street Widening Ft.

District Map No. 5525
Fee 5.00
Stamp here when Permit is Issued
1940

PLANS
Fee Forms Sent
Filed with
Rec'd

Continuous Inspection
SPRINKLERS Specified—Required
Valuation included
Fee No.

Inspector

1

APPLICATION TO ERECT A NEW BUILDING

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Lot No. Part of City Lands of Los Angeles
Patents 3-64/65 M.R. 2-504-5

Tract 505

Location of Building 214 SANTA FE AVE (House Number and Street)

Between what cross streets FIRST & THIRD

Approved by City Engineer ______ Deputy.

USE INK OR INDELIBLE PENCIL

1. Purpose of building FREIGHT HOUSE (Store, Dwelling, Apartment House, Hotel or other purpose) Families — Rooms —
2. Owner A.T. & S.F. RY. CO (Print Name) Phone
3. Owner's address 121 E. 6th ST. P.O.
4. Certificated Architect H.L. GILMAN State License No. B984 Phone MU 0111 STA 436
5. Licensed Engineer — State License No. — Phone —
6. Contractor — State License No. — Phone —
7. Contractor's address
8. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $ 300,000 B.T.
9. State how many buildings NOW on lot and give use of each. NONE (Store, Dwelling, Apartment House, Hotel, or other purpose)
10. Size of new building 60 x 815 No. Stories 1½ Height to highest point 30 Size lot — x —
11. Material Exterior Walls CONCRETE Type of Roofing ASBESTOS (ROLL)
12. For Accessory Buildings and similar structures
    (a) Footing: Width 2' Depth in Ground 4' Width of Wall 6
    (b) Size of Studs 2x6 Material of Floor CONCRETE & WOOD
    (c) Size of Floor Joists 2 x 12 Size of Rafters 2 x 10

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

Sign here B Calvin Teal Jr. (Owner or Authorized Agent)

Plans, Specifications and other data must be filed.

By

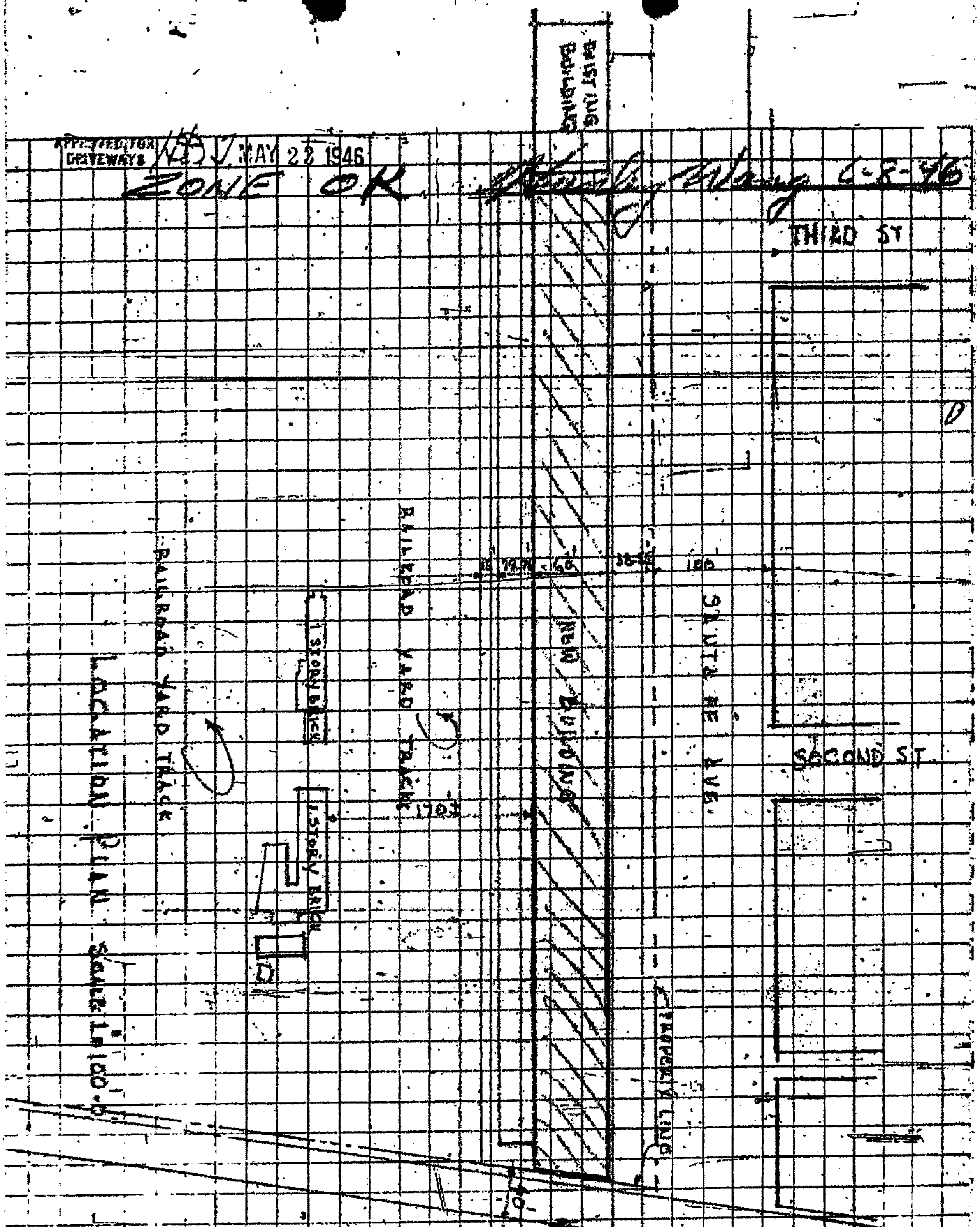
FOR DEPARTMENT USE ONLY

(1) PLAN CHECKING	(2) REINFORCED CONCRETE	(3)
Receipt No. 7598 Valuation $ 300,000.00 Fee Paid $ 150.00	Bbls. Cement Tons of Reinforcing Steel	The building referred to in this Application will be more than 100 feet from ______ Street Sign here ______ (Owner or Authorized Agent)

Type	Group	Maximum No. Occupants	Inside Lot / Corner Lot	Key Lot / Corner Lot Keyed	Lot Size	Ft. rear alley / Ft. side alley	Clerk
III A	G	480			400 x ...		

PERMIT No. 19610	Plans and Specifications checked	Zone M3	Fire District 3	District Map No. 5555
	Corrections Verified	Bldg. Line No Ft.	Street Widening Ft.	Fee 308
	Plans, Specifications and Application rechecked and approved. B.H. Norris	Application checked and approved	AUG 2 1946	Stamp here when Permit is Issued. AUG 27 1946
PLANS	For Plans Fee	Cafeteria Inspection	SPRINKLERS	Inspector Hewitt

5818



There will be no self-propelled vehicle powered by an internal combustion motor stored, repaired, or serviced in this building.

(Signed) W.L. Blanchard

7/10/46

3

APPLICATION TO ALTER, REPAIR OR DEMOLISH AND FOR A Certificate of Occupancy

CITY OF LOS ANGELES DEPARTMENT OF BUILDING AND SAFETY BUILDING DIVISION

Lot No. ____

Tract Bigelow Tract

Location of Building 214 South Santa Fe Ave (Street Number and Street)

Between what cross streets 1st & 2nd Streets

Approved by City Engineer ____ Deputy.

USE INK OR INDELIBLE PENCIL

1. Present use of building Freight Warehouse Families ____ Rooms ____ (Store, Dwelling, Apartment House, Hotel or other purpose)
2. State how long building has been used for present occupancy New under construction
3. Use of building AFTER alteration or moving same Families ____ Rooms ____
4. Owner The A. T. & S. F. Railway Company (Print Name) Phone ____
5. Owner's Address 121 East Sixth St. P. O. Los Angeles, Calif.
6. Certificated Architect A. L. Gilman State License No. [illegible] Phone MU [illegible]
7. Licensed Engineer M. C. Blanchard State License No. 2147 Phone [illegible]
8. Contractor The Utah Construction Co State License No. 1296 Phone [illegible]
9. Contractor's Address No. 1 Montgomery Street, San Francisco 4, Calif. T.H.C.
10. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $ 7,500.00
11. State how many buildings NOW on lot and give use of each. one Warehouse under construction (Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building 60' x 810' Number of stories high 2 Height to highest point 27'
13. Material Exterior Walls Masonry (Wood, Steel or Masonry) Exterior framework ____ (Wood or Steel)
14. Describe briefly all proposed construction and work:
    Woodframe partitions walls, plastered, wood frame exterior windows & [illegible], metal lath. No structural change.

[illegible] 14. * partition walls [illegible] 6'

NEW CONSTRUCTION

15. Size of Addition [illegible] Size of Lot ____ x ____ Number of Stories when complete 1
16. Footing: Width ____ Depth in Ground ____ Width of Wall ____ Size of Floor Joists ____ x ____
17. Size of Studs 2" x 4" Material of Floor Concrete Size of Rafters 2" x [illegible] Type of Roofing ____

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

Sign here THE UTAH CONSTRUCTION COMPANY (Owner or Authorized Agent)

By [illegible]

FOR DEPARTMENT USE ONLY

PLAN CHECKING		REINFORCED CONCRETE	FEES	
Date AUG 1 x 1947		Bldg. Cement		Bldg. Per. [illegible]
Receipt No. 4526		Tests of Reinforcing Steel		Cert. of Occupancy
Valuation $ 7500				Total 33.[illegible]
Fee Paid $ 15.00				

TYPE	GROUP	Assessor No. / Occupancy	Inside Lot / Corner Lot	Key Lot / Corner Lot Keyed	Lot Size	Feet rear alley / Ft. side alley	Cont.
III-A	C					1	[illegible]

PERMIT No.	Plans and Specifications checked	Zone	Fire District	District Map No.
8034.	[illegible]	M3	No. 2	5526
	Corrections Verified	Bldg. Line ____ Ft.	Street Widening ____ Ft.	Stamp here when Permit is issued
	[illegible]	Application checked and approved AUG 1 x 1947		AUG 14 1947
PLANS	Plans, Specifications and Application rechecked and approved	Clerk		
	[illegible]	Conditions Inspector	SPRINKLERS Specified—Required Valuation Included	Inspector
Book	For Plans ____ File Fee ____	[illegible]		Spitzer

Permit # 18[illegible] [illegible]

3

APPLICATION TO ALTER, REPAIR OR DEMOLISH AND FOR A Certificate of Occupancy

CITY OF LOS ANGELES DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Lot No.

Tract

Location of Building 214 South Santa Fe Avenue (House Number and Street) — Approved by City Engineer

Between what cross streets 2nd & 3rd Sts. — Deputy.

USE INK OR INDELIBLE PENCIL

1. Present use of building Freight station (Store, Dwelling, Apartment House, Hotel or other purpose) Families Rooms
2. State how long building has been used for present occupancy UNKNOWN
3. Use of building AFTER alteration or moving Freight station Families Rooms
4. Owner The Atchison, Topeka & Santa Fe Rwy. Co. (Print Name) Phone
5. Owner's Address 121 East 6th St. P. O. Los Angeles 14, Calif.
6. Certificated Architect State License No. Phone
7. Licensed Engineer State License No. Phone
8. Contractor Electrical Products Corp. State License No. 12539 Phone PR 0371
9. Contractor's Address 1128 Venice Blvd., Los Angeles 15, Calif.
10. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $180.00
11. State how many buildings NOW on lot and give use of each. UNKNOWN (Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building x Number of stories high 2 Height to highest point
13. Material Exterior Walls CONCRETE (Wood, Steel or Masonry) Exterior framework (Wood or Steel)
14. Describe briefly all proposed construction and work:
Installation of one double faced vertical sign reading: "SANTA FE FREIGHT STATION". Sq. ft. area approx. 30.
Weight - 300.
Job No. 14853
See drawing on reverse side.

NEW CONSTRUCTION

15. Size of Addition x Size of Lot x Number of Stories when complete
16. Footing: Width Depth in Ground Width of Wall Size of Floor Joists x
17. Size of Studs x Material of Floor Size of Rafters x Type of Roofing

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

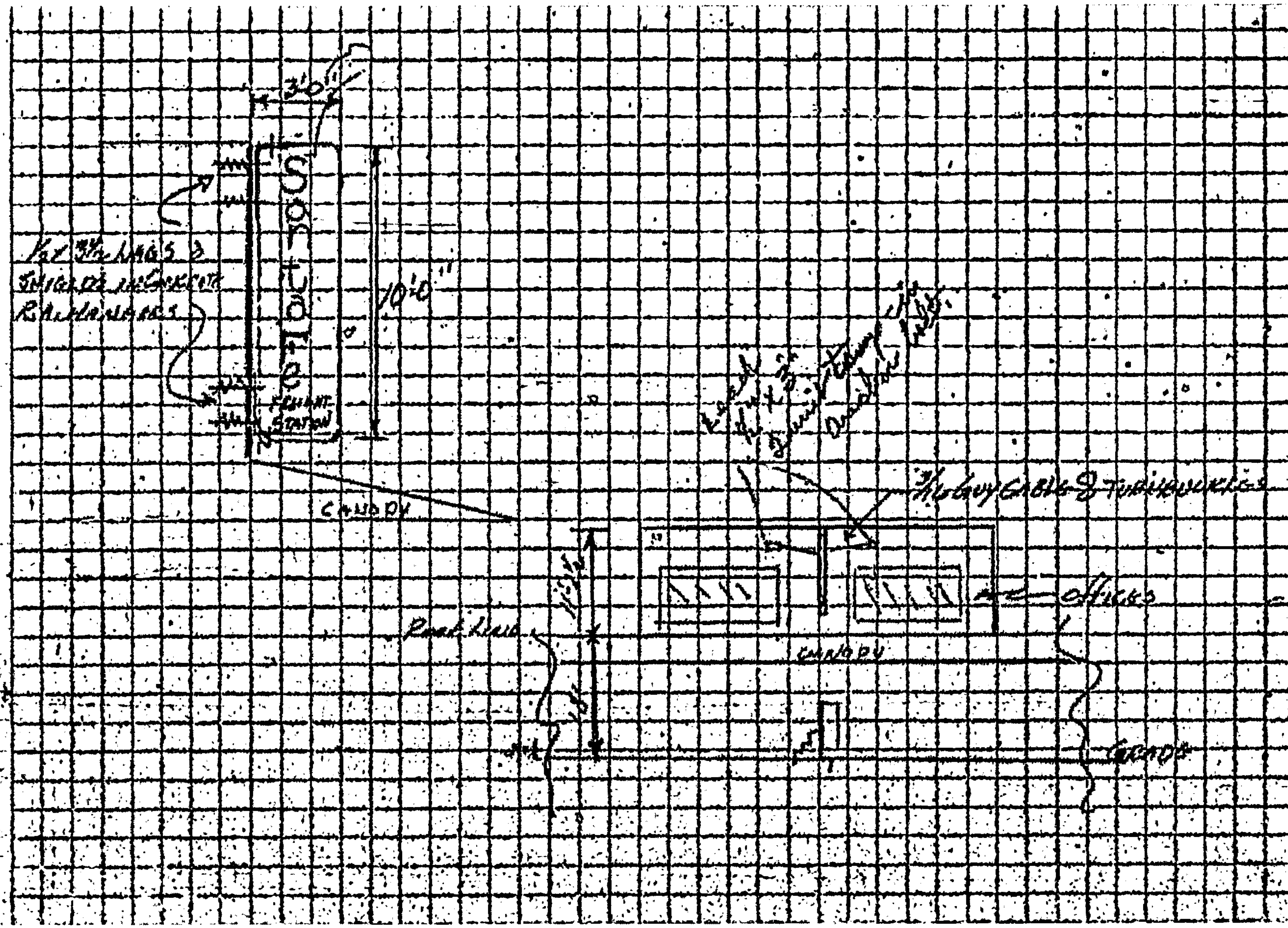
Sign here ELECTRICAL PRODUCTS CORPORATION (Owner or Authorized Agent)
By W. C. Tingleall

FOR DEPARTMENT USE ONLY

PLAN CHECKING		REINFORCED CONCRETE		FEES	
Date:		Bldg. Cement		Bldg. Per.	
Receipt No.		Tons of Reinforcing Steel		Cert. of Occupancy	
Valuation $				Total 2.00	
Fee Paid $					

TYPE	GROUP	Masonry or Frame	Inside Lot	Key Lot	Lot Area	Feet rear alley / Ft. side alley	Clerk
I	G-1		Corner Lot	Corner Lot-Keyed			Kastner

PERMIT No.	Plans and Specifications checked	Zone M-3	Fire District 2	District Map No. 5925
25015	Correction Verified	Bldg. Line Ft.	Street Widening Ft.	Stamp here when Permit is issued
	Plans, Specifications and Application rechecked and approved	Application checked and approved 12 Austin		NOV 13 1947
PLANS		Checked		
Sent	Bld. Check	Filed with	Conditional Inspection	INSPECTOR / Standard Checked / Valuation Reduced	Inspector


Sonic
FUELING STATION
3'0"
10'0"
CANOPY
Road Level
Offices
GRADE

214

214 Santa Fe Ave. Address of Building

A.T. & S.F. Ry. Co. Owner

121 E. 6th St. Owner's Address

Los Angeles, Calif.

19610 Permit Number 1946 Year

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY

CERTIFICATE OF OCCUPANCY

Date Certificate Issued: DEC 5 1947, 19

This certifies that, so far as ascertained by or made known to the undersigned, the building at the above address complies with the applicable requirements of the Municipal Code, as follows: Chapter 1, as to permitted uses of said property; Chapter 9, Articles 1, 3, 4, and 5; and with the applicable requirements of the State Housing Act,— for the following occupancies:

THERE WILL BE NO SELF-PROPELLED VEHICLE POWERED BY AN INTERNAL COMBUSTION MOTOR STORED, REPAIRED, OR SERVICED IN THIS BUILDING.

2 story, Type IIIA, Freight House, 51,280 sq. ft., G occupancy. —

NOTE: Any change of use or occupancy must be approved by the Department of Building and Safety.

Form B-95—20M—8-47

G. E. MORRIS
Superintendent of Building

By P. Crowley

3

APPLICATION TO ALTER, REPAIR OR DEMOLISH AND FOR A Certificate of Occupancy

CITY OF LOS ANGELES DEPARTMENT OF BUILDING AND SAFETY BUILDING DIVISION

Lot No.

Tract

Location of Building 214 S. Santa Fe Ave (Street Number and Street)

Between what cross streets

Approved by City Engineer

Deputy.

USE INK OR INDELIBLE PENCIL

1. Present use of building Freight Station (Store, Dwelling, Apartment House, Hotel or other purpose) Families Rooms
2. State how long building has been used for present occupancy
3. Use of building AFTER alteration or moving Same Families Rooms
4. Owner A. T. & S. F. R. R. (Print Name) Phone
5. Owner's Address Same P. O.
6. Certificated Architect State License No. Phone
7. Licensed Engineer State License No. Phone
8. Contractor State License No. Phone
9. Contractor's Address
10. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $1400
11. State how many buildings NOW on lot and give use of each. One (Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building 80 x 700 Number of stories high 1 Height to highest point 20
13. Material Exterior Walls wood (Wood, Steel or Masonry) Exterior framework wood (Wood or Steel)
14. Describe briefly all proposed construction and work:

Erect 2 neon signs

NEW CONSTRUCTION

15. Size of Addition x Size of Lot x Number of Stories when complete
16. Footing: Width Depth in Ground Width of Wall Size of Floor Joists x
17. Size of Studs x Material of Floor Size of Rafters x Type of Roofing

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

Sign here Elec. Products Corp (Owner or Authorized Agent)

By R. [illegible]

FOR DEPARTMENT USE ONLY

PLAN CHECKING

Date AUG 14 1947

Receipt No. 8012

Valuation $ 1400

Fee Paid $ 7.20

REINFORCED CONCRETE

Bbls. Cement

Tons of Reinforcing Steel

FEES

Bldg. Fee 7.20

Cert. of Occupancy —

Total 7.20

TYPE	GROUP	Assessment Dist.	Inside Lot	Key Lot	Lot Size	Feet clear alley	Clerk
V	G		Corner Lot	Corner Lot Keyed		Ft. side alley	Snyder

PERMIT No. 23677

Plans and Specifications checked: J. W. Clinton

Correction Verified: Durand

Plans, Specifications and Application rechecked and approved: Durand

Zone M-3

Fire District No. 2

Bldg. Line — Ft.

Street Widening — Ft.

District Map No.

Application checked and approved: Snyder

Stamp here when Permit is issued: AUG 15 1947

PLANS

Inspector: Sutton Oct. 1[illegible]

Sort

For Plans Inc. Filed with

Conditions [illegible]

Specifications Approved

Valuation Included

3

APPLICATION TO ALTER, REPAIR, or DEMOLISH AND FOR A Certificate of Occupancy

Form B-3

CITY OF LOS ANGELES DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Lot No.

Tract

Location of Building 214 So SANTA FE AVE (House Number and Street)

Between what cross streets? ~~[illegible]~~ NORTH OF 1ST ST

Approved by City Engineer .... Deputy.

USE INK OR INDELIBLE PENCIL

1. Present use of building FREIGHT HOUSE (Store, Dwelling, Apartment House, Hotel or other purpose) Families — Rooms —
2. State how long building has been used for present occupancy 10 YEARS
3. Use of building AFTER alteration or moving SAME Families — Rooms —
4. Owner A.T. & S.F. RY CO (Print Name) Phone MU 0111 EXT 432
5. Owner's Address 121 E SIXTH ST P. O. LOS ANGELES
6. Certificated Architect H. L. GILMAN State License No. Phone
7. Licensed Engineer — State License No. — Phone —
8. Contractor OWNER State License No. — Phone —
9. Contractor's Address
10. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $1500.00 RD
11. State how many buildings NOW on lot and give use of each. ONE (Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building 60 x 800 Number of stories high 2 Height to highest point 25
13. Material Exterior Walls CONCRETE (Wood, Steel or Masonry) Exterior framework STEEL (Wood or Steel)
14. Describe briefly all proposed construction and work:
REMOVE PORTION OF FREIGHT LOADING PLATFORM 15' WIDE x 25' LONG 3 HEAVY 1ST ST VIADUCT
NO M-10 [illegible] R. J. [illegible] M-10 1-28-54

NEW CONSTRUCTION

15. Size of Addition ... x ... Size of Lot ... x ... Number of Stories when complete
16. Footing: Width ... Depth in Ground ... Width of Wall ... Size of Floor Joists ... x
17. Size of Studs ... x ... Material of Floor ... Size of Rafters ... x ... Type of Roofing

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

GRADING [illegible]

Sign here [signature] (Owner or Authorized Agent)

DISTRICT OFFICE MAINTENANCE ROOM M-10 By

FOR DEPARTMENT USE ONLY

PLAN CHECKING		OCCUPANCY SURVEY		
Valuation $		Area of Bldg. ... Sq. Ft.		Investigation Fee $— Cert. of Occupancy Fee $ Bldg. Permit Fee $7.50 Total $
Fee $		Fee $		

TYPE	Maximum No. Occupants	Inside Lot / Corner Lot	Key Lot / Corner Lot Keyed	Lot Size	Ft. rear alley / Ft. side alley	Clerk Colum
GROUP Str	Plans and Specifications checked	Zone M-3		Fire District No. II 200	District Map No. 129-217	
For Plans See	Correction Verified	Bldg. Line ... Ft.		Street Widening ... Ft.	Application checked and approved JAN 28 1954 [signature] Clerk	
Filed with	Plans, Specifications and Application rechecked and approved [signature]	Continuous Inspection		SPRINKLER Specified Required Valuation Included Yes No	Inspector [signature]	

DO NOT WRITE BELOW THIS LINE

TYPE OF RECEIPT	DATE ISSUED	TRACER NO. (M)	RECEIPT NO.	CODE	FEE PAID
Plan Checking					
Supplemental Plan Checking					V
Building Permit	JAN 29 1954		LA78880		

3

APPLICATION TO ALTER, REPAIR, or DEMOLISH AND FOR A Certificate of Occupancy

Form B-3
CITY OF ~~LOS ANGELES~~ DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Lot No. City Lands of Los Angeles
Tract Santa Fe Right of Way Reservation
Location of Building 214 So. Santa Fe Ave (House Number and Street) — Approved by City Engineer
Between what cross streets? First & Fourth Streets — Deputy.

USE INK OR INDELIBLE PENCIL

1. Present use of building Freight Warehouse (Store, Dwelling, Apartment House, Hotel or other purpose) Families — Rooms 1
2. State how long building has been used for present occupancy 1946 New
3. Use of building AFTER alteration or moving Warehouse Families — Rooms —
4. Owner A.T.&S.F. Ry (Print Name) Phone
5. Owner's Address 121 E 6th P. O. Los Angeles Calif
6. Certificated Architect H. L. Gilman State License No. B-984 Phone MU
7. Licensed Engineer State License No. Phone
8. Contractor A.T.&S.F. Building Dept State License No. Phone
9. Contractor's Address
10. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $ 3100
11. State how many buildings NOW on lot and give use of each. Numerous Buildings (Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building 60 x 800 Number of stories high 1 Height to highest point 30'
13. Material Exterior Walls Masonry (Wood, Steel or Masonry) Exterior framework (Wood or Steel)
14. Describe briefly all proposed construction and work:
Revision of Room For Frieght Checkers office

F/AX 19843
~~MAINTENANCE ROOM M-10~~ no sequence to M-10 file. C. Wilson M-10

~~NONE~~ NEW CONSTRUCTION

15. Size of Addition x Size of Lot x Number of Stories when complete
16. Footing: Width Depth in Ground Width of Wall Size of Floor Joists x
17. Size of Studs x Material of Floor Size of Rafters x Type of Roofing

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

CONSERVATION ROOM M-10

DISTRICT OFFICE GRADING
Sign here A.T.&S.F. Ry Co (Owner or Authorized Agent)
By Ru. Coleman

Certificate of Occupancy Survey | TYPE OF RECEIPT | DATE ISSUED | TRACER NO. (M) | RECEIPT NO. | CODE

FOR DEPARTMENT USE ONLY

PLAN CHECKING		OCCUPANCY SURVEY		
Valuation $ 3100		Area of Bldg. — Sq. Ft.	Investigation Fee $ —	Cert. of Occupancy Fee $ —
Fee $ 7.50		Fee $ —	Bldg. Permit Fee $ 12.50	Total $ 12.50

TYPE	Maximum No. Occupants	Inside Lot / Corner Lot	Key Lot / Corner Lot Keyed	Lot Size	Ft. rear alley / Ft. side alley	Clerk
III-A	None			ACREAGE		[signature]

GROUP	Plans and Specifications checked	Zone	Fire District	District Map No.
G-1	[signature]	M-3	No. 2	5525

For Plans See	Correction Verified	Bldg. Line	Street Widening	Application checked and approved
	[signature]	Ft.	Ft.	MAR 10 1954 [signature] Clerk

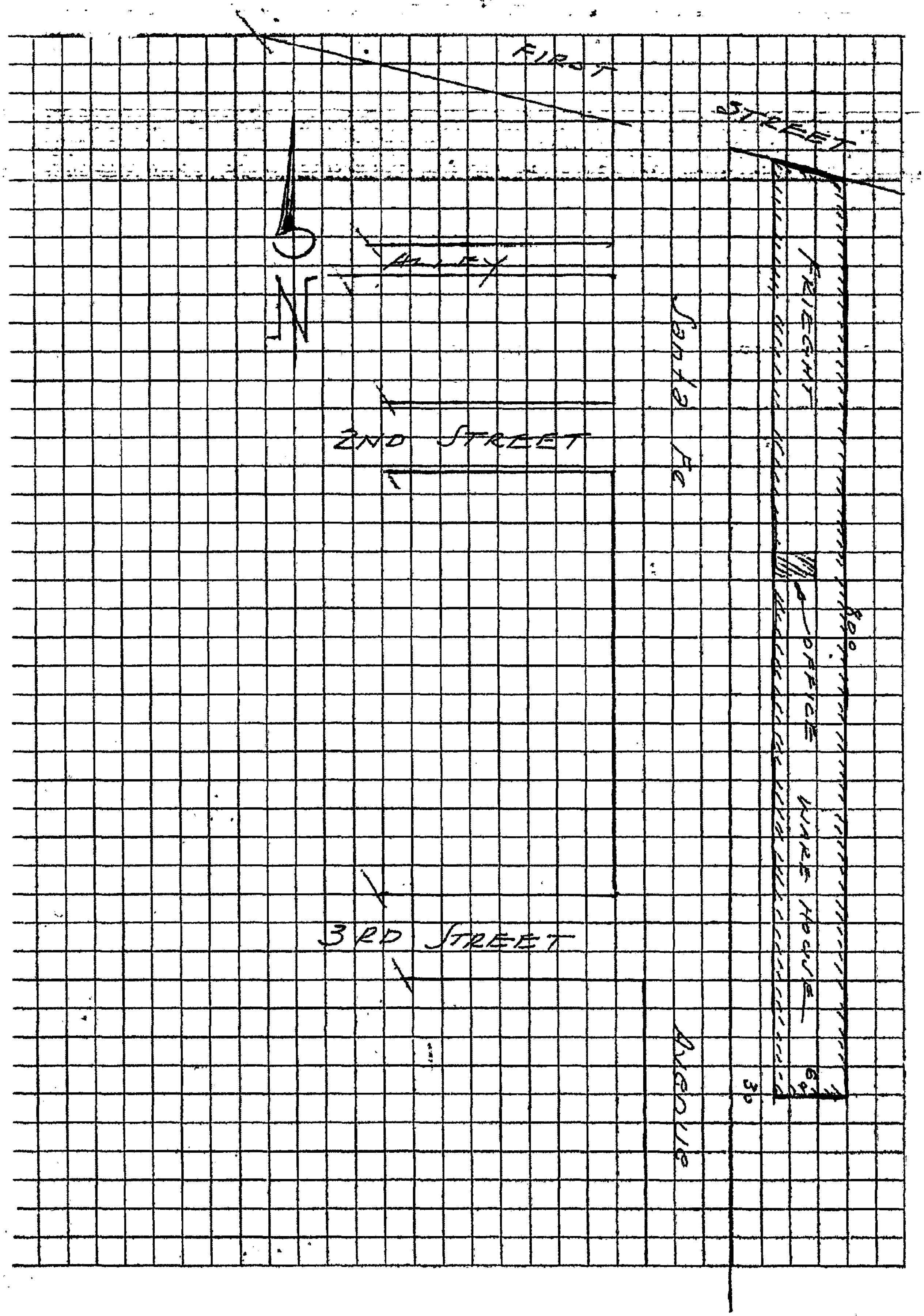
Filed with	Plans, Specifications and Application rechecked and approved	Continuous Inspection	SPRINKLER Specified—Required Valuation Included Yes No	Inspector
	[signature]	[signature]		[signature]

K 4274

DO NOT WRITE BELOW THIS LINE

FEE PAID

TYPE OF RECEIPT	DATE ISSUED	TRACER NO. (M)	RECEIPT NO.	CODE	FEE PAID
Plan Checking	MAR 10 1954		A448140		
Supplemental Plan Checking					
Building Permit	MAR 22 1954		A480949		


FIRST STREET
N
ALLEY
2ND STREET
3RD STREET
Santa Fe
Avenue
FREIGHT
OFFICE
WARE HOUSE
800
30
60

Form B-1

1

APPLICATION TO ERECT A NEW BUILDING AND FOR A Certificate of Occupancy

CITY OF LOS ANGELES DEPARTMENT OF BUILDING AND SAFETY

BUILDING DIVISION

Lot No.

Tract AT & S.F. Right of Way Pt. of City Lands

Location of Building 214 S. Santa Fe Ave. (House Number and Street)

Approved by City Engineer

Deputy.

Between what cross streets? First & Fourth Streets

USE INK OR INDELIBLE PENCIL & flammable liquid dispensing (Methyl Alcohol)

1. Purpose of building Heater Storage (Store, Dwelling, Apartment House, Hotel or other purpose) Families — Rooms 1
2. Owner A.T. & S.F. Ry. Co. (Print Name) Phone MU 0111
3. Owner's Address 121 E. 6TH St. P. O. Los Angeles, Calif.
4. Certificated Architect H. L. Gilman State License No. B-984 Phone MU 0111
5. Licensed Engineeer State License No. Phone
6. Contractor None - Santa Fe Force State License No. Phone
7. Contractor's Address None
8. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $ 1500.00
9. State how many buildings NOW on lot and give use of each. 5-2 warehouses, 1-locker Room, 1-Yard office, 1-Car Repair Storage (Store, Dwelling, Apartment House, Hotel or other purpose)
10. Size of new building 16 x 20 No. Stories 1 Height to highest point 11 Size lot x
11. Material Exterior Walls Sheet Metal Type of Roofing Sheet Metal
12. For Accessory Buildings and similar structures
    - (a) Footing: Width 6" Depth in Ground 12 Width of Wall Sheet metal
    - (b) Size of Studs Steel Material of Floor Concrete
    - (c) Size of Floor Joists Steel Size of Rafters Steel

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

G GRADING

DISTRICT OFFICE GROUP "E" OCC.

Sign here A.T. & S.F. Ry. Co. (Owner or Authorized Agent)

By R.W. Coulson

FOR DEPARTMENT USE ONLY

PLAN CHECKING			
Valuation $ 1500	$		Investigation Fee $ —; Bldg. Permit Fee $ 7.50; Total $ 7.50
Fee $ 3.00	$		

TYPE	Maximum No. Occupants	Inside Lot / Corner Lot	Key Lot / Corner Lot Keyed	Lot Size	Ft. rear alley / Ft. side alley	Clerk
IV						

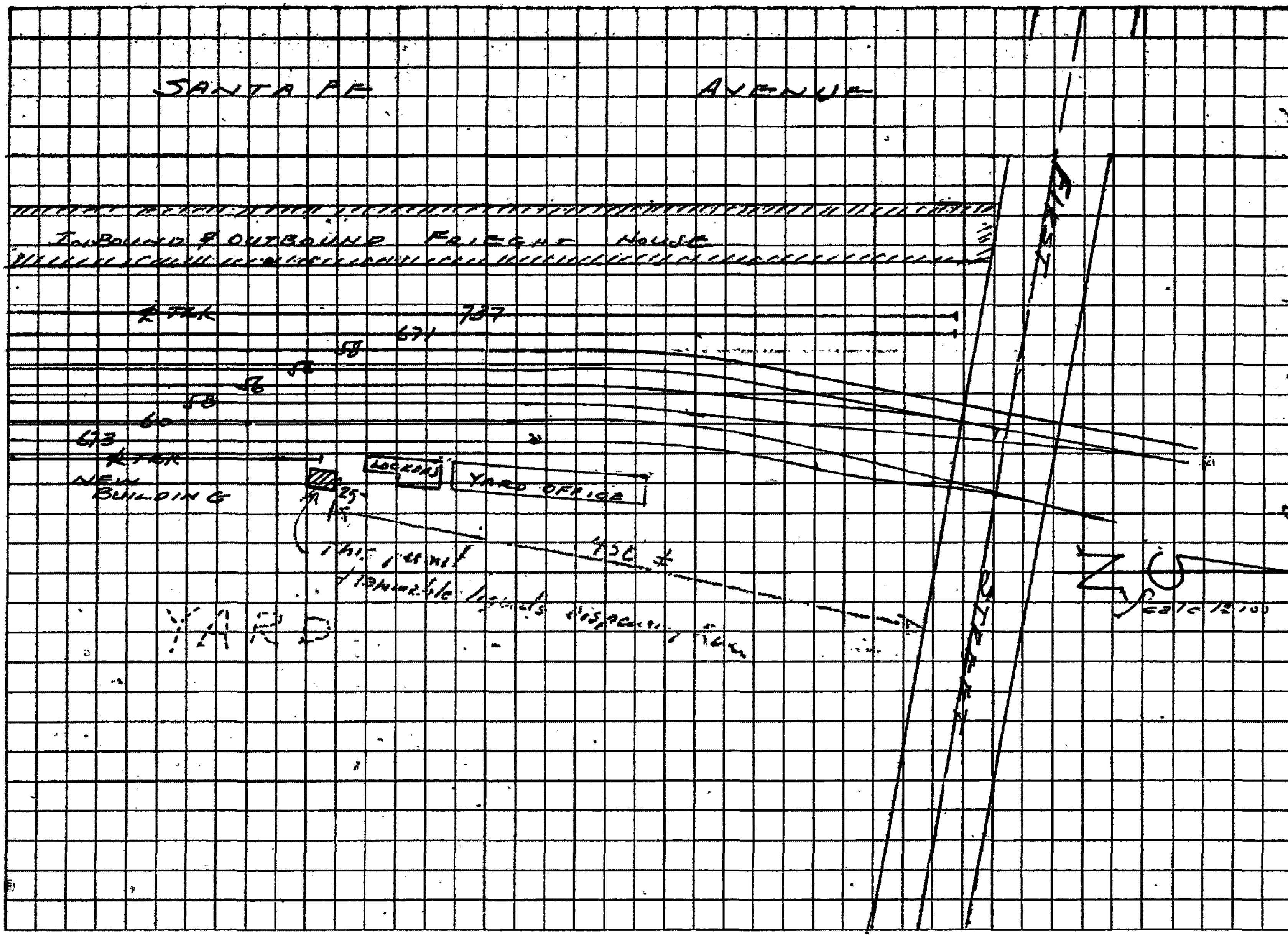
GROUP	Plans and Specifications checked	Zone	Fire District	District Map No.
E-1	J. R. Gruno	M-3	No. 2	129-217

For Plans See	Correction Verified	Bldg. Line	Street Widening	Application checked and approved
	J. R. Gruno	Ft.	Ft.	E. H. Hopkins

Filed with	Plans, Specifications and Application rechecked and approved.	Continuous Inspection	SPRINKLER — Specified—Required Valuation Included Yes—No	Inspector

DO NOT WRITE BELOW THIS LINE

TYPE OF RECEIPT	DATE ISSUED	TRACER NO. (M)	RECEIPT NO.	CODE	FEE PAID
Plan Checking	SEP 15 1954		LA56114		
Supplemental Plan Checking				LA98209	
Building Permit	OCT 11 1954		LA[redacted]		


SANTA FE
AVENUE
INBOUND & OUTBOUND FREIGHT HOUSE
FIRST
STREET
737
671
58
60
673
NEW
BUILDING
LOCKERS
YARD OFFICE
YARD
Scale 1"=100'

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY

CERTIFICATE OF OCCUPANCY

NOTE: Any change of use or occupancy must be approved by the Department of Building and Safety.

Address of Building: 214 S. Santa Fe Ave.

Permit No. and Year: LA 98209 - 1954

Certificate Issued: Sept. 26, 1955, 19

This certifies that, so far as ascertained by or made known to the undersigned, the building at above address complies with the applicable requirements of the Municipal Code, as follows: Ch. 1, as to permitted uses; Ch. 9, Arts. 1, 3, 4, and 5; and with applicable requirements of State Housing Act,—for following occupancies:

1 Story, Type IV, 16' x 20' Flammable Liquid Storage and Dispensing Building, (Group F-1 Flammable Liquids), Maximum Capacity - 1,280 gallons. E-1 Occupancy.

EXCEPT FOR DEVIATIONS APPROVED BY BOARD OF BLDG. & SAFETY COMMISSIONERS

Owner: Atchison, Topeka & Santa Fe Railway Co.

Owner's Address: 121 E. 6th St. Los Angeles 14, Calif.

WILLIAM A. TINKER ag

Form B-955a—20M—5-55 G. E. MORRIS, Superintendent of Building By

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY

CERTIFICATE OF OCCUPANCY

NOTE: Any change of use or occupancy must be approved by the Department of Building and Safety.

Address of Building: 214 So. Santa Fe Avenue

Permit No. and Year: LA 50572--1956

Certificate Issued: November 21, 1956

This certifies that, so far as ascertained by or made known to the undersigned, the building at above address complies with the applicable requirements of the Municipal Code, as follows: Ch. 1, as to permitted uses; Ch. 9, Arts. 1, 3, 4, and 5; and with applicable requirements of State Housing Act,—for following occupancies:

1 story, type IV, 8' x 12' utility building. G-1 Occupancy.

Owner: A. T. & S. F. Railway Co.

Owner's Address: 121 East 6th Street
Los Angeles 14, California

Form B-95-a-a—10M—11-56 G. E. MORRIS, Superintendent of Building By A. R. HEWITT

1

APPLICATION TO CONSTRUCT NEW BUILDING
AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

DIST. MAP 129-217	1. LEGAL LOT / BLK. / TRACT: Cit Lands of Los Angeles
ZONE M-3	JOB ADDRESS: 214 So. Santa Fe Ave. — APPROVED RB
FIRE DIST. F	2. BETWEEN CROSS STREETS: 1st St. AND 3rd St.
INSIDE / KEY	3. PURPOSE OF BLDG.: Utility Bldg.
COR. LOT X / REV. COR.	4. OWNER: A.T.& S.F. Railway Co. Ph. MU 0111
LOT SIZE Acreage x	5. OWNER'S ADDRESS: 121 E. 6th St.
REAR ALLEY / SIDE ALLEY	6. CERT. ARCH. — STATE LICENSE NUMBER
BLDG. LINE	7. LIC. ENGR.: E. Leo Callahan Ph. MU 0111 — STATE LICENSE NUMBER S.E. 94
AFFIDAVITS	8. CONTRACTOR: 10811 E. Thust St. El Monte Ph. CU 36362 Soutwest Fabricating Co. — STATE LICENSE NUMBER 143092
BLDG. AREA	9. SIZE OF NEW BLDG.: 8' x 12' STORIES 1 HEIGHT 8'
SPRINKLERS REQ'D. SPECIFIED	10. MATERIAL OF EXTERIOR WALLS: ☐ WOOD ☐ STUCCO ☐ METAL ☐ BRICK ☐ CONC. BLOCK ☐ CONCRETE

1 214 So. Santa Fe Ave.

VALIDATION LA50572

	JUN-17-56 63655 B — 2 CK 2.00
TYPE IV / GROUP G-1 / MAX. OCC. —	AUG-13-56 68661 C — 1 CK 5.00
DIST. OFFICE L. A.	
C. OF O. ISSUED	P. C. $2.00 B.P. $5.00

DWELL. UNITS	11. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $800.00	VALUATION APPROVED Mutel
PARKING SPACES	I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance.	APPLICATION CHECKED Ogan
GUEST ROOMS		PLANS CHECKED Mutel
FILE WITH	SOUTHWEST FABRICATING Co [signature] SIGNED	CORRECTIONS VERIFIED
CONT. INSP. ~~[illegible]~~		PLANS APPROVED
Bldg By Iii Fab	This Form When Properly Validated is a Permit to Do the Work Described	APPLICATION APPROVED
	No new driveways to be built	

Form B-1 M-35222

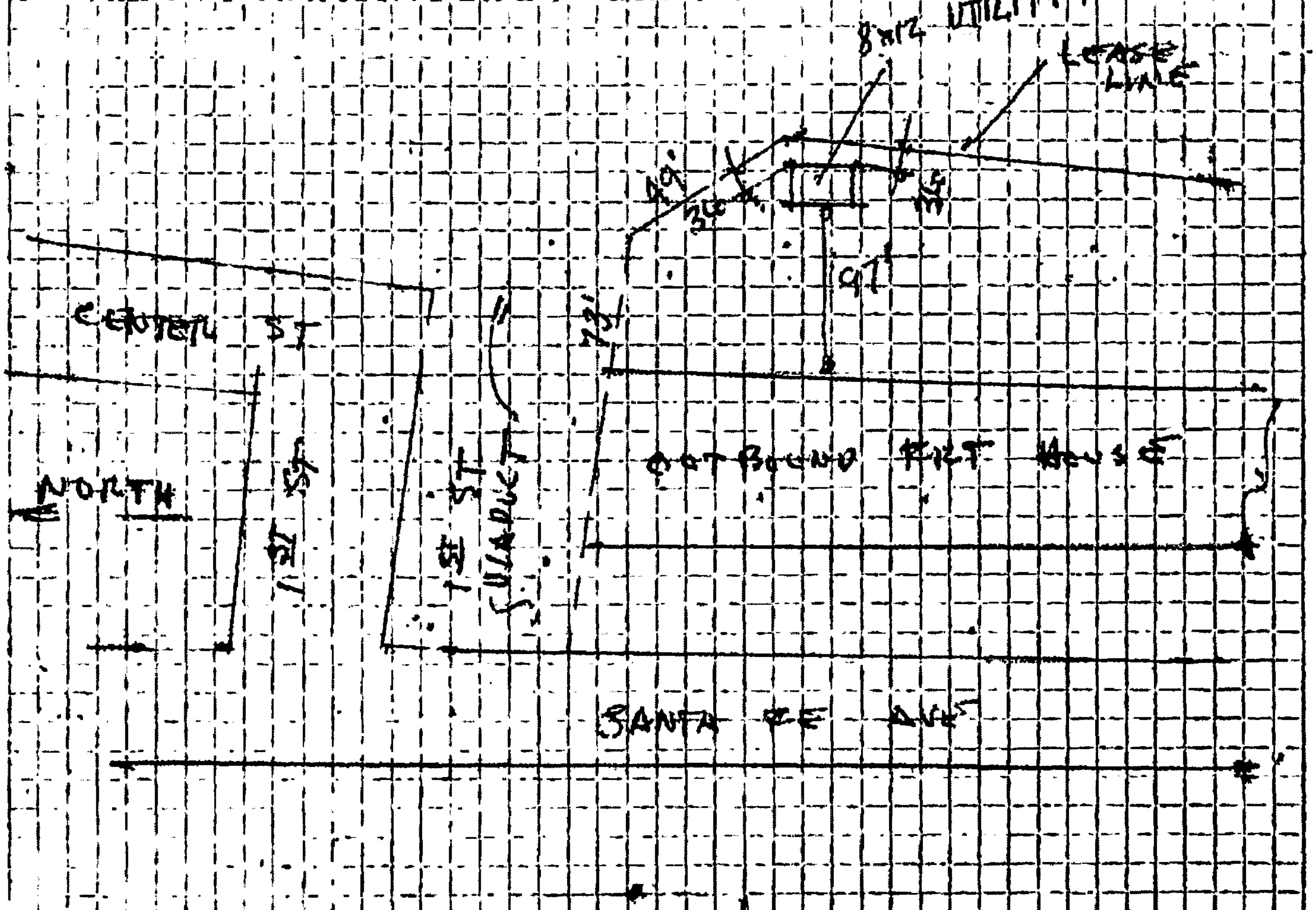
INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.
2. Plot Plan Required on Back of Original.

LEGAL DESCRIPTION

On Plot Plan Show all Buildings on Lot and Use of Each

Occupancy [illegible] will be permitted until approved [illegible] to [illegible] facilities or sewer [illegible] authorized by the Board of Public [illegible] for use.

~~11-22-79~~	~~43487~~	C — 1 [illegible]	5.00
11-1-79	83957	B — 2 [illegible]	2.00



1

APPLICATION TO CONSTRUCT NEW BUILDING AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

DIST. MAP 129-217	1. LEGAL LOT	BLK.	TRACT City Lands of Los Angeles
ZONE M-3	JOB ADDRESS 214 S. Santa Fe Ave		APPROVED RB
FIRE DIST. II	2. BETWEEN CROSS STREETS 1st AND 3rd		
INSIDE / KEY	3. PURPOSE OF BLDG. Truck Wash Rack		
COR. LOT X / REV. COR.	4. OWNER A. T. & O. F. Delivary Co.		
LOT SIZE Acreage	5. OWNER'S ADDRESS 121 E. 6th St.		
REAR ALLEY / SIDE ALLEY	6. CERT. ARCH.	STATE LICENSE NUMBER	
BLDG. LINE	7. LIC. ENGR. E. Leo, Callahan	STATE LICENSE NUMBER CE94	
AFFIDAVITS	8. CONTRACTOR Southwest Fabricating Co.	STATE LICENSE NUMBER 143092	
BLDG. AREA	9. SIZE OF NEW BLDG. 18' x 40' STORIES 1	HEIGHT 19'	
SPRINKLERS REQ'D. SPECIFIED	10. MATERIAL OF EXTERIOR WALLS: ☐ WOOD ☐ STUCCO. ☒ METAL ☐ BRICK ☐ CONC. BLOCK ☐ CONCRETE		

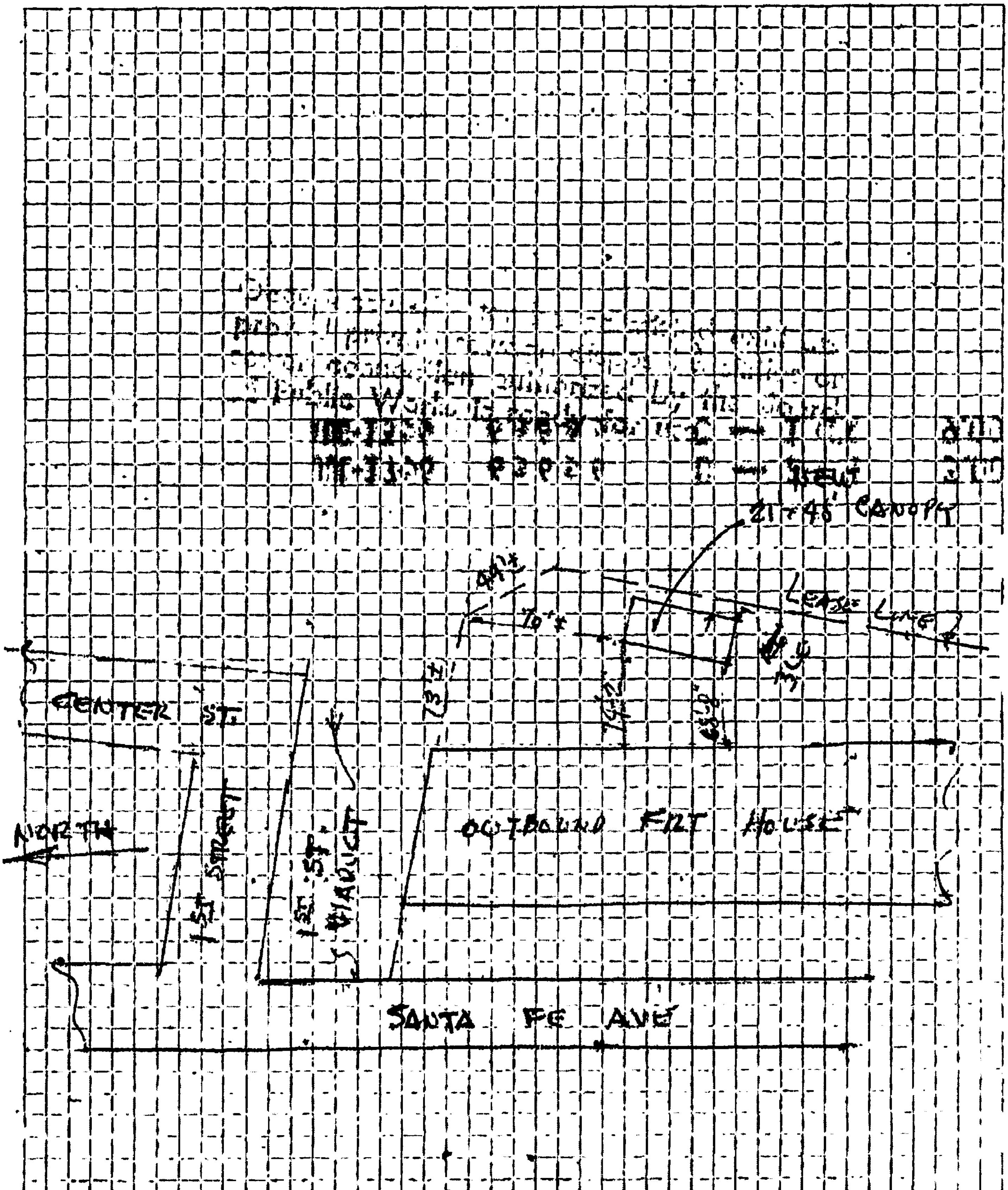
1

214 S. Santa Fe Ave

VALIDATION LA50574	JUL-17-56	63656	B — 2 CK	3.00
TYPE IV / GROUP G-1 / MAX. OCC. —	AUG-13-56	68683	C — 1 CK	9.00
DIST. OFFICE LA				
C. OF O. ISSUED	P. C. $3.00 B.P. $9.00			

DWELL. UNITS	11. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ ~~1400.00~~ 2000.00	VALUATION APPROVED Mutel
PARKING SPACES	I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance.	APPLICATION CHECKED Ogan
GUEST ROOMS	Southwest Fabricating Co	PLANS CHECKED Mutel
FILE WITH	SIGNED	CORRECTIONS VERIFIED
CONT. INSP. LIC FAB #167		PLANS APPROVED
	This Form When Properly Validated is a Permit to Do the Work Described	APPLICATION APPROVED

Form B-1 M-3522 INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.


21'x45' CANOPY
44'±
70'±
LEASE LINE
13'±
CENTER ST.
NORTH
1ST STREET
1ST ST. VIADUCT
OUTBOUND FRT HOUSE
SANTA FE AVE

All applic[illegible]ons must be filled out b[illegible] applicant.

WARD 7

PLANS and SPECIFICATIONS and other data must also be filed.

BOARD OF PUBLIC WORKS

DEPARTMENT OF BUILDINGS

Application to Alter, Repair or Demolish

Application is hereby made to the Board of Public Works (Chief Inspector of Buildings) of the City of Los Angeles, for the approval of the detailed statement of specifications herewith submitted for the alteration, repair or demolition of the building herein described. All provisions of the Building Ordinances shall be complied with in the alteration, repair or demolition of said building, whether specified herein or not.

(SIGN HERE) Wells Fargo & Co by J H Humphreys

Los Angeles, Cal., Oct 3 OCT 4 1910 1910

PLANS CHECKED BY—O. K. [illegible]

CITY ASSESSOR: Please Verify

TAKE TO ROOM NO. 6 FIRST FLOOR

REMOVED FROM	REMOVED TO
Lot Block	Lot Block
Tract	Tract
Depot Grounds of	Same location
Santa Fe R.R. Co.	
East side Santa Fe	
avenue, opposite	
3rd St. Art 147	Lupton Lionelaud
	OT Weldel
Book 5 Page 8 F. B. Page 101	Book Page F. B. Page 4

TAKE TO ROOM NO. 34 THIRD FLOOR

CITY ENGINEER: Please Verify Street Number

From No. 230 Santa Fe To No. Ave. OK [illegible]

1. Owner's name Wells Fargo & Co. Express
2. Owner's address Central Building N 6th & Main St
3. Architect's name Jas. H Humphreys
4. Contractor's name A. McNally Co. 4216
5. Contractor's address 538 Bradbury Building
6. Entire cost of the Proposed Improvements, $ 6340.—
7. Purpose of the building Depot Bldg of Express Co.
8. Class of building C No. of rooms at present 1
9. No. of stories in height 1 Size of present building 40 X 110
10. Size of new addition ~~[illegible] X~~ 50 x 40 & 10 x 160
11. Material of foundation Concrete Size Footing 21" Size of wall 17"
12. Size of exterior studs — X Interior studs — X —
13. Size of mud sills — X — Bearing studs — X —
14. Size of first floor joist — X — Second floor joist — X —
15. STATE ON FOLLOWING LINES JUST WHAT YOU WANT TO DO:—

Enlarge present building by taking down East & South walls increasing floor area from 40 x 110 to 50 x 160.

Date OCT 4 1910 Oct 3 1910

PERMIT NO. 8116 (4)

Application Rec'd [illegible]

3

APPLICATION TO ALTER - REPAIR - DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

B&S Form B-3

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR. LOT: Pt. of BLK. TRACT: City Lands of L.A. — ADDRESS APPROVED: RB
2. BUILDING ADDRESS: 290 South Santa Fe Ave — DIST. MAP: 129-217
3. BETWEEN CROSS STREETS: 1 St St AND 3 rd St — ZONE: M-3-3
4. PRESENT USE OF BUILDING: Locker Bldg — NEW USE OF BUILDING: Demolish — FIRE DIST.: II
5. OWNER'S NAME: A.T. & S.F. Ry. Co — PHONE: MA80111 — INSIDE / KEY
6. OWNER'S ADDRESS: 121 E 6th St — P.O. — ZONE — COR. LOT / REV. COR.
7. CERT. ARCH.: B.A. Teal — STATE LICENSE: C671 — PHONE: MA80111 — LOT SIZE: Acreage
8. LIC. ENGR.: Owner — STATE LICENSE — PHONE
9. CONTRACTOR: Owner — STATE LICENSE — PHONE — REAR ALLEY / SIDE ALLEY
10. CONTRACTOR'S ADDRESS: Same — P.O. — ZONE — BLDG. LINE
11. SIZE OF EXISTING BLDG.: ~~975~~ sq. ft. — STORIES: 1 — HEIGHT: 10' — NO. OF EXISTING BUILDINGS ON LOT AND USE: Many R.R. bldgs — BLDG. AREA

SEWER (Available) (Not Available)

3 290 South Santa Fe Avenue — DISTRICT OFFICE: L.A.

12. MATERIAL EXT. WALLS: [X] WOOD [ ] METAL [ ] CONC. BLOCK [ ] STUCCO [ ] BRICK [ ] CONCRETE — ROOF CONST.: [X] WOOD [ ] STEEL [ ] CONC. [ ] OTHER — ROOFING — SPRINKLERS REQ'D. SPECIFIED
13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 300.00 — VALUATION APPROVED: [signature] — AFFIDAVITS
14. SIZE OF ADDITION — STORIES — HEIGHT — APPLICATION CHECKED: ARODACA*
15. NEW WORK: (Describe) EXT. WALLS — ROOFING — PLANS CHECKED — DWELL. UNITS

Demolish S.C.# 04538

CORRECTIONS VERIFIED — SPACES PARKING

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance, and I have read reverse side of Application.

PLANS APPROVED — GUEST ROOMS

APPLICATION APPROVED: [signature] — FILE WITH

Signed E Rounsteugle Jr.

INSPECTOR — CONT. INSP.

This Form When Properly Validated Is a Permit to Do the Work Described.

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O
V						2 50	X		

CASHIER'S USE ONLY

LA28610 JAN-15-63 02581 B — 1 CB 2.50

P.C. No. .... GRADING .... X CRIT. SOIL .... X CONS. X

CRITICAL SOIL

3

APPLICATION TO ALTER - REPAIR - DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY — B&S Form B-3

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR. LOT: — BLK.: — TRACT: City Lands of Los Angeles
2. BUILDING ADDRESS: 290 South Santa Fe Avenue (Bldg "B")
3. BETWEEN CROSS STREETS: 2nd Street AND 3rd Street
4. PRESENT USE OF BUILDING: Office — NEW USE OF BUILDING: Same - 33
5. OWNER'S NAME: Santa Fe Railway Company — PHONE:
6. OWNER'S ADDRESS: 310 South Santa Fe Avenue — P.O. — ZONE: 90013
7. CERT. ARCH. — STATE LICENSE — PHONE
8. LIC. ENGR. — STATE LICENSE — PHONE
9. CONTRACTOR: Owner — STATE LICENSE — PHONE
10. CONTRACTOR'S ADDRESS: As above — P.O. — ZONE
11. SIZE OF EXISTING BLDG.: 25 X 25 — STORIES: 1 — HEIGHT: 18 — NO. OF EXISTING BUILDINGS ON LOT AND USE:

ADDRESS APPROVED / DIST. MAP / ZONE / FIRE DIST. / INSIDE / KEY / COR. LOT / REV. COR. / LOT SIZE / REAR ALLEY / SIDE ALLEY / BLDG. LINE / BLDG. AREA

SEWER (Available) (Not Available)

3 290 South Santa Fe Avenue (Bldg "B") — DISTRICT OFFICE: Los Angeles

12. MATERIAL EXT. WALLS: ☐ WOOD ☐ METAL ☐ CONC. BLOCK ☐ STUCCO ☒ BRICK ☐ CONCRETE — ROOF CONST.: ☐ WOOD ☒ STEEL ☐ CONC. ☐ OTHER — ROOFING — SPRINKLERS REQ'D. SPECIFIED
13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 300.00
14. SIZE OF ADDITION — STORIES — HEIGHT
15. NEW WORK: (Describe) EXT. WALLS — ROOFING
Parapet correction as per plans and Department File

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance, and I have read reverse side of Application.

Signed V. W. Main

This Form When Properly Validated is a Permit to Do the Work Described.

VALUATION APPROVED / APPLICATION CHECKED / PLANS CHECKED / CORRECTIONS VERIFIED / PLANS APPROVED / APPLICATION APPROVED / INSPECTOR

CRITICAL SOIL / AFFIDAVITS / DWELL. UNITS / SPACES PARKING / GUEST ROOMS / FILE WITH: PARAPET DIV. ROOM 225 / CONT. INSP.

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O
IV	G-1	N.C.	1.63			2.50			

CASHIER'S USE ONLY

JAN--6-65 00545 5 •85245 Z — 2 CS 1.63

1-6-65 005306 85245 Z-1CS 2.50

P.C. No. — GRADING — CRIT. SOIL — CONS.

3

APPLICATION TO ALTER - REPAIR - DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — B&S Form B-3 — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR. LOT — BLK. — TRACT City Lands of Los Angeles
2. BUILDING ADDRESS: 290 South Santa Fe Avenue (Bldg "A")
3. BETWEEN CROSS STREETS: 2nd Street AND 3rd Street
4. PRESENT USE OF BUILDING: Office and Storage — NEW USE OF BUILDING: Same - 33
5. OWNER'S NAME: Santa Fe Railway Company — PHONE
6. OWNER'S ADDRESS: 310 South Santa Fe Avenue — P.O. — ZONE 90013
7. CERT. ARCH. — STATE LICENSE — PHONE
8. LIC. ENGR. — STATE LICENSE — PHONE
9. CONTRACTOR: Owner — STATE LICENSE — PHONE
10. CONTRACTOR'S ADDRESS: As above — P.O. — ZONE
11. SIZE OF EXISTING BLDG. 25 X 130 — STORIES 1 — HEIGHT 16 — NO. OF EXISTING BUILDINGS ON LOT AND USE

ADDRESS APPROVED — DIST. MAP — ZONE — FIRE DIST. — INSIDE — KEY — COR. LOT — REV. COR. — LOT SIZE — REAR ALLEY — SIDE ALLEY — BLDG. LINE — BLDG. AREA

SEWER (Available) (Not Available)

3 290 South Santa Fe Avenue (Bldg "A") — DISTRICT OFFICE: Los Angeles

12. MATERIAL EXT. WALLS: ☐ WOOD ☐ METAL ☐ CONC. BLOCK ☐ STUCCO ☒ BRICK ☒ CONCRETE — ROOF CONST.: ☒ WOOD ☐ STEEL ☐ CONC. ☐ OTHER — ROOFING — SPRINKLERS REQ'D. SPECIFIED
13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 800.00
14. SIZE OF ADDITION — STORIES — HEIGHT
15. NEW WORK: (Describe) EXT. WALLS — ROOFING
Parapet correction as per plans and Department File

VALUATION APPROVED — APPLICATION CHECKED — PLANS CHECKED — CORRECTIONS VERIFIED — PLANS APPROVED — APPLICATION APPROVED — INSPECTOR

AFFIDAVITS — DWELL. UNITS — SPACES PARKING — GUEST ROOMS — FILE WITH PARAPET DIV. ROOM 225 — CONT. INSP.

CRITICAL SOIL

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance, and I have read reverse side of Application.

Signed V. W. Mar...

This Form When Properly Validated is a Permit to Do the Work Described.

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O
III A	G-1	N.C.	3.25	.		5.00			

CASHIER'S USE ONLY

JAN-6-65 00543 C •85244 Z — 2 CS 3.25

JAN-6-65 00544 C •85244 Z — 1 CS 5.00

P.C. No. ______ GRADING ______ CRIT. SOIL ______ CONS. ______

230 - 330 S Santa Fe Ave
230 S Santa Fe Ave

Permit #: **11010 - 10000 - 01774**
Plan Check #: B11LA09457 Printed: 12/21/11 09:14 AM
Event Code:

Bldg-New GREEN - MANDATORY
·mercial
·ılar Plan Check
Plan Check

City of Los Angeles - Department of Building and Safety

APPLICATION FOR BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY

Last Status: Ready to Issue
Status Date: 12/21/2011

1. TRACT	BLOCK	LOT(s)	ARB	COUNTY MAP REF #	PARCEL ID # (PIN #)	2. ASSESSOR PARCEL #
CITY LANDS OF LOS ANGEI		"UNNUMBERED LT"	202	M R 2-504/505 PAT 3-64	127-5A217 3	5163 - 017 - ***
CITY LANDS OF LOS ANGEI		"UNNUMBERED LT"	201	M R 2-504/505 PAT 3-64	127-5A217 4	5163 - 017 - ***
CITY LANDS OF LOS ANGEI		"UNNUMBERED LT"	200	M R 2-504/505 PAT 3-64	127-5A217 5	5163 - 017 - ***
MILLS AND WICKS EXTENS		242		M R 13-87/88	127-5A217 53	5163 - 017 - ***

3. PARCEL INFORMATION

Area Planning Commission - Central
LADBS Branch Office - LA
Council District - 9
Cmpt. Fill Grd. - CFG
Certified Neighborhood Council - Historic Cultural
Community Plan Area - Central City North
Census Tract - 2060.40
District Map - 127-5A217
Energy Zone - 9
Fire District - 2
Methane Hazard Site - Methane Zone
Near Source Zone Distance - 1.6
Parking Dist. - CCPD
Thomas Brothers Map Grid - 634-H4
Thomas Brothers Map Grid - 634-H5

ZONES(S): (T)(Q)C2-2D / PF-1XL

4. DOCUMENTS

ZI - ZI-1117 MTA Project
ZI - ZI-2129 East Los Angeles State Ent
ZI - ZI-223 Site Plan OK for Legal Desc
ZA - ZA-2011-401-ZAA-SPR
ORD - ORD-164855-SA1740
ORD - ORD-171037-SA99
ORD - ORD-179685
MODF - 12-7-11 50% OPEN'S AT EAS
MODF - 12-7-11 ONE TIME APPROV
MODF - 12-7-11 PARKING RAMP TU
MODF - 12-7-11 REDUCE FIRE RATI
MODF - 12-7-11 S2 OPENINGS AT PI
MODF - 12-7-11 ALLOW NON FIRETI
MODF - 12-7-11 ANCHOR BOLT W/ 4
MODF - 12-7-11 CORRIDOR (PROT'D
MODF - 12-7-11 ELASTIZELL AS STR

5. CHECKLIST ITEMS

Special Inspect - Concrete>2.5ksi
Special Inspect - Grading:Special Hazard
Special Inspect - Impervious Methane Membrane
Special Inspect - Non-Destructive Testing
Special Inspect - Structural Observation
Special Inspect - Structural Wood (periodic)
Fabricator Reqd - Glued-Laminated Timber
Fabricator Reqd - Precast Concrete Panel
Fabricator Reqd - Prefabricated Joist

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION

Owner(s):
Cjuf Iii One Santa Fe, Llc 230 Santa Fe LA, CA 90012

Tenant:

Applicant: (Relationship: Architect)
Steve Xolotl - Ktgy Group, Inc. 1733 Ocean Blvd Suite 250 SANTA MONICA, CA (310) 394-2623

LA Department of Buildings and Safety
LA 01 22 295086 12/21/11 09:41AM
ARTS DEV FEE $75,41.
BUILDING PLAN CHECK $...
BUILDING PLAN CHECK $0.00
1010100001774FN
Total Due: $75,416.00
[illegible] $75,416.00

7. EXISTING USE

PROPOSED USE
(05) Apartment
(16) Retail
(13) Office
(07) Garage - Private

8. DESCRIPTION OF WORK

PROPOSED 6 STORY MIXED USE BLDG (RETAIL, APARTMENT, PARKING, LIVE/WORK). PORTION OF THE BLDG IS 5-STORY TYPE IIIA APARTMENT OVER 1 STORY TYPE I GARAGE/COMMERCIAL(RETAIL/OFFICE). THE OTHER PORTION IS 3 STORY TYPE IIIA APARTMENT OVER 3 STORY TYPE I

NO FEE NO FEE NO FEE

9. # Bldgs on Site & Use:

For inspection requests, call toll-free (888) LA4BUILD (524-2845). Outside LA County, call (213) 482-0000 or request inspections via www.ladbs.org. To speak to a Call Center agent, call 311 or (866) 4LACITY (452-2489). Outside LA County, call (213) 473-3231.

Dept. CULTURAL AFFAIRS

10. APPLICATION PROCESSING INFORMATION

BLDG. PC By: John Vasquez
DAS PC By: Eddie Garin
OK for Cashier: Lincoln Lee
Coord. OK:
Signature: [signature] Date: 12/21/2011

For Cashier's Use Only W/O #: 11001774

11. PROJECT VALUATION & FEE INFORMATION Final Fee Period

Permit Valuation: $73,200,000 PC Valuation:

FINAL TOTAL Bldg-New	2,134,611.49	Arts Development	75,416.00
Permit Fee Subtotal Bldg-New	277,640.50	Arts Dev. Retail Area	
Energy Surcharge		Arts Dev. Misc Fee	40.00
Handicapped Access		School District Residential Level 2	1,468,353.34
Plan Check Subtotal Bldg-New	0.00	School District Commercial Area	27,072.00
Plan Maintenance	300.00	Dwelling Unit Construction Tax	87,600.00
Fire Hydrant Refuse-To-Pay		Residential Development Tax	131,400.00
E.Q. Instrumentation	15,372.00	State Green Building Surcharge	2,928.00
O.S. Surcharge	5,866.25	Green Building	
Sys. Surcharge	17,598.75	Permit Issuing Fee	0.00
Planning Surcharge	16,676.43		
·ing Surcharge Misc Fee	10.00		
·ing Gen Plan Maint Surcharg	8,338.22		

Sewer Cap ID: Total Bond(s) Due:

2011LA72162

12. ATTACHMENTS OMIT (SEE PLAN)
~~Metes & Bounds Legal~~ Plot Plan
Owner-Builder Declaration

P11010100001774FN

13. STRUCTURE INVENTORY (Note: Numeric measurement data in the format "number / number" implies "change in numeric value / total resulting numeric value") **11010 - 10000 - 01774**

(P) Basement (BC): +1 Levels / 1 Levels
(P) Basement (ZC): +1 Levels / 1 Levels
(P) Floor Area (ZC): +527028 Sqft / 527028 Sqft
'P) Height (BC): +70.75 Feet / 70.75 Feet
') Height (ZC): +70 Feet / 70 Feet
' ength: +1670 Feet / 1670 Feet
tories: +6 Stories / 6 Stories
(r) Width: +206 Feet / 206 Feet
(P) Dwelling Unit: +438 Units / 438 Units
(P) NFPA-13 Fire Sprinklers Thru-out
(P) Methane Site Design Level II
(P) A3 Occ. Group: +14711 Sqft / 14711 Sqft
(P) B Occ. Group: +31243 Sqft / 31243 Sqft
(P) M Occ. Group: +45801 Sqft / 45801 Sqft
(P) R2 Occ. Group: +454717 Sqft / 454717 Sqft
(P) S2 Occ. Group: +268207 Sqft / 268207 Sqft
(P) A3 Occ. Load: +900 Max Occ. / 900 Max Occ.
(P) Parking Req'd for Bldg (Auto+Bicycle): +802 Stalls /
(P) Provided Bicycle for Bldg: +6 Stalls / 6 Stalls
(P) Provided Compact for Bldg: +397 Stalls / 397 Stalls
(P) Provided Disabled for Bldg: +18 Stalls / 18 Stalls
(P) Provided Standard for Bldg: +381 Stalls / 381 Stalls
(P) Total Provided Parking for Site: +802 Stalls / 802 Sta
(P) Type I-A Construction
(P) Type III-A Construction

14. APPLICATION COMMENTS:
** Approved Seismic Gas Shut-Off Valve may be required. ** **Total Project valuation is $73,200,000. Balance of pc fees to be collected prior to release of pc corrections under submittal 2. (per Lincoln Lee) **Architect Steve Xolotl to determine if shoring and methane plans are part of the original building submittal (C. Huynh) **Project is described in the planning entitlements as Buildings A, B, C and D, however the entire project is one building. The designation on the plans shows Bldgs A, B and C; same layout and scope as in the planning entitlements. Also, Max Zoning Code Height for "Bldg A" is 70' and Max Zoning Code Height for "Bldgs B and C" is 65' all per

In the event that any box (i.e. 1-16) is filled to capacity, it is possible that additional information has been captured electronically and could not be printed due to space restrictions. Nevertheless the information printed exceeds that required by section 19825 of the Health and Safety Code of the State of California.

15. BUILDING RELOCATED FROM:

16. CONTRACTOR, ARCHITECT & ENGINEER NAME

	NAME	ADDRESS		CLASS	LICENSE #	PHONE #
(A)	Gonzalez, Manuel George	1014 Crater Camp Dr,	Calabasas, CA 91302		C15088	
(E)	Cochran, Brian L	13770 Raywood Dr,	Los Angeles, CA 90049		S1356	
(O)	Owner-Builder				0	

PERMIT EXPIRATION/REFUNDS: This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inpection within 60 days of receiving a request for final inspection (HS 17951).

17. OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the Contractors' State License Law for the following reason (Section 7031.5, Business and Professions Code. Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

( ) I, as the owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year from completion, the owner-builder will have the burden of proving that he or she did not build or imrove for the purpose of sale).

OR

(X) I, as the owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.)

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations:

( ) I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

( ) I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: ______________________ Policy Number: ______________________

(X) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

19. ASBESTOS REMOVAL DECLARATION / LEAD HAZARD WARNING

I certify that notification of asbestos removal is either not applicable or has been submitted to the AQMD or EPA as per section 19827.5 of the Health and Safety Code. Information is available at (909) 396-2336 and the notification form at www.aqmd.gov. Lead safe construction practices are required when doing repairs that disturb paint in pre-1978 buildings due to the presence of lead per section 6716 and 6717 of the Labor Code. Information is available at Health Services for LA County at (800) 524-5323 or the State of California at (800) 597-5323 or www.dhs.ca.gov/childlead.

20. FINAL DECLARATION

I certify that I have read this application **INCLUDING THE ABOVE DECLARATIONS** and state that the above information **INCLUDING THE ABOVE DECLARATIONS** is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not auhorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a ·itute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

By signing below, I certify that:

(1) I accept all the declarations above namely the Owner-Builder Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration / Lead Hazard Warning, and Final Declaration; and

(2) This permit is being obtained with the consent of the legal owner of the property.

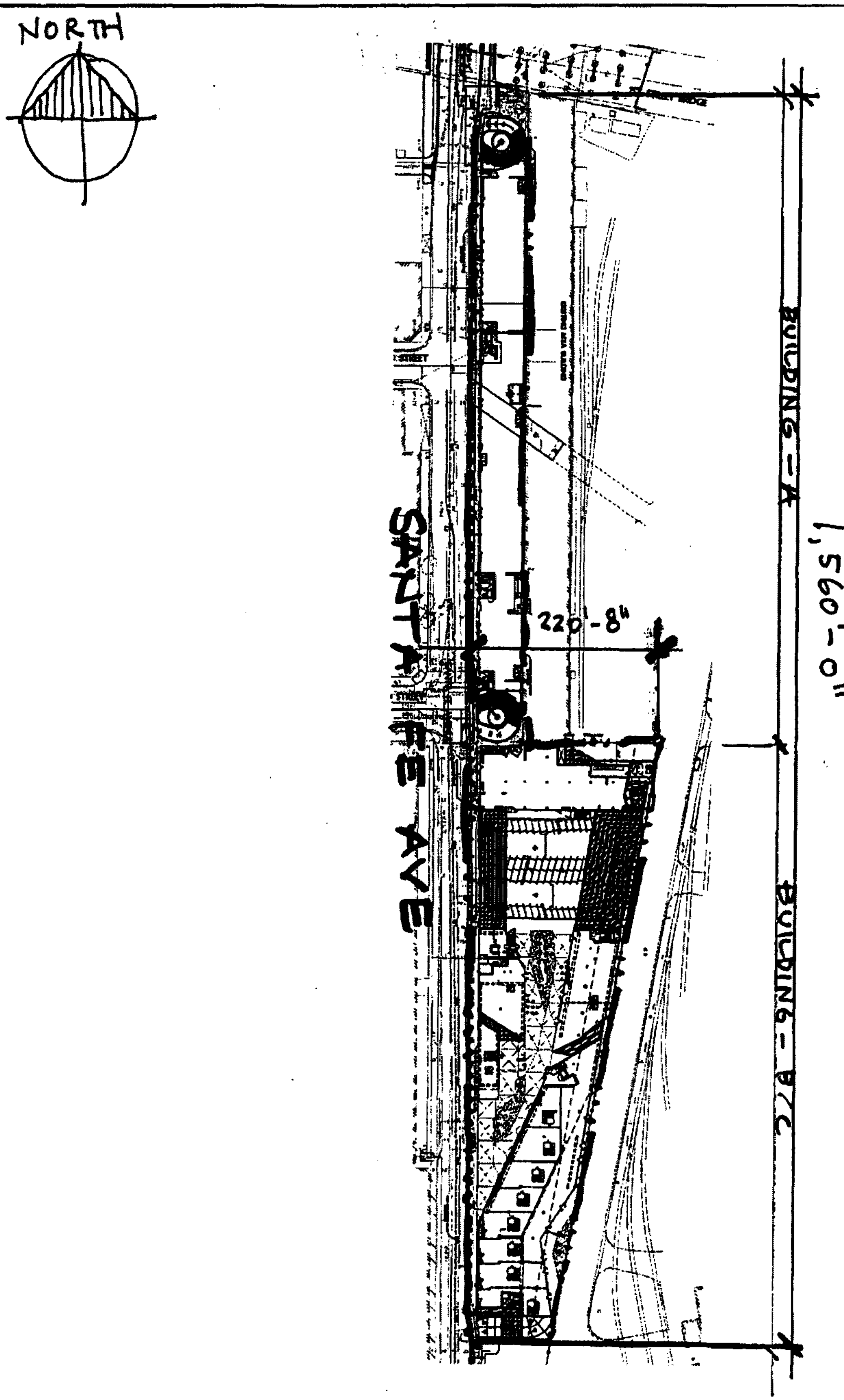
Print Name: William T. Hebbel[illegible] Sign: [signature] Date: 12/21/11 (X) Owner (X) Authorized Agent

330 S Santa Fe Ave

Permit Application # : **11010 - 10000 - 01774**

Bldg-New Commercial Plan Check	City of Los Angeles - Department of Building and Safety **PLOT PLAN ATTACHMENT**	Plan Check #: B11LA09457 Initiating Office: METRO Printed on: 12/07/11 08:25:27

(DO NOT DRAW, WRITE, OR PASTE ATTACHMENTS OUTSIDE BORDER)



COUNCIL DISTRICT: 9 INSPECTION DISTRICT: BIMSM1 PLOT PLAN

230 S Santa Fe Ave
230 - 330 S Santa Fe Ave

Permit #: **11010 - 10001 - 01774**
Plan Check #: B12LA04853 Printed: 06/26/12 09:51 AM
Event Code:

Bldg-Alter/Repair
Commercial
Regular Plan Check
Plan Check

City of Los Angeles - Department of Building and Safety

APPLICATION FOR BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY

Last Status: Ready to Issue
Status Date: 06/26/2012

1. TRACT	BLOCK	LOT(s)	ARB	COUNTY MAP REF #	PARCEL ID # (PIN #)	2. ASSESSOR PARCEL #
CITY LANDS OF LOS ANGEI		"UNNUMBERED LT"	202	M R 2-504/505 PAT 3-64	127-5A217 3	5163 - 017 - ***
CITY LANDS OF LOS ANGEI		"UNNUMBERED LT"	201	M R 2-504/505 PAT 3-64	127-5A217 4	5163 - 017 - ***
CITY LANDS OF LOS ANGEI		"UNNUMBERED LT"	200	M R 2-504/505 PAT 3-64	127-5A217 5	5163 - 017 - ***
MILLS AND WICKS EXTENS		242		M R 13-87/88	127-5A217 53	5163 - 017 - ***

3. PARCEL INFORMATION

Area Planning Commission - Central	Community Plan Area - Central City North	Methane Hazard Site - Methane Zone
LADBS Branch Office - LA	Census Tract - 2060.40	Near Source Zone Distance - 1.6
Council District - 9	District Map - 127-5A217	Parking Dist. - CCPD
Cmpt. Fill Grd. - CFG	Energy Zone - 9	Thomas Brothers Map Grid - 634-H4
Certified Neighborhood Council - Historic Cultural	Fire District - 2	Thomas Brothers Map Grid - 634-H5

ZONES(S): (T)(Q)C2-2D / PF-1XL

4. DOCUMENTS

ZI - ZI-1117 MTA Project	ORD - ORD-164855-SA1740	CPC - CPC-1986-607-GPC	CPC - CPC-2007-3036-CA
ZI - ZI-2129 East Los Angeles State Ent	ORD - ORD-171037-SA99	CPC - CPC-1995-148-GPC	CPC - CPC-2007-778-GPA-ZC-SPR-ZA
ZI - ZI-223 Site Plan OK for Legal Desc	ORD - ORD-179685	CPC - CPC-1995-352-CPU	CDBG - BID-ARTS DISTRICT
ZA - ZA-2011-401-ZAA-SPR	HCM - LA-909	CPC - CPC-2006-48-ICO	CDBG - FEZ-Los Angeles

5. CHECKLIST ITEMS

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION

Owner(s):
Cjuf Iii One Santa Fe, Llc 230 Santa Fe LA, CA 90012

Tenant:

Applicant: (Relationship: Agent for Owner)
Chris Tekaat - Methane Specialists 621 Via Alondra Suite 610 CAMARILLO, CA 93012 (805) 987-5356

7. EXISTING USE **PROPOSED USE**
(05) Apartment
(16) Retail
(13) Office
(07) Garage - Private

8. DESCRIPTION OF WORK
SUPPLEMENTAL PERMIT TO 11010-10000-01774 TO REVISE METHANE PLAN. NO CHANGE OF FLOOR PLAN LAYOUT

LA Department of Building and Safety
LA 03 17 336392 06/26/12 09:57AM

9. # Bldgs on Site & Use:

For inspection requests, call toll-free (888) LA4BUILD (524-2845). Outside LA County, call (213) 482-0000 or request inspections via www.ladbs.org. To speak to a Call Center agent, call 311 or (866) 4LACITY (452-2489). Outside LA County, call (213) 473-3231.

10. APPLICATION PROCESSING INFORMATION
BLDG PC By: Hok Chi Chiu DAS PC By:
OK for Cashier: Alex Mendez Coord. OK:
Signature: Date: 6/26/12

For Cashier's Use Only W/O #: 1100177[illegible]

BUILDING PERMIT COMM	$130.00
PLAN MAINTENANCE	$10.00
EI COMMERCIAL	$0.50
ONE STOP SURCH	$2.81
SYSTEMS DEVT FEE	$8.43
CITY PLANNING SURCH	$8.40
MISCELLANEOUS	$10.00
PLANNING GEN PLAN MAINT	$4.20
CA BLDG STD COMMISSION S	$1.00
BUILDING PLAN CHECK	$0.00
BUILDING PLAN CHECK	$0.00
BUILDING PLAN CHECK	$0.00

P110101000101774FN

Total Due: $175.34
Credit Card: $175.34
216907

2012LA79738

11. PROJECT VALUATION & FEE INFORMATION Final Fee Period
Permit Valuation: $501 PC Valuation: $0

FINAL TOTAL Bldg-Alter/Repair	175.34	Permit Issuing Fee	0.00
Permit Fee Subtotal Bldg-Alter/Re	130.00		
Plan Check Subtotal Bldg-Alter/Re	0.00		
Off-hour Plan Check	0.00		
Plan Maintenance	10.00		
Fire Hydrant Refuse-To-Pay			
E.Q. Instrumentation	0.50		
O.S. Surcharge	2.81		
Sys. Surcharge	8.43		
Planning Surcharge	8.40		
Planning Surcharge Misc Fee	10.00		
Planning Gen Plan Maint Surcharg	4.20		
Bldg Std Commission Surchar	1.00		

Sewer Cap ID: Total Bond(s) Due:

12. ATTACHMENTS

P110101000101774FN

13. STRUCTURE INVENTORY (Note: Numeric measurement data in the format "number / number" implies "change in numeric value / total resulting numeric value") **11010 - 10001 - 01774**

(P) Methane Site Design Level II

14. APPLICATION COMMENTS:
[1] Supplemental permit to revise methane plan only, see original permit for site plan, other information and clearance. [2] Afte consult with the Fire Department, approval from Fire Department for Emergency Procedures (LABC section 7107) is not required for passive system with sub-slab vent system. 5/25/2012.

In the event that any box (i.e. 1-16) is filled to capacity, it is possible that additional information has been captured electronically and could not be printed due to space restrictions. Nevertheless the information printed exceeds that required by section 19825 of the Health and Safety Code of the State of California

15. BUILDING RELOCATED FROM:

16. CONTRACTOR, ARCHITECT & ENGINEER NAME

	CONTRACTOR, ARCHITECT & ENGINEER NAME	ADDRESS		CLASS	LICENSE #	PHONE #
(A)	Gonzalez, Manuel George	1014 Crater Camp Dr,	Calabasas, CA 91302		C15088	
(C)	Intergrated Construction Services	621 Via Alondra Suite 610,	Camarillo, CA 93012	B	954856	(805) 987-5356
(E)	Cochran, Brian L	13770 Raywood Dr,	Los Angeles, CA 90049		S1356	

PERMIT EXPIRATION/REFUNDS: This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by LADBS (Sec. 22.12 & 22.13 LAMC). The permittee may be entitled to reimbursement of permit fees if the Department fails to conduct an inpection within 60 days of receiving a request for final inspection (HS 17951).

17. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. The following applies to B contractors only: I understand the limitations of Section 7057 of the Business and Professional Code related to my ability to take prime contracts or subcontracts involving specialty trades

License Class: B License No.: 954856 Contractor: INTERGRATED CONSTRUCTION SERVICES

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations.

( ) I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

( ) I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: State Comp. Ins. Fund Policy Number: 541-0000736

( ) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVI FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

19. ASBESTOS REMOVAL DECLARATION / LEAD HAZARD WARNING

I certify that notification of asbestos removal is either not applicable or has been submitted to the AQMD or EPA as per section 19827.5 of the Health and Safety Code. Information is available at (909) 396-2336 and the notification form at www.aqmd.gov. Lead safe construction practices are required when doing repairs that disturb paint in pre-1978 buildings due to the presence of lead per section 6716 and 6717 of the Labor Code. Information is available at Health Services for LA County at (800) 524-5323 or the State of California at (800) 597-5323 or www.dhs.ca.gov/childlead.

20. CONSTRUCTION LENDING AGENCY DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code)

Lender's Name (If Any) ______ Lender's Address: ______

21. FINAL DECLARATION

I certify that I have read this application **INCLUDING THE ABOVE DECLARATIONS** and state that the above information **INCLUDING THE ABOVE DECLARATIONS** is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not auhorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC)

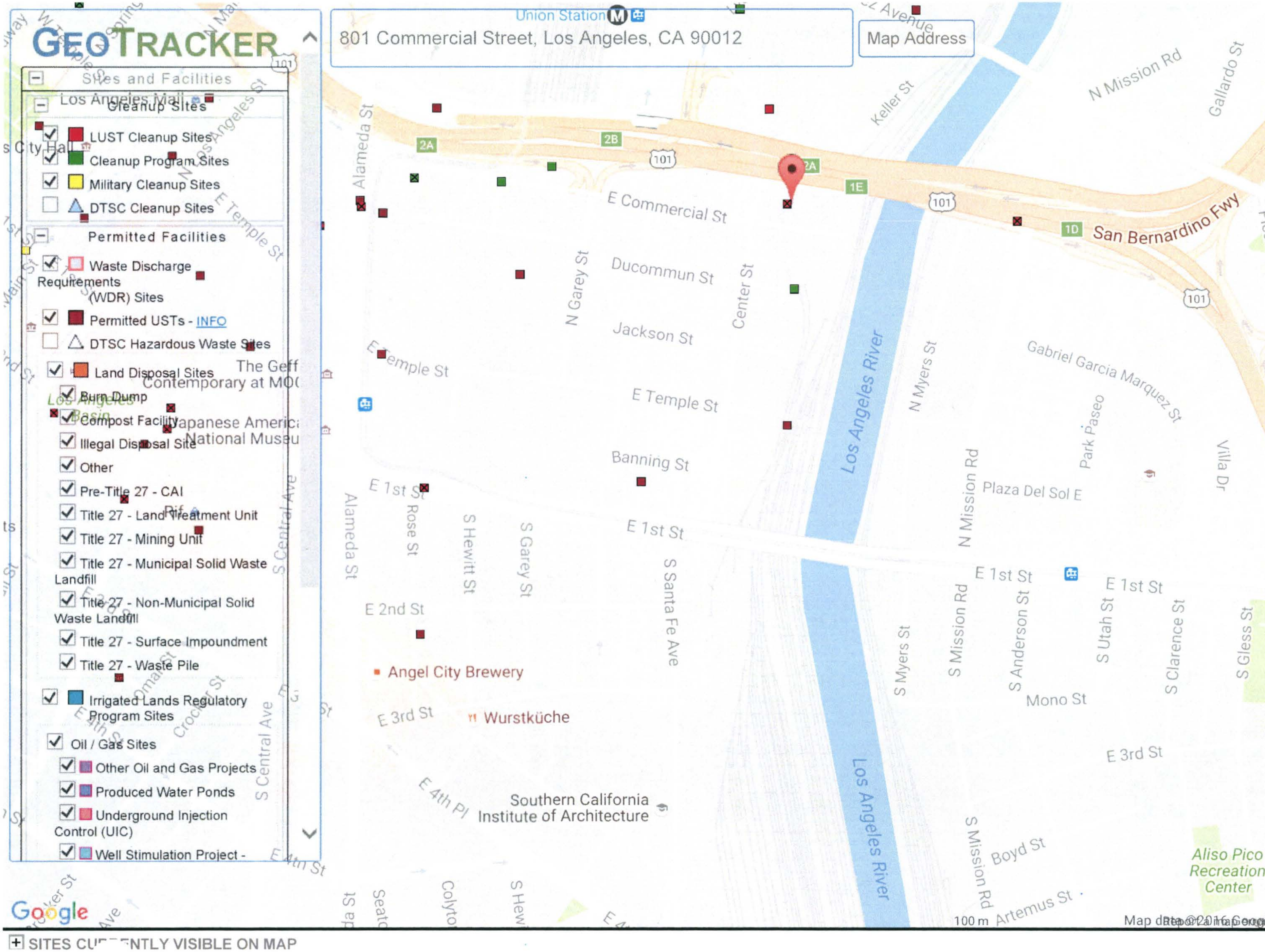
By signing below, I certify that:

(1) I accept all the declarations above namely the Licensed Contractor's Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration / Lead Hazard Warning, Construction Lending Agency Declaration, and Final Declaration, and

(2) This permit is being obtained with the consent of the legal owner of the property.

Print Name: CHRIS TEKAAT Sign: Chr Tekaat Date: 6/26/12 ☐ Contractor ☒ Authorized Agent

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER™, LOS ANGELES REGIONAL WATER
QUALITY CONTROL BOARD


GEOTRACKER
801 Commercial Street, Los Angeles, CA 90012
Map Address
Sites and Facilities
Cleanup Sites
LUST Cleanup Sites
Cleanup Program Sites
Military Cleanup Sites
DTSC Cleanup Sites
Permitted Facilities
Waste Discharge Requirements (WDR) Sites
Permitted USTs - INFO
DTSC Hazardous Waste Sites
Land Disposal Sites
Burn Dump
Compost Facility
Illegal Disposal Site
Other
Pre-Title 27 - CAI
Title 27 - Land Treatment Unit
Title 27 - Mining Unit
Title 27 - Municipal Solid Waste Landfill
Title 27 - Non-Municipal Solid Waste Landfill
Title 27 - Surface Impoundment
Title 27 - Waste Pile
Irrigated Lands Regulatory Program Sites
Oil / Gas Sites
Other Oil and Gas Projects
Produced Water Ponds
Underground Injection Control (UIC)
Well Stimulation Project -
Union Station
E Commercial St
Ducommun St
Jackson St
E Temple St
Banning St
E 1st St
E 2nd St
E 3rd St
E 4th Pl
Alameda St
N Garey St
Center St
Rose St
S Hewitt St
S Garey St
S Santa Fe Ave
S Central Ave
Los Angeles River
San Bernardino Fwy
N Mission Rd
Keller St
Gallardo St
Gabriel Garcia Marquez St
N Myers St
Park Paseo
Plaza Del Sol E
Villa Dr
S Myers St
S Mission Rd
S Anderson St
S Utah St
S Clarence St
S Gless St
Mono St
Boyd St
Artemus St
Angel City Brewery
Wurstküche
Southern California Institute of Architecture
Aliso Pico Recreation Center
The Geffen Contemporary at MOCA
Japanese American National Museum
101
2A
2B
1E
1D
Google
100 m
Map data ©2016 Google
SITES CURRENTLY VISIBLE ON MAP

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

Tools Reports UST Case Closures Information

CASE SUMMARY

REPORT DATE
5/5/1987

HAZARDOUS MATERIAL INCIDENT REPORT FILED WITH OES?

I. REPORTED BY -
UNKNOWN

CREATED BY
UNKNOWN

III. SITE LOCATION

FACILITY NAME
FRIEDMAN BAG CO

FACILITY ID

FACILITY ADDRESS
801 COMMERCIAL ST
LOS ANGELES, CA 90012
LOS ANGELES COUNTY

ORIENTATION OF SITE TO STREET

CROSS STREET
CENTER

V. SUBSTANCES RELEASED / CONTAMINANT(S) OF CONCERN
GASOLINE

VI. DISCOVERY/ABATEMENT

DATE DISCHARGE BEGAN

DATE DISCOVERED	HOW DISCOVERED	DESCRIPTION
4/21/1987	Tank Closure	

DATE STOPPED	STOP METHOD	DESCRIPTION
4/21/1987		

VII. SOURCE/CAUSE

SOURCE OF DISCHARGE
Other

CAUSE OF DISCHARGE
Unknown

DISCHARGE DESCRIPTION

VIII. CASE TYPE

CASE TYPE
Soil

IX. REMEDIAL ACTION
NO REMEDIAL ACTIONS ENTERED

X. GENERAL COMMENTS

XI. CERTIFICATION
I HEREBY CERTIFY THAT THE INFORMATION REPORTED HEREIN IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

XII. REGULATORY USE ONLY

LOCAL AGENCY CASE NUMBER	REGIONAL BOARD CASE NUMBER
	900120407

LOCAL AGENCY

CONTACT NAME	INITIALS	ORGANIZATION_NAME	EMAIL ADDRESS
ELOY LUNA	EL	LOS ANGELES, CITY OF	eloy.luna@lacity.org

ADDRESS
200 North Main Street, Suite 1780
LOS ANGELES, CA 90012

CONTACT DESCRIPTION

PHONE TYPE	PHONE NUMBER	EXTENSION
BUSINESS	(213)-482-6520	

REGIONAL BOARD

CONTACT NAME	INITIALS	ORGANIZATION_NAME	EMAIL ADDRESS
ARMAN TOUMARI	AT	LOS ANGELES RWQCB (REGION 4)	atoumari@waterboards.ca.gov

ADDRESS
320 WEST 4TH STREET, SUITE 200
LOS ANGELES, CA 90013

CONTACT DESCRIPTION

PHONE TYPE	PHONE NUMBER	EXTENSION
MAIN FAX	(213)-576-6700	
MAIN PHONE	(213)-576-6708	

California Regional Water Quality Control Board
Los Angeles Region
Over 50 Years Serving Coastal Los Angeles and Ventura Counties
Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

inston H. Hickox
Secretary for Environmental Protection

Gray Davis
Governor

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.swrcb.ca.gov/rwqcb4

August 23, 2002

Mr. Al Friedman
Friedman Bag Company
801 East Commercial Street
Los Angeles, CA 90012

UNDERGROUND TANK CASE CLOSURE
FRIEDMAN BAG COMPANY
801 EAST COMMERCIAL STREET, LOS ANGELES, CA (FILE No. 900120407)

Dear Mr. Friedman:

This letter confirms the completion of a site investigation and corrective action for the underground storage tank(s) formerly located at the above referenced site location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on the information contained in the case file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground tank(s) site is in compliance with the requirements of subdivision (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code.

Please contact Mr. Arman Toumari at (213) 576-6758 or atoumari@rb4.swrcb.ca.gov if you have any questions regarding this matter.

Sincerely,

Dennis A. Dickerson
Executive Officer

cc: Mr. Hari Patel, State Water Resources Control Board, UST Cleanup Fund
Dr. Bruce Mowry, Water Replenishment District of Southern California
Dr. Ken Hekimian, HVN Environmental Services Co, Inc. (Huntington Beach Office)

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

Tools | Reports | UST Case Closures | Information

CASE SUMMARY

REPORT DATE
1/2/1965

HAZARDOUS MATERIAL INCIDENT REPORT FILED WITH OES?

I. REPORTED BY -
UNKNOWN

CREATED BY
UNKNOWN

III. SITE LOCATION

FACILITY NAME
UNOCAL - CENTER STREET TERMINAL #0500

FACILITY ID

FACILITY ADDRESS
501 CENTER STREET
Los Angeles, CA
LOS ANGELES COUNTY

ORIENTATION OF SITE TO STREET

CROSS STREET

V. SUBSTANCES RELEASED / CONTAMINANT(S) OF CONCERN

PET, VOC, PAH

VI. DISCOVERY/ABATEMENT

DATE DISCHARGE BEGAN

DATE DISCOVERED | HOW DISCOVERED | DESCRIPTION

DATE STOPPED | STOP METHOD | DESCRIPTION

VII. SOURCE/CAUSE

SOURCE OF DISCHARGE

CAUSE OF DISCHARGE

DISCHARGE DESCRIPTION

VIII. CASE TYPE

CASE TYPE

IX. REMEDIAL ACTION

NO REMEDIAL ACTIONS ENTERED

X. GENERAL COMMENTS

XI. CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION REPORTED HEREIN
IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

XII. REGULATORY USE ONLY

LOCAL AGENCY CASE NUMBER

REGIONAL BOARD CASE NUMBER
0353

LOCAL AGENCY

UNKNOWN

REGIONAL BOARD

CONTACT NAME	INITIALS	ORGANIZATION NAME	EMAIL ADDRESS
DTSC	DDD	LOS ANGELES RWQCB (REGION 4)	

ADDRESS
1011 N. GRANDVIEW AVE.
LOS ANGELES, CA 91201

CONTACT DESCRIPTION

STATE OF CALIFORNIA, DEPARTMENT OF TOXIC SUBSTANCES CONTROL, ENVIROSTOR DATABASE

This page is part of your document - DO NOT DISCARD

20160258304

Pages: 0021

Recorded/Filed in Official Records
Recorder's Office, Los Angeles County,
California

03/09/16 AT 01:14PM

FEES:	75.00
TAXES:	0.00
OTHER:	0.00
PAID:	75.00

LEADSHEET

201603093240021

00011806276

007424099

SEQ:
01

DAR - Counter (Upfront Scan)

THIS FORM IS NOT TO BE DUPLICATED

E282485

RECORDING REQUESTED BY:
Center Street Realty Investors, LLC
8600 Rheem Avenue
South Gate, CA 90280
Attn: Randy Steinberg

RECORDED, MAIL TO:

Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311
Attention: Allan Plaza

03/09/2016
20160258304

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

LAND USE COVENANT AND AGREEMENT

ENVIRONMENTAL RESTRICTIONS

County of Los Angeles, Assessor Parcel Number: 5173-020-010
500 North Center Street
DTSC Site Code: 300885-11

This Land Use Covenant and Agreement ("Covenant") is made by and between Center Street Realty Investors, LLC(Attn: Randy Steinberg) (the "Covenantor"), the current owner of the property located at 500 North Center Street, Los Angeles in the County of Los Angeles, State of California (the "Property"), and the Department of Toxic Substances Control (the "Department"). Pursuant to Civil Code section 1471, the Department has determined that this Covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the land of hazardous materials as defined in Health and Safety Code section 25260. The Covenantor and the Department, (collectively referred to as the "Parties"), hereby agree that, pursuant to Civil Code section 1471, and Health and Safety Code section 25395.99, the use of the Property be restricted as set forth in this Covenant; and that the Covenant shall conform with the requirements of California Code of Regulations, title 22, section 67391.1.

ARTICLE I

STATEMENT OF FACTS

1.1. Property Location. The Property that is subject to this Covenant consists of one parcel, totaling approximately 1.4 acres, is more particularly described in the attached Exhibit A, "Legal Description", and depicted in Exhibit B, "Legal Description", Exhibit C, "Exhibit for the Property and Parcel 1 & Parcel 2", and Exhibit D, "Location of Monitoring Wells". The Property is currently used by a towing company as a storage lot for automobiles. The Property is bordered by East Commercial Street to the north, Center Street to the west, Ducommun Street to the south, and an open dirt lot owned by the Los Angeles County Metropolitan Transportation Authority ("MTA") to the east. Beneath the Property, MTA owns a subway tunnel through which it operates trains that run northwest/southeast across the Property (see Exhibits B and C). The Property is also identified as County of Los Angeles Assessor Parcel Number 5173-020-010.

Southern California Gas Company ("SoCalGas") owned and operated a manufactured gas plant (MGP) on an area of Aliso Street (known as the Aliso Street MGP) beginning in 1887. The plant ceased operation in the early 1930's. The former structures on the Property included a large aboveground gasholder (approximately 6 million cubic feet capacity) and water cooling towers. During World War II and beginning in 1942, under a contract to the U.S. Defense Plant Corporation, SoCalGas converted much of its Aliso Street MGP facilities to the production of butadiene, a raw material used in the manufacture of synthetic rubber. This plant was operated by SoCalGas from 1943 to 1947. Most of the butadiene plant facilities were demolished in 1952, except for the large gasholders including the one on the Property that was removed in 1973.

1.2. Remediation of Property. This Property has been investigated and remediated under the Department's oversight. The Department approved a Removal Action Workplan (RAW), developed in accordance with Health and Safety Code, division 20, chapter 6.8. The RAW, including a Health Risk Assessment and a notice of exemption pursuant to the California Environmental Quality Act, Public Resources Code Section 21000 et seq., were released for public review and comment and subsequently approved by the Department on September 9, 2005.

As detailed in the Removal Action Completion Report, dated August 2009, several areas of the Property have been remediated. The remedial action consisted of removal of contaminated soil down to a depth of approximately 17 feet below ground surface (bgs) in areas known to have contamination based on the remedial investigation results. The excavated areas were then graded and backfilled with clean soil. Approximately 1,322 tons of soil were excavated from the Property and transported to a thermal processing facility as non-hazardous solid waste for thermal desorption treatment and offsite disposal. None of the recycled soil was reused at the Property. Soil samples were collected and analyzed from remaining unexcavated areas before backfilling and the Department determined that the remedial action effectively reduced the chemicals of concern previously identified at this Property to levels that are protective of future workers.

Contaminants of concern, found in the upper 25 feet of remaining soils at the Property, include: carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) expressed as benzo-a-pyrene (B(a)P) equivalent concentrations ranging from non-detect to a maximum concentration of 48.37 mg/kg; naphthalene concentrations ranging from non-detect to a maximum 4.18 mg/kg at 6 feet bgs; and benzene concentrations ranging from non-detect to a maximum of 0.097 mg/kg at 5 feet bgs. Total petroleum hydrocarbon concentrations (TPHs) at the Property are below action levels. In the Removal Action Completion Report, it was concluded that there is no human health risk from the remaining residuals at the Property when used for commercial or industrial purposes.

Groundwater beneath the entire former Aliso Street MGP Site is not currently used for drinking water due to: 1) naturally elevated total dissolved solids (TDS) and nitrates; 2) the presence of constituents and dissolved gases associated with natural petroleum hydrocarbons; and 3) ubiquitous occurrence of anthropogenic sources of hydrocarbon and solvent-type contamination. With the exception of occasional pumping of groundwater within the area for dewatering in construction projects, there are no other known groundwater extraction activities associated with the water table aquifer beneath the Property. Groundwater at the Property is found at approximately 29 to 33 feet bgs.

SoCalGas is continuing to monitor the groundwater at the Property as part of the entire Aliso Street MGP site Groundwater Operable Unit under the oversight of the Department. As of March 2014, there are currently five monitoring wells on the Property (identified as TtK-1, TtK-2, TtK-3, TtK-4, and TtK-6) as depicted in Exhibit D, which are part of the ongoing regional groundwater monitoring.

1.3. Basis for Environmental Restrictions. As a result of the presence of hazardous substances, which are also hazardous materials as defined in Health and Safety Code section 25260, at the Property, the Department has concluded that it is reasonably necessary to restrict the use of the Property in order to protect present or future human health or safety or the environment, and that this Covenant is required as part of the Department-approved remedy for the Property. The Department has also concluded that the Property, as remediated and when used in compliance with the Environmental Restrictions of this Covenant, does not present an unacceptable risk to present and future human health or safety or the environment.

1.4. Land Use Covenant Master Agreement. The Department and SoCalGas have entered into a Land Use Covenant Master Agreement dated June 12, 2013 (Docket Number HAS-O&MEA 13/14-078), which provides that SoCalGas will conduct necessary inspections, reporting activities, and pay the Department's costs associated with this Covenant.

ARTICLE II
DEFINITIONS

2.1. Department. "Department" means the State of California Department of Toxic Substances Control and its successor agencies, if any.

2.2 Environmental Restrictions. "Environmental Restrictions" means all protective provisions, covenants, restrictions, prohibitions, and terms and conditions as set forth in any section of this Covenant.

2.3. Improvements. "Improvements" includes, but is not limited to: buildings, structures, roads, driveways, improved parking areas, additional groundwater monitoring wells, soil gas monitoring probes, pipelines or other utilities.

2.4. Lease. "Lease" means lease, rental agreement, or any other document that creates a right to use or occupy any portion of the Property.

2.5. Occupant. "Occupant" means Owners and any person or entity entitled by ownership, leasehold, or other legal relationship to the right to occupy any portion of the Property.

2.6. Owner. "Owner" means the Covenantor, and all successors in interest including heirs and assigns, who at any time hold title to all or any portion of the Property.

ARTICLE III
GENERAL PROVISIONS

3.1. Runs with the Land. This Covenant sets forth Environmental Restrictions that apply to and encumber the Property and every portion thereof no matter how it is improved, held, used, occupied, leased, sold, hypothecated, encumbered, or conveyed. This Covenant: (a) runs with the land pursuant to Civil Code section 1471 and Health and Safety Code section 25395.99; (b) inures to the benefit of and passes with each and every portion of the Property; (c) is for the benefit of, and is enforceable by the Department; and (d) is imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof.

3.2. Binding upon Owners/Occupants. This Covenant binds all Owners of the Property, their heirs, successors, and assignees, and the agents, employees, and lessees of the Owners, heirs, successors, and assignees. Pursuant to Civil Code section 1471, all successive Owners of the Property are expressly bound hereby for the benefit of the Department; this Covenant, and for the sole purpose of this Covenant, however, is binding on all Owners and Occupants, and their respective successors and assigns, only during their respective periods of ownership or occupancy except that such Owners or Occupants shall continue to be liable for any violations of, or non-compliance with, the Environmental Restrictions of this Covenant or any acts or omissions during their ownership or occupancy.

3.3. Incorporation into Deeds and Leases. This Covenant shall be incorporated by reference in each and every deed and Lease for any portion of the Property.

3.4. Conveyance of Property. The Owner shall provide written notice to the Department and SoCalGas not later than 30 days after any conveyance of any ownership interest in the Property (excluding Leases, and mortgages, liens, and other non-possessory encumbrances). The written notice shall include the name and mailing address of the new Owner of the Property and shall reference the site name and site code as listed on page one of this Covenant. The notice shall also include the Assessor's Parcel Number(s) noted on page one. If the new Owner's property has been assigned a different Assessor Parcel Number, each such Assessor Parcel Number that covers the Property must be provided. The Department shall not, by reason of this Covenant, have authority to approve, disapprove, or otherwise affect proposed conveyance, except as otherwise provided by law or by administrative order.

3.5. Costs of Administering the Covenant to be paid by SoCalGas and its Successors. The terms of this Covenant run with the land and will continue in perpetuity unless a variance is granted pursuant to section 6.1, or unless removed pursuant to section 6.2. The Department has incurred and will in the future incur costs associated with the administration of this Covenant. SoCalGas shall pay the costs incurred by the Department for administrative oversight of the Covenant and for review of the Annual Status Reports pursuant to Section 4.6.

ARTICLE IV
RESTRICTIONS AND REQUIREMENTS

4.1. Prohibited Uses. The Property shall only be used for industrial and commercial uses. The Property shall not be used for any of the following purposes:

(a) A residence, including any mobile home or factory built housing, constructed or installed for use as residential human habitation.

(b) A hospital for humans.

(c) A public or private school for persons under 21 years of age.

(d) A day care center for children; and

(e) Any other similar sensitive uses resulting in the indoor habitation of humans for greater than twelve hours per day.

4.2. Soil Management

(a) No soil disturbing activities (e.g., excavation, grading, removal, trenching, filling, earth movement, mining, or drilling) shall be allowed on the Property below 25 feet without written approval of a soil management plan by the Department in advance. Although the concentration of chemicals of concern on the Property are below the remedial goals and they have no adverse health effect on utility or construction workers, some of the soils have residuals that may be subject to restrictions for offsite disposal. As a result, a soil management plan is also required for any such excavated soil on the Property that needs to be disposed offsite. Information regarding the locations that were remediated and from which hazardous materials were removed can be found in the Removal Action Completion Reports for former Aliso Street MGP – Block K on the Department's website located at https://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60000171

(b) Any contaminated soils brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of state and federal law.

(c) The Owner shall provide the Department and the SoCalGas written notice at least fourteen (14) days prior to any building, filling, grading or excavating at the Property.

4.3. Prohibited Activities. The following activities shall not be conducted at the Property:

(a) Drilling for any water, oil, or gas without prior notice to SoCalGas and written Approval by SoCalGas and the Department.

(b) Extraction of groundwater except as approved by the Department in a Groundwater Management Plan.

4.4 Access to the Property. The Department, SoCalGas, and entities administering long term monitoring, if necessary, shall have reasonable right of entry and access to the Property for inspection, monitoring, operation, maintenance, repair and other activities consistent with the purposes of this Covenant as deemed necessary by the Department in order to protect the public health or safety, or the environment.

4.5. Non-Interference with Groundwater Monitoring Well Network and Groundwater Remediation Treatment Equipment, if any

(a) Activities that may disturb, alter, damage or destroy groundwater monitoring wells and groundwater remediation treatment equipment, if any, on the Property shall be prohibited unless authorized in writing by the Department. Any authorized damage to a groundwater monitoring well resulting from intentional or negligent acts or omissions of the Owner and/or Occupant constitutes a violation of this Covenant.

(b) All uses and development of the Property shall preserve the integrity and physical accessibility of the groundwater monitoring wells and groundwater remediation treatment equipment, if any, on the Property.

(c) The Owner and/or Occupant, as applicable, shall notify the Department and SoCalGas of any damage caused by such Owner or Occupant, as applicable, to a groundwater monitoring well and groundwater remediation treatment equipment, if any, on the property, including information on the date of damage and the nature of the damage. Notification to the Department shall be made, as provided below, within ten (10) working days of discovery of the damage.

4.6 Inspection and Reporting Requirements. No more often than once a year from the effective date of this Covenant, and annually thereafter, SoCalGas or their agent(s) shall submit an Annual Status Report to the Department certifying whether the Owner is in compliance with the use restrictions specified in Section 4.1 of this covenant. SoCalGas shall submit the Annual Status Report to the Department, Chatsworth Office. The requirement to submit an Annual Status Report shall continue in effect during the term of this Covenant and may not be removed except in accordance with Section 6.2. SoCalGas shall include in the Annual Status Report either Statement (1) or Statement (2):

Statement (1): The undersigned submits this Annual Status Report on behalf of the Owner of the Property subject to the Land Use Covenant entered into by and between Owner and the Department on DATE and hereby certifies that to the best of its knowledge, any and all use of the Property for the calendar year preceding the date of this report has been in conformance with Section 4.1 of said Covenant.

Statement (2): The undersigned submits this Annual Status Report on behalf of the Owner of Property subject to the Land Use Covenant entered into by and between Owner and the Department on DATE and hereby states that use of such Property for the calendar year preceding the date of this report has failed to conform with one or more or the requirements listed in Section 4.1 of said Covenant.

4.7 Five-Year Review. In addition to the annual reviews noted above, after a period of five (5) years from December 15, 2015 and every five (5) years thereafter, SoCalGas shall submit a Five-Year Review report documenting its review of the remedy implemented and its evaluation to determine if human health and the environment are being adequately protected by the remedy as implemented. The report shall describe the results of all inspections, sampling analyses, tests and other data generated or received by SoCalGas and evaluate the adequacy of the implemented remedy in protecting human health and the environment. As a result of any review work performed, DTSC may require SoCalGas to perform additional review work or modify the review work previously performed by SoCalGas.

ARTICLE V

ENFORCEMENT

5.1. Enforcement. Failure of the Owner or Occupant to comply with this Covenant shall be grounds for the Department to require modification or removal of any Improvements constructed or placed upon any portion of the Property in violation of this Covenant. Additionally, violation of this Covenant, including but not limited to, failure to submit, or the submission of any false statement, record or report to the Department, shall be grounds for the Department to pursue administrative, civil, or criminal actions, as provided by law.

ARTICLE VI

VARIANCE, REMOVAL, AND TERM

6.1. Variance from Environmental Restrictions. Any person may apply to the Department for a written variance from one of the Environmental Restrictions imposed by this Covenant. Such application shall be made in accordance with Health and Safety Code section 25223.

6.2. Removal of Environmental Restrictions. Any person may apply to the Department to remove any of the Environmental Restrictions imposed by this Covenant. Such application shall be made in accordance with Health and Safety Code section 25224.

6.3 Term. Unless ended in accordance with paragraph 6.2, or by law, or by the Department in the exercise of its discretion, this Covenant shall continue in effect in perpetuity.

ARTICLE VII

MISCELLANEOUS

7.1. No Dedication Intended. Nothing set forth in this Covenant shall be construed to be a gift or dedication, or offer of a gift or dedication, of the Property, or any portion thereof to the general public or anyone else for any purpose whatsoever.

7.2. Recordation. The Covenantor shall record this Covenant, with all referenced Exhibits, in the County of Los Angeles within ten (10) days of the Covenantor's receipt of a fully executed original.

7.3. Notices. Whenever any person gives or serves any Notice ("Notice" as used herein includes any demand or other communication with respect to this Covenant), each such Notice shall be in writing and shall be deemed effective: (1) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served, or (2) three business days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested:

To Owner:

Center St Realty Investors, LLC
8600 Rheem Avenue
South Gate, CA 90280
Attn: Randy Steinberg

Or To: Any new owner as identified to the Department under paragraph 3.4 of this Covenant.

and

To the Department:

Sayareh Amirebrahimi
Branch Chief
Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311

Any party may change its address or the individual to whose attention a Notice is to be sent by giving written Notice in compliance with this paragraph.

7.4. Partial Invalidity. If this Covenant or any of its terms are determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall remain in full force and effect as if such portion found invalid had not been included herein.

7.5. Statutory References. All statutory references include successor provisions.

7.6 Incorporation of Exhibits. All attachments and exhibits to this Covenant are incorporated herein by reference.

IN WITNESS WHEREOF, the Parties execute this Covenant.

Covenantor:
Center St Realty Investors, LLC
8600 Rheem Avenue
South Gate, CA 90280
Attn: Randy Steinberg

By: ______________________

Title: Managing member

Date: 12/17/2015

Department of Toxic Substances Control

By: ______________________

Title: Sayareh Amirebrahimi
Branch Chief
Department of Toxic Substances Control

Date: January 6, 2016

State of California
County of ________

On ______________________ before me, see attachment

(space above this line is for name and title of the officer/notary),

personally appeared ____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,

_____________________________ (seal)
Signature of Notary Public

ALL- PURPOSE
CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }

County of Los Angeles }

On 12/17/2015 before me, Mayra Pineda, Notary Public,
(Here insert name and title of the officer)

personally appeared Randy Steinberg,
who proved to me on the basis of satisfactory evidence to be the person~~(s)~~ whose name~~(s)~~ is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity~~(ies)~~, and that by his/~~her/their~~ signature~~(s)~~ on the instrument the person~~(s)~~, or the entity upon behalf of which the person~~(s)~~ acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Notary Public Signature (Notary Public Seal)

MAYRA PINEDA
COMM. #2072279
NOTARY PUBLIC • CALIFORNIA
LOS ANGELES COUNTY
My Comm. Expires JUL 18, 2018

ADDITIONAL OPTIONAL INFORMATION

DESCRIPTION OF THE ATTACHED DOCUMENT

Land use covenant and
(Title or description of attached document)

agreement
(Title or description of attached document continued)

Number of Pages 14 Document Date —

CAPACITY CLAIMED BY THE SIGNER

- ☐ Individual (s)
- ☒ Corporate Officer
  Managing Member
  (Title)
- ☐ Partner(s)
- ☐ Attorney-in-Fact
- ☐ Trustee(s)
- ☐ Other ______

INSTRUCTIONS FOR COMPLETING THIS FORM

This form complies with current California statutes regarding notary wording and, if needed, should be completed and attached to the document. Acknolwedgents from other states may be completed for documents being sent to that state so long as the wording does not require the California notary to violate California notary law.

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. ~~he/she/they,~~ is ~~/are~~) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
  - ❖ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
  - ❖ Indicate title or type of attached document, number of pages and date.
  - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document with a staple.

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of LOS ANGELES

On JANUARY 06, 2016 before me,

M. BOSE, NOTARY PUBLIC
(space above this line is for name and title of the officer/notary),

personally appeared SAYAREH AMIREBRAHIMI, who proved to me on the basis of satisfactory evidence to be the person(~~s~~) whose name(~~s~~) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(~~s~~) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,

M. BOSE
Commission No. 2041082
NOTARY PUBLIC-CALIFORNIA
LOS ANGELES COUNTY
My Comm. Expires SEPTEMBER 12, 2017

M. Bose (seal)
Signature of Notary Public

EXHIBIT "A"
LEGAL DESCRIPTION OF PROPERTY
(500 N. Center Street)

LOT 2 OF TRACT NO. 11189, IN THE CITY OF LOS ANGELES, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER THE MAP RECORDED IN BOOK 201, OF MAPS, PAGES 1 AND 2, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPTING THEREFROM PARCEL A1-013-2, AS DESCRIBED IN THAT CERTAIN FINAL ORDER OF CONDEMNATION, RECORDED AS INSTRUMENT NO. 90-1870497, OF OFFICIAL RECORDS, IN SAID OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

CONTAINING 61,462 SQ. FT., OR 1.411 ACRES, MORE OR LESS.

SUBJECT TO: COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS AND RIGHTS-OF-WAY, IF ANY.

AND AS SHOWN ON THE MAP ATTACHED HERETO AS EXHIBIT "C" AND MADE A PART HEREOF.

NOTE: THIS DESCRIPTION WAS PREPARED AS A CONVENIENCE ONLY AND IS NOT FOR USE IN THE DIVISION AND/OR CONVEYANCE OF LAND IN VIOLATION OF THE SUBDIVISION MAP ACT OF THE STATE OF CALIFORNIA.

EXHIBIT "B"
LEGAL DESCRIPTION FOR
SUBWAY TUNNEL AND BUILDING
(500 N. Center Street)

PARCEL 1: ***(SUBSURFACE EASEMENT: PCL. A1-013-1 PER INST. NO. 90-187049, O.R.)***

THAT PORTION OF LOT 2 OF TRACT NO. 11189 IN THE CITY OF LOS ANGELES, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 201 PAGES 1 AND 2 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEASTERLY CORNER OF SAID LOT 2 OF TRACT 11189; THENCE ALONG THE EASTERLY LINE OF SAID LOT 2 NORTH 09°07'00" EAST 109.90 FEET; THENCE SOUTH 74°12'36" WEST 10.26 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING SOUTH 74°12'36" WEST 62.62 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 483.50 FEET, A RADIAL LINE OF SAID CURVE THROUGH SAID POINT BEARS NORTH 59°00'18" EAST; THENCE NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 02°58'34", AN ARC DISTANCE OF 25.11 FEET; THENCE NORTH 37°48'25" WEST 98.31 FEET; THENCE NORTH 39°42'02" WEST 126.78 FEET TO THE WESTERLY LINE OF SAID LOT 2; THENCE ALONG SAID WESTERLY LINE NORTH 09°07'00" EAST 30.26 FEET TO THE NORTHWESTERLY CORNER OF SAID LOT 2; THENCE ALONG THE NORTHERLY LINE OF SAID LOT 2 SOUTH 80°40'30" EAST 58.15 FEET; THENCE SOUTH 39°41'53" EAST 171.28 FEET; THENCE SOUTH 34°01'49" EAST 34.19 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 516.50 FEET; THENCE SOUTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 05°09'48", AN ARC DISTANCE OF 46.55 FEET TO THE POINT OF BEGINNING.

CONTAINING 16,280 SQ. FT., OR 0.374 ACRES, MORE OR LESS.

AND AS SHOWN ON THE MAP ATTACHED HERETO AS EXHIBIT "C" AND MADE A PART HEREOF.

PARCEL 2: *(ORIGINAL BUILDING FOOTPRINT)*

THAT PORTION OF LOT 2 OF TRACT NO. 11189, IN THE CITY OF LOS ANGELES, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER THE MAP RECORDED IN BOOK 201, OF MAPS, PAGES 1 AND 2, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWESTERLY CORNER OF SAID LOT 2; THENCE ALONG THE WESTERLY LINE OF SAID LOT 2 NORTH 09°07'00" EAST 57.05 FEET; THENCE LEAVING SAID WESTERLY LINE SOUTH 79°47'09" EAST 67.20 FEET TO THE **POINT OF BEGINNING**; THENCE CONTINUING SOUTH 79°47'09" EAST 42.32 FEET; THENCE NORTH 10°12'51" EAST 40.11 FEET; THENCE NORTH 79°47'09" WEST 42.32 FEET; THENCE SOUTH 10°12'51" WEST 40.11 FEET TO THE **POINT OF BEGINNING**.

CONTAINING 1,697 SQ. FT., OR 0.039 ACRES, MORE OR LESS.

AND AS SHOWN ON THE MAP ATTACHED HERETO AS EXHIBIT "C" AND MADE A PART HEREOF.

THIS LEGAL DESCRIPTION WAS PREPARED BY ME OR UNDER MY DIRECTION.

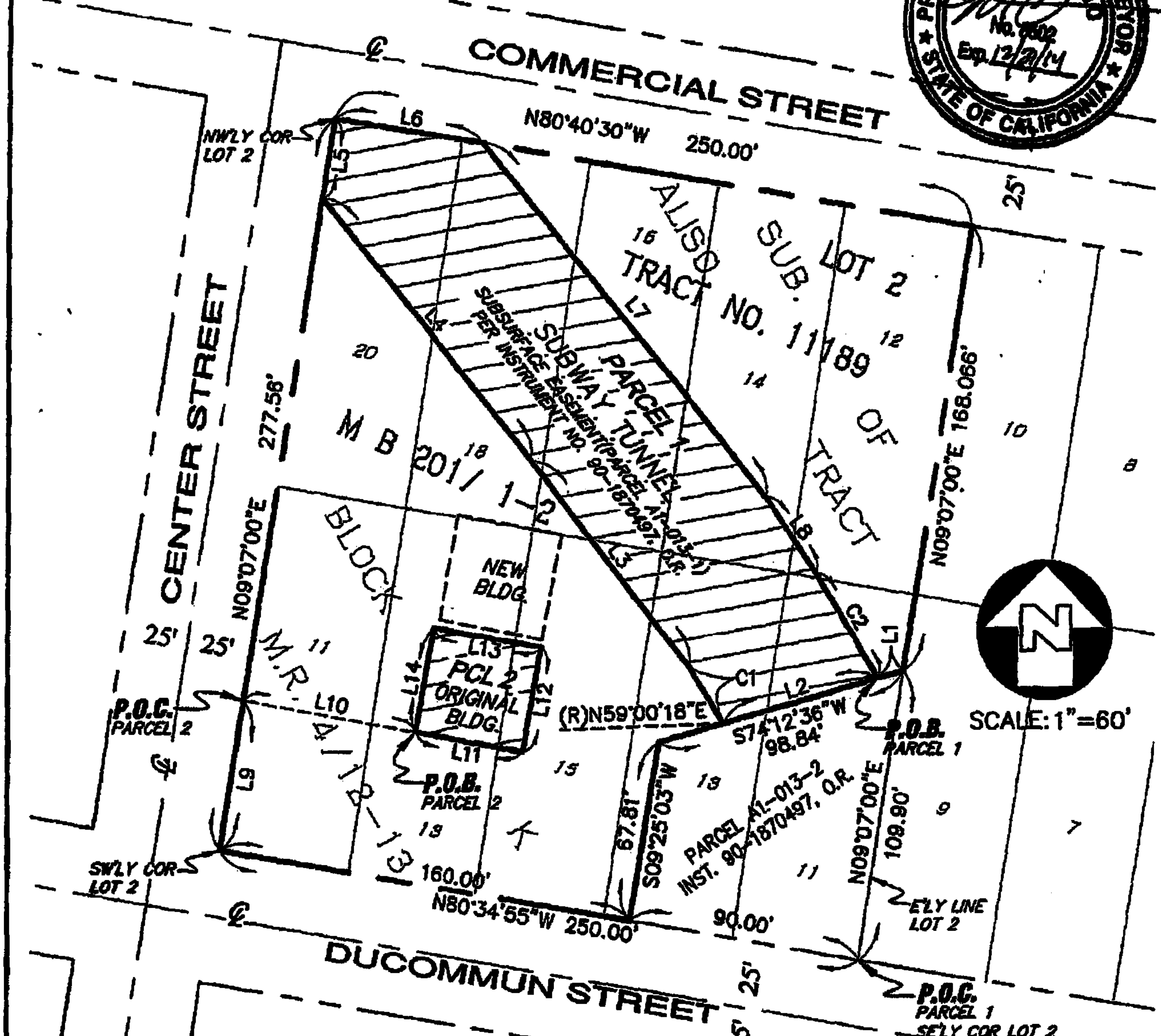
PROFESSIONAL LAND SURVEYOR
MICHAEL C. ANGELO
No. 8502
Exp. 12/31/14
STATE OF CALIFORNIA

MICHAEL C. ANGELO
P.L.S. 8502 EXPIRES 12/31/14

3/12/14
DATE

EXHIBIT "C"

EXHIBIT FOR THE PROPERTY
AND PARCEL 1 & PARCEL 2
(500 N. CENTER STREET)



LINE TABLE		
LINE	LENGTH	BEARING
L1	10.26'	S74°12'36"W
L2	62.62'	S74°12'36"W
L3	98.31'	N37°48'25"W
L4	126.78'	N39°42'02"W
L5	30.26'	N09°07'00"E
L6	58.15'	S80°40'30"E
L7	171.28'	S39°41'53"E
L8	34.19'	S34°01'49"E
L9	57.05'	N09°07'00"E
L10	67.20'	S79°47'09"E
L11	42.32'	S79°47'09"E
L12	40.11'	N10°12'51"E
L13	42.32'	N79°47'09"W
L14	40.11'	S10°12'51"W

= EXHIBIT "A" PROPERTY DESCRIBED CONTAINING 61,462 SQ. FT., OR 1.411 ACRES.

= EXHIBIT "B" PARCEL 1 CONTAINING 16,280 SQ. FT., OR 0.374 ACRES.

= EXHIBIT "B" PARCEL 2 CONTAINING 1,697 SQ. FT., OR 0.039 ACRES.

= NEW BLDG. CONSTRUCTED AFTER REMEDIATION

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	25.11	483.50'	2°58'34"
C2	46.55	516.50'	5°09'48"

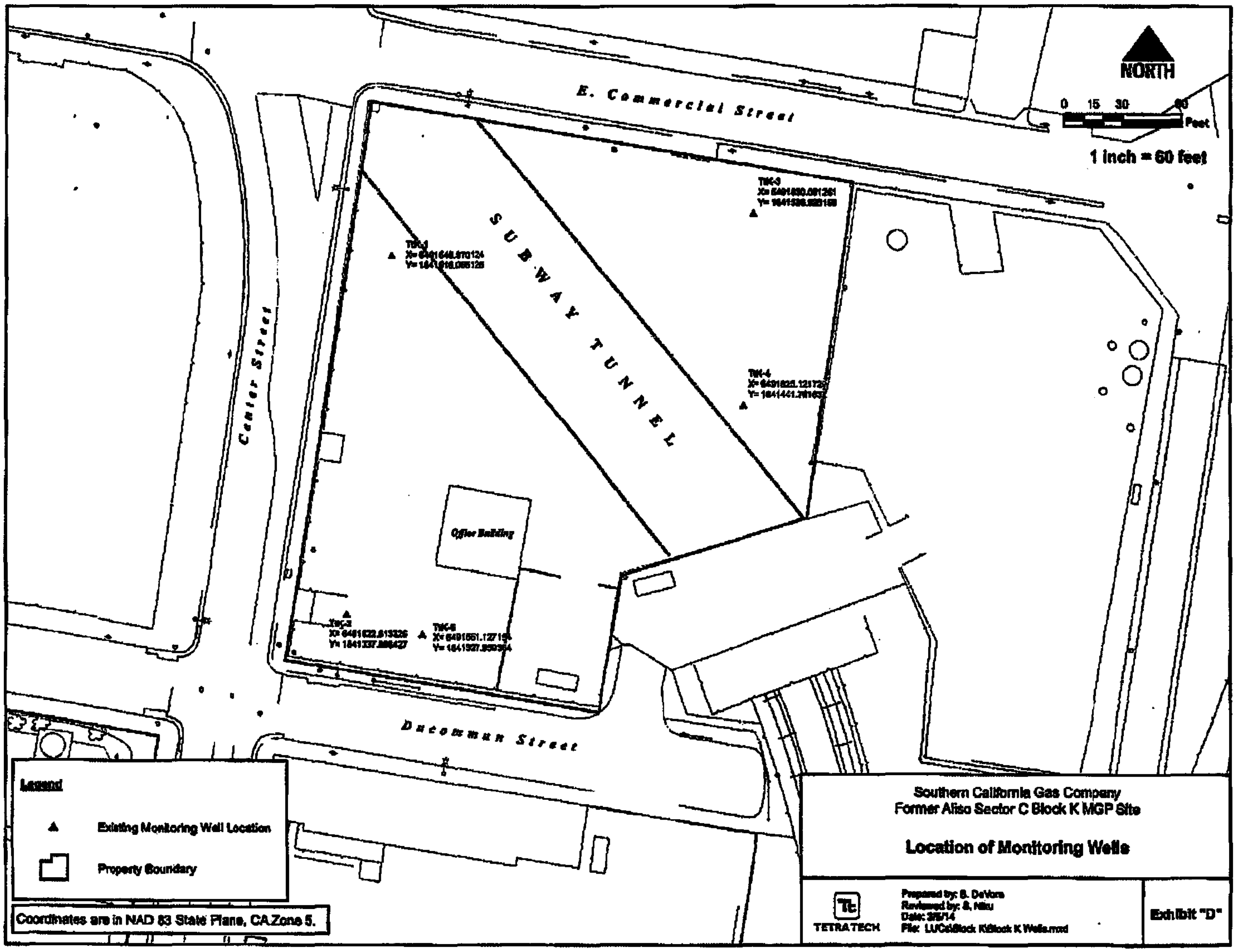
WestLAND Group, Inc. Land Surveyors • Civil Engineers • GIS

11118 Elm Avenue
Rancho Cucamonga, California 91730

Phone: (909) 989-9789
Fax: (909) 989-9660
www.westlandgroup.net

03/09/2016

20160258304



REMOVAL ACTION CERTIFICATION FORM
(Please type or print in blank ink)

1. Certification of Remedial or Removal Action:

I hereby certify that the following information is true and correct to the best of my knowledge.

1. Chand Sultana ______ 04-01-2016
Regional Project Manager ______ Date

2. Allan Plaza ______ 4/07/2016
Regional Unit Chief ______ Date

3. Sayareh Amir ______ 4/07/2016
Regional Branch Chief ______ Date

2. Certification Statement: Based upon the information which is currently and actually known to the Department,

___The Department has determined that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal/remedial action is necessary.

___The Department has determined, based upon a remedial investigation or site characterization that the site poses no significant threat to public health, welfare or the environment and therefore implementation of removal/remedial measures is not necessary.

_X_The Department has determined that all appropriate removal/remedial actions have been completed and that all acceptable engineering practices were implemented; however, the site requires ongoing operation and maintenance (O&M) and monitoring efforts. The site will be deleted from the "active" site list following (1) a trial operation and maintenance period and (2) execution of a formal written settlement between Department and the responsible parties, if appropriate. However, the site will be placed on the Department's list of sites undergoing O&M to ensure proper monitoring of long-term cleanup efforts.

3. Site Name and Location: (Street address, County, City and zip code)

Former Aliso Street Manufactured Gas Plant (MGP) Sector C Block K, 500 North Center Street, Los Angeles, California.

A. List any other names that have been used to identify this site:

Southern California MGP Block K

B. Address of site if different from above: None

C. Assessor's Parcel Number:
5173-020-010

4. **Responsible Parties:** (Use extra pages if necessary.)

Name: Anita Bohrnerud Name:

Title: Senior Project Manager (Responsible Party) Title:

Firm: The Gas Company Firm:

Address: 555 West 5th Street, GT 16G2, Address:

City: Los Angeles City:

Zip: California 90013-1011 Zip:

Telephone: (213) 220-1609 Telephone: ( )

Relationship To Site: (such as generator, hauler, etc.)

Senior Project Manager/Operator: Senior Project Manager

5. **Brief Description and History of the Site:** (Include previous and current uses of site, a brief description of the cleanup action and concentrations of significant hazardous substances left on site)

Site Description and History

The former 1.4 acre Aliso MGP Sector C Block K site is located approximately 0.5 mile east of downtown Los Angeles. Southern California Gas (SoCalGas) owned and operated a manufactured gas plant (MGP) on an area of Aliso Street (known as Aliso Street MGP) beginning in 1887. SoCalGas divided the approximately 56-acre Aliso Street MGP site into five sectors, A through E. The subject Block K site located in the middle of Sector C bordered on the north by Commercial Street, to the east by railroad tracks and an open dirt lot owned by the Los Angeles County Metropolitan Transportation Authority (MTA), to the south by Ducommun Street, and to the west by Center Street. Beneath the Property, MTA owns a subway tunnel through which it operates trains that run in a northwest/southeast direction across the Property. The lot of Block K was purchased sometime between 1910 and 1921. A large aboveground gasholder (No. 8) with a six-million cubic feet capacity was built by 1914 and used for both the MGP plant and the butadiene plant. Water cooling towers were built between 1923 and 1929 on the southern and eastern sections of Block K as part of the MGP plant.

During World War II and beginning in 1942, under a contract to the U.S. Defense Plant Corporation, Southern California Gas Company converted much of its Aliso Street MGP facilities to the production of butadiene, a raw material used in the manufacture of synthetic rubber. Additional land was added for these facilities and the MGP facilities were modified. This plant was owned by the U.S. Defense Plant Corporation, but operated by SCG from 1943 to 1947. Most of the butadiene plant facilities were demolished in 1952, except for the large gasholders on Sector C that were removed in 1973. The Property is currently used by a towing company as a storage lot for automobiles.

Cleanup Action

The Property was investigated and remediated under the DTSC's oversight. The DTSC approved a Removal Action Workplan (RAW), developed in accordance with Health and Safety Code, division 20, chapter 6.8. The RAW, including a Health Risk Assessment and a notice of exemption pursuant to the California Environmental Quality Act, Public Resources Code Section 21000 et seq., were released for public review and comment and subsequently approved by the DTSC on September 9, 2005.

The remedial action at this Property consisted of removal of contaminated soil down to a depth of approximately 17 feet below ground surface (bgs) in areas known to have contamination based on the remedial investigation results. The excavated areas were then graded and backfilled with clean soil. Approximately 1,322 tons of soil was excavated from the Property and was transported to a thermal processing facility as non-hazardous solid waste for thermal desorption treatment and offsite disposal. None of the recycled soil was reused at the Property. Soil samples were collected and analyzed from remaining unexcavated areas before backfilling to determine whether or not the chemicals of potential concern that still remain are at levels that could pose residual risks or hazards to future workers. The DTSC determined that the remedial action effectively reduced the chemicals of concern previously identified at this Property to levels that are protective of future workers.

Groundwater beneath the entire former Aliso Street MGP Site is not currently used for drinking water due to: 1) naturally elevated total dissolved solids (TDS) and nitrates, 2) the presence of constituents and dissolved gases associated with natural petroleum hydrocarbons, and 3) ubiquitous occurrence of anthropogenic sources of hydrocarbon and solvent-type contamination. With the exception of occasional pumping of groundwater within the area for dewatering in construction projects, there are no other known groundwater extraction activities associated with the water table aquifer beneath the Property. Groundwater at the Property is found at approximately 29 to 33 feet bgs. SoCalGas is continuing to monitor the groundwater at the Property as part of the entire Aliso MGP Street site Groundwater Operable Unit under the oversight of the DTSC. There are currently (as of March 2014) five monitoring wells on the Property (TtK-1, TtK-2, TtK-3, TtK-4, and TtK-6) which are part of the ongoing regional groundwater monitoring.

As detailed in the Removal Action Completion Report for this Property dated August 2009, several areas of the Property have been remediated. Hazardous substances, as defined in Health and Safety Code section 25260, remain in some parts of the Property above levels acceptable for unrestricted land use. Contaminants of concern, found in the upper 25 feet of remaining soils at the Property, include: carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) expressed as benzo-a-pyrene [B(a)P] equivalent concentrations ranging from non-detect to a maximum concentration of 48.37 mg/kg, naphthalene concentrations from non-detect to a maximum 4.18 mg/kg at 6 feet bgs, and benzene concentrations from non-detect to a maximum of 0.097 mg/kg at 5 feet bgs. Total petroleum hydrocarbon concentrations (TPHs) at the Property were below action levels. In the Removal Action Completion Report, it was concluded that there is no human health risk from the remaining residuals at the Property when used for commercial/industrial purposes.

As a result of the presence of hazardous substances, which are also hazardous materials as defined in Health and Safety Code section 25260, at the Property, the DTSC has concluded that it is reasonably necessary to restrict the use of the Property in order to protect present or future human health or safety or the environment, and that this Covenant is required as part of the DTSC-approved remedy for the Property. The DTSC has also concluded that the Property, as remediated and when used in compliance with the Environmental Restrictions of this Covenant, does not present an unacceptable risk to present and future human health or safety or the environment

6. **Type of Site:** (Check appropriate response)

Included in Bond Expenditure Plan? Yes____ No X

RCRA-Permitted Facility ________ Bond - funded
RCRA Facility Closure ________RP - funded

*NPL
Federal Facility

Other (i.e., walk-in): Explain Briefly: State-funded (Orphan site)

7. **Size of Site:** (Based on Expenditure Plan definition of size)

Small ____ Medium X Large ____ Extra Large

8. **Dates of Remedial or Removal Action:**

A. Initiated: Start of August 2008 B. Completed: End of September 2008

*Per SARA, any NPL site that is not permanently cleaned must be scheduled for a follow-up visit after 5 years to verify that cleanup measures are still satisfactory.

9. **Response Action Taken on Site:** (check appropriate action)

X Removal Action (satisfactory abatement of site)
____ Final Remedial Action
____ RCRA Enforcement/Closure action
____ No action, further investigation verified that no cleanup action at site was needed.

A. Type of Remedial or Removal Action (e.g. Excavation and redisposal, cap, on-site treatment?):

Excavated and contaminated soil hauled off site.

B. Estimated quantity of waste associated with the site (i.e., tons/gallons/cubic yards) which was:

Table 4-5
Post-removal Risk Estimates for Future Industrial Workers
Block K, Sector C, Aliso MGP Site
Los Angeles, CA

Chemical	RME (mg/kg)	Remedial Goals		Risk Estimates	
		Cancer	Non-Cancer	Cancer Risk Probability	Non-Cancer Hazard Quotient
Metals					
Cadmium	1.723	823	402	2.1E-08	0.004
Mercury	0.296	-	262	-	0.001
Molybdenum	2.763	-	4,754	-	0.0006
Carcinogenic PAHs					
Benzo(a)pyrene equivalents[1]	0.916	5	-	2.0E-06	-
Total C-PAHs	3.311	-	9,313	-	0.0004
Naphthalene [2]	0.174	2	8	8.4E-07	0.02
Non-carcinogenic PAHs					
Volatile PAHs					
Acenaphthene	0.0927	-	4,235	-	0.00002
Acenaphthylene	0.0143	-	83	-	0.0002
Anthracene	0.31	-	78,281	-	0.000004
Fluorene	0.133	-	8,656	-	0.00002
Phenanthrene	1.353	-	288	-	0.005
Non-volatile PAHs					
Benzo(g,h,i)perylene	2.718	-	9,313	-	0.0003
Fluoranthene	1.052	-	20,452	-	0.00005
Pyrene	1.307	-	15,339	-	0.00009
Volatile Organic Compounds (VOCs)					
Benzene	0.0135	0.8	23	1.8E-07	0.0006
Ethylbenzene	0.0025	8.8	775	2.8E-09	0.000003
m,p-Xylenes	0.00413	-	78	-	0.00005
Methyl-tert-butylether (MTBE)	0.00586	84	2,355	6.9E-10	0.000002
o-Xylene	0.00218	-	78	-	0.00003
Tetrachloroethene	0.00613	3.6	27	1.7E-08	0.0002
Toluene	0.00325	-	234	-	0.00001
			Approximate Risk/Hazard	3.E-06	0.03

Definitions:

bgs - Below ground surface
C-PAHs - carcinogenic polycyclic aromatic hydrocarbons (see Table 4-1)
ft - Feet.
mg/kg - Milligrams per kilogram
ND - Chemical not detected in this depth interval.
RME - Reasonable maximum exposure (i.e., the lesser of the maximum detected and UCL_{95} concentration) of chemicals in soils (0-10 ft bgs)

Notes:

1 - Results for B(a)P-equivalents are shown for on-site samples only; including the off-site sample (D1W7-6), the RME concentration is 5.3 mg/kg, which equates to a cancer risk of approximately 1E-5.

2 - To be health protective, the RME is based on Method 8310 analyses; compared to the Method 8260 RME of 0.007 mg/kg.

Table 4-6
Risk Estimates for Indoor Workers,
based on Soil Gas Concentrations Measured at Different Depths
Block K, Sector C, Aliso MGP Site
Los Angeles, CA

Chemical	5 ft bgs Maximum ug/m3	Goal Cancer (mg/m^3)	Goal Non-Cancer (mg/m^3)	Risk Estimates Cancer Risk Probability	Risk Estimates Non-Cancer Hazard Quotient
Benzene	35,300	8	237	5.E-05	0.1
Chloroform	ND	37	2,248	NA	NA
Dicyclopentadiene	3,000	-	66	-	0.05
Ethylbenzene	6,600	99	8,750	7.E-07	0.0008
Isopropylbenzene	700	-	3,856	-	0.0002
Methylene chloride	61	203	2,796	3.E-09	0.00002
Methyl-tert-butylether	3,400	776	21,605	4.E-08	0.0002
Naphthalene	ND	8	31	NA	NA
n-Propylbenzene	800	-	4,063	-	0.0002
Styrene	2,600	-	9,075	-	0.0003
Tetrachloroethene	1,450	42	315	3.E-07	0.005
Toluene[1]	43,200	-	2,386	-	0.02
1,1,1-Trichloroethane	89	-	42,639	-	0.000002
Trichloroethene	14	118	5,032	1.E-09	0.000003
1,2,4-Trimethylbenzene	1,300	-	71	-	0.02
1,3,5-Trimethylbenzene	800	-	61	-	0.01
m,p-Xylenes	10,700	-	916	-	0.01
o-Xylene	4,800	-	795	-	0.006
	Approximate Carcinogenic Risk/Hazard			5.E-05	0.3

Chemical	15 ft bgs Maximum ug/m3	Goal Cancer (mg/m^3)	Goal Non-Cancer (mg/m^3)	Risk Estimates Cancer Risk Probability	Risk Estimates Non-Cancer Hazard Quotient
Benzene	32,000	18	565	1.7E-05	0.06
Chloroform	11	85	5,162	1.3E-09	0.000002
Dicyclopentadiene	4,000	-	167	-	0.02
Ethylbenzene	6,000	243	21,575	2.5E-07	0.0003
Isopropylbenzene	ND	-	9,775	NA	NA
Methylene chloride	82	470	6,462	1.7E-09	0.00001
Methyl-tert-butylether	1,000	1,787	49,775	5.6E-09	0.00002
Naphthalene	74	22	80	3.4E-08	0.001
n-Propylbenzene	ND	-	10,449	NA	NA
Styrene	2,800	-	22,622	-	0.0001
Tetrachloroethene[2]	2,650	104	782	2.5E-07	0.003
Toluene[3]	39,300	-	5,703	-	0.007
1,1,1-Trichloroethane	176	-	104,300	-	0.000002
Trichloroethene	40	289	12,277	1.4E-09	0.000003
1,2,4-Trimethylbenzene	1,700	-	182	-	0.009
1,3,5-Trimethylbenzene	900	-	157	-	0.006
m,p-Xylenes	10,500	-	2,290	-	0.005
o-Xylene	4,900	-	1,901	-	0.003
	Approximate Carcinogenic Risk/Hazard			2.E-05	0.1

Table 4-6
Risk Estimates for Indoor Workers,
based on Soil Gas Concentrations Measured at Different Depths
Block K, Sector C, Aliso MGP Site
Los Angeles, CA

Chemical	20 ft bgs Maximum ug/m3	Goal Cancer (mg/m^3)	Goal Non-Cancer (mg/m^3)	Risk Estimates Cancer Risk Probability	Risk Estimates Non-Cancer Hazard Quotient
Benzene	2,900	24	729	1.2E-06	0.004
Chloroform	ND	108	6,618	NA	NA
Dicyclopentadiene	2,700	-	218	-	0.01
Ethylbenzene	2,000	315	27,988	6.3E-08	0.00007
Isopropylbenzene	ND	-	12,735	NA	NA
Methylene chloride	56	603	8,295	9.3E-10	0.000007
Methyl-tert-butylether	ND	2,292	63,860	NA	NA
Naphthalene	ND	28	104	NA	NA
n-Propylbenzene	ND	-	13,642	NA	NA
Styrene	ND	-	29,395	NA	NA
Tetrachloroethene[4]	1,790	135	1,016	1.3E-07	0.002
Toluene[5]	6,500	-	7,361	-	0.0009
1,1,1-Trichloroethane	117	-	135,131	-	0.0000009
Trichloroethene	21	374	15,899	5.6E-10	0.000001
1,2,4-Trimethylbenzene	500	-	238	-	0.002
1,3,5-Trimethylbenzene	ND	-	205	NA	NA
m,p-Xylenes	1,700	-	2,977	-	0.0006
o-Xylene	1,000	-	2,454	-	0.0004
	Approximate Carcinogenic Risk/Hazard			1.E-06	0.02

Chemical	25 ft bgs Maximum ug/m3	Goal Cancer (mg/m^3)	Goal Non-Cancer (mg/m^3)	Risk Estimates Cancer Risk Probability	Risk Estimates Non-Cancer Hazard Quotient
Benzene	1100	29	893	3.8E-07	0.001
Chloroform	ND	132	8,075	NA	NA
Dicyclopentadiene	3600	-	268	-	0.01
Ethylbenzene	1100	388	34,401	2.8E-08	0.00003
Isopropylbenzene	ND	-	15,695	NA	NA
Methylene chloride[6]	52400	737	10,128	7.1E-07	0.005
Methyl-tert-butylether	ND	2,798	77,945	NA	NA
Naphthalene	ND	35	129	NA	NA
n-Propylbenzene	ND	-	16,835	NA	NA
Styrene	500	-	36,169	NA	NA
Tetrachloroethene[7]	1780	167	1,250	1.1E-07	0.001
Toluene[8]	3700	-	9,020	-	0.0004
1,1,1-Trichloroethane	117	-	165,961	-	0.0000007
Trichloroethene	21	459	19,522	4.6E-10	0.000001
1,2,4-Trimethylbenzene	500	-	293	-	0.002
1,3,5-Trimethylbenzene	ND	-	253	NA	NA
m,p-Xylenes	1700	-	3,665	-	0.0005
o-Xylene	900	-	3,006	-	0.0003
	Approximate Carcinogenic Risk/Hazard			1.E-06	0.02

Table 4-6
Risk Estimates for Indoor Workers,
based on Soil Gas Concentrations Measured at Different Depths
Block K, Sector C, Aliso MGP Site
Los Angeles, CA

Definitions:

bgs	- Below ground surface
ft	- Feet.
$\mu g/m^3$	- Micrograms per cubic meter
NA	- Not applicable
ND	- Chemical not detected in this depth interval.

Notes:

All units are in $\mu g/m^3$.

To be health protective, the higher of separate analyses of vapors at each chemical at each depth was used:

1	- Toluene results for Method 8260 were used over Method TO-15 (12 ug/m^3).
2	- Tetrachloroethene results for Method TO-15 were used over Method 8260 (1,200 ug/m^3).
3	- Toluene results for Method 8260 were used over Method TO-15 (16 ug/m^3).
4	- Tetrachloroethene results for Method TO-15 were used over Method 8260 (900 ug/m^3).
5	- Toluene results for Method 8260 were used over Method TO-15 (11 ug/m^3).
6	- Methylene chloride results associated for Method 8260 were used over Method TO-15 (66 ug/ı
7	- Tetrachloroethene results for Method TO-15 were used over Method 8260 (1,000 ug/m^3).
8	- Toluene results for Method 8260 were used over Method TO-15 (13 ug/m^3).

Table 4-7
Comparison of Maximum COPC Concentrations in Soil to Goals Protective of Groundwater
Block K, Sector C, Former Aliso Street MGP Site
Los Angeles, CA

Chemical	0 - ≤ 5 ft bgs Goal (mg/kg)	0 - ≤ 5 ft bgs Maximum (mg/kg)	>5 - ≤ 10 ft bgs Goal (mg/kg)	>5 - ≤ 10 ft bgs Maximum (mg/kg)	>10 - ≤ 15 ft bgs Goal (mg/kg)	>10 - ≤ 15 ft bgs Maximum (mg/kg)	>15 - ≤ 20 ft bgs Goal (mg/kg)	>15 - ≤ 20 ft bgs Maximum (mg/kg)	>20 - ≤ 25 ft bgs Goal (mg/kg)	>20 - ≤ 25 ft bgs Maximum (mg/kg)
Acenaphthene[1]	>100,000	0.40	>100,000	2.03	-	ND	50,315	0.028	-	ND
Acenaphthylene[1]	>100,000	0.02	-	ND	-	ND	-	ND	-	ND
Anthracene[1]	>100,000	0.67	>100,000	5.65	>100,000	0.02	>100,000	ND	>100,000	0.10
Benzene[2]	0.25	0.10	0.09	0.07	0.06	0.02	0.04	0.007	0.02	0.02
Bromochloromethane	NG	0.009	-	ND	-	ND	-	ND	-	ND
Ethylbenzene[2]	797	0.01	286	0.002	-	ND	-	ND	-	ND
Fluorene[1]	>100,000	1.770	>100,000	2.83	>100,000	ND	>100,000	0.15	-	ND
Naphthalene[3]	132	0.242	39	4.18	16	0.15	8	0.01	5	0.09
MTBE[2]	0.7	0.010	-	ND	0.2	0.01	0.1	0.01	0.09	0.009
Phenanthrene[1]	>100,000	4.14	>100,000	24.8	>100,000	0.26	>100,000	0.03	43,515	0.82
Tetrachloroethene[2]	3.2	0.013	-	ND	-	ND	-	ND	-	ND
Toluene[2]	93	0.046	34	0.002	-	ND	-	ND	9	0.003
Xylenes (m,p)[2]	977	0.015	354	0.004	-	ND	-	ND	92	0.004
Xylenes (o)[2]	977	0.008	354	0.002	-	ND	-	ND	-	ND

Definitions:

-	- Goal not shown as chemical not detected at specified depth.
bgs	- Below ground surface
COPC	- Chemical of potential concern
ft	- Feet.
mg/kg	- Milligrams per kilogram
ND	- chemical not detected in this depth interval.
NG	- No goal; drinking water criteria not available.
RME	- Reasonable maximum exposure (i.e., the lesser of the maximum detected and UCL_{95})

Notes:

1	- Groundwater protective goal based on the USEPA tap water PRG (2004a).
2	- Groundwater protective goal based on the California Maximum Contaminant Level (MCL; California Department of Health Services 2008).
3	- Groundwater protective goal is based on the California Notification levels (NL; California Department of Health Services 2007).

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August 17, 2009

Dr. Masood Hosseini
Senior Project Manager
Site Assessment and Mitigation
555 West Fifth Street, GT16G2
Los Angeles, California 90013-1011

100-PEN-T22316

Subject: **Final Removal Action Completion Report**
Former Aliso MGP Site, Sector C, Block K, Los Angeles, CA
Master Agreements 6160000372
Service Release No. 5660009308

Dear Dr. Hosseini:

Enclosed is one copy of the Final Removal Action Completion Report for Block K of Sector C, former Aliso Street Manufactured Gas Plant (MGP) Site. We have incorporated all DTSC comments received on June 19, 2009 in this report.

Per your instruction, we will submit three final copies of this report to DTSC; two copies to Mr. Manjul Bose, the DTSC Project Manager, and one copy to Dr. Kimiko Klein, the DTSC Toxicologist, for their final review and approval.

Respectfully Submitted,
TETRA TECH INC.

Salar D. Niku, P.E.
Program Manager

cc: Mr. Manjul Bose, DTSC (2 copies)
Dr. Kimoko Klein, DTSC (1 copy)

Final

REMOVAL ACTION COMPLETION REPORT

for

FORMER ALISO MGP SITE
SECTOR C, BLOCK K
LOS ANGELES, CALIFORNIA

Prepared for
Southern California Gas Company
555 West Fifth Street
Los Angeles, California 90013-1011

Prepared by
Tetra Tech Inc.
3475 East Foothill Boulevard
Pasadena, California 91107
(626) 470-2462

Master Agreement: 6160000372
Service Release No: 5660009308
Tetra Tech Project No. TC 22316

August 2009

REGISTERED PROFESSIONAL ENGINEER
SALAR D. NIKU
NO. 32003
EXP. 12/31/10
CIVIL
STATE OF CALIFORNIA

Daniel P. Hencey, P.G.
Senior Geologist
Tetra Tech, Inc.

Salar D. Niku, Ph.D., P.E.
Project Manager
Tetra Tech, Inc.

Submitted by:
Masood Hosseini, Ph.D., P.E
Senior Project Manager
Southern California Gas Company
Authorized Agent for
Southern California Gas Company

8/17/09
Date

Copy 5 of 5
TE Copy 1 of 1

DISCLAIMER

This Removal Action Completion Report (Report) is prepared for the sole use and benefit of the Southern California Gas Company (Client) and for the specific Site known as the former Aliso Street Sector C, Block K Manufactured Gas Plant (Site), located in Los Angeles, California. **Neither this Report nor any of the information contained therein shall be used or relied upon for any purpose by any person or entity other than the Client and for the Aliso Site.**

This Report was prepared based partially on information supplied to Tetra Tech from outside sources and other information which is in the public domain, and partially on the information Tetra Tech obtained during the removal action activities. Documentation for the statements made in the Report is on file at Tetra Tech's Pasadena, California, office. Tetra Tech makes no warranty as to the accuracy of statements made by others which are contained in this Report, nor are any other warranties or guarantees, expressed or implied, included or intended in the Report with respect to information supplied by outside sources or conclusions or recommendations substantially based on information supplied by outside sources. This Report has been prepared in accordance with the current generally accepted practices and standards consistent with the level of care and skill exercised under similar circumstances by other professional consultants or firms performing the same or similar services. Since the facts forming the basis for this Report are subject to professional interpretation, differing conclusions could be reached. Tetra Tech does not assume responsibility for the discovery and elimination of hazards, which could possibly cause accidents, injuries, or damage unless those hazards were apparent, and should have been discovered, as a result of the services Tetra Tech performed for the Client. This Report represents the best professional judgment of Tetra Tech; however, compliance with submitted recommendations or suggestions does not assure elimination of hazards or the fulfillment of the Client's obligations under local, state, or federal laws, or any modifications or changes to such laws.

None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind of nature, but shall be a representation of findings of fact from records examined.

TABLE OF CONTENTS

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

TABLE OF CONTENTS

LIST OF APPENDICES

ACKNOWLEDGMENT

This Removal Action Completion Report has been prepared by Tetra Tech Inc. for the former Aliso Manufactured Gas Plant (MGP) Site, Sector C, Block K, located in Downtown Los Angeles, California. Mr. Daniel Hencey, P.G., was the Site Manager during the removal activities. Mr. Daniel Hencey P.G. and Karen Summers P.G. were the principal authors of this report. Dr. Salar Niku, P.E. was the Project Manager.

PIVOX Corporation was the General Contractor for the Southern California Gas Company (SCG) and was in charge of the removal activities at the Site under a direct contract with SCG. Geotechnical Soilutions Inc. managed the geotechnical issues at the Site under a contract with Tetra Tech, Inc.

All work was managed under the direction of Dr. Masood Hosseini, Senior Project Manager for SCG, managing the work under the supervision of Dr. Todd Sostek (SCG).

All work was performed under the direct supervision of the Department of Toxic Substances Control (DTSC). Mr. Manjul Bose was the DTSC Project Manager; Mr. Steven McArdle, was the DTSC Geologist, and Dr. Kimiko Klein, was the Toxicologist all working under the direction of Ms. Rita Kamat, the DTSC Unit Chief. Mr. Manjul Bose and Mr. Steve McArdle performed periodic site inspections during the removal action activities on behalf of the DTSC.

Background
This Removal Action Completion Report (Report) has been prepared by Tetra Tech, Inc. on behalf of the Southern California Gas Company (SCG) for property located at 500 North Center Street, Los Angeles, California. This property is a portion of the former Aliso Manufactured Gas Plant (MGP) Site is known as Block K of Sector C, hereinafter referred to as the "Site". This report is submitted to comply in part with the Voluntary Cleanup Agreement (VCA) [Docket No. HAS-A-00/01-100] executed between the Department of Toxic Substances Control (DTSC) and the SCG, dated October 10, 2000 [DTSC, 2000a]. This Report documents the removal activities at the Site, and provides the results of post-confirmation soil sampling and risk evaluation.

Purpose
The intent of the removal action was to remove the contaminated soils at the Site as described in the RAW and approved by DTSC and to restore the Site.

Site Location and Description
The former Aliso MGP site is located approximately 0.5 mile east of downtown Los Angeles (Figure 1-1). SCG has divided the approximately 56-acre Aliso Street MGP site into five sectors, A through E. The subject of this Report is Block K located in Sector C. Block K is a City block (approximately 1.8 acres) located in the middle of Sector C bordered on the north by Commercial Street, to the east by railroad tracks, to the south by Ducommun Street, and to the west by Center Street.

Removal Action Workplan
Several site investigations have been done at this Site and the results have been included in a Remedial Investigation Report. Tetra Tech prepared a Removal Action Workplan (RAW) for this Site dated August 31, 2004. Tetra Tech responded to the DTSC comments on August 16 and 29, 2005. The RAW was approved by DTSC on September 9, 2005. A Notice of Exemption (NOE) was also prepared and approved by DTSC on September 9, 2005. The removal activities were performed according to the approved RAW.

Soil Removal Action
The RAW identified two isolated areas within the Block K that required removal action. Excavation activities were conducted at the Site from August 2008 to September 2008. The Site removal action was implemented with the removal of contaminated soils at the Site until the remedial goals were achieved. During the removal action, Tetra Tech provided oversight for the removal activities on behalf of SCG. The PIVOX Corporation was the general contractor for the removal action activities, directly contracted by SCG. Geotechnical Soilutions, Inc. was contracted by Tetra Tech to design and oversee geotechnical issues related to the Site. Removal action work was performed under the direct oversight of the DTSC.

In the open excavation areas, contaminated soils and subsurface concrete structures were removed to depths ranging from 2 to 17 feet bgs. The final extent of soil removal is shown on Figure 2-1. A total of 1,322 tons of non-hazardous soils were removed from the Site during the soil removal activities.

The VOC- and TPH-impacted soils were profiled, manifested, and transported to TPST Soil Recyclers of California (formerly TPS Technologies), a soil treatment and recycling facility, located in Adelanto, California. The treated soils were not returned or reused at the Site.

Open excavation areas were backfilled with clean imported soil according to the City of Los Angeles Grading Permit requirements.

Confirmation Soil Sampling

Confirmation soil samples were collected from the walls and floors of the Site excavation during removal action activities. The samples represent the condition of the soils remaining at the Site following the completion of the removal action. A total of 109 samples were used in the risk evaluation; 43 post-excavation confirmation samples, and 66 remedial investigation samples. In addition, 27 soil gas samples (including duplicates) were collected at the Site from June 2002 to January 2003 during remedial investigations and prior to soil removal activities (Figure 1-3). After excluding soil gas samples that were collected in excavated areas, 26 soil gas samples remained in areas considered representative of on-site conditions and were used in assessing the risks to future on-site commercial/industrial workers. The results of post-excavation confirmation sampling are discussed in Section 3. The locations of confirmation soil samples as well as the remaining remedial investigation soil samples at multiple depth intervals are shown on Figure 2-1.

All confirmation soil samples were analyzed for PAHs by EPA Method 8310 and VOCs by EPA Method 8260B. Selected samples were analyzed for total petroleum hydrocarbons (TPH) by EPA Method M8015 (gas and diesel) and metals by EPA Method 6010/7000. AETL, Inc analyzed all samples.

Chemicals of Potential Concern

All of the organic chemicals detected in soils were identified as COPCs. These organic chemicals include the 7 C-PAHs, 9 other PAHs, and 8 VOCs. Of the metals detected in soils at the Site, only 3 were identified as COPCs. Therefore, 27 chemicals were identified as COPCs in soils remaining at the Site. All of the COPCs in soil are listed in Table 4-2. Seventeen VOCs (including m/p- and o-xylenes) were detected in soil gas. As shown in Table 4-2, all of these chemicals were identified as COPCs. Seven of the COPCs in soil gas were also detected in soils, while 10 chemicals were detected only in soil gas.

Post-Excavation Risk Evaluation

All of the COPCs, including the C-PAHs (expressed as B(a)P-equivalents) and metals, in soils at the Site were removed to levels lower than the goals protective of commercial/industrial workers. This equates to estimated cumulative carcinogenic risks less than the acceptable level of 1×10^{-5} for commercial/industrial workers and non-carcinogenic hazards less than the acceptable HI of 1 (i.e., a risk of approximately 3×10^{-6} and a HI of approximately 0.03). Further, the observed on-site B(a)P-equivalents have mean and UCL_{95} concentrations (0.35 and 0.9 mg/kg) that only slightly differ from the mean and UCL_{95} concentrations (0.16 and 0.24 mg/kg) observed in ambient Southern California soils [Environ 2002; DTSC 2009]. Thus, B(a)P-equivalent concentrations are nearly as low as ambient conditions protective of all receptors. For the protection of groundwater, it was found that following excavation, none of the COPCs in soil had concentrations exceeding groundwater protective goals. Based on soil gas measurements collected prior to soil removal activities, risks estimated for soil gas exposure exceed the acceptable level for future indoor workers (i.e., 1×10^{-5}), with risks estimated up to 5×10^{-5}. However, this risk estimate is entirely due to benzene detected at one location (TtKSG-4) in the northeast corner of the Site. Consequently, the risk for indoor workers may be overestimated since vapor sources in soil may have been removed during remediation, the subway tunnel beneath this Site may limit future Site development, such as building construction, and the tunnel may also prevent exposure to the benzene observed in a limited (northeast) portion of the Site. Thus, these results indicate that the removal action objectives for this Site have been met, i.e., to restore the Site soils to conditions acceptable for future industrial land use and soil conditions nearly approach levels protective of unrestricted Site use.

Conclusions

During removal activities at the Site, contaminated soils were removed and the remedial action objectives for the protection of human health and the environment have been achieved. The activities at the Site were performed under the direct oversight of the Department of Toxic Substances Control (DTSC). Through this Removal Action Completion Report, the Southern California Gas Company requests from DTSC a Certificate of Completion of removal activities and "No Further Action" for restricted land use of the Site.

1. BACKGROUND

This Removal Action Completion Report (Report) has been prepared by Tetra Tech, Inc. on behalf of the Southern California Gas Company (SCG) for property located at 500 North Center Street, Los Angeles, California. This portion of the former Aliso Manufactured Gas Plant (MGP) Site, (hereinafter referred to as the "Site) is known as Block K of Sector C. This report is submitted to comply with the Voluntary Cleanup Agreement (VCA) [Docket No. HAS-A-00/01-100] executed between the Department of Toxic Substances Control (DTSC) and the SCG, dated October 10, 2000 [DTSC, 2000a].

Tetra Tech prepared a Removal Action Workplan (RAW) for this Site dated August 31, 2004. Tetra Tech responded to the DTSC comments on August 16 and 29, 2005. The RAW was approved by DTSC on September 9, 2005. A Notice of Exemption was also prepared and approved by DTSC on September 9, 2005. The removal activities were performed according to the approved RAW.

During the removal action, Tetra Tech provided oversight for the removal activities on behalf of SCG. The PIVOX Corporation was the general contractor for the removal action activities, directly contracted by SCG. Geotechnical Soilutions, Inc. was contracted by Tetra Tech to design and oversee geotechnical issues related to the Site. Tetra Tech is the principal author of this Removal Action Completion Report. Removal action work was performed under the direct oversight of the DTSC.

1.1 PURPOSE

The intent of the removal action was to remove the contaminated soils at the Site as described in the RAW and approved by DTSC and to restore the Site. This Removal Action Completion Report documents the removal activities at the Site and provides the results of post-confirmation soil sampling and risk evaluation.

1.2 SITE LOCATION

The former Aliso MGP site is located approximately 0.5 mile east of downtown Los Angeles (Figure 1-1). The Aliso MGP site boundary covers an area from south of the railroad tracks by Bauchet Street to the north, across the 101 Hollywood Freeway to about East Temple Street to the south, and between Union Station to the west and the Los Angeles River to the east. The Site is located in Township 1 South, Range 13 West, Section 27, of the San Bernardino Meridian.

For ease of managing the required investigation and remediation activities, SCG has divided the approximately 56-acre[1] Aliso Street MGP site into five sectors, A through E, as shown on Figure 1-2. SCG has determined sector boundaries based on past and current ownership, as well as

[1] The acreage estimate given here is based on the previous reports that cite the size of the Aliso MGP site as 52 acres based on previous boundaries. The actual acreage of the Aliso MGP site based on current site boundaries is approximately 56.3 acres.

physical boundaries and past operations. The boundaries do not necessarily correspond exactly to the areas used by the former Aliso Street MGP and butadiene facilities.

The subject of this Report is Block K located in Sector C. Sector C includes seven City blocks covering approximately 16.4 acres. Block K is a City block (approximately 1.8 acres) located in the middle of Sector C bordered on the north by Commercial Street, to the east by railroad tracks, to the south by Ducommun Street, and to the west by Center Street.

1.3 SITE DESCRIPTION

The Site contains an existing small one-story office building which is occupied by Viertel's Towing Company used for towing and parking cars. The building is surrounded by asphalt pavement with parking on the north, east, south and west sides. Beneath the Site, MTA operates a train tunnel that travels from the northwest corner of the property and exits out the southeast edge of the property.

1.4 MGP AND POST-MGP OPERATIONS

The lot of Block K was purchased sometime between 1910 and 1921. A large aboveground gasholder (No. 8) with a six-million cubic feet capacity, was built by 1914 and used for both the MGP plant and the butadiene plant. Water cooling towers were built between 1923 and 1929 on the southern and eastern sections of Block K as part of the MGP plant. A full discussion of the past operations regarding the entire Aliso Street MGP site has been documented in the Remedial Investigation Master Workplan [Tetra Tech, 2001].

The first facilities for the MGP operations were built in 1874 on Sectors A and B. Additional properties on Sector C were bought between 1900 and 1925 and used mostly for gas storage. In 1922, natural gas became available and was mixed with the manufactured gas until January 1927 when straight natural gas was distributed to the Los Angeles market. The briquette plant on the Agnes Cline Tract of Sector D was shut down in about 1927, when lampblack was no longer produced. The Los Angeles Gas and Electric Company placed the gas plant facilities on standby mode in January 1927. This company merged with the Southern California Gas Company (SCG) in 1937. The gas plant remained on stand-by until administratively retired by SCG in 1941. In 1942, many of the facilities were converted to the production of butadiene, as discussed below.

Butadiene Plant Operations

During World War II and beginning in 1942, under a contract to the U.S. Defense Plant Corporation, Southern California Gas Company converted much of its Aliso Street MGP facilities to the production of butadiene, a raw material used in the manufacture of synthetic rubber. Additional land was added for these facilities and the MGP facilities were modified. This plant was owned by the U.S. Defense Plant Corporation, but operated by SCG from 1943 to 1947. The butadiene facilities on the Block K that existed in 1945 are shown on Figure 1-3. Most of the butadiene plant facilities were demolished in 1952, except for the large gasholders on Sector C that were removed in 1973.

The butadiene manufacturing process involved a series of steps. The first step was heating vaporized oil distillates and steam in the gas generators. The gas was then cooled in a wash box to remove tars, light oils and oil emulsions. The vapors passed out of the wash box into a pipeline for transfer to other units for cleaning. This wet butadiene gas was passed through a condensate scrubber and a Cottrell precipitator to remove entrained oil particles, and then passed through purifiers with iron oxides to remove hydrogen sulfide. The gas was then stored in a large gasholder on Ducommun Street (Block K). The wet butadiene gas was then sent to the Ducommun Street compressor plant (Block N), to a Hortonsphere on Block R, which acted as a surge tank, and to the Jackson Street compressor unit, also on Block R. The gas pressure was raised in these units to allow the gas to be further processed in the adsorption-distillation plant (Block Q). This unit was used to separate the butadiene gas from valuable fractions, such as the aromatic liquids, for sale. The butadiene gas was cooled into a liquid and transferred by pipeline to Torrance for rubber manufacturing. The remaining residue gas then went through a stripping plant, and the cleaned gas was either used by the plant or pumped into the gas distribution system for outside customers. One of the by-products was dicyclopentadiene, which was stored in small, above-ground tanks located on the 490 Bauchet Street property on Sector E. After the butadiene plant was closed, the gas gasholder remained on Block K until it was demolished in 1973.

In late 1998-99, MTA installed a subsurface tunnel to the Metrorail Maintenance Yard that crosses through the middle of Block K.

1.5 PREVIOUS SITE INVESTIGATIONS

The former Aliso MGP has been redeveloped and modified since the MGP operations, thus removing and/or mitigating a large portion of the soil contamination. The following is a summary of the previous investigations and removal actions that have been conducted in the past. Soil boring locations referred to below from previous site investigations are shown on Figure 1-3.

Three site-specific investigations were previously performed at the Site. These included the following:

- Field Investigations by GeoTransit, 1993 and 1994;
- PEA by Earth Technology Corporation, 1998; and
- Remedial Investigation, Tetra Tech/TRC, 2002-2003.

1.5.1 Field Investigations by GeoTransit Consultants (1993 – 1994)

In 1993 and 1994, GeoTransit Consultants conducted field investigations in Sector C for the proposed Metro Red Line Segment 3 Eastside Extension [GeoTransit, 1994]. A portion of the alignment between Union Station and First Street was within Sector C. Soil samples collected from borings along the Eastside Extension alignment indicated that TPH was present near the Unocal Terminal and near the contact between alluvium and bedrock. None of the borings or wells installed in 1993 or 1994 was located near Block K. In 1995, additional wells were installed by GeoTransit to evaluate proposed tunnels in this area; two of the wells installed were next to Block K.

Well C-3 (originally named DD-1) was installed on East Commercial Street upgradient of Block K in June 1995. The material encountered was 5 feet of fill underlain by alluvium consisting of 75 feet of silty sand and sand. Hydrocarbon odors were noted during drilling of the boring. Clayey sand was present from 20 to 25 feet bgs and silt was found at a depth of 65 to 70 feet below ground surface (bgs). Cobbles from 6 to 8 inches in diameter were present from 33.5 to 49 feet bgs, and 4-inch diameter cobbles were present at a depth of 64 feet bgs. Siltstone bedrock was reached at 84.5 feet bgs and the boring terminated at a depth of 88 feet. Groundwater was reached at a depth of 31.1 feet bgs at the time of drilling. This well was screened from 20 to 85 feet, covering alluvium and the alluvium-bedrock contact zone.

A deep boring, DD-2S, next to the location of C-6, was drilled on Ducommun Street to 100 feet bgs. The material encountered was gravelly sand for the top 10 feet, underlain by sand with silty sand and some gravel to a depth of about 75 feet, and siltstone bedrock from 75 to 100 feet bgs. Cobbles from 6 to 8 inches in diameter were present at multiple depths from 9 to 74 feet bgs. BTEX and naphthalene were detected in two soil samples from DD-2S. This boring was then grouted, and a shallow well, C-6 (originally named DD-2), was drilled next to it in June 1995 to a depth of 62 feet deep. Groundwater was reached at a depth of 30.1 feet bgs at the time of drilling; the well was screened in the alluvium from 29 to 59 feet bgs. The well was stopped at 62 feet, because free phase hydrocarbons were present in the groundwater.

A groundwater sample taken from Well C-3 after development in August 1995 showed that BTEX, PAHs, TCE, cis- and trans-1,2-DCE, 1,1-DCA, and VC were present. A sample from C-6 after development in September 1995 showed that BTEX, cis- and trans-1,2-DCE, 1,1-DCA, and VC were present, mostly at lower concentrations than in C-3. Both Wells C-3 and C-6 were sampled as part of SCG's quarterly groundwater monitoring program.

1.5.2 PEA by Earth Technology Corporation (1998)

Earth Technology Corporation (ETC) performed a PEA for Sector C between February 24 and July 11, 1998. A total of 51 borings were drilled; eleven shallow borings to about 36 feet were located on Block K (K-1 through K-11), as shown on Figure 1-3. The entire Site was paved with 0.5 foot of asphalt. Three borings were drilled inside the former gas holder, K-1, K-8, and K-9. Concrete was present at or near the surface in two of these borings, at 0-1 foot in K-1, and 1-4 feet in K-9. Of the three borings near the outer edge of the gas holder, K-2, K-3, and K-7, only one had concrete (0-0.5 foot in boring K-3 in the northeast corner). The two borings inside the footprint of the former cooling towers, K-4 and K-10, had concrete from 1-3.5 feet. The three borings south of the gas holder, K-5, K-6, and K-11, had concrete in K-5 from 0.5-1.5 feet and 2.5-3.5 feet separated by a clay layer, and in K-6 from 1-4 feet.

The soil in the PEA borings was predominantly sand and sandy gravel. Clay was present in two borings on the western side of the Site; Boring K-1 from 1-5 feet and K-2 from 5-10 feet bgs, underlain by sand with 20 to 25 percent silt to a depth of 36.5 feet bgs. Groundwater was

[2]reached in these two borings at 33 feet bgs. The other borings had thick sandy gravel zones beginning at about 15 to 23 feet bgs, which extended to the bottom of the borings, except in K-8 where a layer of sand was encountered from 24 to 30 feet. Groundwater was reached in these borings at depths ranging from 30 to 34 feet bgs. No hydrocarbon product, stains or odors were noted during drilling in any of the borings, including the three borings within the footprint of the gas holder.

A total of 34 soil samples were collected from Block K and analyzed for VOCs, PAHs, TPH, and metals. No soil samples from Block K were analyzed for cyanide, total phenols, or PCBs. Metals were analyzed in three samples from K-2 at 35 feet bgs, K-6 at 5 feet bgs, and K-11 at 35 feet bgs. TPH diesel and heavy hydrocarbons were detected in all borings except in borings inside the gasholder (K-1, K-8, and K-9). No TPH-gasoline was found in any of the soil samples. Low concentrations of PAHs were found in soil samples from most of the borings. VOCs were occasionally detected in the soil samples from Block K. Benzene was detected in only one soil sample (0.01 mg/kg in boring K-9 at 35 feet bgs below the water table). Ethylbenzene was also detected in only one boring (0.03 mg/kg in K-10 at a depth of 30 feet bgs, just above the water table). Xylenes were detected in two soil samples, 0.24 mg/kg in K-3 at 25 feet and 0.22 mg/kg in K-10 at 30 feet. Other VOCs were detected in the K-10 sample from 30 feet, including MTBE, naphthalene, 1,2,4-trimethylbenzene, n-propyl benzene, and p-isopropyl toluene. Detected solvents included TCE in two samples, K-3 at 25 feet and K-7 at 30 feet.

One boring near Block K was converted to a groundwater monitoring well, C-18 (originally Commercial-1), located upgradient of Block K on East Commercial Street. No wells were installed directly on Block K. Well C-18 is 55 feet deep and screened from 23 to 53 feet in the alluvium. The groundwater was reached at a depth of 31 feet bgs at the time of drilling. In February 2003, the groundwater level was at 30.31 feet bgs. The material in this well was 0.5 foot of asphalt, 5 feet of fill with bricks and gravel, fine sand from 5 to 12 feet, and fine sand with 10 percent coarse sand, 15 percent gravel, and 5 percent silt to the total depth. No VOCs, PAHs, or TPH were detected in soil samples from Well C-18.

1.5.3 Remedial Investigation by Tetra Tech and TRC (2002 – 2003)

A remedial investigation (RI) was performed between April 2002 and January 2003 to further determine the nature and extent of contamination at Block K. Tetra Tech prepared the Master Workplan for site investigations at the Site. TRC performed all field activities and data collection. A total of 27 borings and 7 monitoring wells were installed on Block K. Chemical analyses were conducted of soil, soil gas, and groundwater. Compounds detected in soil samples included PAHs, TPH gasoline and diesel, petroleum-related VOCs, solvents, and metals. Analytical results of the samples collected during this investigation are presented in Tables 2-1 through 2-12 of the Remedial Investigation Report [Tetra Tech, 2004][3].

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[2] Please note that a portion of the Site has been remediated and therefore, the location of some of the RI samples have been excavated. Tables 3-1 through 3-12 in Section 3 show the RI data remaining at the Site after excavation is completed.

Soil Investigation

In Block K, the concentrations of carcinogenic PAHs (C-PAHs), expressed as B(a)P equivalent, ranged from non-detect (i.e., <0.02) to a maximum concentration of 59.98 mg/kg in the alluvium at 5 feet bgs in TtK-5. The areas of concern with respect to C-PAHs were the southwest corner of the Site, primarily in the top 5 feet of fill, and one small spot on the eastern part of the Site. The area that exceeded the cleanup goals for industrial workers was limited in extent. Non-carcinogenic PAHs (NC-PAHs) were commonly detected in the top 10 feet of fill, but most concentrations were low.

Naphthalene ranged from 0.01 and 2.19 mg/kg in the top 10 feet of fill. One location exceeded the cleanup goal for hypothetical residents, although it does not represent a concern based on the RME for naphthalene across the Site. Naphthalene levels did not exceed the cleanup goals for workers. Naphthalene was detected at a maximum concentration of 2,720 mg/kg in the saturated alluvium at 52 feet bgs in TtK-2.

Benzene was detected in the top 10 feet of fill mostly south of the tunnel. The maximum benzene concentration in the top 5 feet of fill was 0.10 mg/kg in TtK-2, located in the southwest corner of the Site. None of the detected benzene concentrations exceeded the cleanup goals for workers in the top 10 feet. The benzene concentrations in the southwest corner and a small area north of the tunnel exceeded the goals for hypothetical residents due to potential inhalation of indoor air. The maximum benzene concentration was detected at 3.95 mg/kg at 52 feet bgs in TtK-2.

Other hydrocarbon-related VOCs were present, particularly in the borings with higher TPH. As was the case for naphthalene, the highest fuel-related VOCs were present in the deeper samples from the southwest corner near TtK-2.

Dicyclopentadiene was found in saturated alluvium at a maximum concentration of 37.5 mg/kg in TtK-5 at a depth of 30.5 feet, located in the southwest corner of the Site. This compound was not a concern for workers or potential residents via the inhalation or groundwater pathways. The absence of this compound in the shallow soil samples suggests that the compound may have been transported by groundwater from upgradient sources.

PCE was the only solvent detected in the soil samples from the Site. PCE was detected at 5 feet in TtK-7 at a maximum concentration of 0.013 mg/kg, in one area north of the tunnel. The observed PCE concentrations in soil did not represent a concern for workers or potential residents, and did not exceed the goal to protect groundwater based on the MCL. Other solvents were found in soil gas and groundwater as discussed below.

Soil Gas Investigation

Soil gas was analyzed in vapor probes at seven locations on Block K. The maximum concentration of dicyclopentadiene by EPA Method TO-15 was 4.0 mg/m^3 at a depth of 15 feet bgs and 2.7 mg/m^3 at a depth of 20 feet bgs in TtKSG-1. Similar dicyclopentadiene results were detected in soil vapor from TtKSG-7. PCE was detected in the soil gas sample from TtKSG-1 at depths of 5 to 25 feet bgs with a maximum PCE concentration of 2.6 mg/m^3. TCE and 1,1,1-trichloroethane were detected in the soil gas sample from TtKSG-1-15 at a concentration of

0.040 mg/m^3 and .176 mg/m^3, respectively. TtKSG-1 is located in the northeast corner of the Site.

Groundwater Investigation

Seven groundwater-monitoring wells (TtK-1, TtK-2, TtK-3, TtK-4, TtK-5, TtK-6, and TtK-7) were installed at the Site. TtK-1 and TtK-3 to TtK-7 were completed at depths ranging from approximately 42 to 45 feet bgs as shallow groundwater-monitoring wells, while TtK-2 was completed at approximately 84 feet bgs as a deep well. Carcinogenic PAHs (B(a)P equivalent) were detected in the groundwater with concentrations ranging from 0.0002 mg/L in TtK-7 to 0.0019 mg/L in TtK-2. While many VOCs by EPA Method 8260B were detected in the groundwater samples, only benzene and vinyl chloride exceeded the goals for potential workers and residents due to inhalation of indoor air. This screening evaluation did not include areas where extensive subsurface concrete is present and in the area of the underground tunnel. Compounds detected included benzene (0.664 mg/L in TtK-2), naphthalene (12.4 mg/L in TtK-1), PCE (0.0014 mg/L in TtK-3 and TtK-7), TCE (.0068 mg/L in TtK-7) and vinyl chloride (.0716 mg/L in TtK-3). TPH-gasoline was highest in the deep well TtK-2, located in the southwest corner of the Site (11.0 mg/L). The groundwater is not currently being used as a potable source, due to the high total dissolved solids (e.g., 6,200 mg/L in TtK-1).

1.6 SITE GEOLOGY AND HYDROGEOLOGY

Geology

The subsurface lithology on Block K consists primarily of fill and sandy alluvium overlying bedrock. The upper 2.5 feet (TtKB-17) to 15 feet (TtK-2) encountered in the unsaturated zone mainly consisted of fill material. The alluvium is predominantly composed of dark grayish brown, fine- to medium-grained sands with minor silt and clay layers that are not continuous between the borings or wells. Brick fragments were observed in most of the fill material.

Extensive concrete was encountered across the Site during the subsurface investigation. The concrete may be the remains of the base of the former gas holder onsite. Concrete was also found in areas outside of the former gas holder at the surface in TtKB-35 and from 1.5 to 4.5 feet in TtKB-13 and in TtKB-30. Concrete thicknesses ranged from less than 1 foot in well TtK-7 to 9 and 10 feet in TtKB-28 and TtKB-35. The soil boring and groundwater well locations are shown on Figure 1-3.

Alluvium extended from the fill material or concrete to the bedrock, which was reached in the deep well TtK-2 at 79 feet bgs, boring TtKB-33 at 92 feet bgs, and boring TtKB-34 at 82 bgs. During drilling, groundwater was encountered at depths ranging from 30 feet bgs in TtKB-16, north of the tunnel, to 36 feet bgs in TtKB-25, TtKB-30 and TtKB-31 south of the tunnel. Saturated alluvium near the groundwater table was typically fine to coarse-grained, yellowish brown to dark gray sand and gravel with pebbles and cobbles. Deeper saturated alluvium below about 32 feet bgs was typically dark bluish-gray sand and gravel with a few silt layers. Petroleum hydrocarbons were not observed in the deep alluvium or at the alluvium-bedrock interface in the deep borings TtKB-33 and TtKB-34 on Block K.

The Fernando Formation bedrock was encountered at a depth of 92 feet bgs in bedrock boring TtKB-33 and 82.5 feet bgs in bedrock boring TtKB-33. The formation was described as dark greenish-gray mudstone/claystone/siltstone in TtKB-33 and as a greenish-black mudstone/claystone/siltstone boring TtKB-34. The Fernando Formation bedrock was encountered at a depth of 79 feet bgs in deep well TtK-2 and was described as a dark greenish-gray siltstone.

Eight soil samples from TtKB-38 in Block K were analyzed for total organic carbon, pH, dry density, moisture content, air permeability, effective porosity, effective permeability to water, and saturated hydraulic conductivity. Samples from TtKB-38 were from the depths of 5 to 31 feet bgs. The hydraulic conductivities ranged from 1.27×10^{-3} cm/s to 9.85×10^{-5} cm/s. The moisture content ranged from 4.2 percent to 16.4 percent. The air permeability ranged from 946 millidarcies to 5,053 millidarcies at 10 feet bgs.

Hydrogeology

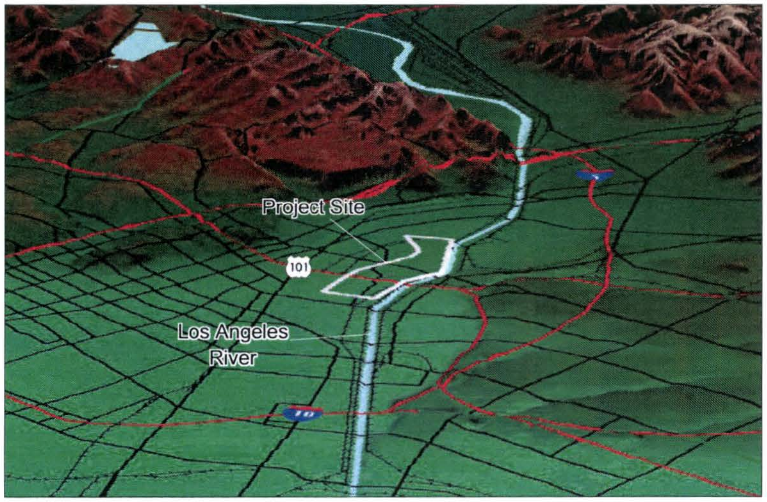
The former Aliso Street MGP site is located within the Los Angeles Forebay Area of the Los Angeles Central Groundwater Basin (California Division of Water Resources, (CDWR), 1961, "Ground Water Geology of the Coastal Plain of Los Angeles County", Bulletin 104). Eight aquifers and associated aquitards have been mapped in the basin area. The aquifers, from shallowest to deepest are: Gaspur, Exposition, Gage, Hollydale, Jefferson, Lynwood, Silverado, and Sunnyside. Except for the Gaspur aquifer, all aquifers of the basin thin and pinch out towards the southern portion of the Aliso Street MGP site. The Gaspur aquifer has been mapped to continue northward from the basin through the Aliso Street MGP site.

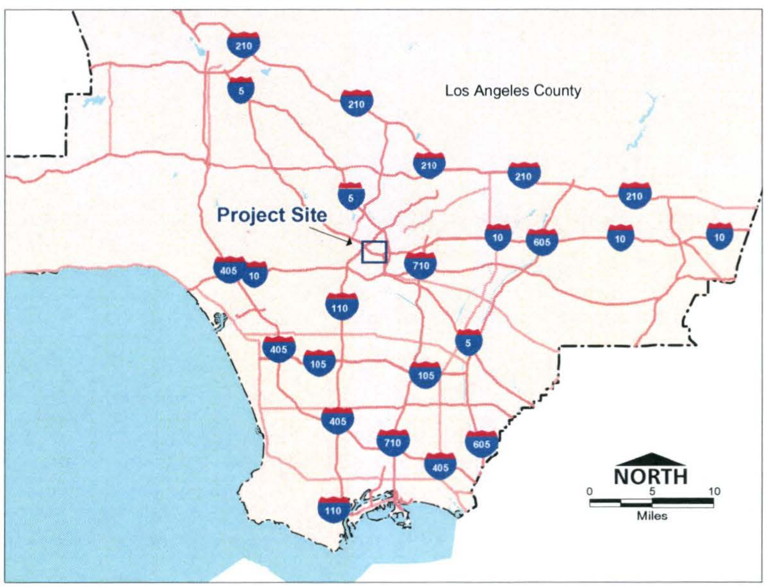
Previous hydrogeologic investigations in the MGP site have established the presence of groundwater in the underlying river alluvial deposits at depths ranging between 29 and 42 feet below ground surface (bgs). This groundwater is unconfined and has a flow direction to the south. There are no intervening, continuous, confining layers. The base of the saturated zone is bedrock, encountered at depths from 45 feet bgs in well C-10, located near the corner of East Temple Street and Center Street on Block Q to 145 feet bgs in TtS-2, located on Sector E in the northern part of the Aliso Street MGP site. In some places, the underlying bedrock is dry such as beneath Sector A, while in other places there are thin, permeable sand layers in the weathered bedrock formation. The saturated hydraulic conductivity of bedrock samples range from 3.2E-7 to 7.0E-9 cm/sec, compared to 1.55E-03 cm/sec for the site-wide mean for samples from the alluvium.

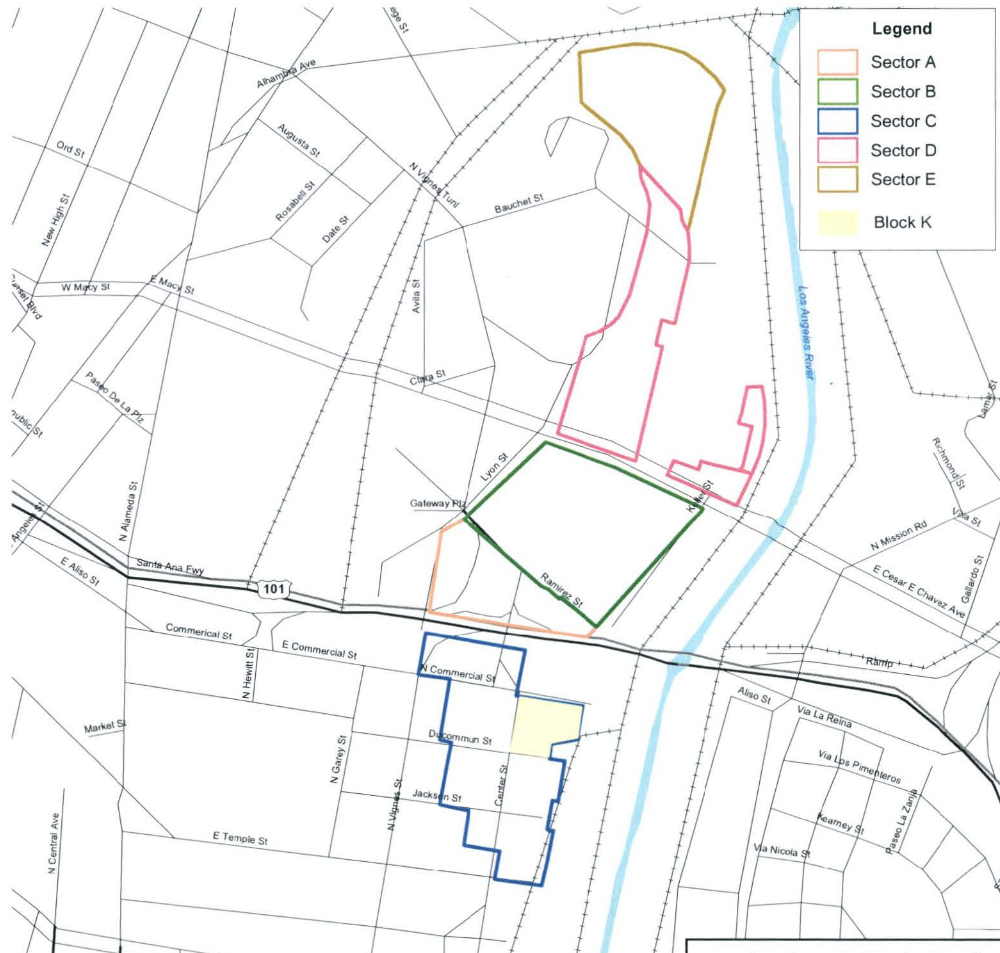
During drilling, groundwater was encountered beneath Block K at depths ranging from 30 feet bgs TtKB-16, north of the tunnel, to 36 feet bgs TtKB-25, TtKB-30 and TtKB-31, south of the tunnel. Initially, groundwater occurs in gray and brown fine- to coarse-grained sand and gravel in the alluvium. The saturated alluvium extends to the top of the Fernando Formation and ranges in thickness from 79 feet in well TtK-2 to 92 feet in well TtKB-33. The saturated alluvium comprises one aquifer overlying the bedrock, which may correspond to the Gaspur aquifer. The deeper aquifers below the Gaspur aquifer found elsewhere in the Los Angeles Basin are not present beneath Block K. Based on the network of shallow wells at the Aliso Site, the groundwater flow direction across Block K is to the south.

1.7 REMOVAL ACTION WORKPLAN

Tetra Tech prepared a Removal Action Workplan (RAW) dated August 31, 2004, which was annotated with the Response to DTSC Comments on August 16, 2005. The RAW included all necessary detailed plans and specifications required to conduct the removal activities at the Site, considering all physical, geotechnical, structural, and environmental constraints.







Southern California Gas Company
Former Aliso Street Site - Sector C, Block K

Site Location Map

TETRA TECH

PREPARED BY: BD
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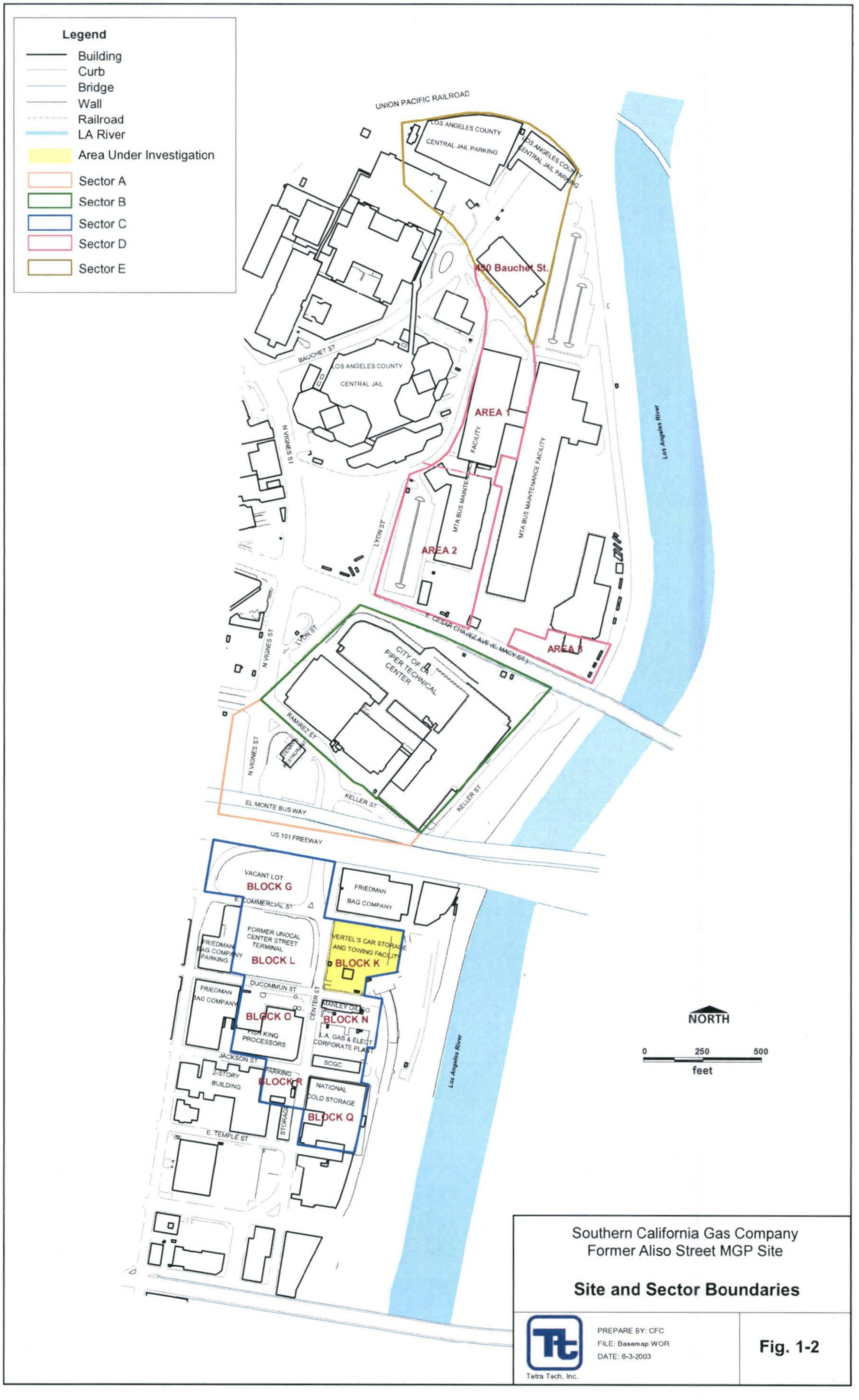
Fig. 1-1



Southern California Gas Company
Former Aliso Street MGP Site

Site and Sector Boundaries

Tetra Tech, Inc.

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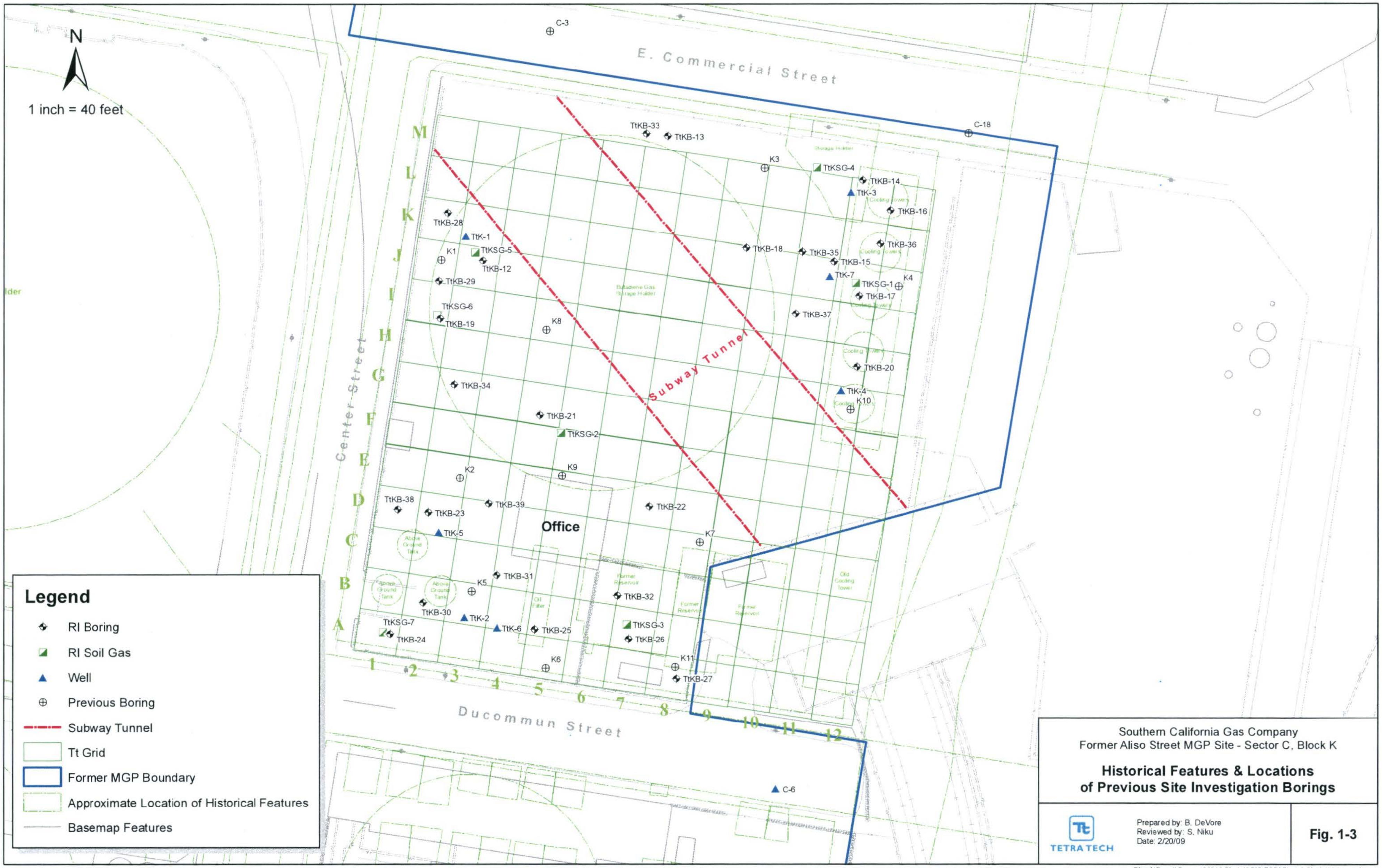
Fig. 1-2



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2. REMOVAL ACTION

This section describes the field activities performed during the soil removal action at the Aliso MGP Site, Sector C, Block K (located at 500 North Center Street, Los Angeles, California). The removal activities were implemented under the oversight of DTSC. The site removal action was implemented with the removal of contaminated soils at the Site until the remedial goals were achieved. A total of 1,322 tons of non-hazardous soils were removed from the Site during the soil removal activities.

2.1 CONTRACTORS AND SUBCONTRACTORS

The contractors and subcontractors that were involved in the soil removal activities included:

- Tetra Tech Inc., the environmental consultant under a direct contract with SCG, oversaw and managed the removal activities for SCG.
- Geotechnical Soilutions, Inc., (GSI) a subcontractor to Tetra Tech Inc., managed the geotechnical issues.
- Coory Engineering, a subcontractor to Tetra Tech Inc. surveyed the Site prior to remedial investigation.
- PIVOX Corporation (PIVOX), the General Contractor under direct contract with the SCG, performed all removal actions.
- American Environmental Testing Laboratory (AETL), under direct contract with SCG, performed analyses on all soil, soil gas, water, and air samples.
- TPS Soil Recyclers of California (TPS), under a direct contract with the SCG, managed transportation, treatment, and recycling of the non-hazardous contaminated soils.
- Belshire Environmental Services, Inc. (B.E.S.I.) provided transportation services under contract with TPS.
- Briggs Trucking, a subcontractor to PIVOX, transported concrete and asphalt out of the Site to the recycling facilities.
- Robertons Ready Mix a subcontractor to PIVOX supplied and delivered cement slurry used for backfilling the pipes on the Site.
- Kornoff Industrial Recycling in Pomona, California, a subcontractor to PIVOX, received the metals shipped out of the Site.
- Nu-Way Recycling in Irwindale, California, a subcontractor to PIVOX, was another recycling facility that received the concrete and asphalt shipped out of the Site.

- B.E.S.I, transported clean import soil for backfilling the Site.

- United Rentals, a subcontractor to PIVOX, supplied the heavy equipment, temporary fencing, restroom, and hand washer.

- Terra Pave, a subcontractor to PIVOX, paved, the parking areas that was affected by the removal action.

- Centerline Striping Company, a subcontractor to PIVOX paved and striped the section of the parking area that was affected by the removal action.

- Baker Tank provided a pump and temporary containment system for storing the contents of the pipes.

- AF Figueroa Welding Services, a subcontractor to PIVOX repaired the metal gate along Center Street.

- Pierce Saw Cutting, a subcontractor to PIVOX, provided concrete saw cutting services.

- Trench Plate Rental Co., a supplier to PIVOX, provided the temporary shoring equipment used during excavation in the sidewalk areas.

- Canyon & Associates, Inc. provided surveying services during the removal action.

2.2 SITE SECURITY

Block K had an existing 8-foot high metal fence that separated the Site from the public streets. During the removal action, the Site was separated into three areas: Area 1, Area 2, and the Impound Parking Area. The staging area was located along Commercial Street to the north of the Site.

During the removal action in Area 1 of Block K, a temporary fence with wind screen was placed on the north side of the area to be excavated (Photo 1–Appendix B). The gate along North Center Street was used to allow ingress and egress for the movement of personnel, equipment, and materials.

During removal action in Area 2, a temporary fence was placed allowing the Viertel customers to enter the business through the North Center Street gate, allowing access to the office along a fenced corridor. Area 2 was enclosed by the existing fences with sheet metal and barbed wire along the top on the east, south, and west sides. A 6-foot high temporary fence with windscreen was placed on the northern side of the removal area. The existing gate along Ducommun Street allowed ingress and egress for the movement of personnel, equipment, and materials.

During removal action in the Impound Parking Area, the existing fences provided security, and the excavation were barricaded with caution tape. The existing gate along Commercial Street allowed ingress and egress for the movement of personnel, equipment, and materials.

The security fencing encompassed the exclusion, decontamination, and support zones. During non-working hours, the gate to the fenced-in area was kept locked. Fences around the Site were covered with a visual barrier (e.g., wind screen) to minimize potential dust from moving offsite and to reduce visual impact of the Site activities. After completion of the removal action, the temporary fences were removed.

2.3 SITE ACCESS

The Site was accessed through the gates at N. Center Street, Commercial Street, and Ducommun Street, depending on which area the removal action was being done. A sign-in log was maintained to document personnel entering the Site.

During the removal action at Area 1, the gate on N. Center Street was used as egress and ingress points. During the removal action at Area 2, the gate on Ducommun Street was used as egress and ingress points. During the removal action in the Parking Area of the rear impound area, the gate on Commercial Street was used as egress and ingress points.

Site Visitors

During the soil removal activities, the following people visited the Site:

- Mr. Manjul Bose, Project Manager (DTSC) visited the Site,
- Mr. Steve McArdle, Geologist (DTSC) visited the Site on a regular basis,
- Dr. Masood Hosseini, Senior Project Manager visited the site daily.

A copy of the visitors' log is kept on file at Tetra Tech Inc.'s Pasadena Office.

Traffic Control

During removal action in Area 1, access to the Site for the trucks was through the gate on North Center Street. During removal action in Area 2, access to the Site for the trucks was through the gate on Ducommun Street. During removal action in the Impound Parking Area, access to the Site for the trucks was through the gate on Commercial Street. Trucks hauling the contaminated soil were staged north of the Site on Commercial Street and called in to the Site so as not to cause unnecessary congestion on North Center Street and Ducommun Street. Traffic control measures were applied during the removal activities for the trucks and equipment entering and exiting the Site. Two flagmen were assigned to monitor and direct the trucks and equipment entering and exiting the Site.

2.4 PERMIT REQUIREMENTS

The removal action contractor (PIVOX) obtained the necessary permits for soil removal activities, site grading, well decommissioning, transportation, and air quality. The following permits were obtained for this project and copies of these permits are included in Appendix C.

- On-site grading permit from the City of Los Angeles – Development Services Department, Public Works Division. The excavation and grading permit was prepared by PIVOX and approved by City of Los Angeles (Permit # 07030-10000-02034), dated October 19, 2007.

- South Coast Air Quality Management District Mitigation (AQMD) Plan Number 478722 (valid until September 16, 2008). The AQMD assigned reference Number 140111, dated August 12, 2008, to PVIOX.

- Dig Alert number A821104 was issued to PIVOX on August 11, 2008 and renewed every 28 days, prior to expiration until September 2008.

- Activity Notification, dated July 10, 2008, for Annual Trench/Excavation Permit Number 2008-906656 – State of California Department of Industrial Relations Division of Occupational Safety and Health (Cal OSHA), issued to PIVOX Corp. and valid through July 10, 2009.

2.5 MOBILIZATION

PIVOX began mobilizing equipment to the Site on August 12, 2008. Staging areas, truck loading areas, decontamination areas, and support zones on the Site were clearly identified. The health and safety, noise, dust, and odor control equipment and materials were positioned for use when necessary.

The following construction equipment were mobilized and used at the Site: one medium excavator (CAT 315C) with compacting wheel, a back-hoe (John Deere 310G) with compacting wheel, one rubber tire front-end loader (John Deere 624J), and a 2,000-gallon water truck.

2.6 SITE SURVEYS AND PHOTOGRAPHS

Geophysical Survey
Prior to the soil removal activities, GeoVision conducted a geophysical survey to identify the underground utilities in Areas 1 and 2 and the Impound Area.

Site Condition Survey
Prior to the soil removal activities, Tetra Tech documented and photographed the existing conditions of the Site. This included photographing the block wall bordering the Site.

Topographic Surveys
An initial survey of the existing Site conditions was conducted by Coory Engineering. This initial survey was used as the basis for the Site excavation plans. An additional survey was conducted at the excavation in Area 1 by Canyon Consulting.

Site Photographs
Many photographs were taken at the Site during the removal activities. Representative

photographs (as referred to in this report) have been included in Appendix B. Additional photographs of the removal activities are on file in the Tetra Tech's Pasadena Office.

2.7 REMOVAL ACTIVITIES

Excavation activities were conducted at the Site from August 2008 to September 2008. The excavation was conducted in accordance with the approved City of Los Angeles Excavation/Grading Plan, Temporary Excavation Plan by GSI, and the Removal Action Workplan by Tetra Tech, dated August 2004 as amended in August 2005 by responses to DTSC comments.

Establishment of a Grid System

Prior to the soil removal activities, the proposed area of excavation was divided by a grid system for ease of reference and sample labeling. As shown on Figure 1-3, the grid system was comprised of 20-foot by 20-foot squares. The grids were identified from the south to north by alpha characters and the west to the east by numeric characters.

Initial Site Activities

Excavation activities began with the removal of the asphalt and concrete at the north-west corner of Area 1. The removal of asphalt and concrete continued as the excavation progressed. The concrete debris was excavated and cleaned onsite using a pressure washer and fire hose. The cleaned materials were transported to Kornoff Recycling in Pomona, California.

Prior to open excavation in the center of Area 1, the location of the utility lines that provided electricity to the shed and water to the office were marked and temporarily rerouted. Hand digging was performed to expose the conduit to ensure its integrity. After removing the surrounding contaminated soil, the lines were reconnected (Photo 2–Appendix B).

2.8 SOIL REMOVAL ACTION

To accomplish the removal action and allow the Viertel towing company to continue operating with minimum disruption, it was necessary to separate the Site into three areas and remediate one area at a time, so access to the site operations will be available. The contaminated soil was removed by open excavation and slot trenching.

Soil Removal by Open Excavation

Open excavation started from the west side of Area 1 progressing towards the east as per approved Excavation Plans prepared by GSI. The excavation limits and depths defined in the approved plans were revised as the excavation continued. A trench plate was placed next to the fence in Area 1 to protect the fence along Center Street while removing the soil along the west side of Area 1. Confirmation soil samples were collected and analyzed. The results of soil confirmation samples were compared to the remedial goals, and if it was necessary, additional soil was excavated until the confirmation samples met the cleanup goals.

The excavation plans required a slope of 1:1 on all excavations deeper than 5 feet. The onsite

Geotechnical Engineer monitored the excavations. In the western portion of Area 1 where the excavation reached 10 feet, temporary shoring was used to protect the workers entering the trench.

Open excavation in Area 2 started from the north eastern part of the Area, (Photo 3–Appendix B). This excavation involved an area of about 25 feet by 25 feet (625 Square feet) and 7 to 8 feet deep. Prior to major open excavation, soil samples were collected at 2 and 4 feet bgs from several trenches and hand augered borings, where trenching was not possible. These samples were sent to AETL for lead analysis including STLC and TCLP when deemed necessary. The results showed the presence of lead impacted Cal-Haz soil in some areas of the Site. The rest of the excavated soil that was TPH- and/or PAH-impacted was transported to TPS for thermal desorption[1]. Any excavated soil that was stockpiled was covered with plastic sheets before the end of the workday to minimize dust at the Site. In areas where needed, PIVOX called the Geotechnical Engineer (GSI) for a bottom inspection prior to placing the backfill.

As stated in the Removal Action Workplan, Section 5.2.1 (Tetra Tech, August 2004) in one boring (RI Boring TtK-4 located in Grid H-11) located north of the MTA subsurface tunnel, the concentration of C-PAHs slightly exceeded (7.85 mg/kg) the industrial worker protection goal of 6.1 mg/kg. During the Site remediation, the Area 3 around RI boring TtK-4 was trenched to remove this isolated anomaly. Eventually an area approximately 15' by 22' was excavated to approximately 5 feet bgs. All visual contamination was removed and five confirmation samples were collected (Figure 2-1).

In Area 3, two additional trenches were dug to randomly evaluate and confirm that the rest of the Site is not contaminated. One trench was placed at grid L10 (Figure 2-1), with dimensions of 25' by 7' to approximately 5 feet bgs and two confirmation samples were collected.

Another trench was placed in Grid M7 (Figure 2-1). Trench Excavation was terminated since there was a concrete slab at one foot depth bgs. No confirmation samples were collected in this area. Previous RI sampling did not show contamination in this general area. Photo 9 in Appendix B shows the general location of Area 3.

Slot Trenching

Slot trenching by A-B-C method with clean soil backfilling was implemented to maintain the structural integrity of the block wall (Photo 4–Appendix B) in Area 1. The slots labeled "A" was first excavated and the soil replaced with clean compacted backfill, before the next slot (B) was removed. The "B's" were removed and replaced the same as the "A" trenches. A representative from the Geotechnical Engineer was onsite during the slot cutting activities to monitor and

[1] Thermal desorption involves induced volatilization of organic wastes by low temperature heating, and subsequent destruction or capture of the resulting gaseous emissions. A thermal desorption system typically consists of a low temperature (300 to 800 °F) primary chamber, and a secondary afterburner, operating at a temperature of 2000+ °F. A wet scrubber control system is typically used to control air emissions. This process is effective for the treatment of TPH and PAHs.

document the operations. The slot trenches were backfilled using approximately 12 cubic yards of clean soil.

2.9 REMOVAL OF STRUCTURES

Concrete structures and footings were encountered and removed during the removal action. A total of 10 loads of concrete were excavated, cleaned by hand and pressure washed, and shipped to Nu-Way recycling facility located in Irwindale, California.

Removal of MGP and Butadiene Subsurface Structures

Historical records and maps showed the presence of structures on Site related to the former industrial activities during and after the MGP operations as shown on Figure 1-3.

During open excavation in the northwest section of Area 1, there was a concrete wall and several large pipes that were removed next to the former gasholder base. In addition, there was a 10-foot by 10-foot concrete sump pit that extended approximately 22 feet below ground surface (bgs) and a brick vault that allowed access to one of the subsurface pipe valves. The bottom of the pit was encountered at 22 feet bgs and a soil sample was collected at 23 feet bgs. A similar problem existed below the brick vault; soil was excavated to the bottom of the vault and a sample was collected at 12 feet bgs.

Removal of Pipes

Several large pipes at the Site were encountered during the removal action; these pipes were used during the previous industrial activities at the Site. Numerous pipes were uncovered during the excavation. The pipes varied in size from 18 inches to 36 inches in diameter and were comprised of cast-iron or steel. The pipes had been capped with steel or cast bulk heads (Photo 5–Appendix B). After removing the bulk heads, all but two of the pipes were empty. The water inside the pipes was pumped out into a Baker Tank and the pipes were rinsed. The liquid was sampled and profiled. The liquid was then placed into a vacuum truck and sent to Crosby and Overton Inc. located in Long Beach, California. The analytical results of the water are contained in Table L-1 to 4. The two pipes contained approximately 1,800 gallons of contaminated water. Once the pipes were empty and rinsed, the portion of piping that could not be removed was filled with 2-sack sand slurry. Prior to filling the pipes sand bags were placed in the piping as far back as possible to be able to close the pipe by slurry (Photo 6–Appendix B).

2.10 POST-EXCAVATION CONFIRMATION SAMPLES

Confirmation soil samples were collected from the walls and floors of the Site excavation during removal action activities. The samples represent the condition of the soils remaining at the Site following the completion of the removal action. Please refer to Section 5.2 of the RAW for a detailed discussion on confirmation sampling procedure. The results of post-excavation confirmation sampling are discussed in Section 3.

2.11 EXTENT OF EXCAVATION AND VOLUME OF SOIL REMOVED

In the open excavation areas, contaminated soils and concrete structures were removed to depths ranging from 2 to 17 feet bgs. The final extent of soil removal is shown on Figure 2-1. A total of 1,324 tons of non-hazardous soil were removed from the Site during the remedial excavation.

2.12 GEOTECHNICAL AND STRUCTURAL MONITORING

A representative of the Geotechnical Engineer - Geotechnical Soilutions, Inc. (GSI) - was present onsite to monitor the excavation, slot trenching, backfill activities, and to provide necessary modifications during the project. Additionally a GSI representative was also onsite to conduct compaction tests on the backfilled soil (Photo 7–Appendix B).

2.13 ENVIRONMENTAL MONITORING

Prior to excavation, background air levels were established at several locations surrounding the Site. This was performed by PUF samplers and Summa Canisters used to monitor ambient air quality over an 8-hour workday. Short-term action levels were developed in addition to the background data acquired prior to excavation.

During the soil removal activities, both real-time air monitoring and ambient air sampling was conducted. Real-time air monitoring was conducted by a PID[2] and ambient air sampling was conducted by Summa Canisters (Method TO-14). In addition, the perimeter/area-wide air monitoring was conducted by high-volume continuous samplers (PUFs) to measure dust and PAHs, stationed at the perimeter of the work area during excavation operations.

Dust monitoring was performed within the exclusion zone and Site perimeter, using Haz-Dust HD-1100 dust meter. During excavation activities, the work areas were sprayed with water to reduce dust levels.

The perimeter sound level was monitored using a sound level meter to ensure that the sound level around the work area does not exceed 85dB.

The analytical results of air samples were compared to the Chronic Reference Exposure Levels (RELs) for VOCs, PAHs, and Naphthalene. The REL is an airborne level that would pose no significant health risk to individuals indefinitely exposed to that level. None of the chemical concentrations in the air samples exceeded REL levels during the removal activities. Also, none of the chemicals were measured at concentrations exceeding odor thresholds or occupational criteria. Thus, the air sampling and monitoring results indicate that any chemicals released to the atmosphere, if any, during excavation activities did not result in airborne concentrations exceeding levels of a potential health concern. A summary of the analytical results of air samples are included in Appendix D.

[2] The photo ionization detector (PID) provided instantaneous readings of elevated levels of organic vapors during soil excavation. PIDs are non-chemical specific but were used to accurately detect elevated emissions of a wide range of organic and chlorinated compounds including the constituents that have been detected in soils at this Site. The type of PID that was used for this monitoring was the MiniRae that has a detection limit of 0.1 ppmv organic vapor.

2.14 WASTE TRANSPORTATION AND DISPOSAL

Wastes generated during the removal activities included:

1) Contaminated Soils
   The VOC- and TPH-impacted soils were profiled, manifested, and transported to TPST Soil Recyclers of California (formerly TPS Technologies), a soil treatment and recycling facility, located in Adelanto, California. The treated soils were not returned or reused at the Site.

2) Solid Wastes (Concrete and Asphalt)
   A total of 10 truckloads of asphalt and concrete were transported from the Site to the concrete and asphalt recycling facility. The concrete debris was excavated and cleaned onsite using a pressure washer and fire hose. The cleaned materials were transported to Nu-Way Recycling in Irwindale, California.

3) Abandoned Pipelines
   Some of the small pipes were shipped offsite with the contaminated soils to TPST. The large pipes were transported to Konoff Industries in Pomona, California.

4) Non-Hazardous Liquid
   Non-hazardous liquid removed from the piping was stored temporarily at the Site using rented storage tanks from Baker Tank (Photo 8 -Appendix B). On November 08, 2008 it was transported to Crosby and Overton in Long Beach, California by Nieto & Sons (see Appendix C for Hazardous Waste Manifest)

Transportation

Transportation activities were performed in strict compliance with regulations and ordinances. The transportation contractors were fully licensed and permitted by the USEPA and the State of California to haul hazardous waste. The DOT and California Highway Patrol (CHP) safety regulations were strictly followed.

Treatment/Recycling Facility

TPST Soil Recyclers of California (TPST) is a treatment/recycling facility that treats soil by thermal desorption. TPST is located at 12328 Hibiscus Avenue, Adelanto, California. TPST has proper permits from the Regional Water Quality Control Board Lahontan Region (Board Order No. 6-91-935A1 WDID No. 6B369107002); County of San Bernardino Air Pollution Control District (File B002924/C002925); Mojave Desert Air Quality Management District (Certificate Nos. B003664 and C003663); County of San Bernardino Environmental Health Services (no jurisdiction); and City of Adelanto to operate and recycle the treated soil.

2.15 BACKFILL OPERATIONS

Open excavation areas were backfilled with clean imported soil according to the City of Los Angeles Grading Permit requirements. During the backfilling operation, none of the excavated soils were re-used for backfill at the Site. The entire Site was backfilled with imported clean soil.

Source of Imported Soil

Imported clean soil was brought from a location at the corner of San Pascual and Lake Streets in Pasadena, California (source location). A new building was being constructed at this location. The soil excavated from this location was imported and stockpiled temporarily at 490 Bauchet Street while the removal action was in progress at Block K and then transported to the Site during the backfill phase of the project. During the backfill operation, the loads of clean soil were directly unloaded to the excavation area by the bottom dump trucks.

The clean soil was stockpiled at the location of 490 Bauchet Street. More clean soil was delivered and stockpiled at this location that was necessary for use at Block K Site. The excess clean soil was stockpiled at 490 Bauchet was for use for other remediation sites at the Aliso site.

Backfill Soil Sampling

As per specifications in the RAW, soil samples were collected from the source location for screening prior to importation. Summary of the analytical results of import soil used at the Site is included in Appendix F. The analytical results indicated that the soil was clean and suitable for use as backfill material (import soil). Samples were also collected from the imported soil during delivery to the Site. The frequency of sampling was based on the specifications in the RAW. In general, the "DTSC Clean Imported Fill Material Information Advisory, October 2001" was used as the guide.

The soil samples BFP1-1 through BFP1-4 were collected from the source location prior to importation of soil on August 30, 2008. An additional 34 samples of the import soil were collected and analyzed as the soil was imported to the Site for backfilling. The backfill and import soil samples labeled as BFP1-load number (i.e. BFP1-459 for load number 459) and were analyzed using the following methods. The soil sample BFB1-7 was collected from a truck load coming from the stockpiled soil at 490 Bauchet Street. The import soil samples labeled as BFP1-load number (i.e. BFB1-7 for load number 7) and were analyzed using the following methods:

- Total petroleum hydrocarbons (EPA Method 8015M for gasoline [C4-C12], diesel [C12-C23], and heavy hydrocarbons [C23-C40]);
- Volatile Organic Compounds (EPA Method 8260B/5035);
- Semi-Volatile Organic Compounds (EPA Method 8270C);
- Polycyclic Aromatic Hydrocarbons (EPA Method 8310);
- California Assessment Manual (CAM) Title 22 Metals (EPA Method 6010B/7000CAM);
- Pesticides (EPA Method 8081A); and
- Herbicides (EPA Method 8151A).

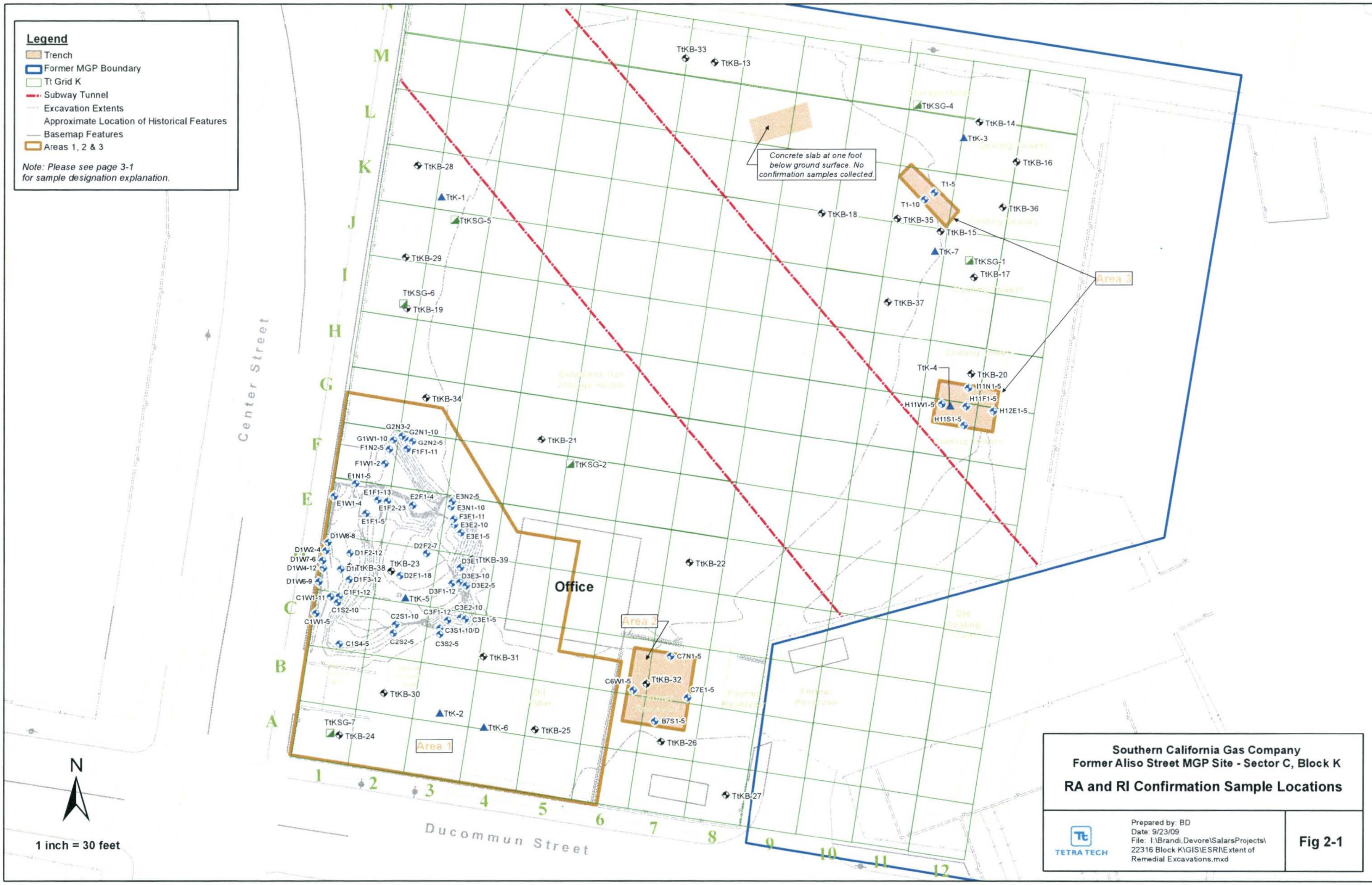
Compaction

The excavation was backfilled with clean imported soil and compacted to 95% or greater relative compaction. Where the minimum relative compaction was not achieved, the area was re-worked, re-compacted, and re-tested until the minimum relative compaction was achieved. A rubber-tire loader (John Deere) was used to spread, shuttle, and compact the backfill soil. Compactor attachments for the Cat excavator and the Bomag sheeps-foot were used to compact the backfill soil in the sidewalk areas (Photo 7–Appendix B). In areas that are not accessible by heavy equipment, a hand compactor was used.

Field density tests were performed by Geotechnical Engineer (GSI) to determine the relative compaction of the fill material. The relative compaction of the fill material was determined by the sand cone test method (ASTM D1556-90) and a CPN MC-3 Portaprobe nuclear gauge. The compaction report prepared by GSI is included in this report as Appendix H.

2.16 SITE RESTORATION

The excavated areas at the Site were leveled and sloped properly for drainage purposes. The backfill was placed and the Site was paved and restored according to the grading requirements and specifications as per plans approved by the City of Los Angeles. All utility lines were restored after the removal action has been completed (Photos 9, 10, and 11 –Appendix B).



Southern California Gas Company
Former Aliso Street MGP Site - Sector C, Block K

RA and RI Confirmation Sample Locations

TETRA TECH

Prepared by: BD
Date: 9/23/09
File: I:\Brandi.Devore\SalarsProjects\22316 Block K\GIS\ESRI\Extent of Remedial Excavations.mxd

Fig 2-1

3. POST-EXCAVATION SAMPLING RESULTS

In this section, the results of the removal activities are discussed. This section also presents the methods of sampling and the analyses that were used to confirm completion of removal action activities at the Site.

3.1 DEFINITIONS

Grid System
The Site was divided by a virtual grid system approximately 20 feet by 20 feet as shown on Figure 1-3 in Section 1. For ease of reference, the grid was labeled alphabetically starting at the southwest end of the property, in ascending order from south to north (A through I) and numerically west to east (1 through 12).

Sample Designation
Each excavation and confirmation soil sample has a unique identification code, as follows: Each sample has an alpha designation starting with a letter name followed by a numeric designation to indicate the grid in which the sample was collected. Following the grid designation, a second letter designation of "F" for floor sample, "N" for north wall, "S" for south wall, "E" for east wall, and "W" for west wall, were used. If there was more than one sample in any grid block, samples were identified with a number in ascending order (the first, the second, or third sample, etc.). Each sample designation is also followed by a number to specify the depth of the sample. Duplicate samples were identified with a "D" at the end of the sample designation.

As an example, D3W2-3 designates that this confirmation soil sample was collected from grid D3 and is from the west wall of the excavation, and it is the second sample in that grid block, and was collected at 3 feet below ground surface.

Sample Designation for Backfill Material
Each backfill soil sample has a unique identification code, as follows: In sample number BFB1-7 for example, the BF indicates that it is a backfill soil sample, and the 7 indicates the truck load number. Analytical results of the soil samples collected from the backfill (imported) material are shown in Tables F-1 through F-10 in Appendix F.

3.2 CONFIRMATION SOIL SAMPLES

Confirmation soil samples are those samples that have been collected after completion of excavation. These samples represent the condition of the remaining soil at the Site.

Sample Locations
A systematic confirmation sampling system was implemented by collecting soil samples from the bottom and walls of slot cut trenched and open excavation areas. Confirmation samples were collected at least one from each grid block, and in many places several soil samples were collected from one grid block. A maximum spacing of 20 feet between the sampling points was established to provide the necessary statistical data. Floor and sidewall samples were also collected at intervals of approximately 20 feet or less to confirm that the horizontal boundaries of

the impacted soil have been adequately defined and removed. Although systematic floor and sidewall sampling at 20-foot intervals was the overall goal, the number and location of samples were adjusted based on observations in the field.

Analytical results of the confirmation soil samples are summarized in Tables 3-1 through 3-8. The confirmation sample results were used in the final post-excavation risk evaluation of the Site. There are two different types of final confirmation soil samples representing the unexcavated condition of soil at the Site. These confirmation soil samples include:

1. During the soil removal activities, soil samples were collected directly from the bottoms and walls of open excavations. These samples represent the soil remaining at the bottom and side walls of excavations at the Site.

2. Samples collected during previous remedial investigation (RI) activities that showed no contamination (e.g. sample TtKB-25), and therefore no excavations were performed at those locations.

For ease of reference, the locations of confirmation soil samples as well as the remaining remedial investigation soil samples at multiple depth intervals are shown on Figure 2-1.

<u>**Sample Analyses**</u>

All confirmation soil samples were analyzed for PAHs by EPA Method 8310 and VOCs by EPA Method 8260B. Selected samples were analyzed for total petroleum hydrocarbons (TPH) by EPA Method M8015 (gas and diesel) and metals by EPA Method 6010/7000. AETL, Inc analyzed all samples.

<u>**Excavation Samples**</u>

In some locations, after confirmation soil samples were collected and analyzed, it was determined that additional excavation was necessary. Therefore, additional soil was removed in these locations. These samples, therefore, could not be considered as confirmation samples and were removed from the list of confirmation samples and were not used in the risk evaluation. These samples were called "excavation samples" to distinguish them from confirmation samples. The analytical results of these excavation soil samples are on file at Tetra Tech's Pasadena Office.

<u>**Sample Collection**</u>

Open excavation area soil samples (for PAH, TPH, and metals analysis) were manually collected directly from just beneath the surface and placed in the glass jars. Only sample containers supplied by the laboratory were used. After filling the appropriate sample container, the container lid was sealed and the container labeled. For VOC analysis, soil samples were collected in accordance with the revised SW-846 update III guidance from the U.S. EPA, Method 5035. The samples were picked up daily by the laboratory, using appropriate chain-of-custody and shipping procedures.

3.3 ANALYTICAL RESULTS

Polycyclic Aromatic Hydrocarbons (PAHs)

The soil samples that were selected for analysis were analyzed by EPA Method 8310 (HPLC) for PAHs. PAHs are common constituents of lampblack and tars from the gas manufacturing processes. Analytical results of carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) in confirmation soil samples are shown in Table 3-2. In this table, each detected C-PAH compound is shown. When the results of the analyzed compound was less than its listed Method Detection Limit (MDL)[2], the concentrations are listed as less than (<) the MDL value in the table. All C-PAH compounds have been added in the second to the last column of the table to list the total values. The following procedure was used:

1) If all C-PAH compounds were detected in a sample, the sum of C-PAHs is the total value of each C-PAH compound in the sample.

2) If some C-PAH compounds were detected and one or a few compounds were not detected (e.g., <MDL) in a sample, then the sum of C-PAHs is equal to adding all detected values plus one-half of the MDL value of those compounds not detected.

3) If all C-PAH compounds in one sample were not detected, the sum of C-PAHs was considered to be non-detect, and listed as ND.

Because all of the C-PAHs do not have the same potency, one cannot simply add the concentration of each C-PAH and use it as the total C-PAH concentration. The Environmental Protection Agency (EPA) has established a set of relative potency values [Cal-EPA, 1993] to be used in conjunction with the measured concentration of each C-PAH to calculate a C-PAH concentration for each C-PAH compound, expressed as benzo(a)pyrene [B(a)P] equivalent. To convert measured levels of C-PAHs in terms of B(a)P equivalent, the California EPA has identified the following "Potency Equivalency Factors (PEFs)" which express the carcinogenic potency for each of the C-PAHs relative to the potency of B(a)P. To calculate the B(a)P equivalent value of total C-PAHs in a sample, the measured concentration of each individual C-PAH is multiplied by the appropriate PEF value, and then the calculated values of all of the compounds are summed. Presentation of C-PAHs in B(a)P equivalent allows comparison of results of total C-PAHs from one sample to another on a comparable and the same basis. Benzo(a)pyrene-equivalency concentrations of each C-PAH compound have been calculated using the following values:

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[2] **Definition of "Method Detection Limit and Practical Quantification Limit".** The Method Detection Limit (MDL) or the detected chemical is defined as a specific compound or class of compounds that exceeds its instrument detection limit under an acceptable Federal (U.S. EPA) or State (California) analytical protocol. An instrument detection limit is the lowest amount that can be distinguished from normal "noise" of the analytical instrument or method. Due to the irregular nature of instrument or method noise, reproducible quantification of a chemical is not possible at the detection limit. Generally, a factor of 3 to 5 is applied to the detection limit to obtain a Practical Quantification Limit (PQL) which is considered to be the lowest level at which a chemical may be accurately and reproducibly quantified [U.S. EPA, 1989].

Factors to Calculate Total C-PAHs as Benzo(a)pyrene Equivalency *

Compound	PEF
Benzo(a)pyrene	**1** (index compound)
Benzo(a)anthracene	0.1
Benzo(b)fluoranthene	0.1
Benzo(j)fluoranthene	0.1
Benzo(k)fluoranthene	0.1
Chrysene	0.01
Dibenzo(a,h,anthracene)	0.34
Indeno[1,2,3-c,d]pyrene	0.1

*Based on Cal EPA, 1994 Appendix 1 [Cal EPA, 1994, 1999]

The analytical results of non-carcinogenic PAHs (NC-PAHs) in confirmation soil samples are shown in Table 3-3. Total value of NC-PAHs was calculated using procedures explained above to calculate total C-PAHs.

Total Polycyclic Aromatic Hydrocarbons (PAHs)
Confirmation soil samples were analyzed for Total Polycyclic Aromatic Hydrocarbons using EPA Method 8310. Analytical results for PAHs are summarized in Table 3-4.

Purgeable Volatile Organic Compounds (VOCs)
Confirmation soil samples were analyzed for (VOCs) using EPA Method 8260B. Analytical results for (VOCs) are summarized in Table 3-5.

Total Petroleum Hydrocarbons (TPH)
Soil samples were analyzed for TPH using Modified EPA Method 8015M to investigate the extent of contamination, if any, with crude oil compounds. Analytical results of TPH in confirmation soil samples are shown in Table 3-6.

Metals
Confirmation soil samples were analyzed for CAM metals using EPA Method 6010/7000CAM. Analytical results for metals are summarized in Table 3-7.

Chromium VI
Confirmation soil samples were analyzed for chromium VI using EPA Method 7196A. Analytical results for chromium VI are summarized in Table 3-8.

3.4 DATA QUALITY

The following quality assurance and quality control (QA/QC) data were included with the laboratory data sheets:

- Chain-of-custody documentation;
- Field duplicate sample analyses;
- Method blanks, matrix spikes, and matrix spike duplicates; and
- Surrogate recovery results for volatile organic analyses.

Laboratory QA/QC included method blank, matrix spike, surrogate recovery, and duplicate sample analyses data. Field QA/QC included duplicate sample analyses and chain-of-custody records. The laboratory data were evaluated to ensure that units were correct, detection limits were provided, all blank analyses were below detection limits, holding time requirements (e.g., 7 days for extraction of organics) were met, and percent recoveries from the matrix spike analyses were within the prescribed limits (70%-120%). Finally, the chain-of-custody forms were cross-referenced during the data review to ensure that all requested analyses had been performed and reported correctly.

TABLE 3-1

Summary of Samples Collected and Analyzed

Site Remediation at Former Sector C, Block K

Sample Number	Depth	Date	CPAH 8310	Purgeables 8260B	TPH M8015	Metals 6010B/7000	Chrome VI 7196A
Confirmation Soil Samples							
B7S1-5	5	9/17/2008	X	X	X		
C1F1-12	12	8/13/2008	X	X	X		
C1S2-10	10	8/19/2008	X	X	X		
C1S4-5	5	9/8/2008	X	X	X	X	
C1W1-11	11	8/19/2008	X	X	X		
C1W1-5	5	9/9/2008	X	X	X	X	
C2S1-10	10	9/3/2008	X	X	X		
C2S2-5	5	9/3/2008	X	X	X	X	
C3E1-5	5	9/3/2008	X	X	X	X	
C3E2-10	10	9/3/2008	X	X	X		
C3F1-12	12	8/29/2008	X	X	X		
C3S1-10	10	9/3/2008	X	X	X		
C3S1-10D	10	9/3/2008	X	X	X		
C3S2-5	5	9/3/2008	X	X	X	X	
C6W1-5	5	9/17/2008	X	X	X		
C7E1-5	5	9/17/2008	X	X	X		
C7N1-5	5	9/17/2008	X	X	X		
D1F1-11	11	8/14/2008	X	X	X		
D1F2-12	12	8/15/2008	X	X	X		
D1F3-12	12	8/15/2008	X	X	X		
D1W2-4	4	8/14/2008	X	X	X		
D1W4-12	12	8/15/2008	X	X	X		
D1W6-9	9	8/20/2008	X	X	X		
D1W7-6	6	8/20/2008	X	X	X		
D1W8-8	8	8/20/2008	X	X	X		
D2F1-18	18	8/28/2008	X	X	X		
D2F2-7	7	8/29/2008	X	X	X		
D3E1-5	5	8/28/2008	X	X	X		
D3E2-5	5	9/3/2008	X	X	X	X	
D3E3-10	10	9/3/2008	X	X	X		
D3F1-12	12	8/29/2008	X	X	X		
E1F1-13	13	8/25/2008	X	X	X		
E1F1-5	5	9/8/2008	X	X	X		
E1F2-23	23	8/29/2008	X	X	X		

TABLE 3-1

Summary of Samples Collected and Analyzed

Site Remediation at Former Sector C, Block K

Sample Number	Depth	Date	CPAH 8310	Purgeables 8260B	TPH M8015	Metals 6010B/7000	Chrome VI 7196A
E1N1-5	5	9/8/2008	X	X	X	X	
E1W1-4	4	8/22/2008	X	X	X		
E2F1-4	4	8/26/2008	X	X	X		
E3E1-5	5	9/3/2008	X	X	X	X	
E3E2-10	10	9/3/2008	X	X	X		
E3N1-10	10	9/4/2008	X	X	X		
E3N2-5	5	9/4/2008	X	X	X	X	
F1F1-11	11	9/5/2008	X	X	X		
F1N2-5	5	9/8/2008	X	X	X		
F1W1-2	2	9/8/2008	X	X	X		
F3F1-11	11	8/21/2008	X	X	X		
G1W1-10	10	9/5/2008	X	X	X		
G2N1-10	10	9/5/2008	X	X	X		
G2N2-5	5	9/5/2008	X	X	X	X	
G2N3-2	2	9/5/2008	X	X	X	X	
H11F1-6	6	9/18/2008	X	X	X		
H11S1-5	5	9/18/2008	X	X	X		
H11W1-5	5	9/18/2008	X	X	X		
H12E1-5	5	9/18/2008	X	X	X		
I11N1-5	5	9/18/2008	X	X	X		
T1-10	10	9/17/2008	X	X	X		
T1-5	5	9/17/2008	X	X	X		
Total			**56**	**56**	**56**	**11**	

RI Confirmation Soil Samples

TtKB-13-1'	1	4/15/2002	X	X	X		
TtKB-13-5'	5	4/15/2002	X	X	X		
TtKB-13-10'	10	4/15/2002	X	X	X		
TtKB-13- 20.5'	20.5	4/15/2002	X	X	X		
TtKB-13- 20.5'Dup	20.5	4/15/2002	X	X	X		
TtKB-13-30'	30	4/15/2002	X	X	X		
TtKB-13- 33.5'	33.5	4/15/2002	X	X	X		
TtKB-14-2'	2	4/17/2002	X	X	X		
TtKB-14-5'	5	4/17/2002	X	X	X		
TtKB-14- 10.5'	10.5	4/17/2002	X	X	X		

TABLE 3-1

Summary of Samples Collected and Analyzed

Site Remediation at Former Sector C, Block K

Sample Number	Depth	Date	CPAH 8310	Purgeables 8260B	TPH M8015	Metals 6010B/7000	Chrome VI 7196A
TtKB-14- 10.5' Dup	10.5	4/17/2002	X	X	X		
TtKB-14- 20'	20	4/17/2002	X	X	X		
TtKB-14-30'	30	4/17/2002	X	X	X		
TtKB-14- 33.5'	33.5	4/17/2002	X	X	X		
TtKB-15-1'	1	4/16/2002	X	X	X	X	
TtKB-15-5'	5	4/16/2002	X	X	X		
TtKB-15-10'	10	4/16/2002	X	X	X		
TtKB-15-15'	15	4/16/2002	X	X	X	X	
TtKB-15-20'	20	4/16/2002	X	X	X		
TtKB-15-30'	30	4/16/2002	X	X	X	X	
TtKB-15- 33.5'	33.5	4/16/2002	X	X	X		
TtKB-15-41'	41	4/16/2002	X	X	X		
TtKB-16-1'	1	4/17/2002	X	X	X		
TtKB-16-5'	5	4/17/2002	X	X	X		
TtKB-16-10'	10	4/17/2002	X	X	X		
TtKB-16-20'	20	4/17/2002	X	X	X		
TtKB-16-30'	30	4/17/2002	X	X	X		
TtKB-16- 32.5'	32.5	4/17/2002	X	X	X		
TtKB-17-5'	5	4/16/2002	X	X	X		
TtKB-17-10'	10	4/16/2002	X	X	X		
TtKB-17- 30.5'	30.5	4/16/2002	X	X	X		
TtKB-17- 30.5'Dup	30.5	4/16/2002	X	X	X		
TtKB-17-33'	33	4/16/2002	X	X	X		
TtKB-18-1'	1	4/15/2002	X	X	X	X	
TtKB-18-5'	5	4/15/2002	X	X	X		
TtKB-18-10'	10	4/15/2002	X	X	X		
TtKB-18-15'	15	4/15/2002	X	X	X	X	
TtKB-18-20'	20	4/15/2002	X	X	X		
TtKB-18-30'	30	4/15/2002	X	X	X	X	
TtKB-18-33'	33	4/15/2002	X	X	X		
TtKB-18-41'	41	4/15/2002	X	X	X		
TtKB-19-1'	1	4/17/2002	X	X	X		
TtKB-19-5'	5	4/17/2002	X	X	X		
TtKB-19-10'	10	4/17/2002	X	X	X		
TtKB-19-20'	20	4/17/2002	X	X	X		

TABLE 3-1

Summary of Samples Collected and Analyzed

Site Remediation at Former Sector C, Block K

Sample Number	Depth	Date	CPAH 8310	Purgeables 8260B	TPH M8015	Metals 6010B/7000	Chrome VI 7196A
TtKB-19-30'	30	4/17/2002	X	X	X		
TtKB-19- 33.5'	33.5	4/17/2002	X	X	X		
TtKB-20-2'	2	4/16/2002	X	X	X		
TtKB-20-5'	5	4/16/2002	X	X	X		
TtKB-20-10'	10	4/16/2002	X	X	X		
TtKB-20-20'	20	4/16/2002	X	X	X		
TtKB-20-33'	33	4/16/2002	X	X	X		
TtKB-20- 33.5'	33.5	4/16/2002	X	X	X		
TtKB-21-1'	1	4/19/2002	X	X	X		
TtKB-21-5'	5	4/19/2002	X	X	X		
TtKB-21-10'	10	4/19/2002	X	X	X		
TtKB-21-20'	20	4/19/2002	X	X	X		
TtKB-21-30'	30	4/19/2002	X	X	X		
TtKB-21-36'	36	4/19/2002	X	X	X		
TtKB-22-1'	1	4/12/2002	X	X	X	X	
TtKB-22-5'	5	4/12/2002	X	X	X		
TtKB-22-10'	10	4/12/2002	X	X	X		
TtKB-22-15'	15	4/12/2002	X	X	X	X	
TtKB-22-20'	20	4/12/2002	X	X	X		
TtKB-22- 32.5'	32.5	4/12/2002	X	X	X	X	
TtKB-22-36'	36	4/12/2002	X	X	X		
TtKB-23-20'	20	4/19/2002	X	X	X		
TtKB-23- 30.5'	30.5	4/19/2002	X	X	X	X	
TtKB-23- 30.5'Dup	30.5	4/19/2002	X	X	X		
TtKB-23- 36.5'	36.5	4/19/2002	X	X	X		
TtKB-24-1'	1	5/6/2002	X	X	X		
TtKB-24-5'	5	5/6/2002	X	X	X		
TtKB-24-10'	10	5/6/2002	X	X	X		
TtKB-24-20'	20	5/6/2002	X	X	X		
TtKB-24-30.25'	30.25	5/6/2002	X	X	X		
TtKB-24-30.25' Dup	30.25	5/6/2002	X	X	X		
TtKB-24-37'	37	5/6/2002	X	X	X		
TtKB-25- 1.5'	1.5	4/19/2002	X	X	X	X	
TtKB-25-5'	5	4/19/2002	X	X	X		
TtKB-25-10'	10	4/19/2002	X	X	X		

TABLE 3-1

Summary of Samples Collected and Analyzed

Site Remediation at Former Sector C, Block K

Sample Number	Depth	Date	CPAH 8310	Purgeables 8260B	TPH M8015	Metals 6010B/7000	Chrome VI 7196A
TtKB-25-15'	15	4/19/2002	X	X	X	X	
TtKB-25-20'	20	4/19/2002	X	X	X		
TtKB-25-30'	30	4/19/2002	X	X	X	X	
TtKB-25-38'	38	4/19/2002	X	X	X		
TtKB-26-5'	5	4/12/2002	X	X	X		
TtKB-26-15'	15	4/12/2002	X	X	X	X	
TtKB-26- 20.5'	20.5	4/12/2002	X	X	X		
TtKB-26- 20.5'Dup	20.5	4/12/2002	X	X	X		
TtKB-26-30'	30	4/12/2002	X	X	X	X	
TtKB-26-35'	35	4/12/2002	X	X	X		
TtKB-27-1'	1	4/12/2002	X	X	X		
TtKB-27-5'	5	4/12/2002	X	X	X		
TtKB-27-10'	10	4/12/2002	X	X	X		
TtKB-27-20'	20	4/12/2002	X	X	X		
TtKB-27-30'	30	4/12/2002	X	X	X		
TtKB-27- 33.5'	33.5	4/12/2002	X	X	X		
TtKB-28- 10.5'	10.5	10/24/2002	X	X	X		
TtKB-29-5'	5	10/16/2002	X	X	X		
TtKB-29- 10.5'	10.5	10/16/2002	X	X	X		
TtKB-29- 15.5'	15.5	10/16/2002	X	X	X		
TtKB-29- 20.5'	20.5	10/16/2002	X	X	X		
TtKB-29- 25.5'	25.5	10/16/2002	X	X	X		
TtKB-29- 30.5'	30.5	10/16/2002	X	X	X		
TtKB-29- 35.5'	35.5	10/16/2002	X	X	X		
TtKB-29- 39.0'	39	10/16/2002	X	X	X		
TtKB-30-5'	5	10/15/2002	X	X	X		
TtKB-30- 10.5'	10.5	10/15/2002	X	X	X		
TtKB-30- 15.5'	15.5	10/15/2002	X	X	X		
TtKB-30- 20.5'	20.5	10/15/2002	X	X	X		
TtKB-30- 25.5'	25.5	10/15/2002	X	X	X		
TtKB-30- 30.5'	30.5	10/15/2002	X	X	X		
TtKB-30- 35.5'	35.5	10/15/2002	X	X	X		
TtKB-30- 40.5'	40.5	10/15/2002	X	X	X		
TtKB-30- 40.5' Dup	40.5	10/15/2002	X	X	X		
TtKB-31-5'	5	10/15/2002	X	X	X		

TABLE 3-1

Summary of Samples Collected and Analyzed

Site Remediation at Former Sector C, Block K

Sample Number	Depth	Date	CPAH 8310	Purgeables 8260B	TPH M8015	Metals 6010B/7000	Chrome VI 7196A
TtKB-31-5' Dup	5	10/15/2002	X	X	X		
TtKB-31- 10.5'	10.5	10/15/2002	X	X	X		
TtKB-31- 15.5'	15.5	10/15/2002	X	X	X		
TtKB-31- 23.0'	23	10/15/2002	X	X	X		
TtKB-31- 25.5'	25.5	10/15/2002	X	X	X		
TtKB-31- 30.5'	30.5	10/15/2002	X	X	X		
TtKB-31- 35.5'	35.5	10/15/2002	X	X	X		
TtKB-31- 38.0'	38	10/15/2002	X	X	X		
TtKB-32- 10.5'	10.5	10/15/2002	X	X	X		
TtKB-32- 15.5'	15.5	10/15/2002	X	X	X		
TtKB-32- 20.5'	20.5	10/15/2002	X	X	X		
TtKB-32- 25.5'	25.5	10/15/2002	X	X	X		
TtKB-32- 30.5'	30.5	10/15/2002	X	X	X		
TtKB-32- 38.0'	38	10/15/2002	X	X	X		
TtKB-33-1.0'	1	11/25/2002	X	X	X		
TtKB-33-1.0'Dup	1	11/25/2002	X	X	X		
TtKB-33-10.5'	10.5	11/25/2002	X	X	X		
TtKB-33-20.5'	20.5	11/25/2002	X	X	X		
TtKB-33-30.5'	30.5	11/25/2002	X	X	X		
TtKB-33-40.5'	40.5	11/25/2002	X	X	X		
TtKB-33-50.5'	50.5	11/25/2002	X	X	X		
TtKB-33-55.5'	55.5	11/25/2002	X	X	X		
TtKB-33-60.5'	60.5	11/25/2002	X	X	X		
TtKB-33-65.5'	65.5	11/25/2002	X	X	X		
TtKB-33-70.5'	70.5	11/25/2002	X	X	X		
TtKB-33-80.5'	80.5	11/25/2002	X	X	X		
TtKB-33-94'	94	11/13/2002	X	X	X		
TtKB-33- 118'	118	11/13/2002	X	X	X		
TtKB-34-5.5'	5.5	11/26/2002	X	X	X		
TtKB-34-5.5' Dup	5.5	11/26/2002	X	X	X		
TtKB-34-10.5'	10.5	11/26/2002	X	X	X		
TtKB-34-20.5'	20.5	11/26/2002	X	X	X		
TtKB-34-30.5'	30.5	11/26/2002	X	X	X		
TtKB-34-40.5'	40.5	11/26/2002	X	X	X		
TtKB-34-66.5'	66.5	11/26/2002	X	X	X		

TABLE 3-1

Summary of Samples Collected and Analyzed

Site Remediation at Former Sector C, Block K

Sample Number	Depth	Date	CPAH 8310	Purgeables 8260B	TPH M8015	Metals 6010B/7000	Chrome VI 7196A
TtKB-34-70.5'	70.5	11/26/2002	X	X	X		
TtKB-34-82.5'	82.5	11/26/2002	X	X	X		
TtKB-34-86'	86	11/14/2002	X	X	X		
TtKB-34-107'	107	11/14/2002	X	X	X		
TtKB-35-1'	1	10/17/2002	X	X	X	X	X
TtKB-35- 10.5'	10.5	10/17/2002	X	X	X	X	X
TtKB-35- 15.5'	15.5	10/17/2002	X	X	X		
TtKB-35- 20.5'	20.5	10/17/2002	X	X	X		
TtKB-35- 25.5'	25.5	10/17/2002	X	X	X		
TtKB-35- 30.5'	30.5	10/17/2002	X	X	X		
TtKB-35- 32.0'	32	10/17/2002	X	X	X		
TtKB-35- 35.5'	35.5	10/17/2002	X	X	X		
TtKB-35- 44.5'	44.5	10/17/2002	X	X	X		
TtKB-36- 5' Dup	5	10/17/2002	X	X	X	X	X
TtKB-36-5'	5	10/17/2002	X	X	X	X	X
TtKB-36- 10.5'	10.5	10/17/2002	X	X	X		
TtKB-36- 15.5'	15.5	10/17/2002	X	X	X		
TtKB-36- 20.5'	20.5	10/17/2002	X	X	X		
TtKB-36- 25.5'	25.5	10/17/2002	X	X	X		
TtKB-36- 30.5'	30.5	10/17/2002	X	X	X		
TtKB-36- 35.5'	35.5	10/17/2002	X	X	X		
TtKB-36- 39.0'	39	10/17/2002	X	X	X		
TtKB-37-1'	1	10/17/2002	X	X	X	X	X
TtKB-37-5'	5	10/17/2002	X	X	X	X	X
TtKB-37- 10.5'	10.5	10/17/2002	X	X	X	X	X
TtKB-37- 10.5' Dup	10.5	10/17/2002	X	X	X	X	X
TtKB-37- 15.5'	15.5	10/17/2002	X	X	X		
TtKB-37- 20.5'	20.5	10/17/2002	X	X	X		
TtKB-37- 25.5'	25.5	10/17/2002	X	X	X		
TtKB-37- 30.5'	30.5	10/17/2002	X	X	X		
TtKB-37- 35.5'	35.5	10/17/2002	X	X	X		
TtKB-38- 15.5'	15.5	10/18/2002	X	X	X		
TtKB-38- 21.5'	21.5	10/18/2002	X	X	X		
TtKB-38- 25.0'	25	10/18/2002	X	X	X		
TtKB-38- 30.0'	30	10/18/2002	X	X	X		

TABLE 3-1

Summary of Samples Collected and Analyzed

Site Remediation at Former Sector C, Block K

Sample Number	Depth	Date	CPAH 8310	Purgeables 8260B	TPH M8015	Metals 6010B/7000	Chrome VI 7196A
TtKB-38- 32.0'	32	10/18/2002	X	X	X		
TtKB-38- 35.0'	35	10/18/2002	X	X	X		
TtKB-38- 36.5'	36.5	10/18/2002	X	X	X		
TtKB-39-5'	5	10/16/2002	X	X	X		
TtKB-39-5' Dup	5	10/16/2002	X	X	X		
TtKB-39- 10.5'	10.5	10/16/2002	X	X	X		
TtKB-39- 15.5'	15.5	10/16/2002	X	X	X		
TtKB-39- 20.5'	20.5	10/16/2002	X	X	X		
TtKB-39- 25.5'	25.5	10/16/2002	X	X	X		
TtKB-39- 30.5'	30.5	10/16/2002	X	X	X		
TtKB-39- 35.5'	35.5	10/16/2002	X	X	X		
TtKB-39- 38.0'	38	10/16/2002	X	X	X		
Total			**197**	**197**	**197**	**23**	**8**

RI Confirmation Well Samples

TtK-1-3.5'	3.5	4/24/2002	X	X	X	X	
TtK-1-5'	5	4/24/2002	X	X	X		
TtK-1-10'	10	4/24/2002	X	X	X		
TtK-1-15'	15	4/24/2002	X	X	X	X	
TtK-1-20'	20	4/24/2002	X	X	X		
TtK-1-30.5'	30.5	4/24/2002	X	X	X	X	
TtK-1-30.5' DUP	30.5	4/24/2002	X	X	X	X	
TtK-1-36.5'	36.5	4/24/2002	X	X	X		
TtK-1-43'	43	4/24/2002	X	X	X		
TtK-2-2'	2	4/22/2002	X	X	X		
TtK-2-5'	5	4/22/2002	X	X	X		
TtK-2-10'	10	4/22/2002	X	X	X		
TtK-2-20'	20	4/22/2002	X	X	X		
TtK-2-30'	30	4/22/2002	X	X	X		
TtK-2-37.5'	37.5	4/22/2002	X	X	X		
TtK-2-52'	52	4/22/2002	X	X	X		
TtK-2-61'	61	4/22/2002	X	X	X		
TtK-2-67.5'	67.5	4/22/2002	X	X	X		
TtK-2-84.5'	84.5	4/22/2002	X	X	X		
TtK-3-5'	5	10/23/2002	X	X	X		

TABLE 3-1

Summary of Samples Collected and Analyzed

Site Remediation at Former Sector C, Block K

Sample Number	Depth	Date	CPAH 8310	Purgeables 8260B	TPH M8015	Metals 6010B/7000	Chrome VI 7196A
TtK-3-5' Dup	5	10/23/2002	X	X	X		
TtK-3-10.5'	10.5	10/23/2002	X	X	X		
TtK-3-15.5'	15.5	10/23/2002	X	X	X		
TtK-3-20.5'	20.5	10/23/2002	X	X	X		
TtK-3-25.5'	25.5	10/23/2002	X	X	X		
TtK-3-30.5'	30.5	10/23/2002	X	X	X		
TtK-3-35.5'	35.5	10/23/2002	X	X	X		
TtK-3-40.5'	40.5	10/23/2002	X	X	X		
TtK-4-10.5'	10.5	10/22/2002	X	X	X		
TtK-4-15.5'	15.5	10/22/2002	X	X	X		
TtK-4-25.5'	25.5	10/22/2002	X	X	X		
TtK-4-30.5'	30.5	10/22/2002	X	X	X		
TtK-4-35.5'	35.5	10/22/2002	X	X	X		
TtK-4-40.5'	40.5	10/22/2002	X	X	X		
TtK-5-20.5'	20.5	10/21/2002	X	X	X		
TtK-5-25.5'	25.5	10/21/2002	X	X	X		
TtK-5-30.5'	30.5	10/21/2002	X	X	X		
TtK-5-35.5'	35.5	10/21/2002	X	X	X		
TtK-5-40.5'	40.5	10/21/2002	X	X	X		
TtK-5-44.0'	44	10/21/2002	X	X	X		
TtK-6-5'	5	10/21/2002	X	X	X		
TtK-6-10.5'	10.5	10/21/2002	X	X	X		
TtK-6-15.5'	15.5	10/21/2002	X	X	X		
TtK-6-20.5'	20.5	10/21/2002	X	X	X		
TtK-6-25.5'	25.5	10/21/2002	X	X	X		
TtK-6-30.5'	30.5	10/21/2002	X	X	X		
TtK-6-35.5'	35.5	10/21/2002	X	X	X		
TtK-6-40.5'	40.5	10/21/2002	X	X	X		
TtK-7-5'	5	11/27/2002	X	X	X		
TtK-7-5' Dup	5	11/27/2002	X	X	X		
TtK-7-10.5'	10.5	11/27/2002	X	X	X		
TtK-7-15.5'	15.5	11/27/2002	X	X	X		
TtK-7-20.5'	20.5	11/27/2002	X	X	X		
TtK-7-25.5'	25.5	11/27/2002	X	X	X		
TtK-7-35.5'	35.5	11/27/2002	X	X	X		

TABLE 3-1

Summary of Samples Collected and Analyzed

Site Remediation at Former Sector C, Block K

Sample Number	Depth	Date	CPAH 8310	Purgeables 8260B	TPH M8015	Metals 6010B/7000	Chrome VI 7196A
TtK-7-41.5'	41.5	11/27/2002	X	X	X		
Total			**56**	**56**	**56**	**4**	

TABLE 3-2

Carcinogenic Polycyclic Aromatic Hydrocarbons (C-PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
Confirmation Soil Samples													
B7S1-5	5	9/17/2008	0.020	0.040	0.272	1.48	1.71	1.61	0.424	0.78	<0.02	6.286	1.893
C1F1-12	12	8/13/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
C1S2-10	10	8/19/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
C1S4-5	5	9/8/2008	0.020	0.040	0.15	0.329	0.208	0.313	0.103	0.193	<0.02	1.306	0.412
C1W1-11	11	8/19/2008	0.010	0.020	0.063	0.146	0.082	0.125	0.037	0.074	<0.01	0.532	0.179
C1W1-5	5	9/9/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
C2S1-10	10	9/3/2008	0.020	0.040	0.09	0.284	0.121	0.357	0.092	0.146	<0.02	1.1	0.355
C2S2-5	5	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
C3E1-5	5	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
C3E2-10	10	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
C3F1-12	12	8/29/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
C3S1-10	10	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
C3S1-10D	10	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
C3S2-5	5	9/3/2008	0.010	0.020	0.021	0.077	0.036	0.092	0.024	0.042	<0.01	0.297	0.096
C6W1-5	5	9/17/2008	0.010	0.020	0.097	0.343	0.172	0.374	0.109	0.308	<0.01	1.408	0.423
C7E1-5	5	9/17/2008	0.010	0.020	0.06	0.182	0.088	0.206	0.063	0.112	<0.01	0.716	0.227
C7N1-5	5	9/17/2008	0.020	0.040	0.136	0.528	0.292	0.631	0.177	0.349	<0.02	2.123	0.658
D1F1-11	11	8/14/2008	0.010	0.020	<0.01	0.021	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
D1F2-12	12	8/15/2008	0.010	0.020	<0.01	0.013	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	ND
D1F3-12	12	8/15/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
D1W2-4	4	8/14/2008	0.010	0.020	0.034	0.087	0.047	0.065	0.022	0.046	<0.01	0.306	0.106
D1W4-12	12	8/15/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
D1W6-9	9	8/20/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
D1W7-6	6	8/20/2008	1	2	18.2	39.3	22.6	30.3	15.5	23.6	<1	150	48.366
D1W8-8	8	8/20/2008	0.020	0.040	0.11	0.346	0.115	0.321	0.115	0.163	<0.02	1.18	0.417
D2F1-18	18	8/28/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
D2F2-7	7	8/29/2008	0.010	0.020	<0.01	<0.01	<0.01	0.248	<0.01	<0.01	<0.01	0.278	0.033
D3E1-5	5	8/28/2008	0.020	0.040	0.045	0.26	0.138	0.266	0.071	0.108	<0.02	0.898	0.316
D3E2-5	5	9/3/2008	0.020	0.040	0.084	0.298	0.134	0.326	0.088	0.144	<0.02	1.084	0.366
D3E3-10	10	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
D3F1-12	12	8/29/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
E1F1-13	13	8/25/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
E1F1-5	5	9/8/2008	0.020	0.040	0.587	1.32	1.01	0.99	0.388	0.898	0.141	5.334	1.674
E1F2-23	23	8/29/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
E1N1-5	5	9/8/2008	0.050	0.100	1.94	2.24	1.78	1.59	0.891	2.33	<0.05	10.796	2.892
E1W1-4	4	8/22/2008	0.020	0.040	0.226	0.502	0.378	0.375	0.221	0.382	<0.02	2.094	0.629
E2F1-4	4	8/26/2008	0.100	0.200	0.774	3.2	2.38	6.05	0.881	1.19	<0.1	14.525	4.237

TABLE 3-2
Carcinogenic Polycyclic Aromatic Hydrocarbons (C-PAHs) in mg/kg, (EPA Method 8310)
Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
E3E1-5	5	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
E3E2-10	10	9/3/2008	0.020	0.040	0.329	1.02	0.48	1.02	0.298	0.669	<0.02	3.826	1.243
E3N1-10	10	9/4/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
E3N2-5	5	9/4/2008	0.010	0.020	<0.01	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	0.07	0.044
F1F1-11	11	9/5/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
F1N2-5	5	9/8/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
F1W1-2	2	9/8/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
F3F1-11	11	8/21/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
G1W1-10	10	9/5/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
G2N1-10	10	9/5/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
G2N2-5	5	9/5/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
G2N3-2	2	9/5/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
H11F1-6	6	9/18/2008	0.010	0.020	0.019	0.045	0.022	0.018	0.016	0.093	<0.01	0.218	0.055
H11S1-5	5	9/18/2008	0.010	0.020	<0.01	0.032	0.016	0.016	0.01	<0.01	<0.01	0.089	0.038
H11W1-5	5	9/18/2008	0.010	0.020	<0.01	0.023	0.011	<0.01	<0.01	<0.01	<0.01	0.034	ND
H12E1-5	5	9/18/2008	0.010	0.020	0.015	0.049	0.03	0.035	0.022	0.065	<0.01	0.221	0.062
I11N1-5	5	9/18/2008	0.010	0.020	0.035	0.112	0.058	0.052	0.036	0.171	<0.01	0.469	0.134
T1-10	10	9/17/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND
T1-5	5	9/17/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND

1. See the text for explanation of procedure as how the sum of C-PAHs has been calculated.
2. See the text for explanation of procedure as how the B(a)P equivalent values have been calculated.
<: Compound not detected at or above detection limit.

RI Confirmation Soil Samples

TtKB-13-1'	1	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-13-5'	5	4/15/2002	0.01	0.02	0.015	0.032	0.021	0.028	0.013	0.017	<0.02	0.136	0.043
TtKB-13-10'	10	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-13- 20.5'	20.5	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-13- 20.5'Dup	20.5	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-13-30'	30	4/15/2002	0.01	0.02	0.027	0.029	0.016	0.011	0.01	0.044	<0.02	0.147	0.039
TtKB-13- 33.5'	33.5	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.010	<0.02	0.07	0.018
TtKB-14-2'	2	4/17/2002	0.02	0.04	0.052	0.125	0.064	0.066	0.036	0.085	<0.04	0.448	0.154
TtKB-14-5'	5	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-14- 10.5'	10.5	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-14- 10.5' Dup	10.5	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-14- 20'	20	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-14-30'	30	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-14- 33.5'	33.5	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-15-1'	1	4/16/2002	0.10	0.20	0.267	0.606	0.437	0.618	0.232	0.388	<0.20	2.648	0.799
TtKB-15-5'	5	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.015	<0.02	0.075	0.018

TABLE 3-2

Carcinogenic Polycyclic Aromatic Hydrocarbons (C-PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
TtKB-15-10'	10	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-15-15'	15	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-15-20'	20	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-15-30'	30	4/16/2002	0.01	0.02	0.498	0.446	0.183	0.256	0.149	0.488	0.026	2.046	0.568
TtKB-15- 33.5'	33.5	4/16/2002	0.10	0.20	5.71	5.55	2.52	1.99	1.62	6.72	<0.20	24.21	6.835
TtKB-15-41'	41	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-16-1'	1	4/17/2002	0.01	0.02	<0.02	0.033	0.02	0.026	0.012	0.035	<0.02	0.146	0.044
TtKB-16-5'	5	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-16-10'	10	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-16-20'	20	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-16-30'	30	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-16- 32.5'	32.5	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-17-5'	5	4/16/2002	0.02	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-17-10'	10	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-17- 30.5'	30.5	4/16/2002	0.01	0.02	0.156	0.175	0.08	0.079	0.052	0.195	<0.02	0.747	0.217
TtKB-17- 30.5'Dup	30.5	4/16/2002	0.01	0.02	0.082	0.089	0.039	0.044	0.026	0.063	<0.02	0.353	0.112
TtKB-17-33'	33	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-18-1'	1	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-18-5'	5	4/15/2002	0.01	0.02	0.012	0.029	0.023	0.02	0.011	0.031	<0.02	0.136	0.039
TtKB-18-10'	10	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-18-15'	15	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-18-20'	20	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-18-30'	30	4/15/2002	0.01	0.02	0.089	0.091	0.044	0.038	0.028	0.105	<0.02	0.405	0.115
TtKB-18-33'	33	4/15/2002	0.02	0.04	2.14	2.15	1.01	0.729	0.643	2.5	0.037	9.209	2.640
TtKB-18-41'	41	4/15/2002	0.01	0.02	<0.02	0.011	<0.02	<0.02	<0.02	0.016	<0.02	0.077	0.019
TtKB-19-1'	1	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-19-5'	5	4/17/2002	0.02	0.04	0.024	0.051	0.031	0.032	<0.04	0.064	<0.04	0.242	0.069
TtKB-19-10'	10	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-19-20'	20	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-19-30'	30	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-19- 33.5'	33.5	4/17/2002	0.01	0.02	0.014	<0.02	<0.02	<0.02	<0.02	0.017	<0.02	0.081	0.018
TtKB-20-2'	2	4/16/2002	0.05	0.10	0.237	0.34	0.202	0.239	0.109	0.299	<0.10	1.476	0.439
TtKB-20-5'	5	4/16/2002	0.01	0.02	0.017	0.024	0.018	0.016	0.011	0.02	<0.02	0.116	0.034
TtKB-20-10'	10	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-20-20'	20	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-20-33'	33	4/16/2002	0.01	0.02	0.608	0.521	0.234	0.206	0.156	0.768	0.092	2.585	0.680
TtKB-20- 33.5'	33.5	4/16/2002	0.01	0.02	0.05	0.048	0.012	0.021	0.015	0.068	<0.02	0.224	0.062
TtKB-21-1'	1	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-21-5'	5	4/19/2002	0.010	0.020	0.188	0.347	0.2	0.2559	0.111	0.308	0.01	1.4199	0.429
TtKB-21-10'	10	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-21-20'	20	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND

TABLE 3-2

Carcinogenic Polycyclic Aromatic Hydrocarbons (C-PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
TtKB-21-30'	30	4/19/2002	0.010	0.020	0.01	<0.02	<0.02	<0.02	<0.02	0.01	<0.02	0.07	0.018
TtKB-21-36'	36	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-22-1'	1	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-22-5'	5	4/12/2002	0.01	0.02	0.395	0.682	0.348	0.555	0.227	0.495	0.037	2.739	0.852
TtKB-22-10'	10	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-22-15'	15	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-22-20'	20	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-22- 32.5'	32.5	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-22-36'	36	4/12/2002	0.05	0.1	2.47	2.13	0.828	0.718	0.568	2.35	<0.1	9.114	2.629
TtKB-23-20'	20	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-23- 30.5'	30.5	4/19/2002	0.010	0.020	<0.02	0.011	<0.02	<0.02	<0.02	<0.02	<0.02	0.071	0.019
TtKB-23- 30.5'Dup	30.5	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-23- 36.5'	36.5	4/19/2002	0.010	0.020	0.019	<0.02	<0.02	<0.02	<0.02	0.018	<0.02	0.087	0.018
TtKB-24-1'	1	5/6/2002	0.010	0.020	0.185	0.374	0.143	0.382	0.121	0.238	0.017	1.46	0.465
TtKB-24-5'	5	5/6/2002	0.010	0.020	0.148	0.299	0.114	0.297	0.092	0.183	<0.02	1.143	0.369
TtKB-24-10'	10	5/6/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-24-20'	20	5/6/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-24- 30.25'	30.25	5/6/2002	0.010	0.020	0.066	0.089	0.051	0.046	0.026	0.096	<0.02	0.384	0.112
TtKB-24- 30.25' Du	30.25	5/6/2002	0.010	0.020	0.117	0.062	0.039	0.04	0.028	0.115	<0.02	0.411	0.089
TtKB-24-37'	37	5/6/2002	0.500	1	12.4	12	4	4.97	4.01	14.6	<1	52.48	14.854
TtKB-25- 1.5'	1.5	4/19/2002	0.050	0.100	0.561	1.04	0.635	0.795	0.377	0.675	0.084	4.167	1.312
TtKB-25-5'	5	4/19/2002	0.010	0.020	<0.02	0.017	0.013	0.019	<0.02	<0.02	<0.02	0.089	0.026
TtKB-25-10'	10	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-25-15'	15	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-25-20'	20	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-25-30'	30	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-25-38'	38	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-26-5'	5	4/12/2002	0.05	0.1	0.257	1.14	0.6	1.31	0.341	0.42	<0.1	4.118	1.412
TtKB-26-15'	15	4/12/2002	0.01	0.02	<0.02	0.016	<0.02	0.02	<0.02	<0.02	<0.02	0.086	0.025
TtKB-26- 20.5'	20.5	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-26- 20.5'Dup	20.5	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-26-30'	30	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-26-35'	35	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-27-1'	1	4/12/2002	0.01	0.02	0.072	0.237	0.114	0.364	0.066	0.106	0.011	0.97	0.303
TtKB-27-5'	5	4/12/2002	0.01	0.02	0.048	0.124	0.085	0.114	0.046	0.094	<0.02	0.521	0.158
TtKB-27-10'	10	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-27-20'	20	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-27-30'	30	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-27- 33.5'	33.5	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-28- 10.5'	10.5	10/24/2002	0.01	0.02	0.026	0.016	0.02	0.017	<0.02	0.015	<0.02	0.114	0.027
TtKB-29-5'	5	10/16/2002	0.01	0.02	0.14	0.048	0.058	0.037	0.022	0.069	<0.02	0.384	0.078

TABLE 3-2

Carcinogenic Polycyclic Aromatic Hydrocarbons (C-PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
TtKB-29- 10.5'	10.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-29- 15.5'	15.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-29- 20.5'	20.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-29- 25.5'	25.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-29- 30.5'	30.5	10/16/2002	0.01	0.02	0.037	<0.02	<0.02	<0.02	<0.02	0.018	<0.02	0.105	0.020
TtKB-29- 35.5'	35.5	10/16/2002	0.01	0.02	0.245	0.055	0.043	0.029	0.02	0.142	<0.02	0.544	0.094
TtKB-29- 39.0'	39	10/16/2002	0.01	0.02	0.134	0.015	0.012	<0.02	<0.02	0.061	<0.02	0.252	0.036
TtKB-30-5'	5	10/15/2002	0.01	0.02	0.032	0.024	0.029	0.03	<0.02	0.02	<0.02	0.155	0.038
TtKB-30- 10.5'	10.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-30- 15.5'	15.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-30- 20.5'	20.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-30- 25.5'	25.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-30- 30.5'	30.5	10/15/2002	0.01	0.02	0.48	0.09	0.065	0.053	0.03	0.233	<0.02	0.961	0.159
TtKB-30- 35.5'	35.5	10/15/2002	0.01	0.02	0.061	<0.02	<0.02	<0.02	<0.02	0.029	<0.02	0.14	0.023
TtKB-30- 40.5'	40.5	10/15/2002	0.01	0.02	0.017	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.077	0.018
TtKB-30- 40.5' Dup	40.5	10/15/2002	0.01	0.02	0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.07	0.018
TtKB-31-5'	5	10/15/2002	0.01	0.02	0.3	0.206	0.25	0.243	0.078	0.158	0.021	1.256	0.302
TtKB-31-5' Dup	5	10/15/2002	0.01	0.02	0.485	0.332	0.395	0.374	0.124	0.275	<0.02	1.995	0.476
TtKB-31- 10.5'	10.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-31- 15.5'	15.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-31- 23.0'	23	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-31- 25.5'	25.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-31- 30.5'	30.5	10/15/2002	0.01	0.02	0.029	<0.02	<0.02	<0.02	<0.02	0.013	<0.02	0.092	0.019
TtKB-31- 35.5'	35.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-31- 38.0'	38	10/15/2002	0.01	0.02	0.016	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.076	0.018
TtKB-32- 10.5'	10.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-32- 15.5'	15.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-32- 20.5'	20.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-32- 25.5'	25.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-32- 30.5'	30.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-32- 38.0'	38	10/15/2002	0.01	0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.08	0.019
TtKB-33-1.0'	1	11/25/2002	0.02	0.04	0.626	0.131	0.446	0.044	0.051	0.227	<0.04	1.545	0.257
TtKB-33-1.0'Dup	1	11/25/2002	0.02	0.04	0.762	0.049	0.731	<0.04	<0.04	<0.04	<0.04	1.622	0.209
TtKB-33-10.5'	10.5	11/25/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-33-20.5'	20.5	11/25/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-33-30.5'	30.5	11/25/2002	0.01	0.02	0.089	0.017	0.012	<0.02	<0.02	0.046	<0.02	0.194	0.033
TtKB-33-40.5'	40.5	11/25/2002	0.02	0.04	4.08	1.01	0.764	0.764	0.371	1.57	<0.04	8.579	1.630
TtKB-33-50.5'	50.5	11/25/2002	0.01	0.02	0.382	0.093	0.079	0.055	0.034	0.168	<0.02	0.821	0.153
TtKB-33-55.5'	55.5	11/25/2002	1	2	50.6	17.6	14.1	8.57	6.39	20.1	<2	118.36	26.107
TtKB-33-60.5'	60.5	11/25/2002	0.04	0.08	8.73	2.33	1.74	1.76	0.847	3.45	<0.08	18.897	3.686
TtKB-33-65.5'	65.5	11/25/2002	0.05	0.1	12	3.35	2.68	2.1	1.23	4.64	<0.1	26.05	5.214

TABLE 3-2

Carcinogenic Polycyclic Aromatic Hydrocarbons (C-PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
TtKB-33-70.5'	70.5	11/25/2002	0.05	0.1	8.6	2.31	1.79	1.38	0.853	3.12	<0.1	18.103	3.621
TtKB-33-80.5'	80.5	11/25/2002	0.01	0.02	0.648	0.209	0.151	0.162	0.076	0.292	<0.02	1.548	0.319
TtKB-33-94'	94	11/13/2002	0.01	0.02	<0.02	<0.02	0.013	<0.02	<0.02	<0.02	<0.02	0.073	0.018
TtKB-33- 118'	118	11/13/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-34-5.5'	5.5	11/26/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-34-5.5' Dup	5.5	11/26/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-34-10.5'	10.5	11/26/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-34-20.5'	20.5	11/26/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-34-30.5'	30.5	11/26/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-34-40.5'	40.5	11/26/2002	0.05	0.1	8.43	2.51	1.84	1.41	0.89	3.41	<0.1	18.54	3.818
TtKB-34-66.5'	66.5	11/26/2002	0.1	0.2	23.2	7.11	5.58	3.92	2.65	10.3	<0.2	52.86	10.782
TtKB-34-70.5'	70.5	11/26/2002	0.01	0.02	0.06	0.019	0.013	0.012	<0.02	0.032	<0.02	0.156	0.032
TtKB-34-82.5'	82.5	11/26/2002	0.01	0.02	0.017	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.077	0.018
TtKB-34-86'	86	11/14/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-34-107'	107	11/14/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-35-1'	1	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-35- 10.5'	10.5	10/17/2002	0.01	0.02	0.026	0.017	0.021	0.015	<0.02	0.016	<0.02	0.115	0.028
TtKB-35- 15.5'	15.5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-35- 20.5'	20.5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-35- 25.5'	25.5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-35- 30.5'	30.5	10/17/2002	0.020	0.040	3.18	0.893	0.758	0.608	0.294	1.77	<0.04	7.523	1.402
TtKB-35- 32.0'	32	10/17/2002	0.01	0.02	0.015	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.075	0.018
TtKB-35- 35.5'	35.5	10/17/2002	0.01	0.02	0.962	0.128	0.1	0.062	0.046	0.425	<0.02	1.733	0.253
TtKB-35- 44.5'	44.5	10/17/2002	0.01	0.02	0.016	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.076	0.018
TtKB-36-5'	5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-36- 5' Dup	5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-36- 10.5'	10.5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-36- 15.5'	15.5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-36- 20.5'	20.5	10/17/2002	0.01	0.02	0.118	0.023	0.022	0.014	<0.02	0.063	<0.02	0.26	0.043
TtKB-36- 25.5'	25.5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-36- 30.5'	30.5	10/17/2002	0.01	0.02	0.66	0.124	0.096	0.046	0.046	0.373	<0.02	1.355	0.216
TtKB-36- 35.5'	35.5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-36- 39.0'	39	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-37-1'	1	10/17/2002	0.01	0.02	0.088	0.013	0.032	<0.02	<0.02	0.068	<0.02	0.231	0.031
TtKB-37-5'	5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-37- 10.5'	10.5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-37- 10.5' Dup	10.5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-37- 15.5'	15.5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-37- 20.5'	20.5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-37- 25.5'	25.5	10/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-37- 30.5'	30.5	10/17/2002	0.01	0.02	2.64	0.409	0.336	0.204	0.145	1.23	<0.02	4.974	0.757

TABLE 3-2

Carcinogenic Polycyclic Aromatic Hydrocarbons (C-PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
TtKB-37- 35.5'	35.5	10/17/2002	0.01	0.02	2.03	0.349	0.293	0.107	0.123	0.997	<0.02	3.909	0.618
TtKB-38- 15.5'	15.5	10/18/2002	0.01	0.02	0.012	0.01	0.012	<0.02	<0.02	0.013	<0.02	0.077	0.018
TtKB-38- 21.5'	21.5	10/18/2002	0.050	0.100	2.11	1.84	2.78	2.88	0.609	1.3	0.31	11.829	2.796
TtKB-38- 25.0'	25	10/18/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-38- 30.0'	30	10/18/2002	0.01	0.02	0.257	0.064	0.052	0.041	0.02	0.167	<0.02	0.611	0.106
TtKB-38- 32.0'	32	10/18/2002	0.050	0.100	2.31	1.22	0.997	0.718	0.355	3.42	<0.10	9.07	1.709
TtKB-38- 35.0'	35	10/18/2002	0.01	0.02	0.378	0.072	0.067	0.048	0.023	0.167	<0.02	0.765	0.129
TtKB-38- 36.5'	36.5	10/18/2002	0.01	0.02	0.322	0.197	0.238	0.184	0.065	0.2	<0.02	1.216	0.283
TtKB-39-5'	5	10/16/2002	0.01	0.02	0.13	0.102	0.134	0.112	0.036	0.086	<0.02	0.61	0.147
TtKB-39-5' Dup	5	10/16/2002	0.01	0.02	0.177	0.133	0.166	0.131	0.045	0.123	<0.02	0.785	0.190
TtKB-39- 10.5'	10.5	10/16/2002	0.02	0.04	0.495	0.756	0.965	1.09	0.251	0.385	0.082	4.024	1.068
TtKB-39- 15.5'	15.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-39- 20.5'	20.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-39- 25.5'	25.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-39- 30.5'	30.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-39- 35.5'	35.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtKB-39- 38.0'	38	10/16/2002	0.01	0.02	0.023	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.083	0.019

RI Confirmation Well Samples

TtK-1-3.5'	3.5	4/24/2002	0.100	0.200	2.13	4.79	2.5	2.36	1.63	7.18	<0.2	20.69	5.758
TtK-1-5'	5	4/24/2002	0.050	0.100	2.18	4.56	2.74	2.24	1.54	8.61	0.064	21.934	5.538
TtK-1-10'	10	4/24/2002	0.010	0.020	0.045	0.077	0.044	0.035	0.026	0.126	<0.02	0.363	0.097
TtK-1-15'	15	4/24/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	0.012	<0.02	0.072	0.018
TtK-1-20'	20	4/24/2002	0.010	0.020	0.217	0.437	0.252	0.23	0.15	0.663	<0.02	1.959	0.532
TtK-1-30.5'	30.5	4/24/2002	0.010	0.020	0.015	0.012	<0.02	<0.02	<0.02	0.02	<0.02	0.087	0.020
TtK-1-30.5' DUP	30.5	4/24/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-1-36.5'	36.5	4/24/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-1-43'	43	4/24/2002	1	2	11.7	12.7	5.33	4.48	3.85	13.7	<2	52.76	15.713
TtK-2-2'	2	4/22/2002	0.010	0.020	0.558	0.981	0.718	0.882	0.348	0.589	0.028	4.104	1.247
TtK-2-5'	5	4/22/2002	0.010	0.020	<0.02	0.014	<0.02	<0.02	<0.02	<0.02	<0.02	0.074	0.022
TtK-2-10'	10	4/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-2-20'	20	4/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-2-30'	30	4/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-2-37.5'	37.5	4/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-2-52'	52	4/22/2002	0.400	0.800	55.5	43.3	18.1	16	12.7	70	<0.8	216	54.366
TtK-2-61'	61	4/22/2002	0.020	0.040	1.51	1.4	0.576	0.505	0.394	2.11	<0.04	6.515	1.726
TtK-2-67.5'	67.5	4/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-2-84.5'	84.5	4/22/2002	0.010	0.020	0.027	0.029	<0.02	0.011	<0.02	0.039	<0.02	0.136	0.039
TtK-3-5'	5	10/23/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-3-5' Dup	5	10/23/2002	0.010	0.020	0.049	0.013	0.02	<0.02	<0.02	0.019	<0.02	0.131	0.025
TtK-3-10.5'	10.5	10/23/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND

TABLE 3-2

Carcinogenic Polycyclic Aromatic Hydrocarbons (C-PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
TtK-3-15.5'	15.5	10/23/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-3-20.5'	20.5	10/23/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-3-25.5'	25.5	10/23/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-3-30.5'	30.5	10/23/2002	0.010	0.020	0.023	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.083	0.019
TtK-3-35.5'	35.5	10/23/2002	0.010	0.020	0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.07	0.018
TtK-3-40.5'	40.5	10/23/2002	0.010	0.020	0.09	0.018	0.019	0.01	<0.02	0.048	<0.02	0.205	0.035
TtK-4-10.5'	10.5	10/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-4-15.5'	15.5	10/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-4-25.5'	25.5	10/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-4-30.5'	30.5	10/22/2002	0.020	0.040	2	1.11	0.9	0.368	0.405	2.38	<0.04	7.183	1.508
TtK-4-35.5'	35.5	10/22/2002	0.010	0.020	0.015	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.075	0.018
TtK-4-40.5'	40.5	10/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-5-20.5'	20.5	10/21/2002	0.010	0.020	<0.02	0.017	0.058	0.059	0.016	<0.02	<0.02	0.18	0.035
TtK-5-25.5'	25.5	10/21/2002	0.010	0.020	0.011	<0.02	<0.02	<0.02	<0.02	0.011	<0.02	0.072	0.018
TtK-5-30.5'	30.5	10/21/2002	0.010	0.020	0.036	0.016	0.017	0.014	<0.02	0.015	<0.02	0.118	0.027
TtK-5-35.5'	35.5	10/21/2002	0.010	0.020	0.021	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.081	0.019
TtK-5-40.5'	40.5	10/21/2002	0.010	0.020	0.098	0.06	0.071	0.06	0.019	0.055	<0.02	0.373	0.089
TtK-5-44.0'	44	10/21/2002	0.010	0.020	0.047	<0.02	<0.02	<0.02	<0.02	0.022	<0.02	0.119	0.021
TtK-6-5'	5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-6-10.5'	10.5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-6-15.5'	15.5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-6-20.5'	20.5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-6-25.5'	25.5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-6-30.5'	30.5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-6-35.5'	35.5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-6-40.5'	40.5	10/21/2002	0.010	0.020	0.161	0.026	0.022	0.011	0.01	0.089	<0.02	0.329	0.051
TtK-7-5'	5	11/27/2002	0.01	0.02	0.017	0.01	0.02	<0.02	<0.02	<0.02	<0.02	0.087	0.019
TtK-7-5' Dup	5	11/27/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-7-10.5'	10.5	11/27/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-7-15.5'	15.5	11/27/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-7-20.5'	20.5	11/27/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-7-25.5'	25.5	11/27/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND
TtK-7-35.5'	35.5	11/27/2002	0.01	0.02	0.1	0.013	<0.02	<0.02	<0.02	0.031	<0.02	0.184	0.030
TtK-7-41.5'	41.5	11/27/2002	0.01	0.02	0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.07	0.018

1. See the text for explanation of procedure as how the sum of C-PAHs has been calculated.
2. See the text for explanation of procedure as how the B(a)P equivalent values have been calculated.

<: Compound not detected at or above detection limit.

TABLE 3-3
Noncarcinogenic Polycyclic Aromatic Hydrocarbons (NC-PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
Confirmation Soil Samples														
B7S1-5	5	9/17/2008	0.020	0.040	<0.02	<0.02	0.068	2.75	1.41	<0.02	<0.02	0.314	2.66	7.24
C1F1-12	12	8/13/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
C1S2-10	10	8/19/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
C1S4-5	5	9/8/2008	0.020	0.040	<0.02	<0.02	<0.02	0.486	0.326	<0.02	<0.02	0.094	0.528	1.48
C1W1-11	11	8/19/2008	0.010	0.020	<0.01	<0.01	<0.01	0.191	0.138	<0.01	0.059	0.029	0.271	0.71
C1W1-5	5	9/9/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
C2S1-10	10	9/3/2008	0.020	0.040	<0.02	<0.02	0.043	0.531	0.3	<0.02	0.021	0.086	0.397	1.41
C2S2-5	5	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
C3E1-5	5	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
C3E2-10	10	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
C3F1-12	12	8/29/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
C3S1-10	10	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
C3S1-10D	10	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
C3S2-5	5	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	0.142	0.051	<0.01	<0.01	<0.01	0.067	0.29
C6W1-5	5	9/17/2008	0.010	0.020	<0.01	<0.01	0.032	0.599	0.323	<0.01	<0.01	0.073	0.483	1.53
C7E1-5	5	9/17/2008	0.010	0.020	<0.01	<0.01	<0.01	0.322	0.159	<0.01	<0.01	0.038	0.218	0.76
C7N1-5	5	9/17/2008	0.020	0.040	<0.02	<0.02	<0.02	1.14	0.67	<0.02	<0.02	0.288	0.908	3.06
D1F1-11	11	8/14/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	0.015	<0.01	<0.01	<0.01	0.02	0.07
D1F2-12	12	8/15/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	0.016	<0.01	0.02	<0.01	0.023	0.09
D1F3-12	12	8/15/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	<0.01	<0.01	0.05
D1W2-4	4	8/14/2008	0.010	0.020	<0.01	<0.01	<0.01	0.099	0.082	<0.01	<0.01	<0.01	0.132	0.34
D1W4-12	12	8/15/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
D1W6-9	9	8/20/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
D1W7-6	6	8/20/2008	1	2	2.03	<1	5.65	44	5.38	2.83	4.18	24.8	6.5	95.87
D1W8-8	8	8/20/2008	0.020	0.040	0.036	<0.02	<0.02	0.511	0.28	<0.02	0.092	0.241	0.347	1.54
D2F1-18	18	8/28/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
D2F2-7	7	8/29/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
D3E1-5	5	8/28/2008	0.020	0.040	<0.02	<0.02	0.029	0.445	0.317	<0.02	<0.02	0.071	0.467	1.37
D3E2-5	5	9/3/2008	0.020	0.040	<0.02	<0.02	0.04	0.482	0.273	<0.02	<0.02	0.07	0.374	1.28
D3E3-10	10	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
D3F1-12	12	8/29/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
E1F1-13	13	8/25/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
E1F1-5	5	9/8/2008	0.020	0.040	<0.02	<0.02	<0.02	1.47	1.45	<0.02	0.148	0.467	2.52	6.10
E1F2-23	23	8/29/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
E1N1-5	5	9/8/2008	0.050	0.100	<0.05	<0.05	0.67	2.18	4.82	<0.05	<0.05	4.14	5.9	17.81
E1W1-4	4	8/22/2008	0.020	0.040	<0.02	<0.02	<0.02	0.564	0.63	<0.02	0.142	0.303	0.942	2.62
E2F1-4	4	8/26/2008	0.100	0.200	<0.1	<0.1	<0.1	17.2	1.59	<0.1	0.139	0.434	3.95	23.51

TABLE 3-3

Noncarcinogenic Polycyclic Aromatic Hydrocarbons (NC-PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Sample Numbei	Depth (ft)	Date	MDL	PQL	Acenaph- thene	Acenaph- thylene	Anthracene	Benzo(ghi)- perylene	Fluoran- thene	Fluorene	Naph- thalene	Phenan- threne	Pyrene	Sum of Non- Carcinogenic PAHs(1)
E3E1-5	5	9/3/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
E3E2-10	10	9/3/2008	0.020	0.040	0.062	<0.02	0.236	1.72	1.72	0.03	0.068	0.469	2.14	6.46
E3N1-10	10	9/4/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
E3N2-5	5	9/4/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	0.071	<0.01	<0.01	0.053	0.119	0.27
F1F1-11	11	9/5/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
F1N2-5	5	9/8/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
F1W1-2	2	9/8/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
F3F1-11	11	8/21/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
G1W1-10	10	9/5/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
G2N1-10	10	9/5/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
G2N2-5	5	9/5/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
G2N3-2	2	9/5/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
H11F1-6	6	9/18/2008	0.010	0.020	<0.01	<0.01	<0.01	0.047	0.06	<0.01	<0.01	<0.01	0.066	0.20
H11S1-5	5	9/18/2008	0.010	0.020	<0.01	<0.01	<0.01	0.059	0.032	<0.01	<0.01	<0.01	0.04	0.16
H11W1-5	5	9/18/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	0.026	<0.01	<0.01	<0.01	0.031	0.09
H12E1-5	5	9/18/2008	0.010	0.020	<0.01	<0.01	<0.01	0.066	0.073	<0.01	<0.01	0.036	0.069	0.27
I11N1-5	5	9/18/2008	0.010	0.020	<0.01	<0.01	0.019	0.111	0.131	<0.01	<0.01	0.035	0.143	0.46
T1-10	10	9/17/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND
T1-5	5	9/17/2008	0.010	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND

1. See the text for explanation of procedure as how the sum of non-carcinogenic PAHs has been calculated.

<: Compound not detected at or above detection limit.

RI Confirmation Soil Samples

TtKB-13-1'	1	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-13-5'	5	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	0.037	0.053	<0.02	<0.02	0.034	0.05	0.224
TtKB-13-10'	10	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-13- 20.5'	20.5	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-13- 20.5'Dup	20.5	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-13-30'	30	4/15/2002	0.01	0.02	0.222	<0.02	0.103	<0.02	0.155	0.593	0.357	0.833	0.15	2.433
TtKB-13- 33.5'	33.5	4/15/2002	0.01	0.02	<0.02	<0.02	0.046	<0.02	0.078	<0.02	<0.02	<0.02	0.073	0.257
TtKB-14-2'	2	4/17/2002	0.02	0.04	<0.04	<0.04	<0.04	0.071	0.092	<0.04	<0.04	<0.04	0.13	0.413
TtKB-14-5'	5	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-14- 10.5'	10.5	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-14- 10.5' Dup	10.5	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-14- 20'	20	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-14-30'	30	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-14- 33.5'	33.5	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-15-1'	1	4/16/2002	0.10	0.20	<0.20	<0.20	<0.20	0.874	0.74	<0.20	<0.20	0.219	0.643	2.976
TtKB-15-5'	5	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	0.031	<0.02	<0.02	0.032	0.021	0.144

TABLE 3-3
Noncarcinogenic Polycyclic Aromatic Hydrocarbons (NC-PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtKB-15-10'	10	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-15-15'	15	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-15-20'	20	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-15-30'	30	4/16/2002	0.01	0.02	0.288	<0.02	0.313	0.132	0.797	1.37	0.352	2.19	0.886	6.338
TtKB-15- 33.5'	33.5	4/16/2002	0.10	0.20	2.33	0.352	5.93	2.01	17.7	47.9	<0.20	1.08	17.7	95.102
TtKB-15-41'	41	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	0.021	<0.02	<0.02	<0.02	0.023	0.114
TtKB-16-1'	1	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	0.026	0.035	<0.02	<0.02	0.011	0.05	0.172
TtKB-16-5'	5	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-16-10'	10	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-16-20'	20	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-16-30'	30	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-16- 32.5'	32.5	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-17-5'	5	4/16/2002	0.02	0.04	<0.04	<0.04	<0.04	<0.04	0.023	<0.04	0.023	<0.04	0.031	0.197
TtKB-17-10'	10	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-17- 30.5'	30.5	4/16/2002	0.01	0.02	0.151	<0.02	0.091	0.058	0.186	0.42	<0.02	<0.02	0.187	1.123
TtKB-17- 30.5'Dup	30.5	4/16/2002	0.01	0.02	0.046	<0.02	0.036	0.036	0.09	0.193	<0.02	<0.02	0.113	0.544
TtKB-17-33'	33	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	0.022	0.032	<0.02	<0.02	0.021	0.135
TtKB-18-1'	1	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-18-5'	5	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	0.058	<0.02	<0.02	0.054	0.055	0.227
TtKB-18-10'	10	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-18-15'	15	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-18-20'	20	4/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-18-30'	30	4/15/2002	0.01	0.02	0.027	<0.02	0.076	0.02	0.196	0.38	<0.02	0.28	0.191	1.19
TtKB-18-33'	33	4/15/2002	0.02	0.04	0.3	<0.04	1.67	0.859	4.23	2.93	<0.04	1.62	3.81	15.459
TtKB-18-41'	41	4/15/2002	0.01	0.02	<0.02	0.012	0.016	<0.02	0.045	<0.02	<0.02	<0.02	0.038	0.161
TtKB-19-1'	1	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-19-5'	5	4/17/2002	0.02	0.04	<0.04	<0.04	<0.04	0.046	0.041	<0.04	0.038	<0.04	0.035	0.26
TtKB-19-10'	10	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-19-20'	20	4/17/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-19-30'	30	4/17/2002	0.01	0.02	<0.02	<0.02	0.016	<0.02	0.038	<0.02	<0.02	<0.02	0.04	0.154
TtKB-19- 33.5'	33.5	4/17/2002	0.01	0.02	<0.02	<0.02	0.034	<0.02	0.086	<0.02	<0.02	<0.02	0.089	0.269
TtKB-20-2'	2	4/16/2002	0.05	0.10	0.091	<0.10	<0.10	0.158	0.456	0.793	<0.10	0.268	0.45	2.366
TtKB-20-5'	5	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	0.013	0.039	<0.02	<0.02	<0.02	0.031	0.143
TtKB-20-10'	10	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-20-20'	20	4/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	0.017	<0.02	<0.02	<0.02	0.012	0.099
TtKB-20-33'	33	4/16/2002	0.01	0.02	<0.02	<0.02	0.386	0.111	0.976	1.06	<0.02	0.966	0.987	4.516
TtKB-20- 33.5'	33.5	4/16/2002	0.01	0.02	<0.02	<0.02	0.024	<0.02	0.081	<0.02	<0.02	0.054	0.084	0.293
TtKB-21-1'	1	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-21-5'	5	4/19/2002	0.010	0.020	<0.02	0.016	0.066	0.37	0.668	<0.02	0.083	0.598	0.743	2.564
TtKB-21-10'	10	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND

TABLE 3-3
Noncarcinogenic Polycyclic Aromatic Hydrocarbons (NC-PAHs) in mg/kg, (EPA Method 8310)
Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtKB-21-20'	20	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-21-30'	30	4/19/2002	0.010	0.020	0.023	<0.02	0.052	<0.02	0.072	0.18	<0.02	0.171	0.078	0.606
TtKB-21-36'	36	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	0.012	<0.02	<0.02	<0.02	0.013	0.095
TtKB-22-1'	1	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	0.011	0.01	<0.02	<0.02	<0.02	0.01	0.09
TtKB-22-5'	5	4/12/2002	0.01	0.02	<0.02	0.018	0.084	0.56	1.63	<0.02	<0.02	1.14	1.52	4.98
TtKB-22-10'	10	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	0.012	<0.02	<0.02	0.01	0.012	0.09
TtKB-22-15'	15	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-22-20'	20	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-22- 32.5'	32.5	4/12/2002	0.01	0.02	<0.02	<0.02	0.031	<0.02	0.047	<0.02	<0.02	<0.02	0.045	0.18
TtKB-22-36'	36	4/12/2002	0.05	0.1	<0.1	0.178	2.26	0.626	4.14	<0.1	<0.1	<0.1	3.76	11.16
TtKB-23-20'	20	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-23- 30.5'	30.5	4/19/2002	0.010	0.020	0.109	0.023	0.045	0.017	0.072	0.22	<0.02	0.109	0.089	0.694
TtKB-23- 30.5'Dup	30.5	4/19/2002	0.010	0.020	0.1	0.012	<0.02	0.012	0.059	0.147	<0.02	0.01	0.072	0.432
TtKB-23- 36.5'	36.5	4/19/2002	0.010	0.020	<0.02	0.01	0.128	<0.02	0.163	<0.02	<0.02	<0.02	0.177	0.528
TtKB-24-1'	1	5/6/2002	0.01	0.02	<0.02	<0.02	<0.02	0.436	0.444	<0.02	<0.02	0.11	0.542	1.582
TtKB-24-5'	5	5/6/2002	0.01	0.02	<0.02	0.019	<0.02	0.397	0.267	<0.02	0.011	0.058	0.331	1.113
TtKB-24-10'	10	5/6/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-24-20'	20	5/6/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-24-30.25'	30.25	5/6/2002	0.01	0.02	0.01	<0.02	0.061	0.057	0.214	<0.02	<0.02	0.396	0.228	0.996
TtKB-24-30.25' Dup	30.25	5/6/2002	0.01	0.02	0.017	<0.02	0.076	0.055	0.267	<0.02	<0.02	0.539	0.288	1.272
TtKB-24-37'	37	5/6/2002	0.5	1	<1	<1	3.99	4.86	16.5	4.69	<1	<1	18.8	50.84
TtKB-25- 1.5'	1.5	4/19/2002	0.050	0.100	<0.10	<0.10	<0.10	1.2	1.18	<0.10	0.1	0.115	1.35	4.145
TtKB-25-5'	5	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	0.021	0.01	<0.02	0.021	<0.02	<0.02	0.112
TtKB-25-10'	10	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-25-15'	15	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-25-20'	20	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-25-30'	30	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-25-38'	38	4/19/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-26-5'	5	4/12/2002	0.05	0.1	<0.1	<0.1	<0.1	1.49	0.957	<0.1	0.052	0.233	1.45	4.38
TtKB-26-15'	15	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	0.026	0.016	<0.02	<0.02	<0.02	0.022	0.12
TtKB-26- 20.5'	20.5	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-26- 20.5'Dup	20.5	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-26-30'	30	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-26-35'	35	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-27-1'	1	4/12/2002	0.01	0.02	<0.02	<0.02	0.011	0.387	0.148	<0.02	<0.02	0.061	0.191	0.84
TtKB-27-5'	5	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	0.21	0.18	<0.02	<0.02	0.059	0.165	0.66
TtKB-27-10'	10	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	0.014	<0.02	<0.02	<0.02	<0.02	0.09
TtKB-27-20'	20	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-27-30'	30	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-27- 33.5'	33.5	4/12/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	0.018	<0.02	<0.02	<0.02	0.018	0.11

TABLE 3-3

Noncarcinogenic Polycyclic Aromatic Hydrocarbons (NC-PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtKB-28- 10.5'	10.5	10/24/2002	0.010	0.020	<0.02	<0.02	<0.02	0.017	0.023	<0.02	<0.02	0.016	0.031	0.137
TtKB-29-5'	5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	0.018	0.046	<0.02	<0.02	0.026	0.066	0.206
TtKB-29- 10.5'	10.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-29- 15.5'	15.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-29- 20.5'	20.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-29- 25.5'	25.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-29- 30.5'	30.5	10/16/2002	0.01	0.02	<0.02	<0.02	0.015	<0.02	0.046	<0.02	<0.02	0.024	0.058	0.193
TtKB-29- 35.5'	35.5	10/16/2002	0.01	0.02	<0.02	<0.02	0.091	0.025	0.223	<0.02	<0.02	0.064	0.323	0.766
TtKB-29- 39.0'	39	10/16/2002	0.01	0.02	0.027	<0.02	0.099	<0.02	0.162	0.122	<0.02	0.059	0.217	0.716
TtKB-30-5'	5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	0.023	0.032	<0.02	<0.02	0.011	0.042	0.158
TtKB-30- 10.5'	10.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-30- 15.5'	15.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-30- 20.5'	20.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-30- 25.5'	25.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-30- 30.5'	30.5	10/15/2002	0.01	0.02	<0.02	<0.02	0.111	0.045	0.189	0.107	<0.02	0.665	0.285	1.432
TtKB-30- 35.5'	35.5	10/15/2002	0.01	0.02	<0.02	<0.02	0.035	<0.02	0.046	0.013	<0.02	0.031	0.062	0.227
TtKB-30- 40.5'	40.5	10/15/2002	0.01	0.02	<0.02	<0.02	0.017	<0.02	0.019	<0.02	<0.02	<0.02	0.024	0.12
TtKB-30- 40.5' Dup	40.5	10/15/2002	0.01	0.02	<0.02	<0.02	0.01	<0.02	0.013	<0.02	<0.02	<0.02	0.017	0.1
TtKB-31-5'	5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	0.254	0.129	<0.02	<0.02	0.04	0.216	0.689
TtKB-31-5' Dup	5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	0.372	0.313	<0.02	<0.02	0.109	0.459	1.303
TtKB-31- 10.5'	10.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-31- 15.5'	15.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-31- 23.0'	23	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-31- 25.5'	25.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-31- 30.5'	30.5	10/15/2002	0.01	0.02	0.025	<0.02	<0.02	<0.02	0.031	0.026	<0.02	0.119	0.054	0.295
TtKB-31- 35.5'	35.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	0.014	<0.02	<0.02	<0.02	0.017	0.101
TtKB-31- 38.0'	38	10/15/2002	0.01	0.02	<0.02	<0.02	0.014	<0.02	0.019	<0.02	<0.02	0.014	0.025	0.122
TtKB-32- 10.5'	10.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-32- 15.5'	15.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-32- 20.5'	20.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-32- 25.5'	25.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-32- 30.5'	30.5	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-32- 38.0'	38	10/15/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	0.012	<0.02	<0.02	<0.02	0.018	0.1
TtKB-33-1.0'	1	11/25/2002	0.02	0.04	<0.04	<0.04	<0.04	<0.04	0.191	0.115	0.025	0.095	0.182	0.688
TtKB-33-1.0'Dup	1	11/25/2002	0.02	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.021	<0.04	<0.04	0.181
TtKB-33-10.5'	10.5	11/25/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-33-20.5'	20.5	11/25/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-33-30.5'	30.5	11/25/2002	0.01	0.02	0.022	<0.02	0.021	<0.02	0.046	0.038	0.011	0.183	0.063	0.404
TtKB-33-40.5'	40.5	11/25/2002	0.02	0.04	0.145	<0.04	0.963	0.323	2.2	0.884	<0.04	0.736	3.37	8.661
TtKB-33-50.5'	50.5	11/25/2002	0.01	0.02	0.014	<0.02	0.142	0.023	0.305	0.079	<0.02	0.068	0.389	1.04

TABLE 3-3
Noncarcinogenic Polycyclic Aromatic Hydrocarbons (NC-PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtKB-33-55.5'	55.5	11/25/2002	1	2	<2	2.36	23.7	6.24	43	34.6	316	155	50.2	632.1
TtKB-33-60.5'	60.5	11/25/2002	0.04	0.08	<0.08	<0.08	2.97	0.759	5.68	4	83.7	17.2	8.36	122.749
TtKB-33-65.5'	65.5	11/25/2002	0.05	0.1	<0.1	1.63	3.88	1.26	8.12	4.83	12.1	24	11.7	67.57
TtKB-33-70.5'	70.5	11/25/2002	0.05	0.1	0.403	0.851	2.59	0.851	4.95	3.09	25.2	15.5	7.76	61.195
TtKB-33-80.5'	80.5	11/25/2002	0.01	0.02	<0.02	0.033	0.226	0.076	0.428	0.291	0.819	0.938	0.54	3.361
TtKB-33-94'	94	11/13/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.013	<0.02	<0.02	0.093
TtKB-33- 118'	118	11/13/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-34-5.5'	5.5	11/26/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-34-5.5' Dup	5.5	11/26/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-34-10.5'	10.5	11/26/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-34-20.5'	20.5	11/26/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-34-30.5'	30.5	11/26/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	0.012	<0.02	<0.02	<0.02	0.014	0.096
TtKB-34-40.5'	40.5	11/26/2002	0.05	0.1	<0.1	<0.1	2.8	0.905	4.86	2.37	<0.1	0.745	6.17	18
TtKB-34-66.5'	66.5	11/26/2002	0.1	0.2	<0.2	16.6	7.96	2.52	17.1	13.6	248	45.4	19.9	371.18
TtKB-34-70.5'	70.5	11/26/2002	0.01	0.02	<0.02	0.026	0.022	0.082	0.043	0.04	0.61	0.137	0.052	1.022
TtKB-34-82.5'	82.5	11/26/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	0.012	<0.02	0.063	0.034	0.015	0.174
TtKB-34-86'	86	11/14/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-34-107'	107	11/14/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.012	<0.02	<0.02	0.092
TtKB-35-1'	1	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-35- 10.5'	10.5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	0.021	0.031	<0.02	<0.02	0.028	0.04	0.17
TtKB-35- 15.5'	15.5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-35- 20.5'	20.5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-35- 25.5'	25.5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-35- 30.5'	30.5	10/17/2002	0.020	0.040	0.917	0.045	0.691	0.616	1.16	0.908	0.719	4.14	2.05	11.246
TtKB-35- 32.0'	32	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.054	0.031	0.01	0.155
TtKB-35- 35.5'	35.5	10/17/2002	0.010	0.020	<0.02	<0.02	0.152	0.054	0.343	0.142	<0.02	0.194	0.488	1.403
TtKB-35- 44.5'	44.5	10/17/2002	0.010	0.020	<0.02	<0.02	0.012	<0.02	0.03	<0.02	<0.02	0.016	0.038	0.146
TtKB-36- 5' Dup	5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-36-5'	5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-36- 10.5'	10.5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-36- 15.5'	15.5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-36- 20.5'	20.5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	0.016	<0.02	<0.02	0.032	0.031	0.139
TtKB-36- 25.5'	25.5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-36- 30.5'	30.5	10/17/2002	0.010	0.020	0.45	<0.02	0.229	0.045	0.292	0.575	<0.02	0.489	0.4	2.5
TtKB-36- 35.5'	35.5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-36- 39.0'	39	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-37-1'	1	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-37-5'	5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-37- 10.5'	10.5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-37- 10.5' Dup	10.5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND

TABLE 3-3
Noncarcinogenic Polycyclic Aromatic Hydrocarbons (NC-PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtKB-37- 15.5'	15.5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-37- 20.5'	20.5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-37- 25.5'	25.5	10/17/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-37- 30.5'	30.5	10/17/2002	0.010	0.020	1.2	0.047	0.67	0.158	1.02	1.18	1.15	3.92	1.48	10.825
TtKB-37- 35.5'	35.5	10/17/2002	0.010	0.020	0.662	0.244	0.885	0.155	1.05	1.92	0.094	3.5	1.43	9.94
TtKB-38- 15.5'	15.5	10/18/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	0.028	<0.02	<0.02	0.031	0.031	0.15
TtKB-38- 21.5'	21.5	10/18/2002	0.050	0.100	<0.10	<0.10	0.101	3.45	2.35	<0.10	0.092	0.82	3.5	10.463
TtKB-38- 25.0'	25	10/18/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-38- 30.0'	30	10/18/2002	0.010	0.020	0.183	0.036	0.21	0.027	0.238	0.086	0.012	0.255	0.322	1.369
TtKB-38- 32.0'	32	10/18/2002	0.050	0.100	0.05	0.211	2.78	0.823	2.57	0.608	<0.10	0.348	4.48	11.92
TtKB-38- 35.0'	35	10/18/2002	0.010	0.020	<0.02	<0.02	0.117	0.04	0.228	0.014	<0.02	0.083	0.328	0.84
TtKB-38- 36.5'	36.5	10/18/2002	0.010	0.020	<0.02	0.01	0.086	0.196	0.508	0.017	0.037	0.333	0.637	1.834
TtKB-39-5'	5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	0.122	0.132	<0.02	<0.02	0.042	0.203	0.549
TtKB-39-5' Dup	5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	0.143	0.168	<0.02	<0.02	0.055	0.261	0.677
TtKB-39- 10.5'	10.5	10/16/2002	0.02	0.04	<0.04	<0.04	0.023	1.27	0.309	<0.04	0.147	0.256	0.44	2.505
TtKB-39- 15.5'	15.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-39- 20.5'	20.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-39- 25.5'	25.5	10/16/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtKB-39- 30.5'	30.5	10/16/2002	0.01	0.02	<0.02	<0.02	0.01	<0.02	0.022	<0.02	<0.02	<0.02	0.023	0.115
TtKB-39- 35.5'	35.5	10/16/2002	0.01	0.02	<0.02	<0.02	0.016	<0.02	0.014	<0.02	<0.02	<0.02	0.017	0.107
TtKB-39- 38.0'	38	10/16/2002	0.01	0.02	<0.02	<0.02	0.022	<0.02	0.026	<0.02	<0.02	<0.02	0.034	0.142

RI Confirmation Well Samples

Sample Number	Depth (ft)	Date	MDL	PQL	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtK-1-3.5'	3.5	4/24/2002	0.100	0.200	0.403	<0.20	<0.20	2.68	6.4	1.77	0.18	0.163	7.79	19.586
TtK-1-5'	5	4/24/2002	0.050	0.100	<0.1	<0.1	0.088	2.94	5.83	<0.1	0.242	0.376	6.15	15.776
TtK-1-10'	10	4/24/2002	0.010	0.020	<0.02	<0.02	<0.02	0.038	0.109	0.028	<0.02	<0.02	0.114	0.339
TtK-1-15'	15	4/24/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	0.012	<0.02	<0.02	<0.02	<0.02	0.092
TtK-1-20'	20	4/24/2002	0.010	0.020	0.028	<0.02	<0.02	0.231	0.629	0.15	0.014	0.015	0.764	1.851
TtK-1-30.5'	30.5	4/24/2002	0.010	0.020	0.01	<0.02	0.042	<0.02	0.064	0.12	<0.02	0.234	0.091	0.591
TtK-1-30.5' DUP	30.5	4/24/2002	0.010	0.020	<0.02	<0.02	0.027	<0.02	0.051	<0.02	<0.02	0.098	0.051	0.277
TtK-1-36.5'	36.5	4/24/2002	0.010	0.020	<0.02	<0.02	0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.09
TtK-1-43'	43	4/24/2002	1	2	<2	<2	15.3	5.11	23.6	22.9	33.7	26	24.1	152.71
TtK-2-2'	2	4/22/2002	0.010	0.020	<0.02	0.014	0.118	1.08	1.52	<0.02	0.027	0.845	1.46	5.084
TtK-2-5'	5	4/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	0.027	<0.02	<0.02	0.012	0.019	0.118
TtK-2-10'	10	4/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-2-20'	20	4/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-2-30'	30	4/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-2-37.5'	37.5	4/22/2002	0.010	0.020	<0.02	<0.02	0.01	<0.02	0.015	<0.02	<0.02	<0.02	0.015	0.1
TtK-2-52'	52	4/22/2002	0.400	0.800	<0.80	136	52.3	14.1	102	1120	2700	268	102	4494.8
TtK-2-61'	61	4/22/2002	0.020	0.040	<0.04	4.1	2.54	0.494	3.98	36.7	45.2	10.6	3.99	107.624

TABLE 3-3

Noncarcinogenic Polycyclic Aromatic Hydrocarbons (NC-PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Sample Number	Depth (ft)	Date	MDL	PQL	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtK-2-67.5'	67.5	4/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	0.035	0.515	0.017	<0.02	0.627
TtK-2-84.5'	84.5	4/22/2002	0.010	0.020	<0.02	0.01	0.019	0.01	0.054	<0.02	0.146	0.09	0.05	0.399
TtK-3-5'	5	10/23/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-3-5' Dup	5	10/23/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	0.014	<0.02	<0.02	<0.02	0.017	0.101
TtK-3-10.5'	10.5	10/23/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-3-15.5'	15.5	10/23/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-3-20.5'	20.5	10/23/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-3-25.5'	25.5	10/23/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-3-30.5'	30.5	10/23/2002	0.010	0.020	<0.02	<0.02	0.018	<0.02	0.028	<0.02	<0.02	0.027	0.035	0.158
TtK-3-35.5'	35.5	10/23/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	0.014	<0.02	<0.02	<0.02	0.018	0.102
TtK-3-40.5'	40.5	10/23/2002	0.010	0.020	<0.02	<0.02	0.011	<0.02	0.033	<0.02	<0.02	0.012	0.05	0.156
TtK-4-10.5'	10.5	10/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-4-15.5'	15.5	10/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-4-25.5'	25.5	10/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-4-30.5'	30.5	10/22/2002	0.020	0.040	0.883	<0.04	1.39	0.504	2.7	1	0.363	6.48	3.92	17.26
TtK-4-35.5'	35.5	10/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	0.012	<0.02	<0.02	<0.02	0.018	0.1
TtK-4-40.5'	40.5	10/22/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	0.012	<0.02	<0.02	<0.02	0.015	0.097
TtK-5-20.5'	20.5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	0.059	<0.02	<0.02	<0.02	<0.02	<0.02	0.139
TtK-5-25.5'	25.5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	0.021	<0.02	0.043	0.024	0.029	0.167
TtK-5-30.5'	30.5	10/21/2002	0.010	0.020	0.028	0.094	0.012	0.026	0.054	0.014	0.465	0.123	0.076	0.892
TtK-5-35.5'	35.5	10/21/2002	0.010	0.020	<0.02	<0.02	0.031	<0.02	0.062	<0.02	<0.02	<0.02	0.075	0.228
TtK-5-40.5'	40.5	10/21/2002	0.010	0.020	<0.02	<0.02	0.042	0.045	0.121	<0.02	<0.02	0.061	0.162	0.471
TtK-5-44.0'	44	10/21/2002	0.010	0.020	<0.02	<0.02	0.033	<0.02	0.039	0.01	<0.02	0.038	0.054	0.214
TtK-6-5'	5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-6-10.5'	10.5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-6-15.5'	15.5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-6-20.5'	20.5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-6-25.5'	25.5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-6-30.5'	30.5	10/21/2002	0.010	0.020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-6-35.5'	35.5	10/21/2002	0.010	0.020	<0.02	<0.02	0.015	<0.02	0.017	<0.02	<0.02	<0.02	0.02	0.112
TtK-6-40.5'	40.5	10/21/2002	0.010	0.020	<0.02	<0.02	0.066	<0.02	0.096	0.023	<0.02	0.062	0.132	0.419
TtK-7-5'	5	11/27/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.012	0.092
TtK-7-5' Dup	5	11/27/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-7-10.5'	10.5	11/27/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-7-15.5'	15.5	11/27/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-7-20.5'	20.5	11/27/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-7-25.5'	25.5	11/27/2002	0.01	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND
TtK-7-35.5'	35.5	11/27/2002	0.01	0.02	<0.02	<0.02	0.02	<0.02	0.043	0.023	<0.02	<0.02	0.054	0.19
TtK-7-41.5'	41.5	11/27/2002	0.01	0.02	<0.02	<0.02	0.014	<0.02	0.032	<0.02	<0.02	<0.02	0.036	0.142

1. See the text for explanation of procedure as how the sum of non-carcinogenic PAHs has been calculated.

TABLE 3-4

Total Polycyclic Aromatic Hydrocarbons (PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Data organized based on depth of the sample

Sample Number	Depth (ft)	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
Confirmation Soil Samples						
F1W1-2	2	9/8/2008	ND	ND	ND	ND
G2N3-2	2	9/5/2008	ND	ND	ND	ND
D1W2-4	4	8/14/2008	0.306	0.34	0.65	0.106
E1W1-4	4	8/22/2008	2.094	2.62	4.72	0.629
E2F1-4	4	8/26/2008	14.525	23.51	38.04	4.237
B7S1-5	5	9/17/2008	6.286	7.24	13.53	1.893
C1S4-5	5	9/8/2008	1.306	1.48	2.79	0.412
C1W1-5	5	9/9/2008	ND	ND	ND	ND
C2S2-5	5	9/3/2008	ND	ND	ND	ND
C3E1-5	5	9/3/2008	ND	ND	ND	ND
C3S2-5	5	9/3/2008	0.297	0.29	0.59	0.096
C6W1-5	5	9/17/2008	1.408	1.53	2.94	0.423
C7E1-5	5	9/17/2008	0.716	0.76	1.48	0.227
C7N1-5	5	9/17/2008	2.123	3.06	5.18	0.658
D3E1-5	5	8/28/2008	0.898	1.37	2.27	0.316
D3E2-5	5	9/3/2008	1.084	1.28	2.36	0.366
E1F1-5	5	9/8/2008	5.334	6.10	11.43	1.674
E1N1-5	5	9/8/2008	10.796	17.81	28.61	2.892
E3E1-5	5	9/3/2008	ND	ND	ND	ND
E3N2-5	5	9/4/2008	0.07	0.27	0.34	0.044
F1N2-5	5	9/8/2008	ND	ND	ND	ND
G2N2-5	5	9/5/2008	ND	ND	ND	ND
H11S1-5	5	9/18/2008	0.089	0.16	0.25	0.038
H11W1-5	5	9/18/2008	0.034	0.09	0.13	ND
H12E1-5	5	9/18/2008	0.221	0.27	0.49	0.062
I11N1-5	5	9/18/2008	0.469	0.46	0.93	0.134
T1-5	5	9/17/2008	ND	ND	ND	ND
D1W7-6	6	8/20/2008	150	95.87	245.87	48.366
H11F1-6	6	9/18/2008	0.218	0.20	0.42	0.055
D2F2-7	7	8/29/2008	0.278	ND	0.28	0.033
D1W8-8	8	8/20/2008	1.18	1.54	2.72	0.417
D1W6-9	9	8/20/2008	ND	ND	ND	ND
C1S2-10	10	8/19/2008	ND	ND	ND	ND
C2S1-10	10	9/3/2008	1.1	1.41	2.51	0.355
C3E2-10	10	9/3/2008	ND	ND	ND	ND

TABLE 3-4

Total Polycyclic Aromatic Hydrocarbons (PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Data organized based on depth of the sample

Sample Number	Depth (ft)	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)		Sum of Carcinogenic B(a)P Equivalent Concentration
C3S1-10	10	9/3/2008	ND	ND	ND		ND
C3S1-10D	10	9/3/2008	ND	ND	ND		ND
D3E3-10	10	9/3/2008	ND	ND	ND		ND
E3E2-10	10	9/3/2008	3.826	6.46	10.28		1.243
E3N1-10	10	9/4/2008	ND	ND	ND		ND
G1W1-10	10	9/5/2008	ND	ND	ND		ND
G2N1-10	10	9/5/2008	ND	ND	ND		ND
T1-10	10	9/17/2008	ND	ND	ND		ND
C1W1-11	11	8/19/2008	0.532	0.71	1.24		0.179
D1F1-11	11	8/14/2008	ND	0.07	0.07		ND
F1F1-11	11	9/5/2008	ND	ND	ND		ND
F3F1-11	11	8/21/2008	ND	ND	ND		ND
C1F1-12	12	8/13/2008	ND	ND	ND		ND
C3F1-12	12	8/29/2008	ND	ND	ND		ND
D1F2-12	12	8/15/2008	0.013	0.09	0.10		ND
D1F3-12	12	8/15/2008	ND	0.05	0.05		ND
D1W4-12	12	8/15/2008	ND	ND	ND		ND
D3F1-12	12	8/29/2008	ND	ND	ND		ND
E1F1-13	13	8/25/2008	ND	ND	ND		ND
D2F1-18	18	8/28/2008	ND	ND	ND		ND
E1F2-23	23	8/29/2008	ND	ND	ND		ND

1. Data are from Table 3-2.
2. Data are from Table 3-3.
3. Sum of carcinogenic and non-carcinogenic PAHs.

RI Confirmation Soil Samples

TtKB-13-1'	1	4/15/2002	ND	ND	ND		ND
TtKB-15-1'	1	4/16/2002	2.648	2.976	5.624		0.799
TtKB-16-1'	1	4/17/2002	0.146	0.172	0.318		0.044
TtKB-18-1'	1	4/15/2002	ND	ND	ND		ND
TtKB-19-1'	1	4/17/2002	ND	ND	ND		ND
TtKB-21-1'	1	4/19/2002	ND	ND	ND		ND
TtKB-22-1'	1	4/12/2002	ND	0.09	0.091		ND
TtKB-24-1'	1	5/6/2002	1.46	1.582	3.042		0.465
TtKB-27-1'	1	4/12/2002	0.97	0.84	1.808		0.303
TtKB-33-1.0'	1	11/25/2002	1.545	0.688	2.233		0.257
TtKB-33-1.0'Dup	1	11/25/2002	1.622	0.181	1.803		0.209

TABLE 3-4

Total Polycyclic Aromatic Hydrocarbons (PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Data organized based on depth of the sample

Sample Number	Depth (ft)	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
TtKB-35-1'	1	10/17/2002	ND	ND	ND	ND
TtKB-37-1'	1	10/17/2002	0.231	ND	0.231	0.031
TtKB-25- 1.5'	1.5	4/19/2002	4.167	4.145	8.312	1.312
TtKB-14-2'	2	4/17/2002	0.448	0.413	0.861	0.154
TtKB-20-2'	2	4/16/2002	1.476	2.366	3.842	0.439
TtK-2-2'	2	4/22/2002	4.104	5.084	9.188	1.247
TtK-1-3.5'	3.5	4/24/2002	20.69	19.586	40.276	5.758
TtKB-13-5'	5	4/15/2002	0.136	0.224	0.36	0.043
TtKB-14-5'	5	4/17/2002	ND	ND	ND	ND
TtKB-15-5'	5	4/16/2002	0.075	0.144	0.219	0.018
TtKB-16-5'	5	4/17/2002	ND	ND	ND	ND
TtKB-17-5'	5	4/16/2002	ND	0.197	0.197	ND
TtKB-18-5'	5	4/15/2002	0.136	0.227	0.363	0.039
TtKB-19-5'	5	4/17/2002	0.242	0.26	0.502	0.069
TtKB-20-5'	5	4/16/2002	0.116	0.143	0.259	0.034
TtKB-21-5'	5	4/19/2002	1.4199	2.564	3.9839	0.429
TtKB-22-5'	5	4/12/2002	2.739	4.98	7.721	0.852
TtKB-24-5'	5	5/6/2002	1.143	1.113	2.256	0.369
TtKB-25-5'	5	4/19/2002	0.089	0.112	0.201	0.026
TtKB-26-5'	5	4/12/2002	4.118	4.38	8.5	1.412
TtKB-27-5'	5	4/12/2002	0.521	0.66	1.185	0.158
TtKB-29-5'	5	10/16/2002	0.384	0.206	0.59	0.078
TtKB-30-5'	5	10/15/2002	0.155	0.158	0.313	0.038
TtKB-31-5'	5	10/15/2002	1.256	0.689	1.945	0.302
TtKB-31-5' Dup	5	10/15/2002	1.995	1.303	3.298	0.476
TtKB-36- 5' Dup	5	10/17/2002	ND	ND	ND	ND
TtKB-36-5'	5	10/17/2002	ND	ND	ND	ND
TtKB-37-5'	5	10/17/2002	ND	ND	ND	ND
TtKB-39-5'	5	10/16/2002	0.61	0.549	1.159	0.147
TtKB-39-5' Dup	5	10/16/2002	0.785	0.677	1.462	0.190
TtK-1-5'	5	4/24/2002	21.934	15.776	37.71	5.538
TtK-2-5'	5	4/22/2002	0.074	0.118	0.192	0.022
TtK-3-5'	5	10/23/2002	ND	ND	ND	ND
TtK-3-5' Dup	5	10/23/2002	0.131	0.101	0.232	0.025
TtK-6-5'	5	10/21/2002	ND	ND	ND	ND
TtK-7-5'	5	11/27/2002	0.087	0.092	0.179	0.019

TABLE 3-4

Total Polycyclic Aromatic Hydrocarbons (PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Data organized based on depth of the sample

Sample Number	Depth (ft)	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)		Sum of Carcinogenic B(a)P Equivalent Concentration
TtK-7-5' Dup	5	11/27/2002	ND	ND	ND		ND
TtKB-34-5.5'	5.5	11/26/2002	ND	ND	ND		ND
TtKB-34-5.5' Dup	5.5	11/26/2002	ND	ND	ND		ND
TtKB-13-10'	10	4/15/2002	ND	ND	ND		ND
TtKB-15-10'	10	4/16/2002	ND	ND	ND		ND
TtKB-16-10'	10	4/17/2002	ND	ND	ND		ND
TtKB-17-10'	10	4/16/2002	ND	ND	ND		ND
TtKB-18-10'	10	4/15/2002	ND	ND	ND		ND
TtKB-19-10'	10	4/17/2002	ND	ND	ND		ND
TtKB-20-10'	10	4/16/2002	ND	ND	ND		ND
TtKB-21-10'	10	4/19/2002	ND	ND	ND		ND
TtKB-22-10'	10	4/12/2002	ND	0.09	0.094		ND
TtKB-24-10'	10	5/6/2002	ND	ND	ND		ND
TtKB-25-10'	10	4/19/2002	ND	ND	ND		ND
TtKB-27-10'	10	4/12/2002	ND	0.09	0.094		ND
TtK-1-10'	10	4/24/2002	0.363	0.339	0.702		0.097
TtK-2-10'	10	4/22/2002	ND	ND	ND		ND
TtKB-14- 10.5'	10.5	4/17/2002	ND	ND	ND		ND
TtKB-14- 10.5' Dup	10.5	4/17/2002	ND	ND	ND		ND
TtKB-28- 10.5'	10.5	10/24/2002	0.114	0.137	0.251		0.027
TtKB-29- 10.5'	10.5	10/16/2002	ND	ND	ND		ND
TtKB-30- 10.5'	10.5	10/15/2002	ND	ND	ND		ND
TtKB-31- 10.5'	10.5	10/15/2002	ND	ND	ND		ND
TtKB-32- 10.5'	10.5	10/15/2002	ND	ND	ND		ND
TtKB-33-10.5'	10.5	11/25/2002	ND	ND	ND		ND
TtKB-34-10.5'	10.5	11/26/2002	ND	ND	ND		ND
TtKB-35- 10.5'	10.5	10/17/2002	0.115	0.17	0.285		0.028
TtKB-36- 10.5'	10.5	10/17/2002	ND	ND	ND		ND
TtKB-37- 10.5'	10.5	10/17/2002	ND	ND	ND		ND
TtKB-37- 10.5' Dup	10.5	10/17/2002	ND	ND	ND		ND
TtKB-39- 10.5'	10.5	10/16/2002	4.024	2.505	6.529		1.068
TtK-3-10.5'	10.5	10/23/2002	ND	ND	ND		ND
TtK-4-10.5'	10.5	10/22/2002	ND	ND	ND		ND
TtK-6-10.5'	10.5	10/21/2002	ND	ND	ND		ND
TtK-7-10.5'	10.5	11/27/2002	ND	ND	ND		ND
TtKB-15-15'	15	4/16/2002	ND	ND	ND		ND

TABLE 3-4

Total Polycyclic Aromatic Hydrocarbons (PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Data organized based on depth of the sample

Sample Number	Depth (ft)	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)		Sum of Carcinogenic B(a)P Equivalent Concentration
TtKB-18-15'	15	4/15/2002	ND	ND	ND		ND
TtKB-22-15'	15	4/12/2002	ND	ND	ND		ND
TtKB-25-15'	15	4/19/2002	ND	ND	ND		ND
TtKB-26-15'	15	4/12/2002	0.086	0.12	0.21		0.025
TtK-1-15'	15	4/24/2002	0.072	0.092	0.164		0.018
TtKB-29- 15.5'	15.5	10/16/2002	ND	ND	ND		ND
TtKB-30- 15.5'	15.5	10/15/2002	ND	ND	ND		ND
TtKB-31- 15.5'	15.5	10/15/2002	ND	ND	ND		ND
TtKB-32- 15.5'	15.5	10/15/2002	ND	ND	ND		ND
TtKB-35- 15.5'	15.5	10/17/2002	ND	ND	ND		ND
TtKB-36- 15.5'	15.5	10/17/2002	ND	ND	ND		ND
TtKB-37- 15.5'	15.5	10/17/2002	ND	ND	ND		ND
TtKB-38- 15.5'	15.5	10/18/2002	0.077	0.15	0.227		0.018
TtKB-39- 15.5'	15.5	10/16/2002	ND	ND	ND		ND
TtK-3-15.5'	15.5	10/23/2002	ND	ND	ND		ND
TtK-4-15.5'	15.5	10/22/2002	ND	ND	ND		ND
TtK-6-15.5'	15.5	10/21/2002	ND	ND	ND		ND
TtK-7-15.5'	15.5	11/27/2002	ND	ND	ND		ND
TtKB-14- 20'	20	4/17/2002	ND	ND	ND		ND
TtKB-15-20'	20	4/16/2002	ND	ND	ND		ND
TtKB-16-20'	20	4/17/2002	ND	ND	ND		ND
TtKB-18-20'	20	4/15/2002	ND	ND	ND		ND
TtKB-19-20'	20	4/17/2002	ND	ND	ND		ND
TtKB-20-20'	20	4/16/2002	ND	0.099	0.099		ND
TtKB-21-20'	20	4/19/2002	ND	ND	ND		ND
TtKB-22-20'	20	4/12/2002	ND	ND	ND		ND
TtKB-23-20'	20	4/19/2002	ND	ND	ND		ND
TtKB-24-20'	20	5/6/2002	ND	ND	ND		ND
TtKB-25-20'	20	4/19/2002	ND	ND	ND		ND
TtKB-27-20'	20	4/12/2002	ND	ND	ND		ND
TtK-1-20'	20	4/24/2002	1.959	1.851	3.81		0.532
TtK-2-20'	20	4/22/2002	ND	ND	ND		ND
TtKB-13- 20.5'	20.5	4/15/2002	ND	ND	ND		ND
TtKB-13- 20.5'Dup	20.5	4/15/2002	ND	ND	ND		ND
TtKB-26- 20.5'	20.5	4/12/2002	ND	ND	ND		ND
TtKB-26- 20.5'Dup	20.5	4/12/2002	ND	ND	ND		ND

TABLE 3-4

Total Polycyclic Aromatic Hydrocarbons (PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Data organized based on depth of the sample

Sample Number	Depth (ft)	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
TtKB-29- 20.5'	20.5	10/16/2002	ND	ND	ND	ND
TtKB-30- 20.5'	20.5	10/15/2002	ND	ND	ND	ND
TtKB-32- 20.5'	20.5	10/15/2002	ND	ND	ND	ND
TtKB-33-20.5'	20.5	11/25/2002	ND	ND	ND	ND
TtKB-34-20.5'	20.5	11/26/2002	ND	ND	ND	ND
TtKB-35- 20.5'	20.5	10/17/2002	ND	ND	ND	ND
TtKB-36- 20.5'	20.5	10/17/2002	0.26	0.139	0.399	0.043
TtKB-37- 20.5'	20.5	10/17/2002	ND	ND	ND	ND
TtKB-39- 20.5'	20.5	10/16/2002	ND	ND	ND	ND
TtK-3-20.5'	20.5	10/23/2002	ND	ND	ND	ND
TtK-5-20.5'	20.5	10/21/2002	0.18	0.139	0.319	0.035
TtK-6-20.5'	20.5	10/21/2002	ND	ND	ND	ND
TtK-7-20.5'	20.5	11/27/2002	ND	ND	ND	ND
TtKB-38- 21.5'	21.5	10/18/2002	11.829	10.463	22.292	2.796
TtKB-31- 23.0'	23	10/15/2002	ND	ND	ND	ND
TtKB-38- 25.0'	25	10/18/2002	ND	ND	ND	ND
TtKB-29- 25.5'	25.5	10/16/2002	ND	ND	ND	ND
TtKB-30- 25.5'	25.5	10/15/2002	ND	ND	ND	ND
TtKB-31- 25.5'	25.5	10/15/2002	ND	ND	ND	ND
TtKB-32- 25.5'	25.5	10/15/2002	ND	ND	ND	ND
TtKB-35- 25.5'	25.5	10/17/2002	ND	ND	ND	ND
TtKB-36- 25.5'	25.5	10/17/2002	ND	ND	ND	ND
TtKB-37- 25.5'	25.5	10/17/2002	ND	ND	ND	ND
TtKB-39- 25.5'	25.5	10/16/2002	ND	ND	ND	ND
TtK-3-25.5'	25.5	10/23/2002	ND	ND	ND	ND
TtK-4-25.5'	25.5	10/22/2002	ND	ND	ND	ND
TtK-5-25.5'	25.5	10/21/2002	0.072	0.167	0.239	0.018
TtK-6-25.5'	25.5	10/21/2002	ND	ND	ND	ND
TtK-7-25.5'	25.5	11/27/2002	ND	ND	ND	ND
TtKB-13-30'	30	4/15/2002	0.147	2.433	2.58	0.039
TtKB-14-30'	30	4/17/2002	ND	ND	ND	ND
TtKB-15-30'	30	4/16/2002	2.046	6.338	8.384	0.568
TtKB-16-30'	30	4/17/2002	ND	ND	ND	ND
TtKB-18-30'	30	4/15/2002	0.405	1.19	1.595	0.115
TtKB-19-30'	30	4/17/2002	ND	0.154	0.154	ND
TtKB-21-30'	30	4/19/2002	0.07	0.606	0.676	0.018

TABLE 3-4

Total Polycyclic Aromatic Hydrocarbons (PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Data organized based on depth of the sample

Sample Number	Depth (ft)	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
TtKB-25-30'	30	4/19/2002	ND	ND	ND	ND
TtKB-26-30'	30	4/12/2002	ND	ND	ND	ND
TtKB-27-30'	30	4/12/2002	ND	ND	ND	ND
TtKB-38- 30.0'	30	10/18/2002	0.611	1.369	1.98	0.106
TtK-2-30'	30	4/22/2002	ND	ND	ND	ND
TtKB-24-30.25'	30.25	5/6/2002	0.384	0.996	1.38	0.112
TtKB-24-30.25' Dup	30.25	5/6/2002	0.411	1.272	1.683	0.089
TtKB-17- 30.5'	30.5	4/16/2002	0.747	1.123	1.87	0.217
TtKB-17- 30.5'Dup	30.5	4/16/2002	0.353	0.544	0.897	0.112
TtKB-23- 30.5'	30.5	4/19/2002	0.071	0.694	0.765	0.019
TtKB-23- 30.5'Dup	30.5	4/19/2002	ND	0.432	0.432	ND
TtKB-29- 30.5'	30.5	10/16/2002	0.105	0.193	0.298	0.020
TtKB-30- 30.5'	30.5	10/15/2002	0.961	1.432	2.393	0.159
TtKB-31- 30.5'	30.5	10/15/2002	0.092	0.295	0.387	0.019
TtKB-32- 30.5'	30.5	10/15/2002	ND	ND	ND	ND
TtKB-33-30.5'	30.5	11/25/2002	0.194	0.404	0.598	0.033
TtKB-34-30.5'	30.5	11/26/2002	ND	0.096	0.096	ND
TtKB-35- 30.5'	30.5	10/17/2002	7.523	11.246	18.769	1.402
TtKB-36- 30.5'	30.5	10/17/2002	1.355	2.5	3.855	0.216
TtKB-37- 30.5'	30.5	10/17/2002	4.974	10.825	15.799	0.757
TtKB-39- 30.5'	30.5	10/16/2002	ND	0.115	0.115	ND
TtK-1-30.5'	30.5	4/24/2002	0.087	0.591	0.678	0.020
TtK-1-30.5' DUP	30.5	4/24/2002	ND	0.277	0.277	ND
TtK-3-30.5'	30.5	10/23/2002	0.083	0.158	0.241	0.019
TtK-4-30.5'	30.5	10/22/2002	7.183	17.26	24.443	1.508
TtK-5-30.5'	30.5	10/21/2002	0.118	0.892	1.01	0.027
TtK-6-30.5'	30.5	10/21/2002	ND	ND	ND	ND
TtKB-35- 32.0'	32	10/17/2002	0.075	0.155	0.23	0.018
TtKB-38- 32.0'	32	10/18/2002	9.07	11.92	20.99	1.709
TtKB-16- 32.5'	32.5	4/17/2002	ND	ND	ND	ND
TtKB-22- 32.5'	32.5	4/12/2002	ND	0.18	0.183	ND
TtKB-17-33'	33	4/16/2002	ND	0.135	0.135	ND
TtKB-18-33'	33	4/15/2002	9.209	15.459	24.668	2.640
TtKB-20-33'	33	4/16/2002	2.585	4.516	7.101	0.680
TtKB-13- 33.5'	33.5	4/15/2002	0.07	0.257	0.327	0.018
TtKB-14- 33.5'	33.5	4/17/2002	ND	ND	ND	ND

TABLE 3-4

Total Polycyclic Aromatic Hydrocarbons (PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Data organized based on depth of the sample

Sample Number	Depth (ft)	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
TtKB-15- 33.5'	33.5	4/16/2002	24.21	95.102	119.312	6.835
TtKB-19- 33.5'	33.5	4/17/2002	0.081	0.269	0.35	0.018
TtKB-20- 33.5'	33.5	4/16/2002	0.224	0.293	0.517	0.062
TtKB-27- 33.5'	33.5	4/12/2002	ND	0.11	0.106	ND
TtKB-26-35'	35	4/12/2002	ND	ND	ND	ND
TtKB-38- 35.0'	35	10/18/2002	0.765	0.84	1.605	0.129
TtKB-29- 35.5'	35.5	10/16/2002	0.544	0.766	1.31	0.094
TtKB-30- 35.5'	35.5	10/15/2002	0.14	0.227	0.367	0.023
TtKB-31- 35.5'	35.5	10/15/2002	ND	0.101	0.101	ND
TtKB-35- 35.5'	35.5	10/17/2002	1.733	1.403	3.136	0.253
TtKB-36- 35.5'	35.5	10/17/2002	ND	ND	ND	ND
TtKB-37- 35.5'	35.5	10/17/2002	3.909	9.94	13.849	0.618
TtKB-39- 35.5'	35.5	10/16/2002	ND	0.107	0.107	ND
TtK-3-35.5'	35.5	10/23/2002	0.07	0.102	0.172	0.018
TtK-4-35.5'	35.5	10/22/2002	0.075	0.1	0.175	0.018
TtK-5-35.5'	35.5	10/21/2002	0.081	0.228	0.309	0.019
TtK-6-35.5'	35.5	10/21/2002	ND	0.112	0.112	ND
TtK-7-35.5'	35.5	11/27/2002	0.184	0.19	0.374	0.030
TtKB-21-36'	36	4/19/2002	ND	0.095	0.095	ND
TtKB-22-36'	36	4/12/2002	9.114	11.16	20.278	2.629
TtKB-23- 36.5'	36.5	4/19/2002	0.087	0.528	0.615	0.018
TtKB-38- 36.5'	36.5	10/18/2002	1.216	1.834	3.05	0.283
TtK-1-36.5'	36.5	4/24/2002	ND	0.09	0.09	ND
TtKB-24-37'	37	5/6/2002	52.48	50.84	103.32	14.854
TtK-2-37.5'	37.5	4/22/2002	ND	0.1	0.1	ND
TtKB-25-38'	38	4/19/2002	ND	ND	ND	ND
TtKB-31- 38.0'	38	10/15/2002	0.076	0.122	0.198	0.018
TtKB-32- 38.0'	38	10/15/2002	0.08	0.1	0.18	0.019
TtKB-39- 38.0'	38	10/16/2002	0.083	0.142	0.225	0.019
TtKB-29- 39.0'	39	10/16/2002	0.252	0.716	0.968	0.036
TtKB-36- 39.0'	39	10/17/2002	ND	ND	ND	ND
TtKB-30- 40.5'	40.5	10/15/2002	0.077	0.12	0.197	0.018
TtKB-30- 40.5' Dup	40.5	10/15/2002	0.07	0.1	0.17	0.018
TtKB-33-40.5'	40.5	11/25/2002	8.579	8.661	17.24	1.630
TtKB-34-40.5'	40.5	11/26/2002	18.54	18	36.54	3.818
TtK-3-40.5'	40.5	10/23/2002	0.205	0.156	0.361	0.035

TABLE 3-4

Total Polycyclic Aromatic Hydrocarbons (PAHs) in mg/kg, (EPA Method 8310)

Site Remediation at Former Sector C, Block K

Data organized based on depth of the sample

Sample Number	Depth (ft)	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)		Sum of Carcinogenic B(a)P Equivalent Concentration
TtK-4-40.5'	40.5	10/22/2002	ND	0.097	0.097		ND
TtK-5-40.5'	40.5	10/21/2002	0.373	0.471	0.844		0.089
TtK-6-40.5'	40.5	10/21/2002	0.329	0.419	0.748		0.051
TtKB-15-41'	41	4/16/2002	ND	0.114	0.114		ND
TtKB-18-41'	41	4/15/2002	0.077	0.161	0.238		0.019
TtK-7-41.5'	41.5	11/27/2002	0.07	0.142	0.212		0.018
TtK-1-43'	43	4/24/2002	52.76	152.71	205.47		15.713
TtK-5-44.0'	44	10/21/2002	0.119	0.214	0.333		0.021
TtKB-35- 44.5'	44.5	10/17/2002	0.076	0.146	0.222		0.018
TtKB-33-50.5'	50.5	11/25/2002	0.821	1.04	1.861		0.153
TtK-2-52'	52	4/22/2002	216	4494.8	4710.8		54.366
TtKB-33-55.5'	55.5	11/25/2002	118.36	632.1	750.46		26.107
TtKB-33-60.5'	60.5	11/25/2002	18.897	122.749	141.646		3.686
TtK-2-61'	61	4/22/2002	6.515	107.624	114.139		1.726
TtKB-33-65.5'	65.5	11/25/2002	26.05	67.57	93.62		5.214
TtKB-34-66.5'	66.5	11/26/2002	52.86	371.18	424.04		10.782
TtK-2-67.5'	67.5	4/22/2002	ND	0.627	0.627		ND
TtKB-33-70.5'	70.5	11/25/2002	18.103	61.195	79.298		3.621
TtKB-34-70.5'	70.5	11/26/2002	0.156	1.022	1.178		0.032
TtKB-33-80.5'	80.5	11/25/2002	1.548	3.361	4.909		0.319
TtKB-34-82.5'	82.5	11/26/2002	0.077	0.174	0.251		0.018
TtK-2-84.5'	84.5	4/22/2002	0.136	0.399	0.535		0.039
TtKB-34-86'	86	11/14/2002	ND	ND	ND		ND
TtKB-33-94'	94	11/13/2002	0.073	0.093	0.166		0.018
TtKB-34-107'	107	11/14/2002	ND	0.092	0.092		ND
TtKB-33- 118'	118	11/13/2002	ND	ND	ND		ND

1. Data are from Table 3-2.
2. Data are from Table 3-3.
3. Sum of carcinogenic and non-carcinogenic PAHs.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

			Confirmation Soil Samples							
			B7S1-5	C1F1-12	C1S2-10	C1S4-5	C1W1-11	C1W1-5	C2S1-10	C2S2-5
Analyte	MDL	PQL	9/17/2008	8/13/2008	8/19/2008	9/8/2008	8/19/2008	9/9/2008	9/3/2008	9/3/2008
1,1,1,2-Tetrachloroethane	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-Trichloroethane	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloropropene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichlorobenzene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trichlorobenzene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromo-3-chloropropane (DBCP)	25	50	<25	<25	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichlorobenzene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane (EDC)	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,3,5-Trimethylbenzene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Butadiene	5	10	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Dichlorobenzene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Dichloropropane	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
1,4-Dichlorobenzene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
2,2-Dichloropropane	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	25	50	<25	<25	<25	<25	<25	<25	<25	<25
2-Chloroethyl vinyl ether	50	50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
2-Hexanone	25	50	<25	<25	<25	<25	<25	<25	<25	<25
4-Chlorotoluene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone (MIBK)	25	50	<25	<25	<25	<25	<25	<25	<25	<25
Acetone	25	50	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	1.0	10.0	12.6	<1	<1	17.1	15.3	<1	16.6	<1
Bromobenzene (Phenyl bromide)	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Bromochloromethane	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Bromodichloromethane	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Bromoform (Tribromomethane)	25	50	<25	<25	<25	<25	<25	<25	<25	<25
Bromomethane (Methyl bromide)	15	30	<15	<15	<15	<15	<15	<15	<15	<15
Carbon Disulfide	25	50	<25	<25	<25	<25	<25	<25	<25	<25
Carbon tetrachloride	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	15	30	<15	<15	<15	<15	<15	<15	<15	<15
Chloroform (Trichloromethane)	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane (Methyl chloride)	15	30	<15	<15	<15	<15	<15	<15	<15	<15
cis-1,2-Dichloroethene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Dibromomethane	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	15	30	<15	<15	<15	<15	<15	<15	<15	<15
Dicyclopentadiene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	1.0	10.0	<1	<1	<1	<1	<1	<1	<1	<1
Ferrocene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Hexachlorobutadiene	15	30	<15	<15	<15	<15	<15	<15	<15	<15
Isopropylbenzene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
m,p-Xylenes	1.0	20.0	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride (DCM)	25	50	<25	<25	<25	<25	<25	<25	<25	<25
Methyl-tert-butyl ether (MTBE)	2.0	10.0	<2	<2	<2	<2	<2	<2	<2	<2
Naphthalene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
n-Butylbenzene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
o-Xylene	1.0	10.0	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
sec-Butylbenzene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Styrene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
tert-Butylbenzene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Toluene (Methyl benzene)	1.0	10.0	<1	<1	<1	1.91	<1	<1	<1	<1
trans-1,2-Dichloroethene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	5.0	10.0	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Acetate	25	50	<25	<25	<25	<25	<25	<25	<25	<25
Vinyl chloride (Chloroethene)	15	30	<15	<15	<15	<15	<15	<15	<15	<15

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

Analyte	C3E1-5 9/3/2008	C3E2-10 9/3/2008	C3F1-12 8/29/2008	C3S1-10 9/3/2008	C3S1-10D 9/3/2008	C3S2-5 9/3/2008	C6W1-5 9/17/2008	C7E1-5 9/17/2008	C7N1-5 9/17/2008
1,1,1,2-Tetrachloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromo-3-chloropropane (DBCP)	<25	<25	<25	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane (EDC)	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3,5-Trimethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Butadiene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,4-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
2,2-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	<25	<25	<25	<25	<25	<25	<25	<25	<25
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	<25
4-Chlorotoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Acetone	<25	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	2.24	7.43	<1	1.92	1.57	33.2	<1	4.2	2.9
Bromobenzene (Phenyl bromide)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromodichloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromoform (Tribromomethane)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Bromomethane (Methyl bromide)	<15	<15	<15	<15	<15	<15	<15	<15	<15
Carbon Disulfide	<25	<25	<25	<25	<25	<25	<25	<25	<25
Carbon tetrachloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	<15	<15	<15	<15	<15	<15	<15	<15	<15
Chloroform (Trichloromethane)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane (Methyl chloride)	<15	<15	<15	<15	<15	<15	<15	<15	<15
cis-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromomethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	<15	<15	<15	<15	<15	<15	<15	<15	<15
Dicyclopentadiene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ferrocene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Hexachlorobutadiene	<15	<15	<15	<15	<15	<15	<15	<15	<15
Isopropylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
m,p-Xylenes	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride (DCM)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Methyl-tert-butyl ether (MTBE)	<2	<2	<2	<2	<2	<2	<2	<2	<2
Naphthalene	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
o-Xylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
sec-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Styrene	<5	<5	<5	<5	<5	<5	<5	<5	<5
tert-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene (Methyl benzene)	<1	<1	<1	<1	<1	2.08	<1	<1	<1
trans-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25	<25
Vinyl chloride (Chloroethene)	<15	<15	<15	<15	<15	<15	<15	<15	<15

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	D1F1-11	D1F2-12	D1F3-12	D1W2-4	D1W4-12	D1W6-9	D1W7-6	D1W8-8	D2F1-18
Analyte	8/14/2008	8/15/2008	8/15/2008	8/14/2008	8/15/2008	8/20/2008	8/20/2008	8/20/2008	8/28/2008
1,1,1,2-Tetrachloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromo-3-chloropropane (DBCP)	<25	<25	<25	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane (EDC)	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3,5-Trimethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Butadiene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,4-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
2,2-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	<25	<25	<25	<25	<25	<25	<25	<25	<25
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	<25
4-Chlorotoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Acetone	<25	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	<1	7.7	15.5	<1	1.4	<1	66.8	17.8	<1
Bromobenzene (Phenyl bromide)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromodichloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromoform (Tribromomethane)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Bromomethane (Methyl bromide)	<15	<15	<15	<15	<15	<15	<15	<15	<15
Carbon Disulfide	<25	<25	<25	<25	<25	<25	<25	<25	<25
Carbon tetrachloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	<15	<15	<15	<15	<15	<15	<15	<15	<15
Chloroform (Trichloromethane)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane (Methyl chloride)	<15	<15	<15	<15	<15	<15	<15	<15	<15
cis-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromomethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	<15	<15	<15	<15	<15	<15	<15	<15	<15
Dicyclopentadiene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ferrocene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Hexachlorobutadiene	<15	<15	<15	<15	<15	<15	<15	<15	<15
Isopropylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
m,p-Xylenes	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride (DCM)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Methyl-tert-butyl ether (MTBE)	<2	<2	<2	<2	<2	<2	<2	<2	<2
Naphthalene	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
o-Xylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
sec-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Styrene	<5	<5	<5	<5	<5	<5	<5	<5	<5
tert-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene (Methyl benzene)	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25	<25
Vinyl chloride (Chloroethene)	<15	<15	<15	<15	<15	<15	<15	<15	<15

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

Analyte	D2F2-7 8/29/2008	D3E1-5 8/28/2008	D3E2-5 9/3/2008	D3E3-10 9/3/2008	D3F1-12 8/29/2008	E1F1-13 8/25/2008	E1F1-5 9/8/2008	E1F2-23 8/29/2008	E1N1-5 9/8/2008
1,1,1,2-Tetrachloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromo-3-chloropropane (DBCP)	<25	<25	<25	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane (EDC)	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3,5-Trimethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Butadiene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,4-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
2,2-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	<25	<25	<25	<25	<25	<25	<25	<25	<25
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	<25
4-Chlorotoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Acetone	<25	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	<1	<1	3.1	1.93	<1	<1	14.4	<1	10.9
Bromobenzene (Phenyl bromide)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromodichloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromoform (Tribromomethane)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Bromomethane (Methyl bromide)	<15	<15	<15	<15	<15	<15	<15	<15	<15
Carbon Disulfide	<25	<25	<25	<25	<25	<25	<25	<25	<25
Carbon tetrachloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	<15	<15	<15	<15	<15	<15	<15	<15	<15
Chloroform (Trichloromethane)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane (Methyl chloride)	<15	<15	<15	<15	<15	<15	<15	<15	<15
cis-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromomethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	<15	<15	<15	<15	<15	<15	<15	<15	<15
Dicyclopentadiene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ferrocene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Hexachlorobutadiene	<15	<15	<15	<15	<15	<15	<15	<15	<15
Isopropylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
m,p-Xylenes	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride (DCM)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Methyl-tert-butyl ether (MTBE)	<2	<2	<2	<2	<2	<2	<2	<2	<2
Naphthalene	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
o-Xylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
sec-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Styrene	<5	<5	<5	<5	<5	<5	<5	<5	<5
tert-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene (Methyl benzene)	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25	<25
Vinyl chloride (Chloroethene)	<15	<15	<15	<15	<15	<15	<15	<15	<15

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	E1W1-4	E2F1-4	E3E1-5	E3E2-10	E3N1-10	E3N2-5	F1F1-11	F1N2-5	F1W1-2
Analyte	8/22/2008	8/26/2008	9/3/2008	9/3/2008	9/4/2008	9/4/2008	9/5/2008	9/8/2008	9/8/2008
1,1,1,2-Tetrachloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromo-3-chloropropane (DBCP)	<25	<25	<25	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane (EDC)	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3,5-Trimethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Butadiene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,4-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
2,2-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	<25	<25	<25	<25	<25	<25	<25	<25	<25
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	<25
4-Chlorotoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Acetone	<25	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	56.1	29.7	5.33	6.76	<1	<1	<1	<1	<1
Bromobenzene (Phenyl bromide)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromodichloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromoform (Tribromomethane)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Bromomethane (Methyl bromide)	<15	<15	<15	<15	<15	<15	<15	<15	<15
Carbon Disulfide	<25	<25	<25	<25	<25	<25	<25	<25	<25
Carbon tetrachloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	<15	<15	<15	<15	<15	<15	<15	<15	<15
Chloroform (Trichloromethane)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane (Methyl chloride)	<15	<15	<15	<15	<15	<15	<15	<15	<15
cis-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromomethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	<15	<15	<15	<15	<15	<15	<15	<15	<15
Dicyclopentadiene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ferrocene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Hexachlorobutadiene	<15	<15	<15	<15	<15	<15	<15	<15	<15
Isopropylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
m,p-Xylenes	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride (DCM)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Methyl-tert-butyl ether (MTBE)	<2	<2	<2	<2	<2	<2	<2	<2	<2
Naphthalene	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
o-Xylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
sec-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Styrene	<5	<5	<5	<5	<5	<5	<5	<5	<5
tert-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene (Methyl benzene)	1.72	2.16	1.72	1.81	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25	<25
Vinyl chloride (Chloroethene)	<15	<15	<15	<15	<15	<15	<15	<15	<15

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	F3F1-11	G1W1-10	G2N1-10	G2N2-5	G2N3-2	H11F1-6	H11S1-5	H11W1-5	H12E1-5
Analyte	8/21/2008	9/5/2008	9/5/2008	9/5/2008	9/5/2008	9/18/2008	9/18/2008	9/18/2008	9/18/2008
1,1,1,2-Tetrachloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromo-3-chloropropane (DBCP)	<25	<25	<25	<25	<25	<25	<25	<25	<25
1,2-Dibromoethane (EDB)	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane (EDC)	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3,5-Trimethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Butadiene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,3-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,4-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
2,2-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	<25	<25	<25	<25	<25	<25	<25	<25	<25
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	<25
4-Chlorotoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Acetone	<25	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromobenzene (Phenyl bromide)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromodichloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromoform (Tribromomethane)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Bromomethane (Methyl bromide)	<15	<15	<15	<15	<15	<15	<15	<15	<15
Carbon Disulfide	<25	<25	<25	<25	<25	<25	<25	<25	<25
Carbon tetrachloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	<15	<15	<15	<15	<15	<15	<15	<15	<15
Chloroform (Trichloromethane)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane (Methyl chloride)	<15	<15	<15	<15	<15	<15	<15	<15	<15
cis-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromomethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	<15	<15	<15	<15	<15	<15	<15	<15	<15
Dicyclopentadiene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ferrocene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Hexachlorobutadiene	<15	<15	<15	<15	<15	<15	<15	<15	<15
Isopropylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
m,p-Xylenes	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride (DCM)	<25	<25	<25	<25	<25	<25	<25	<25	<25
Methyl-tert-butyl ether (MTBE)	<2	<2	<2	<2	<2	<2	<2	<2	<2
Naphthalene	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
o-Xylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	<5	<5	<5	<5	<5	<5	<5	<5	<5
sec-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Styrene	<5	<5	<5	<5	<5	<5	<5	<5	<5
tert-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene (Methyl benzene)	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25	<25
Vinyl chloride (Chloroethene)	<15	<15	<15	<15	<15	<15	<15	<15	<15

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

				RI Confirmation Well Samples						
	I11N1-5	T1-10	T1-5	TtK-1-3.5'	TtK-1-5'	TtK-1-10'	TtK-1-15'	TtK-1-20'	TtK-1-30.5'	TtK-1-30.5' DUP
Analyte	9/18/2008	9/17/2008	9/17/2008	4/24/2002	4/24/2002	4/24/2002	4/24/2002	4/24/2002	4/24/2002	4/24/2002
1,1,1,2-Tetrachloroethane	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<25	<25	<25	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<25	<25	<25	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<25	<25	<25	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<25	<25	<25	<50	<50	<50	<50	<50	<50	<50
Acetone	<25	<25	<25	<50	<50	<50	<50	<50	<50	<50
Benzene	<1	<1	<1	<10	9.2	<10	<10	<10	<10	<10
Bromobenzene (Phenyl bromide)	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<25	<25	<25	<50	<50	<50	<50	<50	<50	<50
Bromomethane (Methyl bromide)	<15	<15	<15	<30	<30	<30	<30	<30	<30	<30
Carbon Disulfide	<25	<25	<25	<50	<50	<50	<50	<50	<50	<50
Carbon tetrachloride	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<15	<15	<15	<30	<30	<30	<30	<30	<30	<30
Chloroform (Trichloromethane)	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<15	<15	<15	<30	<30	<30	<30	<30	<30	<30
cis-1,2-Dichloroethene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<15	<15	<15	<30	<30	<30	<30	<30	<30	<30
Dicyclopentadiene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<1	<1	<1	<10	<10	<10	<10	<10	<10	<10
Ferrocene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<15	<15	<15	<30	<30	<30	<30	<30	<30	<30
Isopropylbenzene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
m,p-Xylenes	<1	<1	<1	<20	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<25	<25	<25	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<2	<2	<2	<10	5.7	<10	14	<10	<10	<10
Naphthalene	<5	<5	<5	<10	<10	<10	<10	<10	109	91.4
n-Butylbenzene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
o-Xylene	<1	<1	<1	<10	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Styrene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
tert-Butylbenzene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	<1	<1	<1	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<25	<25	<25	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<15	<15	<15	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtK-1-36.5'	TtK-1-43'	TtK-2-2'	TtK-2-5'	TtK-2-10'	TtK-2-20'	TtK-2-30'	TtK-2-37.5'	TtK-2-52'	TtK-2-61'
Analyte	4/24/2002	4/24/2002	4/22/2002	4/22/2002	4/22/2002	4/22/2002	4/22/2002	4/22/2002	4/22/2002	4/22/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,2,4-Trimethylbenzene	<10	36.3	<10	<10	<10	<10	<10	<10	125000	11400
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<250
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,3,5-Trimethylbenzene	<10	10.1	<10	<10	<10	<10	<10	<10	44800	5230
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<250
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50	<50	<250
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50	<50	<250
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<250
Acetone	<50	<50	<50	<50	<50	<50	<50	<50	<50	<250
Benzene	5.8	15.1	53.6	7.4	<10	<10	<10	10.6	3950	110
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Bromoform (Tribromomethane)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<250
Bromomethane (Methyl bromide)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<150
Carbon Disulfide	<50	<50	<50	<50	<50	<50	<50	<50	<50	<250
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Chloroethane	<30	<30	<30	<30	<30	<30	<30	<30	<30	<150
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Chloromethane (Methyl chloride)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<150
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Dichlorodifluoromethane	<30	<30	<30	<30	<30	<30	<30	<30	<30	<150
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Ethylbenzene	<10	75.8	<10	<10	<10	<10	<10	<10	31400	10400
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Hexachlorobutadiene	<30	<30	<30	<30	<30	<30	<30	<30	<30	<150
Isopropylbenzene	<10	10.1	<10	<10	<10	<10	<10	<10	1810	156
m,p-Xylenes	<20	84.7	<20	<20	<20	<20	<20	<20	86100	29500
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<250
Methyl-tert-butyl ether (MTBE)	8.7	8.7	<10	<10	<10	<10	<10	<10	<10	<50
Naphthalene	<10	20600	<10	<10	<10	<10	<10	<10	2720000	253000
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
n-Propylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	5850	564
o-Xylene	<10	35.3	<10	<10	<10	<10	<10	<10	31600	11400
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	318	<50
Styrene	<10	<10	<10	<10	<10	<10	<10	<10	<10	5770
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Toluene (Methyl benzene)	<10	6.6	3.3	2.8	<10	<10	<10	<10	72.7	10600
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50	<50	<250
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<150

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

Analyte	TtK-2-67.5' 4/22/2002	TtK-2-84.5' 4/22/2002	TtK-3-5' 10/23/2002	TtK-3-5' Dup 10/23/2002	TtK-3-10.5' 10/23/2002	TtK-3-15.5' 10/23/2002	TtK-3-20.5' 10/23/2002	TtK-3-25.5' 10/23/2002	TtK-3-30.5' 10/23/2002	TtK-3-35.5' 10/23/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	11.7	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	26.4	<10	2	3.5	<10	<10	2.2	<10	2.6	18.2
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Bromomethane (Methyl bromide)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Carbon Disulfide	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	33.6	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Isopropylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
m,p-Xylenes	16.9	<20	<20	<20	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	1210	<10	<10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
o-Xylene	10.6	<10	<10	<10	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Styrene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	5.1	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

Analyte	TtK-3-40.5' 10/23/2002	TtK-4-10.5' 10/22/2002	TtK-4-15.5' 10/22/2002	TtK-4-25.5' 10/22/2002	TtK-4-30.5' 10/22/2002	TtK-4-35.5' 10/22/2002	TtK-4-40.5' 10/22/2002	TtK-5-20.5' 10/21/2002	TtK-5-25.5' 10/21/2002	TtK-5-30.5' 10/21/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,1,1-Trichloroethane	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,1,2-Trichloroethane	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,1-Dichloroethane	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,1-Dichloroethene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,1-Dichloropropene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,2,3-Trichloropropane	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,2,4-Trimethylbenzene	<10	<10	<10	<10	1120.00	<10	<10	<10	<10	50.00
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<250	<50	<50	<50	<50	<250
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,2-Dichlorobenzene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,2-Dichloropropane	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,3,5-Trimethylbenzene	<10	<10	<10	<10	60.00	<10	<10	<10	<10	<50
1,3-Butadiene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,3-Dichlorobenzene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,3-Dichloropropane	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
1,4-Dichlorobenzene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
2,2-Dichloropropane	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
2-Butanone (MEK)	<50	<50	<50	<50	<250	<50	<50	<50	<50	<250
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<250	<50	<50	<50	<50	<250
2-Chlorotoluene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
2-Hexanone	<50	<50	<50	<50	<250	<50	<50	<50	<50	<250
4-Chlorotoluene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<250	<50	<50	<50	<50	<250
Acetone	<50	<50	<50	<50	<250	<50	<50	<50	<50	<250
Benzene	17.9	<10	<10	<10	<50	8.50	38.40	<10	<10	<50
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Bromochloromethane	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Bromodichloromethane	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Bromoform (Tribromomethane)	<50	<50	<50	<50	<250	<50	<50	<50	<50	<250
Bromomethane (Methyl bromide)	<30	<30	<30	<30	<150	<30	<30	<30	<30	<150
Carbon Disulfide	<50	<50	<50	<50	<250	<50	<50	<50	<50	<250
Carbon tetrachloride	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Chlorobenzene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Chloroethane	<30	<30	<30	<30	<150	<30	<30	<30	<30	<150
Chloroform (Trichloromethane)	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Chloromethane (Methyl chloride)	<30	<30	<30	<30	<150	<30	<30	<30	<30	<150
cis-1,2-Dichloroethene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
cis-1,3-Dichloropropene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Dibromochloromethane	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Dibromomethane	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Dichlorodifluoromethane	<30	<30	<30	<30	<150	<30	<30	<30	<30	<150
Dicyclopentadiene	<10	<10	<10	<10	<50	<10	<10	<10	<10	37500.00
Ethylbenzene	<10	<10	<10	<10	<50	<10	2.40	<10	<10	<50
Ferrocene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Hexachlorobutadiene	<30	<30	<30	<30	<150	<30	<30	<30	<30	<150
Isopropylbenzene	<10	<10	<10	<10	30.00	<10	<10	<10	<10	<50
m,p-Xylenes	<20	<20	<20	<20	<100	<20	<20	<20	<20	<100
Methylene chloride (DCM)	<50	<50	<50	<50	<250	<50	<50	<50	<50	<250
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Naphthalene	<10	<10	<10	<10	660.00	<10	<10	<10	12.00	700.00
n-Butylbenzene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
n-Propylbenzene	<10	<10	<10	<10	125.00	<10	<10	<10	<10	<50
o-Xylene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
p-Isopropyltoluene	<10	<10	<10	<10	195.00	<10	<10	<10	<10	<50
sec-Butylbenzene	<10	<10	<10	<10	100.00	<10	<10	<10	<10	<50
Styrene	<10	<10	<10	<10	<50	<10	<10	<10	8.80	<50
tert-Butylbenzene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Tetrachloroethene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Toluene (Methyl benzene)	<10	<10	<10	<10	25.00	<10	2.40	2.60	<10	30.00
trans-1,2-Dichloroethene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
trans-1,3-Dichloropropene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Trichloroethene	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Trichlorofluoromethane	<10	<10	<10	<10	<50	<10	<10	<10	<10	<50
Vinyl Acetate	<50	<50	<50	<50	<250	<50	<50	<50	<50	<250
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<150	<30	<30	<30	<30	<150

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtK-5-35.5'	TtK-5-40.5'	TtK-5-44.0'	TtK-6-5'	TtK-6-10.5'	TtK-6-15.5'	TtK-6-20.5'	TtK-6-25.5'	TtK-6-30.5'	TtK-6-35.5'
Analyte	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/21/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	4.80	20.80	8.80	16.20	<10	<10	<10	<10	<10	<10
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Bromomethane (Methyl bromide)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Carbon Disulfide	<50	26.60	<50	<50	<50	<50	<50	<50	<50	<50
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	2.90	<10	<10	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Isopropylbenzene	<10	5.60	<10	<10	<10	<10	<10	<10	<10	<10
m,p-Xylenes	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	<10	<10	9.10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
o-Xylene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Styrene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	<10	2.30	<10	3.80	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtK-6-40.5'	TtK-7-5'	TtK-7-5' Dup	TtK-7-10.5'	TtK-7-15.5'	TtK-7-20.5'	TtK-7-25.5'	TtK-7-35.5'	TtK-7-41.5'
Analyte	10/21/2002	11/27/2002	11/27/2002	11/27/2002	11/27/2002	11/27/2002	11/27/2002	11/27/2002	11/27/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	27.10	<10	<10	<10	<10	<10	<10	12.2	53.8
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<50	<50	<50	<50	<50	<50	<50	<50	<50
Bromomethane (Methyl bromide)	<30	<30	<30	<30	<30	<30	<30	<30	<30
Carbon Disulfide	31.20	<50	<50	<50	<50	<50	<50	<50	<50
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<30	<30	<30	<30	<30	<30	<30	<30	<30
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<30	<30	<30	<30	<30	<30	<30	<30	<30
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<30	<30	<30	<30	<30	<30	<30	<30	<30
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	3.00	<10	<10	<10	<10	<10	<10	<10	2.4
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<30	<30	<30	<30	<30	<30	<30	<30	<30
Isopropylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	7.5
m,p-Xylenes	<20	<20	<20	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	8.00	<10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	8.70	<10	<10	<10	<10	<10	<10	<10	<10
o-Xylene	<10	<10	<10	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Styrene	<10	<10	<10	<10	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	8.2	13.3	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	2.50	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

			RI Confirmation Soil Samples							
			TtKB-13-1'	TtKB-13-5'	TtKB-13-10'	TtKB-13- 20.5'	TtKB-13- 20.5'Dup	TtKB-13-30'	TtKB-13- 33.5'	TtKB-14-2'
Analyte	MDL	PQL	4/15/2002	4/15/2002	4/15/2002	4/15/2002	4/15/2002	4/15/2002	4/15/2002	4/17/2002
1,1,1,2-Tetrachloroethane	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	5.0	10.0	<10	<10	<10	<10	<10	246	12.2	<10
1,2-Dibromo-3-chloropropane (DBCP)	25	50	<50	<50	<50	<50	<50	<50	<50	<10
1,2-Dibromoethane (EDB)	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	5.0	10.0	<10	<10	<10	<10	<10	16.9	<10	<10
1,3-Butadiene	5	10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	25	50	<50	<50	<50	<50	<50	<50	<50	<10
2-Chloroethyl vinyl ether	50	50	<50	<50	<50	<50	<50	<50	<50	<10
2-Chlorotoluene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	25	50	<50	<50	<50	<50	<50	<50	<50	<10
4-Chlorotoluene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	25	50	<50	<50	<50	<50	<50	<50	<50	<10
Acetone	25	50	<50	<50	<50	<50	<50	<50	<50	<10
Benzene	1.0	10.0	<10	<10	<10	6.5	5.5	<10	<10	<10
Bromobenzene (Phenyl bromide)	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	25	50	<50	<50	<50	<50	<50	<50	<50	<10
Bromomethane (Methyl bromide)	15	30	<30	<30	<30	<30	<30	<30	<30	<10
Carbon Disulfide	25	50	<50	<50	<50	<50	<50	<50	<50	<10
Carbon tetrachloride	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	15	30	<30	<30	<30	<30	<30	<30	<30	<10
Chloroform (Trichloromethane)	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	15	30	<30	<30	<30	<30	<30	<30	<30	<10
cis-1,2-Dichloroethene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	15	30	<30	<30	<30	<30	<30	<30	<30	<10
Dicyclopentadiene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	1.0	10.0	<10	<10	<10	<10	<10	97	<10	<10
Ferrocene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	15	30	<30	<30	<30	<30	<30	<30	<30	<10
Isopropylbenzene	5.0	10.0	<10	<10	<10	<10	<10	40.3	8.3	<10
m,p-Xylenes	1.0	20.0	<20	<20	<20	<20	<20	73.7	6.8	<10
Methylene chloride (DCM)	25	50	<50	<50	<50	<50	<50	<50	<50	<10
Methyl-tert-butyl ether (MTBE)	2.0	10.0	<10	<10	<10	<10	<10	<10	<10	<20
Naphthalene	5.0	10.0	<10	<10	<10	<10	<10	158	18.2	<30
n-Butylbenzene	5.0	10.0	<10	<10	<10	<10	<10	50.4	5.2	<30
n-Propylbenzene	5.0	10.0	<10	<10	<10	<10	<10	82.1	9.5	<30
o-Xylene	1.0	10.0	<10	<10	<10	<10	<10	12.5	<10	<30
p-Isopropyltoluene	5.0	10.0	<10	<10	<10	<10	<10	61.7	5.2	<30
sec-Butylbenzene	5.0	10.0	<10	<10	<10	<10	<10	33.9	5.1	<30
Styrene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<50
tert-Butylbenzene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<50
Tetrachloroethene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<50
Toluene (Methyl benzene)	1.0	10.0	<10	<10	<10	<10	<10	<10	8.1	<50
trans-1,2-Dichloroethene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<50
trans-1,3-Dichloropropene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<50
Trichloroethene	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<50
Trichlorofluoromethane	5.0	10.0	<10	<10	<10	<10	<10	<10	<10	<50
Vinyl Acetate	25	50	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	15	30	<30	<30	<30	<30	<30	<30	<30	<50

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

Analyte	TtKB-14-5' 4/17/2002	TtKB-14- 10.5' 4/17/2002	TtKB-14- 10.5' Dup 4/17/2002	TtKB-14- 20' 4/17/2002	TtKB-14-30' 4/17/2002	TtKB-14- 33.5' 4/17/2002	TtKB-15-1' 4/16/2002	TtKB-15-5' 4/16/2002	TtKB-15- 4/16/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<10	<10	<10	<10	<10	<10	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<10	<10	<10	<10	<10	<10	<50	<50	<50
2-Chloroethyl vinyl ether	<10	<10	<10	<10	<10	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<10	<10	<10	<10	<10	<10	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<10	<10	<10	<10	<10	<10	<50	<50	<50
Acetone	<10	<10	<10	<10	<10	<10	<50	<50	<50
Benzene	<10	<10	<10	<10	<10	7	<10	<10	<10
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<10	<10	<10	<10	<10	<10	<50	<50	<50
Bromomethane (Methyl bromide)	<10	<10	<10	<10	<10	<10	<30	<30	<30
Carbon Disulfide	<10	<10	<10	<10	<10	<10	<50	<50	<50
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<10	<10	<10	<10	<30	<30	<30
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<10	<10	<10	<10	<10	<10	<30	<30	<30
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<10	<30	<30	<30
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10	<10	<10	<10	<30	<30	<30
Isopropylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
m,p-Xylenes	<10	<10	<10	<10	<10	<10	<20	<20	<20
Methylene chloride (DCM)	<10	<10	<10	<10	<10	<10	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<20	<20	<20	<20	<20	<20	<10	<10	<10
Naphthalene	<30	<30	<30	<30	<30	<30	<10	<10	<10
n-Butylbenzene	<30	<30	<30	<30	<30	<30	<10	<10	<10
n-Propylbenzene	<30	<30	<30	<30	<30	<30	<10	<10	<10
o-Xylene	<30	<30	<30	<30	<30	<30	<10	<10	<10
p-Isopropyltoluene	<30	<30	<30	<30	<30	<30	<10	<10	<10
sec-Butylbenzene	<30	<30	<30	<30	<30	<30	<10	<10	<10
Styrene	<50	<50	<50	<50	<50	<50	<10	<10	<10
tert-Butylbenzene	<50	<50	<50	<50	<50	<50	<10	<10	<10
Tetrachloroethene	<50	<50	<50	<50	<50	<50	6.3	<10	<10
Toluene (Methyl benzene)	<50	<50	<50	<50	<50	<50	<10	<10	<10
trans-1,2-Dichloroethene	<50	<50	<50	<50	<50	<50	<10	<10	<10
trans-1,3-Dichloropropene	<50	<50	<50	<50	<50	<50	<10	<10	<10
Trichloroethene	<50	<50	<50	<50	<50	<50	<10	<10	<10
Trichlorofluoromethane	<50	<50	<50	<50	<50	<50	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<50	<50	<50	<50	<50	<50	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-15-15'	TtKB-15-20'	TtKB-15-30'	TtKB-15- 33.5'	TtKB-15-41'	TtKB-16-1'	TtKB-16-5'	TtKB-16-10'	TtKB-16-20'
Analyte	4/16/2002	4/16/2002	4/16/2002	4/16/2002	4/16/2002	4/17/2002	4/17/2002	4/17/2002	4/17/2002
1,1,1,2-Tetrachloroethane	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	6580	295	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<250	<250	<50	<10	<10	<10	<10
1,2-Dibromoethane (EDB)	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	1490	<50	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<50	<50	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<50	<50	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<50	<50	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<250	<250	<50	<10	<10	<10	<10
2-Chloroethyl vinyl ether	<50	<50	<250	<250	<50	<10	<10	<10	<10
2-Chlorotoluene	<10	<10	<50	<50	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<250	<250	<50	<10	<10	<10	<10
4-Chlorotoluene	<10	<10	<50	<50	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<250	<250	<50	<10	<10	<10	<10
Acetone	<50	<50	<250	<250	<50	<10	<10	<10	<10
Benzene	<10	<10	<50	184	9.5	<10	<10	<10	<10
Bromobenzene (Phenyl bromide)	<10	<10	<50	<50	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<50	<50	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<50	<50	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<50	<50	<250	<250	<50	<10	<10	<10	<10
Bromomethane (Methyl bromide)	<30	<30	<150	<150	<30	<10	<10	<10	<10
Carbon Disulfide	<50	<50	<250	<250	<50	<10	<10	<10	<10
Carbon tetrachloride	<10	<10	<50	<50	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<50	<50	<10	<10	<10	<10	<10
Chloroethane	<30	<30	<150	<150	<30	<10	<10	<10	<10
Chloroform (Trichloromethane)	<10	<10	<50	<50	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<30	<30	<150	<150	<30	<10	<10	<10	<10
cis-1,2-Dichloroethene	<10	<10	<50	<50	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<50	<50	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<50	<50	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<50	<50	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<30	<30	<150	<150	<30	<10	<10	<10	<10
Dicyclopentadiene	<10	<10	<50	<50	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	1520	278	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<50	<50	<10	<10	<10	<10	<10
Hexachlorobutadiene	<30	<30	<150	<150	<30	<10	<10	<10	<10
Isopropylbenzene	<10	<10	3390	1500	<10	<10	<10	<10	<10
m,p-Xylenes	<20	<20	1180	72.5	<20	<10	<10	<10	<10
Methylene chloride (DCM)	<50	<50	<250	<250	<50	<10	<10	<10	<10
Methyl-tert-butyl ether (MTBE)	<10	<10	<50	<50	<10	<20	<20	<20	<20
Naphthalene	<10	<10	7370	364	<10	<30	<30	<30	<30
n-Butylbenzene	<10	<10	<50	<50	<10	<30	<30	<30	<30
n-Propylbenzene	<10	<10	7610	2450	<10	<30	<30	<30	<30
o-Xylene	<10	<10	1790	<50	<10	<30	<30	<30	<30
p-Isopropyltoluene	<10	<10	7570	4020	<10	<30	<30	<30	<30
sec-Butylbenzene	<10	<10	2750	3090	<10	<30	<30	<30	<30
Styrene	<10	<10	<50	<50	<10	<50	<50	<50	<50
tert-Butylbenzene	<10	<10	<50	<50	<10	<50	<50	<50	<50
Tetrachloroethene	<10	<10	<50	<50	<10	<50	<50	<50	<50
Toluene (Methyl benzene)	<10	<10	<50	<50	<10	<50	<50	<50	<50
trans-1,2-Dichloroethene	<10	<10	<50	<50	<10	<50	<50	<50	<50
trans-1,3-Dichloropropene	<10	<10	<50	<50	<10	<50	<50	<50	<50
Trichloroethene	<10	<10	<50	<50	<10	<50	<50	<50	<50
Trichlorofluoromethane	<10	<10	<50	<50	<10	<50	<50	<50	<50
Vinyl Acetate	<50	<50	<250	<250	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<150	<150	<30	<50	<50	<50	<50

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

Analyte	TtKB-16-30' 4/17/2002	TtKB-16- 32.5' 4/17/2002	TtKB-17-5' 4/16/2002	TtKB-17-10' 4/16/2002	TtKB-17- 30.5' 4/16/2002	TtKB-17- 30.5'Dup 4/16/2002	TtKB-17-33' 4/16/2002	TtKB-18-1' 4/15/2002	TtKB-18-5' 4/15/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<10	<10	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<10	<10	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<10	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<10	<10	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<10	<10	<50	<50	<50	<50	<50	<50	<50
Acetone	<10	<10	<50	<50	<50	<50	<50	<50	<50
Benzene	<10	17.1	<10	<10	3	<10	68.4	<10	5.1
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<10	<10	<50	<50	<50	<50	<50	<50	<50
Bromomethane (Methyl bromide)	<10	<10	<30	<30	<30	<30	<30	<30	<30
Carbon Disulfide	<10	<10	<50	<50	<50	<50	<50	<50	<50
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<30	<30	<30	<30	<30	<30	<30
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<10	<10	<30	<30	<30	<30	<30	<30	<30
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<10	<10	<30	<30	<30	<30	<30	<30	<30
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	<10	<10	<10	<10	6.5	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<30	<30	<30	<30	<30	<30	<30
Isopropylbenzene	<10	<10	<10	<10	69.5	33.8	8.5	<10	<10
m,p-Xylenes	<10	<10	<20	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<10	<10	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<20	<20	<10	<10	<10	<10	<10	<10	<10
Naphthalene	<30	<30	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<30	<30	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<30	<30	<10	<10	<10	<10	<10	<10	<10
o-Xylene	<30	<30	<10	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<30	<30	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<30	<30	<10	<10	107	52.7	<10	<10	<10
Styrene	<50	<50	<10	<10	<10	<10	<10	<10	<10
tert-Butylbenzene	<50	<50	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<50	<50	<10	<10	<10	<10	<10	<10	5.9
Toluene (Methyl benzene)	<50	<50	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<50	<50	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<50	<50	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<50	<50	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<50	<50	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<50	<50	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-18-10'	TtKB-18-15'	TtKB-18-20'	TtKB-18-30'	TtKB-18-33'	TtKB-18-41'	TtKB-19-1'	TtKB-19-5'	TtKB-19-10'
Analyte	4/15/2002	4/15/2002	4/15/2002	4/15/2002	4/15/2002	4/15/2002	4/17/2002	4/17/2002	4/17/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	1460	46.9	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<10	<10	<10
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	9	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<10	<10	<10
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<10	<50	<10
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<10	<10	<10
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<10	<10	<10
Acetone	<50	<50	<50	<50	<50	<50	<10	<10	<10
Benzene	<10	<10	<10	<10	55.6	<10	<10	52.8	<10
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<50	<50	<50	<50	<50	<50	<10	<10	<10
Bromomethane (Methyl bromide)	<30	<30	<30	<30	<30	<30	<10	<10	<10
Carbon Disulfide	<50	<50	<50	<50	<50	<50	<10	<10	<10
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<30	<30	<30	<30	<30	<30	<10	<30	<10
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<30	<30	<30	<30	<30	<30	<10	<10	<10
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<30	<30	<30	<30	<30	<30	<10	<10	<10
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	<10	<10	141	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<30	<30	<30	<30	<30	<30	<10	<10	<10
Isopropylbenzene	<10	<10	<10	<10	3580	9.4	<10	<10	<10
m,p-Xylenes	<20	<20	<20	<20	82	<20	<10	<10	<10
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<10	<10	<10
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<20	9.8	<20
Naphthalene	<10	<10	<10	5.2	<10	<10	<30	<30	<30
n-Butylbenzene	<10	<10	<10	<10	7050	21.2	<30	<30	<30
n-Propylbenzene	<10	<10	<10	<10	10300	18.5	<30	<30	<30
o-Xylene	<10	<10	<10	<10	23.4	<10	<30	<30	<30
p-Isopropyltoluene	<10	<10	<10	<10	3440	7.4	<30	<30	<30
sec-Butylbenzene	<10	<10	<10	<10	2890	10.8	<30	<30	<30
Styrene	<10	<10	<10	<10	<10	<10	<50	<50	<50
tert-Butylbenzene	<10	<10	<10	<10	40.6	<10	<50	<50	<50
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<50	<50	<50
Toluene (Methyl benzene)	<10	<10	<10	<10	32	<10	<50	<50	<50
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<50	<50	<50
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<50	<50	<50
Trichloroethene	<10	<10	<10	<10	<10	<10	<50	<50	<50
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<50	<50	<50
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<50	<50	<50

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-19-20'	TtKB-19-30'	TtKB-19- 33.5'	TtKB-20-2'	TtKB-20-5'	TtKB-20-10'	TtKB-20-20'	TtKB-20-33'	TtKB-20- 33.5'
Analyte	4/17/2002	4/17/2002	4/17/2002	4/16/2002	4/16/2002	4/16/2002	4/16/2002	4/16/2002	4/16/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	68.8	16.4
1,2-Dibromo-3-chloropropane (DBCP)	<10	<10	<10	<50	<50	<50	<50	<250	<100
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<50	<20
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<50	<20
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<50	<20
2-Butanone (MEK)	<10	<10	<10	<50	<50	<50	<50	<250	<100
2-Chloroethyl vinyl ether	<10	<10	<50	<50	<50	<50	<50	<250	<100
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<50	<20
2-Hexanone	<10	<10	<10	<50	<50	<50	<50	<250	<100
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<50	<20
4-Methyl-2-pentanone (MIBK)	<10	<10	<10	<50	<50	<50	<50	<250	<100
Acetone	<10	<10	<10	<50	<50	<50	<50	<250	<100
Benzene	<10	<10	5	3.8	<10	<10	<10	<50	<20
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<50	<20
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<50	<20
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<50	<20
Bromoform (Tribromomethane)	<10	<10	<10	<50	<50	<50	<50	<250	<100
Bromomethane (Methyl bromide)	<10	<10	<10	<30	<30	<30	<30	<150	<60
Carbon Disulfide	<10	<10	<10	<50	<50	<50	<50	<250	<100
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<50	<20
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<50	<20
Chloroethane	<10	<10	<10	<30	<30	<30	<30	<150	<60
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<50	<20
Chloromethane (Methyl chloride)	<10	<10	<10	<30	<30	<30	<30	<150	<60
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<50	<20
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<50	<20
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<50	<20
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<50	<20
Dichlorodifluoromethane	<10	<10	<10	<30	<30	<30	<30	<150	<60
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<50	<20
Ethylbenzene	<10	<10	<10	<10	<10	<10	<10	<50	<20
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<50	<20
Hexachlorobutadiene	<10	<10	<10	<30	<30	<30	<30	<150	<60
Isopropylbenzene	<10	<10	<10	<10	<10	<10	<10	83.2	<20
m,p-Xylenes	<10	<10	<10	<20	<20	<20	<20	<100	<40
Methylene chloride (DCM)	<10	<10	<10	<50	<50	<50	<50	<250	<100
Methyl-tert-butyl ether (MTBE)	<20	<20	<20	<10	<10	<10	<10	<50	<20
Naphthalene	<30	<30	5.5	<10	<10	<10	<10	96.5	<20
n-Butylbenzene	<30	<30	<30	<10	<10	<10	<10	<50	<20
n-Propylbenzene	<30	<30	<30	<10	<10	<10	<10	163	15
o-Xylene	<30	<30	<30	<10	<10	<10	<10	<50	<20
p-Isopropyltoluene	<30	<30	<30	<10	<10	<10	<10	125	<20
sec-Butylbenzene	<30	<30	<30	<10	<10	<10	<10	72.5	<20
Styrene	<50	<50	<50	<10	<10	<10	<10	<50	<20
tert-Butylbenzene	<50	<50	<50	<10	<10	<10	<10	<50	<20
Tetrachloroethene	<50	<50	<50	<10	<10	<10	<10	<50	<20
Toluene (Methyl benzene)	<50	<50	<50	<10	<10	<10	<10	<50	<20
trans-1,2-Dichloroethene	<50	<50	<50	<10	<10	<10	<10	<50	<20
trans-1,3-Dichloropropene	<50	<50	<50	<10	<10	<10	<10	<50	<20
Trichloroethene	<50	<50	<50	<10	<10	<10	<10	<50	<20
Trichlorofluoromethane	<50	<50	<50	<10	<10	<10	<10	<50	<20
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<250	<100
Vinyl chloride (Chloroethene)	<50	<50	<50	<30	<30	<30	<30	<150	<60

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-21-1'	TtKB-21-5'	TtKB-21-10'	TtKB-21-20'	TtKB-21-30'	TtKB-21-36'	TtKB-22-1'	TtKB-22-5'	TtKB-22-10'
Analyte	4/19/2002	4/19/2002	4/19/2002	4/19/2002	4/19/2002	4/19/2002	4/12/2002	4/12/2002	4/12/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	<10	12.9	<10	<10	<10	14.3	<10	54.8	<10
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<50	<50	<50	<50	<50	<50	<50	<50	<50
Bromomethane (Methyl bromide)	<30	<30	<30	<30	<30	<30	<30	<30	<30
Carbon Disulfide	<50	<50	<50	<50	<50	<50	<50	<50	<50
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<30	<30	<30	<30	<30	<30	<30	<30	<30
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<30	<30	<30	<30	<30	<30	<30	<30	<30
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<30	<30	<30	<30	<30	<30	<30	<30	<30
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<30	<30	<30	<30	<30	<30	<30	<30	<30
Isopropylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
m,p-Xylenes	<20	<20	<20	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
o-Xylene	<10	<10	<10	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Styrene	<10	<10	<10	<10	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-22-15'	TtKB-22-20'	TtKB-22- 32.5'	TtKB-22-36'	TtKB-23-20'	TtKB-23- 30.5'	TtKB-23- 30.5'Dup	TtKB-23- 36.5'
Analyte	4/12/2002	4/12/2002	4/12/2002	4/12/2002	4/19/2002	4/19/2002	4/19/2002	4/19/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	<10	<10	<10	11.2	<10	<10	<10	<10
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<50	<50	<50	<50	<50	<50	<50	<50
Bromomethane (Methyl bromide)	<30	<30	<30	<30	<30	<30	<30	<30
Carbon Disulfide	<50	<50	<50	<50	<50	<50	<50	<50
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<30	<30	<30	<30	<30	<30	<30	<30
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<30	<30	<30	<30	<30	<30	<30	<30
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<30	<30	<30	<30	<30	<30	<30	<30
Dicyclopentadiene	<10	<10	<10	<10	<10	529	550	<10
Ethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<30	<30	<30	<30	<30	<30	<30	<30
Isopropylbenzene	<10	<10	<10	38.4	<10	<10	<10	<10
m,p-Xylenes	<20	<20	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	7.9	<10	<10	<10	<10
o-Xylene	<10	<10	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	<10	8.6	<10	<10	<10	<10
Styrene	<10	<10	<10	<10	<10	5.4	9.5	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	<10	<10	<10	<10	<10	2.7	3.7	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-24-1'	TtKB-24-5'	TtKB-24-10'	TtKB-24-20'	TtKB-24-30.25'	TtKB-24-30.25' Dup	TtKB-24-37'	TtKB-25- 1.5
Analyte	5/6/2002	5/6/2002	5/6/2002	5/6/2002	5/6/2002	5/6/2002	5/6/2002	4/19/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	26.2	15.1	<10	<10	<10	<10	10.6	33.2
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<50	<50	<50	<50	<50	<50	<50	<50
Bromomethane (Methyl bromide)	<30	<30	<30	<30	<30	<30	<30	<30
Carbon Disulfide	<50	<50	<50	<50	<50	<50	<50	<50
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<30	<30	<30	<30	<30	<30	<30	<30
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<30	<30	<30	<30	<30	<30	<30	<30
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<30	<30	<30	<30	<30	<30	<30	<30
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<30	<30	<30	<30	<30	<30	<30	<30
Isopropylbenzene	<10	<10	<10	<10	<10	<10	22	<10
m,p-Xylenes	<20	<20	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
o-Xylene	<10	<10	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Styrene	<10	<10	<10	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-25-5'	TtKB-25-10'	TtKB-25-15'	TtKB-25-20'	TtKB-25-30'	TtKB-25-38'	TtKB-26-5'	TtKB-26-15'	TtKB-26- 20.5'
Analyte	4/19/2002	4/19/2002	4/19/2002	4/19/2002	4/19/2002	4/19/2002	4/12/2002	4/12/2002	4/12/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	101	<10	<10	<10	<10	23.3	40	6	<10
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<50	<50	<50	<50	<50	<50	<50	<50	<50
Bromomethane (Methyl bromide)	<30	<30	<30	<30	<30	<30	<30	<30	<30
Carbon Disulfide	<50	<50	<50	<50	<50	<50	<50	<50	<50
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<30	<30	<30	<30	<30	<30	<30	<30	<30
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<30	<30	<30	<30	<30	<30	<30	<30	<30
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<30	<30	<30	<30	<30	<30	<30	<30	<30
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	9.7	<10	<10	<10	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<30	<30	<30	<30	<30	<30	<30	<30	<30
Isopropylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
m,p-Xylenes	5.8	<20	<20	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
o-Xylene	2.9	<10	<10	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Styrene	<10	<10	<10	<10	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	22.9	<10	<10	<10	<10	<10	5.1	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-26- 20.5'Dup	TtKB-26-30'	TtKB-26-35'	TtKB-27-1'	TtKB-27-5'	TtKB-27-10'	TtKB-27-20'	TtKB-27-30'
Analyte	4/12/2002	4/12/2002	4/12/2002	4/12/2002	4/12/2002	4/12/2002	4/12/2002	4/12/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	<10	<10	45.9	6	<10	<10	<10	<10
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<50	<50	<50	<50	<50	<50	<50	<50
Bromomethane (Methyl bromide)	<30	<30	<30	<30	<30	<30	<30	<30
Carbon Disulfide	<50	<50	<50	<50	<50	<50	<50	<50
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<30	<30	<30	<30	<30	<30	<30	<30
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<30	<30	<30	<30	<30	<30	<30	<30
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<30	<30	<30	<30	<30	<30	<30	<30
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<30	<30	<30	<30	<30	<30	<30	<30
Isopropylbenzene	<10	<10	29.1	<10	<10	<10	<10	<10
m,p-Xylenes	<20	<20	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
o-Xylene	<10	<10	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	8.7	<10	<10	<10	<10	<10
Styrene	<10	<10	<10	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-27- 33.5'	TtKB-28- 10.5'	TtKB-29-5'	TtKB-29- 10.5'	TtKB-29- 15.5'	TtKB-29- 20.5'	TtKB-29- 25.5'	TtKB-29- 30.
Analyte	4/12/2002	10/24/2002	10/16/2002	10/16/2002	10/16/2002	10/16/2002	10/16/2002	10/16/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	34.3	3.5	<10	<10	<10	<10	<10	<10
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<10	<50	<10	<10	<10	<10	<10	<10
Bromomethane (Methyl bromide)	<10	<30	<10	<10	<10	<10	<10	<10
Carbon Disulfide	<10	<50	<10	<10	<10	<10	<10	<10
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<10	<30	<10	<10	<10	<10	<10	<10
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<10	<30	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<10	<30	<10	<10	<10	<10	<10	<10
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<10	<30	<10	<10	<10	<10	<10	<10
Isopropylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
m,p-Xylenes	<20	<20	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	8.8	<10	10.1	8.6	<10	<10
Naphthalene	<10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
o-Xylene	<10	<10	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	10	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Styrene	<10	<10	<10	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

Analyte	TtKB-29- 35.5' 10/16/2002	TtKB-29- 39.0' 10/16/2002	TtKB-30-5' 10/15/2002	TtKB-30- 10.5' 10/15/2002	TtKB-30- 15.5' 10/15/2002	TtKB-30- 20.5' 10/15/2002	TtKB-30- 25.5' 10/15/2002	TtKB-30- 30.5' 10/15/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	<10	4.4	49.1	4.9	<10	3.3	<10	<10
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane (Methyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10
Carbon Disulfide	<10	<10	<10	<10	<10	<10	<10	<10
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<10	<10	<10
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<10	4.2	12.3	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10	<10	<10	<10	<10	<10
Isopropylbenzene	<10	8.1	<10	<10	<10	<10	<10	<10
m,p-Xylenes	<20	<20	14.9	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<20	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	24.7	<10	<50	<10	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
o-Xylene	<10	<10	8.2	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Styrene	<10	<10	<10	<10	<10	<10	<10	8.3
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	<10	<10	45.9	<10	<10	2	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

Analyte	TtKB-30- 35.5' 10/15/2002	TtKB-30- 40.5' 10/15/2002	TtKB-30- 40.5' Dup 10/15/2002	TtKB-31-5' 10/15/2002	TtKB-31-5' Dup 10/15/2002	TtKB-31- 10.5' 10/15/2002	TtKB-31- 15.5' 10/15/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50	<50
Benzene	<10	8.7	5.3	96.8	89.9	<10	<10
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<10	<10	<10	<10	<10	<10	<10
Bromomethane (Methyl bromide)	<10	<10	<10	<10	<10	<10	<10
Carbon Disulfide	<10	<10	<10	<10	<10	<10	<10
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<10	<10	<10	<10	<10
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<10	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<10	<10
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10	<10	<10	<10	<10
Isopropylbenzene	<10	<10	<10	<10	<10	<10	<10
m,p-Xylenes	<20	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<10	<10	<10	<10
o-Xylene	<10	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10
Styrene	<10	<10	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-31- 23.0'	TtKB-31- 25.5'	TtKB-31- 30.5'	TtKB-31- 35.5'	TtKB-31- 38.0'	TtKB-32- 10.5'	TtKB-32- 15.5'	TtKB-32- 20.5'
Analyte	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	<10	<10	<10	11	8.9	5.2	<10	<10
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane (Methyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10
Carbon Disulfide	<10	<10	<10	<10	<10	<10	<10	<10
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<10	<10	<10
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10	<10	<10	<10	<10	<10
Isopropylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
m,p-Xylenes	<20	<20	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
o-Xylene	<10	<10	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Styrene	<10	<10	25.8	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-32- 25.5'	TtKB-32- 30.5'	TtKB-32- 38.0'	TtKB-33-1.0'	TtKB-33-1.0'Dup	TtKB-33-10.5'	TtKB-33-20.5'	TtKB-33-30.5'
Analyte	10/15/2002	10/15/2002	10/15/2002	11/25/2002	11/25/2002	11/25/2002	11/25/2002	11/25/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	<10	<10	18.3	<10	<10	<10	<10	<10
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<10	<10	<10	<50	<50	<50	<50	<50
Bromomethane (Methyl bromide)	<10	<10	<10	<30	<30	<30	<30	<30
Carbon Disulfide	<10	<10	<10	<50	<50	<50	<50	<50
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<10	<30	<30	<30	<30	<30
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<10	<10	<10	<30	<30	<30	<30	<30
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<10	<10	<10	<30	<30	<30	<30	<30
Dicyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	<10	<10	<10	<10	<10	26.6
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10	<30	<30	<30	<30	<30
Isopropylbenzene	<10	<10	9.7	<10	<10	<10	<10	18.4
m,p-Xylenes	<20	<20	<20	<20	<20	<20	<20	7.4
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<10	<10	<10	<10	29.7
o-Xylene	<10	<10	<10	<10	<10	<10	<10	2.1
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10	346
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	11.5
Styrene	<10	<10	<10	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-33-40.5'	TtKB-33-50.5'	TtKB-33-55.5'	TtKB-33-60.5'	TtKB-33-65.5'	TtKB-33-70.5'	TtKB-33-80.5'	TtKB-33-94'
Analyte	11/25/2002	11/25/2002	11/25/2002	11/25/2002	11/25/2002	11/25/2002	11/25/2002	11/13/2002
1,1,1,2-Tetrachloroethane	<10	<10	<100	<100	<100	<100	<10	<10
1,1,1-Trichloroethane	<10	<10	<100	<100	<100	<100	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<100	<100	<100	<100	<10	<10
1,1,2-Trichloroethane	<10	<10	<100	<100	<100	<100	<10	<10
1,1-Dichloroethane	<10	<10	<100	<100	<100	<100	<10	<10
1,1-Dichloroethene	<10	<10	<100	<100	<100	<100	<10	<10
1,1-Dichloropropene	<10	<10	<100	<100	<100	<100	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<100	<100	<100	<100	<10	<10
1,2,3-Trichloropropane	<10	<10	<100	<100	<100	<100	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<100	<100	<100	<100	<10	<10
1,2,4-Trimethylbenzene	<10	<10	2350	18100	1320	1600	12	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<500	<500	<500	<500	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<100	<100	<100	<100	<10	<10
1,2-Dichlorobenzene	<10	<10	<100	<100	<100	<100	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<100	<100	<100	<100	<10	<10
1,2-Dichloropropane	<10	<10	<100	<100	<100	<100	<10	<10
1,3,5-Trimethylbenzene	<10	<10	186	880	365	436	<10	<10
1,3-Butadiene	<10	<10	<100	<100	<100	<100	<10	<10
1,3-Dichlorobenzene	<10	<10	<100	<100	<100	<100	<10	<10
1,3-Dichloropropane	<10	<10	<100	<100	<100	<100	<10	<10
1,4-Dichlorobenzene	<10	<10	<100	<100	<100	<100	<10	<10
2,2-Dichloropropane	<10	<10	<100	<100	<100	<100	<10	<10
2-Butanone (MEK)	<50	<50	<500	<500	<500	<500	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<500	<500	<500	<500	<50	<50
2-Chlorotoluene	<10	<10	<100	<100	<100	<100	<10	<10
2-Hexanone	<50	<50	<500	<500	<500	<500	<50	<50
4-Chlorotoluene	<10	<10	<100	<100	<100	<100	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<500	<500	<500	<500	<50	<50
Acetone	<50	<50	<500	<500	<500	<500	<50	<50
Benzene	2.8	3.6	<100	135	<100	<100	<10	<10
Bromobenzene (Phenyl bromide)	<10	<10	<100	<100	<100	<100	<10	<10
Bromochloromethane	<10	<10	<100	<100	<100	<100	<10	<10
Bromodichloromethane	<10	<10	<100	<100	<100	<100	<10	<10
Bromoform (Tribromomethane)	<50	<50	<500	<500	<500	<500	<50	<10
Bromomethane (Methyl bromide)	<30	<30	<300	<300	<300	<300	<30	<10
Carbon Disulfide	<50	<50	<500	<500	<500	<500	<50	148
Carbon tetrachloride	<10	<10	<100	<100	<100	<100	<10	<10
Chlorobenzene	<10	<10	<100	<100	<100	<100	<10	<10
Chloroethane	<30	<30	<300	<300	<300	<300	<30	<10
Chloroform (Trichloromethane)	<10	<10	<100	<100	<100	<100	<10	<10
Chloromethane (Methyl chloride)	<30	<30	<300	<300	<300	<300	<30	<10
cis-1,2-Dichloroethene	<10	<10	<100	<100	<100	<100	<10	<10
cis-1,3-Dichloropropene	<10	<10	<100	<100	<100	<100	<10	<10
Dibromochloromethane	<10	<10	<100	<100	<100	<100	<10	<10
Dibromomethane	<10	<10	<100	<100	<100	<100	<10	<10
Dichlorodifluoromethane	<30	<30	<300	<300	<300	<300	<30	<10
Dicyclopentadiene	<10	<10	<100	<100	<100	<100	<10	<10
Ethylbenzene	<10	<10	358	5350	437	541	5.7	<10
Ferrocene	<10	<10	<100	<100	<100	<100	<10	<10
Hexachlorobutadiene	<30	<30	<300	<300	<300	<300	<30	<10
Isopropylbenzene	<10	<10	148	483	217	108	<10	<10
m,p-Xylenes	<20	<20	152	1700	164	235	<20	<20
Methylene chloride (DCM)	<50	<50	<500	<500	<500	<500	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<100	<100	<100	<100	<10	<10
Naphthalene	12.7	7.4	13100	1310000	123000	109000	2730	<10
n-Butylbenzene	<10	<10	<100	<100	<100	<100	<10	<10
n-Propylbenzene	<10	<10	236	880	331	166	<10	<10
o-Xylene	<10	<10	90	2140	112	210	<10	<10
p-Isopropyltoluene	<10	<10	161	283	257	126	<10	<10
sec-Butylbenzene	<10	<10	<100	135	<100	<100	<10	<10
Styrene	<10	<10	<100	<100	<100	<100	<10	<10
tert-Butylbenzene	<10	<10	<100	<100	<100	<100	<10	<10
Tetrachloroethene	<10	<10	<100	<100	<100	<100	<10	<10
Toluene (Methyl benzene)	<10	<10	232	336	404	314	<10	<10
trans-1,2-Dichloroethene	<10	<10	<100	<100	<100	<100	<10	<10
trans-1,3-Dichloropropene	<10	<10	<100	<100	<100	<100	<10	<10
Trichloroethene	<10	<10	<100	<100	<100	<100	<10	<10
Trichlorofluoromethane	<10	<10	<100	<100	<100	<100	<10	<10
Vinyl Acetate	<50	<50	<500	<500	<500	<500	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<300	<300	<300	<300	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-33- 118'	TtKB-34-5.5'	TtKB-34-5.5' Dup	TtKB-34-10.5'	TtKB-34-20.5'	TtKB-34-30.5'	TtKB-34-40.5'	TtKB-34-66.5'
Analyte	11/13/2002	11/26/2002	11/26/2002	11/26/2002	11/26/2002	11/26/2002	11/26/2002	11/26/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<37573	<10	<10	<10	<60
1,1,1-Trichloroethane	<10	<10	<10	<<10	<10	<10	<10	<60
1,1,2,2-Tetrachloroethane	<10	<10	<10	<<10	<10	<10	<10	<60
1,1,2-Trichloroethane	<10	<10	<10	<<10	<10	<10	<10	<60
1,1-Dichloroethane	<10	<10	<10	<<10	<10	<10	<10	<60
1,1-Dichloroethene	<10	<10	<10	<<10	<10	<10	<10	<60
1,1-Dichloropropene	<10	<10	<10	<<10	<10	<10	<10	<60
1,2,3-Trichlorobenzene	<10	<10	<10	<<10	<10	<10	<10	<60
1,2,3-Trichloropropane	<10	<10	<10	<<10	<10	<10	<10	<60
1,2,4-Trichlorobenzene	<10	<10	<10	<<10	<10	<10	<10	<60
1,2,4-Trimethylbenzene	<10	<10	<10	<<10	<10	<10	<10	18300
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<<10	<50	<50	<50	<300
1,2-Dibromoethane (EDB)	<10	<10	<10	<<50	<10	<10	<10	<60
1,2-Dichlorobenzene	<10	<10	<10	<<10	<10	<10	<10	<60
1,2-Dichloroethane (EDC)	<10	<10	<10	<<10	<10	<10	<10	<60
1,2-Dichloropropane	<10	<10	<10	<<10	<10	<10	<10	<60
1,3,5-Trimethylbenzene	<10	<10	<10	<<10	<10	<10	<10	8220
1,3-Butadiene	<10	<10	<10	<<10	<10	<10	<10	<60
1,3-Dichlorobenzene	<10	<10	<10	<<10	<10	<10	<10	<60
1,3-Dichloropropane	<10	<10	<10	<<10	<10	<10	<10	<60
1,4-Dichlorobenzene	<10	<10	<10	<<10	<10	<10	<10	<60
2,2-Dichloropropane	<10	<10	<10	<<10	<10	<10	<10	<60
2-Butanone (MEK)	<50	<50	<50	<<10	<50	<50	<50	<300
2-Chloroethyl vinyl ether	<50	<50	<50	<<50	<50	<50	<50	<300
2-Chlorotoluene	<10	<10	<10	<<50	<10	<10	<10	<60
2-Hexanone	<50	<50	<50	<<10	<50	<50	<50	<300
4-Chlorotoluene	<10	<10	<10	<<50	<10	<10	<10	<60
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<<10	<50	<50	<50	<300
Acetone	<50	<50	<50	<<50	<50	<50	<50	<300
Benzene	<10	5.7	4.5	12.6	<10	<10	6.8	98.2
Bromobenzene (Phenyl bromide)	<10	<10	<10	<<10	<10	<10	<10	<60
Bromochloromethane	<10	<10	<10	<<10	<10	<10	<10	<60
Bromodichloromethane	<10	<10	<10	<<10	<10	<10	<10	<60
Bromoform (Tribromomethane)	<10	<50	<50	<<10	<50	<50	<50	<300
Bromomethane (Methyl bromide)	<10	<30	<30	<<10	<30	<30	<30	<180
Carbon Disulfide	<10	<50	<50	<<10	<50	<50	<50	<300
Carbon tetrachloride	<10	<10	<10	<<10	<10	<10	<10	<60
Chlorobenzene	<10	<10	<10	<<10	<10	<10	<10	<60
Chloroethane	<10	<30	<30	<<10	<30	<30	<30	<180
Chloroform (Trichloromethane)	<10	<10	<10	<<10	<10	<10	<10	<60
Chloromethane (Methyl chloride)	<10	<30	<30	<<10	<30	<30	<30	<180
cis-1,2-Dichloroethene	<10	<10	<10	<<10	<10	<10	<10	<60
cis-1,3-Dichloropropene	<10	<10	<10	<<10	<10	<10	<10	<60
Dibromochloromethane	<10	<10	<10	<<10	<10	<10	<10	<60
Dibromomethane	<10	<10	<10	<<10	<10	<10	<10	<60
Dichlorodifluoromethane	<10	<30	<30	<<10	<30	<30	<30	<180
Dicyclopentadiene	<10	<10	<10	<<10	<10	<10	<10	<60
Ethylbenzene	<10	2.1	<10	<<10	<10	<10	<10	23600
Ferrocene	<10	<10	<10	<<10	<10	<10	<10	<60
Hexachlorobutadiene	<10	<30	<30	<<10	<30	<30	<30	<180
Isopropylbenzene	<10	<10	<10	<<10	<10	<10	21.2	<60
m,p-Xylenes	<20	3.8	<20	<<10	<20	<20	4.1	34200
Methylene chloride (DCM)	<50	<50	<50	<<20	<50	<50	<50	<300
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<<50	<10	<10	<10	<60
Naphthalene	<10	10.5	6.6	<<10	<10	<10	<10	242000
n-Butylbenzene	<10	<10	<10	<<10	<10	<10	<10	<60
n-Propylbenzene	<10	<10	<10	<<10	<10	<10	<10	1190
o-Xylene	<10	2	<10	<<10	<10	<10	<10	14000
p-Isopropyltoluene	<10	<10	<10	<<10	<10	<10	<10	108
sec-Butylbenzene	<10	<10	<10	<<10	<10	<10	<10	<60
Styrene	<10	<10	<10	<<10	<10	<10	<10	1750
tert-Butylbenzene	<10	<10	<10	<<10	<10	<10	<10	<60
Tetrachloroethene	<10	<10	<10	<<10	<10	<10	<10	<60
Toluene (Methyl benzene)	<10	<10	<10	<<10	<10	<10	<10	3550
trans-1,2-Dichloroethene	<10	<10	<10	<<10	<10	<10	<10	<60
trans-1,3-Dichloropropene	<10	<10	<10	<<10	<10	<10	<10	<60
Trichloroethene	<10	<10	<10	<<10	<10	<10	<10	<60
Trichlorofluoromethane	<10	<10	<10	<<10	<10	<10	<10	<60
Vinyl Acetate	<50	<50	<50	<<10	<50	<50	<50	<300
Vinyl chloride (Chloroethene)	<30	<30	<30	<<50	<30	<30	<30	<180

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-34-70.5'	TtKB-34-82.5'	TtKB-34-86'	TtKB-34-107'	TtKB-35-1'	TtKB-35- 10.5'	TtKB-35- 15.5'	TtKB-35- 20.5'
Analyte	11/26/2002	11/26/2002	11/14/2002	11/14/2002	10/17/2002	10/17/2002	10/17/2002	10/17/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	35.3	6.3	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	13.4	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	9.3	6.5	<10	<10	<10	3.3	<10	<10
Bromobenzene (Phenyl bromide)	<60	<60	<10	<10	<10	<10	<10	<10
Bromochloromethane	<60	<60	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<60	<60	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<300	<300	<10	<10	<50	<50	<50	<50
Bromomethane (Methyl bromide)	<180	<180	<10	<10	<30	<30	<30	<30
Carbon Disulfide	<300	<300	<10	<10	<50	<50	<50	<50
Carbon tetrachloride	<60	<60	<10	<10	<10	<10	<10	<10
Chlorobenzene	<60	<60	<10	<10	<10	<10	<10	<10
Chloroethane	<180	<180	<10	<10	<30	<30	<30	<30
Chloroform (Trichloromethane)	<60	<60	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<180	<180	<10	<10	<30	<30	<30	<30
cis-1,2-Dichloroethene	<60	<60	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<60	<60	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<60	<60	<10	<10	<10	<10	<10	<10
Dibromomethane	<60	<60	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<180	<180	<10	<10	<30	<30	<30	<30
Dicyclopentadiene	<60	<60	<10	<10	<10	<10	<10	<10
Ethylbenzene	71.5	16.2	<10	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<30	<30	<10	<10	<30	<30	<30	<30
Isopropylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
m,p-Xylenes	67.2	11.4	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	2450	505	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
o-Xylene	38.6	7.5	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Styrene	<10	<10	<10	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	10	3.3	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-35- 25.5'	TtKB-35- 30.5'	TtKB-35- 32.0'	TtKB-35- 35.5'	TtKB-35- 44.5'	TtKB-36-5'	TtKB-36- 5' Dup	TtKB-36- 10.5'
Analyte	10/17/2002	10/17/2002	10/17/2002	10/17/2002	10/17/2002	10/17/2002	10/17/2002	10/17/2002
1,1,1,2-Tetrachloroethane	<10	<100	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<100	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<100	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<100	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<100	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<100	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<100	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<100	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<100	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<100	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	6950	1410	30.2	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<500	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<100	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<100	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<100	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<100	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	510	150	6.2	<10	<10	<10	<10
1,3-Butadiene	<10	<100	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<100	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<100	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<100	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<100	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<500	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<500	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<100	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<500	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<100	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<500	<50	<50	<50	<50	<50	<50
Acetone	<50	<500	<50	<50	<50	<50	<50	<50
Benzene	<10	<100	23.4	25.3	19.5	<10	<10	<10
Bromobenzene (Phenyl bromide)	<10	<100	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<100	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<100	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<50	<500	<50	<50	<50	<50	<50	<50
Bromomethane (Methyl bromide)	<30	<300	<30	<30	<30	<30	<30	<30
Carbon Disulfide	<50	<500	<50	<50	<50	<50	<50	<50
Carbon tetrachloride	<10	<100	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<100	<10	<10	<10	<10	<10	<10
Chloroethane	<30	<300	<30	<30	<30	<30	<30	<30
Chloroform (Trichloromethane)	<10	<100	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<30	<300	<30	<30	<30	<30	<30	<30
cis-1,2-Dichloroethene	<10	<100	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<100	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<100	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<100	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<30	<300	<30	<30	<30	<30	<30	<30
Dicyclopentadiene	<10	<100	<10	<10	<10	<10	<10	<10
Ethylbenzene	<10	332	118	6.3	<10	<10	<10	<10
Ferrocene	<10	<100	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<30	<300	<30	<30	<30	<30	<30	<30
Isopropylbenzene	<10	242	29	15	<10	<10	<10	<10
m,p-Xylenes	<20	333	330	39.7	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<500	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<100	<10	<10	<10	<10	<10	<10
Naphthalene	<10	1150	79	16.5	5.1	<10	<10	<10
n-Butylbenzene	<10	<100	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	691	49.7	16	<10	<10	<10	<10
o-Xylene	<10	783	590	15	<10	<10	<10	<10
p-Isopropyltoluene	<10	466	5.8	7.3	<10	<10	<10	<10
sec-Butylbenzene	<10	233	<10	<10	<10	<10	<10	<10
Styrene	<10	<100	16.8	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<100	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<100	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	<10	70	15.2	7.8	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	<100	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<100	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<100	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<100	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<500	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<300	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

	TtKB-36- 15.5'	TtKB-36- 20.5'	TtKB-36- 25.5'	TtKB-36- 30.5'	TtKB-36- 35.5'	TtKB-36- 39.0'	TtKB-37-1'	TtKB-37-5'	TtKB-37- 10.5'
Analyte	10/17/2002	10/17/2002	10/17/2002	10/17/2002	10/17/2002	10/17/2002	10/17/2002	10/17/2002	10/17/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<2500	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<500	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<500	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<500	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<2500	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<2500	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<500	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<2500	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<500	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<2500	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<2500	<50	<50	<50	<50	<50
Benzene	<10	<10	<10	<500	10.1	17.3	<10	14.8	<10
Bromobenzene (Phenyl bromide)	<10	<10	<10	<500	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<500	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<500	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<50	<50	<50	<2500	<50	<50	<50	<50	<50
Bromomethane (Methyl bromide)	<30	<30	<30	<1500	<30	<30	<30	<30	<30
Carbon Disulfide	<50	<50	<50	<2500	<50	<50	<50	<50	<50
Carbon tetrachloride	<10	<10	<10	<500	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<500	<10	<10	<10	<10	<10
Chloroethane	<30	<30	<30	<1500	<30	<30	<30	<30	<30
Chloroform (Trichloromethane)	<10	<10	<10	<500	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<30	<30	<30	<1500	<30	<30	<30	<30	<30
cis-1,2-Dichloroethene	<10	<10	<10	<500	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<500	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<500	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<500	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<30	<30	<30	<1500	<30	<30	<30	<30	<30
Dicyclopentadiene	<10	<10	<10	<500	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	<10	<500	<10	3	<10	<10	<10
Ferrocene	<10	<10	<10	<500	<10	<10	<10	<10	<10
Hexachlorobutadiene	<30	<30	<30	<1500	<30	<30	<30	<30	<30
Isopropylbenzene	<10	<10	<10	<500	<10	<10	<10	<10	<10
m,p-Xylenes	<20	<20	<20	<1000	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<2500	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<500	<10	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<500	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	9800	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<500	<10	<10	<10	<10	<10
o-Xylene	<10	<10	<10	<500	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	2820	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	<10	6790	<10	<10	<10	<10	<10
Styrene	<10	<10	<10	<500	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<500	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<500	<10	<10	<10	7	<10
Toluene (Methyl benzene)	<10	<10	<10	500	<10	<10	<10	4.1	<10
trans-1,2-Dichloroethene	<10	<10	<10	<500	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<500	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<500	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<500	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<2500	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<1500	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

Analyte	TtKB-37- 10.5' Dup 10/17/2002	TtKB-37- 15.5' 10/17/2002	TtKB-37- 20.5' 10/17/2002	TtKB-37- 25.5' 10/17/2002	TtKB-37- 30.5' 10/17/2002	TtKB-37- 35.5' 10/17/2002	TtKB-38- 15.5' 10/18/2002	TtKB-38- 21.5' 10/18/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<100	<500	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<100	<500	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<100	<500	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<100	<500	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<100	<500	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<100	<500	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<100	<500	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<100	<500	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<100	<500	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<100	<500	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	16.1	12100	42700	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<500	<2500	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<100	<500	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<100	<500	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<100	<500	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<100	<500	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	1670	<500	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<100	<500	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<100	<500	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<100	<500	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<100	<500	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<100	<500	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<500	<2500	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<500	<2500	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<100	<500	<10	<10
2-Hexanone	<50	<50	<50	<50	<500	<2500	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<100	<500	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<500	<2500	<50	<50
Acetone	<50	<50	<50	<50	<500	<2500	<50	<50
Benzene	<10	<10	<10	<10	<100	245	<10	21.6
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<100	<500	<10	<10
Bromochloromethane	<10	<10	<10	<10	<100	<500	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<100	<500	<10	<10
Bromoform (Tribromomethane)	<50	<50	<50	<50	<500	<2500	<10	<10
Bromomethane (Methyl bromide)	<30	<30	<30	<30	<300	<1500	<10	<10
Carbon Disulfide	<50	<50	<50	<50	<500	<2500	<10	<10
Carbon tetrachloride	<10	<10	<10	<10	<100	<500	<10	<10
Chlorobenzene	<10	<10	<10	<10	<100	<500	<10	<10
Chloroethane	<30	<30	<30	<30	<300	<1500	<10	<10
Chloroform (Trichloromethane)	<10	<10	<10	<10	<100	<500	<10	<10
Chloromethane (Methyl chloride)	<30	<30	<30	<30	<300	<1500	<10	<10
cis-1,2-Dichloroethene	<10	<10	<10	<10	<100	<500	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<100	<500	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<100	<500	<10	<10
Dibromomethane	<10	<10	<10	<10	<100	<500	<10	<10
Dichlorodifluoromethane	<30	<30	<30	<30	<300	<1500	<10	<10
Dicyclopentadiene	<10	<10	<10	<10	<100	<500	<10	<10
Ethylbenzene	<10	<10	<10	2.6	807	1360	<10	<10
Ferrocene	<10	<10	<10	<10	<100	<500	<10	<10
Hexachlorobutadiene	<30	<30	<30	<30	<300	<1500	<10	<10
Isopropylbenzene	<10	<10	<10	<10	490	5450	<10	<10
m,p-Xylenes	<20	<20	<20	3.6	1350	<1000	<20	4.4
Methylene chloride (DCM)	<50	<50	<50	<50	<500	<2500	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<100	<500	<10	<10
Naphthalene	<10	<10	<10	13.5	3270	540	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<100	5900	<10	<10
n-Propylbenzene	<10	<10	<10	<10	1380	13600	<10	<10
o-Xylene	<10	<10	<10	4.2	1950	3720	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	600	3360	<10	<10
sec-Butylbenzene	<10	<10	<10	<10	327	2270	<10	<10
Styrene	<10	<10	<10	<10	<100	<500	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<100	<500	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<100	<500	<10	<10
Toluene (Methyl benzene)	<10	<10	<10	<10	76	270	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<100	<500	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<100	<500	<10	<10
Trichloroethene	<10	<10	<10	<10	<100	<500	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<100	<500	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<500	<2500	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<300	<1500	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

Analyte	TtKB-38- 25.0' 10/18/2002	TtKB-38- 30.0' 10/18/2002	TtKB-38- 32.0' 10/18/2002	TtKB-38- 35.0' 10/18/2002	TtKB-38- 36.5' 10/18/2002	TtKB-39-5' 10/16/2002	TtKB-39-5' Dup 10/16/2002	TtKB-39- 10.5' 10/16/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	58.6	<50	<50	<50	<50	<50
Benzene	<10	<10	4	4.4	<10	<10	<10	<10
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane (Methyl bromide)	<10	<10	<10	<10	<10	<10	<10	<10
Carbon Disulfide	<10	<10	<10	<10	<10	<10	<10	<10
Carbon tetrachloride	<10	<10	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<10	<10	<10
Dicyclopentadiene	<10	<10	9.2	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10	<10	<10	<10	<10	<10
Isopropylbenzene	<10	<10	10.4	7.9	<10	<10	<10	<10
m,p-Xylenes	<20	<20	2.3	2.5	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	<10	10.6	80.8	11	<10	<10	<10	<10
n-Butylbenzene	<10	<10	6.4	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
o-Xylene	<10	<10	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	12.7	<10	<10	<10	<10	<10
Styrene	<10	29.3	20.6	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-5

Purgeables in ug/kg, (EPA Method 8260B)

Site Remediation at Former Sector C, Block K

Analyte	TtKB-39- 15.5' 10/16/2002	TtKB-39- 20.5' 10/16/2002	TtKB-39- 25.5' 10/16/2002	TtKB-39- 30.5' 10/16/2002	TtKB-39- 35.5' 10/16/2002	TtKB-39- 38.0' 10/16/2002
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10
1,1,2-Trichloroethane	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
1,1-Dichloropropene	<10	<10	<10	<10	<10	<10
1,2,3-Trichlorobenzene	<10	<10	<10	<10	<10	<10
1,2,3-Trichloropropane	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene	<10	<10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	<10	<10	<10	<10	<10	<10
1,2-Dibromo-3-chloropropane (DBCP)	<50	<50	<50	<50	<50	<50
1,2-Dibromoethane (EDB)	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10
1,2-Dichloroethane (EDC)	<10	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10	<10
1,3,5-Trimethylbenzene	<10	<10	<10	<10	<10	<10
1,3-Butadiene	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10
2,2-Dichloropropane	<10	<10	<10	<10	<10	<10
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50
2-Chloroethyl vinyl ether	<50	<50	<50	<50	<50	<50
2-Chlorotoluene	<10	<10	<10	<10	<10	<10
2-Hexanone	<50	<50	<50	<50	<50	<50
4-Chlorotoluene	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50
Acetone	<50	<50	<50	<50	<50	<50
Benzene	<10	<10	<10	<10	<10	2.3
Bromobenzene (Phenyl bromide)	<10	<10	<10	<10	<10	<10
Bromochloromethane	<10	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10	<10
Bromoform (Tribromomethane)	<10	<10	<10	<10	<10	<10
Bromomethane (Methyl bromide)	<10	<10	<10	<10	<10	<10
Carbon Disulfide	<10	<10	<10	<10	<10	<10
Carbon tetrachloride	<10	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<10	<10	<10	<10
Chloroform (Trichloromethane)	<10	<10	<10	<10	<10	<10
Chloromethane (Methyl chloride)	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<10
Dicyclopentadiene	<10	<10	<10	<10	<10	<10
Ethylbenzene	<10	<10	<10	<10	<10	<10
Ferrocene	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	<10	<10	<10	<10	<10	<10
Isopropylbenzene	<10	<10	<10	<10	<10	<10
m,p-Xylenes	<20	<20	<20	<20	<20	<20
Methylene chloride (DCM)	<50	<50	<50	<50	<50	<50
Methyl-tert-butyl ether (MTBE)	<10	<10	<10	<10	<10	<10
Naphthalene	<10	<10	<10	<10	<10	<10
n-Butylbenzene	<10	<10	<10	<10	<10	<10
n-Propylbenzene	<10	<10	<10	<10	<10	<10
o-Xylene	<10	<10	<10	<10	<10	<10
p-Isopropyltoluene	<10	<10	<10	<10	<10	<10
sec-Butylbenzene	<10	<10	<10	<10	<10	<10
Styrene	<10	<10	<10	<10	<10	<10
tert-Butylbenzene	<10	<10	<10	<10	<10	<10
Tetrachloroethene	<10	<10	<10	<10	<10	<10
Toluene (Methyl benzene)	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropene	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	<10
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10
Vinyl Acetate	<50	<50	<50	<50	<50	<50
Vinyl chloride (Chloroethene)	<30	<30	<30	<30	<30	<30

<: Compound not detected at or above detection limit. Value shown in the table is the detection limit (MDL) of the compound for the analytical process. There may be different MDL's for the same compound.

TABLE 3-6
Total Petroleum Hydrocarbons (TPH) in mg/kg, (EPA Method 8015M)

Site Remediation at Former Sector C, Block K

	Sample Number	Depth	Date	TPH (M8015G), in mg/kg	TPH (M8015D), in mg/kg		
				TPH as Gasoline and Light HC. (C4-C12)	TPH as Diesel (C13-C22)	TPH as Heavy Hydrocarbons (C23-C40)	TPH Total as Diesel and Heavy HC.C13-C40
MDL				0.1	5	5	5
PQL				1	10	10	10
	Confirmation Soil Samples						
	B7S1-5	5	9/17/2008	<0.1	13.9	78.2	92.1
	C1F1-12	12	8/13/2008	<0.1	<5	<5	<5
	C1S2-10	10	8/19/2008	<0.1	<5	<5	<5
	C1S4-5	5	9/8/2008	<0.1	<5	<5	<5
	C1W1-11	11	8/19/2008	<0.1	<5	<5	<5
	C1W1-5	5	9/9/2008	<0.1	<5	<5	<5
	C2S1-10	10	9/3/2008	<0.1	<5	<5	<5
	C2S2-5	5	9/3/2008	<0.1	<5	<5	<5
	C3E1-5	5	9/3/2008	<0.1	<5	<5	<5
	C3E2-10	10	9/3/2008	<0.1	<5	<5	<5
	C3F1-12	12	8/29/2008	<0.1	<5	<5	<5
	C3S1-10	10	9/3/2008	<0.1	<5	<5	<5
	C3S1-10D	10	9/3/2008	<0.1	<5	<5	<5
	C3S2-5	5	9/3/2008	<0.1	<5	<5	<5
	C6W1-5	5	9/17/2008	<0.1	<5	26.5	26.5
	C7E1-5	5	9/17/2008	<0.1	18.6	110	129
	C7N1-5	5	9/17/2008	<0.1	61.3	441	502
	D1F1-11	11	8/14/2008	<0.1	<5	<5	<5
	D1F2-12	12	8/15/2008	<0.1	<5	<5	<5
	D1F3-12	12	8/15/2008	<0.1	<5	<5	<5
	D1W2-4	4	8/14/2008	<0.1	<5	<5	<5
	D1W4-12	12	8/15/2008	<0.1	<5	<5	<5
	D1W6-9	9	8/20/2008	<0.1	<5	<5	<5
	D1W7-6	6	8/20/2008	<0.1	178	324	502
	D1W8-8	8	8/20/2008	<0.1	<5	<5	<5
	D2F1-18	18	8/28/2008	<0.1	<5	<5	<5
	D2F2-7	7	8/29/2008	<0.1	28.7	25.9	54.6
	D3E1-5	5	8/28/2008	<0.1	<5	7.68	7.68
	D3E2-5	5	9/3/2008	<0.1	<5	<5	<5
	D3E3-10	10	9/3/2008	<0.1	<5	<5	<5
	D3F1-12	12	8/29/2008	<0.1	<5	<5	<5
	E1F1-13	13	8/25/2008	<0.1	<5	<5	<5
	E1F1-5	5	9/8/2008	<0.1	<5	<5	<5
	E1F2-23	23	8/29/2008	<0.1	<5	<5	<5
	E1N1-5	5	9/8/2008	<0.1	11.6	14.9	26.5
	E1W1-4	4	8/22/2008	<0.1	<5	<5	<5
	E2F1-4	4	8/26/2008	<0.1	136	242	378
	E3E1-5	5	9/3/2008	<0.1	<5	<5	<5
	E3E2-10	10	9/3/2008	<0.1	<5	<5	<5
	E3N1-10	10	9/4/2008	<0.1	<5	<5	<5
	E3N2-5	5	9/4/2008	<0.1	<5	<5	<5
	F1F1-11	11	9/5/2008	<0.1	<5	<5	<5
	F1N2-5	5	9/8/2008	<0.1	<5	<5	<5

TABLE 3-6

Total Petroleum Hydrocarbons (TPH) in mg/kg, (EPA Method 8015M)

Site Remediation at Former Sector C, Block K

			TPH (M8015G), in **mg/kg**	TPH (M8015D), in **mg/kg**		
Sample Number	Depth	Date	TPH as Gasoline and Light HC. (C4-C12)	TPH as Diesel (C13-C22)	TPH as Heavy Hydrocarbons (C23-C40)	TPH Total as Diesel and Heavy HC.C13-C40
MDL			0.1	5	5	5
PQL			1	10	10	10
F1W1-2	2	9/8/2008	<0.1	<5	<5	<5
F3F1-11	11	8/21/2008	<0.1	<5	<5	<5
G1W1-10	10	9/5/2008	<0.1	<5	<5	<5
G2N1-10	10	9/5/2008	<0.1	<5	<5	<5
G2N2-5	5	9/5/2008	<0.1	<5	<5	<5
G2N3-2	2	9/5/2008	<0.1	<5	<5	<5
H11F1-6	6	9/18/2008	<0.1	<5	<5	<5
H11S1-5	5	9/18/2008	<0.1	<5	<5	<5
H11W1-5	5	9/18/2008	<0.1	48.6	151	200
H12E1-5	5	9/18/2008	<0.1	<5	19	19
I11N1-5	5	9/18/2008	<0.1	<5	23.5	23.5
T1-10	10	9/17/2008	<0.1	<5	<5	<5
T1-5	5	9/17/2008	<0.1	<5	<5	<5
RI Confirmation Soil Samples						
TtKB-13-1'	1	4/15/2002	<1	<10	<10	<10
TtKB-13-5'	5	4/15/2002	<1	<10	<10	<10
TtKB-13-10'	10	4/15/2002	<1	<10	<10	<10
TtKB-13- 20.5'	20.5	4/15/2002	<1	<10	<10	<10
TtKB-13- 20.5'Dup	20.5	4/15/2002	<1	<10	<10	<10
TtKB-13-30'	30	4/15/2002	182	39	<10	39
TtKB-13- 33.5'	33.5	4/15/2002	0.6	<10	<10	<10
TtKB-14-2'	2	4/17/2002	<1	<10	14.5	14.5
TtKB-14-5'	5	4/17/2002	<1	<10	<10	<10
TtKB-14- 10.5'	10.5	4/17/2002	<1	<10	<10	<10
TtKB-14- 10.5' Dup	10.5	4/17/2002	<1	<10	<10	<10
TtKB-14- 20'	20	4/17/2002	<1	<10	<10	<10
TtKB-14-30'	30	4/17/2002	<1	<10	<10	<10
TtKB-14- 33.5'	33.5	4/17/2002	<1	<10	<10	<10
TtKB-15-1'	1	4/16/2002	<1	64	484	548
TtKB-15-5'	5	4/16/2002	<1	<10	<10	<10
TtKB-15-10'	10	4/16/2002	<1	<10	<10	<10
TtKB-15-15'	15	4/16/2002	<1	<10	<10	<10
TtKB-15-20'	20	4/16/2002	<1	<10	<10	<10
TtKB-15-30'	30	4/16/2002	182	104	23.6	128
TtKB-15- 33.5'	33.5	4/16/2002	1820	549	338	887
TtKB-15-41'	41	4/16/2002	<1	<10	<10	<10
TtKB-16-1'	1	4/17/2002	<1	<10	<10	<10
TtKB-16-5'	5	4/17/2002	<1	<10	<10	<10
TtKB-16-10'	10	4/17/2002	<1	<10	<10	<10
TtKB-16-20'	20	4/17/2002	<1	<10	<10	<10
TtKB-16-30'	30	4/17/2002	<1	<10	<10	<10
TtKB-16- 32.5'	32.5	4/17/2002	<1	<10	<10	<10
TtKB-17-5'	5	4/16/2002	<1	<10	<10	<10

TABLE 3-6
Total Petroleum Hydrocarbons (TPH) in mg/kg, (EPA Method 8015M)
Site Remediation at Former Sector C, Block K

	Sample Number	Depth	Date	TPH (M8015G), in mg/kg	TPH (M8015D), in mg/kg		
				TPH as Gasoline and Light HC. (C4-C12)	TPH as Diesel (C13-C22)	TPH as Heavy Hydrocarbons (C23-C40)	TPH Total as Diesel and Heavy HC.C13-C40
MDL				0.1	5	5	5
PQL				1	10	10	10
	TtKB-17-10'	10	4/16/2002	<1	<10	<10	<10
	TtKB-17- 30.5'	30.5	4/16/2002	21.7	36.5	<10	36.5
	TtKB-17- 30.5'Dup	30.5	4/16/2002	7.85	14.4	<10	14.4
	TtKB-17-33'	33	4/16/2002	<1	<10	<10	<10
	TtKB-18-1'	1	4/15/2002	<1	<10	11	11
	TtKB-18-5'	5	4/15/2002	<1	<10	<10	<10
	TtKB-18-10'	10	4/15/2002	<1	<10	<10	<10
	TtKB-18-15'	15	4/15/2002	<1	<10	<10	<10
	TtKB-18-20'	20	4/15/2002	<1	<10	<10	<10
	TtKB-18-30'	30	4/15/2002	<1	<10	<10	<10
	TtKB-18-33'	33	4/15/2002	1210	176	71.4	247
	TtKB-18-41'	41	4/15/2002	0.7	<10	<10	<10
	TtKB-19-1'	1	4/17/2002	<1	<10	<10	<10
	TtKB-19-5'	5	4/17/2002	<1	<10	<10	<10
	TtKB-19-10'	10	4/17/2002	<1	<10	<10	<10
	TtKB-19-20'	20	4/17/2002	<1	<10	<10	<10
	TtKB-19-30'	30	4/17/2002	<1	<10	<10	<10
	TtKB-19- 33.5'	33.5	4/17/2002	<1	<10	<10	<10
	TtKB-20-2'	2	4/16/2002	<1	41.2	127	168
	TtKB-20-5'	5	4/16/2002	<1	<10	<10	<10
	TtKB-20-10'	10	4/16/2002	<1	<10	<10	<10
	TtKB-20-20'	20	4/16/2002	<1	<10	<10	<10
	TtKB-20-33'	33	4/16/2002	1210	29.5	5.4	34.9
	TtKB-20- 33.5'	33.5	4/16/2002	<1	<10	<10	<10
	TtKB-21-1'	1	4/19/2002	<1	<10	<10	<10
	TtKB-21-5'	5	4/19/2002	<1	7.5	22.6	30.1
	TtKB-21-10'	10	4/19/2002	<1	<10	<10	<10
	TtKB-21-20'	20	4/19/2002	<1	<10	<10	<10
	TtKB-21-30'	30	4/19/2002	<1	<10	<10	<10
	TtKB-21-36'	36	4/19/2002	<1	<10	<10	<10
	TtKB-22-1'	1	4/12/2002	<1	<10	<10	<10
	TtKB-22-5'	5	4/12/2002	<1	<10	<10	<10
	TtKB-22-10'	10	4/12/2002	<1	<10	<10	<10
	TtKB-22-15'	15	4/12/2002	<1	<10	<10	<10
	TtKB-22-20'	20	4/12/2002	<1	<10	<10	<10
	TtKB-22- 32.5'	32.5	4/12/2002	<1	<10	<10	<10
	TtKB-22-36'	36	4/12/2002	3.1	56.9	22	78.9
	TtKB-23-20'	20	4/19/2002	<1	<10	<10	<10
	TtKB-23- 30.5'	30.5	4/19/2002	<1	54.9	48.8	104
	TtKB-23- 30.5'Dup	30.5	4/19/2002	<1	52.5	46	98.5
	TtKB-23- 36.5'	36.5	4/19/2002	<1	7.5	8.7	16.2
	TtKB-24-1'	1	5/6/2002	<1	<10	<10	<10
	TtKB-24-5'	5	5/6/2002	<1	11.7	9.9	21.6
	TtKB-24-10'	10	5/6/2002	<1	<10	<10	<10

TABLE 3-6

Total Petroleum Hydrocarbons (TPH) in mg/kg, (EPA Method 8015M)

Site Remediation at Former Sector C, Block K

	Sample Number	Depth	Date	TPH (M8015G), in mg/kg	TPH (M8015D), in mg/kg		
				TPH as Gasoline and Light HC. (C4-C12)	TPH as Diesel (C13-C22)	TPH as Heavy Hydrocarbons (C23-C40)	TPH Total as Diesel and Heavy HC.C13-C40
MDL				0.1	5	5	5
PQL				1	10	10	10
	TtKB-24-20'	20	5/6/2002	<1	<10	<10	<10
	TtKB-24-30.25'	30.25	5/6/2002	<1	25.1	9.2	34.3
	TtKB-24-30.25' Dup	30.25	5/6/2002	<1	37.9	11.6	49.5
	TtKB-24-37'	37	5/6/2002	<1	134	152	286
	TtKB-25- 1.5'	1.5	4/19/2002	<1	186	881	1070
	TtKB-25-5'	5	4/19/2002	<1	<10	<10	<10
	TtKB-25-10'	10	4/19/2002	<1	<10	<10	<10
	TtKB-25-15'	15	4/19/2002	<1	<10	<10	<10
	TtKB-25-20'	20	4/19/2002	<1	<10	<10	<10
	TtKB-25-30'	30	4/19/2002	<1	7.8	<10	7.8
	TtKB-25-38'	38	4/19/2002	<1	<10	<10	<10
	TtKB-26-5'	5	4/12/2002	<1	101	511	612
	TtKB-26-15'	15	4/12/2002	<1	<10	<10	<10
	TtKB-26- 20.5'	20.5	4/12/2002	<1	<10	<10	<10
	TtKB-26- 20.5'Dup	20.5	4/12/2002	<1	<10	<10	<10
	TtKB-26-30'	30	4/12/2002	<1	<10	<10	<10
	TtKB-26-35'	35	4/12/2002	<1	<10	<10	<10
	TtKB-27-1'	1	4/12/2002	<1	<10	<10	<10
	TtKB-27-5'	5	4/12/2002	<1	<10	125	125
	TtKB-27-10'	10	4/12/2002	<1	<10	<10	<10
	TtKB-27-20'	20	4/12/2002	<1	<10	<10	<10
	TtKB-27-30'	30	4/12/2002	<1	<10	<10	<10
	TtKB-27- 33.5'	33.5	4/12/2002	<1	<10	<10	<10
	TtKB-28- 10.5'	10.5	10/24/2002	<1	<10	5	6.3
	TtKB-29-5'	5	10/16/2002	<1	<10	<10	5.9
	TtKB-29- 10.5'	10.5	10/16/2002	<1	<10	<10	<10
	TtKB-29- 15.5'	15.5	10/16/2002	<1	<10	<10	<10
	TtKB-29- 20.5'	20.5	10/16/2002	<1	<10	<10	<10
	TtKB-29- 25.5'	25.5	10/16/2002	<1	<10	<10	<10
	TtKB-29- 30.5'	30.5	10/16/2002	<1	<10	<10	<10
	TtKB-29- 35.5'	35.5	10/16/2002	<1	<10	<10	<10
	TtKB-29- 39.0'	39	10/16/2002	<1	<10	<10	<10
	TtKB-30-5'	5	10/15/2002	<1	<10	<10	<10
	TtKB-30- 10.5'	10.5	10/15/2002	<1	<10	<10	<10
	TtKB-30- 15.5'	15.5	10/15/2002	<1	<10	<10	<10
	TtKB-30- 20.5'	20.5	10/15/2002	<1	<10	<10	<10
	TtKB-30- 25.5'	25.5	10/15/2002	<1	<10	<10	<10
	TtKB-30- 30.5'	30.5	10/15/2002	<1	20.8	22.9	43.7
	TtKB-30- 35.5'	35.5	10/15/2002	<1	<10	<10	6.88
	TtKB-30- 40.5'	40.5	10/15/2002	<1	<10	<10	<10
	TtKB-30- 40.5' Dup	40.5	10/15/2002	<1	<10	<10	<10
	TtKB-31-5'	5	10/15/2002	<1	10.2	27.5	37.7
	TtKB-31-5' Dup	5	10/15/2002	<1	7.16	20.5	27.7
	TtKB-31- 10.5'	10.5	10/15/2002	<1	<10	<10	<10

TABLE 3-6
Total Petroleum Hydrocarbons (TPH) in mg/kg, (EPA Method 8015M)
Site Remediation at Former Sector C, Block K

	Sample Number	Depth	Date	TPH (M8015G), in mg/kg	TPH (M8015D), in mg/kg		
				TPH as Gasoline and Light HC. (C4-C12)	TPH as Diesel (C13-C22)	TPH as Heavy Hydrocarbons (C23-C40)	TPH Total as Diesel and Heavy HC.C13-C40
MDL				0.1	5	5	5
PQL				1	10	10	10
	TtKB-31- 15.5'	15.5	10/15/2002	<1	<10	<10	<10
	TtKB-31- 23.0'	23	10/15/2002	<1	<10	<10	<10
	TtKB-31- 25.5'	25.5	10/15/2002	<1	<10	<10	<10
	TtKB-31- 30.5'	30.5	10/15/2002	<1	34.1	45.7	79.8
	TtKB-31- 35.5'	35.5	10/15/2002	<1	<10	<10	<10
	TtKB-31- 38.0'	38	10/15/2002	<1	<10	<10	<10
	TtKB-32- 10.5'	10.5	10/15/2002	<1	<10	<10	<10
	TtKB-32- 15.5'	15.5	10/15/2002	<1	<10	<10	<10
	TtKB-32- 20.5'	20.5	10/15/2002	<1	<10	<10	<10
	TtKB-32- 25.5'	25.5	10/15/2002	<1	<10	<10	<10
	TtKB-32- 30.5'	30.5	10/15/2002	<1	<10	<10	<10
	TtKB-32- 38.0'	38	10/15/2002	<1	<10	<10	<10
	TtKB-33-1.0'	1	11/25/2002	<1	79.1	1680	1760
	TtKB-33-1.0'Dup	1	11/25/2002	<1	132	2880	3010
	TtKB-33-10.5'	10.5	11/25/2002	<1	<10	<10	<10
	TtKB-33-20.5'	20.5	11/25/2002	<1	<10	<10	<10
	TtKB-33-30.5'	30.5	11/25/2002	3.17	<10	<10	<10
	TtKB-33-40.5'	40.5	11/25/2002	2.19	30.8	9.1	39.9
	TtKB-33-50.5'	50.5	11/25/2002	<1	<10	<10	<10
	TtKB-33-55.5'	55.5	11/25/2002	131	242	36.1	278
	TtKB-33-60.5'	60.5	11/25/2002	57.8	346	154	500
	TtKB-33-65.5'	65.5	11/25/2002	69	278	89.6	368
	TtKB-33-70.5'	70.5	11/25/2002	121	119	38.8	158
	TtKB-33-80.5'	80.5	11/25/2002	10.6	7.8	<10	9.8
	TtKB-33-94'	94	11/13/2002	<1	<10	<10	<10
	TtKB-33- 118'	118	11/13/2002	<1	<10	<10	<10
	TtKB-34-5.5'	5.5	11/26/2002	<1	<10	<10	<10
	TtKB-34-5.5' Dup	5.5	11/26/2002	<1	<10	<10	<10
	TtKB-34-10.5'	10.5	11/26/2002	<1	<10	<10	<10
	TtKB-34-20.5'	20.5	11/26/2002	<1	<10	<10	<10
	TtKB-34-30.5'	30.5	11/26/2002	<1	<10	<10	<10
	TtKB-34-40.5'	40.5	11/26/2002	<1	92.7	24.8	118
	TtKB-34-66.5'	66.5	11/26/2002	378	396	64	460
	TtKB-34-70.5'	70.5	11/26/2002	3.36	<10	<10	5.47
	TtKB-34-82.5'	82.5	11/26/2002	0.568	<10	<10	<10
	TtKB-34-86'	86	11/14/2002	0.694	<10	<10	<10
	TtKB-34-107'	107	11/14/2002	<1	<10	<10	<10
	TtKB-35-1'	1	10/17/2002	<1	<10	<10	<10
	TtKB-35- 10.5'	10.5	10/17/2002	<1	<10	<10	<10
	TtKB-35- 15.5'	15.5	10/17/2002	<1	<10	<10	<10
	TtKB-35- 20.5'	20.5	10/17/2002	<1	<10	<10	<10
	TtKB-35- 25.5'	25.5	10/17/2002	<1	<10	<10	<10
	TtKB-35- 30.5'	30.5	10/17/2002	80.7	38.3	9.9	48.2
	TtKB-35- 32.0'	32	10/17/2002	2.43	<10	<10	<10

TABLE 3-6
Total Petroleum Hydrocarbons (TPH) in mg/kg, (EPA Method 8015M)
Site Remediation at Former Sector C, Block K

	Sample Number	Depth	Date	TPH (M8015G), in mg/kg: TPH as Gasoline and Light HC. (C4-C12)	TPH (M8015D), in mg/kg: TPH as Diesel (C13-C22)	TPH as Heavy Hydrocarbons (C23-C40)	TPH Total as Diesel and Heavy HC.C13-C40
MDL				0.1	5	5	5
PQL				1	10	10	10
	TtKB-35- 35.5'	35.5	10/17/2002	1.71	10.7	<10	10.7
	TtKB-35- 44.5'	44.5	10/17/2002	<1	<10	<10	<10
	TtKB-36-5'	5	10/17/2002	<1	<10	<10	5.5
	TtKB-36- 5' Dup	5	10/17/2002	<1	8	13.9	21.9
	TtKB-36- 10.5'	10.5	10/17/2002	<1	<10	<10	<10
	TtKB-36- 15.5'	15.5	10/17/2002	<1	<10	<10	<10
	TtKB-36- 20.5'	20.5	10/17/2002	<1	<10	<10	<10
	TtKB-36- 25.5'	25.5	10/17/2002	<1	<10	<10	<10
	TtKB-36- 30.5'	30.5	10/17/2002	378	54.7	<10	54.7
	TtKB-36- 35.5'	35.5	10/17/2002	<1	<10	<10	<10
	TtKB-36- 39.0'	39	10/17/2002	<1	<10	<10	<10
	TtKB-37-1'	1	10/17/2002	<1	<10	59.6	62.6
	TtKB-37-5'	5	10/17/2002	<1	<10	<10	<10
	TtKB-37- 10.5'	10.5	10/17/2002	<1	<10	<10	<10
	TtKB-37- 10.5' Dup	10.5	10/17/2002	<1	<10	<10	<10
	TtKB-37- 15.5'	15.5	10/17/2002	<1	<10	<10	<10
	TtKB-37- 20.5'	20.5	10/17/2002	<1	<10	<10	<10
	TtKB-37- 25.5'	25.5	10/17/2002	<1	<10	<10	<10
	TtKB-37- 30.5'	30.5	10/17/2002	174	61.3	<10	65.5
	TtKB-37- 35.5'	35.5	10/17/2002	1640	126	6.4	132
	TtKB-38- 15.5'	15.5	10/18/2002	<1	<10	<10	<10
	TtKB-38- 21.5'	21.5	10/18/2002	<1	13	139	152
	TtKB-38- 25.0'	25	10/18/2002	<1	<10	<10	<10
	TtKB-38- 30.0'	30	10/18/2002	<1	54.2	32.1	86.3
	TtKB-38- 32.0'	32	10/18/2002	3.78	556	300	856
	TtKB-38- 35.0'	35	10/18/2002	0.648	17.9	6	23.9
	TtKB-38- 36.5'	36.5	10/18/2002	<1	<10	<10	5.9
	TtKB-39-5'	5	10/16/2002	<1	<10	37.9	39.9
	TtKB-39-5' Dup	5	10/16/2002	<1	<10	29	30.6
	TtKB-39- 10.5'	10.5	10/16/2002	<1	12.1	42	54.1
	TtKB-39- 15.5'	15.5	10/16/2002	<1	<10	<10	<10
	TtKB-39- 20.5'	20.5	10/16/2002	<1	<10	<10	<10
	TtKB-39- 25.5'	25.5	10/16/2002	<1	<10	<10	<10
	TtKB-39- 30.5'	30.5	10/16/2002	<1	<10	<10	<10
	TtKB-39- 35.5'	35.5	10/16/2002	<1	<10	<10	<10
	TtKB-39- 38.0'	38	10/16/2002	<1	<10	<10	<10

RI Confirmation Well Samples

TtK-1-3.5'	3.5	4/24/2002	<1	66.9	271	338
TtK-1-5'	5	4/24/2002	<1	35.7	154	190
TtK-1-10'	10	4/24/2002	<1	<10	<10	<10
TtK-1-15'	15	4/24/2002	<1	<10	<10	<10
TtK-1-20'	20	4/24/2002	<1	<10	<10	<10
TtK-1-30.5'	30.5	4/24/2002	<1	<10	<10	<10

TABLE 3-6
Total Petroleum Hydrocarbons (TPH) in mg/kg, (EPA Method 8015M)
Site Remediation at Former Sector C, Block K

	Sample Number	Depth	Date	TPH (M8015G), in mg/kg	TPH (M8015D), in mg/kg		
				TPH as Gasoline and Light HC. (C4-C12)	TPH as Diesel (C13-C22)	TPH as Heavy Hydrocarbons (C23-C40)	TPH Total as Diesel and Heavy HC.C13-C40
MDL				0.1	5	5	5
PQL				1	10	10	10
	TtK-1-30.5' DUP	30.5	4/24/2002	<1	<10	<10	<10
	TtK-1-36.5'	36.5	4/24/2002	<1	<10	<10	<10
	TtK-1-43'	43	4/24/2002	<1	203	144	347
	TtK-2-2'	2	4/22/2002	<1	5.3	20.5	25.8
	TtK-2-5'	5	4/22/2002	<1	<10	<10	<10
	TtK-2-10'	10	4/22/2002	<1	<10	<10	<10
	TtK-2-20'	20	4/22/2002	<1	<10	<10	<10
	TtK-2-30'	30	4/22/2002	<1	<10	<10	<10
	TtK-2-37.5'	37.5	4/22/2002	<1	<10	<10	<10
	TtK-2-52'	52	4/22/2002	700	5220	1240	6460
	TtK-2-61'	61	4/22/2002	217	566	130	696
	TtK-2-67.5'	67.5	4/22/2002	<1	<10	<10	<10
	TtK-2-84.5'	84.5	4/22/2002	<1	<10	<10	<10
	TtK-3-5'	5	10/23/2002	<1	<10	<10	<10
	TtK-3-5' Dup	5	10/23/2002	<1	<10	8.9	13.2
	TtK-3-10.5'	10.5	10/23/2002	<1	<10	<10	<10
	TtK-3-15.5'	15.5	10/23/2002	<1	<10	<10	<10
	TtK-3-20.5'	20.5	10/23/2002	<1	<10	<10	<10
	TtK-3-25.5'	25.5	10/23/2002	<1	<10	<10	<10
	TtK-3-30.5'	30.5	10/23/2002	<1	<10	<10	<10
	TtK-3-35.5'	35.5	10/23/2002	<1	<10	<10	<10
	TtK-3-40.5'	40.5	10/23/2002	<1	<10	<10	<10
	TtK-4-10.5'	10.5	10/22/2002	<1	<10	<10	<10
	TtK-4-15.5'	15.5	10/22/2002	<1	<10	<10	<10
	TtK-4-25.5'	25.5	10/22/2002	<1	<10	<10	<10
	TtK-4-30.5'	30.5	10/22/2002	56.9	100	19.8	120
	TtK-4-35.5'	35.5	10/22/2002	<1	<10	<10	<10
	TtK-4-40.5'	40.5	10/22/2002	<1	<10	<10	<10
	TtK-5-20.5'	20.5	10/21/2002	<1	9.74	<10	9.74
	TtK-5-25.5'	25.5	10/21/2002	<1	53.2	18.3	71.5
	TtK-5-30.5'	30.5	10/21/2002	87.2	201	70	271
	TtK-5-35.5'	35.5	10/21/2002	<1	5.73	<10	8.6
	TtK-5-40.5'	40.5	10/21/2002	<1	<10	<10	<10
	TtK-5-44.0'	44	10/21/2002	<1	<10	<10	<10
	TtK-6-5'	5	10/21/2002	<1	<10	<10	<10
	TtK-6-10.5'	10.5	10/21/2002	<1	<10	<10	<10
	TtK-6-15.5'	15.5	10/21/2002	<1	<10	<10	<10
	TtK-6-20.5'	20.5	10/21/2002	<1	<10	<10	<10
	TtK-6-25.5'	25.5	10/21/2002	<1	<10	<10	<10
	TtK-6-30.5'	30.5	10/21/2002	<1	29.1	10.4	39.5
	TtK-6-35.5'	35.5	10/21/2002	<1	<10	<10	<10
	TtK-6-40.5'	40.5	10/21/2002	<1	5.73	<10	8.6
	TtK-7-5'	5	11/27/2002	<1	<10	<10	<10
	TtK-7-5' Dup	5	11/27/2002	<1	<10	<10	<10

TABLE 3-6
Total Petroleum Hydrocarbons (TPH) in mg/kg, (EPA Method 8015M)
Site Remediation at Former Sector C, Block K

	Sample Number	Depth	Date	TPH (M8015G), in mg/kg	TPH (M8015D), in mg/kg		
				TPH as Gasoline and Light HC. (C4-C12)	TPH as Diesel (C13-C22)	TPH as Heavy Hydrocarbons (C23-C40)	TPH Total as Diesel and Heavy HC.C13-C40
MDL				0.1	5	5	5
PQL				1	10	10	10
	TtK-7-10.5'	10.5	11/27/2002	<1	<10	<10	<10
	TtK-7-15.5'	15.5	11/27/2002	<1	<10	<10	<10
	TtK-7-20.5'	20.5	11/27/2002	<1	<10	<10	<10
	TtK-7-25.5'	25.5	11/27/2002	<1	<10	<10	<10
	TtK-7-35.5'	35.5	11/27/2002	<1	<10	<10	<10
	TtK-7-41.5'	41.5	11/27/2002	97.9	<10	<10	<10

TABLE 3-7

Metals in mg/kg, (EPA Method 6010B/7000CAM)

Site Remediation at Former Sector C, Block K

	Sample Number	Depth (ft.)	Date	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
MDL				1.0	1.0	2.5	1.3	1.3	2.5	2.5	2.5	2.5	0.1	2.5	2.5	1.0	2.5	1.0	2.5	2.5
PQL				5.0	5.0	5.0	2.5	2.5	5.0	5.0	5.0	5.0	0.2	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Confirmation Soil Samples																			
	C1S4-5	5	9/8/2008	<1	<1	58	<1.3	<1.3	8.85	4.7	10.1	20.2	0.301	<2.5	14.7	<1	<2.5	<1	19.1	39
	C1W1-5	5	9/9/2008	<1	<1	31.7	<1.3	<1.3	4.4	3.2	3.85	3.85	<0.1	<2.5	2.95	<1	<2.5	<1	15.5	20.9
	C2S2-5	5	9/3/2008	<1	<1	30.6	<1.3	<1.3	4.6	3.2	3.35	<2.5	<0.1	<2.5	2.5	<1	<2.5	<1	18.1	16.5
	C3E1-5	5	9/3/2008	<1	2.75	99.5	<1.3	<1.3	17	9.35	20.6	3.4	<0.1	<2.5	12.5	<1	<2.5	<1	33.3	49.6
	C3S2-5	5	9/3/2008	<1	<1	64.5	<1.3	<1.3	5.9	3.7	7.45	61	0.227	<2.5	4.05	<1	<2.5	<1	17.8	34.5
	D3E2-5	5	9/3/2008	<1	3.8	99	<1.3	<1.3	15.6	8.95	21.2	21.3	<0.1	<2.5	12.9	<1	<2.5	<1	32.5	63.5
	E1N1-5	5	9/8/2008	<1	1.45	77.5	<1.3	<1.3	8.7	4.45	16.9	62.5	0.386	<2.5	7.25	<1	<2.5	<1	21.2	75.5
	E3E1-5	5	9/3/2008	<1	2.4	121	<1.3	<1.3	14.6	6.5	23	4.2	0.11	2.65	18.6	<1	<2.5	<1	39.8	55.5
	E3N2-5	5	9/4/2008	<1	1.9	71.5	<1.3	<1.3	9.7	5.8	14.2	21.9	<0.1	<2.5	7.85	<1	<2.5	<1	25.1	59
	G2N2-5	5	9/5/2008	<1	<1	45.5	<1.3	<1.3	6.85	4.25	5.75	<2.5	<0.1	<2.5	3.9	<1	<2.5	<1	21.9	23
	G2N3-2	2	9/5/2008	<1	3.05	333	<1.3	<1.3	23.4	7.25	32.7	5.7	<0.1	3.35	12.9	<1	<2.5	<1	31.6	63.5
				5.0	5.0	2.5	1.3	1.3	2.5	2.5	2.5	2.5	0.1	2.5	2.5	5.0	2.5	5.0	2.5	2.5
	RI Confirmation Soil Samples			10.0	10.0	5.0	2.5	2.5	5.0	5.0	5.0	5.0	0.2	5.0	5.0	10.0	5.0	10.0	5.0	5.0
	TtKB-15-1'	1	4/16/2002	<10	<10	182	<2.5	<2.5	16.1	4.3	34.3	232	1.25	<5	9.5	<10	<5	<10	19.9	194
	TtKB-15-15'	15	4/16/2002	<10	<10	141	<2.5	<2.5	11.4	6.9	17.9	6.2	<0.2	<5	12.8	<10	<5	<10	27.4	37.6
	TtKB-15-30'	30	4/16/2002	<10	<10	37.4	<2.5	<2.5	5.6	4	5.2	9.1	0.15	<5	3.4	<10	<5	<10	25.3	20.3
	TtKB-18-1'	1	4/15/2002	<10	<10	123	<2.5	1.8	30.5	15.3	19.2	18	<0.2	<5	22.4	<10	<5	<10	46.9	47.4
	TtKB-18-15'	15	4/15/2002	<10	<10	24.7	<2.5	<2.5	5.3	3.4	4	5.6	<0.2	<5	2.5	<10	<5	<10	29	14
	TtKB-18-30'	30	4/15/2002	<10	<10	87	<2.5	<2.5	10.2	8.3	15.2	11.3	<0.2	<5	9.6	<10	<5	<10	35.1	49.8
	TtKB-22-1'	1	4/12/2002	<10	<10	71.5	<2.5	<2.5	8.5	6	21.8	20.8	<0.2	<5	7.1	<10	<5	<10	22.7	50.5
	TtKB-22-15'	15	4/12/2002	<10	<10	29.4	<2.5	<2.5	3.9	2.7	3.3	3.6	<0.2	<5	<5	<10	<5	<10	21.2	13.4
	TtKB-22- 32.5'	32.5	4/12/2002	<10	<10	260	<2.5	1.4	39.1	10.3	4.6	6.7	<0.2	4.3	13.9	<10	<5	<10	58	66.5
	TtKB-23- 30.5'	30.5	4/19/2002	<10	<10	47.2	<2.5	<2.5	3	3.3	3.8	3.1	<0.2	<5	2.6	<10	<5	<10	17.7	21.3
	TtKB-25- 1.5'	1.5	4/19/2002	<10	<10	99	<2.5	<2.5	10.2	5.9	20.6	44.6	<0.2	<5	10	<10	<5	<10	24.7	62
	TtKB-25-15'	15	4/19/2002	<10	<10	30.3	<2.5	<2.5	2.6	2.6	3.5	<5	<0.2	<5	2.7	<10	<5	<10	10.3	15
	TtKB-25-30'	30	4/19/2002	<10	<10	31.1	<2.5	<2.5	5.3	2.9	4.1	4.1	<0.2	<5	<5	<10	<5	<10	23.4	17.8
	TtKB-26-15'	15	4/12/2002	<10	<10	57.5	<2.5	<2.5	12.2	4.6	11.5	7.5	<0.2	<5	6.5	<10	<5	<10	17.3	22.1
	TtKB-26-30'	30	4/12/2002	<10	<10	30.7	<2.5	<2.5	4.6	2.6	4.3	4.6	0.1	<5	<5	<10	<5	<10	16.5	16.4
	TtKB-35-1'	1	10/17/2002	<10	<10	69.5	<2.5	1.7	30.6	9.2	14.7	17.2	<0.2	<5	20.7	<10	<5	<10	41.5	35
	TtKB-35- 10.5'	10.5	10/17/2002	<10	<10	56.5	<2.5	<2.5	30.8	3.9	7.8	8.3	<0.2	<5	5.5	<10	<5	<10	20.6	21.1
	TtKB-36-5'	5	10/17/2002	<10	<10	64.5	<2.5	<2.5	8.6	5.8	9	4.6	<0.2	<5	6.5	<10	<5	<10	21.1	30.2
	TtKB-36- 5' Dup	5	10/17/2002	<10	<10	28.9	<2.5	<2.5	5.2	3	4.6	4.9	<0.2	<5	3.7	<10	<5	<10	12.8	15.6
	TtKB-37-1'	1	10/17/2002	<10	<10	98	<2.5	1.8	25.8	7.5	17.5	49.2	<0.2	<5	18.4	<10	<5	<10	39	65.5
	TtKB-37-5'	5	10/17/2002	<10	<10	56.5	<2.5	<2.5	9.7	5.5	10.7	9.1	<0.2	<5	6.9	<10	<5	<10	24.3	29.4

TABLE 3-7
Metals in mg/kg, (EPA Method 6010B/7000CAM)

Site Remediation at Former Sector C, Block K

	Sample Number	Depth (ft.)	Date	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
MDL				1.0	1.0	2.5	1.3	1.3	2.5	2.5	2.5	2.5	0.1	2.5	2.5	1.0	2.5	1.0	2.5	2.5
PQL				5.0	5.0	5.0	2.5	2.5	5.0	5.0	5.0	5.0	0.2	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	TtKB-37- 10.5'	10.5	10/17/2002	<10	<10	46.9	<2.5	<2.5	8.2	5	6.7	3.7	<0.2	<5	5.4	<10	<5	<10	24.5	25.3
	TtKB-37- 10.5' Dup	10.5	10/17/2002	<10	<10	52	<2.5	<2.5	9.4	5.2	7.5	5.1	<0.2	<5	5.9	<10	<5	<10	30.1	26.3

RI Confirmation Well Samples

Sample Number	Depth (ft.)	Date	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
TtK-1-3.5'	3.5	4/24/2002	<10	<10	107	<2.5	<2.5	12.3	8.1	13.3	7.7	<0.2	<5	9.5	<10	<5	<10	30.9	44
TtK-1-15'	15	4/24/2002	<10	<10	51.5	<2.5	<2.5	5.5	4.9	6.1	2.8	<0.2	<5	4.4	<10	<5	<10	19.2	24.1
TtK-1-30.5'	30.5	4/24/2002	<10	<10	45.9	<2.5	<2.5	5.7	4.3	6.7	3.8	0.1	<5	3.5	<10	<5	<10	22.4	24.7
TtK-1-30.5' DUP	30.5	4/24/2002	<10	<10	55	<2.5	<2.5	6.8	4.8	9.3	2.7	<0.2	<5	4.6	<10	<5	<10	22.7	24.3

TABLE 3-8
Chromium VI (EPA Method 7196A), in mg/kg

Site Remediation at Former Sector C, Block K

RI Confirmation Soil Samples

Sample ID	Date	MDL	PQL	Chromium (VI)
TtKB-35-1'	10/17/2002	0.25	0.50	<0.50
TtKB-35- 10.5'	10/17/2002	0.25	0.50	<0.50
TtKB-36-5'	10/17/2002	0.25	0.50	<0.50
TtKB-36- 5' Dup	10/17/2002	0.25	0.50	<0.50
TtKB-37-1'	10/17/2002	0.25	0.50	<0.50
TtKB-37-5'	10/17/2002	0.25	0.50	<0.50
TtKB-37- 10.5'	10/17/2002	0.25	0.50	<0.50
TtKB-37- 10.5' Dup	10/17/2002	0.25	0.50	<0.50

4. POST-EXCAVATION RISK EVALUATION

4.1 INTRODUCTION

This post-excavation risk evaluation examines the potential for human health impacts from chemicals within the limits of Block K following the completion of removal activities. Block K (hereinafter referred to as the "Site") is a portion of Sector C of the former Aliso Street manufactured gas plant (MGP) and is located in the City of Los Angeles, approximately one mile east of downtown Los Angeles.

As described in Section 2, removal of soils at the Site consisted of excavating soils to a maximum depth of approximately 10 feet below ground surface (bgs). In general, the excavation was performed in isolated areas in the southern and western portions of the Site. Excavated soils were replaced with clean backfill. Figure 2-1 in Section 2 shows the locations of the confirmation samples collected during the removal actions, and the locations of the remedial investigation (RI) samples that were not removed as part of the excavation activities. Figure 2-1 also shows the areas excavated at the Site.

This post-excavation health evaluation consists of the following steps:

1) Data evaluation;
2) Identification of chemicals of potential concern;
3) Identification of human receptors;
4) Comparison to remedial goals; and
5) Uncertainty Analysis.

Each of these steps is examined in detail in the following sections.

4.2 DATA EVALUATION

4.2.1 Soils

Removal activities resulted in the excavation of soils in several areas of the Site to a depth of approximately 10 feet bgs. Data available to characterize post-excavation conditions consist of a combination of confirmation samples collected from the walls and floor of the excavations and samples collected as part of the site-specific remedial investigation in areas unaffected by the excavation activities.

A total of 62 samples (including duplicates) were collected from the floors and sidewalls of the excavated areas in August and September 2008. Only a portion of these samples was used to evaluate residual risks to on-site receptors. Some of the samples collected during excavation were subsequently removed (i.e., over-excavated). Further, since soils at a depth greater than 10 feet bgs are not accessible for direct contact by future on-site commercial/industrial workers, the samples collected below 10 feet bgs were evaluated only with regard to potential migration to groundwater. After excluding soil samples that were over-excavated or below 10 feet bgs, 43 samples remained in on-site areas and were used in assessing risks to future on-site receptors. With the exception of one sample (D1W7-6), all samples were collected on-site. In order to provide perspective on the effectiveness of the soil removal activities, residual risk estimates included evaluations with and without the influence of benzo(a)pyrene-equivalents in the off-site soil sample. All samples that are in place are shown on Figure 2-1.

During the RI, 268 soil samples were collected. Samples that were over-excavated (15) and/or collected below 10 feet bgs (187) were not included in this risk evaluation. Thus, 66 samples from the RI were used in the evaluation of residual risk. The RI sample locations remaining are also shown on Figure 2-1.

Altogether, a total of 109 samples collected at the Site were used in the risk evaluation, as follows:

- 43 post-excavation confirmation samples; and
- 66 remedial investigation samples.

A listing of all soil samples used in this risk evaluation is provided in Appendix I.1.

Samples were variously analyzed for PAHs (EPA Method 8310), VOCs (EPA Method 8260B), metals (EPA Methods 6010B/7000 series), and TPH (EPA Methods8015D and 8015G).

4.2.2 Soil Gas

A total of 27 soil gas samples (including duplicates) at multiple depths at seven locations were collected at the Site from June 2002 to January 2003. After excluding the soil gas sample that was collected in excavated areas (i.e., at former soil gas sampling location SG-3), 26 soil gas samples (at 6 sampling locations) remained in areas considered representative of on-site conditions. These data were used in assessing the risks to future on-site commercial/industrial workers. All samples that are in place are shown on Figure 2-1 and the specific samples used in the evaluation are listed in Appendix I.1.

4.3 IDENTIFICATION OF CHEMICALS OF POTENTIAL CONCERN

Chemicals of potential concern (COPCs) are those identified in soil and soil gas at the Site and for which human contact may result in adverse health effects. All of the data collected in soils and soil gas remaining at the Site were reviewed as part of the identification of COPCs. The organic chemicals detected in soils remaining above 10 feet bgs at the Site include the seven C-PAHs, five volatile non-carcinogenic PAHs (NC-PAHs), one volatile carcinogenic PAH (naphthalene), three non-volatile NC-PAHs, eight other volatile organic compounds, and twelve metals. All of the organic chemicals detected in soils were identified as COPCs.

Based on USEPA [1989] and DTSC [1999] guidance, chemicals that are naturally occurring and present at concentrations equivalent to (or lower than) background concentrations do not need to be identified as COPCs. Similarly, ubiquitous anthropogenic chemicals do not need to be considered in the risk assessment process [USEPA 1989]. Thus, an initial set of analyses was conducted to determine whether site-specific concentrations of selected chemicals (i.e., metals) differ from background and should be selected as COPCs. These evaluations are presented below.

4.3.1 Evaluation of Metals

Metals occur naturally in soils. On-site metal concentrations were compared to local background concentrations to determine if on-site concentrations are elevated over background. A local background data set was used to determine which metals are elevated over background. The comparisons are described below.

Metals were identified as COPCs by comparing site-related concentrations to a background dataset collected in the vicinity of the former Aliso MGP Site. This background dataset [Tetra Tech 2004] consisted of a total of 16 soil samples collected at 1 and 5 feet bgs from 10 soil borings and analyzed using EPA Method 6010B. The statistical comparison of metals remaining in soils at the Site and background was conducted as follows:

1) Statistical testing was conducted based on the distribution of the data for each metal in background and on-site samples (for metals detected in more than 50 percent of the samples).

    a. The distribution of the data for each metal was determined using ProUCL [USEPA 2004a].

    b. When both on-site and background metal distributions were Normal, the mean concentrations were compared using the *t*-test [USEPA 2002a, 2006].

    c. When both distributions were Log-normal, the data were natural logarithm transformed and the mean concentrations were compared using the *t*-test [USEPA 2002a, 2006].

    d. When one distribution was Log-normal and the other was Normal, the data were natural logarithm transformed and the mean concentrations were compared using the *t*-test [USEPA 2002a, 2006].

    e. When one or both distributions did not fit either a Normal or Log-normal distribution, the median concentrations were compared using the Wilcoxon rank sum (WRS) test (also known as the Mann-Whitney U test) [USEPA 2002a, 2006, DTSC 1997].

2) When a *t*-test is performed, two different forms can be used. The appropriate form is chosen by conducting a variance ratio test. This tests the assumption of equal variances; i.e., are the variances in the background and site sample data sets equal or not? The choice of the *t*-test to use was based on the results of the variance ratio test:

    a. variance ratio test $p > 0.05$: the standard *t*-test (i.e., Student's *t*-test) was used.

    b. variance ratio test $p < 0.05$: a version of the *t*-test that accounts for separate variances (i.e., the Behrens-Fisher *t*-test) was used.

3) The results of the *t*-tests and WRS tests were interpreted as follows:

   a. $p > 0.05$: background and site metal concentrations do not significantly differ.

   b. $p < 0.05$: background and site metal concentrations do significantly differ.

   c. The direction of the difference (i.e., are site concentrations greater than or less than background) was determined using a box plot (i.e., mean ± standard error for normally or log-normally distributed data and median ± 25 percentiles for non-normally and non-log-normally distributed data).

For the statistical evaluations conducted for metals at this Site, sample results less than the chemical-specific detection limits were replaced by one-half of the detection limit [DTSC 1992].

As can be observed in Table 4-1, the results of the statistical analyses indicate that cadmium was detected in soils at the Site at concentrations elevated over background. The background data set did not include concentrations for mercury and molybdenum. Thus, cadmium, mercury and molybdenum were identified as COPCs in soils at the Site.

4.3.2 Chemicals of Potential Concern

All of the organic chemicals detected in soils were identified as COPCs. These organic chemicals include the 7 C-PAHs, 9 other PAHs, and 8 VOCs. Of the metals detected in soils at the Site, only 3 were identified as COPCs. Therefore, 27 chemicals were identified as COPCs in soils remaining at the Site. All of the COPCs in soil are listed in Table 4-2. All of the COPCs were evaluated quantitatively, except for bromochloromethane, which had no toxicity data available to support the analyses.

Seventeen VOCs (including m/p- and o-xylenes) were detected in soil gas. As shown in Table 4-2, all of these chemicals were identified as COPCs. Seven of the COPCs in soil gas were also detected in soils, while 10 chemicals were detected only in soil gas.

4.4 COMPARISON TO REMEDIAL GOALS

To assess the effectiveness of the removal actions performed at this Site, COPC concentrations were compared to remedial goals for soils and soil gas that are protective of industrial workers. Also, COPC concentrations were compared to soil goals protective of groundwater, assuming volatile chemicals in soil could potentially migrate to groundwater. The comparisons of detected chemical concentrations and these goals are used to assess the potential future adverse effects to potential future on-site workers and groundwater.

Risk-based evaluations were conducted to assess the potential for chemicals remaining in soils and soil gas to pose health risks to future on-site workers. In compliance with risk assessment guidance, these evaluations consisted of a comparison of the representative COPC concentrations to risk-based remedial goals protective of industrial workers. In addition, in order to evaluate the cumulative risks, the ratios estimated by these comparisons were summed for those constituents with goals based on carcinogenic endpoints and those with goals based on non-carcinogenic endpoints. The resulting summations were then expressed either as estimated carcinogenic risks or non-carcinogenic hazards by multiplying the ratio summations by 10^{-5} or 1 for workers, since each remedial goal is based on the specified target risk and hazard index.

Separate risk evaluations were conducted for the COPCs in soil and soil gas. The following sections describe the methodology used to examine potential future exposures to the COPCs in soils and soil gas, as well as the risks estimated for these exposures.

4.4.1 Risk Evaluations for Future On-site Workers

Comparisons of risk-based remedial goals and COPC concentrations in soils were primarily conducted for the depth interval that future on-site industrial workers may contact directly, i.e., 0-10 feet bgs. To be health protective and consistent with the procedures used for the former Aliso Street MGP Site, remedial goals were based on the combination of direct soil contact (i.e., soil ingestion, dermal contact with soil, and airborne dust inhalation) and indoor vapor inhalation. All of the remedial goals were updated for this report to incorporate current toxicity data and exposure parameter modifications as agreed upon for completion of remedial investigations at other portions of the former MGP Site. The updated set of remedial goals is provided in Appendix J, with supporting materials in Appendix K.

The inclusion of the indoor vapor inhalation pathway may have introduced some uncertainty into the risk calculations, since the remedial goal calculations rely on the theoretical partitioning of the total soil concentration into the sorbed, aqueous, and vapor phases. For this reason and to comply with DTSC [2005a] guidance on the evaluation of subsurface vapor intrusion, potential health risks for future indoor workers were also evaluated using soil gas measurements, as described below. Altogether, however, the risks estimated for future industrial worker exposures to soil may be considered as upperbound estimates.

For this risk evaluation, the representative COPC concentrations in soil consists of the reasonable maximum exposure (RME) (i.e., the lesser of the maximum detected concentration and the UCL_{95} [USEPA 1992a]) concentrations. As described above, the UCL_{95} concentrations were calculated according to the USEPA [2002b] risk assessment guidance using the latest version of ProUCL [v4.0, USEPA 2007a,b] and measurements from the combination of pre- and post-excavation samples (Appendix I).

The C-PAH evaluations for carcinogenic effects were conducted on the basis of B(a)P-equivalent concentrations, which were calculated using the potency equivalency factors (PEFs; Table 4-3) provided in DTSC [1999] guidance. The calculated B(a)P-equivalent concentrations for all the removal action and remedial investigation samples used in this assessment are provided in Table 4-4. Samples in which no C-PAHs were detected are also indicated in Table 4-4 (designated with the letter "U"). Where an individual carcinogenic PAH was not detected, it was assumed to be present at one-half the method detection limit (MDL). A concentration of 0.00875 mg/kg B(a)P-equivalent represents a sample in which no C-PAHs were detected (calculated from the analytical data by adding the MDLs for all of the carcinogenic PAHs together and then dividing by two).

Upon close examination of the data, it can be observed that the calculated B(a)P-equivalent concentration for the off-site sample (D1W7-6) is considerably higher than the on-site samples. Accordingly, the UCL_{95} calculated for B(a)P-equivalents is heavily influenced by this off-site sample, although it is laterally and vertically surrounded by sample locations with substantially lower concentrations of B(a)P-equivalents. Hence, evaluations of B(a)P-equivalents were conducted both with and without the inclusion of this one off-site sample.

Non-carcinogenic effects of C-PAHs were evaluated using total C-PAHs, determined using the sum of all of the C-PAHs analyzed for in each sample as the basis for calculating a UCL_{95}.

The comparisons of remedial goals and the representative exposure concentrations for the COPCs in soils (0-10 feet bgs) are shown in Table 4-5. As can be observed, none of the estimated COPC concentrations exceed the industrial worker goals. The carcinogenic risks estimated for individual chemicals do not exceed the target risk for future industrial workers of 1×10^{-5}, with risks ranging from approximately 7×10^{-10} to 2×10^{-6}. The summation of the risks estimated for all COPCs in soils (0-10 feet bgs) is approximately 3×10^{-6}. Therefore, the risks estimated for post-remediation soil conditions do not exceed the level established to be protective of future industrial workers at this Site.

The RME concentration (based on the UCL_{95} concentration, as shown in Appendix I.1) for the on-site B(a)P-equivalents is 0.9 mg/kg in the 0- to 10-foot soil interval. This on-site concentration is, therefore, substantially below the remedial goal protective of industrial workers (5 mg/kg). Hence, it appears that the remedial action objective for B(a)P-equivalents in on-site locations was achieved. Further, the observed on-site B(a)P-equivalents have mean and UCL_{95} concentrations (0.35 and 0.9 mg/kg; Appendix I.3) that only slightly differ from the mean and UCL_{95} concentrations (0.16 and 0.24 mg/kg) observed in ambient Southern California soils [Environ 2002; DTSC 2009]. Also, even with the inclusion of the off-site sample (D1W7-6), the RME concentration for B(a)P-equivalents is 5.3 mg/kg, which is essentially the same as the remedial goal for industrial workers. Therefore, the risks estimated for post-remediation conditions do not exceed the level established to be protective of future industrial workers at this Site and are nearly as low as ambient conditions protective of all receptors.

Table 4-5 also shows that the non-carcinogenic hazard indices calculated for future industrial workers are less than the target HI of 1. All of the ratios of measured concentrations and chemical-specific remedial goals are less than 1. Also, since each of the goals for the non-carcinogenic COPCs is based on a HI of 1, the ratios are comparable to the HI that would be calculated for a future industrial worker potentially exposed to soils at this Site. As shown in Table 4-5, the HIs calculated for worker exposure to chemicals range from 0.0000008 to 0.02. The summation of HIs is approximately 0.03. Thus, these results indicate that workers are not likely to experience adverse non-carcinogenic health effects from assumed exposures to soils under current Site conditions.

Future industrial workers are not likely to contact soils deeper than 10 feet bgs. However, volatile chemicals in soils deeper than 10 feet bgs could potentially migrate through soils to indoor air. As indicated above, in accordance with DTSC [2005a] guidance, the potential risks associated with indoor air exposures are preferentially evaluated using measurements of COPCs in soil gas. The evaluations of risks from indoor vapor intrusion of COPCs in soil gas are described below. Nevertheless, to be complete, evaluations of volatile constituents detected in soils deeper than 10 feet bgs are also provided in Appendix J.

4.4.2 Risk Evaluations for Future On-site Indoor Workers

A risk-based evaluation was conducted to assess the potential for chemicals in soil gas to pose health risks to future on-site indoor workers. In compliance with risk assessment guidance, this evaluation consisted of a comparison of the representative COPC concentrations in soil gas to remedial goals protective of indoor industrial workers.

Depth-specific remedial goals developed for soil gas were calculated using the infinite source version of the Johnson and Ettinger (J&E) indoor air model [DTSC 2005b] to model chemical migration from soil gas to indoor air. This process, therefore, assumed that the goals calculated for each depth interval represented a chemical mass that is sufficiently large that indoor air concentrations are constant over time. Consequently, the remedial goal calculation process necessitated separate evaluations of risks for each sampling depth for which goals were calculated: 5, 15, 20 and 25 feet bgs. The maximum concentration of each COPC within the depths of the specified remedial goals was compared to the chemical-specific soil gas remedial goals. The maximum soil gas concentrations for each COPC that were used for these comparisons are shown in Table 4-6.

Table 4-6 shows the results of comparing the maximum soil gas concentrations for each COPC to the depth-specific remedial goals. As shown in Table 4-6, the cancer risks estimated for the various depth intervals range from approximately 1×10^{-6} to 5×10^{-5}, with only the risks estimated for soil gas measurements collected at 5 feet and 15 feet resulting in risk estimates exceeding 1×10^{-5} (i.e., 5×10^{-5} and 2×10^{-5}, respectively). As can be observed in Table 4-6, the primary COPC contributing to these risk estimates exceeding 1×10^{-5} is benzene. Further, it should be noted that these risk estimates are due entirely to benzene concentrations measured at 5 and 15 feet (35.3 and 32 mg/m^3, respectively) at one location (TtKSG-4). All other benzene concentrations measured at these two depth intervals were less than 20 percent of those detected at TtKSG-4 (i.e., 7.2 mg/m^3 or lower), thereby suggesting that the area impacted by benzene is relatively limited. This conclusion is also supported by the risks estimated for soil gas measured at 20 and 25 feet bgs, which were both approximately 1×10^{-6} (see Table 4-6).

The summations of the hazard quotients for the non-carcinogenic soil gas COPCs in each depth interval range from 0.02 to 0.3. These equate directly to HIs for potential worker exposures to vapors intruding into indoor air. The highest HI was calculated for COPCs detected in the two shallowest sampling intervals, as was observed for the carcinogenic COPCs in soil gas. Together, these non-carcinogenic hazard estimates based on maximum COPC concentrations in soil gas indicate that hazards are within acceptable limits for future industrial uses.

Further, the risk estimates based on soil gas intrusion into indoor air are consistent with the evaluations presented for VOCs detected in soils deeper than 15 feet bgs (see Appendix J). That is, risks estimated for indoor vapors intruding from deeper soils do not exceed 1×10^{-5} for future industrial workers at the Site.

4.5 COMPARISON TO GROUNDWATER PROTECTIVE GOALS

A screening evaluation was conducted to assess the potential for chemicals remaining in soils to impact groundwater beneath the Site by comparing the site-specific remedial goals to the concentrations of chemicals in soils remaining in place at the Site. To be health protective, the representative COPC concentrations were based on the maximum detected concentrations in each of several depth intervals. As shown in Table 4-7, comparisons were made for five depth intervals, i.e., each 5-foot depth interval from 0 to 25 feet bgs. Groundwater protective goals were calculated for each volatile chemical that could potentially migrate from soils to groundwater. The remedial goals were based on achieving drinking water criteria, including the maximum contaminant levels (MCLs), notification limits (NLs), or tap water PRGs, depending on which criteria were available (see Appendix K).

Table 4-7 shows the results of the comparisons of the representative COPC concentrations and groundwater protective remedial goals for soil. The evaluation shows that none of the COPCs exceed groundwater protective goals. Thus, this evaluation indicates that none of the chemicals remaining in soils represent potential sources that could adversely impact groundwater by migration at concentrations exceeding applicable water quality criteria.

4.6 UNCERTAINTY ANALYSIS

The risk-based remedial goals and risk ratios estimated for this Site must be evaluated in terms of the conditions assumed in identifying the COPCs, quantifying exposures, estimating dose-response variables, and characterizing risks. In general, USEPA and DTSC guidance was used in developing the remedial goals and, thus, health protective assumptions were used in the risk evaluations. Several assumptions considered in the evaluation of post-remediation conditions are discussed below.

- All chemicals detected in soils and soil gas remaining at the Site and elevated over background were identified as COPCs in this post-remediation risk assessment. All of the COPCs were evaluated quantitatively except for bromochloromethane. The lack of available toxicity data for this COPC could potentially have resulted in an under-estimation of risks. However, since bromochloromethane was only detected in 2 of 109 soil samples collected within the 0 to 10 feet depth interval (see Appendix I.2), this source of uncertainty in the post-remediation risk assessment may be relatively minor.

- This risk evaluation assumed that future on-site industrial workers would be consistently exposed to the COPCs, such as the B(a)P-equivalents, in soils at the Site. However, since the Site is likely to be entirely covered by paving or buildings in the future, chemical exposures are likely to be substantially less than those used in evaluating risks for this Site.

- Additionally, industrial workers were evaluated assuming that they could be present as indoor workers for 25 years at the Site. As stated in Appendix J, this is approximately four times the typical occupational tenure of 6.6 years. Therefore, based on this assumption alone, risks may have been over-estimated for a future indoor worker.

- Indoor vapor exposure was evaluated for future workers without regard to physical constraints unique to this Site. However, a subway tunnel runs through the center of Block K (see Figure 1-2) and this tunnel is likely to limit the use of the Site, including construction of a building on that portion of the Site. In the event that a building is constructed on the Site, the subway tunnel may also prevent exposure to levels exceeding the target risk level set for workers, since the maximum concentrations of benzene in soil gas appear limited to one location in the north-east corner of the Site. Thus, the exposure assumptions used to evaluate outdoor and indoor workers may have substantially overestimated risks for likely future conditions across much of this Site.

- Soil gas concentrations used in the risk assessment were collected prior to the removal of soils and may not entirely represent the post-remediation conditions. Hence, the risks calculated using soil gas measurements may not reflect the potential effects of the soil removal activities on future indoor vapor exposures. Consequently, risks based on soil gas measurements may substantially over-estimate those strictly associated with any remaining soil sources at this Site.

- Toxicity data for several chemicals, including dicyclopentadiene and 1,2,3- and 1,3,5-trimethylbenzene, are available only as provisional peer-reviewed toxicity values (PPRTVs), which, although developed by the USEPA, have not received the full review or documentation necessary to be reported in the IRIS database. The degree of uncertainty associated with the use of these toxicity data is unknown.

4.7 SUMMARY

Based on the determinations described above, the removal activities have effectively reduced the concentrations of COPCs in soils at the Site to levels acceptable for industrial land use. In particular, C-PAHs (expressed as B(a)P-equivalents) and metals in soils at the Site were removed to levels lower than the goals protective of commercial/industrial workers. This equates to estimated cumulative carcinogenic risks less than the acceptable level of 1×10^{-5} for commercial/industrial workers and non-carcinogenic hazards less than the acceptable HI of 1 (i.e., a risk of approximately 3×10^{-6} and a HI of approximately 0.03). Further, the observed on-site B(a)P-equivalents have mean and UCL_{95} concentrations (0.35 and 0.9 mg/kg) that only slightly differ from the mean and UCL_{95} concentrations (0.16 and 0.24 mg/kg) observed in ambient Southern California soils [Environ 2002; DTSC 2009]. Thus, B(a)P-equivalent concentrations are nearly as low as ambient conditions protective of all receptors. For the protection of groundwater, it was found that following excavation, none of the COPCs in soil had concentrations exceeding groundwater protective goals.

Based on soil gas measurements collected prior to soil removal activities, risks estimated for soil gas exposure exceed the acceptable level for future indoor workers (i.e., 1×10^{-5}), with risks estimated up to 5×10^{-5}. However, this risk estimate is entirely due to benzene detected at one location (TtKSG-4) in the northeast corner of the Site. Consequently, the risk for indoor workers may be overestimated since vapor sources in soil may have been removed during remediation, the subway tunnel beneath this Site may limit future Site development, such as building construction, and the tunnel may also prevent exposure to the benzene observed in a limited (northeast) portion of the Site.

Thus, these results indicate that the removal action objectives for this Site have been met, i.e., to restore the Site soils to conditions acceptable for future industrial land use and soil conditions nearly approach levels protective of unrestricted Site use. Only soil gas in one location in the northeast corner of the Site may need to be considered further. Also, the chemicals remaining in soils are unlikely to migrate at levels of concern to groundwater in the future.

Table 4-1
Statistical Comparison
Metals in Background vs. Site Soils
Block K, Sector C, Aliso MGP Site

Metal	Distribution[1]		Detection Frequency and Concentrations (mg/kg)											Test results		
			Background					Site								
0 to 10 ft	Background	Site	Number of Detects	Number of Samples	Min	Max	UCL	Number of Detects	Number of Samples	Min	Max	UCL	Test Used	*t* Statistic	*p*	Elevated?
Arsenic	None	Normal, LN	2	16	1.3	6.3	6.3	6	24	1.45	3.8	2.50	Non-parametric	0.97	0.39	No
Barium	Normal, LN	Lognormal	16	16	34.3	119	91.04	24	24	28.9	333	116.6	t-test[2]	0.03	0.98	No
Cadmium	Normal, LN	None	8	16	1.7	4.5	2.787	3	26	1.7	1.8	1.72	Non-parametric	-2.86	0.02	**Yes**
Chromium	Normal, LN	Lognormal	16	16	2.5	18.8	12.74	24	24	4.4	30.6	16.7	t-test[2]	0.92	0.36	No
Cobalt	Normal, LN	Lognormal	16	16	3	12.4	7.991	24	24	3.0	15.3	7.41	t-test[2]	-1.03	0.31	No
Copper	Normal, LN	Normal, LN	16	16	3.6	20.9	14.57	24	24	3.35	34.3	18.7	t-test	0.87	0.39	No
Lead	Lognormal	Lognormal	14	16	2.5	52	19.14	22	24	3.4	232	98	t-test[2]	1.32	0.20	No
Mercury	-	Normal, LN	0	16	<0.1	<0.1	-	5	24	0.11	1.3	0.30	-	-	-	**Yes[3]**
Molybdenum	-	None	0	16	-	-	-	2	24	2.7	3.4	2.8	-	-	-	**Yes[3]**
Nickel	Normal, LN	Lognormal	15	16	4.4	15.6	11.48	24	24	2.5	22.4	12.5	t-test[2]	-0.11	0.91	No
Vanadium	Normal, LN	Normal, LN	16	16	10.6	41.8	30.58	24	24	12.8	46.9	30.2	t-test	0.06	0.95	No
Zinc	Normal, LN	Lognormal	16	16	14.8	79.5	55.17	24	24	15.6	194	64.7	t-test[2]	-0.54	0.6	No

Notes:

1 - Distribution assessed using ProUCL.
2 Data log-transformed prior to analysis.
3 - Identified as a COPC because constituent was not detected in the background samples and detected at the site, although infrequently.

Definitions:

Normal - Data is normally distributed.
Lognormal - Data is log-normally distributed.
Min - Minimum
Max - Maximum
Normal, LN - Data fit both a log-normal and a normal distribution.
None - Data is neither log-normally or normally distributed.
UCL - 95% upper confidence limit on the mean concentration (see also Appendix I)

Table 4-2
Chemicals of Potential Concern
Block K, Sector C, Aliso MGP Site
Los Angeles, CA

Chemical	Soil 0 to 10 ft bgs	Soil Gas 5-25 ft bgs
Metals		
Cadmium	X	
Mercury	X	
Molybdenum	X	
Carcinogenic PAHs		
Benzo(a)pyrene equivalents[1]	X	
Naphthalene	X	X
Non-carcinogenic PAHs		
Volatile PAHs		
Acenaphthene	X	
Acenaphthylene	X	
Anthracene	X	
Fluorene	X	
Phenanthrene	X	
Non-volatile PAHs		
Benzo(g,h,i)perylene	X	
Fluoranthene	X	
Pyrene	X	
Volatile Organic Compounds (VOCs)		
Benzene	X	X
Bromochloromethane	X	
Chloroform		X
Dicyclopentadiene		X
Ethylbenzene	X	X
Isopropylbenzene		X
Methylene chloride		X
Methyl-tert-butylether(MTBE)	X	X
n-Propylbenzene		X
Styrene		X
Tetrachloroethene	X	X
Toluene	X	X
1,1,1-Trichloroethane		X
Trichloroethene		X
1,2,4-Trimethylbenzene		X
1,3,5-Trimethylbenzene		X
m,p-Xylenes	X	X
o-Xylene	X	X

Definitions:

ft - Feet.
bgs - Below ground surface.
PAH - Polycylic aromatic hydrocarbons.

Note:

1 - See Table 4-3 for the list of chemicals included in Benzo(a)pyrene[B(a)P]-equivalents.
Also evaluated non-carcinogenic effects as total C-PAHs

Table 4-3
Toxicity Equivalency Factors
Block K, Sector C, Aliso MGP Site
Los Angeles, CA

Chemical	TEF[a]
Benzo(a)anthracene	0.1
Benzo(a)pyrene	1
Benzo(b)fluoranthene	0.1
Benzo(k)fluoranthene	0.1
Chrysene	0.01
Dibenzo(a,h)anthracene	0.34
Indeno(1,2,3-cd)pyrene	0.1

Definitions:

TEF - Toxicity equivalency factor

SF - Slope factor.

Notes:

a - Obtained from DTSC [1999], with the exception of dibenzo(a,h)anthracene. TEF for dibenzo(a,h)anthracene obtained by taking the ratio of its SF to the benzo(a)pyrene SF from DTSC [1999].

Table 4-4
Concentrations of C-PAHs in Post-Remediation Soils
Block K, Sector C, Aliso MGP Site
Los Angeles, CA

Depth (ft bgs)	Sample ID	Qualifier	Benzo(a)pyrene-equivalents[1] (mg/kg)	Total C-PAHs[2] (mg/kg)
Remedial Investigation (RI) Samples				
1	TtKB-13-1'	U	0.00875	0.035
1	TtKB-15-1'		0.78	2.598
1	TtKB-16-1'		0.04	0.136
1	TtKB-18-1'	U	0.00875	0.035
1	TtKB-19-1'	U	0.00875	0.035
1	TtKB-21-1'	U	0.00875	0.035
1	TtKB-22-1'	U	0.00875	0.035
1	TtKB-24-1'		0.47	1.46
1	TtKB-27-1'		0.30	0.97
1	TtKB-33-1.0'		0.25	1.535
1	TtKB-33-1.0' Dup		0.20	1.582
1	TtKB-35-1'	U	0.00875	0.035
1	TtKB-37-1'		0.03	0.216
1.5	TtKB-25-1.5'		1.31	4.167
2	TtK-2-2'		1.25	4.104
2	TtKB-14-2'		0.15	0.438
2	TtKB-20-2'		0.43	1.451
3.5	TtK-1-3.5'		5.74	20.64
5	TtK-1-5'		5.54	21.934
5	TtK-2-5'		0.02	0.044
5	TtK-3-5'	U	0.00875	0.035
5	TtK-3-5' Dup		0.02	0.116
5	TtK-6-5'	U	0.00875	0.035
5	TtK-7-5'		0.02	0.067
5	TtK-7-5' Dup	U	0.00875	0.035
5	TtKB-13-5'		0.04	0.131
5	TtKB-14-5'	U	0.00875	0.035
5	TtKB-15-5'		0.00885	0.045
5	TtKB-16-5'	U	0.00875	0.035
5	TtKB-17-5'	U	0.02	0.07
5	TtKB-18-5'		0.04	0.131
5	TtKB-19-5'		0.06	0.222
5	TtKB-20-5'		0.03	0.111
5	TtKB-21-5'		0.43	1.4199
5	TtKB-22-5'		0.85	2.739
5	TtKB-24-5'		0.37	1.138
5	TtKB-25-5'		0.02	0.069
5	TtKB-26-5'		1.40	4.093
5	TtKB-27-5'		0.16	0.516
5	TtKB-29-5'		0.08	0.379
5	TtKB-30-5'		0.04	0.145
5	TtKB-31-5'		0.30	1.256
5	TtKB-31-5' Dup		0.47	1.99
5	TtKB-36-5'	U	0.00875	0.035

Table 4-4
Concentrations of C-PAHs in Post-Remediation Soils
Block K, Sector C, Aliso MGP Site
Los Angeles, CA

Depth (ft bgs)	Sample ID	Qualifier	Benzo(a)pyrene-equivalents[1] (mg/kg)	Total C-PAHs[2] (mg/kg)
5	TtKB-36-5' Dup	U	0.00875	0.035
5	TtKB-37-5'	U	0.00875	0.035
5	TtKB-39-5'		0.15	0.605
5	TtKB-39-5' Dup		0.19	0.78
5.5	TtKB-34-5.5'	U	0.00875	0.035
5.5	TtKB-34-5.5' Dup	U	0.00875	0.035
10	TtK-1-10'		0.09496	0.358
10	TtK-2-10'	U	0.00875	0.035
10	TtKB-13-10'	U	0.00875	0.035
10	TtKB-14-10.5'	U	0.00875	0.035
10	TtKB-14-10.5' Dup	U	0.00875	0.035
10	TtKB-15-10'	U	0.00875	0.035
10	TtKB-16-10'	U	0.00875	0.035
10	TtKB-17-10'	U	0.00875	0.035
10	TtKB-18-10'	U	0.00875	0.035
10	TtKB-19-10'	U	0.00875	0.035
10	TtKB-20-10'	U	0.00875	0.035
10	TtKB-21-10'	U	0.00875	0.035
10	TtKB-22-10'	U	0.00875	0.035
10	TtKB-24-10'	U	0.00875	0.035
10	TtKB-25-10'	U	0.00875	0.035
10	TtKB-27-10'	U	0.00875	0.035
Removal Action (RA) Confirmation Samples				
2	F1W1-2	U	0.00875	0.035
2	G2N3-2	U	0.00875	0.035
4	D1W2-4		0.11	0.306
4	E1W1-4		0.63	2.094
4	E2F1-4		4.24	14.525
5	B7S1-5		1.89	6.286
5	C1S4-5		0.41	1.306
5	C1W1-5	U	0.00875	0.035
5	C2S2-5	U	0.00875	0.035
5	C3E1-5	U	0.00875	0.035
5	C3S2-5		0.10	0.297
5	C6W1-5		0.42	1.408
5	C7E1-5		0.23	0.716
5	C7N1-5		0.66	2.123
5	D3E1-5		0.32	0.898
5	D3E2-5		0.37	1.084
5	E1F1-5		1.67	5.334
5	E1N1-5		2.89	10.796
5	E3E1-5	U	0.00875	0.035
5	E3N2-5		0.04375	0.07
5	F1N2-5	U	0.00875	0.035
5	G2N2-5	U	0.00875	0.035
5	H11S1-5		0.04	0.089

Table 4-4
Concentrations of C-PAHs in Post-Remediation Soils
Block K, Sector C, Aliso MGP Site
Los Angeles, CA

Depth (ft bgs)	Sample ID	Qualifier	Benzo(a)pyrene-equivalents[1] (mg/kg)	Total C-PAHs[2] (mg/kg)
5	H11W1-5		0.03	0.059
5	H12E1-5		0.06	0.221
5	I11N1-5		0.13	0.469
5	T1-5	U	0.00875	0.035
6	D1W7-6 (offsite)		48.37	150
6	H11F1-6		0.06	0.218
7	D2F2-7		0.03	0.278
8	D1W8-8		0.42	1.18
9	D1W6-9	U	0.00875	0.035
10	C1S2-10	U	0.00875	0.035
10	C2S1-10		0.35	1.1
10	C3E2-10	U	0.00875	0.035
10	C3S1-10	U	0.00875	0.035
10	C3S1-10D	U	0.00875	0.035
10	D3E3-10	U	0.00875	0.035
10	E3E2-10		1.24	3.826
10	E3N1-10	U	0.00875	0.035
10	G1W1-10	U	0.00875	0.035
10	G2N1-10	U	0.00875	0.035
10	T1-10	U	0.00875	0.035

Definitions:

B(a)P-equiva - Benzo(a)pyrene equivalent concentration
bgs - Below ground surface
C-PAH - Carcinogenic polycyclic aromatic hydrocarbons
Dup or D - Indicates a duplicate sample
ft - Feet
mg/kg - Milligrams per kilogram
TEF - Toxicity equivalency factor

Notes:

1 - Converted from the analytical results for the individual PAHs using the TEFs on Table 4-3.
2 - The sum of all C-PAHs without applying the TEFs.

Table 4-5
Post-removal Risk Estimates for Future Industrial Workers
Block K, Sector C, Aliso MGP Site
Los Angeles, CA

Chemical	RME (mg/kg)	Remedial Goals: Cancer	Remedial Goals: Non-Cancer	Risk Estimates: Cancer Risk Probability	Risk Estimates: Non-Cancer Hazard Quotient
Metals					
Cadmium	1.723	823	402	2.1E-08	0.004
Mercury	0.296	-	262	-	0.001
Molybdenum	2.763	-	4,754	-	0.0006
Carcinogenic PAHs					
Benzo(a)pyrene equivalents[1]	0.916	5	-	2.0E-06	-
Total C-PAHs	3.311	-	9,313	-	0.0004
Naphthalene [2]	0.174	2	8	8.4E-07	0.02
Non-carcinogenic PAHs					
Volatile PAHs					
Acenaphthene	0.0927	-	4,235	-	0.00002
Acenaphthylene	0.0143	-	83	-	0.0002
Anthracene	0.31	-	78,281	-	0.000004
Fluorene	0.133	-	8,656	-	0.00002
Phenanthrene	1.353	-	288	-	0.005
Non-volatile PAHs					
Benzo(g,h,i)perylene	2.718	-	9,313	-	0.0003
Fluoranthene	1.052	-	20,452	-	0.00005
Pyrene	1.307	-	15,339	-	0.00009
Volatile Organic Compounds (VOCs)					
Benzene	0.0135	0.8	23	1.8E-07	0.0006
Ethylbenzene	0.0025	8.8	775	2.8E-09	0.000003
m,p-Xylenes	0.00413	-	78	-	0.00005
Methyl-tert-butylether (MTBE)	0.00586	84	2,355	6.9E-10	0.000002
o-Xylene	0.00218	-	78	-	0.00003
Tetrachloroethene	0.00613	3.6	27	1.7E-08	0.0002
Toluene	0.00325	-	234	-	0.00001
			Approximate Risk/Hazard	3.E-06	0.03

Definitions:

bgs - Below ground surface
C-PAHs - carcinogenic polycyclic aromatic hydrocarbons (see Table 4-1)
ft - Feet.
mg/kg - Milligrams per kilogram
ND - Chemical not detected in this depth interval.
RME - Reasonable maximum exposure (i.e., the lesser of the maximum detected and UCL_{95} concentration) of chemicals in soils (0-10 ft bgs)

Notes:

1 - Results for B(a)P-equivalents are shown for on-site samples only; including the off-site sample (D1W7-6), the RME concentration is 5.3 mg/kg, which equates to a cancer risk of approximately 1E-5.

2 - To be health protective, the RME is based on Method 8310 analyses; compared to the Method 8260 RME of 0.007 mg/kg.

Table 4-6
Risk Estimates for Indoor Workers, based on Soil Gas Concentrations Measured at Different Depths
Block K, Sector C, Aliso MGP Site
Los Angeles, CA

	5 ft bgs	Goal		Risk Estimates	
	Maximum	Cancer	Non-Cancer	Cancer	Non-Cancer
Chemical	**ug/m3**	**(mg/m³)**	**(mg/m³)**	**Risk Probability**	**Hazard Quotient**
Benzene	35,300	8	237	5.E-05	0.1
Chloroform	ND	37	2,248	NA	NA
Dicyclopentadiene	3,000	-	66	-	0.05
Ethylbenzene	6,600	99	8,750	7.E-07	0.0008
Isopropylbenzene	700	-	3,856	-	0.0002
Methylene chloride	61	203	2,796	3.E-09	0.00002
Methyl-tert-butylether	3,400	776	21,605	4.E-08	0.0002
Naphthalene	ND	8	31	NA	NA
n-Propylbenzene	800	-	4,063	-	0.0002
Styrene	2,600	-	9,075	-	0.0003
Tetrachloroethene	1,450	42	315	3.E-07	0.005
Toluene[1]	43,200	-	2,386	-	0.02
1,1,1-Trichloroethane	89	-	42,639	-	0.000002
Trichloroethene	14	118	5,032	1.E-09	0.000003
1,2,4-Trimethylbenzene	1,300	-	71	-	0.02
1,3,5-Trimethylbenzene	800	-	61	-	0.01
m,p-Xylenes	10,700	-	916	-	0.01
o-Xylene	4,800	-	795	-	0.006
	Approximate Carcinogenic Risk/Hazard			5.E-05	0.3

	15 ft bgs	Goal		Risk Estimates	
	Maximum	Cancer	Non-Cancer	Cancer	Non-Cancer
Chemical	**ug/m3**	**(mg/m³)**	**(mg/m³)**	**Risk Probability**	**Hazard Quotient**
Benzene	32,000	18	565	1.7E-05	0.06
Chloroform	11	85	5,162	1.3E-09	0.000002
Dicyclopentadiene	4,000	-	167	-	0.02
Ethylbenzene	6,000	243	21,575	2.5E-07	0.0003
Isopropylbenzene	ND	-	9,775	NA	NA
Methylene chloride	82	470	6,462	1.7E-09	0.00001
Methyl-tert-butylether	1,000	1,787	49,775	5.6E-09	0.00002
Naphthalene	74	22	80	3.4E-08	0.001
n-Propylbenzene	ND	-	10,449	NA	NA
Styrene	2,800	-	22,622	-	0.0001
Tetrachloroethene[2]	2,650	104	782	2.5E-07	0.003
Toluene[3]	39,300	-	5,703	-	0.007
1,1,1-Trichloroethane	176	-	104,300	-	0.000002
Trichloroethene	40	289	12,277	1.4E-09	0.000003
1,2,4-Trimethylbenzene	1,700	-	182	-	0.009
1,3,5-Trimethylbenzene	900	-	157	-	0.006
m,p-Xylenes	10,500	-	2,290	-	0.005
o-Xylene	4,900	-	1,901	-	0.003
	Approximate Carcinogenic Risk/Hazard			2.E-05	0.1

Table 4-6
Risk Estimates for Indoor Workers,
based on Soil Gas Concentrations Measured at Different Depths
Block K, Sector C, Aliso MGP Site
Los Angeles, CA

Chemical	20 ft bgs Maximum ug/m3	Goal Cancer (mg/m^3)	Goal Non-Cancer (mg/m^3)	Risk Estimates Cancer Risk Probability	Risk Estimates Non-Cancer Hazard Quotient
Benzene	2,900	24	729	1.2E-06	0.004
Chloroform	ND	108	6,618	NA	NA
Dicyclopentadiene	2,700	-	218	-	0.01
Ethylbenzene	2,000	315	27,988	6.3E-08	0.00007
Isopropylbenzene	ND	-	12,735	NA	NA
Methylene chloride	56	603	8,295	9.3E-10	0.000007
Methyl-tert-butylether	ND	2,292	63,860	NA	NA
Naphthalene	ND	28	104	NA	NA
n-Propylbenzene	ND	-	13,642	NA	NA
Styrene	ND	-	29,395	NA	NA
Tetrachloroethene[4]	1,790	135	1,016	1.3E-07	0.002
Toluene[5]	6,500	-	7,361	-	0.0009
1,1,1-Trichloroethane	117	-	135,131	-	0.0000009
Trichloroethene	21	374	15,899	5.6E-10	0.000001
1,2,4-Trimethylbenzene	500	-	238	-	0.002
1,3,5-Trimethylbenzene	ND	-	205	NA	NA
m,p-Xylenes	1,700	-	2,977	-	0.0006
o-Xylene	1,000	-	2,454	-	0.0004
	Approximate Carcinogenic Risk/Hazard			1.E-06	0.02

Chemical	25 ft bgs Maximum ug/m3	Goal Cancer (mg/m^3)	Goal Non-Cancer (mg/m^3)	Risk Estimates Cancer Risk Probability	Risk Estimates Non-Cancer Hazard Quotient
Benzene	1100	29	893	3.8E-07	0.001
Chloroform	ND	132	8,075	NA	NA
Dicyclopentadiene	3600	-	268	-	0.01
Ethylbenzene	1100	388	34,401	2.8E-08	0.00003
Isopropylbenzene	ND	-	15,695	NA	NA
Methylene chloride[6]	52400	737	10,128	7.1E-07	0.005
Methyl-tert-butylether	ND	2,798	77,945	NA	NA
Naphthalene	ND	35	129	NA	NA
n-Propylbenzene	ND	-	16,835	NA	NA
Styrene	500	-	36,169	NA	NA
Tetrachloroethene[7]	1780	167	1,250	1.1E-07	0.001
Toluene[8]	3700	-	9,020	-	0.0004
1,1,1-Trichloroethane	117	-	165,961	-	0.0000007
Trichloroethene	21	459	19,522	4.6E-10	0.000001
1,2,4-Trimethylbenzene	500	-	293	-	0.002
1,3,5-Trimethylbenzene	ND	-	253	NA	NA
m,p-Xylenes	1700	-	3,665	-	0.0005
o-Xylene	900	-	3,006	-	0.0003
	Approximate Carcinogenic Risk/Hazard			1.E-06	0.02

Table 4-6
Risk Estimates for Indoor Workers, based on Soil Gas Concentrations Measured at Different Depths
Block K, Sector C, Aliso MGP Site
Los Angeles, CA

Definitions:

bgs	- Below ground surface
ft	- Feet.
$\mu g/m^3$	- Micrograms per cubic meter
NA	- Not applicable
ND	- Chemical not detected in this depth interval.

Notes:

All units are in $\mu g/m^3$.

To be health protective, the higher of separate analyses of vapors at each chemical at each depth was used:

1	- Toluene results for Method 8260 were used over Method TO-15 (12 ug/m^3).
2	- Tetrachloroethene results for Method TO-15 were used over Method 8260 (1,200 ug/m^3).
3	- Toluene results for Method 8260 were used over Method TO-15 (16 ug/m^3).
4	- Tetrachloroethene results for Method TO-15 were used over Method 8260 (900 ug/m^3).
5	- Toluene results for Method 8260 were used over Method TO-15 (11 ug/m^3).
6	- Methylene chloride results associated for Method 8260 were used over Method TO-15 (66 ug/ı
7	- Tetrachloroethene results for Method TO-15 were used over Method 8260 (1,000 ug/m^3).
8	- Toluene results for Method 8260 were used over Method TO-15 (13 ug/m^3).

Table 4-7
Comparison of Maximum COPC Concentrations in Soil to Goals Protective of Groundwater
Block K, Sector C, Former Aliso Street MGP Site
Los Angeles, CA

	0 - ≤ 5 ft bgs		>5 - ≤ 10 ft bgs		>10 - ≤ 15 ft bgs		>15 - ≤ 20 ft bgs		>20 - ≤ 25 ft bgs	
Chemical	**Goal (mg/kg)**	**Maximum (mg/kg)**	**Goal (mg/kg)**	**Maximum (mg/kg)**	**Goal (mg/kg)**	**Maximum (mg/kg)**	**Goal (mg/kg)**	**Maximum (mg/kg)**	**Goal (mg/kg)**	**Maximum (mg/kg)**
Acenaphthene[1]	>100,000	0.40	>100,000	2.03	-	ND	50,315	0.028	-	ND
Acenaphthylene[1]	>100,000	0.02	-	ND	-	ND	-	ND	-	ND
Anthracene[1]	>100,000	0.67	>100,000	5.65	>100,000	0.02	>100,000	ND	>100,000	0.10
Benzene[2]	0.25	0.10	0.09	0.07	0.06	0.02	0.04	0.007	0.02	0.02
Bromochloromethane	NG	0.009	-	ND	-	ND	-	ND	-	ND
Ethylbenzene[2]	797	0.01	286	0.002	-	ND	-	ND	-	ND
Fluorene[1]	>100,000	1.770	>100,000	2.83	>100,000	ND	>100,000	0.15	-	ND
Naphthalene[3]	132	0.242	39	4.18	16	0.15	8	0.01	5	0.09
MTBE[2]	0.7	0.010	-	ND	0.2	0.01	0.1	0.01	0.09	0.009
Phenanthrene[1]	>100,000	4.14	>100,000	24.8	>100,000	0.26	>100,000	0.03	43,515	0.82
Tetrachloroethene[2]	3.2	0.013	-	ND	-	ND	-	ND	-	ND
Toluene[2]	93	0.046	34	0.002	-	ND	-	ND	9	0.003
Xylenes (m,p)[2]	977	0.015	354	0.004	-	ND	-	ND	92	0.004
Xylenes (o)[2]	977	0.008	354	0.002	-	ND	-	ND	-	ND

Definitions:

-	- Goal not shown as chemical not detected at specified depth.
bgs	- Below ground surface
COPC	- Chemical of potential concern
ft	- Feet.
mg/kg	- Milligrams per kilogram
ND	- chemical not detected in this depth interval.
NG	- No goal; drinking water criteria not available.
RME	- Reasonable maximum exposure (i.e., the lesser of the maximum detected and UCL_{95})

Notes:

1	- Groundwater protective goal based on the USEPA tap water PRG (2004a).
2	- Groundwater protective goal based on the California Maximum Contaminant Level (MCL; California Department of Health Services 2008).
3	- Groundwater protective goal is based on the California Notification levels (NL; California Department of Health Services 2007).

The removal action objective for this Site was to restore the Site to conditions acceptable for unrestricted land use.

During removal activities at the Site, the contaminated soils have been removed. The removal action was implemented with the removal of contaminated soils at the Site until the remedial goals were achieved. A total of 1,322 tons of non-hazardous soil were removed from the Site during the remedial excavation.

Based on the determinations described above, the removal activities have effectively reduced the concentrations of COPCs in soils at the Site to levels acceptable for industrial land use. In particular, C-PAHs (expressed as B(a)P-equivalents) and metals in soils at the Site were removed to levels lower than the goals protective of commercial/industrial workers. This equates to estimated cumulative carcinogenic risks less than the acceptable level of 1×10^{-5} for commercial/industrial workers and non-carcinogenic hazards less than the acceptable HI of 1 (i.e., a risk of approximately 3×10^{-6} and a HI of approximately 0.03). For the protection of groundwater, it was found that following excavation, none of the COPCs in soil had concentrations exceeding groundwater protective goals.

Based on soil gas measurements collected prior to soil removal activities, risks estimated for soil gas exposure exceed the acceptable level for future indoor workers (i.e., 1×10^{-5}), with risks estimated up to 5×10^{-5}. However, this risk estimate is entirely due to benzene detected at one location (TtKSG-4) in the northeast corner of the Site. Consequently, the risk for indoor workers may be overestimated since vapor sources in soil may have been removed during remediation, the subway tunnel beneath this Site may limit future Site development, such as building construction, and the tunnel may also prevent exposure to the benzene observed in a limited (northeast) portion of the Site.

Thus, these results indicate that the Site soils have been restored to conditions acceptable for future industrial land use and soil conditions nearly approach levels protective of unrestricted Site use.

The activities at the Site were performed under the direct oversight of the Department of Toxic Substances Control (DTSC). Through this Removal Action Completion Report, the Southern California Gas Company requests from DTSC a Certificate of Completion of removal activities and "No Further Action" for restricted land use of the Site.

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The Southern California Gas Company files.

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Glendale, California 91201
Attention: Sayareh Amir, Chief
Southern California Cleanup Operations Branch

COVENANT TO RESTRICT USE OF PROPERTIES
ENVIRONMENTAL RESTRICTION

Re: County of Los Angeles APN 5173-021-002 and 5173-021-003
410 North Center Street,, Los Angeles, California
DTSC Site Codes 301001-11 and 301333-11.

This Covenant and Agreement ("Covenant") is made by and between The Bennet Greenwald Trust under the Will and Trust Agreement of Jacob Feldman, dated June 10, 1980 (Bennet Greenwald Trust)(the "Covenantor"), the current owner of properties situated in the City of Los Angeles, County of Los Angeles, described in Exhibit "A", attached hereto and incorporated herein by this reference (the "Properties") and the California Department of Toxic Substances Control (the "Department").

RECITALS

a. This Covenant describes restrictions on the uses of the Properties described in Article IV of this document and is being recorded in connection with issuance of a certification letter by the Department.

b. The covenant does not restrict commercial and industrial land uses on the Site.

c. Pursuant to Civil Code section 1471, the Department has determined that the limited restrictions on the use of the property described in this Covenant are reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the land of hazardous materials as defined in Health and Safety Code section 25260.

d. The Covenantor and the Department, collectively referred to as the "Parties," hereby agree, pursuant to Civil Code section 1471 and Health and Safety Code section 25355.5, that the use of the Properties be restricted as set forth in this Covenant; and the Parties further agree that the Covenant shall conform with the requirements of California Code of Regulations, title 22, section 67391.1.

ARTICLE I
STATEMENT OF FACTS

1.01 The Properties are adjacent, rectangular-shaped parcels of approximately 1.2 and 0.2 acres, and are more particularly described and depicted in Exhibit "A". The Properties are located in the area now generally bounded by North Center Street on the west, Ducommun Street on the north and Jackson Street on the south. The Properties are also known as the former Aliso Street Manufactured Gas Plant (MGP), Sector C Block N, site (Site). The Properties are also generally described as County of Los Angeles Assessor Parcel Numbers 5173-021-002 and 5173-021-003. A legal description of the Properties is attached and incorporated as Exhibit "A". A survey of the Properties is attached and incorporated as Exhibit "B".

1.02 The Site was formerly occupied by the Los Angeles Gas and Electric Company and its successor, Southern California Gas Company ("Gas Company"), which entered into a Voluntary Cleanup Agreement dated January 19, 2001, amended August 3, 2005, [Docket No. HAS-A 00101-173] with the Department.

1.03. According to the Remedial Investigation (RI) for the Site dated October 21, 2003, prepared by the Gas Company, soil was impacted by volatile organic compounds (VOCs), including benzene and xylene, and by polynuclear aromatic hydrocarbons, (PAHs), including naphthalene; and soil gas was impacted by several VOCs, of which two compounds (benzene and tetrachloroethylene) exceeded their respective commercial and residential land use California Human Health Screening Levels for shallow soil gas.

1.04 The Gas Company prepared a Removal Action Workplan (RAW) pursuant to Chapter 6.8 of Division 20 of the Health and Safety Code, under the oversight of the Department. The objective of the RAW was to clean up the Site to a non-restricted (residential) land use, based on the most protective removal action goals. The RAW did not address groundwater underlying the Site.

1.05 Pursuant to the RAW, the Gas Company conducted excavation and various remedial actions during 2005 and 2006. The Removal Action Completion Report dated October 30, 2006 and approved by the Department on November 3, 2006 concluded that the requirements of the RAW were satisfied. However, in its approval of the Removal Action Completion Report, the Department noted the Site was not remediated to unrestricted land use cleanup levels and recommended that a land use covenant be prepared that would prohibit sensitive land uses.

1.06 The Site is within a methane zone as defined by the Los Angeles Department of Building and Safety through Los Angeles City Ordinance No. 175790. As such, protective measures will be required for new construction on the Site in accordance with the requirements of the ordinance. The ordinance is implemented and enforced by the Los Angeles Department of Building and Safety. The Engineering Controls described in Article IV of this Covenant are intended to be functionally equivalent to the protective measures required by the ordinance.

1.07 The Department has determined that use of the Properties does not pose a risk to human health or the environment from the hazardous substances subject to the Removal Action completed on the site if developed and used in accordance with the terms of this Covenant, and therefore this Covenant is being recorded against the Properties for such purpose.

ARTICLE II
DEFINITIONS

2.01 Department. "Department" means the California Department of Toxic Substances Control and includes its successor agencies, if any.

2.02 Environmental Restrictions. "Environmental Restrictions" means all protective provisions, covenants, restrictions, prohibitions, and terms and conditions as set forth in any paragraph of this Covenant.

2.03 Improvements. "Improvements" includes, but is not limited to: buildings, structures, roads, driveways, improved parking areas, wells, pipelines, or other utilities.

2.04 Lease. "Lease" means lease, rental agreement, or any other document that creates a right to use or occupy any portion of the Properties.

2.05 Owner: "Owner" means the Covenantor, its successors in interest, and their successors in interest, including heirs and assigns, who at any time hold title to all or any portion of the Properties.

2.06 Occupant. "Occupant" means Owners and any person or entity entitled by ownership, leasehold, or other legal relationship to the right to occupy all or any portion of the Properties.

2.07 Engineering Controls. "Engineering Controls" shall refer to physical structures, such as vapor barrier control systems, that eliminate or sufficiently reduce exposure to contaminants. These Engineering Controls and related restrictions are described in more detail in Article IV and the Operations and Maintenance Plan, Exhibit "C" to this Covenant.

ARTICLE III
GENERAL PROVISIONS

3.01 Runs with the Land. This Covenant sets forth Environmental Restrictions that apply to and encumber the Properties and every portion thereof no matter how they are improved, held, used, occupied, leased, sold, hypothecated, encumbered, or conveyed. This Covenant: (a) runs with the land pursuant to Health and Safety Code section 25355.5 (a) (1) (C) and Civil Code section 1471; (b) inures to the benefit of and passes with each and every portion of the Properties, (c) is for the benefit of, and is enforceable by the Department, and (d) is imposed upon the entirety of both Properties unless expressly stated as applicable only to a specific portion thereof.

3.02 Binding upon Owners/Occupants. Pursuant to the Health and Safety Code, this Covenant binds all owners of the Properties and any portion of the Properties, their heirs, successors, and assignees, and the agents, employees, and lessees of the owners, heirs, successors, and assignees. Pursuant to Civil Code section 1471, all successive owners of the Properties and any portion of the Properties are expressly bound hereby for the benefit of the Department.

7

3.03 Incorporation into Deeds and Leases. This Covenant and its Environmental Restrictions shall be incorporated by reference in each and every deed and Lease for all or any portion of the Properties.

3.04 Conveyance of Properties. The Owner shall provide written notice to the Department not later than thirty (30) days after any conveyance of any ownership interest in the Properties or any portion of the Properties (excluding Leases, and mortgages, liens, and other non-possessory encumbrances). The written notice shall include the name and mailing address of the new owner of the Properties or any portion thereof and shall reference the site name and site codes as listed on page one of this Covenant. The notice shall also include the Assessor's Parcel Numbers (APNs) noted on page one. If the new owner's Property or Properties has or have been assigned a different APN, each such APN that covers the Properties must be provided. The Department shall not, by reason of this Covenant, have authority to approve, disapprove, or otherwise affect any proposed conveyance, except as otherwise provided by law, by administrative order, or by a specific provision of this Covenant.

3.05. Costs of Administering the Covenant to be Paid by Owner. The Department has already incurred and will in the future incur costs associated with the administration of this Covenant. Therefore, the Covenantor hereby covenants for the Covenantor and for all subsequent Owners that, pursuant to California Code of Regulations, title 22, section 67391.1(h), the Owner agrees to pay the Department's costs in administering this Covenant. The Department's estimated costs are described in Exhibit "D". The Owner shall pay the Department's costs of administering this Covenant for each parcel comprising the Site, including costs already incurred and future costs associated with the administration of this Covenant. Cost recovery may also be pursued by the Department under CERCLA, Health and Safety Code section 25360, or any other applicable state or federal statute or common law. The Department will invoice Owner for the Department's costs on a quarterly basis.

8

ARTICLE IV
RESTRICTIONS AND REQUIREMENTS

4.01 No structure may be occupied on the Properties or on any portion of the Properties for any of the uses set forth in paragraph 4.02 (a) through (e) unless the structure includes one or more of the Engineering Controls described in the Operation and Maintenance Plan, attached as Exhibit "C" and incorporated by reference.

4.02 Prohibited Uses at or Below Grade Level.

The Properties or any portion of the Properties shall not be used for any of the following uses at or below grade level;

(a) A hospital for humans;

(b) A public or private school for persons under 21 years of age;

(c) A day care center for children;

(d) A single family residence.

(e) A ground-floor residence (in a basement or first floor above slab-on-grade)

4.03. Soil Management

(a) No activities that will disturb the soil (e.g., excavation, grading, removal, trenching, filling, earth movement or mining) shall be allowed on the Properties or any portion of the Properties without a Soil Management Plan and a Health and Safety Plan approved by the Department.

(b) Any contaminated soils brought to the surface by grading, excavation, or trenching shall be managed in accordance with all applicable provisions of state and federal law.

(c) The Owner shall provide the Department written notice at least fourteen (14) days prior to any building, filling, grading, mining or excavating in the Properties or any portion of the Properties more than 10 feet below the soil surface.

4.04. Prohibited Activities. The following activities shall not be conducted at the Properties or any portion of the Properties:

(a) Installation of wells or extraction of groundwater without prior written approval by the Department.

(b) Raising of food (e.g., food crops).

4.05 Access for Department. The Department shall have reasonable right of entry and access to the Properties or any portion of the Properties for inspection, monitoring, and other activities consistent with the purposes of this Covenant as deemed necessary by the Department in order to protect the public health or safety, or the environment.

4.06 Inspection and Reporting Requirements. One year from the effective date of this Covenant, and annually thereafter, Owner(s) or their agents(s) shall conduct an annual inspection of the Properties verifying compliance with this Covenant and shall submit an annual inspection report to the Department for its approval, certifying whether the Owner is in compliance with the use restrictions specified in this Covenant. An Annual Inspection Report Form is attached as Exhibit "E". The Owner(s) shall submit the Annual Inspection Report by the 15th day of the anniversary month to: Sayareh Amir, Department of Toxic Substances Control, Southern California Cleanup Operations Branch, Glendale Office, or her successor. The annual inspection report must include the dates, times, and names of those who conducted the inspection and reviewed the annual inspection report. It also shall describe how the observations were performed that were the basis for the statements and conclusions in the annual inspection report (e.g., drive by, fly over, walk in, etc.). If violations are noted, the annual inspection report must detail the steps taken to return to compliance. If the Owner identifies any violations of this Covenant during the annual inspections or at any other time, the Owner must within 10 days of identifying the violation: determine the identity of the party in violation, send a letter advising the party of the violation of the Covenant, and demand that the violation cease immediately. Additionally, copies of any correspondence related to the violation of this Covenant shall be sent to the Department within ten (10) days of its original transmission.

ARTICLE V
ENFORCEMENT

5.01 Enforcement. Failure of the Owner or Occupant to comply with this Covenant shall be grounds for the Department to require modification or removal of any improvements constructed or placed upon any portion of the Properties in violation of this Covenant. Violation of this Covenant, including but not limited to failure to submit, or the submission of any false statement, record or report to the Department, shall be grounds for the Department to pursue administrative, civil or criminal actions as provided by law.

ARTICLE VI
VARIANCE, TERMINATION AND TERM

6.01 Variance. Covenantor, or any other aggrieved person, may apply to the Department for a written variance from the provisions of this Covenant. Such application shall be made in accordance with Health and Safety Code section 25233.

6.02 Termination or Partial Termination. Owner, or any other aggrieved person, may apply to the Department for a termination or partial termination of one or more terms of this Covenant as they apply to all or any portion of the Properties. Such application shall be made in accordance with Health and Safety Code section 25234.

//

6.03 Term. Unless ended in accordance with paragraph 6.02 above, by law, or by the Department in the exercise of its discretion, this Covenant shall continue in effect in perpetuity.

ARTICLE VII
MISCELLANEOUS

7.01 No Dedication Intended. Nothing set forth in this Covenant shall be construed to be a gift or dedication, or offer of a gift or dedication, of the Properties, or any portion thereof, to the general public or anyone else for any purpose whatsoever.

7.02 Recordation. The Covenantor shall record this Covenant, with all referenced Exhibits, in the County of Los Angeles within ten (10) days of the Covenantor's receipt of a fully executed original.

7.03 Notices. Whenever any person gives or serves any Notice ("Notice" as used herein includes any demand or other communication with respect to this Covenant), each such Notice shall be in writing and shall be deemed effective: (1) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served, or (2) three (3) business days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested:

To Owner: Bennet Greenwald, Trustee
The Bennet Greenwald Trust
Under the Will and Trust Agreement
of Jacob Feldman Dated June 10, 1980
2929 Canon Street
San Diego, California 92106
Telephone: (619) 231-1900
Facsimile: (619) 232-1997

With a copy to:

Richard S. Bayer, Esq.
1150 Silverado Street
La Jolla, California 92037
Telephone: (858) 454-1005

17

Facsimile: (858) 454-1021
rbayer@richardbayer.com

To Department:

Department of Toxic Substances Control
1011 N. Grandview Avenue
Glendale, California 91201
Attn: Sayareh Amir, Chief

Any party may change its address or the individual to whose attention a Notice is to be sent by giving written Notice in compliance with this paragraph.

7.04 Partial Invalidity. If this Covenant or any of its terms are determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall remain in full force and effect as if such portion found invalid had not been included herein.

7.05 Statutory References. All statutory references include successor provisions.

7.06 Incorporation of Attachments. All attachments and exhibits to this Covenant are incorporated herein by reference.

IN WITNESS WHEREOF, the Parties execute this Covenant.

Covenantor: The Bennet Greenwald Trust

By: ______________________________
Title: Trustee
Date: 11-29-07

Department of Toxic Substances Control

By: Sayareh Amir
Title: Southern California Cleanup Operations Branch Chief, Glendale Office
Date: 11-29-07

07 2663019

13

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of San Diego } ss.

On 11/29/07 (Date), before me, S. Brin Plourde, Notary Public (Name and Title of Officer (e.g., "Jane Doe, Notary Public")) personally appeared Bennet Greenwald (Name(s) of Signer(s)),

[X] personally known to me

[ ] proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

S. BRIN PLOURDE
Commission # 1526956
Notary Public - California
San Diego County
My Comm. Expires Nov 15, 2008

Place Notary Seal Above

WITNESS my hand and official seal.

S Brin Plourde
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Covenant to Restrict Use of Properties - Environmental Restriction

Document Date: November 29, 2007 Number of Pages: 35

Signer(s) Other Than Named Above: Sayareh Amir

Capacity(ies) Claimed by Signer(s)

Signer's Name: ______
[ ] Individual
[ ] Corporate Officer — Title(s): ______
[ ] Partner — [ ] Limited [ ] General
[ ] Attorney in Fact
[ ] Trustee
[ ] Guardian or Conservator
[ ] Other: ______

Signer Is Representing: ______

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

Signer's Name: ______
[ ] Individual
[ ] Corporate Officer — Title(s): ______
[ ] Partner — [ ] Limited [ ] General
[ ] Attorney in Fact
[ ] Trustee
[ ] Guardian or Conservator
[ ] Other: ______

Signer Is Representing: ______

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

07 270319

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CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of San Diego } ss.

On 11/29/07 (Date), before me, S. Brin Plourde, Notary Public (Name and Title of Officer (e.g., "Jane Doe, Notary Public")),

personally appeared Sayareh Amir (Name(s) of Signer(s)),

☐ personally known to me

☒ proved to me on the basis of satisfactory evidence to be the person~~(s)~~ whose name~~(s)~~ is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity~~(ies)~~, and that by ~~his~~/her/~~their~~ signature~~(s)~~ on the instrument the person~~(s)~~, or the entity upon behalf of which the person~~(s)~~ acted, executed the instrument.

S. BRIN PLOURDE
Commission # 1526956
Notary Public - California
San Diego County
My Comm. Expires Nov 15, 2008

Place Notary Seal Above

WITNESS my hand and official seal.

S Brin Plourde
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Covenant to Restrict Use of Properties - Environmental Restriction

Document Date: November 29, 2007 Number of Pages: 35

Signer(s) Other Than Named Above: Bennet Greenwald

Capacity(ies) Claimed by Signer(s)

Signer's Name: ______
☐ Individual
☐ Corporate Officer — Title(s): ______
☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: ______

Signer Is Representing: ______

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

Signer's Name: ______
☐ Individual
☐ Corporate Officer — Title(s): ______
☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: ______

Signer Is Representing: ______

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

07 263019

15

List of Exhibits

16

Exhibit A – Legal Description

PARCEL 1:

PARCEL "B", IN THE CITY OF LOS ANGELES, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS SHOWN ON PARCEL MAP L.A. NO. 4255, AS PER MAP FILED IN BOOK 112 PAGES 21 AND 22 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT THEREFROM 50 PER CENT OF ALL OIL, GAS, HYDROCARBONS AND OTHER MINERAL RIGHTS BELOW A DEPTH OF 500 FEET, WITHOUT THE RIGHT OF SURFACE ENTRY WHICH ARE NOT THE SUBJECT TO PRIOR EXCEPTION OR RESERVATION, AS RESERVED BY SOUTHERN CALIFORNIA GAS COMPANY, A CORPORATION, IN THE DEED RECORDED ON AUGUST 9, 1979 AS INSTRUMENT NO. 79-878320.

PARCEL 2:

PARCEL "A", IN THE CITY OF LOS ANGELES, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS SHOWN ON PARCEL MAP L.A. NO. 4255, FILED IN BOOK 112 PAGES 21 AND 22 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

Exhibit B: Survey of the Properties

E. I. LEGAL   112/21   #5

BOOK 112 PAGE 21

SCALE: 1" = 30'   SHEET 1 OF 2 SHEETS

PARCEL MAP L.A. Nº 4255

IN THE CITY OF LOS ANGELES
STATE OF CALIFORNIA
FOR SUBDIVISION PURPOSES

79- 597120

BEING A SUBDIVISION OF LOT 4, TRACT NO. 11189, PER MAP RECORDED IN BOOK 201, PAGES 1 AND 2 OF MAPS, RECORDS OF LOS ANGELES COUNTY.

FILED
AT REQUEST OF So Cal Gas Co.
Jun 1, 1979
1 PAST 4 PM
IN BOOK 112
AT PAGE 21
OF PARCEL MAPS
LOS ANGELES COUNTY, CALIF.
Registrar-Recorder
BY
$7.00

OWNER'S CERTIFICATE

WE HEREBY CERTIFY THAT WE ARE THE OWNERS OF OR ARE INTERESTED IN THE LAND INCLUDED WITHIN THE SUBDIVISION SHOWN ON THIS MAP WITHIN THE DISTINCTIVE BORDER LINES, AND WE CONSENT TO THE PREPARATION AND FILING OF SAID MAP AND SUBDIVISION. WE HEREBY DEDICATE FOR PUBLIC USE FOR STREET PURPOSES THOSE CERTAIN STRIPS OF LAND DESIGNATED AS FUTURE STREET ON SAID MAP WITHIN SAID SUBDIVISION, RESERVING TO OURSELVES FOR THE USE OF OURSELVES AND SUCCESSIVE OWNERS OF SAID STRIPS OF LAND, ANY AND ALL ORDINARY USES OF SAID LAND EXCEPT FOR THE ERECTION OR CONSTRUCTION OF BUILDINGS THEREON, UNTIL SUCH TIME AS THE LEGISLATIVE BODY SHALL ACCEPT THE SAME FOR STREET PURPOSES. THOSE PORTIONS OF THE DEDICATIONS OCCUPIED BY EXISTING BUILDINGS WILL NOT BE ACCEPTED FOR PUBLIC USE UNTIL THE BUILDINGS HAVE BEEN REMOVED OR REMODELED SO AS NOT TO ENCROACH.

SOUTHERN CALIFORNIA GAS COMPANY, A PUBLIC UTILITY CORPORATION, WHO ACQUIRED TITLE AS LOS ANGELES GAS AND ELECTRIC CORPORATION, A CALIFORNIA CORPORATION (OWNER).

Burton Larson
BURTON LARSON - VICE-PRESIDENT

J. L. Barton
J. L. BARTON - ASST SECRETARY

STATE OF CALIFORNIA }
COUNTY OF LOS ANGELES } SS

ON THIS 29th DAY OF November 1978, BEFORE ME Charlotte E. Waugh A NOTARY PUBLIC IN FOR SAID COUNTY AND STATE, PERSONALLY APPEARED Burton Larson KNOWN TO ME TO BE THE Vice President AND J. L. Barton KNOWN TO ME TO BE THE Assistant Secretary OF SOUTHERN CALIFORNIA GAS COMPANY, A CALIFORNIA CORPORATION, THE CORPORATION THAT EXECUTED THE WITHIN INSTRUMENT AND KNOWN TO ME TO BE THE PERSONS WHO EXECUTED THE WITHIN INSTRUMENT ON BEHALF OF THE CORPORATION THEREIN NAMED AND ACKNOWLEDGED TO ME THAT SUCH CORPORATION EXECUTED THE WITHIN INSTRUMENT PURSUANT TO ITS BY-LAWS OR A RESOLUTION OF ITS BOARD OF DIRECTORS.

Charlotte E. Waugh
NOTARY PUBLIC IN AND FOR THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

OFFICIAL SEAL
CHARLOTTE E. WAUGH
NOTARY PUBLIC-CALIFORNIA

THE SIGNATURE OF THE CITY OF LOS ANGELES, HOLDER OF AN EASEMENT FOR OVERHEAD ELECTRICAL WIRES PER DEED RECORDED IN BOOK 14706, PAGE 1, OF OFFICIAL RECORDS, RECORDS OF LOS ANGELES COUNTY, HAS BEEN OMITTED UNDER THE PROVISIONS OF SECTION 66436, SUBSECTION (c)(1) OF THE SUBDIVISION MAP ACT; ITS INTEREST IS SUCH THAT IT CANNOT RIPEN INTO A FEE TITLE AND SAID SIGNATURE IS NOT REQUIRED BY THE LOS ANGELES CITY COUNCIL.

ENGINEER'S CERTIFICATE

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION, AND WAS COMPILED FROM RECORD DATA IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF SOUTHERN CALIFORNIA GAS COMPANY ON OCTOBER 27, 1978. I HEREBY STATE THAT THIS PARCEL MAP SUBSTANTIALLY CONFORMS TO THE APPROVED OR CONDITIONALLY APPROVED TENTATIVE MAP, IF ANY.

THOMAS O. McCUTCHAN   R.C.E. 9890

BASIS OF BEARINGS

THE BEARING N. 3°13'50" E. OF THE CENTERLINE OF CENTER STREET AS SHOWN ON MAP OF TRACT NO. 11189, AS RECORDED IN BOOK 201, PAGES 1 & 2 OF MAPS, RECORDS OF LOS ANGELES COUNTY, WAS TAKEN AS THE BASIS OF BEARINGS SHOWN ON THIS MAP.

CERTIFICATE OF SPECIAL ASSESSMENT

I HEREBY CERTIFY that, according to the records of the offices of the Bureau of Engineering of the Department of Public Works and the Treasurer of the City of Los Angeles, none of the lines of lots or parcels of the subdivision shown on the attached subdivision map will divide any land subject to any special assessment or bond representing a special assessment which may be paid in full except as follows: NONE

The amount necessary for the payment in full of such assessment and/or bond at this time is $ NONE
Date: MAY 17, 1979
DONALD C. TILLMAN, City Engineer, City of Los Angeles, By A. Fornis
ROBERT M. ODELL, JR., Treasurer, City of Los Angeles, By XXXXXX

NOTE: The approval of this Parcel Map shall not be construed as having been based upon geological investigation such as will authorize the issuance of building permits on the subject property. Such permits will be issued only at such time as the Department of Building and Safety has received such topographic maps and geological reports as it deems necessary to justify the issuance of such building permits.

CITY ENGINEER'S CERTIFICATE (PARCEL MAP)

This map conforms with the requirements of the Subdivision Map Act and local ordinance.

Dated May 30, 1979
DONALD C. TILLMAN, CITY ENGINEER

CERTIFICATE OF TITLE

I HEREBY CERTIFY that there is on file in the office of the City Engineer of the City of Los Angeles, County of Los Angeles, State of California, a Certificate made by the [illegible] of said City, Order No. [illegible] dated May 17, 1979 certifying that it appears from the records of said City and County that SOUTHERN CALIFORNIA GAS COMPANY (is) (are) the only persons whose consent is required for the recording of this map by law.
Date: May 30, 1979
DONALD C. TILLMAN, City Engineer

CERTIFICATE OF ACCEPTANCE

I HEREBY CERTIFY that the City Council of the City of Los Angeles approved the attached map and accepted on behalf of the public all the streets, roads, alleys, highways, easements and all other properties offered for dedication hereon unless otherwise rejected and abandonment of ingress and egress rights shown on said map and therein offered and dedication except those marked "Future Street" and "Future Alley" provided that nothing herein contained shall be construed as an acceptance of any improvements made in or upon any street, road, alley, highway or easement shown on this map.

Date: May 31, 1979
REX E. LAYTON, City Clerk
By Edward W. Cahdoon, Deputy

7-C-1

112/22

SCALE: 1" = 30'

PARCEL MAP L.A. No 4255

IN THE CITY OF LOS ANGELES
STATE OF CALIFORNIA

LEGEND

INDICATES THE BOUNDARY OF THE LAND BEING SUBDIVIDED BY THIS MAP.

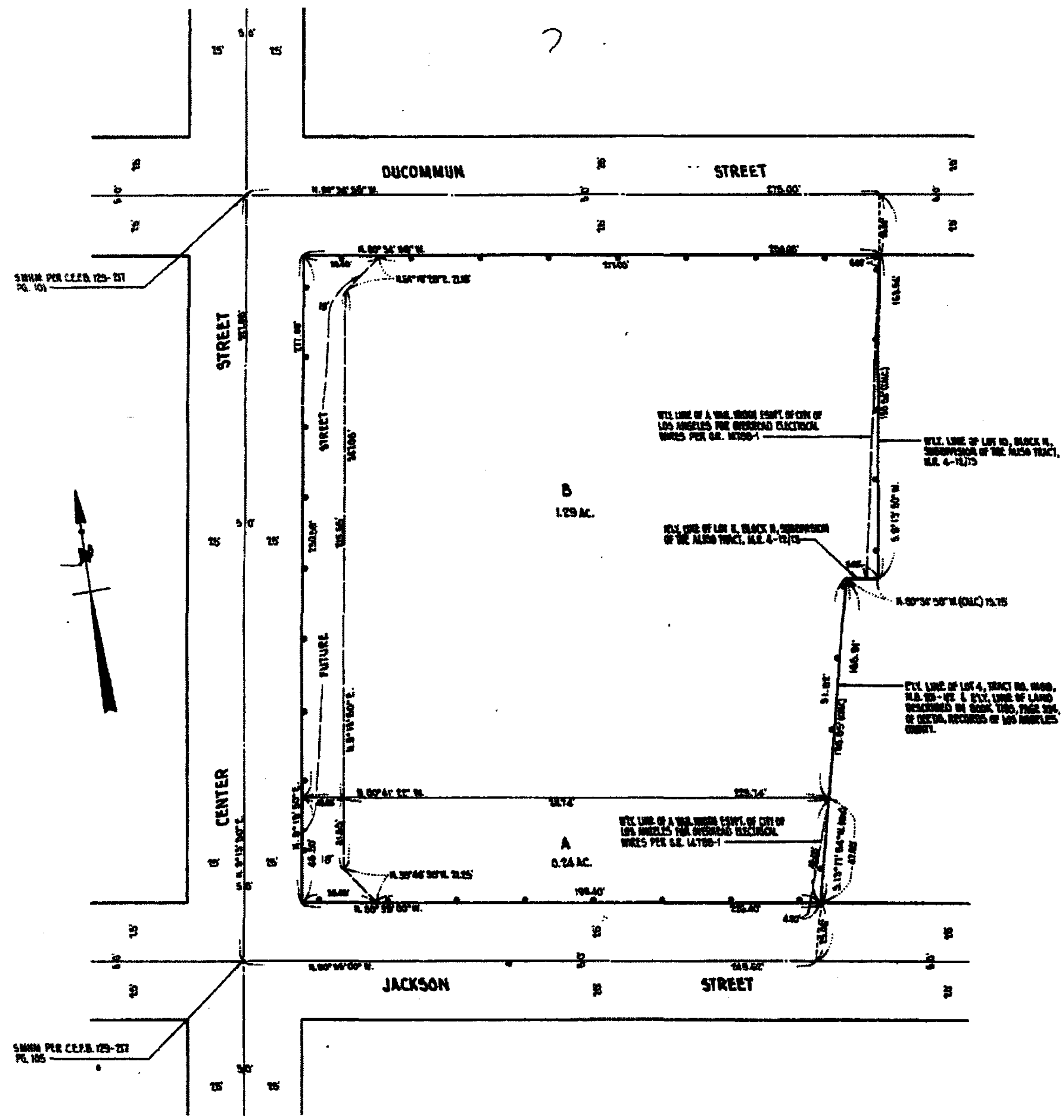


Exhibit C: Operation and Maintenance Plan

AVOCET
ENVIRONMENTAL, INC.

June 21, 2007 Project No. 1208.001

Mr. Benett Greenwald
President
THE GREENWALD COMPANY
2929 Canon Street
San Diego, California 92106

Operations and Maintenance Plan
410 Center Street
Los Angeles, California

Dear Mr. Greenwald:

This Operations and Maintenance Plan describes proposed engineering controls for the property located at 410 Center Street in Los Angeles, California. Although the site has been remediated to the satisfaction of the Department of Toxic Substances Control (DTSC), there are additional environmental factors that will continue to affect the property. As such, a land use covenant (LUC) has been prepared that restricts certain uses and activities, and requires that structures built on the site include engineering controls to ensure protection of human health from these factors. This plan accompanies that LUC, and conceptually describes implementation of the engineering controls.

EXISTING CONDITIONS

This section provides a brief summary of the conditions warranting engineering controls. It is not an exhaustive description of the site characterization or remediation. If further information is sought regarding the environmental conditions of the site the reader is referred to the reports listed in the reference section of this document.

The 410 Center Street property was once part of the Aliso Street Manufactured Gas Plant (MGP). It was also used for various other industrial purposes after the MGP facility closed in 1927. Various cleanup activities were conducted under the supervision of the DTSC, and the site was approved for commercial uses on November 3, 2006. Residential uses, however, must be within certain parameters, which is the subject of the LUC.

Even with the approval for commercial uses, there are regional environmental factors which make the LUC necessary and the implementation of engineering controls prudent. The site is within a methane zone as described by the Los Angeles Department of Building and Safety. As such certain steps (e.g., investigation, analysis) are necessary to support development. Fundamentally, however, some type of barrier system is typically required to prevent accumulation of methane within structures.

10 Technology Drive, Suite 154 ■ Irvine, California 92618-2327
Phone 949.296.0977 ■ Fax 949.296.0978
www.avocetenv.com

In addition, although unrelated to activities on the 410 Center Street property, groundwater has been impacted such that it is not useable without treatment. The LUC therefore prevents the drilling of wells or the extraction of groundwater without the express permission of the DTSC. Some of the components affecting groundwater are also volatile and have the potential to migrate as vapor to the surface. The potential therefore exists for an inhalation hazard should these vapors be allowed to enter a structure.

Given the potential for methane seepage, off-gassing from the groundwater and residual tetrachloroethylene (PCE) that has been detected in soil gas it is considered prudent to require vapor barrier installation.

ENGINEERING CONTROLS

Vapor barriers will be used to prevent the migration of gases from the subsurface into structures constructed on the property. This section describes what type of barriers may be used, the general construction methods and other factors that should be considered during engineering and design. These are not, however, detailed engineering designs. Those must be completed by a qualified engineer on a site-specific basis, and must meet the requirements of the Los Angeles Building and Safety Department's Methane Mitigation Plan.

Vapor barriers are either passive or active. A passive system includes some type of impermeable seal and an outlet providing a path of least resistance that vents vapors to the atmosphere away from the structure. In contrast, an active structure applies a vacuum beneath the structure that pulls vapors from the surface and discharges them to the atmosphere. An active system will still typically include an impermeable barrier of some sort. The barrier improves the performance of the extraction system and ensures that vapors do not migrate into the building should the vacuum diminish or be lost due to an equipment failure. In areas of shallow groundwater an active system typically includes provisions for dewatering to keep the gas extraction system clear. At 410 Center Street groundwater is approximately 30 feet below ground surface and a dewatering system is not anticipated to be necessary. Both types of systems will include gas monitoring systems within the building that will alert the occupants to unhealthful or potentially explosive vapor accumulation. The selection of an active or passive system will be based on the design criteria contained within Los Angeles City Ordinance No. 175790.

Figure 1 depicts a passive system for a structure with slab-on-grade construction. The details show the three most common methods for installing and impermeable barrier. The first is applying an epoxy coating over the concrete slab. Special attention must be given to construction joints, corners and penetrations. This approach has the disadvantage of being exposed to wear, spills, and other forms of deterioration. The second approach depicted is a spray applied geomembrane. This approach is effective but usually expensive. The third approach is to use a solid sheet of high-density polyethylene (HDPE), or other flexible membrane liner (FML) material. This material must be secured to footing or other penetrations to ensure an adequate seal. The system includes a pipe that can vent accumulating gases and be used for monitoring gas concentration beneath the slab.

Figure 2 shows application of a gas extraction system to a raised foundation with a crawl space. This configuration requires active venting of accumulating vapors. A geomembrane is installed in the subgrade along the foundation footings and is protected by an overlying thickness of soil. An extraction system is used to pull air from the crawl space. Monitors and alarms are installed within the space and just outside the vent areas to ensure that potentially harmful or explosive vapors do not accumulate during operation and to alert responsible individuals when the system has malfunctioned.

Another passive approach is to construct buildings (consistent with allowable uses) on a permeable sand bed as depicted in Figure 3. This is a variation on the approach depicted in Figure 1. It would be used where site soils are impermeable and air conductivity values are low.

In conditions with elevated methane or other problematic vapors it may be necessary to actively withdraw soil gas from the sand barrier as shown in Figure 4. A series of pipes would be installed within the sand barrier in two levels during construction. The upper level of pipes would bring in atmospheric air to the sand bed. A vacuum would be applied to the lower level of pipes to withdraw soil gas containing the target vapors.

The LUC explicitly prohibits residential construction on grade. However, a popular use available to this property is multi-story residential with first floor parking or commercial. Implementations of passive and active systems for this use are depicted in Figures 5 and 6, respectively.

MAINTENANCE AND TESTING

Monitoring and extraction systems will require periodic testing and maintenance. Within Los Angeles monitoring and extraction systems must be approved for installation by the Fire Department. Testing and maintenance must be performed in accordance with the manufacturer's specifications by a person certified by the Fire Department.

Respectfully submitted,

AVOCET ENVIRONMENTAL, INC.

R. Van Hyning

Robert Van Hyning, P.E.
Principal

RVH:sh
Attachments
cc:

Document2

94

REFERENCES

Avocet Environmental, Inc., January 23, 2007, *Confirmation Soil Gas Survey Work Plan.*

California Department of Water Resources, 1961, *Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County.* Bulletin No. 104.

California Environmental Protection Agency (Cal/EPA), January 21, 2005. California Human Health Screening Levels (CHHSLs). http://calepa.ca.gov/Brownfields/SB32.htm.

California Department of Toxic Substances Control (DTSC) and California Regional Water Quality Control Board, Los Angeles Region (LARWQCB), January 28, 2003, *Advisory – Active Soil Gas Investigations.*

California Department of Toxic Substances Control, November 3, 2006, *Removal Action Completion Report, Block N, Section C, Former Aliso Street MGP Site, Los Angeles,* letter to Sempra Energy.

California Department of Toxic Substances Control, November 30, 2006, *Manley Oil PCE in Soil Vapor*, e-mail correspondence from Pete Cook (DTSC) to Rita Kamat (DTSC).

Earth Tech, 1998, *Preliminary Endangerment Report - Sector C, Aliso Gas Plant, Los Angeles, California.*

Earth Tech, October 19, 2001, *Remedial Investigation for Block N - Sector C, Former MGP Site, Los Angeles, California*, prepared for Southern California Gas Company.

Kleinfelder, December 20, 2005, *Sump Closure Report Former Aliso Street MGP Site, 410 Center Street, Los Angeles, California.*

McDaniel Lambert, March 28, 2007, *Former Aliso Street MGP Facility, Block N, Soil Gas Human Health Risk Evaluation.*

Tetra Tech, September 2002, *Aliso Remedial Investigation Master Workplan, Los Angeles, California.*

Tetra Tech, June 2004, *Removal Action Workplan, Block N, Sector C, Former Aliso Street MGP Site, 410 Center Street, Los Angeles, California.*

Tetra Tech, January 2006, *Removal Action Completion Report for Aliso Street (Sector C) – Block N, Former MGP Site, 410 Center Street, Los Angeles, California.* Unpublished report prepared for Southern California Gas Company.

TRC Alton Geoscience, November 2002, *Supplementary Site Investigation Report, Center Street Terminal.*

75

U.S. Environmental Protection Agency, Region 9, October 2004. Preliminary Remediation Goals. http://www.epa.gov/region9/waste/sfund/prg/. Last updated on Thursday, August 17th, 2006.

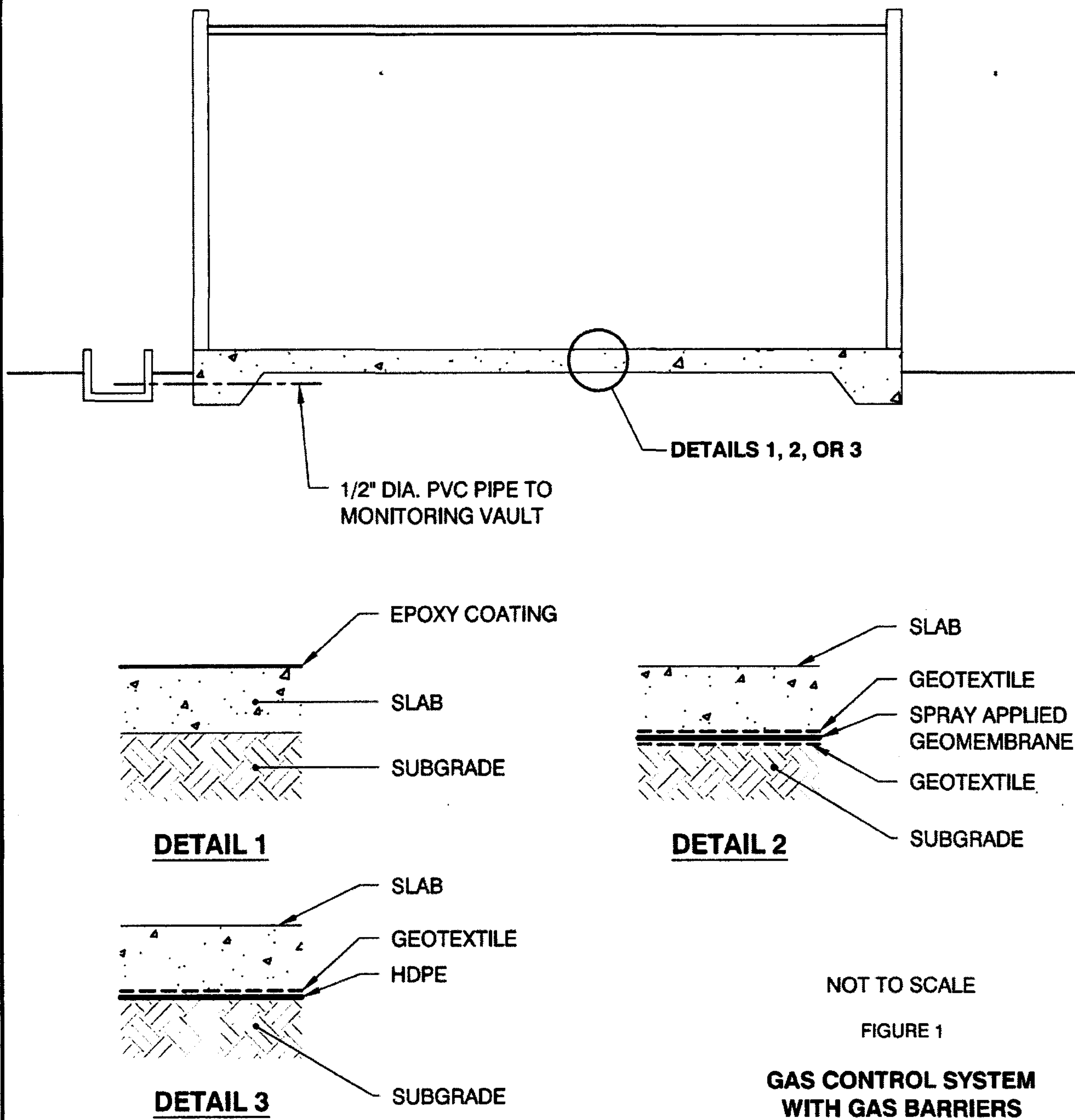
0 2 4 3 1 9

76

Figures

77

V:\1208_The Greenwald Company\1208.001_410_Center_Street\012_1208.001_Gas_Control_System_Gas_Barriers.dwg\06/06/07



NOT TO SCALE

FIGURE 1

GAS CONTROL SYSTEM WITH GAS BARRIERS

410 CENTER STREET
LOS ANGELES, CALIFORNIA

PREPARED FOR

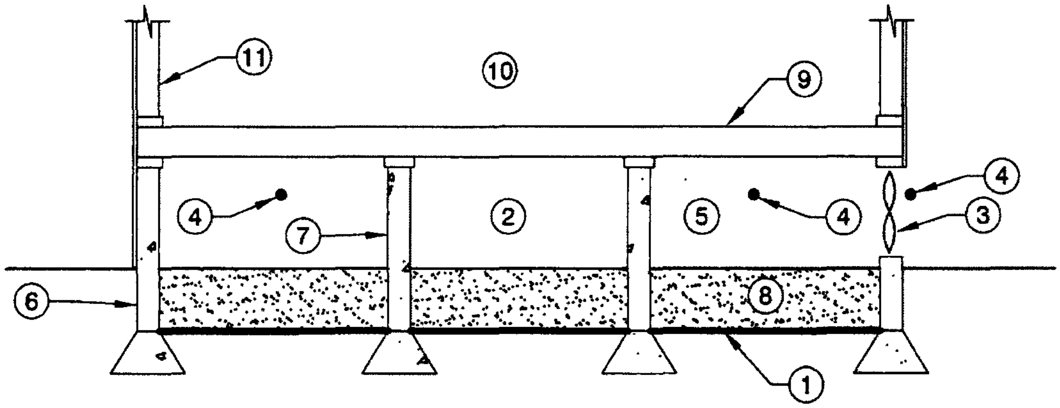
THE GREENWALD COMPANY
SAN DIEGO, CALIFORNIA

AVOCET ENVIRONMENTAL, INC

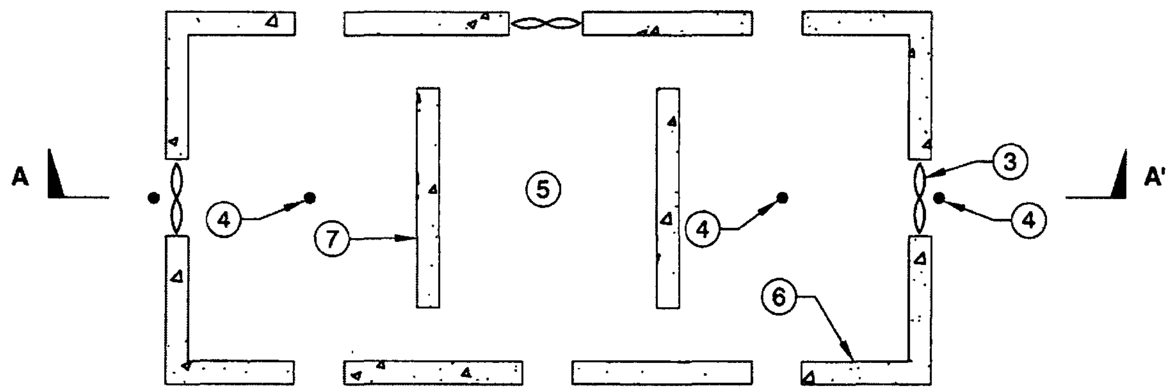
**Privileged and Confidential
Attorney-Client
Communication And/Or
Attorney Work Product**

6105 2 40

V:\1208 The Greenwald Company\1208.001 410 Center Street\014 1208.001 Crawl Space Open Air Gas Extraction.dwg\06/07/07



SECTION A-A'



PLAN OF CRAWL SPACE

GAS CONTROL SYSTEM

1. GAS BARRIER - GEOMEMBRANE
2. GAS EXTRACTION - CRAWL SPACE
3. GAS EXTRACTION - FAN
4. MONITORING - INSTRUMENTS AND ALARMS

HOUSE AND STRUCTURE

5. CRAWL SPACE
6. PERIMETER STEM WALLS
7. INTERIOR STEM WALLS (OR ISOLATED FOOTINGS)
8. SOIL - GEOMEMBRANE PROTECTION
9. FLOOR SYSTEM AND FLOORING
10. INDOOR AIR SPACE
11. HOUSE STRUCTURE FRAMING

NOT TO SCALE

FIGURE 2

CRAWL SPACE OPEN AIR GAS EXTRACTION

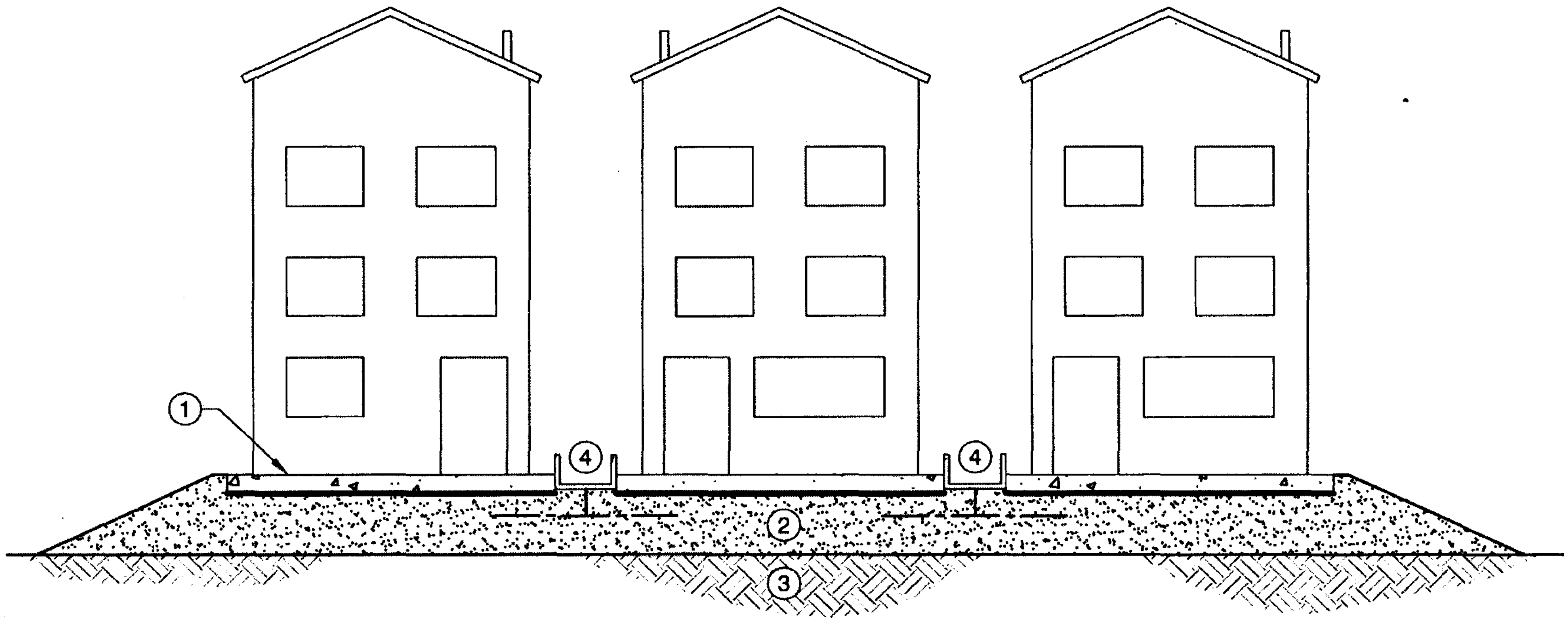
410 CENTER STREET
LOS ANGELES, CALIFORNIA

PREPARED FOR

THE GREENWALD COMPANY
SAN DIEGO, CALIFORNIA

AVOCET
ENVIRONMENTAL, INC

V:\1208_The_Greenwald_Company\1208.001_410_Center_Street\015_1208.001_Passive_Gas_Control_Sand.dwg\06/07/07



NOT TO SCALE

FIGURE 3

PASSIVE GAS CONTROL SYSTEM ON SAND PLATFORM

410 CENTER STREET
LOS ANGELES, CALIFORNIA

PREPARED FOR

THE GREENWALD COMPANY
SAN DIEGO, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

GAS BARRIER SYSTEM

1. GAS BARRIER - SLAB AND GEOMEMBRANE
2. PASSIVE GAS EXTRACTION - COMPACTED SAND PLATFORM

OTHER

3. NATURAL GRADE - NATIVE SITE SOIL
4. 1/2" DIA. PVC PIPE TO MONITORING VAULT

30

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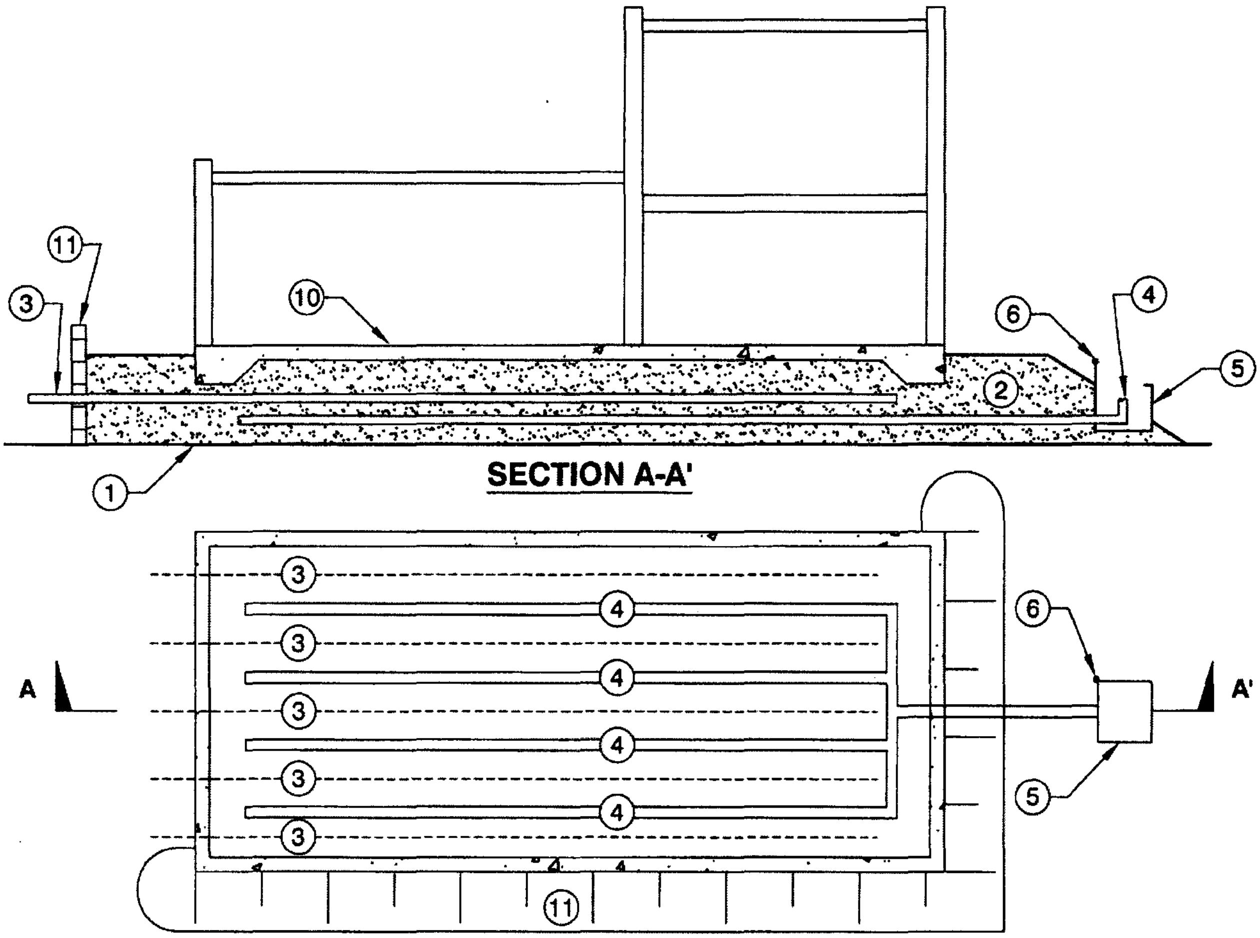


SECTION A-A'

PLAN OF SOIL PLATFORM

GAS CONTROL SYSTEM

1. GAS BARRIER - GEOMEMBRANE BENEATH GEOTEXTILE
2. GAS COLLECTION - SAND PLATFORM
3. GAS EXTRACTION - AIR INLET PIPES
4. GAS EXTRACTION - AIR REMOVAL PIPES
5. GAS EXTRACTION - PUMP AND EXIT PORT BOX
6. MONITORING - INSTRUMENTS AND ALARMS

STRUCTURE

10. OPEN SPACE FLOOR SLAB
11. PERIMETER WALL OR SLOPE

NOT TO SCALE

FIGURE 4

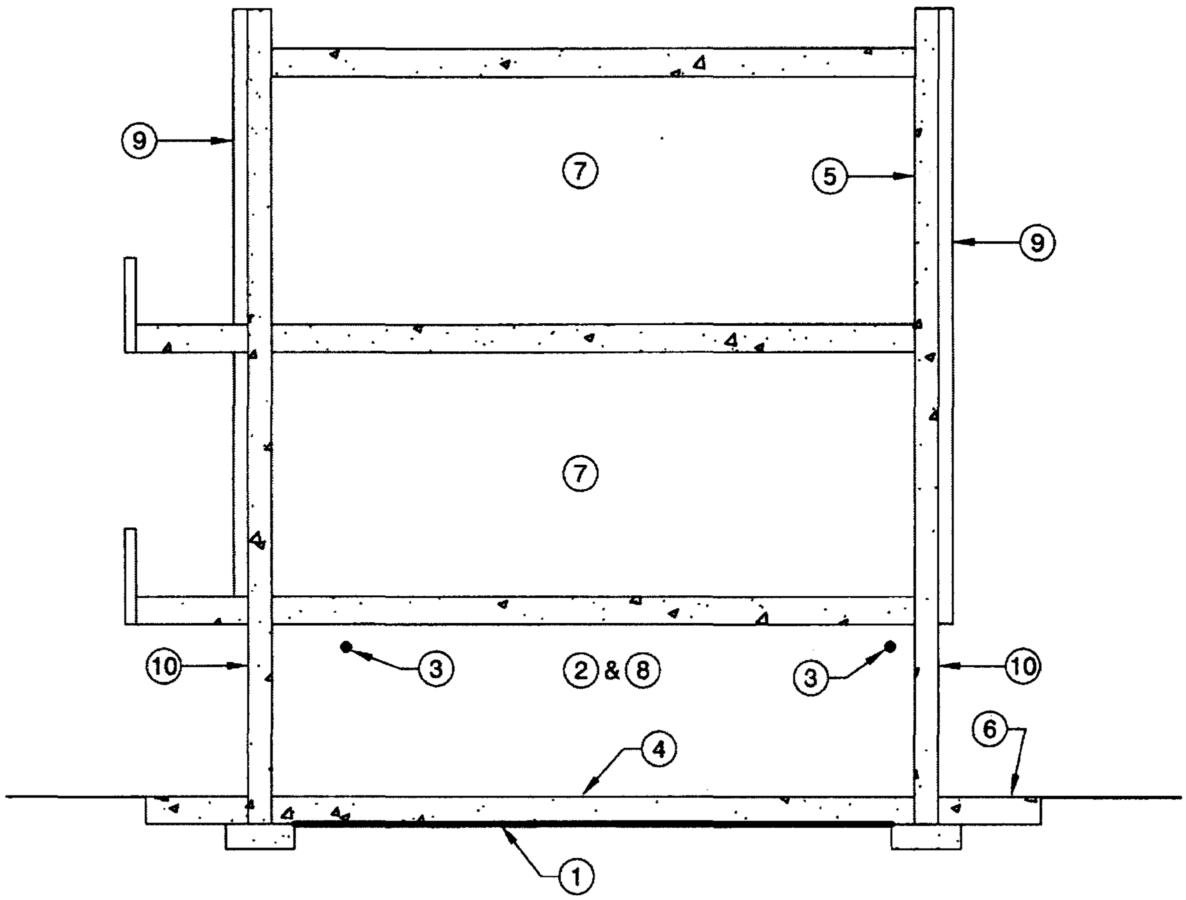
STRUCTURE ON SAND PLATFORM WITH ACTIVE GAS EXTRACTION COMPONENTS

410 CENTER STREET
LOS ANGELES, CALIFORNIA

PREPARED FOR

THE GREENWALD COMPANY
SAN DIEGO, CALIFORNIA

AVOCET
ENVIRONMENTAL, INC



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31

GAS CONTROL SYSTEM

1. GAS BARRIER - GEOMEMBRANE
2. GAS EXTRACTION - OPEN FIRST FLOOR
3. MONITORING - INSTRUMENTS AND ALARMS

STRUCTURE

4. OPEN SPACE FLOOR SLAB
5. 3-STORY STRUCTURE
6. FLATWORK
7. LIVING SPACE
8. OPEN SPACE (PARKING)
9. WALLS AND WINDOWS
10. COLUMNS

NOT TO SCALE

FIGURE 5

MULTI-STORY RESIDENCE WITH OPEN SPACE FLOOR AND PASSIVE GAS EXTRACTION

410 CENTER STREET
LOS ANGELES, CALIFORNIA

PREPARED FOR

THE GREENWALD COMPANY
SAN DIEGO, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

67 2 3019

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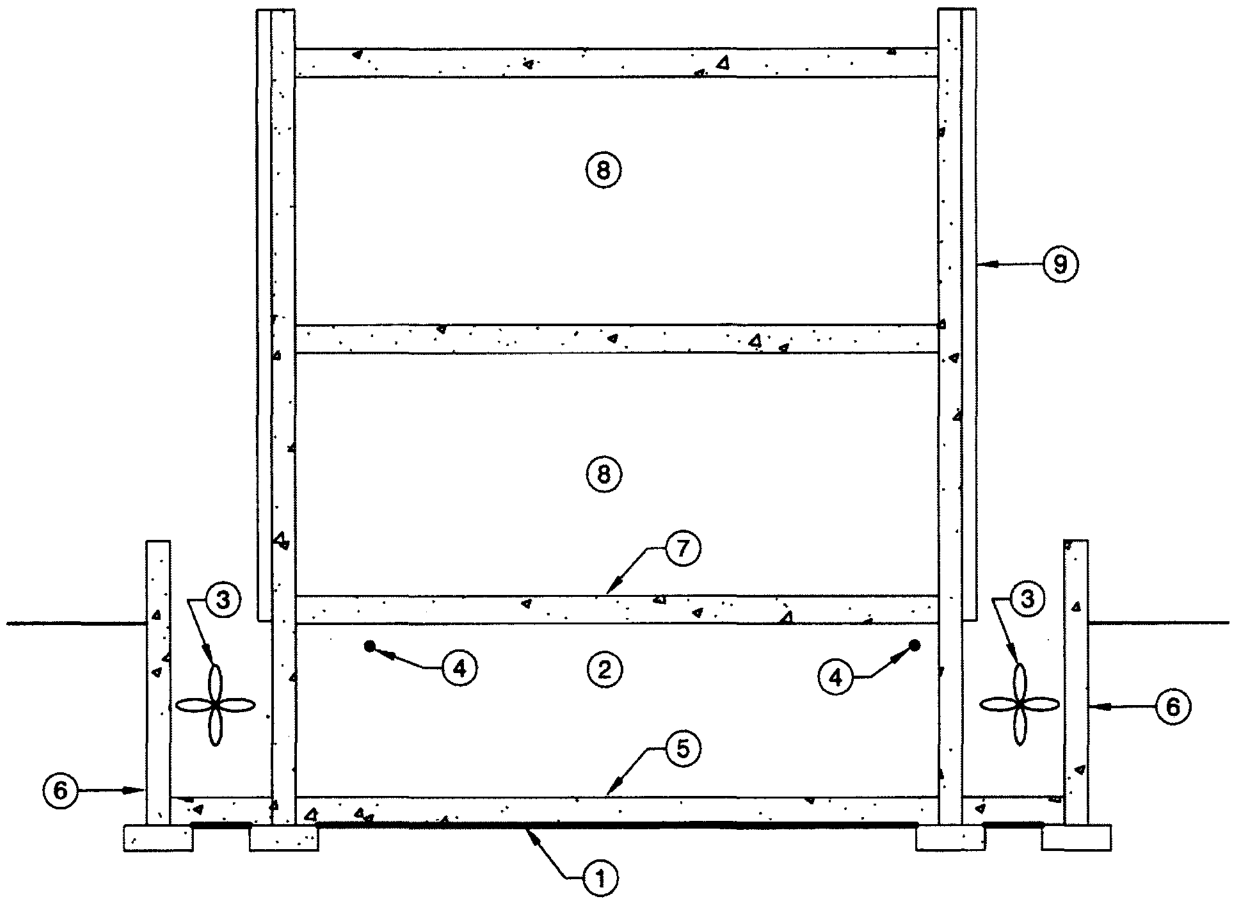

NOT TO SCALE

GAS CONTROL SYSTEM

1. GAS BARRIER - GEOMEMBRANE
2. GAS EXTRACTION - CRAWL SPACE
3. GAS EXTRACTION - FAN
4. MONITORING - INSTRUMENTS AND ALARMS

STRUCTURE

5. FLOOR SLAB
6. RETAINING WALL (ALTERNATIVELY - SLOPE EXCAVATION)
7. MAIN LIVING SPACE STRUCTURE ON COLUMNS
8. LIVING SPACE
9. WALLS AND WINDOWS

FIGURE 6

MULTI-STORY RESIDENCE WITH OPEN BASEMENT AND ACTIVE GAS EXTRACTION

410 CENTER STREET
LOS ANGELES, CALIFORNIA

PREPARED FOR

THE GREENWALD COMPANY
SAN DIEGO, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

5 1 0 3 7 2 7 0

Exhibit D

OVERSIGHT COST ESTIMATE for ADMINISTRATION OF DUTIES by THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL for the LAND USE COVENANT for the property known as 410 NORTH CENTER STREET, LOS ANGELES, CALIFORNIA Los Angeles County Assessor Parcels 5173-021-002 and 5173-021-003 also known as FORMER ALISO STREET MANUFACTURED GAS PLANT, SECTOR C, BLOCK N

As a part of its regulatory oversight role, the Department of Toxic Substances Control (DTSC) will conduct yearly activities to verify that the provisions of the Land Use Covenant (LUC) of the subject properties are being maintained. The owner is to inspect and submit an Annual Status Report verifying compliance with the LUC restrictions. In addition, DTSC's activities are expected to include:

- Annual inspections.
- Pertinent phone calls or meetings with entities associated with the site, including the landowners, tenants, and other regulatory agencies.
- Review of and response to correspondence from the landowner pertaining to the LUC.
- Handling of internal and external inquiries about the status of the provisions of the LUC.

DTSC's estimated annual costs for performing the above activities are:

	Branch Chief	Unit Supervisor	Project Manager	Technical Support	Clerical Support	Grand Total
Total Hours/yr			4	2	1	-
Hourly Cost, $			145	166	67	-
Total Cost, $			580	332	67	979

The above costs assume that no LUC violations, breaches, or disruptions are noted during the inspection or otherwise reported to DTSC. If such problems arise as a result of negligence, non-compliance, or natural disasters such as earthquakes and floods, DTSC may incur the following costs in a single year:

04 2653019

	Branch Chief	Unit Supervisor	Project Manager	Technical Support	Clerical Support	Attorney Support	Grand Total
Total Hours/yr	1	2	8	6	4	2	-
Hourly Cost, $	191	166	145	166	67	165	-
Total Cost, $	191	332	1160	996	268	330	3,277

The costs assume that DTSC will conduct the following actions:

- All of the activities described previously.
- Work related to discoveries of LUC violations, breaches, or disruptions, including preparing associated documentation, discussions with the landowner or regulatory agency personnel and supervisor; preparation of associated internal and external correspondence; and documenting that problems have been corrected.
- Work related to potential LUC violations, breaches, or disruptions that are outside of the control of the landowner, including acts of nature (flood, earthquake), vandalism, or violence. The time would include the site inspection; preparing associated documentation; discussions with the landowner, regulatory agency personnel and supervisor; preparations of associated internal and external correspondence; and documenting that problems have been corrected.

The above estimates are based on **the Contract Estimate Rates effective July 7, 2007** and include labor rates and overhead. The estimates do not include:

- Renegotiation or termination of the LUC or associated documents or agreements.
- Revisions of the LUC due to changes in land use.
- Discussions with local land use agencies, prospective purchasers or developers about changing the land use at the properties.

35

Exhibit E

Annual Status Report For Covenant to Restrict Use of Property

Former Aliso Street Manufactured Gas Plant, Sector C Block N, Site

410 North Center Street, Los Angeles, CA

Los Angeles County Assessor Parcels 5173-021-002 and 5173-021-003

Name of Person Completing Form: ______________________________

Address: ______________________________

____

____

Phone number: ______________________________

Date: ______________________________

How was status verified? ______________________________

____

____

	YES	NO
1. Is there a residence, including any mobile home or factory built housing, constructed or installed for use as residential human habitation at or below grade level on the property?		
2. Is there a hospital for humans at or below grade level on the property?		
3. Is there a public or private school for persons under 21 years of age at or below grade level on the property?		
4. Is there a day care center for children at or below grade level on the property?		
5. Are there any occupied structures on the property that do not have engineering controls?		
6. Are there any ground water wells on site?		
7. Are foods crops being raised in property soil?		

07 2663019

Exhibit E

Annual Status Report For Covenant to Restrict Use of Property

Former Aliso Street Manufactured Gas Plant, Sector C Block N, Site

410 North Center Street, Los Angeles, CA

Los Angeles County Assessor Parcels 5173-021-002 and 5173-021-003

8. Is there evidence of disturbance of soil? [If disturbance of soil was noted on the property explain in detail on attached pages the purpose of the disturbance, when it was performed, and who at the Department approved the Soil Management Plan?]

7. Did you fail to use due diligence and make an inquiry as to each and every restriction noted in the Covenant or listed on this annual status report form?

8. Has there been any change in the restrictions under a variance, modification or termination as approved by the Department under the Health and Safety Code? [If yes, describe in detail the change and the date of such approval for that change.]

9. Have there been any violations of the Covenant? [If yes, describe in detail on an attached page the steps taken to return to compliance.]

10. Is the following a true and accurate statement?

    Statement: The undersigned is the Owner of Property subject to this Covenant, and hereby admits that such Property has been used for one or more of the purposes listed in Sections 4.01, 4.02, 4.03 and 4.04 of this Covenant during the past year.

Please explain each YES response in detail on attached pages.

I certify that the foregoing information is true and correct to the best of my knowledge. I understand that a person making a false statement or representation in this report may be subject to fine or imprisonment or both.

Signed: ______________________________

Representative of owner

37

Exhibit E

Annual Status Report For Covenant to Restrict Use of Property

Former Aliso Street Manufactured Gas Plant, Sector C Block N, Site

410 North Center Street, Los Angeles, CA

Los Angeles County Assessor Parcels 5173-021-002 and 5173-021-003

Printed Name ________________________________

DATE:________________

Department of Toxic Substances Control

Linda S. Adams
Secretary for
Environmental
Protection

Maureen F. Gorsen, Director
1011 North Grandview Avenue
Glendale, California 91201

Arnold Schwarzenegger
Governor

December 14, 2007

Mr. Bennet Greenwald
The Greenwald Company
2929 Cañon Street, Suite A
San Diego, California 92106

SITE CERTIFICATION, 410 CENTER STREET, FORMER ALISO STREET MGP FACILITY, SECTOR C, BLOCK N, LOS ANGELES

Dear Mr. Greenwald:

This letter provides clarification on the site certification issued by The Department of Toxic Substances Control (DTSC) dated December 11, 2007 for the site located at 410 Center Street in Los Angeles, California. Due to the presence of residual chemicals, a land use covenant (LUC) was signed on November 28, 2007, which the Greenwald Company agreed to implement. The covenant does not restrict commercial and industrial land uses on the Site. The LUC prevents sensitive uses such as: a hospital for humans; a public or private school for persons under 21 years of age; a day care center for children; a single family residence and a ground-floor residence (in a basement or first floor above slab-on-grade).

The LUC includes an Operation and Maintenance (O&M) Plan that specifies engineering controls required to ensure safe uses of the site. Therefore, DTSC certifies that the Removal Action Workplan dated June 2004 has been satisfactorily implemented and the LUC has been recorded with the County of Los Angeles effective December 5, 2007. Thank you for your efforts in remediating this property. If you have any questions, please contact me at (818) 551-2822.

Sincerely,

Sara Amir

Sayareh Amir, Chief
Southern California Cleanup Operations Branch - Glendale Office

cc: Masood Hosseini, Ph.D.
Senior Project Manager, Site Assessment and Mitigation
Sempra Energy
555 West Fifth Street, GT16G2
Los Angeles, California 90013-1011

TETRA TECH, INC.
3475 E. Foothill Boulevard
Pasadena, California 91107
Main #: (626) 351-4664
Direct #: (626) 470-2462
E-fax #: (626) 470-2662
Salar.Niku@tetratech.com

October 30, 2006

Mr. Masood Hosseini T15969-16
Senior Project Manager
Site Assessment and Mitigation
555 West Fifth Street, GT16G2
Los Angeles, California 90013-1011

**Subject: Final Removal Action Completion Report and Response to DTSC Comments Dated September 26, 2006 and October 27, 2006
Former Aliso Street Sector C Block N Former MGP Site
Located at 410 Center Street, Los Angeles, California**
Master Agreements 6100000232 and 6160000372
Service Release No. 5500000669 and 5660000968

Dear Mr. Hosseini:

On Tuesday September 26, 2006, Mr. Pete Cooke, the Department of Toxics Substances Control (DTSC) Project Manager, sent an e-mail to Southern California Gas Company (SCG) requesting few changes to the final Removal Action Completion Report for the Former Aliso Street Sector C Block N MGP Site. On Thursday October 19, 2006, there was a conference call between DTSC (Mr. Cooke, and Ms. Rita Kamat the Unit Chief), SCG (Mr. Hosseini), Mr. William Girolamo of Enviropro Inc. representing the Site owner, and Tetra Tech, Inc. (Salar Niku). During this conference call the content of Mr. Cooke e-mail was discussed.

The risk assessment in the completion report was acceptable to DTSC. DTSC commented that contaminants resulting from the prior MGP use had been remediated to a level allowing unrestricted use of the site; however, the report required modification to state that unrestricted use of the site was not currently possible due to the presence of tetrachloroethene (PCE) in the soil gas. DTSC requested that the risk assessment be revised to remove all referenced that there is no risk left at the Site. DTSC also requested that in the conclusion section, all references to no further action should be removed. The corrections were made in this final submittal of the completion report.

On Wednesday October 25, 2006 Mr. Cooke requested Tetra Tech an electronic copy of the completion report text to be able to search all other possible areas that need correction. The text was sent to Mr. Cooke on a confidential basis. Mr. Cooke had additional comments on October 27, 2006 in an e-mail To Tetra Tech. The comments were responded.

Enclosed is one copy of the corrected pages of the Report for the former Aliso Street Sector C Block N former manufactured gas plant (MGP) Site. We have modified the text of document in Sections 1, 6, and 7 and in the executive summary, as well as the signature page. Please replace the text of the document (dated January 2006, as modified May 9, 2006 and August 9, 2006) with the attached revised text (dated Revised October 2006). With this inclusion, the original draft Removal Action Completion Report dated January 2006 may be considered to be the final document.

Per your instruction, I am forwarding three copies of this Report to the Department of Toxic Substances Control. Two copies will be forwarded to the attention of Mr. Pete Cooke, DTSC Project Manager and one copy will be forwarded to the attention of Dr. Kimiko Klein in Sacramento office. I am also forwarding a copy of the revised pages to Mr. William Girolamo of Enviropro, who is representing the Site owner.

If you have any questions regarding the corrections to the Report, please call me at (626) 351-4664.

Respectfully Submitted,
TETRA TECH, INC.

Salar D. Niku, P.E.
Project Manager

cc: Mr. Pete Cooke, DTSC (2 copies)
Dr. Kimiko Klein (1 copy)
Mr. William Girolamo (1 copy)

REMOVAL ACTION COMPLETION REPORT
for
ALISO STREET, SECTOR C, BLOCK N
FORMER MANUFACTURED GAS PLANT (MGP) SITE
Located at
410 CENTER STREET, LOS ANGELES, CALIFORNIA

Prepared for:
Southern California Gas Company
555 West Fifth Street
Los Angeles, California 90013-1011

Prepared by:
Tetra Tech, Inc.
3475 East Foothill Boulevard
Pasadena, California 91107
(626) 351-4664

Master Agreement 6160000372.0
Service Release No: 556000968
Tetra Tech Project No. 15969

May 2006
Revised August and October 2006

REGISTERED PROFESSIONAL ENGINEER SALAR D. NIKU NO. 32003 EXP. 12/31/06 CIVIL STATE OF CALIFORNIA

Prepared by: for James McHarry, R.G.
Task Manager
Tetra Tech, Inc.

Reviewed by: Salar D. Niku, Ph.D., P.E.
Project Manager
Tetra Tech, Inc.

Submitted by: Masood Hosseini, Senior Project Manager
San Diego Gas & Electric
Authorized Agent for
Southern California Gas Company

10/30/06
Date

Copy 2 of 6
DTSC Copy 1 of 3

DISCLAIMER

This Removal Action Completion Report (Report) is prepared for the sole use and benefit of the Southern California Gas Company (Client) and for the specific Site known as former Aliso Street MGP Site, Sector C – Block N, located in Los Angeles, California. **Neither this Report nor any of the information contained therein shall be used or relied upon for any purpose by any person or entity other than the Client and for the Aliso Site.**

This Report was prepared based partially on information supplied to Tetra Tech from outside sources and other information which is in the public domain, and partially on the information Tetra Tech obtained during the removal action activities. Documentation for the statements made in the Report is on file at Tetra Tech's Pasadena, California, office. Tetra Tech makes no warranty as to the accuracy of statements made by others which are contained in this Report, nor are any other warranties or guarantees, expressed or implied, included or intended in the Report with respect to information supplied by outside sources or conclusions or recommendations substantially based on information supplied by outside sources. This Report has been prepared in accordance with the current generally accepted practices and standards consistent with the level of care and skill exercised under similar circumstances by other professional consultants or firms performing the same or similar services. Since the facts forming the basis for this Report are subject to professional interpretation, differing conclusions could be reached. Tetra Tech does not assume responsibility for the discovery and elimination of hazards, which could possibly cause accidents, injuries, or damage unless those hazards were apparent, and should have been discovered, as a result of the services Tetra Tech performed for the Client. This Report represents the best professional judgment of Tetra Tech; however, compliance with submitted recommendations or suggestions does not assure elimination of hazards or the fulfillment of the Client's obligations under local, state, or federal laws, or any modifications or changes to such laws.

None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind or nature, but shall be a representation of findings of fact from records examined.

This Removal Action Completion Report has been prepared by Tetra Tech, Inc. Mr. James McHarry, R.G., was the Site Manager during the removal activities and the author of this report. Mr. Salar Niku, Ph.D., P.E. was the Project Manager.

El Capitan Environmental Services, Inc. was the general contractor for the Southern California Gas Company and was in charge of the removal activities at the Site. Mr. M. Mesrop, P.E., R.G. of Geotechnical Soilutions, Inc. managed the geotechnical issues at the Site.

All work was managed under the direction of Mr. Masood Hosseini, Senior Project Manager of Southern California Gas Company, managing the work under the supervision of Dr. Todd Sostek, Manager of Site Mitigation.

All work was performed under the direct oversight of the Department of Toxic Substances Control (DTSC). Mr. Pete Cooke, R.G. was the DTSC Project Manager and Dr. Richard Coffman, R.G. was the DTSC Geologist, both working under the direction of Ms. Rita Kamat, DTSC Unit Chief. Mr. Cooke or Dr. Coffman together performed continuing site inspections during the removal action activities on behalf of DTSC.

TABLE OF CONTENTS

SECTION **PAGE**

TABLE OF CONTENTS

SECTION **PAGE**

LIST OF FIGURES

LIST OF TABLES

LIST OF TABLES (Continued)

LIST OF APPENDICES

Introduction

This Removal Action Completion Report (Report) is submitted by the Southern California Gas Company (SCG) to the Department of Toxic Substances Control (DTSC) to comply with the Voluntary Cleanup Agreement (VCA) [Docket No. HAS-A00\01-100] dated October 10, 2000 [DTSC, 2000a]. This Report presents the removal action activities completed at the former Aliso Street Manufactured Gas Plant (MGP), Sector C Block N, hereinafter referred to as the "Site".

SCG contracted with Tetra Tech, Inc. for management of the removal action activities at the northwest corner of the Site, in accordance with the Removal Action Workplan (RAW), as approved by DTSC.

Site Location and Description

The Site has a street address of 410 Center Street, Los Angeles, California, and is located on the southeast corner of the intersection of Center Street and Ducommun Street (County Assessor reference is 5173-021-002). The Site, located in an industrial land use area, was formerly owned by SCG and later on by Manley Oil Company. In 2004 the Site was sold to the current owner.

The Manley Oil building is situated on the northwest corner of the Site. The building consists of a brick structure with a pit present at the southern boundary of the building. This pit runs east west and continues along the brick wall south of the Manley Oil Building. The surrounding properties are used for industrial purposes, including a car storage and towing facility, fish processing, and cold storage.

Site Past History

Block N was purchased in 1902 by Los Angeles Gas and Electric Company, a predecessor to SCG. The historical MGP operations at the Site included gas compression and warehouse storage. SCG first used Block N for two aboveground gasholders, which are present on the 1905 Sanborn map of the area. The two gasholders located on the Site were removed in approximately 1920. New structures were built following the removal of the gasholders including generators, gas compressors used for gas compression and transmission, blowers for gas transmission, and warehouses. The newer facilities were used to support MGP operations until 1927. After that date, the facilities were used in support of butadiene production elsewhere at the former Aliso Street MGP site. SCG or its predecessors operated facilities on the Site as early as 1904 until 1979, when part of the property was sold to Manley Oil Company.

Site Investigations

Earth Tech performed the site-wide investigations for SCG, including a preliminary endangerment assessment (1998) and a remedial investigation (2001). A supplemental sampling in the northwest corner of Block N was performed by TRC and Tetra Tech (2002). A fourth investigation was conducted in June 2003 in the northwest corner of Block N to further delineate the horizontal extent of contamination observed in the northwest corner area of the Site (i.e., at Boring N-2). The purpose of this supplementary investigation was to collect additional information to prepare a Removal Action Workplan for the northwest corner of the Site.

Removal Action Goals

The objective of this removal action was to remove sources of contaminated soils at Block N on the northwest corner area of the Site. The goal was to cleanup the Site to a non-restricted (residential) land use. In general, Site cleanup was based on the most protective (i.e., lowest) removal action goals, regardless of whether the goals are protective of residents, workers, or groundwater. This set of health-protective goals was presented in Table 5-1 in the Removal Action Workplan [Tetra Tech, 2004b].

In addition, because the remedial goal for the Site was non-restricted land use, DTSC requested that total petroleum hydrocarbon (TPH) concentrations detected in the soil be remediated to screening levels listed in the May 1996 California Regional (Region IV) Water Quality Control Board Interim Site Assessment and Cleanup Guidebook.

Groundwater was not a part of this remedial activity. The groundwater management for the entire former Aliso MGP site will be addressed as one operable unit and will be discussed in a separate document under the groundwater management plan.

Removal Action Activities

Excavation activities were conducted at the Site from June through December 2005. Excavation was conducted in accordance with the Removal Action Workplan, approved by DTSC and the excavation plan approved by the City of Los Angeles.

The proposed area of excavation was situated in the northwest corner area of the Site between the south and east outer retaining walls of the concrete pit located south of the Manley Oil Building (Figure 2-1) and in part, inside the Building. The base of the footing for the pit was approximately 12 feet bgs. Initial soil removal was conducted by open excavation to a depth of approximately 8 feet bgs to be protective of the structural integrity of the sump walls. Following the initial excavation, the deeper contaminated soil was removed by auger drilling and backfilling with cement slurry. The auger drilling method consisted of drilling through the contaminated soil using 2- or 3-foot diameter auger. Open excavation was performed following the completion of excavation by auger drilling and slurry replacement.

Soils from the contaminated area were removed to depths ranging from 28 to 30 feet bgs over an area of approximately 27 feet wide by 33 feet long. The extent of impacted soil that was excavated during the removal action is shown on Figure 2-1 in Section 2 of this Report. The total volume of contaminated soil augered and/or excavated from the Site during the remedial excavation was approximately 1,664 cubic yards or 2,663 tons.

Additional investigation was conducted in August and then in October through December 2005 beneath the Manley Oil Building and under the concrete lined pit south of the building. The investigation consisted of drilling and sampling 11 soil borings, nine in the building and two in the pit, and sampling two soil gas probes installed in the pit. Elevated concentrations of C-PAHs and TPH were detected in the 6-foot and 10-foot samples collected beneath the northwest corner area of the building (Boring NB-7). The contaminated soil beneath the Building was removed through excavation of two trenches (ET1 and ET2) around boring NB-7. A small lens of hardened, dry, and black stained silty-sand was observed in the soils excavated from the trenches, in the north and west sidewalls of trench ET2, at depths ranging from 8 to 12 feet bgs. Since trenching next to the north wall of the Building was not feasible, the bucket-auger drilling method was employed to remove the contaminated soils observed in the north wall of trench ET2. Six borings were drilled using a 2.5-foot diameter bucket auger, removing the soil located between the north wall of the trench and the building's footing. The bucket auger borings were drilled to depths ranging from 5.5 to 13 feet bgs. All contaminated soils beneath the Building were removed except a small and limited section under the footing of the Building.

Two additional removal actions were conducted in other parts of Block N. A small quantity of soil was removed using 3-foot auger drilling around boring BN-7 in the eastern part of the Site where elevated C-PAHs had previously been detected. Asphalt and soil were removed in a small area (2 feet by 2 feet by 1 foot) east of the main excavation area where a mercury spill occurred.

Confirmation Sampling

Under the supervision of the DTSC Project Manager, confirmation samples representing the condition of the soil remaining at the Site were collected and analyzed for PAHs, volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH), and metals by EPA Methods 8310 (HPLC), 5035/8260, 8015 (modified), and 6010/7000 CAM, respectively. A summary of the chemical results in soil and soil gas are included in Section 5. In general, PAHs and VOCs are low in the remaining soils with higher concentrations, if present, in the deeper soils below 20 feet. Benzene and naphthalene were not detected in the new soil gas samples, although PCE and other organic compounds were present.

Backfill

Imported clean soil was brought from the University of California Los Angeles (UCLA) Campus located in the City of Los Angeles, California. A parking structure was being constructed on the UCLA campus. The soil excavated from the construction site at the campus was imported to Block N as clean backfill material. Prior to import and placement, the imported soil was analyzed and certified clean. The backfill soil was compacted to 95% relative compaction.

Treatment and Recycling

Wastes generated during the removal action activities included contaminated soils, concrete, asphalt, and abandoned pipelines. All contaminated soils were manifested and transported offsite to TPS Technologies Inc. in Adelanto, California, a treatment/recycling facility that treats the soil by thermal desorption. The treated soil was not returned or reused at the Site.

Risk Assessment

The remedial action objective for the removal of MGP-related residuals and other contaminants conducted at this Site was to restore the Site to conditions requiring no land use restrictions (i.e., to residential standards), although the Site is currently used for commercial/industrial purposes.

Based on the determinations described above, the removal activities have effectively reduced the C-PAH concentrations at the Site to background levels. The residual concentrations of C-PAH in soils across the Site are sufficiently low that if subsurface soils were redistributed on the surface, the resulting concentrations would be lower than background levels. In other words, the risks from C-PAHs to future residents potentially living on the Site under post-excavation conditions would be no more than people living and working elsewhere in southern California.

From a cumulative risk standpoint, since C-PAH levels are sufficiently low that they would not represent a significant risk above background, the cumulative lifetime incremental cancer risk for the PAHs, metals, and VOCs is no more than $2x10^{-6}$ to $1x10^{-5}$. Also, since this risk estimate is within the acceptable cancer risk range of 10^{-6} to 10^{-4} recommended by the USEPA and DTSC, the residual constituents do not pose a significant health risk for potential future residents (i.e., unrestricted Site use). Similarly, for non-carcinogenic health effects, the cumulative hazard index calculated for all of the PAHs, metals, and VOCs is well below the critical threshold value of 1.0 and, thus, no adverse non-cancer health effects would be expected under a residential exposure scenario.

Comparisons of chemical concentrations in recent samples and those used to evaluate risks previously show that none of the recent sampling results would result in unacceptable residential risks, except possibly for tetrachloroethene in soil gas.

For groundwater, the removal activities have removed soils and sufficient chemical mass that predicted impacts of chemical migration to groundwater are less than potentially applicable water quality criteria. In particular, based on the mass remaining in soils, the predicted concentrations of benzene and naphthalene in groundwater do not exceed the drinking water MCL and Notification Level, respectively.

The data indicate that removal activities conducted at the Site have been successful in achieving the remediation action objective for the Site and that the COPCs (PAHs, metals, and VOCs) have been remediated to levels that are protective of human health for unrestricted land use except possibly for tetrachloroethene in soil gas.

The Department of Toxics Substances Control has determined (please refer to the DTSC comments dated July 28, 2006 in Appendix V) that "....the impact of tetrachloroethene at the site remains unresolved". DTSC further recommends that, in order to develop the Site for sensitive uses, including residential, one of the following three actions may be necessary: "(1) the impact of tetrachloroethene to the site be reduced to levels which would allow unrestricted use, or (2) a land use restriction be enacted to limit site use to non-sensitive uses, including residential use, or (3) implement engineering controls that would allow mixed use."

Site Restoration

The excavations and trenches were backfilled with cement slurry and clean imported soil following completion of removal activities. The excavated areas were repaved with asphalt.

Removal action Oversight

The soil removal and all confirmation soil sampling activities were performed under the oversight of the DTSC. Mr. Pete Cooke, Project Manager (DTSC), visited the Site one to two times a week and Dr. Richard Coffman, geologist (DTSC), visited the Site periodically to observe the sampling procedures.

Conclusion

Through this remedial action, the requirements of the Removal Action Workplan (RAW) have been satisfied, and the Southern California Gas Company (SCG) requests from DTSC a Certificate of Completion for implementation of the RAW.

1. BACKGROUND

This Removal Action Completion Report (Report) was prepared by the Southern California Gas Company (SCG) for the former Aliso Street Manufactured Gas Plant (MGP) Site, Sector C, Block N, located at 410 Center Street, Los Angeles, California (hereinafter referred to as the "Site") for submittal to the Department of Toxic Substances Control (DTSC), to comply with the Voluntary Cleanup Agreement (VCA) [Docket No. HAS-A-00/01-26] executed between DTSC and the SCG dated October 26, 2000.

Tetra Tech prepared the Removal Action Workplan (RAW) dated June 2004 [Tetra Tech, 2004a]. During the removal action, Tetra Tech oversaw the removal activities for SCG. Kleinfelder (formerly Geologic Services Corporation) oversaw the removal activities for the current property owner of the Site. El Capitan Environmental Inc. was the general contractor for the removal action activities, directly contracted by SCG. Geotechnical Soilutions, Inc. was contracted by SCG to design and oversee the geotechnical issues of the Site. Tetra Tech oversaw the removal activities on behalf of SCG and is the principal author of this Report.

1.1 PURPOSE

The purpose of this Removal Action Completion Report is to document the removal action activities at the Site, provide the results of post-excavation soil sampling, and request from DTSC a Certification of Completion of remedial action at this Site as stated in the RAW.

The removal action was performed to remediate the Site to unrestricted land use. Removal action activities were focused and were primarily performed in the northwest corner area of the Site (Block N).

1.2 SITE LOCATION, BOUNDARIES, AND DESCRIPTION

The former Aliso Street MGP site is located in downtown Los Angeles (Figure 1-1). The Aliso MGP site boundary covers an area from south of the railroad tracks by Bauchet Street to the north, across the 101 Hollywood Freeway to about East Temple Street to the south, and between Union Station to the west, and the Los Angeles River to the east (Figure 1-2). The Site is located in Township 1 South, Range 13 West, Section 27, of the San Bernardino Meridian.

For ease of managing the required investigation and remediation activities, SCG has divided the approximately 56-acre[1] Aliso Street MGP site into five sectors, A through E, as shown on Figure 1-2. SCG determined sector boundaries based on past and current ownership, as well as physical boundaries and past operations. The boundaries do not necessarily correspond exactly to the areas used by the former MGP facilities.

[1] The acreage estimate given here is based on the previous reports that cite the size of the Aliso MGP site as 52 acres based on previous boundaries. The actual acreage of the Aliso MGP site based on current site boundaries is approximately 56.3 acres.

Block N is located in Sector C. Sector C includes seven city blocks covering approximately 16.4 acres. **Block N is a property with the street address of 410 Center Street.** Ducommun Street bounds the Site to the north, Jackson Street to the south, Center Street to the west, and railroad tracks and the Los Angeles River to the east (Figure 1-3).

The Site (Block N) is further subdivided into three properties: the former Manley Oil Company property located on the north half of the Site, and the former Los Angeles Gas and Electric Corporate Plant property and the former Southern California Gas Company property located on the south half of the Site. The Manley Oil Building is located on the northwest corner of the Site (Figure 1-3).

Based on SCG's review of current land use maps and land planning documents, the current and reasonably anticipated future land uses for the Aliso MGP site (56-acre site) are expected to remain commercial, industrial, public institutional, and transportation. Land uses may include office buildings, public institutions, enclosed warehouse spaces, indoor and outdoor manufacturing areas, restaurants, exterior storage yards, parking lots, and public transportation right-of-ways (e.g., highways and rail).

1.3 MGP AND POST-MGP OPERATIONS AT THE SITE

The historical MGP operations within Block N included gas compression and warehouse storage in support of other facilities located adjacent to the Site. The present day 101 (Hollywood) Freeway was built on the former route of Aliso Street. Block N was purchased in 1902. The SCG first used the Site for two aboveground gasholders, which are present on the 1905 Sanborn map of the area. Earlier maps of the Site in the 1890s indicate that it was used for residential lots or the lots were vacant. Physical structures used by SCG at Block N included:

- Generators;
- Gas compressors used for gas compression and transmission;
- Blowers for gas transmission;
- Two gasholders (1,000,000 cubic foot, pre-1921); and
- Warehouses.

The two gasholders located on the Site were removed in approximately 1920. These gasholders existed when the property was first used for MGP operations in 1910 [Earth Tech, 2001]. New structures were built following the removal of the gasholders. The facilities at the Site were used to support MGP operations until 1927. After that date, the facilities at the Site were used in support of butadiene production elsewhere at the former Aliso Street MGP site. Butadiene was not stored or produced on Block N. SCG, or its predecessors, operated facilities on the Site as early as 1904 until 1979, when part of the property was sold to Manley Oil Company.

The Manley Oil Company building located on the corner of Center and Ducommun Streets remains standing to this day. A review of the Foundation and Trench Plan drawings associated with this building's construction show that the building consists of a brick structure with a pit present at the southern boundary of the building. This pit runs east-to-west and continues along the brick wall south of the Manley Oil Building. The Design Engineering Trench Plan drawings show one of the existing tanks to be used for drip oil, another for dirty oil, another for separator oil, and two for lube oil [SCGC, 1956]. There was no label showing what type of liquid was to be stored in the future tank. No underground tanks were found during removal activities; therefore it is evident that all the subsurface structures in this area have been removed sometime in the past. SCG and Tetra Tech are not aware of any records showing the closure of these tanks. There are also no records that SCG is aware of to document the tanks' use or integrity testing.

1.4 SUMMARY OF PREVIOUS SITE INVESTIGATIONS AND REMEDIATIONS

Three site-specific investigations were previously performed at the Site. These include:

- Preliminary Endangerment Assessment, Earth Tech [1998];
- Remedial Investigation, Earth Tech [2001]; and
- Supplemental Sampling in the Northwest Corner, TRC (for Tetra Tech Master Remedial Investigation) [2002].

Earth Tech performed the site-wide investigations for SCG. A fourth investigation was conducted in June 2003 to further delineate the horizontal extent of contamination observed in the northwest corner area of the Site (i.e., at Boring N-2). The purpose of this supplementary investigation was to collect additional information to prepare a Removal Action Workplan for the northwest corner of the Site.

Summaries of the observed geology, hydrogeology, and nature and extent of contamination delineated during these investigations are presented below. Additional information from site investigations performed at locations adjacent to the Site that is relevant to the delineation of the extent of contamination at the Site is also provided below.

During site investigation activities, areas of the Site that were accessible were investigated by SCG. In many cases, however, sampling beneath the location of former tanks, buildings, concrete pads, and other support structures at the Site was either highly limited or not possible. Please refer to Figure 1-3 from Removal Action Workplan [Tetra Tech 2004a] showing the historical structures and Figures 4, 5A, and 5B from Remedial Investigation Report [Earth Tech 2001] showing the presence of concrete layers at the Site. Copies of these 4 figures are included in Appendix V.

1.5 GEOLOGIC SETTINGS

1.5.1 Geology

The subsurface lithology underlying the Site can be generalized as coarsening downward with artificial fill material in the upper few feet of the soil column. In the northwest corner of the Site concrete structures and foundation footings encountered during removal action activities extended as deep as 12 feet bgs. Fill materials observed in the trenches and borings excavated and drilled in the Manley Oil Building were also observed at depths ranging as deep as 12 feet below surface grade (Appendix J). Concrete structures and foundations were encountered in borings drilled in central and southern sections of the Site at depths ranging between 8 and 14 feet bgs [Earth Tech, 2001]. Sandy fill material was observed from surface to 10 feet bgs in central and northern sections of the Site. Sand or gravelly sand was encountered from surface to 10 feet bgs in the southern section of the Site.

In the northwest corner of the Site where removal action activities were implemented, and across the rest of the Site, native alluvium of medium to coarse sands (both well and poorly graded) were observed to extend from the fill layer at approximately 10 to 12 feet bgs to the top of the groundwater table, approximately 30 feet bgs. In the central area of the Site (boring BN-04) sand, gravelly sand, and silty sand were observed to be below the groundwater table (approximately 30 feet bgs) to the bedrock layer at 78.5 feet bgs (Figure 2-1). The gravelly sands and sandy gravel encountered near the water table contained rock fragments and cobbles. Soil color ranged from various shades of brown (light yellowish brown to olive brown) to gray above the water table, and gray to dark gray at the capillary fringe and water-saturated zone, respectively [Earth Tech, 2001]. These geologic zones were confirmed during the removal action activities.

1.5.2 Hydrogeology

The former Aliso Street MGP site is located within the Los Angeles Forebay Area of the Los Angeles Central Groundwater Basin [California Division of Water Resources, (CDWR), 1961, "Ground Water Geology of the Coastal Plain of Los Angeles County", Bulletin 104]. Eight aquifers and associated aquitards have been mapped in the basin area. The aquifers, from shallowest to deepest are: Gaspur, Exposition, Gage, Hollydale, Jefferson, Lynwood, Silverado, and Sunnyside. Except for the Gaspur aquifer, all aquifers of the basin thin and pinch out towards the southern portion of the Aliso Street MGP site. The Gaspur aquifer has been mapped to continue northward from the basin through the Aliso Street MGP site.

Previous hydrogeologic investigations in the MGP site have established the presence of groundwater in the underlying river alluvial deposits at depths ranging between 29 and 42 feet below ground surface (bgs). This groundwater is unconfined and has a flow direction to the south. There are no intervening, continuous, confining layers. The base of the saturated zone is bedrock, encountered at depths from 45 feet bgs in well C-10, located near the corner of East Temple Street and Center Street on Block Q to 145 feet bgs in TtS-2, located on Sector E in the northern part of the Aliso Street MGP site. In some places, the underlying bedrock is dry such as beneath Sector A, while in other places there are thin, permeable sand layers in the weathered bedrock formation. The saturated hydraulic conductivity of bedrock samples range from 3.2E-7 to 7.0E-9 cm/sec, compared to 1.55E-03 cm/sec for the site-wide mean for samples from the alluvium.

Groundwater underlying the Site was encountered at approximately 30 feet bgs during the PEA investigation and the saturated zone consisted of mostly coarse-grained alluvial deposits [Earth Tech, 1998]. During the 2001 RI investigations by Earth Tech, the depth to groundwater observed in the borings and temporary wells was 29 to 31 feet bgs. During the removal activities conducted in the northwest corner of the Site, the depth to groundwater ranged from approximately 28 to 30 feet bgs (Appendix S). There are no permanent wells on Block N.

In the central area of the Site (Boring BN-04), the saturated alluvium zone was observed to extend to 78.5 feet bgs, the top of the bedrock layer (Fernando Formation). The saturated alluvium comprises one aquifer overlying the bedrock, which may correspond to the Gaspur aquifer. The deeper aquifers below the Gaspur aquifer found elsewhere in the Los Angeles Basin are not present beneath Block N. Based on the network of shallow wells at the Aliso Site, the groundwater flow direction across Block N varies from south along the eastern part near the Los Angeles River to southwest.

1.6 MEDIA OF INTEREST

Removal action activities focused on excavating and removing from the Site, mainly from the northwest corner area, vadose zone contaminated source soils. Groundwater remediation was not a part of this removal activity. The groundwater remediation management for the entire former Aliso MGP site will be addressed as one operable unit and will be discussed in a separate document under the groundwater management plan.

1.7 PROPOSED REMOVAL ACTIVITIES

Removal action was performed by removing the impacted soil to meet the removal action goals. In general, Site cleanup was based on the most protective (i.e., lowest) removal action goals, regardless of whether the goals are protective of residents, workers, or groundwater. This set of health-protective goals was presented in Table 5-1 in the Removal Action Workplan [Tetra Tech, 2004a]. The soil removal proceeded until the cleanup goals were achieved. This was demonstrated by the analytical results of the confirmation samples collected prior to backfilling.

1.7.1 Removal Action Workplan

A Removal Action Workplan (RAW) was prepared by Tetra Tech for Aliso Block N [Tetra Tech, 2004]. The RAW included all necessary detailed plans and specifications required to conduct the removal activities at the Aliso Block N, considering all physical, geotechnical, structural, and environmental constraints.

1.7.2 Geotechnical Studies

Geotechnical studies were conducted to evaluate potential strategies for safely excavating impacted soils from the Site, particularly at the depths and locations in which such excavations would be performed. Geotechnical plans were prepared for the removal and replacement of contaminated soils. These plans (hereinafter referred to as "approved City of Los Angeles excavation plan") were reviewed and approved by City of Los Angeles on March 21, 2005 (City

Approval Log No. 46381-01). A Request for Modification to use slurry as backfill was approved by the City of Los Angeles on May 9, 2005 (File No. 12578).

Geotechnical evaluation was performed during removal action activities by the Geotechical Contractor (Geotechnical Soilutions, Inc.), when necessary, to evaluate the soil condition at the Site and to revise or modify the conceptual recommendations presented in Section 5.2.1 of the RAW. The conceptual recommendations provided in the RAW were based on generally accepted engineering practices and were only based on limited information obtained from the as-built drawings provided by SCG [Tetra Tech, 2004a]. A geotechnical assessment had not been previously performed for this Site.

This section describes the field activities performed during the removal action at the former Aliso Street MGP Site, Block N of Sector C. The removal activities were implemented with the approval of DTSC. The site removal action was focused on the northwest corner area of the Site and was implemented by proceeding with removal of contaminated soils in the vadose zone from the Site until the cleanup goals were achieved.

2.1 CONTRACTORS AND SUBCONTRACTORS

The contractors and subcontractors that were involve in the removal activities included:

- Tetra Tech was the environmental consultant and under a direct contract with SCG oversaw and managed the removal activities for SCG.
- Kleinfelder was the environmental consultant that oversaw and managed the removal activities for the property owner.
- Geotechnical Soilutions, Inc. under a direct contract with SCG managed the geotechnical issues.
- El Capitan Environmental Services, Inc. (El Capitan) was the general contractor under a direct contract with the SCG, performed all removal action and trenching activities at Block N.
- American Environmental Testing Laboratory (AETL), a vendor under direct contract with SCG, performed all soil and air sample analyses.
- TPS Technology managed transportation, treatment, and recycling of all excavated contaminated soils under a direct contract with the SCG. Belshire Environmental services provided transportation services under the direct contract with TPS.
- J&I Trucking was a subcontractor to El Capitan for transporting all the non-contaminated material such as concrete, asphalt, and metal pipes out of the Site.
- Windrow Earth Transporting Inc. was a subcontractor to El Capitan for transporting clean soil for backfill to the Site.
- S&S Paving was a subcontractor to El Capitan in charge of paving activities.
- Standard Concrete Products was a subcontractor to El Capitan in charge of delivering cement slurry to the Site.

2.2 SITE SECURITY

An 11-foot high, brick wall around the Site provided security for the Site and the areas of excavation. There was adequate room within the walled-off area to operate excavation, loading, and hauling equipment. The walled-off area also encompassed the exclusion, decontamination, and support zones. During non-working hours, the gate to the Site was shut and kept locked. The brick wall around the Site acted as a visual barrier and windscreen around the Site, reducing the visual impact of Site activities and minimizing potential dust moving offsite. The staging area was located onsite within the walled-off area.

2.3 SITE ACCESS

2.3.1 Site Access

During removal activities, Site access was limited to the authorized personnel only. A sign-in log was maintained at the Site to document personnel entering the Site.

2.3.2 Site Visitors

For the duration of the soil removal activities the following people visited the Site: Mr. Masood Hosseini, Senior Project Manager (SCG), visited the Site daily; Mr. Pete Cooke, Project Manager (DTSC), visited the Site one to two times a week; and Dr. Richard Coffman, geologist (DTSC), visited the Site periodically to observe the sampling procedures. The visitors' log is kept on file at El Capitan's office.

2.3.3 Traffic Control

Access to the Site for the trucks and personal vehicles was through the main gated entrance off of Ducommun Street (Photo number 1 in Appendix B). Traffic control measures were applied (i.e., use of flagmen in Ducommun Street and at the gated entrance) during the removal activities for the trucks entering and exiting the Site. One to two flagmen were assigned to monitor and direct the incoming and outgoing trucks and equipment to and from the Site.

2.4 PERMIT REQUIREMENTS

The removal action contractor (El Capitan Environmental Services, Inc.) obtained the necessary permits for removal activities, transportation, and air quality. The following permits were obtained for this project. Copies of these permits are included in Appendix A.

- Excavation permit from City of Los Angeles – Department of Building and Safety. Excavation and grading permit were prepared by Geotechnical Soilutions, Inc., and approved by City of Los Angeles (permit number 05030-10000-01227) on April 4, 2002.

- Modification to Excavation Permit from City of Los Angeles – Department of Building and Safety. A Request for Modification to use slurry as backfill was approved by the City of Los Angeles on May 9, 2005 (File No. 12578).

- South Coast Air Quality Management District – (SCAQMD assigned to El Capitan Environmental Services, Inc reference number is 105386, dated May 27, 2005).

- Annual Trench/Excavation permit – State of California Department of Industrial Relations Division of Occupational Safety and Health, reference number 2005-902415, issued to El Capitan Environmental Services, Inc and valid through December 31, 2005.

2.5 MOBILIZATION

The removal action contractor (El Capitan Environmental Services, Inc.) mobilized onsite on May 31, 2005. A trailer unit placed on the Site by El Capitan was utilized for an office during the removal activities. This office was used by the El Capitan crew, Geotechnical Soilutions, Kleinfelder, Tetra Tech, and the SCG. Staging areas, and truck loading, decontamination, and support zones on the Site were clearly identified. The health and safety, noise, dust, and odor control equipment and materials were positioned for use when necessary.

The following construction equipment was used at the Site: a loader (Volvo DeNardi, L120C), backhoe (Cat446B turbo 4x4), a drill auger attached to a modified excavator (325 Cat), a concrete saw, a concrete pump, a compressor, a medium sized Hatachi EX 270LC excavator, and a sheep's foot attached to the excavator used for soil compaction.

2.6 SITE PHOTOGRAPHS

Many photographs were taken at the Site during removal activities. A few representative photographs (as referred to in this report) have been included in Appendix B. Additional photographs of removal activities are on file in the Tetra Tech Pasadena office.

2.7 REMOVAL ACTIVITIES

Excavation activities were conducted at the Site from June through December 2005. Excavation was conducted in accordance with the approved City of Los Angeles excavation plan [Geotechnical Soilutions, March 2005] and the Block N, Sector C, Removal Action Workplan [Tetra Tech, 2004].

2.7.1 Description of the Proposed Area of Excavation

The proposed area of excavation and environmental cleanup was situated in the northwest corner area of the Site, between the south and east outer retaining walls of the concrete pit located south of the Manley Oil Building (Figure 2-1). The depth of the concrete pit was approximately 11 feet bgs. The construction of the pit consisted of 6-inch thick concrete walls. The base of the footing for the pit was approximately 12 feet bgs. A sump and a drain were located in the floor of the pit. The sump was centrally positioned in the pit and was located approximately 8 feet south of the Manley Oil Building (Photo number 34). The sump was approximately 2-foot by 2-foot square and approximately 2.5-foot deep (Appendix D). The floor of the sump appeared to be concrete lined. The drain, approximately 6-inches in diameter, was located near the west-end of the pit, approximately 8 feet south of the Manley Oil Building (Photo number 35). In addition, three 2-inch diameter holes were observed in retaining wall of the pit adjacent to the proposed area of excavation (Photo number 36). The 2-inch diameter holes were located approximately 6 inches above the floor of the pit.

2.7.2 Grid System

Prior to soil removal activities, the proposed area of excavation located in the northwest corner area of the Site was divided for ease of reference and sample labeling by a grid system. As shown on Figure 2-1, the grid system was comprised of approximate 3-foot by 3-foot virtual squares. The grid was labeled numerically starting at the northwest corner of the proposed area of excavation, in ascending order from west to east (1 through 18) and alphabetically from north to south (A through R). The area initially proposed for excavation was approximately 26 feet by 26 feet.

2.7.3 Removal of Asphalt

Excavation activities began with the removal of the asphalt that was covering the proposed area of excavation. The asphalt was removed and transported off-site to an asphalt recycling facility.

2.7.4 Initial Excavation Activities

Soil removal activities were begun in the northwest corner area of the Site on June 2, 2005 (Photo number 2). In accordance with the approved excavation report [Geotechnical Soilutions, March 2005], initial soil removal activities were conducted in the area of proposed removal action to a depth of approximately 8 feet bgs (Photo number 2). The depth of the initial excavation was purposely kept approximately 1 to 2 feet above the bottom of the concrete footings of the retaining walls (i.e., at approximately 10 feet bgs) to be protective of their structural integrity and to help insure the support of the walls during augering and soil removal activities. Soil samples from selected locations of the initial excavation were collected and analyzed.

Portions of the excavation temporarily exceeded 8-foot in depth to remove deeper concrete structures. Soil from the excavation was temporarily used to fill in areas in the floor of the excavation where the removal of concrete structures resulted in holes deeper than 8 feet. The south portion of the excavation was temporarily lowered an additional 3.5 feet for removal of abandoned subsurface concrete structures and to facilitate soil augering operations (Photo number 3). This area was backfilled with soil from other parts of the excavation back up to 8 feet bgs to support the retaining wall (Photo number 5). Some near-surface old abandoned buried pipes and debris were exposed and removed from the Site during shallow subsurface excavation activities.

2.7.5 Soil Removal by Auger Drilling and Slurry Replacement

In accordance with the excavation plan approved by City of Los Angeles, a vertical excavation of approximately 8 feet bgs, was made adjacent to the concrete lined sumps and footings on the north, south, and west walls. In addition, a 1:1 slope of the east side was necessary before excavation was made. Following these initial excavation activities, soil removal from the excavation was performed through auger drilling and cement slurry replacement per specifications indicated in the approved City of Los Angeles plans. This method served two purposes: 1) to replace the contaminated soil with clean materials, and 2) to provide support for the adjacent concrete retaining walls.

Auger drilling activities at the Site were begun on June 6, 2005. The auger drilling method consisted of drilling through the contaminated soil using 2- and 3-foot diameter auger (Photo number 4). The first six auger borings drilled at the Site (No.'s 1 through 6) were located to the east and south of the excavation limits proposed in the approved City of Los Angeles excavation plan (Figure 2-1). These borings were drilled to evaluate the limits of the contaminated soils at the Site.

A total of 117 borings were drilled at the Site by auger drilling method (Appendix S). Of these, 102 auger borings were drilled using the 3-foot diameter auger in the Deep Excavated Area (Figure 2-1). The final surface area dimensions of the deep excavated area were approximately 27 feet by 33 feet. The auger borings in the Deep Excavated Area were drilled to depths ranging from approximately 28 to 30 feet bgs. Each of these auger borings was drilled until groundwater was encountered at approximately 28 to 30 feet bgs of approximately 20 to 22 feet below the bottom of the 8-foot deep open excavation. Caving occurred while drilling many of the boreholes resulting in an auger-boring diameter of approximately 4 feet. The borings were drilled to overlap each other to eliminate or minimize the amount of contaminated soil left behind. Soil samples from selected borings were collected and analyzed.

The contamination along the southern limits of the excavation was removed by drilling three additional rows of borings (Rows I, J, and K) beyond the limits initially proposed in the approved City of Los Angeles excavation plan (Figure 2-1). Contamination in the northeast corner of the excavation was removed by drilling two extra boring locations, No's 100 and 106 (Appendix S).

A total of 15 other auger borings were drilled on the Site outside the limits of the Deep Excavated Area. They include auger boring No's 2 through 6, 40, 47 through 51, 68, and 114 on Figure 2-1, and auger borings NB-5 and NB-6 on Figure 2-2. These borings were drilled with 2- to 3-foot diameter auger and ranged in depth from 5 feet to 30 feet bgs.

In both cases the contaminated soil was removed and the borings backfilled with 2-sack cement sand slurry. The borings were replaced with slurry the same day as recommended in the Los Angeles City approved plans.

The majority of the boreholes were drilled with 3-foot diameter auger. Some additional boreholes located near the limits of the excavation were drilled for confirmation sample collection with 2-foot diameter auger (Figure 2-1). Each auger boring was tremmied to the surface with 2-sack cement sand slurry per specification of the approved Los Angeles City plans, with a minimum compressive strength of 100 psi (Appendix T). The auger borings drilled in the deep excavated area were backfilled with slurry up to the base of the initial excavation, approximately 8 feet bgs. The drilled boreholes were backfilled as soon as possible and no later than the end of each working day as recommended in the Los Angeles City approved plans. A curing period of 24 hours was granted between adjacent drilled boreholes, such that a hole could not be drilled if the adjacent holes had been backfilled in less than 24 hours with slurry. The location of the additional slurry holes along the southern and eastern limits of the excavation are shown on Figure 2-1.

2.7.6 Open Excavation

Open excavation was performed on July 13, 2005 following the completion of excavation activities by auger drilling and slurry replacement. These additional excavation activities were conducted at the southern and eastern limits of the excavation. Open excavation activities were limited to shallow depths (i.e., not exceeding 11.5 feet bgs) because no more contamination was found below these depths. Soil samples were collected from the limits of these areas (Photo number 7) and analyzed. The results show that the contamination levels were below the cleanup goals.

Open excavation was performed as follows:

1. In the southern portion of the excavation, backfilled soil temporarily placed from 8 to 11.5 feet bgs on the floor of the excavation as fill was removed (Figure 2-1; Photo numbers 5 and 6).

2. At the east side, soil was excavated to approximately 8 feet to 10 feet bgs until the contamination identified in borings 48, 49, and 50 was removed. A sump and piping were exposed (Figure 2-1; Photo numbers 8 and 9). The sump was backfilled with slurry. The piping was left, with DTSC approval, capped as found (Appendix K).

3. The excavation on the northern and western sides was limited by the sump retaining walls.

A 1:1 slope of the east wall was completed before proceeding with open excavation activities.

2.7.7 Additional Excavation at BN7

On June 21, 2005 two 3-foot diameter auger borings, NB-5 and NB-6, were drilled at boring BN-7 (Figure 2-2) to remove elevated concentrations of polycyclic aromatic hydrocarbons (PAHs) that have been detected in the soil at that location during pervious remedial investigation activities [Tetra Tech, 2004]. Benzo(a)pyrene [B(a)P] equivalent concentrations of C-PAH exceeding the remedial goal were detected during previous investigation activities in a 3-foot sample collected from boring BN7 [Tetra Tech, 2004]. At the request of the property owner, the soil at the location where the 3-foot sample from boring BN7 had been collected was augered out and removed.

During auger boring activities at BN7, two former boring locations were visually identified at BN7. Auger borings NB-5 and NB-6 were drilled to remove the soil from both of the visually identified boring locations. Auger boring NB5 was drilled to 5 feet bgs when refusal was encountered. Auger boring NB6 was drilled to completion at 10 feet bgs. Samples NB5-3', and NB6-5' and NB6-10' were collected from the two auger boring locations. Auger borings NB-5 and NB-6 are identified in Appendix S as boring No.'s 77 and 78. Photo number 10 shows the excavation activities. Auger borings NB5 and NB6 were backfilled with cement slurry (Photo number 11).

2.7.8 Breach and Repair of Section of North Pit Retaining Wall

A section of the pit retaining wall in the northwest corner of the excavation was breached during soil removal activities. Photo number 12 shows the breach. The wall was later repaired with cinder block construction to match the previous structure. Photo number 13 shows the wall following its repair.

2.7.9 Sampling, Remedial Action, and Excavation Conducted in the Mercury Contaminated Area

A few droplets of silvery liquid material (Photo number 15) were first observed at the Site on June 8, 2005 on the asphalt pavement west of the contractor's trailer on June 8, 2005. The area was cordoned off with caution tape and covered with plastic sheeting (Photo number 16). A sample of the liquid material was collected in a glass jar. The sample, identified as "EX1-1", was sent to the laboratory for analysis by EPA Method 7470A. Results of laboratory analysis indicated that the sample was 99.9 percent mercury by weight. Results of sample analysis are included on Table E-9 in Appendix E.

Mercury cleanup activities were performed by El Capitan on June 21, 2005 at the location west of the trailer over an area approximately 7 feet by 7 feet on the sides and roughly triangular in shape (Figure 2-2). Mercon Merconsorb Powder, according to directions provided by the manufacturer, was applied across the affected area. The location was then carefully wet down with water. A brush was then used to mix the Merconsorb Powder with the water and any liquid mercury present to form a slurried material (Photo number 17). The slurried material and excess reactant were then swept up (Photo number 18). The used cleanup materials were drummed.

Following cleanup activities, a mercury indicator powder (Spilfyter, NPS Corporation, Green Bay, WI) was then applied according to directions provided by the manufacturer to the affected area (Photo numbers 19 and 20). A light sprinkle of water was carefully applied and mixed on the asphalt surface with the indicator powder. After a 24-hour period the area was inspected and no color changes were observed, indicating that the liquid mercury in the affected area had been removed. The affected area was delineated by white marking paint.

On June 24, 2005, a sample of the asphalt from where the mercury was observed, identified as "Asphalt #01", was collected and sent to the laboratory for analysis (Photo number 21). The sample was analyzed for mercury and other CAM metals by EPA Method 6010B/7000CAM. A concentration of 1,190 mg/kg of mercury was detected in the sample. On August 12, 2005, a section of asphalt from where the above sample was collected, approximately 2-foot by 2-foot square, was cut and removed. Soil beneath the asphalt cut was excavated to approximately 1-foot bgs (Photo number 22). Soil samples NMSA-F1-1' and NMSA-F2-1' were collected from the limits of the excavation and sent to the laboratory for analysis by EPA Method 6010/7000. Detected concentrations of 0.1 mg/kg and 0.15 mg/kg of mercury were detected in samples NMSA-F1-1' and NMSA-F2-1', respectively. The complete results of the sample analysis are included on Table E-8 in Appendix E.

The asphalt and soil cuttings, along with the materials from the mercury cleanup activities, were containerized in a 55-gallon DOT drum. The drummed materials were stored onsite pending completion of chemical analysis and transferred, based on analytical results and applicable federal, state, and local regulations, to an appropriate disposal facility. However, on September 28, 2205, the Southern California Gas Company informed Tetra Tech that the drum in which the stored wastes had been containerized had been opened and mixed by the property owner's contractor with other material onsite for disposal. A copy of a letter from Tetra Tech to SCG Company documenting this event is included in Appendix L.

2.8 CONFIRMATION SAMPLES

Confirmation samples are those samples that were collected from the limits of the excavation and from the Site during removal action activities. These samples represent the condition of the in-place soils remaining at the Site following the completion of removal action. Please refer to Section 5.2 for a detailed discussion on confirmation sampling.

2.9 EXTENT OF EXCAVATION AND VOLUME OF SOIL REMOVED

Vadose zone contaminated soils (and in some areas the loose soil, concrete, and debris) were removed to the extent physically, structurally, and geotechnically feasible and to the extent allowed by excavation permit requirements (Appendix A). Due to constraints of excavation, any vadose zone contaminated soils located beneath the concrete lined pits along the northern and western limits of the deep excavated area were left in place. In the excavation, contaminated soils and concrete structures were removed in the shallow excavated areas to depths ranging from 8 feet to 11.5 feet bgs. In the augered area of the excavation contaminated soils were removed to depths ranging from approximately 28 feet to 30 feet below surface. Some accessible debris and non-contaminated soils were also removed during the remedial activities to prepare the Site for proper compaction. The final extent of the excavation, including the open excavation area, encompassed an area approximately 50 feet by 55 feet. The final extent of soil removal is shown on Figure 2-1.

The total volume of contaminated soil augered and/or excavated from the Site during the remedial excavation was approximately 1,664 cubic yards or 2,663 tons (Appendix M). Figure 2-1 shows the area and the depth of the excavation.

2.10 GEOTECHNICAL AND STRUCTURAL MONITORING

2.10.1 Monitoring Sump Retaining Walls

The retaining walls of the sumps were monitored during the excavation activities. The augered borings were backfilled daily in order to avoid settlement of the walls following soil removal activities. Visual monitoring of the retaining walls was performed daily by the general and geotechnical contractors, and was continued throughout the excavation activities, until the excavation was backfilled.

2.10.2 Geotechnical Oversight

A representative of Geotechnical Soilutions, Inc. was present on-site at all times during the excavation and backfill activities to observe excavation procedures and provide necessary modifications during the duration of the project.

2.11 WASTE TRANSPORTATION

Wastes generated during the removal activities included:

1. **Contaminated soil**. The contaminated soils associated with the removal action were manifested and transported to the TPS Technologies, Inc., a soil treatment and recycling facility, located in Adelanto, California. If pieces of bricks contaminated with PAHs were excavated they were also transported to the TPS Technologies Inc. None of the treated soils were returned or reused at the Site.

2. **Solid wastes such as concrete and asphalt.** Approximately 180 tons (7 loads) of concrete were transported to Nu-Way Live Oak Reclamation, in the City of Irwindale and Shamrock Base Corp. in Los Angeles (Appendix O). Approximately 44 tons (2 loads) of asphalt was transported to Nu-Way Live Oak Reclamation (Appendix O).

3. **Abandoned pipelines.** Approximately 64.5 feet of pipes that were 6-inch in diameter, and 26.5 feet of pipes that were 8-inch in diameter were transported off of the Site to Irwindale Iron and Metal for recycling (Appendix O).

A detailed log of the contaminated soil loads hauled from the Site is included in Appendix M. Each load of waste was off-loaded for treatment in a manner consistent with current Federal EPA, State, and local regulations. During loading, dust and odor emissions were monitored and mitigated as necessary according to discussions earlier in this section. During transportation, the soil and debris in the trucks were tightly covered by a heavy tarp.

Each contaminated soil load that was transported offsite was subject to inspection conducted by the Contractor and/or Tetra Tech representatives prior to departure. Each shipment was accompanied by a completed Non-Hazardous Waste Manifest (Appendix M). Total tonnage was calculated from the certified scale tickets.

Transportation

Transportation activities were performed in strict compliance with regulations and ordinances. Transporters were certified by the USEPA and the State of California as hazardous waste transporters that permitted to haul contaminated waste material. The transportation contractors were fully licensed and permitted by the USEPA and the State of California. The DOT and California Highway Patrol (CHP) safety regulations were strictly followed.

Treatment/Recycling Facility

TPS Technologies, Inc. (TPS) is a treatment/recycling facility that treats soil by thermal desorption[1]. TPS is located at_12328 Hibiscus Avenue, Adelanto, California. TPS has proper permits from the Regional Water Quality Control Board Lahontan Region (Board Order No. 6-91-935A1 WDID No. 6B369107002); County of San Bernardino Air Pollution Control District (File B002924/C002925); Mojave Desert Air Quality Management District (Certificate Nos B003664 and C003663); County of San Bernardino Environmental Health Services (no jurisdiction); and City of Adelanto to operate and recycle the treated soil.

Thermal desorption involves induced volatilization of organic wastes by low temperature heating, and subsequent destruction or capture of the resulting gaseous emissions. A thermal desorption system typically consists of a low temperature (300 to 800 °Farenheit [F]) primary chamber, and a secondary afterburner, operating at a temperature of 2000+ °F. A wet scrubber control system is typically used to control air emissions. This process is effective for the treatment of TPH and PAHs.

2.12 BACKFILL OPERATIONS

The augered areas were backfilled with a 2-sack cement sand slurry mix (Appendix C). Open excavation areas were backfilled with clean imported soil. During the backfilling operation, none of the excavated soils were re-used for backfill at the Site. The entire site was backfilled with clean virgin soil, except the areas that were backfilled with cement/sand slurry.

Source of Import Soil

Imported clean soil was brought from the University of California, Los Angeles (UCLA) Campus located in City of Los Angeles, California. A parking structure was being constructed on the UCLA campus. The soil excavated from the construction site at the campus was imported to Block N as clean backfill material.

Backfill Soil Sampling

When brought on to the Site, the backfill soil was temporarily stockpiled near the east side of the primary excavation (photo number 25) until the time it was used for backfill. Eight soil samples were collected from the clean imported soil during the backfilling activities. The analytical results demonstrated that the soil was clean and suitable for backfilling at Block N. In general,

[1] Thermal desorption involves induced volatilization of organic wastes by low temperature heating, and subsequent destruction or capture of the resulting gaseous emissions. A thermal desorption system typically consists of a low temperature (300 to 800 °F) primary chamber, and a secondary afterburner, operating at a temperature of 2000+ °F. A wet scrubber control system is typically used to control air emissions. This process is effective for the treatment of TPH and PAHs.

for collection of soil samples for backfill materials, the "DTSC Clean Imported Fill Material Information Advisory, October 2001" was used as the guide. The backfill samples were analyzed using the following methods:

- Total petroleum hydrocarbons (EPA Method 8015M for gasoline [C_4-C_{12}], diesel [C_{12}-C_{23}], and heavy hydrocarbons [C_{23}-C_{40}])
- VOCs (EPA Method 8260B)
- SVOCs (EPA Method 8270C)
- PAHs (EPA Method 8310)
- TPHs (EPA Method 8015)
- California Assessment Manual (CAM) 17 Metals (EPA Method 6010/7000 CAM)
- Pesticides (EPA Method 8081)
- Herbicides (EPA Method 8151)

All soil samples collected from the backfill soil were sent to American Environmental Testing Laboratory (AETL) for chemical analyses. AETL is a State of California certified environmental laboratory. Summary of the analytical results are included in Appendix F in Tables F-1 through F-10. Based on the sampling results, all of the fill material was determined to be suitable for backfilling at the Site.

Compaction

The excavation was backfilled with imported soil compacted to 95% or greater relative compaction. Where the minimum relative compaction was not achieved, the area was re-worked, re-compacted, and re-tested until the minimum relative compaction was achieved. A loader and a sheep-foot attached to an excavator were used to compact the backfill (Photo number 26).

Field density tests were performed by Geotechnical Soilutions, Inc to determine the relative compaction of the fill material. The relative compaction of the fill material was determined by the sand cone test method ASTM D1556-90.

A summary of the compaction report from Geotechnical Soilutions, Inc. is included in Appendix C.

2.13 SITE RESTORATION

The excavated areas at the Site were leveled and sloped properly for drainage purposes. The large excavation in the northwest corner area of the Site was backfilled with clean backfill materials up to approximately 9 inches below finish grade. A minimum of 2 inches of base was placed on top of the compacted fill. The base was compacted with a vibrator roller. The backfill was placed according to the grading requirements and specifications of Los Angeles City approved plans.

On September 7, 2005, after completion of backfilling activities, the three areas of the Site where removal activities were conducted (i.e., the large excavation in the northwest corner area, the excavation at BN7, and the excavation in the Mercury Cleanup Area) were re-paved with asphalt and restored to their original condition. The excavated areas of the Site were restored to finish grade with new asphalt pavement (Figure 2-2). The finished grade was similar to the grade prior to the excavation. Photo number 27 shows Block N in the area of large excavation after completion of restoration activities.

3. SITE INVESTIGATION DURING REMOVAL ACTION ACTIVITIES

During removal action activities, elevated concentrations of the constituents identified in the June 2004 Removal Action Workplan as being chemicals of potential concern (COPCs) where detected in selected soil samples collected from the north limits of the deep excavation area. As a result, a limited investigation was performed to obtain information of the subgrade soils located beneath the Manley Oil Building and the concrete lined pit south of the Manley Oil Building.

This section describes investigation activities performed in the course of removal action at the former Aliso Street MGP Site, Block N of Sector C. The technical procedures of the sampling performed with the investigation activities are also included in this section. The investigation activities performed during removal action were implemented with the approval of DTSC. The approach of the investigation activity was to perform a limited investigation of subsurface soils located beneath the northwestern corner area of the Site, including those areas of the Site located beneath the Manley Oil Building and the pit south of the Manley Oil Building.

3.1 CONTRACTORS AND SUBCONTRACTORS

The contractors and subcontractors that were involve in the removal activities included:

- Tetra Tech was the environmental consultant who under a direct contract with SCG oversaw and managed the investigation activities.
- Test America Drilling Corporation was a subcontractor to Tetra Tech to perform soil boring and soil gas probe installation at the Site.
- R.B. Concrete Cutting, Inc., and Skaggs Concrete Cutting were subcontractors to Test America Drilling Corporation for concrete coring services.
- Spectrum Geophysics was a subcontractor to Tetra Tech to perform underground utility locating service.
- Kleinfelder was the environmental consultant that oversaw investigation activities for the property owner.
- Geotechnical Soilutions, Inc. who under a direct contract with SCG managed the geotechnical issues that arose during the investigation activities.
- El Capitan Environmental Services, Inc. was the general contractor who, under a direct contract with the SCG, performed all trenching activities conducted during the investigation.
- August Construction was a subcontractor to El Capitan for limited access rig (LAR) bucket auger drilling activities.

- American Environmental Testing Laboratory (AETL), a vendor under direct contract with SCG, performed all sample analyses and soil gas collection.

- TPS Technologies, Inc. managed transportation, treatment, and recycling of all excavated contaminated soils under a direct contract with the SCG. Belshire Environmental services provided transportation services under the direct contract with TPS.

3.2 SOIL BORING ACTIVITIES

3.2.1 Mobilization

Tetra Tech contracted with Test America Drilling Corporation to perform soil boring and soil gas probe installation inside the Manley Oil Building. On August 10, 2005, Test America Drilling mobilized a limited access hollow stem auger drilling rig inside the Manley Oil Building to perform drilling operations. Prior to drilling, Dig Alert was notified and each boring location was cleared by an underground utility locating service.

3.2.2 Soil Borings Drilled Inside Manley Oil Building

On August 10 and 11, 2005, SCG performed soil boring activities inside the Manley Oil Building (Photo number 14). The boring activities were performed in conjunction with the removal activities conducted on Block N in June and July 2005. These soil boring and sampling activities were conducted to delineate under the Manley Oil Building any detectable concentrations of the constituents identified in the June 2004 Removal Action Workplan as being chemicals of potential concern (COPCs) and to characterize the soil under the Building. The borings were located under the Manley Oil Building, where only a limited amount of data had been collected during previous investigation activities.

The planned scope of work was to drill and collect samples from 5 soil borings drilled to 30 feet bgs. However, refusal was encountered in two of the five planned boring locations, NB-7 and NB-11. At boring NB-7, refusal was encountered due to rock or a subsurface concrete structure at 20 feet bgs. In response, boring NB-7A was added, located 5 feet west of boring NB-7, to provide soil data in the same area as boring NB-7 at the depth range of 20 to 30 feet bgs. At boring NB-11, refusal was encountered at approximately 3 feet bgs due to a subsurface concrete structure. Borings NB-11A was added to replace NB-11. However, refusal at 3 feet bgs was also encountered in boring NB-11A and likewise in boring NB-11B due to the concrete structure. Drilling at boring NB-11C, however, was able to proceed past the concrete structure. Borings NB-7A, NB-8, NB-9, NB-10, and NB-11C (five borings) were completed to 30 feet bgs. Figure 3-1 shows the boring locations inside the Manley Oil Building.

3.2.3 Soil Borings Drilled in the Pit South of the Manley Oil Building

On October 14, 2005, two soil borings, SN-10 and SN-11, were hand augered in the pit south of the Manley Oil Building. These soil boring and sampling activities were conducted to delineate under the pit area between the Manley Oil Building and the deep excavated area any detectable concentrations of the constituents identified in the June 2004 Removal Action Workplan as being chemicals of potential concern (COPCs) and to characterize the soil under the Pit. The two borings were located in the northwest corner area of Block N, in the pit south of the Manley Oil Building, where either no data or only a very limited amount of data had been collected during previous investigation activities (Figure 3-1).

Boring SN-10 was drilled through the floor of a 2-foot by 2-foot sump located in the pit. A portion of the floor of the sump were the boring would be located had been broken out prior to drilling. Boring SN-11 was located in the pit approximately 16 feet west of SN-10 (Figure 3-1). At SN-11 the concrete was approximately 14 inches thick and was cored. These soil borings were hand augered as opposed to power drilling due to the difficulty that would be inherent in setting up a powered drilling rig on the floor of the concrete lined pit.

3.2.4 Soil Sample Collection

Each boring location drilled inside the Manley Oil Building was cored and hand augered, where possible, to 5 feet bgs. The borings were drilled with a hollow stem auger (HSA) limited access rig (LAR). Soil samples were collected from each of the borings at 1-foot, 3-foot, and 5-foot and from each 5-foot interval following using the modified split spoon method. Samples were collected in stainless steel rings, capped, labeled, entered on a Chain of Custody, and placed in a cooler on ice. Samples for VOC analysis were collected by EPA Method 5035A.

Soil borings SN-10 and SN-11 were hand augered to approximately 6 feet and 5 feet bgs, respectively, using a 4-inch diameter auger barrel. Soil samples were collected at 3-foot and 6-foot in SN-10, and at 1.5-foot and 5-foot in SN-11. The samples were collected at the selected depth intervals from soil filled auger barrels in 4-ounce glass jars by pressing the opened end of the jars into the soil retrieved in the auger barrel. The samples were then sealed, labeled, entered on a Chain of Custody, and place in a cooler on ice.

Soil samples collected for VOC analysis form the borings drilled in the Manley Oil Building and from the Pit were collected by EPA Method 5035A.

Portions of each sample were analyzed for visible contamination, odor, and volatile organic vapors using a Mini-RAE 2000 PID. A California Registered Geologist described the sample cores according to the Unified Soil Classification System and standard geologic terminology (Appendix D). Each of the borings were drilled and sampled in accordance with procedures outlined in the Aliso Remedial Investigation Master Workplan dated September 2002 [Tetra Tech, 2002].

Selected samples collected from the borings were analyzed for polycyclic aromatic hydrocarbons (PAHs) by EPA Methods 8310, volatile organic compounds (VOCs) by EPA Methods 5035A/8260B, and total petroleum hydrocarbons (TPHs) by EPA Methods 8015M. Results of sample analysis are included in Appendix E.

3.2.5 Boring Completion

Each of the borings drilled in the Manley Oil Building was backfilled with bentonite grout and capped with concrete to match the surface grade. Soil gas probes were installed in borings, SN-10 and SN-11, drilled through the floor of the pit. The soil cuttings and decontamination water from the drilling activities was containerized in labeled 55-gallon drums. The drums were inventoried and stored onsite pending completion of chemical analysis (Appendix N).

3.3 SOIL GAS PROBE INSTALLATION AND SAMPLE COLLECTION

3.3.1 Soil Gas Probe Installation

The installation of the soil gas probes was conducted in accordance with the Los Angeles Regional Water Quality Control Board's requirements for active soil gas investigation dated January 28, 2003. The soil gas probes were installed at boring locations SN-10 and SN-11 in the Pit South of the Manley Oil Building. Soil gas probes consisted of 1/4"-diameter Nylaflow TM tubing. The lower 6 inches of the soil gas inlet end of the probe was slotted (Figure 3-3). The surface end of the probe was plugged with a galvanized sheet screw.

Soil gas probes were installed by feeding the slotted end of the probe down the center hole of the auger or drill casing until it reached the desired subgrade depth. A one-inch protective PVC pipe was used during the construction of the soil gas points to feed the probes down hole and prevent entangling or collapsing of the tubing (Photo number 28). Once a soil gas probe was in place, soil gas point construction began by backfilling the boring with #3 sand around the slotted section of soil gas probe. The #3 sand was backfilled in the boring around the slotted probe section beginning approximately 0.5 foot beneath the end of the probe to approximately 0.5 foot above the top of the slotted section of the probe. The sand was used as a filtration pack to allow soil gas from the subgrade formation into the slotted section of the probe. Backfilled in the boring above the #3 sand was approximately 0.5 foot of #30 sand. The #30 sand was used as a protective layer to keep water and debris materials from mixing with the filter pack. A thin layer of dry granular bentonite, up to 0.5 foot thick, was used above the sand sequence to wick up any moisture. The remainder of the borehole was backfilled with hydrated granular bentonite.

The probes were installed at subgrade depths ranging from 5 to 6 feet bgs. A cross-section of a soil gas point construction is shown on Figure 3-3.

3.3.2 Soil Gas Sample Collection

Soil gas sampling was conducted at the Site on November 1, 2005. Fieldwork procedures, sample collection, and analyses were performed in accordance with Los Angeles Regional Water Quality Control Board's requirements for active soil gas investigation dated January 28, 2003 and the approved Aliso Remedial Investigation Master Workplan dated September 2002 [Tetra Tech, 2002].

The soil gas sampling was performed to evaluate the subsurface soil gas for any detectable concentrations of the constituents identified in the June 2004 Removal Action Workplan as being chemicals of potential concern (COPCs), and to characterize the soil under the Pit (Appendix K). Two soil gas samples and one duplicate soil gas sample were collected and analyzed for VOCs by EPA Method TO-15. The TO-15 compound list used for reporting results was appended to include 55 compounds, including methyl-tert-butyl-ether (MTBE), naphthalene, dicyclopentadiene, 1,3-butadiene, and ferrocene. The soil gas sample locations are shown on Figure 3-1. Results of sample analysis are included in Table E-13 of Appendix E.

The soil gas probes installed during drilling activities at boring locations SN-10 and SN-11 were allowed to equilibrate for at least 48 hours after installation before they were sampled. A technician from American Environmental Testing Laboratory (AETL) collected soil gas samples from the probes following the equilibration period.

At each selected soil gas sample point, a pre-calculated measured volume of soil gas was purged from the selected soil gas probe prior to soil gas sample collection (Appendix Q). Soil gas purging was accomplished by attaching an adjustable vacuum pump to the surface end of the selected probe. The vacuum pump was used to purge the soil gas from the probe at a rate of approximately 100 to 200 milliliters per minute (ml/min). The volume of gas purged from the probe prior to sampling was equal to approximately 3 times the volume of the soil gas probe plus the volume of the tubing attaching the probe to the vacuum pump. Purging was performed to pull in a fresh volume of soil gas from the formation into the probe for sample collection.

Each soil gas sample was immediately collected from a probe once the required volume of soil gas had been purged. One 3-liter Summa canister was used for each sample (Photo number 29). The Summa canister samples were collected by attaching the canister to the vacuum pump and probe assembly. With the pump in non-operational mode (i.e., turned off), the valves to the Summa canister and pump assembly were opened to allow soil gas from the probe to flow into the canister. The valves were left open for 12 minutes. Afterwards, the valves were closed and the air pressure in the Summa canister was checked using a vacuum gauge to verify that it had been filled.

During sampling, a leak-check compound, such as isobutane, was placed on the ground surface around the probe tubing. Detection of the leak-check compound in a soil gas sample could indicate an intrusion of ambient air, and require further investigation to evaluate the sample results.

The soil gas filled Summa canisters were analyzed for VOCs within a 14-day holding time. Following the completion of sampling activities, the surface end of the tubing of both soil gas probes was re-plugged with a machine screw.

3.4 TRENCHING ACTIVITIES INSIDE THE MANLEY OIL BUILDING

3.4.1 Exploration Trenches ET1 and ET2

On October 28 and November 2, 2005, two exploratory trenches were dug in the subgrade soils beneath the Manley Oil Building. The trenches were dug using a backhoe CAT Model No. 446B equipped with a 3-foot bucket. The trenches, ET1 and ET2, were located near the northwest corner area of the Manley Oil Building and overlapped with the locations of previous drilled borings NB-7 and NB-7A (Figure 3-1). The trenches were dug to investigate the vertical and lateral extent of soil contamination in the vicinity of NB-7. Elevated concentrations of C-PAHs and TPH diesel were detected in the 6-foot and 10-foot samples collected from NB-7 (Appendix E). In addition, the Department of Toxic Substances Control requested SCG to remove TPH contaminated soils located beneath the northwest corner of the Manley Oil Building to a depth of 10 feet bgs.

On October 28, 2005, trenching activities were initiated by removing a rectangular shaped section of the concrete slab floor of the Manley Oil Building (Figure 3-1). The rectangular cut was approximately 17 feet long by 10.5 feet wide. After removing the cut section of the concrete slab, a trench identified as ET1 was dug in the south half of the exposed subgrade soil area. Excavation of trench ET1 was completed on November 1, 2005. The final limits of trench ET1 were approximately 12 long by 5 feet wide, by 12 feet deep (Appendix J). On November 2, 2005, a second trench was dug in the northern half of the concrete cleared area (Figure 3-1). The final extent of the trench, identified as ET2, was approximately 16.5 feet long, by 5.5 feet wide, by 12.5 feet deep. Both trenches were excavated under the observation of DTSC, a Registered Geologist (R.G.), a Geotechnical/Civil Engineer (P.E.), the SCG Project Manager, and the Tetra Tech Site Manager.

A total of 15 soil samples were collected from the two trenches, eight from ET1 and seven from ET2. Soil from the north, south, east, and west sidewalls, and from the trench floor, were sampled. The samples were collected, either from soil cuttings in the backhoe bucket or from the trench sidewalls, in 4-ounce glass jars. Due to safety concerns, Method 5035 samples were collected from soil filled 4-ounce glass jars. The samples were analyzed for VOCs, PAHs, and TPH. The location of the samples are shown on Figure 3-1 and on the figures included in Appendix J. The soil filled jars and the VOC samples were labeled, packaged, and placed in a chilled ice chest to preserve the samples. The samples were delivered with the chain-of-custody forms to a state-certified laboratory (AETL) for analysis.

The trenches and soil samples were named and identified sequentially. For example, for sample ET1-7E-10', the "ET1" stands for the first exploratory trench, the "7" is the sequential number of the trench samples, the "E" stands for the east wall of the trench, and the "10'" stands for the depth below the surface from which the sample was collected.

A California Registered Geologist examined each of the sample locations. Identification of the soil types observed in each of the trench sidewalls was based on the United Soils Classification System (USCS). The contacts in the trenches between soils types were also recorded (Appendix J).

Both ET1 and ET2 were backfilled up to the base of the concrete slab with 2-sack cement sand slurry following completion of trenching and sampling activities (Photo number 30).

3.4.2 Bucket Auger Drilling Conducted along Northern Limits of Trench ET2

On December 7 and 8, 2005, a total of six bucket-auger borings were drilled in the Manley Oil Building (Figure 3-1). The bucket auger borings were located between the northern limits of trench ET2 and the northern wall of the Manley Oil Building. The borings were drilled with a propane powered limited access rig and a 2.5-foot diameter bucket auger (Photo numbers 37 and 38). The borings overlapped the northern edge of trench ET2. However, continued trenching along the north wall was not feasible due to safety concerns about the stability of the footing and building wall. Therefore, the bucket-auger drilling method was employed to remove the contaminated soil observed in the north wall of trench ET2, located between the north wall of the trench and the footing for the north wall of the Manley Oil Building.

On December 6, 2005, bucket-auger boring activities were initiated by removing a rectangular shaped section of the concrete slab floor of the Manley Oil Building located between trench ET2 and the building wall. The rectangular cut was approximately 17 feet long by 2 feet wide. After removing the cut section of the concrete slab, six bucket-auger borings, ETB1 through ETB6, were drilled in the exposed subgrade soil area (Figure 3-2). Four of the borings (ETB1, ETB2, ETB4, and ETB5) were drilled to depths ranging between 10 feet to 13 feet bgs. In the remaining two borings (ETB3 and ETB6) refusal was encountered at 5.5 feet bgs due to a concrete slab (Appendix J). The bucket auger borings were drilled and excavated under the observation of a Registered Geologist (R.G.), a Geotechnical Engineer (P.E.), the SCG Project Manager, and the Tetra Tech Project Manager.

A total of 11 soil samples were collected from the borings. The samples were collected by pressing 4-ounce glass jars into the least-disturbed soil cuttings recovered in the bucket auger. Selected samples were analyzed for TPH and VOCs. The location of the samples are shown on Figure 3-2 and on the figures included in Appendix E. The soil filled jars and the VOC samples were labeled, packaged, and placed in a chilled ice chest to preserve the samples. The samples were delivered with the chain-of-custody forms to a state-certified laboratory (AETL) for analysis.

Portions of each sample were collected in sealable plastic bags and were analyzed for visible contamination, odor, and volatile organic vapors using a Mini-RAE 2000 PID. A California Registered Geologist described the sample cores according to the Unified Soil Classification System and standard geologic terminology (Appendix D). Each of the borings were drilled and sampled in accordance with procedures outlined in the Aliso Remedial Investigation Master Workplan dated September 2002 [Tetra Tech, 2002].

A California Registered Geologist examined each of the sample locations. Identification of the soil types observed in each of the trench sidewalls was based on the United Soils Classification System (USCS). The contacts in the trenches between soils types were recorded (Appendix J).

The bucket auger borings were backfilled up to the base of the concrete slab with 2-sack cement sand slurry following completion of drilling and sampling activities (Photo number 39).

3.4.3 Slab Restoration

On December 12, 2005 new slab was constructed inside the Manley Oil Building at the location where slab had previously been removed (Photo number 40). The new slab was constructed using 0.5-inch diameter rebar dowelled into the cut sides of the concrete slab. A concrete mix with a minimum compressive strength of 3,000 psi was used to construct the slab. The thickness of the newly poured concrete slab was at a minimum equal to that of the existing slab and was finished at matching grade to that of the surrounding slab.

3.4.4 Description of Black Stained Lens of Subgrade Materials Observed in Trench Sidewalls

A lens of hardened, dry, black stained material with little to no discernable hydrocarbon odor was observed in trenches ET1 and ET2 (Photo number 31). The material was composed of a silty sand lithology, approximately 80% very fine to coarse-grained sand and 20% silt. In trench ET1, the black stained material was observed at approximately 10 feet below grade in the excavation (Photo number 32). The lens appeared to taper out vertically below 10 feet and in both the eastward and southward directions. In trench ET2, a 4-foot lens of the black stained material was observed from 8 feet to 12 feet bgs in the northern and western sidewalls (Photo number 33). Unstained native soils were observed in ET2 at depths ranging below 12 feet. Soil samples were collected from the sidewalls and floors of both trenches, including from locations were the black stained material was observed.

This black stained layer was also observed in the bucket auger borings. A sketch showing the approximate subgrade depth of the lens observed in the borings is included in Appendix J. Pockets of loose un-compacted soils with concrete and brick fragments were also observed in the subgrade materials excavated from bucket auger boring ETB4. Slight to moderate hydrocarbons odors were observed in the 6-foot and 7-foot samples collected from ETB4, which was ultimately removed from the Site.

Results of the analytical analysis of the samples collected from the trenches and the bucket auger borings are included in Appendix E.

3.4.5 Volume Estimate of the Black Stained Material and TPH Left beneath the Main Operations Room of Manley Oil Building

An estimate was made of the thickness and extent of the lens of black stained subgrade material left beneath a small section of footing of the Manley Oil Building. The thickness of the lens, based on observations logged while drilling the bucket auger borings, was estimated at the western end of the trench to extend from 8 feet to approximately 11.5 feet bgs or 3.5 feet. At the east end of the trench, the black stained lens was observed to thin out and was estimated to pinch out beneath the concrete slab encountered in borings ETB3 and ETB6. The black stained lens was estimated to extend laterally as far as the outer edge of the north wall and far side of the middle wall separating the main operations room of the Manley Oil Building from the office. Based on this estimated volume of the black stained lens left beneath the building and the analytical results for TPH diesel reported for the three bucket auger boring soil samples ETB1-10', ETB2-7', and ETB4-7', there is estimated to be approximately 19 pounds of soil with TPH residuals remaining beneath the a small section of the footing of the Manley Oil Building (Appendix R). It should be noted that the remaining TPH is very isolated and as observed during excavation, the TPH appeared to be very dry and showed no sign of mobility.

3.5 WASTE TRANSPORTATION

The drummed wastes from the nine borings drilled inside the Manley Oil building were transferred to TPS Technologies Soil Recycling based on analytical results and applicable federal, state, and local regulations. The manifest is included in Appendix N.

Soil excavated from trenches ET1 and ET2 was stockpiled on the Site near the trench on plastic sheeting. The stockpile was covered by plastic sheeting. The drummed wastes from the soil borings SN-10 and SN-11 were transferred to the soil stockpiled from Trenches ET1 and ET2. Soils from the bucket auger borings were containerized in two 10-yard bins. The non-hazardous stockpiled and containerized soils generated from the investigation activities were transported accompanied by a completed Non-Hazardous Waste Manifest to TPS Technologies Facility in Adelanto, California for treatment and disposal (Appendix M). Total tonnage was calculated from the certified scale tickets.

3.6 EXTENT OF TRENCHING AND VOLUME OF SOIL REMOVED

Contaminated soils were removed from the Site during the investigation activities conducted inside the Manley Oil Building. During the investigation activities, contaminated soils along with some accessible debris and non-contaminated soils were removed from Trenches ET1 and ET2 and from the bucket auger borings. The final extent of the trenched area was approximately 17 feet long by 12 feet wide (Figure 3-1). The total volume of soil removed from the combined ET1/ET2 trench and bucket auger borings was approximately 64 cubic yards or 102 tons (Appendix M).

A combined total volume of approximately 1,728 cubic yards (2,765 tons) of contaminated soil removed from the excavation and the ET1/ET2 trench was transported to the TPS facility as non-hazardous materials for thermal desorption treatment (Appendix M).

A total of six drums of containerized soil from the borings (borings NB-7 through NB-11C) drilled inside the Manley Oil Building were also transported to the TPS facility as non-hazardous materials for thermal desorption treatment (Appendix N).

3.7 GEOTECHNICAL AND STRUCTURAL MONITORING

3.7.1 Monitoring Footing of Building

A section of the buildings footing next to the trench was monitored during the trenching and bucket augering activities. During the trenching activities, soil located at 1.5 feet or more bgs, that was immediately adjacent to the buildings footing, was left undisturbed to limit any settlement of the buildings walls following soil removal. Monitoring of the retaining walls continued throughout the trenching and augering activities until the trench was backfilled.

3.7.2 Geotechnical Oversight

A representative of Geotechnical Soilutions, Inc. was present on-site during the trenching and backfilling activities to observe procedures and provide necessary modifications during the duration of the project.

3.8 DECONTAMINATION

Hollow-stem augers and drill rods were steam-cleaned prior to drilling each boring to avoid cross contamination during drilling. The sampling equipment was decontaminated after each sample interval by washing with an Alconox™ solution (a non-phosphate detergent), rinsing with tap water, and rinsing with de-ionized water. The decontamination water was stored onsite in a 55-gallon DOT drum.

This section describes controls and procedures that SCG and Tetra Tech employed during Site activities to identify, monitor, and control potential noise and odor sources and receptors. This section also describes the monitoring methods, worker protections, and mitigation measures applied at the Site during removal action activities. The environmental monitoring measures specified in the Workplan were followed during the Site activities program as indicated below.

4.1 NOISE MONITORING AND CONTROL

Any noise above 85 decibels or above background (whichever was higher) was considered a noise source. During the removal activities, heavy vehicle equipment, generator operation, and excavation equipment operation were considered noise sources. Appropriate worker hearing protections were used for anticipated noise exposure above 85 decibels, based on time-weighted average for 8 hours of exposure. Workers were required to have appropriate hearing protection at all times within the exclusion zone per the health and safety plan.

4.2 AIR QUALITY MONITORING AND DUST CONTROL

The primary dust source at the Site was due to the exposed soil during soil excavation, stockpiling, and loading activities. Potential dust receptors included onsite workers, pedestrians adjacent to the Site, and vehicle drivers adjacent to the Site. During excavation activities, the work areas were sprayed with water to reduce the dust levels. Dust monitoring occurred within the exclusion zone and at the perimeters of the Site.

The Site is bordered by Ducommun Street on the north side, former Los Angeles Gas and Electric Corporate Plant property to the south, railroad tracks and the Los Angeles River to the east, and Center Street to the west. During the soil removal activities, air monitoring and air sampling was conducted onsite by an OVA/PID, a Summa canister, and at the Site perimeter by two high volume continuous samplers during excavation operations as indicated above.

Real-time Air Monitoring
Mini-Ram dust meter (PDK-3) was used by the contractor to measure real-time dust levels within the exclusion zone.

Perimeter and Area Wide Air Monitoring
Continuous air sampling was conducted with two modified high volume (HIVOL)[1] samplers that were stationed at the perimeter of the work area and at sensitive strategic locations within the Site as follows:

[1] Each HI VOL sampler consisted of a sampling pump system with a flow range greater than 200 liters per minute, an orifice and magnehelic gauge to document continuous flow rate, and a sample module that included a PUF and/or XAD-2 cartridge and quartz filter.

- One sampler was stationed approximately 60 feet south of the work area (Photo number 23).
- The other sampler was stationed on top of the roof of a trailer located near the east end of the Manley Oil Building and East by northeast of the work area (Photo number 24).

Figure P-1 in Appendix P shows the location of the HIVOL Puff sample stations. The air samples from each HIVOL sampler were collected over 24-hour periods. The samples were analyzed for PAH compounds by EPA Compendium Method TO-13. SCG provided the high volume air sampler stations at the Site. The results of the air sample analysis are on file at the Tetra Tech Pasadena office.

All air-monitoring results were tabulated and kept onsite. Documentation included equipment calibration data, background concentrations, date, monitoring result, monitoring location, source description, air temperature, and wind direction. Worker protection was conducted according to the health and safety plan.

4.3 ODOR MONITORING AND CONTROL

Odor monitoring was conducted during the soil removal activities in compliance with SCAQMD requirements. The main requirements by SCAQMD (Southern California Air Quality Management District) for odor monitoring and control are Rules 1166 (excavation of soil contaminated with volatile organic compounds) and Rule 402 (odor and nuisance). To comply with Rules 1166 and 402, VOCs were monitored onsite using a properly calibrated organic vapor analyzer (OVA). The odor mitigation measures were in place during work hours. The primary sources of odor at the Site were petroleum and naphthalene, from MGP and sump wastes, and from contaminated soils that were excavated and exposed.

4.4 STORMWATER MANAGEMENT

During excavation, necessary measures were taken to prevent surface water from entering or exiting the work area. The clean up activities took place during Non rainy season.

4.5 HEALTH AND SAFETY

No accident or injury was reported during the soil removal activities at Block N. The removal activities at the Site were performed in accordance with the applicable State and Federal occupational health and safety standards and the site-specific health and safety plan prepared for the Site. The health and safety plan was prepared according to the requirements contained in 29 CFR 1910.120, and CCR Title 8 GISO 5192 (General Industrial Safety Order), for work at hazardous waste sites. The removal action contractor monitored emissions in order to protect its workers and the community.

Environmental monitoring was performed using a Photo Ionization Detector (PID) and Mini Rae

2000 for monitoring VOCs levels, Mini Ram PDK3 for measuring dust levels, and Gas Tech GT302 for detecting hydrogen sulfide (H_2S). In addition, extensive air monitoring was conducted onsite as specified in the RAW to monitor and ensure that there was no exposure of the community to contaminants during the removal actions. Air monitoring was located at both upwind and downwind locations.

The excavation activities were performed in Level "D" personal protective equipment (PPE). No adverse findings were identified. No significant health and safety incidents or documented incidents of worker exposure occurred during the Site cleanup activities.

5. POST-EXCAVATION SAMPLING RESULTS

In this section the results of the removal activities are discussed. This section also presents the methods of sampling and analysis that were used to confirm completion of removal action activities at the Site.

5.1 DEFINITIONS

Grid System
The Site was divided by a virtual grid system approximately 3 feet by 3 feet as shown on Figure 2-1 in Section 2. For ease of reference, the grid was labeled numerically starting at the north corner of the area excavated in ascending order from west to east (1 through 18) and alphabetically north to south (A through R).

Excavation Sample Designation
Excavation samples were labeled with unique identification codes, as follows. Each sample begins with the alpha designation letter N for Block N. The second letter indicates the primary designation of the sample (i.e., "F" for floor sample, "N" for north wall, "S" for south wall, "E" for east wall, "W" for west wall were used). Samples of a primary designation type were identified by a number in ascending order: "1" for the first sample, "2" for the second sample, and "3" for the third sample, etc. Each sample designation is also followed by a number to specify the depth of the sample. Duplicate samples were identified with a "D" at the end of the sample designation.

As an example, NS20-18' designates that this excavation sample was collected from Block N and is from a borehole located at the limits of the south wall, is the twentieth sample of that designation type, and was collected at approximately 18 feet below ground surface.

Sample Designation for Backfill Material
Each backfill soil sample has a unique identification code, as follows. The samples have a prefix that identifies the location of the source of the imported backfill. For example UCLA#44 indicates that this sample was collected from the trucks importing the excess clean soil from the UCLA site located in Westwood, California. The #44 indicates that this sample was collected from the 44th truckload of backfill material brought to the Site. Tables F-1 through F-10 in Appendix F shows the result of the soil samples collected for backfill.

5.2 CONFIRMATION SAMPLES

Confirmation samples refer to those soil samples that were collected during removal action activities conducted at the Site. These samples were collected from the limits of the deep excavation in the northwest corner, from beneath the Manley Oil Building, the pit south of the Manley Oil Building, the excavation around BN7 (on the southeast side of the Site), and the area where mercury droplets were identified. The following provides descriptions of the confirmation samples considered representative of in-place soils remaining at the Site and those samples that were removed.

Sample Location Approach used in Deep Northwest Corner Excavation

A systematic sampling system was implemented during the auger boring and open excavation activities conducted in the northwest corner area of the Site. This sampling system consisted of overlaying a 3-foot by 3-foot virtual grid over the planned area of removal action activity (Figure 2-1). A 3-foot by 3-foot grid spacing was used to approximate what the diameter of the borings that would be generated when using a 3-foot diameter auger. Confirmation samples were collected from selected augered locations within the excavation. Confirmation samples were collected from the bottom (i.e., floor) and the sidewalls of auger borings and from the open excavation conducted in this section of the Site. Floor and sidewall samples were collected to confirm that the horizontal boundaries of the impacted soil had been adequately defined and removed. Although systematic floor and sidewall sampling was the overall goal, the number and location of samples were adjusted based on observations in the field.

After the first set of confirmation samples was collected, it was determined that additional soil removal was necessary at some locations. Therefore, additional soil was removed by auger from those locations. Confirmation samples that were later removed were considered as over-excavated; some of these samples were considered as representative of conditions remaining at the Site. Table E-1 lists all the confirmation samples collected and the status, as explained in more detail below.

Summary of Sample Types Representative of Current Conditions

In Appendix E, Tables E-2 through E-11 show the analytical results of the laboratory analysis of the confirmation samples (i.e., all samples collected during removal activities that are still present at the Site). The analytical results for the soil samples that were collected during previous investigations and still remain at the Site are also provided in Appendix E. The soil samples that were collected at the Site were divided into the following categories:

1. **In place.** These samples are still present at the Site and were not removed during removal activities.
    a. Samples collected from the bottom of augers. These samples were generally collected at about 28 feet to 30 feet bgs (or, approximately at the top of the groundwater table).
    b. During soil removal activities, soil samples were collected from the walls and floors of the excavations and trenches. These samples represent the soil remaining in the sidewalls of the excavated areas.
    c. Samples collected during the previous investigations that were not targeted by the removal action (e.g., sample TtNB-25-15') and therefore, were not excavated.

2. **Excavated-representative.** These samples were removed during removal activities but were considered to be representative of materials that are still in-place at the Site.
    a. Samples that were collected from augers at the edge of the excavation area. These soil samples were collected from excavated soil coming out from the auger

drilling. Although the soils that were sampled have been excavated, it was assumed that the samples represent the soil remaining at the same horizon adjacent to where the samples were collected. These samples were usually collected next to the final sidewalls where no further excavation was necessary or geotechnically feasible.

3. **Excavated.** These samples were removed during removal activities at the Site and are not considered as representative of conditions at the Site. The analytical results for these samples are not provided in Appendix E.
   a. Confirmation samples that was over-excavated.
   b. Samples collected during the past investigations that were removed during the removal action.

For ease of reference, Figures 5-1 through 5-4 show the locations of confirmation samples as well as the samples from previous investigations at different depth intervals.

Sample Analyses

All confirmation soil samples were analyzed for PAHs by EPA Method 8310, for VOCs by EPA Method 8260B, and for total petroleum hydrocarbons (TPH) by EPA Method 8015. Selected confirmation samples were analyzed for metals by EPA Method 6010/7000. American Environmental Testing Laboratory, Inc. analyzed all samples.

Sample Collection Methodology used in the Removal Action Excavation

The auger boring locations were sampled using glass jars to collect soil from the auger flights. Prior to sampling, any loose material or soil was brushed off the surface of the soil on the drilling auger. The open excavation area soil samples were also collected manually and placed in the glass jars. A shovel was used to collect the samples when it was not safe to collect them by hand.

Only sample containers supplied by the laboratory were used. After filling the sample container, the container lid was sealed. For VOC analysis, samples were collected[1] in accordance with the recently revised SW-846 update III guidance from the U.S. EPA, Method 5035. The samples were picked up daily by the laboratory, using appropriate chain-of-custody and shipping procedures.

5.3 ANALYTICAL RESULTS

Polycyclic aromatic hydrocarbons (PAHs)

All soil samples that were selected for analysis were analyzed by EPA method 8310 (HPLC) for

[1]If access was available to the sample location, the VOC samples were collected from the undisturbed soil. If access to the sample point was not available due to physical location of the sample point, the soil samples were collected from the soil mass in the excavator or from the soil on auger flights immediately upon removal of soil from its original location, using sample collection Method 5035.

PAHs. Polycyclic aromatic hydrocarbons (PAHs) are common constituents of lampblack and tars from the gas manufacturing processes. Table E-2 shows the result of carcinogenic polycyclic aromatic hydrocarbons (C-PAHs). In these tables, each detected C-PAH compound is shown. When the results of the analyzed compound was less than its listed Method Detection Limit (MDL)[1], the concentrations are listed as less than (<) the MDL value in the Table. All C-PAH compounds have been added in the last column of the Table to list the total values. The following procedure was used:

1) If all C-PAH compounds were detected in a sample, the sum of C-PAHs is the total value of each C-PAH compound in the sample.

2) If some C-PAH compounds were detected and one or a few compounds were not detected (e.g., <MDL) in a sample, then the sum of C-PAHs is equal to adding all detected values plus one-half of the MDL value of those compounds not detected.

3) If all C-PAH compounds in one sample were non-detected, the sum of C-PAHs is considered to be non-detect, and listed as ND.

Because all of the C-PAHs do not have the same potency, one cannot simply add the concentration of each C-PAH and use it as the total C-PAH concentration. The Environmental Protection Agency (EPA) has established a set of relative potency values [Cal-EPA, 1993] to be used in conjunction with the measured concentration of each C-PAH to calculate a C-PAH concentration for each C-PAH compound, expressed as benzo(a)pyrene [B(a)P] equivalent. To convert measured levels of C-PAHs in terms of B(a)P equivalent, the California EPA has identified the following "Potency Equivalency Factors (PEFs)" which express the carcinogenic potency for each of the C-PAHs relative to the potency of B(a)P. To calculate the B(a)P equivalent value of total C-PAHs in a sample, the measured concentration of each individual C-PAH is multiplied by the appropriate PEF value, and then the calculated values of all of the compounds are summed. Presentation of C-PAHs in B(a)P equivalent allows comparison of results of total C-PAHs from one sample to another on a comparable and the same basis. Benzo(a)pyrene-equivalency concentrations of each C-PAH compound have been calculated using the following values:

Factors to Calculate Total C-PAHs as Benzo(a)pyrene Equivalency *

Compound	PEF
Benzo(a)pyrene	1 (index compound)

[1] **Definition of "Method Detection Limit and Practical Quantification Limit".** The Method Detection Limit (MDL) or the detected chemical is defined as a specific compound or class of compounds that exceeds its instrument detection limit under an acceptable Federal (U.S. EPA) or State (California) analytical protocol. An instrument detection limit is the lowest amount that can be distinguished from normal "noise" of the analytical instrument or method. Due to the irregular nature of instrument or method noise, reproducible quantification of a chemical is not possible at the detection limit. Generally, a factor of 3 to 5 is applied to the detection limit to obtain a Practical Quantification Limit (PQL) which is considered to be the lowest level at which a chemical may be accurately and reproducibly quantified [U.S. EPA, 1989]. Therefore, a chemical that was detected at or close to the detection limit may not actually be present in a sample.

Benzo(a)anthracene	0.1
Benzo(b)fluoranthene	0.1
Benzo(j)fluoranthene	0.1
Benzo(k)fluoranthene	0.1
Chrysene	0.01
Dibenzo(a,h,anthracene)	0.34
Indeno[1,2,3-c,d]pyrene	0.1

*Based on Cal EPA, 1994 Appendix 1 [Cal EPA, 1994, 1999]

Table E-3 shows the results of non-carcinogenic PAHs (NC-PAHs). Total value of NC-PAHs was calculated using procedures explained above to calculate total C-PAHs. The sum of the carcinogenic B(a)P equivalent concentrations of PAHs is included in Table E-4.

Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs)

Soil samples were collected and analyzed for VOCs and SVOCs using EPA Methods 5035/8260B and 8270C. Analytical results for VOCs and SVOCs are summarized in Tables E-5 and E-6.

Total Petroleum Hydrocarbons (TPHs)

Crude oil was generally used as the feedstock for the manufactured gas process at oil based MGPs. Several soil samples were analyzed for total petroleum hydrocarbons (TPH, EPA Method 8015 Modified) to investigate the extent of contamination, if any, with crude oil compounds. Table E-7 shows the results of TPHs.

Metals

Soil samples were analyzed for metals using EPA Method 6010/7000. Analytical results for metals are summarized in Table E-8. One sample collected at the Site, EX1-1, was analyzed for mercury using EPA Method 7470A. The analytical result for this analysis is also included in Table E-8.

Cyanide, Polychlorinated Biphenyls (PCBs), and Aroclor

As part of remedial investigation activities Selected soil samples collected from the Site during remedial investigation activities were analyzed for cyanide, PCBs, and aroclor (PCBs) by EPA Methods 9010B, 8080, and 8082, respectively. Analytical results for these test methods are included in Tables E-9 through E-11.

5.4 DATA QUALITY

The following quality assurance and quality control (QA/QC) data were included with the laboratory data sheets:

- Chain-of-custody documentation;
- Field duplicate sample analyses;
- Method blanks, matrix spikes, and matrix spike duplicates; and
- Surrogate recovery results for volatile organic analyses.

Laboratory QA/QC included method blank, matrix spike, surrogate recovery, and duplicate sample analyses data. Field QA/QC included duplicate sample analyses and chain-of-custody records. The laboratory data were evaluated to ensure that units were correct, detection limits were provided, all blank analyses were below detection limits, holding time requirements (e.g., 7 days for extraction of organics) were met, and percent recoveries from the matrix spike analyses were within the prescribed limits (70%-120%). The percent recoveries of some of the matrix spike analysis, however, were not within the prescribed limits. Although the percent recoveries of some of the matrix spikes analyses were not within the prescribed limits, the surrogate recoveries on individual samples were within the acceptable limits and the corresponding lab control samples (LCSs) were also within the acceptable limits. Therefore, the data were acceptable. Finally, the chain-of-custody forms were cross-referenced during the data review to ensure that all requested analyses had been performed.

5.5 SUMMARY OF CHEMICAL RESULTS

The results of the chemical analyses in soil and soil gas are summarized below.

Main Excavation Area

C-PAHs were detected in soil samples from the walls and floor of the main excavation area, ranging from 0.009 mg/kg to 0.85 mg/kg, as B(a)P eq. The maximum concentration as B(a)P eq was from a grab sample at a depth of 3 feet (NS24-3) along the slope near the southwest corner of the main excavation (see Figure 5-1). Most of the samples with elevated naphthalene and NC-PAHs within the main excavation were removed, except for some deep samples along the north wall next to the pit. The highest naphthalene concentrations in the remaining samples were 910 mg/kg in NN10-21' and 531 mg/kg in NN9-21', both along the northern wall next to the pit. In general, VOCs were detected only in the deeper samples at greater than 20 feet, which also had higher TPH levels. Arsenic and thallium were measured in nine samples from the main excavation, although two of them were later excavated. Arsenic ranged from 1.25 to 5.35 mg/kg in the non-excavated samples. Thallium was below detection in all the samples at detection limits of 1 or 5 mg/kg. Soil samples within the top 25 feet from the previous investigations in areas not excavated were included in the Risk Assessment, and have been included in the data tables in Appendix E. Metals were analyzed in 27 previous samples, although eight of them were from depths below 25 feet. Cyanide and PCBs were measured in some of the previous samples, but none of these compounds were detected.

Samples were also obtained from a sump and drain found within the pit south of the Manley Oil Building, shown on Figure 3-1, which is located just north of the main excavation area. No C-PAHs or VOCs were detected in the five samples from depths of 1.5 to 6 feet in the sump area. The only NC-PAH detected in the sump samples was benzo(ghi)perylene. One sump area sample and a duplicate were analyzed for all the CAM metals. Arsenic was <1 and 3.8 mg/kg. Other detected metals in the sump samples were barium, chromium, cobalt, copper, nickel, vanadium, and zinc; concentrations were not elevated.

Beneath Manley Oil Company Building

A series of nine borings were installed inside the Manley Oil Building; part of this area was later excavated in two trenches and using bucket augers (ET1 and ET2). The maximum oncentrations of PAHs were found in boring NB-7; C-PAHs as B(a)P eq were 3.5 mg/kg at a depth of 6 feet and 2.2 mg/kg at 10 feet. This boring also had elevated levels of diesel and heavy hydrocarbon range TPH. This boring is located within the area that was excavated (ET2) to a depth of 12.5 feet, as shown on Figure 3-1. The detected C-PAHs as B(a)P eq in the non-excavated trench samples ranged from 0.02 mg/kg to 2.9 mg/kg. Naphthalene was not detected in the non-excavated trench samples. The only other VOCs detected in these trench samples were: benzene (<0.002 to 0.032 mg/kg), m,p-xylenes (<0.002 to 0.004 mg/kg), and toluene (0.002 to 0.008 mg/kg). NC-PAHs and diesel and heavy TPH were detected in some of the trench samples. Deeper samples beneath the trench had C-PAHs and NC-PAHs. The highest naphthalene was in NB-7A at a depth of 30 feet (5.12 mg/kg from the 8310 analyses and 16.9 mg/kg from the 8260B analyses). The high observed concentrations at 30 feet indicate that the source is the groundwater, since the shallower samples from 20 and 25 feet had no detected naphthalene. Other VOCs were also detected in the sample at 30 feet from NB-7A including 1,2,4- and 1,3,5-TMB, DCP, E, X, and six substituted BTEX compounds.

The C-PAHs as B(a)P eq, outside of the trench areas ranged from 0.01 mg/kg to 0.23 mg/kg in NB-8 at a depth of 30 feet; this boring is located south of the trenches. The maximum total NC-PAHs were 5.92 mg/kg in NB-9 at a depth of 30 feet and 1.94 mg/kg at a depth of 30 feet in NB-8. Naphthalene was detected in NB-8 at 30 feet (0.05 mg/kg by the 8310 method only, in NB-9 at 30 feet (0.48 mg/kg by 8260B) and in NB-11C at 10 feet (0.013 mg/kg). The deep samples from 30 feet in NB-8 and NB-9 had detected concentrations of similar VOCs, as detected in NB-7A. The shallower samples from NB-8 and NB-9 had no detected VOCs, except for benzene (0.008 mg/kg in NB-9 at 10 feet). The other borings beneath the building (NB-10 and NB-11C) had only two detected VOCs (0.025 mg/kg of benzene in NB-10 at 5 feet and 0.013 mg/kg of naphthalene in NB-11C at 10 feet). TPH was detected at higher concentrations in the samples from 25 feet or deeper, and was mostly diesel and heavy TPH.

Excavation at BN-7

The location of the small excavation area near BN-7 is shown on Figure 2-2. C-PAHs as B(a)P eq from the confirmation samples following excavation of the top 3 feet of soil at BN-7 were low, ranging from 0.014 mg/kg to 0.262 mg/kg. Low concentrations of seven of the nine non-carcinogenic PAHs were detected in one of the soil samples, NB-5, at a depth of 3 feet. Naphthalene was 0.14 mg/kg. Two VOCs were detected in this soil sample (0.005 mg/kg of benzene and 0.002 m/kg of toluene). No TPH was detected in the three confirmation samples near BN-7. Metals were not analyzed in the samples near BN-7.

Excavation at Mercury Spill Area

A mercury spill was found west of the main excavation area, and confirmed by analyzing a sample of the liquid, which turned out to be 99.9 percent elemental mercury. An asphalt sample was also analyzed for metals. The asphalt sample had high mercury (1,190 mg/kg) and, therefore, was excavated within a 2-foot by 2-foot area along with the underlying one-foot of soil, as described in Section 2.7.9. The soil samples collected below the excavation had low mercury (0.1 and 0.15 mg/kg). These soil samples were analyzed for other metals, but not organic compounds.

Soil Gas Results

Two soil gas probes were installed around the sump, located within the pit, SN-10 and SN-11. Soil gas samples were collected at depths of 6 and 5 feet, respectively. Benzene and naphthalene were not detected in either probe or the duplicate sample from SN-10 collected on the same day. However, other organics were detected, 9 to 10 compounds in SN-10 and 13 compounds in SN-11. PCE was detected in all three soil gas samples, ranging from 630 to 827 $\mu g/m^3$, as was 1,1,1-TCA (17.8 to 32.7 $\mu g/m^3$). Dicyclopentadiene was detected in only one sample from SN-11 (3,320 $\mu g/m^3$). Additional soil gas samples were collected during the RI, and were used in the risk assessment, as discussed in Section 6.

6. POST-EXCAVATION RISK EVALUATION

This post-excavation risk evaluation examines the potential for human health and environmental impacts from chemicals within the limits of Block N of the former Aliso Street manufactured gas plant (MGP) (hereinafter referred to as the "Site") based on data available following the completion of removal activities at the Site.

The Site is a portion of the former Aliso Street MGP. Historical MGP operations within Block N included gas compression and warehouse storage in support of other facilities located adjacent to the Site. Later, the facilities at the Site were used in support of butadiene production elsewhere on the former Aliso Street MGP, although butadiene is not known to have been stored or produced on Block N. In 1979, part of the property was sold to Manley Oil Company, which has used the Site, including a building located on the corner of Center and Duccomun Streets, for commercial/industrial purposes. Manley Oil sold the property to the current owner of the Site in 2004.

A focused human health risk assessment [Tetra Tech 2003] was performed previously for the Site, which identified several chemicals of potential concern as exceeding remedial goals developed for the Site. Therefore, a removal action workplan (RAW) was developed for the Site [Tetra Tech 2004]. The RAW was implemented from about June to December 2005. As described in Section 2, the removal action consisted of excavating soils to a maximum depth of approximately 30 feet in the northwest corner of the Site. Additional smaller selected areas were also excavated in: 1) two large trenches underneath the Manley Oil Building, 2) to the south of the Manley Oil Building, and 3) along the eastern boundary of the Site. Figures 5-1 through 5-4 show the locations of the confirmation samples collected during removal activities and the locations of the RI samples that are still in place following completion of removal activities at the Site. Figures 2-1, 2-2, and 3-1 show the areas excavated at the Site. Excavated soils were replaced with either clean backfill or cement-sand slurry. This risk assessment confirms the completion of removal activities at the Site.

To address the carcinogenic PAHs (C-PAHs) in soils, C-PAH concentrations remaining in soils at the Site are compared to background C-PAH concentrations in southern California soils. The methodology and background database used for evaluating PAHs is described in the report, "A Methodology for Using Background PAHs to Support Remediation Decisions" [Environ Corporation 2002].

The residual levels of the other COPCs identified using available data are addressed by a standard risk assessment process wherein risks are calculated on the basis of exposures estimated for future unrestricted Site use. This post-excavation risk assessment is consistent with the DTSC [1992, 1997, 1999, 2000a, 2000b] and the USEPA [1989, 1990, 1991, 1992a, 1992b, 1996a, 1996b, 1997, 2002a,b, 2004] guidance and consists of four main steps: 1) identification of the chemicals of potential concern (COPCs), 2) the identification of receptors and exposure pathways, 3) toxicity assessment, and 4) risk characterization, including consideration of potential uncertainties in the risk analyses.

An additional evaluation is conducted on the potential for groundwater impact of the residual chemicals in soils that could migrate to groundwater in the future. Predicted impacts to groundwater are compared to potential water quality criteria to assess the effectiveness of the removal action. Supporting materials for all of these evaluations are provided in the appendices.

A scoping level ecological risk assessment consistent with DTSC [1996, 1999] guidance is presented in Section 6.7.

6.1 CHEMICALS OF POTENTIAL CONCERN

6.1.1 Data Evaluation

To determine the effects of the removal actions on residual chemical concentrations, samples considered representative of current on-site soil conditions were identified from a combination of confirmation samples and samples from previous investigations that are still in place at the Site following the completion of removal activities. The sample locations have been shown on Figure 2-1 of the RAW [Tetra Tech 2004a], and a copy is included in Appendix V for ease of reference. As described in Sections 2 through 5, confirmation samples (including duplicates) were collected from the floors and sidewalls of the excavated areas. In addition, samples collected from augers along the edges of the excavations were considered to be representative of soils remaining in place, although the auger "borings" were filled with cement-sand slurry. Samples collected below the water table (i.e., identified as 25 feet bgs for purposes of this removal action) were not considered in the evaluation of residual risks because contact with soils at these depths is unlikely and constituents should be in equilibrium with groundwater (i.e., groundwater measurements are considered as representative of the chemical concentrations in these soil samples). Samples collected from the west sidewall of the excavation in the northwest corner were considered to be representative of off-site conditions as they extend beyond the western boundary of the Site, while on-site soils have been replaced by cement-sand slurry in this area of the Site. As a result of these considerations, 102 confirmation samples were identified as representative of soils remaining on-site (see Appendix H).

The lateral and vertical extent of onsite excavations was compared to the locations of soil samples collected during past investigations to determine those that are likely to still remain in place. A total 59 samples from previous investigations were identified for use in the evaluation of post-excavation conditions (see Appendix H).

Finally, five samples were collected from the imported fill material before it was put in place at the Site. These sample results were used in the evaluation of the mass of selected constituents potentially remaining in soils at this Site.

Altogether, a total of 166 samples collected at 0 to 25 feet bgs were used in the post-excavation risk assessment, including:

- 102 confirmation samples;
- 59 samples from previous investigation; and

- 5 fill material samples.

Listings of all soil samples collected at the Site and used in the risk assessment are presented in Table 6-1.

6.1.2 Selection of COPCs

All chemicals detected in soils remaining at the Site are shown in Table 6-1. These chemicals consist of metals, PAHs, and VOCs. The type of soil samples (e.g., post- or pre-remediation samples) and the general depth in which each chemical was detected (e.g., less than 10 feet or more than 10 feet bgs) are shown in Table 6-3.

The removal action objective for this Site was to restore the Site to a condition acceptable for unrestricted land use. Chemicals present at concentrations equivalent to (or lower than) background concentrations do not need to be considered as COPCs [DTSC 1999, USEPA 1989]. The initial determination for this Site, therefore, consisted of an examination of two groups of constituents, i.e., C-PAHs and metals, to assess whether they should be considered COPCs. This was accomplished by comparing C-PAH concentrations in soils after the completion of the removal activities to Southern California background conditions. This evaluation was then followed by an examination of metal concentrations in soils with background concentrations. All constituents detected in soils, other than the C-PAHs and metals, were also evaluated in the identification of COPCs. Background comparisons and the identification of COPCs are described in more detail below.

<u>Evaluation of C-PAHs</u>

To determine whether C-PAH concentrations met the remedial action objective of unrestricted future land use, two procedures were used to evaluate C-PAH concentrations in soils at the Site. First, it was determined whether people assumed to be living on the Site would be exposed to levels of C-PAHs greater than background levels in southern California surface soils. This was based on a statistical comparison to a dataset developed for C-PAH concentrations in Southern California soils [Environ 2002]. Second, residual C-PAHs were evaluated to determine whether they pose an incremental health risk inconsistent with the goal of restoring the Site to a condition requiring no land use restrictions. To support this second analysis, volume-weighted C-PAH concentrations were estimated for soils at the Site and compared to the remedial goals for C-PAHs in soils. Each of these procedures, and their results, are described below.

As described in Section 5, the C-PAH evaluations were conducted using benzo(a)pyrene-equivalent (B(a)P) concentrations calculated according to DTSC [1999] guidance. Of the 54 pre- and post-remediation samples collected at depths up to 10 feet bgs and analyzed for PAHs, C-PAHs were below detection limits in 27 samples (or 50%) (Table 6-4). In the samples in which C-PAHs were detected, concentrations ranged from 0.0985 mg/kg to 2.9 mg/kg B(a)P-equivalents, with a median concentration of 0.105 mg/kg.

To determine whether removal activities resulted in the reduction of C-PAH concentrations to background levels, residual concentrations of C-PAHs in soils from 0 to 10 feet bgs were compared to background levels of C-PAHs in Southern California surface soils (Table 6-5). This comparison was performed using a two-step process. In the first step, the distribution of the C-

PAHs remaining in soils at the Site were evaluated; while in the second step, a statistical test was conducted to compare Site and background C-PAH concentrations. The data distributions in background and on-site samples were determined using the Shapiro-Wilk's test for normality [USEPA 2000, 2002c]. As shown in Table 6-2 (with supporting descriptive statistics, such as UCL_{95} concentrations in Appendix H-1), background C-PAH data fit a lognormal distribution, but the C-PAH data from the Site did not fit either a normal or lognormal distribution. Based on these determinations, the median concentrations of the two datasets were compared using the Wilcoxon rank sum test (also known as the Mann-Whitney U test) [USEPA 2000, 2002c, DTSC 1997]. The results of this test indicate that the C-PAH concentrations in soils at the Site are below Southern California background C-PAH concentrations (N Site = 54, N background = 84, adjusted Z = 2.17, $p = 0.03$) (Table 6-2).

In addition to the above statistical analyses, which do not account for the imported clean fill, a volume-weighted evaluation was conducted to examine whether the removal action at the Site achieved an acceptable level of C-PAHs in soils at the Site. This procedure consisted of the calculation of a volume-weighted mean concentration and a comparison of the resulting concentrations with the remedial goal protective of unrestricted Site use for C-PAHs in soils. This analysis addresses the few samples remaining in place with residual C-PAH concentrations above the average background concentration (e.g., at ET2-3E-5 under the Manley Oil Building), although the entire set of C-PAH data for the samples remaining in place is statistically below the concentrations in southern California background surface soil. The volume-weighted C-PAH concentration was calculated for the soil interval future receptors could potentially contact (i.e., the top 10 feet of soil). This concentration was then compared to the concentration in background Southern California surface soils, which is protective of unrestricted Site use. In this case, the background Southern California surface soil concentration was based on the 95th percent upper confidence limit on the mean concentration (UCL_{95}) of 0.24 mg/kg [Environ 2002].

A four-step process was used to volume-weight C-PAH concentrations in the top ten feet of soils remaining at the Site. These steps consisted of: 1) contouring of C-PAH concentrations in soil; 2) replacement of C-PAHs concentrations within each excavation with a concentration representative of fill material; 3) calculation of the average C-PAH concentration in each contoured depth interval; and 4) calculation of the average volume-weighted concentration across the Site. The specific procedures involved in each step of the volume weighting are described in Appendix I. As shown in Table 6-6, these calculations determined that the volume-weighted C-PAH concentration for soils across the Entire Site (0.07 mg/kg) is substantially below the Southern California background concentration of 0.24 mg/kg and also below the risk-based remedial goal (6 mg/kg), protective of future on-site workers [Tetra Tech 2004]. These results indicate that if future activities at the Site brought subsurface soil to the surface, the resulting concentrations would be lower than background and that land-use restrictions, or other measures, to prevent the excavation and spreading of subsurface soils across the surface of the Site in the future are not necessary. Further, since C-PAH concentrations do not exceed background, there are no incremental risks above levels of exposure typical of southern California soils. Based on these results, C-PAHs were not identified as COPCs.

The same process used to estimate a volume-weighted concentration for C-PAHs was also used to estimate volume-weighted concentrations for benzene and naphthalene (see Appendix I). Concentration contours were developed for each 5-foot depth interval to a depth of 25 feet (i.e., approximately to the water table). Appendix I presents the excavation areas for each depth zone.

Evaluation of Metals

Consistent with DTSC [1997, 1999] and USEPA [1989] guidance, metals detected in soils at concentrations that fall within the range of background concentrations are not likely to be due to past releases at the Site and, thus, do not require further evaluation. In accordance with DTSC [1997] guidance, the comparison of metal concentrations to background concentrations is an iterative process in which the first step is a simple comparison of maximum concentrations of metals at the Site to maximum background metals concentrations. When the maximum detected concentration at the Site falls below the upper bound background concentration for a given metal, it may be concluded that the Site concentrations for that metal are within the range of background concentrations. The second step involves a more robust statistical analysis that is employed in cases where maximum concentrations of metals at the Site exceed upper bound background concentrations. Use of this approach is important because failing the simple comparison method described above does not necessarily mean that the distribution of metal concentrations at the Site is not within the range of background concentrations. In these cases, DTSC [1997] and U.S. EPA [2000, 2002a] guidance was followed to statistically compare metal concentration distributions from the Site to local background metal distributions.

The maximum detected concentrations of metals in soils at the Site are compared to local background concentrations in Table 6-2. Sixteen soil samples were collected for use as local background from eight borings near the former Aliso MGP [Tetra Tech 2004] (see also Appendix H). The results of this comparison indicate that six metals (i.e., barium, cadmium, cobalt, nickel, vanadium, and zinc) are clearly within the range of the local background concentrations. Metals not detected in Site soils were considered to be within background and were not identified as COPCs.

The remaining metals (i.e., antimony, arsenic, chromium, copper, lead, and mercury) were statistically compared to background, except for three metals (i.e., antimony arsenic, and mercury) that were either not detected in local background soils or were detected infrequently (i.e., detection frequency of 11 percent or lower) in Site soils and, therefore, could not be statistically evaluated. As shown in Table 6-2, one of these metals (antimony) exceeds the range of regional background concentrations [Bradford *et al.* 1996] and was identified as a COPC. As shown in Table 6-2, arsenic and mercury are within the range of regional background concentrations. Also, the average and UCL_{95} concentrations of arsenic within the upper ten feet of soils remaining at the Site (3.6 and 5.3 mg/kg, respectively) are less than the background concentration identified for the Los Angeles Unified School District, i.e., 6 mg/kg [DTSC June 2005]. Altogether these findings support the determination that these metals are generally within background levels for Los Angeles and are not associated with contamination at this Site. On this basis, these two metals were not identified as COPCs.

Statistical comparisons were conducted using the statistical test appropriate for the distribution of both the Site-specific and local background data. The distribution of the data for each metal in each dataset was tested using the Shapiro-Wilk's test [U.S.EPA 2000]. For metals that are normally or log-normally distributed in both the Site and background soils, the *t*-test was used for the comparisons [U.S.EPA 2000, 2002a]. For metals that fit neither a normal or log-normal distribution in either soil or background soil datasets, the Wilcoxon rank sum (WRS) test was used to assess whether the distribution of metal concentrations at the Site statistically differ from background at $p = 0.05$ [DTSC 1997; U.S.EPA 2000, 2002a]. For the statistical comparisons, sample results less than the detection limits were replaced by one-half of the detection limit [DTSC 1992b]. As shown in Table 6-2, the results of the statistical testing indicate that none of the tested metals differ from the local background concentrations. Therefore, these metals (i.e., chromium, copper, and lead) were not selected as COPCs. Based on all of these evaluations, the only metal that is identified as a COPC is antimony.

Evaluation of Organics

As shown in Table 6-7, 24 organic constituents other than the C-PAHs (not including naphthalene) were detected in soils following the completion of remediation activities. These consisted of one carcinogenic PAH (naphthalene), five volatile non-carcinogenic PAHs (acenaphthene, acenaphthylene, anthracene, fluorene, and phenanthrene), three non-volatile non-carcinogenic PAHs (fluoranthene, benzo(g,h,i)perylene, and pyrene) and 15 other volatile organic constituents. All of these organic constituents were identified as COPCs, since the non-volatile constituents were detected in the top ten feet of soil and the volatile constituents could be emitted from any depth down to the water table (i.e., 25 feet bgs).

Only two soil gas samples (plus one duplicate) were collected as part of the post-remediation confirmation sampling (see Figure 3-1 and Appendix E-13). The results of this and past soil gas sampling were used to evaluate the modeling conducted for migration of benzene and naphthalene vapors from soils to indoor air (see Appendix H.1-3 and Appendix H.3, Table H.3-1). This approach was considered appropriate because use of soil gas data reduces uncertainties associated with soil to vapor equilibrium partitioning [DTSC 2005]. Also, the recently collected soil gas samples provide additional information for assessing potential volatilization for these two chemicals detected in soils sampled in relatively inaccessible areas during the removal action. In particular, analyses for naphthalene below the pit south of the Manley Oil building provides an indication that this constituent is not present in soil gas (at a detection limit of 10 ug/m^3, although for geotechnical reasons it was not feasible to fully assess residual levels of naphthalene in soils near the water table (e.g., 531 mg/kg at NN7-25) extending below the pit. Similar, the benzene analyses in these soil gas samples beneath the pit confirm the relatively limited extent of levels previously observed beneath the Manley Oil Building (e.g., 40 ug/m^3 at SN-1).

The other chemicals detected in soil gas were not evaluated quantitatively because of two main determinations. One, the maximum concentrations of constituents detected currently are substantially lower than levels evaluated in the focused risk assessment [Tetra Tech 2003]. Comparisons of chemical concentrations in recent samples and those used to evaluate risks previously show that none of the recent sampling results would result in unacceptable residential risks, except possibly tetrachloroethene (see Appendix H.3, Table H.3-1). It is likely that tetrachloroethene in soil gas is due to upgradient groundwater or other unknown sources because it was detected only once just above the detection limit in soils. Second, other constituents detected in soil gas and not evaluated previously have also not been detected in soils and the likely source of these other constituents is groundwater.

The entire list of COPCs is provided in Table 6-7.

6.2 RECEPTORS AND EXPOSURE PATHWAYS

The Site has been used in the past for commercial/industrial purposes and the likely future use of this Site is for commercial purposes including office buildings, public institutions, enclosed warehouse spaces, indoor and outdoor manufacturing areas, exterior storage yards, and public transportation right-of-ways (e.g. highways and rail). However, to assess whether unrestricted site use[1] is feasible, a residential land use evaluation was performed. Potential chemical exposures were evaluated for the Site by considering the following four factors:

- Sources of chemicals of potential concern;
- Environmental media in which chemicals of potential concern have been detected (e.g., soil);
- Exposure or contact points with the environmental media (e.g., direct soil contact); and
- Exposure routes for chemical intake by a receptor (e.g., ingestion).

The exposure pathways identified for the Site were based on evaluations of the likelihood of receptors directly contacting chemicals of potential concern in soil and the mechanisms governing the fate and transport of the chemicals of potential concern. Based on a review of current conditions, the only potentially complete exposure pathways may be for future on-site receptors. At present, the entire Site is either paved or covered by buildings, greatly limiting the potential for contact. Therefore, under current conditions, soil contact, including incidental soil ingestion, dermal contact, and airborne dust inhalation, are considered incomplete. However, for risk assessment purposes, it was assumed in the future on-site residents might be exposed to COPCs in surface soils at the Site via these pathways. This allows for a determination of whether Site conditions are consistent with unrestricted Site use.

Residential exposures were assessed at the Site for direct exposures to soils to a depth of 10 feet bgs and exposures to indoor air from VOCs detected in soils down to the water table (i.e., 25 feet bgs). The depth of samples used for direct exposure from soils (i.e., 0-10 feet bgs) is considered the maximum depth to which residents are likely to excavate at their properties for such purposes as building a pool, basement, or planting trees. It was assumed these soils could be re-distributed across the surface, resulting in exposure to the COPCs via direct contact (i.e., incidental ingestion, dermal contact, and the inhalation of dusts) [DTSC, 1992].

Chemicals detected in soil may be transported to groundwater by rainwater infiltration and dissolution, with subsequent migration to groundwater. The potential for the volatile organic chemicals that may readily dissolve in infiltrating water and migrate to groundwater was, therefore, selected for evaluation. This is health-protective because groundwater use in the vicinity of the Site is unlikely due to: 1) naturally high levels of dissolved solids and nitrates, 2) the presence of the constituents of natural petroleum hydrocarbons, as noted in reports by the USACOE and LA GED [2001], and 3) the occurrence of upgradient sources of hydrocarbons and

[1] The current owner of the Site has requested that the Site be cleaned up for unrestricted residential use.

solvents, such as tetrachloroethene, trichloroethene, and vinyl chloride. Further, the nearest downgradient municipal water supply wells are in the City of Vernon, located approximately 3 miles to the south of the Site and in deeper aquifers (i.e., more than 500 feet bgs) than those sampled as part of this risk assessment. Also, future groundwater use will be examined in the groundwater management plan being developed for the entire former Aliso Street MGP.

6.2.1 Quantitative Exposure Analysis

Quantitative exposure analysis consists of estimates of the type, timing, and magnitude of exposures human receptors may experience at the Site. In order to calculate risks protective of future receptors, exposure parameters were determined for each of the identified receptors based on DTSC [1992, 1999, 2000b] and USEPA [1989, 1991b, 1997b, 2001b, 2002, 2004] guidance. Exposure parameters were estimated for future onsite residents potentially exposed to COPCs as a result of incidental soil ingestion, dermal contact with soil, and by the inhalation of dusts in outdoor air and volatile constituents in indoor air. Exposure to vapors in indoor air was considered protective of exposures to vapors in outdoor air and, therefore, this latter pathway was not evaluated quantitatively.

The exposure parameters and formulas used to calculate risks for exposures to COPCs in soil are shown in Tables 6-8 to 6-10.

Predicted groundwater concentrations were compared to potential drinking water criteria, including drinking water maximum contaminant levels (MCLs) and USEPA [2004] tap water preliminary remediation goals (PRGs), as was done in the focused risk assessment for this Site [Tetra Tech 2003]. Also, for naphthalene, predicted concentrations were compared to the Notification Level (NL), the health-based advisory level established by the California Department of Health Services (CDHS) to ensure that drinking water provided by public water supplies is protective of public health.

6.2.2 Exposure Point Concentrations

Exposure point concentrations (EPCs) are represented by the reasonable maximum exposure (RME) point concentrations, i.e., the lower of either the maximum or UCL_{95} concentration calculated for the depth intervals that individuals might contact. RME concentrations were calculated according to USEPA [1989, 1992c] and DTSC [1992] risk assessment guidance (Table 6-15) using data determined to be representative of post-remediation soil conditions. RMEs were also calculated for chemicals detected in soil gas.

For volatile chemicals, RMEs were calculated for each 5-ft depth interval to a depth of 25 ft bgs. The RMEs for each depth interval were used as source terms in the fate and transport analyses, as described in Section 6.3, to calculate the EPCs for vapors in indoor air and impacts to groundwater. For benzene and naphthalene, the source terms used to predict migration to indoor air were, however, based on soil gas, although the results of these evaluations are compared to those based on concentrations measured in soils (see Section 6.5).

Separate RMEs and fate and transport analyses were conducted for each of two areas at the Site: 1) the Entire site and 2) the area within the footprint of the Manley Oil Building (hereinafter also referred to as "Manley Building") (see Table 6-15). The results of the evaluations for each of these two areas are presented separately below.

6.3 FATE AND TRANSPORT ANALYSIS

In order to assess the potential chemical concentrations receptors could be exposed to, the effects of chemical fate and transport processes were evaluated, including inter-media transfer and chemical transport. Inter-media transfer is the movement of chemicals between environmental media such as soil and air. Chemical transport occurs through the movement of an environmental medium by natural advective and dispersive processes, such as air dispersion. Of particular concern at the Site is the migration of volatile COPCs through soil pores upward to the ground surface and downward to groundwater. At the ground surface, volatile chemicals can be released as vapors to the atmosphere or indoor air. At the water table, volatile chemicals will mix with groundwater.

Analysis of chemical fate and transport was conducted using models to calculate concentrations in air due to the migration of volatiles in soils upwards to indoor air and to calculate concentrations in groundwater due to the downwards migration of volatiles in soils.

6.3.1 Migration to Indoor Air

The Johnson and Ettinger indoor air model [USEPA 2003] was used to model migration of chemicals from soil to indoor air. The model incorporates both convective and diffusive mechanisms that drive vapor intrusion rates, and also accounts for subsurface soil and building properties. The Johnson and Ettinger indoor air model is one of the models recommended in the *Air/Superfund National Technical Guidance Study Series on Assessing Potential Indoor Air Impacts for Superfund Sites* [USEPA 1992c]. The finite source version of the Johnson and Ettinger indoor air model [USEPA 2003; CalEPA 2003] was used (as described in Appendix H) with site-specific soil properties to model emissions to indoor air from soils for 6 and 30 years. These time periods correspond to the exposures durations used to estimate exposures to child residents for noncarcinogenic effects and both child and adult residents for carcinogenic effects, respectively. Additional perspective on the potential migration of volatiles in soils to indoor air is provided for benzene and naphthalene based on soil gas and volume-weighted average concentrations in soils as the source terms. For modeling emissions from soil gas, the infinite source version of the Johnson and Ettinger model was used [USEPA 2003]. Further details of the indoor air modeling are described in Appendix H. The derivation of volume-weighted average concentrations used for modeling of benzene and naphthalene is described in Appendix H.

6.3.2 Migration to Groundwater

Volatile chemicals in soils may also migrate downwards into shallow groundwater. Chemical concentrations in shallow groundwater directly under the Site were predicted using VLEACH. VLEACH calculates the pore water concentrations for chemicals at the water table. In turn, these pore water concentrations (C_{pw}) were used to calculate chemical concentrations in groundwater using a groundwater dilution factor (DAF) of 20 [USEPA 1996], as used in the focused human health risk assessment [Tetra Tech 2003]. The dilution factor accounts for dilution due to mixing of the pore water concentration with underlying ambient groundwater.

6.4 TOXICITY ASSESSMENT

The toxic effects of the COPCs were estimated by using toxicity assessments published by the California Environmental Protection Agency (Cal EPA) and the USEPA. The Cal EPA and USEPA have determined which COPCs are probable or possible carcinogens and have derived toxicity values, known as slope factors (SFs) that quantitatively define the relationship between exposure and the likelihood of carcinogenic effects. SFs are used for estimating the individual upperbound excess lifetime cancer risks associated with various levels of lifetime exposure to potential human carcinogens. In practice, SFs (expressed in units of $(mg/kg/day)^{-1}$) are derived from the results of human epidemiology studies or chronic animal bioassays. For this report, the Cal EPA [2005] slope factors were used preferentially, unless a Cal EPA slope factor was not available, in which case a slope factor from USEPA's [2005] IRIS was used. Tabulations of the oral and inhalation SFs are provided in Tables 6-11 and 6-12, respectively.

The USEPA has determined which constituents potentially cause adverse health effects other than cancer. Typically, these non-carcinogenic adverse health effects may not occur until a specific level of exposure occurs. Toxicity values for non-carcinogens are, therefore, based on a threshold level of exposure, typically demonstrated in laboratory animals, with the incorporation of several uncertainty factors to ensure the protection of sensitive human individuals. The resulting chronic reference doses (RfDs) are defined as an estimate of the maximum daily exposure that will not produce an appreciable risk of adverse health effects during a lifetime. For this report, the following hierarchy of sources was used for the RfDs:

1) Cal EPA [2005] chronic reference exposure levels (RELs), but only if lower than those obtained from the USEPA [2005] Integrated Risk Information System (IRIS);

2) USEPA [2005] IRIS;

3) USEPA Region IX [2004] PRG tables; and

4) USEPA [1997] Health Effects Assessment Tables (HEAST).

Tabulations of the oral and inhalation RfDs for the COPCs are provided in Tables 6-13 and 6-14, respectively.

The toxicity data for dicyclopentadiene were re-evaluated as part of the RAW for this Site [Tetra Tech, 2004]. The determination was made that the most representative toxicity data for dicyclopentadiene exposure were those determined for the oral exposure pathway. Consequently, using a route-to-route extrapolation, the oral RfD was used to evaluate both oral and inhalation exposures to dicyclopentadiene.

6.5 RISK CHARACATERIZATION

Risk characterization integrates the exposure assessment and chemical toxicity information to quantitatively estimate potential health risks due to COPCs. Risk estimates were determined for individual routes of chemical exposure, as well as for additive effects. Due to fundamental differences in the calculation of critical toxicity values, the estimates of potential individual excess carcinogenic risks and noncarcinogenic health effects were developed separately.

The risk of cancer from carcinogens is assumed to be proportional to the dose and any exposure results in a nonzero risk probability. Carcinogenic risk probabilities were calculated by multiplying the estimated exposure level by the route-specific cancer SF for each carcinogen [USEPA 1989]:

$$Risk = E \times SF$$

where:

Risk	=	Estimated individual excess lifetime cancer risk;
E	=	Exposure or Intake level for each COPC (mg/kg/day); and
SF	=	Route- and chemical-specific slope factor ($(\text{mg/kg/day})^{-1}$).

Risk probabilities determined for each carcinogen were also considered to be additive over all exposure pathways.

Risk probabilities can be compared to the generally acceptable risk range specified by the USEPA. According to the revised National Contingency Plan (NCP) [USEPA, 1990], carcinogenic risks from exposures at Superfund sites are considered to be unacceptable at a level greater than 1×10^{-4}, whereas risks less than 1×10^{-6} are considered to be of minimal concern. Action may not be necessary in the risk range of 10^{-6} to 10^{-4}. In general, a potential excess individual lifetime cancer risk of 1×10^{-6} is used as a "point of departure" when determining whether chemical exposures represent a potentially unacceptable level of risk to public health. Altogether, this range of potentially acceptable risks helps put the numerical risk estimates into perspective.

In contrast to carcinogens, noncarcinogens are considered to be threshold chemicals; i.e., a critical chemical dose must be exceeded before an adverse health effect is observed. The likelihood of a potential adverse health effect is represented by the ratio of the chemical exposure level and the route-specific RfD:

$$HQ = \frac{E}{RfD}$$

where:

HQ	=	Hazard Quotient for each chemical of potential concern;
E	=	Exposure or Intake level for each COPC (mg/kg/day); and
RfD	=	Route- and chemical-specific Reference Dose (mg/kg/day).

Also, in a manner similar to carcinogens, hazard quotient (HQ) values were summed across exposure pathways and for all chemical exposures to develop Hazard Index (HI) values. An HQ or HI value greater than 1 indicates an adverse health effect may occur due to a chemical exposure. HQs and HIs are not risk probabilities, but currently are accepted by the USEPA and DTSC as quantitative levels of risk for noncarcinogens or the noncarcinogenic endpoints of carcinogens. In cases where the summation of HIs exceed 1 and the COPCs do not cause the same health effect, the HIs are presented separately for COPCs potentially causing the same type of health effect (i.e., same toxic endpoint) [USEPA 1989].

6.5.1 Risk Estimates

The total carcinogenic risks and overall non-carcinogenic HIs were estimated for residents across the entire site and within the footprint of the Manley Oil Building (Tables 6-16 and 6-17). Risks are provided for each COPC and each potentially complete exposure pathway. Each set of risk analyses provides a determination of the contribution (noted as percentages) of each compound to the overall risk estimates. The risk analyses, therefore, provide an indication of the influence of individual organic compounds or metals on the overall risk estimates.

Risks are discussed separately for direct soil contact (i.e., ingestion, dermal contact, and dust inhalation) and for the inhalation of vapors in indoor air, in order to examine the results of indoor vapor modeling.

<u>Entire Site</u>
Carcinogenic risk probabilities were calculated for future residents potentially exposed to COPCs in post-remediation soils across the Entire Site. Table 6-16 shows that the overall risk estimate for direct contact with soils at the Site (i.e., incidental soil ingestion, soil dermal contact, and dust inhalation) is approximately 8×10^{-9}. This risk estimate is well below the USEPA [1990] target risk range of 10^{-6} to 10^{-4} and the point of departure of 1×10^{-6}.

The risks estimated for residential exposures that includes the indoor vapor inhalation pathway range from approximately 2×10^{-6} to 1×10^{-5}. These risk estimates are within the USEPA [1990] target risk range of 10^{-6} to 10^{-4} but exceed the point of departure of 1×10^{-6}. As shown in Table 6-16 and Appendix H.3, exposure via the indoor vapor inhalation risk estimates is the primary source of the estimated risks. Exposure to benzene in indoor air results in a risk estimate of approximately 2×10^{-6}, while the risks estimated for tetrachloroethene exposure range from approximately 1×10^{-7} to 8×10^{-6}, depending on whether risks are based on soils or soil gas data. Since DTSC [2005] guidance recommends the use of soil gas data in evaluating indoor air exposures, the primary source of risks from indoor air exposures appears to be tetrachloroethene (approximately 50 to 80 percent of the total calculated incremental risk), although tetrachloroethene was detected only once in soils (at a concentration of 0.02 mg/kg at (NE6-16).

Non-carcinogenic HIs were also calculated for future residents potentially exposed to COPCs in soils and indoor vapors across the Entire site. All of the HQs were determined to be less than 1, with the overall HI estimated at approximately 1. Since the overall HI does not exceed the threshold value of 1, the likelihood of a future resident experiencing non-carcinogenic adverse health effects at the Site is negligible.

Manley Oil Building

Carcinogenic risk probabilities were calculated for future residents potentially exposed to COPCs within the footprint of the Manley Oil Building. Table 6-17 shows that the overall risk estimate for direct contact with soils at the Manley Oil Building (i.e., incidental soil ingestion, soil dermal contact, and dust inhalation) is approximately 6 x 10^{-7}. This risk estimate is below the USEPA [1990] target risk range of 10^{-6} to 10^{-4} and the point of departure of 1 x 10^{-6}.

The total risk from assumed residential exposures to soils and the inhalation of indoor vapors, based on soil gas as the source term under the Manley Oil Building, is approximately 6 x 10^{-7}. This results in an overall risk estimate (including the inhalation of vapors in indoor air) of 6×10^{-7} for residential exposures at the Manley Oil Building. Thus, carcinogenic risks estimated for this area of this Site do not exceed the point of departure of 1 x 10^{-6}.

Non-carcinogenic HIs were also calculated for future residents potentially exposed to COPCs in soils and indoor vapors at the Manley Oil Building. All of the HQs were determined to be substantially less than 1, with the overall HI estimated at approximately 0.3. Since the overall HI does not exceed the threshold value of 1, the likelihood of a future resident experiencing non-carcinogenic adverse health effects at the Manley Oil Building is negligible.

6.5.2 Groundwater

The potential for volatile chemicals remaining in soils to impact groundwater was evaluated by predicting concentrations resulting from downwards migration and mixing with shallow groundwater. The evaluation was conducted using the RME and volume-weighted chemical concentrations to predict potential impacts to groundwater beneath the Site. The predicted concentrations were then compared to potential water quality criteria protective of use of the water as a drinking water source. These criteria consisted of tap water PRGs [USEPA 2004] and MCLs [DHS 2002] for those chemicals with both sets of groundwater protective criteria. Also, for naphthalene, predicted concentrations were compared to the Notification Level (NL), the health-based advisory level established by the California Department of Health Services (CDHS) to ensure that drinking water provided by public water supplies is protective of public health.

Table 6-18 shows that none of the COPCs in soils are predicted to migrate to groundwater at concentrations exceeding the potentially applicable water quality criteria, except for benzene and naphthalene. Also, in these cases, only the predictions based on the RME concentrations in soil exceed the PRGs, while those based on the volume-weighted means do not exceed either the MCL or NL. These results, therefore, indicate that the mass of these two contaminants remaining in soils does not represent future sources of health concerns, based on the drinking water criteria. Thus, the soil removal actions have successfully reduced VOCs to levels that do not pose future impacts to groundwater beneath the Site.

6.6 UNCERTAINTY ANALYSIS

The risk estimates for this Site must be considered in terms of the conditions assumed in identifying the COPCs, quantifying exposures, estimating dose-response variables, and characterizing risks. USEPA and DTSC guidance was used in the calculations of the risk estimates. Health protective assumptions were used in the risk evaluations, such as those outlined below:

- The metals identified as COPCs at this Site were determined by comparing onsite and background concentrations. These comparisons were conducted using a combination of a comparison of maximum reported concentrations and statistical testing, depending on the frequency of detection of each metal. This process could have resulted in uncertainty in the selection of COPCs, since the limited number of detections for certain metals (e.g., antimony, arsenic, and mercury) precluded a statistical comparison to background. In order to ensure that the background comparisons were placed into proper perspective, therefore, a regional background dataset was used that contains more samples than the local background dataset. This comparison showed that only antimony may be elevated over metal concentrations found in soils in California. Nevertheless, the identification of metals as COPCs may be a source of uncertainty in the evaluation of post-remediation risks for this Site.

- The results of three soil sample analyses collected as part of sump closure activities by Kleinfelder [2006] were received after the risks were calculated for this Site. One of these samples was collected beneath the sump sampled at SN-10. Since the analytical results for the two depths sampled at SN-10 were used in this risk assessment, only the two other samples represent areas not included in this risk assessment. The reported analytical results for those samples collected in the other two areas indicate that all VOCs (except acetone) and SVOCs were not detected and metals were not considered hazardous. Some uncertainty may have occurred by not including the analyses from these two other areas in the risk assessment, but given the lack of detection of VOCs and SVOCs would likely result in the calculation of lower exposure point concentrations. Consequently, excluding the analyses from these two other areas may have resulted in the over-estimation of risks.

- At this Site, reasonable maximum exposures were typically characterized by using the 90^{th} or 95^{th} percentile of the various exposure parameters. Use of these values in calculating risks for future residential, unrestricted Site use is likely to be highly protective. For example, it was assumed that residential receptors would reside on the Site for a total of 30 years, first as a child, then as an adult. A 30-year occupancy of a house is the 95^{th} percentile residence time in the United States. This contrasts with the average residential occupancy of 9 years [USEPA, 1997], thereby indicating that on the basis of this factor alone, risks may be overestimated for the typical resident by a factor of about three. Nevertheless, use of the 95^{th} percentile of residential occupancy ensures that the risk estimates provided in this report are health protective.

- The health protective assumption was also made that future unrestricted Site use could result in on-site residents being exposed on a daily basis to the COPCs in soils at the Site. However, the Site is currently entirely paved or covered with structures, and any future development would probably result in much of the Site being paved or covered with structures, as well. Further, the Site has been used in the past for commercial/industrial purposes and is likely to be used for such purposes in the future. Thus, chemical exposures in the future are likely to be substantially less than those used in evaluating risks for this Site.

- The potency equivalency factors (PEFs) used in characterizing the potential carcinogenic effects of the C-PAHs also include uncertainties. Of the seven potential C-PAHs, the USEPA and Cal EPA have developed cancer slope factors for only two: benzo(a)pyrene and dibenzo(a,h) anthracene. In order to assess these chemicals as one group, the USEPA and Cal EPA have developed PEFs that are for the most part based on short-term animal tests. The results of these short-term tests were used to extrapolate to longer-term carcinogenic effects. Thus, use of benzo(a)pyrene-equivalents for assessing risks is likely to include various sources of uncertainty.

- As mentioned in Section 6.5.1, soil gas data for benzene and naphthalene were used preferentially to predict indoor vapor exposures. Guidance from both DTSC [2005] and USEPA [2003a] support the preferential use of soil gas data because this approach reduces uncertainties in the equilibrium partitioning and the fate and transport models used to predict vapor intrusion into buildings. The level of uncertainty in the fate and transport analyses conducted for this Site can be determined by comparing the indoor vapor concentrations predicted for benzene and naphthalene using soil gas and soils as the source terms. As naphthalene was not detected in soil gas, the comparison presented below is based on the typical detection limit of 60 ug/m^3 for naphthalene in soil gas.

Predicted indoor vapor concentrations[1] (mg/m^3) by source term

Area	Entire Site		Manley Oil Building	
Source term	**Soils[2]**	**Soil gas**	**Soils[2]**	**Soil gas**
Benzene	2.62E-04	1.03E-04	1.09E-04	3.79E-05
Naphthalene	3.75E-03	<4.37E-5	1.17E-02	<4.37E-5

Notes:

1 – Assuming exposures over a 30-year period for emissions from soils and over an infinite period for soil gas.

2- volume-weighted concentration (see Appendix I).

As shown above, using soils rather than soil gas as a source term for indoor vapor concentrations of benzene and naphthalene could result in predicted indoor vapor concentrations that are higher for both chemicals and comparably higher risks. For benzene, predicted indoor vapor concentrations are approximately two times higher across the entire site and almost four times higher for the Manley Oil Building. Naphthalene shows a larger degree of uncertainty. Indoor vapor concentrations for naphthalene are two to three orders of magnitude higher when estimated using soils as a source term than when using the soil gas detection limits. Since naphthalene was not detected in soil gas, the indoor vapor predictions for naphthalene based on the soil gas detection limits represent the concentrations *below* which naphthalene may be present. This difference appears to indicate that naphthalene in soils is less volatile than would be predicted using equilibrium partitioning models, one of the key reasons that DTSC [2005] and USEPA [2003a] recommend the preferential use of soil gas data to estimate indoor vapor intrusion.

- For naphthalene, it should also be noted that naphthalene was primarily detected in soils from 20-25 ft bgs, as shown below.

Depth (feet bgs)		Volume Weighted Concentration (mg/kg)
Minimum	Maximum	
0	5	0.01
>5	10	0.005
>10	15	0.005
>15	20	0.005
>20	25	1.2

As all soil gas samples were collected at approximately 7 feet bgs, the soil gas analytical results should reflect any volatilization of naphthalene from soils at 20-25 feet bgs. This is particularly important in the area beneath the pit just south of the Manley Oil Building where it was not feasible to collect soil samples near the water table and yet soil gas samples demonstrated that naphthalene was not present in soil vapors. Thus, the soil gas data for naphthalene at the Site is appropriate to use in modeling indoor vapor intrusion (i.e., the soil gas data should be representative of all naphthalene sources at the Site).

- The Cal EPA naphthalene inhalation slope factor was used in the calculation of indoor vapor risks. This is notable because the USEPA has not developed a cancer slope factor for naphthalene. The use of the Cal EPA inhalation slope factor results in carcinogenic risks for naphthalene at the detection limit in soil gas that shows risks based on direct vapor measurements are well below the point of departure, although risks from modeled vapor emissions from soils are higher. The noncarcinogenic HI for naphthalene is substantially below the hazard threshold of 1, which indicates that risks for naphthalene exposures based on Cal EPA toxicity analysis have been overestimated relative to those based on USEPA toxicity analyses.

- Finally, it should be recognized the evaluations of VOC migration to groundwater were conducted assuming that groundwater beneath the Site is suitable for use as a potable water supply and is uncontaminated. However, groundwater at the Site is not currently suitable for beneficial purposes because of the presence of: 1) naturally high levels of dissolved solids and nitrates, 2) the constituents of natural petroleum hydrocarbons, and 3) the occurrence of upgradient sources of hydrocarbon and solvent contamination. Evaluations of future groundwater use will be presented in the groundwater management plan for the entire former Aliso Street MGP.

6.7 ECOLOGICAL RISK ASSESSMENT

A scoping assessment was conducted to assess whether the potential for ecological risk exists at this Site [DTSC 1996, 1999]. The scoping assessment addresses the following three questions:

- Are there any potentially affected habitats or receptors of concern present at or near the Site?

- Are there potentially complete pathways through which biological resources of concern may be exposed to released chemicals?
- Are potentially harmful chemicals released or present at the Site?

A negative response to any one of the above questions indicates the absence of potential ecological impacts.

The Site consists of one city block in an area of Los Angeles used for commercial, light industrial, public institutions, and transportation purposes. The surrounding properties are used for various industrial purposes, including a car storage and towing facility (north), fish processing (west), and cold storage (south). Due east of the Site are a number of railroad and transit tracks. The Site has buildings on the northern and southern boundaries and is otherwise entirely covered by asphalt paving or concrete slabs.

The nearest surface water (i.e., the Los Angeles River) is located east of the Site and in this section of Los Angeles has a concrete-lined channel. Groundwater is found at a depth of about 25 to 30 feet bgs and in the vicinity of the river is between 5 to 20 feet below the bottom of the channel. Groundwater, therefore, does not discharge to the surface. Groundwater flow is also generally towards the south and not directly towards the river. Based on these observations, there is no habitat available for terrestrial plants or animals and none for aquatic receptors. Thus, no biological receptors of regulatory, ecological, or commercial/recreational concern are likely to be at or near the Site.

The potential for ecological risks exists when ecological receptors may be exposed to chemical constituents through complete exposure pathways. At this Site, the ecological exposure pathways are considered to be incomplete because 1) no terrestrial or aquatic biota were identified as biological receptors of concern, 2) biota cannot contact soils that are currently paved or under a building, 3) groundwater is too deep for plants or animals to contact, and 4) groundwater does not discharge at locations where aquatic biota could be exposed. Thus, biota is not likely to be exposed to the affected environmental media.

Without complete exposure pathways, ecological receptors are not exposed to any chemicals of potential concern. Therefore, as a result of this determination, the potential that this Site represents risks to ecological receptors is negligible.

6.8 RISK SUMMARY

The remedial action objective for the removal of MGP-related *or other* residuals conducted at this Site was to restore the Site to conditions requiring no land use restrictions (i.e., to residential standards), although the Site is currently used for commercial/industrial purposes and is likely to be used for similar purposes in the future.

Based on the determinations described above using available data, the removal activities have effectively reduced the C-PAH concentrations at the Site to background levels. The residual concentrations of C-PAH in soils across the Site are sufficiently low that if subsurface soils were redistributed on the surface, the resulting concentrations would be lower than background levels.

In other words, the risks from C-PAHs to future residents potentially living on the Site under post-excavation conditions would be no more than people living and working elsewhere in southern California.

From a cumulative risk standpoint, since C-PAH levels are sufficiently low that they would not represent a significant risk above background, the cumulative lifetime incremental cancer risk for the PAHs, metals, is less than 1×10^{-6}. Only risks estimated for exposures to VOCs in indoor air exceed 1×10^{-6}, ranging up to 8×10^{-6} for potential exposure to tetrachloroethene. Nonetheless these risk estimates are within the acceptable cancer risk range of 10^{-6} to 10^{-4} recommended by the USEPA and DTSC.

Similarly, for noncarcinogenic health effects, the cumulative hazard index calculated for all of the PAHs, metals, and VOCs is well below the critical threshold value of 1.0 and, thus, no adverse noncancer health effects would be expected under a residential exposure scenario.
For groundwater, the removal activities have removed soils and sufficient chemical mass that predicted impacts of chemical migration to groundwater are less than potentially applicable water quality criteria. In particular, based on the mass remaining in soils, the predicted concentrations of benzene and naphthalene in groundwater do not exceed the drinking water MCL and Notification Level, respectively.

No habitat is available at the Site for terrestrial plants or animals and none for aquatic receptors. On this basis there are no complete exposure pathways for ecological receptors to be exposed to COPCs at this Site. Therefore, the potential that this Site represents risks to ecological receptors is negligible.

The available data also indicate that removal activities conducted at the Site have been successful in achieving the removal action objective for the Site and that the COPCs (PAHs, metals, and VOCs) have been remediated to levels that are protective of human health for unrestricted land use, except possibly for tetrachloroethene detected in soil gas.

The Department of Toxics Substances Control has determined (please refer to the DTSC comments dated July 28, 2006 in Appendix V) that "....the impact of tetrachloroethene at the site remains unresolved". DTSC further recommends that, in order to use the Site for sensitive users (including residential), one of the following three actions may be necessary: "(1) the impact of tetrachloroethene to the site be reduced to levels which would allow unrestricted use, or (2) a land use restriction be enacted to limit site use to non-sensitive uses, including residential use, or (3) implement engineering controls that would allow mixed use."

7. CONCLUSION

The removal action activities at Aliso Sector C Block N former MGP Site located at 410 Center Street, Los Angeles, California have been completed, as stated in the approved Removal Action Workplan (RAW). All MGP-related and other contaminated soils in the area located at the northwest corner of the Site and the area inside the building have been excavated and removed.

A closure report entitled " Sump Closure Report, Former Aliso street MGP Site, 410 North Center Street, Los Angeles, California", prepared by Klienfelder, the consulting firm representing the current owner of the Site, related to oil sump cleanup is submitted with this report to DTSC in a separate volume.

All of the investigation and removal activities at the Site were performed under the direct oversight of the Department of Toxic Substances Control (DTSC). Therefore, through this remedial action, the requirements of the Removal Action Workplan (RAW) have been satisfied, and the Southern California Gas Company (SCG) requests from DTSC a Certificate of Completion for implementation of the RAW.

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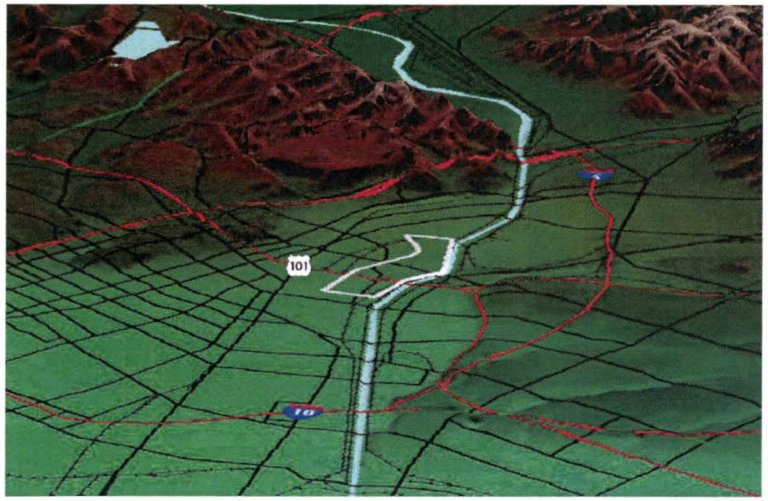
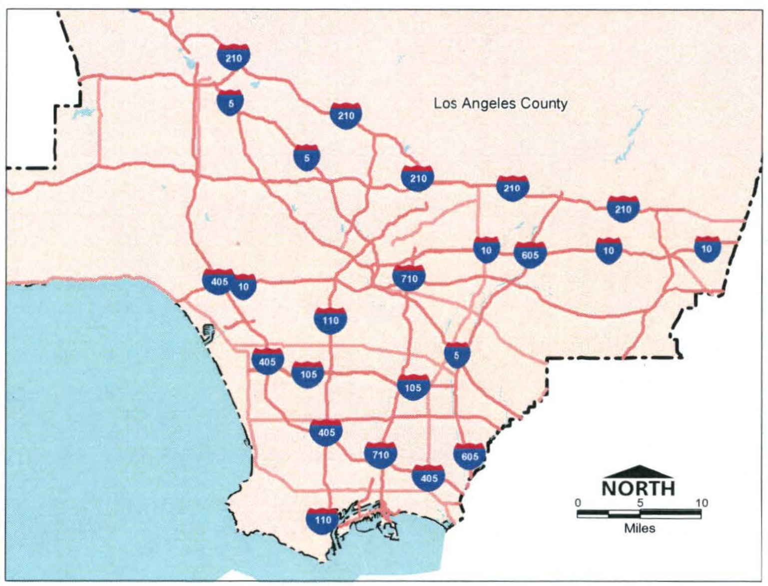
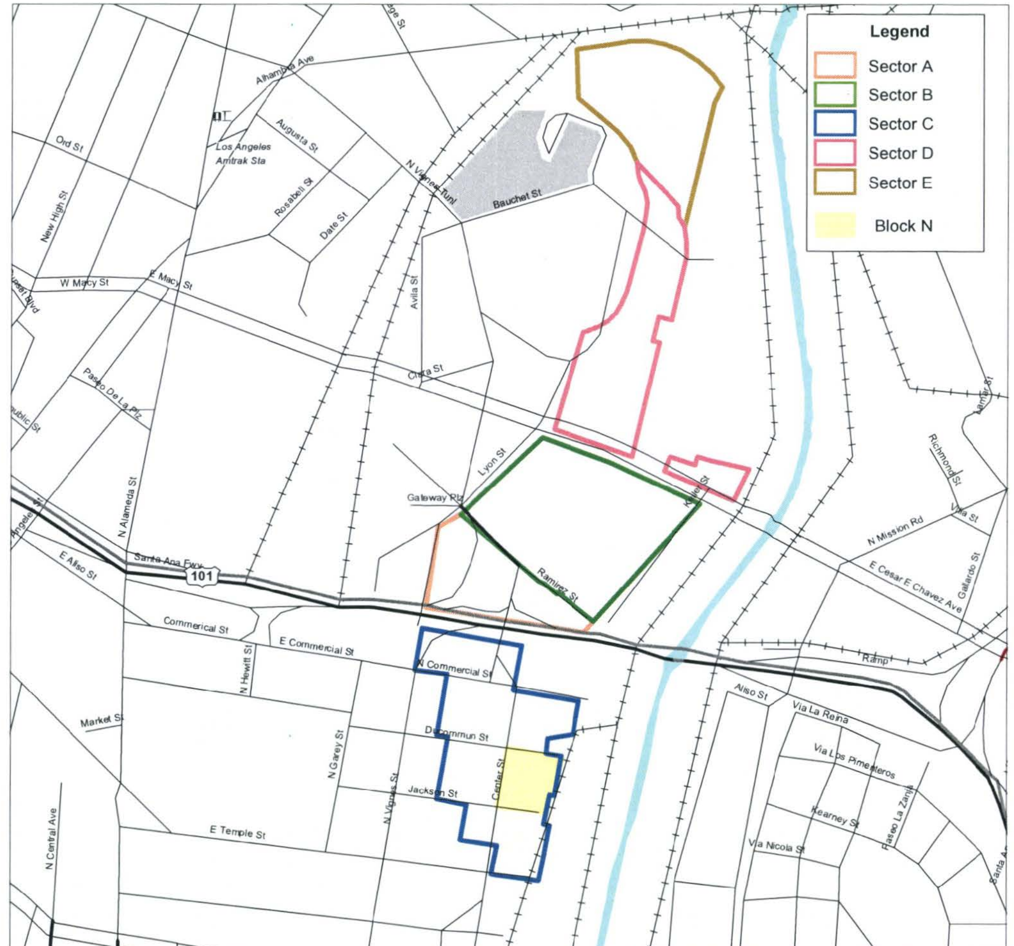






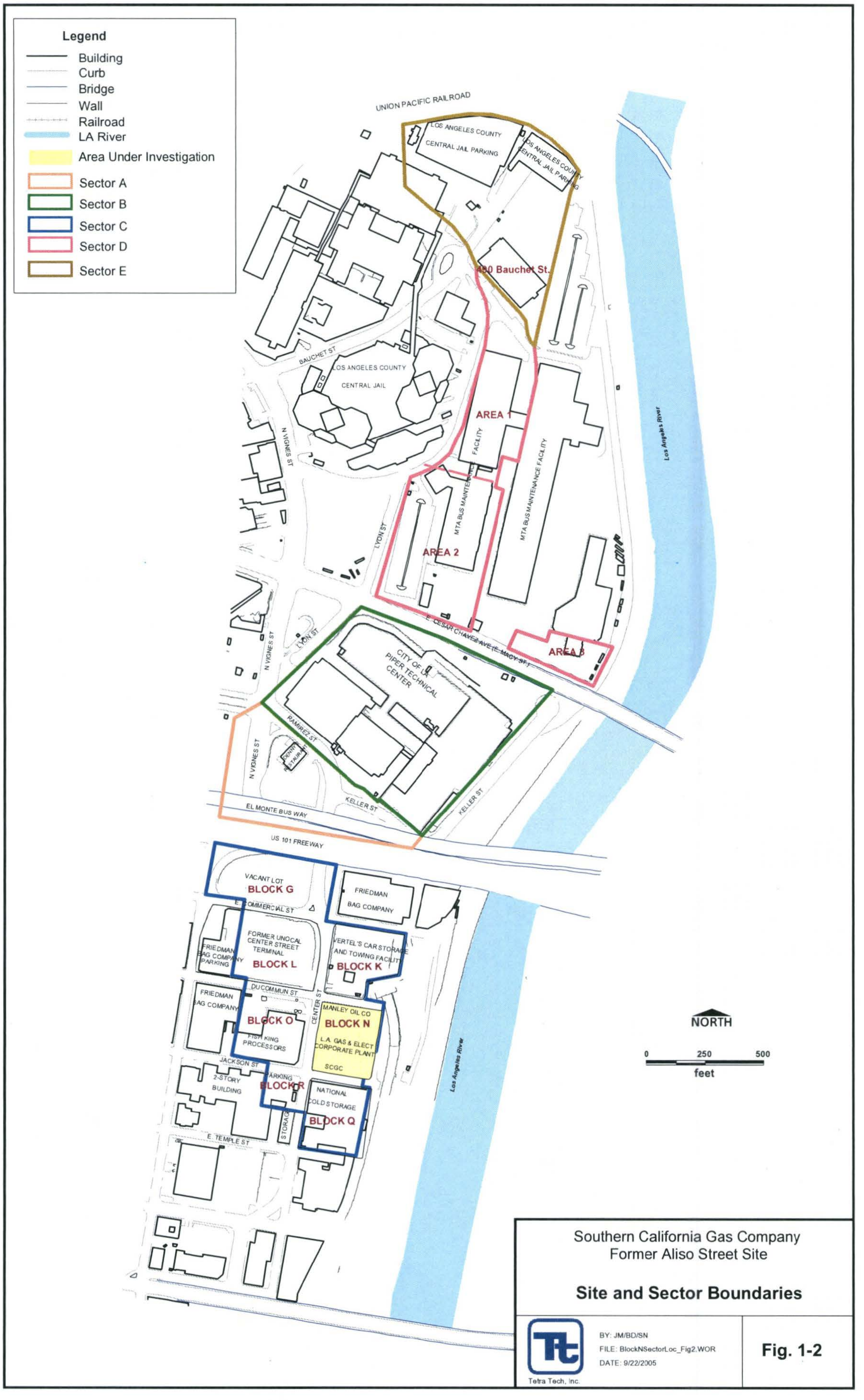
Southern California Gas Company
Former Aliso Street Site

Site Location Map

Tetra Tech, Inc.

BY: JM/BD/SN
FILE: Site_locationFig1.WOR
DATE: 9/22/2005

Fig. 1-1



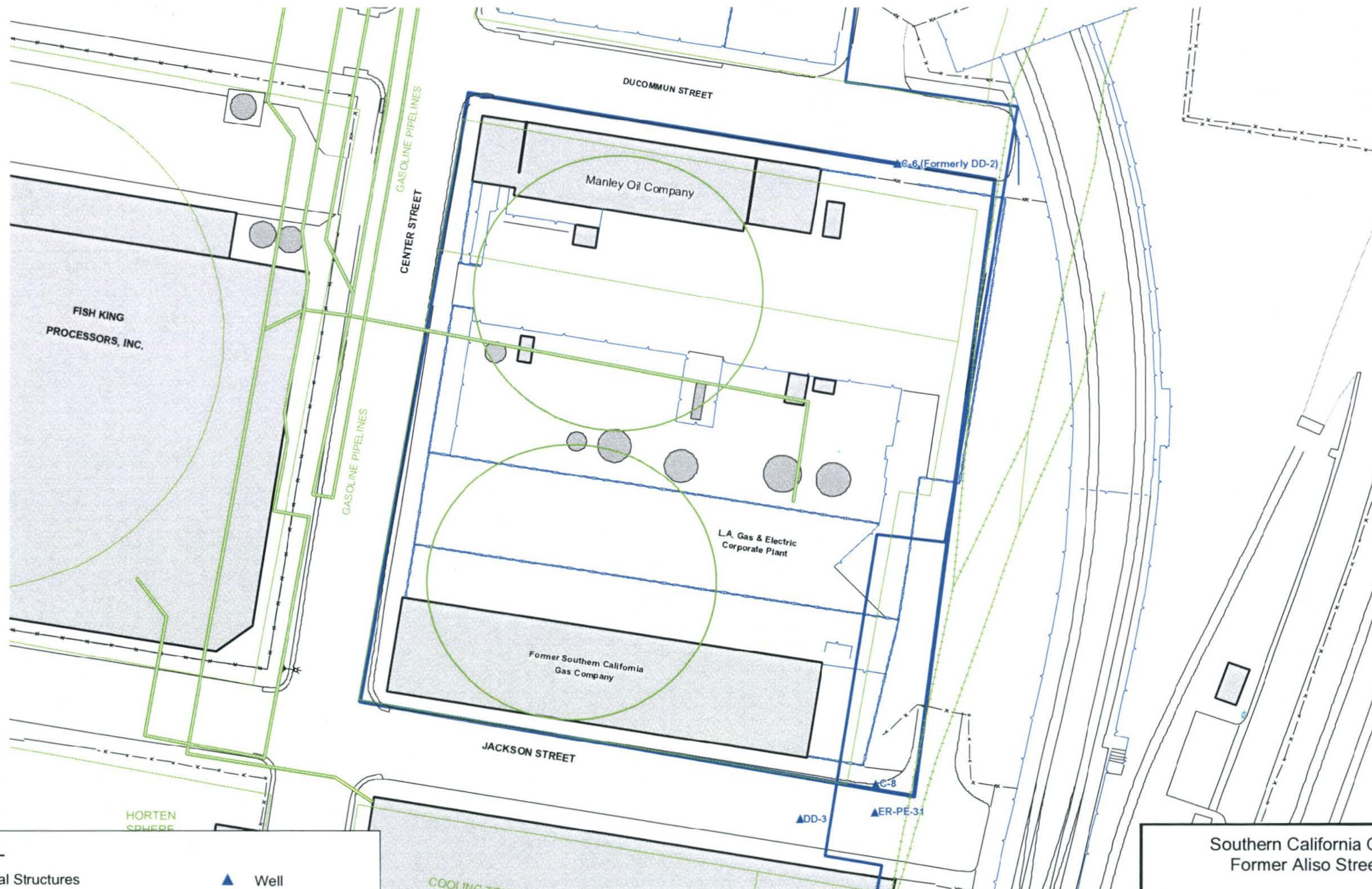
Southern California Gas Company
Former Aliso Street Site

Site and Sector Boundaries

Tetra Tech, Inc.

BY: JM/BD/SN
FILE: BlockNSectorLoc_Fig2.WOR
DATE: 9/22/2005

Fig. 1-2



Legend

- Historical Structures
- Block N Boundary
- Facilities
- Former MGP Boundary (Sector C)
- Well
- Wall
- Fence

Southern California Gas Company
Former Aliso Street MGP Site

Block N Site Location

Tetra Tech, Inc.

BY: JM/BD/SN
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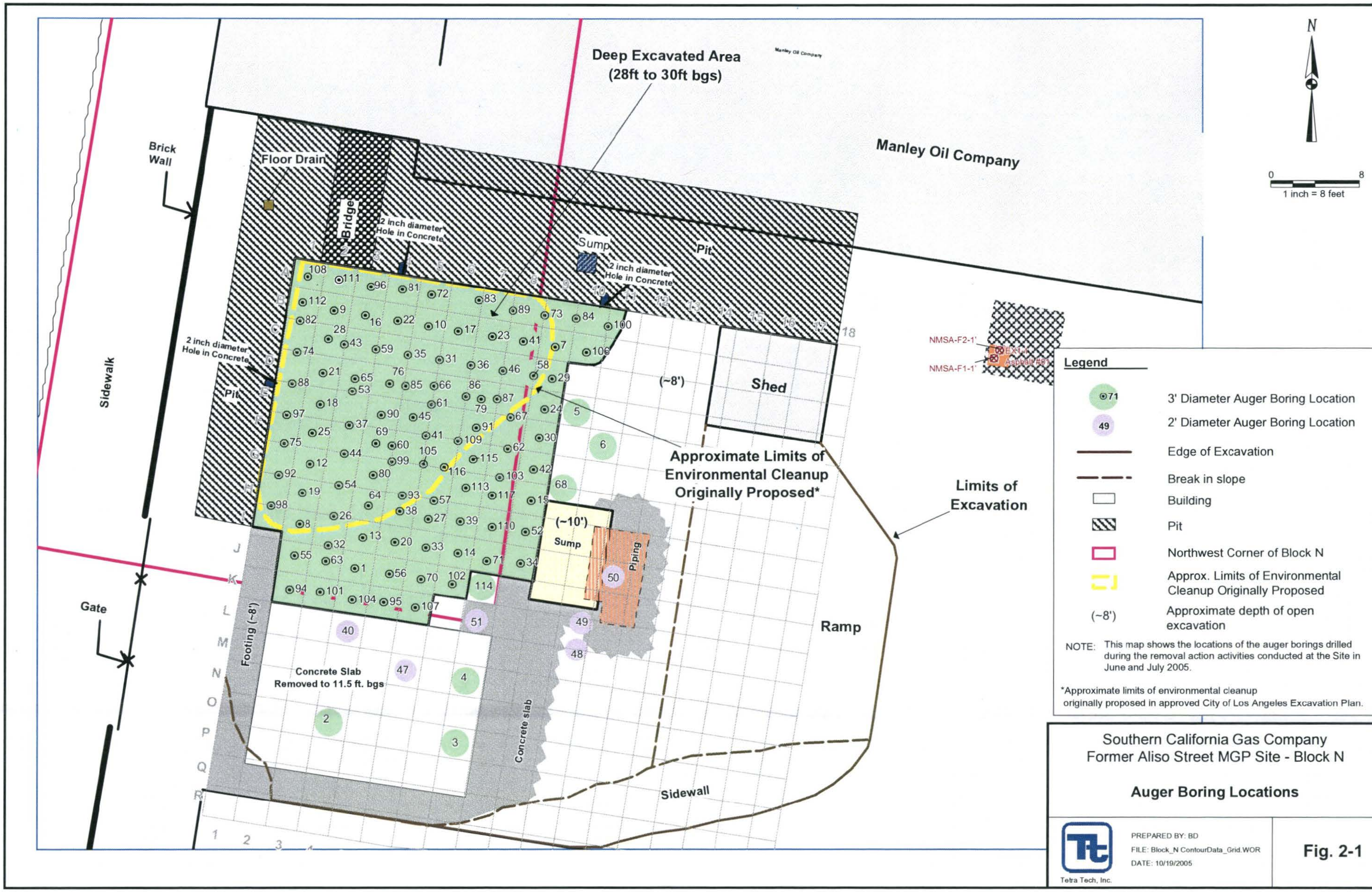
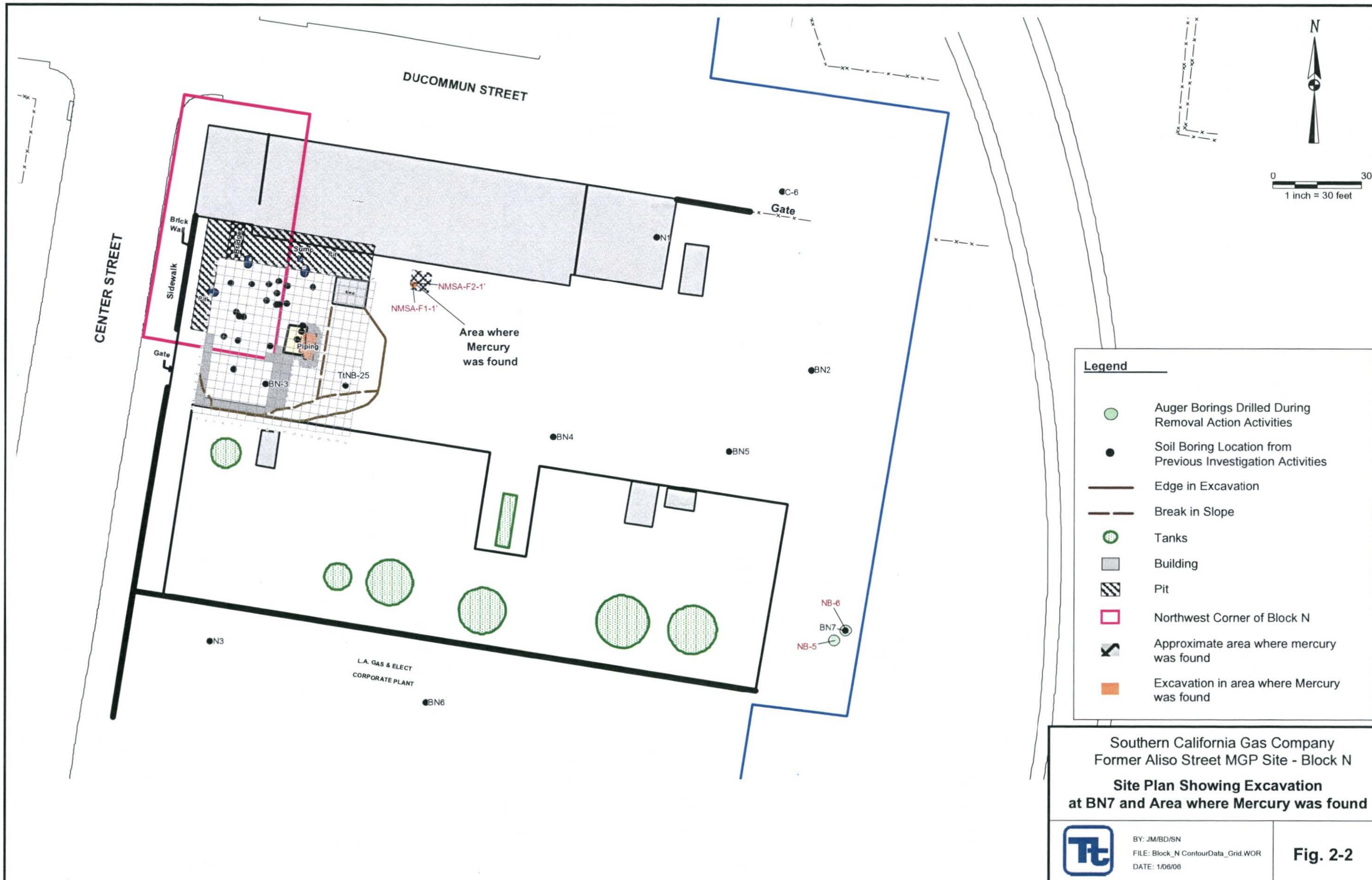
DATE: 1/6/2006

Fig. 1-3



Deep Excavated Area
(28ft to 30ft bgs)
Manley Oil Company
Brick Wall
Floor Drain
Bridge
2 inch diameter Hole in Concrete
Sump
Pit
Sidewalk
(~8')
Shed
Approximate Limits of Environmental Cleanup Originally Proposed*
Limits of Excavation
(~10')
Sump
Piping
Gate
Footing (~8')
Concrete Slab Removed to 11.5 ft. bgs
Concrete slab
Ramp
Sidewall
NMSA-F2-1'
NMSA-F1-1'
N
0
8
1 inch = 8 feet
Legend
3' Diameter Auger Boring Location
2' Diameter Auger Boring Location
Edge of Excavation
Break in slope
Building
Pit
Northwest Corner of Block N
Approx. Limits of Environmental Cleanup Originally Proposed
(~8') Approximate depth of open excavation
NOTE: This map shows the locations of the auger borings drilled during the removal action activities conducted at the Site in June and July 2005.
*Approximate limits of environmental cleanup originally proposed in approved City of Los Angeles Excavation Plan.
Southern California Gas Company
Former Aliso Street MGP Site - Block N
Auger Boring Locations
Tetra Tech, Inc.
PREPARED BY: BD
FILE: Block_N ContourData_Grid.WOR
DATE: 10/19/2005
Fig. 2-1



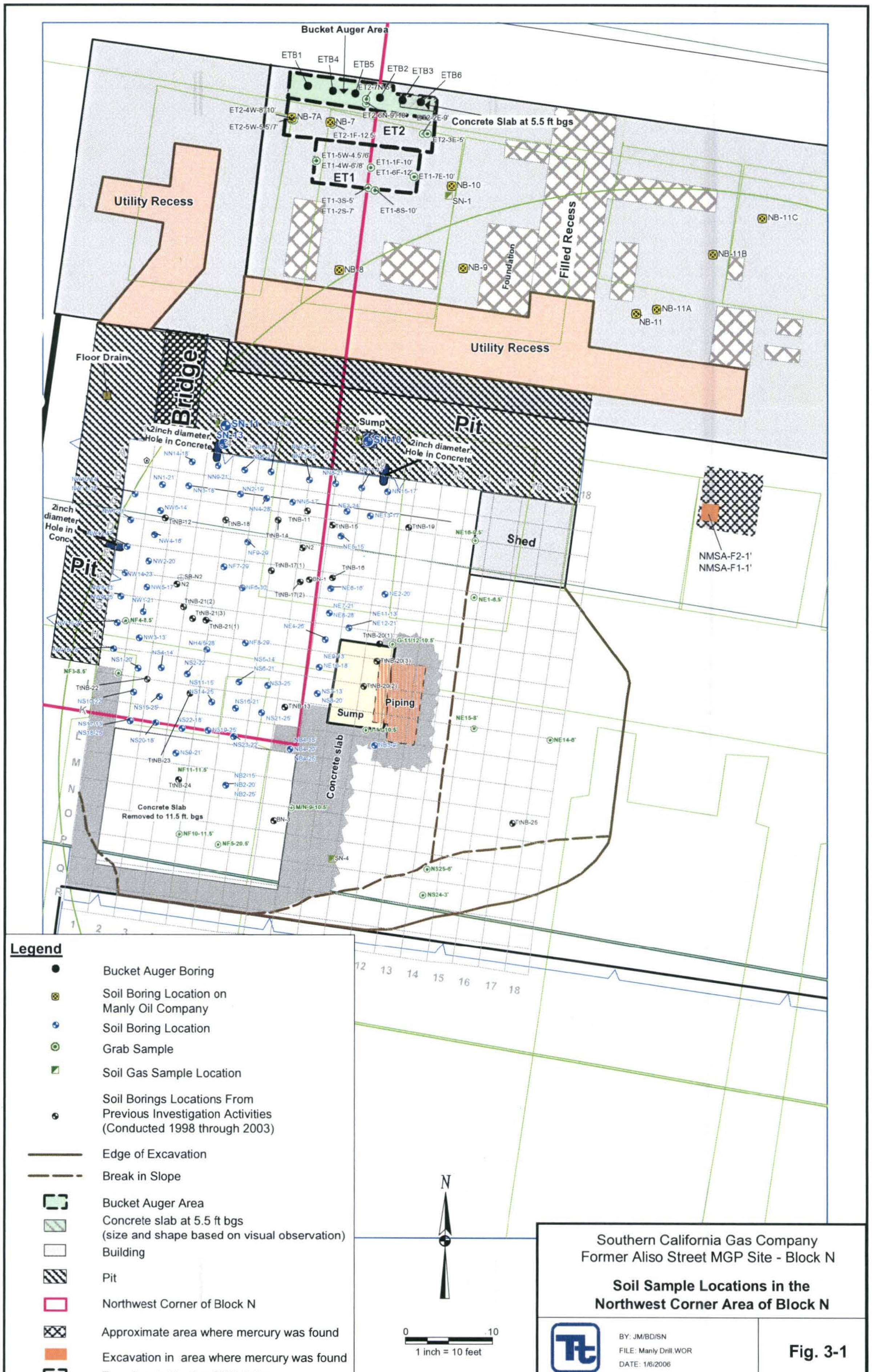
Southern California Gas Company
Former Aliso Street MGP Site - Block N

Site Plan Showing Excavation at BN7 and Area where Mercury was found

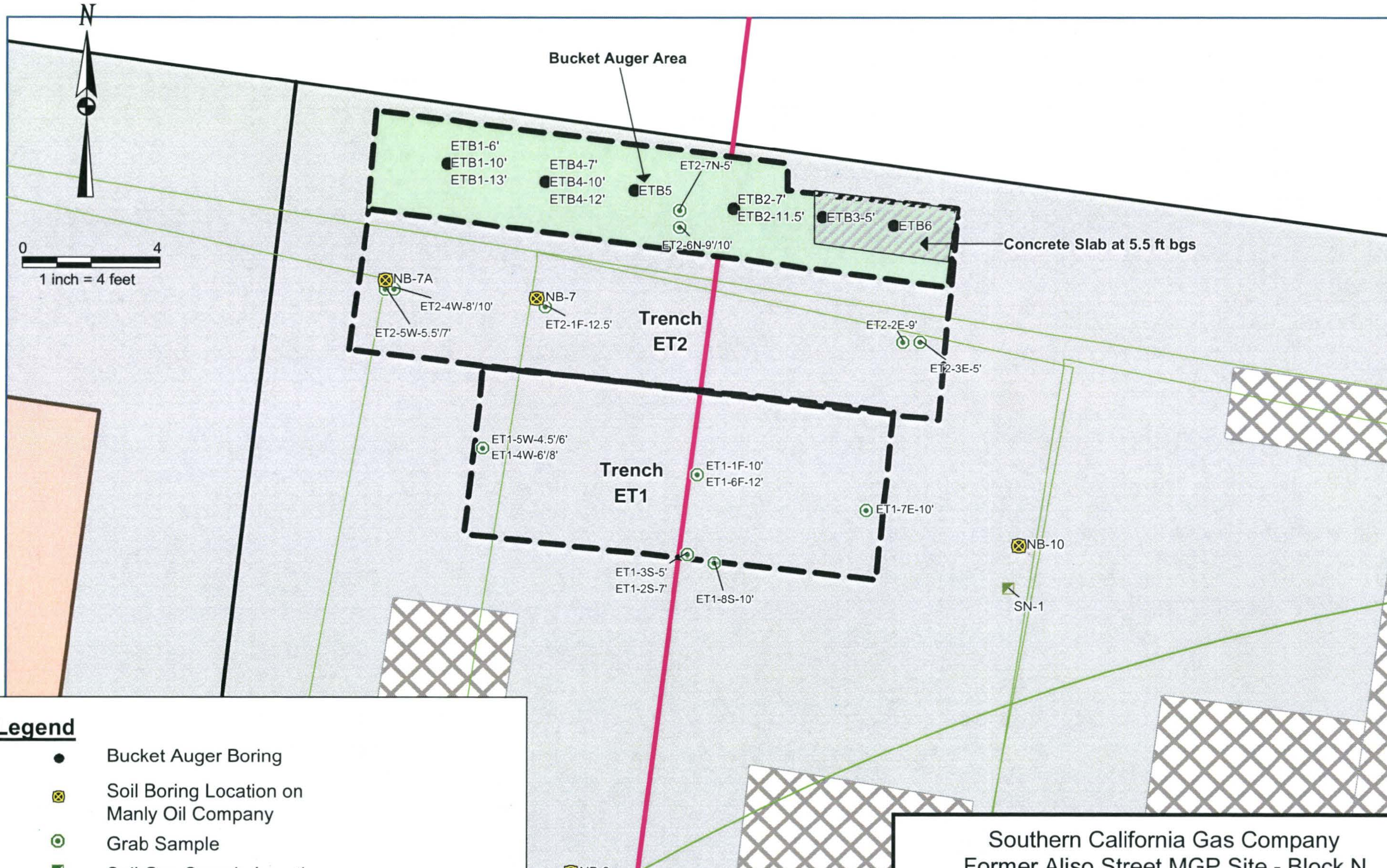
Tetra Tech, Inc.

BY: JM/BD/SN
FILE: Block_N ContourData_Grid.WOR
DATE: 1/06/06

Fig. 2-2



Bucket Auger Area
ETB1
ETB4
ETB5
ETB2
ETB3
ETB6
ET2
ET1
Concrete Slab at 5.5 ft bgs
NB-7A
NB-7
NB-8
NB-9
NB-10
SN-1
NB-11
NB-11A
NB-11B
NB-11C
Utility Recess
Utility Recess
Foundation
Filled Recess
Floor Drain
Bridge
Pit
Pit
Pit
Sump
2inch diameter Hole in Concrete
2inch diameter Hole in Concrete
2inch diameter Hole in Conc
SN-11
SN-13
SN-10
Shed
NMSA-F2-1'
NMSA-F1-1'
Piping
Sump
Concrete slab
Concrete Slab Removed to 11.5 ft. bgs
SN-4
TtNB-25
Legend
Bucket Auger Boring
Soil Boring Location on Manly Oil Company
Soil Boring Location
Grab Sample
Soil Gas Sample Location
Soil Borings Locations From Previous Investigation Activities (Conducted 1998 through 2003)
Edge of Excavation
Break in Slope
Bucket Auger Area
Concrete slab at 5.5 ft bgs (size and shape based on visual observation)
Building
Pit
Northwest Corner of Block N
Approximate area where mercury was found
Excavation in area where mercury was found
Trenches in Manley Oil Building
N
0
10
1 inch = 10 feet
Southern California Gas Company
Former Aliso Street MGP Site - Block N
Soil Sample Locations in the Northwest Corner Area of Block N
Tetra Tech, Inc.
BY: JM/BD/SN
FILE: Manly Drill.WOR
DATE: 1/6/2006
Fig. 3-1



Legend

- Bucket Auger Boring
- Soil Boring Location on Manly Oil Company
- Grab Sample
- Soil Gas Sample Location
- Bucket Auger Area
- Trenches in Manley Oil Building
- Building
- Concrete Slab at 5.5 ft bgs (size and shape based on visual observation)
- Northwest Corner of Block N

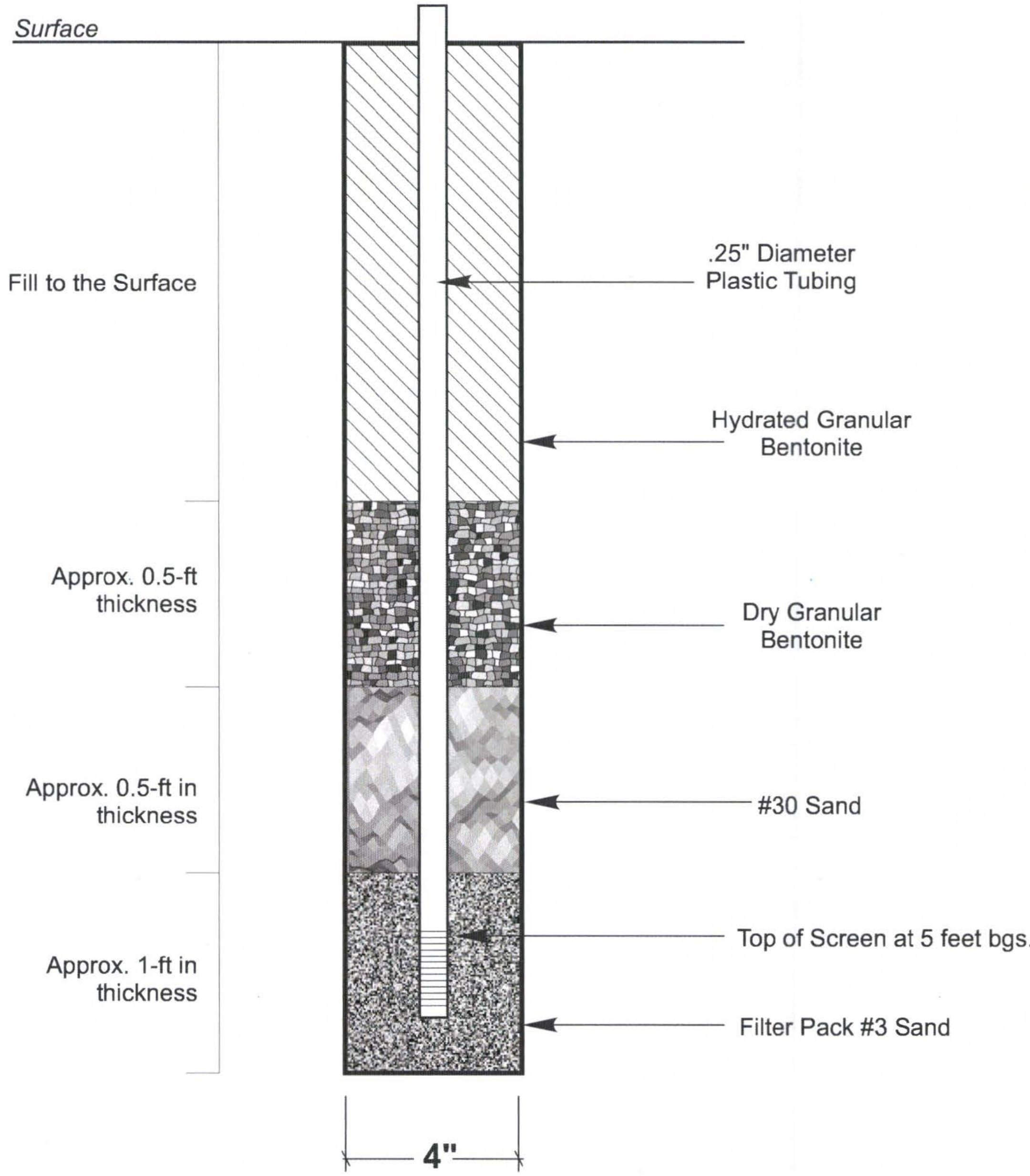
Southern California Gas Company
Former Aliso Street MGP Site - Block N

Trenches and Bucket Augered Area in Manley Oil Building

Tetra Tech, Inc.

BY: JM/BD/SN
FILE: Manly Drill.WOR
DATE: 12/16/2005

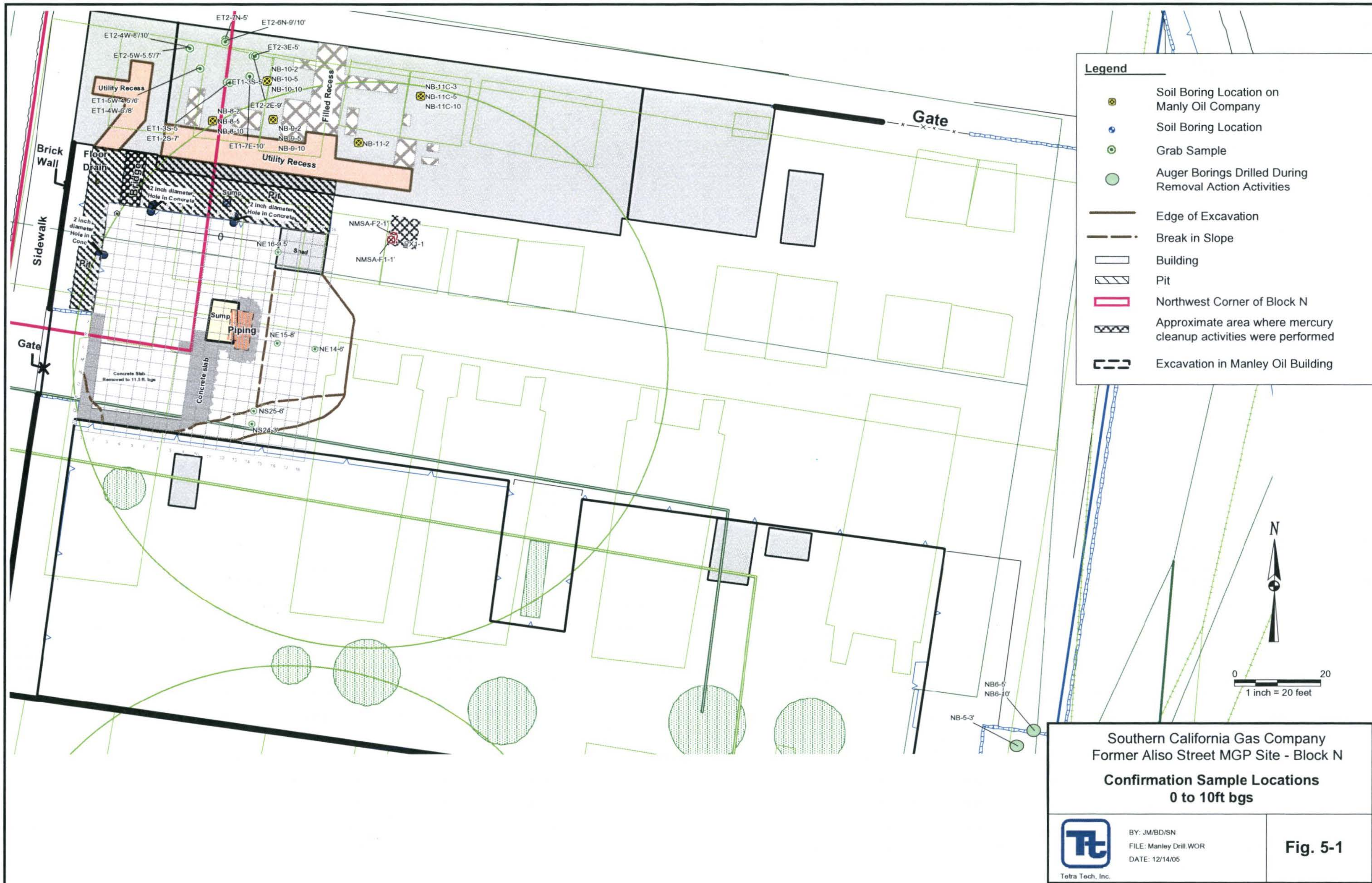
Fig. 3-2



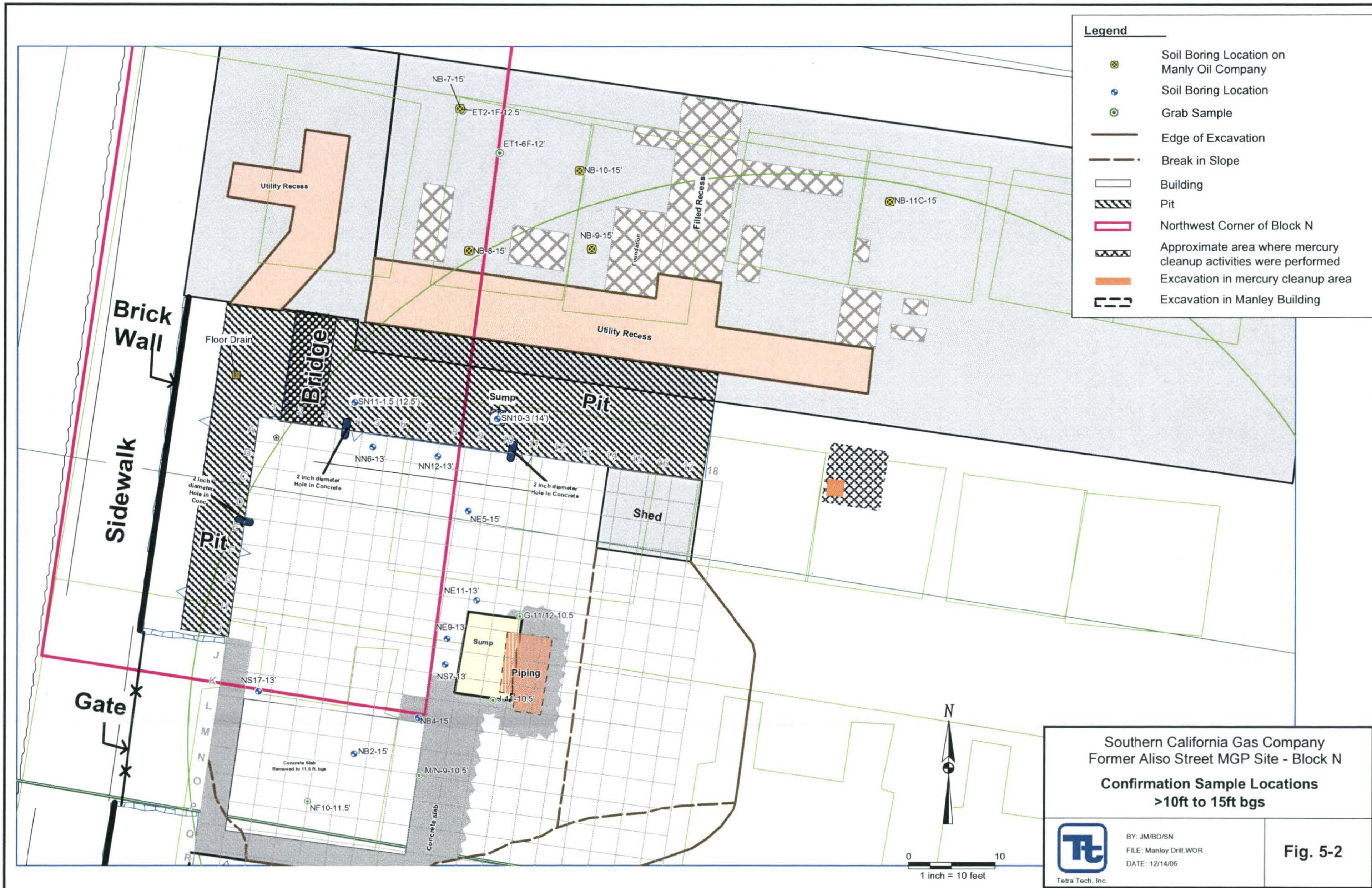
Multi-Depth Gas Probe
Construction Diagram

NOT TO SCALE

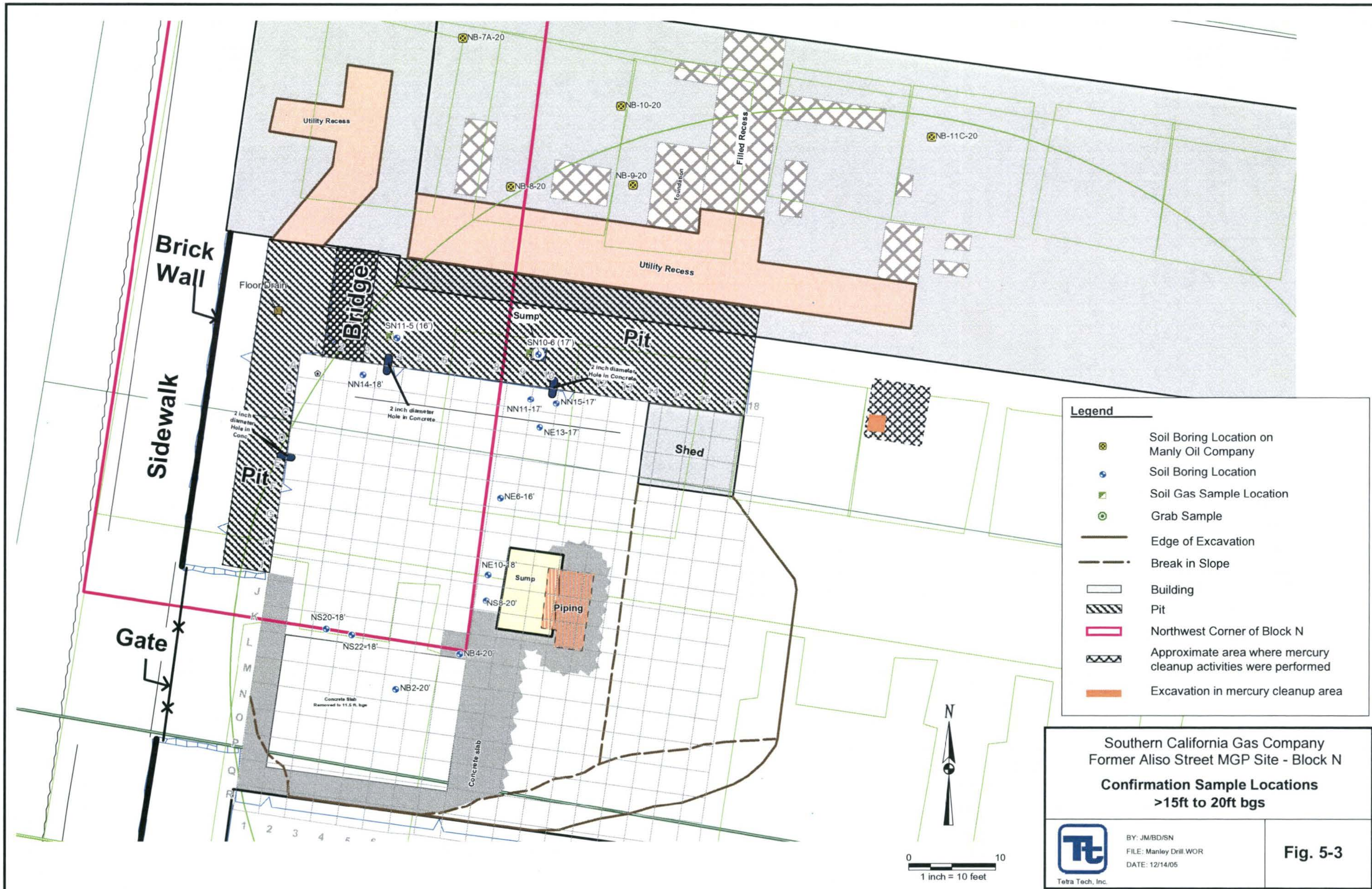
Southern California Gas Company Former Ventura MGP Site **TYPICAL SOIL GAS PROBE CONSTRUCTION**	
Tetra Tech, Inc. Prepared By: M.ROMERO File: 15969-11_Gas-Probe.cdr Date: 11/11/05	**FIGURE 3-3**



ET2-7N-5'
ET2-6N-9'/10'
ET2-4W-8'/10'
ET2-5W-5.5'/7'
ET2-3E-5'
NB-10-2
NB-10-5
NB-10-10
ET1-3S-5'
Utility Recess
ET1-5W-4.5'/6'
ET1-4W-6'/8'
ET2-2E-9'
Filled Recess
NB-11C-3
NB-11C-5
NB-11C-10
NB-8-2
NB-8-5
NB-8-10
ET1-3S-5'
ET1-2S-7'
ET1-7E-10'
NB-9-2
NB-9-5
NB-9-10
NB-11-2
Gate
Brick Wall
Floor Drain
Bridge
2 inch diameter Hole in Concrete
Sump
Pit
2 inch diameter Hole in Concrete
2 inch diameter Hole in Conc
Pit
Sidewalk
NE16-9.5'
Shed
NMSA-F2-1'
EX1-1
NMSA-F1-1'
0
Sump
Piping
NE15-8'
NE14-6'
Gate
Concrete Slab Removed to 11.5 ft. bgs
Concrete slab
NS25-6'
NS24-3'
NB6-5'
NB6-10'
NB-5-3'
N
0
20
1 inch = 20 feet
Legend
Soil Boring Location on Manly Oil Company
Soil Boring Location
Grab Sample
Auger Borings Drilled During Removal Action Activities
Edge of Excavation
Break in Slope
Building
Pit
Northwest Corner of Block N
Approximate area where mercury cleanup activities were performed
Excavation in Manley Oil Building
Southern California Gas Company
Former Aliso Street MGP Site - Block N
Confirmation Sample Locations
0 to 10ft bgs
Tetra Tech, Inc.
BY: JM/BD/SN
FILE: Manley Drill.WOR
DATE: 12/14/05
Fig. 5-1



Legend
Soil Boring Location on Manly Oil Company
Soil Boring Location
Grab Sample
Edge of Excavation
Break in Slope
Building
Pit
Northwest Corner of Block N
Approximate area where mercury cleanup activities were performed
Excavation in mercury cleanup area
Excavation in Manley Building
NB-7-15'
ET2-1F-12.5'
ET1-6F-12'
NB-10-15'
NB-11C-15'
NB-9-15'
NB-8-15'
Utility Recess
Filled Recess
Foundation
Utility Recess
Brick Wall
Floor Drain
Bridge
Pit
Sump
SN11-1.5 (12.5')
SN10-3 (14')
NN6-13'
NN12-13'
2 inch diameter Hole in Concrete
2 inch diameter Hole in Concrete
Sidewalk
Pit
NE5-15'
Shed
NE11-13'
G-11/12-10.5'
NE9-13'
Sump
Piping
NS7-13'
NS17-13'
Gate
NB4-15'
NB2-15'
Concrete Slab Removed to 11.5 ft. bgs
M/N-9-10.5'
NF10-11.5'
Concrete slab
N
0
10
1 inch = 10 feet
Southern California Gas Company
Former Aliso Street MGP Site - Block N
Confirmation Sample Locations
>10ft to 15ft bgs
Tetra Tech, Inc.
BY: JM/BD/SN
FILE: Manley Drill.WOR
DATE: 12/14/05
Fig. 5-2


NB-7A-20
NB-10-20
NB-11C-20
NB-9-20
NB-8-20
Utility Recess
Filled Recess
Foundation
Utility Recess
Brick Wall
Floor Drain
Bridge
Sump
Pit
SN11-5 (16')
SN10-6 (17')
2 inch diameter Hole in Concrete
NN14-18'
2 inch diameter Hole in Concrete
NN11-17'
NN15-17'
NE13-17'
Shed
Sidewalk
Pit
NE6-16'
NE10-18'
Sump
NS8-20'
Piping
NS20-18'
NS22-18'
NB4-20'
NB2-20'
Concrete Slab Removed to 11.5 ft. bgs
Concrete slab
Gate
Legend
Soil Boring Location on Manly Oil Company
Soil Boring Location
Soil Gas Sample Location
Grab Sample
Edge of Excavation
Break in Slope
Building
Pit
Northwest Corner of Block N
Approximate area where mercury cleanup activities were performed
Excavation in mercury cleanup area
N
0
10
1 inch = 10 feet
Southern California Gas Company
Former Aliso Street MGP Site - Block N
Confirmation Sample Locations
>15ft to 20ft bgs
BY: JM/BD/SN
FILE: Manley Drill.WOR
DATE: 12/14/05
Tetra Tech, Inc.
Fig. 5-3

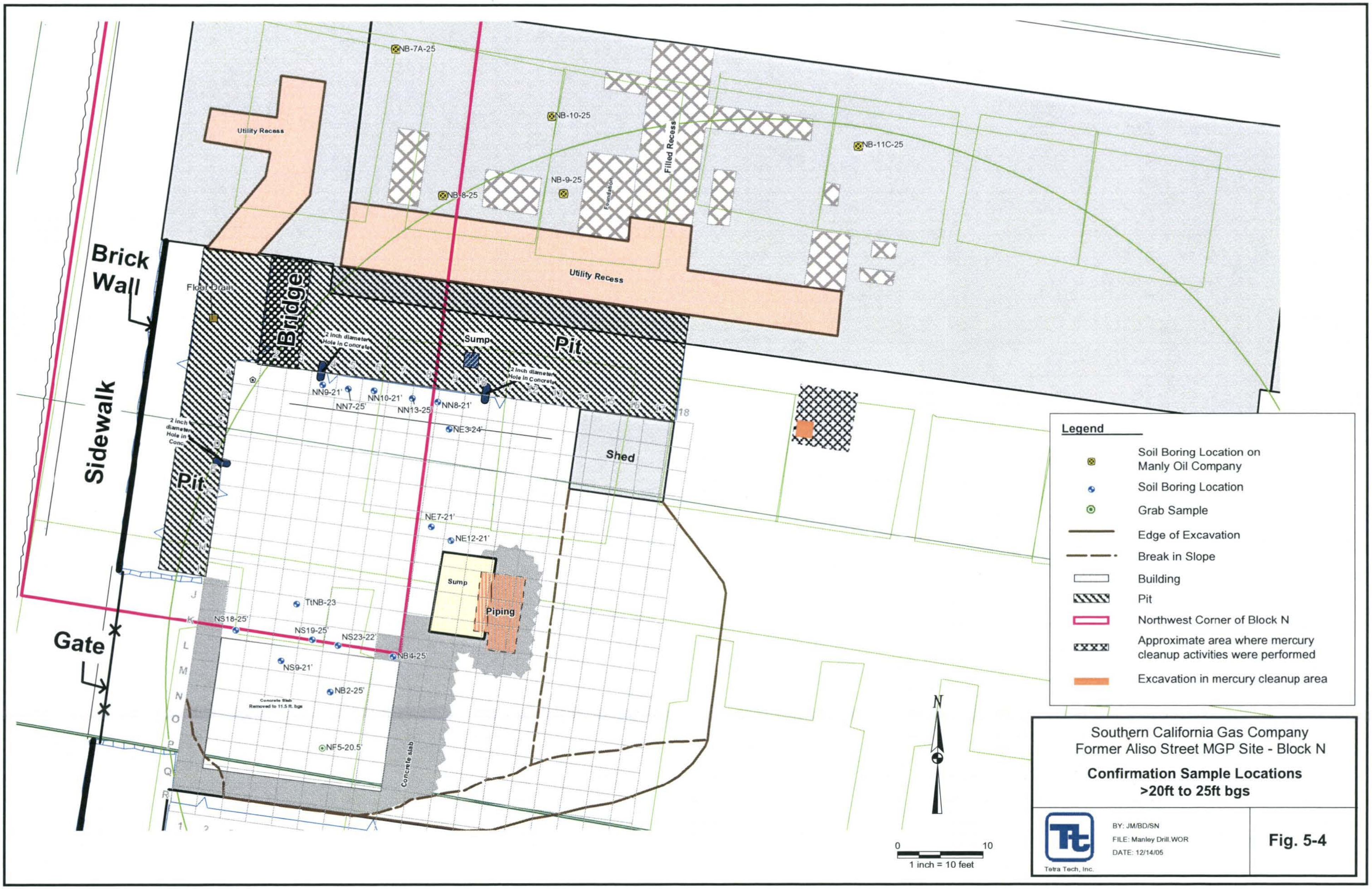

NB-7A-25
NB-10-25
Utility Recess
Filled Recess
NB-11C-25
NB-9-25
Foundation
NB-8-25
Utility Recess
Brick Wall
Floor Drain
Bridge
Sump
Pit
2 inch diameter Hole in Concrete
2 inch diameter Hole in Concrete
NN9-21'
NN10-21'
NN7-25'
NN13-25'
NN8-21'
NE3-24'
Sidewalk
Shed
Pit
NE7-21'
NE12-21'
Sump
Piping
TtNB-23
NS18-25'
NS19-25'
NS23-22'
NB4-25'
NS9-21'
NB2-25'
Concrete Slab Removed to 11.5 ft. bgs
NF5-20.5'
Concrete slab
Gate
Legend
Soil Boring Location on Manly Oil Company
Soil Boring Location
Grab Sample
Edge of Excavation
Break in Slope
Building
Pit
Northwest Corner of Block N
Approximate area where mercury cleanup activities were performed
Excavation in mercury cleanup area
N
0 10
1 inch = 10 feet
Southern California Gas Company
Former Aliso Street MGP Site - Block N
Confirmation Sample Locations
>20ft to 25ft bgs
Tetra Tech, Inc.
BY: JM/BD/SN
FILE: Manley Drill.WOR
DATE: 12/14/05
Fig. 5-4

Table 6-1
Chemicals Detected in Post-Excavation Soils
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Post-remediation		Pre-remediation	
Chemical	**0 to 10 ft bgs**	**>10 ft - 25 bgs**	**0 to 10 ft bgs**	**>10 ft - 25 bgs**
Metals				
Antimony	X			
Arsenic	X	X		
Barium	X		X	X
Cadmium	X			X
Chromium, Total	X		X	X
Cobalt	X		X	
Copper	X		X	X
Lead	X		X	X
Mercury	X		X	
Nickel	X		X	X
Vanadium	X		X	X
Zinc	X		X	X
Carcinogenic PAHs				
Benzo(a)anthracene	X	X	X	X
Benzo(a)pyrene	X	X	X	X
Benzo(b)fluoranthene	X	X	X	X
Benzo(k)fluoranthene	X	X	X	X
Chrysene	X	X	X	X
Dibenzo(a,h)anthracene		X	X	X
Indeno(1,2,3-cd)pyrene	X	X	X	X
Naphthalene	X	X	X	X
Non-carcinogenic PAHs				
Volatile PAHs				
Acenaphthene		X		X
Acenaphthylene		X		X
Anthracene		X	X	X
Fluorene	X	X		X
Phenanthrene	X	X	X	X
Non-volatile PAHs				
Fluoranthene	X	X	X	X
Benzo(g,h,i)perylene	X	X	X	X
Pyrene	X	X	X	X
Other organics				
Benzene	X	X	X	X
n-Butylbenzene		X		
tert-Butylbenzene		X		
sec-Butylbenzene		X		X
Dicyclopentadiene		X		
Ethylbenzene		X		X
Isopropylbenzene		X		X
p-Isopropyltoluene		X		X
n-Propylbenzene		X		X
Tetrachloroethene		X		
Toluene	X	X		
1,2,4-Trimethylbenzene		X		X
1,3,5-Trimethylbenzene		X		
m,p-Xylenes		X		X
o-Xylene		X		X

Definitions:

ft - feet

bgs - below ground surface

Table 6-2
Statistical Comparison
Metals in Background vs. Site Soils
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Detected Concentrations (mg/kg)										Statistical Testing			
	Site		Local Background		Regional Background		Distribution[1]		Percent Detected			Test results		
Metal	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Site	Local Background[2]	Site	Local Background[2]	Statistical Test Used	Statistic[4]	p	COPC Yes or No
0 to 10 ft														
Antimony	**4.75**	**4.75**	**ND**	**ND**	**0.15**	**1.95**	**N**	**-**	**6**	**0**	**-**	**-**	**-**	**Yes[5]**
Arsenic	7.95	10.4	1.3	6.3	0.6	11	N	N	11	38	-	-	-	No[6]
B(a)P equivalents	0.00875	4.0	-	-	0.0002	4.1	N	Log-normal	50	84	WRS test	2.17	0.030	No[8]
Barium	17.8	115	34.3	119	133	1,400	(Log)-Normal	(Log)-Normal	100	100	t-test	-2.84	0.008	No[7,8]
Cadmium	1.65	1.65	1.7	4.5	0.05	1.7	N	N	6	0	-	-	-	No[7]
Chromium (III)	3.3	32.2	2.5	18.8	23	1,579	Log-normal	(Log)-Normal	100	100	t-test[3]	-9.37	<0.0001	No[7,8]
Cobalt	3.1	8.7	3	12.4	2.7	46.9	(Log)-Normal	(Log)-Normal	89	100	t-test	-2.64	0.01	No[7,8]
Copper	7.9	48.9	3.6	20.9	9.1	96.4	Log-normal	(Log)-Normal	100	100	t-test[3]	-9.39	<0.0001	No[7,8]
Lead	2.6	144	2.5	52	12.4	97.1	N	Log-normal	78	100	WRS	-1.04	0.3	No[8]
Mercury	0.1	0.2	ND	ND	0.1	0.9	N	-	28	0	-	-	-	No[6]
Nickel	2.6	14.8	4.4	15.6	9	509	(Log)-Normal	Normal	89	87.5	t-test	-1.87	0.07	No[7,8]
Vanadium	5.8	31.1	10.6	41.8	39	288	(Log)-Normal	(Log)-Normal	100	100	t-test	-2.85	0.008	No[7,8]
Zinc	19.9	69	14.8	79.5	88	236	N	(Log)-Normal	100	100	WRS	-2.81	0.005	No[7,8]

Definitions:

Log-normal	- Data is log-normally distributed.
(Log-)Normal	- Data fit both a log-normal and a normal distribution.
N	- Data is neither log-normally or normally distributed.
ND	- Not detected.
Normal	- Data is normally distributed.
WRS Test	- Wilcoxon rank sum test

Notes:

BOLD	- Metal determined to be elevated above background levels.
1	- Assessed for normality and log-normality using the Shapiro-Wilks test. If the data fit neither distriubtion, "N" is given as the result.
2	- For BaP-equivalents, value is for Southern California background.
3	- Data log-transformed prior to analysis.
4	- t statistic given for the t-test and adjusted Z statistic given for the WRS test.
5	- Maximum site concentration exceeds maximum of local and regional background concentrations
6	- Maximum site concentration does not exceed regional background concentrations; insufficient detections to test statistically
7	- Maximum site concentration does not exceed maximum of local background
8	- Test result indicates there is a significant difference between background and Site concentrations. However, Site concentrations are significantly lower than background concentrations.

Table 6-3
Summary of Sample Designations for Soils at 0-25 ft bgs
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Excavated		Excavated-representative		Present	
Sample_ID	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation
1JACKSN3-SS3						X
2JACKSN3-SS1						X
BN10-10						X
BN10-15						X
BN10-25						X
BN10-3						X
BN10-5						X
BN1-10		X				
BN1-11		X				
BN1-15		X				
BN1-25		X				
BN1-3		X				
BN1-5		X				
BN2-10						X
BN2-15						X
BN2-25						X
BN2-3						X
BN2-5						X
BN3 @10		X				
BN3 @15						X
BN3 @16						X
BN3 @25						X
BN3 @3		X				
BN3 @5		X				
BN4-15						X
BN4-20						X
BN4-25						X
BN4-3						X
BN4-5						X
BN5-10						X
BN5-15						X
BN5-25						X
BN5-3						X
BN5-5						X
BN6-10						X
BN6-15						X
BN6-16						X
BN6-20						X
BN6-25						X
BN7 @10		X				
BN7 @15						X
BN7 @25						X
BN7 @3		X				
BN7 @5		X				
BN8-10						X
BN8-11						X
BN8-15						X
BN8-5						X
BN9-10						X
BN9-3						X
ET1-1F-10	X					
ET1-2S-7					X	
ET1-3S-5					X	
ET1-4W-6/8					X	
ET1-5W-4.5/6					X	
ET1-6F-12					X	
ET1-6F-12D					X	
ET1-7E-10					X	
ET1-8S-10					X	
ET2-1F-12.5					X	
ET2-2E-9					X	
ET2-3E-5					X	
ET2-4W-8 /10					X	
ET2-5W-5.5/7					X	

Table 6-3
Summary of Sample Designations for Soils at 0-25 ft bgs
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Excavated		Excavated-representative		Present	
Sample_ID	**Post-remediation**	**Pre-remediation**	**Post-remediation**	**Pre-remediation**	**Post-remediation**	**Pre-remediation**
ET2-6N-9/10					X	
ET2-6N-9/10 DUP					X	
ET2-7N-5					X	
G-11/12-10.5					X	
J-11-10.5					X	
J4-SS3						X
M/N9-10.5					X	
N1-SS1						X
N1-SS5						X
N2-SS1		X				
N2-SS3		X				
N2-SS5		X				
N3-SS1						X
N3-SS3						X
NB-10-10					X	
NB-10-15					X	
NB-10-2					X	
NB-10-20					X	
NB-10-25					X	
NB-10-5					X	
NB-11-2					X	
NB-11C-10					X	
NB-11C-15					X	
NB-11C-20					X	
NB-11C-25					X	
NB-11C-3					X	
NB-11C-5					X	
NB-11C-5d					X	
NB2-15					X	
NB2-20					X	
NB2-25					X	
NB3-9	X					
NB4-15			X			
NB4-20			X			
NB4-25			X			
NB5-3			X		X	
NB6-10			X		X	
NB6-5			X		X	
NB-7-10	X					
NB-7-10d	X					
NB-7-15					X	
NB-7-2	X					
NB-7-6	X					
NB-7A-20					X	
NB-7A-25					X	
NB-8-10					X	
NB-8-15					X	
NB-8-2					X	
NB-8-20					X	
NB-8-25					X	
NB-8-5					X	
NB-9-10					X	
NB-9-15					X	
NB-9-2					X	
NB-9-20					X	
NB-9-25					X	
NB-9-5					X	
NE10-18			X			
NE11-13			X			
NE12-21			X			
NE13-17			X			
NE14-6					X	
NE15-8					X	
NE1-6.5	X					

Table 6-3
Summary of Sample Designations for Soils at 0-25 ft bgs
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Excavated		Excavated-representative		Present	
Sample_ID	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation
NE16-9.5					X	
NE2-20	X					
NE3-24			X			
NE5-15			X			
NE6-16			X			
NE7-21			X			
NE9-13			X			
NF10-11.5					X	
NF1-9	X					
NF2-8.5	X					
NF3-8.5	X					
NF4-8.5	X					
NF5-20.5					X	
NMSA-F1-1					X	
NMSA-F2-1					X	
NN10-21			X			
NN11-17			X			
NN1-21	X					
NN12-13			X			
NN13-25			X			
NN14-18			X			
NN15-17			X			
NN2-19	X					
NN3-18	X					
NN5-17	X					
NN6-13			X			
NN7-25			X			
NN8-21			X			
NN9-21			X			
NS10-22	X					
NS11-15	X					
NS1-20	X					
NS14-25	X					
NS15-25	X					
NS16-21	X					
NS17-13			X			
NS18-25			X			
NS19-25			X			
NS20-18			X			
NS21-25	X					
NS22-18			X			
NS2-22	X					
NS23-22			X			
NS24-3					X	
NS25-6					X	
NS3-25	X					
NS4-14	X					
NS5-14	X					
NS6-21	X					
NS7-13			X			
NS8-20			X			
NS9-21			X			
NW10-14	X					
NW11-25	X					
NW1-21	X					
NW12-17	X					
NW13-21	X					
NW14-23	X					
NW15-18	X					
NW2-20	X					
NW3-17	X					
NW4-16	X					
NW5-17	X					
NW6-14	X					

Table 6-3
Summary of Sample Designations for Soils at 0-25 ft bgs
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Excavated		Excavated-representative		Present	
Sample_ID	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation
NW7-21	X					
NW8-13	X					
NW9-25	X					
SN10-3					X	
SN10-6					X	
SN11-1.5					X	
SN11-1.5D					X	
SN11-5					X	
TtNB-11-15		X				
TtNB-11-20		X				
TtNB11-5		X				
TtNB-11-5		X				
TtNB-12-15		X				
TtNB-12-20		X				
TtNB12-25		X				
TtNB-12-25		X				
TtNB12-5		X				
TtNB-12-5		X				
TtNB-13-15		X				
TtNB-13-20						X
TtNB13-25						X
TtNB-13-25						X
TtNB13-5		X				
TtNB-13-5		X				
TtNB-14-15		X				
TtNB-14-20		X				
TtNB-14-25		X				
TtNB-14-5		X				
TtNB-14-5 Dup		X				
TtNB-15-15				X		
TtNB-15-25				X		
TtNB-15-5				X		
TtNB-16-15				X		
TtNB-16-25				X		
TtNB-16-5				X		
TtNB-17-15		X				
TtNB-17-25		X				
TtNB-17-5		X				
TtNB-18-15		X				
TtNB-18-20		X				
TtNB-18-25		X				
TtNB-18-5		X				
TtNB-18-5 Dup		X				
TtNB-19-15						X
TtNB-19-20						X
TtNB-19-25						X
TtNB-19-5		X				
TtNB-20-10		X				
TtNB-20-15						X
TtNB-20-25						X
TtNB-20-5		X				
TtNB-21-10		X				
TtNB-21-15		X				
TtNB-21-20		X				
TtNB-21-25		X				
TtNB-21-5		X				
TtNB-22-5		X				
TtNB-23-15		X				
TtNB-23-25		X				
TtNB-23-5		X				
TtNB-23-5 Dup		X				
TtNB-25-15						X
TtNB-25-25						X
TtNB-25-5		X				

Table 6-3
Summary of Sample Designations for Soils at 0-25 ft bgs
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Excavated		Excavated-representative		Present	
Sample_ID	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation
Grand Total	43	55	34	6	68	53

Table 6-3
Summary of Sample Designations for Soils at 0-25 ft bgs
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Excavated		Excavated-representative		Present	
Sample_ID	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation
1JACKSN3-SS3						X
2JACKSN3-SS1						X
BN10-10						X
BN10-15						X
BN10-25						X
BN10-3						X
BN10-5						X
BN1-10		X				
BN1-11		X				
BN1-15		X				
BN1-25		X				
BN1-3		X				
BN1-5		X				
BN2-10						X
BN2-15						X
BN2-25						X
BN2-3						X
BN2-5						X
BN3 @10		X				
BN3 @15						X
BN3 @16						X
BN3 @25						X
BN3 @3		X				
BN3 @5		X				
BN4-15						X
BN4-20						X
BN4-25						X
BN4-3						X
BN4-5						X
BN5-10						X
BN5-15						X
BN5-25						X
BN5-3						X
BN5-5						X
BN6-10						X
BN6-15						X
BN6-16						X
BN6-20						X
BN6-25						X
BN7 @10		X				
BN7 @15						X
BN7 @25						X
BN7 @3		X				
BN7 @5		X				
BN8-10						X
BN8-11						X
BN8-15						X
BN8-5						X
BN9-10						X
BN9-3						X
ET1-1F-10	X					
ET1-2S-7					X	
ET1-3S-5					X	
ET1-4W-6/8					X	
ET1-5W-4.5/6					X	
ET1-6F-12					X	
ET1-6F-12D					X	
ET1-7E-10					X	
ET1-8S-10					X	
ET2-1F-12.5					X	
ET2-2E-9					X	
ET2-3E-5					X	
ET2-4W-8 /10					X	
ET2-5W-5.5/7					X	

Table 6-3
Summary of Sample Designations for Soils at 0-25 ft bgs
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Excavated		Excavated-representative		Present	
Sample_ID	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation
ET2-6N-9/10					X	
ET2-6N-9/10 DUP					X	
ET2-7N-5					X	
G-11/12-10.5					X	
J-11-10.5					X	
J4-SS3						X
M/N9-10.5					X	
N1-SS1						X
N1-SS5						X
N2-SS1		X				
N2-SS3		X				
N2-SS5		X				
N3-SS1						X
N3-SS3						X
NB-10-10					X	
NB-10-15					X	
NB-10-2					X	
NB-10-20					X	
NB-10-25					X	
NB-10-5					X	
NB-11-2					X	
NB-11C-10					X	
NB-11C-15					X	
NB-11C-20					X	
NB-11C-25					X	
NB-11C-3					X	
NB-11C-5					X	
NB-11C-5d					X	
NB2-15					X	
NB2-20					X	
NB2-25					X	
NB3-9	X					
NB4-15			X			
NB4-20			X			
NB4-25			X			
NB5-3			X		X	
NB6-10			X		X	
NB6-5			X		X	
NB-7-10	X					
NB-7-10d	X					
NB-7-15					X	
NB-7-2	X					
NB-7-6	X					
NB-7A-20					X	
NB-7A-25					X	
NB-8-10					X	
NB-8-15					X	
NB-8-2					X	
NB-8-20					X	
NB-8-25					X	
NB-8-5					X	
NB-9-10					X	
NB-9-15					X	
NB-9-2					X	
NB-9-20					X	
NB-9-25					X	
NB-9-5					X	
NE10-18			X			
NE11-13			X			
NE12-21			X			
NE13-17			X			
NE14-6					X	
NE15-8					X	
NE1-6.5	X					

Table 6-3
Summary of Sample Designations for Soils at 0-25 ft bgs
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Excavated		Excavated-representative		Present	
Sample_ID	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation
NE16-9.5					X	
NE2-20	X					
NE3-24			X			
NE5-15			X			
NE6-16			X			
NE7-21			X			
NE9-13			X			
NF10-11.5					X	
NF1-9	X					
NF2-8.5	X					
NF3-8.5	X					
NF4-8.5	X					
NF5-20.5					X	
NMSA-F1-1					X	
NMSA-F2-1					X	
NN10-21			X			
NN11-17			X			
NN1-21	X					
NN12-13			X			
NN13-25			X			
NN14-18			X			
NN15-17			X			
NN2-19	X					
NN3-18	X					
NN5-17	X					
NN6-13			X			
NN7-25			X			
NN8-21			X			
NN9-21			X			
NS10-22	X					
NS11-15	X					
NS1-20	X					
NS14-25	X					
NS15-25	X					
NS16-21	X					
NS17-13			X			
NS18-25			X			
NS19-25			X			
NS20-18			X			
NS21-25	X					
NS22-18			X			
NS2-22	X					
NS23-22			X			
NS24-3					X	
NS25-6					X	
NS3-25	X					
NS4-14	X					
NS5-14	X					
NS6-21	X					
NS7-13			X			
NS8-20			X			
NS9-21			X			
NW10-14	X					
NW11-25	X					
NW1-21	X					
NW12-17	X					
NW13-21	X					
NW14-23	X					
NW15-18	X					
NW2-20	X					
NW3-17	X					
NW4-16	X					
NW5-17	X					
NW6-14	X					

Table 6-3
Summary of Sample Designations for Soils at 0-25 ft bgs
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Excavated		Excavated-representative		Present	
Sample_ID	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation
NW7-21	X					
NW8-13	X					
NW9-25	X					
SN10-3					X	
SN10-6					X	
SN11-1.5					X	
SN11-1.5D					X	
SN11-5					X	
TtNB-11-15		X				
TtNB-11-20		X				
TtNB11-5		X				
TtNB-11-5		X				
TtNB-12-15		X				
TtNB-12-20		X				
TtNB12-25		X				
TtNB-12-25		X				
TtNB12-5		X				
TtNB-12-5		X				
TtNB-13-15		X				
TtNB-13-20						X
TtNB13-25						X
TtNB-13-25						X
TtNB13-5		X				
TtNB-13-5		X				
TtNB-14-15		X				
TtNB-14-20		X				
TtNB-14-25		X				
TtNB-14-5		X				
TtNB-14-5 Dup		X				
TtNB-15-15				X		
TtNB-15-25				X		
TtNB-15-5				X		
TtNB-16-15				X		
TtNB-16-25				X		
TtNB-16-5				X		
TtNB-17-15		X				
TtNB-17-25		X				
TtNB-17-5		X				
TtNB-18-15		X				
TtNB-18-20		X				
TtNB-18-25		X				
TtNB-18-5		X				
TtNB-18-5 Dup		X				
TtNB-19-15						X
TtNB-19-20						X
TtNB-19-25						X
TtNB-19-5		X				
TtNB-20-10		X				
TtNB-20-15						X
TtNB-20-25						X
TtNB-20-5		X				
TtNB-21-10		X				
TtNB-21-15		X				
TtNB-21-20		X				
TtNB-21-25		X				
TtNB-21-5		X				
TtNB-22-5		X				
TtNB-23-15		X				
TtNB-23-25		X				
TtNB-23-5		X				
TtNB-23-5 Dup		X				
TtNB-25-15						X
TtNB-25-25						X
TtNB-25-5		X				

Table 6-3
Summary of Sample Designations for Soils at 0-25 ft bgs
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Excavated		Excavated-representative		Present	
Sample_ID	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation	Post-remediation	Pre-remediation
Grand Total	43	55	34	6	68	53

Table 6-5
Concentrations of C-PAHs in Southern California Background Soils from ENVIRON [2002]
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

B(a)P-equivalents[1] (mg/kg)	Qualifier	Sample ID	Site
0.0278		BK-1	Alhambra
0.0765		BK-11	Alhambra
0.007502	U	BK-13	Alhambra
0.007253	U	BK-14	Alhambra
0.0541		BK-19	Alhambra
0.2492		BK-20	Alhambra
0.00701	U	BK-25	Alhambra
0.006771	U	BK-26	Alhambra
0.006537	U	BK-27	Alhambra
0.0209		BK-32	Alhambra
0.0399		BK-33	Alhambra
0.0726		BK-35	Alhambra
0.0723		BK-36	Alhambra
0.0189		BK-38	Alhambra
0.0329		BK-39	Alhambra
0.006309	U	BK-4	Alhambra
0.006084	U	BK-43	Alhambra
0.0351		BK-44	Alhambra
0.1121		BK-45	Alhambra
0.0263		BK-51	Alhambra
0.022		BK-52	Alhambra
0.005865	U	BK-54	Alhambra
0.00565	U	BK-55	Alhambra
0.0926		BK-57	Alhambra
0.1854		BK-60	Alhambra
0.1083		BK-62	Alhambra
0.1197		BK-64	Alhambra
0.0388		BK-69	Alhambra
0.005439	U	BK-7	Alhambra
0.1644		BK-70	Alhambra
0.2229		BK-71	Alhambra
0.3992		BK-72	Alhambra
0.0889		BK-73	Alhambra
0.005233	U	BK-75	Alhambra
0.005031	U	BK-76	Alhambra
0.0836		BK-77	Alhambra
0.0541		BK-78	Alhambra
0.024		BK-79	Alhambra
0.0516		BK-8	Alhambra
0.004833	U	BK-80	Alhambra
0.0766		BK-82	Alhambra
0.0501		BK-83	Alhambra
0.0412		BK-85	Alhambra
0.1536		BK-87	Alhambra
0.004639	U	BK-9	Alhambra
0.0213		BK-90	Alhambra
0.0373		BK-95	Alhambra

Table 6-5
Concentrations of C-PAHs in Southern California Background Soils from ENVIRON [2002]
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

B(a)P-equivalents[1] (mg/kg)	Qualifier	Sample ID	Site
0.001098	U	BS-10	Beaumont
0.1424		BS-6	Beaumont
0.0083		BS-7	Beaumont
0.0177		BS-8	Beaumont
0.0026		BS-9	Beaumont
0.0177		CLT-BK-01	Colton
0.007756	U	CLT-BK-02	Colton
0.0296		CLT-BK-03	Colton
0.018		CLT-BK-04	Colton
0.0312		CLT-BK-05	Colton
0.0175		CLT-BK-06	Colton
0.0176		CLT-BK-07	Colton
0.0351		CLT-BK-08	Colton
0.0339		CLT-BK-09	Colton
0.0579		CLT-BK-10	Colton
0.0037		A	Corona
0.0084		B	Corona
0.1348		BG-1	Corona
0.1223		BG-2	Corona
0.0651		BG-3	Corona
0.002596	U	BG-5	Corona
0.0958		BG-7	Corona
0.0217		BG-8	Corona
0.0219		BG-9	Corona
0.031		BCK-1	Covina
0.1615		BCK-2	Covina
0.5901		BCK-3	Covina
0.1608		BCK-4	Covina
0.0345		TTOS-E	Covina
0.0177		TTOS-N	Covina
0.3274		TTOS-NE	Covina
0.1305		TTOS-NW	Covina
0.1497		TTOS-S	Covina
0.004449	U	TTOS-SE	Covina
0.3331		TTOS-SW	Covina
1.4284		TTOS-W	Covina

Table 6-5
Concentrations of C-PAHs in Southern California Background Soils from ENVIRON [2002]
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

B(a)P-equivalents[1] (mg/kg)	Qualifier	Sample ID	Site
0.0357		BG-1-B	Dinuba
1.6772		BG-2-B	Dinuba
0.0476		BG-3-B	Dinuba
0.0419		BG-4-B	Dinuba
0.0607		BG-5-B	Dinuba
0.000221	U	BG-6-B	Dinuba
0.1932		C-1018	Dinuba
0.0196		C-1020	Dinuba
0.27		C-1047	Dinuba
0.121		C-1052	Dinuba
0.0167		C-1102	Dinuba
0.0614		C-1105	Dinuba
0.0078		C-145	Dinuba
0.0033		C-323	Dinuba
0.0438		C-348	Dinuba
0.0044		C-396	Dinuba
0.0088		C-456	Dinuba
0.0174		C-518	Dinuba
0.0313		C-599	Dinuba
0.0722		C-624	Dinuba
0.1098		C-696	Dinuba
0.6085		C-7	Dinuba
0.01		C-770	Dinuba
0.0364		C-843	Dinuba
0.0252		DHS-BG-1-1B	Dinuba
0.0069		DHS-BG-1-2B	Dinuba
0.000486	U	DHS-BG-2-1B	Dinuba
0.000358	U	DHS-BG-2-2B	Dinuba
0.197		DL3-D1	Dinuba
0.011945	U	UG No. 1	Elsinore
0.011602	U	UG No. 2	Elsinore
0.5291		UG No. 3	Elsinore
0.024		Background A	Former Ontario
0.0145		Background B	Former Ontario
0.2985		B-1	Fullerton
0.1198		B-2	Fullerton
0.0564		B-3	Fullerton
0.2224		B-4	Fullerton
0.0096		HSB-1	Hemet
0.0167		HSB-2	Hemet
0.0023	U	HSB-3	Hemet
0.0132		HSB-4	Hemet
0.0884		HSB-5	Hemet
0.004263	U	B-1-NS	Ingelwood

Table 6-5
Concentrations of C-PAHs in Southern California Background Soils from ENVIRON [2002]
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

B(a)P-equivalents[1] (mg/kg)	Qualifier	Sample ID	Site
0.0683		LA-BK-1	LA Alameda
0.1212		LA-BK-2	LA Alameda
0.0235		LA-BK-3	LA Alameda
0.0568		LA-BK-4	LA Alameda
0.0195		BG-1	LA Main St.
0.0388		BG-2	LA Main St.
0.0259		BG-3	LA Main St.
0.3458		MBG-1	Monrovia
0.0357		MBG-2	Monrovia
1.5412		MBG-4	Monrovia
0.0302		MBG-5	Monrovia
0.0357		PBG-1	Pomona
0.1184		PBG-2	Pomona
0.1306		PBG-3	Pomona
0.1798		PBG-4	Pomona
0.0348		PBG-5	Pomona
0.0934		RS-10	Redlands
0.3126		RS-6	Redlands
0.1727		RS-7	Redlands
0.2295		RS-8	Redlands
0.0154		RS-9	Redlands
0.0455		RVB1	Riverside
0.0523		B-10-1A	San Pedro
0.00135	U	B-11-1A	San Pedro
0.0244		B-12-1A	San Pedro
0.0347		B-13-1A	San Pedro
0.1064		B-14-1A	San Pedro
0.0688		BG-1	Santa Ana
0.0476		BG-8	Santa Ana
0.1206		BG-9	Santa Ana
2.4386		SBG-1	Santa Ana
0.018		SBG-2	Santa Ana
0.072		SBG-3	Santa Ana
0.1531		02-BKG-104	Santa Barbara
0.0174		02-BKG-118	Santa Barbara
0.954		02-BKG-129	Santa Barbara
4.052		02-BKG-160	Santa Barbara
0.281		02-BKG-26	Santa Barbara
0.1561		02-BKG-33	Santa Barbara
0.761		02-BKG-60	Santa Barbara
0.0342		02-BKG-65	Santa Barbara
0.1142		02-BKG-69	Santa Barbara
1.005		02-BKG-78	Santa Barbara
0.2189		02-BKG-83	Santa Barbara
0.0798		02-BKG-92	Santa Barbara

Table 6-5
Concentrations of C-PAHs in Southern California Background Soils from ENVIRON [2002]
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

B(a)P-equivalents[1] (mg/kg)	Qualifier	Sample ID	Site
0.8173		BACK-1	Visalia
0.3432		BACK-2	Visalia
0.18		BACK-3	Visalia
0.4773		BACK-4	Visalia
0.0243		BACK-5	Visalia
0.0654		BACK-6	Visalia
0.004081	U	BACK-7	Visalia
0.003902	U	BACK-8	Visalia
0.003727	U	BACK-9	Visalia
0.0316		WH-BK-1	Whittier
0.0271		WH-BK-2	Whittier
0.0179		WH-BK-3	Whittier
0.3246		WH-BK-4	Whittier

Definitions:

B(a)P-equivalents - Benzo(a)pyrene equivalent concentration.
bgs - Below ground surface.
C-PAH - Carcinogenic polycyclic aromatic hydrocarbons.
ft - Feet.
U - Indicates a sample in which no carcinogenic PAHs were detected.

Notes:

1 - All data obtained from ENVIRON [2002]. Smoothed dataset given.

Table 6-6
Comparison of Volume Weighted BaP-equivalent Concentrations to Background
Former Aliso (MGP) Block N
Los Angeles, CA

Location	Concentration (mg/kg)
Entire Site[1]	0.07
Manley Oil Building[1]	0.1
Southern Califronia Background	0.24

Note:
1 - Volume-weighting based on natural neighbor contouring

Table 6-7
Chemicals of Potential Concern
Former Aliso Street MGP Sector C Block N
Los Angeles, California

	Soil	
Chemical	**0 to 10 ft bgs**	**>10 ft - 25 bgs**
Metals		
Antimony	X	X
Carcinogenic PAHs		
C-PAHs	1	
Naphthalene	X	X
Non-carcinogenic PAHs		
Volatile PAHs		
Acenaphthene		X
Acenaphthylene		X
Anthracene	X	X
Fluorene	X	X
Phenanthrene	X	X
Non-volatile PAHs		
Fluoranthene	X	X
Benzo(g,h,i)perylene	X	X
Pyrene	X	X
Other organics		
Benzene	X	X
n-Butylbenzene		X
tert-Butylbenzene		X
sec-Butylbenzene		X
Dicyclopentadiene		X
Ethylbenzene		X
Isopropylbenzene		X
p-Isopropyltoluene		X
n-Propylbenzene		X
Tetrachloroethene		X
Toluene	X	X
1,2,4-Trimethylbenzene		X
1,3,5-Trimethylbenzene		X
m,p-Xylenes		X
o-Xylene		X

Definitions:

COPC - chemical of potential concern
C-PAHs - carcinogenic polycyclic aromatic hydrocarbons
ft - feet
bgs - below ground surface

Note:

1 - C-PAHs as benzo(a)pyrene-equivalents do not differ from background; evaluated only for non-carcinogenic hazards.

Table 6-8
Exposure Formula and Parameters for Soil Ingestion Pathway
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

Incidental Soil Ingestion

$$Intake\ \ (mg/kg/day) = \frac{C_s \times CF \times FI \times IR \times EF \times ED}{BW \times AT}$$

Variable	Parameter	RME Value	Source/Rationale
C_s	Chemical concentration in soil	mg/kg	Units for soil
CF	Conversion factor for chemical fraction of soil	10^{-6} kg/mg	-
FI	Fraction of chemical ingested from soil		
	Resident	1 unitless	Conservative assumption
IR	Soil Ingestion Rate		
	Resident		
	Adult	100 mg/day	U.S. EPA 2002
	Child	200 mg/day	U.S. EPA 2002
EF	Exposure Frequency		
	Resident	350 days/year	U.S. EPA 2002, 2004
ED	Exposure Duration		
	Resident		
	Adult	24 years	U.S. EPA 1991a
	Child	6 years	U.S. EPA 1991a
BW	Body Weight		
	Resident		
	Adult	70 kg	U.S. EPA 1989a
	Child	15 kg	U.S. EPA 1989a
AT	Averaging Time		
	Carcinogen	70 years x 365 days/year	Lifetime (U.S. EPA 1989a)
	Non-carcinogen	ED x 365 days/year	U.S. EPA 1989a

Definitions:

RME - reasonable maximum exposure

Table 6-9
Exposure Formula and Parameters for Soil Dermal Contact Pathway
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

Dermal Exposure to Soil

$$Intake(mg/kg/day) = \frac{C_s \times CF \times SA \times FC \times AF \times ABS \times EF \times ED}{BW \times AT}$$

Variable	Parameter	RME Value	Source/Rationale
C_s	Chemical concentration in soil	mg/kg	Units for soil
CF	Conversion factor for chemical fraction of soil	10^{-6} kg/mg	-
SA	Skin surface area		
	Resident		
	Adult	5,700 cm^2	U.S. EPA 2002, 2004, DTSC 2000a
	Child	2,900 cm^2	U.S. EPA 2000a
FC	Fraction contacted		
	Resident	1 unitless	Conservative assumption
AF	Soil Adherence Factor		
	Resident		
	Adult	0.07 mg/cm^2	DTSC 2000a, U.S. EPA 2002, 2004
	Child	0.2 mg/cm^2	DTSC 2000a, U.S. EPA 2002, 2004
ABS	Absorption fraction	chemical-specific	-
EF	Exposure frequency		
	Resident	350 days/year	U.S. EPA 1991a, 2002, 2004
ED	Exposure Duration		
	Resident		
	Adult	24 years	U.S. EPA 1991a
	Child	6 years	U.S. EPA 1991a
BW	Body weight		
	Resident		
	Adult	70 kg	U.S. EPA 1989a
	Child	15 kg	U.S. EPA 1989a
AT	Averaging time		
	Carcinogen	70 years x 365 days/year	Lifetime (U.S. EPA 1989a)
	Noncarcinogen	ED x 365 days/year	U.S. EPA 1989a

Definitions:

RME - reasonable maximum exposure

Table 6-10
Exposure Formula and Parameters for Inhalation of Dust and Vapor
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

Inhalation of Dust/Vapor

$$Intake(mg/kg/day) = \frac{C_a \times IN \times ET \times EF \times ED}{BW \times AT}$$

Variable	Parameter	RME Value	Source/Rationale
C_a	Chemical concentration in air	mg/m^3	Units for air
IN	Inhalation rate		
	Resident		
	Adult	0.83 m^3/hour	U.S. EPA 1989a, 1997a
	Child	0.42 m^3/hour	U.S. EPA 1989a, 1997a
FI	Fraction inhaled at site		
	Resident		
	Adult	1 unitless	Conservative assumption
	Child	1 unitless	Conservative assumption
ET	Exposure time		
	Resident		
	Adult	24 hour/day	Conservative assumption
	Child	24 hour/day	Conservative assumption
EF	Exposure frequency		
	Resident		
	Adult	350 days/year	U.S. EPA 1991a
	Child	350 days/year	U.S. EPA 1991a
ED	Exposure duration		
	Resident		
	Adult	24 years	U.S. EPA 1991a
	Child	6 years	U.S. EPA 1991a
BW	Body weight		
	Resident		
	Adult	70 kg	U.S. EPA 1989a
	Child	15 kg	U.S. EPA 1989a
AT	Averaging time		
	Carcinogen	70 years x 365 days/year	Lifetime (U.S. EPA 1989a)
	Non-carcinogen	ED x 365 days/year	U.S. EPA 1989a

Definitions:
RME - reasonable maximum exposure

Table 6-11
Oral Carcinogenic Slope Factors
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

Chemical	Oral Slope Factor $(mg/kg/day)^{-1}$	Weight of Evidence	Tumor	Test Species	Slope Factor Source	Date
Metals						
Antimony	-	-	-	-	-	-
Carcinogenic PAHs						
Naphthalene	1.20E-01	C	Nasal	Rat	CalEPA	Sept-05
Non-carcinogenic PAHs						
Volatile PAHs						
Acenaphthene	-	-	-	-	1	-
Acenaphthylene	-	D	-	-	-	-
Anthracene	-	D	-	-	-	-
Fluorene	-	D	-	-	-	-
Phenanthrene	-	D	-	-	-	-
Non-volatile PAHs						
Fluoranthene	-	D	-	-	-	-
Benzo(g,h,i)perylene	-	D	-	-	-	-
Pyrene	-	D	-	-	-	-
Other organics						
Benzene	1.00E-01	A	Leukemia	Human	Cal EPA	Sept-05
n-Butylbenzene	-	-	-	-	1	-
tert-Butylbenzene	-	-	-	-	1	-
sec-Butylbenzene	-	-	-	-	1	-
Dicyclopentadiene	-	-	-	-	1	-
Ethylbenzene	-	D	-	-	-	-
Isopropylbenzene	-	D	-	-	-	-
p-Isopropyltoluene	-	D	-	-	2	-
n-Propylbenzene	-	-	-	-	1	-
Tetrachloroethene	5.40E-01	C	Hepatocarcinoma	Rat	Cal EPA	Sept-05
Toluene	-	D	-	-	-	-
1,2,4-Trimethylbenzene	-	-	-	-	1	-
1,3,5-Trimethylbenzene	-	-	-	-	1	-
m,p-Xylenes	-	D	-	-	-	-
o-Xylene	-	D	-	-	-	-

Definitions:

Cal EPA - California Environmental Protection Agency.
IRIS - Integrated Risk Information System.
SF - Slope Factor

Notes:

1 - No SFs available from USEPA or CalEPA
2 - Isopropylbenzene used as a surrogate.

All weight of evidence classifications were obtained from USEPA (2005) Integrated Risk Information System (IRIS).

Table 6-12
Inhalation Carcinogenic Slope Factors
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

Chemical	Inhalation Slope Factor $(mg/kg/day)^{-1}$	Weight of Evidence	Tumor	Test Species	Slope Factor Source	Date
Metals						
Antimony	-	-	-	-	-	-
Carcinogenic PAHs						
Naphthalene	1.20E-01	C	Nasal	Rat	CalEPA	Sept-05
Non-carcinogenic PAHs						
Volatile PAHs						
Acenaphthene	-	-	-	-	1	-
Acenaphthylene	-	D	-	-	-	-
Anthracene	-	D	-	-	-	-
Fluorene	-	D	-	-	-	-
Phenanthrene	-	D	-	-	-	-
Non-volatile PAHs			-	-	-	-
Fluoranthene	-	D	-	-	-	-
Benzo(g,h,i)perylene	-	D	-	-	-	-
Pyrene	-	D	-	-	-	-
Other organics						
Benzene	1.00E-01	A	Leukemia	Human	Cal EPA	Sept-05
n-Butylbenzene	-	-	-	-	1	-
tert-Butylbenzene	-	-	-	-	1	-
sec-Butylbenzene	-	-	-	-	1	-
Dicyclopentadiene	-	-	-	-	1	-
Ethylbenzene	-	D	-	-	-	-
Isopropylbenzene	-	D	-	-	-	-
p-Isopropyltoluene	-	D	-	-	2	-
n-Propylbenzene	-	-	-	-	1	-
Tetrachloroethene	2.10E-02		Hepatic	Mouse	Cal EPA	Sep-05
Toluene	-	D	-	-	-	-
1,2,4-Trimethylbenzene	-	-	-	-	1	-
1,3,5-Trimethylbenzene	-	-	-	-	1	-
m,p-Xylenes	-	D	-	-	-	-
o-Xylene	-	D	-	-	-	-

Definitions:

Cal EPA - California Environmental Protection Agency.
IRIS - Integrated Risk Information System.
SF - Slope Factor

Notes:

1 - No slope factors available from the USEPA or Cal/EPA.
2 - Isopropylbenzene used as a surrogate.

All weight of evidence classifications were obtained from USEPA (2005) Integrated Risk

Table 6-13
Chronic Oral Reference Doses
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

Chemical	RfD (mg/kg/day)	Confidence	MF	UF	Critical Effect	Test Species	Source	Date
Metals								
Antimony	4.00E-04	Low	1	1000		Rat	IRIS	Dec-05
Carcinogenic PAHs								
Total CPAHs	2.00E-02	-	-	-	-	-	1	-
Naphthalene	2.00E-02	Low	1	3,000	Decreased mean body weight	Rat	IRIS	Sep-05
Non-carcinogenic PAHs								
Volatile PAHs								
Acenaphthene	6.00E-02	Low	1	3,000	Liver toxicity	Mouse	IRIS	Sep-05
Acenaphthylene	2.00E-02	-	-	-	-	-	1	-
Anthracene	3.00E-01	Low	1	3,000	No oberved effects	Mouse	IRIS	Sep-05
Fluorene	4.00E-02	Low	1	3,000	Decreased RBC, packed cell volume and hemoglobin	Mouse	IRIS	Sep-05
Phenanthrene	2.00E-02	-	-	-	-	-	1	-
Non-volatile PAHs								
Fluoranthene	4.00E-02	Low	1	3,000	Nephropathy, increased liver weights, hematological alterations, clinical effects	Mouse	IRIS	Sep-05
Benzo(g,h,i)perylene	2.00E-02	-	-	-	-	-	1	-
Pyrene	3.00E-02	Low	1	3,000	Kidney Effects	Mouse	IRIS	Sep-05
Other organics								
Benzene	4.00E-03	Medium	1	300	Decreased lymphocyte count	Human	IRIS	Oct-04
n-Butylbenzene	4.00E-02	-	-	-	-	-	PRG	Oct-04
tert-Butylbenzene	4.00E-02	-	-	-	-	-	PRG	Oct-04
sec-Butylbenzene	4.00E-02	-	-	-	-	-	PRG	Oct-04
Dicyclopentadiene	3.00E-02	-	-	-	No oberved effects	Rat	HEAST	1997
Ethylbenzene	1.00E-01	Low	1	1,000	Liver and kidney toxicity	Rat	IRIS	Sep-05
Isopropylbenzene	1.00E-01	Low	1	1,000	Increased kidney weight in females	Rat	IRIS	Sep-05
p-Isopropyltoluene	1.00E-01	-	-	-	-	-	2	-
n-Propylbenzene	4.00E-02	-	-	-	-	-	PRG	Oct-04
Tetrachloroethene	1.00E-02	Medium	1	1,000	Hepatotoxicty	Rat, Mouse	IRIS	Sep-05
Toluene	8.00E-02	Medium	1	3,000	Liver and kidney weight changes	Rat	IRIS	Sep-05
1,2,4-Trimethylbenzene	5.00E-02	-	-	-	-	-	PRG	Oct-04
1,3,5-Trimethylbenzene	5.00E-02	-	-	-	-	-	PRG	Oct-04
m,p-Xylenes	2.00E-01	Medium	1	1,000	Decreased body weight, increased mortality	Rat	IRIS	Sep-05
o-Xylene	2.00E-01	Medium	1	1,000	Decreased body weight, increased mortality	Rat	IRIS	Sep-05

Definitions:

IRIS - Integrated Risk Information System. Available online at www.epa.gov/iris/
HEAST - Human Effects Assessment Summary Tables, USEPA FY 1997
MF - Modifying factor
PRG - Preliminary Remidiation Goals. Available online at http://www.epa.gov/region09/waste/sfund/prg/index.htm
UF - Uncertainty factor

Notes:

1 - Naphthalene used as a surrogate.
2 - Isopropylbenzene used as a surrogate.

Table 6-14
Chronic Inhalation Reference Doses
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

Chemical	RfD (mg/kg/day)	REL (ug/m^3)	RfC (mg/m^3)	Confidence	MF	UF	Critical Effect	Test Species	Source	Date
Metals										
Antimony	4.00E-04	-	-	-	-	-	-	-	1	Dec-05
Carcinogenic PAHs		-								
Total CPAHs	8.57E-04	-	-	-	-	-	-	-	1	-
Naphthalene	8.57E-04	9.00E+00	3.00E-03	Medium	1	3,000	Nasal effects	Mouse	IRIS;2	Sep-05
Non-carcinogenic PAHs										
Volatile PAHs		-	-							
Acenaphthene	6.00E-02	-	-	-	-	-	-	-	3	-
Acenaphthylene	8.57E-04	-	-	-	-	-	-	-	1	-
Anthracene	3.00E-01	-	-	-	-	-	-	-	3	-
Fluorene	4.00E-02	-	-	-	-	-	-	-	3	-
Phenanthrene	8.57E-04	-	-	-	-	-	-	-	1	-
Non-volatile PAHs										
Fluoranthene	4.00E-02	-	-	-	-	-	-	-	3	-
Benzo(g,h,i)perylene	8.57E-04	-	-	-	-	-	-	-	1	-
Pyrene	3.00E-02	-	-	-	-	-	-	-	3	-
Other organics										
Benzene	8.57E-03	6.00E+01	3.00E-02	Medium	1	300	Decreased lymphocyte count	Human	IRIS;2	Sep-05
n-Butylbenzene	4.00E-02	-	-	-	-	-	-	-	PRG	Oct-04
tert-Butylbenzene	4.00E-02	-	-	-	-	-		-	PRG	Oct-04
sec-Butylbenzene	4.00E-02	-	-	-	-	-	-	-	PRG	Oct-04
Dicyclopentadiene	3.00E-02	-	-	-	-	-	-	-	3	-
Ethylbenzene	2.86E-01	2.00E+03	1.00E+00	Low	1	300	Develomental toxicity	Rat, rabbit	IRIS;2	Sep-05
Isopropylbenzene	1.14E-01	-	4.00E-01	Medium	1	1,000	Increased kidney weights in females; increased adrenal weights in both sexes	Rat	IRIS	Sep-05
p-Isopropyltoluene	1.14E-01	-	-	-	-	-	-	-	4	-
n-Propylbenzene	4.00E-02	-	-	-	-	-	-	-	PRG	Oct-04
Tetrachloroethene	1.00E-02	3.50E+01	-	-	-	-	-	-	OEHHA	Sep-05
Toluene	8.57E-02	3.00E+02	5.00E+00	-	-	100	Neurological Effects	Rat	OEHHA;5	Sep-05
1,2,4-Trimethylbenzene	1.70E-03	-	-	-	-	-	-	-	PRG	Oct-04
1,3,5-Trimethylbenzene	1.70E-03	-	-	-	-	-	-	-	PRG	Oct-04
m,p-Xylenes	2.86E-02	7.00E+02	1.00E-01	Medium	1	300	Impaired motor coordination	Human	IRIS;2	Sep-05
o-Xylene	2.86E-02	7.00E+02	1.00E-01	Medium	1	300	Impaired motor coordination	Human	IRIS;2	Sep-05

Definitions:

HEAST	- Health Effects Assessment Summary Tables
IRIS	- Integrated Risk Information System
MF	- modifying factor
mg/kg/day	- milligrams per kilogram per day
mg/m^3	- milligrams per cubic meter
RfC	- reference concentration
RfD	- reference dose
UF	- uncertainty factor
PPRTV	- Provisional Peer Reviewed Toxicity Values
Notes:	-
1	- Naphthalene used as a surrogate
2	- IRIS RfC used to calculate RfD
3	- No inhalation RfD available. A route to route extrapolation from the oral RfD was used.
4	- Isopropylbenzene used as a surrogate.
5	- OEHHA REL used to calculte RFD

Table 6-15
Exposure Point Concentrations for Chemicals of Potential Concern in Soil and Vapors Emitted from Soil
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Ingestion/Dermal		Vapor/Dust		
			COPC	RME (mg/m^3)	
Receptor	COPC	RME (mg/kg)	Indoor Vapor[1]	Resident	Child
Entire Site	Antimony	4.75E+00	Acenaphthene	1.30E-03	1.31E-03
(0–10 ft bgs)	Benzene	9.70E-03	Acenaphthylene	3.60E-05	3.61E-05
	Total C-PAHS	2.29E-01	Anthracene	1.28E-05	1.29E-05
	Benzo(g,h,i)perylene	2.34E-01	Benzene[2]	1.03E-04	1.03E-04
	Fluoranthene	1.01E-01	n-Butylbenzene	2.91E-04	1.45E-03
	Fluorene	1.10E-02	sec-Butylbenzene	2.41E-04	2.61E-04
	Naphthalene	1.98E-02	tert-Butylbenzene	6.54E-05	3.27E-04
	Phenanthrene	3.85E-02	Dicyclopentadiene	1.58E-04	7.90E-04
	Pyrene	1.73E-01	Ethylbenzene	2.15E-04	1.07E-03
	Toluene	4.46E-03	Fluorene	3.53E-05	3.56E-05
			Isopropylbenzene	3.33E-04	1.67E-03
			p-Isopropyltoluene	1.05E-04	4.72E-04
			Naphthalene[2,3]	-	-
			n-Propylbenzene	3.14E-04	1.57E-03
			Phenanthrene	2.03E-04	2.05E-04
			Tetrachloroethene	4.28E-05	2.14E-04
			1,2,4-Trimethylbenzene	2.29E-04	1.15E-03
			1,3,5-Trimethylbenzene	6.10E-05	3.05E-04
			Toluene	1.55E-04	7.77E-04
			m,p-Xylenes	1.36E-04	6.80E-04
			o-Xylene	1.04E-04	5.20E-04
			Dust (0–10 ft bgs)		
			Antimony	4.35E-07	
			Total C-PAHS	1.15E-07	
			Benzo(g,h,i)perylene	1.17E-07	
			Fluoranthene	5.04E-08	
			Pyrene	8.66E-08	
Manley Building	Benzene	8.73E-03	Acenaphthene	4.34E-05	4.36E-05
(0–10 ft bgs)	Total C-PAHS	1.87E-01	Anthracene	8.41E-06	8.68E-06
	Benzo(g,h,i)perylene	8.75E-01	Benzene[2]	3.79E-05	3.79E-05
	Fluoranthene	2.34E-01	Fluorene	2.08E-05	2.11E-05
	Fluorene	1.10E-02	Naphthalene[2,3]	-	-
	Naphthalene	1.48E-02	Phenanthrene	2.45E-04	2.51E-04
	Phenanthrene	6.85E-02	Toluene	1.84E-05	9.19E-05
	Pyrene	5.09E-01	m,p-Xylenes	1.46E-05	7.31E-05
			Dust (0–5 ft bgs)		
			Total C-PAHS	8.22E-09	
			Benzo(g,h,i)perylene	3.84E-08	
			Fluoranthene	1.03E-08	
			Pyrene	2.24E-08	

Definitions:

COPC - chemical of potential concern
ft bgs - feet below ground surface
µg/L - micrograms per liter.
mg/kg - milligrams per kilogram.
mg/m^3 - milligrams per cubic meter.
RME - reasonable maximum exposure.
Italics - Values are from volume weighted results (see Appendix C).

Table 6-15
Exposure Point Concentrations for Chemicals of Potential Concern in Soil and Vapors Emitted from Soil
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

Ingestion/Dermal		Vapor/Dust	
	RME	COPC	RME (mg/m^3)

NA - not applicable

Notes:

1 - EPCs estimated using a soil source with the finite source version of the Johnson and Ettinger model; with 30 year exposures for "residents" and 6 year exposures for child residents.

2 - EPCs estimated using soil gas as the source term at the RME concentration of 109 $\mu g/m^3$ (See Table H-1 Appendix H with the infinite source version of the Johnson and Ettinger model.

3 - Not detected in soil gas. Therefore, not assumed to be present in indoor air.

PAHs were analyzed using both 8310 and 8270. When detected using both methods, the EPC is based on 8310.

Table 6-17
Risks to Residents
Surface Soil (0 to 5 ft, Underneath the Manley Building)
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Risk Probabilities					
	Soil					
Carcinogen	**Ingestion**	**Dermal Contact**	**Inhalation of Dust**	**Inhalation of Indoor Vapor**	**Summation**	**% Contribution**
Benzene	1.37E-09	4.41E-10	-	5.63E-07	5.65E-07	99%
Naphthalene	2.78E-09	1.34E-09	-	-	4.12E-09	1%
Summation	4.15E-09	1.78E-09	-	5.63E-07	5.69E-07	

	Hazard Index-Child					
	Soil					
Noncarcinogen	**Ingestion**	**Dermal Contact**	**Inhalation of Dust**	**Inhalation of Indoor Vapor**	**Summation**	**% Contribution**
Acenaphthene	-	-	-	4.65E-04	4.65E-04	0%
Anthracene	-	-	-	1.85E-05	1.85E-05	0%
Benzene	2.79E-05	8.09E-06	-	2.83E-03	2.87E-03	1%
Total C-PAHs	1.20E-04	5.20E-05	6.11E-06	-	1.78E-04	0%
Benzo(g,h,i)perylene	5.59E-04	2.43E-04	2.86E-05	-	8.31E-04	0%
Fluoranthene	7.48E-05	3.25E-05	1.64E-07	-	1.07E-04	0%
Fluorene	3.52E-06	1.53E-06	-	3.37E-04	3.42E-04	0%
Naphthalene	9.46E-06	4.12E-06	-	-	1.36E-05	0%
Phenanthrene	4.38E-05	1.90E-05	-	1.87E-01	1.87E-01	96%
Pyrene	2.17E-04	9.44E-05	4.75E-07	-	3.12E-04	0%
Toluene	-	-	-	6.86E-04	6.86E-04	0%
m,p-Xylenes	-	-	-	1.63E-03	1.63E-03	1%
Summation	1.06E-03	4.55E-04	3.53E-05	1.93E-01	1.95E-01	

Definitions:

Italics - Risk estimates are from volume weighted results (See Appendix I).

Table 6-17
Risks to Residents
Surface Soil (0 to 5 ft, Underneath the Manley Building)
Former Aliso Street MGP Sector C, Block N
Los Angeles, California

	Risk Probabilities					
	Soil					
Carcinogen	**Ingestion**	**Dermal Contact**	**Inhalation of Dust**	**Inhalation of Indoor Vapor**	**Summation**	**% Contribution**
Benzene	1.37E-09	4.41E-10	-	5.63E-07	5.65E-07	99%
Naphthalene	2.78E-09	1.34E-09	-	-	4.12E-09	1%
Summation	4.15E-09	1.78E-09	-	5.63E-07	5.69E-07	

	Hazard Index-Child					
	Soil					
Noncarcinogen	**Ingestion**	**Dermal Contact**	**Inhalation of Dust**	**Inhalation of Indoor Vapor**	**Summation**	**% Contribution**
Acenaphthene	-	-	-	4.65E-04	4.65E-04	0%
Anthracene	-	-	-	1.85E-05	1.85E-05	0%
Benzene	2.79E-05	8.09E-06	-	2.83E-03	2.87E-03	1%
Total C-PAHs	1.20E-04	5.20E-05	6.11E-06	-	1.78E-04	0%
Benzo(g,h,i)perylene	5.59E-04	2.43E-04	2.86E-05	-	8.31E-04	0%
Fluoranthene	7.48E-05	3.25E-05	1.64E-07	-	1.07E-04	0%
Fluorene	3.52E-06	1.53E-06	-	3.37E-04	3.42E-04	0%
Naphthalene	9.46E-06	4.12E-06	-	-	1.36E-05	0%
Phenanthrene	4.38E-05	1.90E-05	-	1.87E-01	1.87E-01	96%
Pyrene	2.17E-04	9.44E-05	4.75E-07	-	3.12E-04	0%
Toluene	-	-	-	6.86E-04	6.86E-04	0%
m,p-Xylenes	-	-	-	1.63E-03	1.63E-03	1%
Summation	1.06E-03	4.55E-04	3.53E-05	1.93E-01	1.95E-01	

Definitions:

Italics - Risk estimates are from volume weighted results (See Appendix I).

Table 6-18
Volatile Chemical Maximum Predicted Concentrations in Groundwater
Former Aliso Street Manufactured Gas Plant
Sector C - Block N, Los Angeles, California

Chemical	Maximum predicted concentration in groundwater (µg/l)	CA MCL[1] (ug/l)	Tap water PRG[2] (ug/l)
Entire Site			
Acenaphthene	3.48E+01	-	370
Acenaphthylene	1.31E+00	-	-
Anthracene	1.32E-01	-	1,800
Benzene	6.47E-01	1	$\boxed{0.35}$
Benzene[4]	4.96E-01	1	$\boxed{0.35}$
n-Butylbenzene	6.12E-01	-	240
sec-Butylbenzene	5.44E-01	-	240
tert-Butylbenzene	1.72E-01	-	240
Dicyclopentadiene[3]	3.97E-01	-	180
Ethylbenzene	7.64E-01	700	1,340
Fluorene	8.20E-01	-	240
Isopropylbenzene	7.05E-03	-	660
p-Isopropyltoluene	6.92E-02	-	-
m-Xylene	4.59E-01	-	210
Naphthalene	7.41E+03	$\boxed{17}$	$\boxed{0.11}$
Naphthalene[4]	1.64E+01	17	$\boxed{0.11}$
o-Xylene	4.44E-01	-	210
Phenanthrene	2.79E+01	-	-
n-Propylbenzene	9.63E-01	-	240
Tetrachloroethene	7.14E-02	-	0.1
Toluene	5.56E-01	150	720
1,2,4-Trimethylbenzene	5.23E-01	-	12
1,3,5-Trimethylbenzene	1.40E-01	-	12

Definitions:

µg/l - Micrograms per liter.

Notes:

$\boxed{}$ Predicted concentration in groundwater exceeds potentially applicable criterion.

1 - California Maximum Contaminant Level (MCL) (2002), except for naphthalene the value is the Notification Limit (DHS 2005).

2 - USEPA Region 9 Preliminary Remediation Goals (PRGs) (2004).

3 - PRG is recalculated using updated toxicity data.

4 - Concentration based on volume-weighted analysis.

AVOCET
ENVIRONMENTAL, INC.

April 26, 2007 Project No. 1208.001

Mr. Peter Cooke
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
1011 Grandview Avenue
Glendale, California 91201

Soil Gas Verification Sampling Report
Former Aliso Street MGP Facility, Sector C, Block N
410 Center Street
Los Angeles, California

Dear Mr. Cooke:

On November 3, 2006, the California Department of Toxic Substances Control (DTSC) approved Tetra Tech's *Removal Action Completion Report* for the property located at 410 Center Street in Los Angeles, California (Figure 1). The letter noted, however, that volatile organic compounds (VOCs) detected in soil gas remained an outstanding issue preventing unrestricted use of the site. Several compounds were detected in the soil gas samples collected by Earth Tech Inc. (Earth Tech) in 2001. Most of the constituents occurred at concentrations well below any recognized risk threshold. Tetrachloroethene (PCE), however, warranted further consideration since it exceeded the residential benchmark established under the California Human Health Screening Levels (CHHSLs).

The property owner, The Greenwald Company, intends to convert it to a different use at some time in the future. As such, the deed for the property will contain a Land Use Covenant (LUC) that will protect human health and the environment. To fully accomplish this, however, requires resolution of the outstanding soil gas issue. At the request of the Greenwald Company Avocet Environmental, Inc. (Avocet) prepared and submitted a work plan to DTSC on January 23, 2007 with the objective of identifying the PCE source and assessing the potential human health risk posed by inhalation of the soil vapors in both commercial and residential scenarios. Avocet conducted the work between February 15 and 19, 2007, which included the installation of five new soil gas probes, collection of soil and soil gas samples, and evaluation of potential human health risk based on the new soil gas data.

Analysis of the soil gas samples found compounds similar to those detected in the original assessment, although at lower concentrations. However, only one of the soil samples contained a detectable concentration of one VOC (PCE), and that result was below the reporting limit. Consequently, we cannot identify the source of the VOCs with certainty at this time. It is not unreasonable to believe, though, that the source of the VOCs is likely located near the northeast quadrant of the facility, in the vicinity of the former Manley Oil Company (Manley Oil) building. In general, the constituents found in shallow soil gas are not found in groundwater, and, conversely, those in groundwater are not found in shallow soil gas. This suggests that the VOC source is something other than groundwater. Another argument in favor of a surface source is the heterogeneous distribution of PCE across the site, concentrated at the east end of the Manley Oil building. The elevated concentrations in only one portion of the site are indicative of a localized source. Off-gassing from groundwater would tend to produce more uniform concentrations across a wider area of the site. Finally, although low levels of PCE have been detected in an upgradient monitoring well maintained by Sempra Energy, it has not been detected in any of the crossgradient or downgradient monitoring wells.

As with the 2001 soil gas sampling event, PCE was the compound of greatest concern. Although all PCE concentrations were 4 to 48 percent less than the former detections, the residential CHHSL was still exceeded in the samples from the north side of the site. A health risk assessment was performed by McDaniel Lambert, Inc. (McDaniel Lambert) to further evaluate the hazard posed by soil gas. The assessment found that the potential cancer risks to future commercial business employees are below the California Proposition 65 standard (1×10^{-5}) but that cancer risks for future residents was at the 1×10^{-5} residential standard. The residential risk is driven primarily by the PCE. Noncancer hazards for both groups are all well below the target value of 1. A copy of the health risk assessment (McDaniel Lambert, March 28, 2007) is included as Attachment 1 to this report.

In its current state, portions of the site are not suitable for unrestricted use. However, it is believed that if the impacted soil gas is remediated the environmental issues originating from the site will have been addressed in a manner protective of human health. As such, alternative uses of the site can be considered consistent with an LUC attached to the property that addresses the underlying regional groundwater condition.

The remainder of this report presents a detailed description of the site background, previous environmental investigations, field effort, laboratory analyses, and human health risk assessment.

SITE BACKGROUND

The property located at 410 Center Street in Los Angeles, California (Figure 1) is a parcel of approximately 1.5 acres that was formerly part of the Aliso Street Manufactured Gas Plant (MGP). The 56-acre Aliso MGP site was divided into five sectors, A through E, to manage the remedial investigations and subsequent remedial activities. The subject site is in Block N, which is a part of Sector C and is bounded by Jackson Street to the south, Center Street to the west, and Ducommun Street to the north. Portions of Block N were most recently used by (from north to south) Manley Oil, Los Angeles Gas and Electric, and Southern California Gas Company (SCG) (Figure 2). None of the above-mentioned operations are active onsite.

PREVIOUS ENVIRONMENTAL INVESTIGATIONS

Earth Tech performed a Preliminary Endangerment Assessment (PEA) at Sector C of the former Aliso Street MGP between February and July 1998. Based on the PEA, polynuclear aromatic hydrocarbon (PAH)-contaminated soil and hydrocarbon-impacted groundwater was discovered beneath Block N. The PEA concluded that the groundwater contamination appeared regional, whereas the soil contamination appeared localized. The human health risk evaluation for Sector C, conducted as part of the PEA, indicated that the cumulative cancer risk exceeded 1×10^{-6} and the cumulative hazard quotient exceeded 1.0 (Earth Tech, 1998).

Subsequently, Earth Tech performed two remedial investigations at Block N on behalf of SCG from October 2001 through 2003. As part of the 2001 remedial investigation, nine soil gas samples (SN-1 through SN-9) were collected and analyzed for VOCs using U.S. Environmental Protection Agency (EPA) Method TO-14. The soil gas samples were found to contain elevated concentrations of several VOCs, including PCE. Concentrations in two of the samples exceeded the residential CHHSL for PCE (Earth Tech, October 19, 2001). Supplemental sampling was conducted by TRC Alton Geoscience in the northwest corner of the site in 2002 as part of Tetra Tech's Master Remedial Investigation (Tetra Tech, September 2002).

Tetra Tech compiled and submitted a *Removal Action Workplan* to DTSC in June 2004. One of the primary objectives of the removal action was to restore the site to a condition consistent with unrestricted land use. Subsequently, Tetra Tech conducted field activities, on behalf of SCG, to remediate the site, which included soil and soil gas sampling and soil removal (Tetra Tech, 2006). As part of the remediation effort, the impacted soil was excavated and removed from the site. A majority of the excavated soil was in the northwest corner, just south of the Manley Oil building. Several confirmation soil samples were collected in the excavation area, beneath the Manley Oil building and its vicinity, during removal action activities onsite. Site cleanup was based on the most protective removal action goals. The soil cleanup continued until the cleanup goals were achieved, as demonstrated by the confirmation soil sample results. Three confirmation soil gas samples (including one duplicate) were also collected in two locations (SN-10 and SN-11) near the excavation area and analyzed for VOCs using EPA Method TO-15. Tetra Tech submitted a *Removal Action Completion Report* to the DTSC in January 2006. A post-excavation risk evaluation, examining the potential for human health and environmental impacts from chemicals within the limits of Block N, was also included as part of this report. Only risks estimated for exposures to VOCs in indoor air were found to exceed 1×10^{-6}, ranging up to 8×10^{-6} for potential exposure to PCE.

Two aboveground storage tanks previously used by Manley Oil for separating oil and water were dismantled and removed from the site in September 2005. Subsequently, a general cleanup of several sumps and the boiler platform was undertaken to remove accumulated oil sludge and soils contaminated by petroleum hydrocarbons, including benzene and naphthalene. The report (Kleinfelder, 2005) noted that the areas of concern had been cleaned to the satisfaction of the DTSC representative.

SOIL GAS VERIFICATION SAMPLING

As described previously, soil gas was noted as an outstanding issue by DTSC. The soil gas sampling effort in this scope of work proposed to collect verification samples from soil gas probes that would be located relatively close to the original sample locations. The verification sampling was intended to achieve three objectives. The first objective was to confirm that the VOCs were occurring at the locations and concentrations first observed by Earth Tech. The original data were over five years old and the samples were not analyzed using Method TO-15, which is preferred for these types of soil gas evaluations. If the soil gas had attenuated, further work might be unnecessary. The second objective was to attempt to identify the source from which the VOCs are originating. There had been some discussion that the PCE could be originating from groundwater, and PCE has been detected in groundwater well C-6 (Figure 3), located northeast of the site, at least once (February 2005), although it has not been detected in recent sampling events. Consequently, most of the sample locations were clustered around the former Manley Oil building, where the soil gas concentrations are highest. A third objective of the program was to provide recent shallow soil gas results that could be used to support a human health risk assessment.

Following is a description of the onsite field activities, the soil and soil gas sampling results, and the potential human health risks associated with possible VOCs beneath the site.

FIELD ACTIVITIES

Health and Safety

Prior to any field activities involving potential exposure to chemicals in the subsurface, Avocet prepared a site-specific health and safety plan (HASP). The HASP identified the potential hazards (chemical and physical) likely to be encountered at the site and specified the measures to be taken to avoid or minimize these hazards. All Avocet field personnel were required to review the HASP and sign a HASP Distribution Record form to acknowledge that they had reviewed it and agreed to abide by its requirements. While in the field, the supervising Avocet employee evaluated Avocet and subcontractor work practices for consistency with the site-specific HASP. The work related to the soil gas verification sampling was completed without any health and safety incidents of any kind.

Boring Mark-Out and Utility Clearance

Prior to initiating intrusive field activities, Avocet personnel marked out the proposed soil gas sampling locations. Underground Service Alert of Southern California (DigAlert) was notified 72 hours before the field investigation began to allow any utility providers an opportunity to "clear" the investigation area relative to below-surface obstructions. As a final check for possible subsurface utilities, probe locations were hand augered to a depth of 5 feet.

Investigation Locations

The soil and soil gas sampling locations are shown in Figure 2. The location of SGP01 was originally proposed between SN-4 and SN-5 pursuant to the *Confirmation Soil Gas Survey Work Plan* (Avocet 2007). However, this boring met with refusal at the time of hand-augering. Therefore, it was relocated adjoining the southern wall of the existing structure along the northern boundary of the site (SGP01A), where higher soil gas VOCs have historically been reported.

Probe Installation, Sampling, and Analysis

All of the investigation work, including the soil gas probe installation, sampling, and laboratory analysis, was conducted in accordance with the work plan (Avocet, January 23, 2007) that was approved by the DTSC, as well as the DTSC and Los Angeles Regional Water Quality Control Board (LARWQCB) guidance for active soil gas investigations (DTSC/LARWQCB, January 28, 2003). All work pertaining to the shallow soil sampling and soil gas probe installation was conducted by Kehoe Testing & Engineering (Kehoe), of Huntington Beach, California, using a limited-access direct-push GeoProbe™ rig due to the restrictions on entering the existing buildings.

Soil Sampling

Soil samples were collected at each of the locations, except SGP03, at depths of 5, 10, and 15 feet below ground surface (bgs). Only one sample was collected at SGP03, at 5 feet bgs, because the boring could not be advanced any further due to refusal. All the soil samples were collected in 1.5-inch-diameter clear acetate liners contained within stainless steel samplers. The acetate sleeves were cut lengthwise to expose the soil core for logging and subsampling. Soil samples were collected for laboratory analysis by extracting two 5-gram and one 25-gram Encore samples from the cores at the appropriate depths and sealing the Encores in Mylar® envelopes in accordance with EPA Method 5035. Each sample was labeled with the date, time, depth, boring location, and geologist; logged onto a chain-of-custody form; and placed in a sealed plastic bag and put into a chilled cooler until delivery to a state-certified environmental testing laboratory. Samples were analyzed for VOCs using EPA Method 8260B. The sampler was decontaminated between borings to prevent cross-contamination by hand-washing in a detergent solution, rinsing in tap water, and then rinsing in distilled water. The GeoProbe™ rods and bits were also decontaminated between borings.

Soil Gas Probe Installation

The shallow temporary probes were constructed within the 5-foot-deep hand-auger borings, and the deep temporary probes were constructed within borings created using direct-push equipment. All borings, except Boring SGP03, were provided with nested gas probes at 5 and 15 feet bgs. As mentioned earlier, Boring SGP03 could not be advanced beyond 5 feet bgs. A single probe was installed in this boring at a depth of 5 feet bgs.

The soil gas probes consisted of a porous ceramic tip set at the desired sampling depth and connected to ⅛-inch outside diameter nylon tubing extending approximately 2.5 feet above the ground surface. The tip (subsurface termination) was constructed of polymerized ceramic, designed to be gas permeable yet prevent the entrance of fine material that could potentially clog the nylon tubing. The extension tubing was premeasured to ensure that the borehole was the correct depth and that the tube reached the bottom of the borehole. Each probe was completed at the surface with a gas-tight valve to prevent degassing after construction and during equilibration. Each probe was clearly labeled with its unique location identifier and depth. The probe tips were installed midway within a 12-inch-thick filter pack consisting of No. 3 Monterey sand. After installing a 5- to 6-inch-thick bed of sand, the probe tip was installed and the remainder of the filter pack added to cover the tip, and the 12-inch filter interval was completed. Approximately 12 inches of dry granular bentonite was placed above the sand and hydrated in place to provide an annular seal. The remainder of the annular space was then backfilled in 12-inch lifts with additional dry granular bentonite, with each lift hydrated with the recommended volume of water.

For the nested completions, the 15-foot-deep probes were installed as described above. Sequential 12-inch lifts of hydrated No. 16 granular bentonite were then added above the filter pack until a depth of 5 feet was reached. Again, a 5- to 6-inch bed of sand was placed, the probe tip installed, and the remainder of the sand added to cover the tip, and the 12-inch filter pack interval was completed. The filter pack was pneumatically isolated with sequential 12-inch lifts of hydrated granular bentonite until the annular construction reached ground surface. Each probe was labeled immediately after installation to ensure proper identification.

Avocet collected the soil gas samples for fixed laboratory analysis in laboratory-provided 6-liter SUMMA-type canisters (including flow regulators and pressure gauges) on February 19, 2007, after allowing the probes to equilibrate over a period of 48 hours. The samples were submitted to Severn Trent Laboratories, Inc. (STL), of Santa Ana, California, for analysis using EPA Method TO-15. The canisters were "batch certified" as "clean" by STL using EPA Method TO-15 certification criteria. Leak detection tests were performed at each soil gas probe location every time a sample was collected to ensure the integrity of the well seal and the sample train. Avocet used 2-propanol (CAS No. 67-63-0) as the leak detection compound during the collection of SUMMA canister samples.

Wastes and Borehole Decommissioning

Investigation-derived waste (IDW) generated during the course of the soil gas verification sampling included soil cuttings generated by hand-auger utility clearance activities, as well as water generated by equipment decontamination.

The used personal protective equipment (PPE) was limited to discarded gloves, which were not expected to be hazardous and which were disposed of in trash receptacles at the site. Drill cuttings, excess soil sample material, and the equipment decontamination rinsate were placed in a single 55-gallon drum. Based on the results of the soil samples, the contents of the drum are currently being profiled. The profile results and manifest will be submitted under separate cover.

The soil gas borehole was decommissioned in accordance with applicable guidance. The soil gas probes were decommissioned by pulling out the polyethylene tubes, thereby detaching the porous tips, and sealing the resulting hole with granular bentonite. The granular bentonite was hydrated with potable water to seal the tubing holes such that abandoned probes do not provide preferential gas migration pathways in the future.

SUMMARY OF RESULTS

Results of Soil Sample Analyses

The results of the soil analyses are summarized in Table 1. VOCs were detected in only 1 of the 13 samples that were analyzed using EPA Method 5035. Specifically, PCE was reported at 2.75 µg/kg in the 5-foot soil matrix sample from Boring SGP03. However, this result was J-flagged by the laboratory to indicate that it was below the reporting limit (RL) of 5.4 µg/kg and above the Method Detection Limit (MDL). In either case, the PCE concentration in this soil sample is negligible. Figure 3 shows the reported PCE concentrations in the soil samples. The corresponding laboratory reports are provided in Attachment 2.

Results of Soil Gas Analyses

The results of the soil gas analyses are summarized in Table 2. A total of nine soil gas samples were collected and analyzed for VOCs using EPA Method TO-15. In brief, all the soil gas samples contained detectable concentrations of at least one VOC compound. Figure 4 shows all the detected VOCs in the soil gas samples analyzed. The corresponding laboratory reports are provided in Attachment 2.

The detected VOCs and the frequency of detection are summarized below.

Compound	Detection Frequency	Concentration Range (µg/m^3)
1,1,1-Trichloroethane	6 / 9	3.5 (J) – 8.2 (J)
1,2,4-Trimethylbenzene	1 / 9	8.8 (J)
2-Butanone (MEK)	9 / 9	9.1 (J) – 1,800
2-Hexanone	5 / 9	17 (J) – 33 (J)
4-Ehyltoluene	4 / 9	4.7 (J) – 8.5 (J)
Acetone	8 / 9	7.2 (J) - 300
Benzene	1 / 9	3.5 (J)
Chloromethane	1 / 9	3.8 (J)
Dichlorodifluoromethane	7 / 9	2.5 (J) – 3.5 (J)
Ethylbenzene	3 / 9	4.3 (J) – 6.9 (J)
Methylene chloride	5 / 9	3.3 (J) – 4.5 (J)
Tetrachloroethene (PCE)	9 / 9	77 – 3,100
Toluene	8 / 9	5.2 (J) - 18
Trichloroethene (TCE)	4 / 9	10 (J) - 22
Trichlorofluoromethane	2 / 9	54 - 130
Xylenes (Total)	8 / 9	16 - 43

As indicated above, 2-butanone (MEK), acetone, and PCE are the most widely distributed VOCs in the soil gas. Total xylenes, toluene, and dichlorofluoromethane were also detected in several of the analyzed samples at concentrations above the RL but below a level of significance relative to their respective CHHSL.

Review of SCG Groundwater Monitoring Data

SCG provided Avocet with quarterly groundwater monitoring data for all of the wells surrounding the site, including data for a two year period (March 2005 through November 2006) corresponding to Wells C-6, C-8A, TtK-2, TtK-5, TtK-6, and TtO-1, as shown in Figure 3. The data are provided in Attachment 3.

The groundwater monitoring results show that acetone and MEK were not detected in any of the groundwater samples collected during the course of the two-year sampling period. Samples from only two of the wells, C-6 and C-8A, contained PCE at concentrations higher than the reporting limit. PCE was reported at concentrations ranging from 0.5 to 1.4 µg/l in Well C-6; the well nearest to the northern boundary of the subject site. The most recent sample from this well, however, did not detect any PCE. Similarly, although PCE has been reported at concentrations ranging from 0.5 and 1.2 µg/l in Well C-8A, it has not been reported in any of the samples analyzed after the October 2005 sampling event. Conversely, the soil gas samples collected during the most recent soil gas investigation had high concentrations of acetone, PCE, and MEK. The absence or negligible concentrations of acetone, PCE, and MEK in the groundwater and their detection in the soil gas at high concentrations suggest that the underlying groundwater is probably not the source of these compounds.

Conversely, all the wells have consistently shown high concentrations of other VOCs, including benzene, ethylbenzene, isopropylbenzene, and vinyl chloride. Other detected VOCs include *cis*-1,2-dichloroethene, methyl *tert*-butyl ether (MTBE), *n*-propylbenzene, *sec*-butylbenzene, toluene, *trans*-1,2-dicholroethene, and trichloroethene (TCE). In addition, Wells TtK-2 and TtO-1 have shown exceptionally high concentrations of naphthalene (up to 11,800 µg/l), xylenes (up to 1,321 µg/l), toluene (up to 203 µg/l), and total petroleum hydrocarbons (TPH [up to 22,600 µg/l as gasoline]). Although xylene and toluene was detected in some of the soil gas samples at low concentrations, none of the other VOCs were detected in any of the soil gas samples. Again, the presence of high concentrations of the VOCs mentioned above and their corresponding absence in the soil gas suggest that groundwater is probably not the source of these compounds. Since groundwater is typically found at approximately 28 feet bgs, and the soil gas samples were collected at 5 and 15 feet bgs, these VOCs would have been detected in the deeper soil gas probes if off-gassing from the groundwater was occurring.

Based on the available data, it appears that the VOCs detected in the soil gas are probably originating from a near-surface source, and the lack of correlation between the VOCs in the groundwater and soil gas suggests that the near-surface source, if any, has not contributed to the VOC-impacted groundwater.

HUMAN HEALTH RISK EVALUATION

McDaniel Lambert conducted an evaluation of the potential future human health risks from indoor vapor intrusion due to the detected VOCs in the soil gas samples collected in the vicinity of the former Manley Oil building on the site. A copy of the report compiled by McDaniel Lambert is provided as Attachment 1.

The health evaluation primarily focused on the potential exposures of residents or business employees who may reside or work in future onsite buildings. Based on the human health risk evaluation, the potential cancer risks from VOC vapor intrusion to future commercial business employees were found to be below the California Proposition 65 cancer risk level (1×10^{-5} or 1 in 100,000). Cancer risks for future residents were found at the California Proposition 65 cancer risk level of 1×10^{-5}, driven primarily by modeled concentrations of PCE in indoor air. Noncancer hazards for both groups were all well below the target value of 1.

CONCLUSIONS

The analytical results show that soil gas, especially around the former Manley Oil building, is impacted by VOCs. At present, the site poses a potential risk to future residential receptors due to inhalation of soil gas. The primary risk driver within the soil gas is PCE. The data and site configuration suggest that most of the VOCs, and certainly PCE, originate from a near-surface source around the east end of the Manley Oil building. The lack of certain VOCs, such as MEK and acetone, in groundwater further argue that the PCE source is not off-gassing from groundwater. It is not possible, however, to clearly delineate the PCE source at this time with the available data.

In its current state, portions of the site are not suitable for unrestricted use. However, it is believed that if the impacted soil gas is remediated the environmental issues originating from the site will have been addressed in a manner protective of human health. As such, alternative uses of the site can be considered consistent with an LUC attached to the property that addresses the underlying regional groundwater condition.

If you have any questions regarding this report or require additional information, please do not hesitate to call.

Respectfully submitted,

AVOCET ENVIRONMENTAL, INC.

R. Van Hyning

Robert Van Hyning, P.E.
Principal

REGISTERED PROFESSIONAL ENGINEER
ROBERT VAN HYNING
C 054691
Exp. Date 12/31/07
CIVIL
STATE OF CALIFORNIA

AVOCET
ENVIRONMENTAL, INC.

RVH:sh
Attachments
cc: Benett Greenwald – The Greenwald Company
Richard Bayer, Esq.
Rita Kamat – Department of Toxic Substances Control

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Tables

Table 1
Summary of Soil VOC Analyses
(Concentrations are in ug/kg)
Former Aliso Street MGP Facility
Los Angeles, California

Boring No.	Sample Date	Sample Depth (feet bgs)	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene (1,1-Dichloroethylene)	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane (EDB, Ethylene dibromide)	1,2-Dichlorobenzene (o-Dichlorobenzene)	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene (m-Dichlorobenzene)	1,3-Dichloropropane	1,4-Dichlorobenzene (p-Dichlorobenzene)	2,2-Dichloropropane	2-Butanone (MEK, Methyl ethyl ketone)	2-Chlorotoluene (o-Chlorotoluene)	2-Hexanone	4-Chlorotoluene (p-Chlorotoluene)	4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	Acetone	Benzene	Bromobenzene (Phenyl bromide)	Bromochloromethane (Chlorobromomethane)	Bromodichloromethane (Dichlorobromomethane)	Bromoform (Tribromomethane)	Bromomethane (Methyl bromide)
SGP01A	02/15/07	5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25.0	<5.0	<25.0	<5.0	<25.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	02/15/07	10.0	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<9.4	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<24.0	<4.7	<24.0	<4.7	<24.0	<24.0	<4.7	<4.7	<4.7	<4.7	<4.7	<9.4
	02/15/07	15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25.0	<5.0	<25.0	<5.0	<25.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	02/15/07	15.0	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<12.0	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<29.0	<5.8	<29.0	<5.8	<29.0	<29.0	<5.8	<5.8	<5.8	<5.8	<5.8	<12.0
SGP02	02/15/07	5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25.0	<5.0	<25.0	<5.0	<25.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	02/15/07	10.0	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11.0	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<27.0	<5.4	<27.0	<5.4	<27.0	<27.0	<5.4	<5.4	<5.4	<5.4	<5.4	<11.0
	02/15/07	15.0	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<9.6	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<24.0	<4.8	<24.0	<4.8	<24.0	<24.0	<4.8	<4.8	<4.8	<4.8	<4.8	<9.6
SGP03	02/15/07	5.0	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11.0	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<27.0	<5.4	<27.0	<5.4	<27.0	<27.0	<5.4	<5.4	<5.4	<5.4	<5.4	<11.0
SGP04	02/15/07	5.0	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<9.3	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<23.0	<4.6	<23.0	<4.6	<23.0	<23.0	<4.6	<4.6	<4.6	<4.6	<4.6	<9.3
	02/15/07	10.0	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<9.5	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<24.0	<4.8	<24.0	<4.8	<24.0	<24.0	<4.8	<4.8	<4.8	<4.8	<4.8	<9.5
	02/15/07	15.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<26.0	<5.2	<26.0	<5.2	<26.0	<26.0	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0
SGP05	02/15/07	5.0	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<9.6	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<24.0	<4.8	<24.0	<4.8	<24.0	<24.0	<4.8	<4.8	<4.8	<4.8	<4.8	<9.6
	02/15/07	10.0	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<9.0	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<22.0	<4.5	<22.0	<4.5	<22.0	<22.0	<4.5	<4.5	<4.5	<4.5	<4.5	<9.0
	02/15/07	15.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<26.0	<5.2	<26.0	<5.2	<26.0	<26.0	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0
Screening Criteria																																			
Region 9 Residential Preliminary Remediation Goals (PRGs)			3,200	1,200,000	410	730	510,000	120,000	- -	- -	34	62,000	52,000	30	32	600,000	280	340	21,000	530,000	100,000	3,400	- -	22,000,000	160,000	- -	- -	5,300,000	14,000,000	640	28,000	- -	820	62,000	3,900
Region 9 Industrial Preliminary Remediation Goals (PRGs)			7,300	1,200,000	930	1,600	1,700,000	410,000	- -	- -	76	220,000	170,000	76	73	600,000	600	740	70,000	600,000	360,000	7,900	- -	110,000,000	560,000	- -	- -	47,000,000	54,000,000	1,400	92,000	- -	1,800	220,000	13,000

Notes: Analyses conducted by Severn Trent Laboratories, Inc. using EPA Method 8260B.
< Denotes nondetected at the Reporting Limit (RL) indicated.
Bold type indicates reported at detectable concentration.
J Flag denotes estimated concentration between the Reporting Limit (RL) and the Method Detection Limit (MDL).

AVOCET
ENVIRONMENTAL, INC.

Table 1
Summary of Soil VOC Analyses
(Concentrations are in ug/kg)
Former Aliso Street MGP Facility
Los Angeles, California

Boring No.	Sample Date	Sample Depth (feet bgs)	Carbon disulfide	Carbon tetrachloride (Tetrachloromethane)	Chlorobenzene	Chloroethane	Chloroform (Trichloromethane)	Chloromethane (Methyl chloride)	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Ethylbenzene	Hexachlorobutadiene (1,3-Hexachlorobutadiene)	Isopropylbenzene
SGP01A	02/15/07	5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
	02/15/07	10.0	<4.7	<4.7	<4.7	<9.4	<4.7	<9.4	<4.7	<4.7	<4.7	<4.7	<9.4	<4.7	<4.7	<4.7
	02/15/07	15.0	<5.0	<5.0	<5.0	<10.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
	02/15/07	15.0	<5.8	<5.8	<5.8	<12.0	<5.8	<12.0	<5.8	<5.8	<5.8	<5.8	<12.0	<5.8	<5.8	<5.8
SGP02	02/15/07	5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
	02/15/07	10.0	<5.4	<5.4	<5.4	<11.0	<5.4	<11.0	<5.4	<5.4	<5.4	<5.4	<11.0	<5.4	<5.4	<5.4
	02/15/07	15.0	<4.8	<4.8	<4.8	<9.6	<4.8	<9.6	<4.8	<4.8	<4.8	<4.8	<9.6	<4.8	<4.8	<4.8
SGP03	02/15/07	5.0	<5.4	<5.4	<5.4	<11.0	<5.4	<11.0	<5.4	<5.4	<5.4	<5.4	<11.0	<5.4	<5.4	<5.4
SGP04	02/15/07	5.0	<4.6	<4.6	<4.6	<9.3	<4.6	<9.3	<4.6	<4.6	<4.6	<4.6	<9.3	<4.6	<4.6	<4.6
	02/15/07	10.0	<4.8	<4.8	<4.8	<9.5	<4.8	<9.5	<4.8	<4.8	<4.8	<4.8	<9.5	<4.8	<4.8	<4.8
	02/15/07	15.0	<5.2	<5.2	<5.2	<10.0	<5.2	<10.0	<5.2	<5.2	<5.2	<5.2	<10.0	<5.2	<5.2	<5.2
SGP05	02/15/07	5.0	<4.8	<4.8	<4.8	<9.6	<4.8	<9.6	<4.8	<4.8	<4.8	<4.8	<9.6	<4.8	<4.8	<4.8
	02/15/07	10.0	<4.5	<4.5	<4.5	<9.0	<4.5	<9.0	<4.5	<4.5	<4.5	<4.5	<9.0	<4.5	<4.5	<4.5
	02/15/07	15.0	<5.2	<5.2	<5.2	<10.0	<5.2	<10.0	<5.2	<5.2	<5.2	<5.2	<10.0	<5.2	<5.2	<5.2
Screening Criteria																
Region 9 Residential Preliminary Remediation Goals (PRGs)			360,000	250	150,000	3,000	220	47,000	43,000	780	1,100	-	94,000	400,000	6,200	570,000
Region 9 Industrial Preliminary Remediation Goals (PRGs)			720,000	550	530,000	6,500	470	160,000	150,000	1,800	2,600	-	310,000	400,000	22,000	2,000,000

Boring No.	Sample Date	Sample Depth (feet bgs)	m- & p-Xylenes	Methylene chloride (Dichloromethane, DCM)	MTBE	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Isopropyltoluene (4-Isopropyltoluene)	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene (Tetrachloroethylene)	Toluene (Methyl benzene)	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl chloride (Chloroethene)
SGP01A	02/15/07	5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
	02/15/07	10.0	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<9.4	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<9.4	<4.7
	02/15/07	15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
	02/15/07	15.0	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<12.0	<5.8	<5.8	<5.8	<5.8	<5.8	<5.8	<12.0	<5.8
SGP02	02/15/07	5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
	02/15/07	10.0	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11.0	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11.0	<5.4
	02/15/07	15.0	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<9.6	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<9.6	<4.8
SGP03	02/15/07	5.0	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<11.0	<5.4	**2.7** J	<5.4	<5.4	<5.4	<5.4	<11.0	<5.4
SGP04	02/15/07	5.0	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<9.3	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<9.3	<4.6
	02/15/07	10.0	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<9.5	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<9.5	<4.8
	02/15/07	15.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.2
SGP05	02/15/07	5.0	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<9.6	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<9.6	<4.8
	02/15/07	10.0	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<9.0	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<9.0	<4.5
	02/15/07	15.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.2
Screening Criteria																				
Region 9 Residential Preliminary Remediation Goals (PRGs)			270,000	9,100	32,000	56,000	240,000	240,000	- -	- -	220,000	1,700,000	- -	480	520,000	69,000	520,000	- -	390,000	79
Region 9 Industrial Preliminary Remediation Goals (PRGs)			420,000	21,000	70,000	190,000	240,000	240,000	- -	- -	220,000	1,700,000	- -	1,300	520,000	230,000	520,000	- -	2,000,000	75

Notes: Analyses conducted by American Scientific Laboratories, Inc. using EPA Method 8260B.
< Denotes nondetected at the Reporting Limit (RL) indicated.
Bold type indicates reported at detectable concentration.
J Flag denotes estimated concentration between the Reporting Limit (RL) and the Method Detection Limit (MDL).

AVOCET ENVIRONMENTAL, INC.

Table 2
Summary of Soil Gas VOC Analyses
(Concentrations are in ug/m^3)
Former Aliso Street MGP Facility
Los Angeles, California

Boring No.	Sample Date	Sample Depth (feet bgs)	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene (1,1-Dichloroethylene)	1,1,2-Trichloro-1,2,2-triflouroehane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromoethane (EDB, Ethylene dibromide)	1,2-Dichlorobenzene (o-Dichlorobenzene)	1,2-Dichloroethane	1,2-Dichloropropane	1,2-Dichloro-1,1,2,2-tetraflouroethane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene (m-Dichlorobenzene)	1,4-Dichlorobenzene (p-Dichlorobenzene)	2-Butanone (MEK, Methyl ethyl ketone)	2-Hexanone	4-Ethyltoluene	4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	Acetone	Benzene	Benzyl chloride	Bromodichloromethane (Dichlorobromomethane)
SGP01A	02/19/07	5.0	**4.7 J**	<14.0	<11.0	<8.1	<7.9	<15.0	<37.0	<15.0	<15.0	<12.0	<8.1	<9.2	<14.0	<15.0	<12.0	<12.0	**190.0**	**22.0 J**	**4.7 J**	<41.0	**25.0**	<6.4	<130.0	<13.0
	02/19/07	15.0	<11.0	<14.0	<11.0	<8.1	<7.9	<15.0	<37.0	<15.0	<15.0	<12.0	<8.1	<9.2	<14.0	<15.0	<12.0	<12.0	**220.0**	**17.0 J**	**8.5 J**	<41.0	**30.0**	<6.4	<130.0	<13.0
SGP02	02/15/07	5.0	<48.0	<61.0	<48.0	<35.0	<34.0	<65.0	<160.0	<65.0	<65.0	<52.0	<35.0	<40.0	<61.0	<65.0	<52.0	<52.0	**1,800.0**	<180.0	<43.0	<180.0	**300.0**	<28.0	<570.0	<57.0
	02/15/07	15.0	<45.0	<57.0	<45.0	<33.0	<32.0	<61.0	<150.0	<61.0	<61.0	<49.0	<33.0	<38.0	<57.0	<61.0	<49.0	<49.0	**1,800.0**	**25.0 J**	<40.0	<170.0	**300.0**	<26.0	<530.0	<53.0
SGP03	02/15/07	5.0	**5.8 J**	<14.0	<11.0	<8.1	<7.9	<15.0	<37.0	<15.0	<15.0	<12.0	<8.1	<9.2	<14.0	<15.0	<12.0	<12.0	**9.1 J**	<41.0		<41.0	<21.0	**3.5 J**	<130.0	<13.0
SGP04	02/15/07	5.0	**7.1 J**	<14.0	<11.0	<8.1	<7.9	<15.0	<37.0	<15.0	<15.0	<12.0	<8.1	<9.2	<14.0	<15.0	<12.0	<12.0	**15.0 J**	<41.0		<41.0	**7.2 J**	<6.4	<130.0	<13.0
	02/15/07	15.0	**8.2 J**	<14.0	<11.0	<8.1	<7.9	<15.0	<37.0	**8.8 J**	<15.0	<12.0	<8.1	<9.2	<14.0	<15.0	<12.0	<12.0	**27.0 J**	<41.0	**7.1 J**	<41.0	**31.0**	<6.4	<130.0	<13.0
SGP05	02/15/07	5.0	**3.5 J**	<14.0	<11.0	<8.1	<7.9	<15.0	<37.0	<15.0	<15.0	<12.0	<8.1	<9.2	<14.0	<15.0	<12.0	<12.0	**610.0**	**33.0 J**	**8.2 J**	<41.0	**37.0**	<6.4	<130.0	<13.0
	02/15/07	15.0	**3.9 J**	<14.0	<11.0	<8.1	<7.9	<15.0	<37.0	<15.0	<15.0	<12.0	<8.1	<9.2	<14.0	<15.0	<12.0	<12.0	**550.0**	**31.0 J**		<41.0	**35.0**	<6.4	<130.0	<13.0

Notes: Analyses conducted by Severn Trent Laboratories, Inc. using EPA-2 TO-15.
< Denotes nondetected at the Reporting Limit (RL) indicated.
Bold type indicates reported at detectable concentration.
J Flag denotes estimated concentration between the Reporting Limit (RL) and the Method Detection Limit (MDL).

AVOCET ENVIRONMENTAL, INC.

Table 2
Summary of Soil Gas VOC Analyses
(Concentrations are in ug/m^3)
Former Aliso Street MGP Facility
Los Angeles, California

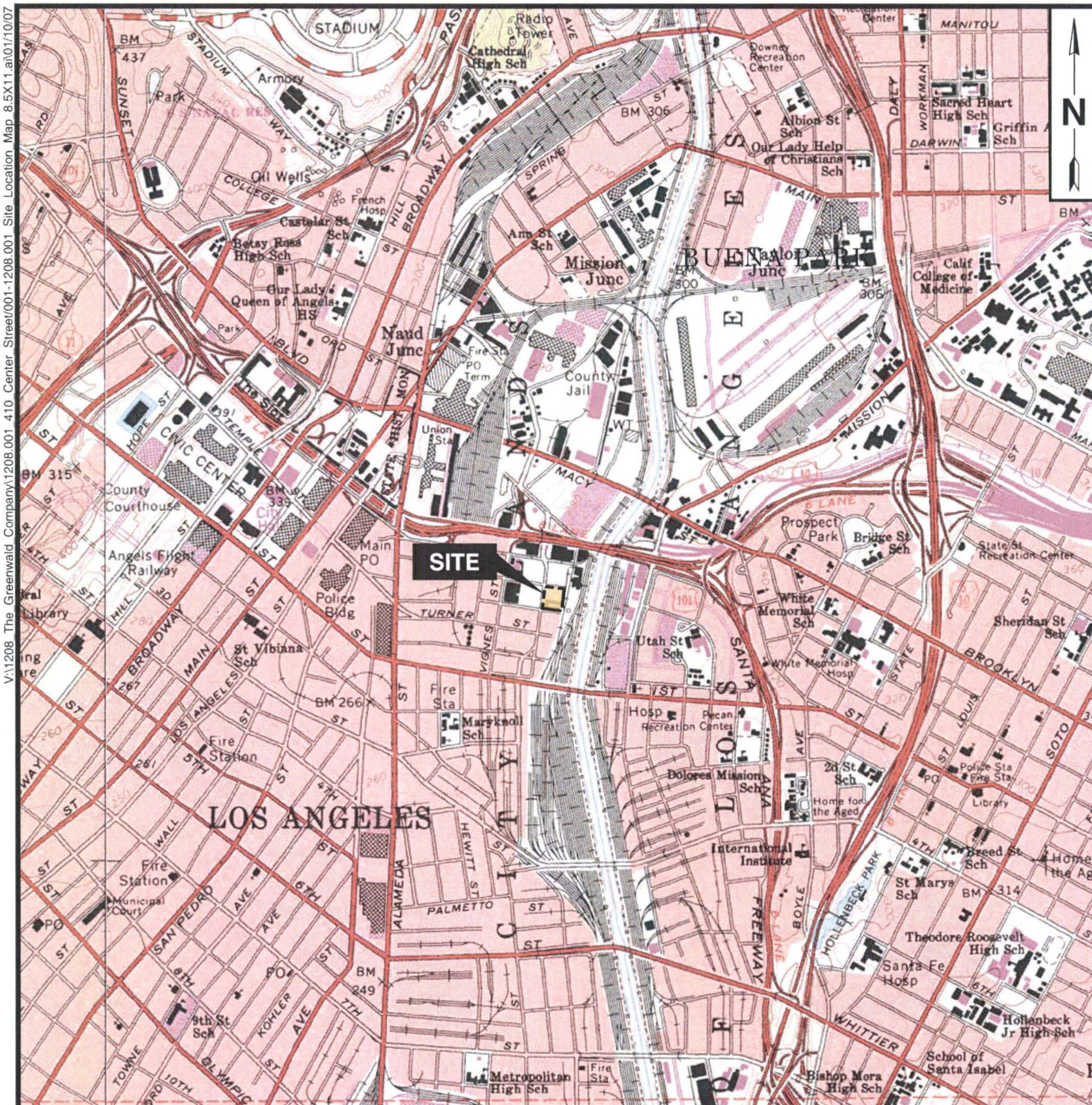
Boring No.	Sample Date	Sample Depth (feet bgs)	Bromoform (Tribromomethane)	Bromomethane (Methyl bromide)	Carbon disulfide	Carbon tetrachloride (Tetrachloromethane)	Chlorobenzene	Chloroethane	Chloroform (Trichloromethane)	Chloromethane (Methyl chloride)	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Hexachlorobutadiene (1,3-Hexachlorobutadiene)	Methylene chloride (Dichloromethane, DCM)	Styrene	Tetrachloroethene (Tetrachloroethylene)	Toluene (Methyl benzene)	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl acetate	Vinyl chloride (Chloroethene)	Xylenes (Total)
SGP01A	02/19/07	5.0	<21.0	<7.8	<31.0	<13.0	<9.2	<10.0	<7.8	<8.2	<7.9	<9.1	<17.0	**2.6 J**	<8.7	<43.0	<6.9	<8.5	**2,000.0**	**8.6**	<7.9	<9.1	**22.0**	<11.0	<35.0	<5.1	**19.0**
	02/19/07	15.0	<21.0	<7.8	<31.0	<13.0	<9.2	<10.0	<7.8	<8.2	<7.9	<9.1	<17.0	**2.9 J**	**6.9 J**	<43.0	**3.3 J**	<8.5	**1,900.0**	**18.0**	<7.9	<9.1	**10.0 J**	<11.0	<35.0	<5.1	**40.0**
SGP02	02/15/07	5.0	<91.0	<34.0	<130.0	<57.0	<40.0	<44.0	<34.0	<36.0	<34.0	<40.0	<74.0	<43.0	<38.0	<190.0	<30.0	<37.0	**1,300.0**	<33.0	<34.0	<40.0	<11.0	<48.0	<150.0	<22.0	<38.0
	02/15/07	15.0	<86.0	<32.0	<130.0	<53.0	<38.0	<1.0	<32.0	<33.0	<32.0	<37.0	<69.0	<40.0	<35.0	<180.0	<28.0	<35.0	**1,500.0**	**12.0 J**	<32.0	<37.0	**11.0 J**	<45.0	<140.0	<21.0	**24.0 J**
SGP03	02/15/07	5.0	<21.0	<7.8	<31.0	<13.0	<9.2	<10.0	<7.8	<8.2	<7.9	<9.1	<17.0	**2.5 J**	<8.7	<43.0	<6.9	<8.5	**3,100.0**	**6.9 J**	<7.9	<9.1	**21.0**	<11.0	<35.0	<5.1	**16.0**
SGP04	02/15/07	5.0	<21.0	<7.8	<31.0	<13.0	<9.2	<10.0	<7.8	<8.2	<7.9	<9.1	<17.0	**3.2 J**	<8.7	<43.0	**4.5 J**	<8.5	**330.0**	**7.1 J**	<7.9	<9.1	<11.0	<11.0	<35.0	<5.1	**18.0**
	02/15/07	15.0	<21.0	<7.8	<31.0	<13.0	<9.2	<10.0	<7.8	<8.2	<7.9	<9.1	<17.0	**3.3 J**	**4.3 J**	<43.0	**3.9 J**	<8.5	**440.0**	**12.0**	<7.9	<9.1	<11.0	<11.0	<35.0	<5.1	**26.0**
SGP05	02/15/07	5.0	<21.0	<7.8	<31.0	<13.0	<9.2	<10.0	<7.8	<8.2	<7.9	<9.1	<17.0	**3.5 J**	**7.0 J**	<43.0	**3.9 J**	<8.5	**91.0**	**17.0**	<7.9	<9.1	<11.0	**130.0**	<35.0	<5.1	**43.0**
	02/15/07	15.0	<21.0	<7.8	<31.0	<13.0	<9.2	<10.0	<7.8	**3.8 J**	<7.9	<9.1	<17.0	**3.4 J**	<8.7	<43.0	**3.9 J**	<8.5	**77.0**	**5.2 J**	<7.9	<9.1	<11.0	**54.0**	<35.0	<5.1	**13.0**

Notes: Analyses conducted by Severn Trent Laboratories, Inc. using EPA-2 TO-15.
< Denotes nondetected at the Reporting Limit (RL) indicated.
Bold type indicates reported at detectable concentration.
J Flag denotes estimated concentration between the Reporting Limit (RL) and the Method Detection Limit (MDL).

Figures

AVOCET
ENVIRONMENTAL, INC.

V:\1208 The Greenwald Company\1208.001 410 Center Street\001-1208.001 Site Location Map 8.5X11.ai\01/10/07



0 2,000 4,000 FEET

APPROXIMATE SCALE

FIGURE 1

SITE LOCATION MAP

410 CENTER STREET
LOS ANGELES, CALIFORNIA

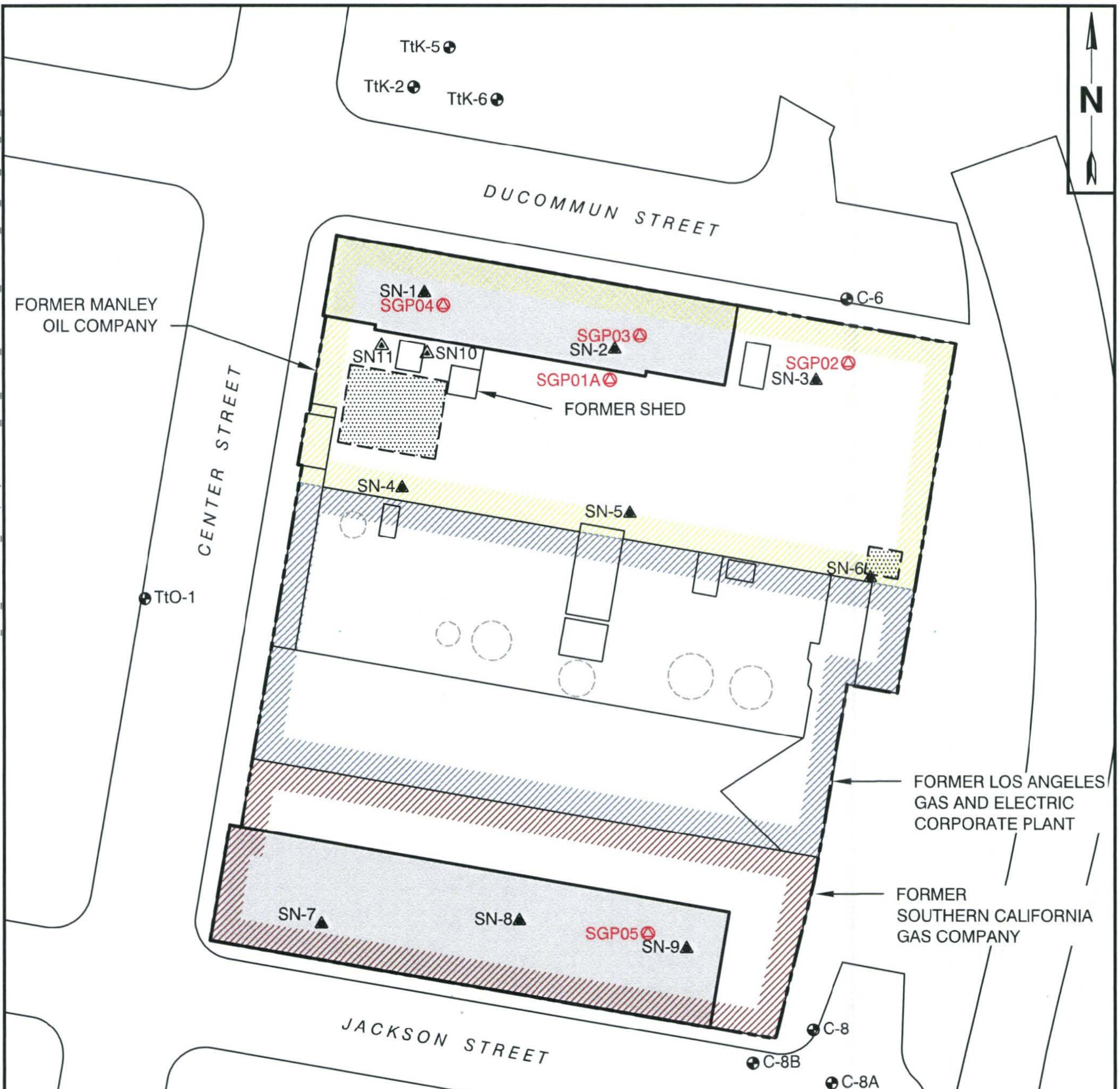
PREPARED FOR

THE GREENWALD COMPANY
SAN DIEGO, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

REFERENCE:
7.5 MINUTE U.S.G.S. TOPOGRAPHIC MAPS
OF HOLLYWOOD AND LOS ANGELES, CALIFORNIA
DATED: 1966
PHOTOREVISED: 1981

V:\1208_The_Greenwald_Company\1208.001_410_Center_Street\003_1208.001_Site_Plan_Prop_Soil_Gas.dwg\04/12/07



REFERENCE:
KLEINFELDER, 2005 "SITE PLAN SHOWING SOIL VAPOR SAMPLE AND GROUNDWATER MONITORING WELL LOCATIONS"

0 60 120 FEET

SCALE

FIGURE 2

LEGEND

	SOIL GAS SAMPLE LOCATION
SN-1	SOIL VAPOR SAMPLING LOCATION (EARTH TECH, 2001)
SN10	SOIL VAPOR SAMPLING LOCATION (TETRA TECH, 2005)
TtK-2	EXISTING GROUNDWATER MONITORING WELL
	FORMER ABOVEGROUND STORAGE TANK (REMOVED)
	AREA OF EXCAVATION (THE GAS COMPANY, 2005)
	EXISTING BUILDING
	SITE BOUNDARY

NOTES:
1. GROUNDWATER WELL LOCATIONS FROM DRAWING PROVIDED BY TETRA TECH, 09/29/05.
2. ALL LOCATIONS ARE APPROXIMATE.

SITE PLAN SHOWING SOIL GAS SAMPLE LOCATIONS

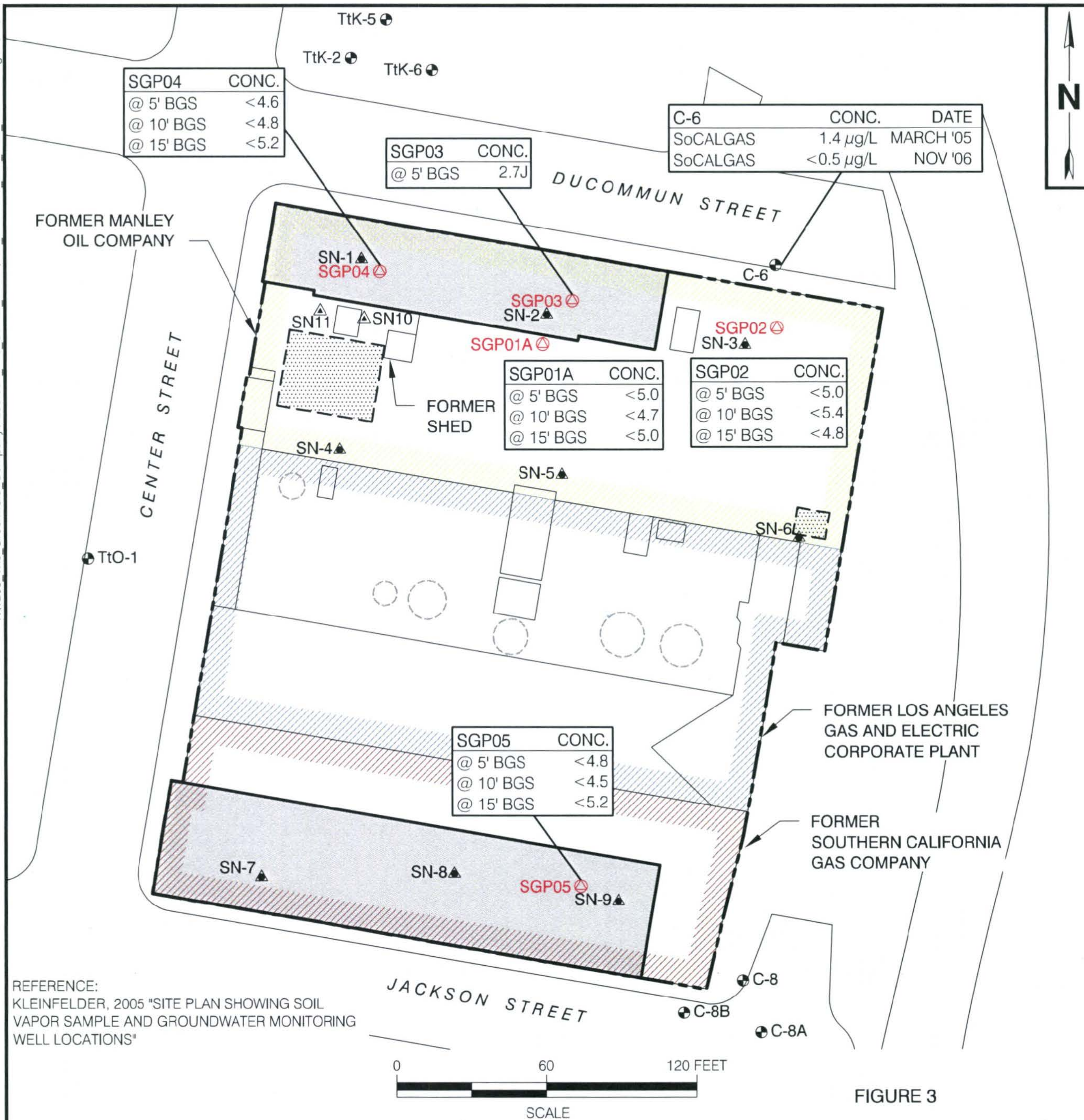
410 CENTER STREET
LOS ANGELES, CALIFORNIA

PREPARED FOR

THE GREENWALD COMPANY
SAN DIEGO, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

V:\1208 The Greenwald Company\1208.001 410 Center Street\007 1208.001 Soil PCE Results.dwg\04/12/07



LEGEND

- SOIL GAS SAMPLE LOCATION
- SN-1 SOIL VAPOR SAMPLING LOCATION (EARTH TECH, 2001)
- SN10 SOIL VAPOR SAMPLING LOCATION (TETRA TECH, 2005)
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FIGURE 3

TETRACHLOROETHENE (PCE) IN SOIL AND GROUNDWATER

410 CENTER STREET
LOS ANGELES, CALIFORNIA

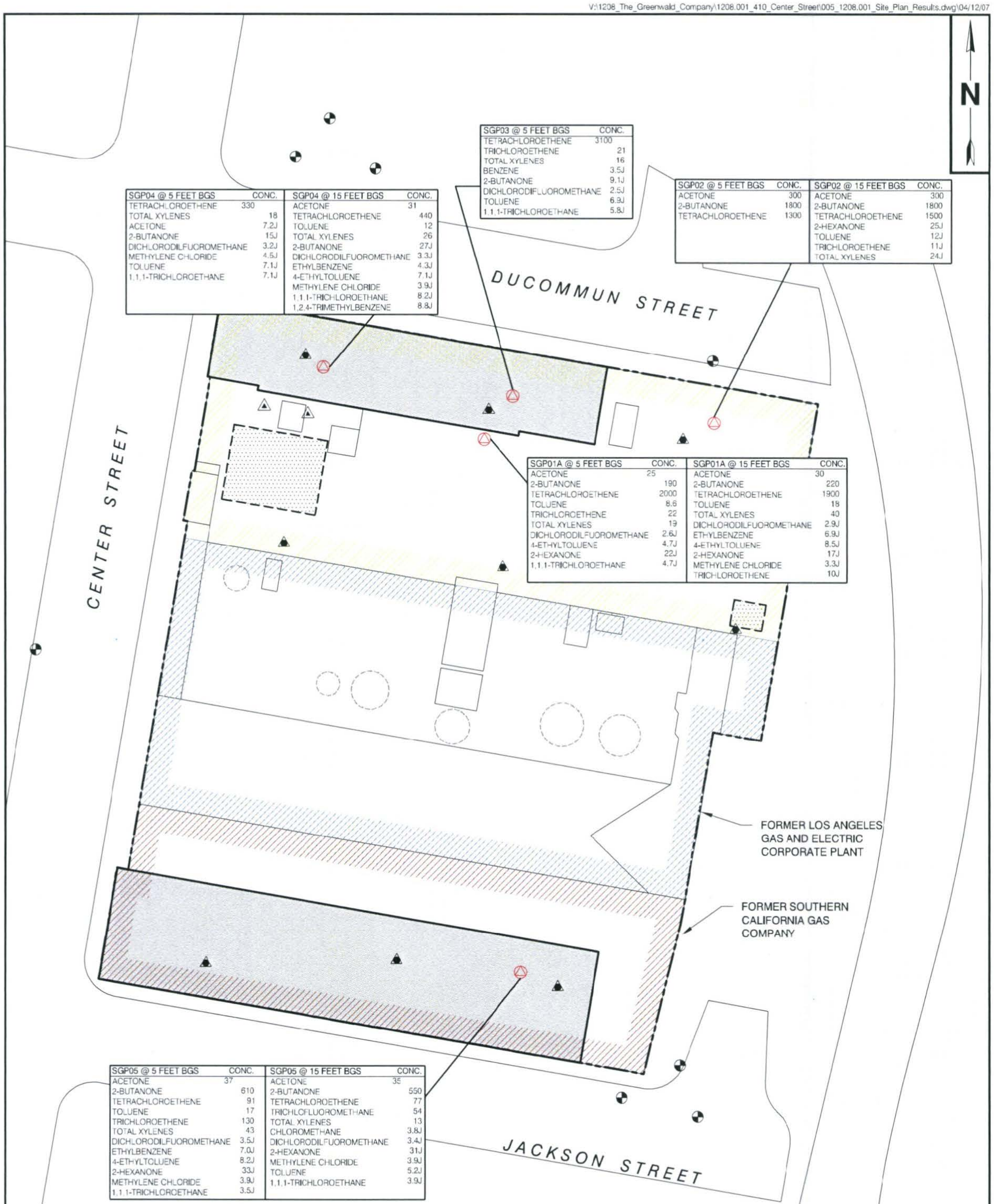
PREPARED FOR

THE GREENWALD COMPANY
SAN DIEGO, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

NOTES:
1. GROUNDWATER WELL LOCATIONS FROM DRAWING PROVIDED BY TETRA TECH, 09/29/05.
2. ALL LOCATIONS ARE APPROXIMATE.
3. ALL CONCENTRATIONS (CONC.) IN μg/kg UNLESS OTHERWISE NOTED. ND = NON DETECT.
4. PCE REPORTED IN GROUNDWATER SAMPLES FROM WELL C-6. ACETONE AND MEK WERE NON-DETECT.

V:\1208_The_Greenwald_Company\1208.001_410_Center_Street\005_1208.001_Site_Plan_Results.dwg\04/12/07



SGP04 @ 5 FEET BGS	CONC.
TETRACHLOROETHENE	330
TOTAL XYLENES	18
ACETONE	7.2J
2-BUTANONE	15J
DICHLORODILFUOROMETHANE	3.2J
METHYLENE CHLORIDE	4.5J
TOLUENE	7.1J
1,1,1-TRICHLOROETHANE	7.1J

SGP04 @ 15 FEET BGS	CONC.
ACETONE	31
TETRACHLOROETHENE	440
TOLUENE	12
TOTAL XYLENES	26
2-BUTANONE	27J
DICHLORODILFUOROMETHANE	3.3J
ETHYLBENZENE	4.3J
4-ETHYLTOLUENE	7.1J
METHYLENE CHLORIDE	3.9J
1,1,1-TRICHLOROETHANE	8.2J
1,2,4-TRIMETHYLBENZENE	8.8J

SGP03 @ 5 FEET BGS	CONC.
TETRACHLOROETHENE	3100
TRICHLOROETHENE	21
TOTAL XYLENES	16
BENZENE	3.5J
2-BUTANONE	9.1J
DICHLORODIFLUOROMETHANE	2.5J
TOLUENE	6.9J
1,1,1-TRICHLOROETHANE	5.8J

SGP02 @ 5 FEET BGS	CONC.
ACETONE	300
2-BUTANONE	1800
TETRACHLOROETHENE	1300

SGP02 @ 15 FEET BGS	CONC.
ACETONE	300
2-BUTANONE	1800
TETRACHLOROETHENE	1500
2-HEXANONE	25J
TOLUENE	12J
TRICHLOROETHENE	11J
TOTAL XYLENES	24J

SGP01A @ 5 FEET BGS	CONC.
ACETONE	25
2-BUTANONE	190
TETRACHLOROETHENE	2000
TOLUENE	8.6
TRICHLOROETHENE	22
TOTAL XYLENES	19
DICHLORODILFUOROMETHANE	2.6J
4-ETHYLTOLUENE	4.7J
2-HEXANONE	22J
1,1,1-TRICHLOROETHANE	4.7J

SGP01A @ 15 FEET BGS	CONC.
ACETONE	30
2-BUTANONE	220
TETRACHLOROETHENE	1900
TOLUENE	18
TOTAL XYLENES	40
DICHLORODILFUOROMETHANE	2.9J
ETHYLBENZENE	6.9J
4-ETHYLTOLUENE	8.5J
2-HEXANONE	17J
METHYLENE CHLORIDE	3.3J
TRICHLOROETHENE	10J

SGP05 @ 5 FEET BGS	CONC.
ACETONE	37
2-BUTANONE	610
TETRACHLOROETHENE	91
TOLUENE	17
TRICHLOROETHENE	130
TOTAL XYLENES	43
DICHLORODILFUOROMETHANE	3.5J
ETHYLBENZENE	7.0J
4-ETHYLTOLUENE	8.2J
2-HEXANONE	33J
METHYLENE CHLORIDE	3.9J
1,1,1-TRICHLOROETHANE	3.5J

SGP05 @ 15 FEET BGS	CONC.
ACETONE	35
2-BUTANONE	550
TETRACHLOROETHENE	77
TRICHLOFLUOROMETHANE	54
TOTAL XYLENES	13
CHLOROMETHANE	3.8J
DICHLORODILFUOROMETHANE	3.4J
2-HEXANONE	31J
METHYLENE CHLORIDE	3.9J
TOLUENE	5.2J
1,1,1-TRICHLOROETHANE	3.9J

REFERENCE:
KLEINFELDER, 2005 "SITE PLAN SHOWING SOIL VAPOR SAMPLE AND GROUNDWATER MONITORING WELL LOCATIONS"

LEGEND

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- EXISTING BUILDING
- SITE BOUNDARY

FIGURE 4

SOIL GAS SAMPLING RESULTS

410 CENTER STREET
LOS ANGELES, CALIFORNIA

PREPARED FOR

THE GREENWALD COMPANY
LOS ANGELES, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

NOTES:
1. GROUNDWATER WELL LOCATIONS FROM DRAWING PROVIDED BY TETRA TECH, 09/29/05.
2. ALL LOCATIONS ARE APPROXIMATE.
3. ALL CONCENTRATIONS (CONC.) REPORTED IN $\mu g/m^3$

Tetra Tech Project No. 100-PEN-T30816

Technical Report
Monitored Natural Attenuation of Groundwater
Former Aliso Street MGP Site
Los Angeles, California

Prepared for:

Southern California Gas Company

Southern California Gas Company
555 West Fifth Street, GT16G2
Los Angeles, CA 90013-1011

Prepared by:

Tetra Tech, Inc.
3475 East Foothill Boulevard
Pasadena, CA 91107

November 2013
Revised February 2015

TETRA TECH

February 18, 2015 100-PEN-T30816

Masood Hosseini, Ph.D.
Senior Project Manager
Site Assessment and Mitigation
Southern California Gas Company
555 West Fifth Street, GT16G2
Los Angeles, California 90013-1011

Subject: **Technical Report - Monitored Natural Attenuation of Groundwater Former Aliso Street MGP Site, Los Angeles, California**
Master Service Agreement No. 6160015094
Release Order No. 5660028387

Dear Dr. Hosseini:

Enclosed is one copy of the revised Technical Report for Monitored Natural Attenuation (MNA) Report of Groundwater for the former Aliso Street Manufactured Gas Plant (MGP) Site. A draft version of this document was sent to the Department of Toxics Substances Control (DTSC) on November 26, 2013. We received the DTSC comments on April 8, 2014.

Response to DTSC comments are included in Appendix E of this Report. The Report has been updated based on the comments received from DTSC as referenced to in the responses in Appendix E; the Executive Summary and Section 7 have also been revised accordingly. Sections 1, 2, 3, and 5 of the report as well as Appendices A and B have not been revised and the footers reflect the original November 2013 date. The footer for sections that have been modified states "November 2013, Revised February 2015".

Per your instruction, we will submit three hard copy of this revised report to the DTSC; two to the attention of Dr. Chand Sultana, the DTSC Project Manager, and one to the attention of Dr. Kimi Klein, the DTSC Toxicologist, for final review and approval. Per directions from Dr. Sultana, we will upload this document to the DTSC internal EnviroStor as well. If you have any questions regarding this report, please call me at (626) 470-2462 or at "salar.niku@tetratech.com".

Respectfully submitted,
TETRA TECH, INC.

Salar Niku

Salar D. Niku, Ph.D., P.E.
Program Manager

cc: Dr. Chand Sultana, DTSC Project Manager
Dr. Kimi Klein, DTSC Toxicologist

Tetra Tech, Inc.
3475 E. Foothill Boulevard, Pasadena, CA 91107-6024
Tel 626.470.2462 Fax 626.470.2662 www.tetratech.com

TECHNICAL REPORT
MONITORED NATURAL ATTENUATION OF GROUNDWATER
FORMER ALISO STREET MGP SITE
LOS ANGELES, CALIFORNIA

Prepared for
Southern California Gas Company
555 West Fifth Street
Los Angeles, California 90013-1011

Prepared by
Tetra Tech, Inc.
3475 East Foothill Boulevard
Pasadena, California 91107

Master Agreement No. 6160015094
Service Release No. 5660028387
Tetra Tech Project No. 100-PEN-T30816

November 2013
Revised February 2015

Karen V. Summers

Prepared by: Karen Summers, P.G.
Principal Geologist
Tetra Tech, Inc.

Salar Niku
Salar Niku, Ph.D., P.E.
Program Manager
Tetra Tech, Inc.

Submitted by: Masood Hosseini, Ph.D.
Senior Project Manager
Southern California Gas Company

February 16, 2015
Date

Copy _____ of _____
_______ Copy _____ of _____

DISCLAIMER

This Technical Report for Monitored Natural Attenuation of Groundwater for former Aliso MGP Site (Report) is prepared for the sole use and benefit of the Southern California Gas Company (Client) and for the specific Site known as the Former Aliso Street Manufactured Gas Plant (Site), located in Los Angeles, California. **Neither this Report nor any of the information contained therein shall be used or relied upon for any purpose by any person or entity other than the Client and for the Aliso Site.**

This Report was prepared based partially on information supplied to Tetra Tech from outside sources and other information which is in the public domain, and partially on the information Tetra Tech obtained during previous activities at this Site. Documentation for the statements made in the Report is on file at Tetra Tech's Pasadena, California, office. Tetra Tech makes no warranty as to the accuracy of statements made by others which are contained in this Report, nor are any other warranties or guarantees, expressed or implied, included or intended in the Report with respect to information supplied by outside sources or conclusions or recommendations substantially based on information supplied by outside sources. This Report has been prepared in accordance with the current generally accepted practices and standards consistent with the level of care and skill exercised under similar circumstances by other professional consultants or firms performing the same or similar services. Since the facts forming the basis for this Report are subject to professional interpretation, differing conclusions could be reached. Tetra Tech does not assume responsibility for the discovery and elimination of hazards, which could possibly cause accidents, injuries, or damage unless those hazards were apparent, and should have been discovered, as a result of the services Tetra Tech performed for the Client. This Report represents the best professional judgment of Tetra Tech; however, compliance with submitted recommendations or suggestions does not assure elimination of hazards or the fulfillment of the Client's obligations under local, state, or federal laws, or any modifications or changes to such laws.

None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind of nature, but shall be a representation of findings of fact from records examined.

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

APPENDICES:

LIST OF TABLES

TABLE OF CONTENTS (Continued)

LIST OF FIGURES

NOTE: All figures and tables are at end of the section

This Technical Report for Monitored Natural Attenuation (MNA) Report of the former Aliso Street MGP Site (Site) groundwater has been prepared by Tetra Tech, Inc. on behalf of the Southern California Gas Company (SCG). Salar Niku, P.E., was the Project Manager and Karen Summers, P.G., was the principal author, assisted by Clifford Pollock, P.G., C.Hg., Senior Geologist and Brandi DeVore, GIS Analyst.

All work was executed under the direction of Dr. Masood Hosseini, SCG Senior Project Manager, who directed the work under the supervision of Dr. Todd Sostek, the SCG Manager of Site Assessment and Mitigation.

Dr. Chand Sultana served as DTSC Project Manager, supported by Mr. Steve McArdle, P.G., the DTSC Geologist, Ms. Alice Campbell, P.G., DTSC Senior Hydrologist, and Dr. Kimiko Klein, DTSC Toxicologist.

Acronyms / Abbreviations

ID	Definition
AMSL	Above Mean Sea Level
AOC	Available Organic Carbon
AST	Aboveground Storage Tank
BaP	Benzo(a)pyrene
bgs	Below Ground Surface
BTEX	Benzene, Toluene, Ethyl Benzene, and Xylene Isomers
CADPHS	California Department of Public Health Services
CA DWR	California Deparment of Water Resources
$CaSO_4$	Calsium Sulfate
CH_4	Methane
cm^3	Cubic Centimeters
COPC	Chemicals of Potential Concern
DCE	Dichloroethene
DCPD	Dicyclopentadiene
DO	Dissolved Oxygen
DOC	Dissolved Organic Carbon
DTSC	Department of Toxic Substances Control
EPA	Environmental Protection Agency
ERM	Environmental Resources Management
etnC	Ethene Mono-oxygenase
etnE	Epoxylane Transferase
Fe	Iron
H_2S	Hydrogen Sulfide
HI	Hazard Index
HQ	Hazard Quotient
ISCO	In-Situ Chemical Oxidation
K_{oc}	Organic Carbon Partition Coefficient
LA GED	Los Angeles Geotechnical Engineering Division
LARWQCB	Los Angeles Regional Water Quality Control Board
LTSR	Long-term Sustainability Rate
MCL	Maximum Contaminant Level
µg/day	Micrograms per Day
µg/kg	Micrograms per Kilogram
µg/L	Micrograms per Liter
mg/L	Miligrams per Liter
MGP	Manufactured Gas Plant
mM/L	Millimoles per Liter
MNA	Monitored Natural Attenuation
MTA	Metropolitan Transportaton Authority
MTBE	Methyl Tertiary-butyl Ether
NL	Notification Level
nM	Nanometer
NO_3	Nitrate
OEHHA	Office of Health Hazard Assessment
ORC	Oxygen Releasing Compounds
PAH	Polycyclic Aromatic Hydrocarbon
PCE	Perchloroethylene / Tetrachloroethene
pH	Potential of Hydrogen
PHG	Public Health Goals
RAP	Remedial Action Plan
RAW	Removal Action Workplan
RBC	Risk-based Concentrations
RBSL	Risk-based Screening Level
RI	Remedial Investigation
RME	Reasonable Maximum Exposure
RSL	Regional Screening Level
S.U.	Standard Units
SCAQMD	South Coast Air Quality Management District

ID	Definition
SCG	Southern California Gas Company
SO_4	Sulfate
STSR	Short-term Sustainability Rate
SVE	Soil Vapor Extraction
SVOC	Semi-volatile Organic Compound
TCE	Trichloroethene/Trichloroethane
TOC	Total Organic Carbon
TPH	Total Petroleum Hydrocarbons
TPH-g	Total Petroleum Hydrocarbons, as gasoline
USACOE	U.S. Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank
VC	Vinyl Chloride
VDH	Van der Horst Corp
VOC	Volatile Organic Compound
WRD	Water Replenishment District

INTRODUCTION

The Southern California Gas Company (SCG) submitted a *Groundwater Quality Management Plan* for the former Aliso Street Manufactured Gas Plant (MGP) Site (the Site) to the Department of Toxic Substances Control (DTSC) on March 8, 2000. Since the year 2000, many soil contaminated areas of the Site have been remediated by excavation and removal. On May 4, 2010, the SCG and Tetra Tech met with the DTSC in the Chatsworth office; it was agreed that the SCG would submit to DTSC a "Technical Report for Monitored Natural Attenuation (MNA) Report" followed by a "Remedial Action Plan (RAP)". The SCG also agreed to begin submitting annual groundwater monitoring reports, with the initial one covering the 1996-2010 periods; that report and the 2011, 2012, and 2013 annual groundwater monitoring reports have been submitted to the DTSC. This document presents the MNA Report.

PURPOSE

MNA is a proven groundwater remedial methodology which uses naturally occurring contaminant degradation, dispersion, and immobilization processes to reach site-specific remediation goals. The purpose of this MNA Report is to present:

1) A summary of the recent groundwater quality at the Site;

2) The hydrogeologic and geochemical conditions that influence the fate and transport of chemicals in groundwater; and

3) The evidence for the occurrence of natural attenuation in groundwater based on data from the quarterly groundwater monitoring program.

The focus of the MNA evaluation at the Site is on several key chemicals including: benzene, naphthalene, chlorinated solvent parent products tetrachloroethene (PCE) and trichloroethylene (TCE), and their breakdown products, specifically cis-1,2-dichloroethene (DCE), trans-1,2-DCE, and vinyl chloride (VC). These chemicals are considered to be site-specific indicator compounds for groundwater quality that can be most readily degraded by natural attenuation.

Benzene and naphthalene are potentially associated with the former MGP and butadiene operations, although they may be from other non-MGP sources, and both can be biodegraded at different rates. Both PCE and TCE are not associated with and are not a byproduct of MGP or butadiene operations. Following the closure of the former MGP and butadiene operations, the northern part of the former Aliso Site (i.e., 490 and 496 Bauchet Street properties), were used by others for operations that included PCE and TEC. PCE and TCE are the most likely compounds to degrade considering the current anaerobic geochemical conditions present at this Site.

A combination of a mass source removal and reduction processes as well as MNA have resulted in substantial decreases in concentrations of benzene, PCE, and TCE and have resulted in lower naphthalene concentrations in groundwater, as discussed in Section 5, using chemical data and trend analysis.

WATER QUALITY DATA

The quarterly groundwater monitoring program began at the Aliso Site in 1996 and continued through 2012, after which, per DTSC approval, it switched to annual Fall Quarter sampling. In addition to annual Fall Quarter sampling, a selected set of wells are also sampled during the Spring Quarter.

In this Report, the data for October 2011 have been used to highlight typical groundwater quality and the geochemical conditions present in different parts of the Site. The chemicals analyzed for the groundwater monitoring program include: volatile organic carbons (VOCs) by the Environmental Protection Agency (EPA) Method 8260B (including dicyclopentadiene - DCPD), polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8310, total petroleum hydrocarbons (TPH) as gasoline, diesel, and heavier hydrocarbons by EPA Method 8015 Modified, and field parameters including: specific conductivity, pH, temperature, dissolved oxygen, and turbidity. Additional inorganic parameters have been measured on occasion.

Human health-based carcinogenic and non-carcinogenic risk-based goals to protect workers from inhalation of volatile compounds from the groundwater were developed for the Site. These goals were compared to the observed concentrations, as well as to other criteria such as California Maximum Contaminant Levels (MCLs), Tap-water Regional Screening Levels (RSLs), and Notification Levels (NLs) when pertinent for a given compound. These comparisons are for evaluation purposes only, as the groundwater at the Site is not used as a drinking water source at present, and is not expected to be used in the future.

A network of 68 wells was sampled in October 2011 (Figure 1-3a). Future monitoring will include additional wells that were not accessible in October 2011 and 2012, as well as three additional new replacement wells downgradient of 1st Street that were installed and sampled in 2013. A total of 78 wells will be monitored annually during the Fall season from 2013 forward. The number of wells to be monitored may be modified after further evaluation and consultation with the DTSC based on local conditions, accessibility, and results of each year's monitoring.

CONCEPTUAL SITE MODEL

The major components of a conceptual site model for MNA as defined by the EPA in Pope and others [2004] include:

- Sources and source control information;
- Geologic information;
- Hydrogeologic information;
- Geochemical and redox conditions in groundwater; and
- Receptor locations.

Most of this information has been presented in the previous Aliso groundwater annual reports; the pertinent information for consideration of MNA is summarized in this Report.

Major Sources and Past Remediation Activities

The compounds of most concern for MNA at this Site are benzene, naphthalene, and DCPD, as well as PCE, TCE, and their breakdown products. DCPD is not a readily degraded compound, but is discussed since this compound is associated with the butadiene operations at the Site and is present in the groundwater. PCE, TCE, and their breakdown products are not the byproducts of former MGP and butadiene operations. The major sources of these chemicals and corresponding remediation status are summarized below:

- Benzene and naphthalene sources may include some of the former MGP/butadiene operations (e.g., former gasholders and former MGP units on Sector A, settling pits on Sector D, former butadiene plant's adsorption-distillation on Block Q, some areas on Blocks K and N, and potentially from piping at the intersection of Center Street and Jackson Street on Sector C). Other sources of benzene and naphthalene include post-MGP/butadiene operations including Fuel Terminal on Block L, potentially leaks from piping along Center Street between Jackson and Ducommun Streets on Sector C, former gasoline underground storage tanks and from piping on Block G, some areas on Blocks K and N, and 1980s-1990s gasoline leaks from numerous underground storage tanks used after former MGP/butadiene operations ceased on different properties at the Aliso Site. With the exception of piping under Center Street, the majority of these sources have been removed during a succession of remediation activities as described in Section 3. In addition to the anthropogenic sources of benzene, there are also natural sources from hydrocarbon deposits, particularly in the Puente Formation.

- The major source of PCE is post-MGP/butadiene operations and not related to MGP or butadiene operations, including: 1) a metal cleaning plant on the 496 Bauchet Street property, and 2) a mannequin manufacturing plant on the 490 Bauchet Street property, both formerly located on the eastern half of Sector E. The major source of TCE is from the reductive dechlorination and breakdown of PCE. However, TCE also was used in the mannequin manufacturing plant. Both metal cleaning and mannequin manufacturing plants have been demolished and the former waste clarifier and piping beneath the mannequin plant have been removed.

- Excavations to remediate and remove contaminated soils in all accessible areas of Sectors A, D, E, and C were conducted as discussed in Section 3. All removal actions were conducted based on DTSC-approved Removal Action Workplans, and all removal activities were documented in Removal Action Completion Reports approved by DTSC. The tonnages of contaminated soil, concrete, pipes, and other materials removed are summarized in Table 3-1 and the masses and percentages of key chemicals in soil that have been removed are estimated and presented in Table 3-2. In addition, soil vapor extraction was conducted for several weeks prior to excavations on the 490 Bauchet Street property and the former settling pits on Sector D. Oxygen releasing compounds (ORC® and ORC® Advanced) were added at the water table at a depth of about 30 feet below ground surface (bgs) when large excavations were open at the 490 and 496 Bauchet Street properties, the eastern parcel of Sector A, and the southern part of Sector D.

The remediation of contaminated soil and soil vapor at the Site has removed over 5,950 lbs of benzene, 68,100 lbs of naphthalene, 921 lbs of PCE, and 79 lbs of TCE, as well as other compounds including dicyclopentadiene (DCPD) and total petroleum hydrocarbons (TPH) from the source areas with the largest mass of chemicals in the soil in Sectors A, D, and the 490 and 496 Bauchet Street properties of Sector E. These remediation actions removed between 88% and 99% of the mass of benzene and naphthalene in soil on Sectors A and D, and 490 and 496 Bauchet Street properties of Sector E. A significant mass of PCE and TCE, originally in soil and soil gas on the 490 and 496 Bauchet Street properties, also was removed. The available soil gas data before and after remediation are discussed in Appendix D.

<u>Site Geology</u>
The lithologic units that underlie the Site are fill, alluvium, and bedrock. Much of the original disturbed fill on the Site has been removed as part of the rebuilding and remediation activities and replaced by clean silty sand fill. The alluvium is comprised of unconsolidated materials deposited by the Los Angeles River, consisting of river channel and flood plain sediments. The alluvial materials include sands, silts, a few clay stringers, and gravels that are laterally discontinuous with some cobble and boulder beds. There are two different bedrock formations: the Puente Formation north of the 101 Freeway, and the Fernando Formation mostly south of the 101 Freeway. The Puente Formation consists of shale, sandstone, siltstone, and claystone, which are usually dry and hard. The Fernando Formation in this area consists primarily of siltstone and claystone. This formation is also dry in most areas, but has some non-lithified sandy zones and carbonates.

<u>Site Hydrogeology</u>
Groundwater occurs under unconfined conditions in the alluvium overlying the bedrock. There are no intervening, continuous, confining layers (i.e., aquitards or aquicludes) within the alluvium above the bedrock, which acts as the base of the saturated zone. The groundwater is unconfined and acts as one unit, although there are permeability differences within the alluvium as evidenced by vertical gradients in some of the paired shallow and deep wells.

SCG has conducted groundwater level monitoring and sampling at this Site on a quarterly basis since 1996. A groundwater elevation contour map for October 2011 that was prepared using the shallow wells data (Figure 4-1a) shows that the elevation of the groundwater ranged from 263.47 feet above mean sea level (AMSL) in TtE-6 located at the northwest corner of Sector E along the upgradient edge of the Site to 234.07 feet AMSL in TtC-30 located on East Temple Street west of Block Q. Downgradient of the Site to the south, the water level decreased to 229.39 feet AMSL in TtC-31S on Banning Street, located one block south of Block Q. Further south, the groundwater elevation decreased to 185.91 feet AMSL in TtC-39, located 3½ blocks further south of TtC-30 (Figure 4-1b, groundwater elevations of the deep wells).

As shown on Figure 4-1a, groundwater flow generally is to the south with a southeastward direction across the eastern part of Sector B, and then to the south crossing the 101 Freeway. There is an apparent southwestern flow direction downgradient of Sector C on the western side, which also then shifts to the south. The flow directions in this area have been confirmed by water level data for the new replacement well TtC-32R. The general flow direction of the groundwater has remained the same since 2004 when the Aliso Site groundwater monitoring well network was completed. The flow direction in the deep wells is also to the south, as shown on Figure 4-1b. Detection of DCPD in groundwater in October 2004, February and May 2005, and again in April 2010 shows that flow from the Site does reach the furthest downgradient well, TtC-39. DCPD has not been detected in this well since April 2010.

EVIDENCE OF MNA

General water quality parameters including total dissolved solids, pH, alkalinity, major cations and anions, and redox indicators have been measured on a limited basis. Past and recent data were used to evaluate the geochemical conditions in the groundwater. The Site groundwater is mostly under anaerobic conditions; sulfate (SO_4)-reduction has been the dominant geochemical reaction. The potential reactions of chemicals of interest in groundwater at the Aliso Site that can occur under both aerobic and anaerobic conditions are summarized in Section 6.

Benzene Degradation

Benzene concentrations have been decreasing in most wells on the Aliso Site; only seven wells had increasing concentrations in either the 1996-2010 or 2005-2010 periods. The estimated benzene degradation rates for the shallow wells ranged from -0.0002 to -0.11 µg/day. These degradation rates are a combination of the effect of sorption, dispersion, and microbial decay.

The benzene degradation rate would be expected to be low due to the anaerobic conditions in the aquifer, as confirmed by dissolved oxygen measurements (Section 6.1.2); this can make the degradation rate over two orders of magnitude less than in an aerobic system. While the rate of benzene biodegradation is less than if it would occur in an aerobic environment, the degradation rate is sufficient enough to prevent migration of benzene downgradient of Banning Street. Benzene has been detected only once in late October 2009 at 0.55 µg/L in the furthest downgradient Well TtC-39, in the span of 2004 to 2011.

In portions of the Aliso Site where aerobic conditions are present (e.g., on Sector E and the upper part of Sector D, and outside of the western Site boundary on Sector C between Jackson and Commercial Streets), benzene has decreased to less than the maximum contaminant level (MCL) (1 µg/L). In contrast, in the areas that are considered to be under sulfate-reducing conditions (e.g., southern part of Sector D and the eastern side of Sectors A and C), benzene concentration is elevated, indicating that the degradation rate is slow. Since the major unsaturated zone source in the former settling pits on the southern part of Sector D has been removed and ORC® has been added to the water table, the benzene concentrations in this area are expected to decrease over time. The area around the intersection of Jackson and Center streets (Well TtC-40S) is influenced by TPH (source most probably includes other non-MGP operations as concentrations of methyl tertiary-butyl ether (MTBE) were also measured) in the saturated zone, and thus is likely to remain under sulfate-reducing conditions.

The combination of active remediation and natural attenuation has been sufficient to prevent migration of benzene downgradient of Banning Street, with the exception of one date when benzene was detected at 0.55 µg/L in October 2009 in the furthest downgradient Well TtC-39, which this concentration was less than the California MCL of 1 µg/L.

Naphthalene Degradation
Naphthalene can degrade under both aerobic and anaerobic conditions; the biodegradation rate under anaerobic conditions is less than for aerobic conditions. Naphthalene also has been shown to degrade at a low rate in groundwater under methanogenic conditions. The degradation rates in the shallow wells had a range of -0.001 to -0.7 μg/day for the 1996-2010 period and -0.0006 to -1.6 μg/day for the 2005-2010 period.

Areas with elevated naphthalene occurs in parts of the same areas as benzene, and one additional area near a former gasoline underground storage tank leak (TtC-43) due to a post-MGP/butadiene operation [Fleming Engineering 1987]. The naphthalene areas are more localized than benzene areas, which is consistent with naphthalene's slower migration rate. The sources in the southern part of Sector D and near TtC-43 have been removed. Further degradation of naphthalene is expected under the sulfate-reducing conditions present on the southern part of Sector D and the central and eastern part of Sector C.

For the 5-year period of 2009 to 2012, no naphthalene has been detected in the downgradient wells south of 1st Street. Well TtC-37 located on 1st Street had detected naphthalene in May 2006 (1.3 μg/L), but not since then through January 2008, when bridge reconstruction prevented access to the well. The well was replaced in 2013. Naphthalene was not detected in the new Well TtC-45 on 1st Street or in the wells TtC-37R2, TtC-46R, and TtC-47R south of 1st Street in October 2013. The degradation rate of naphthalene has been sufficient to control migration to the furthest downgradient wells.

PCE and TCE Degradation
Although PCE and TCE were not a byproduct of the MGP or butadiene operations, their existence in groundwater has been evaluated.

The intermediate to strongly reducing conditions present on most of the Site favor the anaerobic reductive dechlorination reactions that degrade solvents such as PCE and TCE. However, the degradation cycle is not proceeding to complete mineralization, resulting in the accumulation of VC on parts of the Site (see Section 6.1.3).

PCE degradation rates ranged from -0.002 to -0.4 μg/day in the shallow wells for the 1996-2010 period. The breakdown of PCE is fast, compared to the later steps in the reductive dechlorination process. Two of the wells with detected PCE in the 4th Quarter of 2011 are in the former settling pits on Sector D, which is the only area on the Site where PCE (and all of its breakdown products) was present due to the strong sulfate-reducing conditions in that area.

TCE (and its three breakdown products) is present on most of Sector D and the eastern portion of the downgradient parts of the Aliso Site. TCE concentrations above 5 μg/L occurred only in wells on the main part of Sector D, the eastern part of Sector E, and in 2 downgradient wells TtB-7 and TtA-6S. TCE is not detected in most of the Sector A wells, where it has been replaced by its breakdown products, mostly cis-1,2-DCE. Cis-1,2-DCE was detected more frequently than trans-1,2-DCE. The remaining breakdown products, cis-1,2-DCE and trans-1,2-DCE, would be expected to continue to degrade to VC under the sulfate-reducing conditions present across most of the Aliso Site.

The VC degradation rates in most wells were low (i.e., less than -0.002 µg/day). The Well TtC-39 furthest south of the Aliso Site had about 0.8 mg/L of dissolved oxygen (DO) in July 2011 and 0.9 mg/L in October 2011, which is conducive to aerobic degradation of VC. VC may also be degrading via aerobic processes in the southernmost part of the downgradient area, since VC is at lower concentrations south of Block Q than in the shallow wells near Block K. VC was detected at low concentrations in downgradient Well TtC-38 at 1.4 µg/L in November 2006 and 1.5 µg/L in January 2008.

VC was more prevalent in the eastern part of Sector C where sulfate-reducing conditions exist. In the 4th Quarter 2011 data, VC was detected in three deep wells TtA-5D, TtA-6D, and TtC-27D in the northeast part of Sector C and in one other deep Well TtC-31D on the eastern side of Sector C (the latter well has an overlapping screen with the shallow well, and the screen is only one foot deeper. There is insufficient soluble iron to promote the anoxic oxidation of VC to CO_2, and the complete mineralization to ethene is slow under sulfate-reducing conditions. The addition of ORC® to former source areas on Sectors E and D would promote aerobic oxidation of VC in those localized areas until the added DO was consumed. The presence of DO in some wells south of Block Q is also promoting oxidation of VC. Addition of ORC or equivalent compounds to wells with VC could enhance the degradation of VC, particularly in areas without high benzene or naphthalene such as the Agnes Cline tract and on the far eastern side of Sectors A and B.

VC has not been detected in the furthest downgradient well, TtC-39. In October 2012, the new deep Well TtC-45 was sampled south of the Site; it had no VC detected. In October 2013, the new deep wells TtC-45, TtC-46R, and TtC-47R, and shallow Well TtC-37R were sampled south of the Site; they also had no VC detected.

RECOMMENDATIONS

There are two areas on the Aliso Site with a thin layer of free product on top of the water table; one area is in wells A-2 and A-3 in Sector A East and wells TtA-7S and TtA-8S under Ramirez Street, and the other area is in and proximal to Well TtD-10 in Sector D. The free product layer is very thin and is potentially amenable to passive adsorption.

The residual free product in Well TtD-10 in Sector D contains DCPD. It is recommended that a lab study be done to evaluate if the addition of oxygen releasing compounds will be useful in reduction of DCPD concentrations. At present time, the MNA process will be monitored for this area of the Site similar to all other areas.

<u>Annual Groundwater Monitoring</u>

As approved by DTSC, starting from 2013, groundwater gauging and sampling of the Aliso Site wells will be on an annual basis in the Fall Season of each calendar year as part of a 3-year trial evaluation. A total of 78 wells were sampled in the Fall Season 2013; sampling will be continued in the following years as shown on Figure 7-1 and listed in Table 7-1. The number of wells to be sampled may be modified after further evaluation and consultation with the DTSC based on site conditions, accessibility, and the results of data collected each year.

Per the DTSC recommendations, 10 wells will also be measured in the Spring of each year to measure water levels and to determine if chemical concentrations will increase due to higher water levels as the result of recharge events. The wells to be sampled in the Spring are: E-1S, E-1D, TtE-6, TtB-1, TtC-29D, TtC-31D, TtC-32R, TtC-36, TtC-45, and TtC-47R (replacement well for TtC-39).

The groundwater data for a 5-year period, from 2011 through 2015, as well as sampling frequency will be re-evaluated after completion of CY 2015 groundwater monitoring.

It is recommended that the Aliso site groundwater continue to be monitored for the chemicals listed below to track future changes due to MNA. In addition, measurements should continue to be made in the field at the time of sampling after checking that the groundwater conditions are stable for specific conductivity, temperature, pH, dissolved oxygen, and turbidity. The groundwater samples should be measured in the laboratory for:

- VOCs by EPA Method 8260B, including naphthalene and DCPD;
- The 16 PAHs by EPA Method 8310; and
- TPH by EPA Method modified 8015 for gasoline, diesel, and heavy hydrocarbons.

These three sets of laboratory analyses cover the compounds that are recommended to be monitored at the Aliso Site. TPH is monitored to keep track of the migration of dissolved hydrocarbons, which influences migration of some of the dissolved compounds such as benzene and naphthalene.

Parameters that can track the redox conditions governing natural attenuation at the Site should be measured periodically (e.g., on a biennial basis) at a subset of wells. The parameters include: DO, pH, SO_4, sulfide, NO_3, dissolved iron, and manganese. The purpose is to determine if redox conditions in the groundwater have changed, which influences the degradation rate of the chemicals (e.g., benzene, naphthalene) evaluated here. Ten wells have been selected to be sampled. The selection criteria include wells with high concentrations of benzene and VC, and the furthest downgradient wells. The proposed wells are: TtE-5R, TtD-14, TtD-15, TtA-7S, TtB-7, TtC-21S, TtC-40S, TtC-45, TtC-47R (replaced well for TtC-39), and the new upgradient well, E-1S. The data from the redox measurements would be used to determine the dominant redox conditions in the groundwater using the spreadsheet program of Jurgens and others [2009]. The MNA evaluation will be reported in the future annual groundwater reports for the Aliso Site.

1.1 INTRODUCTION

The Southern California Gas Company (SCG) submitted a *Groundwater Quality Management Plan* for the former Aliso Street Manufactured Gas Plant (MGP) Site (the Site) to the Department of Toxic Substances Control (DTSC) on March 8, 2000 [Tetra Tech and Environ, 2000]. Since year 2000, many soil contaminated areas of the Site (potential contaminant sources to the groundwater) have been remediated by excavation and removal. On May 4, 2010, the SCG and Tetra Tech met with the DTSC to discuss a path forward for managing the Aliso site groundwater. It was agreed that the SCG would submit a "Technical Report for Monitored Natural Attenuation" (MNA Report) followed by a "Remedial Action Plan" (RAP). The SCG also agreed to begin submitting annual groundwater monitoring reports, with the initial one covering the 1996-2010 periods. That report and the 2011 and 2012 annual groundwater monitoring reports have been submitted to DTSC. This document presents the MNA Report.

1.2 SITE LOCATION

The former Aliso Street MGP site is approximately 52 acres in size[1], and is located in downtown Los Angeles (Figure 1-1). The Site boundary covers an area beginning below the railroad tracks by Bauchet Street to the north, across the 101 Hollywood Freeway to about Temple Street to the south. The middle part of the Site is located east of Union Station in Los Angeles, and west of the Los Angeles River. The Site is located in Township 1 South, Range 13 West, Section 27 of the San Bernardino Meridian.

The SCG has divided the Site into five sectors, A through E, as shown on Figure 1-2, for ease of managing the required investigation activities. The SCG determined the sector boundaries based on past ownership as well as physical boundaries and past operations. These boundaries do not necessarily correspond exactly to the areas used by the former MGP and butadiene facilities.

The SCG does not own any part of the Site. Different parcels of this Site belong to various parties other than the SCG.

1.3 PURPOSE

The purpose of the MNA Report is to present: 1) a summary of the recent groundwater quality at the Site, 2) the hydrogeologic and geochemical conditions that influence the fate and transport of chemicals in groundwater, and 3) the evidence for the occurrence of natural attenuation in groundwater based on data from the quarterly groundwater monitoring program.

1.4 MNA PROCESS

MNA is a proven groundwater remedial methodology which uses naturally occurring

[1] The acreage estimate given here is based on previous reports that cite the size of the Site as 52 acres based on previous boundaries. The actual acreage of the Site based on current site boundaries is approximately 56.3 acres.

contaminant degradation, dispersion, and immobilization processes to reach site-specific remediation goals [Wiedemeier and others, 1996]. The U.S. Environmental Protection Agency (USEPA) has published a technical protocol for evaluating MNA of chlorinated solvents in 1998 [USEPA, 1998]. According to that technical protocol, MNA effectiveness can be established using three lines of evidence: 1) historical monitoring data showing decreasing concentrations and/or contaminant mass over time, 2) geochemical data showing that the site conditions favor contaminant transformation or immobilization, and 3) site-specific laboratory studies that document ongoing biodegradation processes. The first two lines of evidence have been used for this Site and are discussed in Section 6. Laboratory tests have not been conducted using groundwater and soil from this Site to confirm specific biodegradation reactions; however, total organic carbon (TOC) has been measured in the soil.

Pope and others [2004] present guidance for performance monitoring of MNA for volatile organic compound (VOC)-impacted groundwater sites. Additional methods and a framework for assessing the short-term and long-term sustainability of MNA recently were developed by the U.S. Geological Survey (USGS) using chlorinated solvents such as tetrachloroethene (PCE) and trichloroethene (TCE) as examples [Chapelle and others, 2007]. These guidance documents have been considered in this report.

The focus of the MNA evaluation at this Site is on several key chemicals including: benzene, naphthalene, chlorinated solvent parent products PCE and TCE, and their breakdown products (specifically cis-1,2-dichloroethene [DCE], trans-1,2-DCE, and vinyl chloride). These chemicals are considered to be site-specific indicator compounds for groundwater quality that can be most readily degraded by natural attenuation. Benzene and naphthalene are potentially associated with the former MGP and butadiene operations, and both can be biodegraded, although at different rates. Solvents are the most likely compounds to degrade considering the anoxic geochemical conditions present at this Site. Both PCE and TCE are not associated with and are not a byproduct of MGP or butadiene operations, but were used by third parties (i.e., metal cleaning plant at 496 Bauchet Street and Mannequin Manufacturing Plant on 490 Bauchet Street) on part of the properties following the closure of the former MGP and butadiene operations, as explained in Section 2. Mass reduction processes (i.e., source removal and MNA) have resulted in substantial decreases in concentrations of benzene, PCE, and TCE and lower naphthalene concentrations in groundwater, as shown in Section 5, using chemical data and trend analysis.

1.5 OVERVIEW OF QUARTERLY MONITORING PROGRAM

The quarterly monitoring program was started at the former MGP site in 1996 and has continued through the present. **The recent data set for October 2011 is used to highlight current conditions and geochemical processes in this document**, since some critical wells were not available in 2012 including the furthest downgradient well, TtC-39.

The network of wells used for monitoring has changed over time, as new wells were installed for the remedial investigations and some wells were removed due to source remediation or redevelopment of a block or a sector. Twenty wells not suitable for monitoring were properly abandoned by the SCG between May and June 2011, and six new wells (five deep (TtC-27D, TtC-34D, TtC-36D, TtD-7D, and TtE-1D), one shallow well (TtE-1S))and one replacement well

(TtC-32R) were installed between June and July 2011. One well (TtB-8) was monitored only for the first two quarters of 2011, since it was not part of the annual monitoring program. Mostly due to a change in ownership on Block Q, 12 wells were not accessible for monitoring during the 4Q2011 monitoring event that was completed in October 2011. Another deep well (TtC-45) was installed downgradient of the Site in February 2012.

A total of 132 wells have existed on the Aliso Site, and 130 have been sampled at least once (two wells, C-13 and C-14 were dry). Of the 130 wells 87 were located on the Aliso Site, and 43 were located offsite. Among offsite wells, 3 were upgradient, 10 were cross-gradient outside the Site boundaries, and 30 were downgradient of the Site boundaries. Figure 1-3a and Table 1 show the network of 68 wells sampled in October 2011, while Figure 1-3b and Table A in Appendix A show the entire well network (including the abandoned wells and recent new wells listed above).

The chemicals analyzed for the quarterly groundwater monitoring program included: VOCs by EPA Method 8260B, polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8310, TPH (gasoline, diesel, and heavier hydrocarbons) by EPA Method 8015 Modified, and four field parameters (specific conductivity, pH, temperature, and turbidity). Occasionally, additional parameters were measured such as dissolved oxygen, semi-volatile organic compounds (SVOCs) by EPA Method 8270, Title 22 metals by EPA Methods 6010, hexavalent chromium by EPA Method 7199, cyanide by EPA 335.2, and sulfides by EPA 376.2 or 9030B. Additional inorganic parameters were measured occasionally to evaluate redox conditions, as discussed later in this report.

1.6 RISK-BASED GOALS FOR GROUNDWATER

Human health-based carcinogenic and non-carcinogenic risk-based goals to protect workers from inhalation of volatile compounds from the groundwater have been developed for the former Aliso Site. The basis for these goals has been provided in Section 4.2 of the 2011 Annual Groundwater Monitoring Report, dated November 6, 2012 [Tetra Tech, 2012b]. A copy of that section of the 2012 Report and the associated appendices are included in Appendix B of this MNA Report for ease of reference. In addition, observed concentrations were compared to other criteria such as California Maximum Contaminant Levels (MCL), tap-water Regional Screening Levels (RSLs), and Notification Levels (NLs), where pertinent for a given chemical. These comparisons are for evaluation purposes only, as the groundwater at the Site is not used as a drinking water source at the present time, and is not expected to be used in the future. Table 1-2 lists the MCLs, RSLs, and the other types of criteria that pertain to the chemicals discussed in this report. Table 1-3 lists the risk-based goals developed for groundwater protection at this Site, including the carcinogenic and non-carcinogenic goals to protect indoor workers.

Table 1-1
Status of Wells Used for Monitoring in 2011
Former Aliso Street MGP Site, Los Angeles, California

Well Name	Owner	Sector	Monitored at Least Once in CY 2011	Well Diameter, inches	Well Depth (feet bgs)	Screened Interval (feet bgs)	Last Monitoring Event
A-1	SCG	A	X	4	40	24-39	10/25/2011
A-2	SCG	A	X	4	41	25-40	10/27/2011
A-3	SCG	A	X	4	40	25-40	10/27/2011
TtA-4D	SCG	A	X	4	92.5	72.5-92.5	10/31/2011
TtA-4S	SCG	A	X	4	40	20-40	10/31/2011
TtA-5D	SCG	A	X	4	92.5	72.5-92.5	10/26/2011
TtA-5S	SCG	A	X	4	41	21-41	10/26/2011
TtA-6D	SCG	A	X	4	92.5	72.5-92.5	10/28/2011
TtA-6S	SCG	A	X	4	42	22-42	10/28/2011
TtA-7	SCG	A	X	4	45	20-45	10/25/2011
TtA-7S	SCG	A	X	4	38.5	18.5-38.5	10/27/2011
TtA-8S	SCG	A	X	4	38.5	18.5-38.5	10/27/2011
TtB-1	SCG	B	X	4	42	20.5-40.5	10/27/2011
TtB-2D	SCG	B	X	4	100.5	85.5-96	10/27/2011
TtB-2S	SCG	B	X	4	41.5	21-41	10/27/2011
TtB3	SCG	B	X	4	44	21.5-42	10/27/2011
TtB-5	SCG	B	X	4	45.5	24-44	10/27/2011
TtB-7	SCG	B	X	4	44.5	22-42	10/27/2011
TtB-8*	SCG	B	X	4	100.5	81-90.5	5/4/2011
C-6	MTA	C	X	2	62	29-59	10/24/2011
C-16*	SCG	C	X	4	60	33-53	7/25/2011
C-17*	SCG	C	X	4	55	37.5-57.5	7/25/2011
C-20D*	SCG	C	X	4	69.8	60-70	7/26/2011
C-20S*	SCG	C	X	4	48.5	27-47	7/26/2011
C-21D*	SCG	C	X	4	72.5	62-72	7/25/2011
C-21S*	SCG	C	X	4	44.3	22-42	7/25/2011
C-22D*	SCG	C	X	4	62.1	52-62	7/26/2011
C-22S*	SCG	C	X	4	45	25-45	7/26/2011
C-23D*	SCG	C	X	4	70	60-70	7/25/2011
C-23S*	SCG	C	X	4	45	25-45	7/25/2011
C-25	SCG	C	X	4	60	33-53	10/24/2011
C-26	SCG	C	X	4	53	33-53	10/24/2011
TtC-27	SCG	C	X	4	45	24-44	10/26/2011
TtC-27D	SCG	C	X	4	91	78-88	10/26/2011
TtC-29D*	SCG	C	X	4	78	67-77	7/25/2011
TtC-29S*	SCG	C	X	4	49	27.5-47.5	7/25/2011
TtC-30	SCG	C	X	4	50	29-49	10/25/2011
TtC-31S	SCG	C	X	4	57.5	36.5-56.5	10/24/2011
TtC-31D	SCG	C	X	4	63	47.5-57.5	10/24/2011
TtC-32*	SCG	C	X	4	52	31-51	5/4/2011
TtC-32R	SCG	C	X	4	52	31-51	10/25/2011
TtC-33	SCG	C	X	4	50	29-49	10/25/2011
TtC-34D	SCG	C	X	4	67	52-62	10/25/2011
TtC-34	SCG	C	X	4	46	26-46	10/25/2011

Table 1-1
Status of Wells Used for Monitoring in 2011
Former Aliso Street MGP Site, Los Angeles, California

Well Name	Owner	Sector	Monitored at Least Once in CY 2011	Well Diameter, inches	Well Depth (feet bgs)	Screened Interval (feet bgs)	Last Monitoring Event
TtC-35	SCG	C	X	4	43.5	22-42	10/25/2011
TtC-36D	SCG	C	X	4	81	70-80	10/31/2011
TtC-36	SCG	C	X	4	45	24.5-44.5	10/31/2011
TtC-39	SCG	C	X	4	115	73-93	10/27/2011
TtC-40D	SCG	C	X	4	66	55-65	10/27/2011
TtC-40S	SCG	C	X	4	45	23-43	10/27/2011
TtC-41D	SCG	C	X	4	80	60-75	10/26/2011
TtC-41S	SCG	C	X	4	41	20-40	10/26/2011
TtC-42	SCG	C	X	4	42.5	21-41	10/26/2011
TtC-43	SCG	C	X	4	47.5	27-47	10/26/2011
TtC-44	SCG	C	X	4	40.5	20.5-40.5	10/27/2011
TtK-1	SCG	C	X	4	44	24-44	10/28/2011
TtK-2	SCG	C	X	4	84	74-84	10/28/2011
TtK-3	SCG	C	X	4	42.5	22.5-42.5	10/28/2011
TtK-4	SCG	C	X	4	42.5	22.5-42.5	10/28/2011
TtK-6	SCG	C	X	4	45	25-45	10/27/2011
TtO-1	SCG	C	X	4	42	33-43	10/25/2011
D-2	Caltrans	D	X	4	36.5	16-35	10/26/2011
D-4	Caltrans	D	X	4	37.5	17-37	10/26/2011
TtD-7	SCG	D	X	4	45.2	25-45	10/26/2011
TtD-7D	SCG	D	X	4	101	90-100	10/31/2011
TtD-9	SCG	D	X	4	46	26-46	10/26/2011
TtD-10	SCG	D	X	4	47.5	26-46	10/25/2011
TtD-14	SCG	D	X	4	45	25-45	10/26/2011
TtD-15	SCG	D	X	4	46	26-46	10/26/2011
TtD-17R	SCG	D	X	4	40	19-40	10/24/2011
TtD-18	SCG	D	X	4	43	23-43	10/25/2011
TtD-19	SCG	D	X	4	44	24-44	10/25/2011
TtD-20 D	SCG	D	X	4	102.7	92.5-102.5	10/25/2011
TtD-20 S	SCG	D	X	4	44.7	25-45	10/25/2011
TtD-21 S	SCG	D	X	4	43.4	23-43	10/25/2011
E-1D	SCG	E	X	4	97	83-93	10/31/2011
E-1S	SCG	E	X	4	55	15-35	10/31/2011
TtE-3R2	SCG	E	X	4	43.5	22-42	10/24/2011
TtE-5R2	SCG	E	X	4	42.5	22-42	10/24/2011
TtE-6	SCG	E	X	4	44.1	24-44	10/24/2011
TtE-8	SCG	E	X	4	104.7	89.5-104.5	10/24/2011
TtE-10R	SCG	E	X	4	45	24-44	10/25/2011

Notes: Well status notes provided in complete well status Table A-1 in Appendix.

Table 1-2
Water Quality Criteria for Groundwater Chemicals of Potential Concern
Former Aliso Street MGP Site
Los Angeles, California

Chemical	California MCL[1] (ug/l)	Tap water RSL[2] (ug/l)	California PHG[3] (ug/l)
Polycyclic Aromatic Hydrocarbons			
Acenaphthene	-	400	-
Acenaphthylene[4]	-	6.2	-
Anthracene	-	1,300	-
Benzo(a)anthracene	-	0.029	-
Benzo(a)pyrene	0.2	0.0029	0.007
Benzo(b)fluoranthene	-	0.29	-
Benzo(g,h,i)perylene[4]	-	6.2	-
Benzo(k)fluoranthene	-	0.29	-
Chrysene	-	2.00	-
Fluorene	-	220	-
Fluoranthene	-	630	-
Indeno(1,2,3-c,d)pyrene	-	0.029	-
Naphthalene[5]	17	0.14	-
Phenanthrene[4]	-	6.2	-
Pyrene	-	87	-
Metals			-
Barium	1,000	2,900	2,000
Boron[5]	1,000	3,100	-
Zinc[7]	5,000	4,700	-
Volatile Organic Compounds			
Benzene	1	0.39	0.15
n-Butylbenzene[6]	260	780	-
sec-Butylbenzene[6]	260	780	-
tert-Butylbenzene[6]	260	780	-
Carbon disulfide[5]	160	720	-
1,1-Dichloroethane	5	2.4	3
1,1-Dichloroethene	6	260	10
cis-1,2-Dichloroethene	6	28	100
trans-1,2-Dichloroethene	10	86	60
trans-1,3-Dichloropropene[8]	0.5	0.41	0.2
Dicyclopentadiene[9]	12	12	-
Ethylbenzene	300	1.3	300
Isopropylbenzene (Cumene)[5]	770	390	-
p-Isopropyltoluene[10]	770	390	-
Methylene Chloride	5	9.9	-
MTBE	13	12	13
n-Propylbenzene[6]	260	530	-
Styrene	100	1100	0.5
Tetrachloroethene	5	9.7	0.06
Toluene	150	860	150
Trichloroethene	5	0.44	1.7
1,2,4-Trimethylbenzene[5]	330	15	-
1,3,5-Trimethylbenzene[5]	330	87	-
m,p-Xylenes	1,750	190	1,800
o-Xylene	1,750	190	1,800
Vinyl Chloride	0.5	0.015	0.05

Definitions:
MCL - maximum contaminant level
PHG - public health goal
Notes:
1 - California Maximum Contaminant Level (MCL) (Last updated in Jan. 2013; Cal DHS, 2013). Criteria for above chemicals did not change from previous update in July 2011.
2 - USEPA Region 9 tap water RSLs (EPA,2012 May).
3 - California Public Health Goal (Last updated July 2011, OEHHA)
4 - No RSL available; naphthalene non-carcinogenic tap water RSL used as a surrogate.
5 - Notification level (NL) provided [DHS 2010], since no MCL is available.
6 - NL & RSL for n-butylbenzene used as surrogate.
7 - Primary MCL not available; secondary MCL used.
8 - No RSL and MCL available; 1,3-dichloropropene used as a surrogate.
9 - Tapwater RSL US EPA, 2012. No MCL or Notification criteria are available.
10 - Isopropylbenzene MCL and RSL used as a surrogate.

http://www.oehha.ca.gov/water/pals/index.html Notification Levels of OEHHA checked July 23, 2013

http://www.epa.gov/region9/superfund/prg/ Updated RSLs May 2012

Table 1-3
Remedial Goals for Groundwater
Protective of Indoor Workers
Former Aliso Street MGP Site
Los Angeles, California

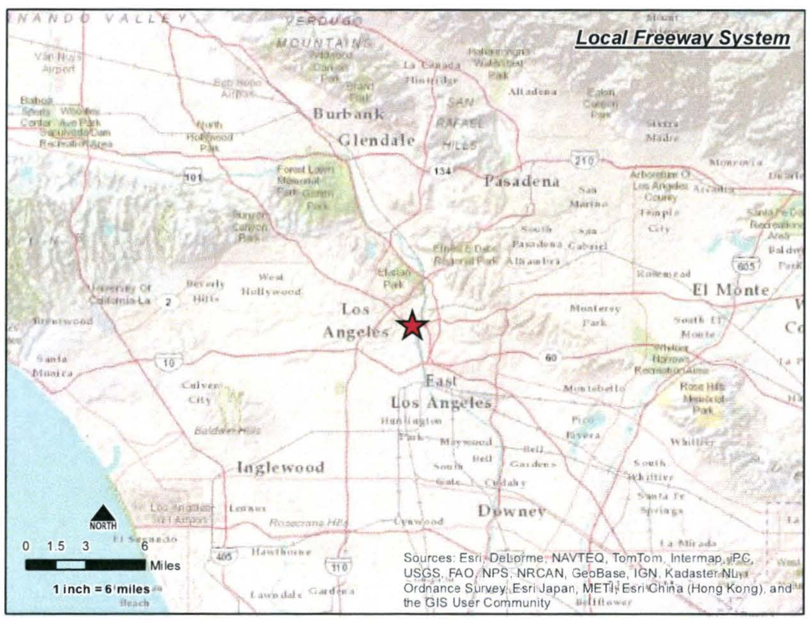
Chemical	Carcinogenic Remedial Goal[1] (ug/l)	Non-carcinogenic Remedial Goal[1] (ug/l)
Volatile PAHs		
Acenaphthene	-	7,758,270
Acenaphthylene	-	157,387
Anthracene	-	66,103
Fluorene	-	7,818,277
Naphthalene	7,172	26,127
Phenanthrene	-	673,167
Volatile Organic Compounds		
Benzene	410	12,742
n-Butylbenzene	-	53,222
sec-Butylbenzene	-	1,082,671
tert-Butylbenzene	-	55,136
Carbon disulfide	-	44,633
1,1-Dichloroethane	8,419	336,772
1,1-Dichloroethene	-	5,868
cis-1,2-Dichloroethene	-	4,715
trans-1,2-Dichloroethene	-	17,928
trans-1,3-Dichloropropene	1,326	3,788
Dicyclopentadiene	-	341
Ethylbenzene	4,154	370,914
Isopropylbenzene	-	1,250
p-Isopropyltoluene	-	170,172
Methylene Chloride	25,563	365,184
MTBE	340,568	9,487,251
n-Propylbenzene	-	350,621
Styrene	-	1,014,927
Tetrachloroethene	769	6,481
Toluene	-	111,302
Trichloroethene	1,753	513
1,2,4-Trimethylbenzene	-	4,265
1,3,5-Trimethylbenzene	-	4,491
m,p-Xylenes	-	42,620
o-Xylene	-	42,620
Vinyl Chloride	24	6,652

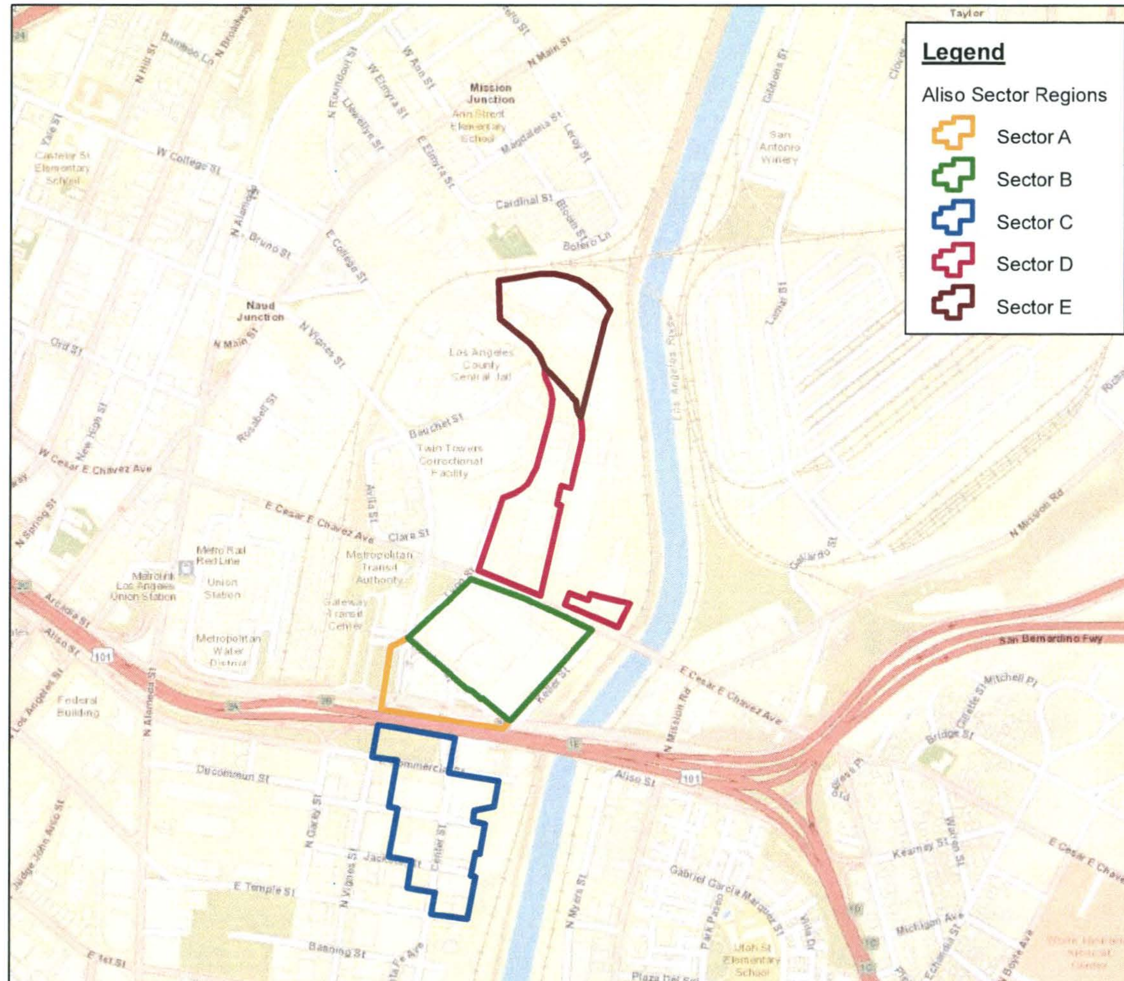
Definitions:

PAH - polycyclic aromatic hydrocarbon

Notes:

1 - Remedial goals for groundwater calculated to be protective of indoor worker vapor inhalation, assuming vapor intrusion from groundwater into a standard building (100 feet x 100 feet x 12 feet) and a depth to groundwater of 30 feet. Indoor workers assumed to be exposed on a daily basis (250 days/year) for 8 hours per day, for 25 years. Goals calculated using the DTSC (2005) ADV-GW J&E model, updated with current chemical properties (see Appendix B in this MNA





Southern California Gas Company
Former Aliso Street MGP Site

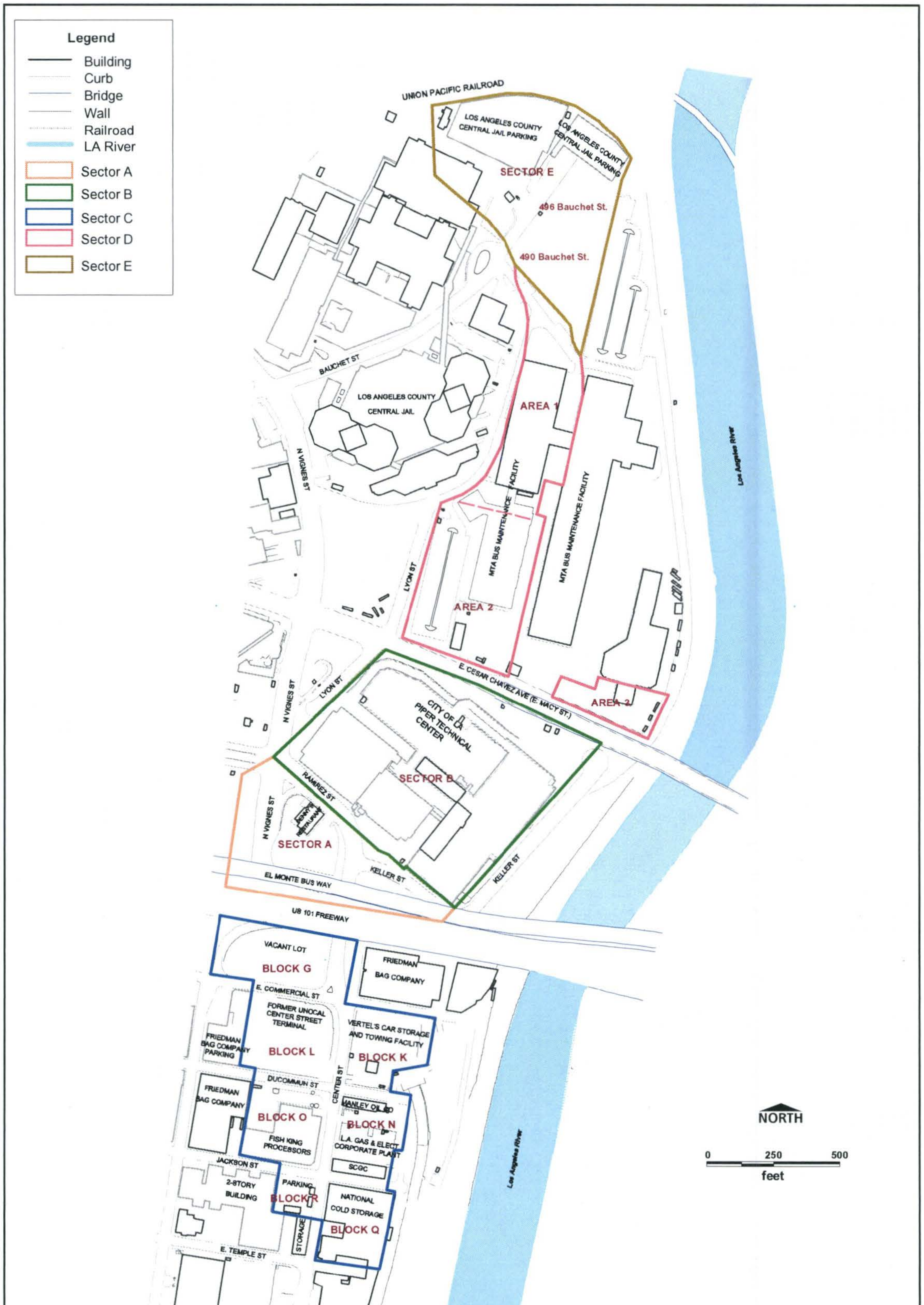
Site Location Map

TETRA TECH

Prepared by: B. DeVore
Reviewed by: C. Pollock
Date: 7/15/13

Figure 1-1

File: 15970 GW ManPln\GIS\Figure 1-1 Site Location Map.mxd



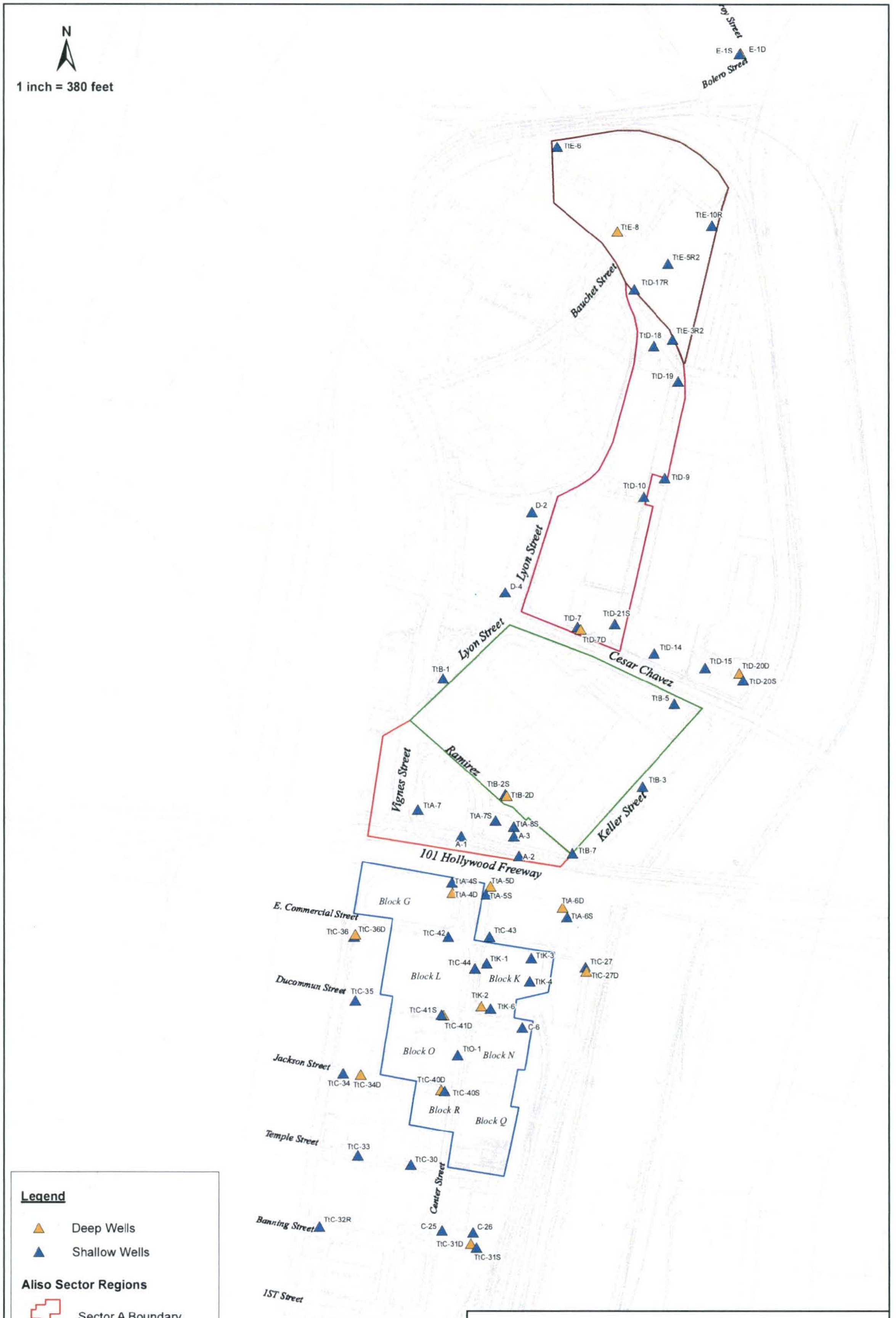
Southern California Gas Company
Former Aliso Street MGP Site

Site and Sector Boundaries

TETRA TECH

PREPARED BY: CFC
FILE: D:\D drive\aliso\Basemap.WOR
DATE: 11-26-2007

Fig. 1-2



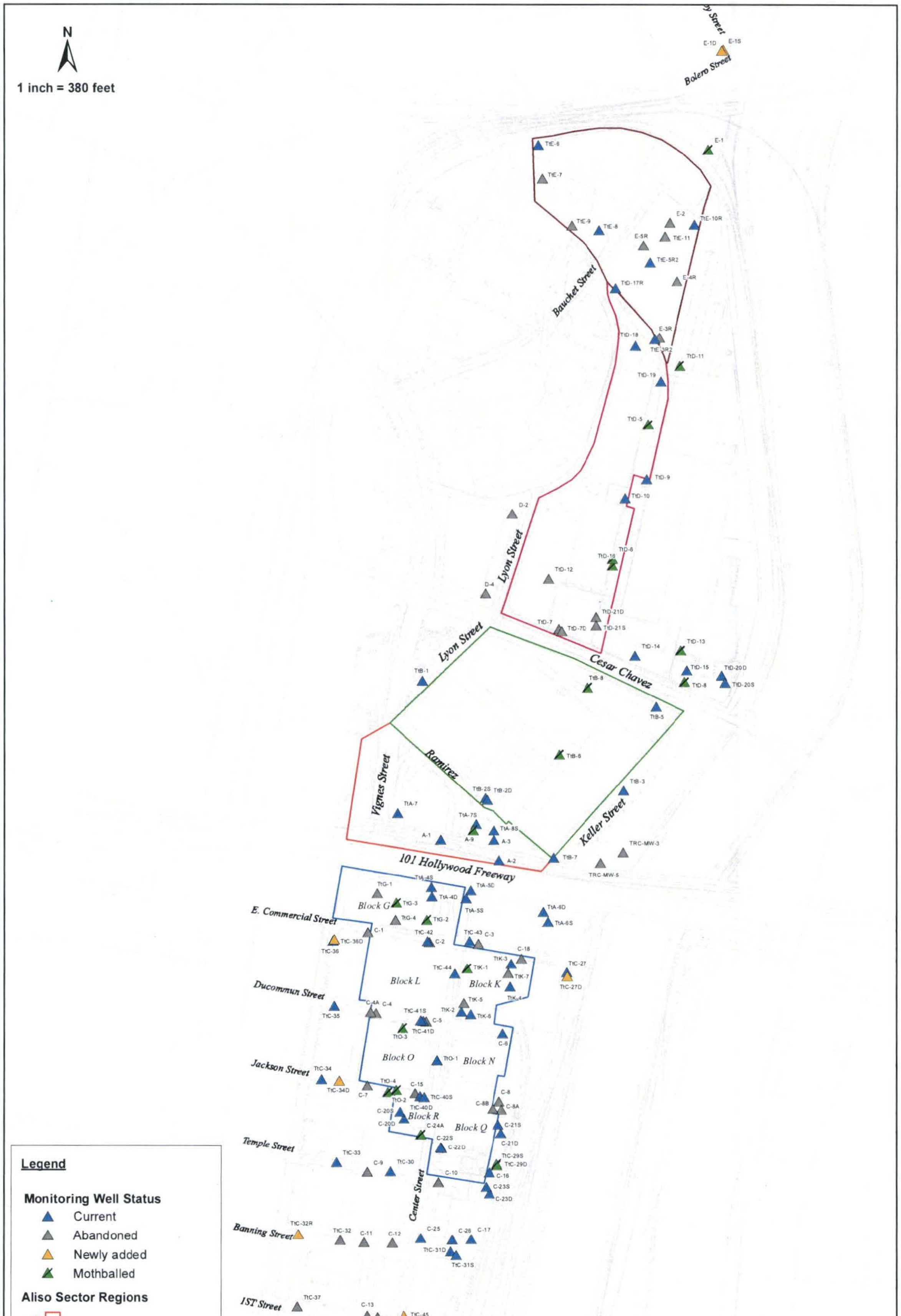
Southern California Gas Company
Former Aliso Street MGP Site

October 2011 Aliso Monitoring Wells

TETRA TECH

Prepared by: B. DeVore
Reviewed by: C. Pollock
Date: 7/16/13
File: MNA Shallow_Deep Wells.mxd

Figure 1-3a



Southern California Gas Company
Former Aliso Street MGP Site

All Aliso Monitoring Wells
(including recently abandoned)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: C. Pollock
Date: 7/24/13
File: Aliso Wells Current.mxd

Figure 1-3b

2. SUMMARY OF FORMER MGP/BUTADIENE OPERATIONS

A full discussion of the past operations at the Aliso Site has been documented in the *Remedial Investigation Master Workplan* [Tetra Tech, 2001]. An overview of the former MGP and former butadiene operations are discussed below. The major facilities of the former MGP and butadiene operations are shown on Figures 2-1 and 2-2 (MGP operations) and Figure 2-3 (butadiene operations). Land uses prior to and following the MGP/butadiene operations are also summarized in this section. Remediation of the Aliso Site Sectors by the SCG is discussed in Section 3 and summarized in Tables 3-1 and 3-2.

2.1 OVERVIEW OF CONTAMINANT SOURCES FROM FORMER MGP AND BUTADIENE OPERATIONS

MGP Plant History

The first facilities for the MGP operations were built in 1874 and began operating using coal-based processes. That plant, referred to as the "Early Plant", was situated on Sector A and some adjoining parcels on Sector B. The Early Plant was bounded by the former Howard Street to the west, Keller Street to the east, and the former Aliso Street (now the 101 Freeway) to the south. The main structures were retort houses and a gasholder located east of the former Center Street, and two other gasholders (built prior to 1906) located on the southeast corner of the area currently identified as the Denny's parcel on Sector A (Figure 2-1). This plant continued operation until sometime before 1906.

Review of historical records indicates the coal-based gas manufacturing plant was converted first to the Lowe water-gas process (sometime in the late 1890s) and later to an oil-based process before 1906. Between 1910 and 1925, numerous additional lots were acquired and added to the Early Plant; the MGP plant then was referred to as the "Expanded Plant" or the "Aliso Street Towne Gas Plant". The expanded plant included two oil-based gas generating plants, several purifying facilities, several oil scrubbers, several large oil tanks, exhaust houses, blacksmith and machine shop, briquette storage yard, and a 1-million cubic-foot gasholder (on Sector B). By 1924, another oil-based gas generating plant, meter house, and oil-water separator were added between Center Street and the railroad right-of-way, south of Macy Street.

Sector C properties were used mostly for gas storage; the MGP facilities included three gasholders, a compressor house, and cooling towers. Block G was used for an underground right-of-way for a 600-foot long 60-inch low-pressure gas pipeline. Sector D properties were used for various purposes: The small area close to the Los Angeles River, designated as the Agnes Cline tract, was used for lampblack storage and retail sales of briquettes. The southern portion of Sector D was used for a small briquette plant to convert lampblack to briquettes. By 1915, facilities included seven carbon-settling pits, a series of carbon separators and carbon dryers, five briquette presses, conveyors to move carbon from the separators to the dryers, an industrial railway, and carbon and water lines. The northern portion was not used for MGP operations. Historical (circa 1897–1920) structures of the MGP facilities are shown on Figure 2-2.

In 1922, natural gas became available and was mixed with the manufactured gas until January 1927 when straight natural gas was distributed to the Los Angeles market. The briquette plant also was shut down in about 1927 when lampblack no longer was produced. The gas plant remained on stand-by until administratively retired by the SCG in 1941. In 1942, many of the facilities were converted to the production of butadiene, as discussed below.

MGP Processes and By-products Generated

The coal-based process involved heating the coal in retorts to produce gases. The retort was heated using either coal or coke. The gases were first condensed to remove water and tars. The tars were sometimes used to heat the retorts. The gases were cleaned to remove ammonia, cyanide, and hydrogen sulfide. Ammonia was removed in scrubbers using various chemical solutions. Cyanide and hydrogen sulfide were removed by using solid-phase iron oxides and lime, resulting in spent oxide box wastes. Phenols were also present in the ammonia fraction and were sometimes separated and recovered.

The oil-based process used crude oil as the feedstock. The oil was gasified and alternately passed with steam through a series of pre-heated coke ovens. The gas then was scrubbed in purifiers to remove the minor amounts of ammonia, cyanide, and tar acids and bases such as phenols and cresols. The primary residue from this process was lampblack, which is mostly solid-phase carbon. The lampblack was made into briquettes and sold for fuel. Other residues were light oils and tar. Tars were often used at the plant or sold as fuel.

Butadiene Plant History

During World War II and beginning in 1942, under contract with the U.S. Defense Plant Corporation, the SCG converted much of its Aliso Street MGP facilities to the production of butadiene, which is a raw material used in the manufacture of synthetic rubber. Additional land was added for these facilities and the MGP facilities were modified. Portions of the butadiene plant covered all five sectors. The butadiene facilities on the entire Aliso Site that existed in 1945 are shown on Figure 2-3. The plant was operated by the SCG from 1943 to 1947. Most of the facilities were demolished in 1952, except for the large gasholders and associated equipment that were removed in 1973.

The major facilities on Sector A included three purifiers, Cottrell precipitators, an exhaust house, scrubbers, and cooling tower between Vignes Street and the former Howard Street. The facilities on Sector A along the former Aliso Street and Ramirez Street east of the former Center Street were not used for the butadiene plant.

Major facilities on Sector B included: 1-million cubic foot relief gasholder, an oil-gas generator with stacks and pre-heaters, boilers, two purifiers, scrubbers, a separator, a stripping plant for dehydration, cooling towers, a substation, a water softener unit, two oil tanks, two pump houses, and small miscellaneous buildings. The oil-gas generator was modified to add pre-heaters.

Pipelines carrying product and waste fluids ran along the former Howard Street on Sector B. A water gallery ran along the northeastern part of Sector B parallel to Cesar Chavez Boulevard[1].

The facilities on Sector C used for the butadiene operation included: three gasholders on Blocks L, K, and O; a compressor house and boilers on Block N; a 50-foot diameter Hortonsphere® and compressor station on Block R; an adsorption-distillation plant with six small butadiene storage tanks and cooling towers on Block Q; additional cooling towers, an oil-filter house and associated pumping system, and pipelines on Block K; and a warehouse and storage yard on Block G. The middle of Block G also was used for an underground right-of-way for a 60-inch low-pressure gas pipeline.

Major facilities on Sector D included a large natural gas gasholder, modified filtration and treatment units now used to treat butadiene process wastewater, and several cooling towers, oil storage tanks, and water treatment units.

In Sector E, butadiene-related facilities included two aboveground oil feedstock storage tanks (located inside bermed areas on the eastern part of Sector E, now designated as 490-498 Bauchet Street), a dicyclopentadiene (DCPD) recovery unit, 16 small DCPD aboveground storage tanks (ASTs), and an oil storage tank and storage yard for iron and wood shavings.

Butadiene Process

The butadiene manufacturing process involved many steps. The first step was heating vaporized oil distillates and steam in the gas generators on Sector B. The gas then was cooled in a wash box to remove tars, light oils and oil emulsions. The gas vapors passed out of the wash box into a pipeline for transfer to other units for cleaning. This wet butadiene gas was passed through a condensate scrubber and a Cottrell precipitator to remove entrained oil particles, and through purifiers with iron oxides to remove hydrogen sulfide on the Sector A, Parcel A West parcel. The gas then was stored in a large gasholder on Ducommun Street (Block K). The wet butadiene gas was sent in turn to the Ducommun Street compressor plant (Block N); to the Hortonsphere (Block R), which acted as a surge tank; and to the Jackson Street compressor unit (Block R). The gas pressure was raised in these units to allow the gas to be further processed in the adsorption-distillation plant (Block Q). This unit was used to separate valuable fractions from the butadiene gas, such as the aromatic liquids, which were separated and sold. The butadiene was cooled into a liquid and transferred by pipeline to Torrance for making into rubber. The remaining residue gas then went through a stripping plant (Sector D) and the cleaned gas was either used by the plant or pumped into the gas distribution system for outside customers. Other wastes were treated in facilities located on Sector D.

2.2 OVERVIEW OF CONTAMINANT SOURCES FROM PRE-MGP/ BUTADIENE LAND USES

By 1914, commercial businesses were present on Block Q. By 1929, offices and a parking lot

[1]The gallery was breached in one of the borings, TtB-4D, during the site investigation. The gallery had a wooden structure on the top and bottom of the opening and some sludge in it. There was a void from 44.5 to 49 feet below ground surface (bgs). Because of the water gallery, a deep well was not installed at this location.

were present on Block R, prior to being bought by the SCG. An ice-making company was operating south of Block Q between East Temple Street and Banning Street. Rail lines ran along the eastern side of Sector C along the Los Angeles River. The remaining land on Sector C was mostly residential. The southern half of the main part of Sector D was bought sometime after 1905. Prior to that time, it was residential. The property was owned by the Maier Packing Company (meat packing) from 1905 through 1914.

On Sector E, the 496 and 498 Bauchet Street properties and the 441 Bauchet Street property were used by various oil companies (Puget Oil Co. in 1905, Puente Oil Co. in 1910, Columbia Oil Co. in 1914, Amalgamated Oil Company from 1910-1914 for a distillate plant, and Shell Oil Co. 1934 to about 1942). Based on review of available photos and maps, the 490 Bauchet Street site did not have any oil company-related facilities, but it was owned by the Amalgamated Oil Company and later by Shell Oil Company. A series of oil tanks used by these companies are shown on the map of both pre- and post-remediation tanks installed by third parties that were not part of the MGP or butadiene operations (Figure 2-4).

2.3 OVERVIEW OF CONTAMINANT SOURCES FROM POST-MGP/ BUTADIENE LAND USES

Following the demolition of the MGP/butadiene facilities in the early 1950s except for the large gasholders, the properties formerly occupied by the plant equipment were subdivided and sold to various private and public parties. The large gasholders on Blocks K, L, and O were not removed until the 1970s. A summary of the post MGP/butadiene land uses is presented below. Additional information is provided in the Remedial Investigation (RI) reports for the individual Aliso sectors or blocks.

Sector E

Sector E was divided into parcels, sold to multiple parties, and given separate street addresses. One of the three feedstock oil storage tanks used for the butadiene operations on the west side of Sector E (441 and 451 Bauchet Street) was removed prior to 1952, while the two tanks on the east side were removed between 1952 and 1958. By 1958, on the west side (441 Bauchet Street), there was a ready-mix concrete plant and a crating and crate storage yard with an office. This entire area was converted into a parking lot by 1970. A parking structure and building for the Los Angeles County Central Men's Jail were built on the 441 and 451 Bauchet Street properties by 1986. Fuel underground storage tanks (USTs) and a vehicle fueling station on the western part of Sector E (near well TtE-8) were installed by the County of Los Angeles (see Figure 2-4 for the locations of these tanks).

The land on the east side of Bauchet Street was divided into three parcels (490, 496, and 498 Bauchet Street). A railroad spur ran parallel to the street next to the 496 and 498 properties. The 498 Bauchet Street property was used by several different companies including as a glass distribution warehouse owned by Charles Ulrich from 1952 until 1961. From 1961 until about 1970, the property was owned by Howard Tans but was still a warehouse. In the 1970s and 1980s, China Seaway, Inc. used the property for frozen food storage, office space and a loading dock. The County of Los Angeles bought the property in 1984; the building was removed, and a new eight-story parking structure built in 1987. Several diesel and gasoline USTs were removed prior to building the parking structure [CH2M Hill, 1997].

The 496 Bauchet Street property was used for metal plating operations using the hard chrome process by two companies. Spar-Tan Engineering Company operated from April 1957 to 1964 and Van der Horst Corp (VDH) operated from 1964 to 1987. Chemicals used at the facility included: solvents (acetone and PCE); acids (chromic, fluoroboric, hydrochloric, nitric, and sulfuric); barium carbonate; chrome hydroxide; ferrous sulfate solution; and lime. A 1,500-gallon UST for heating oil formerly was located at the southern edge of the building.

The 490 Bauchet Street Site was sold after the butadiene plant closed. From 1955 to 1970, the property was used for a frozen food processing and packing plant. From 1970 to 1985, a mannequin manufacturing plant was located at the Site, which used TCE and PCE in their operations, based on finding both solvents in sediment from the bottom of the clarifier [CH2M Hill, 1999]. DCPD also was found in the clarifier sediment [CH2M Hill, 1999]. After 1985, the building was used as a warehouse; the building was demolished in 2005.

Sector D

Sector D currently is being used by the Metropolitan Transportation Authority (MTA) as a bus maintenance and operation facility, but not as a bus refueling station. Sector D has five large buildings. Building 1, on the southern part of the property, is used for engine repairs [ENV-America, 2000b]. Buildings 2 and 4 are located on the northern half of Sector D, Building 3 is located to the southeastern part of the property, and Building 5 is located further to the east. The remainder of this Sector is used by MTA for parking lots, located on either side of the buildings. There are several ASTs, a small above-ground diesel tank with one hose for dispensing fuel, and a propane dispensing unit in a small enclosed building. The present USTs on Sector D contain waste solvents, waste oil, motor oil and antifreeze in separate USTs, diesel, and lubricants. (See Figure 2-4 for locations of tanks.)

Sector B

Sector B was purchased by the City of Los Angeles to build the Piper Technical Center, which was completed in 1980 [ENV-America, 2000a]. The Center has an L-shaped building on the eastern and northern part of Sector B and a rectangular building in the south-southwestern part. The Center includes a vehicle maintenance shop on the ground level, a parking structure, and a fuel-storage and refueling area with USTs in the northern part next to the Cesar Chavez Street. Offices and laboratories for the Police Department and other City departments, and the City archives are located on the aboveground floors. The eastern side of the L-shaped building has a basement between the former Center and Keller Streets that contains a warehouse and mechanical room.

Before 1999, 19 USTs were present on the Sector B property, ranging in size from 1,500- to 20,000-gallons, one AST, two waste oil sumps, two fuel dispenser islands, and 15 clarifiers [ENV-America, 2000a]. The tanks contained gasoline, diesel fuel, transmission oil, motor oil, and waste oil. In 1999, the City of Los Angeles removed 13 USTs and one AST, abandoned two other USTs, and removed two waste oil sumps and two fuel-dispensing islands. Two other 12,000-gallon gasoline USTs were abandoned in place (see Figure 2-4 for locations of tanks).

Sector A
The post-MGP/Butadiene operations on Sector A included a restaurant (Denny's Parcel) and parking lot by City of Los Angeles for police cars, etc. (Parcel A East). Parcel A West was located under the El Monte Busway.

Sector C, Block G
Block G is bordered on the north by property belonging to the California Department of Transportation (Caltrans), which is used as a paved buffer zone next to the overhead Hollywood Freeway 101. Block G is currently owned by the Maier Brewing/S&P Company, but is available for use by Caltrans. The property is currently vacant. However, an underground MTA rail maintenance tunnel crosses the northeastern corner of Block G and extends across Block K to the tracks next to the Los Angeles River. The top of the tunnel is about 15 to 20 feet below ground surface. A strip of unpaved land slopes steeply from the fence down to Center Street, which is partly below grade so that it can go under the freeway.

A former diesel UST was found on Block G during the excavation of the 60-inch pipeline. This UST was removed in 2000; no soil contamination was observed around this UST. Another 550-gallon unleaded gasoline UST was located across Center Street from Block G at 801 Commercial Street [Instrument Personnel Inc. (IPI), 1987]. This tank and the associated contaminated soil were removed to a depth of about 17 feet (Fleming Engineering, 1987). Remediation of Block G by SCG is discussed in Section 3.

Sector C, Block K
After the butadiene plant was closed, the gasholder remained on Block K until it was demolished in 1973. Block K was then sold to Viertel's Towing Company, and has since been used for storage of cars; there is a small office on the property. MTA's rail tunnel extends beneath this block, which exits from the southeastern corner to the tracks along the Los Angeles River. The tunnel is used to move trains between Union Station and a maintenance yard and tracks along the Los Angeles River. Remediation of Block K by SCG is discussed in Section 3.

Sector C, Block L
The gasholder on Block L was removed in 1973. The property was then sold to Unocal for a fuel terminal. The fuel terminal was built in 1979 and had six large aboveground tanks and one small tank. Four of the tanks contained unleaded gasoline. The other two tanks had diesel and fuel mixtures; the small tank contained gasoline additive (degreasers). Fuel and additives stored in the aboveground tanks were distributed to tanker trucks from two loading racks adjacent to the tanks. Product was supplied to the terminal by subsurface pipelines. The fuel tanks and filling facilities were removed in 1999 after the property was transferred to Tosco and then to Phillips Petroleum. The property was remediated by Philips Petroleum, which included removal of 14,680 tons of soil in 2004 (see Table 3-1). Block L was vacant until construction of a commercial warehouse in 2005.

Sector C, Block N
The northern two-thirds of Block N was formerly owned by SCG and was sold to the Manley Oil Company in 1979 and used until 2005 for crude oil storage and an office building. The southern one-third of the property was formerly owned by the SCG and was used as a natural gas

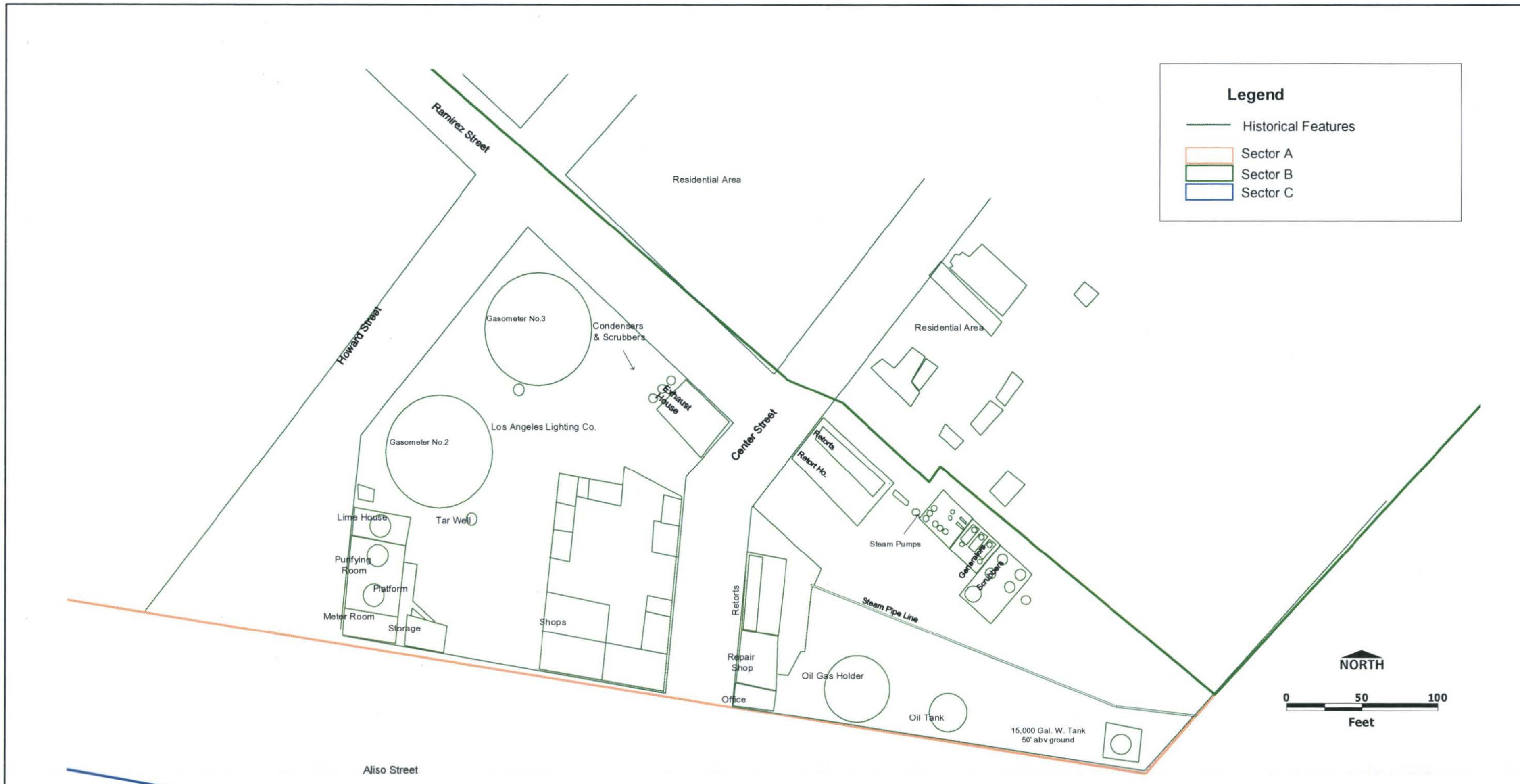
metering and regulation station. Remediation of Block N by SCG is discussed in Section 3. The property is currently being used by MTA.

Sector C, Block O

After the butadiene plant was closed, the gasholder on Block O continued to be used until it was demolished in 1973. Block O was then sold to the Fishking Processing Company, who installed a large building used for food processing, covering the part previously owned by the SCG.

Sector C, Blocks Q and R

Blocks Q and R were bought by the National Cold Storage Company after the butadiene facilities were removed. Block R has a small storage building and a parking lot, but it is not currently being used. Block Q is covered by two large buildings, which formerly were used as a food processing plant and cold storage facility. Portions of the northern building were most recently occupied by Woodland Farms and used as a food processing plant and offices. The buildings are currently vacant.



Southern California Gas Company
Former Aliso Street MGP Site

Historical Coal-based MGP Features in Sector A (1894)

Tetra Tech, Inc.

REVIEW BY: CFC
FILE: SectorA.WOR
DATE: 5-10-2005

Fig. 2-1

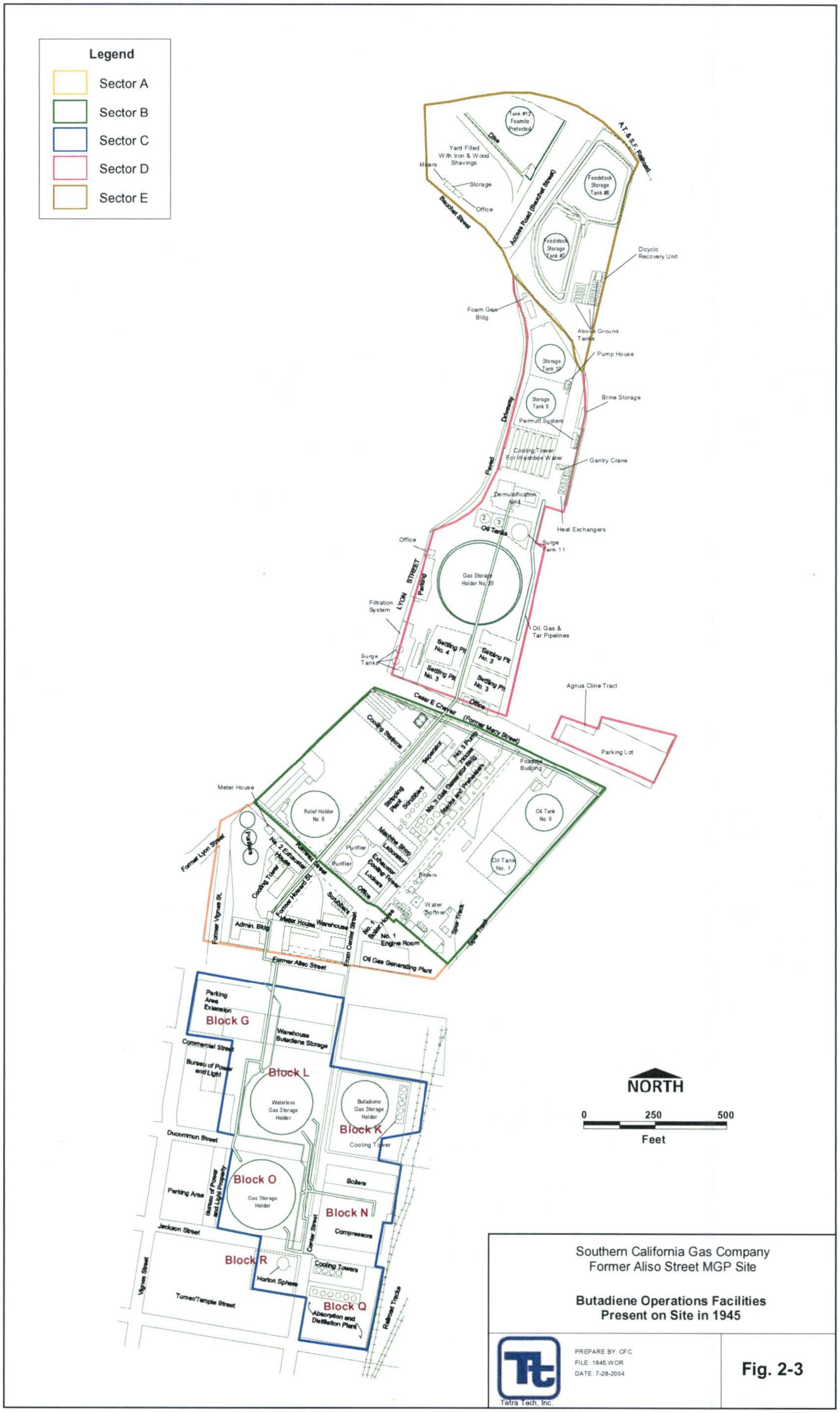
Southern California Gas Company
Former Aliso Street MGP Site

Historical Features: MGP Facilities on Sector B 1897~1920

Tetra Tech, Inc.

REVIEW BY: CFC
FILE: SectorB.WOR
DATE: 5-10-2005

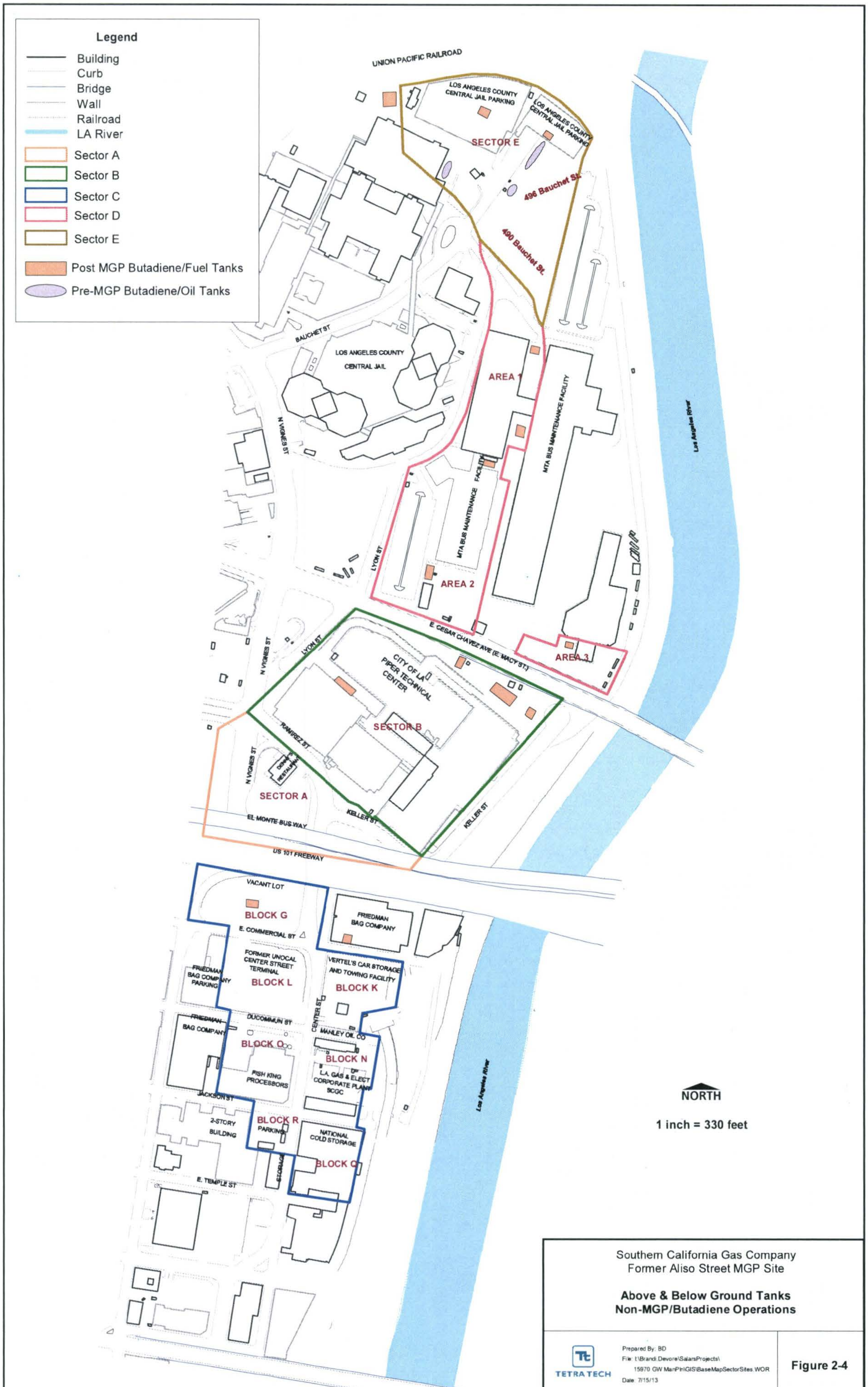
Fig. 2-2



Southern California Gas Company
Former Aliso Street MGP Site

Butadiene Operations Facilities Present on Site in 1945

Fig. 2-3



Southern California Gas Company
Former Aliso Street MGP Site

Above & Below Ground Tanks
Non-MGP/Butadiene Operations

Figure 2-4

3.1 SUMMARY OF COMPLETED SOIL REMEDIATION

Contaminant source removal was conducted by the SCG on Sectors A, E, D, and parts of Blocks G, K, and N as shown on Figure 3-1. Remediation was conducted between June 1998 and December 2010 by excavating contaminated soil; removing remaining aboveground structures such as buildings and tanks, and removing underground structures such as concrete vaults, piping, and UST systems. In addition, third parties remediated Blocks L in 2000 and 2004 and a portion of Block N in 2005. Additional soil removal was conducted on the 490 and 496 Bauchet Street properties in conjunction with the construction of two new buildings on those properties by third parties in 2011-2012. Another new building is being constructed in 2013 for Sector D to the west of existing MTA Building 1 on the southern part of the property.

A summary of the quantities of soil, concrete, and piping removed is shown in Table 3-1. The largest quantities of contaminated soil were removed from the remediated areas of Sectors A, D, and E. Soil vapor extraction (SVE) was conducted on parts of Sectors D and E prior to the excavations. In addition, chemical oxidation injection (a pilot study) and SVE were conducted on the 490 Bauchet Street property in the southeast corner of Sector E. The available soil gas data before and after remediation are discussed in Appendix D.

Oxygen Release Compound (ORC®) was added to the groundwater after excavation on parts of Sectors A, D, and E. At present, soil remediation is not possible on most of Sector B and parts of Sector C, Block Q because these areas are covered by large buildings. The primary soil contamination found at Sector C, Block R is located at the southwest corner of the intersection of Center and Jackson Streets, mostly beneath the street and sidewalk where access is limited by the City of Los Angeles. The remedial investigation on Sector C, Block O indicated that soil results were below remedial goals so remediation was not needed. Remedial work conducted to date by the SCG is summarized below, sector by sector.

3.2 SECTOR A

Sector A included three parcels: 1) Denny's Parcel – 530 Ramirez Street, 2) Parcel A West (no street address, and 3) Parcel A East (no street address).

Sector A, 530 Ramirez Street (Denny's Parcel)

Between June 1998 and October 1999, the SCG excavated and removed the accessible contaminated soil from the Denny's Parcel. The work was done based on a removal action workplan (RAW) prepared by CH2M Hill and approved by the DTSC [CH2M Hill, 1998]. The removal activities were managed by CH2M Hill under the oversight of the DTSC. The SCG removed over 45,000 tons of impacted soil and concrete and pipes within the parking lot and landscaped areas of the Denny's Parcel. In the west portion of the parcel, contaminated soil was removed to approximately 10 feet bgs. In the east and south portions, the northern gasholder base and a major portion (approximately 55%) of the southern gasholder base were removed along with the associated contaminated soil to approximately 28 feet bgs. Concrete and pipes were removed along with the contaminated soil. After excavation, the areas were backfilled and restored to the original condition as an asphalt-paved parking lot area.

Sector A, Parcel A West

For Parcel A West, soil removal activities started in February 2004 and ended in June 2004. The work was done based on a RAW prepared by Tetra Tech and approved by the DTSC [Tetra Tech, 2003a]. The removal activities were managed by Tetra Tech under the oversight of the DTSC. A total of 12,597 tons of contaminated soil was removed to a depth of about 28 feet bgs [Tetra Tech, 2005b]. The remainder of the southern gasholder (left from previous excavation at Denny's parcel), which included a brick wall and a concrete base, was removed from the Caltrans right-of-way under the 101 Freeway Bridge during the removal action. The gasholder base was approximately 17 feet deep and 85 feet in diameter. A combination of auger drilling and open excavation was used to remove contaminated soil and abandoned subsurface structures. The drilled areas were backfilled with cement slurry and open excavated areas were backfilled with clean imported soil. The area was re-graded and paved with concrete or asphalt.

Sector A, Parcel A East

For Parcel A East, soil removal activities started in May 2004 and ended in January 2005. The work was done based on a RAW prepared by Tetra Tech and approved by the DTSC [Tetra Tech, 2003b]. The removal activities were managed by Tetra Tech under the oversight of the DTSC. The SCG excavated and removed the accessible contaminated soil from the parcel based on a RAW. A total volume of 22,459 tons of contaminated soil was removed to depths of 29 to 31 feet bgs [Tetra Tech, 2005a]. The gasholder base that extended partially under the 101 Freeway Bridge, was approximately 80 feet in diameter, and extended to approximately 15 feet bgs. The northern portion of the gasholder, including the brick walls and concrete base, was removed. The portion of the gasholder extending under the 101 Freeway Bridge was left in place. The gasholder base contained large pieces of concrete, sludge, brick, wood, metal pieces, and soil. A sump below the gasholder base containing black oily liquid was removed.

Numerous abandoned buried pipelines of differing diameters were removed from the Site. Five concrete subsurface vaults, three concrete former generator blocks, and approximately 46 tons of brick were removed during the excavation activities. During the deep excavation, groundwater with an approximately 1/16-inch thick floating layer of oil entered the excavation. The oil sheen over the excavated groundwater surface was removed on November 1 and 2, 2004 using absorbent pads designed to absorb oil floating on water. In addition, 210 pounds of ORC® were applied to the excavation bottom prior to backfilling with clean imported soil.

3.3 SECTOR B

Most of Sector B is covered by the Piper Technical Center and associated loading docks, garages, and streets. No remedial excavations have been performed to date at Sector B, although some contaminated soil was removed (to depths up to 20 feet bgs) by City contractors during the construction of the buildings and subsurface garages. Contaminated soil has been identified during Tetra Tech's Sector B RI [Tetra Tech, 2008] and confirmed during the 2009 Aliso Streets site investigation [Tetra Tech, 2013b] along most of Keller Street and part of Ramirez Street, and likely is present along the south side of Cesar Chavez Boulevard [Tetra Tech, 2013b – Report in progress]. The recent investigation (May 18 through June 13, 2013) conducted in Ramirez Street south of Piper Technical Center between the Center and Keller streets shows that contaminated soil is present. Elevated concentrations of naphthalene and TPH as gasoline and diesel are present in some borings to a depth of 30 to 40 feet bgs.

3.4 SECTOR C

Sector C includes 7 blocks named: G, K, L, N, O, Q, and R. Remediation was completed at Blocks G, K, L, and N. The remedial investigation on Block O indicated that soil results were below remedial goals (industrial/commercial) so remediation was not needed. The remedial investigations on Blocks R and Q have indicated that soil results were below remedial goals (industrial/commercial) so remediation is not needed (pending approval from DTSC).

Sector C, Block G

In November 2000, the SCG removed a 130-foot section of 60-inch pipeline and a 3,000-gallon diesel UST in the central part of Block G. The UST was unexpected. This removal action was managed by CH2M Hill under the oversight of the DTSC. The remaining sections of the pipeline under Commercial Street and the 101 Freeway were cleaned out and sealed with concrete. The work was done at the request of Caltrans, as explained in the Closure Report [CH2M Hill, 2001a]. The depth of the excavated area ranged from 2 to 18 feet bgs. Approximately 5,757 tons of contaminated soil was removed above the pipeline and in the vicinity of the UST. The UST was cleaned and removed under a permit from the Los Angeles Fire Department.

Sector C, Block K

The removal activities for Block K were based on the RAW prepared by Tetra Tech [Tetra Tech, 2004a], and approved by DTSC. The remediation areas on Block K were: 1) an area west of the existing office building to approximately 15 feet bgs, 2) an area southeast of the existing office building to 10 feet bgs, and 3) three locations at the northeast corner of Block K, to varying depths. The total soil removed was approximately 1,500 tons [Tetra Tech, 2009]. A 10-foot by 10-foot concrete sump extending to 22 feet bgs and a brick vault also were removed. Several large pipelines with diameters ranging from 18 to 36 inches were found; portions of the pipelines were removed and the remainder filled with sand bags and 2-sack cement sand slurry. Approximately 1,800 gallons of contaminated water were pumped from two of the pipes. The excavated areas were backfilled with clean imported soil, compacted, and the Site re-paved with asphalt or concrete.

Sector C, Block L

Between November 1999 and January 2000, the then-property owner of Block L (Tosco) removed the fuel terminal facilities [TRC, 2000]. This included removal of the aboveground petroleum storage tanks and piping. Approximately 24.3 tons of contaminated soil also was removed in the vicinity of the former oil/water separator. Between February 2004 and April 2004, Tosco excavated 14,680 tons of impacted soil and asphalt and concrete, which included a former concrete transformer pad [TRC, 2004]. These removal activities were based on a RAW prepared by TRC and approved by the DTSC [TRC, 2003]. The removal activities were managed by TRC for ConocoPhillips under the oversight of the DTSC. Excavation extended to the water table at 31 feet bgs. Since the removal action, a new building has been constructed on the property in 2005.

Sector C, Block N

The soil removal activities at Block N were conducted in June 2005 and July 2005. The removal activities for Block N were based on the RAW prepared by Tetra Tech and approved by the DTSC [Tetra Tech, 2004b]. The removal activities were managed by Tetra Tech under the oversight of the DTSC. A combination of auger drilling and open excavation was used to remove 2,663 tons of contaminated soil from Block N [Tetra Tech, 2006a]. The drilled areas were backfilled with cement slurry, and open excavated areas were backfilled with clean imported soil. Contaminated soil and concrete structures were removed in the shallow excavated areas to depths ranging from 8 feet to 11.5 feet bgs. In augered excavation areas, contaminated soil was removed to approximately 28 to 30 feet bgs. During the soil removal, piping and concrete also were removed.

Contaminated soil also was removed during investigation activities conducted inside the Manley Oil Building in December 2005. Contaminated soil along with some accessible debris and non-contaminated soil were removed from two trenches. The total volume of soil removed from the trenches was approximately 79 tons [Tetra Tech, 2006a].

3.5 SECTOR D

Sector D includes two parts: 1) Agnes Cline Tract, and 2) the current MTA bus maintenance station (Main Site). The removal activities for Sector D were based on the Remedial Action Plan (RAP) prepared by Tetra Tech (Tetra Tech, 2006b) and approved by DTSC. The Main Site was divided into 10 areas for excavation and remedial action purposes. Four areas at Sector D, Areas 7 through 10 have been excavated and remediated; two in the Southern Area (Areas 7 and 10) and two on the Agnes Cline Tract (Areas 8 and 9). The remaining Areas 1 through 6 were not accessible for remediation. Recently, MTA conducted additional excavations within the boundaries of Sector D Main Site and as a result removed additional contaminated soil that was not originally accessible during remedial actions by SCG.

Sector D – Agnes Cline Tract

The removal operations at the Agnes Cline Tract, referred to in the RAP as Area 8, was conducted between July 2007 and December 2007. Soil was excavated to depths of 5 to 20 feet deep. A total of 16,272 tons of contaminated soil was removed from Area 8 [Tetra Tech, 2011a]. During the removal action, additional contaminated soil was found to the north of Area 8 in Area 9. Between January 2008 and April, 2008, a total of 11,368 tons of contaminated soil was removed from Area 9. Following excavation, clean backfill was placed and compacted to restore the surface to its original grade. Both areas were repaved with asphalt or concrete.

Sector D – South and West of MTA Building 1 (Areas 7 and 10)

A large area located south and west of MTA Building 1 was remediated where the former settling pits and part of a large gasholder were located. Prior to the excavations, a SVE system was installed and operated from April 2008 to May 2009 to remove VOCs. The SVE system removed approximately 4,960 pounds of benzene, 47 pounds of H_2S, 49,250 pounds of TPH, and

4,660 gallons of soil gas condensate [Tetra Tech, 2011a]. The soil removal action was conducted between May 2008 and December 2009. Soil was excavated to depths ranging from 5 to 33 feet bgs. A total of 155,825 tons of soil were removed, along with concrete and piping

Two separate areas encompassing about 110 feet by 130 feet were excavated down to approximately 2 feet below the groundwater level in the central one-third of Area 7. Sorbent Pads™ and Sorbent Socks™ were used to absorb a thin free product layer that appeared on top of groundwater in the excavation area. A layer of geotextile was placed on the bottom of the excavation to act as a sediment filter and approximately three feet of the excavated area was backfilled with ¾-inch crushed rock. In each area, 5-foot square potholes were trenched through the rock layer to expose the water table and Oxygen Release Compound (ORC Advanced™) added to each pothole, totaling approximately 1,800 pounds. The crushed rock was pushed back over the potholes, and a layer of geotextile was placed above the crushed rock. The excavated areas were then backfilled with clean imported soil, compacted, re-graded, and re-paved with asphalt or concrete.

3.6 SECTOR E

Sector E included several parcels. Two parcels, 490 Bauchet Street and 496 Bauchet Street were excavated and remediated.

Sector E - 490 Bauchet Street

An SVE was used to remove VOCs under the former building located on this Site. The SVE system was designed by CH2M Hill and had four SVE wells and a horizontal trench beneath the large warehouse building [CH2M Hill, 2000a, b; and 2001b]. The system operated from January 2002 to July 2004. During operation, the SVE system removed approximately 687 pounds of tetrachloroethene (PCE), 70 pounds of trichloroethene (TCE), 680 pounds of dicyclopentadiene (DCPD), 12 pounds of naphthalene, and 8 pounds of benzene. The SVE system was shut down in August 2006 per written notification to South Coast Air Quality Management District (SCAQMD).

An In-Situ Chemical Oxidation System (ISCO) was designed and operated by Environmental Resources Management (ERM) under a pilot study recovery system. ERM injected a total of 736 pounds of ozone into 12 injectors [ERM, 2003; 2004]. The system removed 31 pounds of DCPD, 24 pounds of naphthalene, and insignificant masses of PCE, TCE, and benzene totaling less than 0.02 pound.

In November and December 2005, a former warehouse building located at 490 Bauchet Street was demolished and approximately concrete and trash were removed. After demolition, the concrete slab of the building and the surrounding asphalt remained.

The soil removal activities at Aliso Sector E 490 Bauchet Street were conducted from March 2006 through October 2006. The removal activities were based on the RAW prepared by Tetra Tech and approved by DTSC [Tetra Tech, 2005c], and plans approved by the Los Angeles City Excavation/Grading Plan. The removal activities were managed by Tetra Tech under the oversight of the DTSC. Excavation activities are documented in the Removal Action Completion Report [Tetra Tech, 2007a].

Excavation activities began with the removal of asphalt and concrete. A total of 5,043 feet of pipes with diameters of 12-inches or less and 28 feet of larger pipes were removed. The pipes were cut at the property boundary on the south wall of the property, and the exposed ends were plugged with cement or concrete for proper abandonment.

An approximately 9-foot by 20-foot by 9-foot deep concrete vault was found and removed, as well as a 4-stage clarifier located on the west end of the former building. Liquid/sludge (2,250 gallons) was removed from the clarifier, which then was demolished and removed. A clay pipe that connected the clarifier to the sewer line was capped and abandoned. Other concrete structures and footings were encountered and removed. Contaminated soils were removed in the open excavation areas to depths ranging from 5 to 33 feet bgs. Contaminated soil was removed in augered areas to groundwater at depths ranging from approximately 28 to30 feet bgs. A total of 85,793 tons of soil were removed from the Site during the removal action.

An area about 80 feet by 100 feet was excavated to approximately three feet below the water table in the southeastern portion of the Site. A layer of geotextile was placed on the bottom of the excavation to act as a sediment filter and approximately three feet of the excavated area was backfilled with 3/4-inch crushed rock. Four perforated drums were installed during the backfilling with crushed rock and were used as pumping points for the groundwater. A total of 65,000 gallons of groundwater were pumped. Next, a layer of ORC Advanced™ (about 1,400 pounds total) was applied on top of the backfilled crushed rocks, and the perforated drums were removed. A layer of geotextile was then placed between the crushed rock and the imported backfill soil.

<u>Sector E - 496 Bauchet Street</u>

Soil removal activities at the 496 Bauchet Street site started during the removal action at the 490 Bauchet Street site, because removal activities at 490 Bauchet encroached more than 25 feet into the 496 Bauchet Street site. Excavation activities were conducted at the 496 Site from January 2007 through August 2007 and are documented in the Removal Action Completion Report [Tetra Tech, 2007b]. The excavation was performed in accordance with the Remedial Action Workplan [Tetra Tech, 2005c] prepared by Tetra Tech and approved by DTSC for the adjacent site 490 Bauchet Street, and the approved Los Angeles City Excavation/Grading Plan.

Excavation activities included removal of the asphalt and concrete at the southeast corner, sections of two former tank holder bases, and other concrete structures including two concrete vaults that were encountered and excavated in the different sections of the Site [Tetra Tech, 2007b]. Both open excavation and auger drilling were used to remove contaminated soil in two areas along the northeast and western boundaries of the property. The borings were backfilled with 2-sack sand cement slurry. Contaminated soils in the drilled areas were removed to the water table at approximately 28-30 feet. Slot trenches were excavated to the water table along the auger-drilled areas along Bauchet Street, at the northeast section of the Site, and west of the auger-drilled area. The auger-drilled holes and slot trenches were backfilled using approximately 7,758 cubic yards of 2-sack cement slurry. A total of 132,678 tons of soil were removed. The open excavation area was backfilled with clean imported soil and re-graded.

Four areas were excavated into the groundwater and treated for hydrocarbon product. The procedure in each area was to excavate about 1.5 feet into the water table. Groundwater with a visible oily layer was skimmed from the exposed area using Sorbent™ Pads and Socs™ or the floating oily material was excavated with soil. A geotextile layer was placed on the bottom of the excavation to act as a sediment filter, and the area was then backfilled with approximately 3 feet of compacted 3/4-inch crushed rock. ORC Advanced™ was applied to trenches excavated into the crushed rock, which then was returned and re-compacted. A layer of geotextile was placed over the rock; backfill operations using imported clean soil followed. A total of 2,400 lbs of ORC® Advanced was used in the treatment operations.

3.7 SOIL MASS REMOVAL ESTIMATES

The primary MGP-related contaminants that have impacted groundwater are benzene and naphthalene. The mass estimates for these two chemicals have been calculated for all sectors and blocks remediated. The mass estimates for benzene and naphthalene for all the sites remediated and PCE and TCE for the 490 and 496 Bauchet Street sites on Sector E are presented in Table 3-2. Overall, the table indicates that large masses of contamination have been removed from various parts of the Aliso Site. These include the three Sector A parcels, Sector D (Areas 7, 8, 9, and 10), and the 490 and 496 Bauchet Street properties. For the three Sector A parcels and Sector D (Areas 7-10), the mass percentages removed for benzene and naphthalene range between 90% and 99.8%. The estimates of mass removed for the 490 and 496 Bauchet Street sites are 88 and 99% for naphthalene, respectively, in addition to removal of 60 to 80 % of the benzene. Significant TPH, which is a potential source of part of the benzene and naphthalene, also was removed from the Aliso Site. Some additional chemicals also were evaluated, including PCE and TCE for the 490 and 496 Bauchet Street properties on Sector E.

To examine the extent of soil remediation performed at different sectors of Aliso Site, the mass of the primary contaminants in soil was calculated. The pre-remediation mass, post-remediation mass, and the percent mass removed values were calculated.

Estimates of the volumes of contaminant plumes were made using the concentration contour maps for specific unsaturated soil depth zones and then summing their contributions to the total mass. The isoconcentration contour maps were developed using pre- and post-remediation data. This provided the greatest amount of information on the contaminant concentrations present in Aliso Site soil prior to remediation. The isoconcentration contours were developed for the entire Aliso Site and were divided into 5-foot thick depth zones. The average concentration in each depth zone for each isoconcentration contour was calculated using the SURFER program. Then, the SURFER-calculated area-weighted concentrations were multiplied by the soil bulk density and appropriate units conversions to calculate the chemical mass[1]. Next, the mass remaining after excavation was calculated. The area-weighted concentrations of the contaminant in the remaining soils were then calculated using SURFER. Finally, the mass excavated was calculated by subtracting the mass remaining from the mass calculated for conditions prior to removal.

[1] Mass (kg) = C (mg/kg) x Bulk Density (kg/L) x Volume (ft^3) x (28.32 L/ft^3) * 10^{-6} kg/mg where Bulk Density = 1.6 g/cm^3 = 1.6 kg/L (average of measured Aliso bulk density values).

3.8 REMAINING SOURCES

The presence of free product for the Aliso Site is summarized in Table 3-3. There are two areas where sheens or thin layers of free product have been observed recently in the shallow wells: 1) well TtD-10; and 2) the Parcel A East wells A-2, A-3, TtA-7S, and TtA-8S. The product levels in the wells near the East Parcel area have declined since the excavation on Parcel A East in 2004 to 2005. Both benzene and naphthalene are present in these wells. Two of the wells are located in Ramirez Street, TtA-7S and TtA-8S. Because the free product in the Parcel A East wells, A-2 and A-3, is a sheen or thin layer, pumping is not feasible. Benzene and naphthalene are also present in well TtD-10, along with DCPD.

Table 3-1
Summary of Remedial Actions
Former Aliso Street MGP Site, Los Angeles, California

Sector	Area	Date Work Conducted	Quantity of Soil Removed, tons	Quantity of Concrete (tons) and Pipes (ft) Removed	SVE Conducted	ORC Compounds Applied to Groundwater	Other Actions
A	Denny's Parcel	6/1998-10/1999	>45,000	concrete and pipes removed	No	No	Concrete slurry wall (40-50 ft deep) installed along south side of former gasholder base
	Parcel A West	2/2004-6/2004	12,597	125 + 352	No	No	
	Parcel A East	5/2004-1/2005	22,459	154 + 929; 46 tons bric	No	Yes (210 lbs)	Oil removed using absorbent pads and 210 llbs of ORC added
B	Main SIte	none					
C	Block G	11/2000	5,757	0+130	No	No	3,000-gallon diesel UST removed
	Block L	11/1999-1/2000	24.3	ASTs and piping	No	No	
		2/2004-4/2004	14,680	50 + 5 tons	Yes	No	
	Block N	6/2005-7/2005	2,663	180+91	No	No	
		12/1/2005	79	0+0	No	No	
	Block K	8/2008-9/2008	1,322	pipes removed	No	No	
	Block O	none*	NA	NA	NA	NA	1,800 gallons contaminated water pumped out of pipes before sealing
	Block R	none*	NA	NA	NA	NA	
	Block Q	under investigation	NA	NA	NA	NA	
D	Agnes Cline (8 & 9)	7/2007-4/2008	27,640	4,050+200	NA	NA	Area 8 -- 16,272 tons soil removed; Area 9 -- 11,368 tons of soil removed
	Areas 7 & 10	5/2008-12/2009	157,175	7,015+378	Yes	Yes (1,800 lbs)	For SVE mass removal, see Note 1; 1,800 lbs. of ORC applied only in Area 7
E	490 Bauchet St	1/2002-7/2004	NA	NA	Yes	NA	For SVE mass removal, see Note 2; for Chem Ox mass removal, see Note 3
		11/2005-12/2005	NA	210+214 (trash)	Yes	NA	Asbestos & lead removed from building before demolished
		3/2006-10/2006	85,793	267+5,071	Yes	Yes (1,400 lbs)	2,250 gal liquid/sludge removed from clarifier; 65,000 gal gw removed, geotextile membrane, crushed rock, and 1,400 lbs of ORC added at SE quadrant
	496 Bauchet St	1/2007-8/2007	132,678	241 loads+1,546	No	Yes (2,400 lbs)	7,758 yd^3 cement slurry added; 2,400 lbs of ORC applied to groundwater

*Site investigated and recommended as No Further Action

Note 1: SVE system in Area 7 removed an estimated 4,960 lbs benzene; 47 lbs. H_2S; 49,250 lbs. TPH; and 4,660 gal. soil gas condensate

Note 2: SVE system at 490 Bauchet removed an estimated 687 lbs. PCE, 70 lbs. TCE, 12.3 lbs. naphthalene, and 680 lbs. dicyclopentadiene

Note 3: Chemical oxidation pilot test at 490 Bauchet removed an estimated 24 lbs. naphthalene, 31 lbs. dicyclopentadiene, and insignificant masses of benzene, PCE, and TCE

Table 3-2
Contaminant Mass in Soil Prior to Removal, Remaining In-place, and after Removed
Former Aliso Street MGP Site, Los Angeles, California

Sector/Block or Parcel	Contaminant	Intial Mass in Unsaturated Soils (kg)	Mass Remaining (kg)	Mass Removed (kg)	Percent Removed (%)
Sector A					
Parcel A West	TPH	23,570	820	22,750	97%
	PAHs	13,362	287	13,075	98%
	Benzene	43	0.1	43	99.8%
	Naphthalene	10,096	168	9,928	98%
Parcel A East	TPH	73,213	13,914	59,300	81%
	PAHs	6,900	447	6,453	94%
	VOCs	184	15	169	92%
	Benzene	1.07	0.11	0.96	90%
	Naphthalene	3,552	198	3,354	94%
Denny's Parcel	Benzene	38	1.2	37	97%
	Naphthalene	5,408	423	4,984	92%
Sector C					
Block G[+]	Benzene	0.1	0.1	0.0	0.0%
	Naphthalene	2.1	2.1	0.0	0%
Block K*	Benzene	0.36	0.35	0.004	1.1%
	Naphthalene	1.7	1.6	0.0	3.0%
Block L	Benzene	0.31	0.13	0.17	57%
	Naphthalene	5.2	2.9	2.2	43%
Block N	Benzene	0.09	0.08	0.01	6.0%
	Naphthalene	3.5	0.8	2.7	78%
Sector D[1]	TPH	256,138	38,703	217,435	85%
Areas 7, 8, 9, 10	PAHs	73,454	4,999	68,455	93%
	Benzene	369	8	361	98%
	Naphthalene	13,062	729	12,333	94%
490 Bauchet Street Property	TPH	42,462	11,054	31,408	74%
	PAHs	238	56	182	76%
	Dicyclopentadiene	565	43	523	92%
	Benzene	5.5	2.3	3.2	58%
	PCE	10	5	5	52%
	TCE	7	4	3	45%
	Naphthalene	138	16	122	88%
496 Bauchet Street Property	TPH	1,880,605	85,333	1,795,272	95%
	Dicyclopentadiene	0.7	0.3	0.4	63%
	Benzene	0.8	0.1	0.6	81%
	PCE	102	0.6	101	99%
	TCE	1.5	0.3	1.2	83%
	Naphthalene[2]	169	1.6	168	99%

Notes:

*Estimated mass for *proposed* soil remediation. Actual mass removed was greater, so percent removed is higher than shown.

[+]Block G excavation performed to remove pipeline. No naphthalene or benzene were detected in samples in the removal area.

[1]Sector D, Area 7 expanded by 67% by addition of Area 10; similarly, Area 8 expanded by 56% by addition of Area 9; average mass increase should be 62%

[2]Naphthalene was mostly detected by EPA Method 8310; EPA Method 8260B naphthalene concentrations mostly not detected

Definitions:

TPH - Total petroleum hydrocarbons
PAHs - Polycyclic aromatic hydrocarbons
kg - kilograms

Table 3-3
Summary of Free-Phase Product Levels in Aliso Site Wells
Former Aliso Street MGP Site, Los Angeles, California

Well	Range of Product Thickness, feet	Historical Period of Measurable Free Product	4Q2011 Event Thickness, feet	Last Observed
A-2	0.01-0.3	10/1996-10/2011	0.02	10/11/2011
A-3	0.01-3.3	10/1996-10/2011	Mix of thick oil and water****	10/11/2011
TtA-7S	0.01-1.1	2/2003-10/2011	0.01	10/11/2011
TtA-8S	0.01-1.42	2/2003-10/2011	0.02	10/11/2011
C-16*	0.02-0.1	7/1998-1/2008	0.00	7/21/2008
TtD-7**	0.01 (one value)	10/2003	0.00	9/5/2002
TtD-10	0.02-0.72	1/2003-10/2011	0.12	10/11/2011
E-2***	0.08-0.23	7/1997-8/2006	NA	5/10/2005
TtK-2	0.01 (one value)	10/2003	0.00	10/21/2003

NOTES:
* Had product at bottom of well in past.
** Well not accessible due to excavation from April to October 2009; was accessible after January 2010 and no product through October 2011.
*** Area around well E-2 excavated in 2007.

****Oil has high viscosity; when oil/water interface sensor probe penetrates the oil layer, the oil coats the probe surface such that water immersion does not clean it sufficiently for accurate measurement of the water surface.

Legend

- Shallow Well
- Deep Well

Property Status

- Completed Remediation
- Deed Restricted

Aliso Sector Regions

- Sector A Boundary
- Sector B Boundary
- Sector C Boundary
- Sector D Boundary
- Sector E Boundary

Southern California Gas Company
Former Aliso Street MGP Site

Areas of Completed Remediation

TETRA TECH

Prepared by: B. DeVore
Reviewed by: C. Pollock
Date: 8/8/13
File: Locations Completed.mxd

Figure 3-1

4. CONCEPTUAL SITE MODEL FOR MNA

The major components of a conceptual model for MNA as defined by US EPA [Pope et al, 2004] include:

- Sources and source-control information
- Geologic information
- Hydrogeologic information
- Geochemical and redox conditions in groundwater
- Receptor locations.

Most of this information has been presented in previous reports; particularly the extended Conceptual Site Model included in the 2011 Annual Groundwater Monitoring Report. The pertinent information for consideration of MNA is summarized in this report.

4.1 SOURCES AND SOURCE-CONTROL INFORMATION

Past operations at the Site were documented in the Remedial Investigation Master Workplan [Tetra Tech, 2001]. A brief history of the MGP and butadiene operations at the Aliso Site and the post-redevelopment uses of the properties were presented in Section 2 of this report. The major source areas that are important for the chemicals evaluated in this report are discussed briefly below.

Benzene

Due to the combination of MGP/butadiene and more recent other sources of benzene at the Site, contamination in the groundwater by benzene is present across most of the Site. Benzene sources included the old gasholders and MGP plant units on Sector A, the former settling pits on Sector D, the former fuel terminal on Block L (a post-MGP/butadiene operation), piping along Center Street on Sector C, the adsorption-distillation plant on Block Q, a gasoline tank and piping on Block G (a non-MGP source), other areas with soil contamination on Blocks K and N, and recent gasoline leaks from post-MGP/butadiene uses of the properties (e.g. on Sectors E, D, B, and north of Block K as discussed in Section 2.3 and shown on Figure 2-4). Excavation to remediate parts of Sectors A, D, E, and C were conducted as discussed in detail in Section 3. In addition, soil vapor extraction was conducted for several weeks prior to excavations on the 490 Bauchet Street property and the former settling pits on Sector D. ORC compounds were added to the surface of the groundwater at a depth of about 30 feet when the large excavations were open at the 490 and 496 Bauchet Street properties, the eastern parcel of Sector A, and the southern part of Sector D.

In addition to these anthropogenic sources of benzene, there are also natural sources from hydrocarbon deposits, particularly in the Puente Formation. Three oil fields are located in the general vicinity of the Site area [Lamar, 1970]. The Union Station Oil Field lies at the southern limit of the Site, and the Los Angeles and Boyle Heights oil fields are approximately 6,000 and 9,000 feet, respectively, northwest and southeast of the Site area. Naturally occurring oil seeps have been found and reported in the near vicinity of the Site. The U.S. Army Corps of Engineers (USACOE) found natural oil seeps along both sides of the Los Angeles River, east and north of the Site, during the concrete lining of the River channel in 1940 [USACOE, 1940]. In 2001, the Los Angeles Geotechnical Engineering Division (LA GED) noted oil seeps from cracks and seams of the Los Angeles River concrete lining east of the Site [LA GED, 2002]. The investigations for the Northeast Interceptor Sewer project [LA GED, 2001] found near-surface oil deposits along the Los Angeles River between the 101 Freeway and Cesar Chavez Street, and found crude oil and gases in alluvial deposits along Mission Street (about 4,000 feet east of the Site) that had migrated from fractured oil bearing Puente Formation deposits.

Naphthalene

Naphthalene is associated with former source areas such as the settling pits on Sector D, the gasholders on Sector A, piping and tanks on several parts of Sectors C and E, and the adsorption-distillation plant on Block Q of Sector C. Other sources of naphthalene include post MGP/butadiene site uses such as gasoline tank leaks. Remediation was conducted to remove contamination near the former gasholders on Sector A, the settling pits on the southern part of Sector D, and near oil tanks on Sector E, as discussed in Section 3.

PCE

PCE is not associated with and is not a byproduct of MGP or butadiene operations. The major sources of PCE were a metal cleaning plant on the 496 Bauchet Street property and a mannequin manufacturing plant on the 490 Bauchet Street property, both on the eastern half of Sector E. These facilities were later closed and demolished. Both areas were remediated, as described in Section 3. Following excavation of the properties, the excavated areas were filled with clean fill. Since the remediation on Sector E, a new building has been built on the 490 and 496 Bauchet Street properties.

TCE

TCE is not associated with and is not a byproduct of MGP or butadiene operations. The major source of TCE is from the breakdown of PCE, but it is also a solvent that was used in the mannequin manufacturing plant on the 490 Bauchet Street property. The former waste clarifier and piping beneath this plant were removed during the remediation of this property.

4.2 GEOLOGIC INFORMATION

The geologic formations that underlie the Aliso Site are fill, alluvium, and bedrock as summarized briefly below.

Fill Material

Two types of fill are found at this Site: disturbed and clean fill. Disturbed fill consists of sand, silt, silty sand, and occasionally silty clay or clay mixed with pieces of concrete, brick, wood, and metal fragments from past operations when the former facilities and buildings were removed and soils re-graded. Clean fill consists of mostly silty sand where it was used to refill prior excavations from recent remediation operations.

Alluvium

The alluvium is comprised of unconsolidated, sedimentary materials deposited by the Los Angeles River, consisting of river channel and flood plain sediments. The alluvial materials include silts, sands, and gravels that are laterally discontinuous. A coarse gravel layer with cobbles and boulders is often found near the contact with the alluvium and the siltstone/claystone bedrock of the underlying Puente/Fernando formations.

Bedrock

There are two different bedrock formations encountered at the Site. In general, the Puente Formation is found north of the 101 Freeway, while the Fernando Formation is found south of the 101 Freeway. The Puente Formation consists of shale, sandstone, siltstone, and claystone, which are usually dry and hard. The Fernando Formation in this area consists primarily of siltstone, and claystone with some sands. Bedrock samples from the deep borings south of the 101 Freeway were identified as Fernando Formation based on their fossil assemblage. The Fernando Formation bedrock samples on or near the Site varied from dry, massive, olive green mudstone to dark greenish-gray mudstone/claystone with moist sand lenses above a cemented conglomerate layer. This formation is dry in most areas, but has some non-lithified sandy zones and carbonates.

4.3 HYDROGEOLOGIC INFORMATION

Groundwater occurs in the alluvium, which consists mostly of fine- to coarse-grained sands with some gravel and cobbles overlying the Puente and Fernando Formations. There are no intervening, continuous, or confining layers within the alluvium above the bedrock, which acts as the base of the saturated zone. Therefore, the groundwater acts as one unit, and is unconfined, although there are permeability differences within the alluvium, resulting in vertical gradients in some of the paired shallow and deep wells. The Puente Formation bedrock is typically dry, while there are occasionally thin, moist, permeable sand layers in the Fernando Formation bedrock. Not all wells reached bedrock at this Site.

Water Level

Water level monitoring has been conducted on a quarterly basis by the SCG since 1996 when the first monitoring wells were installed on Sector A between Ramirez Street and the 101 Freeway. Static water level depths in Site wells were measured between October 24th and 31st, 2011 as part of the quarterly monitoring program. A groundwater elevation contour map for October 2011 is shown on Figure 4-1. The groundwater elevation ranged from 263.479 feet above mean sea level (AMSL) in TtE-6 (located at the northwest corner of Sector E along the upgradient edge of the Site) to 234.07 feet AMSL in TtC-30S (located west of Block Q on East Temple Street). Depths to groundwater in Site wells in October 2011 ranged from 25.90 feet bgs in TtA-7S (located north of the 101 Freeway in Ramirez Street) to 38.40 feet bgs in TtC-30 (located on East Temple Street west of Block Q). Downgradient of the Aliso Site to the south, the depth to water increased to 42.41 feet bgs in TtC-31S on Banning Street and then to 82.74 feet bgs in TtC-39, located between 2nd and 3rd Streets (not shown on Figure 4-1). Tt C-39 is screened from 73 to 93 feet bgs; the well log showed that the upper alluvium was dry when drilled until 83 feet bgs. Due to reconstruction of the 1st Street Bridge Viaduct, the downgradient wells along 1st Street (TtC-37 and TtC-38) were removed. Wells C-13 (screened from 30 to 50 ft bgs) and C-14 (screened from 10 to 70 ft bgs) are usually dry. Well C-13 has a utility line running through it, and could not be gauged or sampled. C-14 is not visible at the surface, and was not found in a recent geophysical survey. A new deeper well (TtC-45) was installed in February

2012 just north of 1st Street, and added to the monitoring program. The depth to water in this well was 62.01 feet bgs when measured on 2/20/2012.

As discussed in the 2011, 2012, and 2013 Annual Groundwater Monitoring Reports, there were responses to the large rainfall event in the winter of 2004 and 2005, and to the smaller events in December 2010 and January 2008 when rainfall totals for these months were about 8 inches or more. Small increases of less than one foot in water levels occurred in response to events with rainfall totals of five inches or more. The increased response is not due to greater recharge across the Site, as shown by the similar response to the large event in 2004-2005 for four wells spread out across the Site where the increase in water levels was 1.25 feet in well E-3, a well on the northern part of the Site and 1.28 feet in well C-4, a well on the southern part of the Site. The two other in-between wells, D-4 and A-2, had larger increases, 1.61 feet and 1.52 feet, respectively, thought to be due to underflow from offsite.

Recharge to groundwater at the Site does occur from underflow from the San Fernando Valley Basin to the Central Basin. However, the hydrograph for a well on the boundary between the Central and San Fernando Basins shows that the water levels have been essentially flat, particularly after 2005 [ULARA, 2013]. A recent Water Replenishment District (WRD) report notes, referring to the Los Angeles Forebay, that "Historically a recharge area for the Los Angeles River, this forebay's natural recharge capability has been substantially reduced since the river channel was lined and open areas paved over.

The present recharge areas to the Los Angeles Central Basin were updated with current information from California Department of Water Resources (CA DWR) Bulletin 118 (WRD) and Watermaster Reports. A report by the United States Geological Service (USGS) stated that "Under current conditions, most recharge in the study area occurs in the Montebello Forebay" [Land et al, 2002]. The recharge to the Central Basin is still occurring in spreading grounds located in the Montebello Forebay Spreading Grounds adjacent to the Rio Honda and the San Gabriel River, within the unlined portion of the San Gabriel River, and behind the Whittier Narrows Dam in the Whittier Narrows Reservoir [WRD, 2013b]. This area is referred to as "the headwaters for replenishment to the Central and West Coast Basins" in a WRD Technical Bulletin [WRD, 2009]. Recharge is now limited to deep percolation in limited areas, In-Lieu Replenishment[1] when available, subsurface inflow from the Montebello Forebay, the northern portion of the Central Basin outside of the WRD's boundaries, and the San Fernando Valley through the Los Angeles Narrows" [WRD, 2013b]. A USGS report stated that "Under current conditions, most recharge in the study area (Central Basin) occurs in the Montebello Forebay" [Land et al, 2002].

Groundwater Flow Direction

Across the Site, monitoring well data show that groundwater flow is generally to the south, although there is a southeastward direction across the eastern part of Sector B, which then shifts to the south crossing the 101 Freeway. There is an apparent southwestern flow direction downgradient of Sector C on the western side, which also then shifts to the south. The flow directions in this area were confirmed from the water level data in the new replacement well

[1] "In-Lieu Replenishment" refers to use of imported water from outside the Central Basin for water supply purposes, instead of pumping groundwater from the Central Basin.

(TtC-32R) installed in June 2011 east of the corner of Banning Street and Vignes Street. The location of this well is shown on Figure 4-1.

The general groundwater flow direction has remained the same between 2004 when the present well network was completed through the present. Detection of DCPD in October 2004 (3.3 µg/L), February and May 2005, and again in April 2010 (1.44 µg/L) shows that flow from the former MGP/butadiene Site does reach the furthest downgradient well, TtC-39. DCPD has not been detected in this well since April 2010.

Hydraulic Gradient

The hydraulic gradient in the shallow groundwater was 0.00582 ft/ft to the south-southeast across Sectors E and D. Several wells on Sector A sometimes have product sheens, so these wells were not used to determine the gradient. The gradient from Sector B and across Sectors A and C was 0.00958 ft/ft. South of the Aliso Site along the eastern side, the gradient steepens between Temple and Banning Streets (Figure 4-1).

Vertical gradients were discussed in the 2011, 2012 and 2013 Groundwater Monitoring Reports. A summary of the results from the 2011 Report is included here. Seventeen (17) well pairs were used to compute the vertical gradients between shallow and deep wells using the 2011 data. The flux direction for a given well pair was consistent from one quarter to another in calendar year (CY) 2011; in fact, there were no cases for the 17 well pairs where the gradient direction differed between the quarters for a given well pair. Well TtC-31D has a shallower screen that overlaps with the companion shallow well, and thus was not used to determine vertical gradients. In October 2011, vertical gradients in 12 well pairs ranged from upward (-0.15 ft/ft for the TtC-34/34D well pair) to downward (0.014 ft/ft for the TtC-27/27D well pair). Eight of the well pairs with upward gradients were located on Sector C. These small gradients indicate that there is no large downward flux from the shallow groundwater to the deeper groundwater under current conditions, thus chemicals present in the shallow zone are less likely to move into the deeper groundwater.

South of the Aliso Site along the eastern side, the hydraulic gradient steepens between Temple and Banning Streets (Figure 4-1). The bedrock also becomes shallower further south on Sector C where the depth to bedrock is as shallow as 45 feet bgs (at boring C-10, in Sector C just south of Block Q, near the corner of East Temple and Center Streets). South of this high point, the depth to the bedrock increases, particularly south of 1st Street where the depth to bedrock increases steeply and the upper alluvium is dry. The deepest well (TtC-39), located three blocks south of the Aliso Site's southern boundary on Santa Fe Avenue between 1st and 2nd Streets) is 115 feet deep and is screened from 73 to 93 feet bgs. The shallow water-bearing zone is missing and the depth to water in TtC-39 is much deeper than in the other wells north of 1st Street, ranging from 83.23 to 83.26 feet bgs for the first two quarters of CY 2012, when it was last accessible. Water levels were measured in October 2013 in the two new deep replacement wells south of 1st Street, TtC-46R and TtC-47R. Well TtC-46R is located between 1st and 2nd Streets on the west side; this well is 95 feet deep and screened from 75 to 95 feet. The depth to water in TtC-46R in October 2013 was 79.70 feet bgs. Well TtC-47R is located on 2nd Street on the west side; this well is 97.4 feet deep and screened from 77 to 97 feet. The depth to water in TtC-47R in October 2013 was 85.85 feet bgs. Both TtC-46R and TtC-47R were dry to 80.5 and 87 feet bgs, respectively at the time of drilling, confirming that the upper shallow water-bearing zone is missing south of 1st Street. In addition, the saturated thickness is thin across this divide (e.g. 4.3 feet in TtC-45, located just north of 1st Street, in October 2013). Thus, while the gradient becomes steep, the saturated zone is thin, limiting the flow volume migrating beyond 1st Street.

4.4 GEOCHEMISTRY AND REDOX CONDITIONS IN GROUNDWATER

General water quality parameters including total dissolved solids, pH, alkalinity, and major cations and anions and redox indicators have been measured on a limited basis such as in 2000 and 2001. A larger number of wells were sampled for sulfate, nitrate, and sulfide in 2004 after the well network had been expanded. Previous sampling of redox indicators was conducted in April and July 1999. Both the above past and recent data have been used to evaluate the geochemical conditions in the groundwater, as discussed in Section 6.

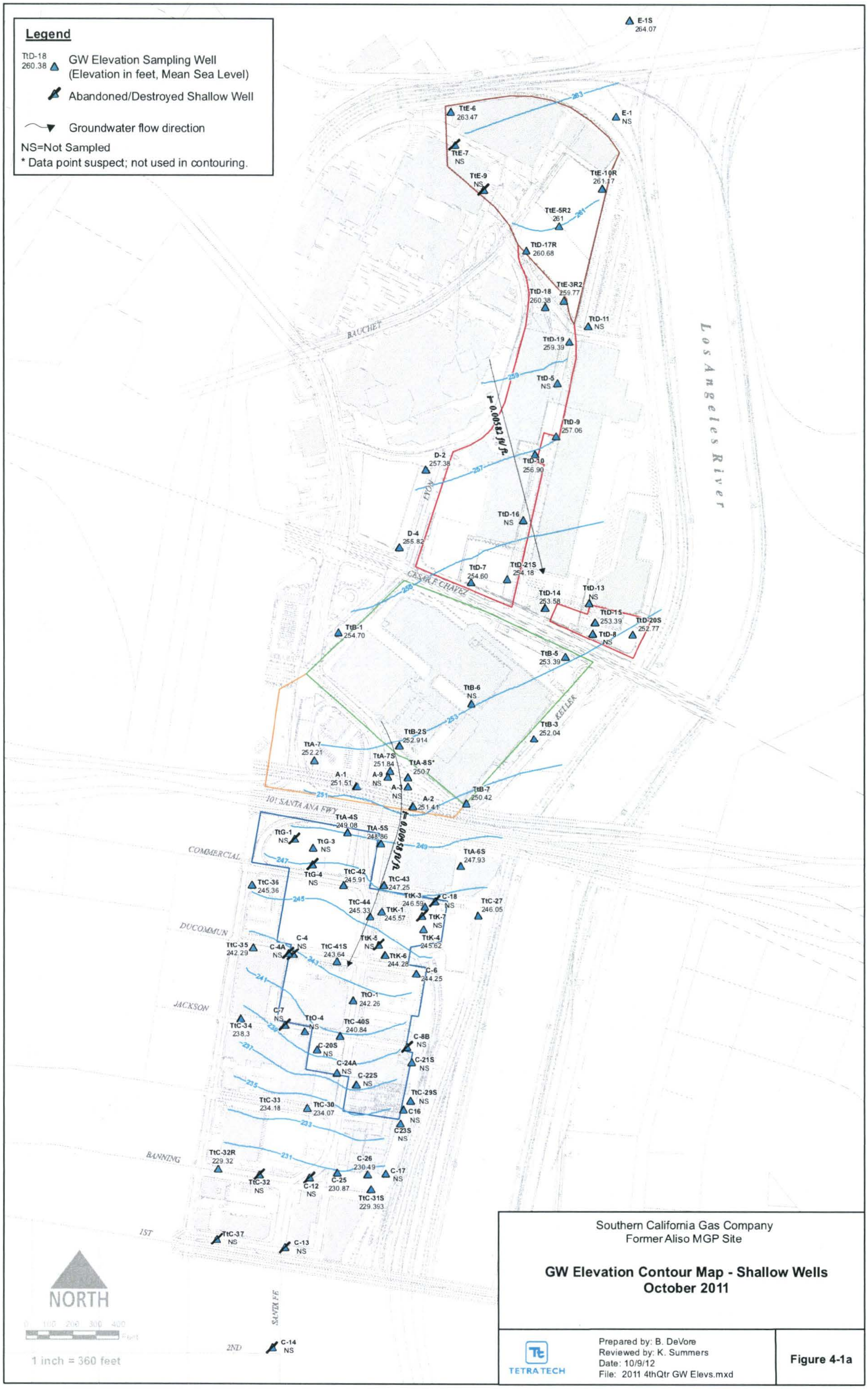
The Site groundwater is mostly under anaerobic conditions, and sulfate-reduction is the dominant geochemical reaction. The occurrence of H_2S and methane in groundwater in the Los Angeles Basin has been noted previously, and was attributed to the anaerobic degradation of natural immature hydrocarbons in the bedrock [e.g., Yerkes and others, 1977; Enviro-Rail, 1997].

4.5 RECEPTOR LOCATIONS

The shallow groundwater at the Site is not currently used for drinking water or for any water supply purpose. However, the Los Angeles Regional Water Quality Control Board (LA RWQCB) has not formally classified the local groundwater as non-potable. In addition, the shallow groundwater contains naturally occurring crude oil residues, as well as hydrogen sulfide and methane gas [Yerkes and others, 1977]. The LARWQCB has acknowledged that the shallow groundwater is not suitable for drinking water due to naturally occurring hydrogen sulfide [e.g., LARWQCB, 1998].

There are no municipal water supply wells within 3 miles of the Site. The closest wells used for drinking water belong to the City of Vernon, which has a total of six wells on the western side of the Los Angeles River. The water supply wells produce from deep confined aquifers, such as the Lynwood and Silverado aquifers of the Central Los Angeles Basin. The nearest downgradient municipal supply wells are Wells No. 11 and No. 16 located about 3.7 miles south of Sector C boundary [City of Vernon, 1952]. Well No. 11 is 1,330 feet deep and is screened from 741 to 997 feet bgs, which corresponds to the Silverado aquifer. The boring log for this well noted a thick clay layer from 148 feet bgs to 532 feet bgs, which would restrict migration. Well No. 16 is 1,520 feet deep and is screened from 510 to 1,460 feet bgs, which would include the Silverado aquifer and possibly the Lynwood aquifer.

While there is a potential for groundwater south of the Site beyond 1st Street to recharge the deeper aquifers, the alluvial basin becomes much thicker and has a sequence of confined aquifers, separated by aquicludes (Reichard et al, 2003). The upper alluvium is dry as confirmed by two monitoring wells used by the WRD, located south of 1st Street and downgradient of the Site: 1) the nested well Huntington #1 where the zone screened from 114 to 134 feet bgs (referred to as Zone 5 Gaspur Aquifer) that was dry when measured on 12 dates between October 2011 and September 2012 and 2) the Los Angeles #2 well screened from 135 to 155 feet bgs (referred to as Zone 6 Exposition Aquifer) that was dry when measured on five dates between November 2011 and September 2012 [WRD, 2013a]. In addition, the WRD 2013 report noted that "There is a large separation in water levels between Zone 4 (Exposition Aquifer) and the three deeper zones suggesting the presence of low permeability aquitard(s) above Zone 3 (Gage Aquifer) that hydraulically isolates the Exposition aquifer from the deeper aquifers. Thus, while the groundwater flowing past 1st Street could eventually reach deeper aquifers, it would have to migrate vertically through thick unsaturated zones and a sequence of aquifers and low permeability aquitard(s) to reach the deep aquifers used for public water supply.



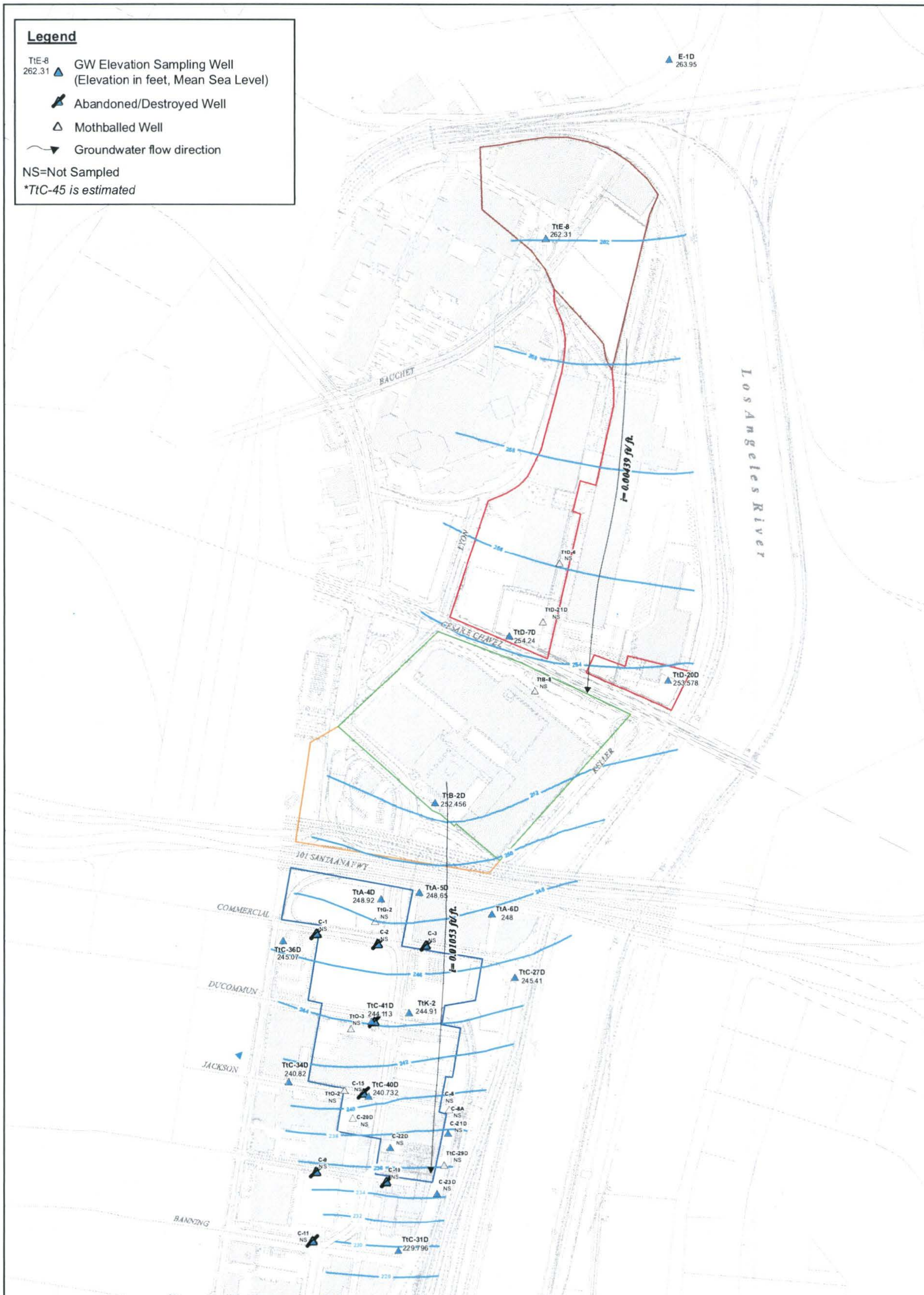
Southern California Gas Company
Former Aliso MGP Site

GW Elevation Contour Map - Shallow Wells
October 2011

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 10/9/12
File: 2011 4thQtr GW Elevs.mxd

Figure 4-1a



Southern California Gas Company
Former Aliso MGP Site

GW Elevation Contour Map - Deep Wells
October 2011

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 10/09/12
File: 2011 4thQtr Deep GW Elevs.mxd

Figure 4-1b

5. GROUNDWATER QUALITY – OCTOBER 2011

This section summarizes recent (e.g., fourth quarter of 2011, October 2011 sampling date) shallow groundwater quality, which is most pertinent for consideration of natural attenuation. Indicator chemicals data, i.e., benzene, methyl-tert-butyl ether (MTBE), naphthalene, and selected chlorinated solvents, (see Section 5.1 below) for October 2011 are discussed in this section. The concentrations of chemical data are compared to water quality criteria and site-specific risk-based goals for protection of groundwater (Section 5.2). Concentration changes over time are discussed in Section 6, which also includes a discussion of potential natural attenuation reactions and evidence for MNA occurrence on this Site. Chemical data for other chemicals, as well as statistical trends, have been discussed in the final *Comprehensive Groundwater Monitoring Report for the 1996 to 2010 Period*, dated June 8, 2012 [Tetra Tech, 2012a]. Chemical data and cited figures are from the draft *2011 Annual Groundwater Monitoring Report*, dated November 6, 2012 [Tetra Tech, 2012b].

5.1. INDICATOR CHEMICALS AND SOURCES

A set of indicator chemicals has been selected for use in assessing changes in groundwater quality and contaminant trends, based on their common detection at the Site in the shallow and deep zones of the alluvial aquifer. These indicator chemicals include: benzene, naphthalene, and benzo(a)pyrene (BaP) partially related to the MGP operations; dicyclopentadiene (DCPD) related to the butadiene operations; and other compounds that are present in the groundwater at the Site from third-party post-MGP/butadiene activities including benzene, naphthalene, MTBE and the solvents PCE, TCE, and the PCE-reductive dechlorination daughter product vinyl chloride (VC).

While benzene, toluene, ethylbenzene, and xylene isomers (BTEX) and polycyclic aromatic hydrocarbons such as BaP can potentially be related to the former MGP activities, there can be other sources such as motor fuel (gasoline and diesel) leaks and spills. For instance, the detection of MTBE (a gasoline additive that has been used since the mid-1980s) in shallow and deep alluvial Site wells suggests that less than 20-year-old gasoline releases are a source of some of the BTEX found in Aliso Site groundwater, particularly in Sector C near and downgradient to Block L.

DCPD is present at the Site due largely to the former butadiene operations. By contrast, chlorinated solvents including PCE, TCE, and their reductive dechlorination daughter products (e.g., cis-1,2- DCE, trans-1,2-DCE, and VC) were not used or produced by MGP/butadiene activities. However, PCE and TCE were used by others during the post-MGP/butadiene activities on the 490/496 Bauchet Street properties. PCE was used as a degreaser in a metal cleaning plant that used the hardchrome process (496 Bauchet Street property), and PCE and TCE were used as solvents in a mannequin manufacturing plant (490 Bauchet Street property). Impacted soils in these properties were excavated to the water table between 2005 and 2007. As explained later in this section, the source of VC found in the Aliso Site groundwater, particularly in Sector C, is from anaerobic biodegradation processes (mainly reductive dechlorination) of PCE and TCE.

5.2 COMPARISON OF CHEMICALS TO WATER QUALITY CRITERIA AND RISK-BASED GOALS FOR PROTECTION OF GROUNDWATER

The water quality criteria for the chemicals of potential concern (COPCs) at the Site are shown in Table 1-2; they include California Maximum Contaminant Levels (MCLs), Notification Levels (NLs), USEPA Region 9 tap water Regional Screening Level (RSLs), and California Office of Health Hazard Assessment (OEHHA) public health goals (PHGs) (July 2011). The current water quality criteria references are California Department of Public Health Services (CA DPHS) [December 2010] for NLs, CA DPHS [as of July 2011] for CA MCLs, and EPA Region 9 [USEPA May 2012] for RSLs. All pertinent agencies were checked for new updates as of July 2013. The California PHGs are also shown in Table 1-2. There were PHGs for 17 chemicals, of which 6 were higher than MCLs, and 2 were the same as the MCL.

The remedial goals for shallow groundwater were developed to protect indoor workers from potential inhalation of volatile chemicals that could enter indoor air in a building situated above contaminated groundwater (Table 1-3). Both carcinogenic and non-carcinogenic goals were developed as explained in Appendix B, depending on the classification of a given chemical by the USEPA and CA DPHS. The chemicals that have been detected at least once at the Site and currently are considered to be carcinogens include: BaP, naphthalene, benzene, MTBE, PCE, TCE, 1,1-DCA, methylene chloride, VC, and trans-1,3-dichloropropene (DCP). Other chemicals are considered to be non-carcinogens, and some chemicals have goals for both classifications.

5.3 WATER QUALITY AT ALISO SITE

Figures 5-1 through 5-12 show the spatial distributions of the indicator chemicals using the fourth quarter of 2011 data. The wells where the indicator chemicals exceeded one or more of the above criteria are highlighted on the figures. The concentration contours are included to highlight the extent of areas with elevated concentrations. The water level contours are also shown on the figures so that relationships to MGP/butadiene sources (e.g., whether a well is downgradient of a nearby source) can be identified. Separate maps were made to differentiate between shallow and deep alluvial wells. The screened intervals of the shallow and deep alluvial wells used for the 2011 monitoring program are summarized in Table 1-1. The status of all the wells used for monitoring at the Site is listed in Table A-1 in Appendix A.

The primary mechanism that is causing the migration of the chemicals is advective groundwater flow, generally to the south across the Aliso Site. Advective groundwater flow patterns are discussed in detail in Section 4.3 and depicted on Figure 4-1. In general, the flow direction across the northern part of the Site is to the southeast (currently at an estimated gradient of 0.00582 ft/ft). Across Sector B, the flow direction changes from southeast to a more southerly direction. The flow gradient across Sector A and the northern part of Sector C typically increases (currently to an estimated 0.00958 ft/ft). The flow direction is to the south along the eastern side of Sector C. In the northwestern part of Sector C, the flow direction is to the south-southwest, but then shifts more to the south between Jackson and Banning Streets.

Secondary mechanisms that are causing the migration of the chemicals include dispersion and vapor migration. Other processes that occur to a varying extent, depending on the chemical, are sorption and biogeochemical reactions.

5.3.1 Benzene

The distribution of benzene concentrations in shallow alluvial wells (Figure 5-1) and deep alluvial wells (Figure 5-2) reflects the fact that there were multiple sources of benzene, resulting in three distinct areas with current elevated benzene concentrations. These areas include:

1) the former settling pits on Sector D,
2) the area downgradient of the former fuel terminal on Block L on the west side of Sector C, and
3) the area downgradient of Block Q where the adsorption-distillation plant and a series of tanks used for the butadiene operations were located.

__Shallow Alluvial Wells:__ The benzene concentrations in the shallow wells are shown on Figure 5-1. There are two areas with elevated benzene (>410 µg/L) above the carcinogenic remedial goal in the shallow groundwater: 1) a small area in the southern part of Sector D where the former settling pits were located, and 2) along Center Street next to Block Q where leaking pipes were located. The area where benzene exceeds the California MCL (1 µg/L) extends from the middle of Sector D to the south along the eastern side of Sectors B, A, and C. Some of the benzene is due to recent gasoline leaks, such as the mid-1980s gasoline tank release near well TtC-43. Benzene is present at low concentrations in one shallow well (TtC-33) south of the Site on the west side of Sector C; this well also had MTBE, which indicates that at least part of the benzene is of "recent" (i.e., post-MGP/butadiene plant) origin. Benzene was not detected in the furthest downgradient offsite well (TtC-39[1]). Some of the intervening wells could not be sampled between the Site and TtC-39 in 4Q2011 due to ongoing construction of the 1st Street viaduct bridge, where three wells (TtC-37, TtC-38, and C-13) were destroyed during bridge construction. A new replacement well, TtC-45, was installed on the north side of 1st Street in February 2012 after construction ended.

__Deep Alluvial Wells:__ The benzene concentrations in the deep wells are shown on Figure 5-2, showing that the highest concentrations are in wells located on the middle part of Sector C near and downgradient of Block L. In the deep groundwater, no benzene concentrations were greater than either the carcinogenic or non-carcinogenic goals to protect indoor workers, although it is highly conservative to consider these for deep groundwater. The highest benzene concentration (327 µg/L) was found in deep well TtC-34D located on Jackson Street outside the Site boundary. The second highest benzene concentration (283 µg/L) was present in well TtC-41D located south of the former fuel terminal on Block L. This well also had a high MTBE concentration (see Section 5.3.2). These data indicate that the sources are relatively recent gasoline releases.

Two other wells (TtC-27D and TtC-31D) on the eastern side of Sector C had elevated benzene and detectable MTBE concentrations (see Section 5.3.2). Elevated benzene concentrations also were present in three wells south of Sector A, in the deep well just to the north on Sector B, and in the deep well in the former settling pits on the southern part of Sector D. The two areas most likely are connected, as is suggested by the flow directions shown on Figure 4-2. Benzene was present in some deep wells on Sector C; three wells (TtA-6D, TtC-40D, and TtC-31D), had

[1] This is a deep well screened from 73-93 ft, because groundwater was not reached until about 83 ft.

higher benzene concentrations in the shallower of the shallow and deep paired wells located on Sector C.

Benzene concentrations decrease south of Block Q, as shown in TtC-31D (45.5 µg/L) and were non-detectable in the furthest downgradient well, TtC-39. Well TtC-31D also had detectable MTBE (4.89 µg/L); therefore, some BTEX compounds in this well are from recent gasoline sources.

5.3.2 MTBE

The distribution of MTBE concentrations in shallow alluvial wells (Figure 5-3) and deep alluvial wells (Figure 5-4) reflects the fact that there were multiple sources of MTBE, resulting in four distinct areas with current elevated MTBE concentrations. These areas include:

1) the eastern half of Sector E and northern part of Sector D, where gasoline UST systems formerly were located (see Figure 2-4),
2) near TtD-10 also on Sector D, near former piping systems,
3) the Agnes Cline Tract, in the bus maintenance area, and
4) the area downgradient of the former fuel terminal on Block L on the west side of Sector C.

Shallow Alluvial Wells: MTBE concentrations in shallow wells are shown on Figure 5-3. MTBE was detected in the offsite upgradient well E-1S (5.74 µg/L), indicating there is a contribution from upgradient recent gasoline leaks to the Site groundwater. The MTBE concentrations in the shallow groundwater are elevated (>13 µg/L CA MCL) in the following areas: 1) the eastern half of Sector E and northern part of Sector D, 2) near TtD-10 also on Sector D, 3) the Agnes Cline Tract, and 4) near a mid-1980s gasoline UST leak near TtC-43. The TtC-43 sample contained the highest MTBE concentration (72.6 µg/L) of any shallow well on the Site. MTBE was detected in well TtK-1 downgradient of TtC-43, but was not detected in the downgradient deep well TtK-2, indicating that the MTBE is not being pushed downward by the small vertical gradients (average of 0.0023 ft/ft in 2011) in TtA-5S/D in this area. Low concentrations of MTBE were present in the wells along the eastern side of Sector C and in wells south of Sector C. The presence of MTBE indicates that some of the BTEX compounds are due to recent gasoline sources.

Deep Alluvial Wells: MTBE was present at elevated concentrations (>13 µg/L CA MCL) in the deep groundwater in three wells south of the former fuel terminal on Block L of Sector C, and one well on Jackson Street outside of the Site boundary (Figure 5-4). Block L (the City block between Commercial and Ducommun Streets on the west side of Center Street) had large gasoline aboveground storage tanks (ASTs), owned and operated by others with known gasoline tank releases. The tanks were removed in 1999 and contaminated soil was removed in 2004. MTBE in the deep wells was highest in the well one block south of Block L showing that the MTBE is migrating further to the south, as expected given that the ASTs were removed.

MTBE was not detected in the deep wells sampled on the Agnes Cline Tract, Sector B, and Sector C just south of Sector A. MTBE was present in two offsite deep wells on the east side of Sector C and at low concentrations in the deep well on Sector D.

5.3.3 Naphthalene

The distribution of naphthalene concentrations in shallow alluvial wells (Figure 5-5) and deep alluvial wells (Figure 5-6) reflects the fact that there were multiple sources of naphthalene, resulting in five distinct areas with current elevated naphthalene concentrations. These areas include:

1) the former settling pits on Sector D,
2) near TtD-10 (a well with free product) on Sector D, near former piping systems,
3) Sector A East Parcel near or downgradient of former gasholders and MGP plant,
4) at depth along Center Street downgradient of Sector A through Sector C to Jackson Street, and
5) the area downgradient of the former fuel terminal on Block L on the west side of Sector C.

In contrast to benzene, areas with elevated naphthalene are spatially limited (e.g., remaining source areas and short distances downgradient), which is consistent with the decreased mobility of naphthalene in groundwater compared to benzene.

Shallow Alluvial Wells: Naphthalene concentrations in the shallow wells are shown on Figure 5-5, showing four areas with concentrations higher than the California NL of 17 μg/L. Two shallow wells had remedial goal exceedances of naphthalene (>7,172 μg/L): TtC-43 near a known past gasoline leak; and TtO-1, in Center Street, downgradient of the former fuel terminal on Block L. The naphthalene concentrations in these two wells had higher concentrations than in nearby deep wells. There were butadiene plant operation pipes located along Center Street, but the shallow and deep wells along Center Street had non-detectable DCPD concentrations and non-detectable or low styrene concentrations, indicating that butadiene operations were not the source of the naphthalene. Three wells in Sector D (TtD-7 and TtD-21S in the settling pits, and TtD-10 near former piping) had naphthalene concentrations exceeding the NL. Elevated naphthalene concentrations exceeding the NL also were found in shallow well TtK-1 (located downgradient of TtC-43) and in shallow well A-2 on the Sector A East Parcel near a former gasholder.

Deep Alluvial Wells: Naphthalene concentrations in the deep wells are shown on Figure 5-6. The naphthalene concentrations in the deep wells are less than the remedial goal of 7,172 μg/L. There are two areas with elevated concentrations: 1) the former settling pits on Sector D (maximum 1,470 μg/L in October 2011), and 2) the wells along Center Street downgradient of Sector A to Jackson Street. The highest naphthalene concentration (1,970 μg/L in October 2011) was found in well TtC-41D on Center and Ducommun Street. The deep wells of paired wells TtD-7/TtD-7D, TtA-4S/D, TtA-5S/D, and TtC-41S/D had higher concentrations than the associated shallow wells, indicating that some naphthalene has migrated downwards below the water table from the source areas on Sector A and from the above-identified sources on Sector C. These results highlight the multiple sources of naphthalene at the Site. The two wells furthest downgradient (i.e., TtC-31D and TtC-39) had non-detectable naphthalene concentrations.

5.3.4 PCE and its Breakdown Products

PCE and its breakdown products are not associated with and are not a byproduct of MGP or butadiene operations. Solvents were used by later property owners on the northern part of the Site (particularly Sector E) after the butadiene operations ended and the properties had been sold by the SCG. Six chlorinated solvents have been detected in groundwater samples from Aliso Site wells: PCE; TCE; cis-1,2- DCE; trans-1,2-DCE; VC, and 1,1-dichloroethane (1,1-DCA). The first two are parent products, although TCE also is the first breakdown product of PCE. The next three solvents are PCE/TCE breakdown products.

PCE

The distribution of PCE concentrations in shallow alluvial wells (Figure 5-7) reflects the fact that there is one main source of PCE, which is the eastern portion of Sector E (e.g., 490 and 496 Bauchet properties). PCE was used on these properties by a metal cleaning plant and a mannequin manufacturing plant after the MGP-butadiene operations were completed.

Shallow Alluvial Wells: PCE concentrations are shown on Figure 5-7, indicating that only three shallow wells on the east side of Sector D had detected values. PCE concentrations exceeded the California MCL (5 µg/L) only in one well TtD-21S (6 µg/L in October 2011). The other two wells are TtD-10 on the east of Sector D and TtD-7 on the southern part of Sector D. Sector D is downgradient of the former 490/496 Bauchet Street properties. Both properties were remediated and the unsaturated soils removed down to a depth of 30 feet. No PCE was detected in the shallow wells on the downgradient of Sectors A, B, and C. The absence of PCE in downgradient wells and the occurrence of breakdown products as discussed below are strong evidence of the in-situ degradation of PCE.

Deep Alluvial Wells: PCE was not detected in any of the 15 deep wells sampled (Figure 5-8).

TCE

The distribution of TCE concentrations in shallow alluvial wells (Figure 5-9) and deep alluvial wells (Figure 5-10) reflects the fact that there is one main source of TCE (i.e., the eastern portion of Sector E). It should be noted that TCE can occur from the breakdown of PCE, but it is also a solvent that was used in the mannequin manufacturing plant on the 490 Bauchet Street property. The former waste clarifier and piping beneath this plant were removed during the remediation of this property. Other breakdown products of PCE and TCE detected in the groundwater at the 490 Bauchet Street property are cis- and trans-1,2-DCE and VC.

Shallow Alluvial Wells: TCE was detected more frequently than PCE in shallow groundwater, which is to be expected since TCE is the first breakdown product of PCE, as noted above and as discussed in more detail in Section 6. Most wells with TCE concentrations above the California MCL (5 µg/L) were located on the former 490/496 Bauchet Street properties (i.e., the eastern half of Sector E, where PCE and some TCE were used) and on or near Sector D, which is downgradient of Sector E (Figure 5-9). Two other wells (TB-7 and TtA-6S, both located downgradient of the main part of Sector D) had elevated TCE concentrations. The intermediate well, TtB-6, will be measured in future monitoring programs to confirm the link between these two areas. The nearby offsite wells D-2 and D-4 had higher TCE concentrations than the other wells on the southern part of Sector D, which suggests that some TCE may be coming from offsite sources. There was no PCE or TCE detected in the upgradient offsite well, TtE-1S. TCE also was detected in some shallow wells on the Agnes Cline tract, Sector B, and Sector C, with the higher concentrations typically found in wells on the east side of the Aliso Site.

Deep Alluvial Wells: TCE was detected at low concentrations in one well next to the former 490 Bauchet Street property on Sector E, the deep well on the southern part of Sector D, and some deep wells on the northern part of Sector C (Figure 5-10). The highest TCE was detected in well TtC-27D (3.86 µg/L), located on the eastern side of Sector C. Several deeper wells with paired shallow wells had lower concentrations than the shallow well, including TtD-7D on the southern part of Sector D, TtA-6D and TtC-27D on the northeastern corner of Sector C, and TtC-31D in the southeast part of Sector C. These results indicate that there is limited downward migration of TCE to the deeper zone. A similar comparison in the paired wells on the western part of Sector C (e.g., TtA-4S/D, TtC-41S/D, and TtC-40S/D) shows that while the TCE concentrations in all of these wells are low, the deeper well of the pair has slightly higher concentrations. These results suggest a combination of less volatilization and degradation in the deeper groundwater.

1,2-DCE Isomers

The next two breakdown products of PCE and TCE are cis-1,2-DCE and trans-1,2-DCE. The compound cis-1,2-DCE is expected to be the primary byproduct, as explained in detail in Section 6. The maximum concentrations of cis-1,2-DCE in October 2011 were 279 µg/L in well D-18 and 199 µg/L in well D-9, both located downgradient of Sector E, and 226 µg/L in well D-4 and 187 µg/L in well D-2, both located west of the southern Sector D boundary (Figure 5-11). The cis-1,2-DCE concentrations decrease to less than 25 µg/L on Sector B, and less than 10 µg/L on Sectors A and C. The cis-1,2-DCE concentrations decrease to less than 5 µg/L in the wells along Banning Street south of the Site, and cis-1,2-DCE was non-detectable in TtC-39, the furthest downgradient well. Trans-1,2-DCE also was highest in wells on Sector D in October 2011 (Figure 5-12). The maximum trans-1,2-DCE concentrations were 14.6 µg/L in well TtD-9 and 12.9 µg/L in TtD-15, the latter located on the Agnes Cline Tract. These were the only wells that had trans-1,2-DCE concentrations ≥10 µg/L, the MCL. The trans-1,2-DCE concentrations decreased downgradient to less than 5 µg/L in the wells on Sectors A and C. The trans-1,2-DCE concentrations then decreased to about 2 µg/L in the wells along Banning Street, and trans-1,2-DCE was non- detectable in TtC-39, the furthest downgradient well.

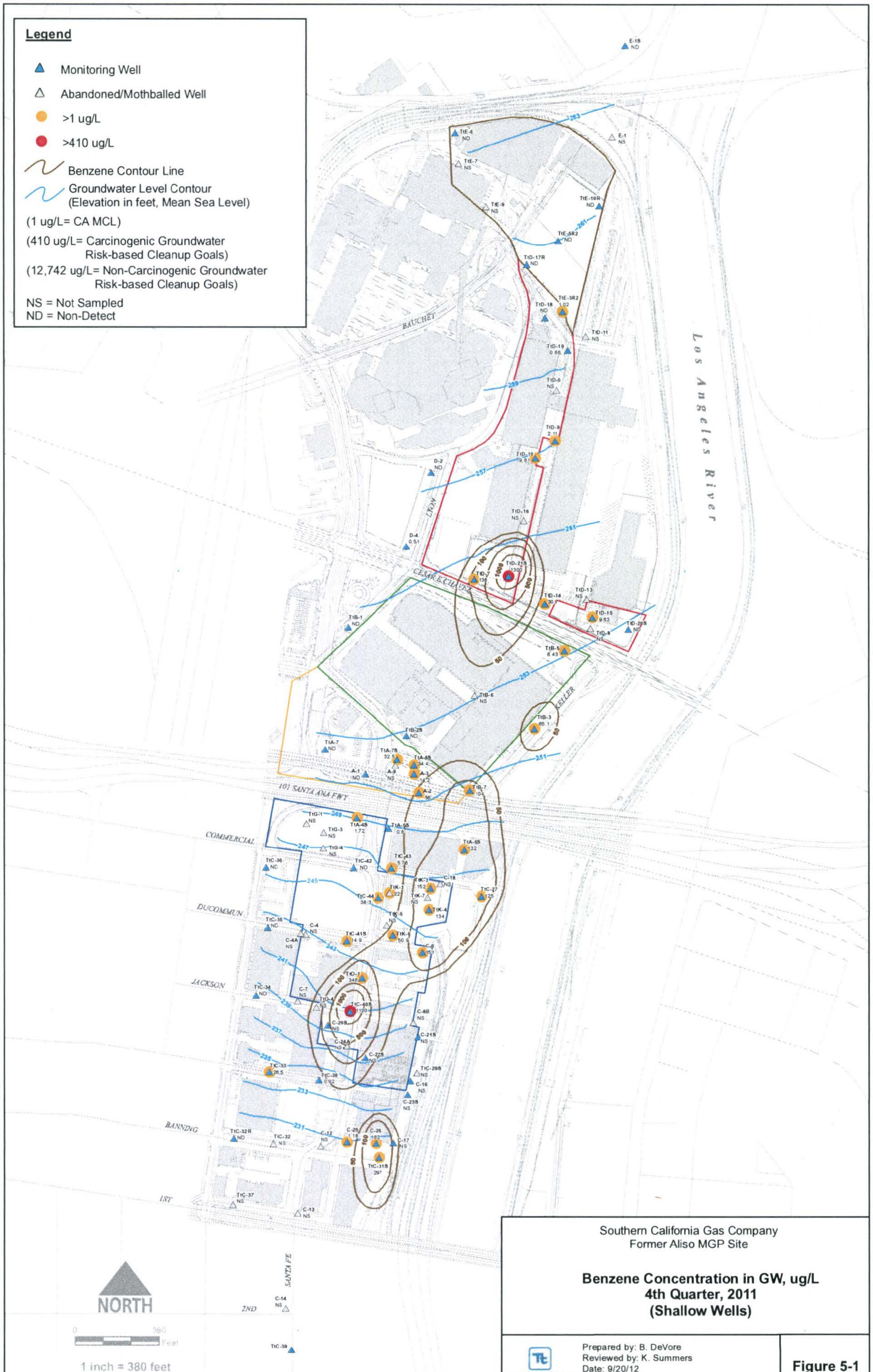
Vinyl Chloride (VC)

The distribution of VC concentrations in shallow alluvial wells (Figure 5-13) and deep alluvial wells (Figure 5-14) reflect the fact that there are no independent "sources" of VC. VC is one of the breakdown products of PCE and TCE, and thus it would be expected to be more widely detected and to increase downgradient across the Aliso Site, as the concentrations of the parent compounds decrease.

Shallow Alluvial Wells: VC was detected widely in shallow groundwater on the eastern part of Sector D and in the Agnes Cline Tract (both located downgradient of the 490/496 Bauchet Street properties), and in most wells further downgradient on Sectors B, A, and C (Figure 5-13). In general, the higher VC concentrations were found in wells on the eastern side, as were all of the elevated VC concentrations above 24 µg/L (the carcinogenic goal to protect indoor workers).

The highest VC concentration was in TtD-10 (151 μg/L) and the next highest was in TtD-15 (101 μg/L) on the Agnes Cline Tract.

Deep Alluvial Wells: VC was detected in four deep wells, all on Sector C (Figure 5-14). None of the deep wells sampled had VC concentrations exceeding the carcinogenic remedial goal for groundwater protective of indoor workers (24 μg/L). The furthest downgradient well, TtC-39, had non-detectable VC. The highest VC concentration (10.1 μg/L) was in well TtC-31D located downgradient of Block Q. The shallow and deep wells of this pair have overlapping screens. The shallow well had essentially the same VC concentration (10.7 μg/L in TtC-31S), so this result does not indicate a true downward vertical gradient in this area. The comparison of the other paired wells with detected VC showed that the shallow wells had much higher VC concentrations, e.g. 36.4 μg/L in TtA-5S compared to 3.18 μg/L in TtA-5D, 60.7 μg/L in TtA-6S compared to 2.31 μg/L in TtA-6D, and 42 μg/L in TtC-27 compared to 1.67 μg/L in TtC-27D. The large difference in VC concentrations is consistent with the small downward vertical gradients in TtA-5S/D and TtC-27/D. The average vertical gradient in TtA-6S/D was upward.



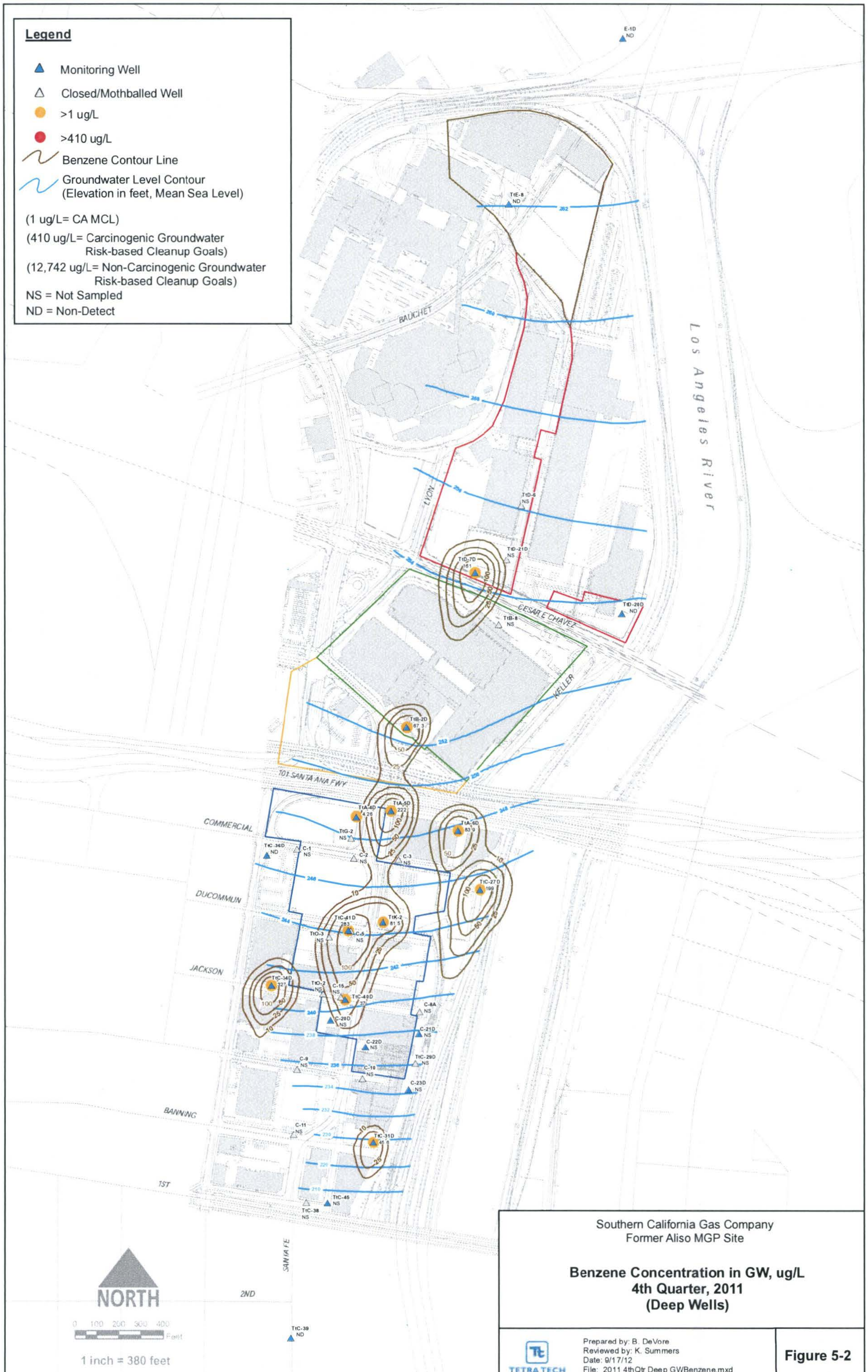
Southern California Gas Company
Former Aliso MGP Site

Benzene Concentration in GW, ug/L
4th Quarter, 2011
(Shallow Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 9/20/12
File: 2011 4thQtr GWBenzene.mxd

Figure 5-1



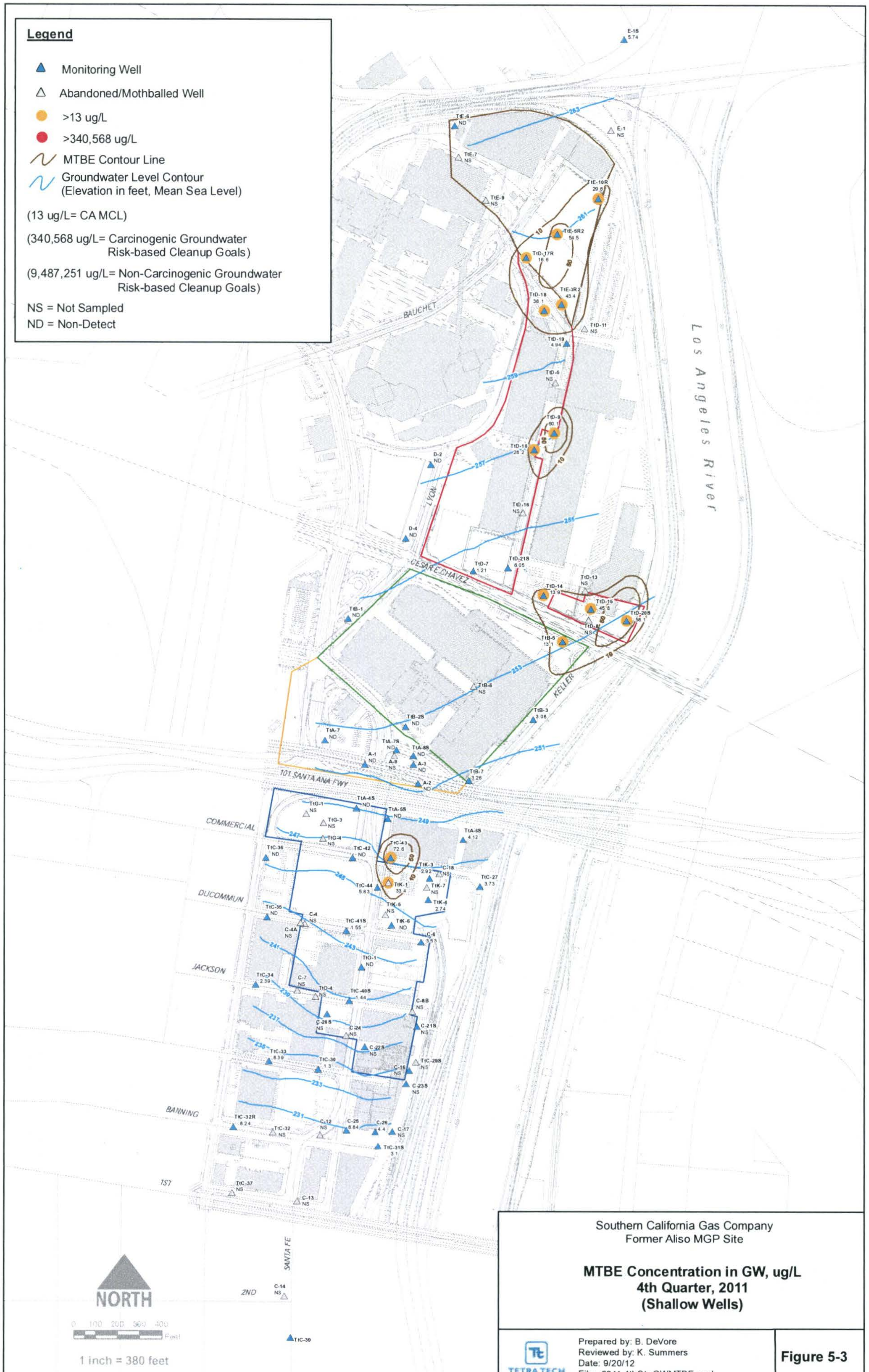
Southern California Gas Company
Former Aliso MGP Site

Benzene Concentration in GW, ug/L
4th Quarter, 2011
(Deep Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 9/17/12
File: 2011 4thQtr Deep GWBenzene.mxd

Figure 5-2



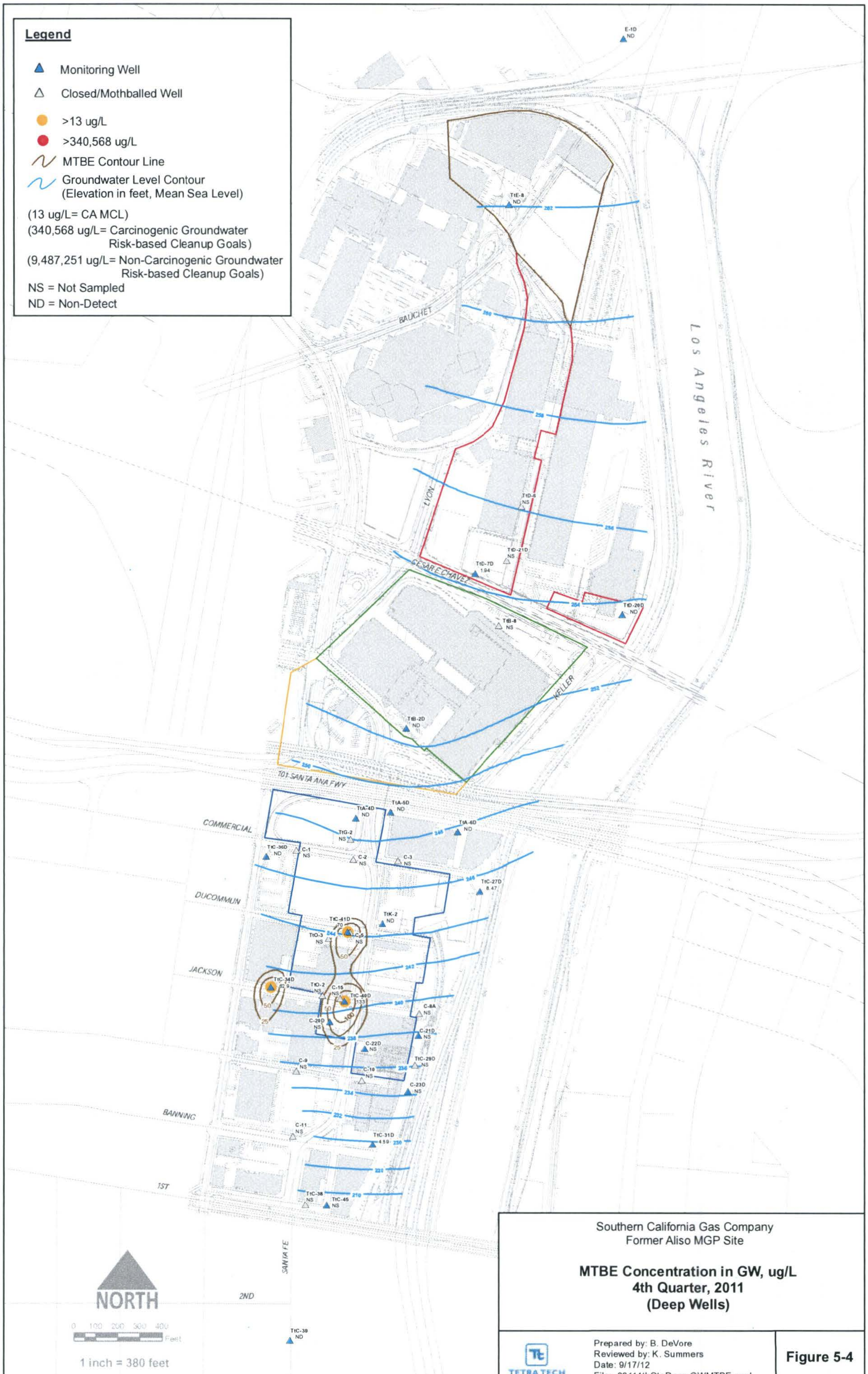
Southern California Gas Company
Former Aliso MGP Site

MTBE Concentration in GW, ug/L
4th Quarter, 2011
(Shallow Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 9/20/12
File: 2011 4thQtr GWMTBE.mxd

Figure 5-3

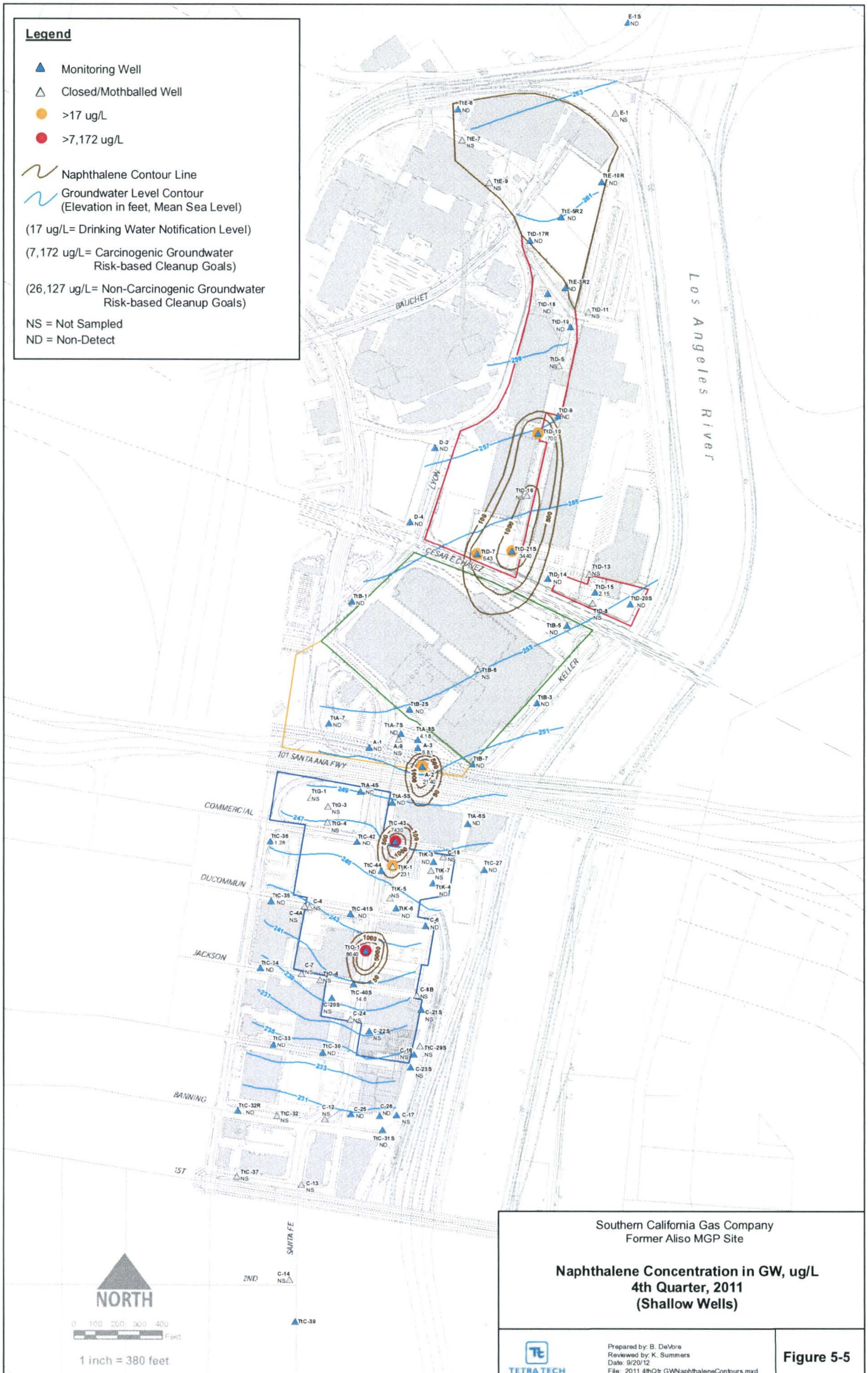


Southern California Gas Company
Former Aliso MGP Site

MTBE Concentration in GW, ug/L
4th Quarter, 2011
(Deep Wells)

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 9/17/12
File: 20114thQtr Deep GWMTBE.mxd

Figure 5-4



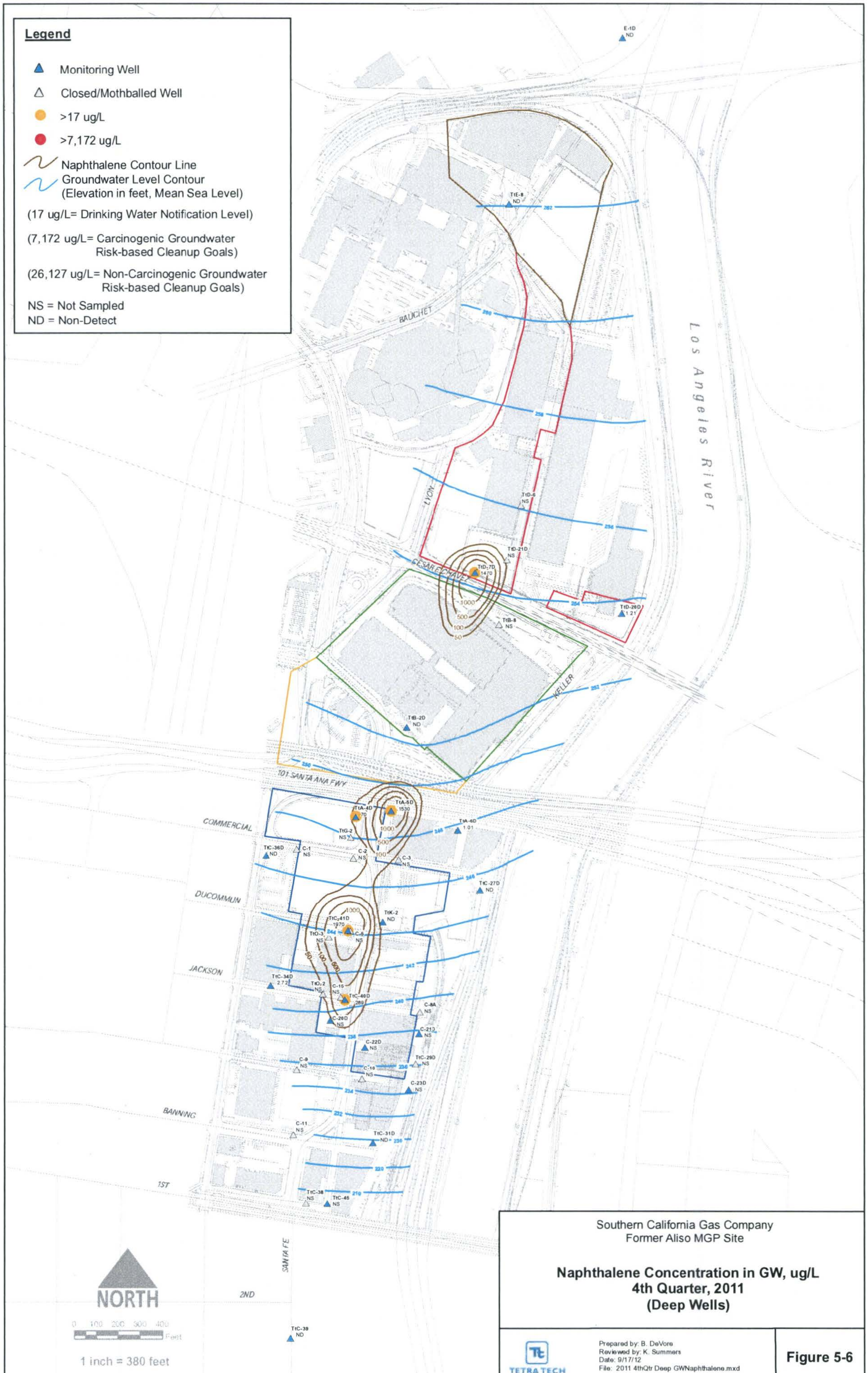
Southern California Gas Company
Former Aliso MGP Site

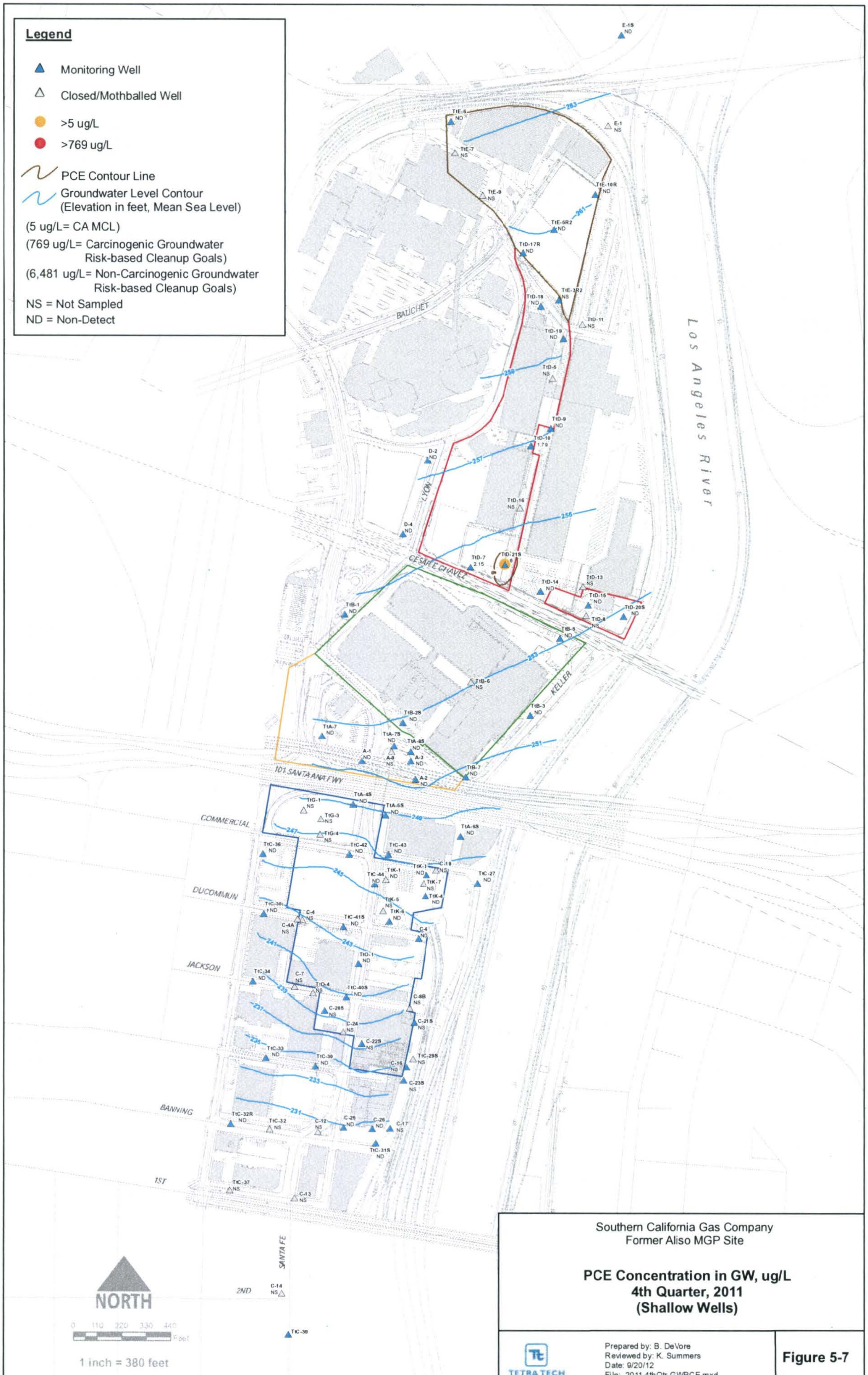
Naphthalene Concentration in GW, ug/L
4th Quarter, 2011
(Shallow Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 9/20/12
File: 2011 4thQtr GWNaphthaleneContours.mxd

Figure 5-5


Legend
Monitoring Well
Closed/Mothballed Well
>17 ug/L
>7,172 ug/L
Naphthalene Contour Line
Groundwater Level Contour
(Elevation in feet, Mean Sea Level)
(17 ug/L= Drinking Water Notification Level)
(7,172 ug/L= Carcinogenic Groundwater Risk-based Cleanup Goals)
(26,127 ug/L= Non-Carcinogenic Groundwater Risk-based Cleanup Goals)
NS = Not Sampled
ND = Non-Detect
Los Angeles River
BAUCHET
LYON
CESAR E CHAVEZ
KELLER
101 SANTA ANA FWY
COMMERCIAL
DUCOMMUN
JACKSON
BANNING
1ST
2ND
SANTA FE
NORTH
0 100 200 300 400 Feet
1 inch = 380 feet
Southern California Gas Company
Former Aliso MGP Site
Naphthalene Concentration in GW, ug/L
4th Quarter, 2011
(Deep Wells)
TETRA TECH
Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 9/17/12
File: 2011 4thQtr Deep GWNaphthalene.mxd
Figure 5-6



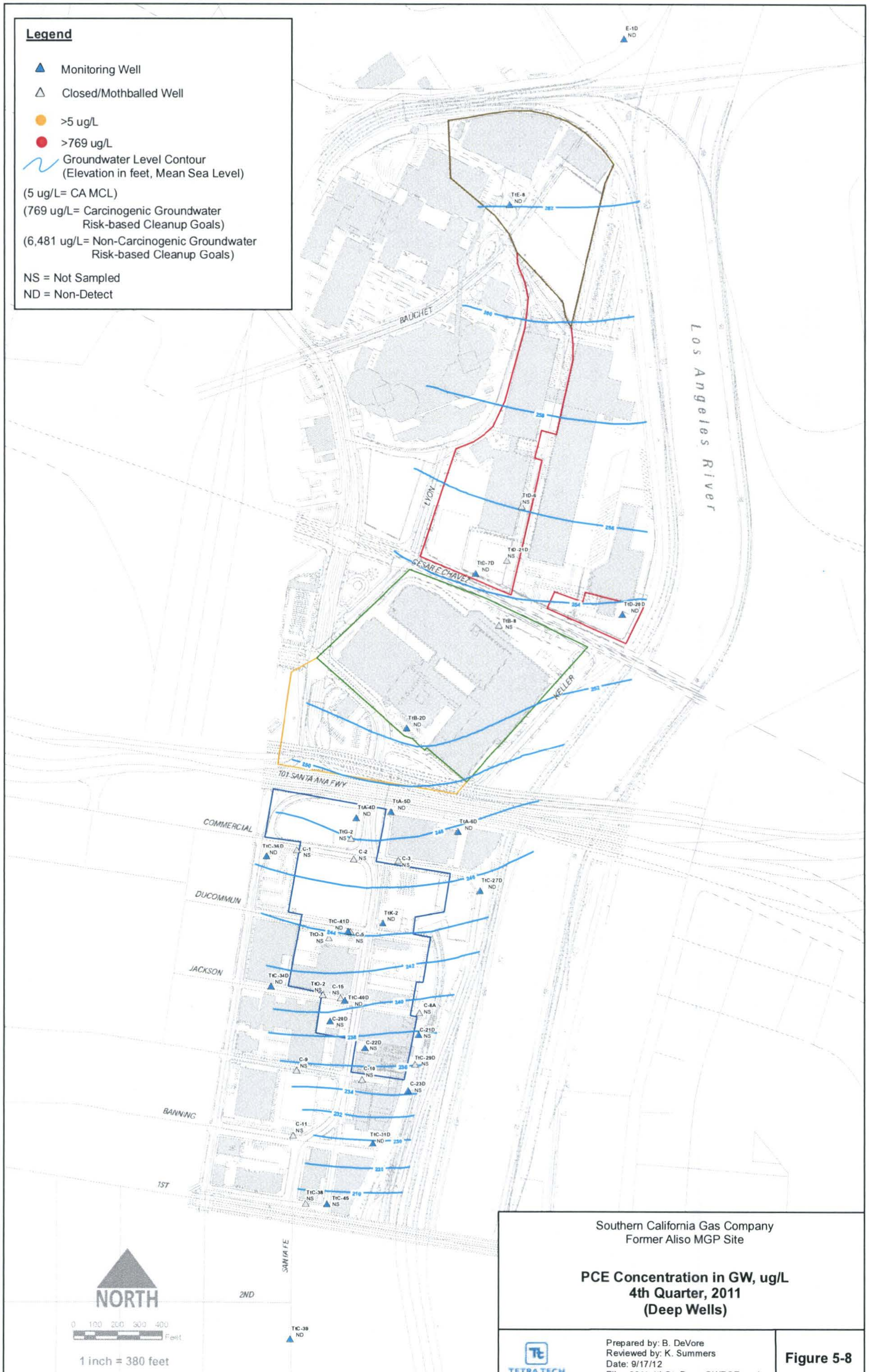
Southern California Gas Company
Former Aliso MGP Site

PCE Concentration in GW, ug/L
4th Quarter, 2011
(Shallow Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 9/20/12
File: 2011 4thQtr GWPCE.mxd

Figure 5-7

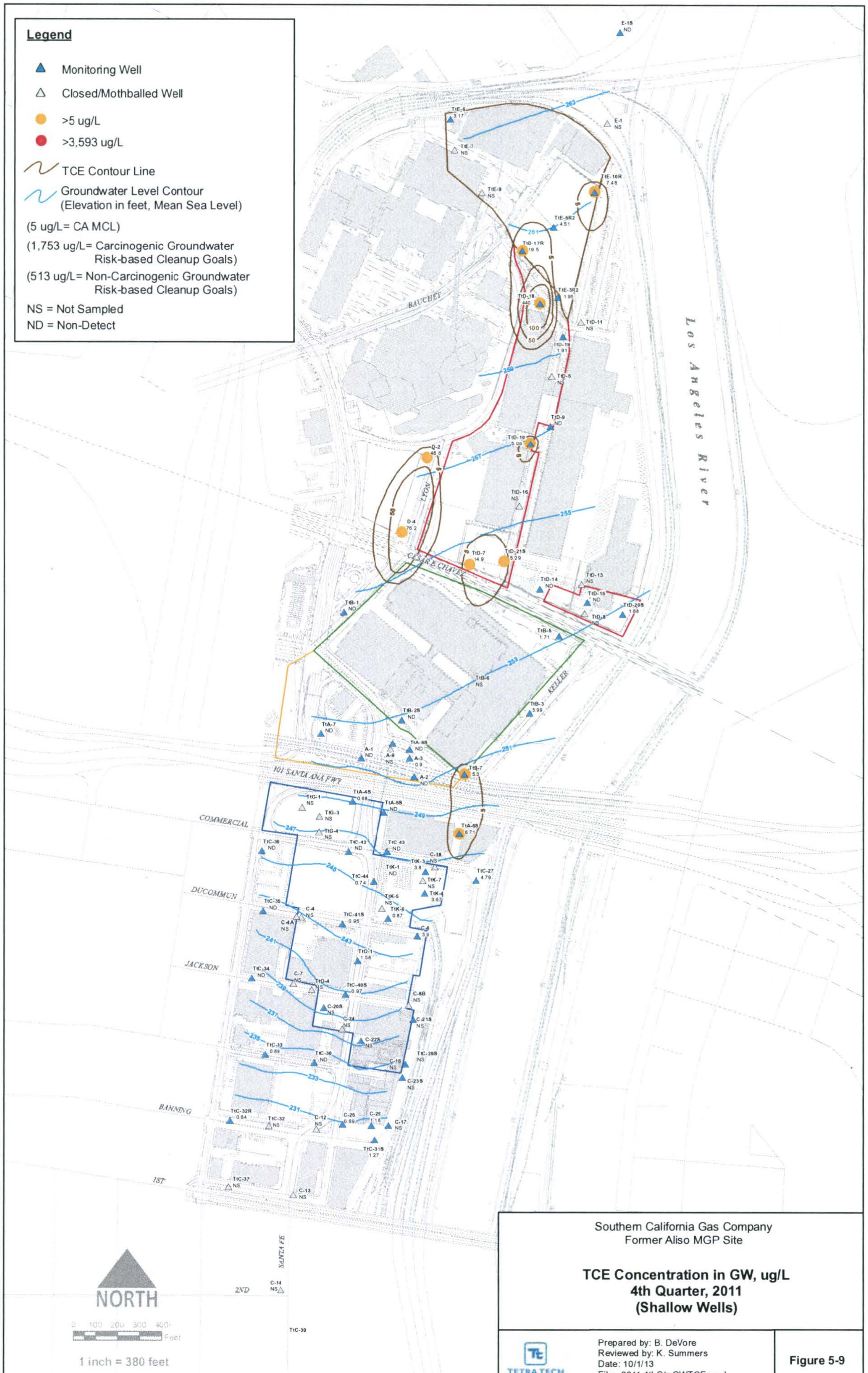


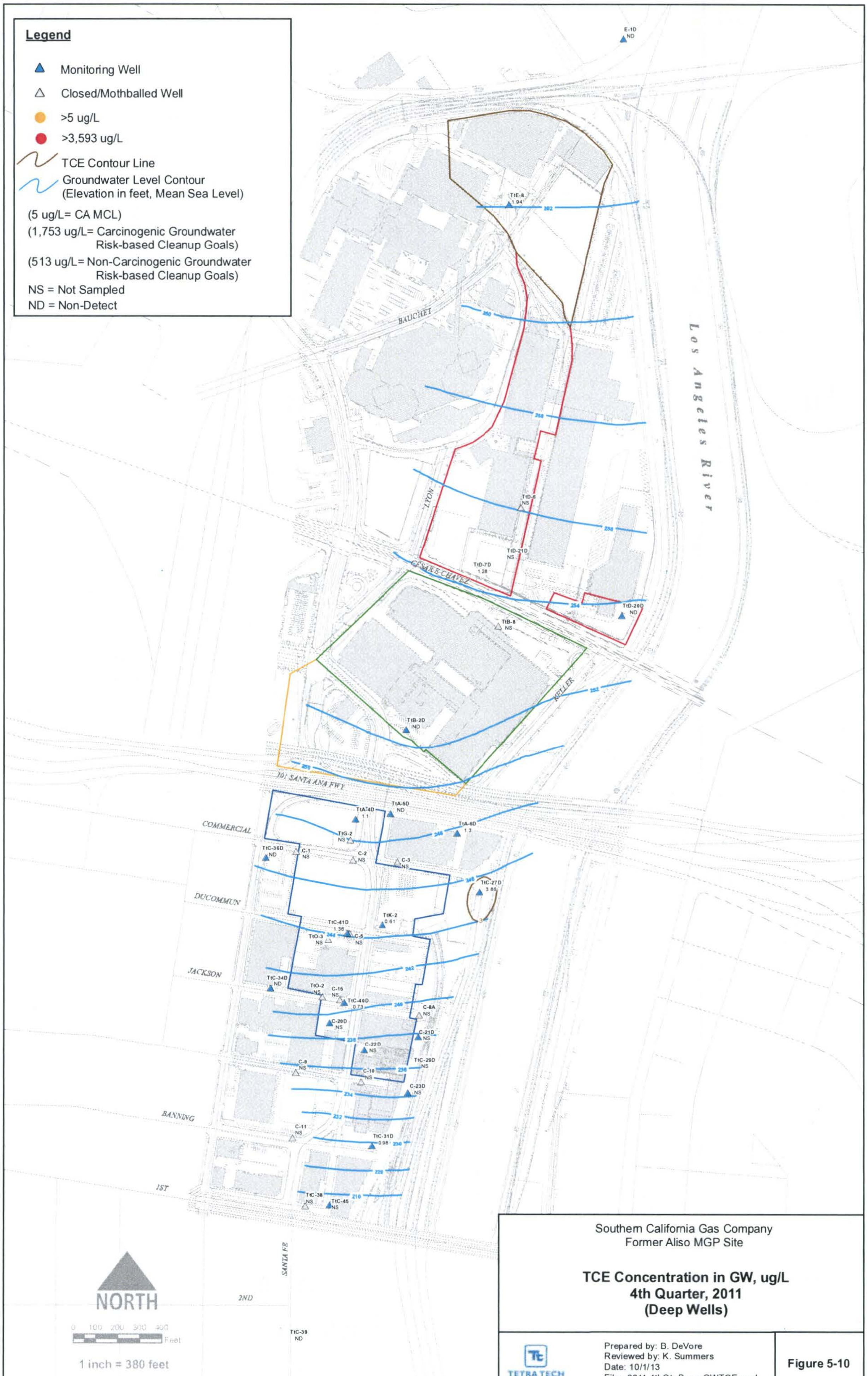
Southern California Gas Company
Former Aliso MGP Site

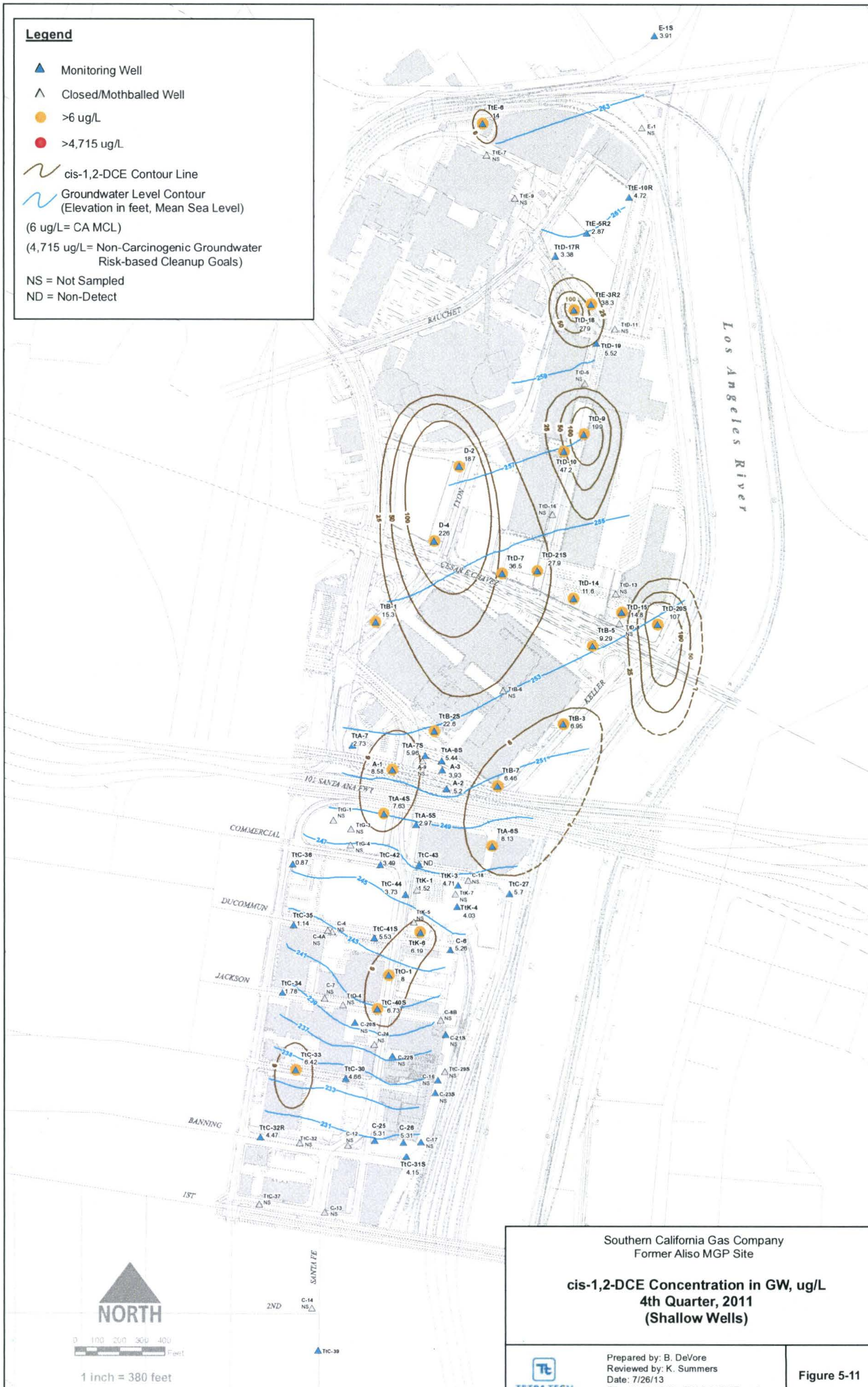
PCE Concentration in GW, ug/L
4th Quarter, 2011
(Deep Wells)

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 9/17/12
File: 2011 4thQtr Deep GWPCE.mxd

Figure 5-8


Legend
Monitoring Well
Closed/Mothballed Well
>5 ug/L
>3,593 ug/L
TCE Contour Line
Groundwater Level Contour
(Elevation in feet, Mean Sea Level)
(5 ug/L= CA MCL)
(1,753 ug/L= Carcinogenic Groundwater Risk-based Cleanup Goals)
(513 ug/L= Non-Carcinogenic Groundwater Risk-based Cleanup Goals)
NS = Not Sampled
ND = Non-Detect
Los Angeles River
BAUCHET
LYON
CESAR E CHAVEZ
KELLER
101 SANTA ANA FWY
COMMERCIAL
DUCOMMUN
JACKSON
BANNING
1ST
2ND
SANTA FE
NORTH
0 100 200 300 400 Feet
1 inch = 380 feet
Southern California Gas Company
Former Aliso MGP Site
TCE Concentration in GW, ug/L
4th Quarter, 2011
(Shallow Wells)
TETRA TECH
Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 10/1/13
File: 2011 4thQtr GWTCE.mxd
Figure 5-9


Legend
Monitoring Well
Closed/Mothballed Well
>5 ug/L
>3,593 ug/L
TCE Contour Line
Groundwater Level Contour
(Elevation in feet, Mean Sea Level)
(5 ug/L= CA MCL)
(1,753 ug/L= Carcinogenic Groundwater
Risk-based Cleanup Goals)
(513 ug/L= Non-Carcinogenic Groundwater
Risk-based Cleanup Goals)
NS = Not Sampled
ND = Non-Detect
Los Angeles River
BAUCHET
LYON
CESAR E CHAVEZ
KELLER
101 SANTA ANA FWY
COMMERCIAL
DUCOMMUN
JACKSON
BANNING
1ST
2ND
SANTA FE
NORTH
0 100 200 300 400
Feet
1 inch = 380 feet
Southern California Gas Company
Former Aliso MGP Site
TCE Concentration in GW, ug/L
4th Quarter, 2011
(Deep Wells)
TETRA TECH
Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 10/1/13
File: 2011 4thQtr Deep GWTCE.mxd
Figure 5-10



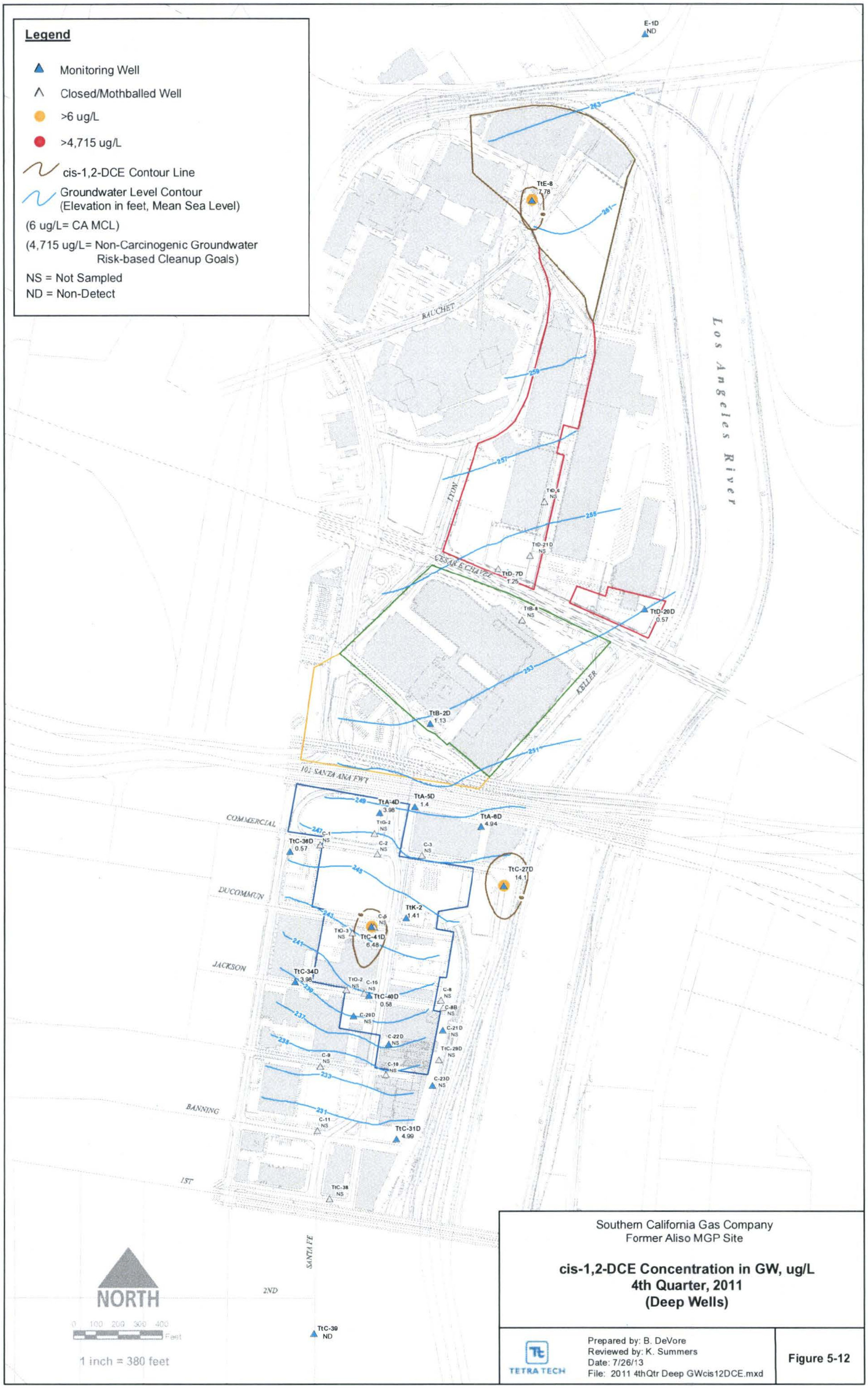
Southern California Gas Company
Former Aliso MGP Site

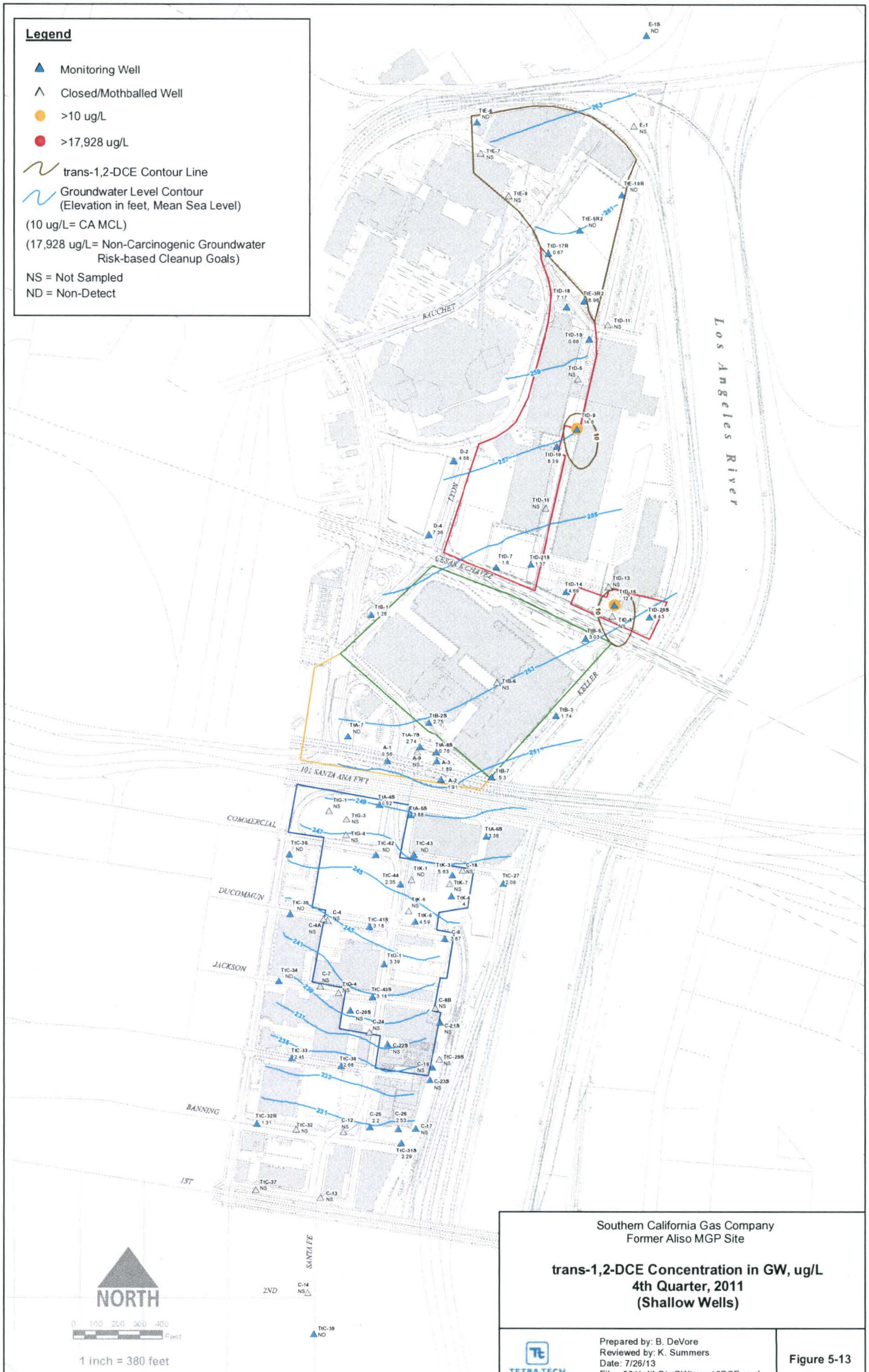
cis-1,2-DCE Concentration in GW, ug/L
4th Quarter, 2011
(Shallow Wells)

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 7/26/13
File: 2011 4thQtr GWcis12DCE.mxd

TETRA TECH

Figure 5-11


Legend
Monitoring Well
Closed/Mothballed Well
>6 ug/L
>4,715 ug/L
cis-1,2-DCE Contour Line
Groundwater Level Contour
(Elevation in feet, Mean Sea Level)
(6 ug/L= CA MCL)
(4,715 ug/L= Non-Carcinogenic Groundwater
Risk-based Cleanup Goals)
NS = Not Sampled
ND = Non-Detect
E-1D
ND
TtE-8
7.78
263
261
BAUCHET
259
257
LYON
TtD-6
NS
255
TtD-21D
NS
CESAR E CHAVEZ
TtD-7D
1.25
TtB-8
NS
TtD-20D
0.57
Los Angeles River
KELLER
253
TtB-2D
1.13
251
101 SANTA ANA FWY
249
TtA-4D
3.98
TtA-5D
1.4
TtA-6D
4.94
COMMERCIAL
247
TtC-36D
0.57
245
DUCOMMUN
TtC-27D
14.1
TtK-2
1.41
243
TtC-41D
6.48
241
JACKSON
TtC-34D
3.98
239
TtC-40D
0.58
237
235
233
231
BANNING
TtC-31D
4.99
1ST
TtC-38
NS
SANTA FE
2ND
TtC-39
ND
NORTH
0 100 200 300 400
Feet
1 inch = 380 feet
Southern California Gas Company
Former Aliso MGP Site
cis-1,2-DCE Concentration in GW, ug/L
4th Quarter, 2011
(Deep Wells)
TETRA TECH
Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 7/26/13
File: 2011 4thQtr Deep GWcis12DCE.mxd
Figure 5-12



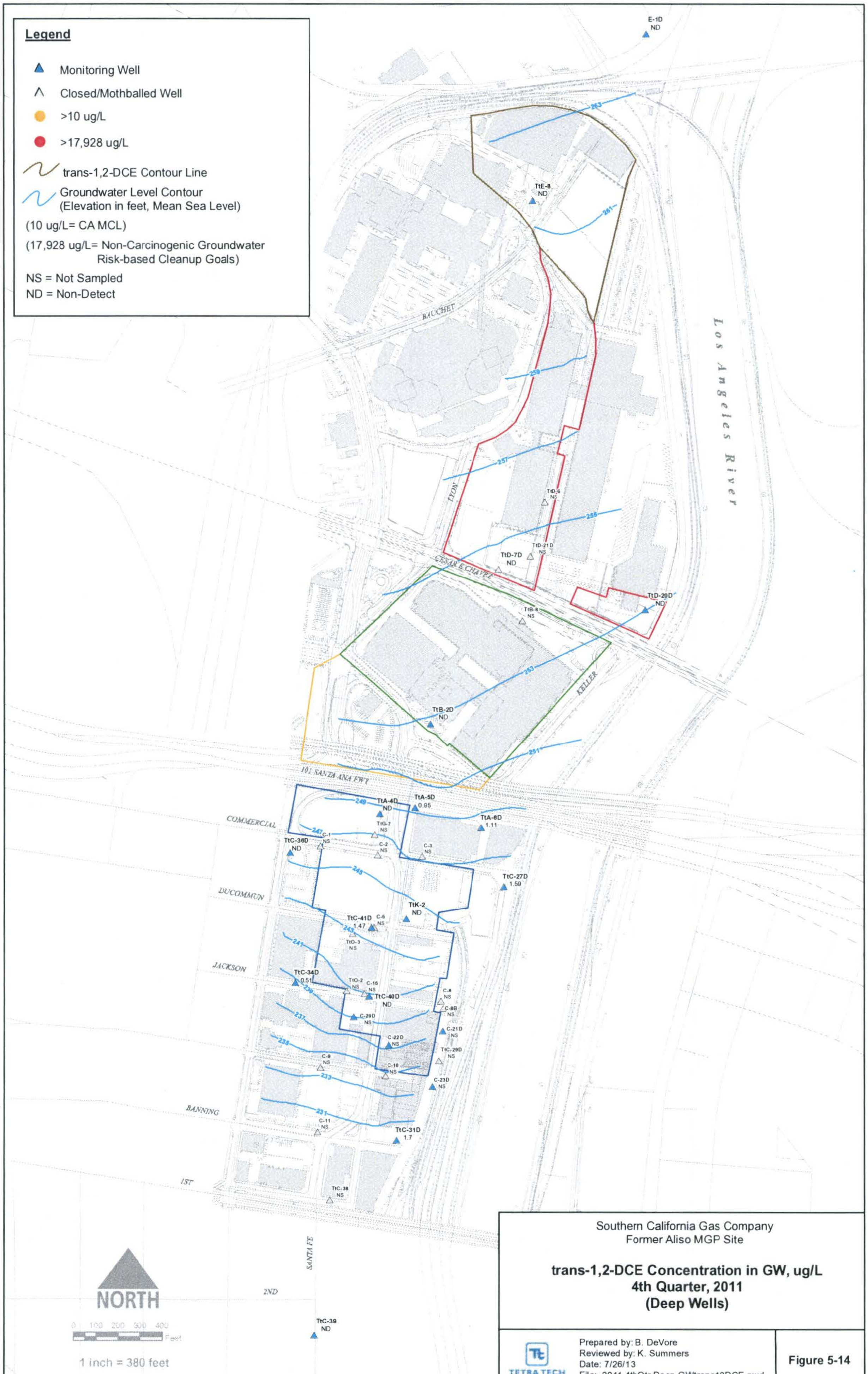
Southern California Gas Company
Former Aliso MGP Site

trans-1,2-DCE Concentration in GW, ug/L
4th Quarter, 2011
(Shallow Wells)

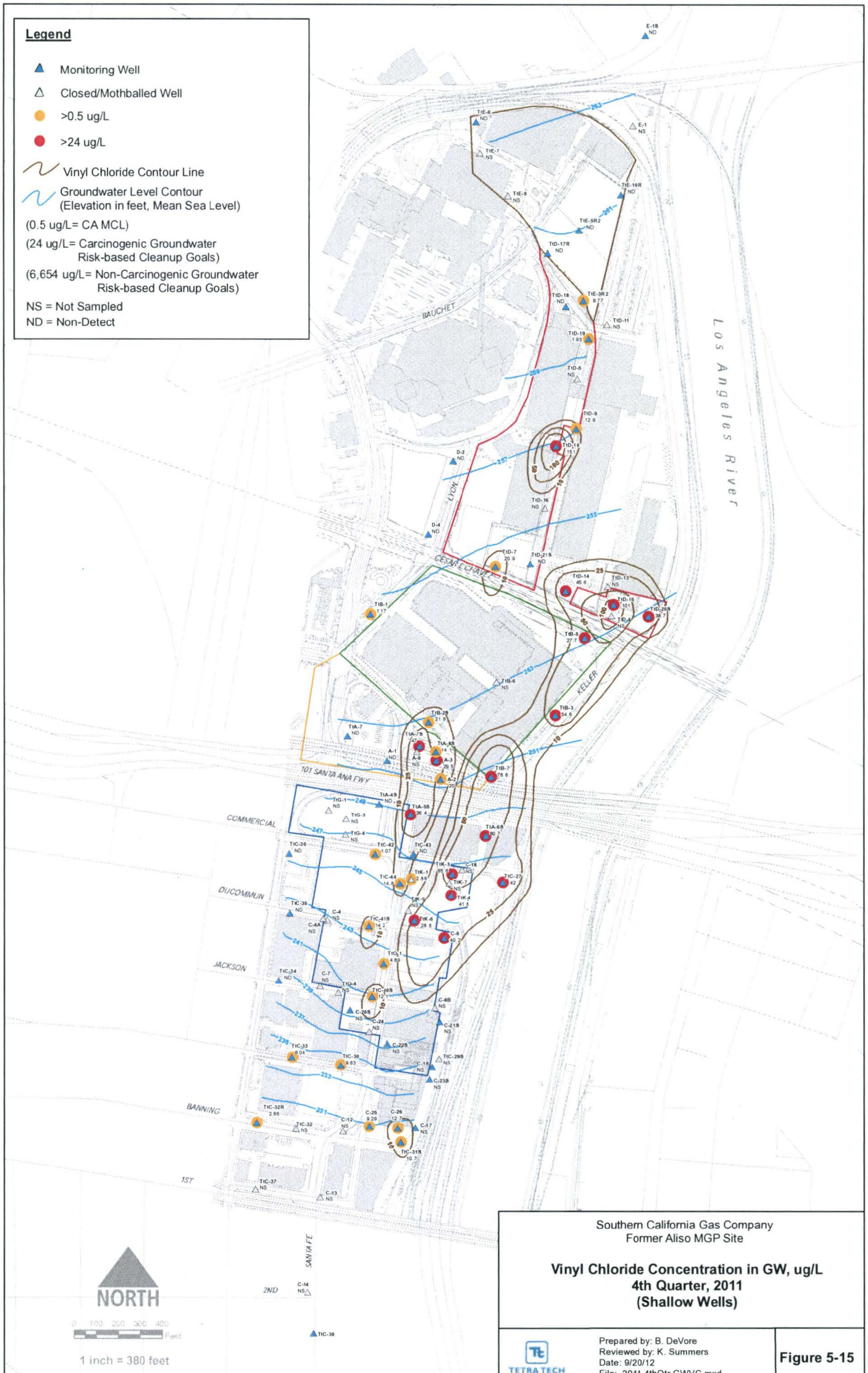
TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 7/26/13
File: 2011 4thQtr GWtrans12DCE.mxd

Figure 5-13



Legend
Monitoring Well
Closed/Mothballed Well
>10 ug/L
>17,928 ug/L
trans-1,2-DCE Contour Line
Groundwater Level Contour (Elevation in feet, Mean Sea Level)
(10 ug/L= CA MCL)
(17,928 ug/L= Non-Carcinogenic Groundwater Risk-based Cleanup Goals)
NS = Not Sampled
ND = Non-Detect
Los Angeles River
BAUCHET
LYON
CESAR E CHAVEZ
KELLER
101 SANTA ANA FWY
COMMERCIAL
DUCOMMUN
JACKSON
BANNING
1ST
2ND
SANTA FE
E-1D ND
TtE-8 ND
TtD-7D ND
TtD-20D ND
TtB-2D ND
TtA-4D ND
TtA-5D 0.95
TtA-6D 1.11
TtC-36D ND
TtC-27D 1.50
TtK-2 ND
TtC-41D 1.47
TtC-34D 0.51
TtC-40D ND
TtC-31D 1.7
TtC-39 ND
NORTH
0 100 200 300 400 Feet
1 inch = 380 feet
Southern California Gas Company
Former Aliso MGP Site
trans-1,2-DCE Concentration in GW, ug/L
4th Quarter, 2011
(Deep Wells)
TETRA TECH
Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 7/26/13
File: 2011 4thQtr Deep GWtrans12DCE.mxd
Figure 5-14



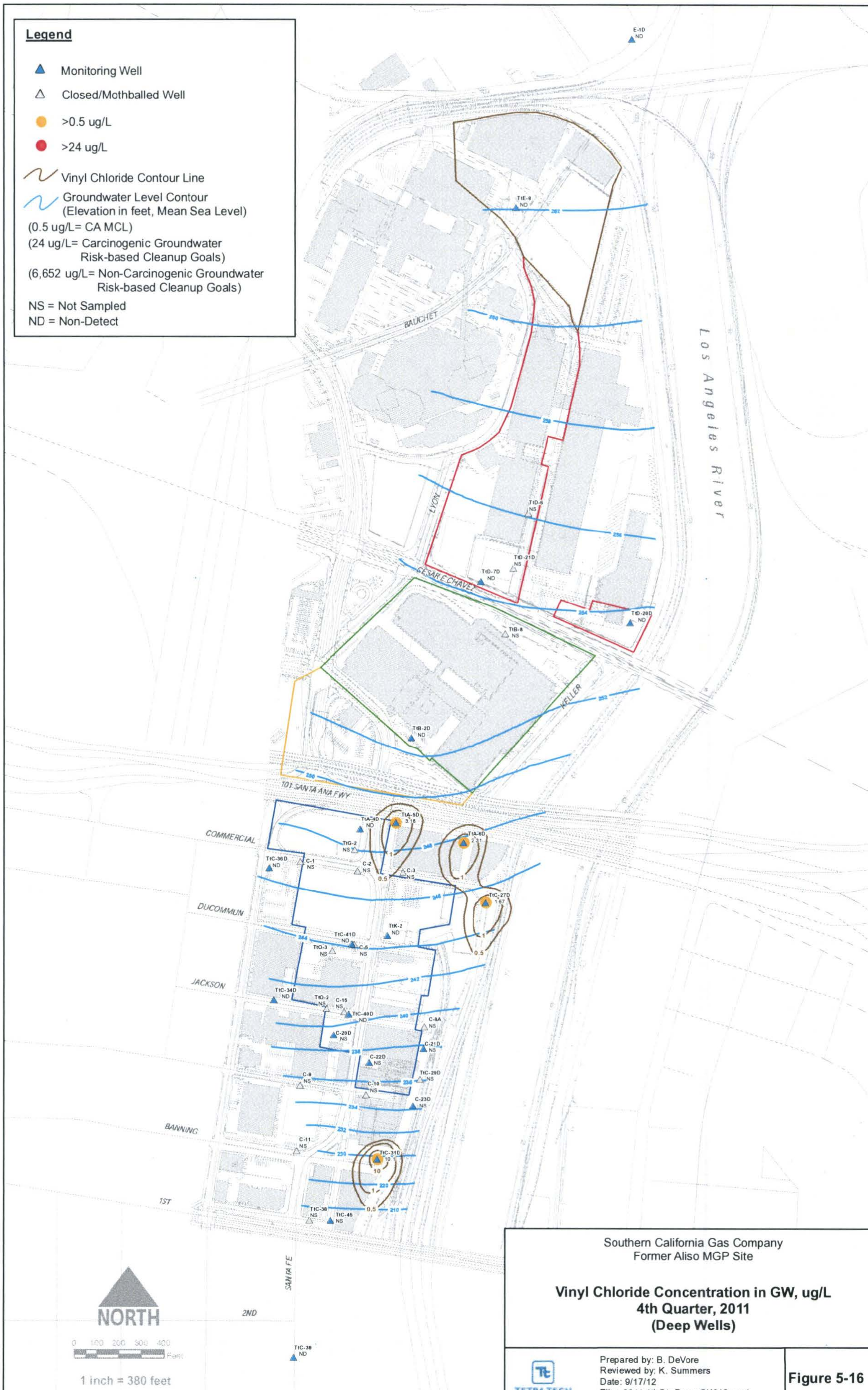
Southern California Gas Company
Former Aliso MGP Site

Vinyl Chloride Concentration in GW, ug/L
4th Quarter, 2011
(Shallow Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 9/20/12
File: 2011 4thQtr GWVC.mxd

Figure 5-15



Southern California Gas Company
Former Aliso MGP Site

Vinyl Chloride Concentration in GW, ug/L
4th Quarter, 2011
(Deep Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 9/17/12
File: 2011 4thQtr Deep GWVC.mxd

Figure 5-16

This section provides an overview of the geochemical conditions required for the degradation of chemicals by both aerobic and anaerobic reactions, the geochemical conditions present in groundwater at the Aliso Site, evidence for degradation of benzene, naphthalene, PCE and TCE including their breakdown products based on concentration trends over time, and estimated degradation rates.

6.1 BACKGROUND

Natural attenuation involves a combination of physical, chemical, and biological processes that result in reduction of chemical concentrations. For natural attenuation to be successful, the compounds of concern at the Site must be present where the geochemical conditions are capable of degrading the chemicals to appropriate levels by the downgradient-end of the Site, over a reasonable time frame compared to other more active options [Pope and others, 2004]. The natural attenuation option can result in remediation of a dissolved plume over time, or may be combined with other treatment options such as source and free product removal. The current and future uses of the groundwater resource need to be considered in order to determine the target chemical concentrations, and hence whether natural attenuation is a technically feasible option.

6.1.1 Potential Aerobic and Anaerobic Reactions

The types of reactions that can occur in the groundwater depend on the geochemical conditions, which include dissolved oxygen concentrations, pH, redox state as oxidizing or reducing, the specific electron acceptors present besides oxygen (e.g., nitrate, iron, manganese, sulfate or methane), the organic carbon present to supply energy for microorganisms, and the types and numbers of microorganisms. The classical sequences of microbially-mediated redox reactions that can occur in groundwater spanning the range of aerobic to strongly reducing conditions are shown on Figure 6-1. The reactions occur in the order of decreasing energy released during electron transfer from aerobic to methanogenic conditions, provided the necessary microorganisms and organic carbon are available to support the specific reaction [USEPA, 1998]. Natural systems have more overlap than is predicted based on thermodynamics alone.

Natural attenuation occurs at different rates for the chemicals depending on the redox and geochemical conditions present in the groundwater, the available organic matter to support microbial metabolism when the outgoing flux of dissolved organic carbon (DOC) is also considered, and the viability of the microbes present in the soil-groundwater system. In addition, more recent research into redox reactions has shown that chlorinated ethenes such as PCE and TCE, which contain highly electronegative chlorine, are also potential electron acceptors in contaminated groundwater systems after oxygen and nitrate have been depleted [Chapelle et al, 2007]. If sufficient organic carbon is present, the PCE and TCE can fully degrade to CO_2, Cl^-, and water by reductive de-chlorination, if not, the end products can accumulate (e.g., cis and trans-DCE, vinyl chloride (VC), and ethenes).

The dominant oxidation-reduction reactions in a given aquifer setting can be determined using a system developed by the USGS [Jurgens et al., 2009]. The dominant reaction is determined by this spreadsheet tool based on observed concentrations of key water quality parameters. The method used to identify the dominant reaction is discussed below. This tool was applied to the Aliso Site groundwater using data for wells in various parts of the Site where different geochemical conditions are present, as discussed in section 6.1.2.

If the dissolved oxygen (DO) is greater than 0.5 mg/L, the conditions are considered aerobic. If the DO is less than 0.5 mg/L, then the conditions are considered anaerobic and a variety of electron acceptors can control the reactions such as nitrate, iron, sulfate, and methane. If the DO is less than 0.5 mg/L and nitrate (NO_3) is greater than 0.5 - 1 mg/L, then NO_3 reduction is considered the dominant process. In between NO_3 and Fe(III) reduction reactions, manganese and PCE/TCE can be used as electron acceptors. The next major sequential reduction reaction is Fe(III) reduction, which requires that both the DO and NO_3 are less than 0.5 mg/L and that the Fe(II)/sulfide mass ratio is greater than 10 [Jurgens et al, 2009]. The sulfide is determined as the sum of H_2S, HS^-, and S^{2-} species in mg/L in the groundwater [Chapelle et al, 2009]. The Fe(III) reduction process can be considered active if Fe(II) is greater than 0.01 mg/L and increases along the flow path [Chapelle and others, 2003]. If the Fe(II)/sulfide mass ratio is greater than 0.3 but less than 10, a combination of iron and sulfate-reducing reactions may be occurring. If the Fe(II)/sulfide mass ratio is less than 0.3, then sulfate reduction is the dominant process [Chapelle et al, 2009]. The Fe(III) reduction reaction also requires sufficient Fe(III) oxyhydroxides or other similar iron source. The products of the Fe(III) reduction reaction with organic matter maintain acetate, hydrogen, and formate at lower levels than needed for sulfate-reducing microbes [Chapelle and Lovley, 1992]. For example, under iron-reducing conditions, the hydrogen concentrations are typically ~0.2 to 0.8 nM, while under sulfate-reducing conditions, the hydrogen concentrations are typically ~1 to 5 nM [Chapelle et al, 2009]. Due to the combination of the relatively rapid precipitation of iron sulfides and the microbial competition, Fe(II) and sulfide species are not typically high in the same samples [Chapelle et al, 2009].

Sulfate (SO_4) reduction is generally the dominant sustainable reduction process when SO_4 is greater than 100 mg/L [Suthersan and others, 2011], although the reaction can occur at concentrations above 1 mg/L. Hydrogen sulfide (H_2S) concentrations would be expected to be increasing along the flow path and at least 0.05 mg/L under sulfate-reducing conditions [Chapelle and others, 2003]. In some settings, the sulfate reduction rate is limited by the sulfate concentration, i.e., if the sulfate concentration is above 2,000 mg/L the degradation rate remains constant [Roychoudhury and McCormick, 2006]. A consequence of this limitation is that the rate of petroleum hydrocarbon degradation increases at higher sulfate concentrations up to the limit. Sulfide inhibition of sulfate reduction reactions can occur at sulfate concentrations ranging from 8.5 to 320 mg/L unless: 1) iron oxides/hydroxides are available to form FeS precipitates; or 2) there is sufficient calcium to allow gypsum ($CaSO_4$) to precipitate [Roychoudhury and McCormick, 2006]. The sulfide inhibition can reduce the sulfate reduction rate by about one-third, although the effect on the rate is also influenced by the specific microbes and geochemical conditions present at a given site. Other control mechanisms for sulfides besides iron include sulfide oxidation when either oxygen or nitrate is present outside of the biologically-active sulfate reduction zone [Suthersan and others, 2011].

6.1.2 Site Geochemical Conditions

Groundwater monitoring in the 3rd and 4th quarters of 2011 showed that the field measurements of DO in groundwater are low across most of the Site, but above 1 mg/L in the two upgradient wells. When DO is greater than 0.5 mg/L, oxygen will be the predominant microbial process [Chapelle and others, 2003].

In the 4th quarter of 2011, of the 16 deep wells tested, the DO was greater than 1 mg/L in the upgradient well (E-1D), two cross-gradient wells on the western side of Sector C (TtC-34D and TtC-36D), and two onsite wells (TtD-7D and TtA-4D), and between 0.5 and 1 mg/L in two downgradient wells (TtC-27D and TtC-39D).

Of the 45 shallow wells tested, three wells had DO above 1 mg/L (TtA-4S, TtB-7, and TtD-17R) and eight wells had DO between 0.5 and 1 mg/L (TtD-18 on the northern part of Sector D, five wells on Sectors A and C (TtA-5S, TtA-6S, TtC-44, TtK-6, TtC-40S), and one well south of Sector C (C-25).

The pH range of the wells in the 4th quarter of 2011 was 4.94 to 8.5 standard units (S.U.), although only two wells (TtD-20S and TtD-20D) were less than 5.98 and two wells were above 7.68 (TtC-43 and TtK-1). The optimum range for SO_4-reducing bacteria is pH between 7.5 and 8 S.U., although the inhibitory effects on bacteria occur outside a range of pH from 5.5 to 9 S.U. [Hao and others, 1996].

Concentrations of potential electron acceptors including nitrate, sulfate, and iron were measured in 2004 and 2001-2002, and sulfate, sulfide, and iron in 1999 in a subset of wells. In 2004, NO_3, SO_4, and sulfide were measured in 21 wells on Sector C (Table 6-1). Only one well had NO_3 concentrations above 0.5 mg/L in 2004 (0.7 mg/L in TtC-32). These data indicate that the reducing conditions are stronger than NO_3-reducing conditions.

SO_4 concentrations in the shallow wells ranged from 179 mg/L in TtC-40S (located near Center Street on the northeast corner of Block R) to 1,660 mg/L in TtC-36 (located west of the Site south of Block G). In the deep wells sampled, SO_4 ranged from 219 mg/L in TtC-40D to 317 mg/L in TtC-41D (located near the northwest corner of Block O). These SO_4 concentrations are sufficient to sustain SO_4-reducing reactions.

Elevated sulfide concentrations were present in most of the sampled wells, except for the furthest downgradient wells on or south of First Street (TtC-37, TtC-38, and TtC-39) and TtC-36. These data indicate that SO_4-reducing conditions are present across most of the Site, except for the far downgradient and western off-site areas, where nitrate was present and none to very low sulfides were detected.

In 2001 and 2002, NO_3, SO_4, and sulfide were measured in a total of 22 wells spanning the Site. NO_3 was present in four of the six Sector E wells, which had elevated SO_4 concentrations but no sulfide concentrations except for one well (Table 6-2). This suggests that SO_4-reducing reactions were not occurring at that time on Sector E. High sulfide concentrations were present in most of the other wells consistent with sulfate-reduction reactions.

In April 1999, a special study was conducted to determine whether groundwater conditions were suitable for biodegradation or reductive dechlorination reactions. Eight wells were sampled from Sectors A, C, D, and E in April 1999 (Table 6-3), which showed that DO was depleted in the shallow groundwater. Well A-1 had a pH of 6.0, DO of 0.2 mg/L, total Fe of 41 mg/L which was identified by the laboratory as Fe(II), high SO_4 (1,386 mg/L), and no sulfide or H_2S, indicating that the groundwater in this area was under iron-reducing conditions using the redox classification system of Jurgens and others [2009]. The other wells had low DO and Fe(II), less SO_4, and detectable sulfide and H_2S. These conditions indicate that the groundwater was also anaerobic, but that SO_4 reduction was the dominant reaction, as confirmed using the system of Jurgens and others [2009]. The occurrence of H_2S and methane (CH_4) in groundwater in the Los Angeles Basin has been noted previously [Enviro-Rail, 1997; Yerkes and others, 1977].

In Summer 1999, DO, dissolved iron, SO_4, and sulfide were measured in five wells on Sector C, one other well on Sector A, and one well upgradient of Sector E (Table 6-4). The DO measured in the laboratory was less than 0.1 mg/L in four of the Sector C wells and the dissolved iron was less than 0.1 mg/L. Three of the five Sector C wells had detected sulfide concentrations. These data indicate that the groundwater was anaerobic and that SO_4 reduction was occurring. The upgradient well E-1 had no DO, high dissolved iron (17.9 mg/L), moderate SO_4 (493 mg/L), but no sulfide. The data for well E-1 are consistent with anaerobic, iron-reducing conditions.

6.1.3 Degradation Reactions and Rates for Selected Chemicals

Benzene and Naphthalene

Aerobic conditions promote faster biodegradation rates for some organic chemicals such as benzene and naphthalene. For example, 3 mg/L of oxygen is required to mineralize 1 mg/L of benzene [Bradley, 2011]. Benzene degradation can also occur under anaerobic conditions, although at a slower rate than under aerobic conditions. For example, the degradation rate of benzene under NO_3- or SO_4-reducing conditions is about 66% of the rate under aerobic conditions when the DO is about 9 to 10 mg/L [Suthersan and others, 2011]. Benzene degradation under iron-reducing conditions is much slower than by the other aerobic or anaerobic reactions. Naphthalene degradation can occur in soil under aerobic or anaerobic conditions, but is reduced by sorption to organic matter, is sensitive to the population of bacteria and fungi present in the soil, and has a longer lag time than benzene. Naphthalene degradation rates under sulfate-reducing conditions ranged from 0.0015 μg/day to 0.0063 μg/day in field studies and 0.026 μg/day under methanogenic conditions in a field study, although other studies did not detect degradation [HydroGeologic, 1999].

PCE and TCE

It should be noted that although PCE and TCE exist in groundwater, the source of these compounds are not related to MGP or butadiene operations. Anaerobic conditions promote attenuation of PCE and TCE by reductive dechlorination (Figure 6-2). This process does not occur if the DO is above 1 mg/L [USEPA, 1998]. The degradation of PCE and TCE also requires organic carbon to generate the anaerobic conditions, although the carbon source can be of natural or anthropogenic origin such as fuel hydrocarbons [Chapelle and others, 2007]. BTEX provides a readily-available carbon source for microbes that then generate reducing conditions, which is a requirement for PCE/TCE degradation via reductive dechlorination.

The PCE to TCE step can occur via any of the nitrate, iron, or sulfate reduction reactions, whereas the TCE to cis-1,2-DCE step requires either Fe(III) or SO_4 reducing conditions [Chapelle and others, 2003]. The step from DCE to VC via reductive dechlorination requires sulfate-reducing or methanogenic conditions. The production of cis-1,2-DCE is more common than trans-1,2-DCE [USEPA, 1998]. However, because PCE and TCE have highly electronegative chlorine (Cl), these compounds can also become potential electron acceptors in contaminated groundwater systems. Based on the relative order by free energy of the reaction (ΔG_o), these reactions occur after use of NO_3 but before use of iron or manganese [Chapelle and others, 2007]. If the predominant electron acceptor in the groundwater is SO_4, as is the case for this Site, the PCE and TCE degradation uses a portion of the electron flow, rather than solely driving the reaction of SO_4 to H_2S.

With respect to chlorinated ethenes such as PCE and/or TCE, the short-term sustainability rate (STSR) can be estimated as the molar ratio of DO to DOC, where 1 mg/L of DO is equal to 0.0312 millimoles per liter (mM/L) and 1 mg/L of DOC is equal to 0.0334 mM/L. For short-term MNA of chlorinated ethenes, this ratio needs to be less than 1, and preferably even smaller [Chapelle et al, 2007]. The long-term sustainability rate (LTSR) can be estimated as the ratio of available organic carbon (AOC) from the aquifer on an aerial basis to the flux of DOC due to recharge (AOC mg/m^3 per DOC flux in mg/yr). A large LTSR ratio indicates that long-term MNA is sustainable.

Vinyl Chloride

The degradation of VC can occur under several types of reactions, either aerobic or anaerobic. The last step in the reductive dechlorination process, i.e., conversion of VC into CO_2, H_2O, and Cl has two different pathways: 1) biochemical oxidation directly into these components, or 2) biochemical reduction first to ethene and second to these components [Chapelle and others, 2007]. Under highly reducing conditions, VC can fully degrade to ethene and then to CO_2 and H_2O via reductive dechlorination [Bradley, 2000]. However, this rate is slow and significant only in methanogenic conditions; thus it is often incomplete, leading to the accumulation of DCE and VC in groundwater [Chapelle and others, 2003]. The anaerobic oxidation or mineralization of VC to CO_2 under iron-reducing conditions is faster than the reductive dechlorination of VC to ethene [Bradley and Chappelle, 1996]. The degradation of VC via anoxic mineralization can be limited by the available amount of Fe(III) [Bradley, 2003]. Under aerobic conditions, VC can degrade to its components via oxic mineralization and can serve as the sole carbon source [Hartmans, 1995].

A common temporary end-product of reductive dechlorination is VC, instead of a complete reaction to carbon dioxide and water or ethene. As described by Mattes et al [2010], "Further from the contaminant source, VC and cis-DCE can migrate into aerobic areas; this would provide a niche for the aerobic, VC- and cis-DCE-oxidizing bacteria". This is an example of a synergistic process where aerobic bacteria that grow on hydrocarbons generate oxygenase enzymes that can subsequently oxidize chloroethenes including VC, although toxic by-products can build-up due to these reactions [Mattes, et al, 2010]. VC can also be degraded by co-metabolism when microbes use BTEX as a carbon source [Wiedemeier and others, 1998].

Other compounds present in fuels can also have an effect on VC degradation as discussed below. MTBE is not as readily degraded as BTEX [Lawrence, 2006], and thus is likely to remain in groundwater where a recent gasoline leak occurred longer than benzene. MTBE can be degraded under both aerobic and anaerobic conditions. Under aerobic conditions, the rate can be rapid after an initial lag period while the microbes adapt to using MTBE as a carbon source. Studies of 76 gas stations showed that MTBE degraded faster under methanogenic conditions, which may exceed the rates under aerobic conditions [Kolhatkar and others, 2000 and 2002]. Other gasoline components were mentioned as promoting co-metabolic degradation of VC including toluene [Chauhan et al, 1998], but not MTBE. Additional bacteria that grow on hydrocarbon compounds in aerobic conditions have also been identified as promoting co-metabolism of VC including methane, phenol, ethene, and ethane [Mattes, et al, 2010].

Early experiments using contaminated groundwater were conducted by Davis and Carpenter (1990) showing that vinyl chloride was also degraded via aerobic biodegradation to CO_2 using ^{14}C radio-labeled VC and then measuring the production of $^{14}CO_2$. About half of the radiolabeled VC was recovered as $^{14}CO_2$ after 109 days at an initial VC concentration of 100 ppb. These reactions do not generate ethene or ethane. Further investigation into the mechanisms of these processes concluded that VC-assimilating bacteria are "widespread and influential in aerobic natural attenuation of VC" (Mattes et al, 2010). A summary of contaminated sites found that aerobic degradation of VC occurred in 23 out of 37 samples from 22 sites with a lag time of 20 to 110 days (Coleman et al, 2002). VC can be mineralized at the rate of 1.3 μg/L DO per 1 μg/L of VC [Bradley, 2011]. Conditions for the growth of VC-assimilating bacteria are likely to be favorable downgradient of chlorinated ethene plumes where the anaerobic electron donors have been depleted and the end products such as VC accumulate [Coleman et al, 2002].

6.2 DETERMINING MNA EFFECTIVENESS

Effectiveness of MNA can be shown using three lines of evidence [USEPA, 1998]:

1. Historical monitoring of chemical data showing decreasing concentrations and/or contaminant mass over time,
2. Geochemical data showing that site conditions favor contaminant transformation or immobilization, and
3. Site-specific laboratory studies documenting ongoing biodegradation processes.

The first two methods have been used for this Site and are discussed below. In addition, statistical trend analyses were conducted for two different time periods, 1996-2010 and 2005-2010, as presented in the 1996-2010 Aliso Groundwater Monitoring Report, showing that decreasing trends are predominant at this Site. Trends were determined separately for the later period, since most remediation efforts had been conducted during that time period. Additional discussion of trends over time was presented in the 2011 Groundwater Monitoring Report, including comparison to rainfall. Examples of trends for key chemicals over time are discussed in Section 6.2.1 and shown in several plots of concentrations over time. Degradation rates for benzene, naphthalene, PCE, and TCE were also estimated based on linear regression analyses, and are discussed in Section 6.2.2. Laboratory tests have not been conducted using groundwater and soil from this Site to confirm specific biodegradation reactions. However, total organic carbon (TOC) has been measured in the soil and was present up to 2%.

6.2.1 Historical Chemical Data

Benzene

The decrease in benzene concentrations is clearly demonstrated in different parts of the Site including wells on Sectors E, A, D, and C (Figure 6-3). Well E-3 in Sector E showed high concentrations beginning in December 2001, possibly due to increased soil vapor migration after a soil vapor extraction (SVE) system was installed, followed by a chemical oxidation pilot test. The SVE system was shut down in August 2006. Excavation of the contaminated soil (and other materials found) at the 490 Bauchet Street property was conducted between March 2006 and October 2006. Since removal of contaminated soil, the concentration of benzene in Well E-3 decreased significantly. Decreases in benzene also occurred in wells downgradient of Sector E such as TtD-5 (Figure 6-3).

Benzene concentrations have also decreased in the Sector A wells, especially A-1 located on Parcel A West (as shown on Figure 6-4), where excavation of the former gasholder base and surrounding contaminated soil was conducted between February 2004 and June 2004. The upgradient Denny's Parcel was excavated, except for underneath the existing building, between June 1998 and October 1999. The benzene concentrations in wells on Parcel A East have declined, but not as much. Part of the former gasholder base and surrounding soil on this part of the Site were excavated between May 2004 and January 2005. The upgradient area to Parcel A East in Ramirez Street was not excavated and has soil contamination from the former coal-based gasification units.

Benzene concentrations in the shallow wells on Block K have also decreased since 1999, particularly in Wells C-18 and C-6 that are screened to deeper depths below the water table than other wells. A rail tunnel extends diagonally across Block K, which would have required excavation and dewatering. In addition, excavation of soils in specified areas in the southern part of Block K was conducted in August 2008 and September 2008.

Naphthalene

The change in naphthalene concentrations over time are shown on Figure 6-5. The change in well E-3 is similar to that for benzene in that it increased in June 2002 and then decreased as further source remediation was conducted. Naphthalene concentrations in the Block K wells have also decreased, although the concentrations were variable in TtK-1. The Sector A wells had high naphthalene concentrations when sheens or thin product layers were present (e.g., A-1, A-7S, and A-8S). By 2010, naphthalene concentrations had decreased substantially, and the areas with high concentrations are limited in areal extent (Figure 3-5 and 3-6 in Section 3).

PCE and Breakdown Products

The decline of PCE and the formation of its breakdown products are demonstrated in a concentration versus time plot for well E-3 and TtD-18 (Figure 6-6). PCE in well E-3 has declined from a peak of almost 2,440 µg/L in August 1998 to non-detectable (<0.5 µg/L) by May 2008. TCE is a breakdown product of PCE, but was also used in past operations by third parties on Sector E. TCE has declined in well E-3 from a peak of 3,390 µg/L in October 1998 and again in August 1999 to 3.9 µg/L by October 2009. The compounds, cis-1,2-DCE and trans-1,2-DCE were first detected in July 1997. VC was detected occasionally in well E-3. In contrast, the breakdown products TCE and cis-1,2-DCE are more dominant in the downgradient well TtD-18. VC was not detected in well TtD-18, but VC was first detected in May 2003 in downgradient well TtD-19. On Block K, the shallow wells had low PCE (less than 4 µg/L) and low TCE (typically less than 10 µg/L), but increasing VC from 1998 to about 2008 and decreasing concentrations thereafter (Figure 6-7). The improvement in the Block K wells could be due partly to the introduction of oxygen through the excavation activities.

6.2.2 Estimated Degradation Rates

Benzene Degradation

Most wells have decreasing benzene concentrations; in fact, only seven wells had increasing concentrations in either the 1996-2010 or 2005-2010 periods, as discussed in the 1996-2010 Aliso Groundwater Monitoring Report. A summary of the chemical degradation rates based on linear regressions is shown in Table 6-5. The benzene degradation rates for the 66 wells, where the analysis was conducted, ranged from -0.0002 to -1.33 µg per day (µg/day) for the 1996-2010 period and from -0.002 to -0.89 µg/day for the 2005-2010 period. Some of the decay rates for naphthalene were larger than for benzene, which is unusual and may be due to source removal activities. The wells with the higher rates were checked to see if product or sheens had been noted when the samples were collected, but that did not explain the results.

The benzene degradation rate would be expected to be low due to the anaerobic conditions in the aquifer. This can make the degradation rate over two orders of magnitude less than in an aerobic system. The estimated benzene degradation rates for the shallow wells ranged from -0.0002 to -0.11 µg/day. These degradation rates are a combination of the effect of sorption, dispersion, and microbial decay.

While the rate of benzene biodegradation is less than would occur in an aerobic environment, the degradation rate is sufficient to prevent most migration of benzene downgradient of Banning Street. Benzene has been detected only once (0.55 µg/L in late October 2009) in the furthest downgradient well, TtC-39, in the span of 2004 to 2011.

Naphthalene Degradation

Naphthalene can degrade under anaerobic conditions, but the biodegradation rate under anaerobic conditions is less than for aerobic conditions [Landmeyer and others, 1998]. Naphthalene also has been shown to degrade at a low rate in groundwater under methanogenic conditions [Godsy and others, 1992]. The naphthalene degradation rates ranged from -0.00045 to -8.13 µg/day for the 1996-2010 period in 34 wells and -0.00018 to -0.89 µg/day for the 2005-2010 period in 26 wells. The upper ends of these rates are affected by source removal, influence of hydrocarbons, and other processes. The degradation rates in the shallow wells had a smaller range, -0.001 to -0.7 µg/day for the 1996-2010 period and -0.0006 to -1.6 µg/day for the 2005-2010 period.

Naphthalene in the furthest downgradient well, Tt C-39, was first measured after installation of the well in early October 2004 (8.5 µg/L). Since then naphthalene concentrations have been detected infrequently as follows: October 2005, 1.1 µg/L; January 2006, 1.0 µg/L; and May 2008, 1.07 µg/L, and not at all in 2009 through 2012.

Solvent Degradation

The intermediate to strongly reducing conditions present on most of the Site favor the anaerobic reductive dechlorination reactions that degrade solvents such as PCE and TCE. However, the degradation cycle is not proceeding to complete mineralization, resulting in the accumulation of VC on parts of the Site. VC may be degrading via aerobic processes in the southernmost part of the downgradient area, since VC is at lower concentrations south of Block Q than in the shallow wells near Block K. Vinyl chloride was detected at low concentrations in downgradient well TtC-38 (1.4 µg/L in November 2006 and 1.5 µg/L in January 2008) formerly located on the eastern part of Banning Street one block south of Block Q near TtC-45 (See Figure 1-3b).

VC was detected in only one deep well south of the Site (TtC-31D) that has an overlapping screen with the shallow well. It was not detected in the furthest downgradient Well TtC-39 in 2011. In October 2011, most other wells south of the Site could not be sampled. However, in October 2012, the new deep Well TtC-45 that sampled south of the Site had no detected VC and in October 2013, the new deep wells sampled south of the Site (TtC-45, TtC-46R, and TtC-47R, and the other new shallow well TtC-37R) also had no detected VC.

PCE degradation rates ranged from -0.002 to -0.4 µg/day in the shallow wells for the 1996-2010 period and -0.0004 to -0.16 µg/day for the 2005-2010 period. As shown on Figure 6-6, most of the decrease in PCE in well E-3 occurred prior to 2005, so the lower degradation rate is reasonable. The degradation rates for TCE in well E-3 also were higher prior to 2005 (i.e. -0.63 µg/day for the 1996-2010 period and -0.17 µg/day for the 2005-2010 period). As discussed previously, the breakdown of PCE is fast, compared to the later steps in the reductive dechlorination process.

As shown on Figure 6-6, there was a lag in the formation of the breakdown products cis-1,2-DCE and trans-1,2-DCE in downgradient well TtD-18. There were more decreasing trends than increasing trends for the 1,2-DCE compounds in the wells (Table 6-5), whereas there were more increasing trends for VC, particularly after 2005. The VC degradation rates in most wells were low (i.e., less than -0.002 µg/day). Three of the wells with higher degradation rates (-0.015 to -0.14 µg/day) were located near excavations where ORC compounds were added to the shallow groundwater (i.e., TtD-20S, TtA-7S, and TtA-1). Addition of oxygen to the groundwater promotes aerobic mineralization [Hartmans, 1995] and a co-metabolic degradation process [Chapelle, 1996]. The well furthest south of the Aliso Site (TtC-39) had about 0.8 mg/L DO in July 2011 and 0.9 mg/L in October 2011, which is conducive to aerobic degradation of VC.

6.3 EXPECTED FUTURE DEGRADATION

A different way of looking at the groundwater data is to identify areas with higher concentrations, identify redox conditions expected to be present in those areas, and then estimate how the chemicals are likely to degrade over time. This comparison was done for benzene, naphthalene, PCE, and the PCE breakdown products TCE, cis-1,2-DCE, trans-1,2-DCE, and VC. Maps of the chemical concentrations were included in Section 5.

Benzene

In portions of the Aliso Site where oxic conditions are present (such as on Sector E and the upper part of Sector D, and outside the western Site boundary on Sector C between Jackson and Commercial Streets), benzene has decreased to less than the MCL (1 μg/L).

In contrast, the areas with elevated benzene in the southern part of Sector D and the eastern side of Sectors A and C are considered to be under sulfate-reducing conditions, indicating that the degradation rates would be slow. The major unsaturated zone source in the former settling pits on the southern part of Sector D has been removed and ORC® added to the water table. The observed higher benzene concentrations along the east side of Sectors A and C are partially from this source. Thus, the benzene concentrations in this area are expected to decrease over time. The area around TtC-40S is influenced by TPH in the saturated zone, and thus is likely to remain under sulfate-reducing conditions.

Benzene concentrations are expected to continue to decrease further downgradient, as is presently observed. The area south of Block Q, where the former butadiene adsorption-distillation plant was located, has elevated benzene in C-26 and TtC-31S. This area also has 633 μg/L TPH as gasoline (TPH-g) in TtC-31S and 530 μg/L in C-26, in October 2011; the source of gasoline is partly recent, as evidenced by the MTBE in these two wells (3.3 to 4.4 μg/L in October 2011). The presence of the TPH-g retards the degradation of benzene, since it is retained in the hydrocarbon phase, and is slowly dissolving into the groundwater. Benzene degradation is occurring downgradient of these wells, as shown by the non-detected benzene in TtC-39.

Naphthalene

Areas with elevated naphthalene occur in more limited parts of the areas with benzene, and in one additional area near a former gasoline UST leak (TtC-43). The naphthalene areas are more localized, which is consistent with naphthalene's slower migration rate due to its greater affinity for sorption to organic matter. The sources in the southern part of Sector D and near TtC-43 have been removed. Further degradation of naphthalene is expected under the sulfate-reducing conditions present on the southern part of Sector D and the central and eastern part of Sector C. Source removal has also been conducted near well A-2 and may occur in the future in the upgradient area beneath Ramirez Street. The other area with elevated naphthalene is localized around well TtO-1 on Sector C. The naphthalene concentrations in this area would be expected to degrade slowly as the TPH gasoline degrades further. The presence of the TPH-g also retards the degradation of naphthalene, since it is partly retained in the hydrocarbon phase, and is slowly dissolving into the groundwater.

PCE and Breakdown Products

As discussed previously, PCE has been decreased in all but three shallow wells (TtD-10, TtD-7, and TtD-21S). The PCE sources were removed on Sector E and no PCE was detected in the Sector E wells sampled in October 2011. Two of the wells are in the former settling pits, which is the only area on the Site where PCE and all of its breakdown products are present due to the strong sulfate-reducing conditions in that area. TCE and three breakdown products are present on most of Sector D and the eastern portion of the downgradient parts of the Aliso Site. However, TCE above 5 μg/L occurred only in wells on the middle part of Sector D, the eastern part of Sector E, and in two downgradient wells (TtB-7 and TtA-6S). TCE is not detected in most of the Sector A wells, where it has been replaced by its breakdown products, mostly cis-1,2-DCE. VC was more prevalent in the eastern part of Sector C where sulfate-reducing conditions exist.

No PCE was detected in the 16 deep wells sampled in October 2011 and only low concentrations of TCE were detected in six of these deep wells. Cis-1,2-DCE was detected more frequently than trans-1,2-DCE. In the 4th Quarter 2011 data, VC was detected in three deep wells in the northeast part of Sector C (TtA-5D, TtA-6D, and TtC-27D) and one other deep well (TtC-31D) on the eastern side of Sector C. The latter well has an overlapping screen with the shallow well, and the screen is only one foot deeper. The VC concentrations have been declining since 2000 and have been less than 5 µg/L since 2006. In addition, the solvent-related compounds were not detected in the furthest downgradient well (TtC-39), and not in the two wells along First Street (in TtC-37 since May 2006, and in TtC-38 since January 2009), although the latter two wells were not accessible in 2010 or later.

The remaining breakdown products, cis-1,2-DCE and trans-1,2-DCE, would be expected to continue to degrade to VC under the sulfate-reducing conditions present across most of the Aliso Site. There is insufficient soluble iron to promote the anoxic oxidation of VC to CO_2, and the complete mineralization to ethene is slow under sulfate-reducing conditions. The addition of ORC® to former source areas on Sectors E and D would promote aerobic oxidation of VC in those localized areas until the added DO was consumed. The presence of DO in some wells south of Block Q is also promoting oxidation of VC and/or co-metabolic degradation using BTEX or other hydrocarbons as a carbon source, as identified by Wiedemeier and others [1998].

Table 6-1
Nitrate, Sulfate, and Sulfide Data for Selected Wells in 2004
Former Aliso Street MGP Site, Los Angeles, California

Well	Date	Nitrate as N, ug/L	Sulfate, mg/L	Sulfide, mg/L
TtB-2S	10/7/2004	NS	394	<0.01
TtC-27	10/6/2004	<0.05	397	196
TtC-29D	10/6/2004	<0.05	291	273
TtC-29S	10/6/2004	<0.05	515	71.2
TtC-30	10/5/2004	0.1	295	93.3
TtC-31D	10/7/2004	<0.05	227	71.2
TtC-31S	10/7/2004	<0.05	340	136
TtC-32	10/4/2004	0.7	221	55
TtC-33	10/4/2004	0.5	769	136
TtC-34	10/5/2004	0.08	1,348	73.8
TtC-35	10/6/2004	<0.05	1,090	15.5
TtC-36	10/4/2004	<0.05	1,660	<0.01
TtC-37	10/4/2004	0.1	428	0.067
TtC-38	10/4/2004	0.4	278	<0.01
TtC-39	10/5/2004	0.1	219	<0.01
TtC-40D	10/1/2004	<0.05	3	381
TtC-40S	10/1/2004	<0.05	179	249
TtC-41D	10/1/2004	<0.05	317	354
TtC-41S	10/1/2004	<0.05	569	195
TtC-42	10/5/2004	<0.05	1,360	23.7
TtC-43	10/6/2004	<0.05	660	98.9
TtC-44	10/5/2004	<0.05	1,300	219

Table 6-2
2001-2002 Nitrate, Sulfate, and Sulfide Data for Selected Wells
Former Aliso Street MGP Site, Los Angeles, California

Well	Date	Nitrate as N, mg/L	Sulfate, mg/L	Sulfide, mg/L
E-2	6/6/2002	0.4	1,090	<0.05
E-2	6/14/2002	1.8	1,080	7.3
E-4	6/5/2002	<0.1	985	25
E-5	6/5/2002	0.4	713	<0.05
TtA-4D	3/19/2001	<0.1	660	34.9
TtA-4S	3/19/2001	<0.1	1,050	<0.05
TtA-5D	3/19/2001	<0.1	175	13.7
TtA-5S	3/19/2001	<0.1	730	12.7
TtA-6D	3/20/2001	<0.1	200	22.2
TtA-6S	3/19/2001	<0.1	365	118
TtA-7	3/19/2001	<0.1	1,150	<0.05
TtD-5	6/6/2002	<0.1	867	<0.05
TtD-6	6/6/2002	<0.1	524	136
TtD-7	6/6/2002	<0.1	287	166
TtD-8	6/6/2002	<0.1	706	<0.05
TtE-6	6/5/2002	2.2	1,660	<0.05
TtE-7	6/5/2002	1.3	1,480	<0.05
TtE-8	6/6/2002	<0.1	959	33
TtG-1	6/4/2002	<0.1	1,660	<0.05
TtG-2	6/6/2002	<0.1	690	75.6
TtK-1	6/4/2002	<0.1	331	154
TtK-2	6/4/2002	<0.1	538	94.8
TtO-1	6/4/2002	<0.1	146	108
TtO-2	6/4/2002	<0.1	153	58.4

Table 6-3
Redox Parameters from April 1999
Former Aliso Street MGP Site, Los Angeles, California

Well No.	Date	pH	DO, mg/L	Sulfate, mg/L	Total Sulfide, mg/L	H_2S, mg/L	Dissolved Iron, mg/L	Fe(II), mg/L	Fe(III), mg/L
A-1	4/14/1999	6.0	0.2	1,386	ND	ND	41	39	<0.1
A-3	4/14/1999	6.7	<0.1	347	46.2	23.1	<0.1	<0.1	<0.1
C-1	4/14/1999	6.6	<0.1	673	130.8	61.5	0.27	<0.1	0.27
C-3	4/14/1999	6.8	<0.1	489	176.9	134.5	0.26	<0.1	0.26
C-4A	4/14/1999	6.9	<0.1	61.2	207.7	110.1	<0.1	<0.1	<0.1
C-6	4/14/1999	6.8	<0.1	358	164.6	108.7	0.3	<0.1	0.3
D-4	4/14/1999	6.6	<0.1	812	152.3	105.9	<0.1	<0.1	<0.1
E-3	4/14/1999	6.3	<0.1	833	1.5	1.3	0.17	<0.1	0.17

Note: DO means Dissolved Oxygen, expressed in milligrams per liter (mg/L)

Table 6-4
Redox Parameters from Summer 1999
Former Aliso Street MGP Site, Los Angeles, California

Well No.	Date	pH	DO, mg/L	Sulfate, mg/L	Total Sulfide, mg/L	Dissolved Iron, mg/L
A-2	8/9/1999	6.92	<0.1	41	7.68	0.098
C-8	7/27/1999	6.99	<0.1	403	29.7	<0.1
C-9	7/27/1999	7.53	1.0	74	<0.05	<0.1
C-11	7/27/1999	6.95	<0.1	304	5.2	<0.1
C-16	7/27/1999	7.21	<0.1	180	61.7	<0.1
C-17	7/27/1999	7.47	<0.1	226	<0.05	<0.1
E-1	7/27/1999	6.71	<0.1	493	<0.05	17.9

Table 6-5. Summary Table for Linear Regression Analyses to Estimate Degradation Rates for 1996-2010 and 2005-2010

Chemical	Time Period	No. of Decreasing Wells	Degradation Rate in µg/day, Well, and (R^2 value)	
			Minimum	Maximum
Benzene	1996-2010	66	-0.000193 TtD-17 (0.32)	-1.33 TtD-21S (0.28)
	2005-2010	42	-0.00018 TtD-20D (0.21)	-0.89 TtC-40D (0.56)
Naphthalene	1996-2010	34	-0.00045 TtA-6D (0.38)	-8.13 TtC-44 (0.69)
8260	2005-2010	26	-9.9 TtC-44 (0.82)*	-0.0005 TtB-6 (0.31)
Naphthalene	1996-2010	28	-0.0048 TtD-6 (0.26)	-9.31 C-5 (0.78)
8310	2005-2010	17	-10.1 TtC-44 (0.77)	-0.0026 C-4A (0.20)
PCE	1996-2010	18	-0.0002 C-8A (0.20)	-0.411 E-3 (0.47)
	2005-2010	8	-0.00037 C-6 (0.28)	-0.16 TtD-17 (0.43)
TCE	1996-2010	50	-7.7 E-05 A-3 (0.30)	-0.627 E-3 (0.61)
	2005-2010	32	-0.00015 C-20S (0.14)	-0.348 TtD-18 (0.82)

*Data for C-16 not used

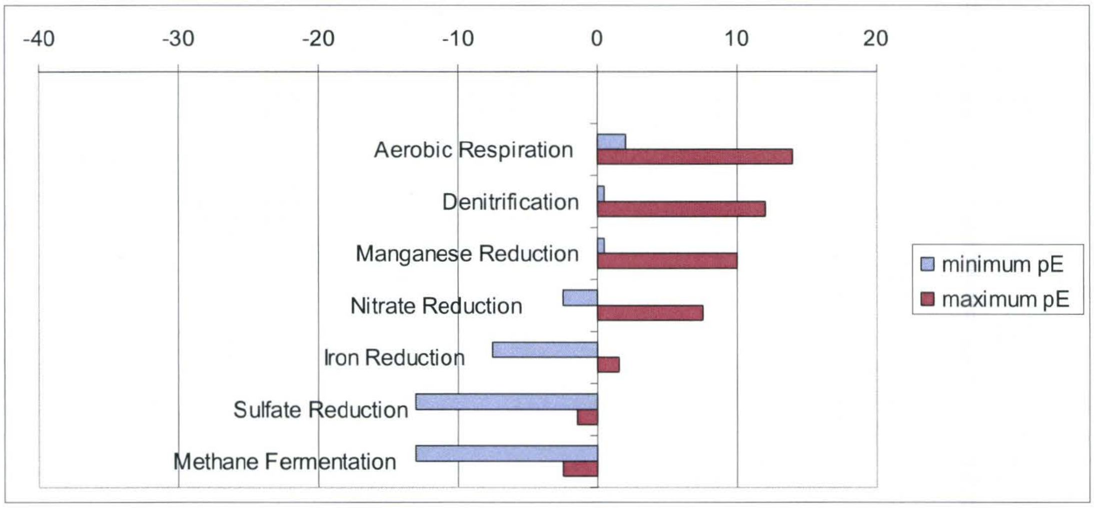


Figure 6-1. Sequence of Aerobic and Anaerobic Pathways for Degradation (after Wiedemeier et al, 1995)

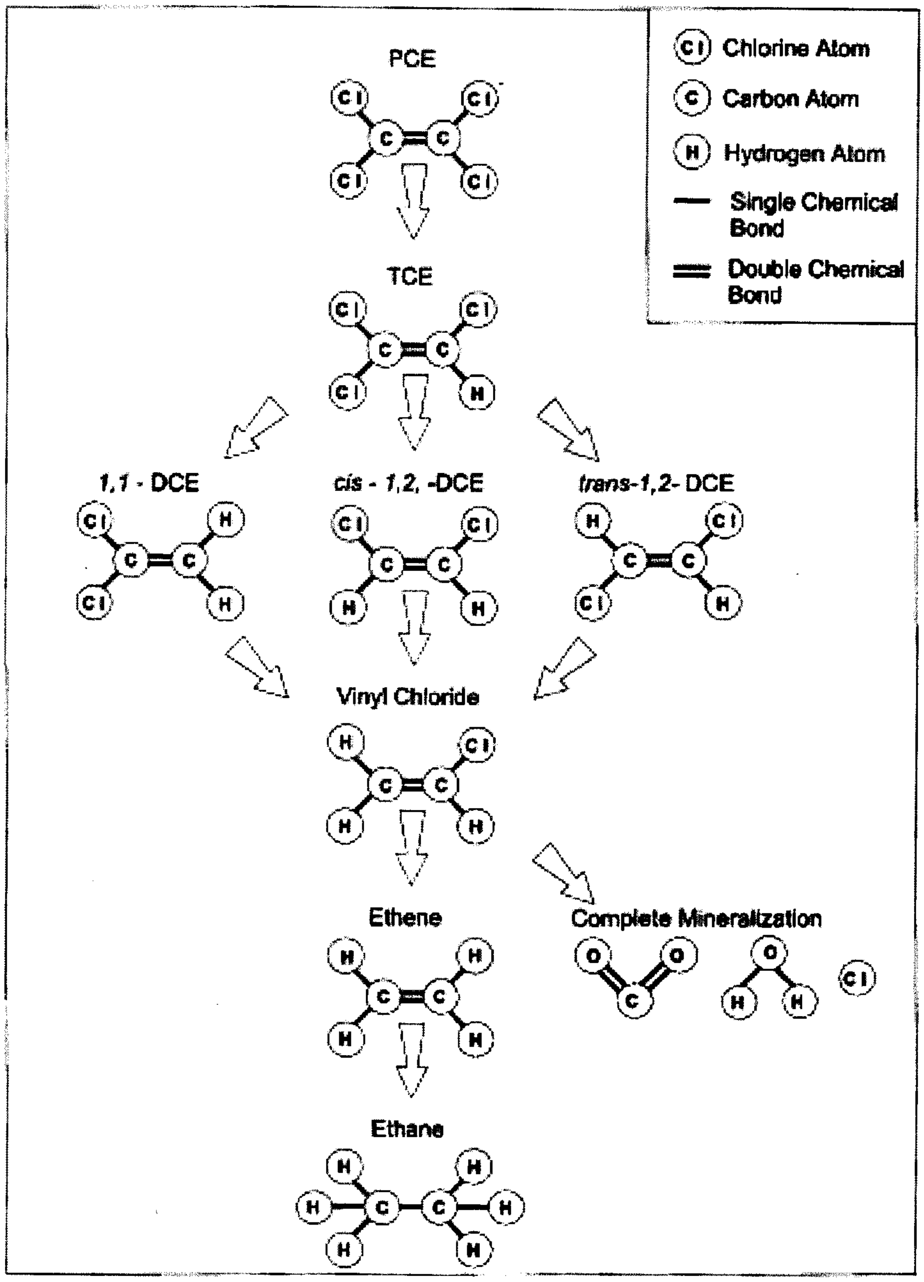


Figure 6-2. Reductive Dechlorination of Chlorinated Ethenes, PCE and TCE

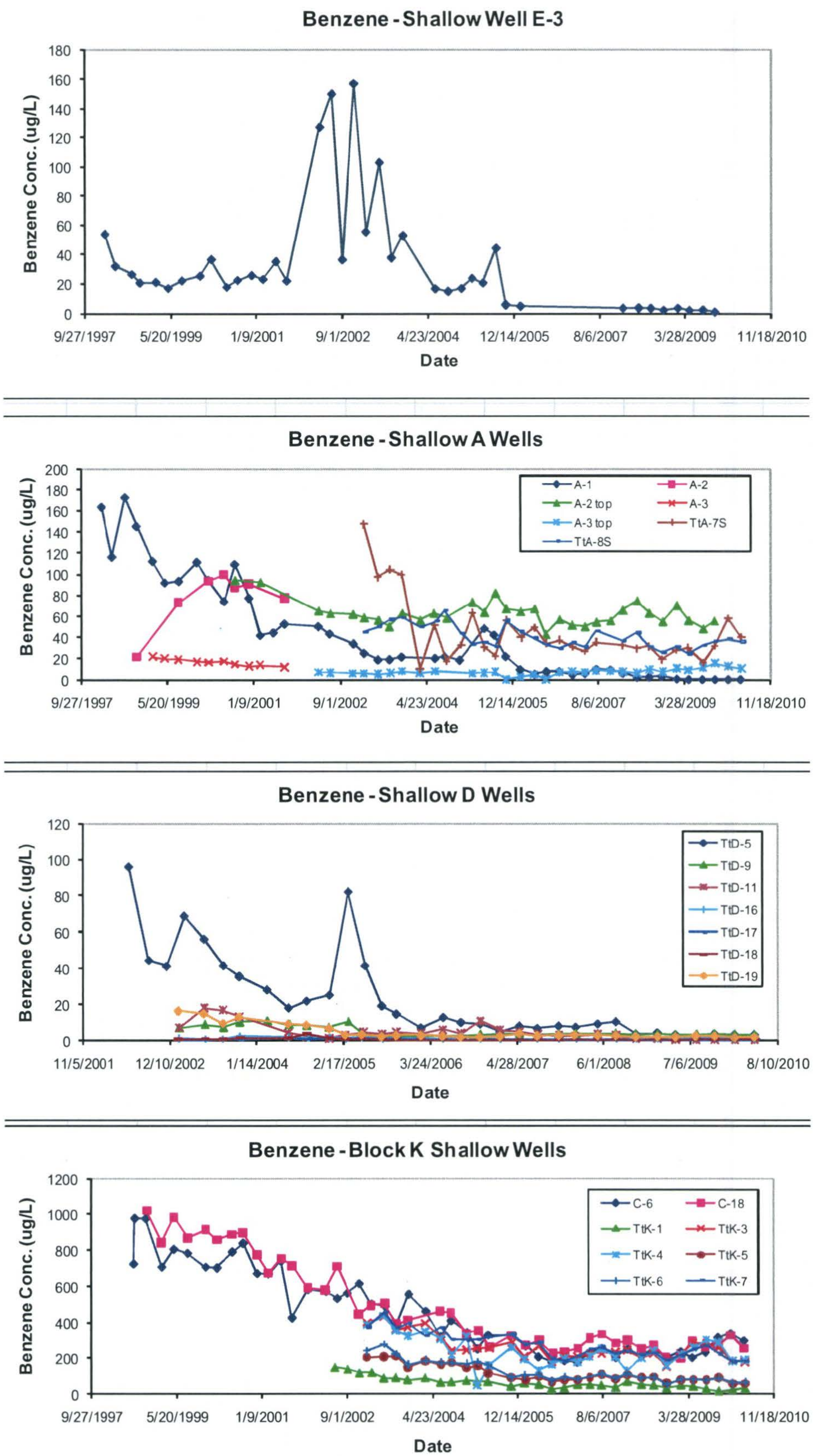


Figure 6-3. Benzene Concentrations over Time at Selected Sector E, D, A, and Block K Wells

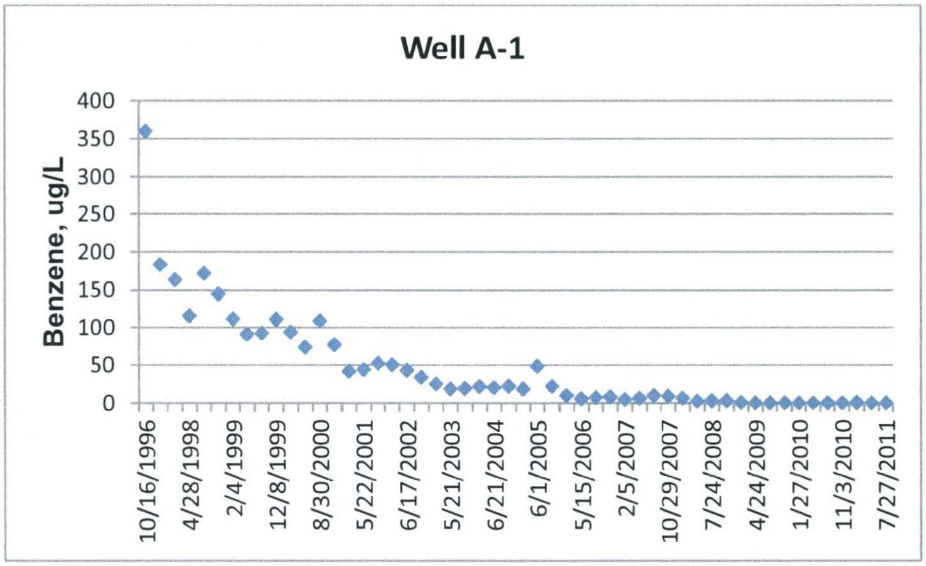
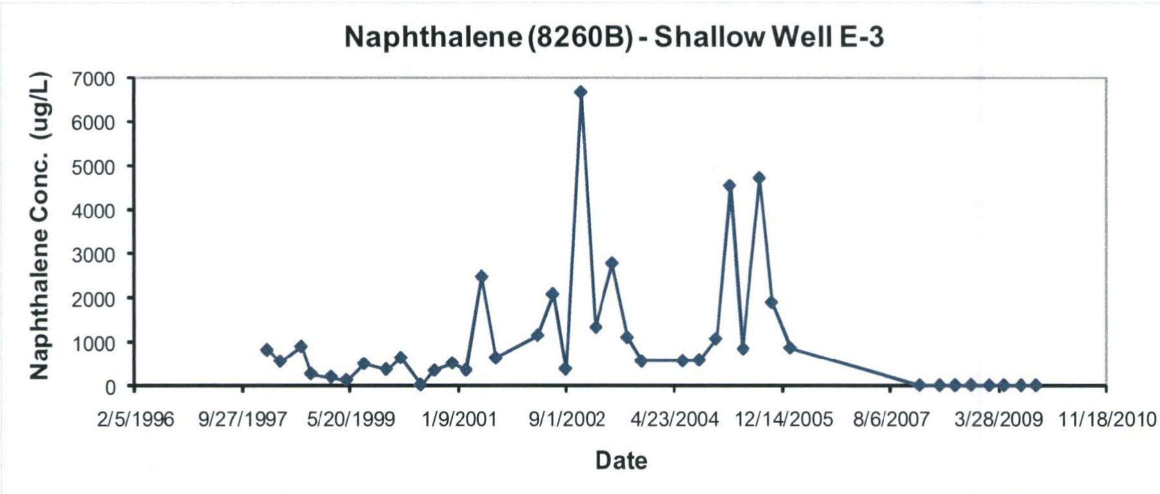
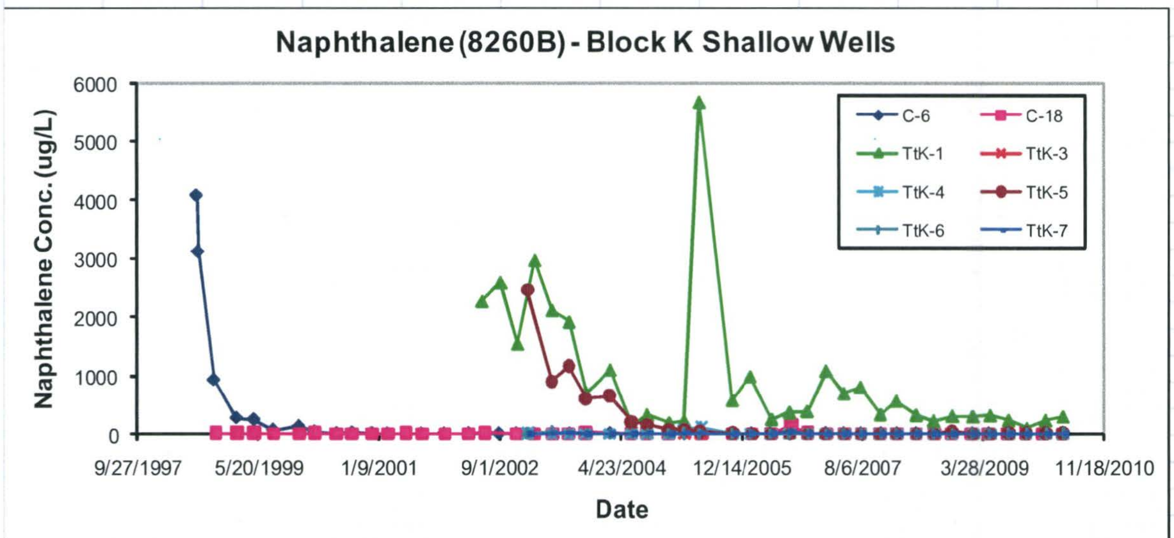


Figure 6-4. Benzene Concentrations in Well A-1





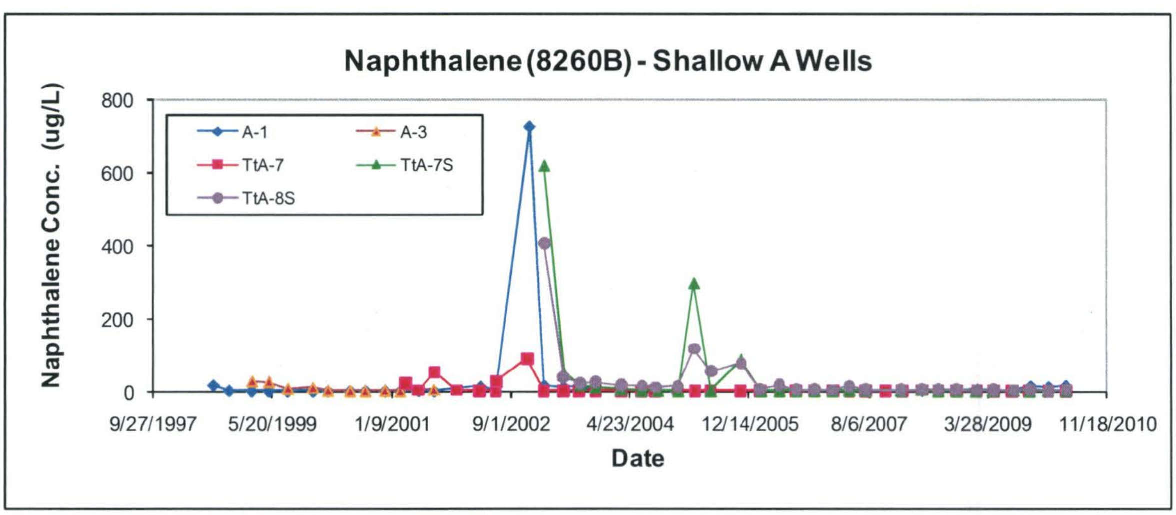
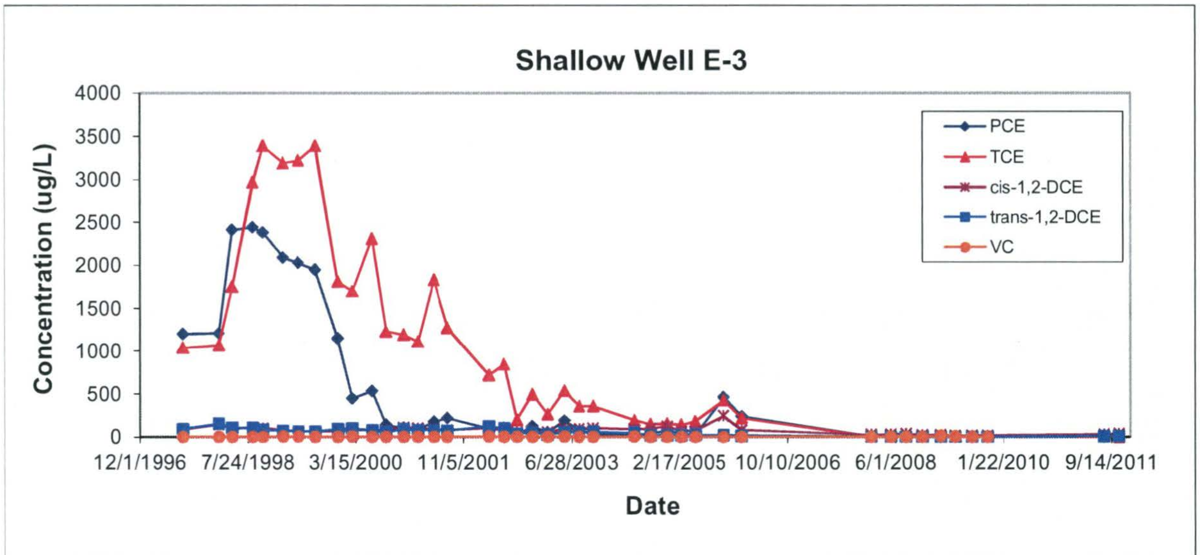


Figure 6-5. Examples of Changes in Naphthalene Concentrations over Time



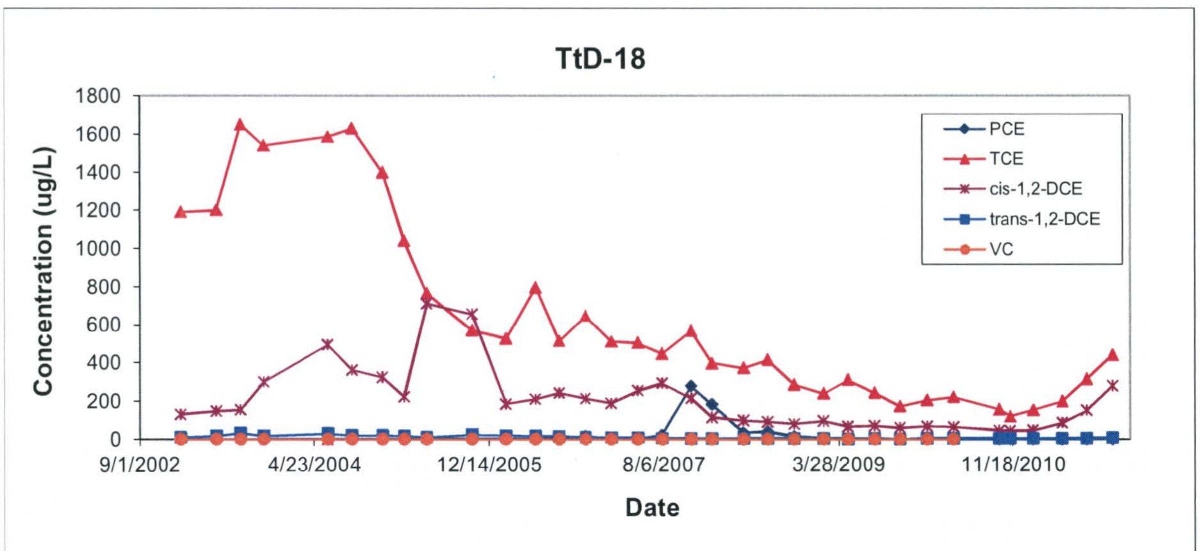
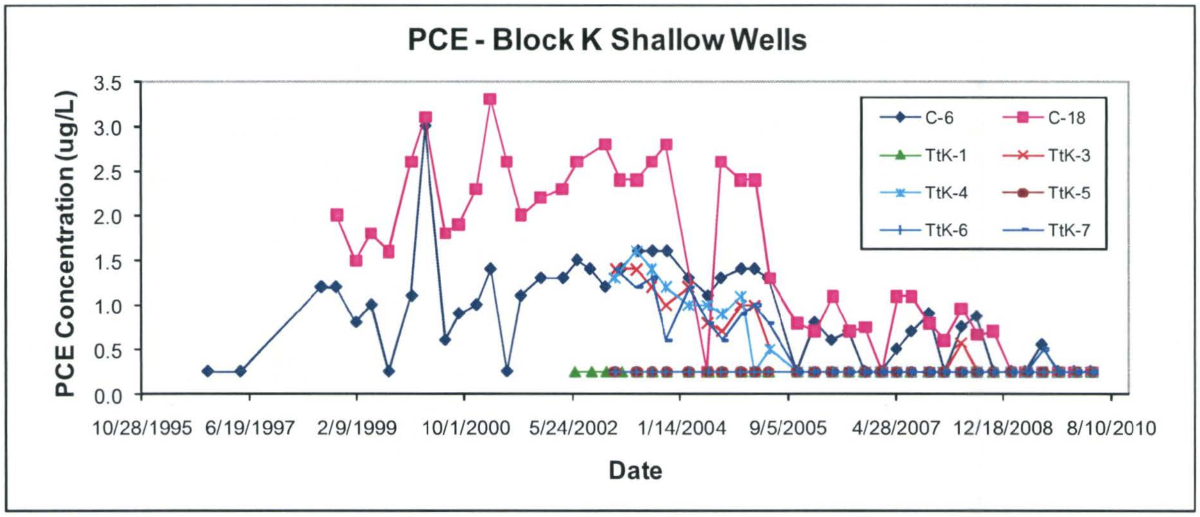
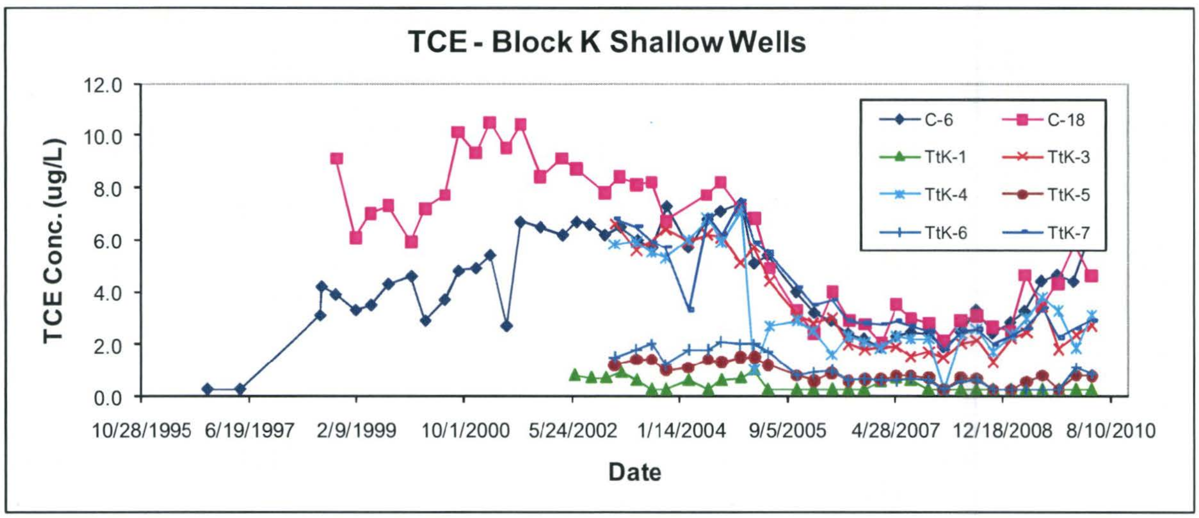


Figure 6-6. Changes in Solvent Concentrations in Well E-3 (and TtE-3R2) and TtD-18





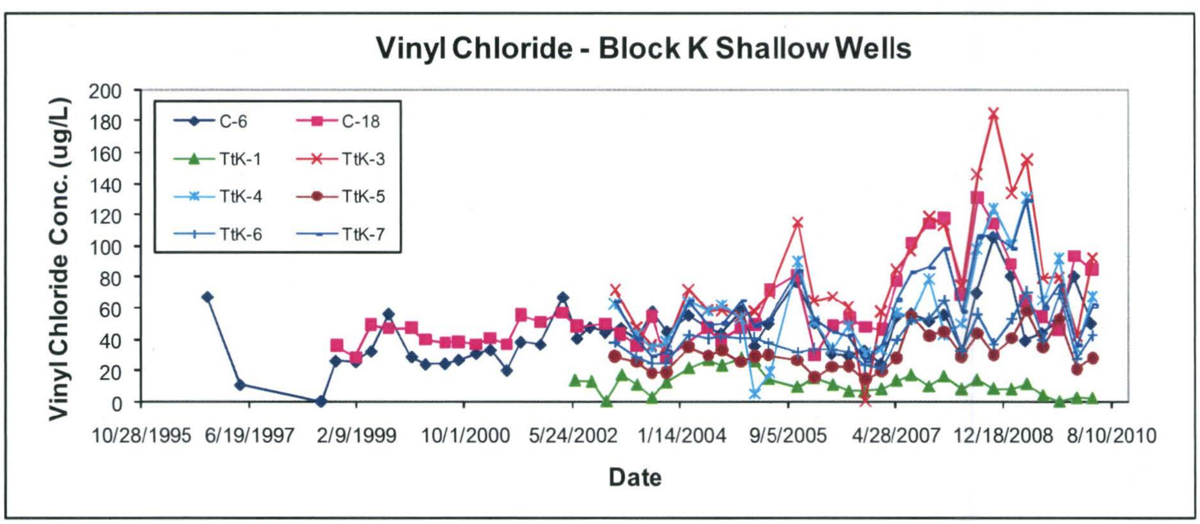


Figure 6-7. Changes in PCE, TCE, and VC in Shallow Block K Wells

7. CONCLUSIONS AND RECOMMENDATIONS

7.1 CONCLUSIONS

The remediation of contaminated soil and soil vapor at the Site has removed over 5,950 lbs of benzene, 68,100 lbs of naphthalene, 921 lbs of tetrachloroethene (PCE), and 79 lbs of trichloroethylene (TCE), as well as other compounds including dicyclopentadiene (DCPD) and total petroleum hydrocarbons (TPH) from the source areas with the largest mass of chemicals in the soil in Sectors A, D, and the 490 and 496 Bauchet Street properties of Sector E. These remediation actions removed between 88% and 99% of the mass of benzene and naphthalene in soil on Sectors A and D, and on the 490 and 496 Bauchet Street properties of Sector E. A significant mass of PCE and TCE, originally present in soil and soil gas on the 490 and 496 Bauchet Street properties, also was removed.

Natural attenuation is occurring in the groundwater for the compounds evaluated in this report (e.g., benzene, naphthalene, PCE, and TCE). Most of the Aliso Site groundwater is under anaerobic conditions with SO_4-reduction being the dominant reaction. Benzene and naphthalene can be biodegraded under both aerobic and anaerobic conditions, although at different rates. Under anaerobic conditions, PCE can break down via reductive dechlorination to TCE, followed by a series of by-products including cis-1,2-dichloroethene (DCE), trans-1,2-DCE, and vinyl chloride (VC). This process has been occurring in the Site groundwater, but as is common when conditions become increasingly anaerobic, the degradation rate has slowed, thus allowing cis-1,2-DCE and VC to accumulate on the downgradient areas of the Site (mainly in Sector C). Other types of reactions also can degrade DCE and VC under both aerobic and anaerobic processes, as was discussed in Section 6. The areas furthest downgradient of the Site have sufficient dissolved oxygen (DO) in the groundwater to allow aerobic degradation reactions of VC to occur in the saturated and unsaturated zones, as is discussed further in Appendix D.

The combination of active remediation and natural attenuation has been sufficient to prevent migration of benzene downgradient of Banning Street, with the one exception when benzene was detected at 0.55 µg/L in October 2009 in the furthest downgradient Well TtC-39. It is important to note that this concentration was less than the California MCL of 1 µg/L.

Naphthalene can also be biodegraded under both aerobic and anaerobic conditions. The degradation rate has been sufficiently high to control migration to the furthest downgradient wells. For the 5-year period of 2009 to 2012, there was no naphthalene detected in the downgradient wells south of 1st Street. In Well TtC-37, located on 1st Street, naphthalene was detected in May 2006 (1.3 µg/L), but not again through at least January 2008, when reconstruction of the 1st Street Bridge and construction of the 1st Street Bridge Viaduct prevented access to the well. The well was presumed to be destroyed, so it was replaced in 2013. Naphthalene was not detected in groundwater samples from the new Well TtC-45 on 1st Street nor in groundwater samples from wells TtC-37R2, TtC-46R, and TtC-47R south of 1st Street in October 2013, as discussed in the 2013 Annual Groundwater Monitoring Report [Tetra Tech, 2014].

Neither PCE nor TCE is associated with and is not a byproduct of former MGP or butadiene operations, but both solvents were used by third parties at later dates after closure of these operations. PCE and TCE have been biodegraded by dechlorination to cis-1,2-DCE, trans-1,2-DCE, and VC in the Aliso Site groundwater. The transformation of PCE and TCE is favored by the reducing (i.e., anaerobic) conditions prevalent in the groundwater, which explains why there are higher concentrations of cis-1,2-DCE than trans-1,2-DCE near the former source areas on Sector E. The concentrations of cis-1,2-DCE and trans-1,2-DCE decrease further downgradient as these compounds are converted to VC. This later stage breakdown product (i.e., VC) is present at higher concentrations in wells on the eastern part of the Site from the Agnes Cline Tract south to Banning Street. It should be noted that there are multiple reactions that can degrade VC under both aerobic and iron-reducing conditions, and that none of the breakdown products of PCE or TCE (including VC) have been detected in the furthest downgradient Well TtC-39 south of Banning Street, which we attribute in part to the higher DO concentrations in the area south of 1st Street.

7.2 RECOMMENDATIONS

There are two areas on the Aliso Site with a thin layer of free product on top of the water table; one area is in wells A-2 and A-3 in Sector A East and wells TtA-7S and TtA-8S under Ramirez Street, and the other area is in Well TtD-10 in Sector D. The free product layer is very thin and is potentially amenable to passive adsorption.

The residual free product in Well TtD-10 in Sector D contains DCPD. It is recommended that a lab study be done to evaluate if the addition of oxygen releasing compounds will be useful in reduction of DCPD concentrations[1]. For the meantime, the MNA process will be monitored for this area of the Site similar to all other areas.

As discussed in the 2011 and 2012 annual groundwater monitoring reports and based on the DTSC's approval, starting from 2013, groundwater gauging and sampling of the Aliso Site wells will be on an annual basis in the Fall season of each calendar year as part of a 3-year trial evaluation. The list of the wells that continue to be sampled (in the Fall 2013 and following years) are shown on Figure 7-1 and are listed in Table 7-1. A total of 78 wells will be monitored annually during the Fall Season. The number of wells to be sampled may be modified after further evaluation and consultation with the DTSC based on site conditions, accessibility, and the results of data collected each year.

Per the DTSC's recommendation, 10 wells will also be measured in the Spring of each year to measure water levels and to determine if chemical concentrations will increase due to higher water levels as the result of recharge events. The wells to be sampled in the Spring Season are: E-1S, E-

[1] Laboratory experiments with DCPD showed that it is recalcitrant in the soil and water environment [Shen et al, 1998]. However, microbes taken from hydrocarbon-contaminated soil were able to generate oxygenated derivatives of DCPD, although only a small amount was fully degraded to CO_2 [Stehmeier, et al, 1996 and 1999]. The lab studies suggest that adding oxygen may be beneficial by increasing degradation as explained further in Appendix C.

1D, TtE-6, TtB-1, TtC-29D, TtC-31D, TtC-32R, TtC-36, TtC-45, and TtC-47R (replaced well for TtC-39).

Due to construction of new buildings along South Santa Fe Street, the most downgradient Well TtC-39 was not accessible after May 2012. In August 2013, three new replacement wells were installed south of 1st Street so that the groundwater conditions downgradient of the Site can be evaluated. Well TtC-39 was replaced by new Well TtC-47R located north of 2nd Street on Vignes Street. In addition, Well TtC-37 was replaced by new Well TtC-37R2 located south of 1st Street on Vignes Street. A third new Well TtC-46R was installed along the east-west alleyway between Vignes Street and Santa Fe Avenue that is south of 1st Street and north of 2nd Street.

The groundwater data for a 5-year period, from 2011 through 2015, as well as sampling frequency will be re-evaluated after completion of CY 2015 groundwater monitoring.

It is recommended that the Aliso site groundwater continue to be monitored for the chemicals listed below to evaluate conditions due to MNA. In addition, measurements should continue to be made in the field at the time of sampling after checking that the groundwater conditions are stable for specific conductivity, temperature, pH, DO, and turbidity. The groundwater samples should be measured in the laboratory for:

- VOCs by EPA Method 8260B, including naphthalene and DCPD;
- The 16 PAHs by EPA Method 8310; and
- TPH by EPA Method modified 8015 for gasoline, diesel, and heavy hydrocarbons.

These three sets of laboratory analyses cover the compounds that are recommended to be monitored at the Aliso Site. TPH is monitored to keep track of the migration of dissolved hydrocarbons, which influences migration of some of the dissolved compounds such as benzene and naphthalene.

Parameters that can track the redox conditions governing natural attenuation at the Site should be measured periodically (e.g., on a biennial basis) at a subset of wells. The parameters include: DO, pH, SO_4, sulfide, NO_3, dissolved iron, and manganese. The purpose is to determine if redox conditions in the groundwater have changed, which influences the degradation rate of the chemicals (e.g., benzene, naphthalene) evaluated here. Ten wells have been selected to be sampled. The selection criteria include wells with high concentrations of benzene and VC and the furthest downgradient wells. The proposed wells are: TtE-5R, TtD-14, TtD-15, TtA-7S, TtB-7, TtC-21S, TtC-40S, TtC-45, TtC-47R (replaced well for TtC-39), and the new upgradient well, E-1S. The data from the redox measurements would be used to determine the dominant redox conditions in the groundwater using the spreadsheet program of Jurgens and others [2009]. The MNA evaluation will be reported in future annual groundwater reports for the Aliso Site.

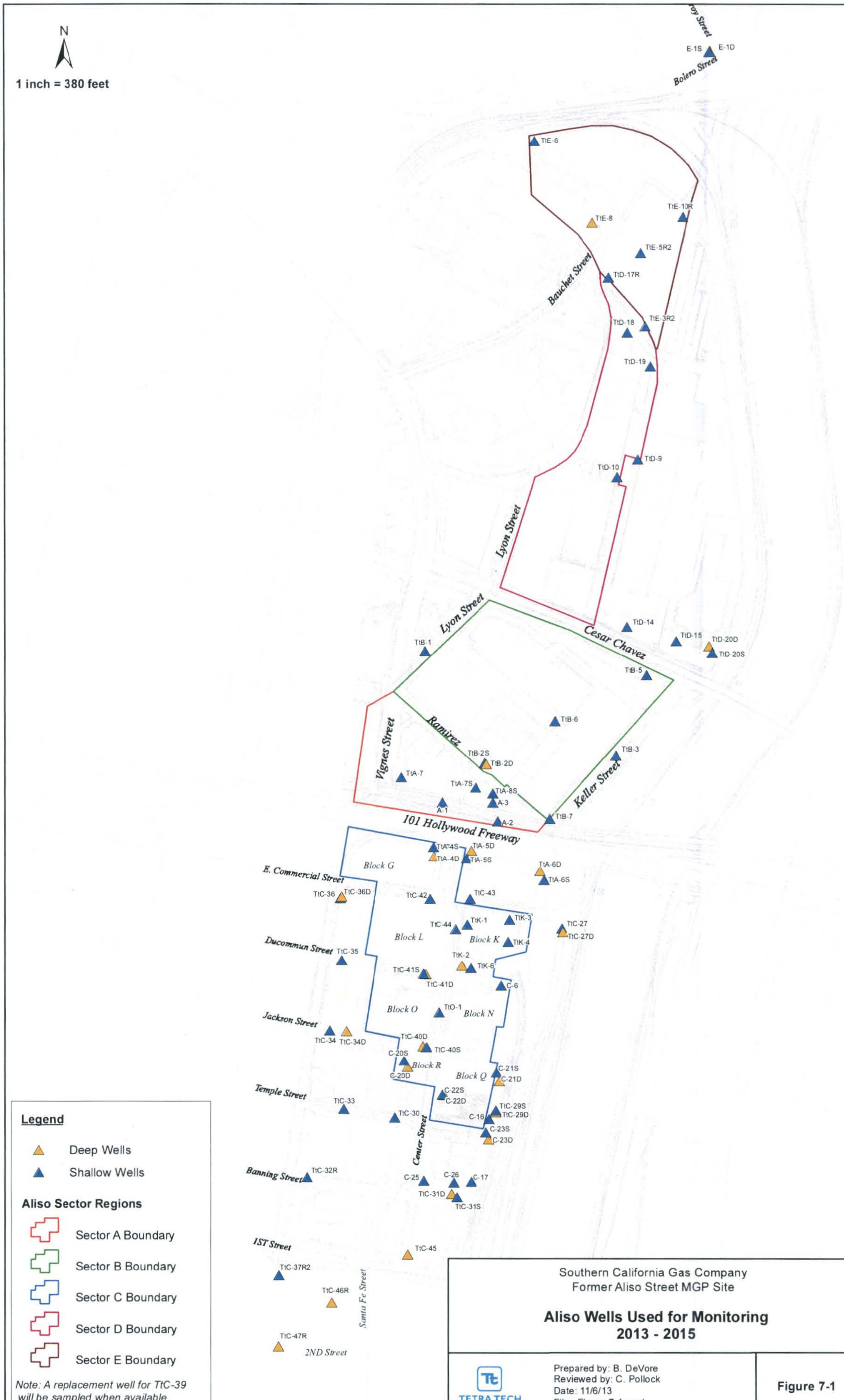
Table 7-1
Status of Wells to be Used for Monitoring in 2013-2015
Former Aliso Street MGP Site, Los Angeles, California

Well Name	Owner	Sector	Monitored at Least Once in CY 2011	Well Diameter, inches	Well Depth (feet bgs)	Screened Interval (feet bgs)
A-1	SCG	A	X	4	40	24-39
A-2	SCG	A	X	4	41	25-40
A-3	SCG	A	X	4	40	25-40
TtA-4D	SCG	A	X	4	92.5	72.5-92.5
TtA-4S	SCG	A	X	4	40	20-40
TtA-5D	SCG	A	X	4	92.5	72.5-92.5
TtA-5S	SCG	A	X	4	41	21-41
TtA-6D	SCG	A	X	4	92.5	72.5-92.5
TtA-6S	SCG	A	X	4	42	22-42
TtA-7	SCG	A	X	4	45	20-45
TtA-7S	SCG	A	X	4	38.5	18.5-38.5
TtA-8S	SCG	A	X	4	38.5	18.5-38.5
TtB-1	SCG	B	X	4	42	20.5-40.5
TtB-2D	SCG	B	X	4	100.5	85.5-96
TtB-2S	SCG	B	X	4	41.5	21-41
TtB3	SCG	B	X	4	44	21.5-42
TtB-5	SCG	B	X	4	45.5	24-44
TtB-6	SCG	B	X	4	48	26-48
TtB-7	SCG	B	X	4	44.5	22-42
C-6	MTA	C	X	2	62	29-59
C-16	SCG	C	X	4	60	33-53
C-17	SCG	C	X	4	55	37.5-57.5
C-20D	SCG	C	X	4	69.8	60-70
C-20S	SCG	C	X	4	48.5	27-47
C-21D	SCG	C	X	4	72.5	62-72
C-21S	SCG	C	X	4	44.3	22-42
C-22D	SCG	C	X	4	62.1	52-62
C-22S	SCG	C	X	4	45	25-45
C-23D	SCG	C	X	4	70	60-70
C-23S	SCG	C	X	4	45	25-45
C-25	SCG	C	X	4	60	33-53
C-26	SCG	C	X	4	53	33-53
TtC-27	SCG	C	X	4	45	24-44
TtC-27D	SCG	C	X	4	91	78-88
TtC-29D	SCG	C	X	4	78	67-77
TtC-29S	SCG	C	X	4	49	27.5-47.5
TtC-30	SCG	C	X	4	50	29-49
TtC-31S	SCG	C	X	4	57.5	36.5-56.5
TtC-31D	SCG	C	X	4	63	47.5-57.5
TtC-32R	SCG	C	X	4	52	31-51
TtC-33	SCG	C	X	4	50	29-49
TtC-34D	SCG	C	X	4	67	52-62
TtC-34	SCG	C	X	4	46	26-46
TtC-35	SCG	C	X	4	43.5	22-42

Table 7-1
Status of Wells to be Used for Monitoring in 2013-2015
Former Aliso Street MGP Site, Los Angeles, California

Well Name	Owner	Sector	Monitored at Least Once in CY 2011	Well Diameter, inches	Well Depth (feet bgs)	Screened Interval (feet bgs)
TtC-36D	SCG	C	X	4	81	70-80
TtC-36	SCG	C	X	4	45	24.5-44.5
TtC-37R2	SCG	C	No[a]	4	70	45-65
TtC-40D	SCG	C	X	4	66	55-65
TtC-40S	SCG	C	X	4	45	23-43
TtC-41D	SCG	C	X	4	80	60-75
TtC-41S	SCG	C	X	4	41	20-40
TtC-42	SCG	C	X	4	42.5	21-41
TtC-43	SCG	C	X	4	47.5	27-47
TtC-44	SCG	C	X	4	40.5	20.5-40.5
TtC-45	SCG	C	X	4	66	55-65
TtC-46R	SCG	C	No[a]	4	95	75-95
TtC-47R	SCG	C	No[a]	4	97.4	77-97
TtK-1	SCG	C	X	4	44	24-44
TtK-2	SCG	C	X	4	84	74-84
TtK-3	SCG	C	X	4	42.5	22.5-42.5
TtK-4	SCG	C	X	4	42.5	22.5-42.5
TtK-6	SCG	C	X	4	45	25-45
TtO-1	SCG	C	X	4	42	33-43
TtD-9	SCG	D	X	4	46	26-46
TtD-10	SCG	D	X	4	47.5	26-46
TtD-14	SCG	D	X	4	45	25-45
TtD-15	SCG	D	X	4	46	26-46
TtD-17R	SCG	D	X	4	40	19-40
TtD-18	SCG	D	X	4	43	23-43
TtD-19	SCG	D	X	4	44	24-44
TtD-20 D	SCG	D	X	4	102.7	92.5-102.5
TtD-20 S	SCG	D	X	4	44.7	25-45
E-1D	SCG	E	X	4	97	83-93
E-1S	SCG	E	X	4	55	15-35
TtE-3R2	SCG	E	X	4	43.5	22-42
TtE-5R2	SCG	E	X	4	42.5	22-42
TtE-6	SCG	E	X	4	44.1	24-44
TtE-8	SCG	E	X	4	104.7	89.5-104.5
TtE-10R	SCG	E	X	4	45	24-44

Notes: [a]Three new replacement wells were installed in August 2013. Well TtC-39 may be sampled if accessible in future.



Southern California Gas Company
Former Aliso Street MGP Site

Aliso Wells Used for Monitoring
2013 - 2015

TETRA TECH

Prepared by: B. DeVore
Reviewed by: C. Pollock
Date: 11/6/13
File: Figure 7-1.mxd

Figure 7-1

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Southern California Gas Company

2012 ANNUAL GROUNDWATER MONITORING REPORT
for FORMER ALISO STREET MGP SITE
LOS ANGELES, CALIFORNIA

JUNE 2013

Tetra Tech, Inc.
Pasadena, CA

2012 ANNUAL GROUNDWATER MONITORING REPORT

FOR

FORMER ALISO STREET MGP SITE
LOS ANGELES, CALIFORNIA

Prepared for

Southern California Gas Company

Prepared by

TETRA TECH, INC.
Pasadena, California

JUNE 2013

TETRA TECH

June 19, 2013 100-PEN-T30816

Dr. Masood Hosseini
Senior Project Manager
Site Assessment and Mitigation
Southern California Gas Company
555 West Fifth Street, GT16G2
Los Angeles, California 90013-1011

Subject: 2012 Annual Groundwater Monitoring Report
Former Aliso Street MGP Site, Los Angeles, California
Master Agreement No. 6160015094, Service Release No. 5660028387

Dear Dr. Hosseini:

Enclosed is one copy of the 2012 Annual Groundwater Monitoring Report (Report) for the former Aliso Street Manufactured Gas Plant (MGP) Site. The Report is a compilation of all groundwater monitoring data that has been collected during calendar year 2012. The report format matches that for the 2011 Annual Groundwater Monitoring Report. Comments received for 2011 report have been incorporated into this report as well.

Per your instruction, we will submit to the Department of Toxic Substances (DTSC) three hard copies. Two copies will be sent to the attention to Dr. Chand Sultana and one copy to Dr. Kimiko Klein, for their review and approval. An electronic copy will be uploaded to DTSC's EnviroStor.

If you have any questions regarding this report, please call me at (626) 470-2462.

Respectfully submitted,
TETRA TECH, INC.

Salar D. Niku, P.E.
Project Manager

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2012 ANNUAL GROUNDWATER MONITORING REPORT
FORMER ALISO STREET MGP SITE
LOS ANGELES, CALIFORNIA

Prepared for

Southern California Gas Company
555 West Fifth Street
Los Angeles, California 90013-1011

Prepared by
Tetra Tech, Inc.
3475 East Foothill Boulevard
Pasadena, California 91107

Master Agreement No. 6160015094
Service Release No. 5660028387
Tetra Tech Project No. 100-PEN-T30816

June 2013

Karen V. Summers

Salar Niku

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TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

LIST OF TABLES

LIST OF FIGURES

TABLE OF CONTENTS (Continued)

LIST OF FIGURES (Continued)

NOTE: All figures and tables are at end of the section, unless otherwise noted

LIST OF APPENDICES

This 2012 Annual Groundwater Monitoring Report (Report) for the former Aliso Street MGP Site (Site) has been prepared by Tetra Tech, Inc. on behalf of Southern California Gas Company (SCG). Salar Niku, P.E. was the Project Manager and Karen Summers, P.G. and Clifford Pollock, P.E., C.Hg. were the principal authors of the Report.

Field sampling was done by EnviroMonitoring Services of Laguna Hills, California, who was a subcontractor to American Environmental Testing Laboratory, Inc., directly contracted by SCG.

All work was executed under the direction of Dr. Masood Hosseini, the SCG Senior Project Manager, who directed the work under the supervision of Dr. Todd Sostek, the SCG Manager of Site Assessment and Mitigation.

Dr. Chand Sultana served as the DTSC Project Manager, supported by Mr. Steve McArdle, P.G. (the DTSC Geologist) and Dr. Kimiko Klein (the DTSC Toxicologist).

This 2012 Annual Groundwater Monitoring Report (Report) is submitted by the Southern California Gas Company (SCG) to the Department of Toxic Substances Control (DTSC) to comply with a Voluntary Cleanup Agreement (VCA) [Docket No. HAS-A00\01-173] executed between the DTSC and SCG, dated January 16, 2001 [DTSC, 2001] for the former Aliso Street Manufactured Gas Plant (MGP) site, hereinafter referred to as the "Aliso Site" or "the Site".

Quarterly Monitoring Program

The quarterly groundwater monitoring program was started at the Aliso Site in 1996 and has continued through the present. In this Report, the groundwater monitoring data collected in the Site wells during calendar year (CY) 2012 are summarized.

Groundwater Monitoring Wells

The groundwater monitoring program currently (as of CY 2012) includes 83 wells; 23 deep zone alluvial wells, and 60 shallow zone alluvial wells. Each well typically was gauged, low-flow purged, and sampled on a quarterly basis for volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and total petroleum hydrocarbons (TPH) as gasoline-range organics, diesel-range organics, and heavy hydrocarbons (oil). Table 2-1 in Section 2 lists the Aliso Site wells that were monitored for at least one quarter in CY 2012.

The network of wells used for monitoring has changed over time, as new wells were installed during the remedial investigations and some wells were removed during removal action activities or site redevelopment by property owners. Mostly due to a change in ownership on Block Q, nine Site wells were not accessible for monitoring during the 1st Quarter 2012 monitoring event that was completed in February 2012. One well (TtC-39) was monitored for the first two quarters of CY 2012 but was not accessible after May 2012 because it was within the footprint of a large construction project along South Santa Fe Street. Well TtA-4S was not sampled in the 3rd and 4th quarters of CY 2012 due to a broken casing, which was repaired in November 2012; the well was then sampled. Two wells, TtC-29S and TtC-29D, were added to the monitoring program in August 2012 to provide additional information at the request of DTSC.

CY 2012 Analytical Testing Program

The analytical testing program for the Aliso Site wells for CY 2012 included: VOCs by U.S. Environmental Protection Agency (EPA) Method 8260B with methanol extraction (EPA Method 3550); PAHs by EPA Method 8310; TPH as gasoline-range organics (TPHg) by EPA Method 8015M(G); TPH as diesel-range organics (TPHd) and heavy hydrocarbons (TPHhvy) by EPA Method 8015M(D); and five water quality indicator (WQI) field parameters (i.e., specific conductivity, pH, temperature, turbidity, and dissolved oxygen [DO] content). The WQI parameters were measured in the field using appropriate field meters.

Groundwater Sampling Contractor

The Aliso Site wells have been gauged, low-flow purged, and sampled on a quarterly basis during CY 2012 by EnviroMonitoring Services of Laguna Hills, California, who was a subcontractor to American Environmental Testing Laboratory, Inc. (AETL), under direct contract with SCG.

Groundwater Elevation Maps

As requested by the DTSC, the 4th Quarter 2012 shallow and deep water level elevation maps (Figure 2-1 and 2-2, respectively, in Section 2 of this Report) were generated using a linear TIN method from static water level data that we believe is representative of typical groundwater flow conditions at the Aliso Site in the shallow zone and deep zone alluvium for the fourth quarter of CY 2012. An ArcGIS-compatible MapInfo contouring software (i.e., Vertical Mapper) was used to generate the TIN maps. The overall flow direction in the shallow zone and deep zone alluvium is to the south, but there is a shift from south-southeast across the eastern part of Sector B to south crossing the 101 Freeway. There is an apparent southwestern flow vector on the western side of Sector C, which then shifts to the south. In CY 2012, the depth to static water (DTW) in wells was greater than 25 feet below ground surface (bgs) in all of the wells except Well TtA-7S. The DTWs in this well varied from 23.61 to 23.86 feet bgs, which was the bottom half-foot of the approximately 22- to 24-foot deep smear zone in Sectors A and B. Appendix A includes a summary of the CY 2012 quarterly gauging results for each Aliso Site well.

Groundwater Quality Trends

Groundwater contaminants that were monitored and evaluated at the Aliso Site during CY 2012 included benzene, toluene, ethylbenzene, and xylene isomers (BTEX); methyl-tert-butyl ether (MTBE); and naphthalene. Other contaminants included benzo(a)pyrene (BaP) and other PAHs; TPHg, TPHd, and TPHhvy; dicyclopentadiene (DCPD); the chlorinated solvents tetrachloroethene (PCE) and trichloroethene (TCE); and their degradation daughter products cis-1,2-dichloroethene (DCE), trans-1,2-DCE, and vinyl chloride. A subset of these contaminants was selected as indicator chemicals to evaluate water quality trends. They include benzene, MTBE, naphthalene, BaP, DCPD, PCE, TCE, and vinyl chloride. Isoconcentration contour maps for these indicator chemicals superimposed over the 4th Quarter 2012 shallow zone and deep zone alluvial water level elevation maps are included as Figures 3-1 through 3-16 in Section 3. CY 2012 water quality data for the indicator chemicals (and cis- and trans-1,2-DCE) are summarized in Appendix B.

Water Quality Criteria and Remedial Goal Exceedances

The CY 2012 Aliso Site water quality data for the shallow zone and deep zone alluvial wells were compared to current water quality criteria (e.g., California maximum contaminant levels [MCLs], notification levels [NLs], USEPA Region 9 tapwater regional screening levels [RSLs], and California Office of Health Hazard Assessment public health goals [PHGs]). Chemicals with exceedances of the criterion (e.g., MCLs or NLs) in shallow and deep zone wells included BaP, naphthalene, benzene, MTBE, DCPD, and two PCE/TCE degradation products (cis-1,2-DCE and vinyl chloride). Chemicals with exceedances only in shallow zone wells included: 1,1-dichloroethane; 1,2,4-trimethylbenzene [TMB]; PCE; TCE; and trans-1,2-DCE. The water quality data also were compared to site-specific remedial goals for protection of indoor workers from potential inhalation of volatile chemicals that could enter indoor air in a building situated above contaminated groundwater. Five chemicals (naphthalene, benzene, DCPD, vinyl chloride, and 1,2,4-TMB) had exceedances in one or more shallow zone alluvial wells. Only benzene had exceedances in one or more deep zone alluvial wells.

Free Product

Free product (chemically classified primarily as diesel and heavy oil) currently is present in five shallow zone alluvial wells, including four Sector A wells and one Sector D well (TtD-10, which is located near former piping and oil tanks). In CY 2012, the maximum free product apparent thickness was 0.31 foot in Well D-10 and 0.53 foot in Well A-3, which is not reliable due to the product's high viscosity.

Comparison of Rainfall and Water Quality at the Aliso Site

The effects of rainfall infiltration on water levels are shown in a series of plots, and are discussed in Section 2. Water quality degradation in shallow zone alluvial wells due to rainfall effects has been evaluated using a series of combined groundwater elevation, rainfall, and benzene concentration versus time plots. The results for the combined plots are discussed in Section 4. In contrast to the response after the abnormally large rainfall event (more than 20 inches of rainfall) over the winter of 2004-2005, benzene concentrations did not increase substantially after the December 2010 rainfall event (10.2 in/month) in TtD-21S, TtA-4S, TtA-5S, or TtA-6S. The 2010 rainfall event occurred following remediation in those areas or upgradient. Benzene in Well TtO-1 did not show a consistent response to rainfall events; there was a small lagged increase in benzene (12 µg/L) following the December 2010 event.

Impacts of Remediation of Aliso Contaminant Sources on Current Water Quality

Comparison of groundwater results for the 2002-2004 time period versus CY 2012 shows that groundwater quality has improved substantially. This is attributed to the extensive remediation of large portions of Sector A, Sector D, and Sector E that have been completed to date. Elevated benzene and naphthalene concentrations in wells on Sector A East (e.g., A-2 and A-3) are attributed to residual and non-remediated sources upgradient (to the north) of Sector A East in Ramirez Street and Sector B.

Solvent Degradation

Chlorinated solvents in groundwater are undergoing reductive dechlorination, generating lesser concentrations of PCE, but increasing concentrations of TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride until those solvents under further biogeochemical reactions. The dechlorination process has resulted in vinyl chloride in Sector C wells, but the concentrations are decreasing downgradient due to a combination of processes including volatilization, anaerobic degradation under iron-reducing conditions, or oxic mineralization.

Conclusions

Based on the results of quarterly groundwater monitoring data collected from Aliso Site Wells during CY 2012 to supplement the monitoring data collected during the period 1996-2011, the following conclusions are made regarding groundwater conditions:

1. With the exception of Sector A East and a few scattered shallow zone and deep zone alluvial wells, groundwater quality continues to improve at the Aliso Site.

2. Vinyl chloride appears to be the temporary end-point for reductive dechlorination in the Sector C wells. However, there is evidence that further degradation is occurring,

based on downgradient decreases in vinyl chloride concentrations due to other geochemical reactions such as mineralization via direct oxidation or co-metabolic processes under low oxygen or iron-reducing conditions. No vinyl chloride was detected in TtC-45, the new well on 1st Street, in 2012 or in TtC-39 in the 1st and 2nd quarters of 2012 when the well was accessible for sampling.

3. Groundwater flow patterns across the Aliso Site remained unchanged during CY 2012 as compared to previous years; the gradients ranged from 0.0055 ft/ft in Sector D to 0.0107 ft/ft in Sectors B and C.

4. Based on the DTSC's approval, in the future, groundwater gauging and sampling of the Aliso Site wells will be on an annual basis in the fall of each calendar year as part of a 3-year trial evaluation. Per DTSC recommendation, 10 wells will also be measured in the spring of each year to measure water levels and to determine if chemical concentrations will increase due to higher water levels as the result of recharge events. The groundwater data, and sampling frequency will be re-evaluated after completion of CY 2014 groundwater monitoring.

5. The quarterly monitoring program for CY 2012 included 23 deep zone alluvial wells and 60 shallow zone alluvial wells. Not all of the wells could be gauged and sampled during each quarterly event, for such reasons as: a change in ownership on Block Q, during which access could not be secured to 9 Site wells during the February 2012 (i.e., 1st Quarter 2012) monitoring event; startup of a large construction project on South Santa Fe Street, which blocked access to TtC-39) was not accessible after May 2012; and the late addition of two wells, TtC-29S and TtC-29D, which were added to the monitoring program in August 2012 to provide additional information at the request of DTSC.

<u>Recommendations</u>

Based on our review and interpretation of the CY 2012 water level elevation and groundwater quality results, we have identified a few data gaps in future annual groundwater monitoring programs due to redevelopment in the vicinity of the Site. We recommend that the following actions be undertaken during CY 2013 and future years.

1. Continue to implement the annual groundwater monitoring program for all wells listed in Table 2-1 during the fall of each calendar year, supplemented by groundwater monitoring of 10 selected wells during the spring of each calendar year. This program was approved by the DTSC in 2011 upon their approval of the *Final Comprehensive Groundwater Monitoring Report 1996-2010*). The wells to be sampled in the spring are: E-1S. E-1D. TtE-6, TtB-1, TtC-29D, TtC-31D, TtC-32R, TtC-36, TtC-45, and the replacement well for TtC-39 when it can be installed.

2. Due to construction of new buildings along S. Santa Fe Street, well TtC-39 was not accessible after May 2012. Two replacement wells are recommended south of 1st Street so that the groundwater water levels downgradient of the Site can be evaluated. The general area where these wells are suggested is west of S. Santa Fe Street between 2nd and 3rd Streets for the replacement for TtC-39 and south of 1st Street

near Vignes St, as a replacement for TtC-37 formerly located north of 1st Street. The specific locations will be selected in consultation with the Southern California Gas Company and DTSC.

1.1 INTRODUCTION

This 2012 Annual Groundwater Monitoring Report (Report) is for the former Aliso Street Manufactured Gas Plant (MGP) site, hereinafter referred to as the "Aliso Site" or "the Site". It is submitted by the Southern California Gas Company (SCG) to the Department of Toxic Substances Control (DTSC) to comply with a Voluntary Cleanup Agreement (VCA) [Docket No. HAS-A00\01-173] executed between the DTSC and SCG, dated January 16, 2001 [DTSC, 2001].

Groundwater monitoring data collected during calendar year (CY) 2012 at the Site are included in this Report. Groundwater quality trends since 1996 (when the Site groundwater monitoring wells [MWs] were first sampled) are discussed for key chemicals of concern (COCs) in selected MWs. This Report summarizes the 2012 groundwater quality data from shallow and deep MWs screened in the shallow and deep zones, respectively, of the alluvial aquifer at the Site.

The Aliso Site is approximately 52 acres[1] in size, and it is located in downtown Los Angeles (Figure 1-1). The former Aliso Street MGP boundary covers an area from south of the railroad tracks by Bauchet Street to the north, across the 101 Hollywood Freeway (also referred to as the Santa Ana Freeway) to about Temple Street to the south. The Site is located in the Township 1 South, Range 13 West, Section 27 of the San Bernardino Baseline and Meridian.

For ease of managing the required investigation activities, SCG has divided the Aliso Site into five sectors, A through E, as shown on Figure 1-2. Each sector has been divided further into smaller areas or blocks. Sector C is approximately 16.4 acres; it has been divided into 7 blocks, and extends south of the 101 Hollywood Freeway to approximately a half-block beyond Jackson Street.

1.2 OVERVIEW OF 2012 QUARTERLY MONITORING PROGRAM

Water quality conditions are evaluated using a set of indicator chemicals, which are key contaminants of concern associated with historical industrial activities at the Site. The indicator chemicals are: benzene; methyl-tert-butyl ether (MTBE); naphthalene; benzo(a)pyrene (BaP); dicyclopentadiene (DCPD); tetrachloroethene (PCE); trichloroethene (TCE); cis-1,2-dichloroethene (DCE); trans-1,2-DCE; and vinyl chloride. Water quality information for all indicator chemicals except cis- and trans-1,2-DCE are presented in a series of maps using the Fourth Quarter 2012 (4Q2012) data set (Figures 3-1 through 3-16 in Section 3). These figures depict isoconcentration contours of key indicator chemicals superimposed on potentiometric surface maps for the shallow zone and deep zone, and they show where current (e.g., 4th Quarter 2012) chemical concentrations exceed remedial goals and use criteria.

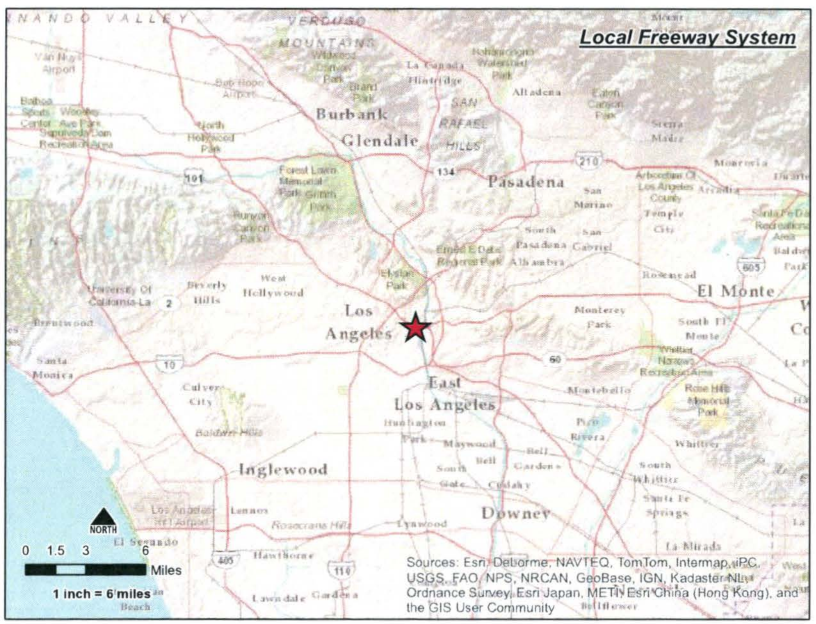
[1] The acreage estimate given here is based on the previous reports that cite the size of the Site as 52 acres based on previous boundaries. The actual acreage of the Site based on current site boundaries is approximately 56.3 acres.

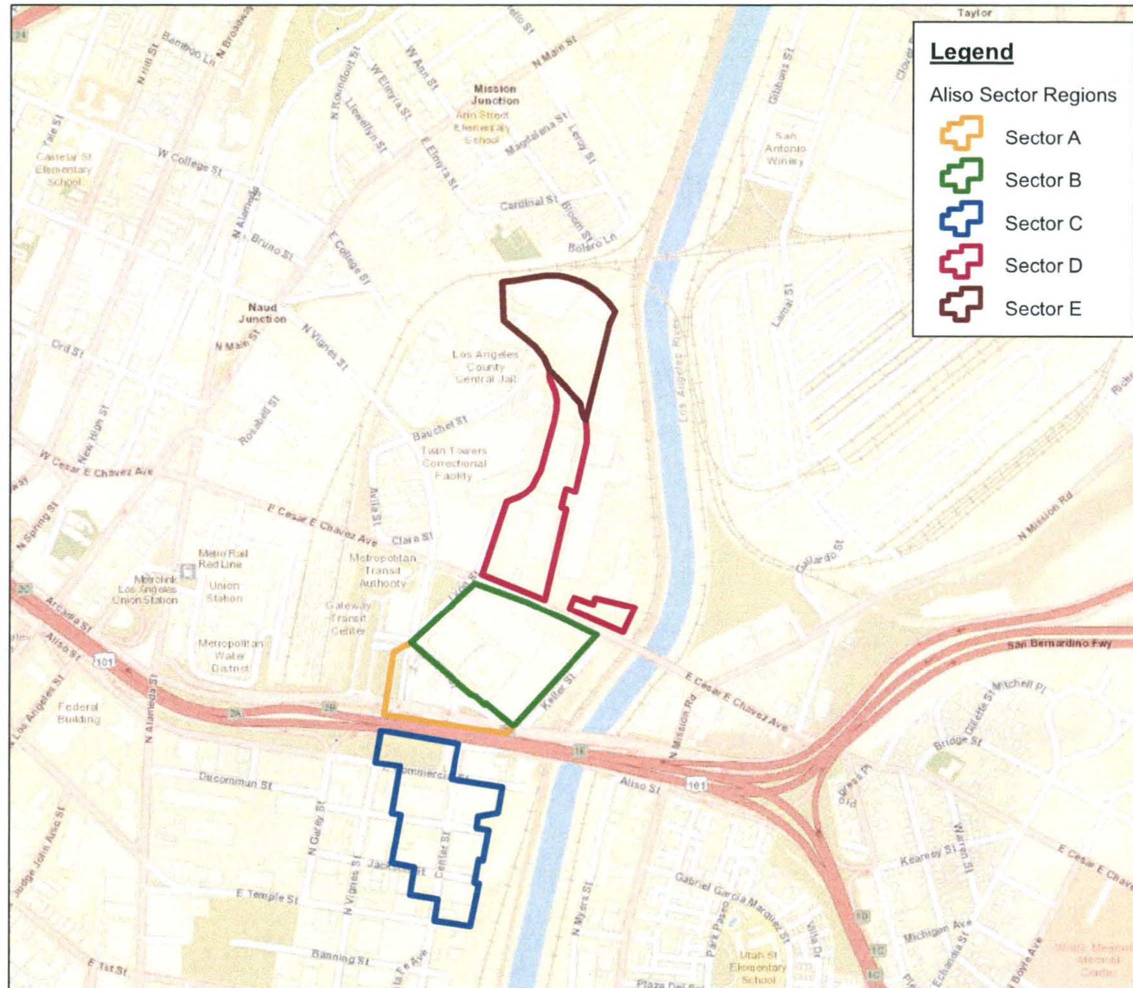
The CY 2012 analytical testing program for the Aliso Site quarterly groundwater monitoring program included: volatile organic compounds (VOCs) by U.S. Environmental Protection Agency (USEPA) Method 8260B; polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8310; total petroleum hydrocarbons (TPH) as gasoline, diesel, and heavier hydrocarbons by USEPA Method 8015 Modified; and five water quality indicator field parameters (i.e., specific conductivity, pH, temperature, turbidity, and dissolved oxygen [DO] using a field meter).

Appendix A provides a summary of analytical testing results for CY 2012 for the key indicator chemicals, and Appendix B provides a summary of CY 2012 water level data. The groundwater goals to protect indoor workers from inhalation of chemicals in indoor air that were recalculated in accordance with DTSC's October 2011 Vapor Intrusion Guidance document [DTSC, 2011] have been used in this report. The methodology for deriving these goals was presented in Appendix D of the 2011 Annual Groundwater Monitoring Report for the Aliso Site [Tetra Tech, 2012].

1.3 CHANGES TO ONGOING MONITORING PROGRAM

The quarterly data set for CY 2012 included 83 wells: 60 shallow zone alluvial wells and 23 deep zone alluvial wells. The list of wells monitored at the Aliso Site for at least one quarter in CY 2012 is provided in Table 2-1 in Section 2 of this Report. Mostly due to a change in ownership on Block Q, nine Site wells were not accessible for monitoring during the 1st Quarter 2012 monitoring event that was completed in February 2012. One well (TtC-39) was monitored for the first two quarters of CY 2012 but was not accessible after the May 2012 event due to a large construction project on S. Santa Fe Street. Well TtA-4S was not sampled in the 3rd and 4th quarters of CY 2012 due to a broken casing, which was repaired in November 2012. Two wells, TtC-29S and TtC-29D, were added to the monitoring program in August 2012 to provide additional information at the request of DTSC.





Southern California Gas Company
Former Aliso Street MGP Site

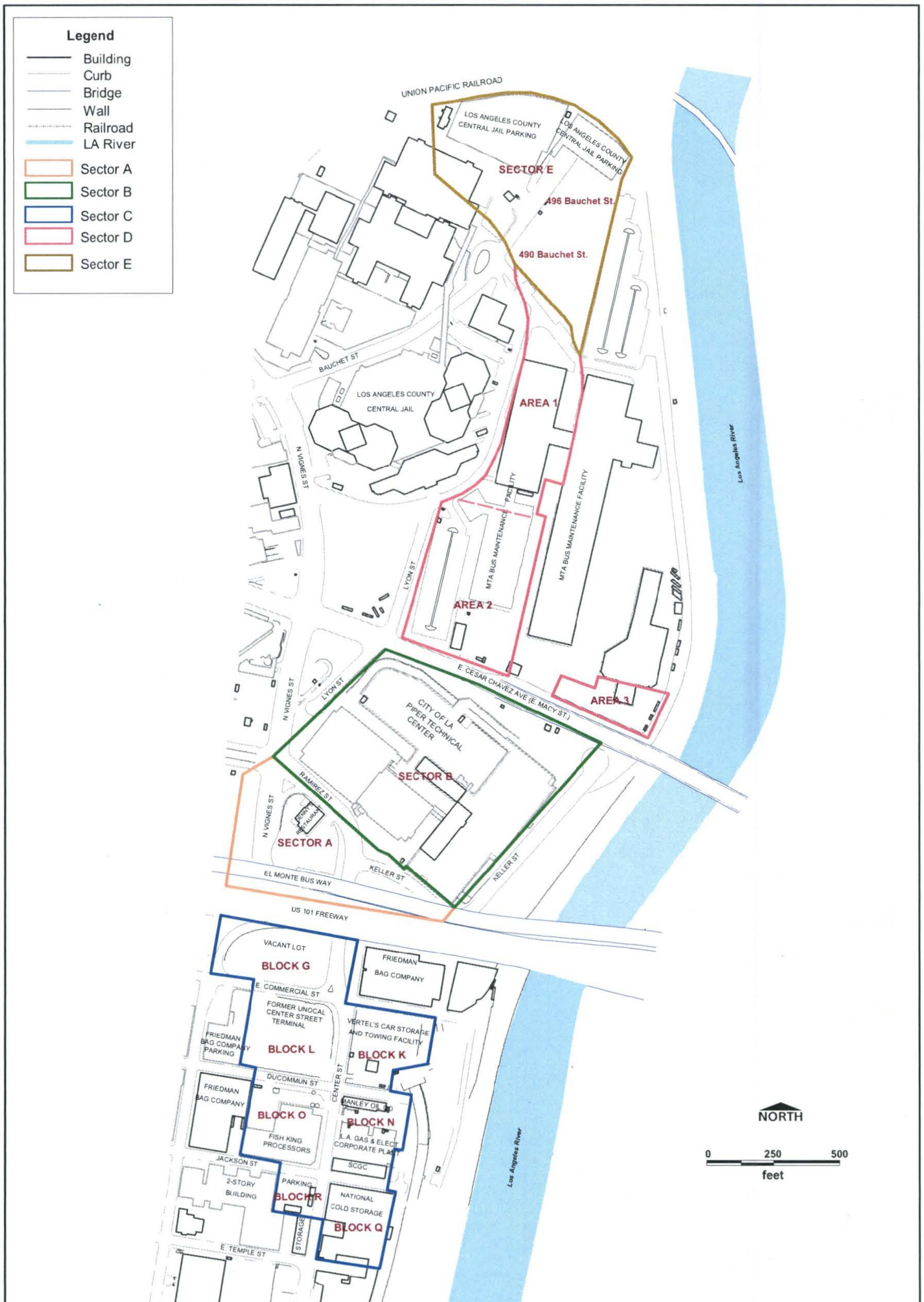
Site Location Map

TETRA TECH

Prepared by: B. DeVore
Reviewed by: C. Pollock
Date: 10/16/12

Figure 1-1

File: 15970 GW MonPln\GIS\Figure 1-1 Site Location Map.mxd



Southern California Gas Company
Former Aliso Street MGP Site

Site and Sector Boundaries

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PREPARED BY: BD
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DATE: 12/7/11

Figure 1-2

2. GROUNDWATER ELEVATIONS IN CALENDAR YEAR 2011

2.1 WATER LEVELS IN SHALLOW ZONE ALLUVIAL WELLS

The shallow zone alluvial wells are screened from 16 to 59 feet below ground surface (bgs). and the wells are 36.5 to 62 feet deep (Table 2-1). The well screens are 19 to 30 feet long. Water levels were measured in each quarter of CY 2012, but not in all wells every quarter. Figure 2-1 depicts the 4th Quarter 2012 shallow zone groundwater elevation contour map for the Aliso Site. A shallow water level elevation contour map using the linear TIN method is included in Appendix C. The flow direction across the northern part of the Site is to the south-southeast at an estimated gradient of 0.00551 ft/ft. Across Sector B, the flow direction changes from south-southeast to a more southerly direction. The flow gradient across Sector A and the northern part of Sector C increases to 0.0107 ft/ft. The flow direction is to the south along the eastern side of Sector C. In the northwestern part of Sector C, the flow direction is to the southwest, but then shifts more to the south between Jackson and Banning Streets.

2.2 WATER LEVELS IN DEEP ZONE ALLUVIAL WELLS

The deep zone alluvial wells are screened from 47.5 to 104.7 feet bgs and are 62 to 105 feet deep, excluding TtC-39 (Table 2-1). The well screens are 10 to 20 feet long. The deepest well (TtC-39, located three blocks south of the Aliso Site's southern boundary on Santa Fe Avenue between 1st and 2nd Streets) is 115 feet deep and is screened from 73 to 93 feet bgs. The shallow zone WBZ is missing and the depth to water (DTW) is much deeper than in the other wells, ranging from 83.23 to 83.26 feet bgs for the first two quarters of CY 2012. Estimated water level elevations were used for TtC-39 for the 4th Quarter 2012 map based on the May 2012 data and the change in the nearby well TtC-45 from May 2012 to October 2012, because access to the well was blocked by construction. Figure 2-2 depicts the 4th Quarter 2012 deep zone groundwater elevation contour map for the Aliso Site. A deep water level elevation contour map using the linear TIN method is included in Appendix C. The flow direction across the northern part of the Site is to the south at an estimated gradient of 0.00448 ft/ft. Across Sector C, the flow gradient increases to 0.0194 ft/ft, and the flow direction is essentially the same as on the northern part of the Site, to the south. However, south of Jackson Street on Sector C, there is a southwest component, which is accentuated due to the limited data along the western side between Jackson and 1st Streets. Deep well elevation maps for 2008 and earlier years when data were available along 1st Street for wells TtC-37 and TtC-38 map confirm that the flow direction changes from southwestward to south, in a similar manner to that in the shallow wells [Tetra Tech, 2011].

2.3 COMPARISON OF SHALLOW AND DEEP ZONE WATER LEVELS

The DTW measurements in the shallow zone wells ranged from 23.61 feet bgs in TtA-7S in May 2012 to 42.38 feet bgs in August 2012 in TtC-31S, as shown in Table 2-2. The DTWs in the deep zone wells, excluding TtC-45 and TtC-39 on or south of 1st Street, ranged from 26.60 feet bgs in E-1D in August 2012 to 42.32 feet bgs in TtC-31D in August 2012, as shown in Table 2-3. The difference in water levels for each well in CY 2012 are shown for the shallow zone and deep zone wells in Table 2-2 and Table 2-3, respectively. The variation in the DTW measurements in the shallow zone wells that were gauged during all four quarters of CY 2012 ranged from 0.01 to 1.12 feet. Two shallow zone wells (E-1S and A-2) had differences of over one foot. For the deep zone wells that were gauged during all four quarters of CY 2012, the variation in the quarterly DTWs ranged from 0.04 to 0.33 feet. Deep well TtC-45 is located just north of 1st Street, and TtC-39 is located south of 1st Street. At both well locations, the depth to bedrock increases and the upper alluvium is unsaturated. The DTWs in TtC-45 ranged from 61.94 to 62.07 feet in CY 2012, a maximum difference of 0.13 feet. The DTWs in TtC-39 ranged from 83.23 to 83.26 feet in the first two quarters of 2012, a maximum difference of 0.03 feet.

Sixteen (16) well pairs were used to compute the vertical gradients between shallow and deep wells using the 2012 data (Table 2-4). The vertical gradients are shown separately for each quarter, in addition to the average gradient. The flux direction for three well pairs varied from one quarter to another in CY 2012. Well TtC-31D has a shallower screen (47.5-57.5 feet bgs) that overlaps with the screen of the companion shallow well (36.5-56.5 feet bgs), and thus was not used to determine vertical gradients. The gradients were calculated as the difference between the shallow zone and deep zone well static water levels divided by the difference in length of the midpoints of the saturated portion of the screened interval between the two paired wells. In October 2012, vertical gradients in 12 well pairs ranged from upward (-0.32 ft/ft in TtC-23S/23D well pair) to downward (0.016 ft/ft in E1S/E1D well pair). Using data for all available quarters, the gradients in the 16 well pairs for CY 2012 were upward for all four quarters in six well pairs. Five of the well pairs with only upward gradients were located on Sector C. The upward gradients varied from -0.0004 ft/ft in TtA-6S/D to -0.324 ft/ft in TtC-23S/D. The downward gradients for all quarters ranged from 0.0022 ft/ft in TtA-6S/D to 0.155 ft/ft in TtC-41S/D. These small gradients indicate that there is no large downward flux from the shallow groundwater to the deeper groundwater under current conditions, thus chemicals present in the shallow zone are less likely to move into the deeper groundwater.

Rainfall at the Los Angeles Civic Center for CY 2012 totaled 8.15 inches; the monthly rainfall amounts varied from zero (in June, August and September) to 2.16 inches in December [WRCC, 2013]. The DTW variations in example shallow zone wells and rainfall are shown on Figure 2-3a. All wells shown on this plot responded to the large rainfall event in the winter of 2004-2005. Between December 1, 2004 and February 15, 2005, rainfall totaled 20.4 inches, and 5.5 inches of rain fell on December 28, 2004. The response to other events was muted, except for December 2010 when the total rainfall was 10.23 inches and January 2008 event when the total rainfall was 7.97 inches. Figure 2-3b shows similar plots for example deep zone wells and rainfall over time. There was a response to the large event in the winter of 2004 and 2005, and to the smaller events in December 2010 and January 2008 when rainfall totals for these months were about 8 inches or more. The furthest downgradient well, TtC-39, showed a larger response to the 2004-2005 winter event and the December 2010 event. Small increases of less than one foot occurred in response to events with rainfall totals of five inches or more, as shown on Figure 2-4. The increased response is not due to increased recharge across the Site, as shown by the similar response to the large event in 2004-2005 for four wells spread out across the Site (Figure 2-5) where the increase in water levels was 1.25 feet in well E-3, a well on the northern part of the Site and 1.28 feet in well C-4, a well on the southern part of the Site. The two intermediate wells, D-4 and A-2, had larger increases, 1.61 feet and 1.52 feet, respectively, and was thought to be due to underflow from offsite, similar to the flow direction of the shallow water level contours (Figure 2-1).

2.4 FREE PRODUCT

Free product was present in the same five wells as in recent years. As shown on Figure 2-6, the product level in well TtD-10 the thickest product fluctuates inversely with the water level. In CY 2012, the product thickness in this well ranged from 0.02 to 0.31 feet, which is less than in most previous years (Table 2-5). The product was analyzed in 2003 and found to contain high concentrations of petroleum hydrocarbons, DCPD, PAHs, and other VOCs and semi-volatile organic compounds (SVOCs).

Table 2-1

Status of Wells Used for Monitoring in CY 2012

Former Aliso Street MGP Site, Los Angeles, California

Well Name	Owner	Sector	Monitored at Least Once in CY 2012	Well Diameter, inches	Well Depth (feet bgs)	Screened Interval (feet bgs)	Last Monitoring Event
A-1	SCG	A	X	4	40	24-39	10/24/2012
A-2	SCG	A	X	4	41	25-40	10/17/2012
A-3	SCG	A	X	4	40	25-40	10/17/2012
TtA-4D	SCG	A	X	4	92.5	72.5-92.5	10/24/2012
TtA-4S	SCG	A	X	4	40	20-40	10/17/2012
TtA-5D	SCG	A	X	4	92.5	72.5-92.5	10/18/2012
TtA-5S	SCG	A	X	4	41	21-41	10/18/2012
TtA-6D	SCG	A	X	4	92.5	72.5-92.5	10/18/2012
TtA-6S	SCG	A	X	4	42	22-42	10/18/2012
TtA-7	SCG	A	X	4	45	20-45	10/24/2012
TtA-7S	SCG	A	X	4	38.5	18.5-38.5	10/18/2012
TtA-8S	SCG	A	X	4	38.5	18.5-38.5	10/18/2012
TtB-1	SCG	B	X	4	42	20.5-40.5	10/22/2012
TtB-2D	SCG	B	X	4	100.5	85.5-96	10/22/2012
TtB-2S	SCG	B	X	4	41.5	21-41	10/22/2012
TtB3	SCG	B	X	4	44	21.5-42	10/22/2012
TtB-5	SCG	B	X	4	45.5	24-44	10/22/2012
TtB-6	SCG	B	X	4	48	26-46	10/22/2012
TtB-7	SCG	B	X	4	44.5	22-42	10/26/2012
C-6	MTA	C	X	2	62	29-59	10/25/2012
C-16	SCG	C	X	4	60	33-53	10/30/2012
C-17	SCG	C	X	4	55	37.5-57.5	10/30/2012
C-20D	SCG	C	X	4	69.8	60-70	10/30/2012
C-20S	SCG	C	X	4	48.5	27-47	10/30/2012
C-21D	SCG	C	X	4	72.5	62-72	10/30/2012
C-21S	SCG	C	X	4	44.3	22-42	10/30/2012
C-22D	SCG	C	X	4	62.1	52-62	10/30/2012
C-22S	SCG	C	X	4	45	25-45	10/30/2012
C-23D	SCG	C	X	4	70	60-70	10/30/2012
C-23S	SCG	C	X	4	45	25-45	10/30/2012
C-25	SCG	C	X	4	60	33-53	10/26/2012
C-26	SCG	C	X	4	53	33-53	10/30/2012
TtC-27	SCG	C	X	4	45	24-44	10/24/2012
TtC-27D	SCG	C	X	4	91	78-88	10/24/2012
TtC-29D	SCG	C	X	4	78	67-77	10/30/2012
TtC-29S	SCG	C	X	4	49	27.5-47.5	10/30/2012
TtC-30	SCG	C	X	4	50	29-49	10/26/2012
TtC-31S	SCG	C	X	4	57.5	36.5-56.5	10/30/2012
TtC-31D	SCG	C	X	4	63	47.5-57.5	10/30/2012
TtC-32R	SCG	C	X	4	52	31-51	10/26/2012
TtC-33	SCG	C	X	4	50	29-49	10/26/2012
TtC-34D	SCG	C	X	4	67	52-62	10/26/2012
TtC-34	SCG	C	X	4	46	26-46	10/25/2012
TtC-35	SCG	C	X	4	43.5	22-42	10/26/2012
TtC-36D	SCG	C	X	4	81	70-80	10/26/2012
TtC-36	SCG	C	X	4	45	24.5-44.5	10/26/2012
TtC-39	SCG	C	X	4	115	73-93	5/9/2012
TtC-40D	SCG	C	X	4	66	55-65	10/25/2012

Table 2-1
Status of Wells Used for Monitoring in CY 2012
Former Aliso Street MGP Site, Los Angeles, California

Well Name	Owner	Sector	Monitored at Least Once in CY 2012	Well Diameter, inches	Well Depth (feet bgs)	Screened Interval (feet bgs)	Last Monitoring Event
TtC-40S	SCG	C	X	4	45	23-43	10/25/2012
TtC-41D	SCG	C	X	4	80	60-75	10/29/2012
TtC-41S	SCG	C	X	4	41	20-40	10/29/2012
TtC-42	SCG	C	X	4	42.5	21-41	10/24/2012
TtC-43	SCG	C	X	4	47.5	27-47	10/25/2012
TtC-44	SCG	C	X	4	40.5	20.5-40.5	10/18/2012
TtC-45	SCG	C	X	4	66	55-65	10/30/2012
TtK-1	SCG	C	X	4	44	24-44	10/25/2012
TtK-2	SCG	C	X	4	84	74-84	10/25/2012
TtK-3	SCG	C	X	4	42.5	22.5-42.5	10/25/2012
TtK-4	SCG	C	X	4	42.5	22.5-42.5	10/25/2012
TtK-6	SCG	C	X	4	45	25-45	10/25/2012
TtO-1	SCG	C	X	4	42	33-43	10/25/2012
D-2	Caltrans	D	X	4	36.5	16-35	10/17/2012
D-4	Caltrans	D	X	4	37.5	17-37	10/17/2012
TtD-7	SCG	D	X	4	45.2	25-45	10/17/2012
TtD-7D	SCG	D	X	4	101	90-100	10/17/2012
TtD-9	SCG	D	X	4	46	26-46	10/29/2012
TtD-10	SCG	D	X	4	47.5	26-46	10/29/2012
TtD-14	SCG	D	X	4	45	25-45	10/29/2012
TtD-15	SCG	D	X	4	46	26-46	10/29/2012
TtD-17R	SCG	D	X	4	40	19-40	10/30/2012
TtD-18	SCG	D	X	4	43	23-43	10/30/2012
TtD-19	SCG	D	X	4	44	24-44	10/23/2012
TtD-20 D	SCG	D	X	4	102.7	92.5-102.5	10/23/2012
TtD-20 S	SCG	D	X	4	44.7	25-45	10/23/2012
TtD-21 S	SCG	D	X	4	43.4	23-43	10/17/2012
TtD-21D	SCG	D	X	4	100	85-100	10/17/2012
E-1D	SCG	E	X	4	97	83-93	10/30/2012
E-1S	SCG	E	X	4	55	15-35	10/30/2012
TtE-3R2	SCG	E	X	4	43.5	22-42	10/30/2012
TtE-5R2	SCG	E	X	4	42.5	22-42	10/30/2012
TtE-6	SCG	E	X	4	44.1	24-44	10/30/2012
TtE-8	SCG	E	X	4	104.7	89.5-104.5	10/30/2012
TtE-10R	SCG	E	X	4	45	24-44	10/23/2012

Notes: Well status notes provided in complete well status Table A-1 in Appendix.

Table 2-2

2012 Water Level Data and Observed Change in Water Levels for Shallow Zone Alluvial Wells

Former Aliso Street MGP Site, Los Angeles, California

Well ID	Depth to Water in Shallow Zone Wells (feet bgs)				Maximum Difference in Water Levels, feet
	1Q2012	2Q2012	3Q2012	4Q2012	
A-1	28.67	28.51	28.64	28.62	0.16
A-2	29.67	29.5	29.65	30.79	1.12
TtA-4S	31.52	31.41	NS	NS	0.11
TtA-5S	28.58	28.41	28.55	28.58	0.17
TtA-6S	30.77	30.7	30.84	30.9	0.2
TtA-7	26.03	25.88	26.03	25.98	0.15
TtA-7S	23.73	23.61	23.70	23.86	0.16
TtA-8S	27.26	NS	NS	27.36	0.10
TtB-1	28.32	28.28	28.24	28.21	0.11
TtB-2S	26.49	26.46	26.5	26.46	0.04
TtB-3	30.14	29.97	30.13	30.11	0.17
TtB-5	32.32	32.29	32.38	32.35	0.09
TB-6	NS	NS	NS	34.43	NA
TtB-7	31	30.91	31.01	30.96	0.10
C-6	29.02	28.85	29.02	28.85	0.17
C-16	NS	36.71	36.72	37.05	0.34
C-17	NS	41.02	41.35	41.38	0.36
C-20S	NS	35.02	35.17	35.07	0.15
C-21S	NS	34.55	34.67	34.65	0.12
C-22S	NS	35.22	35.33	35.23	0.11
C-23S	NS	38.55	38.55	38.6	0.05
C-25	40.98	40.81	40.95	40.91	0.17
C-26	NS	42.38	42.28	41.3	1.08
TtC-27	32.6	32.52	32.61	32.6	0.09
TtC-29S	NS	NS	NS	32.05	NA
TtC-30	38.39	38.28	38.4	38.31	0.12
TtC-31S	NS	42.3	42.38	42.35	0.08
TtC-32R	40.29	40.18	40.29	40.2	0.11
TtC-33	37.82	37.68	37.82	37.7	0.14
TtC-34	34.57	34.43	34.51	34.45	0.14
TtC-35	31.03	30.87	31.02	31.03	0.16
TtC-36	30.37	30.35	30.35	30.38	0.03
TtC-40S	32.94	32.7	32.9	32.75	0.24
TtC-41S	28.15	27.98	28.15	28.1	0.17
TtC-42	30.05	29.87	29.96	29.99	0.18
TtC-43	28.7	28.56	28.63	28.65	0.14
TtC-44	29.39	29.25	29.45	29.4	0.20
D-2	30.18	30.21	30.15	30.25	0.10

Table 2-2

2012 Water Level Data and Observed Change in Water Levels for Shallow Zone Alluvial Wells

Former Aliso Street MGP Site, Los Angeles, California

Well ID	Depth to Water in Shallow Zone Wells (feet bgs)				Maximum Difference in Water Levels, feet
	1Q2012	2Q2012	3Q2012	4Q2012	
D-4	29.49	29.5	NS	29.45	0.05
TtD-7	30.39	30.39	30.41	30.41	0.02
TtD-9	33.51	33.5	33.62	33.52	0.12
TtD-10	33.75	33.79	33.57	33.89	0.32
TtD-14	33.31	33.3	33.34	33.26	0.05
TtD-15	33.64	33.68	33.67	33.6	0.08
TtD-17R	28.55	28.59	28.55	28.6	0.05
TtD-18	30.73	30.78	30.8	30.8	0.07
TtD-19	30.19	30.18	30.19	30.2	0.02
TtD-20 S	34.41	34.41	34.42	34.41	0.01
TtD-21 S	33.02	33.04	32.78	33.05	0.27
E-1S	27.44	26.41	26.56	26.54	1.03
TtE-3R2	31.25	31.22	31.25	31.35	0.13
TtE-5R2	29.35	29.37	29.45	29.4	0.10
TtE-6	31.32	31.31	31.39	31.35	0.08
TtE-10R	29.91	29.96	29.94	30.05	0.14
TtK-1	31.3	31.06	31.32	31.3	0.26
TtK-3	30.4	30.18	30.38	30.38	0.32
TtK-4	31.42	30.78	30.98	30.95	0.64
TtK-6	32.35	32.12	32.36	32.37	0.25
TtO-1	30.06	29.98	30.05	30.01	0.08
Gray shading indicates that water level was measured in less than 4 quarters.					

Table 2-3
2012 Water Level Data and Observed Change in Water Levels for Deep Zone Alluvial Wells
Former Aliso Street MGP Site, Los Angeles, California

Well ID	Depth to Water in Deep Zone Wells (feet bgs)				Maximum Difference in Water Levels
	1Q2012	2Q2012	3Q2012	4Q2012	
E-1D	26.56	26.44	26.60	26.58	0.16 feet
TtA-4D	31.18	31.03	31.19	31.18	0.16 feet
TtA-5D	28.52	28.42	28.54	28.62	0.20 feet
TtA-6D	30.88	30.68	30.81	30.89	0.21 feet
TtB-2D	27.05	27.00	27.05	27.03	0.05 feet
TtC-20D	NS	34.30	34.42	34.35	0.12 feet
TtC-21D	NS	32.88	33.00	33.08	0.20 feet
TtC-22D	NS	34.82	34.88	34.89	0.07 feet
TtC-23D	NS	31.11	31.20	31.30	0.29 feet
TtC-27D	32.25	32. 20	32.31	32.34	0.14 feet
TtC-29D	NS	NS	NS	32.05	NA
TtC-31D	NS	42.25	42.32	42.28	0.04 feet
TtC-34D	30.91	30.85	31.05	30.98	0.20 feet
TtC-36D	29.72	29.68	29.75	29.78	0.10 feet
TtC-39	83.23	83.26	NS	NS	0.03 feet
TtC-40D	33.03	32.77	33.05	32.72	0.33 feet
TtC-41D	27.42	27.28	27.42	27.07	0.14 feet
TtC-45	62.01	61.94	62.07	62.02	0.13 feet
TtD-20D	33.47	33.46	33.51	33.50	0.05 feet
TtD-7D	29.32	29.31	29.36	29.37	0.06 feet
TtE-8	28.02	28.03	28.11	28.11	0.09 feet
TtK-2	31.40	31.31	31.38	31.35	0.09 feet

Gray shading indicates that water levels were available for less than 4 quarters.
NA used where only one measured water level was made.

Table 2-4
Vertical gradients Between paired Wells in CY 2012
Former Aliso Street MGP Site, Los Angeles, California

Well	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	1Q2012	2Q2012	3Q2012	4Q2012	CY 2012 Average
E-1S	15	35	-0.0141	0.0019	0.0021	0.0161	0.00150
E-1D	83	93					
TtD-7	25	45	0.0070	0.0056	0.0061	0.0063	0.00626
TtD-7D	90	100					
TtD-20S	25	45	-0.0135	-0.0137	-0.0130	-0.0130	-0.01328
TtD-20D	92.5	102.5					
TtB-2S	21	41	0.0068	0.0065	0.0066	0.0070	0.00672
TtB-2D	85.5	96					
TtA-4S	20	40	0.0028	0.0019	No data[a]	No data[a]	0.00235
TtA-4D	72.5	92.5					
TtA-5S	21	41	0.0046	0.0061	0.0057	0.0067	0.00576
TtA-5D	72.5	92.5					
TtA-6S	22	42	0.0022	-0.0007	-0.0009	-0.0004	0.00005
TtA-6D	72.5	92.5					
TtC-36	24.5	44.5	0.0049	0.0044	0.0063	0.0063	0.00546
TtC-36D	70	80					
TtC-27	24	44	0.0139	0.0145	0.0150	0.0159	0.01482
TtC-27D	78	88					
TtC-41S	20	40	0.1549	-0.0121	-0.0130	-0.0115	0.02958
TtC-41D	60	75					
TtC-40S	23	43	0.0079	0.0070	0.0107	0.0106	0.00906
TtC-40D	55	65					
TtC-34	26	46	-0.1587	-0.1533	-0.1465	-0.1468	-0.15133
TtC-34D	52	62					
TtC-20S	27	47	No data[b]	-0.0262	-0.0284	-0.0271	-0.02725
TtC-20D	60	70					
TtC-22S	25	45	No data[b]	-0.0177	-0.0190	-0.0124	-0.01638
TtC-22D	52	62					
TtC-21S	22	42	No data[b]	-0.0513	-0.0460	-0.0425	-0.04663
TtC-21D	62	72					
TtC-23S	25	45	No data[b]	-0.3236	-0.3186	-0.3168	-0.31967
TtC-23D	60	70					

Note: negative value indicates upward gradient

[a]Well TtA-4S was not accessible for sampling due to broken casing in August and October 2012.

[b]Wells TtC-20S, TtC-20D, TtC-22S, TtC-22D, TtC-21S, TtC-21D, TtC-23S, and TtC_23D were not accessible for sampling in February 2012

Well pair TtC-29 S/D were measured only in 4th Q of 2012, so not included in table.

Used difference in saturated screened intervals in wells

Table 2-5
Summary of Free Product Thickness Levels in Aliso Site Wells

Former Aliso Street MGP Site, Los Angeles, California

Well	Range of Product Thickness, ft	Historical Period of Measurable Free Product	4Q2012 Event Thickness, ft	Last Observed
A-2	0.01-0.3	10/1996-10/2012	0.04	10/17/2012
A-3	0.01-3.3	10/1996-10/2011	0.53****	10/17/2012
TtA-7S	0.01-1.1	2/2003-10/2011	0.01	10/18/2012
TtA-8S	0.01-1.42	2/2003-10/2011	0.01	10/18/2012
C-16*	0.02-0.1	7/1998-1/2008	0.00	7/21/2008
TtD-7**	0.01 (one value)	9/2002	0.00	9/5/2002
TtD-10	0.02-0.72	1/2003-10/2011	0.31	10/29/2012
E-2***	0.08-0.23	7/1997-5/2005	NA	5/10/2005
TtK-2	0.01 (one value)	10/2003	0.00	10/21/2003

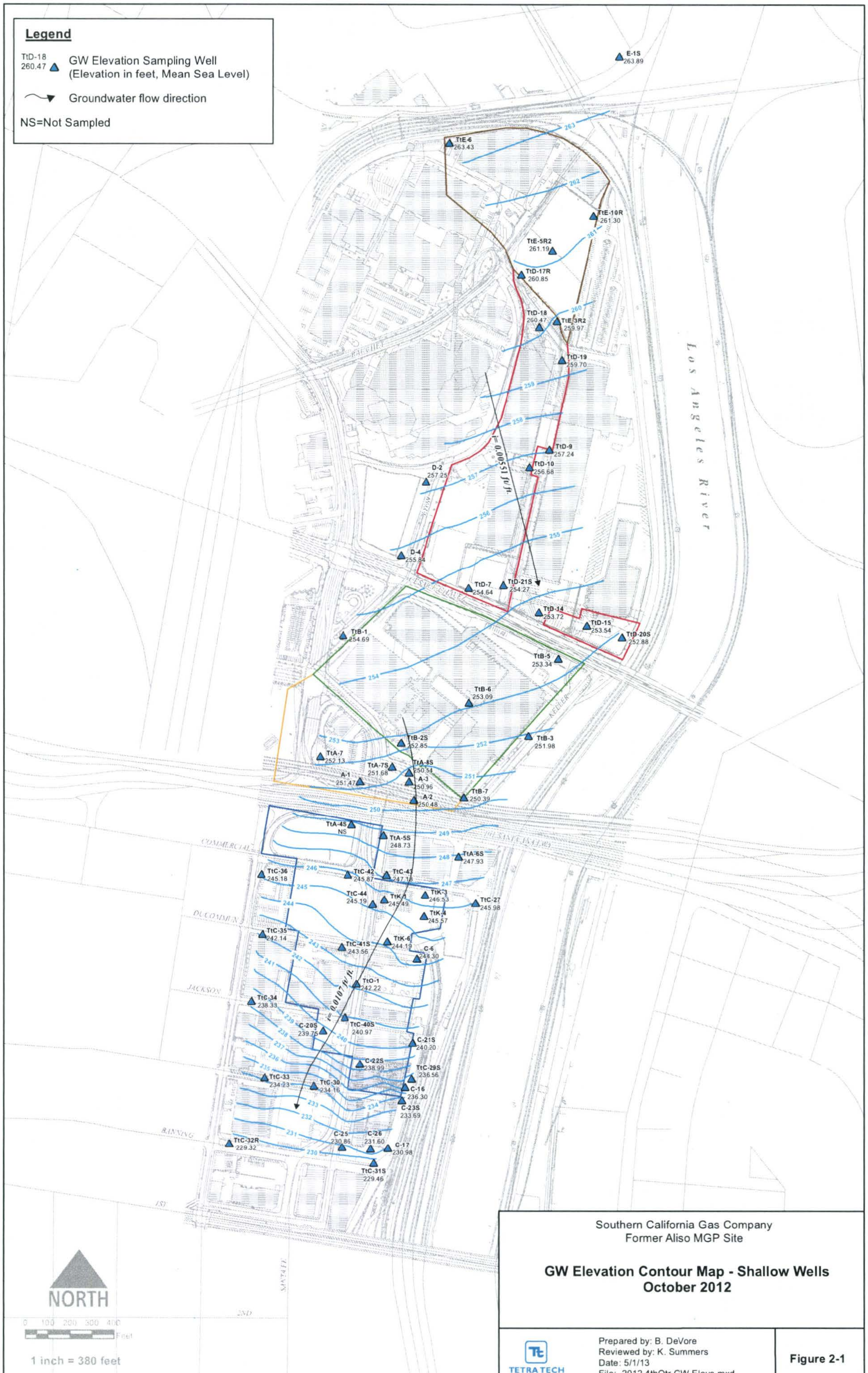
NOTES:

*Had product at bottom of well in past

**Well not accessible due to excavation from April to October 2009; was accessible after January 2010 and no product through October 2012.

***Area around well E-2 excavated in 2007

****Oil has high viscosity; when oil/water interface sensor probe penetrates the oil layer, the oil coats the probe surface such that water immersion does not clean it sufficiently for accurate measurement of the water surface.



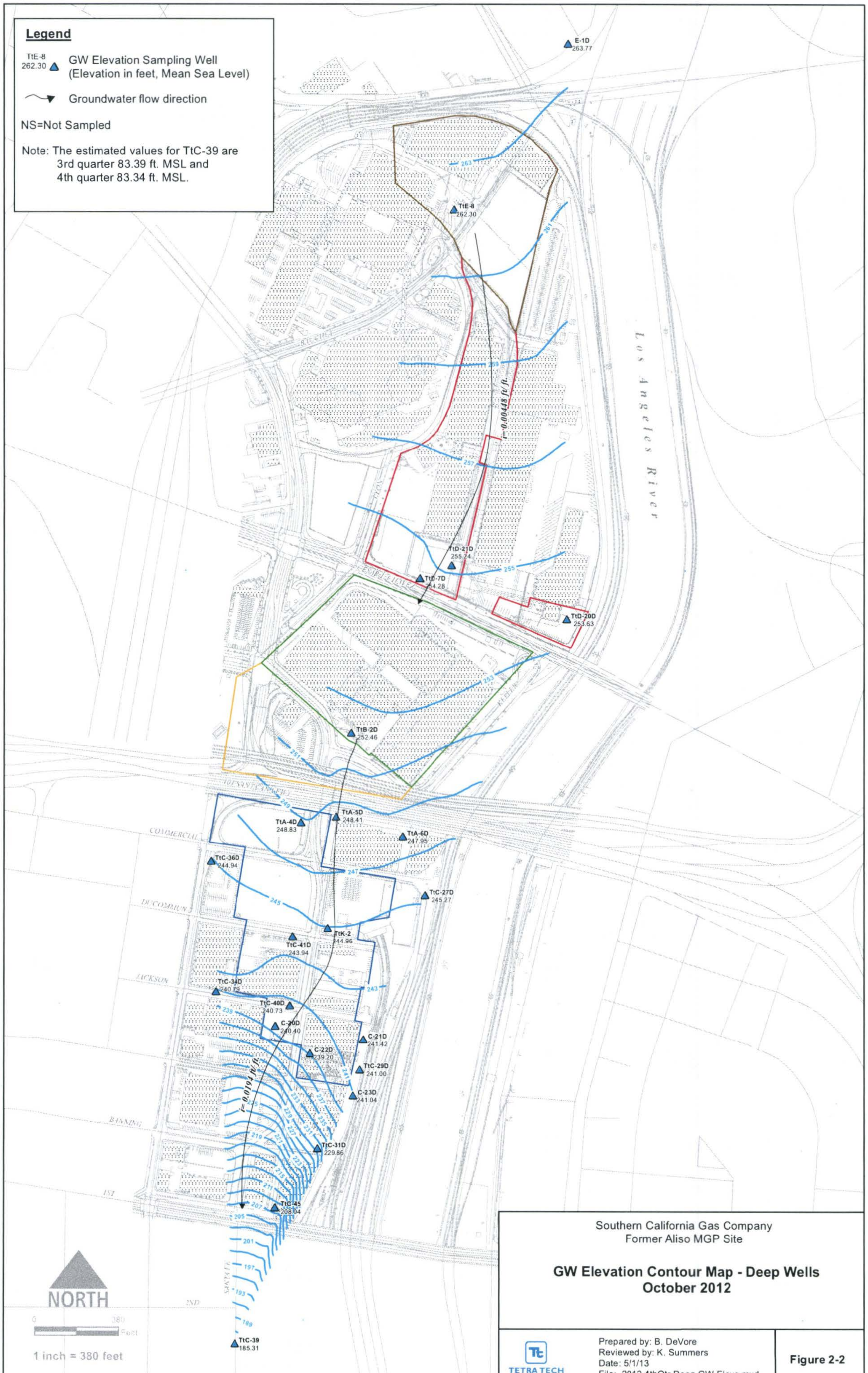
Southern California Gas Company
Former Aliso MGP Site

GW Elevation Contour Map - Shallow Wells
October 2012

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/1/13
File: 2012 4thQtr GW Elevs.mxd

Figure 2-1



Southern California Gas Company
Former Aliso MGP Site

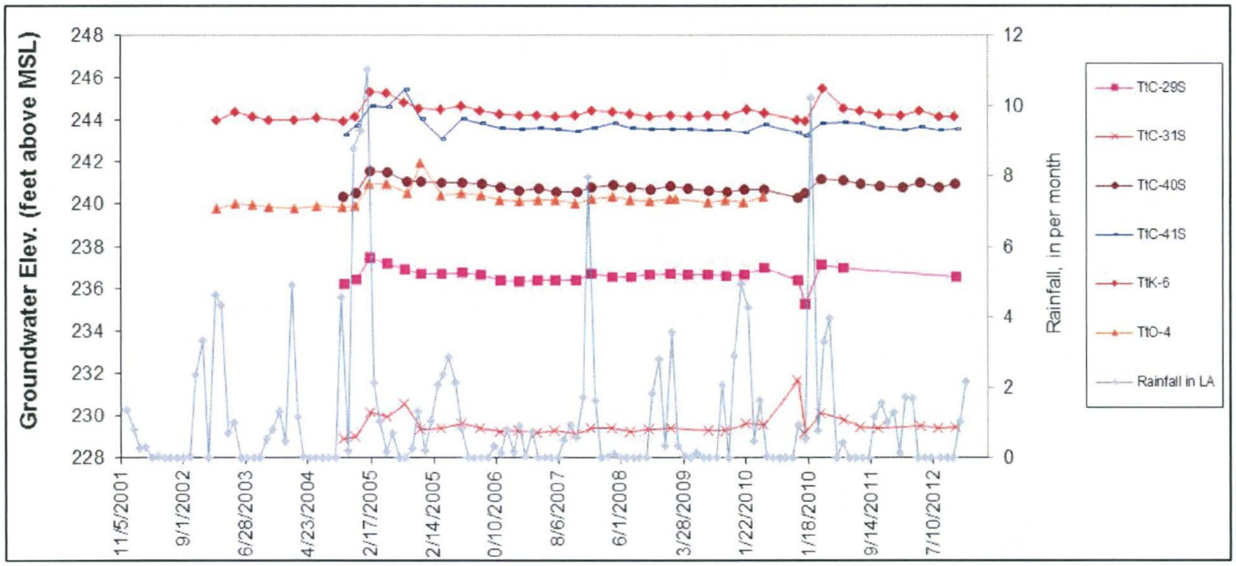
GW Elevation Contour Map - Deep Wells
October 2012

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/1/13
File: 2012 4thQtr Deep GW Elevs.mxd

Figure 2-2

a) Water Levels and Rain in Shallow Wells



b) Water Levels and Rain in Deep Wells

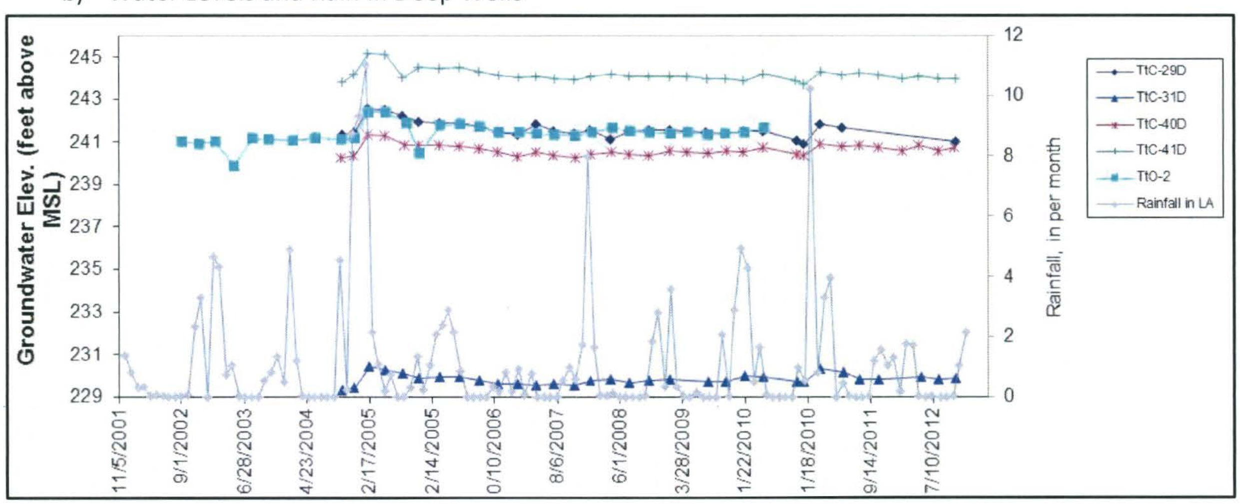


Figure 2-3. Example of Water Levels in Shallow and Deep Wells on Sector C with Rainfall

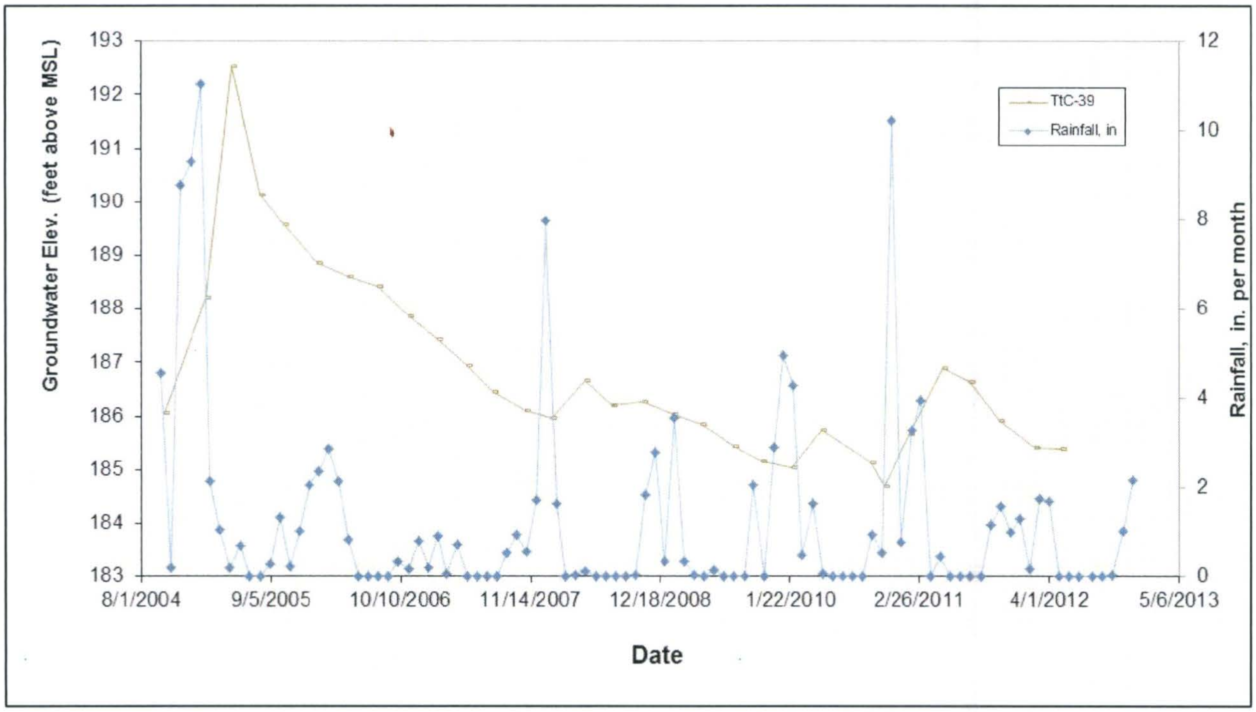


Figure 2-4. Water Levels in TtC-39 and Rainfall

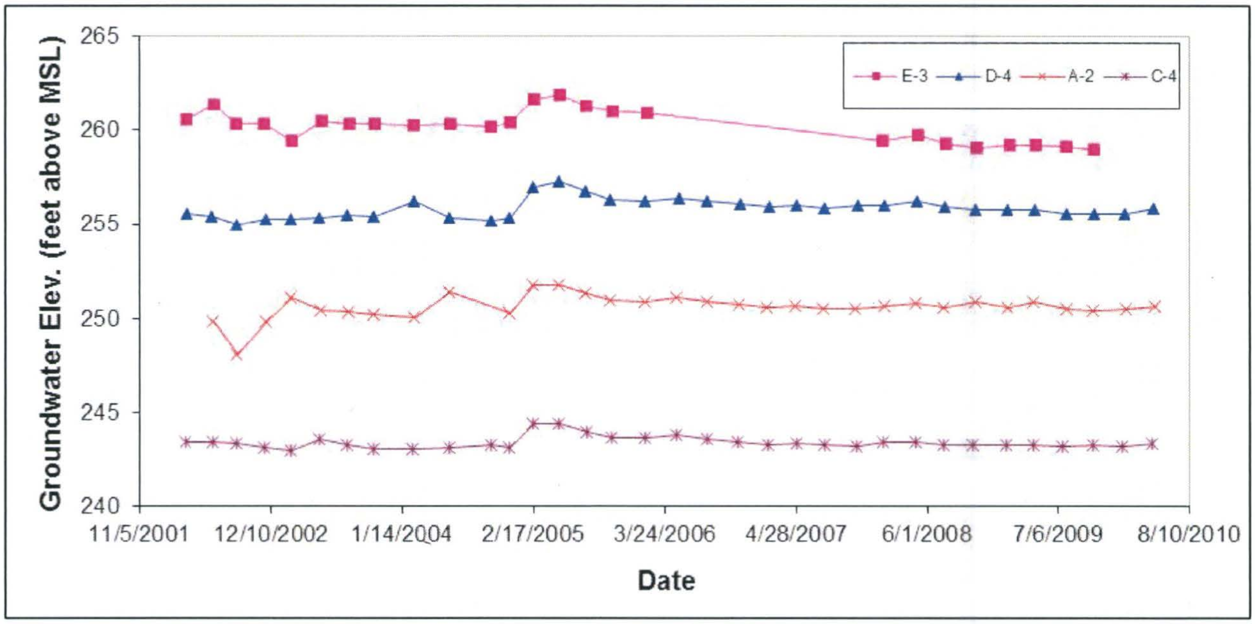


Figure 2-5. Water Levels in Wells spread across Site showing Response to Winter 2004-2005 Rainfall Event

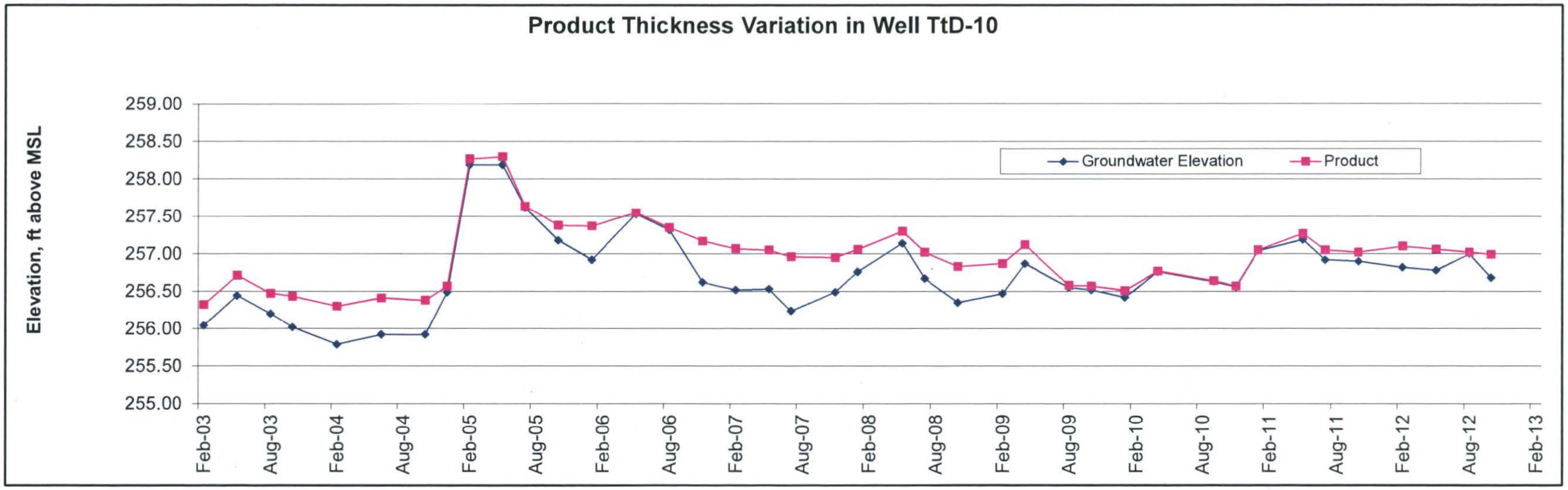


Figure 2-6. Variation of Product Thickness and Water Level in Well TtD-10

3. GROUNDWATER QUALITY IN CALENDAR YEAR 2012

3.1 INDICATOR CHEMICALS

A set of indicator chemicals has been selected for use in assessing changes in groundwater quality and contaminant trends. The indicator chemicals are among the chemicals of potential concern (COPCs) that are commonly detected at the Site in the shallow and deep zones of the alluvial aquifer. The selected indicator chemicals are benzene, MTBE, naphthalene, BaP, DCPD, PCE, TCE, and vinyl chloride.

COPCs include benzene, toluene, ethylbenzene, and xylenes (BTEX) and PAHs. Potential sources of these chemicals at the Aliso Site are discussed in the description of the Conceptual Site Model presented in the 2011 Groundwater Monitoring Report [Tetra Tech, 2012]. While BTEX and PAHs can be related to the former MGP activities, there can be other sources such as motor fuel (gasoline and diesel) leaks and spills. For instance, the detection of MTBE (a gasoline additive that has been used since the mid-1980s) in shallow zone and deep zone alluvial wells suggests that recent gasoline releases are a source of some of the BTEX found in Aliso Site groundwater. DCPD is present at the Site, in part, due to the former butadiene operations. By contrast, chlorinated solvents including PCE, TCE, and their reductive dechlorination daughter products (e.g., cis- and trans-1,2- DCE and vinyl chloride) were not used or produced by MGP/butadiene activities. However, PCE and TCE were used by post-MGP/butadiene activities on the 490/496 Bauchet Street properties. PCE and TCE were used as degreasers in a metal cleaning plant that used the hard chrome process (496 Bauchet Street property) and as solvents in a mannequin manufacturing plant (490 Bauchet Street property). Soils in these properties were excavated to the water table in 2005 and 2006-2007, respectively. As explained later in this section, the source of the vinyl chloride found in the Aliso Site groundwater is from anaerobic biodegradation processes (mainly reductive dechlorination) of PCE and TCE.

3.2 COMPARISON TO WATER QUALITY CRITERIA AND RISK-BASED GOALS FOR PROTECTION OF GROUNDWATER

The water quality criteria for the COPCs at the Site are shown in Table 3-1; they include California maximum contaminant levels (MCLs), notification levels (NLs), USEPA Region 9 tapwater regional screening level (RSLs), and California Office of Health Hazard Assessment (OEHHA) public health goals (PHGs) (July 2011). The current water quality criteria references are California Department of Health Services (CA DHS) [December 2010] for NLs, Cal DHS [July 2011] for CA MCLs, and EPA Region 9 [May 2012] for RSLs. All pertinent agencies were checked for new updates in July 2012. The California PHGs are also shown in Table 3-1. There were values for 17 chemicals, of which 6 were higher than MCLs and 2 were the same as the MCL.

Table 3-2 lists the number of wells where a given criterion (MCLs and/or NLs) was exceeded in one or more quarters in 2012. All wells were sampled for the same compounds. Sixty (60) shallow zone MWs were analyzed at least once in the four quarters of 2012, and 23 deep zone MWs were analyzed at least once in the four quarters of 2012.

Chemicals with one or more exceedances of the criterion (MCLs, NLs, or RSLs) in one or more shallow zone alluvial wells in CY 2012 included BaP; naphthalene; BTEX; MTBE; 1,2,4-trimethylbenzene (TMB); PCE; TCE; cis- and trans-1,2-DCE; vinyl chloride; 1,1-dichloroethane (DCA); and DPCD. There were fewer chemicals with exceedances in the deep zone alluvial wells: BaP, naphthalene, BTEX, MTBE, cis-1,2-DCE, vinyl chloride, and DCPD. The 4th Quarter 2012 sampling event identified only two chemicals (benzene and vinyl chloride) with exceedances of the California MCLs in the downgradient Aliso Site wells on Banning Street. The furthest downgradient well, TtC-39, had no detected chemicals in the two quarterly samples from 2012. Four chemicals were detected in the new well on 1st Street (TtC-45), DCPD, MTBE, sec-butylbenzene, and 1,1-DCA along with TPH gasoline. In TtC-45, the 2012 groundwater data showed that benzene was not detected at a detection limit of 0.5 μg/L and vinyl chloride was not detected at a detection limit of 1 μg/L.

The remedial goals for shallow groundwater were developed to protect indoor workers from potential inhalation of volatile chemicals that could enter indoor air in a building situated above contaminated groundwater. The methodology used to derive the goals was presented in Appendix D to the 2011 Groundwater Monitoring Report [Tetra Tech, 2012]. Both carcinogenic and non-carcinogenic goals were developed, depending on the classification of a given chemical by the USEPA and CA DHS. The chemicals that have been detected at least once at the Site and currently are considered to be carcinogens include: BaP; naphthalene; benzene; MTBE; PCE; TCE; 1,1-DCA; methylene chloride, vinyl chloride; and trans-1,3-dichloropropene (DCP). Additional chemicals are considered to be non-carcinogens, though some chemicals have goals for both classifications.

Table 3-3 lists the remedial goals developed for the groundwater protective of indoor workers at the Aliso Site. The number of shallow and deep wells that had exceedances of the goals in one or more quarters in 2012 is listed in Table 3-4. Carcinogenic chemicals with exceedances included naphthalene, benzene, and vinyl chloride. DCPD and 1,2,4-TMB were the only chemicals where the non-carcinogenic goals were exceeded. The exceedance of 1,2,4-TMB was in TtD-10 on only one sampling date, October 2012. The exceedances of the goal for DCPD occurred in wells downgradient of the former dicyclopentadiene storage tanks on Sector E, TtE-3R, TtD-18, TtD-19, and TtD-10. The concentrations in the deep wells were higher than the carcinogenic goal only for benzene. There were no exceedances of the non-carcinogenic goals in the deep wells.

3.3 WATER QUALITY AT ALISO SITE

Figures 3-1 through 3-16 show the spatial distributions of the indicator chemicals using the 4Q2012 data. The intent is to show the current chemical concentrations to compare to the pertinent groundwater criteria and goals to protect workers from inhalation of indoor air. The figures identify the wells where the indicator chemicals exceeded one or more of the above criteria by highlighting the wells with elevated concentrations. The water level contours are also shown on the map so that relationships to MGP/butadiene sources can be identified. Separate maps were made to differentiate between shallow zone and deep zone alluvial wells. The screened intervals of the shallow zone and deep zone alluvial wells are discussed in Section 2.1 and 2.2, respectively.

The primary mechanism that is causing the migration of the chemicals is advective groundwater flow, generally to the south, as discussed for shallow zone and deep zone alluvial wells in Section 2.1 and Section 2.2, respectively. Secondary mechanisms include dispersion and vapor migration. Other processes that occur to a varying extent, depending on the chemical, are sorption and biogeochemical reactions.

Benzene

Shallow Zone Alluvial Wells: The benzene concentrations in the shallow wells are shown on Figure 3-1. In October 2012, there are three areas with elevated benzene (>410 μg/L) above the carcinogenic remedial goal in the shallow groundwater: 1) a small area in the southern part of Sector D where the former settling pits were located, 2) along Center Street next to Block R where pipes were located (TtC-40S), and in one well (TtC-17) south of Block Q on the eastern side of the Site. The area where benzene exceeds the California MCL (1 μg/L) extends from the middle of Sector D to the south along the eastern side of Sectors B, A, and C. Some of the benzene is due to recent gasoline leaks, such as the known gasoline tank release near well TtC-43. Benzene is present at low concentrations in one shallow well (TtC-33) south of the Site on the west side of Sector C; this well had MTBE indicating that some of the benzene is recent (See Figure 3-3). Benzene was detected in three of the four wells downgradient of Block Q.

Deep Zone Alluvial Wells: The benzene concentrations in the deep wells are shown on Figure 3-2, showing that the highest concentrations (>410 μg/L) are in three wells located on Sector C. The highest benzene (997 μg/L) was found in one of the deep wells south of Sector A TtA-5D located on along Center Street south of the freeway. This benzene is associated with the higher concentrations of old gasoline range TPH in TtA-5D (4,490 μg/L), as confirmed by the absence of MTBE in the October 2012 sample from this well. The second highest benzene (703 μg/L) was present in well (TtC-20D) about one block south of the former fuel terminal on Block L. The comparison to the MTBE concentrations in the deep wells (See Figure 3-4) shows that TtC-20D has high concentrations of MTBE along with the nearby wells TtC-40D, TtC-41D, and TtC-34D indicating that the sources are recent gasoline. The other well with high benzene (462 μg/L) was TtC-29D, located on the east side of Block Q. The MTBE is low in this well, indicating that the gasoline-range TPH (909 μg/L) is mostly older age TPH; the other deep wells on the east side of Sector C also had low detected MTBE. Elevated benzene above 100 μg/L was present in several wells in the middle and east side of Sector C. The comparison of shallow and deep paired wells on Sector C indicated that the deep wells had higher concentrations, with the exceptions of wells TtA-6D, TtC-40D and TtC-31D. Benzene concentrations decreased south of Block Q, as shown in TtC-31D (26.4 μg/L) and were not detected in the downgradient well, TtC-45. Benzene was not detected in the furthest downgradient offsite well (TtC-39) in February or May of 2012 when this well was sampled. After May 2012, construction of new buildings along South Santa Fe Street blocked access to the well.

MTBE

Shallow Zone Alluvial Wells: MTBE concentrations in shallow wells are shown on Figure 3-3. MTBE was detected in the offsite upgradient well E-1S (3.23 μg/L), indicating there is a contribution from upgradient recent gasoline leaks to the Site groundwater. The MTBE concentrations in the shallow groundwater are elevated with MTBE (>13 μg/L) in the following areas: 1) the eastern half of Sector E and northern part of Sector D including TtD-10, 2) the

Agnes Cline Tract, and 3) near a former gasoline UST leak near TtC-43 (Figure 3-3). The TtC-43 sample contained the highest MTBE concentration of any shallow well on the Site (50.7 µg/L). MTBE was detected in well TtK-1 downgradient of TtC-43, but was not detected in the downgradient deep well TtK-2, indicating that the MTBE is not being pushed downward by the small vertical gradients in this area, which ranged from 0.0046 to 0.0067 ft/ft in 2012 in TtA-5S/D, as is shown in Table 2-4. Low concentrations of MTBE were present in the shallow wells along the eastern side of Sector C to Banning Street. The presence of MTBE indicates that some of the BTEX compounds in the shallow wells are due to recent gasoline sources.

Deep Zone Alluvial Wells: MTBE was present at elevated concentrations (>13 µg/L) in the deep groundwater in three wells south of the former fuel terminal on Block L of Sector C, and one well on Jackson Street outside of the Site boundary (Figure 3-4). Block L (the City block between Commercial and Ducommun Streets on the west side of Center Street) had large gasoline aboveground storage tanks (ASTs) and known gasoline tank releases. The tanks were removed in 1999 and contaminated soil was removed in 2004. MTBE in the deep wells was highest in the well one block south of Block L showing that the MTBE is migrating further to the south, as expected given that the ASTs were removed.

MTBE was not detected in the deep wells sampled on the Agnes Cline Tract, Sector B, and Sector C just south of Sector A. MTBE was present at low concentrations in the two deep wells on Sector D and in the deep wells on the east side of Sector C between Commercial and Banning Streets. MTBE was detected in TtC-45 only in February 2012 (1.12 µg/L), but not in TtC-39.

Naphthalene

Shallow Zone Alluvial Wells: Naphthalene concentrations in the shallow wells are shown on Figure 3-5, showing five areas with concentrations higher than the California notification level (NL) of 17 µg/L. Two shallow wells had higher concentrations than the remedial goal for naphthalene (7, 172 µg/L): TtO-1, in Center Street, downgradient of the former fuel terminal on Block L and C-16. Well C-16 is next to the former adsorption-distillation plant on Block Q. TtC-43 near a known past gasoline leak had elevated naphthalene concentrations (7,100 µg/L). Three Sector D wells (TtD-7 and TtD-21S in the settling pits and TtD-10 near former piping) had naphthalene exceeding the NL (17 µg/L). Elevated naphthalene concentrations (>17 µg/L) were also found in one shallow well (A-2) on the Sector A East Parcel near a former gasholder, TtK-1 downgradient of TtC-43, and C-17 downgradient of C-16.

Deep Zone Alluvial Wells: Naphthalene concentrations in the deep wells are shown on Figure 3-6. The naphthalene concentrations in all the deep wells were less than the remedial goal of 7,172 µg/L. The highest naphthalene concentrations in October 2012 were found in well TtA-5D south of Sector A (4,600 µg/L) and TtC-41D on Center and Ducommun Street (1,320 µg/L). The deep wells had higher concentrations than the associated shallow paired well for TtD-7, TtA-5S, and TtC-41S, indicating that some naphthalene has migrated downwards below the water table from the source areas on Sector A and from other sources on Sector C identified above. However, naphthalene concentrations in nearby shallow wells on Center Street (TtC-43 and TtO-1) and in the former settling pits of Sector D (TtD-21S) have higher concentrations than in the deep wells. These results highlight the multiple sources of naphthalene at the Site. The furthest downgradient wells, TtC-31D, TtC-45, and TtC-39 had no detected naphthalene when sampled.

Benzo(a)Pyrene

Shallow Zone Alluvial Wells: BaP concentrations in the shallow wells are shown on Figure 3-7. The area on the eastern part of Sector A (A-2 and A-3), TtB-7, two wells near a former UST leak (TtC-43 and TtK-1), TtD-10, and C-16 had elevated BaP with concentrations above (0.2 µg/L). The Sector A and B wells are located near the former coal-based MGP activities. TtD-10 has free product containing 20.7 mg/L as TPH gasoline and 157 mg/L as TPH diesel and heavy hydrocarbons in October 2012. Although BaP has a low solubility and strongly sorbs to organic matter and soil particles, it can be retained in solution as it is has a higher affinity and solubility in the presence of petroleum hydrocarbons.

Deep Zone Alluvial Wells: BaP was detected in only one of the deep wells in October 2012 (0.26 µg/L in TtD-7D) in the former settling pits on Sector D (Figure 3-8).

Dicyclopentadiene

Shallow Zone Alluvial Wells: DCPD is associated with the butadiene operations, not the MGP operations. DCPD concentrations in the shallow wells are shown on Figure 3-9, indicating that the highest concentrations are present in well TtE-3R2 (1,990 µg/L) downgradient of former DCPD tanks on Sector E and in well TtD-10 (3,020 µg/L) near former piping on Sector D, which has free product with DCPD. In January 2003, the free product in well TtD-10 was analyzed and had 10,500 mg/L DCPD. The thickness of the free product layer varies inversely with the water table; the thickness has ranged from a maximum of 0.7 foot in July 2007 to a minimum of 0.01 foot. In October 2012, the product thickness was 0.31 foot, as shown on Figure 2-6 and in Table 2-5.

In the shallow groundwater, the non-carcinogenic remedial goal (341 µg/L) was exceeded in the southernmost well in Sector E (TtE-3R2), TtD-10, and one well (TtD-19) on the northern part of Sector D. This area is downgradient of the DCPD recovery unit and DCPD storage tanks formerly located in the southeast corner of Sector E. The northern part of Sector D is where the butadiene process wastewaters were treated. The DCPD in the wells on the Agnes Cline tract are due to downgradient migration from this area. The Agnes Cline tract was not used for the butadiene operations. In the shallow groundwater, the US EPA tapwater RSL (12 µg/L) was exceeded in the above wells and in one well (A-1) on the west side of Sector A, one well (C-22S) on Block Q where the former absorption/distillation plant was located, and in two wells south of Block Q (C-26 and C-31S).

Deep Zone Alluvial Wells: All of the deep wells sampled had non-detectable DCPD (Figure 3-10), except for two wells downgradient of Sector C, Block Q on the east side. Well TtC-31D is downgradient of the former adsorption-distillation plant and had lower concentrations (6.74 µg/L) than the well screened in the upper part of the alluvium (17 µg/L in TtC-31S). The new well TtC-45 north of 1st Street had 103 µg/L in October 2012, which is less than in February 2012 when first sampled (185 µg/L). The furthest downgradient well TtC-39 had no detected DCPD in February or May 2012. DCPD is volatile and sorbs to soil at an intermediate level between benzene and naphthalene; it does not readily degrade.

Solvent-related Chemicals

PCE

Shallow Zone Alluvial Wells: PCE concentrations are shown on Figure 3-11, indicating that only two shallow wells on the southern part of Sector D had detected values. PCE concentrations exceeded the California MCL (5 μg/L) only in one well TtD-21S (5.6 μg/L in October 2012). The other well TtD-7 on the southern part of Sector D had PCE of 2.19 μg/L. Sector D is downgradient of the former 490 and 496 Bauchet Street properties where PCE was used by a metal cleaning plant and a mannequin manufacturing plant after the MGP-butadiene operations were completed. Both these properties were remediated and the unsaturated soils removed down to a depth of 30 feet.

Deep Zone Alluvial Wells: PCE was not detected in any of the 23 deep wells sampled in 2012 (Figure 3-12).

TCE

Shallow Zone Alluvial Wells: TCE was detected more frequently than PCE in the shallow groundwater, which is expected since TCE is the first breakdown product of PCE. Most wells with TCE above the California MCL (5 μg/L) were located downgradient of the former 490/496 Bauchet Street properties on the eastern half of Sector E where PCE and some TCE were used (Figure 3-13). The exception was one well, TtA-6S, which is downgradient of the main part of Sector D. The intermediate well, TtB-6, was sampled in October 2012 and did not have detected TCE. The nearby offsite well D-2 had a higher TCE concentration (30 μg/L) than the other wells on the southern part of Sector D, suggesting that some TCE may be coming from offsite sources. TCE was not detected in the upgradient offsite shallow well, TtE-1S, but was present in TtE-6 (2.96 μg/L), located on the northern edge of Sector E. TCE was also detected in some shallow wells on the Agnes Cline tract, Sector B, and Sector C where the higher concentrations typically were found in wells on the east side.

Deep Zone Alluvial Wells: TCE was detected at low concentrations in one of the two deep wells on the southern part of Sector D, and some deep wells on Sector C (Figure 3-14). The highest TCE was detected in well TtC-27D (2.71 μg/L), located on the eastern side of Sector C. The deep wells with associated shallow wells had lower concentrations than the shallow well for TtD-7S/D on the southern part of Sector D and two well pairs on the northeastern corner of Sector C, TtA-6S/D and TtC-27/D. These results indicate that there is limited downward migration of TCE to the deeper zone. A similar comparison in the paired wells on the western part of Sector C (TtA-4S/D and TtC-41S/D) show that while the TCE concentrations in all these wells are low, the deeper well of these two pairs has slightly higher concentrations, suggesting a combination of less volatilization and degradation in the deeper groundwater.

Vinyl Chloride

Shallow Zone Alluvial Wells: Vinyl chloride is a breakdown product of PCE and TCE, and thus it would be expected to be more widely detected and to increase downgradient, as the concentrations of the parent compounds decrease. PCE and TCE were used on the 490/496 properties by third parties on Sector E after the MGP/butadiene operations were closed. Vinyl chloride was detected widely in shallow groundwater on the eastern part of Sector D, the Agnes Cline Tract, and in most wells on Sectors B, A, and C (Figure 3-15). In general, the higher vinyl chloride concentrations were found in wells on the eastern side, as were all of the elevated vinyl chloride concentrations above 24 μg/L, the carcinogenic goal to protect indoor workers. The highest vinyl chloride concentration was in TtD-10 (151 μg/L) and the next highest was in TtD-15 (65.8 μg/L) on the Agnes Cline Tract.

<u>Deep Zone Alluvial Wells:</u> Vinyl chloride was detected in five deep wells, all on Sector C (Figure 3-16). The northern part of Sector C is closer to the former facilities where PCE and TCE were used, and TCE is present in some of the deep wells. None of the deep wells sampled had vinyl chloride concentrations exceeding the carcinogenic remedial goal for groundwater protective of indoor workers (24 μg/L). The two wells furthest downgradient, TtC-45 and TtC-39, had no detected vinyl chloride.

The highest vinyl chloride concentration (7.69 μg/L) was in well TtC-31D located downgradient of Block Q. The shallow well had a higher concentration (10.8 μg/L in TtC-31S). The screened intervals of well TtC-31S (36.5 to 56.5 feet bgs) and well TtC-31D (47.5 to 57.5 feet bgs) are set such that the wells are essentially sampling the same groundwater. The new well TtC-45 had no detected vinyl chloride when sampled in all four quarters of 2012. Thus, degradation of the vinyl chloride is occurring over the distance of about 317 feet to TtC-45. TtC-39 had no detected vinyl chloride in February or May 2012 when it was sampled. The groundwater is under strongly reducing conditions in this area, as the dissolved oxygen is low (e.g., 1.07 mg/L in TtC-45 on October 30, 2012). However, this amount of oxygen is conducive to degradation of vinyl chloride by bacteria under aerobic conditions in the groundwater [Bradley, 2011]. Vinyl chloride can also degrade under aerobic conditions in a vapor plume [Sale and Newell, 2011]. Degradation of vinyl chloride can also occur by iron-reducing bacteria [Bradley and Chapelle, 1996] and methanogenic bacteria [Vogel and McCarty, 1985]. While the specific reactions causing the observed reduction are not known, there appears to be no vinyl chloride moving further downgradient of 1st Street.

The comparison of three other paired wells with detected vinyl chloride concentrations showed that the shallow wells had much higher concentrations than the deep well (e.g., 21.4 μg/L in TtA-5S vs. <1 μg/L in TtA-5D, 44.4 μg/L in TtA-6S vs. 1.49 μg/L in TtA-6D, and 32.1 μg/L in TtC-27 vs. 2.69 μg/L in TtC-27D. The large difference in concentrations is consistent with the small downward vertical gradients in all four quarters of 2012 in TtA-5S/D and TtC-27/D. The vertical gradient in TtA-6S/D was upward in three quarters of 2012, as discussed in Section 2.3. In addition, some well pairs with downward gradients such as TtC-40S/D did not have detected vinyl chloride in the deep well even though there was detected vinyl chloride in the shallow well.

<u>Total Petroleum Hydrocarbons</u>

In October 2012, free product was present as a sheen or a measureable thickness of light non-aqueous phase liquid in wells A-2, A-3, TtA-7S. TtA-8S, and TtD-10, as shown previously in Table 2-5. The maximum apparent thicknesses are provided in that table and are discussed in Section 2.4. Only one well (C-16) has sometimes had product at the bottom of the well. The chemical composition of the free product has been measured in five Aliso Site wells at various times (A-3 in April 2010, TtA-7S and TtA-8S in February 2003, and TtD-10 in January 2003). TPH gasoline and diesel only were measured in product samples from the bottom of A-3 and C-16 in January 2008. All the product samples consisted primarily of diesel (C_{13}-C_{22}) and heavy oil (C_{23}-C_{40}) and related constituents including butylbenzenes and PAHs. Most of the product samples also had TPH gasoline. The product in TtD-10 is different, since it also contains high concentrations of DCPD and styrene.

The maximum TPH diesel and gasoline concentrations in October 2012 were present in the shallow wells. TPH gasoline was detected in 54 shallow wells of the 59 wells sampled in October 2012. The wells with elevated gasoline concentrations (> 5 mg/L) were C-16, TtD-10, TtD-21S, TtO-1, TtC-43 and C-17. As discussed previously, the TPH gasoline is a mixture of sources, as seen in the elevated MTBE concentrations near a former UST (TtC-43 and TtK-1) and on the eastern part of Sector E and the downgradient wells on Sector D. MTBE was also present in the offsite upgradient well, E-1S.

TPH gasoline was detected in 18 deep wells out of the 22 wells sampled in October 2012. The wells with detected gasoline included: one well on Sector B, two wells on Sector D, and the remainder on Sector C or downgradient. At least some of the gasoline found in the deep wells is of recent age, since MTBE was also detected at elevated concentrations, greater than the CA MCL of 13 µg/L in three wells downgradient of the former fuel terminal, TtC-41D, TtC-40D, TtC-34D, and TC-20D, and at low concentrations in five other wells located on the eastern side of Sector C (TtC-27D, TtC-21D, TtC-29D, C-23D and TtC-31D), and in two wells on the southern part of Sector D (TtD-21D and TtD-7D). When the paired wells are compared for the 15 cases where detected TPH gasoline was detected in the deep wells, 11 of them had higher TPH gasoline in the deep wells: TtB-2D, at the southeast corner of Sector B; two wells downgradient of Sector A near Center Street (TtA-4D using November 2012 data when measured and TtA-5D); and seven wells on Sector C (TtC-41D, TtC-34D, C-20D, C-21D, C-22D, C-23D, and TtC-29D). Four paired wells, all located on Sector C, had lower TPH gasoline in the deep wells: TtC-40D, TtC-31D, TtA-6D, and TtC-27D.

TPH diesel was detected in 39 shallow wells out of the 59 wells sampled in October 2012. The TPH diesel analysis includes the heavier carbon fraction as well as true diesel. The highest TPH diesel and heavy hydrocarbons fractions were present in TtD-10 that has free product. The thickness fluctuates with the water level, and was 0.31 inches in October 2012.

TPH diesel was detected in 18 deep wells out of the 22 wells sampled in October 2012, 15 on Sector C, two on Sector D, and one on Sector B. When the paired wells are compared for the cases with detected TPH diesel in the deep wells, nine had higher TPH diesel in the deep wells, the well on the southern part of Sector B, one well pair downgradient of Sector A near Center Street (TtA-5D) and seven other wells on Sector C or downgradient (TtC-41D, TtC-34D, C-20D, C-22D, TtC-27D, C-21D, and TtC-29D).

The presence of TPH influences the solubility of other organic chemicals and leaching of the TPH from soil. The dissolved concentrations of the chemical is dependent on the mole fraction of the chemical in the TPH based on Raoult's Law and its affinity for the organic phase compared to water [O'Reilly et al, 2001]. It is not dependent on the mass of TPH present. The effect is to increase the dissolved concentration of strongly sorbing chemicals such as BaP and other PAHs. Examples of this effect are seen at this Site, in that naphthalene concentrations were highest in the wells with high concentrations of diesel and gasoline. BaP was detected in nine shallow zone alluvial wells, all of which had TPH, and in one deep well with TPH in the former settling pits on Sector D. Benzene was detected at higher concentrations in wells with gasoline, but due to the multiple types of sources present at this Site, there is not a direct correlation between TPH gasoline and benzene concentrations. In the deep wells, all the wells with detectable benzene concentrations also had detectable TPH gasoline concentrations. While there was overlap between the wells with detectable benzene and MTBE concentrations, MTBE is present in fewer deep wells, reflecting the presence of newer and older sources.

Table 3-1
Water Quality Criteria for Groundwater Chemicals of Potential Concern
Former Aliso Street MGP Site
Los Angeles, California

Chemical	California MCL[1] (ug/l)	Tap water RSL[2] (ug/l)	California PHG[3] (ug/l)
Polycyclic Aromatic Hydrocarbons			
Acenaphthene	-	400	-
Acenaphthylene[4]	-	6.2	-
Anthracene	-	1,300	-
Benzo(a)anthracene	-	0.029	-
Benzo(a)pyrene	0.2	0.0029	0.007
Benzo(b)fluoranthene	-	0.29	-
Benzo(g,h,i)perylene[4]	-	6.2	-
Benzo(k)fluoranthene	-	0.29	-
Chrysene	-	2.00	-
Fluorene	-	220	-
Fluoranthene	-	630	-
Indeno(1,2,3-c,d)pyrene	-	0.029	-
Naphthalene[5]	17	0.14	-
Phenanthrene[4]	-	6.2	-
Pyrene	-	87	-
Metals			-
Barium	1,000	2,900	2,000
Boron[5]	1,000	3,100	-
Zinc[7]	5,000	4,700	-
Volatile Organic Compounds			
Benzene	1	0.39	0.15
n-Butylbenzene[6]	260	780	-
sec-Butylbenzene[6]	260	780	-
tert-Butylbenzene[6]	260	780	-
Carbon disulfide[5]	160	720	-
1,1-Dichloroethane	5	2.4	3
1,1-Dichloroethene	6	260	10
cis-1,2-Dichloroethene	6	28	100
trans-1,2-Dichloroethene	10	86	60
trans-1,3-Dichloropropene[8]	0.5	0.41	0.2
Dicyclopentadiene[9]	12	12	-
Ethylbenzene	300	1.3	300
Isopropylbenzene (Cumene)[5]	770	390	-
p-Isopropyltoluene[10]	770	390	-
Methylene Chloride	5	9.9	-
MTBE	13	12	13
n-Propylbenzene[6]	260	530	-
Styrene	100	1100	0.5
Tetrachloroethene	5	9.7	0.06
Toluene	150	860	150
Trichloroethene	5	0.44	1.7
1,2,4-Trimethylbenzene[5]	330	15	-
1,3,5-Trimethylbenzene[5]	330	87	-
m,p-Xylenes	1,750	190	1,800
o-Xylene	1,750	190	1,800
Vinyl Chloride	0.5	0.015	0.05

Definitions:

MCL - maximum contaminant level

PHG - public health goal

Notes:

1 - California Maximum Contaminant Level (MCL) (Last updated in July 2011; Cal DHS, 2011).

2 - USEPA Region 9 tap water RSLs (EPA,2012 May).

3 - California Public Health Goal (Last updated July 2011, OEHHA)

4 - No RSL available; naphthalene non-carcinogenic tap water RSL used as a surrogate.

5 - Notification level (NL) provided [DHS 2010], since no MCL is available.

6 - NL & RSL for n-butylbenzene used as surrogate.

7 - Primary MCL not available; secondary MCL used.

8 - No RSL and MCL available; 1,3-dichloropropene used as a surrogate.

9 - Tapwater RSL US EPA, 2012. No MCL or Notification criteria are available.

10 - Isopropylbenzene MCL and RSL used as a surrogate.

http://www.oehha.ca.gov/water/pals/index.html Notification Levels of OEHHA checked July 20, 2012

http://www.epa.gov/region9/superfund/prg/ Updated RSLs May 2012

Table 3-2
Water Quality Criteria and Exceedances in Groundwater in 2012
Former Aliso Street MGP Site
Los Angeles, California

Chemical	California MCL[1] (ug/l)	Number of Wells with Exceedances Shallow	Deep[10]
Polycyclic Aromatic Hydrocarbons			
Acenaphthene	-	NA	NA
Acenaphthylene[3]	-	NA	NA
Anthracene	-	NA	NA
Benzo(a)anthracene	-	NA	NA
Benzo(a)pyrene	0.2	15	3
Benzo(b)fluoranthene	-	NA	NA
Benzo(g,h,i)perylene[3]	-	NA	NA
Benzo(k)fluoranthene	-	NA	NA
Chrysene	-	NA	NA
Fluorene	-	NA	NA
Fluoranthene	-	NA	NA
Indeno(1,2,3-c,d)pyrene	-	NA	NA
Naphthalene[5,11]	17	12	8
Phenanthrene[3]	-	NA	NA
Pyrene	-	NA	NA
Volatile Organic Compounds			
Benzene	1	34	17
n-Butylbenzene[4]	260	0	0
sec-Butylbenzene[4]	260	0	0
tert-Butylbenzene[4]	260	0	0
Carbon disulfide[4]	160	0	0
1,1-Dichloroethane	5	2	0
1,1-Dichloroethene	6	0	0
cis-1,2-Dichloroethene	6	23	4
trans-1,2-Dichloroethene	10	4	0
trans-1,3-Dichloropropene[6]	0.5	0	0
Dicyclopentadiene[9]	12	13	1
Ethylbenzene	300	6	4
Isopropylbenzene[4]	770	0	0
p-Isopropyltoluene[9]	770	0	0
Methylene Chloride	5	0	0
MTBE	13	12	4
n-Propylbenzene[4]	260	0	0
Styrene	100	0	0
Tetrachloroethene	5	1	0
Toluene	150	4	1
Trichloroethene	5	11	0
1,2,4-Trimethylbenzene[4]	330	4	0
1,3,5-Trimethylbenzene[4]	330	0	0
m,p-Xylenes	1,750	2	1
o-Xylene	1,750	1	1
Vinyl Chloride	0.5	43	5

Definitions:

MCL - maximum contaminant level
NA - not applicable.
PHG - public health goal

Notes:

1 - California Maximum Contaminant Level (MCL) (Last updated in July 2011; Cal DHS, 2011).
2 - USEPA Region 9 tap water RSLs (EPA,2012 May).
3 - California Public Health Goal (Last updated July 2011, OEHHA)
4 - No RSL available; naphthalene non-carcinogenic tap water RSL used as a surrogate.
5 - Notification level (NL) provided [DHS 2010], since no MCL is available.
6 - NL & RSL for n-butylbenzene used as surrogate.
7 - Primary MCL not available; secondary MCL used.
8 - No RSL and MCL available; 1,3-dichloropropene used as a surrogate.
9 - Tapwater RSL US EPA, 2012. No MCL or Notification criteria are available.
10 - Isopropylbenzene MCL and RSL used as a surrogate.
11 - Same wells had exceedances of NL for both methods (8310 and 8260B).

Table 3-3
Remedial Goals for Groundwater
Protective of Indoor Workers
Former Aliso Street MGP Site
Los Angeles, California

Chemical	Carcinogenic Remedial Goal[1] (ug/l)	Non-carcinogenic Remedial Goal[1] (ug/l)
Volatile PAHs		
Acenaphthene	-	7,758,270
Acenaphthylene	-	157,387
Anthracene	-	66,103
Fluorene	-	7,818,277
Naphthalene	7,172	26,127
Phenanthrene	-	673,167
Volatile Organic Compounds		
Benzene	410	12,742
n-Butylbenzene	-	53,222
sec-Butylbenzene	-	1,082,671
tert-Butylbenzene	-	55,136
Carbon disulfide	-	44,633
1,1-Dichloroethane	8,419	336,772
1,1-Dichloroethene	-	5,868
cis-1,2-Dichloroethene	-	4,715
trans-1,2-Dichloroethene	-	17,928
trans-1,3-Dichloropropene	1,326	3,788
Dicyclopentadiene	-	341
Ethylbenzene	4,154	370,914
Isopropylbenzene	-	1,250
p-Isopropyltoluene	-	170,172
Methylene Chloride	25,563	365,184
MTBE	340,568	9,487,251
n-Propylbenzene	-	350,621
Styrene	-	1,014,927
Tetrachloroethene	769	6,481
Toluene	-	111,302
Trichloroethene	1,753	513
1,2,4-Trimethylbenzene	-	4,265
1,3,5-Trimethylbenzene	-	4,491
m,p-Xylenes	-	42,620
o-Xylene	-	42,620
Vinyl Chloride	24	6,652

Definitions:

PAH - polycyclic aromatic hydrocarbon

Notes:

1 - Remedial goals for groundwater calculated to be protective of indoor worker vapor inhalation, assuming vapor intrusion from groundwater into a standard building (100 feet x 100 feet x 12 feet) and a depth to groundwater of 30 feet. Indoor workers assumed to be exposed on a daily basis (250 days/year) for 8 hours per day, for 25 years. Goals calculated using the DTSC (2005) ADV-GW J&E model, updated with current chemical properties (see Appendix D in 2011

Table 3-4
Number of Exceedances of Remedial Goals for Groundwater in 2012
Protective of Indoor Workers
Former Aliso Street MGP Site
Los Angeles, California

Chemical	Carcinogenic Remedial Goal[1] (ug/l)	Number of Wells with Exceedances Shallow	Number of Wells with Exceedances Deep	Non-carcinogenic Remedial Goal[1] (ug/l)	Number of Wells with Exceedances Shallow	Number of Wells with Exceedances Deep
Volatile PAHs						
Acenaphthene	-	NA	NA	7,758,270	0	0
Acenaphthylene	-	NA	NA	157,387	0	0
Anthracene	-	NA	NA	66,103	0	0
Fluorene	-	NA	NA	7,818,277	0	0
Naphthalene	7,172	2 (2)[2]	0(0)[2]	26,127	0(0)[2]	0(0)[2]
Phenanthrene	-	NA	NA	673,167	0	0
Volatile Organic Compounds						
Benzene	410	3	3	12,742	0	0
n-Butylbenzene	-	NA	NA	53,222	0	0
sec-Butylbenzene	-	NA	NA	1,082,671	0	0
tert-Butylbenzene	-	NA	NA	55,136	0	0
Carbon disulfide	-	NA	NA	44,633	0	0
1,1-Dichloroethane	8,419	0	0	336,772	0	0
1,1-Dichloroethene	-	NA	NA	5,868	0	0
cis-1,2-Dichloroethene	-	NA	NA	4,715	0	0
trans-1,2-Dichloroethene	-	NA	NA	17,928	0	0
trans-1,3-Dichloropropene	1,326	0	0	3,788	0	0
Dicyclopentadiene	-	NA	NA	341	4	0
Ethylbenzene	-	NA	NA	370,914	0	0
Isopropylbenzene	-	NA	NA	1,250	0	0
p-Isopropyltoluene	-	NA	NA	170,172	0	0
Methylene Chloride	25,563	0	0	365,184	0	0
MTBE	340,568	0	0	9,487,251	0	0
n-Propylbenzene	-	NA	NA	350,621	0	0
Styrene	-	NA	NA	1,014,927	0	0
Tetrachloroethene	769	0	0	6,481	0	0
Toluene	-	NA	NA	111,302	0	0
Trichloroethene	1,753	0	0	513	0	0
1,2,4-Trimethylbenzene	-	NA	NA	4,265	1	0
1,3,5-Trimethylbenzene	-	NA	NA	4,491	0	0
m,p-Xylenes	-	NA	NA	42,620	0	0
o-Xylene	-	NA	NA	42,620	0	0
Vinyl Chloride	24	21	0	6,652	0	0

Definitions:

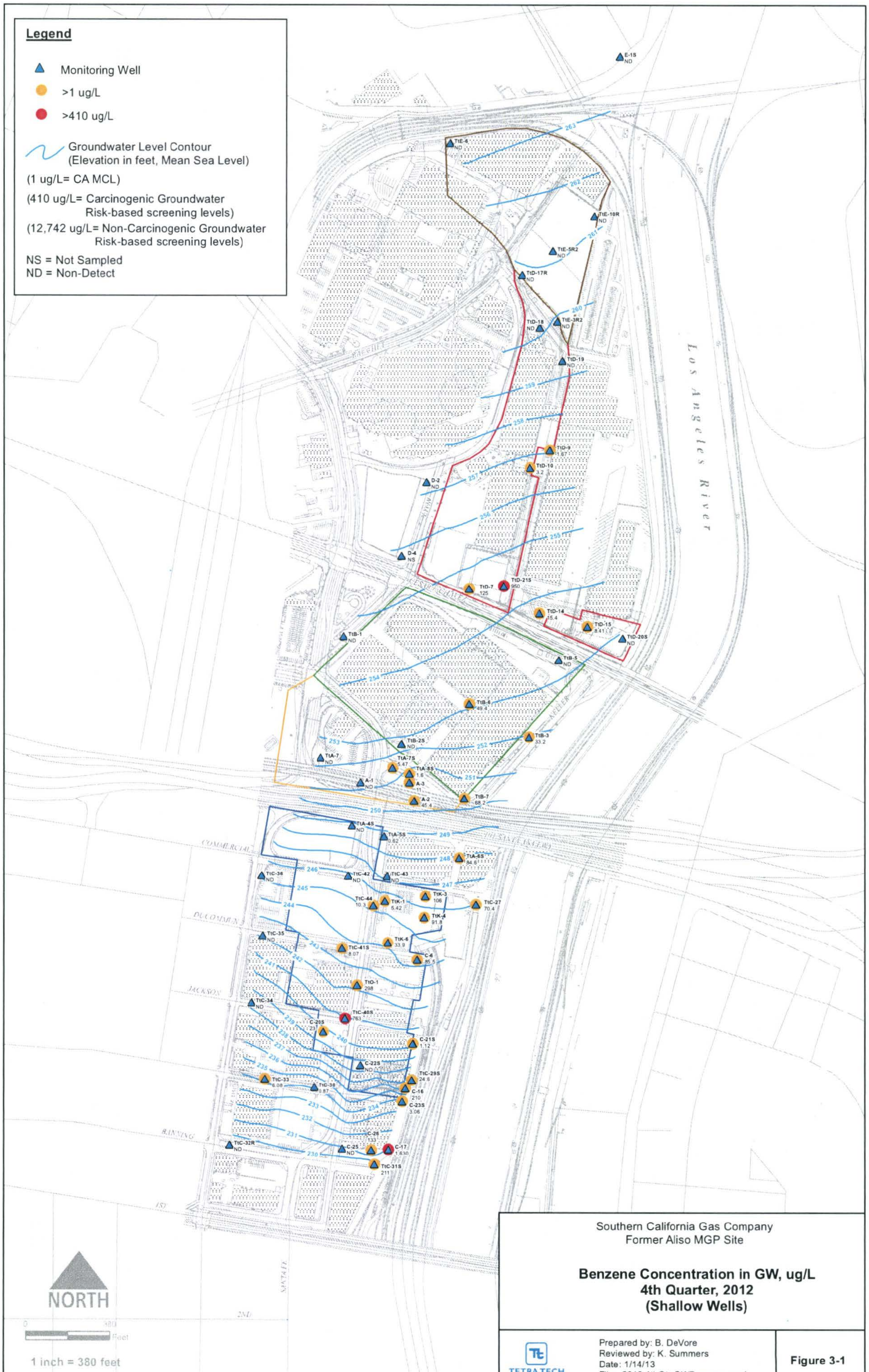
PAH - polycyclic aromatic hydrocarbon

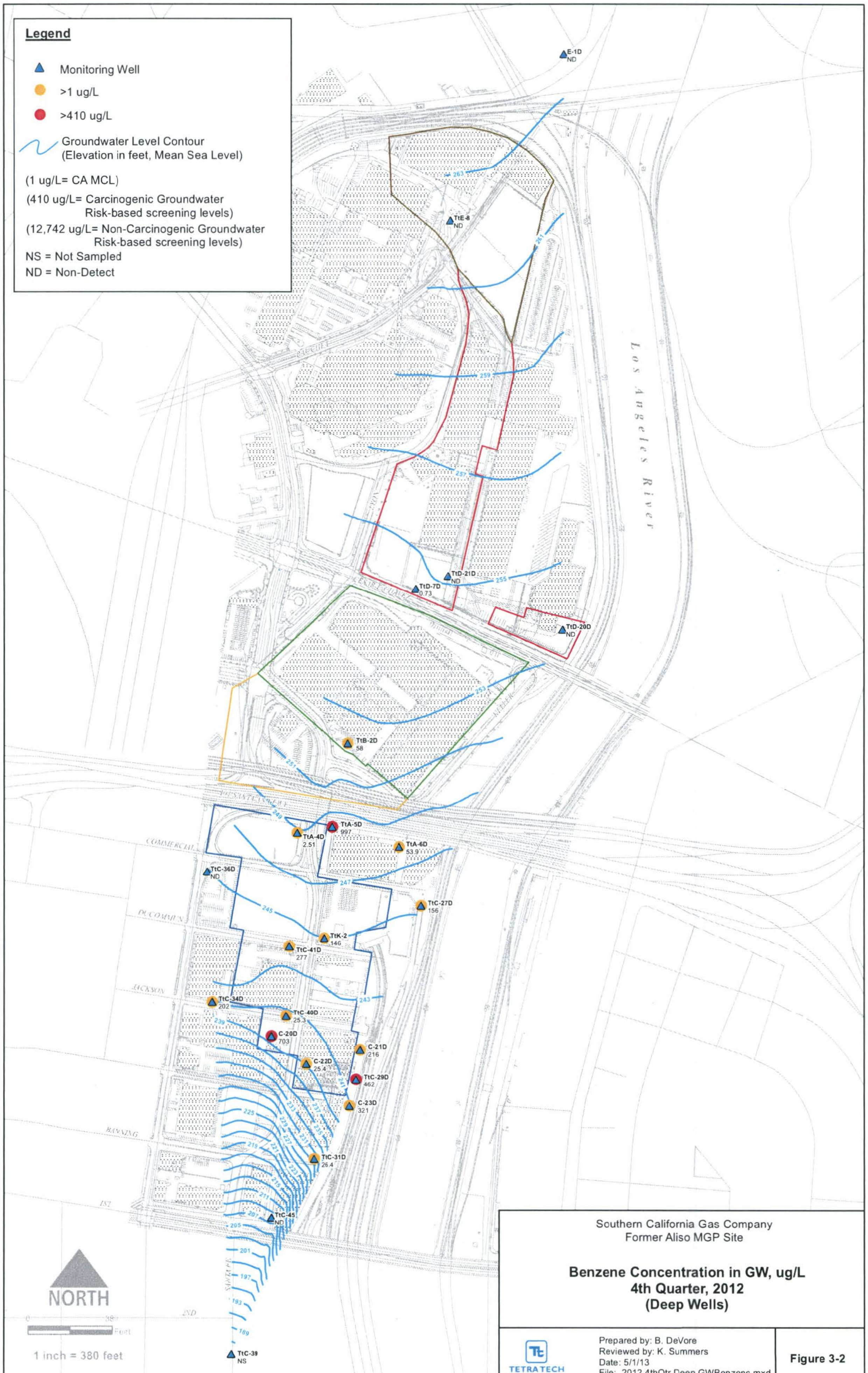
Notes:

1 - Remedial goals for groundwater calculated to be protective of indoor worker vapor inhalation, assuming vapor intrusion from groundwater into a standard building (100 feet x 100 feet x 12 feet) and a depth to groundwater of 30 feet.

2 - Value is for Naphthalene Method 8310; value in parantheses is for Method 8260B.

All goals updated in July 2012 based on DTSC VI Guidance and any revised toxicity. TCE was updated in May 2013. Exceedances based on 61 shallow wells and 22 deep wells when sampled. Exceedances occurred in one or more quarters.


Legend
Monitoring Well
>1 ug/L
>410 ug/L
Groundwater Level Contour (Elevation in feet, Mean Sea Level)
(1 ug/L= CA MCL)
(410 ug/L= Carcinogenic Groundwater Risk-based screening levels)
(12,742 ug/L= Non-Carcinogenic Groundwater Risk-based screening levels)
NS = Not Sampled
ND = Non-Detect
Los Angeles River
NORTH
0 380 Feet
1 inch = 380 feet
Southern California Gas Company
Former Aliso MGP Site
Benzene Concentration in GW, ug/L
4th Quarter, 2012
(Shallow Wells)
TETRA TECH
Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 1/14/13
File: 2012 4thQtr GWBenzene.mxd
Figure 3-1



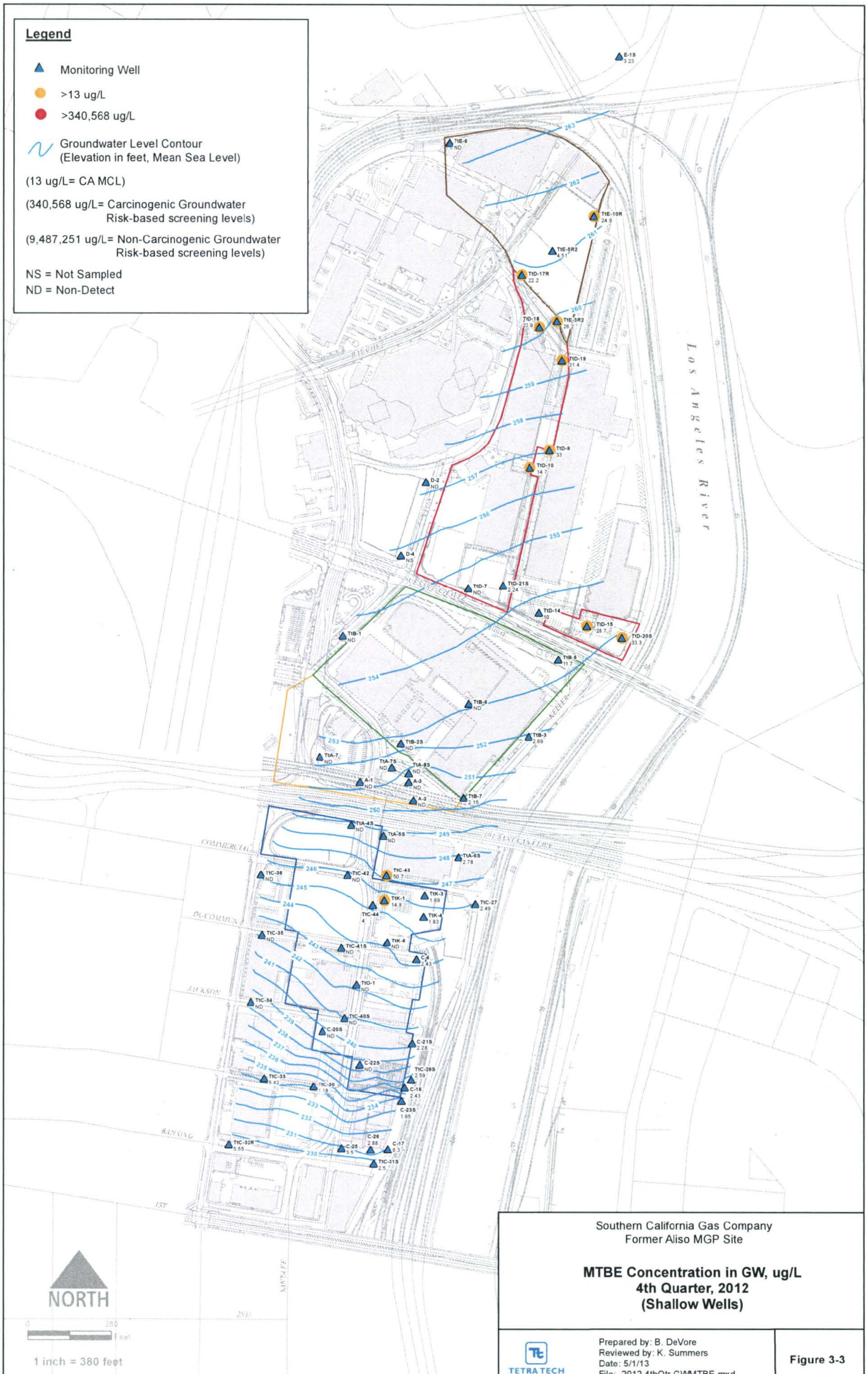
Southern California Gas Company
Former Aliso MGP Site

Benzene Concentration in GW, ug/L
4th Quarter, 2012
(Deep Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/1/13
File: 2012 4thQtr Deep GWBenzene.mxd

Figure 3-2



Legend

- Monitoring Well
- >13 ug/L
- >340,568 ug/L
- Groundwater Level Contour (Elevation in feet, Mean Sea Level)

(13 ug/L= CA MCL)

(340,568 ug/L= Carcinogenic Groundwater Risk-based screening levels)

(9,487,251 ug/L= Non-Carcinogenic Groundwater Risk-based screening levels)

NS = Not Sampled

ND = Non-Detect

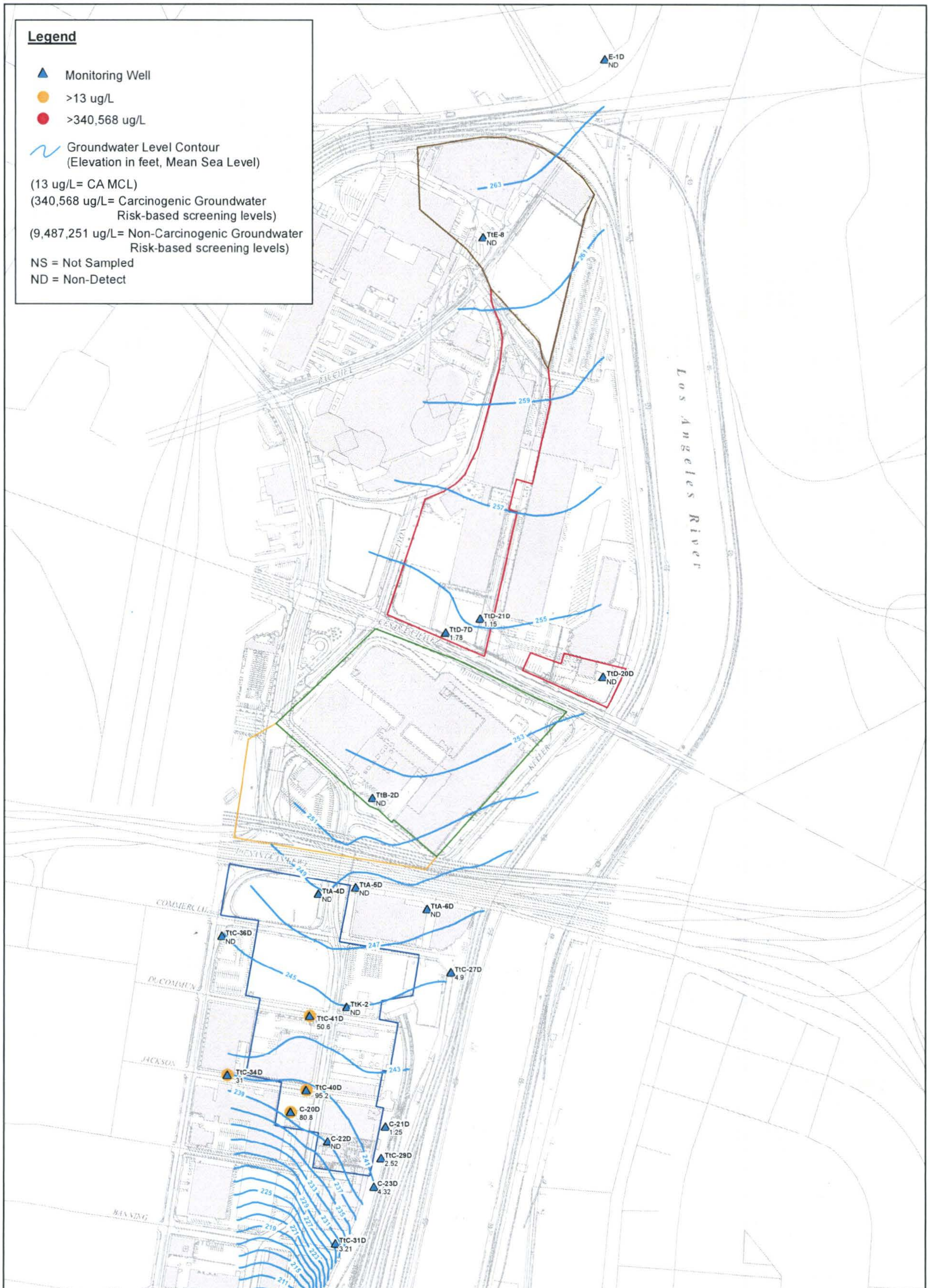
Southern California Gas Company
Former Aliso MGP Site

MTBE Concentration in GW, ug/L
4th Quarter, 2012
(Shallow Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/1/13
File: 2012 4thQtr GWMTBE.mxd

Figure 3-3



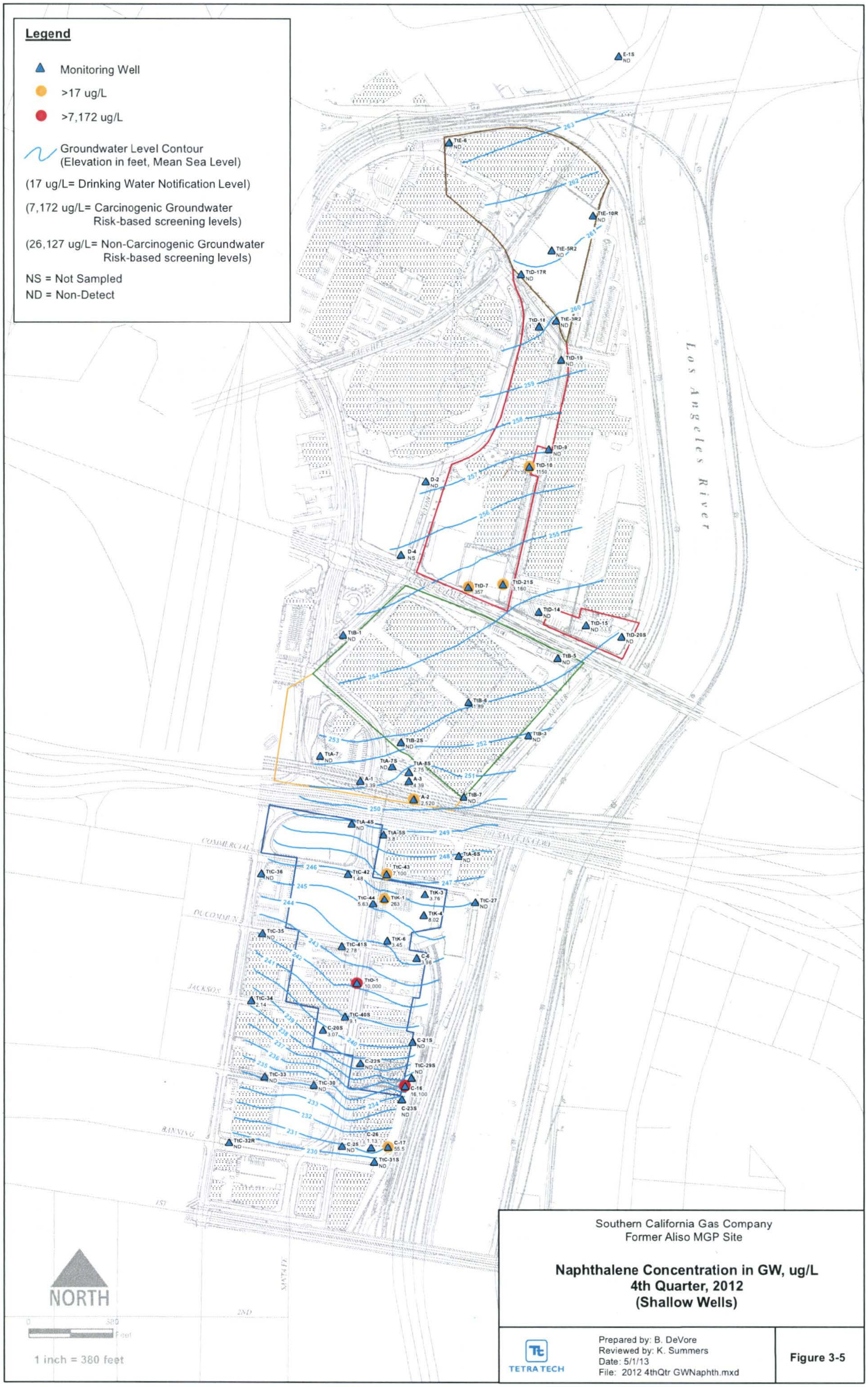
Southern California Gas Company
Former Aliso MGP Site

MTBE Concentration in GW, ug/L
4th Quarter, 2012
(Deep Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/1/13
File: 2012 4thQtr Deep GWMTBE.mxd

Figure 3-4



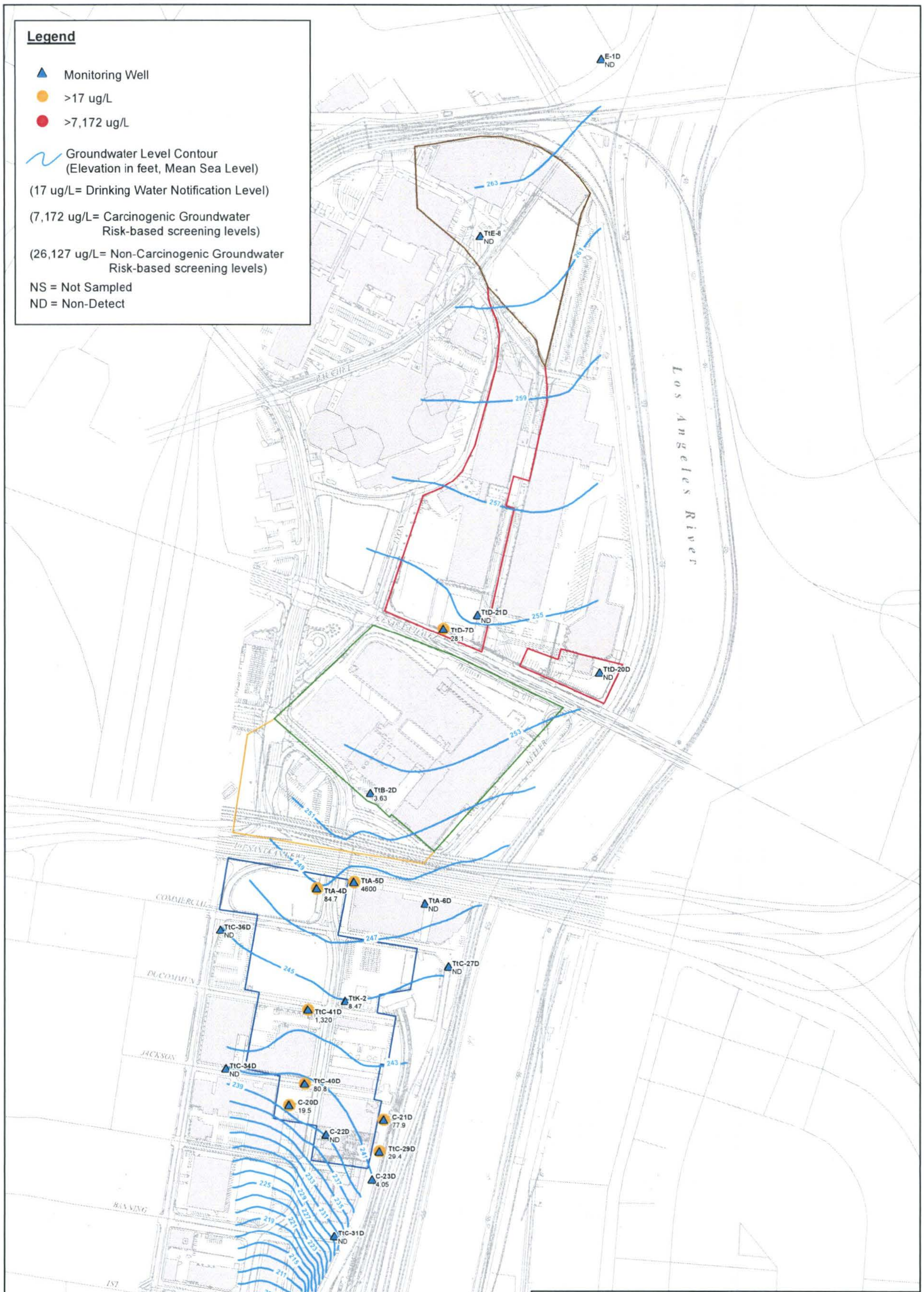
Southern California Gas Company
Former Aliso MGP Site

Naphthalene Concentration in GW, ug/L
4th Quarter, 2012
(Shallow Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/1/13
File: 2012 4thQtr GWNaphth.mxd

Figure 3-5



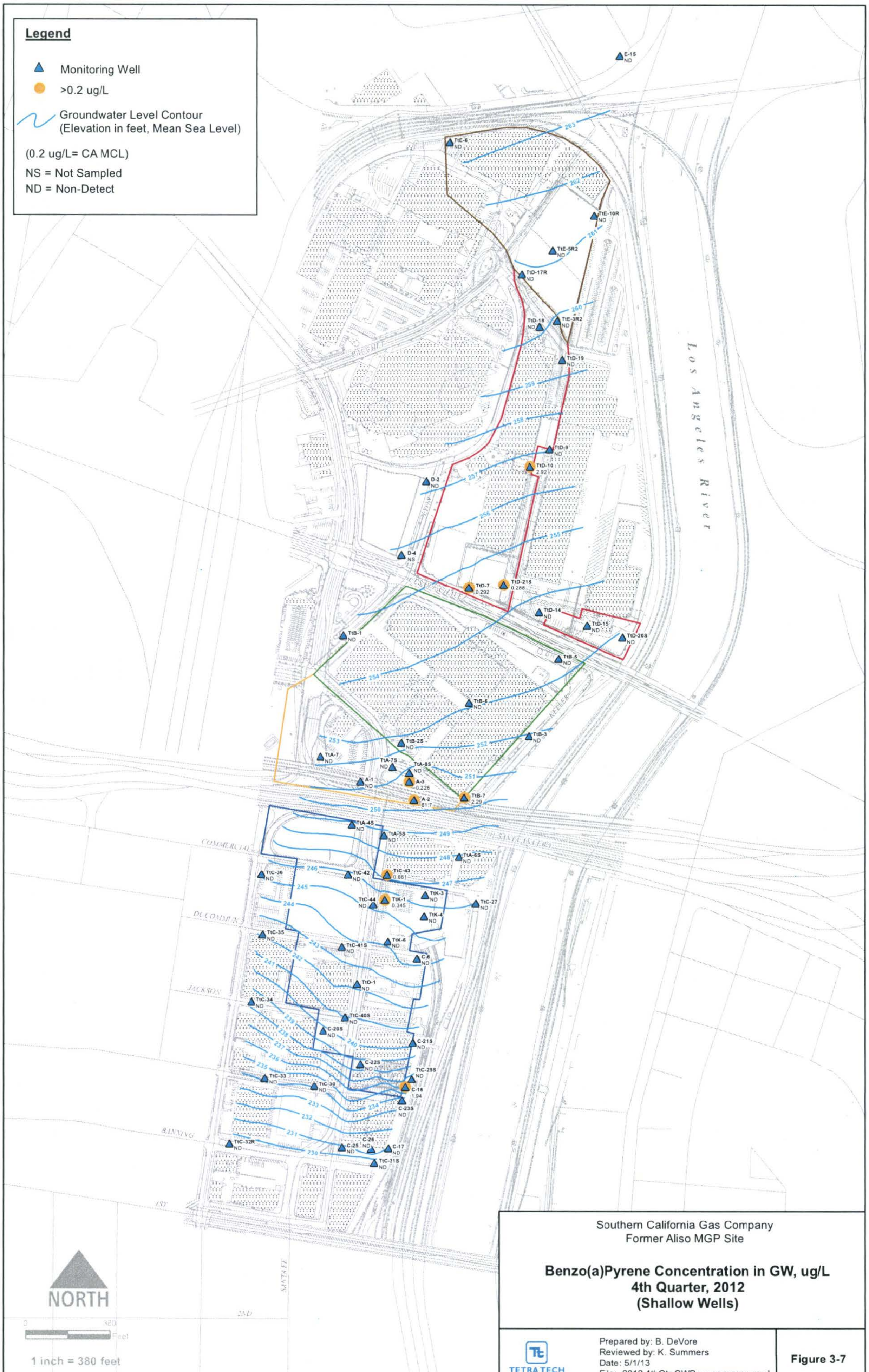
Southern California Gas Company
Former Aliso MGP Site

Naphthalene Concentration in GW, ug/L
4th Quarter, 2012
(Deep Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/1/13
File: 2012 4thQtr Deep GWNaphth.mxd

Figure 3-6



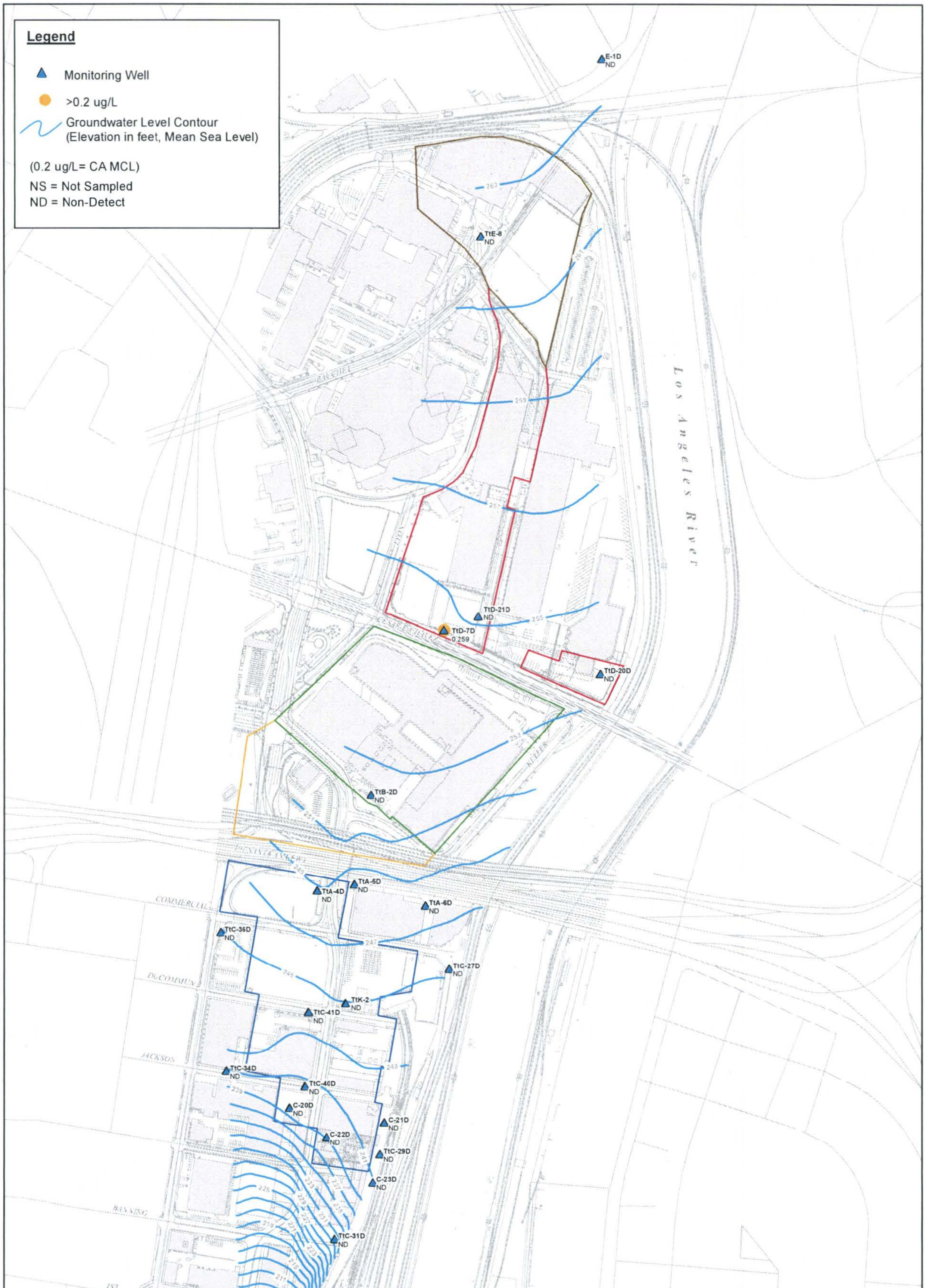
Southern California Gas Company
Former Aliso MGP Site

Benzo(a)Pyrene Concentration in GW, ug/L
4th Quarter, 2012
(Shallow Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/1/13
File: 2012 4thQtr GWBenzoapyrene.mxd

Figure 3-7

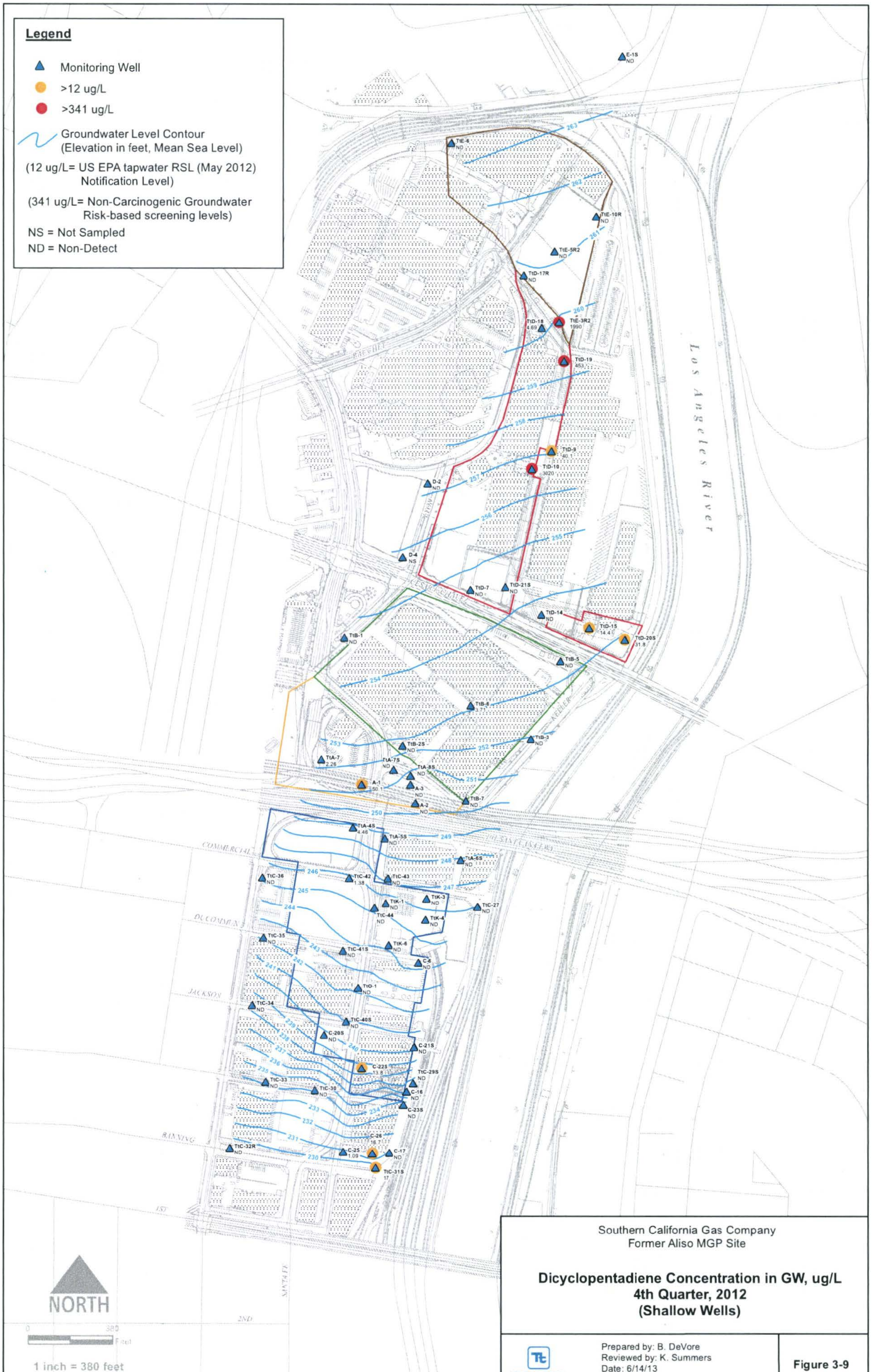


Southern California Gas Company
Former Aliso MGP Site

Benzo(a)Pyrene Concentration in GW, ug/L
4th Quarter, 2012
(Deep Wells)

TETRA TECH
Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/1/13
File: 2012 4thQtr Deep GWBenzoapyrene.mxd

Figure 3-8



Legend

- Monitoring Well
- >12 ug/L
- >341 ug/L
- Groundwater Level Contour (Elevation in feet, Mean Sea Level)

(12 ug/L= US EPA tapwater RSL (May 2012) Notification Level)

(341 ug/L= Non-Carcinogenic Groundwater Risk-based screening levels)

NS = Not Sampled

ND = Non-Detect

Southern California Gas Company
Former Aliso MGP Site

Dicyclopentadiene Concentration in GW, ug/L
4th Quarter, 2012
(Shallow Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 6/14/13
File: 2012 4thQtr GWDicyclo.mxd

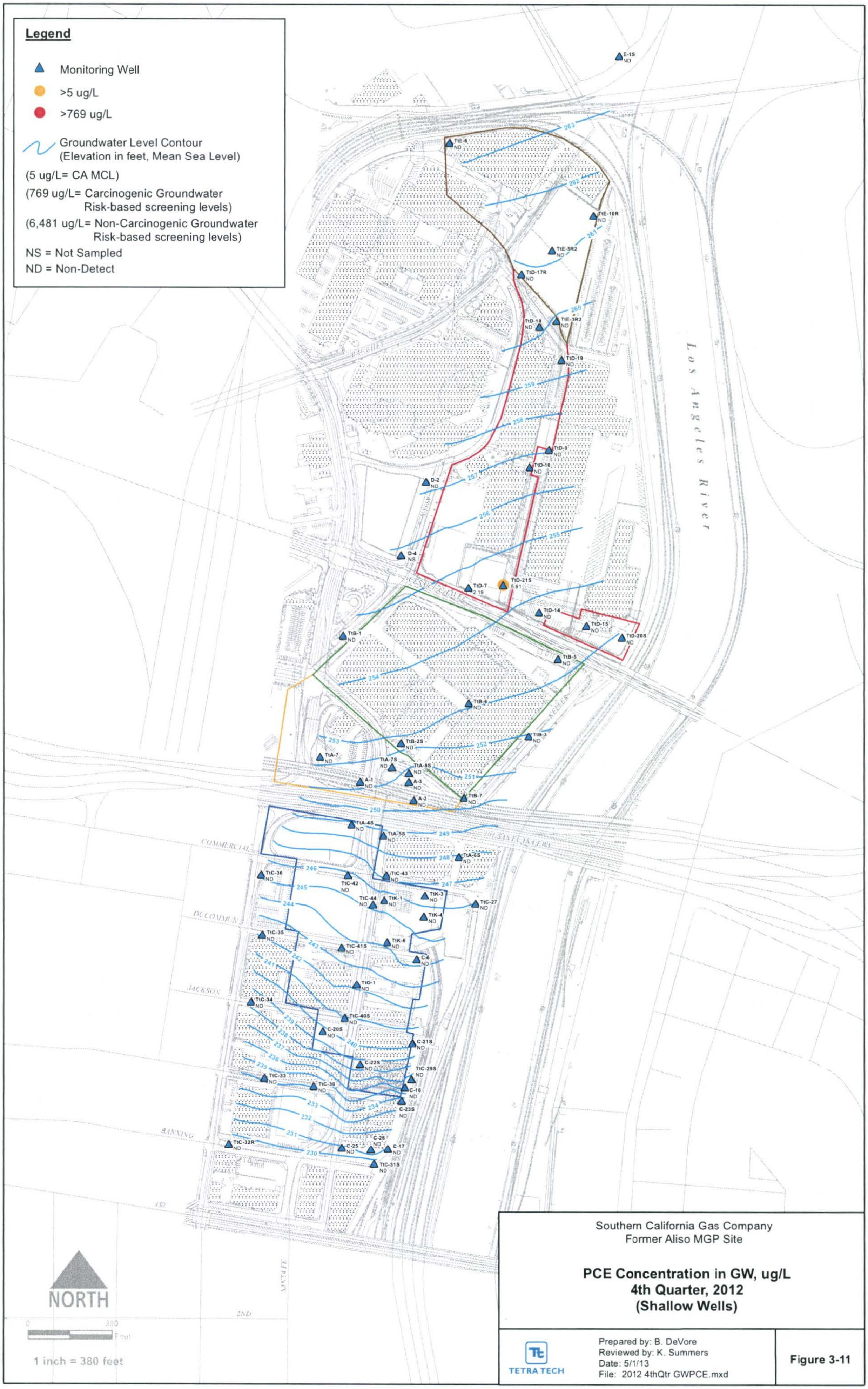
Figure 3-9

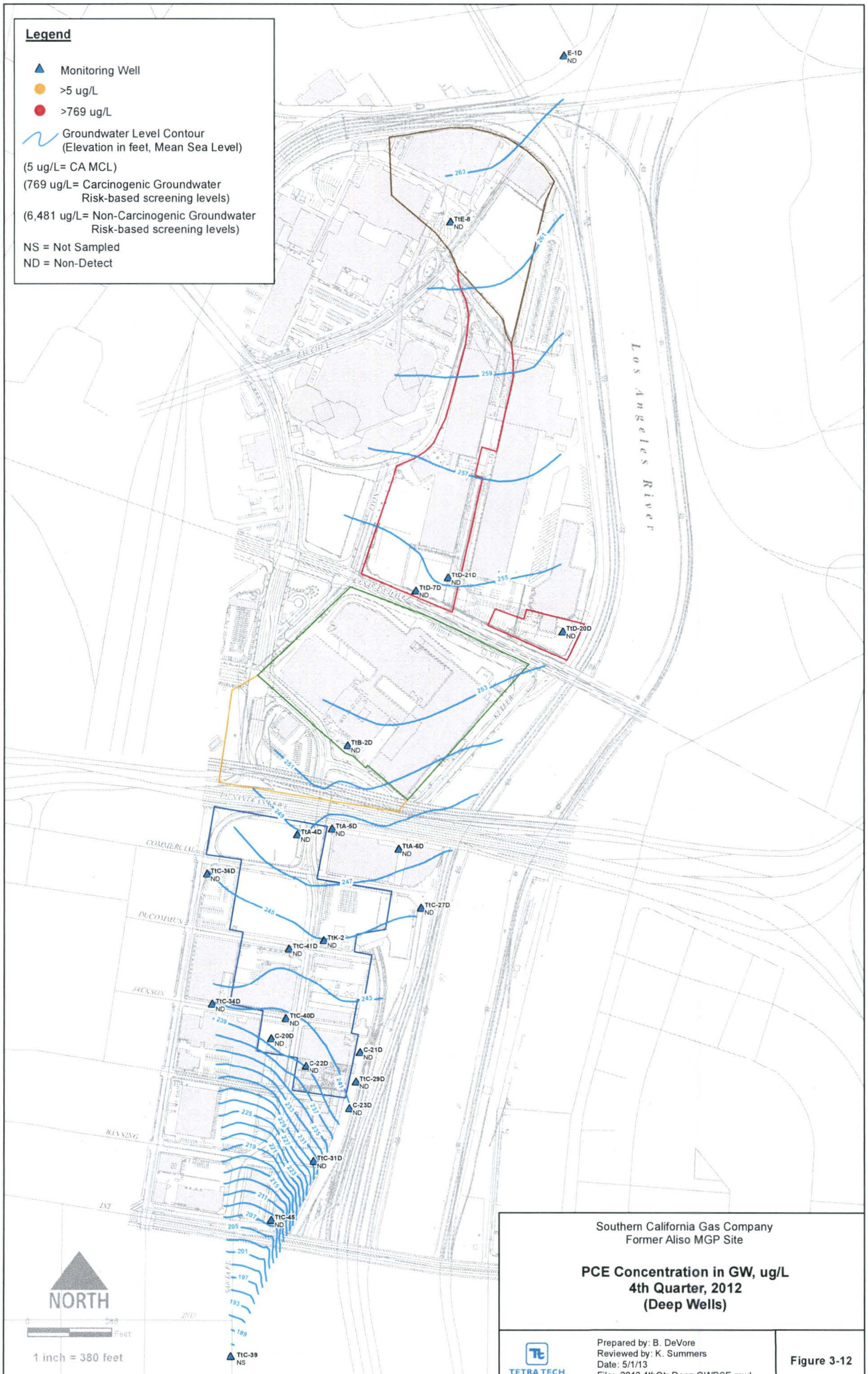
Southern California Gas Company
Former Aliso MGP Site

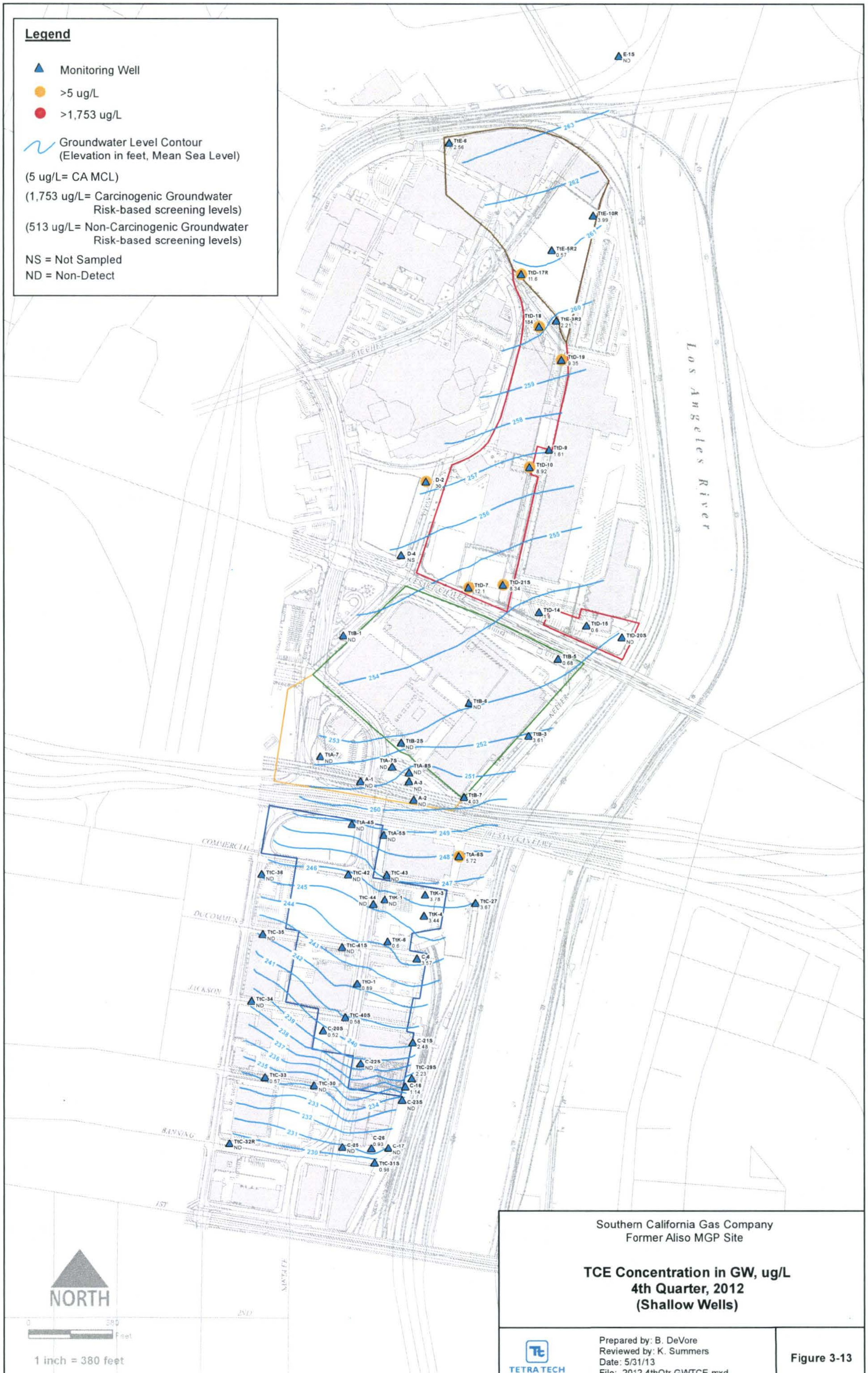
Dicyclopentadiene Concentration in GW, ug/L
4th Quarter, 2012
(Deep Wells)

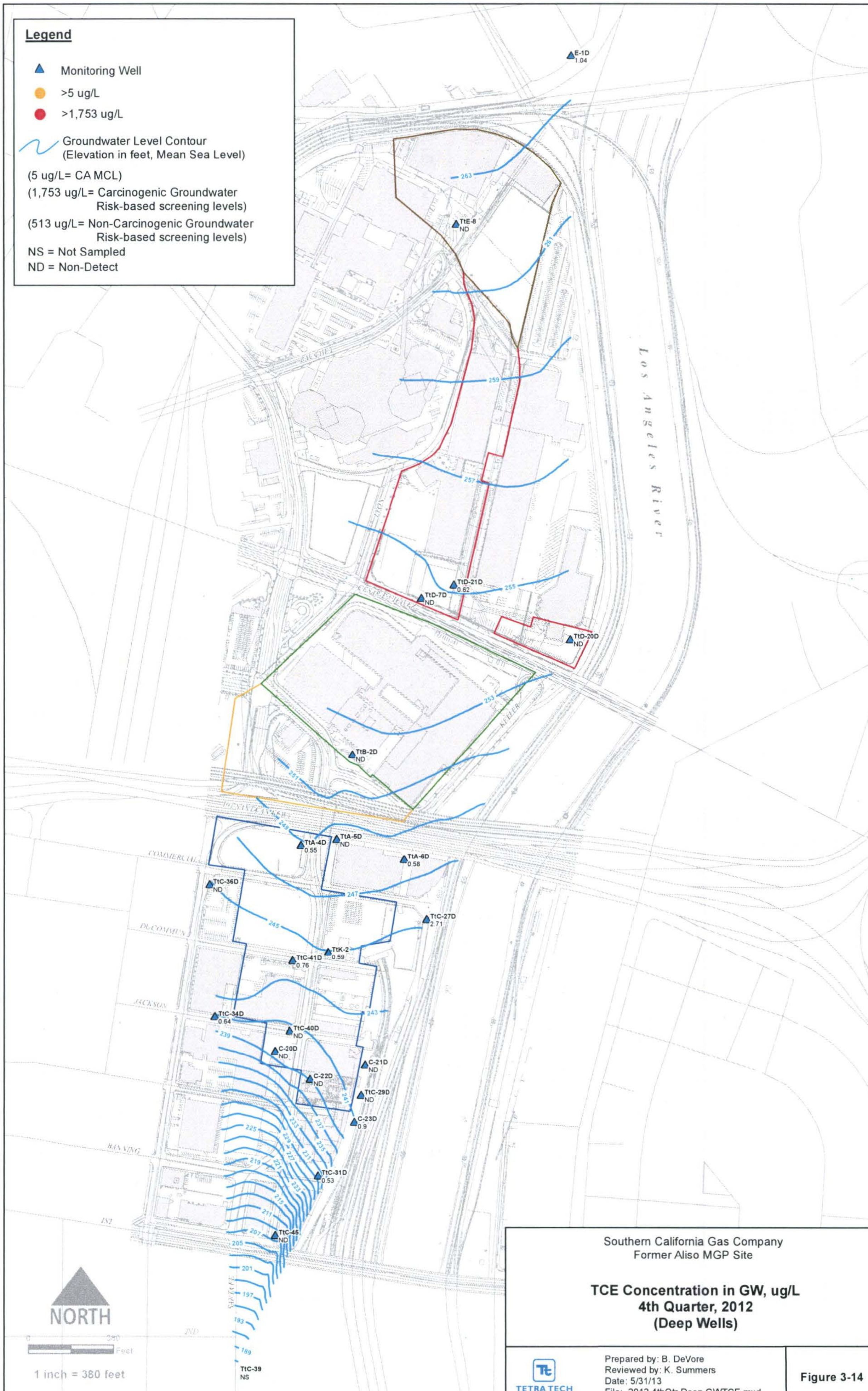
TETRA TECH
Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/1/13
File: 2012 4thQtr Deep GWDicyclo.mxd

Figure 3-10

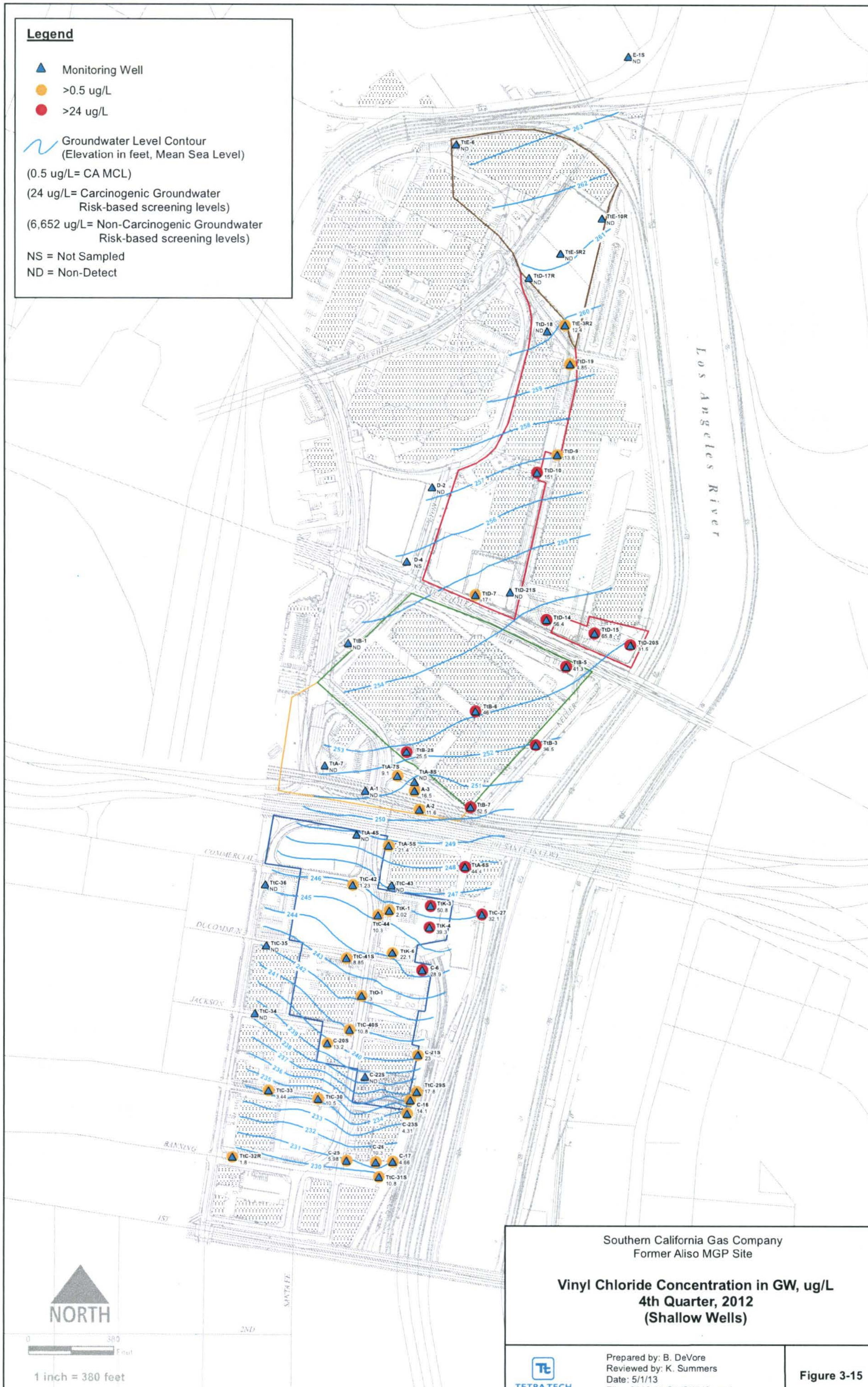

Legend
Monitoring Well
>5 ug/L
>769 ug/L
Groundwater Level Contour
(Elevation in feet, Mean Sea Level)
(5 ug/L= CA MCL)
(769 ug/L= Carcinogenic Groundwater
Risk-based screening levels)
(6,481 ug/L= Non-Carcinogenic Groundwater
Risk-based screening levels)
NS = Not Sampled
ND = Non-Detect
Los Angeles River
TtD-21S
5.61
TtD-7
2.19
D-4
NS
NORTH
1 inch = 380 feet
Southern California Gas Company
Former Aliso MGP Site
PCE Concentration in GW, ug/L
4th Quarter, 2012
(Shallow Wells)
TETRA TECH
Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/1/13
File: 2012 4thQtr GWPCE.mxd
Figure 3-11


Legend
Monitoring Well
>5 ug/L
>769 ug/L
Groundwater Level Contour (Elevation in feet, Mean Sea Level)
(5 ug/L= CA MCL)
(769 ug/L= Carcinogenic Groundwater Risk-based screening levels)
(6,481 ug/L= Non-Carcinogenic Groundwater Risk-based screening levels)
NS = Not Sampled
ND = Non-Detect
E-1D ND
TtE-8 ND
TtD-21D ND
TtD-7D ND
TtD-20D ND
TtB-2D ND
TtA-4D ND
TtA-5D ND
TtA-6D ND
TtC-36D ND
TtC-27D ND
TtK-2 ND
TtC-41D ND
TtC-34D ND
TtC-40D ND
C-20D ND
C-21D ND
C-22D ND
TtC-29D ND
C-23D ND
TtC-31D ND
TtC-45 ND
TtC-39 NS
263
261
259
257
255
253
251
249
247
245
243
239
241
237
235
233
231
229
227
225
223
221
219
217
215
211
207
205
201
197
193
189
Los Angeles River
COMMERCIAL
DUCOMMUN
JACKSON
BANNING
1ST
2ND
ALHAMBRA
VIGNES
KELLER
NORTH
0
380
Feet
1 inch = 380 feet
Southern California Gas Company
Former Aliso MGP Site
PCE Concentration in GW, ug/L
4th Quarter, 2012
(Deep Wells)
TETRA TECH
Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/1/13
File: 2012 4thQtr Deep GWPCE.mxd
Figure 3-12


Legend
Monitoring Well
>5 ug/L
>1,753 ug/L
Groundwater Level Contour
(Elevation in feet, Mean Sea Level)
(5 ug/L= CA MCL)
(1,753 ug/L= Carcinogenic Groundwater Risk-based screening levels)
(513 ug/L= Non-Carcinogenic Groundwater Risk-based screening levels)
NS = Not Sampled
ND = Non-Detect
Los Angeles River
COMMERCIAL
DUCOMMUN
JACKSON
BANNING
1ST
2ND
NORTH
0
380
Feet
1 inch = 380 feet
Southern California Gas Company
Former Aliso MGP Site
TCE Concentration in GW, ug/L
4th Quarter, 2012
(Shallow Wells)
TETRA TECH
Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/31/13
File: 2012 4thQtr GWTCE.mxd
Figure 3-13



Legend
Monitoring Well
>5 ug/L
>1,753 ug/L
Groundwater Level Contour (Elevation in feet, Mean Sea Level)
(5 ug/L= CA MCL)
(1,753 ug/L= Carcinogenic Groundwater Risk-based screening levels)
(513 ug/L= Non-Carcinogenic Groundwater Risk-based screening levels)
NS = Not Sampled
ND = Non-Detect
E-1D 1.04
TtE-8 ND
263
261
259
257
255
253
251
249
247
245
243
241
239
Los Angeles River
TtD-21D 0.62
TtD-7D ND
TtD-20D ND
TtB-2D ND
TtA-4D 0.55
TtA-5D ND
TtA-6D 0.58
TtC-36D ND
TtC-27D 2.71
TtK-2 0.59
TtC-41D 0.76
TtC-34D 0.64
TtC-40D ND
C-20D ND
C-21D ND
C-22D ND
TtC-29D ND
C-23D 0.9
TtC-31D 0.53
TtC-45 ND
TtC-39 NS
225
219
215
211
207
205
201
197
193
189
COMMERCIAL
DUCOMMUN
JACKSON
BANNING
KELLER
NORTH
0 380 Feet
1 inch = 380 feet
Southern California Gas Company
Former Aliso MGP Site
TCE Concentration in GW, ug/L
4th Quarter, 2012
(Deep Wells)
TETRA TECH
Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/31/13
File: 2012 4thQtr Deep GWTCE.mxd
Figure 3-14



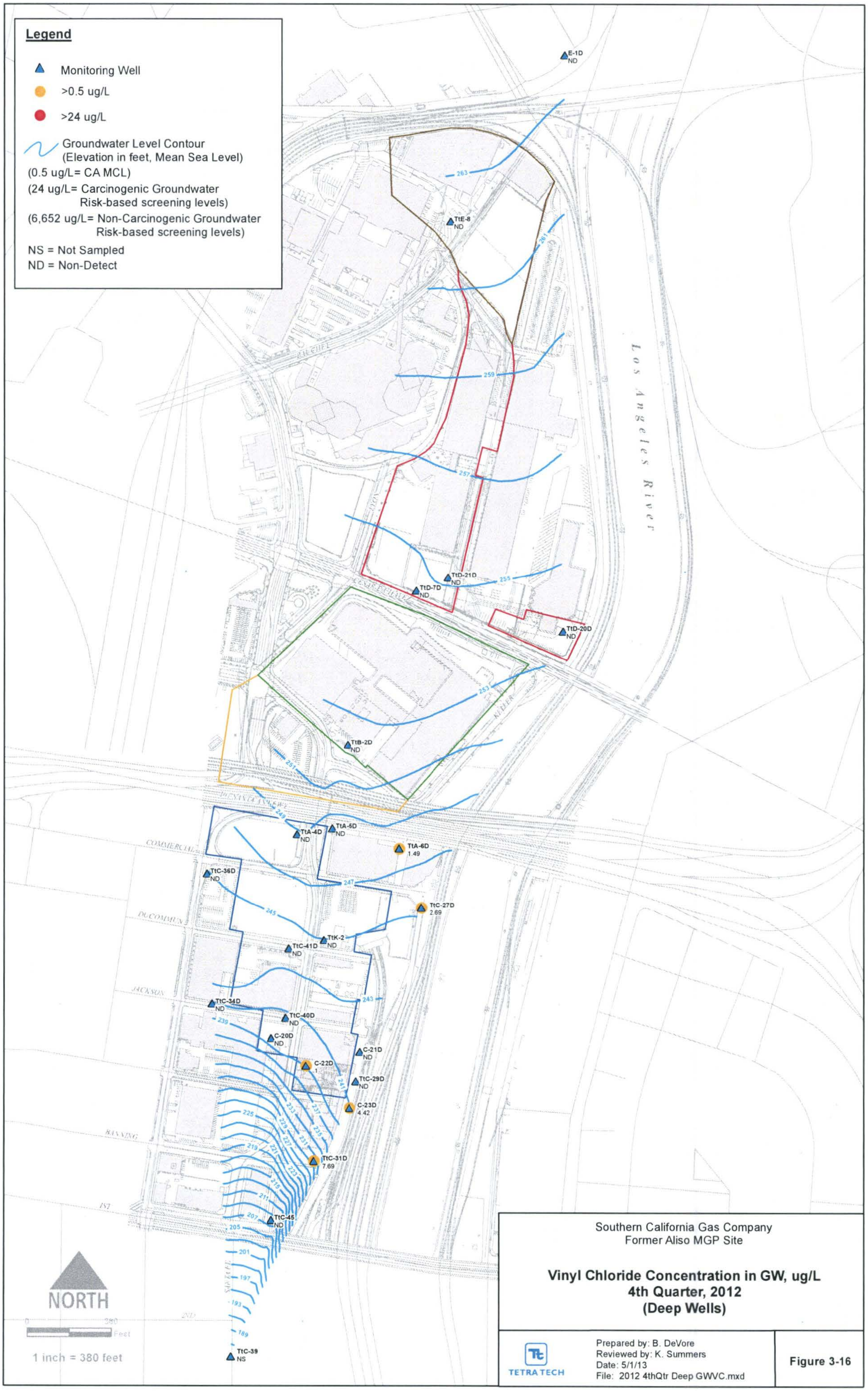
Southern California Gas Company
Former Aliso MGP Site

Vinyl Chloride Concentration in GW, ug/L
4th Quarter, 2012
(Shallow Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/1/13
File: 2012 4thQtr GWVC.mxd

Figure 3-15



Southern California Gas Company
Former Aliso MGP Site

Vinyl Chloride Concentration in GW, ug/L
4th Quarter, 2012
(Deep Wells)

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/1/13
File: 2012 4thQtr Deep GWVC.mxd

Figure 3-16

4. TIME TRENDS

Example concentration versus time plots are shown for selected wells to illustrate changes over time and the response to rainfall. In addition, time trend plots are shown downgradient of remediated areas.

4.1 COMPARISON OF RAINFALL AND WATER QUALITY

Examples of the effect of rainfall are shown for four wells on different parts of the Site. For each well, a combined plot of water levels, rainfall, and benzene is shown. Figure 4-1 displays the plot for well TtD-21S, located next to the former settling pits on Sector D. Water level increases were observed in this well following large rain events over 6 inches/month. Smaller increases of up to 0.2 feet occurred after rainfall events of 2 to 4 inches/month.

The effect of rainfall on dissolved benzene concentrations is small, except for the large rainfall event (20.4 inches total) over the winter of 2004-2005 when the dissolved benzene concentrations increased from 2,830 µg/L to 12,700 µg/L. There was soil contamination in the unsaturated zone at this time, therefore an increase in the water level could have contacted waste materials in the smear zone. Since 2006, dissolved benzene concentrations have been less than 2,270 µg/L and in CY 2012 averaged 950 µg/L. After rainfall events of about 8 inches/month in January 2008 and 10.2 inches/month in December 2010, there were only small changes in the dissolved benzene concentrations. The December 2010 rainfall event occurred after remediation of the former settling pits, and thus showed that high rainfall did not result in a spike in benzene concentrations, even though infiltrating rainwater from the December 2010 event did increase the water level in TtD-21S by about 0.8 foot.

The May 2008-December 2009 remediation in Sector D, Area 7 removed most of the wastes in the unsaturated zone of the former settling pits, thereby reducing the mass of waste that a higher water table could contact. The companion deep well, TtD-21D, had dissolved benzene concentrations of 14.8 µg/L when first measured in January 2003. Since then, dissolved benzene concentrations were detected at about 1 µg/L during three quarterly sampling events, the last one in May 2005. The replacement deep well in the southern part of the former settling pits, TtD-7D, had benzene concentrations of 146 to 161 µg/L from August 2011 to October 2011. Benzene decreased to 78 µg/L in May 2012 and was less than 2 µg/L on the other dates in 2012.

The second example is shallow zone alluvial well TtA-6S located south of Highway 101 in Sector A East. Figure 4-2 displays the benzene concentrations and water levels and rainfall on one plot. The water levels rose by small amounts for infiltrating rainwater after the larger rainfall events and small responses to other rainfall events. The response to the large rainfall event in the winter of 2004-2005 was an approximately 1.25 feet rise, and the dissolved benzene concentrations increased to above 400 µg/L. However, there was no response following the large December 2010 event. At this location, there is no soil contamination, therefore if the water level rises it does not contact residually impacted soil. The other two wells downgradient of Sector A, TtA-4S and TtA-5S, showed even less response to rainfall events, as shown in Figure 4-3. The dissolved benzene concentrations in shallow zone alluvial wells TtA-4S and TtA-5S have decreased consistently since the former gas holders and other wastes were removed, first on the Denny's parcel on the west side of Sector A between June 1998 and October 1999

and then on the southern part on the west side (Parcel A West) and the east side of Sector A (Parcel A East) between February 2004 and January 2005.
The third example is shallow zone alluvial well TtO-1 located in Center Street between Blocks O and N. Figure 4-4 displays the benzene concentrations and water levels and rainfall on one plot. The water level rose in response to the larger rainfall events, but the increase was more variable. Benzene concentrations in this well do not show a consistent response to the rain events. There was a small lagged increase in benzene (12 μg/L) following the Dec. 2010 event.

4.2 SOLVENT DEGRADATION

As explained in Section 2 of the 2011 Monitoring Report, the sources of PCE and TCE were the metal cleaning plant and mannequin manufacturing operations formerly located on the eastern half of Sector E, following redevelopment of the Site for post-MGP/butadiene operations. Sector E is the upgradient portion of the Site. As PCE and TCE move downgradient, they are affected by biogeochemical reactions, as explained below, depending on the geochemical conditions present in the groundwater.

Chlorinated ethenes such as PCE and TCE can degrade via several possible reactions, including reductive dechlorination, anaerobic oxidation, aerobic oxidation, and aerobic co-metabolism [Chapelle et al., 2003]. Geochemical conditions at the Aliso Site are anaerobic, which favors the degradation of PCE and TCE by reductive dechlorination processes [Wiedemeier et al., 1998] (Figure 4-5a). This process does not occur if the DO concentration in the groundwater is above 1 mg/L [USEPA, 1998]. Recent experiments have indicated that PCE with other chlorinated solvents can be degraded under aerobic conditions by specific bacteria [Shim et al, 2001], although a required DO concentration was not stated. The degradation of PCE and TCE also requires organic carbon to generate the anaerobic conditions, although the carbon source can be of natural or anthropogenic origin [Chapelle et al, 2007]. PCE readily undergoes reductive dechlorination to TCE under all geochemical conditions except aerobic conditions, whereas the TCE to cis-1,2-DCE step occurs under either Fe(III)- or sulfate (SO_4^{-2})-reducing conditions [Chapelle et al., 2003]. The step from DCE to vinyl chloride requires sulfate-reducing or methanogenesis conditions. The production of cis-1,2-DCE is more common than trans-1,2-DCE [USEPA, 1998], and cis-1,2-DCE was found more often and at higher concentrations at this site than trans-1,2-DCE.

Because PCE and TCE have highly electronegative chlorine (Cl), these compounds can also become potential electron acceptors in contaminated groundwater systems. Based on the relative order by free energy of the reaction as shown in Figure 4-5b, these reactions occur after use of NO_3 but before use of iron or manganese [Chapelle et al., 2007]. If the predominant electron acceptor in the groundwater is SO_4, as is the case for this Site, the PCE and TCE degradation uses a portion of the electron flow, rather than solely driving the reaction of SO_4 to H_2S. While the mechanism for PCE degradation is not specifically known, in CY 2012 only two shallow wells had detected PCE, indicating that widespread degradation has occurred.

The last step in the reductive dechlorination process (i.e., conversion of vinyl chloride into CO_2, H_2O, and Cl^{-1}) can occur via different pathways. Under highly reducing conditions, vinyl chloride can fully degrade to ethene and then to CO_2 and H_2O via reductive dechlorination [Bradley, 2000]. However, this rate is slow and significant only in methanogenic conditions; thus it is often incomplete, leading to the accumulation of DCE and vinyl chloride in groundwater [Chapelle et al., 2003]. Under iron-reducing conditions, anaerobic oxidation or anoxic mineralization of VC to CO_2 can occur, which is faster than the reductive dechlorination of VC to ethene [Bradley and Chappelle, 1996]. However, the degradation of vinyl chloride via anoxic mineralization is limited by the available amount of Fe(III) [Bradley, 2003]. Vinyl chloride can degrade to its components by oxic mineralization via co-metabolic reactions or VC can serve as the sole carbon source, but only under aerobic conditions [Hartmans, 1995]. VC can be mineralized at the rate of 1 µg/L of VC per 1.3 µg/L DO [Bradley, 2011].

Figure 4-6 shows the change in concentrations of PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride in one well in the southeast corner of Sector E and TtD-18, located a short distance away; data for well E-3 have been updated with recent data for the replacement well, TtE-3R2. The plot shows that all solvent concentrations at the location of wells E-3/TtE-3R2 has decreased substantially from the earliest data from 1996-1998. In October 2012, the concentrations in well TtE-3R2 were non-detect for PCE, 2.21 µg/L for TCE, 19.6 µg/L for cis-1,2-DCE, 6.58 µg/L for trans-1,2-DCE, and 12.4 µg/L for vinyl chloride. In TtD-18, there was also no detected PCE, which was replaced by TCE (184 µg/L) and cis-1,2-DCE (95.4 µg/L) and a low concentration of trans-1,2-DCE (5.47 µg/L); vinyl chloride was non-detect. The higher concentrations of cis-1,2-DCE than trans-1,2-DCE is the expected relationship.

Another way to compare breakdown products is to compare solvent concentrations (in µg/L) with distance downgradient. The change in solvent concentrations over time for the prior years (2004 through 2011) in wells along the centerline (Figure 4-7), showed a shift in position of high concentrations of each solvent from PCE in the upgradient source area on Sector E to the middle portions of the Site for the final degradation product, vinyl chloride. There is also a change in concentrations as the breakdown product, cis-1,2-DCE, has higher concentrations than either PCE or TCE, since it is derived from degradation of both compounds. The decreasing solvent concentrations in the northern wells are evident by comparing the concentration in 4Q2004 to the concentrations in 4Q2012, as shown on Figure 4-8.

Figure 4-9 plots solvent molar concentration changes (in micromoles per liter, µmol/L) for October 2012 for the same wells as shown on Figure 4-8. The plot is interpreted to show nearly total degradation of PCE and TCE, and evidence that biodegradation is the main attenuation process for cis-1,2-DCE and vinyl chloride. The PCE, TCE, and trans-1,2-DCE have been nearly all degraded.

As was seen on Figure 3-15, vinyl chloride is relatively widespread in the shallow groundwater, indicating that the breakdown to ethene is not proceeding to completion, which is consistent with the presence of anaerobic conditions and limited methanogenic conditions. According to Parsons [2009], degradation of cis-1,2-DCE and/or vinyl chloride (VC) can occur via direct oxidation or abiotic reductive dechlorination under moderately reducing (e.g., iron (III)-reducing) conditions or aerobic conditions. Compounds can be added to enhance either aerobic or anaerobic breakdown of vinyl chloride. In pilot tests using the same vinyl chloride-contaminated groundwater with both aerobic and anaerobic approaches, the use of agents to promote stronger anaerobic conditions resulted in greater decreases in vinyl chloride concentrations [Cornuet et al., 2012]. Under aerobic conditions that have at least 1.3 µg/L of oxygen, about 1 µg/L of vinyl chloride can be mineralized [Bradley, 2011]. Mineralization of DCE and VC can occur at DO levels of 0.1 to 0.5 mg/L [Gossett, 2010]. This process may be occurring on the south of Sector C where limited oxygen is present in the groundwater (e.g., 0.3 to 0.85 mg/L in TtC-39 in February and May 2012 and 0.13 to 1.07 mg/L in TtC-45 in 2012).

4.3 RELATIONSHIP TO REMEDIATED AREAS

Major remediation was conducted in the eastern part of Sector E, which has resulted in significant decreases in solvent and benzene concentrations. No PCE was detected in the wells on Sector E or the wells on the northern part of Sector D that border Sector E in October 2012. The 2012 groundwater data showed that benzene was not detected in the Sector E shallow or deep wells. MTBE is present in the upgradient shallow groundwater in this area. MTBE was detected in the wells on the eastern side of Sector E, indicating that recent gasoline has contributed to the observed benzene in the southern Sector D wells. Degradation of MTBE is possible under aerobic conditions [Thornton et al, 2011], however, the dissolved oxygen in the Sector E wells is low (<1.0 mg/L), in contrast to the upgradient groundwater that had 5.3 mg/L in the shallow well (E-1S) and 5.2 mg/L in the deep well (E-1D). Other pathways for loss of MTBE are possible in the presence of elevated hydrogen concentrations [Bradley et al, 2006]. DCPD is present in TtE-3R2, but not in the other three wells on the eastern side of Sector E.

The major remediation of the southern part of Sector D has reduced PAHs and VOCs in the groundwater. Further reductions in benzene and naphthalene are expected over time, although due to the anaerobic conditions the degradation is slower than if aerobic conditions were present. Additional agents to promote faster anaerobic degradation could be added to particular wells. In addition, a passive free product extraction system could be used in well TtD-10 to remove the free product, which would also decrease DCPD and vinyl chloride in that well.

The combined remediation efforts on Sector A have been successful in reducing BTEX and PAHs in the wells on and downgradient of Sector A, especially on the west side. Further improvement is expected following completion of planned removal work in the area between Sectors A and B under Ramirez Street and in the southeast corner of Sector B. This remediation is expected to help reduce the sheens observed in TtA-7S, TtA-8S, and A-3. A passive product removal system could be installed in the well under the highway (A-2) that has had product sheens.

Remediation efforts in Sector C have been conducted on various blocks, although not in Block Q, R or the streets. Removal efforts on Block Q and along Center Street may occur when these areas are accessible. Furthermore, addition of agents to promote faster anaerobic degradation could be added to wells with elevated benzene and naphthalene, such as TtC-40S and C-17. Addition of oxygen to the vadose zone near occupied buildings could be considered to increase degradation of vinyl chloride in the soil gas, although it has not been detected in 5-ft soil gas probes on Sector C previously. Vinyl chloride was detected in a few soil gas probe locations at 15 feet bgs on Block Q in the 2012 Supplemental Site Investigation for Block Q. While air sparging could be considered for the groundwater, there are petroleum hydrocarbons and other chemicals that are more likely to be degraded by the oxygen than the vinyl chloride, so that method may not be effective.

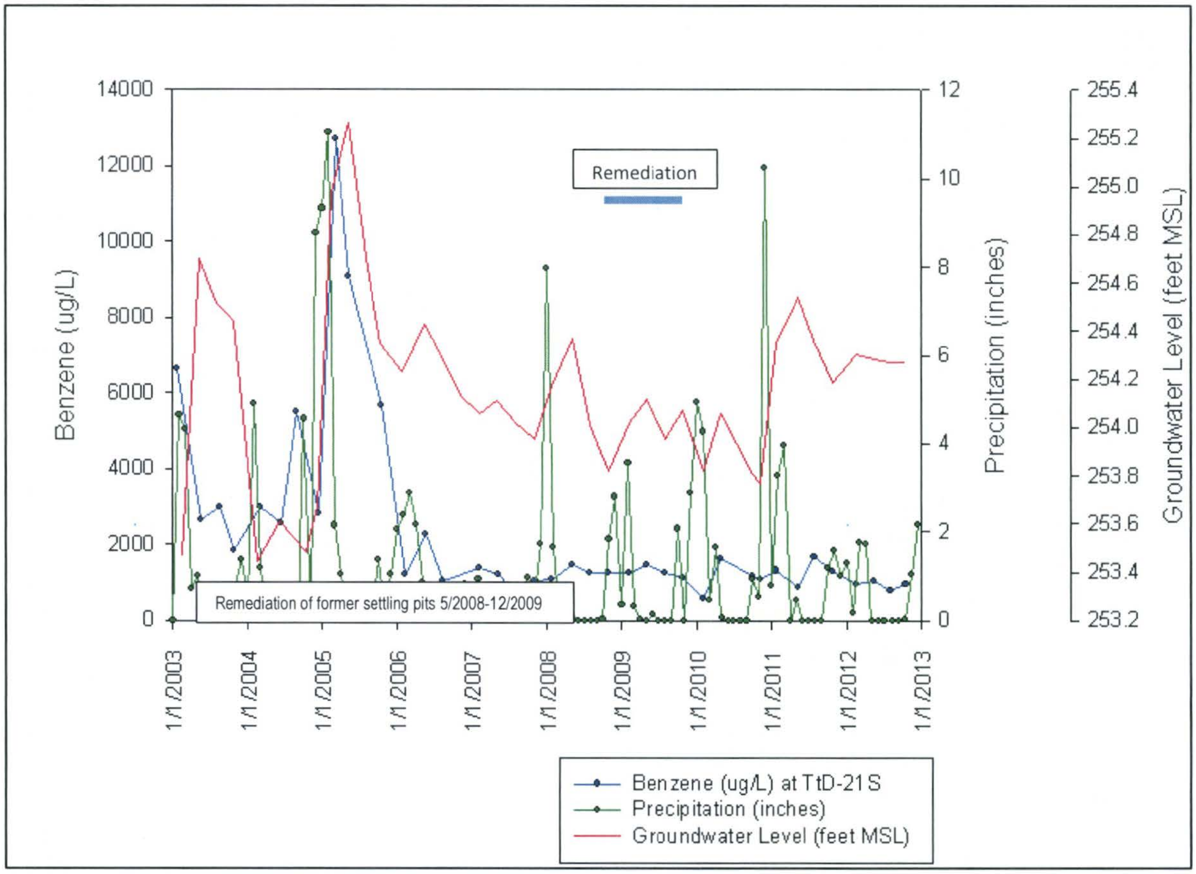


Figure 4-1. Comparison of Rain and Groundwater Levels and Benzene Concentrations in TtD-21S

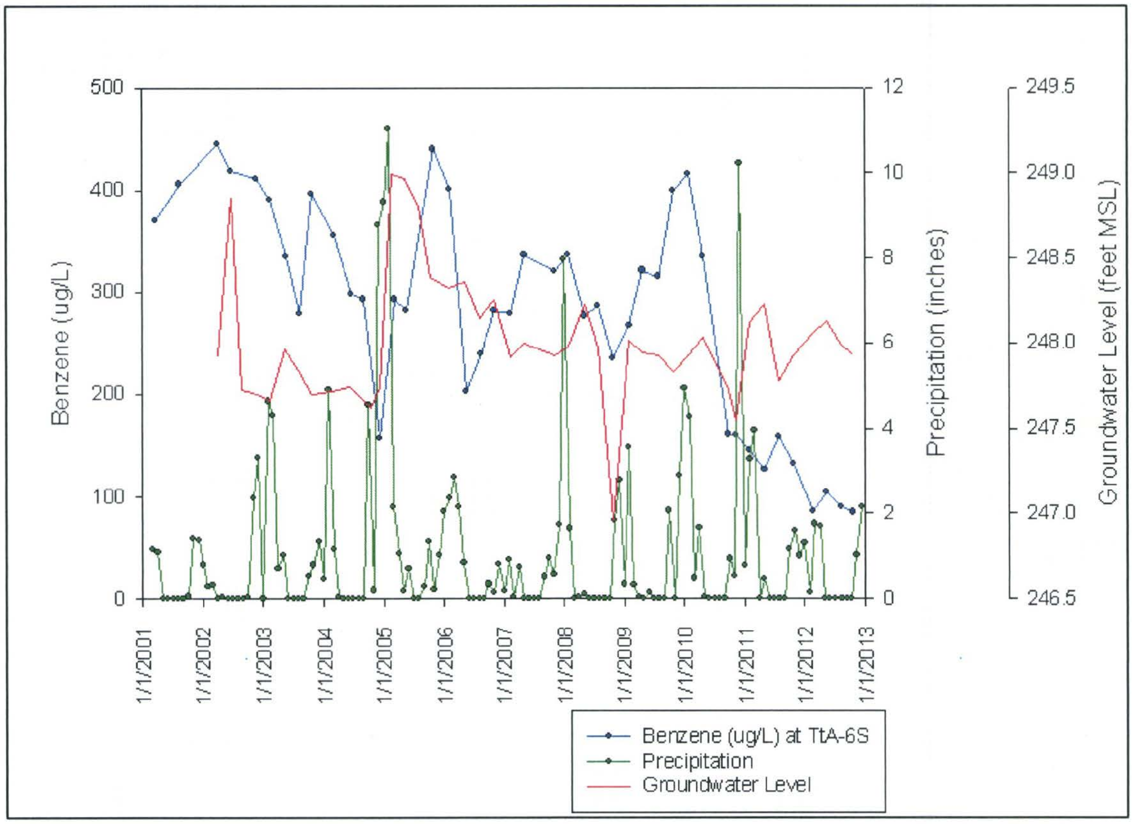
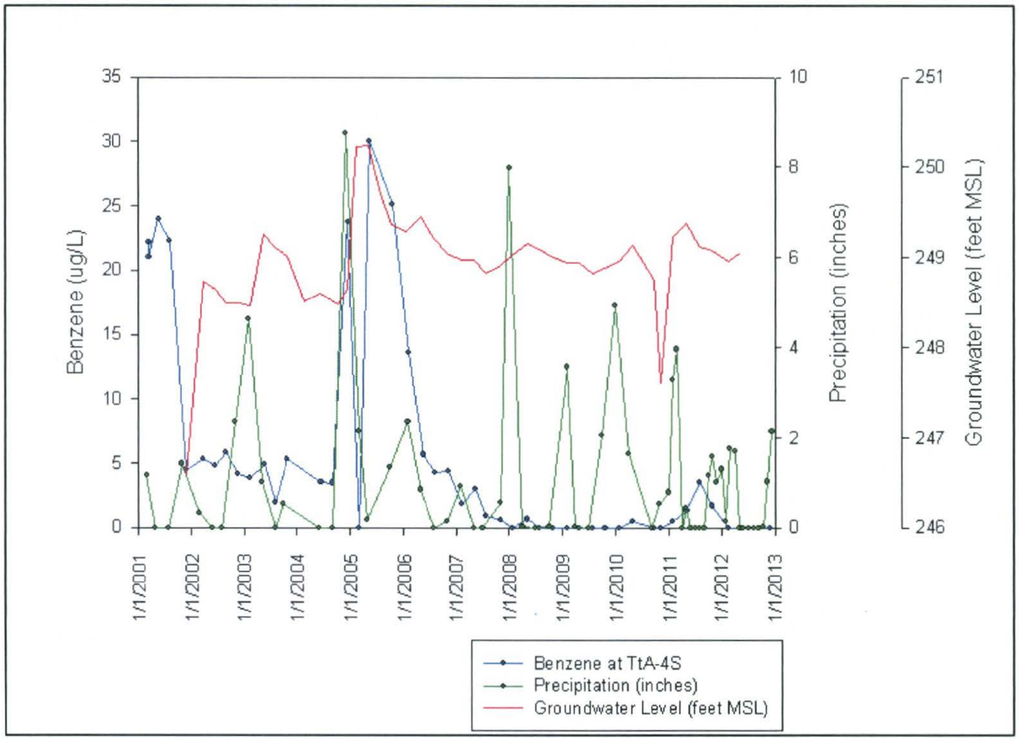


Figure 4-2. Benzene in Wells Downgradient of Sector A with Water Levels and Rainfall

a) Well TtA-4S



b) Well TtA-5S

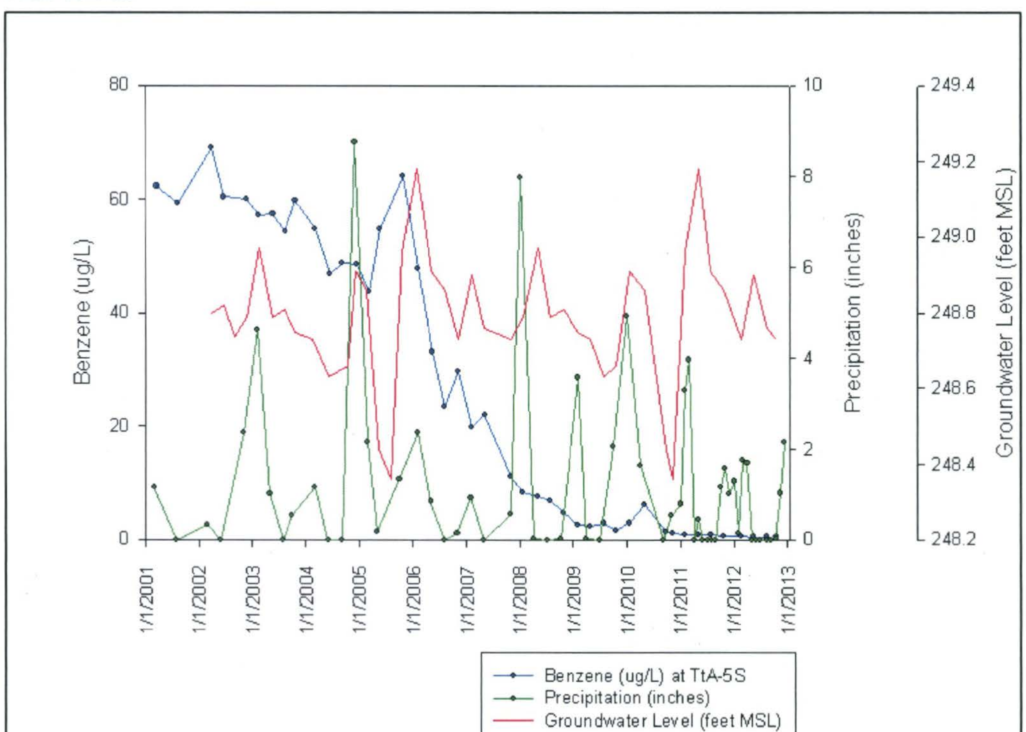


Figure 4-3. Benzene in Wells TtA-4S and TtA5S with Water Levels and Rainfall

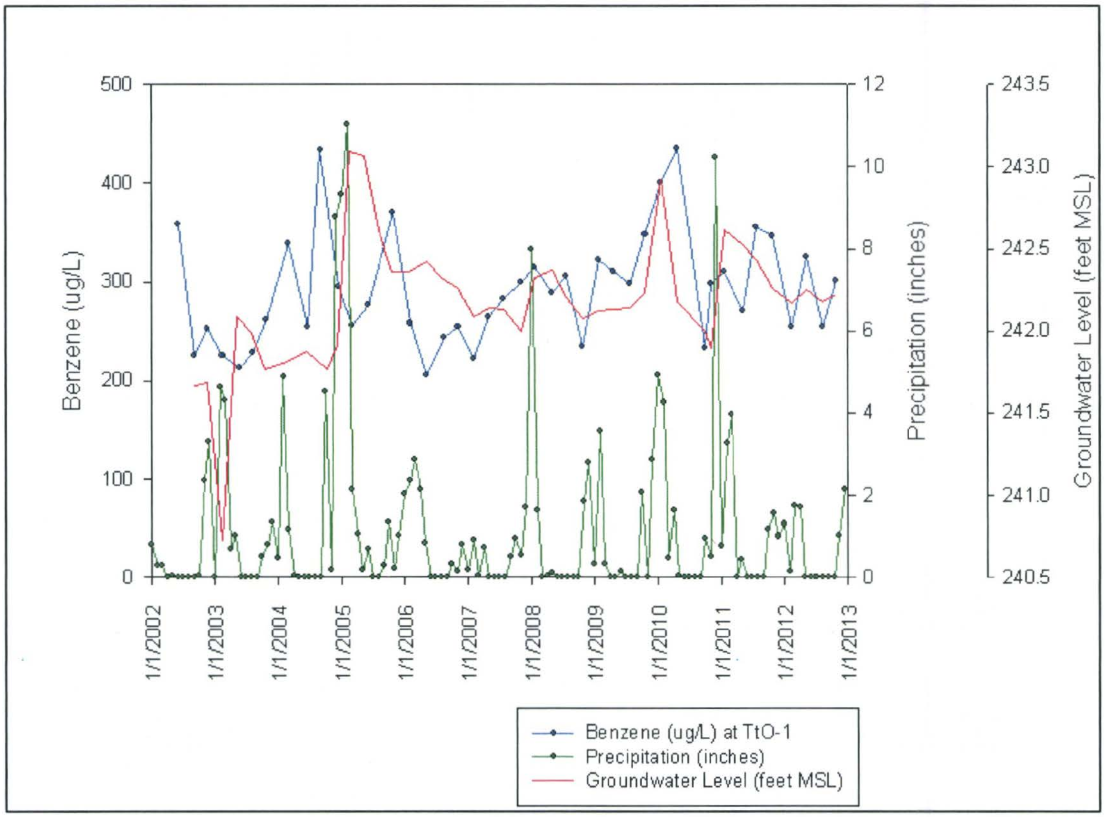
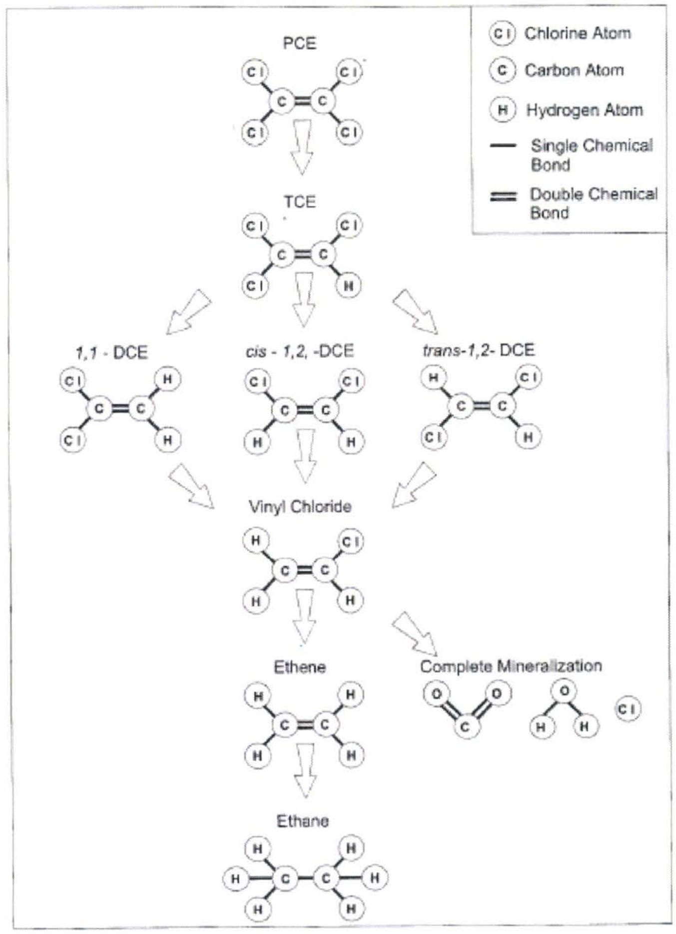


Figure 4-4. Benzene in Well TtO-1 with Water Levels and Rainfall



b)

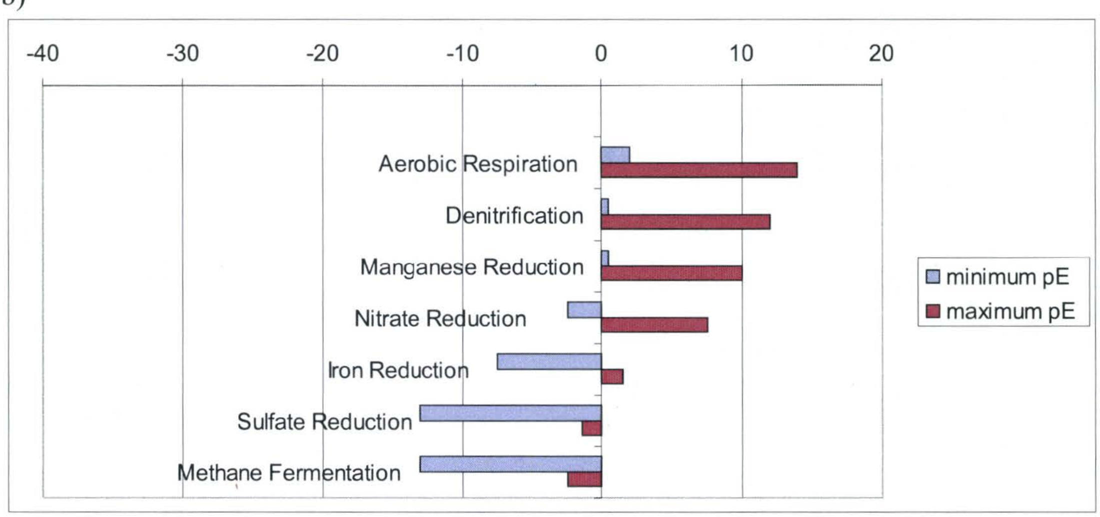
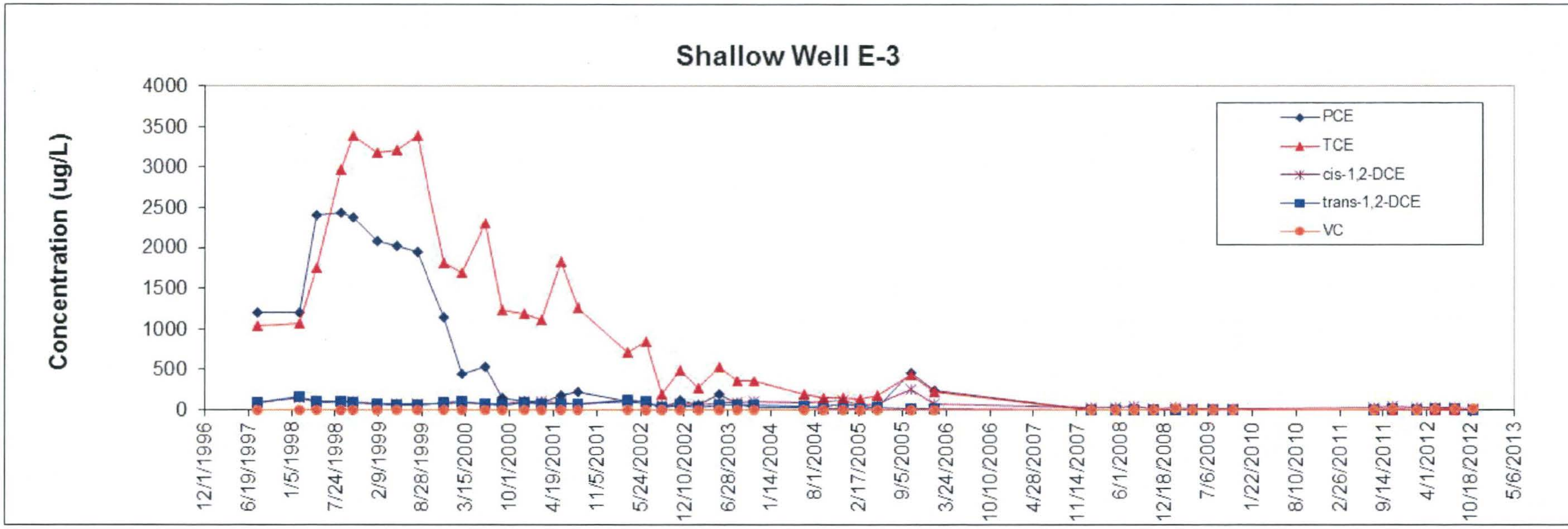


Figure 4-5. Sequence of Potential Reactions: a) Reductive Dechlorination Pathways of the Chlorinated Ethenes, PCE and TCE, and b) Aerobic and Anaerobic Pathways for Degradation (after Wiedemeier et al, 1998)



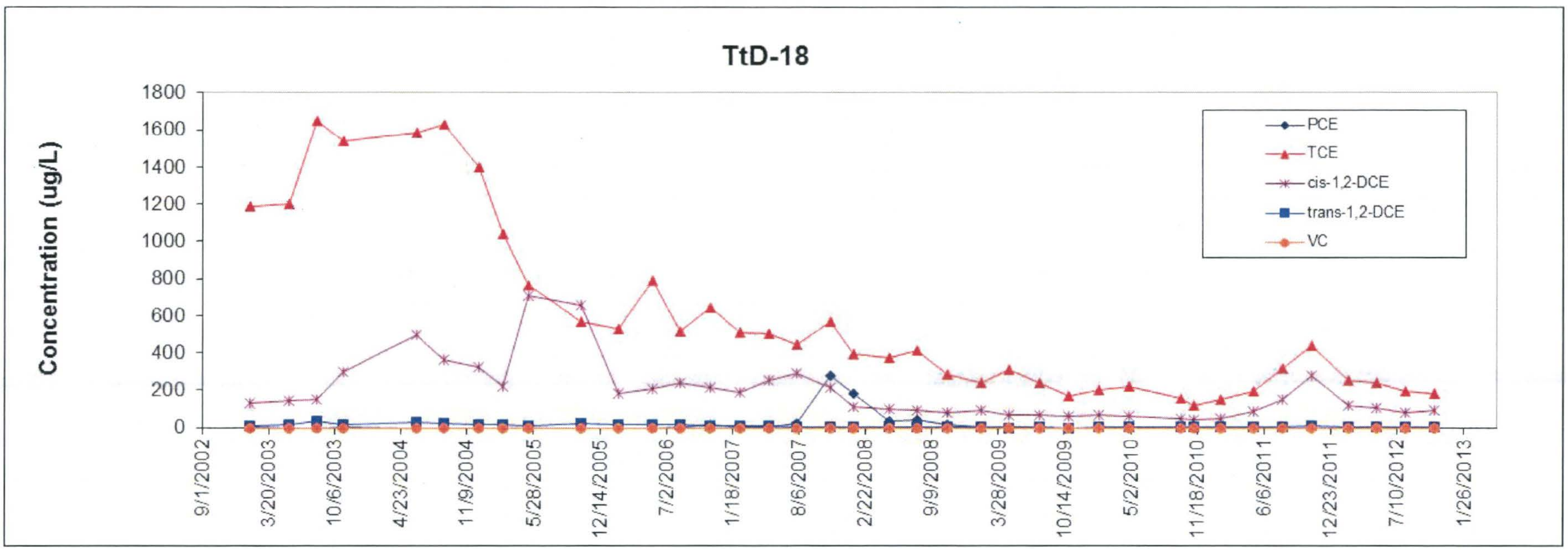


Figure 4-6. Changes in Solvent Concentrations in Well E-3 (and TtE-3R) and TtD-18

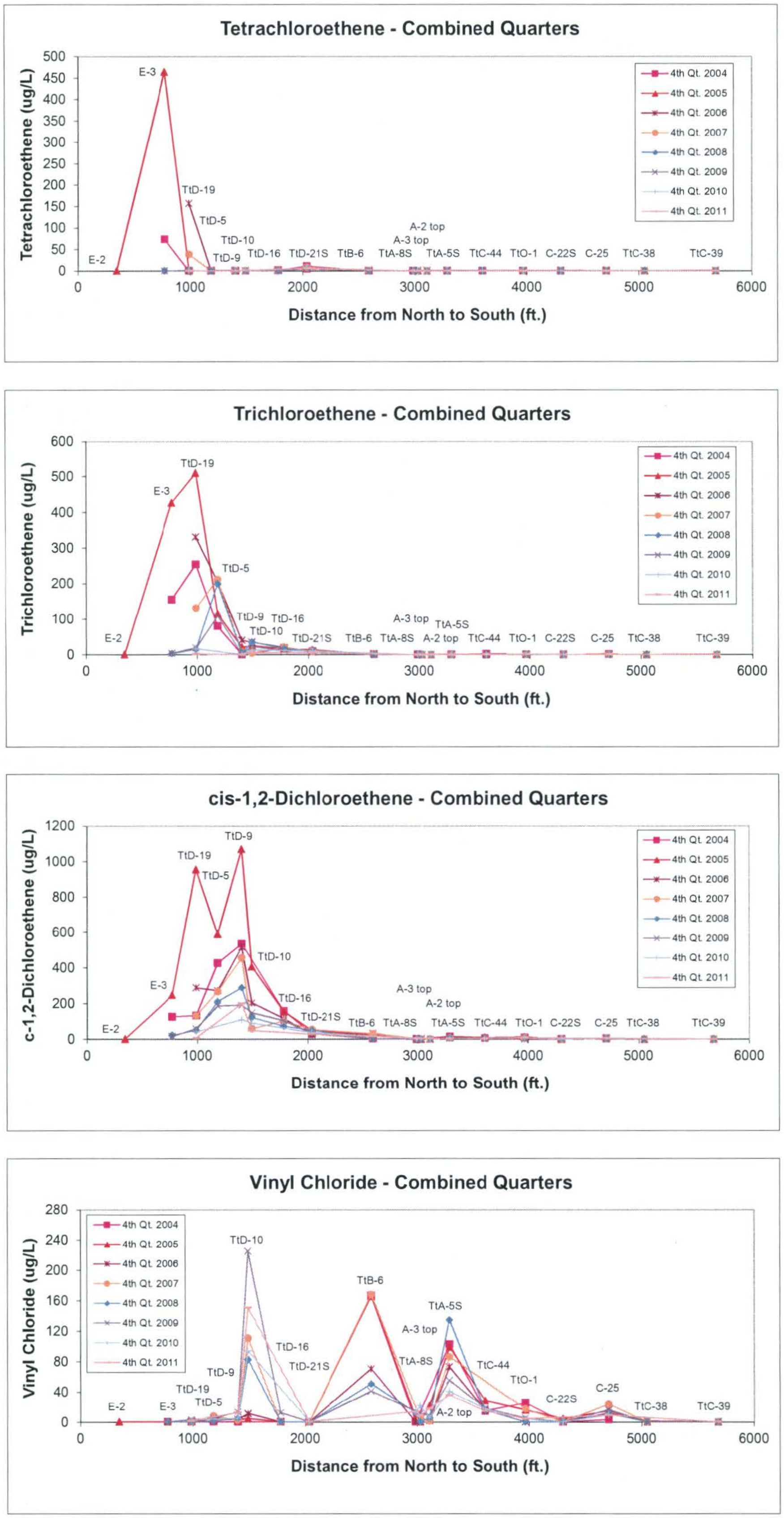


Figure 4-7. Comparison of Solvent Concentrations in Centerline Wells

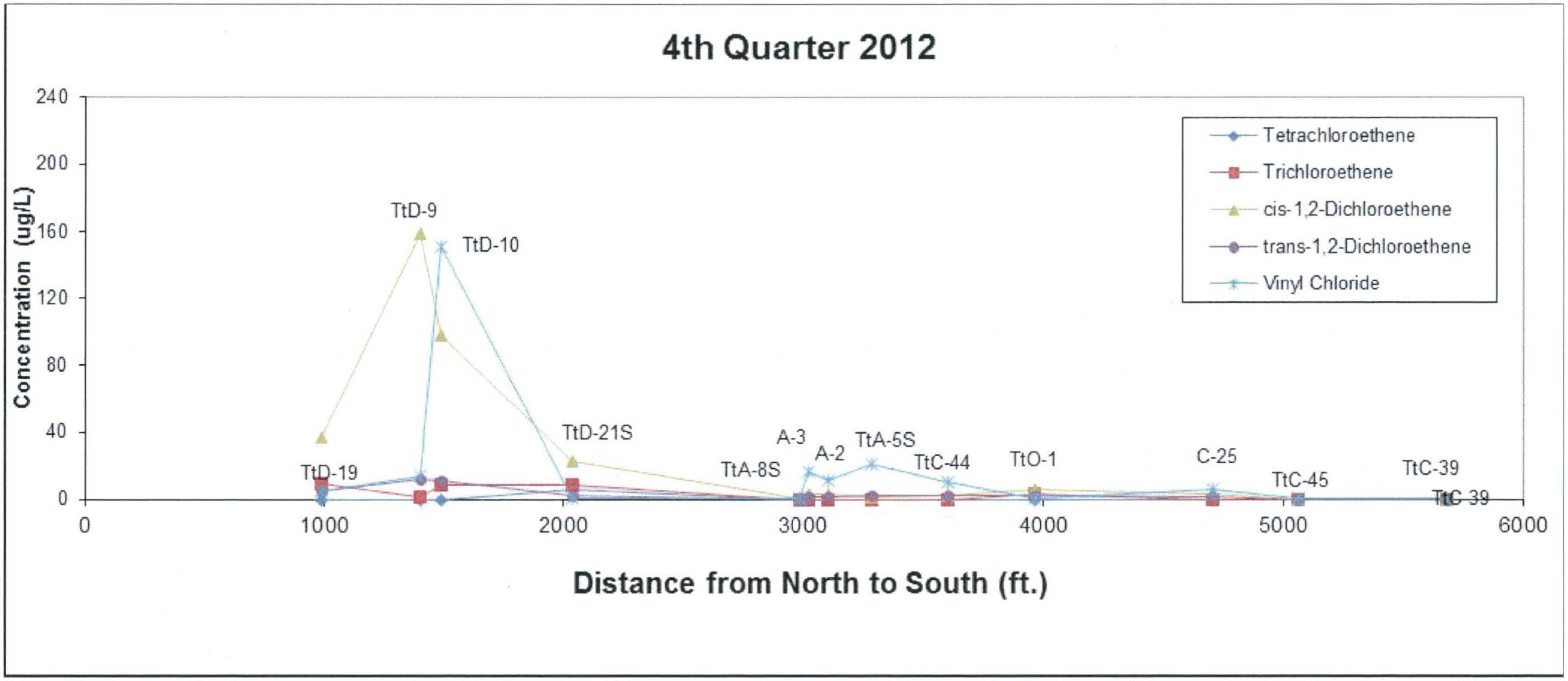
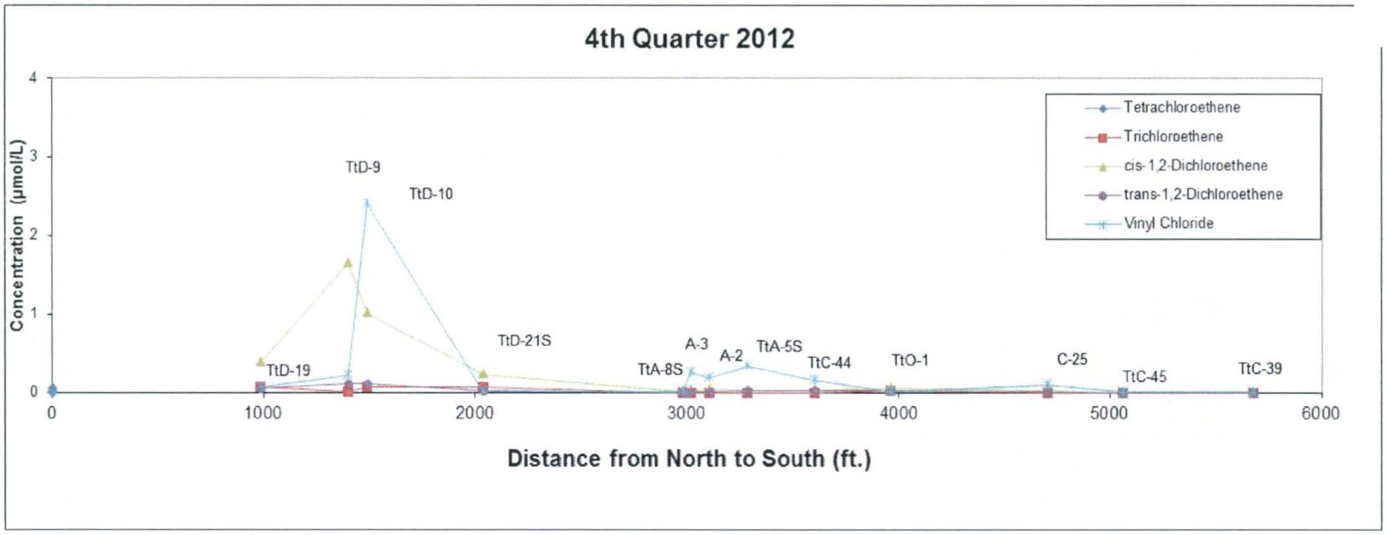


Figure 4-8. Solvent Concentrations in Wells along Centerline of Site in October 2012



Molar Concentrations of Solvents, µmol/L

Wells	Distance, feet	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
TtD-19	987.4	0.0015	0.0712	0.3847	0.0570	0.0776
TtD-9	1398.9	0.0015	0.0123	1.6400	0.1217	0.2176
TtD-10	1489.4	0.0015	0.0679	1.0067	0.1145	2.4161
TtD-21S	2033.3	0.0338	0.0635	0.2383	0.0209	0.0080
TtA-8S	2983.1	0.0015	0.0019	0.0063	0.0026	0.0080
A-3	3023.4	0.0015	0.0019	0.0336	0.0124	0.2640
A-2	3105.0	0.0015	0.0019	0.0381	0.0153	0.1856
TtA-5S	3285.1	0.0015	0.0019	0.0202	0.0217	0.3424
TtC-44	3603.4	0.0015	0.0019	0.0275	0.0214	0.1648
TtO-1	3963.9	0.0015	0.0262	0.0601	0.0235	0.0142
C-25	4704.7	0.0015	0.0019	0.0314	0.0158	0.0957
TtC-45	5063.2	0.0015	0.0019	0.0026	0.0026	0.0080
TtC-39	5678.6	0.0015	0.0019	0.0026	0.0026	0.0080

The above plot shows that PCE and TCE are essentially all degraded. The divergence of the downgradient changes of cis-1,2-DCE and VC indicate that the degradations are caused by microbiologically-based processes. If the changes were parallel that would suggest that abiotic reactions were occurring. This distinction is based on example sites described in an article by Richard Brown et al, 2005 on Abiotic and Biotic Pathways in Chlorinated Solvent Natural Attenuation.

Figure 4-9. Solvent Molar Concentrations vs. Downgradient Distance along East Side of Aliso Site

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

Based on the results of quarterly groundwater monitoring data collected from Aliso Site wells during CY 2012 to supplement the monitoring data collected during the period 1996-2010 [Tetra Tech, 2011] and in CY 2011 [Tetra Tech, 2012], the following conclusions are made regarding groundwater conditions:

1. With the exception of Sector A East and a few scattered zone and deep zone alluvial wells, particularly shallow wells with product, groundwater quality continues to improve at the Aliso Site.

2. Vinyl chloride appears to be the temporary end-point for reductive dechlorination in the Sector C wells. However, there is evidence that further degradation is occurring, based on downgradient decreases in vinyl chloride concentrations due to other geochemical reactions such as mineralization via direct oxidation or co-metabolic processes under low oxygen or iron-reducing conditions. No vinyl chloride was detected in TtC-45, the new well just north of 1st Street, in CY 2012 or in TtC-39 in the 1st and 2nd Quarter 2012 when the well was accessible for sampling.

3. Groundwater flow patterns across the Aliso Site remained unchanged during CY 2012 as compared to previous years; the gradients ranged from 0.0055 ft/ft in Sector D to 0.0107 ft/ft in Sectors B and C.

4. Based on the DTSC's approval, in the future, groundwater gauging and sampling of the Aliso Site wells will be on an annual basis in the fall of each calendar year as part of a 3-year trial evaluation. Per DTSC recommendation, 10 wells will also be measured in the spring of each year to measure water levels and to determine if chemical concentrations will increase due to higher water levels as the result of recharge events. The groundwater data, and sampling frequency will be re-evaluated after completion of CY 2014 groundwater monitoring.

5. The quarterly data set for CY 2012 included 83 wells, 23 classified as deep zone alluvial wells and 60 classified as shallow zone alluvial wells. Changes to the planned wells to be sampled were made as summarized here. Mostly due to a change in ownership on Block Q, nine Site wells were not accessible for monitoring during the 1st Quarter 2012 monitoring event that was completed in February 2012. One well (TtC-39) was monitored for the first two quarters of CY 2012, but was not accessible after May due to a large construction project on S. Santa Fe Street. Well TtA-4S was not sampled in the 3rd and 4th quarters of CY 2012 due to a broken casing, which was repaired in November 2012. Two wells, TtC-29S and TtC-29D, were added to the monitoring program in August 2012 to provide additional information at the request of DTSC.

5.2 RECOMMENDATIONS

1. Continue to implement the annual groundwater monitoring program for all accessible wells listed in Table 2-1 during the fall of each calendar year, supplemented by groundwater monitoring of 10 selected wells during the spring of each calendar year. This program was approved by the DTSC in 2010. The wells to be sampled in the spring are: E-1S. E-1D. TtE-6, TtB-1, TtC-29D, TtC-31D, TtC-32R, TtC-36, TtC-45, and the replacement well for TtC-39 when available.

2. Due to construction of new buildings along S. Santa Fe Street, well TtC-39 was not accessible after May 2012. Two replacement wells are recommended south of 1st Street so that the groundwater water levels downgradient of the Site can be evaluated. The general area where these wells are suggested is west of S. Santa Fe Street between 2nd and 3rd Streets for the replacement for TtC-39 and south of 1st Street near Vignes St, as a replacement for TtC-37 formerly located north of 1st Street. The specific locations will be selected in consultation with the Southern California Gas Company and DTSC.

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APPENDIX A

2012 Summary of Water Level Measurements

Table A-1
2012 Summary of Water Level Measurements
Aliso Site Groundwater Monitoring Wells
Former Aliso Street MGP Site, Los Angeles, California

Well ID	Date	Measure Point NGVD88	AEI New Elev Measure Point (6/2011)	Depth to Groundwater	Groundwater Elevation	X	Y
C-16	2/13/12	273.35		Not Accessible. The place was locked up.		6491740.14274	1840672.47818
C-17	2/13/12	272.36		Not Accessible. The place was locked up.		6491663.61196	1840397.91157
C-20D	2/13/12	274.75		Not Accessible. The place was locked up.		6491385.06973	1840898.59185
C-20S	2/13/12	274.82		Not Accessible. The place was locked up.		6491368.91875	1840926.66971
C-21D	2/13/12	274.50		Not Accessible. The place was locked up.		6491785.86243	1840837.46662
C-21S	2/13/12	274.85		Not Accessible. The place was locked up.		6491775.02648	1840873.10294
C-22D	2/13/12	274.09		Not Accessible. The place was locked up.		6491542.35539	1840775.59595
C-22S	2/13/12	274.22		Not Accessible. The place was locked up.		6491537.48272	1840777.95877
C-23D	2/13/12	272.34		Not Accessible. The place was locked up.		6491738.90036	1840585.01443
C-23S	2/13/12	272.29		Not Accessible. The place was locked up.		6491726.72501	1840613.58923
C-26	2/13/12	272.90		Not Accessible. The place was locked up.		6491585.59032	1840395.17833
C-6	2/13/12	273.15		29.02	244.13	6491793.81368	1841250.68315
TtC-31D	2/13/12	272.14		Not Accessible. The place was locked up.		6491576.89364	1840346.47692
TtC-31S	2/13/12	271.81		Not Accessible. The place was locked up.		6491599.75348	1840331.56833
TtD-18	2/13/12	291.27		30.73	260.54	6492347.17100	1844084.06146
TtD-19	2/13/12	289.90		30.19	259.71	6492449.79182	1843935.96942
TtD-20D	2/13/12	287.13		33.47	253.66	6492705.22573	1842724.39768

Table A-1
2012 Summary of Water Level Measurements
Aliso Site Groundwater Monitoring Wells
Former Aliso Street MGP Site, Los Angeles, California

Well ID	Date	Measure Point NGVD88	AEI New Elev Measure Point (6/2011)	Depth to Groundwater	Groundwater Elevation	X	Y
TtD-20S	2/13/12	287.29		34.41	252.88	6492719.38890	1842694.33201
TtD-7	2/13/12	285.05		30.39	254.66	6492027.38166	1842915.47616
TtD-7D	2/13/12	283.65		29.32	254.33	6492040.01850	1842906.82990
TtE-10R	2/13/12	291.35		29.91	261.44	6492592.17880	1844583.60420
TtK-1	2/13/12	276.79		31.30	245.49	6491645.97012	1841516.05613
TtK-2	2/13/12	276.31		31.40	244.91	6491622.61333	1841337.89843
TtK-3	2/13/12	276.91		30.40	246.51	6491830.09126	1841536.92816
TtK-4	2/13/12	276.52		31.42	245.10	6491825.12173	1841441.76163
TtK-6	2/13/12	276.56		32.35	244.21	6491661.12719	1841327.95936
C-25	2/14/12	271.77		40.98	230.79	6491455.38860	1840402.13567
D-2	2/14/12	287.50		30.18	257.32	6491835.06079	1843390.81183
D-4	2/14/12	285.29		29.49	255.80	6491722.50091	1843061.82886
TtC-27	2/14/12	278.58		32.60	245.98	6492059.68361	1841500.40210
TtC-32R	2/14/12	269.52		40.29	229.23	6490945.20350	1840417.90410
TtC-34	2/14/12	272.78		34.57	238.21	6491043.16597	1841058.61076
TtC-34D	2/14/12	271.77		30.91	240.86	6491117.04840	1841053.03320
TtC-35	2/14/12	273.17		31.03	242.14	6491094.60062	1841361.50370
TtD-17R	2/14/12	289.45		28.55	260.90	6492265.77410	1844320.47050
TtE-3R2	2/14/12	291.32		31.25	260.07	6492426.40860	1844110.42080
TtE-5R2	2/14/12	290.59		29.35	261.24	6492406.24960	1844425.86710
TtE-6	2/14/12	294.78		31.32	263.46	6491940.91181	1844910.74300
TtE-8	2/14/12	290.41		28.02	262.39	6492195.10334	1844558.90018
TtO-1	2/14/12	272.23		30.06	242.17	6491522.22879	1841136.13545
A-1	2/15/12	280.09		28.67	251.42	6491537.13739	1842046.80208
TtA-7	2/15/12	278.11		26.03	252.08	6491356.74340	1842157.12567
TtB-1	2/15/12	282.90		28.32	254.58	6491460.60660	1842702.78022
TtB-2D	2/15/12	279.49		27.05	252.44	6491730.45216	1842212.53595
TtB-2S	2/15/12	279.31		26.49	252.82	6491722.50091	1842218.49938
TtB-3	2/15/12	282.09		30.14	251.95	6492298.22111	1842250.05591
TtB-5	2/15/12	285.69		32.32	253.37	6492432.64694	1842597.67463

Table A-1
2012 Summary of Water Level Measurements
Aliso Site Groundwater Monitoring Wells
Former Aliso Street MGP Site, Los Angeles, California

Well ID	Date	Measure Point NGVD88	AEI New Elev Measure Point (6/2011)	Depth to Groundwater	Groundwater Elevation	X	Y
TtB-7	2/15/12	281.35		31.00	250.35	6492006.50962	1841975.48930
TtD-14	2/15/12	286.98		33.31	253.67	6492345.43166	1842806.39494
TtD-15	2/15/12	287.14		33.64	253.50	6492560.86085	1842746.26361
A-2	2/16/12	281.27		29.67	251.60	6491779.40204	1841963.81090
A-3	2/16/12	280.41		28.85	251.56	6491758.03306	1842046.55360
TtA-7S	2/16/12	275.54		23.73	251.81	6491681.99923	1842111.65446
TtA-8S	2/16/12	277.90		27.26	250.64	6491757.50610	1842085.31480
TtC-27D	2/16/12	277.61		32.25	245.36	6492063.22390	1841484.34330
TtC-39	2/16/12	268.65		83.23	185.42	6491203.93031	1839469.10616
TtC-43	2/16/12	275.83		28.70	247.13	6491656.40614	1841627.37363
TtC-44	2/16/12	274.59		29.39	245.20	6491594.53547	1841495.43257
TtA-4D	2/17/12	280.01		31.18	248.83	6491501.35676	1841811.49477
TtA-4S	2/17/12	280.48		31.52	248.96	6491498.87200	1841852.24492
TtA-5D	2/17/12	277.03		28.52	248.51	6491661.62415	1841838.08176
TtA-5S	2/17/12	277.31		28.58	248.73	6491642.24298	1841804.04047
TtA-6D	2/17/12	278.84		30.88	247.96	6491963.02622	1841749.12715
TtA-6S	2/17/12	278.83		30.77	248.06	6491982.15892	1841709.37090
TtC-30	2/17/12	272.47		38.39	234.08	6491327.17469	1840678.19314
TtC-33	2/17/12	271.93		37.82	234.11	6491104.53968	1840714.71919
TtC-40D	2/17/12	273.63		33.03	240.60	6491451.41297	1840989.53428
TtC-40S	2/17/12	273.72		32.94	240.78	6491468.06090	1840986.55256
TtC-41D	2/17/12	271.36		27.42	243.94	6491464.58223	1841301.12389
TtC-41S	2/17/12	271.66		28.15	243.51	6491453.89774	1841302.61475
E-1D	2/20/12	290.35		26.56	263.79	6492711.03830	1845301.03300
E-1S	2/20/12	290.43		27.44	262.99	6492706.64920	1845297.89070
TtC-36	2/20/12	275.56		30.37	245.19	6491089.38261	1841628.86449
TtC-36D	2/20/12	274.72		29.72	245.00	6491094.90880	1841637.33880
TtC-42	2/20/12	275.86		30.05	245.81	6491482.22407	1841627.62211
TtC-45	2/20/12	270.06		62.01	208.05	6491384.67100	1840082.52600
TtD-10	2/20/12	290.57		33.75	256.82	6492303.19065	1843456.40965

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2012 Summary of Water Level Measurements
Aliso Site Groundwater Monitoring Wells
Former Aliso Street MGP Site, Los Angeles, California

Well ID	Date	Measure Point NGVD88	AEI New Elev Measure Point (6/2011)	Depth to Groundwater	Groundwater Elevation	X	Y
TtD-21S	2/20/12	287.32		33.02	254.30	6492183.67342	1842928.39694
TtD-9	2/20/12	290.76		33.51	257.25	6492392.89069	1843534.18281
C-25	5/07/12	271.77		40.81	230.96	6491455.38860	1840402.13567
C-6	5/07/12	273.15		28.85	244.30	6491793.81368	1841250.68315
TtC-27D	5/07/12	277.61		32.20	245.41	6492063.22390	1841484.34330
TtC-32R	5/07/12	269.52		40.18	229.34	6490945.20350	1840417.90410
TtC-34	5/07/12	272.78		34.43	238.35	6491043.16597	1841058.61076
TtC-34D	5/07/12	271.77		30.85	240.92	6491117.04840	1841053.03320
TtC-35	5/07/12	273.17		30.87	242.30	6491094.60062	1841361.50370
TtC-43	5/07/12	275.83		28.56	247.27	6491656.40614	1841627.37363
A-2	5/08/12	281.27		29.50	251.77	6491779.40204	1841963.81090
A-3	5/08/12	280.41		Sampled top and bottom of the well with a dedicated pump. Depth to water could not be measured accurately.		6491758.03306	1842046.55360
TtC-27	5/08/12	278.58		32.52	246.06	6492059.68361	1841500.40210
TtC-30	5/08/12	272.47		38.28	234.19	6491327.17469	1840678.19314
TtC-33	5/08/12	271.93		37.68	234.25	6491104.53968	1840714.71919
TtC-40D	5/08/12	273.63		32.77	240.86	6491451.41297	1840989.53428
TtC-40S	5/08/12	273.72		32.70	241.02	6491468.06090	1840986.55256
TtC-41D	5/08/12	271.36		27.28	244.08	6491464.58223	1841301.12389
TtC-41S	5/08/12	271.66		27.98	243.68	6491453.89774	1841302.61475
TtD-10	5/08/12	290.57		33.79	256.78	6492303.19065	1843456.40965
TtA-7S	5/09/12	275.54		23.61	251.93	6491681.99923	1842111.65446
TtC-36	5/09/12	275.56		30.35	245.21	6491089.38261	1841628.86449
TtC-36D	5/09/12	274.72		29.68	245.04	6491094.90880	1841637.33880
TtC-39	5/09/12	268.65		83.26	185.39	6491203.93031	1839469.10616
TtC-42	5/09/12	275.86		29.87	245.99	6491482.22407	1841627.62211
TtC-44	5/09/12	274.59		29.25	245.34	6491594.53547	1841495.43257

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2012 Summary of Water Level Measurements
Aliso Site Groundwater Monitoring Wells
Former Aliso Street MGP Site, Los Angeles, California

Well ID	Date	Measure Point NGVD88	AEI New Elev Measure Point (6/2011)	Depth to Groundwater	Groundwater Elevation	X	Y
TtC-45	5/09/12	270.06		61.94	208.12	6491384.67100	1840082.52600
TtD-17R	5/09/12	289.45		28.59	260.86	6492265.77410	1844320.47050
TtD-18	5/09/12	291.27		30.78	260.49	6492347.17100	1844084.06146
TtE-10R	5/09/12	291.35		29.96	261.39	6492592.17880	1844583.60420
TtE-3R2	5/09/12	291.32		31.22	260.10	6492426.40860	1844110.42080
TtE-5R2	5/09/12	290.59		29.37	261.22	6492406.24960	1844425.86710
TtO-1	5/09/12	272.23		29.98	242.25	6491522.22879	1841136.13545
A-1	5/10/12	280.09		28.51	251.58	6491537.13739	1842046.80208
TtA-4D	5/10/12	280.01		31.03	248.98	6491501.35676	1841811.49477
TtA-4S	5/10/12	280.48		31.41	249.07	6491498.87200	1841852.24492
TtA-5D	5/10/12	277.03		28.42	248.61	6491661.62415	1841838.08176
TtA-5S	5/10/12	277.31		28.41	248.90	6491642.24298	1841804.04047
TtA-6D	5/10/12	278.84		30.68	248.16	6491963.02622	1841749.12715
TtA-6S	5/10/12	278.83		30.70	248.13	6491982.15892	1841709.37090
TtA-7	5/10/12	278.11		25.88	252.23	6491356.74340	1842157.12567
TtB-1	5/11/12	282.90		28.28	254.62	6491460.60660	1842702.78022
TtB-2D	5/11/12	279.49		27.00	252.49	6491730.45216	1842212.53595
TtB-2S	5/11/12	279.31		26.46	252.85	6491722.50091	1842218.49938
TtD-14	5/11/12	286.98		33.30	253.68	6492345.43166	1842806.39494
TtD-15	5/11/12	287.14		33.68	253.46	6492560.86085	1842746.26361
TtD-19	5/11/12	289.90		30.18	259.72	6492449.79182	1843935.96942
TtD-20D	5/11/12	287.13		33.46	253.67	6492705.22573	1842724.39768
TtD-20S	5/11/12	287.29		34.41	252.88	6492719.38890	1842694.33201
TtD-21S	5/11/12	287.32		33.04	254.28	6492183.67342	1842928.39694
TtD-9	5/11/12	290.76		33.50	257.26	6492392.89069	1843534.18281
TtK-1	5/11/12	276.79		31.06	245.73	6491645.97012	1841516.05613
TtK-2	5/11/12	276.31		31.31	245.00	6491622.61333	1841337.89843
TtK-3	5/11/12	276.91		30.18	246.73	6491830.09126	1841536.92816
TtK-4	5/11/12	276.52		30.78	245.74	6491825.12173	1841441.76163
TtK-6	5/11/12	276.56		32.12	244.44	6491661.12719	1841327.95936

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2012 Summary of Water Level Measurements
Aliso Site Groundwater Monitoring Wells
Former Aliso Street MGP Site, Los Angeles, California

Well ID	Date	Measure Point NGVD88	AEI New Elev Measure Point (6/2011)	Depth to Groundwater	Groundwater Elevation	X	Y
C-20D	5/14/12	274.75		34.30	240.45	6491385.06973	1840898.59185
C-20S	5/14/12	274.82		35.02	239.80	6491368.91875	1840926.66971
C-22D	5/14/12	274.09		34.82	239.27	6491542.35539	1840775.59595
C-22S	5/14/12	274.22		35.22	239.00	6491537.48272	1840777.95877
D-2	5/14/12	287.50		30.21	257.29	6491835.06079	1843390.81183
D-4	5/14/12	285.29		29.50	255.79	6491722.50091	1843061.82886
E-1D	5/14/12	290.35		26.44	263.91	6492711.03830	1845301.03300
E-1S	5/14/12	290.43		26.41	264.02	6492706.64920	1845297.89070
TtB-3	5/14/12	282.09		29.97	252.12	6492298.22111	1842250.05591
TtB-5	5/14/12	285.69		32.29	253.40	6492432.64694	1842597.67463
TtB-7	5/14/12	281.35		30.91	250.44	6492006.50962	1841975.48930
TtD-7	5/14/12	285.05		30.39	254.66	6492027.38166	1842915.47616
TtE-6	5/14/12	294.78		31.31	263.47	6491940.91181	1844910.74300
TtE-8	5/14/12	290.41		28.03	262.38	6492195.10334	1844558.90018
C-16	5/15/12	273.35		36.71	236.64	6491740.14274	1840672.47818
C-17	5/15/12	272.36		41.02	231.34	6491663.61196	1840397.91157
C-21D	5/15/12	274.50		32.88	241.62	6491785.86243	1840837.46662
C-21S	5/15/12	274.85		34.55	240.30	6491775.02648	1840873.10294
C-23D	5/15/12	272.34		31.11	241.23	6491738.90036	1840585.01443
C-23S	5/15/12	272.29		38.55	233.74	6491726.72501	1840613.58923
C-26	5/15/12	272.90		42.38	230.52	6491585.59032	1840395.17833
TtA-8S	5/15/12	277.90		Not Accessible. The well was covered by asphalt.		6491757.50610	1842085.31480
TtC-31D	5/15/12	272.14		42.25	229.89	6491576.89364	1840346.47692
TtC-31S	5/15/12	271.81		42.30	229.51	6491599.75348	1840331.56833
TtD-7D	5/15/12	283.65		29.31	254.34	6492040.01850	1842906.82990
TtD-14	8/01/12	286.98		33.34	253.64	6492345.43166	1842806.39494
TtD-15	8/01/12	287.14		33.67	253.47	6492560.86085	1842746.26361
TtD-20D	8/01/12	287.13		33.51	253.62	6492705.22573	1842724.39768
TtD-20S	8/01/12	287.29		34.42	252.87	6492719.38890	1842694.33201

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Aliso Site Groundwater Monitoring Wells
Former Aliso Street MGP Site, Los Angeles, California

Well ID	Date	Measure Point NGVD88	AEI New Elev Measure Point (6/2011)	Depth to Groundwater	Groundwater Elevation	X	Y
TtD-21S	8/01/12	287.32		33.05	254.27	6492183.67342	1842928.39694
TtD-7	8/01/12	285.05		30.41	254.64	6492027.38166	1842915.47616
TtD-7D	8/01/12	283.65		29.36	254.29	6492040.01850	1842906.82990
C-25	8/02/12	271.77		40.95	230.82	6491455.38860	1840402.13567
C-6	8/02/12	273.15		29.02	244.13	6491793.81368	1841250.68315
TtC-27	8/02/12	278.58		32.61	245.97	6492059.68361	1841500.40210
TtC-27D	8/02/12	277.61		32.31	245.30	6492063.22390	1841484.34330
TtC-32R	8/02/12	269.52		40.29	229.23	6490945.20350	1840417.90410
TtC-34	8/02/12	272.78		34.51	238.27	6491043.16597	1841058.61076
TtC-34D	8/02/12	271.77		31.05	240.72	6491117.04840	1841053.03320
TtC-35	8/02/12	273.17		31.02	242.15	6491094.60062	1841361.50370
TtD-10	8/02/12	290.57		33.57	257.00	6492303.19065	1843456.40965
TtD-17R	8/02/12	289.45		28.55	260.90	6492265.77410	1844320.47050
TtD-18	8/02/12	291.27		30.80	260.47	6492347.17100	1844084.06146
TtD-19	8/02/12	289.90		30.19	259.71	6492449.79182	1843935.96942
TtE-10R	8/02/12	291.35		29.94	261.41	6492592.17880	1844583.60420
TtE-3R2	8/02/12	291.32		31.25	260.07	6492426.40860	1844110.42080
TtE-5R2	8/02/12	290.59		29.45	261.14	6492406.24960	1844425.86710
D-2	8/03/12	287.50		30.15	257.35	6491835.06079	1843390.81183
D-4	8/03/12	285.29		The well casing was obstructed with tree roots on 8/1/2012 and could not gauge the well. Water sample was collected on 8/3/2012 with a bailer.		6491722.50091	1843061.82886
E-1D	8/03/12	290.35		26.60	263.75	6492711.03830	1845301.03300
E-1S	8/03/12	290.43		26.56	263.87	6492706.64920	1845297.89070
TtD-9	8/03/12	290.76		33.62	257.14	6492392.89069	1843534.18281
TtE-6	8/03/12	294.78		31.39	263.39	6491940.91181	1844910.74300
TtE-8	8/03/12	290.41		28.11	262.30	6492195.10334	1844558.90018

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2012 Summary of Water Level Measurements
Aliso Site Groundwater Monitoring Wells
Former Aliso Street MGP Site, Los Angeles, California

Well ID	Date	Measure Point NGVD88	AEI New Elev Measure Point (6/2011)	Depth to Groundwater	Groundwater Elevation	X	Y
TtC-40D	8/06/12	273.63		33.05	240.58	6491451.41297	1840989.53428
TtC-40S	8/06/12	273.72		32.90	240.82	6491468.06090	1840986.55256
TtC-41D	8/06/12	271.36		27.42	243.94	6491464.58223	1841301.12389
TtC-41S	8/06/12	271.66		28.15	243.51	6491453.89774	1841302.61475
TtC-42	8/06/12	275.86		29.96	245.90	6491482.22407	1841627.62211
TtO-1	8/06/12	272.23		30.05	242.18	6491522.22879	1841136.13545
A-1	8/07/12	280.09		28.64	251.45	6491537.13739	1842046.80208
TtA-7	8/07/12	278.11		26.03	252.08	6491356.74340	1842157.12567
TtA-7S	8/07/12	275.54		23.70	251.84	6491681.99923	1842111.65446
TtA-8S	8/07/12	277.90		Not Accessible. The well was covered by asphalt.		6491757.50610	1842085.31480
TtB-1	8/07/12	282.90		28.24	254.66	6491460.60660	1842702.78022
TtB-2D	8/07/12	279.49		27.05	252.44	6491730.45216	1842212.53595
TtB-2S	8/07/12	279.31		26.50	252.81	6491722.50091	1842218.49938
TtB-3	8/07/12	282.09		30.13	251.96	6492298.22111	1842250.05591
TtB-5	8/07/12	285.69		32.38	253.31	6492432.64694	1842597.67463
TtB-7	8/07/12	281.35		31.01	250.34	6492006.50962	1841975.48930
TtC-30	8/07/12	272.47		38.40	234.07	6491327.17469	1840678.19314
TtC-33	8/07/12	271.93		37.82	234.11	6491104.53968	1840714.71919
TtC-36	8/07/12	275.56		30.35	245.21	6491089.38261	1841628.86449
TtC-36D	8/07/12	274.72		29.75	244.97	6491094.90880	1841637.33880
TtC-39	8/07/12	268.65		Well was not accessible, a detour was setup on the road.		6491203.93031	1839469.10616
TtC-43	8/07/12	275.83		28.63	247.20	6491656.40614	1841627.37363
TtC-44	8/07/12	274.59		29.45	245.14	6491594.53547	1841495.43257
C-16	8/08/12	273.35		36.72	236.63	6491740.14274	1840672.47818
C-17	8/08/12	272.36		41.35	231.01	6491663.61196	1840397.91157
C-20D	8/08/12	274.75		34.42	240.33	6491385.06973	1840898.59185
C-20S	8/08/12	274.82		35.17	239.65	6491368.91875	1840926.66971

Table A-1
2012 Summary of Water Level Measurements
Aliso Site Groundwater Monitoring Wells
Former Aliso Street MGP Site, Los Angeles, California

Well ID	Date	Measure Point NGVD88	AEI New Elev Measure Point (6/2011)	Depth to Groundwater	Groundwater Elevation	X	Y
C-21D	8/08/12	274.50		33.00	241.50	6491785.86243	1840837.46662
C-21S	8/08/12	274.85		34.67	240.18	6491775.02648	1840873.10294
C-22D	8/08/12	274.09		34.88	239.21	6491542.35539	1840775.59595
C-22S	8/08/12	274.22		35.33	238.89	6491537.48272	1840777.95877
C-23D	8/08/12	272.34		31.20	241.14	6491738.90036	1840585.01443
C-23S	8/08/12	272.29		38.55	233.74	6491726.72501	1840613.58923
C-26	8/08/12	272.90		42.28	230.62	6491585.59032	1840395.17833
TtC-31D	8/08/12	272.14		42.32	229.82	6491576.89364	1840346.47692
TtC-31S	8/08/12	271.81		42.38	229.43	6491599.75348	1840331.56833
A-2	8/09/12	281.27		29.65	251.62	6491779.40204	1841963.81090
A-3	8/09/12	280.41		Could not measure depth to water accurately. Sampled top and bottom of the well with a dedicated pump. There was a sheen of product on water surface. Collected a duplicate sample (Dup-7) from A-3 "Bottom" for QA/QC purposes.		6491758.03306	1842046.55360
TtA-4D	8/09/12	280.01		31.19	248.82	6491501.35676	1841811.49477
TtA-4S	8/09/12	280.48		The casing was broken.		6491498.87200	1841852.24492
TtA-5D	8/09/12	277.03		28.54	248.49	6491661.62415	1841838.08176
TtA-5S	8/09/12	277.31		28.55	248.76	6491642.24298	1841804.04047
TtA-6D	8/09/12	278.84		30.81	248.03	6491963.02622	1841749.12715
TtA-6S	8/09/12	278.83		30.84	247.99	6491982.15892	1841709.37090
TtC-45	8/10/12	270.06		62.07	207.99	6491384.67100	1840082.52600
TtK-1	8/10/12	276.79		31.32	245.47	6491645.97012	1841516.05613
TtK-2	8/10/12	276.31		31.38	244.93	6491622.61333	1841337.89843
TtK-3	8/10/12	276.91		30.38	246.53	6491830.09126	1841536.92816

Table A-1
2012 Summary of Water Level Measurements
Aliso Site Groundwater Monitoring Wells
Former Aliso Street MGP Site, Los Angeles, California

Well ID	Date	Measure Point NGVD88	AEI New Elev Measure Point (6/2011)	Depth to Groundwater	Groundwater Elevation	X	Y
TtK-4	8/10/12	276.52		30.98	245.54	6491825.12173	1841441.76163
TtK-6	8/10/12	276.56		32.36	244.20	6491661.12719	1841327.95936
A-2	10/17/12	281.27		30.79	250.48	6491779.40204	1841963.81090
A-3	10/17/12	280.41		29.45	250.96	6491758.03306	1842046.55360
D-2	10/17/12	287.50		30.25	257.25	6491835.06079	1843390.81183
D-4	10/17/12	285.29		29.45	255.84	6491722.50091	1843061.82886
TtA-4S	10/17/12	280.48		The casing and riser were broken. Could not install a pump in well to sample water.		6491498.87200	1841852.24492
TtD-21D	10/17/12	287.65		32.41	255.24	6492183.67342	1842964.42604
TtD-21S	10/17/12	287.32		33.05	254.27	6492183.67342	1842928.39694
TtD-7	10/17/12	285.05		30.41	254.64	6492027.38166	1842915.47616
TtD-7D	10/17/12	283.65		29.37	254.28	6492040.01850	1842906.82990
TtA-5D	10/18/12	277.03		28.62	248.41	6491661.62415	1841838.08176
TtA-5S	10/18/12	277.31		28.58	248.73	6491642.24298	1841804.04047
TtA-6D	10/18/12	278.84		30.89	247.95	6491963.02622	1841749.12715
TtA-6S	10/18/12	278.83		30.90	247.93	6491982.15892	1841709.37090
TtA-7S	10/18/12	275.54		23.86	251.68	6491681.99923	1842111.65446
TtA-8S	10/18/12	277.90		27.36	250.54	6491757.50610	1842085.31480
TtC-44	10/18/12	274.59		29.40	245.19	6491594.53547	1841495.43257
TtB-1	10/22/12	282.90		28.21	254.69	6491460.60660	1842702.78022
TtB-2D	10/22/12	279.49		27.03	252.46	6491730.45216	1842212.53595
TtB-2S	10/22/12	279.31		26.46	252.85	6491722.50091	1842218.49938
TtB-3	10/22/12	282.09		30.11	251.98	6492298.22111	1842250.05591
TtB-5	10/22/12	285.69		32.35	253.34	6492432.64694	1842597.67463
TtB-6	10/22/12	287.52		34.43	253.09	6492029.12099	1842399.39033
TtD-17R	10/23/12	289.45		28.60	260.85	6492265.77410	1844320.47050
TtD-19	10/23/12	289.90		30.20	259.70	6492449.79182	1843935.96942

Table A-1
2012 Summary of Water Level Measurements
Aliso Site Groundwater Monitoring Wells
Former Aliso Street MGP Site, Los Angeles, California

Well ID	Date	Measure Point NGVD88	AEI New Elev Measure Point (6/2011)	Depth to Groundwater	Groundwater Elevation	X	Y
TtD-20D	10/23/12	287.13		33.50	253.63	6492705.22573	1842724.39768
TtD-20S	10/23/12	287.29		34.41	252.88	6492719.38890	1842694.33201
TtE-10R	10/23/12	291.35		30.05	261.30	6492592.17880	1844583.60420
TtE-3R2	10/23/12	291.32		31.35	259.97	6492426.40860	1844110.42080
TtE-5R2	10/23/12	290.59		29.40	261.19	6492406.24960	1844425.86710
A-1	10/24/12	280.09		28.62	251.47	6491537.13739	1842046.80208
TtA-4D	10/24/12	280.01		31.18	248.83	6491501.35676	1841811.49477
TtA-7	10/24/12	278.11		25.98	252.13	6491356.74340	1842157.12567
TtC-27	10/24/12	278.58		32.60	245.98	6492059.68361	1841500.40210
TtC-27D	10/24/12	277.61		32.34	245.27	6492063.22390	1841484.34330
TtC-42	10/24/12	275.86		29.99	245.87	6491482.22407	1841627.62211
C-6	10/25/12	273.15		28.85	244.30	6491793.81368	1841250.68315
TtC-34	10/25/12	272.78		34.45	238.33	6491043.16597	1841058.61076
TtC-40D	10/25/12	273.63		32.90	240.73	6491451.41297	1840989.53428
TtC-40S	10/25/12	273.72		32.75	240.97	6491468.06090	1840986.55256
TtC-43	10/25/12	275.83		28.65	247.18	6491656.40614	1841627.37363
TtK-1	10/25/12	276.79		31.30	245.49	6491645.97012	1841516.05613
TtK-2	10/25/12	276.31		31.35	244.96	6491622.61333	1841337.89843
TtK-3	10/25/12	276.91		30.38	246.53	6491830.09126	1841536.92816
TtK-4	10/25/12	276.52		30.95	245.57	6491825.12173	1841441.76163
TtK-6	10/25/12	276.56		32.37	244.19	6491661.12719	1841327.95936
TtO-1	10/25/12	272.23		30.01	242.22	6491522.22879	1841136.13545
C-25	10/26/12	271.77		40.91	230.86	6491455.38860	1840402.13567
TtB-7	10/26/12	281.35		30.96	250.39	6492006.50962	1841975.48930
TtC-30	10/26/12	272.47		38.31	234.16	6491327.17469	1840678.19314
TtC-32R	10/26/12	269.52		40.20	229.32	6490945.20350	1840417.90410
TtC-33	10/26/12	271.93		37.70	234.23	6491104.53968	1840714.71919
TtC-34D	10/26/12	271.77		30.98	240.79	6491117.04840	1841053.03320
TtC-35	10/26/12	273.17		31.03	242.14	6491094.60062	1841361.50370
TtC-36	10/26/12	275.56		30.38	245.18	6491089.38261	1841628.86449

Table A-1
2012 Summary of Water Level Measurements
Aliso Site Groundwater Monitoring Wells
Former Aliso Street MGP Site, Los Angeles, California

Well ID	Date	Measure Point NGVD88	AEI New Elev Measure Point (6/2011)	Depth to Groundwater	Groundwater Elevation	X	Y
TtC-36D	10/26/12	274.72		29.78	244.94	6491094.90880	1841637.33880
TtC-39	10/26/12	268.65		Well was not accessible, a detour was setup on the road.		6491203.93031	1839469.10616
TtC-41D	10/29/12	271.36		27.42	243.94	6491464.58223	1841301.12389
TtC-41S	10/29/12	271.66		28.10	243.56	6491453.89774	1841302.61475
TtD-10	10/29/12	290.57		33.89	256.68	6492303.19065	1843456.40965
TtD-14	10/29/12	286.98		33.26	253.72	6492345.43166	1842806.39494
TtD-15	10/29/12	287.14		33.60	253.54	6492560.86085	1842746.26361
TtD-9	10/29/12	290.76		33.52	257.24	6492392.89069	1843534.18281
C-16	10/30/12	273.35		37.05	236.30	6491740.14274	1840672.47818
C-17	10/30/12	272.36		41.38	230.98	6491663.61196	1840397.91157
C-20D	10/30/12	274.75		34.35	240.40	6491385.06973	1840898.59185
C-20S	10/30/12	274.82		35.07	239.75	6491368.91875	1840926.66971
C-21D	10/30/12	274.50		33.08	241.42	6491785.86243	1840837.46662
C-21S	10/30/12	274.85		34.65	240.20	6491775.02648	1840873.10294
C-22D	10/30/12	274.09		34.89	239.20	6491542.35539	1840775.59595
C-22S	10/30/12	274.22		35.23	238.99	6491537.48272	1840777.95877
C-23D	10/30/12	272.34		31.30	241.04	6491738.90036	1840585.01443
C-23S	10/30/12	272.29		38.60	233.69	6491726.72501	1840613.58923
C-26	10/30/12	272.90		41.30	231.60	6491585.59032	1840395.17833
E-1D	10/30/12	290.35		26.58	263.77	6492711.03830	1845301.03300
E-1S	10/30/12	290.43		26.54	263.89	6492706.64920	1845297.89070
TtC-29D	10/30/12	273.05		32.05	241.00	6491769.21450	1840703.04080
TtC-29S	10/30/12	273.20		36.64	236.56	6491769.46298	1840709.50119
TtC-31D	10/30/12	272.14		42.28	229.86	6491576.89364	1840346.47692
TtC-31S	10/30/12	271.81		42.35	229.46	6491599.75348	1840331.56833
TtC-45	10/30/12	270.06		62.02	208.04	6491384.67100	1840082.52600
TtD-18	10/30/12	291.27		30.80	260.47	6492347.17100	1844084.06146
TtE-6	10/30/12	294.78		31.35	263.43	6491940.91181	1844910.74300

Table A-1
2012 Summary of Water Level Measurements
Aliso Site Groundwater Monitoring Wells
Former Aliso Street MGP Site, Los Angeles, California

Well ID	Date	Measure Point NGVD88	AEI New Elev Measure Point (6/2011)	Depth to Groundwater	Groundwater Elevation	X	Y
TtE-8	10/30/12	290.41		28.11	262.30	6492195.10334	1844558.90018

APPENDIX B
Complete Data Set for Aliso Site
Groundwater Sampling Data for CY 2012

TABLE B-1

Summary of groundwater samples collected and analyzed

Aliso Groundwater Sampling 2012

Sample Number	Date	PAHs 8310	Purgeables 8260B	TPH M8015
A-1	15-Feb-12	X	X	X
A-1	10-May-12	X	X	X
A-1	07-Aug-12	X	X	X
A-1	24-Oct-12	X	X	X
A-1 dup.	24-Oct-12	X	X	X
A-2	17-Oct-12	X	X	X
A-2 Bottom	16-Feb-12	X	X	X
A-2 Bottom	08-May-12	X	X	X
A-2 Botttom	09-Aug-12	X	X	X
A-2 Top	16-Feb-12	X	X	X
A-2 Top	08-May-12	X	X	X
A-2 Top	09-Aug-12	X	X	X
A-3	17-Oct-12	X	X	X
A-3 Bottom	16-Feb-12	X	X	X
A-3 Bottom	08-May-12	X	X	X
A-3 Bottom	09-Aug-12	X	X	X
A-3 Bottom dup.	09-Aug-12	X	X	X
A-3 Top	16-Feb-12	X	X	X
A-3 Top	08-May-12	X	X	X
A-3 Top	09-Aug-12	X	X	X
C-16	30-Oct-12	X	X	X
C-16 Bottom	15-May-12	X	X	X
C-16 Bottom	08-Aug-12	X	X	X
C-16 Top	15-May-12	X	X	X
C-16 Top	08-Aug-12	X	X	X
C-17	15-May-12	X	X	X
C-17	08-Aug-12	X	X	X
C-17	30-Oct-12	X	X	X
C-20D	14-May-12	X	X	X
C-20D	08-Aug-12	X	X	X
C-20D	30-Oct-12	X	X	X
C-20S	14-May-12	X	X	X
C-20S	08-Aug-12	X	X	X
C-20S	30-Oct-12	X	X	X
C-21D	15-May-12	X	X	X
C-21D	08-Aug-12	X	X	X
C-21D	30-Oct-12	X	X	X
C-21S	15-May-12	X	X	X
C-21S dup.	15-May-12	X	X	X
C-21S	08-Aug-12	X	X	X
C-21S	30-Oct-12	X	X	X
C-22D	14-May-12	X	X	X
C-22D	08-Aug-12	X	X	X
C-22D	30-Oct-12	X	X	X
C-22S	14-May-12	X	X	X
C-22S	08-Aug-12	X	X	X
C-22S	30-Oct-12	X	X	X
C-23D	15-May-12	X	X	X
C-23D	08-Aug-12	X	X	X
C-23D	30-Oct-12	X	X	X
C-23D dup.	30-Oct-12	X	X	X
C-23S	15-May-12	X	X	X
C-23S	08-Aug-12	X	X	X
C-23S	30-Oct-12	X	X	X

TABLE B-1

Summary of groundwater samples collected and analyzed

Aliso Groundwater Sampling 2012

Sample Number	Date	PAHs 8310	Purgeables 8260B	TPH M8015
C-25	14-Feb-12	X	X	X
C-25	07-May-12	X	X	X
C-25	02-Aug-12	X	X	X
C-25	26-Oct-12	X	X	X
C-26	15-May-12	X	X	X
C-26	08-Aug-12	X	X	X
C-26 dup.	08-Aug-12	X	X	X
C-26	30-Oct-12	X	X	X
C-6	13-Feb-12	X	X	X
C-6	07-May-12	X	X	X
C-6	02-Aug-12	X	X	X
C-6	25-Oct-12	X	X	X
D-2	14-Feb-12	X	X	X
D-2	14-May-12	X	X	X
D-2	03-Aug-12	X	X	X
D-2	17-Oct-12	X	X	X
D-4	14-Feb-12	X	X	X
D-4	14-May-12	X	X	X
D-4	03-Aug-12	X	X	X
E-1D	20-Feb-12	X	X	X
E-1D dup.	20-Feb-12	X	X	X
E-1D	14-May-12	X	X	X
E-1D	03-Aug-12	X	X	X
E-1D	30-Oct-12	X	X	X
E-1S	20-Feb-12	X	X	X
E-1S	14-May-12	X	X	X
E-1S	03-Aug-12	X	X	X
E-1S dup.	03-Aug-12	X	X	X
E-1S	30-Oct-12	X	X	X
TtA-4D	17-Feb-12	X	X	X
TtA-4D	10-May-12	X	X	X
TtA-4D	09-Aug-12	X	X	X
TtA-4D	24-Oct-12	X	X	X
TtA-4S	17-Feb-12	X	X	X
TtA-4S	10-May-12	X	X	X
TtA-4S	29-Nov-12	X	X	X
TtA-5D	17-Feb-12	X	X	X
TtA-5D	10-May-12	X	X	X
TtA-5D	09-Aug-12	X	X	X
TtA-5D	18-Oct-12	X	X	X
TtA-5S	17-Feb-12	X	X	X
TtA-5S	10-May-12	X	X	X
TtA-5S	09-Aug-12	X	X	X
TtA-5S	18-Oct-12	X	X	X
TtA-6D	17-Feb-12	X	X	X
TtA-6D	10-May-12	X	X	X
TtA-6D	09-Aug-12	X	X	X
TtA-6D	18-Oct-12	X	X	X
TtA-6S	17-Feb-12	X	X	X
TtA-6S	10-May-12	X	X	X
TtA-6S dup.	10-May-12	X	X	X
TtA-6S	09-Aug-12	X	X	X
TtA-6S	18-Oct-12	X	X	X
TtA-7	15-Feb-12	X	X	X

TABLE B-1

Summary of groundwater samples collected and analyzed

Aliso Groundwater Sampling 2012

Sample Number	Date	PAHs 8310	Purgeables 8260B	TPH M8015
TtA-7	10-May-12	X	X	X
TtA-7	07-Aug-12	X	X	X
TtA-7	24-Oct-12	X	X	X
TtA-7S	16-Feb-12	X	X	X
TtA-7S	09-May-12	X	X	X
TtA-7S	07-Aug-12	X	X	X
TtA-7S	18-Oct-12	X	X	X
TtA-8S	16-Feb-12	X	X	X
TtA-8S	18-Oct-12	X	X	X
TtB-1	15-Feb-12	X	X	X
TtB-1	11-May-12	X	X	X
TtB-1 dup.	11-May-12	X	X	X
TtB-1	07-Aug-12	X	X	X
TtB-1	22-Oct-12	X	X	X
TtB-2D	15-Feb-12	X	X	X
TtB-2D	11-May-12	X	X	X
TtB-2D	07-Aug-12	X	X	X
TtB-2D	22-Oct-12	X	X	X
TtB-2D dup.	22-Oct-12	X	X	X
TtB-2S	15-Feb-12	X	X	X
TtB-2S	11-May-12	X	X	X
TtB-2S	07-Aug-12	X	X	X
TtB-2S dup.	07-Aug-12	X	X	X
TtB-2S	22-Oct-12	X	X	X
TtB-3	15-Feb-12	X	X	X
TtB-3 dup.	15-Feb-12	X	X	X
TtB-3	14-May-12	X	X	X
TtB-3	07-Aug-12	X	X	X
TtB-3	22-Oct-12	X	X	X
TtB-5	15-Feb-12	X	X	X
TtB-5	14-May-12	X	X	X
TtB-5 dup.	14-May-12	X	X	X
TtB-5	07-Aug-12	X	X	X
TtB-5	22-Oct-12	X	X	X
TtB-6	22-Oct-12	X	X	X
TtB-7	15-Feb-12	X	X	X
TtB-7	14-May-12	X	X	X
TtB-7	07-Aug-12	X	X	X
TtB-7	26-Oct-12	X	X	X
TtC-27	14-Feb-12	X	X	X
TtC-27	08-May-12	X	X	X
TtC-27	02-Aug-12	X	X	X
TtC-27	24-Oct-12	X	X	X
TtC-27D	16-Feb-12	X	X	X
TtC-27D dup.	16-Feb-12	X	X	X
TtC-27D	07-May-12	X	X	X
TtC-27D	02-Aug-12	X	X	X
TtC-27D	24-Oct-12	X	X	X
TtC-29D	30-Oct-12	X	X	X
TtC-29S	30-Oct-12	X	X	X
TtC-30	17-Feb-12	X	X	X
TtC-30	08-May-12	X	X	X
TtC-30	07-Aug-12	X	X	X
TtC-30	26-Oct-12	X	X	X

TABLE B-1

Summary of groundwater samples collected and analyzed

Aliso Groundwater Sampling 2012

Sample Number	Date	PAHs 8310	Purgeables 8260B	TPH M8015
TtC-31D	15-May-12	X	X	X
TtC-31D	08-Aug-12	X	X	X
TtC-31D	30-Oct-12	X	X	X
TtC-31S	15-May-12	X	X	X
TtC-31S	08-Aug-12	X	X	X
TtC-31S	30-Oct-12	X	X	X
TtC-32R	14-Feb-12	X	X	X
TtC-32R	07-May-12	X	X	X
TtC-32R dup.	07-May-12	X	X	X
TtC-32R	02-Aug-12	X	X	X
TtC-32R	26-Oct-12	X	X	X
TtC-32R dup.	26-Oct-12	X	X	X
TtC-33	17-Feb-12	X	X	X
TtC-33	08-May-12	X	X	X
TtC-33	07-Aug-12	X	X	X
TtC-33	26-Oct-12	X	X	X
TtC-34	14-Feb-12	X	X	X
TtC-34	07-May-12	X	X	X
TtC-34	02-Aug-12	X	X	X
TtC-34	25-Oct-12	X	X	X
TtC-34D	14-Feb-12	X	X	X
TtC-34D	07-May-12	X	X	X
TtC-34D	02-Aug-12	X	X	X
TtC-34D	26-Oct-12	X	X	X
TtC-35	14-Feb-12	X	X	X
TtC-35	07-May-12	X	X	X
TtC-35	02-Aug-12	X	X	X
TtC-35	26-Oct-12	X	X	X
TtC-36	20-Feb-12	X	X	X
TtC-36	09-May-12	X	X	X
TtC-36 dup.	09-May-12	X	X	X
TtC-36	07-Aug-12	X	X	X
TtC-36	26-Oct-12	X	X	X
TtC-36D	20-Feb-12	X	X	X
TtC-36D	09-May-12	X	X	X
TtC-36D	07-Aug-12	X	X	X
TtC-36D	26-Oct-12	X	X	X
TtC-39	16-Feb-12	X	X	X
TtC-39	09-May-12	X	X	X
TtC-40D	17-Feb-12	X	X	X
TtC-40D	08-May-12	X	X	X
TtC-40D	06-Aug-12	X	X	X
TtC-40D	25-Oct-12	X	X	X
TtC-40D dup.	25-Oct-12	X	X	X
TtC-40S	17-Feb-12	X	X	X
TtC-40S	08-May-12	X	X	X
TtC-40S dup.	08-May-12	X	X	X
TtC-40S	06-Aug-12	X	X	X
TtC-40S	25-Oct-12	X	X	X
TtC-41D	17-Feb-12	X	X	X
TtC-41D	08-May-12	X	X	X
TtC-41D	06-Aug-12	X	X	X
TtC-41D dup.	06-Aug-12	X	X	X
TtC-41D	29-Oct-12	X	X	X

TABLE B-1

Summary of groundwater samples collected and analyzed

Aliso Groundwater Sampling 2012

Sample Number	Date	PAHs 8310	Purgeables 8260B	TPH M8015
TtC-41S	17-Feb-12	X	X	X
TtC-41S dup.	17-Feb-12	X	X	X
TtC-41S	08-May-12	X	X	X
TtC-41S	06-Aug-12	X	X	X
TtC-41S	29-Oct-12	X	X	X
TtC-42	20-Feb-12	X	X	X
TtC-42	09-May-12	X	X	X
TtC-42	06-Aug-12	X	X	X
TtC-42	24-Oct-12	X	X	X
TtC-43	16-Feb-12	X	X	X
TtC-43	07-May-12	X	X	X
TtC-43	07-Aug-12	X	X	X
TtC-43	25-Oct-12	X	X	X
TtC-44	16-Feb-12	X	X	X
TtC-44	09-May-12	X	X	X
TtC-44	07-Aug-12	X	X	X
TtC-44	18-Oct-12	X	X	X
TtC-44 dup.	18-Oct-12	X	X	X
TtC-45	20-Feb-12	X	X	X
TtC-45	09-May-12	X	X	X
TtC-45	10-Aug-12	X	X	X
TtC-45 dup.	10-Aug-12	X	X	X
TtC-45	30-Oct-12	X	X	X
TtD-10	20-Feb-12	X	X	X
TtD-10	08-May-12	X	X	X
TtD-10	02-Aug-12	X	X	X
TtD-10	29-Oct-12	X	X	X
TtD-14	15-Feb-12	X	X	X
TtD-14	11-May-12	X	X	X
TtD-14	01-Aug-12	X	X	X
TtD-14 dup.	01-Aug-12	X	X	X
TtD-14	29-Oct-12	X	X	X
TtD-15	15-Feb-12	X	X	X
TtD-15	11-May-12	X	X	X
TtD-15	01-Aug-12	X	X	X
TtD-15	29-Oct-12	X	X	X
TtD-17R	14-Feb-12	X	X	X
TtD-17R	09-May-12	X	X	X
TtD-17R	02-Aug-12	X	X	X
TtD-17R	23-Oct-12	X	X	X
TtD-18	13-Feb-12	X	X	X
TtD-18	09-May-12	X	X	X
TtD-18	02-Aug-12	X	X	X
TtD-18	30-Oct-12	X	X	X
TtD-19	13-Feb-12	X	X	X
TtD-19	11-May-12	X	X	X
TtD-19	02-Aug-12	X	X	X
TtD-19 dup.	02-Aug-12	X	X	X
TtD-19	23-Oct-12	X	X	X
TtD-20D	13-Feb-12	X	X	X
TtD-20D	11-May-12	X	X	X
TtD-20D	01-Aug-12	X	X	X
TtD-20D	23-Oct-12	X	X	X
TtD-20S	13-Feb-12	X	X	X

TABLE B-1

Summary of groundwater samples collected and analyzed

Aliso Groundwater Sampling 2012

Sample Number	Date	PAHs 8310	Purgeables 8260B	TPH M8015
TtD-20S	11-May-12	X	X	X
TtD-20S	01-Aug-12	X	X	X
TtD-20S	23-Oct-12	X	X	X
TtD-21D	17-Oct-12	X	X	X
TtD-21S	20-Feb-12	X	X	X
TtD-21S	11-May-12	X	X	X
TtD-21S	01-Aug-12	X	X	X
TtD-21S	17-Oct-12	X	X	X
TtD-7	13-Feb-12	X	X	X
TtD-7	14-May-12	X	X	X
TtD-7	01-Aug-12	X	X	X
TtD-7	17-Oct-12	X	X	X
TtD-7 dup.	17-Oct-12	X	X	X
TtD-7D	13-Feb-12	X	X	X
TtD-7D dup.	13-Feb-12	X	X	X
TtD-7D	15-May-12	X	X	X
TtD-7D	01-Aug-12	X	X	X
TtD-7D	17-Oct-12	X	X	X
TtD-9	20-Feb-12	X	X	X
TtD-9	11-May-12	X	X	X
TtD-9	03-Aug-12	X	X	X
TtD-9	29-Oct-12	X	X	X
TtD-9 dup.	29-Oct-12	X	X	X
TtE-10R	13-Feb-12	X	X	X
TtE-10R	09-May-12	X	X	X
TtE-10R	02-Aug-12	X	X	X
TtE-10R	23-Oct-12	X	X	X
TtE-10R dup.	23-Oct-12	X	X	X
TtE-3R2	14-Feb-12	X	X	X
TtE-3R2	09-May-12	X	X	X
TtE-3R2	02-Aug-12	X	X	X
TtE-3R2	23-Oct-12	X	X	X
TtE-5R2	14-Feb-12	X	X	X
TtE-5R2	09-May-12	X	X	X
TtE-5R2	02-Aug-12	X	X	X
TtE-5R2	23-Oct-12	X	X	X
TtE-6	14-Feb-12	X	X	X
TtE-6 dup.	14-Feb-12	X	X	X
TtE-6	14-May-12	X	X	X
TtE-6	03-Aug-12	X	X	X
TtE-6	30-Oct-12	X	X	X
TtE-8	14-Feb-12	X	X	X
TtE-8	14-May-12	X	X	X
TtE-8	03-Aug-12	X	X	X
TtE-8	30-Oct-12	X	X	X
TtK-1	13-Feb-12	X	X	X
TtK-1	11-May-12	X	X	X
TtK-1	10-Aug-12	X	X	X
TtK-1	25-Oct-12	X	X	X
TtK-2	13-Feb-12	X	X	X
TtK-2	11-May-12	X	X	X
TtK-2	10-Aug-12	X	X	X
TtK-2	25-Oct-12	X	X	X
TtK-3	13-Feb-12	X	X	X

TABLE B-1

Summary of groundwater samples collected and analyzed

Aliso Groundwater Sampling 2012

Sample Number	Date	PAHs 8310	Purgeables 8260B	TPH M8015
TtK-3	11-May-12	X	X	X
TtK-3	10-Aug-12	X	X	X
TtK-3	25-Oct-12	X	X	X
TtK-4	13-Feb-12	X	X	X
TtK-4	11-May-12	X	X	X
TtK-4	10-Aug-12	X	X	X
TtK-4	25-Oct-12	X	X	X
TtK-6	13-Feb-12	X	X	X
TtK-6	11-May-12	X	X	X
TtK-6	10-Aug-12	X	X	X
TtK-6	25-Oct-12	X	X	X
TtO-1	14-Feb-12	X	X	X
TtO-1	09-May-12	X	X	X
TtO-1	06-Aug-12	X	X	X
TtO-1	25-Oct-12	X	X	X
Total		**339**	**339**	**339**

TABLE B-2

Carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
A-1	15-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
A-1	10-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
A-1	07-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
A-1	24-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
A-1 dup.	24-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
A-2	17-Oct-12	21.5	61.7	30.5	24.6	22.2	66.1	<1	227.10	72.41
A-2 Bottom	16-Feb-12	1.68	1.38	<1	<1	<1	1.95	<1	7.01	1.89
A-2 Bottom	08-May-12	2.28	2.21	<1	<1	<1	3.27	<1	9.76	2.79
A-2 Botttom	09-Aug-12	<1	1.01	<1	<1	<1	<1	<1	4.01	1.39
A-2 Top	16-Feb-12	1.83	1.5	<1	<1	<1	1.53	<1	6.86	2.02
A-2 Top	08-May-12	1.36	1.31	<1	<1	<1	2.26	<1	6.93	1.79
A-2 Top	09-Aug-12	<1	1.56	1.31	<1	<1	<1	<1	5.37	2.02
A-3	17-Oct-12	<1	0.226	<1	<1	<1	<1	<1	3.23	0.60
A-3 Bottom	16-Feb-12	<1	0.462	<1	<1	<1	<1	<1	3.46	0.84
A-3 Bottom	08-May-12	11.4	2.99	<1	<1	1.02	2.31	<1	19.22	4.53
A-3 Bottom	09-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
A-3 Bottom dup.	09-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
A-3 Top	16-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
A-3 Top	08-May-12	1.86	0.658	<1	<1	<1	<1	<1	5.02	1.17
A-3 Top	09-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-16	30-Oct-12	2.68	1.94	<1	<1	<1	2.7	<1	9.32	2.56
C-16 Bottom	15-May-12	6.75	7	7.06	3.91	2.96	<1	<1	28.68	9.24
C-16 Bottom	08-Aug-12	6.44	24.8	8.39	7.9	6.66	26.2	<1	80.89	28.17
C-16 Top	15-May-12	<1	6.71	5.72	<1	<1	<1	<1	14.93	7.61
C-16 Top	08-Aug-12	9.27	28.4	8.81	8.91	7.73	29.2	<1	92.82	32.33
C-17	15-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-17	08-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-17	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-20D	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-20D	08-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-20D	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-20S	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-20S	08-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND

TABLE B-2
Carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
C-20S	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-21D	15-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-21D	08-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-21D	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-21S	15-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-21S dup.	15-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-21S	08-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-21S	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-22D	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-22D	08-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-22D	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-22S	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-22S	08-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-22S	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-23D	15-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-23D	08-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-23D	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-23D dup.	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-23S	15-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-23S	08-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-23S	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-25	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-25	07-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-25	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-25	26-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-26	15-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-26	08-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-26 dup.	08-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-26	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-6	13-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-6	07-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-6	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
C-6	25-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND

TABLE B-2
Carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
D-2	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
D-2	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
D-2	03-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
D-2	17-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
D-4	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
D-4	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
D-4	03-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
E-1D	20-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
E-1D dup.	20-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
E-1D	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
E-1D	03-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
E-1D	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
E-1S	20-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
E-1S	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
E-1S	03-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
E-1S dup.	03-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
E-1S	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-4D	17-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-4D	10-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-4D	09-Aug-12	<1	0.23	<1	<1	<1	<1	<1	3.23	0.61
TtA-4D	24-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-4S	17-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-4S	10-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-4S	29-Nov-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-5D	17-Feb-12	<1	0.203	<1	<1	<1	<1	<1	3.20	0.58
TtA-5D	10-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-5D	09-Aug-12	<1	0.453	<1	<1	<1	<1	<1	3.45	0.83
TtA-5D	18-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-5S	17-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-5S	10-May-12	<1	0.245	<1	<1	<1	<1	<1	3.25	0.62
TtA-5S	09-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-5S	18-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-6D	17-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND

TABLE B-2

Carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
TtA-6D	10-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-6D	09-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-6D	18-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-6S	17-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-6S	10-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-6S dup.	10-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-6S	09-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-6S	18-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-7	15-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-7	10-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-7	07-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-7	24-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-7S	16-Feb-12	<1	0.256	<1	<1	<1	<1	<1	3.26	0.63
TtA-7S	09-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-7S	07-Aug-12	<1	0.271	<1	<1	<1	<1	<1	3.27	0.65
TtA-7S	18-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtA-8S	16-Feb-12	<1	0.296	<1	<1	<1	<1	<1	3.30	0.67
TtA-8S	18-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-1	15-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-1	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-1 dup.	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-1	07-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-1	22-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-2D	15-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-2D	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-2D	07-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-2D	22-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-2D dup.	22-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-2S	15-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-2S	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-2S	07-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-2S dup.	07-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-2S	22-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND

TABLE B-2
Carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
TtB-3	15-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-3 dup.	15-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-3	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-3	07-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-3	22-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-5	15-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-5	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-5 dup.	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-5	07-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-5	22-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-6	22-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-7	15-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-7	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-7	07-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtB-7	26-Oct-12	3.95	2.29	1.24	1.51	<1	2.65	<1	12.64	3.21
TtC-27	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-27	08-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-27	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-27	24-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-27D	16-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-27D dup.	16-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-27D	07-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-27D	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-27D	24-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-29D	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-29S	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-30	17-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-30	08-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-30	07-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-30	26-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-31D	15-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-31D	08-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-31D	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND

TABLE B-2
Carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) (EPA Method 8310), in ug/L
Aliso Groundwater Sampling 2012

Sample Number	Date	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
TtC-31S	15-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-31S	08-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-31S	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-32R	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-32R	07-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-32R dup.	07-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-32R	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-32R	26-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-32R dup.	26-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-33	17-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-33	08-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-33	07-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-33	26-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-34	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-34	07-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-34	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-34	25-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-34D	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-34D	07-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-34D	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-34D	26-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-35	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-35	07-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-35	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-35	26-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-36	20-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-36	09-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-36 dup.	09-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-36	07-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-36	26-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-36D	20-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-36D	09-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-36D	07-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND

TABLE B-2

Carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
TtC-36D	26-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-39	16-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-39	09-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-40D	17-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-40D	08-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-40D	06-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-40D	25-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-40D dup.	25-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-40S	17-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-40S	08-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-40S dup.	08-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-40S	06-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-40S	25-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-41D	17-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-41D	08-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-41D	06-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-41D dup.	06-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-41D	29-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-41S	17-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-41S dup.	17-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-41S	08-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-41S	06-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-41S	29-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-42	20-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-42	09-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-42	06-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-42	24-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-43	16-Feb-12	1.91	0.593	<1	<1	<1	1.55	<1	6.05	1.12
TtC-43	07-May-12	3.41	0.466	<1	<1	<1	1.2	<1	7.08	1.14
TtC-43	07-Aug-12	<1	0.283	<1	<1	<1	<1	<1	3.28	0.66
TtC-43	25-Oct-12	1.33	0.661	<1	<1	<1	1.29	<1	5.28	1.13
TtC-44	16-Feb-12	1.02	<0.2	<1	<1	<1	<1	<1	3.62	0.53
TtC-44	09-May-12	1.48	0.419	<1	<1	<1	2.04	<1	5.94	0.91

TABLE B-2
Carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) (EPA Method 8310), in ug/L
Aliso Groundwater Sampling 2012

Sample Number	Date	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
TtC-44	07-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-44	18-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-44 dup.	18-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-45	20-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-45	09-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-45	10-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-45 dup.	10-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtC-45	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-10	20-Feb-12	<1	0.669	<1	<1	<1	<1	<1	3.67	1.04
TtD-10	08-May-12	3.88	3.18	1.04	<1	<1	4.48	<1	14.08	3.99
TtD-10	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-10	29-Oct-12	<1	2.92	1.48	<1	<1	2.99	<1	9.39	3.42
TtD-14	15-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-14	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-14	01-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-14 dup.	01-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-14	29-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-15	15-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-15	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-15	01-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-15	29-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-17R	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-17R	09-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-17R	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-17R	23-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-18	13-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-18	09-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-18	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-18	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-19	13-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-19	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-19	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-19 dup.	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND

TABLE B-2

Carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
TtD-19	23-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-20D	13-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-20D	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-20D	01-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-20D	23-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-20S	13-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-20S	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-20S	01-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-20S	23-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-21D	17-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-21S	20-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-21S	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-21S	01-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-21S	17-Oct-12	<1	0.288	<1	<1	<1	<1	<1	3.29	0.66
TtD-7	13-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-7	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-7	01-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-7	17-Oct-12	<1	0.292	<1	<1	<1	<1	<1	3.29	0.67
TtD-7 dup.	17-Oct-12	<1	0.23	<1	<1	<1	<1	<1	3.23	0.61
TtD-7D	13-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-7D dup.	13-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-7D	15-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-7D	01-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-7D	17-Oct-12	<1	0.259	<1	<1	<1	<1	<1	3.26	0.63
TtD-9	20-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-9	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-9	03-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-9	29-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtD-9 dup.	29-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-10R	13-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-10R	09-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-10R	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-10R	23-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND

TABLE B-2
Carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
TtE-10R dup.	23-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-3R2	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-3R2	09-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-3R2	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-3R2	23-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-5R2	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-5R2	09-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-5R2	02-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-5R2	23-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-6	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-6 dup.	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-6	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-6	03-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-6	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-8	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-8	14-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-8	03-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtE-8	30-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-1	13-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-1	11-May-12	<1	0.866	<1	<1	<1	1.01	<1	4.38	1.25
TtK-1	10-Aug-12	<1	0.243	<1	<1	<1	<1	<1	3.24	0.62
TtK-1	25-Oct-12	<1	0.345	<1	<1	<1	<1	<1	3.35	0.72
TtK-2	13-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-2	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-2	10-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-2	25-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-3	13-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-3	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-3	10-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-3	25-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-4	13-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-4	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-4	10-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND

TABLE B-2

Carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Indeno(1,2,3-cd)pyrene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Sum of Carcinogenic PAHs(1)	B(a)P Equivalent Concentration (2)
TtK-4	25-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-6	13-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-6	11-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-6	10-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtK-6	25-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtO-1	14-Feb-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtO-1	09-May-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtO-1	06-Aug-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND
TtO-1	25-Oct-12	<1	<0.2	<1	<1	<1	<1	<1	ND	ND

1. See the text for explanation of procedure as how the sum of C-PAHs has been calculated.
2. See the text for explanation of procedure as how the B(a)P equivalent values have been calculated.

<: Compound not detected at or above detection limit. Value shown in the Table is the detection limit (MDL) of the compound for the analytical process.

TABLE B-3

Noncarcinogenic polycyclic aromatic hydrocarbons (NC-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
A-1	15-Feb-12	<1	<1	<1	<1	17.5	<1	15	1.07	18	54.07
A-1	10-May-12	<1	<1	<1	<1	14.6	<1	10.8	<1	12.5	40.90
A-1	07-Aug-12	<1	<1	<1	<1	17.2	<1	<1	<1	17.6	38.30
A-1	24-Oct-12	<1	<1	<1	<1	15.6	<1	3.03	<1	14.7	36.33
A-1 dup.	24-Oct-12	<1	<1	<1	<1	19.3	<1	3.39	<1	18.1	43.79
A-2	17-Oct-12	133	<1	72.1	15.2	171	128	2520	257	212	3,508.80
A-2 Bottom	16-Feb-12	20.2	<1	3.11	<1	3.5	12.8	983	12.7	5.68	1,041.99
A-2 Bottom	08-May-12	18.9	<1	4.29	<1	7.28	12.8	854	16	10.9	925.17
A-2 Botttom	09-Aug-12	17.2	<1	2.58	<1	3.31	10.8	541	14.4	3.51	593.80
A-2 Top	16-Feb-12	29.1	<1	2.89	<1	3.99	17.7	2550	16.6	6.27	2,627.55
A-2 Top	08-May-12	18.1	<1	3.21	<1	4.59	12.4	1640	14.3	5.68	1,699.28
A-2 Top	09-Aug-12	18.7	<1	3.29	<1	4.73	11.8	1650	17.9	5.12	1,712.54
A-3	17-Oct-12	5.54	<1	<1	<1	<1	2.34	3.33	<1	1.3	15.01
A-3 Bottom	16-Feb-12	7.68	<1	<1	<1	1.22	3.09	1.35	<1	2.3	17.64
A-3 Bottom	08-May-12	3.67	<1	2.24	<1	7.4	1.36	1.17	<1	10.6	27.94
A-3 Bottom	09-Aug-12	4.73	<1	<1	<1	<1	1.62	<1	<1	<1	9.85
A-3 Bottom dup.	09-Aug-12	4.17	<1	<1	<1	<1	1.14	<1	<1	<1	8.81
A-3 Top	16-Feb-12	8.4	<1	<1	<1	<1	3.74	1.68	<1	<1	16.82
A-3 Top	08-May-12	5.63	<1	<1	<1	1.96	1.86	2.25	<1	2.85	16.55
A-3 Top	09-Aug-12	7.32	<1	<1	<1	<1	2.05	<1	<1	<1	12.87
C-16	30-Oct-12	33	137	10	<1	8.21	66.3	11000	82.5	11.3	11,348.81
C-16 Bottom	15-May-12	5.21	19.6	15.3	3.49	20.8	34.6	31	85.6	28.5	244.10
C-16 Bottom	08-Aug-12	10.4	34.5	23	7.76	41	43.6	17	121	59.4	357.66
C-16 Top	15-May-12	6.14	7.38	9.21	<5	16.6	<5	733	66.2	22.1	865.63
C-16 Top	08-Aug-12	11	21	26.5	9.78	46.1	47.1	18	131	67.9	378.38
C-17	15-May-12	54.6	8.89	4.01	<1	<1	18.7	40	2.19	<1	129.89
C-17	08-Aug-12	48.4	<1	3.51	<1	<1	15.5	74.6	<1	<1	144.51
C-17	30-Oct-12	52	<1	4.11	<1	<1	18	36.5	<1	<1	113.11
C-20D	14-May-12	8.17	<1	<1	<1	<1	<1	14.8	<1	<1	26.47
C-20D	08-Aug-12	8.8	<1	<1	<1	<1	<1	13.1	<1	<1	25.40
C-20D	30-Oct-12	8.24	<1	<1	<1	<1	<1	9.84	<1	<1	21.58
C-20S	14-May-12	<1	<1	8.07	<1	5.31	1.31	<1	3.19	4.88	24.76

TABLE B-3

Noncarcinogenic polycyclic aromatic hydrocarbons (NC-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
C-20S	08-Aug-12	<1	<1	10.9	<1	6.85	<1	<1	<1	7.29	28.04
C-20S	30-Oct-12	<1	<1	8.62	<1	5.9	<1	3.07	<1	5.68	25.77
C-21D	15-May-12	34.4	24.4	5.46	<1	1.55	47.3	91.2	47.3	1.63	253.74
C-21D	08-Aug-12	37.7	<1	5.44	<1	1.67	41.7	89.9	44	1.57	222.98
C-21D	30-Oct-12	25.3	5.2	2.75	<1	1.31	28.6	45.3	22.3	1.22	132.48
C-21S	15-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
C-21S dup.	15-May-12	<1	<1	<1	<1	1.12	<1	<1	<1	1.19	5.81
C-21S	08-Aug-12	<1	<1	<1	<1	1.61	<1	<1	<1	1.25	6.36
C-21S	30-Oct-12	<1	<1	<1	<1	1.39	<1	<1	<1	1.25	6.14
C-22D	14-May-12	<1	<1	<1	<1	<1	1.1	1.44	2.28	<1	7.82
C-22D	08-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
C-22D	30-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
C-22S	14-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
C-22S	08-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
C-22S	30-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
C-23D	15-May-12	21.5	<1	<1	<1	<1	11.1	<1	<1	<1	36.10
C-23D	08-Aug-12	13.2	<1	<1	<1	<1	7.06	<1	<1	<1	23.76
C-23D	30-Oct-12	27.2	<1	<1	<1	<1	15	1.08	<1	<1	46.28
C-23D dup.	30-Oct-12	25.5	<1	<1	<1	<1	14	1	<1	<1	43.50
C-23S	15-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
C-23S	08-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
C-23S	30-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
C-25	14-Feb-12	<1	<1	<1	<1	1.65	<1	<1	<1	1.94	7.09
C-25	07-May-12	<1	<1	<1	<1	3.71	<1	<1	<1	3.91	11.12
C-25	02-Aug-12	<1	<1	<1	<1	1.5	<1	<1	<1	1.58	6.58
C-25	26-Oct-12	<1	<1	<1	<1	1.56	<1	<1	<1	1.35	6.41
C-26	15-May-12	2.34	6.69	4.09	<1	1.36	6.03	<1	<1	1	23.01
C-26	08-Aug-12	2.63	11	5.72	<1	1.4	6.3	<1	<1	1.27	29.82
C-26 dup.	08-Aug-12	2.63	10.4	5.58	<1	1.35	6.3	<1	<1	1.23	28.99
C-26	30-Oct-12	3.52	<1	5.94	<1	1.57	9.05	1.13	<1	1.32	24.03
C-6	13-Feb-12	1.51	<1	1.93	<1	2.93	<1	<1	<1	3.37	12.24
C-6	07-May-12	1.39	<1	3.21	<1	5.26	<1	<1	<1	4.69	17.05
C-6	02-Aug-12	<1	1.78	<1	<1	2.55	<1	<1	<1	2.68	10.01

TABLE B-3
Noncarcinogenic polycyclic aromatic hydrocarbons (NC-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
C-6	25-Oct-12	<1	<1	1.57	<1	2.76	<1	1.49	<1	2.51	10.83
D-2	14-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
D-2	14-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
D-2	03-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
D-2	17-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
D-4	14-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
D-4	14-May-12	188	47.6	14.8	<1	4.32	58.2	196	114	6.18	629.60
D-4	03-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
E-1D	20-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
E-1D dup.	20-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
E-1D	14-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
E-1D	03-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
E-1D	30-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
E-1S	20-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
E-1S	14-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
E-1S	03-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
E-1S dup.	03-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
E-1S	30-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtA-4D	17-Feb-12	49.3	13.3	12.8	<1	8.96	77.2	25.2	8.4	9.63	205.29
TtA-4D	10-May-12	26.7	16	8.42	<1	5.48	50.2	<1	<1	4.85	113.15
TtA-4D	09-Aug-12	25.3	17.8	10.8	<1	7.74	51.2	6.03	12.9	7.56	139.83
TtA-4D	24-Oct-12	34.4	13	12	<1	8.34	65.2	53.3	11.6	8.07	206.41
TtA-4S	17-Feb-12	<1	<1	<1	<1	7.77	<1	<1	<1	6.84	18.11
TtA-4S	10-May-12	<1	<1	<1	<1	6.86	<1	10.7	<1	5.72	26.28
TtA-4S	29-Nov-12	<1	<1	1.04	<1	8.78	<1	<1	<1	7.14	19.96
TtA-5D	17-Feb-12	50.1	<1	7.84	<1	6.63	40.7	4480	47.5	7.53	4,641.30
TtA-5D	10-May-12	30.4	<1	6.76	<1	5.71	28.2	3300	38.6	5.91	3,416.58
TtA-5D	09-Aug-12	31.1	<1	6.77	<1	6.69	27.3	2730	38.9	7.15	2,848.91
TtA-5D	18-Oct-12	43.2	<1	8	<1	6.16	38	4300	36.9	6.19	4,439.45
TtA-5S	17-Feb-12	<1	<1	<1	<1	1.7	<1	2.62	<1	2.67	9.99
TtA-5S	10-May-12	<1	<1	<1	<1	1.53	<1	<1	<1	1.89	6.92
TtA-5S	09-Aug-12	<1	<1	<1	<1	1.54	<1	<1	<1	1.98	7.02
TtA-5S	18-Oct-12	<1	<1	<1	<1	1.45	<1	1.63	<1	2	8.08

TABLE B-3
Noncarcinogenic polycyclic aromatic hydrocarbons (NC-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtA-6D	17-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtA-6D	10-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtA-6D	09-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtA-6D	18-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtA-6S	17-Feb-12	12.3	31.1	11.8	<1	3.69	10.9	<1	<1	5.94	77.23
TtA-6S	10-May-12	6.09	20.2	10.4	<1	3.39	10.9	<1	<1	3.88	56.36
TtA-6S dup.	10-May-12	6.36	30.2	9.44	<1	2.72	10	<1	1.07	3.5	64.29
TtA-6S	09-Aug-12	2.77	12.4	8.45	<1	2.82	9.06	<1	<1	3.53	40.53
TtA-6S	18-Oct-12	5.01	<1	9.53	<1	3.21	7.27	<1	<1	3.88	30.90
TtA-7	15-Feb-12	<1	<1	<1	<1	1.29	<1	<1	<1	5.02	9.81
TtA-7	10-May-12	<1	<1	<1	<1	1.14	<1	<1	<1	3.76	8.40
TtA-7	07-Aug-12	<1	<1	<1	<1	1.1	<1	<1	<1	4.17	8.77
TtA-7	24-Oct-12	<1	<1	<1	<1	1.32	<1	<1	<1	4.52	9.34
TtA-7S	16-Feb-12	<1	<1	<1	<1	6.65	<1	<1	<1	9.04	19.19
TtA-7S	09-May-12	<1	<1	<1	<1	4.88	<1	<1	<1	5.95	14.33
TtA-7S	07-Aug-12	<1	<1	<1	<1	6.45	<1	1.08	<1	8.34	18.87
TtA-7S	18-Oct-12	<1	<1	<1	<1	4.12	<1	<1	<1	4.89	12.51
TtA-8S	16-Feb-12	5.81	<1	<1	<1	<1	3.91	<1	1.05	1.33	14.60
TtA-8S	18-Oct-12	3.35	<1	<1	<1	<1	2.53	<1	<1	1.05	9.93
TtB-1	15-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtB-1	11-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtB-1 dup.	11-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtB-1	07-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtB-1	22-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtB-2D	15-Feb-12	3.88	<1	<1	<1	<1	<1	4.15	<1	<1	11.53
TtB-2D	11-May-12	5.63	<1	<1	<1	<1	<1	<1	<1	<1	9.63
TtB-2D	07-Aug-12	4.59	<1	<1	<1	<1	<1	<1	<1	<1	8.59
TtB-2D	22-Oct-12	4.58	<1	<1	<1	<1	<1	1.75	<1	<1	9.83
TtB-2D dup.	22-Oct-12	2.96	<1	<1	<1	<1	<1	1.35	<1	<1	7.81
TtB-2S	15-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtB-2S	11-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtB-2S	07-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtB-2S dup.	07-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND

TABLE B-3
Noncarcinogenic polycyclic aromatic hydrocarbons (NC-PAHs) (EPA Method 8310), in ug/L
Aliso Groundwater Sampling 2012

Sample Number	Date	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtB-2S	22-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtB-3	15-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	1.49	5.49
TtB-3 dup.	15-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	1.45	5.45
TtB-3	14-May-12	<1	<1	1.01	<1	<1	<1	<1	1.16	1.81	6.98
TtB-3	07-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	1.35	5.35
TtB-3	22-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	1.32	5.32
TtB-5	15-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtB-5	14-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtB-5 dup.	14-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtB-5	07-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtB-5	22-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtB-6	22-Oct-12	<1	<1	<1	<1	<1	<1	1.01	<1	<1	5.01
TtB-7	15-Feb-12	2.71	21.1	12.3	<1	5.05	24	<1	<1	7.47	74.13
TtB-7	14-May-12	<1	19.5	17.4	<1	7.27	28.2	<1	3.59	9.54	87.00
TtB-7	07-Aug-12	1.63	27.5	20.4	<1	8.34	29.8	<1	1.99	12.5	103.16
TtB-7	26-Oct-12	3.43	22.4	28.7	1.38	20.8	32.4	<1	1.58	33.4	144.59
TtC-27	14-Feb-12	1.65	5.64	5	<1	1.73	1.12	<1	<1	2.34	18.98
TtC-27	08-May-12	1.23	6.05	5.43	<1	2.37	<1	<1	<1	3.26	20.34
TtC-27	02-Aug-12	<1	<1	5.23	<1	1.78	<1	<1	<1	2.52	12.53
TtC-27	24-Oct-12	1.3	4.5	5.72	<1	1.91	<1	<1	<1	2.41	17.84
TtC-27D	16-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-27D dup.	16-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-27D	07-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-27D	02-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-27D	24-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-29D	30-Oct-12	51.8	<1	1.1	<1	<1	31	21.2	9.03	<1	116.13
TtC-29S	30-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-30	17-Feb-12	<1	<1	9.78	<1	4.18	<1	<1	<1	4.67	21.63
TtC-30	08-May-12	<1	<1	4.98	<1	2.8	<1	<1	<1	2.47	13.25
TtC-30	07-Aug-12	<1	<1	4.98	<1	2.29	<1	<1	<1	2.26	12.53
TtC-30	26-Oct-12	<1	<1	5	<1	2.43	<1	<1	<1	2.29	12.72
TtC-31D	15-May-12	1.16	3.78	2.94	<1	<1	<1	<1	1.11	<1	11.49
TtC-31D	08-Aug-12	<1	8.31	2.66	<1	<1	<1	<1	<1	<1	14.47

TABLE B-3

Noncarcinogenic polycyclic aromatic hydrocarbons (NC-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtC-31D	30-Oct-12	1.1	3.31	1.97	<1	<1	<1	<1	<1	<1	9.38
TtC-31S	15-May-12	<1	5.86	2.38	<1	<1	7.44	<1	1.12	<1	19.30
TtC-31S	08-Aug-12	1.03	16.3	3.03	<1	<1	6.24	<1	<1	<1	29.10
TtC-31S	30-Oct-12	1.2	11.7	3.4	<1	<1	6.6	<1	<1	<1	25.40
TtC-32R	14-Feb-12	3.58	<1	<1	<1	1.16	<1	<1	<1	1.27	9.01
TtC-32R	07-May-12	<1	<1	1.23	<1	1.62	<1	<1	<1	1.68	7.53
TtC-32R dup.	07-May-12	<1	<1	1.18	<1	1.46	<1	<1	<1	1.38	7.02
TtC-32R	02-Aug-12	<1	<1	1.11	<1	1.47	<1	<1	<1	1.89	7.47
TtC-32R	26-Oct-12	3.42	<1	1	<1	1.39	<1	<1	<1	1.42	9.73
TtC-32R dup.	26-Oct-12	3.42	<1	1.05	<1	1.57	<1	<1	<1	1.77	10.31
TtC-33	17-Feb-12	1.02	12.7	20.3	<1	8.94	4.99	<1	<1	12.3	61.75
TtC-33	08-May-12	<1	8.01	10.3	<1	5.67	<1	<1	<1	5.85	32.33
TtC-33	07-Aug-12	<1	12.3	11.7	<1	5.35	2.67	<1	<1	6.17	40.19
TtC-33	26-Oct-12	5.88	4.67	8.27	<1	4.62	2.66	<1	<1	4.57	32.17
TtC-34	14-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-34	07-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-34	02-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-34	25-Oct-12	23	<1	<1	<1	<1	<1	2.14	<1	<1	28.64
TtC-34D	14-Feb-12	1.61	<1	<1	<1	<1	<1	<1	<1	<1	5.61
TtC-34D	07-May-12	1.28	<1	<1	<1	<1	<1	<1	<1	<1	5.28
TtC-34D	02-Aug-12	1.27	<1	<1	<1	<1	<1	<1	<1	<1	5.27
TtC-34D	26-Oct-12	1.18	<1	<1	<1	<1	<1	<1	<1	<1	5.18
TtC-35	14-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-35	07-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-35	02-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-35	26-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-36	20-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-36	09-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-36 dup.	09-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-36	07-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-36	26-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-36D	20-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-36D	09-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND

TABLE B-3

Noncarcinogenic polycyclic aromatic hydrocarbons (NC-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtC-36D	07-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-36D	26-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-39	16-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-39	09-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-40D	17-Feb-12	<1	<1	<1	<1	<1	<1	134	<1	<1	138.00
TtC-40D	08-May-12	<1	<1	<1	<1	<1	<1	65.2	<1	<1	69.20
TtC-40D	06-Aug-12	<1	<1	<1	<1	<1	<1	38.3	<1	<1	42.30
TtC-40D	25-Oct-12	<1	<1	<1	<1	<1	<1	33.8	<1	<1	37.80
TtC-40D dup.	25-Oct-12	<1	<1	<1	<1	<1	<1	57.4	<1	<1	61.40
TtC-40S	17-Feb-12	6.39	<1	14.5	<1	2.92	1.98	<1	<1	3.14	30.93
TtC-40S	08-May-12	3.53	<1	9	<1	2.12	<1	14.5	<1	1.9	33.05
TtC-40S dup.	08-May-12	3.33	<1	8.5	<1	1.98	<1	13.7	<1	1.85	31.36
TtC-40S	06-Aug-12	3.24	3.66	9.2	<1	2.04	1.12	2.04	<1	2.09	24.39
TtC-40S	25-Oct-12	3.01	<1	8.85	<1	2.08	1.26	2.66	<1	1.92	21.28
TtC-41D	17-Feb-12	29.7	<1	3.32	<1	<1	3.75	1680	7.75	<1	1,726.52
TtC-41D	08-May-12	24.3	<1	3.1	<1	<1	3.37	2180	8.39	<1	2,221.16
TtC-41D	06-Aug-12	25.7	2.55	3	<1	<1	3.15	1080	4.95	<1	1,120.85
TtC-41D dup.	06-Aug-12	24.9	2.14	2.96	<1	<1	3.79	1360	5.51	<1	1,400.80
TtC-41D	29-Oct-12	26.9	2.76	3.45	<1	<1	3.74	1100	5.84	<1	1,144.19
TtC-41S	17-Feb-12	<1	1.89	8.98	<1	9.92	3.13	<1	<1	11.6	37.52
TtC-41S dup.	17-Feb-12	<1	1.46	8.71	<1	9.02	3.27	<1	<1	11.2	35.66
TtC-41S	08-May-12	<1	5.62	8.58	<1	9.68	<1	<1	<1	9.63	36.01
TtC-41S	06-Aug-12	<1	3.28	9.12	<1	8.89	2.79	<1	<1	10.9	36.98
TtC-41S	29-Oct-12	16.1	2.43	8.67	<1	10.3	2.95	2.78	<1	10.6	54.83
TtC-42	20-Feb-12	<1	<1	<1	<1	1.25	<1	<1	<1	<1	5.25
TtC-42	09-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-42	06-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-42	24-Oct-12	<1	<1	<1	<1	<1	<1	1.48	<1	<1	5.48
TtC-43	16-Feb-12	<1	11.9	11.9	<1	11.2	91.4	5500	9.04	17.5	5,653.94
TtC-43	07-May-12	<1	<1	11	<1	13.7	69	4850	9.67	24.1	4,978.97
TtC-43	07-Aug-12	<1	26.1	7.89	<1	7.17	60.9	4520	3.23	10	4,636.29
TtC-43	25-Oct-12	305	<1	13.1	<1	14.1	94.6	6690	6.13	17.3	7,141.23
TtC-44	16-Feb-12	84.8	9.02	12.5	<1	6.71	76.1	<1	35.1	9.01	234.24

TABLE B-3

Noncarcinogenic polycyclic aromatic hydrocarbons (NC-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtC-44	09-May-12	102	60.7	24.7	<1	12.7	98.7	<1	47.4	19.5	366.70
TtC-44	07-Aug-12	91.6	19.5	15.9	<1	7.53	79.6	4.38	34.9	8.81	262.72
TtC-44	18-Oct-12	75.9	10.6	13.8	<1	7.82	66.3	<1	18.9	8.71	203.03
TtC-44 dup.	18-Oct-12	78.7	10.9	14.2	<1	7.51	68.7	2.07	18.1	8.01	208.69
TtC-45	20-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-45	09-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-45	10-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-45 dup.	10-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtC-45	30-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-10	20-Feb-12	9.74	<1	2.26	<1	1.24	2.84	967	9.46	3.01	996.55
TtD-10	08-May-12	15	13.5	8.81	<1	6.76	5.51	987	38	11.4	1,086.48
TtD-10	02-Aug-12	4.01	<1	<1	<1	<1	1.7	575	3.21	<1	586.42
TtD-10	29-Oct-12	36.4	<1	7.63	<1	6.82	11.3	813	32.7	11.8	920.65
TtD-14	15-Feb-12	<1	<1	<1	<1	7.41	<1	<1	<1	9.79	20.70
TtD-14	11-May-12	<1	<1	<1	<1	4.97	<1	<1	<1	5.71	14.18
TtD-14	01-Aug-12	<1	<1	<1	<1	5.44	<1	<1	<1	7.21	16.15
TtD-14 dup.	01-Aug-12	<1	<1	<1	<1	5.32	<1	<1	<1	7.03	15.85
TtD-14	29-Oct-12	<1	<1	<1	<1	5.61	<1	<1	<1	6.41	15.52
TtD-15	15-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-15	11-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-15	01-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-15	29-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-17R	14-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-17R	09-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-17R	02-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-17R	23-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-18	13-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-18	09-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-18	02-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-18	30-Oct-12	<1	<1	<1	<1	<1	<1	1	<1	<1	5.00
TtD-19	13-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-19	11-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-19	02-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND

TABLE B-3

Noncarcinogenic polycyclic aromatic hydrocarbons (NC-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtD-19 dup.	02-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-19	23-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-20D	13-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-20D	11-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-20D	01-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-20D	23-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-20S	13-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-20S	11-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-20S	01-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-20S	23-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-21D	17-Oct-12	<1	<1	<1	<1	1.03	<1	<1	<1	1.05	5.58
TtD-21S	20-Feb-12	85.3	227	4.98	<1	1.47	48.9	3530	64.6	2.32	3,965.07
TtD-21S	11-May-12	27.7	46.4	1.24	<1	<1	4.44	2460	58	<1	2,599.28
TtD-21S	01-Aug-12	64.1	207	3.92	<1	1.9	44	2280	59.2	2.51	2,663.13
TtD-21S	17-Oct-12	72.7	156	5.34	<1	2.08	43.1	2720	56.4	3.12	3,059.24
TtD-7	13-Feb-12	249	71.3	17.9	<1	5.07	76.5	352	124	9.92	906.19
TtD-7	14-May-12	12.5	2.74	1.67	<1	<1	4.5	8.97	9.02	1.83	42.23
TtD-7	01-Aug-12	207	52.6	16.7	<1	5.66	62.6	291	130	8.66	774.72
TtD-7	17-Oct-12	225	42.5	21	<1	9.79	71.7	196	150	15.4	731.89
TtD-7 dup.	17-Oct-12	215	81.1	19.5	<1	8.39	68.2	190	125	12.9	720.59
TtD-7D	13-Feb-12	11.4	15.3	8.02	<1	2.67	17.5	67.5	32.7	4.54	160.13
TtD-7D dup.	13-Feb-12	11.9	15.7	8.14	<1	2.66	17.8	71.8	34	4.65	167.15
TtD-7D	15-May-12	15.2	<1	4.11	<1	1.87	21.2	447	38.3	2.88	531.56
TtD-7D	01-Aug-12	6.1	7.34	5.65	<1	2.73	10	37.9	22.5	3.78	96.50
TtD-7D	17-Oct-12	6.76	9.87	8.68	<1	5.88	11.8	18.9	23.1	8.79	94.28
TtD-9	20-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-9	11-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-9	03-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-9	29-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtD-9 dup.	29-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-10R	13-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-10R	09-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-10R	02-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND

TABLE B-3

Noncarcinogenic polycyclic aromatic hydrocarbons (NC-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtE-10R	23-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-10R dup.	23-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-3R2	14-Feb-12	2.19	1.84	<1	<1	<1	<1	<1	<1	<1	7.53
TtE-3R2	09-May-12	1.32	<1	<1	<1	<1	<1	<1	<1	<1	5.32
TtE-3R2	02-Aug-12	<1	3.35	<1	<1	<1	<1	<1	<1	<1	7.35
TtE-3R2	23-Oct-12	1.97	<1	<1	<1	<1	<1	<1	<1	<1	5.97
TtE-5R2	14-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-5R2	09-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-5R2	02-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-5R2	23-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-6	14-Feb-12	<1	<1	<1	<1	<1	<1	1.87	<1	<1	5.87
TtE-6 dup.	14-Feb-12	<1	<1	<1	<1	<1	<1	1	<1	<1	5.00
TtE-6	14-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-6	03-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-6	30-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-8	14-Feb-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-8	14-May-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-8	03-Aug-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtE-8	30-Oct-12	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
TtK-1	13-Feb-12	42.2	2.71	11.9	<1	6.52	72.7	191	5.26	11.8	344.59
TtK-1	11-May-12	235	<1	14.1	<1	9.86	70.7	179	12.4	11.5	533.56
TtK-1	10-Aug-12	194	7.99	11.3	<1	5.64	69	260	20.5	5.88	574.81
TtK-1	25-Oct-12	26.8	<1	11.9	<1	6.69	78.8	254	15.1	7.71	402.00
TtK-2	13-Feb-12	94.2	<1	3.62	<1	<1	50.7	<1	35.7	<1	186.72
TtK-2	11-May-12	81.7	42	3.49	<1	<1	45.8	<1	37.8	<1	212.79
TtK-2	10-Aug-12	74.2	<1	3.51	<1	<1	40.9	<1	36.2	<1	157.31
TtK-2	25-Oct-12	77.2	<1	3.8	<1	<1	45.4	3.11	29.3	<1	160.81
TtK-3	13-Feb-12	1.66	<1	4.36	<1	7.45	<1	<1	<1	9.47	25.44
TtK-3	11-May-12	<1	<1	3.46	<1	6.57	1.24	<1	<1	6.16	19.93
TtK-3	10-Aug-12	<1	<1	4.71	<1	6.68	1.82	<1	3.75	6.77	25.73
TtK-3	25-Oct-12	1.23	2.41	5.31	<1	7.27	1.04	1.35	<1	7.46	27.07
TtK-4	13-Feb-12	2.15	<1	8.2	<1	6.39	2.16	<1	<1	8.24	29.14
TtK-4	11-May-12	<1	<1	7.18	<1	6.8	2.35	<1	<1	7.03	25.86

TABLE B-3

Noncarcinogenic polycyclic aromatic hydrocarbons (NC-PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(ghi)-perylene	Fluoran-thene	Fluorene	Naph-thalene	Phenan-threne	Pyrene	Sum of Non-Carcinogenic PAHs(1)
TtK-4	10-Aug-12	1.07	<1	5.9	<1	6.17	2.21	<1	3.24	6.26	26.35
TtK-4	25-Oct-12	1.05	2.22	6.05	<1	6.88	1.43	3.52	<1	7.26	29.41
TtK-6	13-Feb-12	1.21	<1	14.7	<1	6.95	3.49	<1	<1	9.15	37.50
TtK-6	11-May-12	<1	<1	12.7	<1	7.38	3.27	<1	<1	7.69	33.54
TtK-6	10-Aug-12	<1	2.67	12.4	<1	7.18	2.97	<1	3.09	8.04	37.85
TtK-6	25-Oct-12	<1	<1	10.3	<1	8.66	1.34	3.45	<1	8.43	34.18
TtO-1	14-Feb-12	20.8	<1	8.19	<1	2.68	26.6	7490	21.6	2.66	7,573.53
TtO-1	09-May-12	12.1	<1	7.97	<1	2.93	20	11500	18	2.71	11,564.71
TtO-1	06-Aug-12	16.3	<1	7.8	<1	2.52	20.3	8070	18	2.9	8,138.82
TtO-1	25-Oct-12	17.7	<1	7.79	<1	2.47	22.7	9590	15.1	2.46	9,659.22

1. See the text for explanation of procedure as how the sum of non-carcinogenic PAHs has been calculated.

ND: Compound not detected at or above detection limit. Value shown in the Table is the detection limit of the compound for the analytic process.

TABLE B-4

Total Polycyclic aromatic hydrocarbons (PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
A-1	15-Feb-12	ND	54.07	54.07	ND
A-1	10-May-12	ND	40.90	40.90	ND
A-1	07-Aug-12	ND	38.30	38.30	ND
A-1	24-Oct-12	ND	36.33	36.33	ND
A-1 dup.	24-Oct-12	ND	43.79	43.79	ND
A-2	17-Oct-12	227.10	3,508.80	3735.90	72.41
A-2 Bottom	16-Feb-12	7.01	1,041.99	1049.00	1.89
A-2 Bottom	08-May-12	9.76	925.17	934.93	2.79
A-2 Botttom	09-Aug-12	4.01	593.80	597.81	1.39
A-2 Top	16-Feb-12	6.86	2,627.55	2634.41	2.02
A-2 Top	08-May-12	6.93	1,699.28	1706.21	1.79
A-2 Top	09-Aug-12	5.37	1,712.54	1717.91	2.02
A-3	17-Oct-12	3.23	15.01	18.24	0.60
A-3 Bottom	16-Feb-12	3.46	17.64	21.10	0.84
A-3 Bottom	08-May-12	19.22	27.94	47.16	4.53
A-3 Bottom	09-Aug-12	ND	9.85	9.85	ND
A-3 Bottom dup.	09-Aug-12	ND	8.81	8.81	ND
A-3 Top	16-Feb-12	ND	16.82	16.82	ND
A-3 Top	08-May-12	5.02	16.55	21.57	1.17
A-3 Top	09-Aug-12	ND	12.87	12.87	ND
C-16	30-Oct-12	9.32	11,348.81	11358.13	2.56
C-16 Bottom	15-May-12	28.68	244.10	272.78	9.24
C-16 Bottom	08-Aug-12	80.89	357.66	438.55	28.17
C-16 Top	15-May-12	14.93	865.63	880.56	7.61
C-16 Top	08-Aug-12	92.82	378.38	471.20	32.33
C-17	15-May-12	ND	129.89	129.89	ND
C-17	08-Aug-12	ND	144.51	144.51	ND
C-17	30-Oct-12	ND	113.11	113.11	ND
C-20D	14-May-12	ND	26.47	26.47	ND
C-20D	08-Aug-12	ND	25.40	25.40	ND

TABLE B-4

Total Polycyclic aromatic hydrocarbons (PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
C-20D	30-Oct-12	ND	21.58	21.58	ND
C-20S	14-May-12	ND	24.76	24.76	ND
C-20S	08-Aug-12	ND	28.04	28.04	ND
C-20S	30-Oct-12	ND	25.77	25.77	ND
C-21D	15-May-12	ND	253.74	253.74	ND
C-21D	08-Aug-12	ND	222.98	222.98	ND
C-21D	30-Oct-12	ND	132.48	132.48	ND
C-21S	15-May-12	ND	ND	ND	ND
C-21S dup.	15-May-12	ND	5.81	5.81	ND
C-21S	08-Aug-12	ND	6.36	6.36	ND
C-21S	30-Oct-12	ND	6.14	6.14	ND
C-22D	14-May-12	ND	7.82	7.82	ND
C-22D	08-Aug-12	ND	ND	ND	ND
C-22D	30-Oct-12	ND	ND	ND	ND
C-22S	14-May-12	ND	ND	ND	ND
C-22S	08-Aug-12	ND	ND	ND	ND
C-22S	30-Oct-12	ND	ND	ND	ND
C-23D	15-May-12	ND	36.10	36.10	ND
C-23D	08-Aug-12	ND	23.76	23.76	ND
C-23D	30-Oct-12	ND	46.28	46.28	ND
C-23D dup.	30-Oct-12	ND	43.50	43.50	ND
C-23S	15-May-12	ND	ND	ND	ND
C-23S	08-Aug-12	ND	ND	ND	ND
C-23S	30-Oct-12	ND	ND	ND	ND
C-25	14-Feb-12	ND	7.09	7.09	ND
C-25	07-May-12	ND	11.12	11.12	ND
C-25	02-Aug-12	ND	6.58	6.58	ND
C-25	26-Oct-12	ND	6.41	6.41	ND
C-26	15-May-12	ND	23.01	23.01	ND
C-26	08-Aug-12	ND	29.82	29.82	ND
C-26 dup.	08-Aug-12	ND	28.99	28.99	ND

TABLE B-4

Total Polycyclic aromatic hydrocarbons (PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
C-26	30-Oct-12	ND	24.03	24.03	ND
C-6	13-Feb-12	ND	12.24	12.24	ND
C-6	07-May-12	ND	17.05	17.05	ND
C-6	02-Aug-12	ND	10.01	10.01	ND
C-6	25-Oct-12	ND	10.83	10.83	ND
D-2	14-Feb-12	ND	ND	ND	ND
D-2	14-May-12	ND	ND	ND	ND
D-2	03-Aug-12	ND	ND	ND	ND
D-2	17-Oct-12	ND	ND	ND	ND
D-4	14-Feb-12	ND	ND	ND	ND
D-4	14-May-12	ND	629.60	629.60	ND
D-4	03-Aug-12	ND	ND	ND	ND
E-1D	20-Feb-12	ND	ND	ND	ND
E-1D dup.	20-Feb-12	ND	ND	ND	ND
E-1D	14-May-12	ND	ND	ND	ND
E-1D	03-Aug-12	ND	ND	ND	ND
E-1D	30-Oct-12	ND	ND	ND	ND
E-1S	20-Feb-12	ND	ND	ND	ND
E-1S	14-May-12	ND	ND	ND	ND
E-1S	03-Aug-12	ND	ND	ND	ND
E-1S dup.	03-Aug-12	ND	ND	ND	ND
E-1S	30-Oct-12	ND	ND	ND	ND
TtA-4D	17-Feb-12	ND	205.29	205.29	ND
TtA-4D	10-May-12	ND	113.15	113.15	ND
TtA-4D	09-Aug-12	3.23	139.83	143.06	0.61
TtA-4D	24-Oct-12	ND	206.41	206.41	ND
TtA-4S	17-Feb-12	ND	18.11	18.11	ND
TtA-4S	10-May-12	ND	26.28	26.28	ND
TtA-4S	29-Nov-12	ND	19.96	19.96	ND
TtA-5D	17-Feb-12	3.20	4,641.30	4644.50	0.58
TtA-5D	10-May-12	ND	3,416.58	3416.58	ND

TABLE B-4

Total Polycyclic aromatic hydrocarbons (PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
TtA-5D	09-Aug-12	3.45	2,848.91	2852.36	0.83
TtA-5D	18-Oct-12	ND	4,439.45	4439.45	ND
TtA-5S	17-Feb-12	ND	9.99	9.99	ND
TtA-5S	10-May-12	3.25	6.92	10.17	0.62
TtA-5S	09-Aug-12	ND	7.02	7.02	ND
TtA-5S	18-Oct-12	ND	8.08	8.08	ND
TtA-6D	17-Feb-12	ND	ND	ND	ND
TtA-6D	10-May-12	ND	ND	ND	ND
TtA-6D	09-Aug-12	ND	ND	ND	ND
TtA-6D	18-Oct-12	ND	ND	ND	ND
TtA-6S	17-Feb-12	ND	77.23	77.23	ND
TtA-6S	10-May-12	ND	56.36	56.36	ND
TtA-6S dup.	10-May-12	ND	64.29	64.29	ND
TtA-6S	09-Aug-12	ND	40.53	40.53	ND
TtA-6S	18-Oct-12	ND	30.90	30.90	ND
TtA-7	15-Feb-12	ND	9.81	9.81	ND
TtA-7	10-May-12	ND	8.40	8.40	ND
TtA-7	07-Aug-12	ND	8.77	8.77	ND
TtA-7	24-Oct-12	ND	9.34	9.34	ND
TtA-7S	16-Feb-12	3.26	19.19	22.45	0.63
TtA-7S	09-May-12	ND	14.33	14.33	ND
TtA-7S	07-Aug-12	3.27	18.87	22.14	0.65
TtA-7S	18-Oct-12	ND	12.51	12.51	ND
TtA-8S	16-Feb-12	3.30	14.60	17.90	0.67
TtA-8S	18-Oct-12	ND	9.93	9.93	ND
TtB-1	15-Feb-12	ND	ND	ND	ND
TtB-1	11-May-12	ND	ND	ND	ND
TtB-1 dup.	11-May-12	ND	ND	ND	ND
TtB-1	07-Aug-12	ND	ND	ND	ND
TtB-1	22-Oct-12	ND	ND	ND	ND
TtB-2D	15-Feb-12	ND	11.53	11.53	ND

TABLE B-4

Total Polycyclic aromatic hydrocarbons (PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
TtB-2D	11-May-12	ND	9.63	9.63	ND
TtB-2D	07-Aug-12	ND	8.59	8.59	ND
TtB-2D	22-Oct-12	ND	9.83	9.83	ND
TtB-2D dup.	22-Oct-12	ND	7.81	7.81	ND
TtB-2S	15-Feb-12	ND	ND	ND	ND
TtB-2S	11-May-12	ND	ND	ND	ND
TtB-2S	07-Aug-12	ND	ND	ND	ND
TtB-2S dup.	07-Aug-12	ND	ND	ND	ND
TtB-2S	22-Oct-12	ND	ND	ND	ND
TtB-3	15-Feb-12	ND	5.49	5.49	ND
TtB-3 dup.	15-Feb-12	ND	5.45	5.45	ND
TtB-3	14-May-12	ND	6.98	6.98	ND
TtB-3	07-Aug-12	ND	5.35	5.35	ND
TtB-3	22-Oct-12	ND	5.32	5.32	ND
TtB-5	15-Feb-12	ND	ND	ND	ND
TtB-5	14-May-12	ND	ND	ND	ND
TtB-5 dup.	14-May-12	ND	ND	ND	ND
TtB-5	07-Aug-12	ND	ND	ND	ND
TtB-5	22-Oct-12	ND	ND	ND	ND
TtB-6	22-Oct-12	ND	5.01	5.01	ND
TtB-7	15-Feb-12	ND	74.13	74.13	ND
TtB-7	14-May-12	ND	87.00	87.00	ND
TtB-7	07-Aug-12	ND	103.16	103.16	ND
TtB-7	26-Oct-12	12.64	144.59	157.23	3.21
TtC-27	14-Feb-12	ND	18.98	18.98	ND
TtC-27	08-May-12	ND	20.34	20.34	ND
TtC-27	02-Aug-12	ND	12.53	12.53	ND
TtC-27	24-Oct-12	ND	17.84	17.84	ND
TtC-27D	16-Feb-12	ND	ND	ND	ND
TtC-27D dup.	16-Feb-12	ND	ND	ND	ND
TtC-27D	07-May-12	ND	ND	ND	ND

TABLE B-4

Total Polycyclic aromatic hydrocarbons (PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
TtC-27D	02-Aug-12	ND	ND	ND	ND
TtC-27D	24-Oct-12	ND	ND	ND	ND
TtC-29D	30-Oct-12	ND	116.13	116.13	ND
TtC-29S	30-Oct-12	ND	ND	ND	ND
TtC-30	17-Feb-12	ND	21.63	21.63	ND
TtC-30	08-May-12	ND	13.25	13.25	ND
TtC-30	07-Aug-12	ND	12.53	12.53	ND
TtC-30	26-Oct-12	ND	12.72	12.72	ND
TtC-31D	15-May-12	ND	11.49	11.49	ND
TtC-31D	08-Aug-12	ND	14.47	14.47	ND
TtC-31D	30-Oct-12	ND	9.38	9.38	ND
TtC-31S	15-May-12	ND	19.30	19.30	ND
TtC-31S	08-Aug-12	ND	29.10	29.10	ND
TtC-31S	30-Oct-12	ND	25.40	25.40	ND
TtC-32R	14-Feb-12	ND	9.01	9.01	ND
TtC-32R	07-May-12	ND	7.53	7.53	ND
TtC-32R dup.	07-May-12	ND	7.02	7.02	ND
TtC-32R	02-Aug-12	ND	7.47	7.47	ND
TtC-32R	26-Oct-12	ND	9.73	9.73	ND
TtC-32R dup.	26-Oct-12	ND	10.31	10.31	ND
TtC-33	17-Feb-12	ND	61.75	61.75	ND
TtC-33	08-May-12	ND	32.33	32.33	ND
TtC-33	07-Aug-12	ND	40.19	40.19	ND
TtC-33	26-Oct-12	ND	32.17	32.17	ND
TtC-34	14-Feb-12	ND	ND	ND	ND
TtC-34	07-May-12	ND	ND	ND	ND
TtC-34	02-Aug-12	ND	ND	ND	ND
TtC-34	25-Oct-12	ND	28.64	28.64	ND
TtC-34D	14-Feb-12	ND	5.61	5.61	ND
TtC-34D	07-May-12	ND	5.28	5.28	ND
TtC-34D	02-Aug-12	ND	5.27	5.27	ND

TABLE B-4

Total Polycyclic aromatic hydrocarbons (PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
TtC-34D	26-Oct-12	ND	5.18	5.18	ND
TtC-35	14-Feb-12	ND	ND	ND	ND
TtC-35	07-May-12	ND	ND	ND	ND
TtC-35	02-Aug-12	ND	ND	ND	ND
TtC-35	26-Oct-12	ND	ND	ND	ND
TtC-36	20-Feb-12	ND	ND	ND	ND
TtC-36	09-May-12	ND	ND	ND	ND
TtC-36 dup.	09-May-12	ND	ND	ND	ND
TtC-36	07-Aug-12	ND	ND	ND	ND
TtC-36	26-Oct-12	ND	ND	ND	ND
TtC-36D	20-Feb-12	ND	ND	ND	ND
TtC-36D	09-May-12	ND	ND	ND	ND
TtC-36D	07-Aug-12	ND	ND	ND	ND
TtC-36D	26-Oct-12	ND	ND	ND	ND
TtC-39	16-Feb-12	ND	ND	ND	ND
TtC-39	09-May-12	ND	ND	ND	ND
TtC-40D	17-Feb-12	ND	138.00	138.00	ND
TtC-40D	08-May-12	ND	69.20	69.20	ND
TtC-40D	06-Aug-12	ND	42.30	42.30	ND
TtC-40D	25-Oct-12	ND	37.80	37.80	ND
TtC-40D dup.	25-Oct-12	ND	61.40	61.40	ND
TtC-40S	17-Feb-12	ND	30.93	30.93	ND
TtC-40S	08-May-12	ND	33.05	33.05	ND
TtC-40S dup.	08-May-12	ND	31.36	31.36	ND
TtC-40S	06-Aug-12	ND	24.39	24.39	ND
TtC-40S	25-Oct-12	ND	21.28	21.28	ND
TtC-41D	17-Feb-12	ND	1,726.52	1726.52	ND
TtC-41D	08-May-12	ND	2,221.16	2221.16	ND
TtC-41D	06-Aug-12	ND	1,120.85	1120.85	ND
TtC-41D dup.	06-Aug-12	ND	1,400.80	1400.80	ND
TtC-41D	29-Oct-12	ND	1,144.19	1144.19	ND

TABLE B-4

Total Polycyclic aromatic hydrocarbons (PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
TtC-41S	17-Feb-12	ND	37.52	37.52	ND
TtC-41S dup.	17-Feb-12	ND	35.66	35.66	ND
TtC-41S	08-May-12	ND	36.01	36.01	ND
TtC-41S	06-Aug-12	ND	36.98	36.98	ND
TtC-41S	29-Oct-12	ND	54.83	54.83	ND
TtC-42	20-Feb-12	ND	5.25	5.25	ND
TtC-42	09-May-12	ND	ND	ND	ND
TtC-42	06-Aug-12	ND	ND	ND	ND
TtC-42	24-Oct-12	ND	5.48	5.48	ND
TtC-43	16-Feb-12	6.05	5,653.94	5659.99	1.12
TtC-43	07-May-12	7.08	4,978.97	4986.05	1.14
TtC-43	07-Aug-12	3.28	4,636.29	4639.57	0.66
TtC-43	25-Oct-12	5.28	7,141.23	7146.51	1.13
TtC-44	16-Feb-12	3.62	234.24	237.86	0.53
TtC-44	09-May-12	5.94	366.70	372.64	0.91
TtC-44	07-Aug-12	ND	262.72	262.72	ND
TtC-44	18-Oct-12	ND	203.03	203.03	ND
TtC-44 dup.	18-Oct-12	ND	208.69	208.69	ND
TtC-45	20-Feb-12	ND	ND	ND	ND
TtC-45	09-May-12	ND	ND	ND	ND
TtC-45	10-Aug-12	ND	ND	ND	ND
TtC-45 dup.	10-Aug-12	ND	ND	ND	ND
TtC-45	30-Oct-12	ND	ND	ND	ND
TtD-10	20-Feb-12	3.67	996.55	1000.22	1.04
TtD-10	08-May-12	14.08	1,086.48	1100.56	3.99
TtD-10	02-Aug-12	ND	586.42	586.42	ND
TtD-10	29-Oct-12	9.39	920.65	930.04	3.42
TtD-14	15-Feb-12	ND	20.70	20.70	ND
TtD-14	11-May-12	ND	14.18	14.18	ND
TtD-14	01-Aug-12	ND	16.15	16.15	ND
TtD-14 dup.	01-Aug-12	ND	15.85	15.85	ND

TABLE B-4

Total Polycyclic aromatic hydrocarbons (PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
TtD-14	29-Oct-12	ND	15.52	15.52	ND
TtD-15	15-Feb-12	ND	ND	ND	ND
TtD-15	11-May-12	ND	ND	ND	ND
TtD-15	01-Aug-12	ND	ND	ND	ND
TtD-15	29-Oct-12	ND	ND	ND	ND
TtD-17R	14-Feb-12	ND	ND	ND	ND
TtD-17R	09-May-12	ND	ND	ND	ND
TtD-17R	02-Aug-12	ND	ND	ND	ND
TtD-17R	23-Oct-12	ND	ND	ND	ND
TtD-18	13-Feb-12	ND	ND	ND	ND
TtD-18	09-May-12	ND	ND	ND	ND
TtD-18	02-Aug-12	ND	ND	ND	ND
TtD-18	30-Oct-12	ND	5.00	5.00	ND
TtD-19	13-Feb-12	ND	ND	ND	ND
TtD-19	11-May-12	ND	ND	ND	ND
TtD-19	02-Aug-12	ND	ND	ND	ND
TtD-19 dup.	02-Aug-12	ND	ND	ND	ND
TtD-19	23-Oct-12	ND	ND	ND	ND
TtD-20D	13-Feb-12	ND	ND	ND	ND
TtD-20D	11-May-12	ND	ND	ND	ND
TtD-20D	01-Aug-12	ND	ND	ND	ND
TtD-20D	23-Oct-12	ND	ND	ND	ND
TtD-20S	13-Feb-12	ND	ND	ND	ND
TtD-20S	11-May-12	ND	ND	ND	ND
TtD-20S	01-Aug-12	ND	ND	ND	ND
TtD-20S	23-Oct-12	ND	ND	ND	ND
TtD-21D	17-Oct-12	ND	5.58	5.58	ND
TtD-21S	20-Feb-12	ND	3,965.07	3965.07	ND
TtD-21S	11-May-12	ND	2,599.28	2599.28	ND
TtD-21S	01-Aug-12	ND	2,663.13	2663.13	ND
TtD-21S	17-Oct-12	3.29	3,059.24	3062.53	0.66

TABLE B-4

Total Polycyclic aromatic hydrocarbons (PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
TtD-7	13-Feb-12	ND	906.19	906.19	ND
TtD-7	14-May-12	ND	42.23	42.23	ND
TtD-7	01-Aug-12	ND	774.72	774.72	ND
TtD-7	17-Oct-12	3.29	731.89	735.18	0.67
TtD-7 dup.	17-Oct-12	3.23	720.59	723.82	0.61
TtD-7D	13-Feb-12	ND	160.13	160.13	ND
TtD-7D dup.	13-Feb-12	ND	167.15	167.15	ND
TtD-7D	15-May-12	ND	531.56	531.56	ND
TtD-7D	01-Aug-12	ND	96.50	96.50	ND
TtD-7D	17-Oct-12	3.26	94.28	97.54	0.63
TtD-9	20-Feb-12	ND	ND	ND	ND
TtD-9	11-May-12	ND	ND	ND	ND
TtD-9	03-Aug-12	ND	ND	ND	ND
TtD-9	29-Oct-12	ND	ND	ND	ND
TtD-9 dup.	29-Oct-12	ND	ND	ND	ND
TtE-10R	13-Feb-12	ND	ND	ND	ND
TtE-10R	09-May-12	ND	ND	ND	ND
TtE-10R	02-Aug-12	ND	ND	ND	ND
TtE-10R	23-Oct-12	ND	ND	ND	ND
TtE-10R dup.	23-Oct-12	ND	ND	ND	ND
TtE-3R2	14-Feb-12	ND	7.53	7.53	ND
TtE-3R2	09-May-12	ND	5.32	5.32	ND
TtE-3R2	02-Aug-12	ND	7.35	7.35	ND
TtE-3R2	23-Oct-12	ND	5.97	5.97	ND
TtE-5R2	14-Feb-12	ND	ND	ND	ND
TtE-5R2	09-May-12	ND	ND	ND	ND
TtE-5R2	02-Aug-12	ND	ND	ND	ND
TtE-5R2	23-Oct-12	ND	ND	ND	ND
TtE-6	14-Feb-12	ND	5.87	5.87	ND
TtE-6 dup.	14-Feb-12	ND	5.00	5.00	ND
TtE-6	14-May-12	ND	ND	ND	ND

TABLE B-4

Total Polycyclic aromatic hydrocarbons (PAHs) (EPA Method 8310), in ug/L

Aliso Groundwater Sampling 2012

Sample Number	Date	Sum of Carcinogenic PAHs(1)	Sum of Non-Carcinogenic PAHs(2)	Total PAHs(3)	Sum of Carcinogenic B(a)P Equivalent Concentration
TtE-6	03-Aug-12	ND	ND	ND	ND
TtE-6	30-Oct-12	ND	ND	ND	ND
TtE-8	14-Feb-12	ND	ND	ND	ND
TtE-8	14-May-12	ND	ND	ND	ND
TtE-8	03-Aug-12	ND	ND	ND	ND
TtE-8	30-Oct-12	ND	ND	ND	ND
TtK-1	13-Feb-12	ND	344.59	344.59	ND
TtK-1	11-May-12	4.38	533.56	537.94	1.25
TtK-1	10-Aug-12	3.24	574.81	578.05	0.62
TtK-1	25-Oct-12	3.35	402.00	405.35	0.72
TtK-2	13-Feb-12	ND	186.72	186.72	ND
TtK-2	11-May-12	ND	212.79	212.79	ND
TtK-2	10-Aug-12	ND	157.31	157.31	ND
TtK-2	25-Oct-12	ND	160.81	160.81	ND
TtK-3	13-Feb-12	ND	25.44	25.44	ND
TtK-3	11-May-12	ND	19.93	19.93	ND
TtK-3	10-Aug-12	ND	25.73	25.73	ND
TtK-3	25-Oct-12	ND	27.07	27.07	ND
TtK-4	13-Feb-12	ND	29.14	29.14	ND
TtK-4	11-May-12	ND	25.86	25.86	ND
TtK-4	10-Aug-12	ND	26.35	26.35	ND
TtK-4	25-Oct-12	ND	29.41	29.41	ND
TtK-6	13-Feb-12	ND	37.50	37.50	ND
TtK-6	11-May-12	ND	33.54	33.54	ND
TtK-6	10-Aug-12	ND	37.85	37.85	ND
TtK-6	25-Oct-12	ND	34.18	34.18	ND
TtO-1	14-Feb-12	ND	7,573.53	7573.53	ND
TtO-1	09-May-12	ND	11,564.71	11564.71	ND
TtO-1	06-Aug-12	ND	8,138.82	8138.82	ND
TtO-1	25-Oct-12	ND	9,659.22	9659.22	ND

1. Data are from Table 2.
2. Data are from Table 3.
3. Sum of carcinogenic and non-carcinogenic PAHs.

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	A-1	A-1	A-1	A-1	A-1 dup.	A-2	A-2 Bottom	A-2 Bottom	A-2 Botttom	A-2 Top	A-2 Top	A-2 Top	A-3
Analyte	15-Feb-12	10-May-12	07-Aug-12	24-Oct-12	24-Oct-12	17-Oct-12	16-Feb-12	08-May-12	09-Aug-12	16-Feb-12	08-May-12	09-Aug-12	17-Oct-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	**1.9**	**1.94**	**2.77**	**2.43**	**1.23**	**2.15**	**1.9**	**1.03**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	**25.7**	**12.7**	**10.3**	**10.2**	**17.4**	**14.9**	**15.1**	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	**10**	**6.3**	**4.65**	**4.88**	**7.26**	**6.13**	**6.33**	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	**45.4**	**39.3**	**46.8**	**46.4**	**48.4**	**48.5**	**49.6**	**11**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**0.71**	ND	ND	ND	ND	**3.33**	**4.04**	ND	**2.02**	**2.95**	ND	**2.19**	**3.16**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**6.03**	**7.31**	**5.74**	**5.84**	**5.49**	**3.69**	**2.21**	**4.26**	**3.71**	**0.62**	**2.2**	**1.9**	**3.26**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	**52**	**40.3**	**77.3**	**45.6**	**50.1**	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	**71.8**	**65.7**	**40**	**43.9**	**83**	**61.5**	**50.4**	ND
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**0.53**	**0.82**	**0.52**	ND	ND	**34.6**	**29.7**	**34.4**	**33.8**	**31.1**	**33.2**	**34**	**13.5**
m,p-Xylenes	ND	ND	ND	ND	ND	**12.5**	**17**	**12**	**14**	**19.4**	**17.9**	**16.9**	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	**14**	**9.01**	ND	**2**	**1.9**	**1920**	**1420**	**891**	**558**	**2940**	**1850**	**1540**	**4.39**
n-Butylbenzene	ND	ND	ND	ND	ND	ND	**35.4**	**17.8**	**18.4**	**70.6**	**59.8**	**63**	**1.97**
n-Propylbenzene	ND	ND	ND	ND	ND	**20.9**	**15.1**	**13**	**12.5**	**20.4**	**21.7**	**20.7**	**8.83**
o-Xylene	ND	ND	ND	ND	ND	**20.7**	**25.2**	**15.3**	**18.8**	**28.5**	**24.5**	**22.6**	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	**1.87**	**1.47**	**0.99**	**1.35**	**1.65**	**1.21**	**1.67**	ND
sec-Butylbenzene	ND	ND	ND	ND	ND	**5.89**	**4.47**	**5.82**	**5.51**	**4.33**	**5.05**	**4.98**	**3.79**
Styrene	ND	ND	ND	ND	ND	ND	**0.68**	ND	ND	**0.98**	**0.65**	**0.51**	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	**0.75**	**0.51**	**0.69**	**0.71**	**0.5**	**0.61**	**0.68**	**0.64**
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	**2.67**	**3.34**	**2.36**	**2.45**	**5.21**	**3.94**	**3.54**	ND
trans-1,2-Dichloroethene	ND	**0.58**	ND	ND	ND	**1.48**	**0.94**	**1.87**	**1.5**	ND	**1.12**	**0.93**	**1.2**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	**11.6**	**9.25**	**18.9**	**13.9**	**1.55**	**11.3**	**9.95**	**16.5**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	A-3 Bottom	A-3 Bottom	A-3 Bottom	A-3 Bottom dup.	A-3 Top	A-3 Top	A-3 Top	C-16	C-16 Bottom	C-16 Bottom	C-16 Top	C-16
Analyte	16-Feb-12	08-May-12	09-Aug-12	09-Aug-12	16-Feb-12	08-May-12	09-Aug-12	30-Oct-12	15-May-12	08-Aug-12	15-May-12	08-Aug-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**1.25**	**1.51**	**1.17**	**1.26**	**1.17**	**1.58**	**1.27**	**2.39**	ND	**2.25**	**3.53**	**2.26**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	**6.25**	**525**	ND	**2.62**	**2.28**	**1.48**
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	**177**	ND	**1.2**	**1.05**	**0.66**
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	**8.27**	ND	ND	ND	ND	ND	**12.7**	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**10.1**	**7.61**	**9.53**	**8.87**	**11.2**	**14.4**	**14.2**	**210**	**5.4**	**1.87**	**2.41**	**0.85**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**3.04**	ND	**1.41**	**1.36**	**2.98**	ND	**1.16**	**3.36**	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**2.76**	**2.59**	**2.46**	**2.39**	**3.01**	**4.05**	**3.37**	**3.7**	**5.1**	**2.75**	**3.81**	**2.78**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**9.89**	**5.66**	**10.6**
Ethylbenzene	ND	ND	ND	ND	ND	**0.6**	**0.56**	**2160**	**7.6**	**3.79**	**2.33**	**1.28**
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**14.6**	**7.85**	**12**	**11.2**	**16.8**	**19.4**	**18.5**	**18.6**	ND	**1.52**	**1.57**	**1.14**
m,p-Xylenes	ND	ND	ND	ND	ND	ND	ND	**2460**	ND	**2.43**	**1.5**	**1.24**
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	**2.43**	ND	**1.95**	**3.17**	**2.01**
Naphthalene	**3.37**	**6.32**	ND	ND	**3.94**	**27.5**	ND	**16100**	**39.5**	**12.5**	**800**	**12.1**
n-Butylbenzene	**1.81**	**1.65**	**1.38**	**1.21**	**2.01**	**2.38**	**2.07**	**27.9**	ND	**0.76**	**0.71**	**0.56**
n-Propylbenzene	**9.97**	**4.75**	**8.05**	**7.35**	**11.8**	**13.6**	**13.1**	**27.9**	ND	**0.77**	**0.81**	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	**1150**	ND	**1.77**	**0.86**	**0.8**
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.53**	**0.52**	ND
sec-Butylbenzene	**3.9**	**4.83**	**3.37**	**3.17**	**4.36**	**5.32**	**5**	ND	ND	ND	**0.56**	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	**79.3**	ND	ND	ND	ND
tert-Butylbenzene	**0.61**	**0.83**	**0.64**	**0.61**	**0.65**	**0.77**	**0.77**	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**0.53**	**1.21**	ND	**0.58**	ND	**0.66**	ND	**518**	ND	**0.54**	ND	ND
trans-1,2-Dichloroethene	**0.68**	**1.85**	**1.07**	**1.13**	ND	ND	ND	**2.06**	ND	**1.95**	**3.02**	**1.98**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	**1.14**	ND	**1.38**	**1.26**	**1.34**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**9.29**	**24.9**	**14**	**13.3**	**6.08**	**10.9**	**9.54**	**14.1**	**22**	**14.2**	**23.4**	**14.2**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	C-17	C-17	C-17	C-20D	C-20D	C-20D	C-20S	C-20S	C-20S	C-21D	C-21D	C-21D	C-21S
Analyte	15-May-12	08-Aug-12	30-Oct-12	14-May-12	08-Aug-12	30-Oct-12	14-May-12	08-Aug-12	30-Oct-12	15-May-12	08-Aug-12	30-Oct-12	15-May-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**2.73**	**1.83**	**1.78**	**0.97**	**0.78**	**0.72**	**2.78**	**2.24**	**2.37**	**0.51**	ND	ND	**2.73**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	**14**	**9.92**	**7.22**	ND	ND	ND	ND	ND	ND	**5.31**	**4.25**	**3.29**	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**1.48**	**1.07**	**0.79**	ND	ND	ND	ND	ND	ND	**11.3**	**9.3**	**5.45**	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.95**	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**22500**	**1660**	**1630**	**827**	**718**	**703**	**30.7**	**31.1**	**23**	**403**	**320**	**216**	**0.82**
Bromobenzene	ND	ND	ND	ND	**1.18**	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	**1.2**	ND	**2.85**	**0.72**	**5.1**	**1.4**	**1.34**	**2.27**	**4.88**	**2.34**	**2.49**	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**3.72**	**2.62**	**2.75**	**3.54**	**2.84**	**2.75**	**6.05**	**5.08**	**5.71**	**4.49**	**3.02**	**2.26**	**3.26**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	**15200**	**1270**	**994**	**9.25**	**7.47**	**6.31**	**2.92**	**2**	**0.95**	**184**	**139**	**94.8**	ND
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**114**	**91.6**	**68.7**	**22.6**	**21.1**	**18.4**	**36.4**	**36.4**	**34.9**	**21.8**	**17.7**	**11.9**	**3.16**
m,p-Xylenes	**22.6**	**17.1**	**13.8**	**1.16**	**1.13**	ND	**1.4**	**1.31**	ND	**24.6**	**16.4**	**8.12**	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	**7.34**	**5.67**	**6.3**	**96.5**	**76**	**80.8**	ND	ND	ND	**2.03**	**1.31**	**1.25**	**2.33**
Naphthalene	**64**	**49.8**	**55.5**	**19.2**	**14.3**	**19.5**	**1.46**	ND	ND	**102**	**87.4**	**77.9**	ND
n-Butylbenzene	ND	**8.48**	**1.95**	ND	ND	ND	ND	ND	ND	**3.03**	**2.19**	**1.48**	ND
n-Propylbenzene	**28.5**	**22.2**	**16.6**	**11.6**	**10.4**	**9.65**	**1.04**	**1.08**	**1.02**	**15.1**	**12.3**	**8.38**	ND
o-Xylene	**139**	**98.6**	**72.4**	**1.21**	**1.04**	**0.78**	ND	ND	ND	**14.7**	**10.3**	**6.19**	ND
p-Isopropyltoluene	**0.87**	**0.64**	**0.55**	**0.81**	**0.65**	**0.55**	ND	ND	ND	**0.81**	**0.6**	**1.79**	ND
sec-Butylbenzene	**1.96**	**1.55**	**1.18**	ND	ND	ND	**1.31**	**1.3**	**1.3**	**0.63**	**0.52**	ND	ND
Styrene	**0.59**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	**0.54**	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**17.6**	**13.4**	**11.2**	**2.4**	**2.1**	**1.69**	ND	ND	ND	**6.36**	**4.83**	**3.51**	ND
trans-1,2-Dichloroethene	**2.09**	**1.43**	**1.33**	**0.89**	**0.64**	**0.64**	**4.02**	**3.09**	**3.24**	**0.95**	**0.52**	ND	**2.49**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	**0.62**	**0.75**	ND	ND	**0.56**	ND	**0.55**	**0.55**	**0.52**	**0.83**	**0.65**	ND	**1.76**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**9.29**	**5.26**	**4.66**	ND	ND	ND	**20**	**15.1**	**13.2**	ND	ND	ND	**26.8**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	C-21S dup.	C-21S	C-21S	C-22D	C-22D	C-22D	C-22S	C-22S	C-22S	C-23D	C-23D	C-23D	C-23D dup
Analyte	15-May-12	08-Aug-12	30-Oct-12	14-May-12	08-Aug-12	30-Oct-12	14-May-12	08-Aug-12	30-Oct-12	15-May-12	08-Aug-12	30-Oct-12	30-Oct-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**2.89**	**2.69**	**2.57**	ND	ND	ND	ND	ND	ND	**0.87**	ND	**0.55**	**0.51**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	**1.97**	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.77**	ND	**0.9**	**0.82**
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**1.13**	**0.9**	**1.12**	**4.08**	ND	**25.4**	ND	ND	ND	**354**	**218**	**321**	**296**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	**0.53**	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	**5.21**	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	**0.83**	**1.4**	ND	ND	ND	ND	ND	ND	**6.63**	**2.18**	**3.19**	**2.72**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	**16.4**	ND	**13.5**	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**3.41**	**3.87**	**3.93**	ND	ND	ND	ND	ND	ND	**4.76**	**2.4**	**3.6**	**3.33**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	**1.44**	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	**10.5**	**17.2**	**13.8**	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	**9.05**	ND	ND	ND	**14.1**	**10**	**14.7**	**12.8**
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**4.08**	**5.54**	**5.24**	ND	ND	**0.91**	ND	ND	ND	**25.1**	**15.7**	**24.2**	**21.7**
m,p-Xylenes	ND	ND	ND	ND	ND	**1.54**	ND	ND	ND	**1.42**	**1**	**1.3**	**1.09**
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	**2.36**	**2.36**	**2.28**	ND	ND	ND	ND	ND	ND	**5.54**	**3.37**	**4.18**	**4.32**
Naphthalene	ND	ND	ND	**3.41**	ND	ND	ND	ND	ND	**1.86**	ND	**4.05**	ND
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.18**	**0.73**	**1.31**	**1.05**
n-Propylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**14.2**	**8.44**	**14**	**12.2**
o-Xylene	ND	ND	ND	ND	ND	**1.12**	ND	ND	ND	ND	ND	**0.59**	**0.5**
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	**0.51**	**0.72**	**0.6**	ND	ND	ND	ND	ND	ND	**0.57**	ND	**0.53**	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	**0.6**	ND	ND	ND	**1.06**	**0.75**	**1.03**	**0.95**
trans-1,2-Dichloroethene	**2.58**	**2.75**	**2.33**	ND	ND	ND	ND	ND	ND	**1.12**	**0.57**	**0.71**	**0.76**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	**2.3**	**2.95**	**2.48**	ND	ND	ND	ND	ND	ND	**1.36**	**0.56**	**0.9**	**0.73**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**26.2**	**29**	**23**	ND	ND	**1**	ND	ND	ND	**8.78**	**4.64**	**4.42**	**4.05**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	C-23S	C-23S	C-23S	C-25	C-25	C-25	C-25	C-26	C-26	C-26 dup.	C-26	C-6	C-6
Analyte	15-May-12	08-Aug-12	30-Oct-12	14-Feb-12	07-May-12	02-Aug-12	26-Oct-12	15-May-12	08-Aug-12	08-Aug-12	30-Oct-12	13-Feb-12	07-May-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**2.49**	**1.49**	**1.47**	**1.6**	**2.1**	**1.25**	**1.42**	**3.12**	**2.17**	**2.1**	**2.21**	**3.08**	**3.85**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.71**
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**5.92**	**3.38**	**3.06**	ND	**0.54**	ND	ND	**130**	**121**	**119**	**133**	**101**	**119**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**4.25**	**1.12**	**1.25**	ND	ND	ND	ND	**1.18**	ND	ND	**1.39**	**1.74**	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**1.85**	**1.08**	**1.25**	**3.02**	**4.23**	**3.5**	**3.04**	**5.35**	**3.92**	**3.78**	**4.06**	**4.17**	**5.42**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	**1.1**	ND	ND	**1.09**	**10.9**	**17.6**	**19**	**16.7**	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	**9.32**	**7.35**	**7.23**	**7.75**	**1.14**	**1.83**
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**5**	**3.65**	**3.59**	**10.3**	**10.6**	**7.6**	**7.36**	**17.5**	**16.8**	**18.4**	**20.9**	**30.9**	**43.1**
m,p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	**2.32**	**1.7**	**1.65**	**3.52**	**4.64**	**3.02**	**3.5**	**4.1**	**3**	**2.79**	**2.88**	**2.4**	**2.87**
Naphthalene	ND	ND	ND	ND	ND	ND	ND	**1.69**	ND	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	**2.08**	**1.64**	**1.72**	**2.56**	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND	ND	ND	**2.56**	**2.38**	**2.59**	**3.45**	**1.42**	**2.11**
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	**3.27**	**2.48**	**2.52**	**0.59**	**1.15**	ND	**0.59**	**2.9**	**2.49**	**2.74**	**3.32**	**1.89**	**3.27**
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	**0.77**	**0.66**	**0.64**	ND	**0.68**	ND	ND	**0.51**	ND	**0.55**	**0.66**	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	**0.95**	**0.89**	**0.91**	**0.9**	**0.94**	**0.76**
trans-1,2-Dichloroethene	**0.73**	ND	ND	**1.67**	**2.34**	**1.37**	**1.53**	**2.7**	**1.86**	**1.8**	**2**	**3.08**	**4.04**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	**0.56**	ND	ND	**1.04**	**0.85**	**1.04**	**0.93**	**2.95**	**4.14**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**8.65**	**4.85**	**4.31**	**5.82**	**11.6**	**5.44**	**5.98**	**17.2**	**10.6**	**10.3**	**10.3**	**26**	**52**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	C-6	C-6	D-2	D-2	D-2	D-2	D-4	D-4	D-4	E-1D	E-1D dup.	E-1D	E-1D
Analyte	02-Aug-12	25-Oct-12	14-Feb-12	14-May-12	03-Aug-12	17-Oct-12	14-Feb-12	14-May-12	03-Aug-12	20-Feb-12	20-Feb-12	14-May-12	03-Aug-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**3.15**	**2.78**	**5.8**	**7.8**	**5.62**	**5.32**	**4.16**	**5.5**	**3.52**	ND	ND	**0.57**	**0.51**
1,1-Dichloroethene	ND	ND	**0.77**	**0.98**	**0.57**	**0.64**	**1.02**	**1.24**	**0.66**	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	**0.56**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**91.6**	**85.5**	ND	ND	ND	ND	ND	**0.51**	ND	ND	ND	ND	ND
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**3.08**	**1.87**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	**1.8**	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**4.71**	**4.88**	**135**	**176**	**138**	**145**	**200**	**244**	**197**	**1.69**	**1.59**	**1.93**	**1.51**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	**1.7**	**2.15**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**30.5**	**29.7**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	**2.36**	**2.43**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	**3.96**	ND	ND	ND	ND	ND	**276**	ND	ND	ND	ND	ND
n-Butylbenzene	ND	**0.55**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	**1.5**	**1.6**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	**1.9**	**1.94**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**0.6**	**0.58**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	**2.72**	**2.74**	**3.66**	**5.06**	**3.5**	**4.36**	**5.53**	**7.68**	**5.53**	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	**3.56**	**3.57**	**26.3**	**34.7**	**29.3**	**30**	**13.8**	**55.8**	**18.2**	**0.91**	**0.84**	**1.1**	**0.97**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**35**	**28.9**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

Analyte	E-1D 30-Oct-12	E-1S 20-Feb-12	E-1S 14-May-12	E-1S 03-Aug-12	E-1S dup. 03-Aug-12	E-1S 30-Oct-12	TtA-4D 17-Feb-12	TtA-4D 10-May-12	TtA-4D 09-Aug-12	TtA-4D 24-Oct-12	TtA-4S 17-Feb-12	TtA-4S 10-May-12	TtA-4S 29-Nov-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**0.52**	ND	**0.57**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	**4.8**	**4.21**	**4.49**	**8.82**	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	**0.55**	**0.54**	**0.54**	**0.58**	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	**0.53**	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	**16.6**	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	**3.08**	**3.5**	**3.24**	**2.51**	ND	ND	ND
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	ND	ND	ND	ND	ND	**4.15**	ND	**1.42**	1.74	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**1.65**	**2.29**	**4.4**	**2.55**	**2.51**	**3.1**	**2.91**	**3.41**	**3.08**	**2.99**	**5.62**	**6.37**	**3.78**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**16.9**	**10.6**	**4.46**
Ethylbenzene	ND	ND	ND	ND	ND	ND	**92.6**	**99.7**	**98.2**	**96.3**	ND	ND	ND
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	ND	ND	ND	ND	ND	ND	**32.3**	**33.9**	**29.5**	**27.6**	ND	ND	**0.77**
m,p-Xylenes	ND	ND	ND	ND	ND	ND	**4.94**	**4.52**	**4.37**	**7.23**	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	ND	**3.11**	**4.5**	**2.96**	**2.93**	**3.23**	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	**40.7**	ND	**9.1**	**84.7**	**1.07**	**10.5**	ND
n-Butylbenzene	ND	ND	ND	ND	ND	ND	**2.23**	**2.3**	**1.9**	**2.1**	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND	ND	**19.3**	**20.1**	**17.6**	**16.9**	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	**3.95**	**4.12**	**4.26**	**5.64**	ND	ND	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	**1.87**	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	**0.88**	**0.95**	**0.75**	**0.79**	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	**0.91**	**1.05**	**1.04**	**0.91**	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	**1.04**	ND	ND	ND	ND	ND	**0.61**	**0.66**	**0.6**	**0.55**	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtA-5D	TtA-5D	TtA-5D	TtA-5D	TtA-5S	TtA-5S	TtA-5S	TtA-5S	TtA-6D	TtA-6D	TtA-6D	TtA-6D	TtA-6S
Analyte	17-Feb-12	10-May-12	09-Aug-12	18-Oct-12	17-Feb-12	10-May-12	09-Aug-12	18-Oct-12	17-Feb-12	10-May-12	09-Aug-12	18-Oct-12	17-Feb-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	**1.59**	**1.62**	**1.27**	**1.23**	**0.68**	**0.8**	**0.71**	**0.53**	**3.41**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	**33**	**29.8**	**27.7**	**38.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**7.93**	**7.13**	**6.48**	**9.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**831**	**897**	**857**	**997**	**0.65**	**0.59**	**0.58**	**0.62**	**55.6**	**64**	**65.3**	**53.9**	**86**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**3.73**	ND	**2.03**	**11.1**	ND	ND	**0.98**	**1.26**	**4.91**	ND	**1.09**	**1.53**	**4.75**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**1.01**	**1.27**	**0.94**	ND	**2.24**	**2.35**	**1.89**	**1.96**	**3.24**	**4.05**	**3.5**	**2.65**	**5.97**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	**462**	**393**	**413**	**520**	ND	ND	ND	ND	**3.03**	**3.5**	**3.35**	**2.76**	**19.2**
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**9.34**	**8.5**	**7.39**	**10.7**	ND	ND	ND	ND	**8.04**	**9.07**	**7.74**	**7.43**	**50.4**
m,p-Xylenes	**135**	**138**	**136**	**179**	ND	ND	ND	ND	ND	ND	ND	ND	**1.16**
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.95**
Naphthalene	**4530**	**3860**	**2720**	**4600**	**2.19**	ND	ND	**3.8**	ND	**1.38**	ND	ND	ND
n-Butylbenzene	**61.9**	ND	**68.6**	**72.4**	ND	ND	ND	ND	ND	ND	ND	ND	**2.8**
n-Propylbenzene	**2.57**	**2.33**	**1.96**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**6.3**
o-Xylene	**105**	**110**	**115**	**128**	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	**0.54**	**0.66**	**0.62**	ND	**2.02**
Styrene	**0.68**	**0.64**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**27.6**	**34.6**	**25**	**44.1**	ND	ND	ND	ND	ND	ND	ND	ND	**1.14**
trans-1,2-Dichloroethene	**0.52**	**0.64**	**0.52**	ND	**2.76**	**2.98**	**2.33**	**2.1**	**0.75**	**0.98**	**0.75**	**0.71**	**2.39**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	**0.73**	**0.71**	**0.96**	**0.58**	**4.84**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.18**	ND
Vinyl chloride	ND	**1.44**	**1.15**	ND	**23.2**	**36.1**	**26**	**21.4**	**1.03**	**2.04**	**1.68**	**1.49**	**39.4**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtA-6S	TtA-6S dup.	TtA-6S	TtA-6S	TtA-7	TtA-7	TtA-7	TtA-7	TtA-7S	TtA-7S	TtA-7S	TtA-7S	TtA-8S
Analyte	10-May-12	10-May-12	09-Aug-12	18-Oct-12	15-Feb-12	10-May-12	07-Aug-12	24-Oct-12	16-Feb-12	09-May-12	07-Aug-12	18-Oct-12	16-Feb-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	4.08	3.97	2.95	2.97	ND	ND	ND	ND	1.26	1.49	1.06	0.98	1.82
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.73	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	8.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	105	104	89.9	84.6	ND	ND	ND	ND	24.4	32.7	29.4	5.47	25.7
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	ND	1.79	1.64	0.73	ND	ND	ND	2.58	ND	0.75	1.6	3.19
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	8.56	8.11	6.6	6.87	2.09	2.34	1.86	2.04	3.66	5.75	3.69	2.84	4.88
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	2.35	2.05	2.85	2.26	ND	ND	ND	ND	ND
Ethylbenzene	28.6	28.3	28.6	27.2	ND	ND	ND	ND	1.05	1.46	1.26	ND	0.6
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	62.1	62.2	51.6	51.2	ND	ND	ND	ND	4.85	5.75	4.76	0.78	17.9
m,p-Xylenes	1.93	1.87	1.59	1.55	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	3.35	3.35	2.97	2.78	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	1	ND	ND	ND	1.04	ND	ND	ND	ND	1.87	1.13	ND	ND
n-Butylbenzene	3.83	3.82	3.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2
n-Propylbenzene	8.99	8.75	8.01	7.88	ND	ND	ND	ND	0.55	0.66	0.58	ND	13.9
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69	ND	ND	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	2.69	2.63	2.04	2.22	ND	ND	ND	ND	0.95	1.13	0.95	ND	6.19
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.92
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1.57	1.64	1.36	1.37	ND	ND	ND	ND	ND	ND	ND	ND	0.79
trans-1,2-Dichloroethene	3.1	3.15	2.27	2.31	ND	ND	ND	ND	1.82	2.37	1.74	1.28	0.75
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	6.37	6.19	5.99	5.72	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.97	ND
Vinyl chloride	69.2	67.7	46.3	44.4	ND	ND	ND	ND	27.5	52.6	39.6	9.1	8.68

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtA-8S	TtB-1	TtB-1	TtB-1 dup.	TtB-1	TtB-1	TtB-2D	TtB-2D	TtB-2D	TtB-2D	TtB-2D dup.	TtB-2S	TtB-2S
Analyte	18-Oct-12	15-Feb-12	11-May-12	11-May-12	07-Aug-12	22-Oct-12	15-Feb-12	11-May-12	07-Aug-12	22-Oct-12	22-Oct-12	15-Feb-12	11-May-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.78**	**1**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**1.6**	ND	ND	ND	ND	ND	**35.4**	**68.7**	**32.7**	**58**	**40.2**	ND	ND
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**1.03**	**0.71**	ND	ND	ND	ND	**0.87**	ND	ND	**0.99**	**0.83**	**0.75**	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**0.61**	**12.2**	**16.7**	**16.8**	**13.8**	**13.3**	ND	**0.91**	**0.95**	**0.62**	**0.5**	**16.1**	**19.9**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	**1.65**	**2.6**	**1.73**	**2.7**	**1.5**	ND	ND
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**1.91**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	**2.75**	ND	ND	ND	ND	ND	**4.97**	ND	ND	**3.63**	**3.51**	ND	ND
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	**1.39**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	**0.54**	**0.77**	ND	**0.83**	**0.53**	ND	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	**0.78**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	**0.57**	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	**1.09**	**1.45**	**1.45**	**0.99**	**0.94**	ND	ND	ND	ND	ND	**2.57**	**3.5**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	**2.02**	**1.62**	**1.22**	ND	ND	ND	ND	ND	ND	**19.8**	**42.3**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtB-2S	TtB-2S dup.	TtB-2S	TtB-3	TtB-3 dup.	TtB-3	TtB-3	TtB-3	TtB-5	TtB-5	TtB-5 dup.	TtB-5	TtB-5
Analyte	07-Aug-12	07-Aug-12	22-Oct-12	15-Feb-12	15-Feb-12	14-May-12	07-Aug-12	22-Oct-12	15-Feb-12	14-May-12	14-May-12	07-Aug-12	22-Oct-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**0.8**	**0.79**	**0.7**	**2.95**	**2.91**	**3.55**	**2.48**	**2.36**	**1.26**	**1.32**	**1.36**	**1.06**	**0.93**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	**6.47**	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	**49.6**	**49.8**	**60.4**	**42**	**33.2**	ND	ND	ND	ND	ND
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	ND	ND	**1.34**	**1.42**	**1.82**	**2.29**	**1.31**	**0.83**	ND	ND	ND	**0.61**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**17.6**	**17.6**	**15.8**	**6.66**	**6.65**	**8.76**	**6.5**	**6.73**	**5.16**	**4.65**	**4.87**	**3.83**	**3.4**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	**2.14**	**2.13**	**3.09**	**2.42**	**1.72**	ND	ND	ND	ND	ND
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	ND	ND	ND	**23.1**	**23.1**	**31.1**	**22.1**	**19.7**	ND	ND	ND	ND	ND
m,p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	ND	ND	ND	**2.43**	**2.18**	**3.02**	**2.83**	**2.69**	**12**	**12.5**	**12.9**	**11.9**	**11.7**
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	**0.61**	**0.54**	**0.91**	ND	**0.57**	ND	ND	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND	**0.58**	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	**3.26**	**3.36**	**5.33**	**3.23**	**2.86**	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	**0.51**	**0.52**	**0.68**	**0.51**	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	**2.89**	**2.92**	**2.43**	**1.66**	**1.76**	**2.35**	**1.8**	**1.68**	**3.5**	**4.17**	**4.17**	**3.21**	**2.99**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	**3.34**	**3.56**	**4.42**	**4.43**	**3.61**	**1.14**	**1.13**	**1.11**	**0.85**	**0.68**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**30.8**	**31.4**	**25.5**	**31.6**	**32.5**	**48.9**	**40.2**	**36.5**	**33.8**	**57.7**	**58.1**	**49.8**	**41.3**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtB-6	TtB-7	TtB-7	TtB-7	TtB-7	TtC-27	TtC-27	TtC-27	TtC-27	TtC-27D	TtC-27D dup.	TtC-27D	TtC-27D
Analyte	22-Oct-12	15-Feb-12	14-May-12	07-Aug-12	26-Oct-12	14-Feb-12	08-May-12	02-Aug-12	24-Oct-12	16-Feb-12	16-Feb-12	07-May-12	02-Aug-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	**0.6**	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**1.1**	**3.55**	**4.33**	**3.08**	**2.99**	**2.68**	**3.07**	**2.61**	**2.49**	**2.09**	**2.06**	**2.25**	**1.92**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	**0.53**	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**49.4**	**69.9**	**89.4**	**72.8**	**68.2**	**67.5**	**71.2**	**66.6**	**70.4**	**166**	**161**	**179**	**152**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**1.08**	**1.58**	**2.74**	**3.2**	**2.48**	**2.58**	ND	**2.7**	**1.57**	**3.09**	**3.29**	ND	**1.62**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**1.69**	**5.37**	**7.15**	**5.08**	**4.64**	**3.29**	**4.15**	**3.98**	**4.76**	**11.1**	**11**	**12.8**	**10.8**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	**3.71**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	**4.33**	**11.5**	**7.61**	**4.54**	**2.86**	**4.45**	**6.45**	**9.82**	**0.94**	**0.95**	**1.16**	**0.78**
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**4.94**	**35.3**	**49.5**	**44.5**	**39.2**	**30.9**	**33**	**29.2**	**31.3**	**5.69**	**5.86**	**6.32**	**4.34**
m,p-Xylenes	ND	**1.09**	**1.77**	**1.55**	**1.4**	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	**1.12**	ND	ND	ND	ND	**1.04**
Methyl-tert-butyl ether	ND	**2.37**	**2.68**	**2.07**	**2.15**	**2.15**	**2.49**	**2.29**	**2.49**	**5.71**	**5.7**	**5.91**	**4.66**
Naphthalene	**1.89**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	ND	**1.82**	**3.24**	**2.87**	**2.41**	**1.3**	**1.35**	**1.25**	**1.59**	ND	ND	ND	ND
n-Propylbenzene	ND	**4.88**	**10.2**	**8.21**	**5.54**	**1.96**	**2.13**	**2.54**	**4.18**	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	**1.64**	**2.63**	**2.42**	**2.24**	**1.29**	**1.45**	**1.26**	**1.42**	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	**1**	**1.38**	**1.13**	**1.07**	ND	**0.61**	**0.52**	**0.58**	ND	ND	ND	ND
trans-1,2-Dichloroethene	**3.66**	**4.19**	**5.18**	**4.05**	**3.87**	**1.32**	**1.64**	**1.28**	**1.41**	**1.37**	**1.37**	**1.61**	**1.19**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	**3.87**	**5.63**	**4.81**	**4.03**	**2.92**	**3.33**	**3.37**	**3.67**	**2.99**	**2.83**	**3.3**	**2.57**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**46**	**57.7**	**103**	**75**	**52.5**	**25**	**40.4**	**32.4**	**32.1**	**1.79**	**1.87**	**3.29**	**2.53**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtC-27D	TtC-29D	TtC-29S	TtC-30	TtC-30	TtC-30	TtC-30	TtC-31D	TtC-31D	TtC-31D	TtC-31S	TtC-31S	TtC-31S
Analyte	24-Oct-12	30-Oct-12	30-Oct-12	17-Feb-12	08-May-12	07-Aug-12	26-Oct-12	15-May-12	08-Aug-12	30-Oct-12	15-May-12	08-Aug-12	30-Oct-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**1.99**	ND	**2.54**	**1.83**	**2.39**	**1.79**	**1.91**	**2.74**	**1.87**	**1.9**	**3**	**2.17**	**2.36**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	**1.34**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	**1.34**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**156**	**462**	**24.6**	ND	**0.73**	**0.74**	**0.87**	**26.4**	**26.3**	**26.4**	**284**	**230**	**211**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**1.04**	**2.7**	**1.06**	**3.69**	ND	**0.59**	**1.92**	ND	ND	ND	ND	**1.36**	**1.79**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**10.8**	**3.39**	**4.52**	**3.52**	**4.55**	**3.63**	**3.94**	**5.03**	**3.61**	**3.46**	**4.13**	**3.25**	**3.56**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	**7.65**	**10.9**	**6.74**	**15.3**	**22.7**	**17**
Ethylbenzene	**0.78**	**39.2**	ND	**0.51**	**0.61**	**0.76**	**0.71**	ND	ND	ND	**2.13**	**1.59**	**1.32**
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**54.3**
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**5.02**	**17.7**	**3.13**	**24.6**	**25.7**	**24**	**22.6**	**7.17**	**6.93**	**6.21**	**42.9**	**42**	**41.9**
m,p-Xylenes	ND	**1.88**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	**4.9**	**2.52**	**2.59**	**1.11**	**1.06**	ND	**1.18**	**4.76**	**3.24**	**3.21**	**3.1**	**2.01**	**2.5**
Naphthalene	ND	**29.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	ND	**1.29**	ND	ND	ND	ND	ND	**0.61**	ND	**0.64**	**0.92**	**0.84**	**1.12**
n-Propylbenzene	ND	**11.3**	ND	**0.98**	**0.85**	**0.79**	**0.72**	ND	ND	ND	**2.09**	**1.93**	**2.14**
o-Xylene	ND	**2.56**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	**0.8**	**0.8**	**0.75**	**0.7**	**2.5**	**2.14**	**1.94**	**3.18**	**3.03**	**3.31**
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	**0.62**	**0.58**	**0.5**	**0.59**	ND	**0.61**
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	**1.97**	ND	ND	ND	ND	ND	ND	ND	ND	**1.09**	**0.94**	**0.77**
trans-1,2-Dichloroethene	**1.23**	**0.55**	**2.47**	**2.13**	**2.97**	**2.29**	**2.41**	**2.16**	**1.51**	**1.34**	**2.87**	**1.99**	**2.19**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	**2.71**	ND	**2.23**	ND	ND	ND	ND	**0.81**	**0.69**	**0.53**	**1.16**	**1.19**	**0.98**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**2.69**	ND	**17.8**	**6.61**	**13.7**	**10.8**	**10.5**	**15.7**	**10.2**	**7.69**	**15.2**	**12.1**	**10.8**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtC-32R	TtC-32R	TtC-32R dup.	TtC-32R	TtC-32R	TtC-32R dup.	TtC-33	TtC-33	TtC-33	TtC-33	TtC-34	TtC-34	TtC
Analyte	14-Feb-12	07-May-12	07-May-12	02-Aug-12	26-Oct-12	26-Oct-12	17-Feb-12	08-May-12	07-Aug-12	26-Oct-12	14-Feb-12	07-May-12	02-Aug-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**0.76**	**0.9**	**0.94**	**0.81**	**0.63**	**0.68**	**1.32**	**1.47**	**1.12**	**0.99**	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	**16.7**	**15.7**	**9.76**	**6.08**	ND	ND	ND
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	ND	ND	ND	ND	ND	**4.04**	ND	ND	**1.62**	**2.52**	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**2.93**	**3.79**	**3.69**	**3.12**	**2.83**	**2.93**	**4.6**	**5.29**	**4.41**	**4.15**	**1.42**	**1.84**	**1.5**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	**6.18**	**5.51**	**4.09**	**3.45**	ND	ND	ND
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**1.1**	**1.03**	**0.98**	**0.99**	**0.95**	**0.88**	**45**	**39.4**	**37.7**	**30.9**	**3.99**	**4.3**	**3.25**
m,p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	**5.63**	**5.77**	**6.68**	**6.19**	**5.55**	**5.53**	**6.23**	**5.22**	**4.82**	**5.42**	**3.37**	**1.24**	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	ND	ND	ND	**1.24**	**0.82**	**0.85**	ND	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND	ND	**2.96**	**1.26**	**1.14**	**1.02**	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	**1.02**	**0.79**	**0.8**	**0.64**	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	**0.95**	**1.17**	**1.23**	**0.92**	**0.81**	**0.79**	**1.95**	**2.32**	**1.73**	**1.53**	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	**0.62**	**0.7**	**0.78**	**0.57**	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**1.7**	**3.18**	**2.88**	**2.28**	**1.63**	**1.8**	**3.9**	**6.55**	**4.76**	**3.44**	ND	ND	ND

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtC-34	TtC-34D	TtC-34D	TtC-34D	TtC-34D	TtC-35	TtC-35	TtC-35	TtC-35	TtC-36	TtC-36	TtC-36 dup.	TtC-36
Analyte	25-Oct-12	14-Feb-12	07-May-12	02-Aug-12	26-Oct-12	14-Feb-12	07-May-12	02-Aug-12	26-Oct-12	20-Feb-12	09-May-12	09-May-12	07-Aug-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	**0.91**	**1.07**	**0.98**	**0.74**	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	**211**	**254**	**251**	**202**	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**1.05**	**3.61**	ND	**1.36**	**1.67**	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**1.59**	**3.5**	**4.73**	**4.44**	**3.8**	**0.85**	**1.2**	**1.12**	**1.01**	**0.65**	**0.87**	**0.75**	**0.66**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	**2.76**	**3.39**	**3.06**	**2.96**	ND	ND	ND	ND	ND	ND	ND	ND
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**2.86**	**21.2**	**24.3**	**22.7**	**21.1**	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	ND	**35.1**	**31**	**32.5**	**31**	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	ND	**1.41**	**1.59**	**1.45**	**1.18**	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	**0.91**	**1.07**	**0.91**	**0.76**	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	**0.6**	**0.75**	**0.62**	**0.61**	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	**0.51**	**0.7**	**0.64**	**0.64**	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtC-36	TtC-36D	TtC-36D	TtC-36D	TtC-36D	TtC-39	TtC-39	TtC-40D	TtC-40D	TtC-40D	TtC-40D	TtC-40D dup.	TtC-40S
Analyte	26-Oct-12	20-Feb-12	09-May-12	07-Aug-12	26-Oct-12	16-Feb-12	09-May-12	17-Feb-12	08-May-12	06-Aug-12	25-Oct-12	25-Oct-12	17-Feb-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.25**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	**2.89**	**1.95**	**1.48**	**1.77**	**2.09**	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	**21.8**	**19.9**	**15.7**	**16.7**	**25.3**	**745**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	**3.13**	ND	ND	ND	ND	ND	**4.96**	ND	**2.29**	**1.77**	**1.99**	**4.87**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**0.69**	**0.64**	**0.89**	**0.66**	**0.83**	ND	ND	ND	ND	ND	ND	ND	**5.21**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	**682**	**451**	**231**	**331**	**391**	**16.4**
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	**13.9**	**9.67**	**7.4**	**9.14**	**10**	**61.1**
m,p-Xylenes	ND	ND	ND	ND	ND	ND	ND	**11**	**7.5**	**3.79**	**3.91**	**5.45**	**2.75**
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	**93.7**	**97.7**	**89.6**	**95.2**	**94.8**	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	**154**	**70.7**	**22.6**	**43.3**	**80.8**	**2.8**
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	**1.43**	**0.97**	ND	**5.75**	**1.67**
n-Propylbenzene	ND	ND	ND	ND	ND	ND	ND	**6.74**	**4.4**	**3.49**	**4.2**	**4.56**	**11.9**
o-Xylene	ND	ND	ND	ND	ND	ND	ND	**1.16**	**0.96**	**0.75**	**1.32**	**1.69**	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.72**
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.93**
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	**2.11**	**2.42**	**1.59**	**1.88**	**2.08**	**3.18**
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.74**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.58**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**8.36**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtC-40S	TtC-40S dup.	TtC-40S	TtC-40S	TtC-41D	TtC-41D	TtC-41D	TtC-41D dup.	TtC-41D	TtC-41S	TtC-41S dup.	TtC-41S
Analyte	08-May-12	08-May-12	06-Aug-12	25-Oct-12	17-Feb-12	08-May-12	06-Aug-12	06-Aug-12	29-Oct-12	17-Feb-12	17-Feb-12	08-May-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**2.77**	**2.7**	**2.25**	**2.01**	**1.36**	**1.74**	**1.16**	**1.23**	**1.15**	**1.23**	**1.15**	**1.54**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	**0.72**	**0.67**	ND	ND	**60.7**	**90.2**	**52.5**	**55.1**	**42.9**	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**0.71**	**0.73**	ND	ND	**6.23**	**8.97**	**5.14**	**5.19**	**4.33**	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**1060**	**1070**	**976**	**763**	**245**	**272**	**255**	**238**	**277**	**8**	**8.07**	**11.1**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	ND	**4.86**	**2.14**	**6.79**	ND	**5.79**	**6.01**	**3.13**	**3.9**	**3.43**	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**6.38**	**6.32**	**4.84**	**4.84**	**5.35**	**6.71**	**4.66**	**5.04**	**5.22**	**3.47**	**3.48**	**4.34**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	**28.4**	**26.6**	**16.3**	**14.9**	**384**	**613**	**540**	**404**	**265**	**1.47**	**1.65**	**2.3**
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**60.7**	**60**	**53**	**45.5**	**36.8**	**39**	**32.1**	**25.9**	**31.4**	**17.3**	**16.8**	**21.7**
m,p-Xylenes	**5.49**	**5.13**	**2.46**	**2.62**	**6.3**	**9.7**	**4.96**	**5.38**	**4.52**	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	**1.05**	ND	ND	ND	**57.2**	**57.7**	**46**	**48.4**	**50.6**	**1.13**	**1.12**	**1.26**
Naphthalene	**27.4**	**25.8**	**1.9**	**9.1**	**1760**	**2390**	**1820**	**1600**	**1320**	**4.19**	**4.69**	ND
n-Butylbenzene	**1.54**	**1.46**	**1.26**	**1.09**	**2.04**	**1.29**	ND	**0.9**	**1.85**	ND	ND	**0.66**
n-Propylbenzene	**11.3**	**11**	**9.68**	**8.26**	**19.4**	**23.1**	**18.6**	**15.9**	**18.3**	**0.88**	**0.84**	**0.97**
o-Xylene	**0.69**	**0.69**	ND	ND	**8.11**	**12**	**6.6**	**6.89**	**5.5**	ND	ND	ND
p-Isopropyltoluene	ND	ND	**0.62**	**0.52**	**1.47**	**0.71**	**1.37**	ND	**1.46**	ND	ND	ND
sec-Butylbenzene	**1.71**	**1.72**	**1.57**	**1.32**	**0.53**	**0.74**	**0.56**	ND	**0.52**	**0.58**	**0.51**	**0.8**
Styrene	ND	ND	ND	ND	**0.54**	**0.64**	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	**0.64**	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**6.42**	**6.07**	**2.92**	**3.71**	**4.87**	**6.65**	**3.55**	**3.78**	**3.33**	ND	ND	ND
trans-1,2-Dichloroethene	**3.77**	**3.59**	**2.69**	**2.81**	**1.28**	**1.72**	**1.09**	**1.12**	**1.22**	**1.95**	**2.04**	**2.74**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	**0.68**	**0.72**	**0.54**	**0.58**	**0.85**	**1.02**	**0.76**	**0.74**	**0.76**	ND	ND	**0.53**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**16.5**	**16.1**	**11.9**	**10.8**	ND	ND	ND	ND	ND	**5.24**	**7.64**	**14.2**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtC-41S	TtC-41S	TtC-42	TtC-42	TtC-42	TtC-42	TtC-43	TtC-43	TtC-43	TtC-43	TtC-44	TtC-44	TtC-44
Analyte	06-Aug-12	29-Oct-12	20-Feb-12	09-May-12	06-Aug-12	24-Oct-12	16-Feb-12	07-May-12	07-Aug-12	25-Oct-12	16-Feb-12	09-May-12	07-Aug-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**1.28**	**1.16**	ND	ND	ND	ND	ND	ND	ND	ND	**1.69**	**1.92**	**1.45**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	**102**	**147**	**152**	**162**	**1.92**	**3.41**	**2.47**
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	**43.6**	**64.7**	**59.2**	**58.1**	**0.66**	**1.08**	**0.77**
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.8**	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**9.51**	**8.07**	ND	ND	ND	ND	ND	**7**	ND	ND	**21.9**	**17.3**	**12.5**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	**1.7**	ND	ND	ND	ND	ND	ND	ND	**8**	**3.23**	ND	**0.57**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**3.54**	**3.61**	**3**	**3.31**	**2.86**	**2.8**	ND	ND	ND	ND	**2.94**	**3.48**	**2.65**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	**1.85**	**2.52**	ND	**1.38**	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	**2.39**	**1.92**	ND	ND	ND	ND	**39.2**	**58.5**	**51.9**	**55.4**	**100**	**149**	**118**
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**19.3**	**17.7**	ND	ND	**0.53**	ND	**16.9**	**24.1**	**20.2**	**19.3**	**47.5**	**68.3**	**50**
m,p-Xylenes	ND	ND	ND	ND	ND	ND	**51.7**	**80.4**	**69.7**	**71.9**	**1.3**	**2.53**	**1.92**
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	**1**	ND	ND	ND	ND	ND	**58.9**	**68.8**	**44.8**	**50.7**	**4.37**	**5.23**	**3.06**
Naphthalene	ND	ND	ND	ND	ND	ND	**4840**	**5340**	**4340**	**7100**	ND	**2.78**	**1.82**
n-Butylbenzene	ND	**0.56**	ND	ND	ND	ND	**11.9**	**16.9**	**15.3**	**16.8**	**3.36**	**5.59**	**3.27**
n-Propylbenzene	**0.83**	**0.69**	ND	ND	ND	ND	ND	**6.1**	**5.4**	**5.3**	**26**	**40.7**	**26.7**
o-Xylene	ND	ND	ND	ND	ND	ND	**89.5**	**141**	**126**	**129**	**4.04**	**6.36**	**4.66**
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.29**	**1.22**	**0.55**
sec-Butylbenzene	**0.68**	**0.63**	ND	ND	ND	ND	ND	ND	ND	ND	**1.42**	**2.28**	**1.5**
Styrene	ND	ND	ND	ND	ND	ND	**6.3**	**7.1**	**6.3**	**8.5**	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	**21.9**	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	**13.3**	**18.8**	**14.7**	**13.9**	**2.26**	**3.15**	**2.28**
trans-1,2-Dichloroethene	**2.06**	**2.07**	ND	ND	ND	ND	ND	ND	ND	ND	**2.45**	**2.97**	**2.28**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**10.6**	**8.85**	**1.01**	**2.16**	**1.55**	**1.23**	ND	ND	ND	ND	**11.1**	**17.6**	**13.3**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

Analyte	TtC-44 18-Oct-12	TtC-44 dup. 18-Oct-12	TtC-45 20-Feb-12	TtC-45 09-May-12	TtC-45 10-Aug-12	TtC-45 dup. 10-Aug-12	TtC-45 30-Oct-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**1.41**	ND	**0.58**	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	**1.92**	**1.92**	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**0.6**	**0.6**	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND
Benzene	**10.3**	**10.3**	ND	ND	ND	ND	ND
Bromobenzene	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**1.26**	**1.81**	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**2.67**	**2.65**	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	**185**	**68.6**	**90.4**	**96.3**	**103**
Ethylbenzene	**95.1**	**98.1**	ND	ND	ND	ND	ND
Ferrocene	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**44.3**	**45.9**	ND	ND	ND	ND	ND
m,p-Xylenes	**1.52**	**1.56**	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	**4**	**3.94**	**1.12**	ND	ND	ND	ND
Naphthalene	**5.63**	**4.24**	ND	ND	ND	ND	ND
n-Butylbenzene	**3.04**	**3.19**	ND	ND	ND	ND	ND
n-Propylbenzene	**23.2**	**24**	ND	ND	ND	ND	ND
o-Xylene	**3.44**	**3.62**	ND	ND	ND	ND	ND
p-Isopropyltoluene	**0.5**	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	**1.37**	**1.35**	**0.52**	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND
Toluene	**1.7**	**1.73**	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	**2.07**	**2.06**	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**10.3**	**9.21**	ND	ND	ND	ND	ND

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtD-10	TtD-10	TtD-10	TtD-10	TtD-14	TtD-14	TtD-14	TtD-14 dup.	TtD-14	TtD-15	TtD-15	TtD-15	TtD-15
Analyte	20-Feb-12	08-May-12	02-Aug-12	29-Oct-12	15-Feb-12	11-May-12	01-Aug-12	01-Aug-12	29-Oct-12	15-Feb-12	11-May-12	01-Aug-12	29-Oct-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	**1.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**1.37**	**1.53**	**1.24**	**1.05**	**1.47**	**1.64**	**1.18**	**1.17**	**1.12**	**1.01**	**1.31**	**0.98**	**0.92**
1,1-Dichloroethene	ND	**0.69**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	**2190**	**3940**	**2510**	**4520**	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**836**	**1510**	**860**	**1650**	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	**1.14**	ND	ND	**1.29**	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	**1.24**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**4.23**	**4.06**	**3.33**	**3.2**	**19.5**	**15.3**	**14.2**	**14.3**	**15.4**	**7.62**	**9.9**	**8.15**	**8.41**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	ND	**4**	**4.38**	**0.99**	ND	ND	ND	**1.45**	**0.73**	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**49.9**	**84.6**	**30**	**97.6**	**7.26**	**5.76**	**4.16**	**4.18**	**4.84**	**12.2**	**14.8**	**12.5**	**11**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	**1800**	**485**	**602**	**3020**	ND	ND	ND	ND	ND	**33.7**	**25**	**34.7**	**14.4**
Ethylbenzene	**1480**	**2240**	**2130**	**2680**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**83.5**	**86.1**	**78.2**	**73.8**	**1.18**	**0.87**	**0.77**	**0.74**	**0.88**	ND	ND	ND	ND
m,p-Xylenes	**1890**	**2960**	**2890**	**3870**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	**20.7**	**21**	**15.4**	**14.7**	**11.6**	**14.9**	**10.8**	**10.5**	**10**	**36.3**	**43.1**	**32.5**	**28.7**
Naphthalene	**1160**	**1680**	**643**	**1150**	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	**27**	**27.5**	**29.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	**130**	**133**	**126**	**116**	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	**2230**	**3420**	**3460**	**4220**	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	**4.97**	**9.6**	**6.55**	**4.74**	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	**5.1**	**5.38**	**4.45**	**4.65**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	**8.7**	**5.94**	**6.02**	**6.87**	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	**0.8**	**0.7**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**209**	**159**	**148**	**136**	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	**9.78**	**14.4**	**9.88**	**11.1**	**4.27**	**6.41**	**4.53**	**4.32**	**4.27**	**9.65**	**13.1**	**8.72**	**8.15**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	**6.73**	**15**	**6.03**	**8.92**	**2.21**	**1.65**	**1.5**	**1.52**	**1.6**	**0.62**	**0.69**	**0.73**	**0.6**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**129**	**236**	**197**	**151**	**42.2**	**102**	**66.9**	**67.1**	**56.4**	**62**	**116**	**81.5**	**65.8**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtD-17R	TtD-17R	TtD-17R	TtD-17R	TtD-18	TtD-18	TtD-18	TtD-18	TtD-19	TtD-19	TtD-19	TtD-19 dup.	TtD-19
Analyte	14-Feb-12	09-May-12	02-Aug-12	23-Oct-12	13-Feb-12	09-May-12	02-Aug-12	30-Oct-12	13-Feb-12	11-May-12	02-Aug-12	02-Aug-12	23-Oct-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.58	0.82	0.64	0.7	0.71	0.83	0.69	0.66	ND	0.74	0.53	0.53	0.55
1,1-Dichloroethene	ND	ND	ND	ND	ND	0.72	ND	ND	ND	0.73	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	0.58	0.7	0.56	0.56	ND
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	ND	ND	ND	0.96	ND	ND	ND	1.05	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	2.18	2.65	2.29	2.53	118	104	81	95.4	37.2	49.1	35.7	35.5	37.3
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	1.58	ND	16.9	8.38	7.02	4.69	674	552	559	589	453
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	0.51	0.51	ND	ND	ND
m,p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	1.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	24.1	28.5	21.4	22.2	28	30.1	23.8	23.9	35.4	43.1	31	30.9	31.4
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	0.88	1.02	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	0.58	0.9	0.81	0.75	0.73
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.54	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	5.27	6.21	4.61	5.47	3.81	7.48	5.36	5.3	5.53
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	8.26	10.9	11.2	11.6	251	238	198	184	8.8	12.5	10.3	10.2	9.35
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	1.3	8.34	5.81	5.68	4.85

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtD-20D	TtD-20D	TtD-20D	TtD-20D	TtD-20S	TtD-20S	TtD-20S	TtD-20S	TtD-21D	TtD-21S	TtD-21S	TtD-21S	TtD-21S
Analyte	13-Feb-12	11-May-12	01-Aug-12	23-Oct-12	13-Feb-12	11-May-12	01-Aug-12	23-Oct-12	17-Oct-12	20-Feb-12	11-May-12	01-Aug-12	17-Oct-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	**0.94**	**1.31**	**0.99**	**0.91**	ND	**2.41**	**2.98**	**2.11**	**1.74**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**715**	**865**	**760**	**825**
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	**0.57**	**0.6**	**0.58**	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**267**	**327**	**303**	**324**
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.42**	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.46**	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**980**	**1060**	**810**	**950**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**1.95**	ND	ND	**1.45**	ND	ND	ND	ND	**4.07**	**3.67**	ND	ND	**3.94**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**17.2**	ND	ND	**20.4**	**85.9**	**127**	**107**	**102**	**2.67**	**26.2**	**31.7**	**22.1**	**23.1**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	**57.6**	**38.1**	**44.1**	**31.8**	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1420**	**1850**	**1630**	**1860**
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**39.8**	**49**	**40.2**	**44.5**
m,p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1150**	**1520**	**1230**	**1460**
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	ND	ND	ND	ND	**41.6**	**47.8**	**35.3**	**33.3**	**1.15**	**4.84**	**5.96**	**4.03**	**2.24**
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4410**	**3000**	**2320**	**3160**
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**35**	**46.1**	**39**	**44.3**
n-Propylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**73.7**	**93.5**	**80.1**	**88.2**
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1170**	**1450**	**1280**	**1500**
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**7.49**	**15.4**	**8.6**	**13.9**
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.04**	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**7.81**	**17.2**	**8.75**	**10.6**
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.47**	**6.38**	**4.72**	**5.61**
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1390**	**1750**	**1240**	**1400**
trans-1,2-Dichloroethene	ND	ND	ND	ND	**5.96**	**8.35**	**5.7**	**5.56**	ND	**1.72**	**2.64**	**1.69**	**2.03**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	**0.62**	**7.7**	**9.25**	**8.03**	**8.34**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	**2.34**	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	**27.5**	**51.5**	**37.3**	**31.5**	ND	**3.79**	**14.5**	**9.62**	ND

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtD-7	TtD-7	TtD-7	TtD-7	TtD-7 dup.	TtD-7D	TtD-7D dup.	TtD-7D	TtD-7D	TtD-7D	TtD-9	TtD-9	TtD-9
Analyte	13-Feb-12	14-May-12	01-Aug-12	17-Oct-12	17-Oct-12	13-Feb-12	13-Feb-12	15-May-12	01-Aug-12	17-Oct-12	20-Feb-12	11-May-12	03-Aug-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**3.65**	**4.8**	**3.21**	**2.5**	ND	ND	ND	ND	ND	ND	**0.75**	**0.93**	**0.78**
1,1-Dichloroethene	ND	**0.57**	ND	ND	ND	ND	ND	ND	ND	ND	**0.61**	**0.83**	**0.54**
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	**41.4**	**37.9**	**30.6**	**23**	**14.8**	**14.8**	**15.6**	**88.9**	**10.2**	**8.63**	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**12.8**	**12.5**	**10.7**	**9.55**	**12.6**	**4.97**	**5.18**	**36.5**	**3.4**	**2.72**	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**79.6**	**81.4**	**73.1**	**57.3**	**125**	**1.36**	**1.43**	**78.9**	**1.75**	**0.73**	**1.48**	**1.82**	**1.62**
Bromobenzene	ND	ND	ND	ND	ND	ND	**0.79**	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**2.23**	**2.42**	ND	**2.95**	**2.19**	**3.2**	**3.56**	**10.3**	ND	**3.64**	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**25.3**	**32.9**	**21.3**	**22.1**	ND	**1.1**	**1.16**	**0.95**	**1.14**	**1.51**	**136**	**172**	**157**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**58.2**	**43.3**	**73**
Ethylbenzene	**761**	**836**	**772**	**768**	**829**	**110**	**115**	**2020**	**86.7**	**51.3**	ND	ND	ND
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**30.7**	**33.4**	**28.3**	**28.9**	**104**	**2.42**	**2.46**	**20.6**	**1.5**	**1.09**	ND	ND	ND
m,p-Xylenes	**187**	**223**	**195**	**166**	**28.7**	**151**	**158**	**4050**	**123**	**60.3**	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	ND	ND	ND	ND	ND	**3.18**	**3.33**	**2.03**	**2.92**	**1.78**	**43.1**	**46.4**	**35.1**
Naphthalene	**354**	**9.5**	**288**	**357**	**143**	**82**	**75.9**	**662**	**34.8**	**28.1**	ND	ND	ND
n-Butylbenzene	**7.89**	**8.44**	**7.78**	**7.73**	**79.3**	**0.81**	**0.8**	**4.05**	**0.62**	**0.65**	ND	ND	ND
n-Propylbenzene	**30**	**33.7**	**28.8**	**28.9**	**240**	**2.57**	**2.68**	**17.7**	**1.64**	**1.3**	ND	ND	ND
o-Xylene	**154**	**164**	**128**	**102**	**1.58**	**80**	**83.5**	**2150**	**63.9**	**28.7**	ND	ND	ND
p-Isopropyltoluene	**6.26**	**7.73**	**6.2**	**5.02**	**2.53**	ND	ND	**1.15**	ND	ND	ND	ND	ND
sec-Butylbenzene	**0.88**	**0.95**	**0.75**	**0.95**	**16.1**	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	**4.14**	ND	**3.66**	ND	ND	**9.17**	**9.46**	**49.3**	**6.19**	**1.09**	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	**1.29**	ND	ND	**12.9**	ND	ND	ND	ND	ND
Tetrachloroethene	**1.58**	**2.09**	**1.92**	**2.19**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**32.1**	**37.3**	**30.4**	**31.1**	**1.93**	**38.7**	**40.3**	**1330**	**40.1**	**18.7**	ND	ND	ND
trans-1,2-Dichloroethene	**1.17**	**1.75**	**1.12**	**1.23**	ND	ND	ND	ND	ND	ND	**11.4**	**14.4**	**11.9**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	**10.4**	**13.6**	**12.5**	**12.1**	ND	ND	ND	ND	ND	ND	**1.26**	**1.66**	**1.4**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**12.9**	**31**	**19.6**	**17**	ND	ND	ND	ND	ND	ND	**8.45**	**18.7**	**13.3**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtD-9	TtD-9 dup.	TtE-10R	TtE-10R	TtE-10R	TtE-10R	TtE-10R dup.	TtE-3R2	TtE-3R2	TtE-3R2	TtE-3R2	TtE-5R2	TtE-5R2
Analyte	29-Oct-12	29-Oct-12	13-Feb-12	09-May-12	02-Aug-12	23-Oct-12	23-Oct-12	14-Feb-12	09-May-12	02-Aug-12	23-Oct-12	14-Feb-12	09-May-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.5**	ND
1,1-Dichloroethane	**0.65**	**0.68**	**0.65**	**0.8**	**0.68**	**0.66**	**0.64**	**0.62**	**0.74**	**0.66**	**0.57**	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	**0.68**	**0.72**	**0.54**	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**1.54**	**1.67**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	ND	**1.53**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**159**	**156**	**2.72**	**3.21**	**2.5**	**2.74**	**2.56**	**25.1**	**29.7**	**23.3**	**19.6**	**1.11**	**1.33**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	**40.1**	**39.9**	ND	ND	ND	ND	ND	**2970**	**2150**	**3470**	**1990**	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	**0.66**	**0.93**	**0.86**	**0.85**	**12.8**	**18.8**
m,p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	**33**	**32.7**	**22.9**	**25.4**	**21.7**	**24.6**	**24.1**	**34.2**	**36.3**	**29.1**	**26.2**	**16.5**	**15**
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	**1.34**	**4.14**	**4.51**	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	**0.79**	**0.95**	**0.77**	**0.68**	ND	ND
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	**2.99**	**3.69**	**3.3**	**2.84**	**5.11**	**7.76**
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	**0.77**	**0.91**	ND	**0.79**	**1.03**	**1.31**
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	**11.8**	**11.3**	ND	ND	ND	ND	ND	**7.38**	**11.2**	**8.26**	**6.58**	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	**1.61**	**1.53**	**3.64**	**4.31**	**3.98**	**3.99**	**3.76**	**2.84**	**3.21**	**2.68**	**2.21**	**1.57**	**1.81**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**13.6**	**13.2**	ND	ND	ND	ND	ND	**6.82**	**13.8**	**12.7**	**12.4**	ND	ND

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtE-5R2	TtE-5R2	TtE-6	TtE-6 dup.	TtE-6	TtE-6	TtE-6	TtE-8	TtE-8	TtE-8	TtE-8	TtK-1	TtK-1
Analyte	02-Aug-12	23-Oct-12	14-Feb-12	14-Feb-12	14-May-12	03-Aug-12	30-Oct-12	14-Feb-12	14-May-12	03-Aug-12	30-Oct-12	13-Feb-12	11-May-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.54**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**6.93**	**16.6**
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.18**	**2.44**
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.3**
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.04**	**2.44**
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**8.35**	**9.66**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ND	**0.93**	ND	ND	ND	ND	ND	**2.54**	ND	ND	ND	**2.95**	**2.33**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	**0.51**	**10.7**	**10.8**	**14.4**	**11.2**	**13.2**	**5.5**	**7.91**	ND	ND	**0.84**	**1.21**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**24**	**43.3**
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**24.5**	**26.9**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**22**	**26**
m,p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**11.8**	**21.3**
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	**3.59**	**4.51**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**19.2**	**25.5**
Naphthalene	ND	ND	**6.7**	**7.33**	ND	ND	ND	ND	ND	ND	ND	**182**	**186**
n-Butylbenzene	**0.56**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.89**	**5.52**
n-Propylbenzene	ND	**0.51**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5.64**	**6.71**
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.61**	**5.5**
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.55**	**0.84**
sec-Butylbenzene	**10.3**	**11.8**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.55**	**0.59**
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	**1.98**	**1.91**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.28**	**5.23**
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.72**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	**0.59**	**0.57**	**2.15**	**2.18**	**2.71**	**2.4**	**2.56**	**1.48**	**2.07**	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.24**	**3.52**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtK-1	TtK-1	TtK-2	TtK-2	TtK-2	TtK-2	TtK-3	TtK-3	TtK-3	TtK-3	TtK-4	TtK-4	TtK-4
Analyte	10-Aug-12	25-Oct-12	13-Feb-12	11-May-12	10-Aug-12	25-Oct-12	13-Feb-12	11-May-12	10-Aug-12	25-Oct-12	13-Feb-12	11-May-12	10-Aug-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**0.51**	ND	ND	ND	ND	ND	**3.03**	**4.12**	**3.25**	**2.92**	**2.87**	**3.7**	**2.98**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	**16.3**	**13.5**	**2.6**	**2.64**	**2.96**	**2.17**	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**1.82**	**1.77**	**0.95**	**0.97**	**1.14**	**0.87**	ND	ND	ND	**0.8**	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	**2.29**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	**1.53**	**1.99**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.77**	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**6.66**	**5.42**	**167**	**184**	**212**	**146**	**103**	**131**	**122**	**106**	**91.4**	**118**	**111**
Bromobenzene	ND	ND	ND	ND	ND	ND	**3.52**	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**3.4**	**3.37**	**2.71**	**4.46**	**1.8**	**2.19**	**1.55**	**2.48**	**2.86**	**2.5**	**1.5**	ND	**2.76**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**0.9**	**0.89**	**2.73**	**3.44**	**3.21**	**2.74**	**3.85**	**5.6**	**4.82**	**4.62**	**3.22**	**4.8**	**4.6**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	**35**	**34.4**	**186**	**203**	**253**	**159**	**1.47**	**2.72**	**3.89**	**3.13**	**1.27**	**2.12**	**3.7**
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**27.5**	**24.5**	**20.4**	**20.9**	**24.1**	**16.8**	**34.8**	**42.4**	**40.9**	**36.8**	**39.1**	**44.8**	**42.3**
m,p-Xylenes	**14**	**12.3**	**2.3**	**2.57**	**2.87**	**2.17**	ND	ND	**1.02**	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	**14.8**	**14.8**	ND	ND	ND	ND	**1.92**	**2.53**	**2.01**	**1.69**	**1.7**	**2.12**	**1.97**
Naphthalene	**269**	**263**	**3.52**	**3.58**	**2.38**	**8.47**	**1.93**	ND	ND	**3.76**	ND	ND	ND
n-Butylbenzene	**4.09**	**3.94**	**1.51**	**1.7**	**1.7**	**1.45**	**0.86**	**1.1**	**1.17**	**1.04**	**2.19**	**1.86**	**1.54**
n-Propylbenzene	**8.45**	**7.72**	**15.4**	**16.2**	**18.5**	**13.3**	**1.98**	**2.66**	**2.91**	**2.63**	**1.69**	**2.39**	**2.71**
o-Xylene	**3.47**	**3.26**	**2.71**	**3.14**	**3.99**	**2.91**	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	**0.62**	**0.56**	**1.87**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	**0.54**	ND	**0.56**	**0.59**	**0.63**	**0.53**	**2.12**	**2.61**	**2.6**	**2.37**	**8.55**	**7.74**	**6**
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.76**	**0.65**	**0.66**
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**3.37**	**3.29**	**2.12**	**2.19**	**2.3**	**1.62**	**0.75**	**0.94**	**0.87**	**0.78**	**0.62**	**0.79**	**0.82**
trans-1,2-Dichloroethene	**0.59**	**0.5**	**0.53**	**0.65**	**0.58**	ND	**3.88**	**5.26**	**4**	**3.65**	**3.25**	**4.24**	**3.23**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	**0.67**	**0.65**	**0.94**	**0.59**	**2.68**	**3.91**	**4.44**	**3.78**	**2.43**	**3.57**	**4.12**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**2.41**	**2.02**	ND	ND	ND	ND	**26.4**	**81.1**	**61.7**	**50.8**	**32.7**	**66.8**	**50.8**

TABLE B-5

Purgeables (EPA Method 8260B), in ug/L

Aliso Groundwater Sampling 2012

	TtK-4	TtK-6	TtK-6	TtK-6	TtK-6	TtO-1	TtO-1	TtO-1	TtO-1
Analyte	25-Oct-12	13-Feb-12	11-May-12	10-Aug-12	25-Oct-12	14-Feb-12	09-May-12	06-Aug-12	25-Oct-12
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**2.64**	**2.51**	**3.13**	**2.24**	**2.13**	**2.08**	**2.55**	**2.03**	**1.98**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	**330**	**427**	**422**	**485**
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	**36**	**42.5**	**39**	**37.6**
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**91.8**	**38.5**	**47.9**	**40.3**	**33.9**	**254**	**325**	**301**	**298**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	**1.78**	**1.8**	ND	**1.66**	**1.54**	**3.97**	ND	**5.67**	**3.4**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**4.26**	**4.38**	**5.17**	**3.78**	**3.95**	**5.65**	**6.71**	**5.62**	**5.83**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dicyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	**4.04**	**0.88**	**1.02**	**0.97**	**0.84**	**2040**	**2740**	**2130**	**2320**
Ferrocene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**37.7**	**27.8**	**30.5**	**26.7**	**23.5**	**60.3**	**60.1**	**56.4**	**53.9**
m,p-Xylenes	**1.01**	ND	ND	ND	ND	**638**	**1280**	**657**	**806**
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether	**1.83**	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	**8.02**	ND	ND	ND	ND	**10800**	**13400**	**7580**	**10000**
n-Butylbenzene	**1.71**	**0.69**	**0.82**	**0.6**	**0.62**	**63.5**	ND	**74.5**	**77.4**
n-Propylbenzene	**2.45**	**1.04**	**1.07**	**0.93**	**0.83**	**27.9**	**30.1**	**28.5**	**27.4**
o-Xylene	ND	ND	ND	ND	ND	**115**	**187**	**131**	**135**
p-Isopropyltoluene	ND	ND	ND	ND	ND	**2.08**	**3.64**	**2**	**2.01**
sec-Butylbenzene	**6**	**3.37**	**3.86**	**3.35**	**3.1**	**1.5**	ND	ND	**1.51**
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	**0.59**	**0.52**	**0.57**	**0.56**	**0.51**	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**0.68**	ND	**0.57**	**0.52**	ND	**140**	**225**	**153**	**140**
trans-1,2-Dichloroethene	**2.94**	**3.68**	**4.82**	**3.47**	**3.23**	**2.47**	**3.04**	**2.35**	**2.28**
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	**3.44**	**0.51**	**0.66**	**0.65**	**0.6**	**0.78**	**1.02**	**0.9**	**0.89**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	**39.3**	**22.1**	**43.5**	**28.7**	**22.1**	**2.16**	**4.5**	**3.92**	**3**

TABLE B-6
Total Petroleum Hydrocarbons (TPH)
Aliso Groundwater Sampling 2012

		TPH (M8015G), in **ug/L**	TPH (M8015D), in **ug/L**
Sample Number	Date	TPH as Gasoline and Light HC. (C4-C12)	TPH as Heavy Hydrocarbons (C12-C40)
A-1	15-Feb-12	**113**	ND
A-1	10-May-12	**160**	ND
A-1	07-Aug-12	**134**	**671**
A-1	24-Oct-12	**131**	ND
A-1 dup.	24-Oct-12	**130**	ND
A-2	17-Oct-12	**2,870**	**77,500**
A-2 Bottom	16-Feb-12	**1,740**	**1,570**
A-2 Bottom	08-May-12	**1,030**	**3,580**
A-2 Botttom	09-Aug-12	**1,060**	**2,740**
A-2 Top	16-Feb-12	**2,670**	**2,130**
A-2 Top	08-May-12	**1,920**	**3,330**
A-2 Top	09-Aug-12	**1,920**	**3,910**
A-3	17-Oct-12	**236**	**4,380**
A-3 Bottom	16-Feb-12	**234**	**3,600**
A-3 Bottom	08-May-12	**277**	**21,600**
A-3 Bottom	09-Aug-12	**217**	**2,570**
A-3 Bottom dup.	09-Aug-12	**217**	**1,480**
A-3 Top	16-Feb-12	**223**	**1,440**
A-3 Top	08-May-12	**341**	**6,870**
A-3 Top	09-Aug-12	**262**	**2,370**
C-16	30-Oct-12	**23,700**	**5,300**
C-16 Bottom	15-May-12	**360**	**1,800**
C-16 Bottom	08-Aug-12	**294**	**2,680**
C-16 Top	15-May-12	**250**	**1,900**
C-16 Top	08-Aug-12	**210**	**3,130**
C-17	15-May-12	**6,770**	**1,370**
C-17	08-Aug-12	**4,590**	**1,190**
C-17	30-Oct-12	**5,280**	**1,020**
C-20D	14-May-12	**1,290**	ND
C-20D	08-Aug-12	**1,080**	ND
C-20D	30-Oct-12	**968**	ND
C-20S	14-May-12	**243**	**635**
C-20S	08-Aug-12	**235**	**1,080**
C-20S	30-Oct-12	**215**	**748**
C-21D	15-May-12	**1,250**	**1,460**
C-21D	08-Aug-12	**1,010**	**1,370**
C-21D	30-Oct-12	**750**	**975**
C-21S	15-May-12	**66**	ND
C-21S dup.	15-May-12	**67**	ND
C-21S	08-Aug-12	**177**	**563**
C-21S	30-Oct-12	**138**	ND
C-22D	14-May-12	ND	ND
C-22D	08-Aug-12	ND	ND
C-22D	30-Oct-12	**74**	ND
C-22S	14-May-12	**21**	ND
C-22S	08-Aug-12	**20**	ND
C-22S	30-Oct-12	**17**	ND
C-23D	15-May-12	**686**	**507**
C-23D	08-Aug-12	**442**	ND
C-23D	30-Oct-12	**783**	**605**
C-23D dup.	30-Oct-12	**740**	**579**
C-23S	15-May-12	**180**	**1,890**
C-23S	08-Aug-12	**112**	**1,880**
C-23S	30-Oct-12	**178**	**1,700**
C-25	14-Feb-12	**124**	ND
C-25	07-May-12	**286**	**633**
C-25	02-Aug-12	**135**	**814**
C-25	26-Oct-12	**149**	**544**
C-26	15-May-12	**478**	**740**
C-26	08-Aug-12	**485**	**773**

TABLE B-6
Total Petroleum Hydrocarbons (TPH)

Aliso Groundwater Sampling 2012

		TPH (M8015G), in **ug/L**	TPH (M8015D), in **ug/L**
Sample Number	Date	TPH as Gasoline and Light HC. (C4-C12)	TPH as Heavy Hydrocarbons (C12-C40)
C-26 dup.	08-Aug-12	**484**	**936**
C-26	30-Oct-12	**535**	**625**
C-6	13-Feb-12	**449**	ND
C-6	07-May-12	**547**	**603**
C-6	02-Aug-12	**348**	**685**
C-6	25-Oct-12	**387**	**537**
D-2	14-Feb-12	**74**	ND
D-2	14-May-12	**74**	ND
D-2	03-Aug-12	**69**	ND
D-2	17-Oct-12	**73**	ND
D-4	14-Feb-12	**104**	ND
D-4	14-May-12	**99**	**2,190**
D-4	03-Aug-12	**93**	ND
E-1D	20-Feb-12	ND	ND
E-1D dup.	20-Feb-12	ND	ND
E-1D	14-May-12	ND	ND
E-1D	03-Aug-12	ND	ND
E-1D	30-Oct-12	ND	ND
E-1S	20-Feb-12	ND	ND
E-1S	14-May-12	ND	ND
E-1S	03-Aug-12	ND	ND
E-1S dup.	03-Aug-12	ND	ND
E-1S	30-Oct-12	ND	ND
TtA-4D	17-Feb-12	**495**	**920**
TtA-4D	10-May-12	**391**	**878**
TtA-4D	09-Aug-12	**394**	**1,080**
TtA-4D	24-Oct-12	**484**	**1,200**
TtA-4S	17-Feb-12	**69**	ND
TtA-4S	10-May-12	**60**	ND
TtA-4S	29-Nov-12	**30**	**1,440**
TtA-5D	17-Feb-12	**4,840**	**760**
TtA-5D	10-May-12	**4,400**	**521**
TtA-5D	09-Aug-12	**4,420**	**557**
TtA-5D	18-Oct-12	**4,490**	**1,300**
TtA-5S	17-Feb-12	**26**	ND
TtA-5S	10-May-12	**23**	ND
TtA-5S	09-Aug-12	**53**	**606**
TtA-5S	18-Oct-12	**29**	**649**
TtA-6D	17-Feb-12	**156**	ND
TtA-6D	10-May-12	**125**	ND
TtA-6D	09-Aug-12	**204**	ND
TtA-6D	18-Oct-12	**109**	ND
TtA-6S	17-Feb-12	**570**	**548**
TtA-6S	10-May-12	**604**	**550**
TtA-6S dup.	10-May-12	**609**	**531**
TtA-6S	09-Aug-12	**526**	**834**
TtA-6S	18-Oct-12	**520**	**812**
TtA-7	15-Feb-12	**11**	ND
TtA-7	10-May-12	**18**	ND
TtA-7	07-Aug-12	**25**	**532**
TtA-7	24-Oct-12	**15**	ND
TtA-7S	16-Feb-12	**102**	**1,230**
TtA-7S	09-May-12	**141**	**703**
TtA-7S	07-Aug-12	**136**	**2,140**
TtA-7S	18-Oct-12	**58**	**1,210**
TtA-8S	16-Feb-12	**247**	**3,060**
TtA-8S	18-Oct-12	**255**	**2,650**
TtB-1	15-Feb-12	ND	ND
TtB-1	11-May-12	ND	ND
TtB-1 dup.	11-May-12	ND	ND

TABLE B-6
Total Petroleum Hydrocarbons (TPH)

Aliso Groundwater Sampling 2012

		TPH (M8015G), in **ug/L**	TPH (M8015D), in **ug/L**
Sample Number	Date	TPH as Gasoline and Light HC. (C4-C12)	TPH as Heavy Hydrocarbons (C12-C40)
TtB-1	07-Aug-12	ND	ND
TtB-1	22-Oct-12	ND	ND
TtB-2D	15-Feb-12	**53**	ND
TtB-2D	11-May-12	**98**	ND
TtB-2D	07-Aug-12	**51**	ND
TtB-2D	22-Oct-12	**67**	ND
TtB-2D dup.	22-Oct-12	**60**	ND
TtB-2S	15-Feb-12	ND	ND
TtB-2S	11-May-12	**12**	ND
TtB-2S	07-Aug-12	**11**	ND
TtB-2S dup.	07-Aug-12	**10**	ND
TtB-2S	22-Oct-12	**10**	ND
TtB-3	15-Feb-12	**224**	ND
TtB-3 dup.	15-Feb-12	**217**	ND
TtB-3	14-May-12	**369**	ND
TtB-3	07-Aug-12	**238**	ND
TtB-3	22-Oct-12	**327**	ND
TtB-5	15-Feb-12	**13**	ND
TtB-5	14-May-12	**15**	ND
TtB-5 dup.	14-May-12	**16**	ND
TtB-5	07-Aug-12	**23**	ND
TtB-5	22-Oct-12	**15**	ND
TtB-6	22-Oct-12	**278**	**579**
TtB-7	15-Feb-12	**422**	**523**
TtB-7	14-May-12	**582**	**702**
TtB-7	07-Aug-12	**502**	**1,040**
TtB-7	26-Oct-12	**510**	**1,890**
TtC-27	14-Feb-12	**295**	ND
TtC-27	08-May-12	**298**	ND
TtC-27	02-Aug-12	**287**	ND
TtC-27	24-Oct-12	**332**	ND
TtC-27D	16-Feb-12	**328**	ND
TtC-27D dup.	16-Feb-12	**320**	ND
TtC-27D	07-May-12	**296**	ND
TtC-27D	02-Aug-12	**213**	ND
TtC-27D	24-Oct-12	**265**	ND
TtC-29D	30-Oct-12	**909**	**856**
TtC-29S	30-Oct-12	**215**	ND
TtC-30	17-Feb-12	**173**	**520**
TtC-30	08-May-12	**132**	**512**
TtC-30	07-Aug-12	**131**	**685**
TtC-30	26-Oct-12	**150**	**762**
TtC-31D	15-May-12	**335**	**647**
TtC-31D	08-Aug-12	**296**	**713**
TtC-31D	30-Oct-12	**333**	**638**
TtC-31S	15-May-12	**654**	**914**
TtC-31S	08-Aug-12	**631**	**855**
TtC-31S	30-Oct-12	**672**	**835**
TtC-32R	14-Feb-12	**15**	ND
TtC-32R	07-May-12	**18**	ND
TtC-32R dup.	07-May-12	**17**	ND
TtC-32R	02-Aug-12	**26**	ND
TtC-32R	26-Oct-12	**18**	ND
TtC-32R dup.	26-Oct-12	**19**	ND
TtC-33	17-Feb-12	**251**	ND
TtC-33	08-May-12	**132**	ND
TtC-33	07-Aug-12	**187**	**732**
TtC-33	26-Oct-12	**135**	**520**
TtC-34	14-Feb-12	**29**	ND
TtC-34	07-May-12	**22**	ND

TABLE B-6
Total Petroleum Hydrocarbons (TPH)

Aliso Groundwater Sampling 2012

		TPH (M8015G), in **ug/L**	TPH (M8015D), in **ug/L**
Sample Number	Date	TPH as Gasoline and Light HC. (C4-C12)	TPH as Heavy Hydrocarbons (C12-C40)
TtC-34	02-Aug-12	**36**	ND
TtC-34	25-Oct-12	**41**	ND
TtC-34D	14-Feb-12	**362**	ND
TtC-34D	07-May-12	**318**	ND
TtC-34D	02-Aug-12	**340**	ND
TtC-34D	26-Oct-12	**329**	ND
TtC-35	14-Feb-12	ND	ND
TtC-35	07-May-12	ND	ND
TtC-35	02-Aug-12	ND	ND
TtC-35	26-Oct-12	ND	ND
TtC-36	20-Feb-12	ND	**925**
TtC-36	09-May-12	ND	**928**
TtC-36 dup.	09-May-12	ND	**872**
TtC-36	07-Aug-12	ND	**1,100**
TtC-36	26-Oct-12	ND	**912**
TtC-36D	20-Feb-12	ND	ND
TtC-36D	09-May-12	ND	ND
TtC-36D	07-Aug-12	ND	ND
TtC-36D	26-Oct-12	ND	ND
TtC-39	16-Feb-12	ND	ND
TtC-39	09-May-12	ND	ND
TtC-40D	17-Feb-12	**1,440**	ND
TtC-40D	08-May-12	**758**	ND
TtC-40D	06-Aug-12	**607**	ND
TtC-40D	25-Oct-12	**700**	ND
TtC-40D dup.	25-Oct-12	**701**	ND
TtC-40S	17-Feb-12	**1,510**	**775**
TtC-40S	08-May-12	**1,650**	**562**
TtC-40S dup.	08-May-12	**1,650**	**593**
TtC-40S	06-Aug-12	**1,460**	**805**
TtC-40S	25-Oct-12	**1,360**	**796**
TtC-41D	17-Feb-12	**2,450**	**860**
TtC-41D	08-May-12	**2,850**	**1,180**
TtC-41D	06-Aug-12	**2,050**	**905**
TtC-41D dup.	06-Aug-12	**2,060**	**1,110**
TtC-41D	29-Oct-12	**1,740**	**1,010**
TtC-41S	17-Feb-12	**99**	**502**
TtC-41S dup.	17-Feb-12	**93**	**500**
TtC-41S	08-May-12	**107**	**536**
TtC-41S	06-Aug-12	**165**	**707**
TtC-41S	29-Oct-12	**100**	**665**
TtC-42	20-Feb-12	ND	ND
TtC-42	09-May-12	**17**	ND
TtC-42	06-Aug-12	**36**	ND
TtC-42	24-Oct-12	**10**	ND
TtC-43	16-Feb-12	**5,990**	**7,010**
TtC-43	07-May-12	**4,790**	**6,940**
TtC-43	07-Aug-12	**5,210**	**6,640**
TtC-43	25-Oct-12	**5,860**	**6,930**
TtC-44	16-Feb-12	**609**	**1,960**
TtC-44	09-May-12	**767**	**2,350**
TtC-44	07-Aug-12	**546**	**2,360**
TtC-44	18-Oct-12	**477**	**1,990**
TtC-44 dup.	18-Oct-12	**482**	**2,200**
TtC-45	20-Feb-12	**388**	ND
TtC-45	09-May-12	**219**	ND
TtC-45	10-Aug-12	**232**	ND
TtC-45 dup.	10-Aug-12	**231**	ND
TtC-45	30-Oct-12	**289**	ND
TtD-10	20-Feb-12	**48,600**	**29,200**

TABLE B-6
Total Petroleum Hydrocarbons (TPH)

Aliso Groundwater Sampling 2012

		TPH (M8015G), in **ug/L**	TPH (M8015D), in **ug/L**
Sample Number	Date	TPH as Gasoline and Light HC. (C4-C12)	TPH as Heavy Hydrocarbons (C12-C40)
TtD-10	08-May-12	**23,600**	**134,000**
TtD-10	02-Aug-12	**27,800**	**10,900**
TtD-10	29-Oct-12	**20,700**	**157,000**
TtD-14	15-Feb-12	**46**	ND
TtD-14	11-May-12	**43**	ND
TtD-14	01-Aug-12	**51**	ND
TtD-14 dup.	01-Aug-12	**51**	ND
TtD-14	29-Oct-12	**72**	ND
TtD-15	15-Feb-12	**87**	**504**
TtD-15	11-May-12	**120**	ND
TtD-15	01-Aug-12	**141**	**940**
TtD-15	29-Oct-12	**151**	**880**
TtD-17R	14-Feb-12	**25**	ND
TtD-17R	09-May-12	**30**	ND
TtD-17R	02-Aug-12	**29**	**596**
TtD-17R	23-Oct-12	**21**	ND
TtD-18	13-Feb-12	**251**	ND
TtD-18	09-May-12	**194**	ND
TtD-18	02-Aug-12	**187**	ND
TtD-18	30-Oct-12	**161**	ND
TtD-19	13-Feb-12	**728**	**765**
TtD-19	11-May-12	**925**	**639**
TtD-19	02-Aug-12	**836**	**846**
TtD-19 dup.	02-Aug-12	**839**	**838**
TtD-19	23-Oct-12	**995**	**864**
TtD-20D	13-Feb-12	**15**	ND
TtD-20D	11-May-12	ND	ND
TtD-20D	01-Aug-12	ND	ND
TtD-20D	23-Oct-12	**18**	ND
TtD-20S	13-Feb-12	**122**	ND
TtD-20S	11-May-12	**129**	**519**
TtD-20S	01-Aug-12	**148**	**746**
TtD-20S	23-Oct-12	**136**	**722**
TtD-21D	17-Oct-12	ND	ND
TtD-21S	20-Feb-12	**17,300**	**3,520**
TtD-21S	11-May-12	**19,300**	**3,780**
TtD-21S	01-Aug-12	**15,900**	**4,850**
TtD-21S	17-Oct-12	**15,000**	**5,460**
TtD-7	13-Feb-12	**3,300**	**2,630**
TtD-7	14-May-12	**3,050**	ND
TtD-7	01-Aug-12	**2,830**	**3,040**
TtD-7	17-Oct-12	**2,410**	**2,760**
TtD-7 dup.	17-Oct-12	**2,430**	**2,890**
TtD-7D	13-Feb-12	**882**	ND
TtD-7D dup.	13-Feb-12	**921**	ND
TtD-7D	15-May-12	**13,400**	**2,650**
TtD-7D	01-Aug-12	**656**	ND
TtD-7D	17-Oct-12	**173**	ND
TtD-9	20-Feb-12	**263**	ND
TtD-9	11-May-12	**266**	ND
TtD-9	03-Aug-12	**268**	**562**
TtD-9	29-Oct-12	**248**	ND
TtD-9 dup.	29-Oct-12	**244**	**538**
TtE-10R	13-Feb-12	**15**	ND
TtE-10R	09-May-12	**23**	ND
TtE-10R	02-Aug-12	**17**	ND
TtE-10R	23-Oct-12	**19**	ND
TtE-10R dup.	23-Oct-12	**20**	ND
TtE-3R2	14-Feb-12	**2,960**	**547**
TtE-3R2	09-May-12	**3,350**	**671**

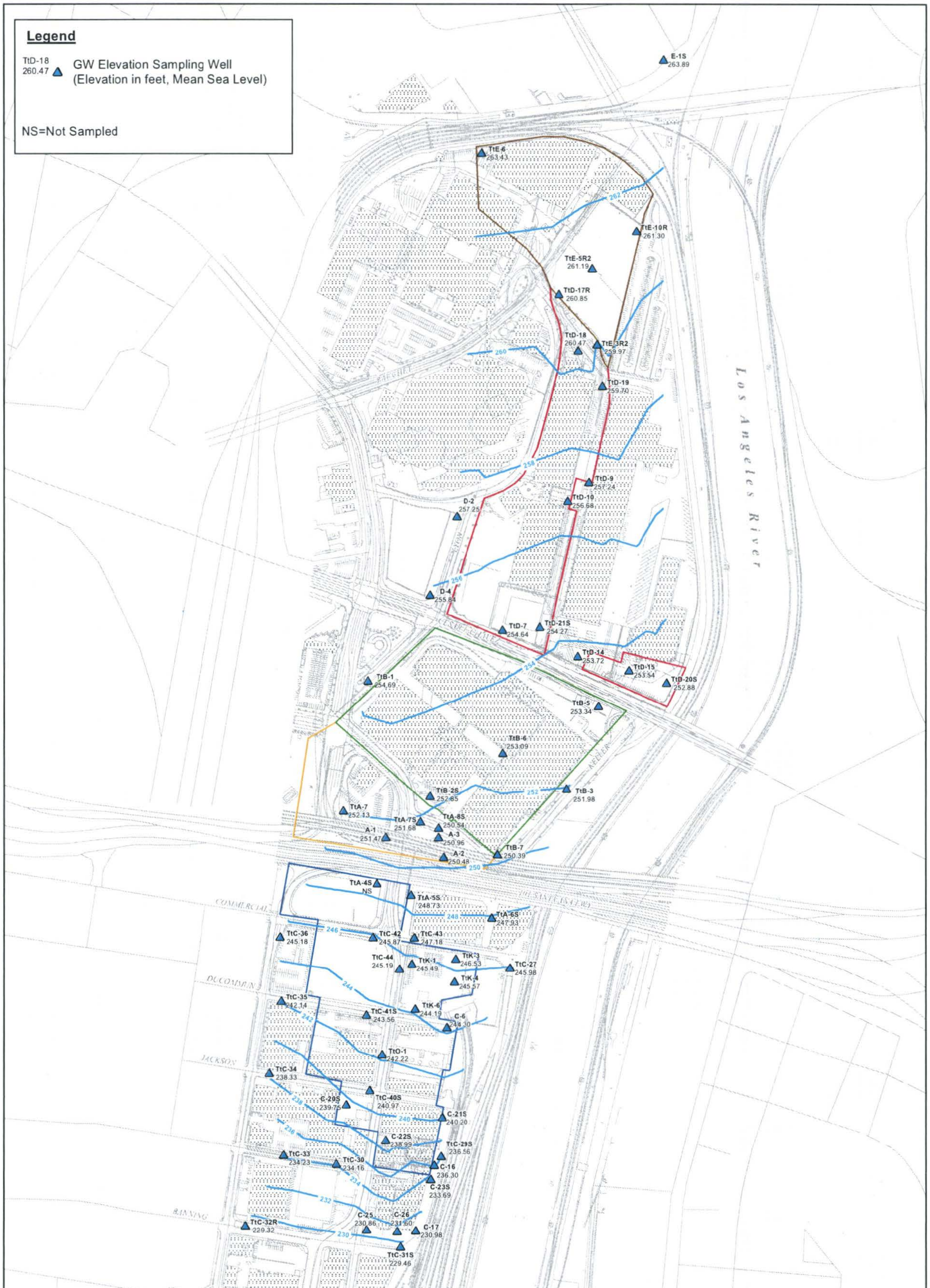
TABLE B-6
Total Petroleum Hydrocarbons (TPH)

Aliso Groundwater Sampling 2012

		TPH (M8015G), in **ug/L**	TPH (M8015D), in **ug/L**
Sample Number	Date	TPH as Gasoline and Light HC. (C4-C12)	TPH as Heavy Hydrocarbons (C12-C40)
TtE-3R2	02-Aug-12	**3,530**	**1,080**
TtE-3R2	23-Oct-12	**3,310**	**912**
TtE-5R2	14-Feb-12	**409**	**829**
TtE-5R2	09-May-12	**384**	**685**
TtE-5R2	02-Aug-12	**513**	**1,570**
TtE-5R2	23-Oct-12	**549**	**1,510**
TtE-6	14-Feb-12	ND	**683**
TtE-6 dup.	14-Feb-12	ND	**714**
TtE-6	14-May-12	ND	**577**
TtE-6	03-Aug-12	ND	**916**
TtE-6	30-Oct-12	ND	**771**
TtE-8	14-Feb-12	ND	ND
TtE-8	14-May-12	ND	ND
TtE-8	03-Aug-12	ND	ND
TtE-8	30-Oct-12	ND	ND
TtK-1	13-Feb-12	**279**	**2,270**
TtK-1	11-May-12	**668**	**3,060**
TtK-1	10-Aug-12	**483**	**2,940**
TtK-1	25-Oct-12	**429**	**2,990**
TtK-2	13-Feb-12	**823**	**967**
TtK-2	11-May-12	**590**	**1,160**
TtK-2	10-Aug-12	**855**	**1,400**
TtK-2	25-Oct-12	**629**	**1,090**
TtK-3	13-Feb-12	**478**	**677**
TtK-3	11-May-12	**492**	**643**
TtK-3	10-Aug-12	**523**	**890**
TtK-3	25-Oct-12	**541**	**695**
TtK-4	13-Feb-12	**823**	ND
TtK-4	11-May-12	**640**	**643**
TtK-4	10-Aug-12	**656**	**984**
TtK-4	25-Oct-12	**613**	**720**
TtK-6	13-Feb-12	**433**	**641**
TtK-6	11-May-12	**432**	**623**
TtK-6	10-Aug-12	**382**	**968**
TtK-6	25-Oct-12	**319**	**959**
TtO-1	14-Feb-12	**12,500**	**1,120**
TtO-1	09-May-12	**12,000**	**1,300**
TtO-1	06-Aug-12	**11,700**	**2,770**
TtO-1	25-Oct-12	**10,600**	**2,510**

APPENDIX C

4th Quarter 2012 Water Level Elevation Maps Using Linear TIN Method



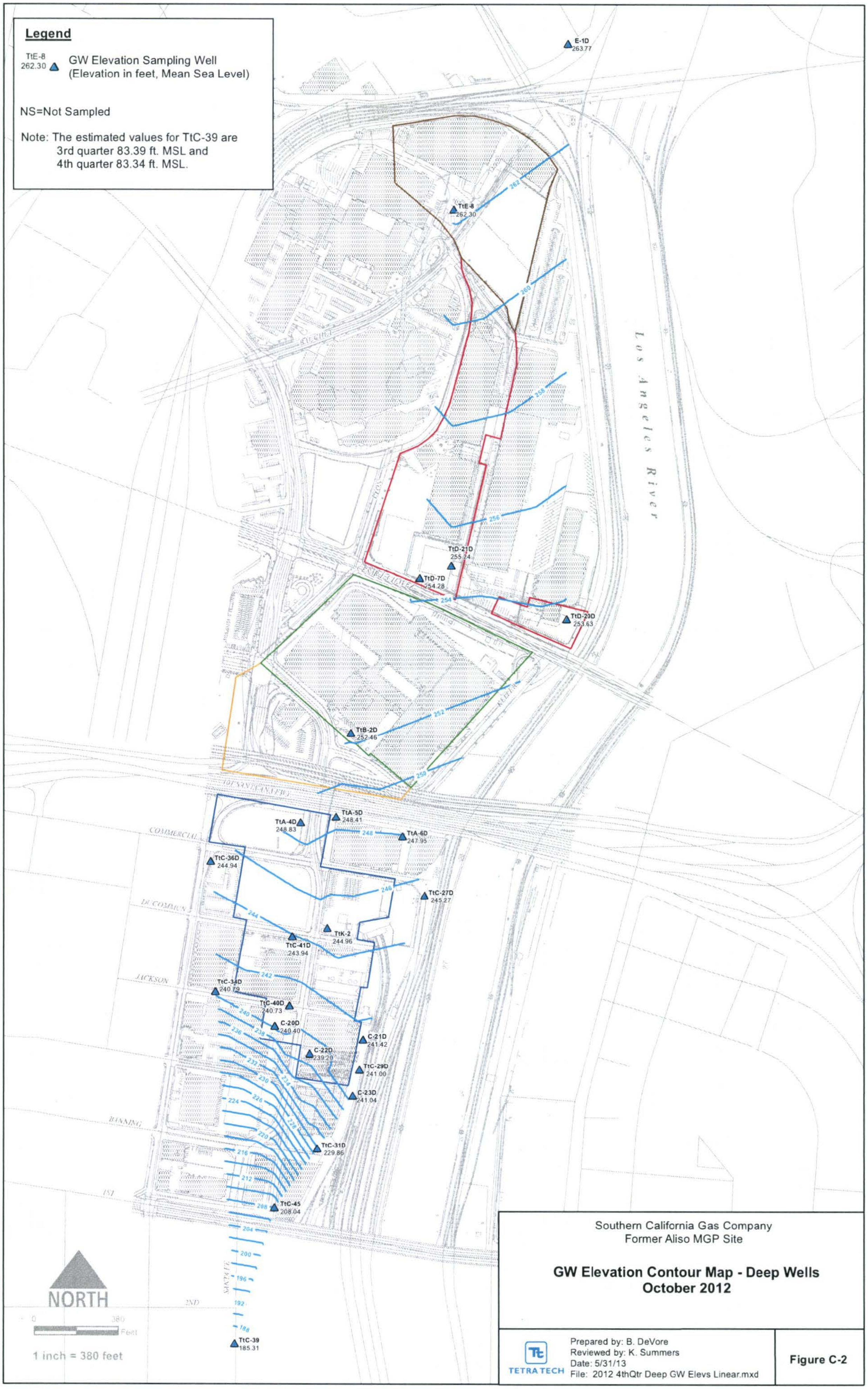
Southern California Gas Company
Former Aliso MGP Site

GW Elevation Contour Map - Shallow Wells
October 2012

TETRA TECH

Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/31/13
File: 2012 4thQtr Shallow GW Elevs Linear.mxd

Figure C-1



Legend
TtE-8 262.30 GW Elevation Sampling Well (Elevation in feet, Mean Sea Level)
NS=Not Sampled
Note: The estimated values for TtC-39 are 3rd quarter 83.39 ft. MSL and 4th quarter 83.34 ft. MSL.
E-1D 263.77
TtE-8 262.30
262
260
258
256
Los Angeles River
TtD-21D 255.24
TtD-7D 254.28
254
TtD-20D 253.63
252
TtB-2D 252.46
250
TtA-5D 248.41
TtA-4D 248.83
248
TtA-6D 247.95
COMMERCIAL
TtC-36D 244.94
246
TtC-27D 245.27
DE COMMUN
244
TtK-2 244.96
TtC-41D 243.94
242
JACKSON
TtC-34D 240.79
TtC-40D 240.73
240
238
236
C-20D 240.40
C-21D 241.42
C-22D 239.20
232
234
TtC-29D 241.00
230
C-23D 241.04
224
226
228
BANNING
220
TtC-31D 229.86
216
212
208
TtC-45 208.04
204
200
196
192
188
TtC-39 185.31
NORTH
0 380 Feet
1 inch = 380 feet
Southern California Gas Company
Former Aliso MGP Site
GW Elevation Contour Map - Deep Wells
October 2012
TETRA TECH
Prepared by: B. DeVore
Reviewed by: K. Summers
Date: 5/31/13
File: 2012 4thQtr Deep GW Elevs Linear.mxd
Figure C-2

PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION, NATIONAL PIPELINE MAPPING SYSTEM

Legend

- Accidents (Liquid)
- Incidents (Gas)
- Gas Transmission Pipelines
- Hazardous Liquid Pipelines

500 m
1000 ft

Pipelines depicted on this map represent gas transmission and hazardous liquid lines only. Gas gathering and gas distribution systems are not represented.

This map should never be used as a substitute for contacting a one-call center prior to excavation activities. Please call 811 before any digging occurs.

Questions regarding this map or its contents can be directed to npms@dot.gov.

Projection: Geographic

Datum: NAD83

Map produced by the Public Viewer application at www.npms.phmsa.dot.gov

Date Printed: Nov 17, 2016

811 Know what's below. Call before you dig.

APPENDIX D

Historical Research Documentation

Metro Division 20

801 E. Commercial Street

Los Angeles, CA 90012

Inquiry Number: 4729798.3

September 19, 2016

Certified Sanborn® Map Report

EDR®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

09/19/16

Site Name:	Client Name:
Metro Division 20	Kleinfelder, Inc.
801 E. Commercial Street	2 Ada, Suite 250
Los Angeles, CA 90012	Irvine, CA 92618-0000
EDR Inquiry # 4729798.3	Contact: Margaret Carroll

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Certified Sanborn Results:

Certification # D4AA-42BB-BEA2

PO # NA

Project 20168300.025A/07-0000

Maps Provided:

1970	1950
1968	1920
1965	1906
1964	1894
1960	1888
1957	
1954	
1953	

Sanborn® Library search results

Certification #: D4AA-42BB-BEA2

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- ✓ Library of Congress
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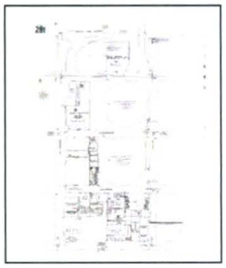
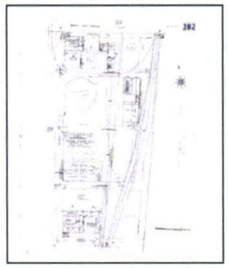
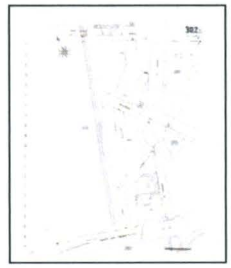
Sanborn Sheet Key

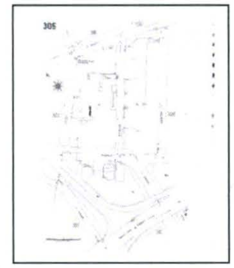
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

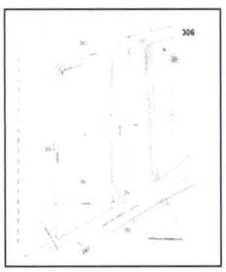
1970 Source Sheets


Volume 3, Sheet 281

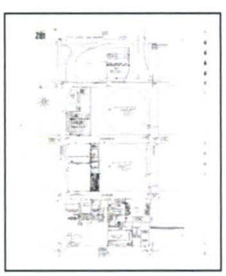

Volume 3, Sheet 282

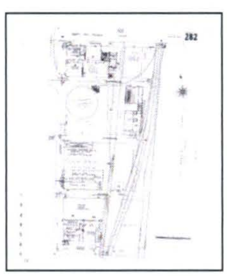

Volume 3, Sheet 302

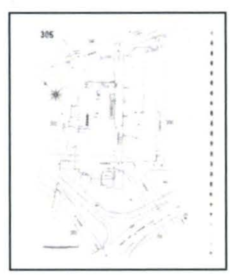

Volume 3, Sheet 305

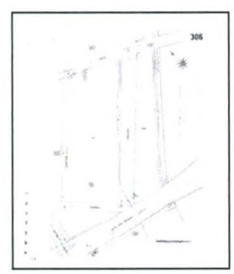

Volume 3, Sheet 306

1968 Source Sheets

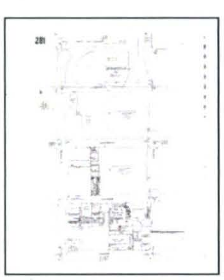

Volume 3, Sheet 281

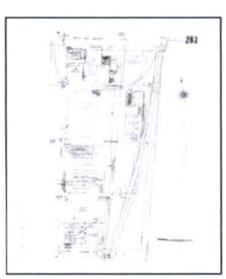

Volume 3, Sheet 282

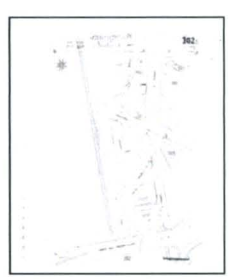

Volume 3, Sheet 305

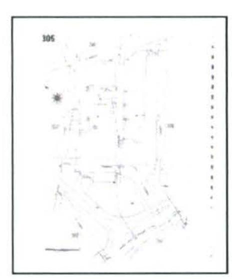

Volume 3, Sheet 306

1965 Source Sheets


Volume 3, Sheet 281


Volume 3, Sheet 282


Volume 3, Sheet 302


Volume 3, Sheet 305

Sanborn Sheet Key

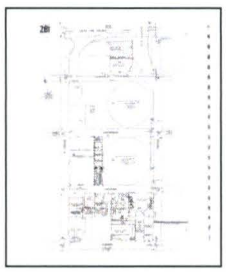
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1965 Source Sheets

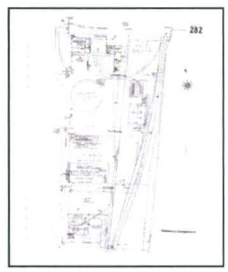
Volume 3, Sheet 306

1964 Source Sheets

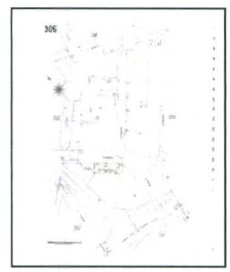
Volume 3, Sheet 280



Volume 3, Sheet 281



Volume 3, Sheet 282

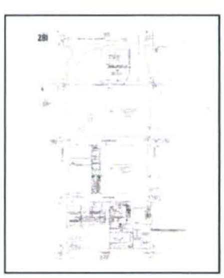


Volume 3, Sheet 305

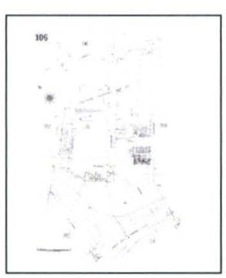
Volume 3, Sheet 306

Volume 3, Sheet 302

1960 Source Sheets

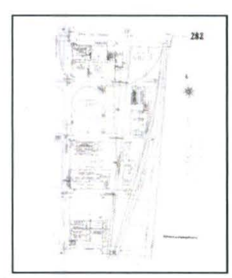


Volume 3, Sheet 281



Volume 3, Sheet 305

Volume 3, Sheet 306

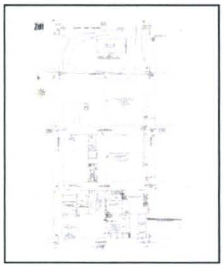


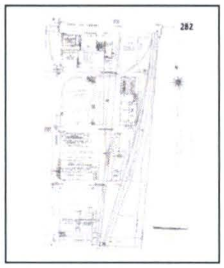
Volume 3, Sheet 282

Sanborn Sheet Key

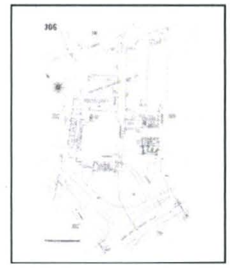
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1957 Source Sheets


Volume 3, Sheet 281


Volume 3, Sheet 282


Volume 3, Sheet 302

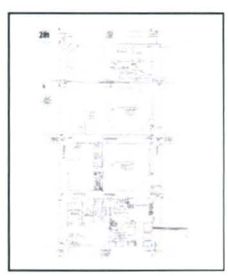

Volume 3, Sheet 305

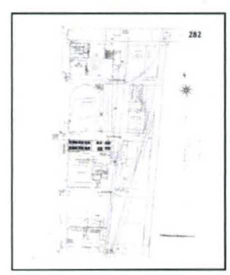

Volume 3, Sheet 306

1954 Source Sheets


Volume 3, Sheet 305


Volume 3, Sheet 306


Volume 3, Sheet 281


Volume 3, Sheet 282

1953 Source Sheets


Volume 3, Sheet 281


Volume 3, Sheet 282

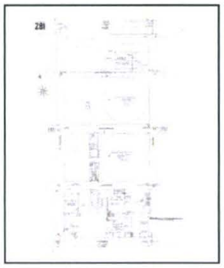

Volume 3, Sheet 305


Volume 3, Sheet 306

Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1953 Source Sheets


Volume 3, Sheet 281

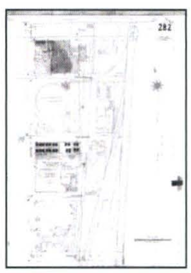

Volume 3, Sheet 282

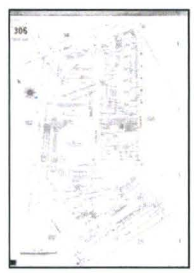

Volume 3, Sheet 305


Volume 3, Sheet 306

1950 Source Sheets


Volume 3, Sheet 281


Volume 3, Sheet 282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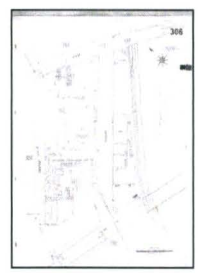
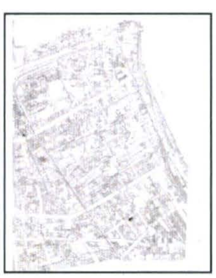
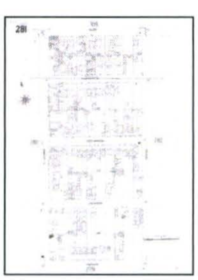
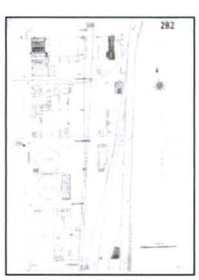

Volume 3, Sheet 306

1920 Source Sheets

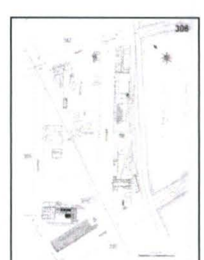

Volume Congested Business District, Sheet xxxx

1906 Source Sheets


Volume 3, Sheet 281


Volume 3, Sheet 282

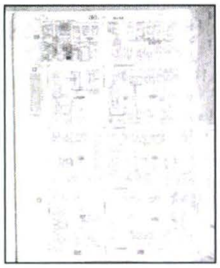

Volume 3, Sheet 305


Volume 3, Sheet 306

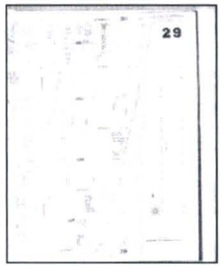
Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

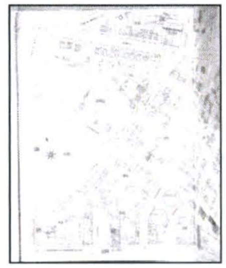
1894 Source Sheets



Volume 1, Sheet 29



Volume 1, Sheet 29



Volume 1, Sheet 30

Volume 1, Sheet 30

1888 Source Sheets

Volume 1, Sheet 13

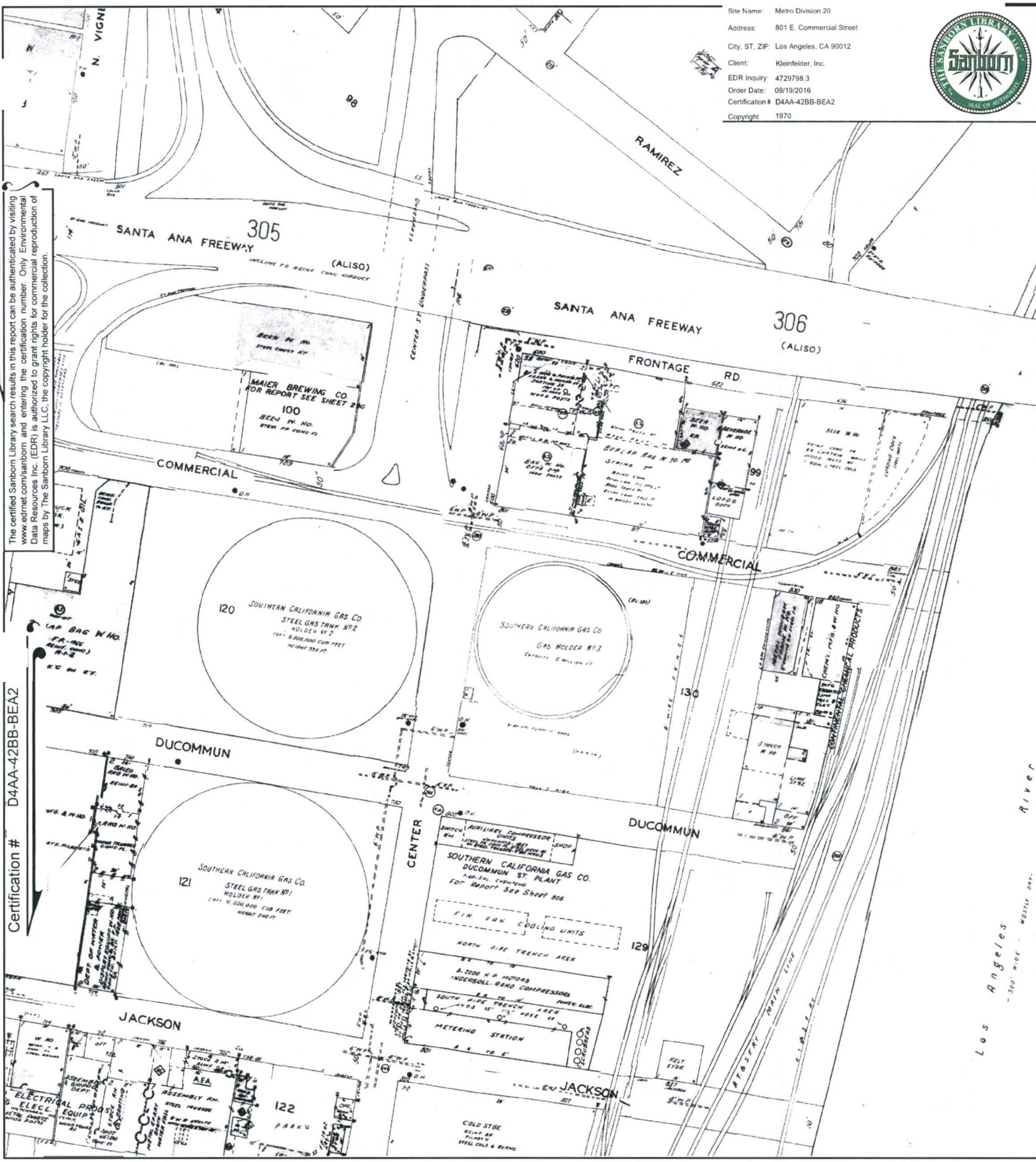
Volume 1, Sheet 13

Volume 1, Sheet 15

Certified Sanborn® Map

1970

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification #: D4AA-42BB-BEA2
Copyright: 1970



Certification # D4AA-42BB-BEA2

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Outlined areas indicate map sheets within the collection.

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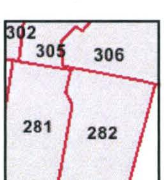
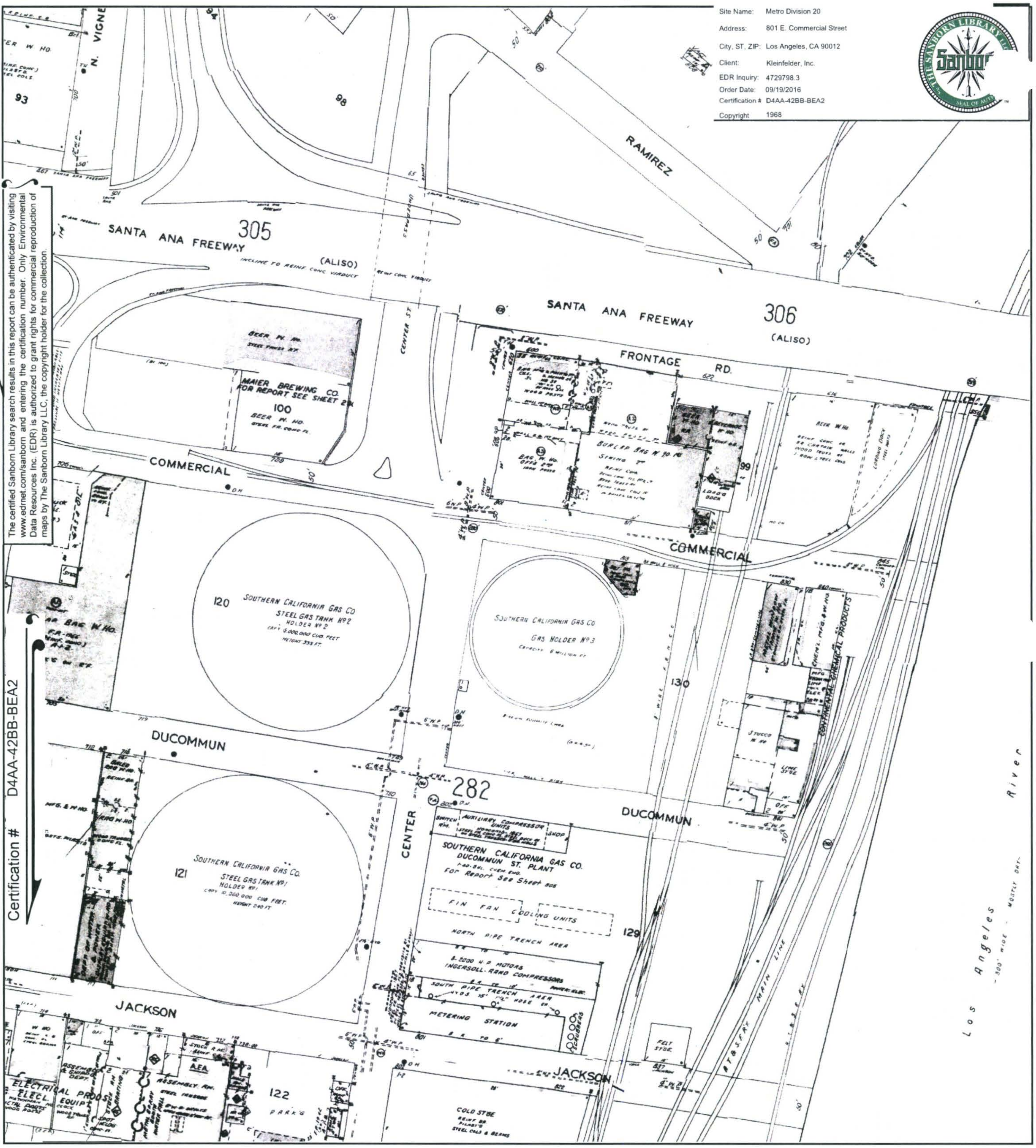


Volume 3, Sheet 306
Volume 3, Sheet 305
Volume 3, Sheet 302
Volume 3, Sheet 282
Volume 3, Sheet 281

N

Certified Sanborn® Map

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1968



Certification # D4AA-42BB-BEA2

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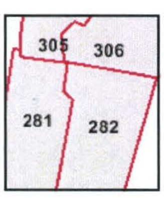


Volume 3, Sheet 306
Volume 3, Sheet 305
Volume 3, Sheet 282
Volume 3, Sheet 281

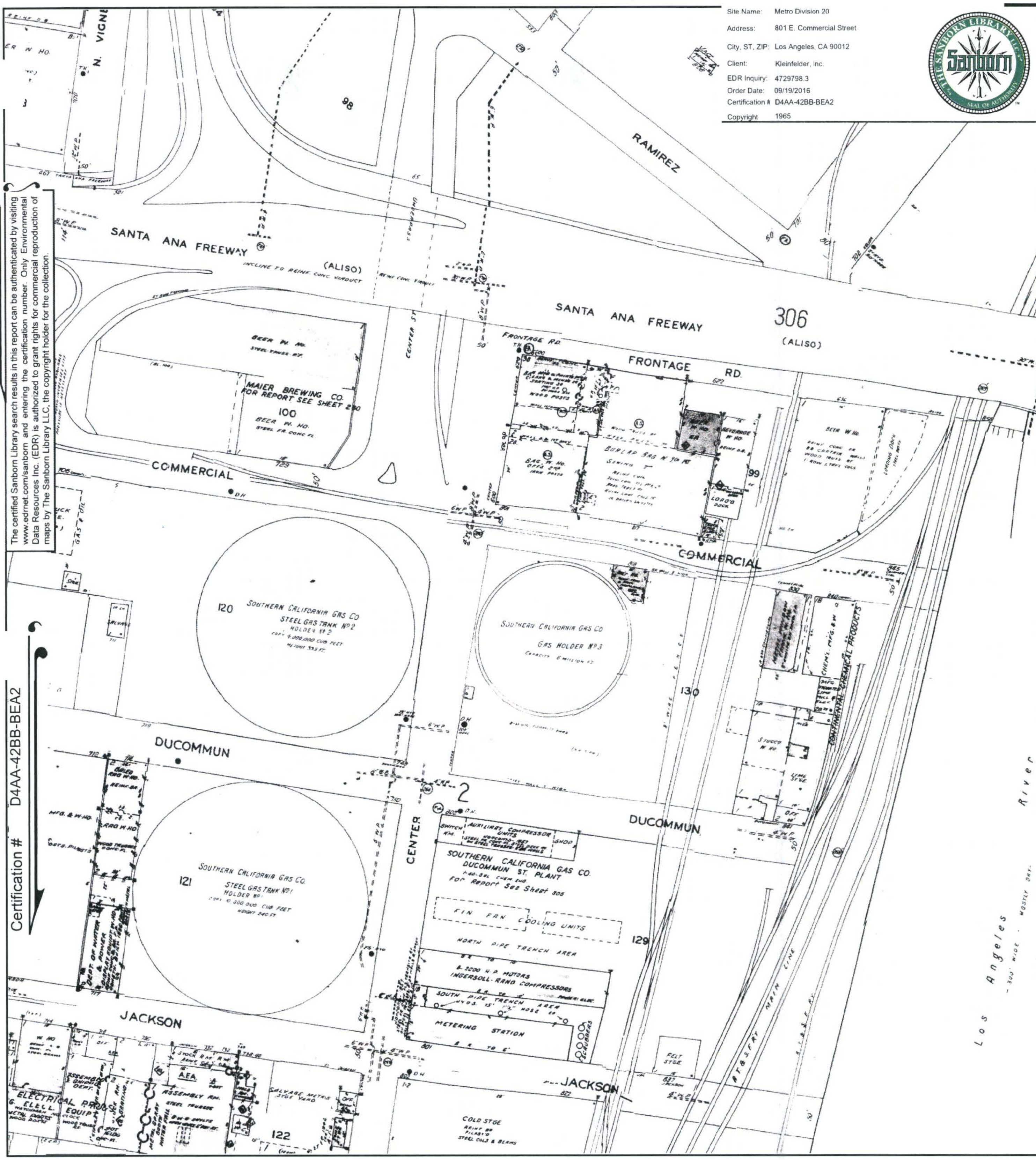
N

Certified Sanborn® Map

1965

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1965

Certification # D4AA-42BB-BEA2



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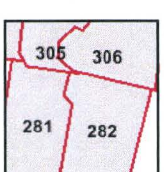


Volume 3, Sheet 306
Volume 3, Sheet 305
Volume 3, Sheet 302
Volume 3, Sheet 282
Volume 3, Sheet 281

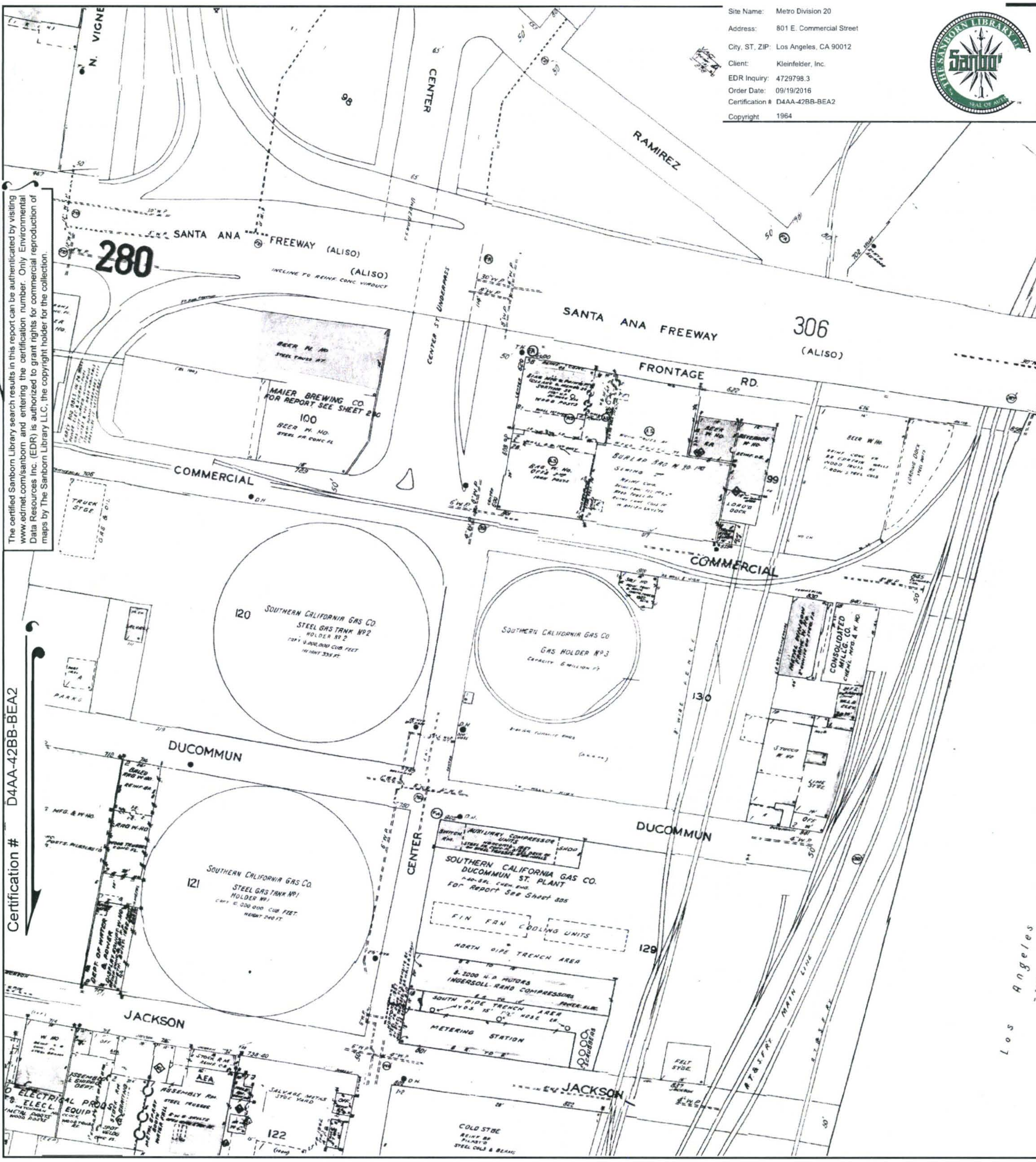
N

Certified Sanborn® Map

1964

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1964

Certification # D4AA-42BB-BEA2



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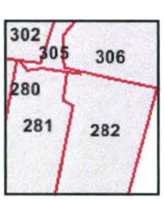


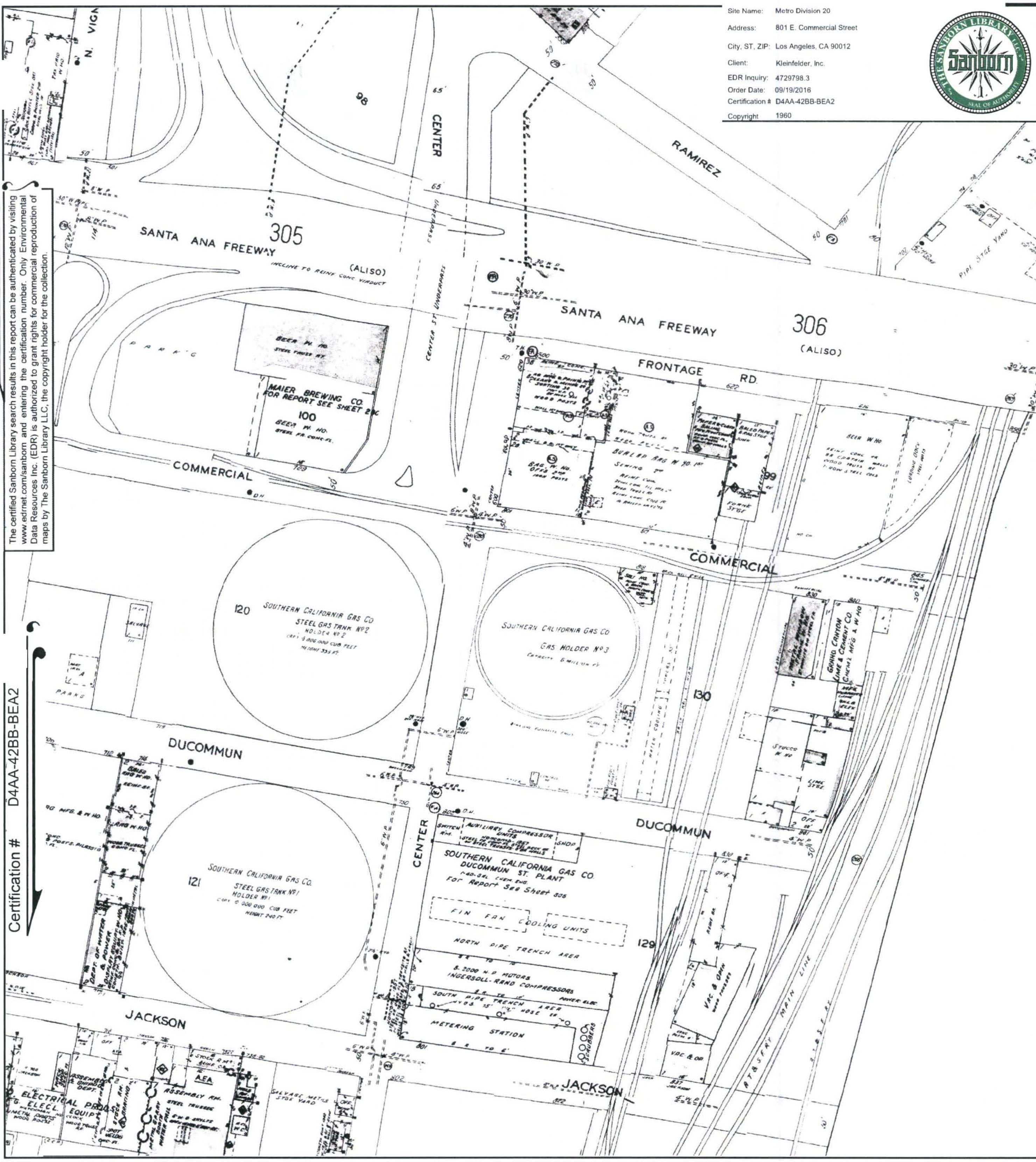
Volume 3, Sheet 302
Volume 3, Sheet 306
Volume 3, Sheet 305
Volume 3, Sheet 282
Volume 3, Sheet 281
Volume 3, Sheet 280

N

Certified Sanborn® Map

1960

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1960



Certification # D4AA-42BB-BEA2

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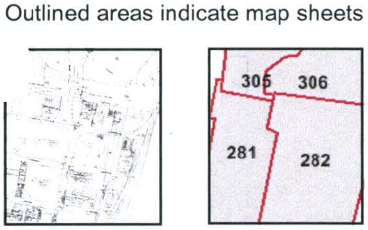


Volume 3, Sheet 282
Volume 3, Sheet 306
Volume 3, Sheet 305
Volume 3, Sheet 281

0 Feet 150 300 600

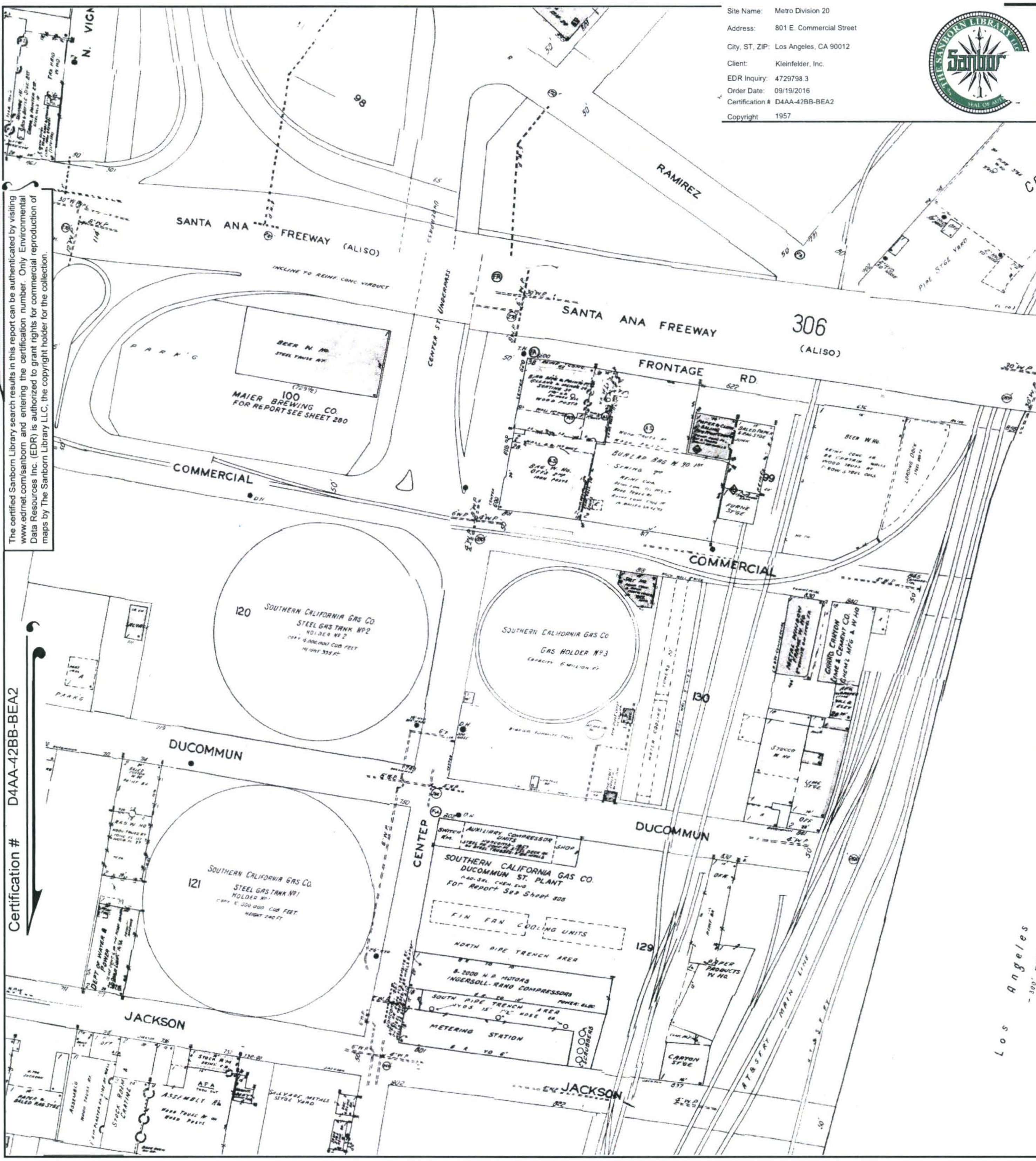
N

EDR

Certified Sanborn® Map

1957

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1957



Certification # D4AA-42BB-BEA2

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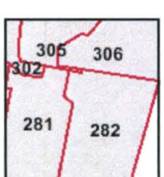


Volume 3, Sheet 306
Volume 3, Sheet 305
Volume 3, Sheet 302
Volume 3, Sheet 282
Volume 3, Sheet 281

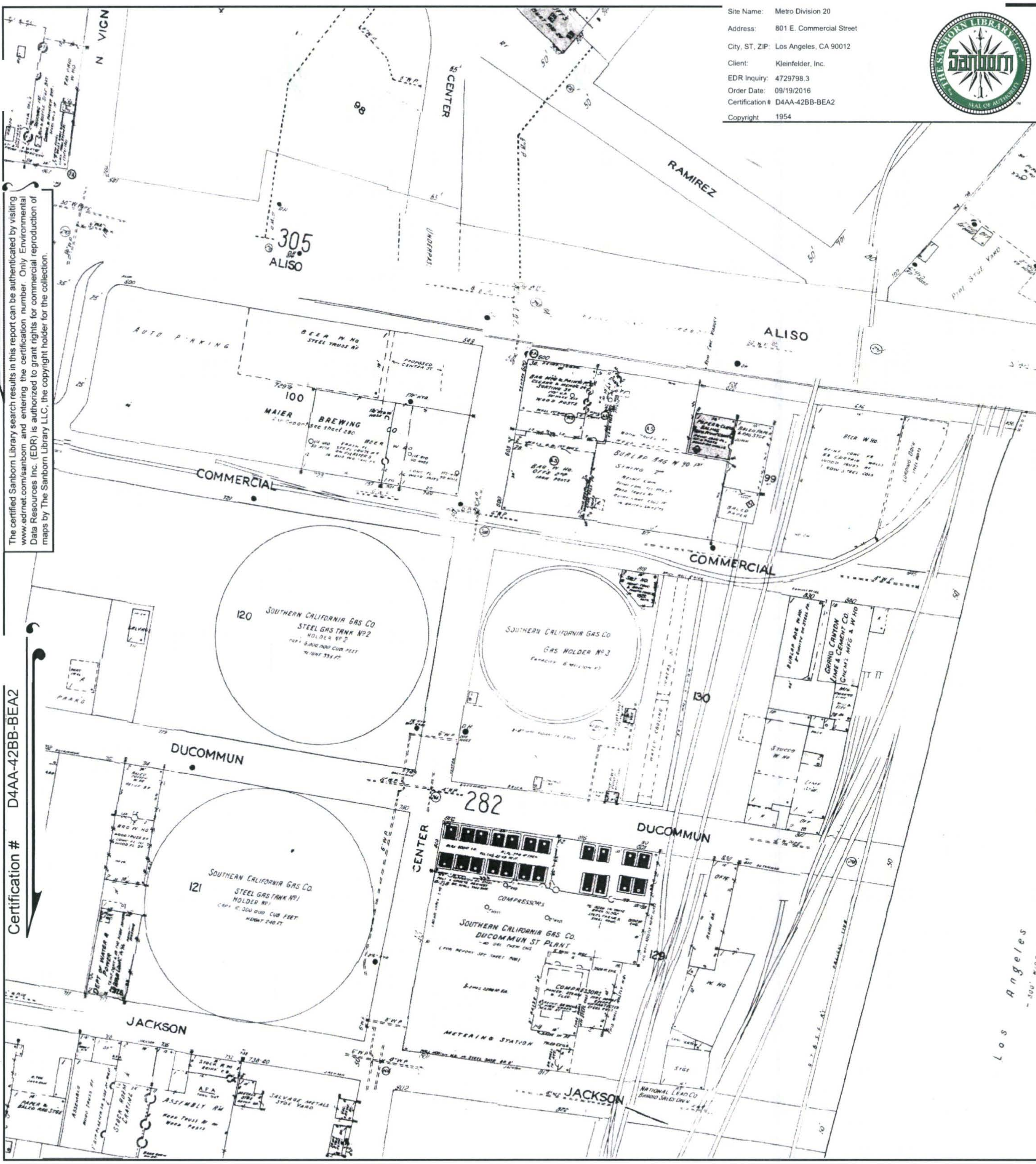
N

Certified Sanborn® Map

1954

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1954

Certification # D4AA-42BB-BEA2



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

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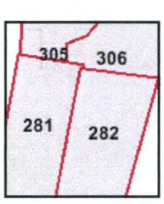


Volume 3, Sheet 282
Volume 3, Sheet 281
Volume 3, Sheet 306
Volume 3, Sheet 305

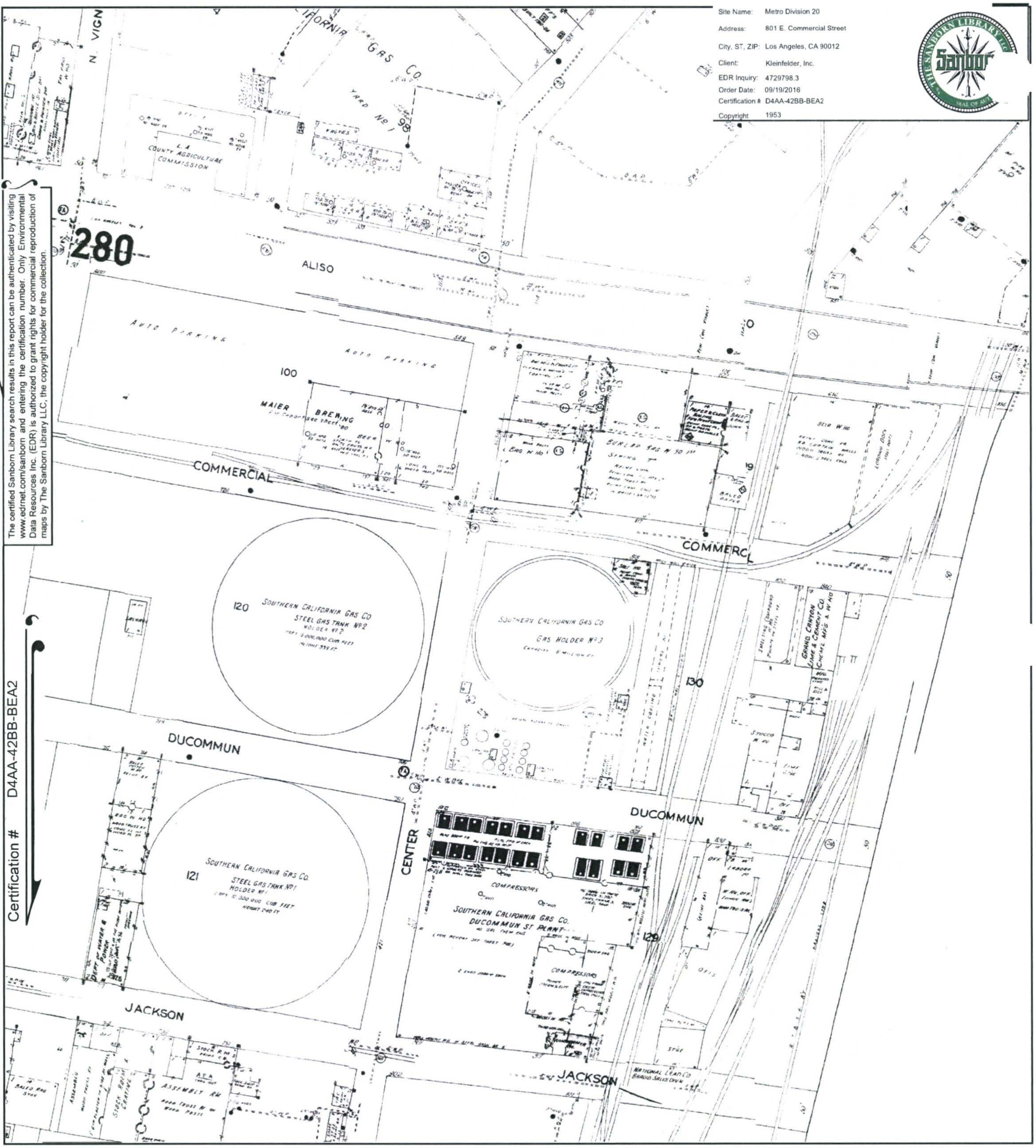
N

Certified Sanborn® Map

1953

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1953

Certification # D4AA-42BB-BEA2



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Outlined areas indicate map sheets within the collection.

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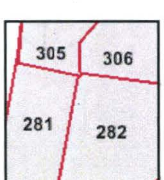


Volume 3, Sheet 306
Volume 3, Sheet 305
Volume 3, Sheet 282
Volume 3, Sheet 281
Volume 3, Sheet 306
Volume 3, Sheet 305
Volume 3, Sheet 282
Volume 3, Sheet 281

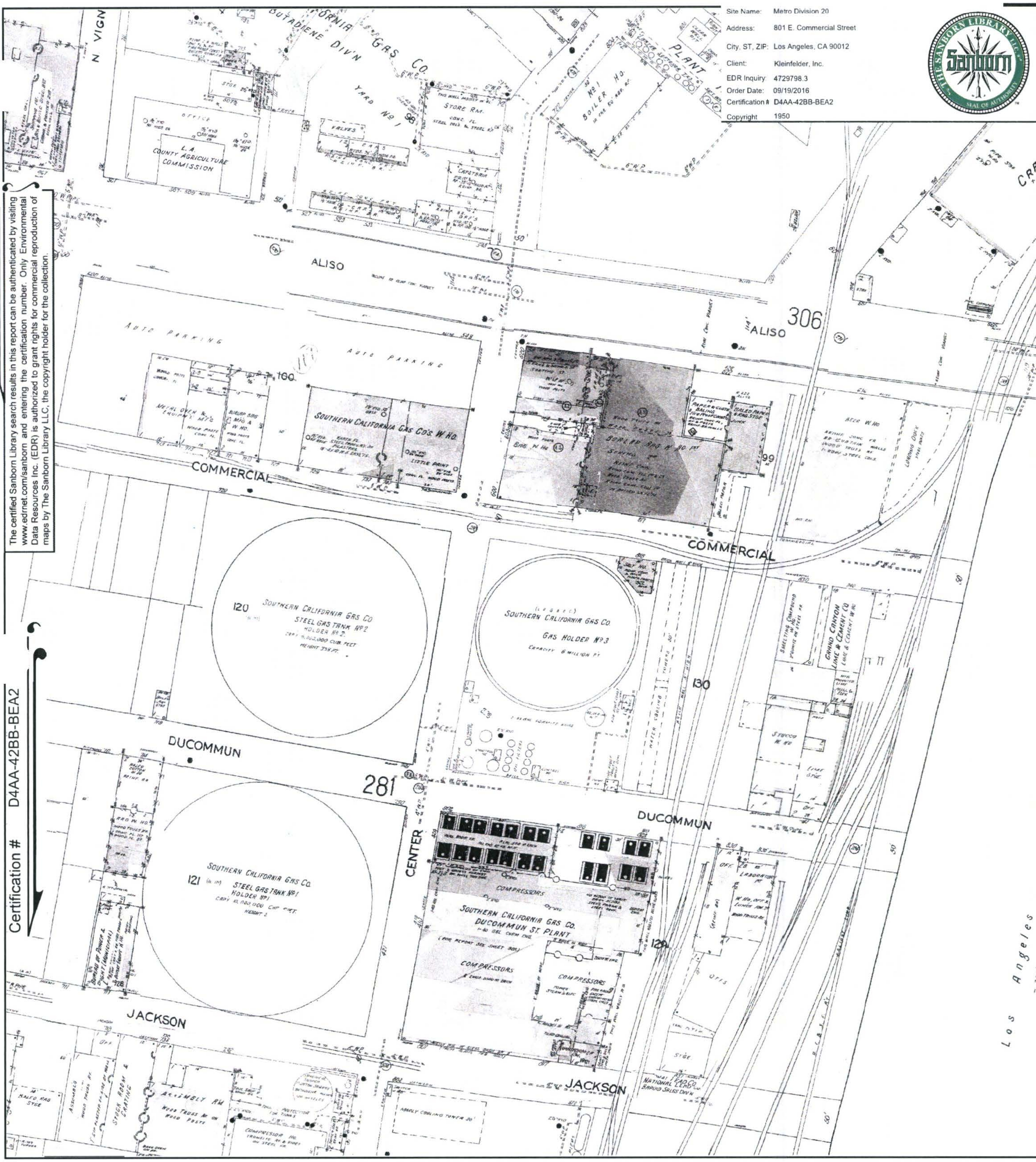
N

Certified Sanborn® Map

1950

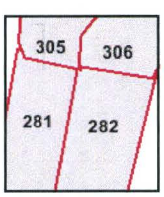
Site Name:	Metro Division 20
Address:	801 E. Commercial Street
City, ST, ZIP:	Los Angeles, CA 90012
Client:	Kleinfelder, Inc.
EDR Inquiry:	4729798.3
Order Date:	09/19/2016
Certification #:	D4AA-42BB-BEA2
Copyright	1950

Certification # D4AA-42BB-BEA2



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600



Volume 3, Sheet 306
Volume 3, Sheet 305
Volume 3, Sheet 282
Volume 3, Sheet 281

N

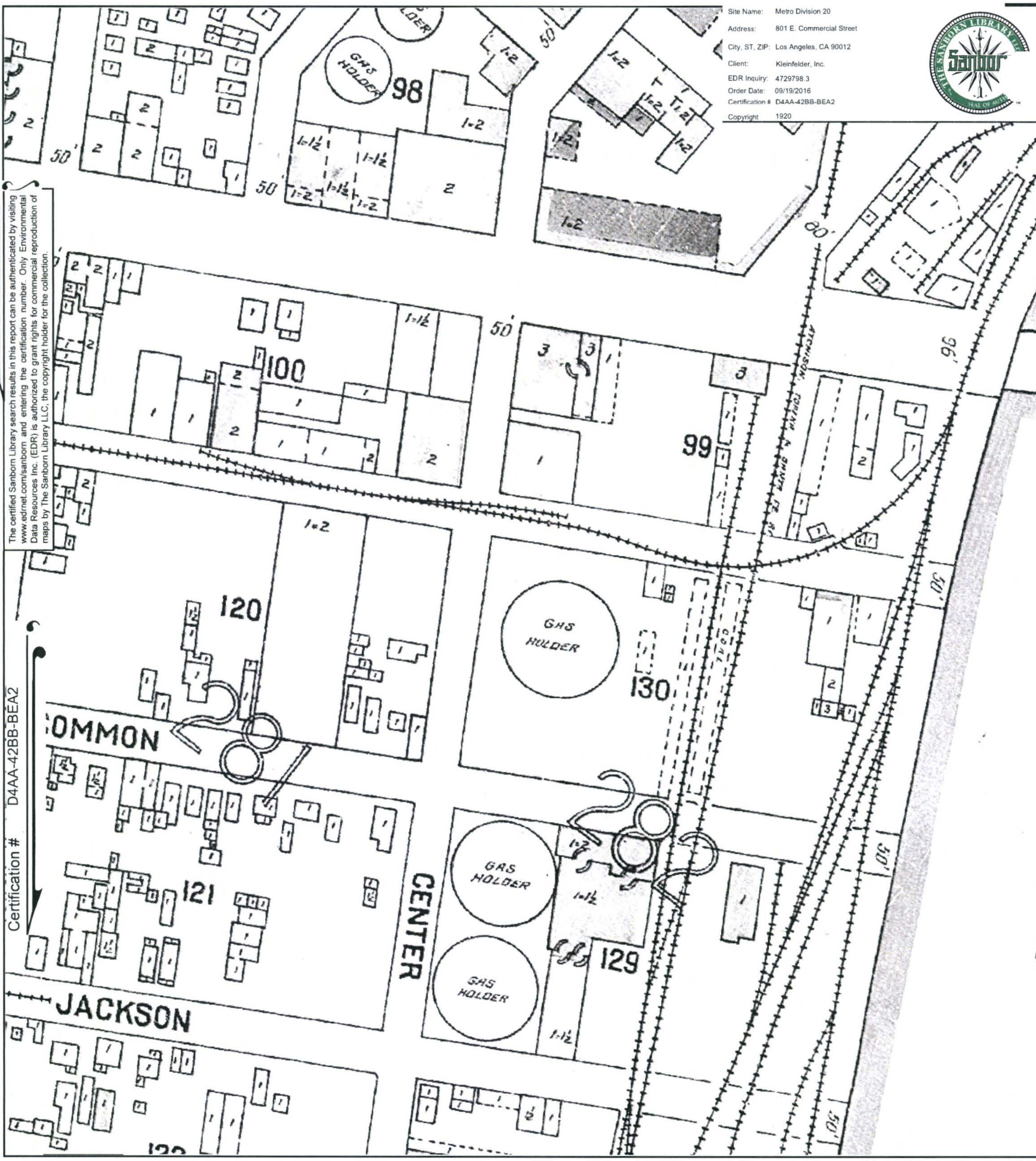
Certified Sanborn® Map

EDR

1920

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1920

Certification # D4AA-42BB-BEA2



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300

xxxx

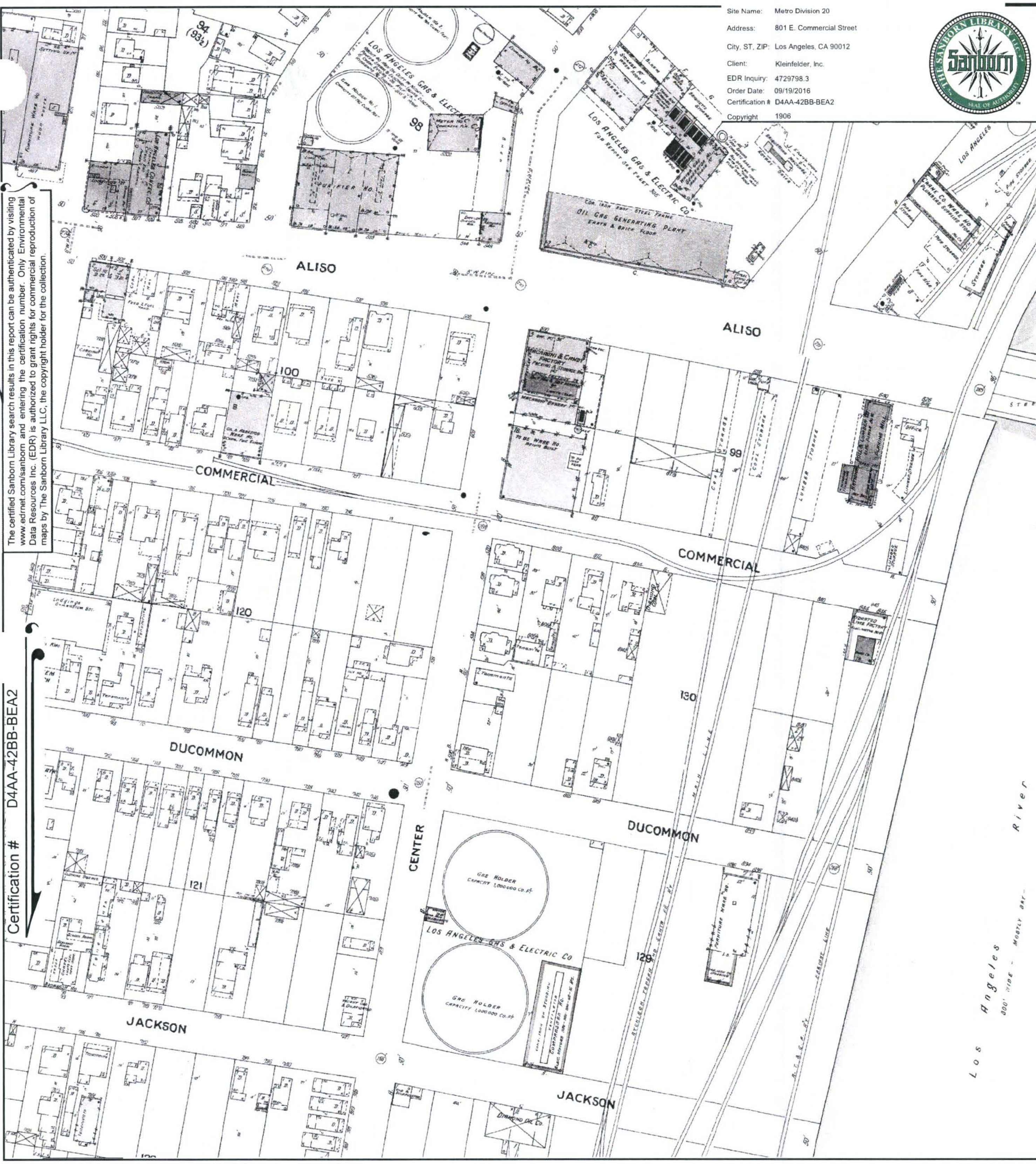
Volume Congested Business District, Sheet xxxx

N

Certified Sanborn® Map

1906

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1906



Certification # D4AA-42BB-BEA2

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

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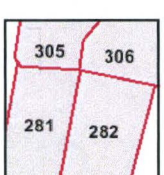

Volume 3, Sheet 306
Volume 3, Sheet 305
Volume 3, Sheet 282
Volume 3, Sheet 281

N

Certified Sanborn® Map

1894

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1894

Certification # D4AA-42BB-BEA2

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

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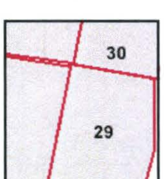


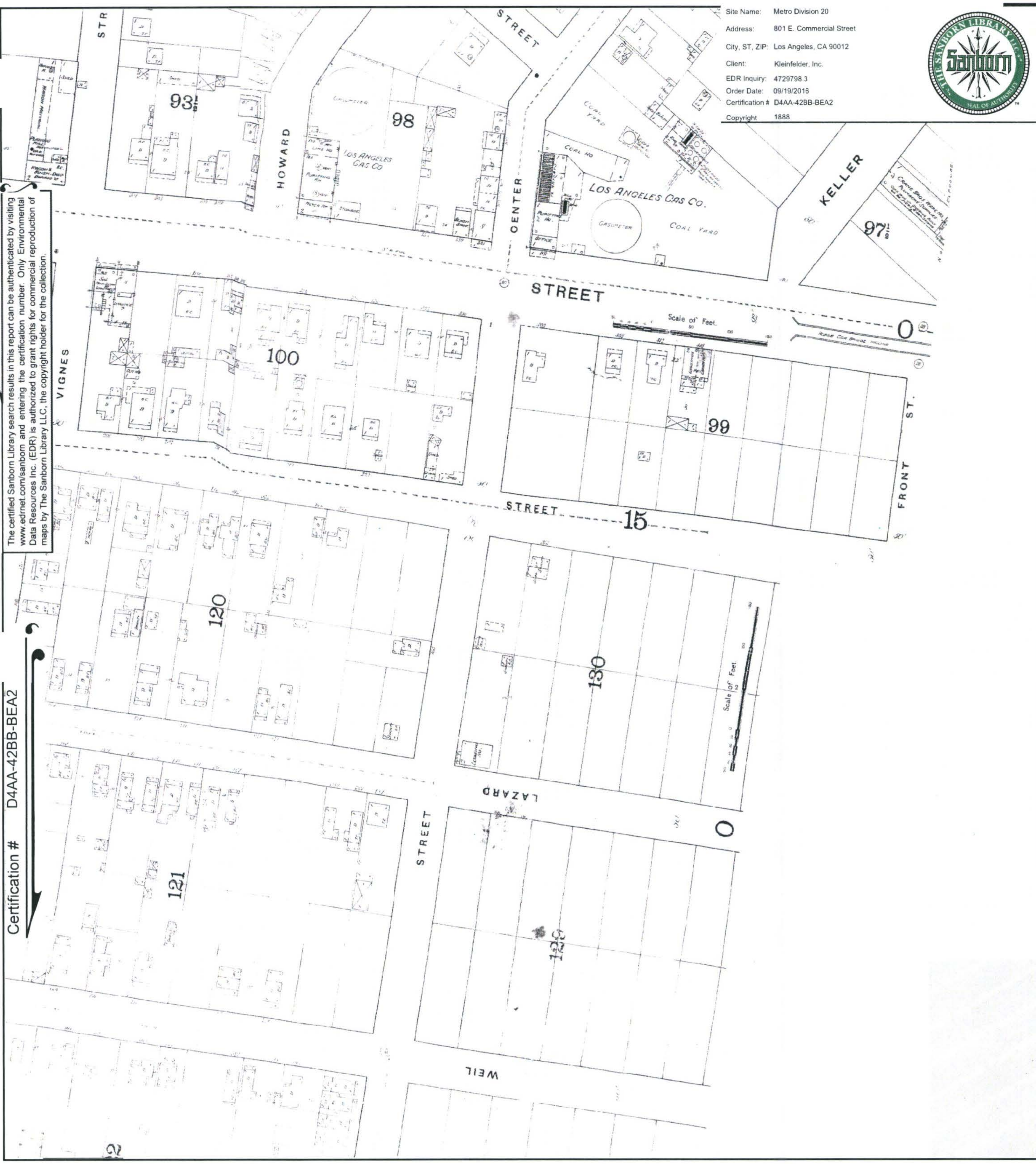
Volume 1, Sheet 30
Volume 1, Sheet 30
Volume 1, Sheet 29
Volume 1, Sheet 29

N

Certified Sanborn® Map

1888

Site Name:	Metro Division 20
Address:	801 E. Commercial Street
City, ST, ZIP:	Los Angeles, CA 90012
Client:	Kleinfelder, Inc.
EDR Inquiry:	4729798.3
Order Date:	09/19/2016
Certification #	D4AA-42BB-BEA2
Copyright	1888



Certification # D4AA-42BB-BEA2

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600

Volume 1, Sheet 15
Volume 1, Sheet 13
Volume 1, Sheet 13

Metro Division 20
801 E. Commercial Street
Los Angeles, CA 90012

Inquiry Number: 4729798.3
September 19, 2016

Certified Sanborn® Map Report

EDR®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

09/19/16

Site Name:	Client Name:
Metro Division 20	Kleinfelder, Inc.
801 E. Commercial Street	2 Ada, Suite 250
Los Angeles, CA 90012	Irvine, CA 92618-0000
EDR Inquiry # 4729798.3	Contact: Margaret Carroll

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Kleinfelder, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

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Certified Sanborn Results:

Certification # D4AA-42BB-BEA2

PO # NA

Project 20168300.025A/07-0000

Maps Provided:

1970	1954
1968	1953
1967	1950
1965	1920
1964	1906
1960	1894
1959	1888
1957	

Sanborn® Library search results

Certification #: D4AA-42BB-BEA2

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

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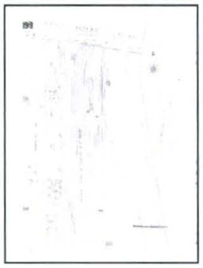
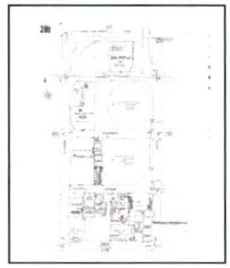
Sanborn Sheet Key

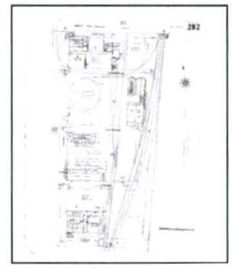
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1970 Source Sheets


Volume 2, Sheet 199

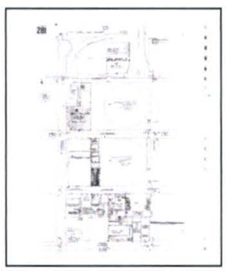

Volume 3, Sheet 278


Volume 3, Sheet 281


Volume 3, Sheet 282

1968 Source Sheets


Volume 3, Sheet 278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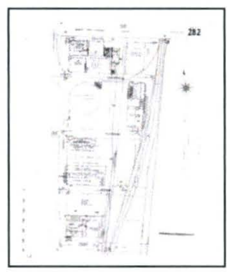
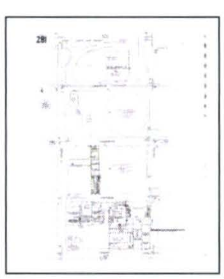

Volume 3, Sheet 282

1967 Source Sheets


Volume 2, Sheet 199

1965 Source Sheets


Volume 3, Sheet 278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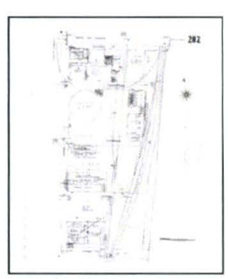
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Sanborn Sheet Key

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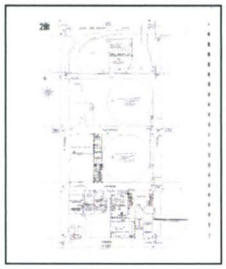
1964 Source Sheets


Volume 3, Sheet 278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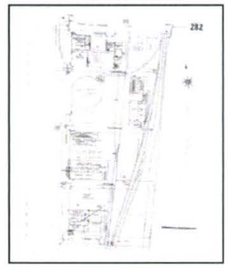
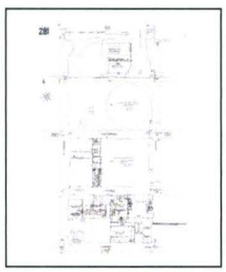

Volume 3, Sheet 282

1960 Source Sheets


Volume 3, Sheet 278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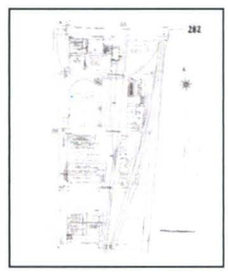

Volume 3, Sheet 282

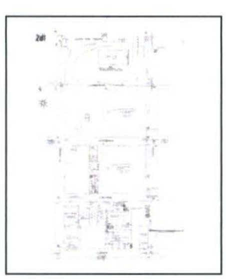

Volume 2, Sheet 199

1959 Source Sheets


Volume 2, Sheet 199

1957 Source Sheets


Volume 3, Sheet 278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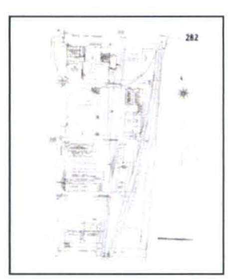
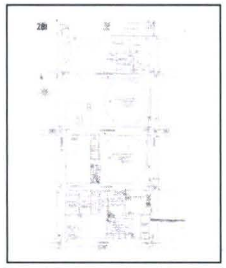

Volume 3, Sheet 282

Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1954 Source Sheets


Volume 3, Sheet 278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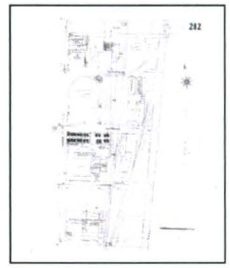
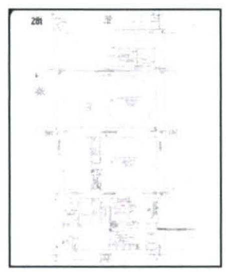

Volume 3, Sheet 282


Volume 2, Sheet 199

1953 Source Sheets


Volume 2, Sheet 199


Volume 3, Sheet 278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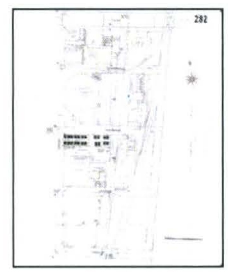
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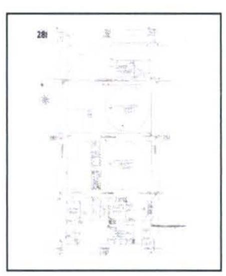
Volume 3, Sheet 278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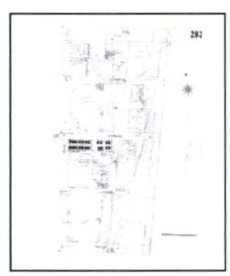
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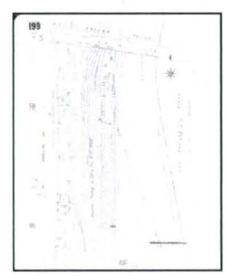
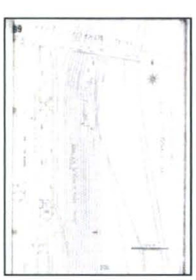

Volume 2, Sheet 199

1950 Source Sheets


Volume 2, Sheet 199

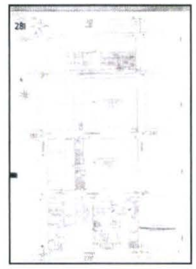
Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1950 Source Sheets


Volume 2, Sheet 199


Volume 3, Sheet 278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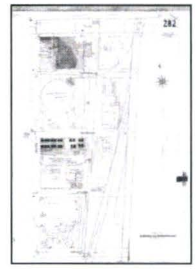
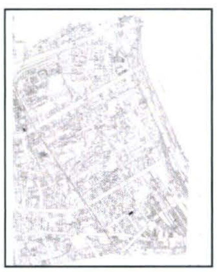
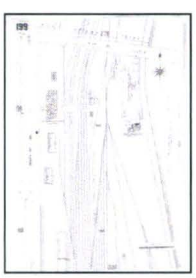

Volume 3, Sheet 282

1920 Source Sheets


Volume Congested Business District, Sheet xxxx

1906 Source Sheets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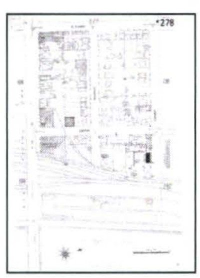
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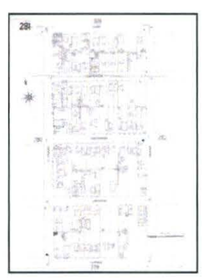
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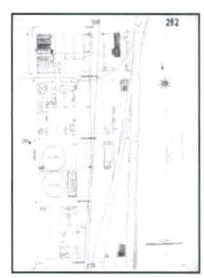
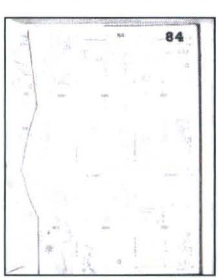
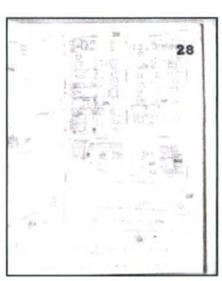
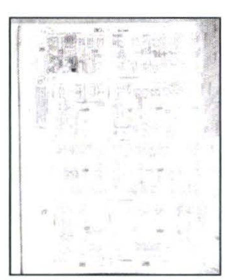
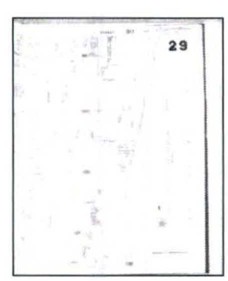

Volume 3, Sheet 282

1894 Source Sheets


Volume 2, Sheet 84


Volume 1, Sheet 28


Volume 1, Sheet 29


Volume 1, Sheet 29

Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1888 Source Sheets

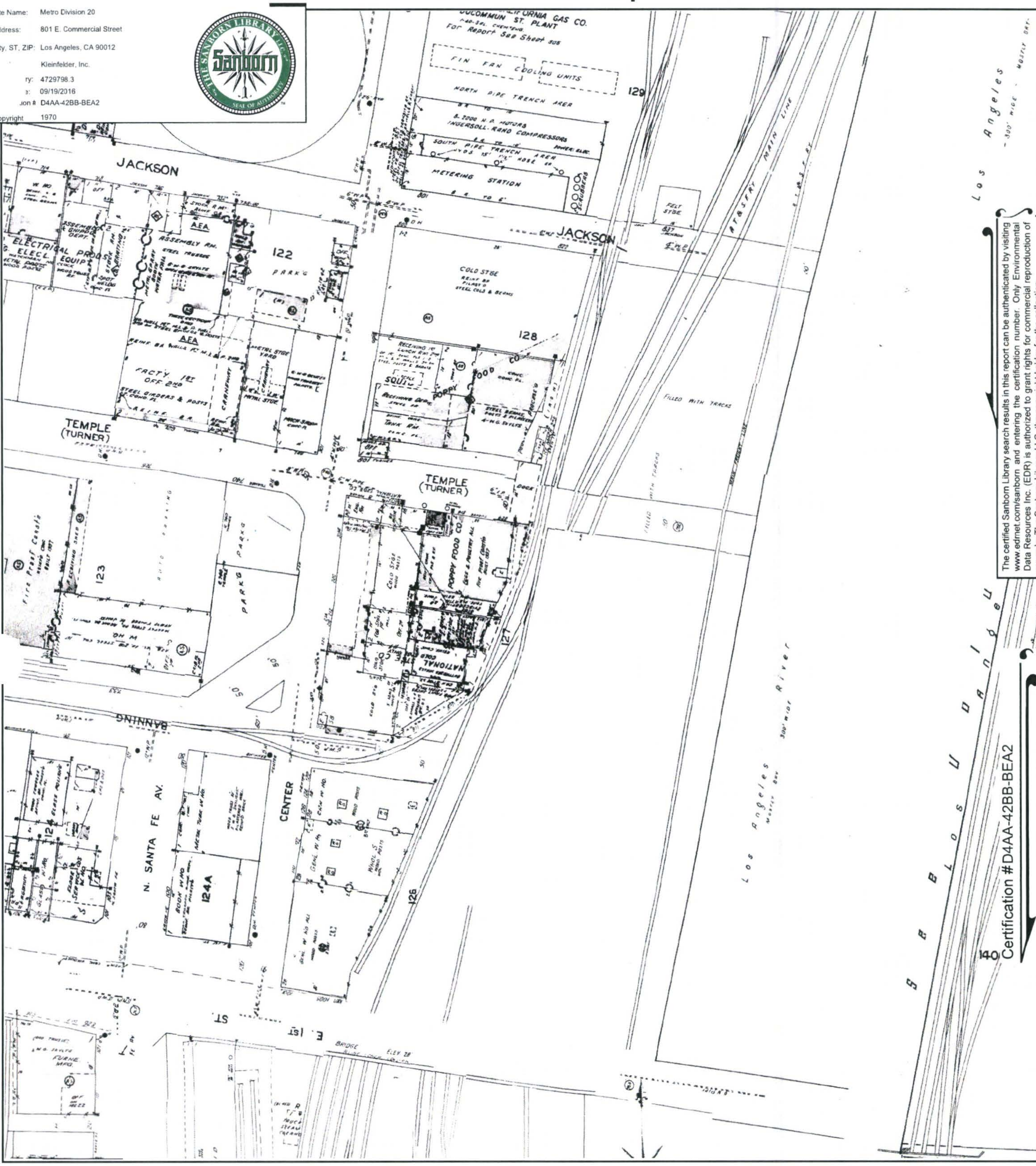
Volume 1, Sheet 15

Volume 1, Sheet 15

Certified Sanborn® Map

1970

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Kleinfelder, Inc.
ry: 4729798.3
e: 09/19/2016
ion # D4AA-42BB-BEA2
Copyright 1970



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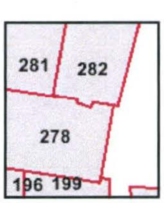


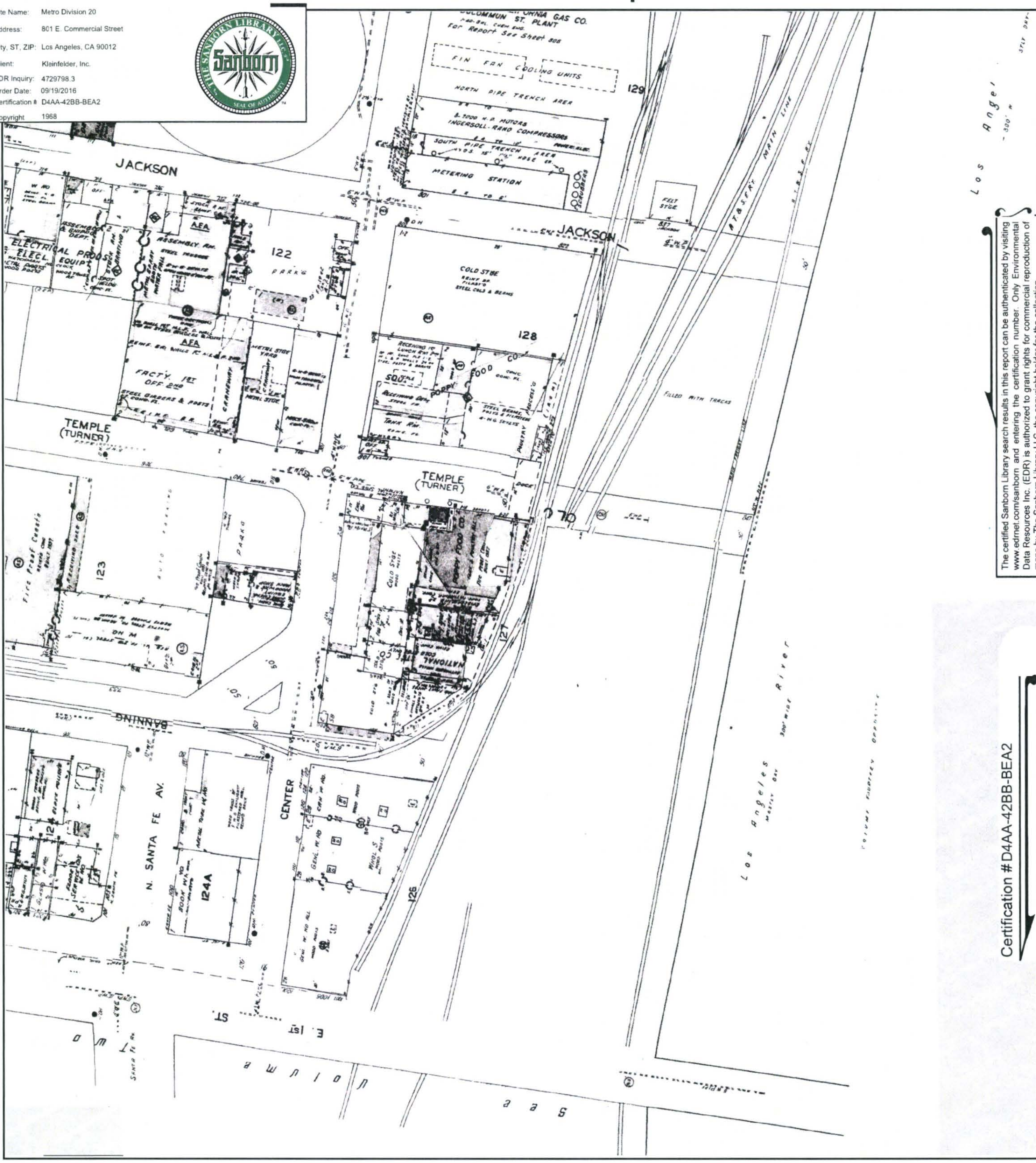
Volume 3, Sheet 282
Volume 3, Sheet 281
Volume 3, Sheet 278
Volume 2, Sheet 199

EDR

Certified Sanborn® Map

1968

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1968



Certification # D4AA-42BB-BEA2

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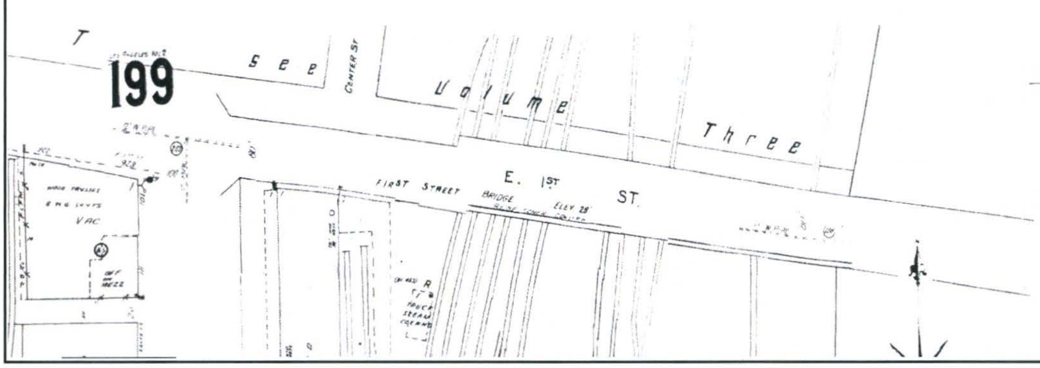
N

Volume 3, Sheet 282
Volume 3, Sheet 281
Volume 3, Sheet 278

Certified Sanborn® Map

1967

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
ry: 4729798.3
: 09/19/2016
on # D4AA-42BB-BEA2
Copyright 1967



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Volume 2, Sheet 199

N

Certified Sanborn® Map

1965

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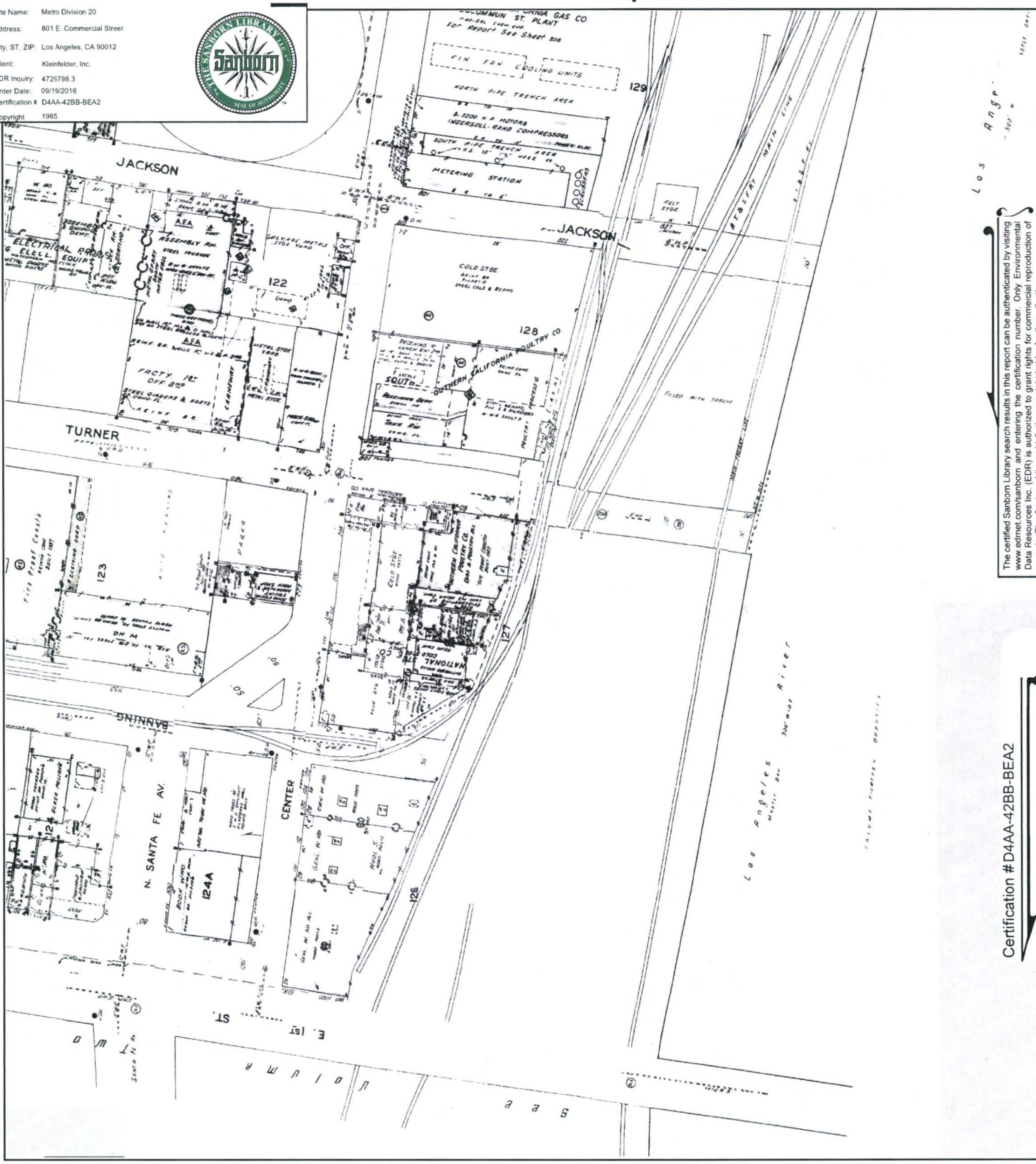
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1965



Certification # D4AA-42BB-BEA2

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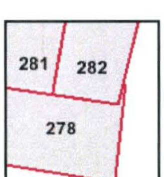

Volume 3, Sheet 282
Volume 3, Sheet 281
Volume 3, Sheet 278

N

Site Name: Metro Division 20
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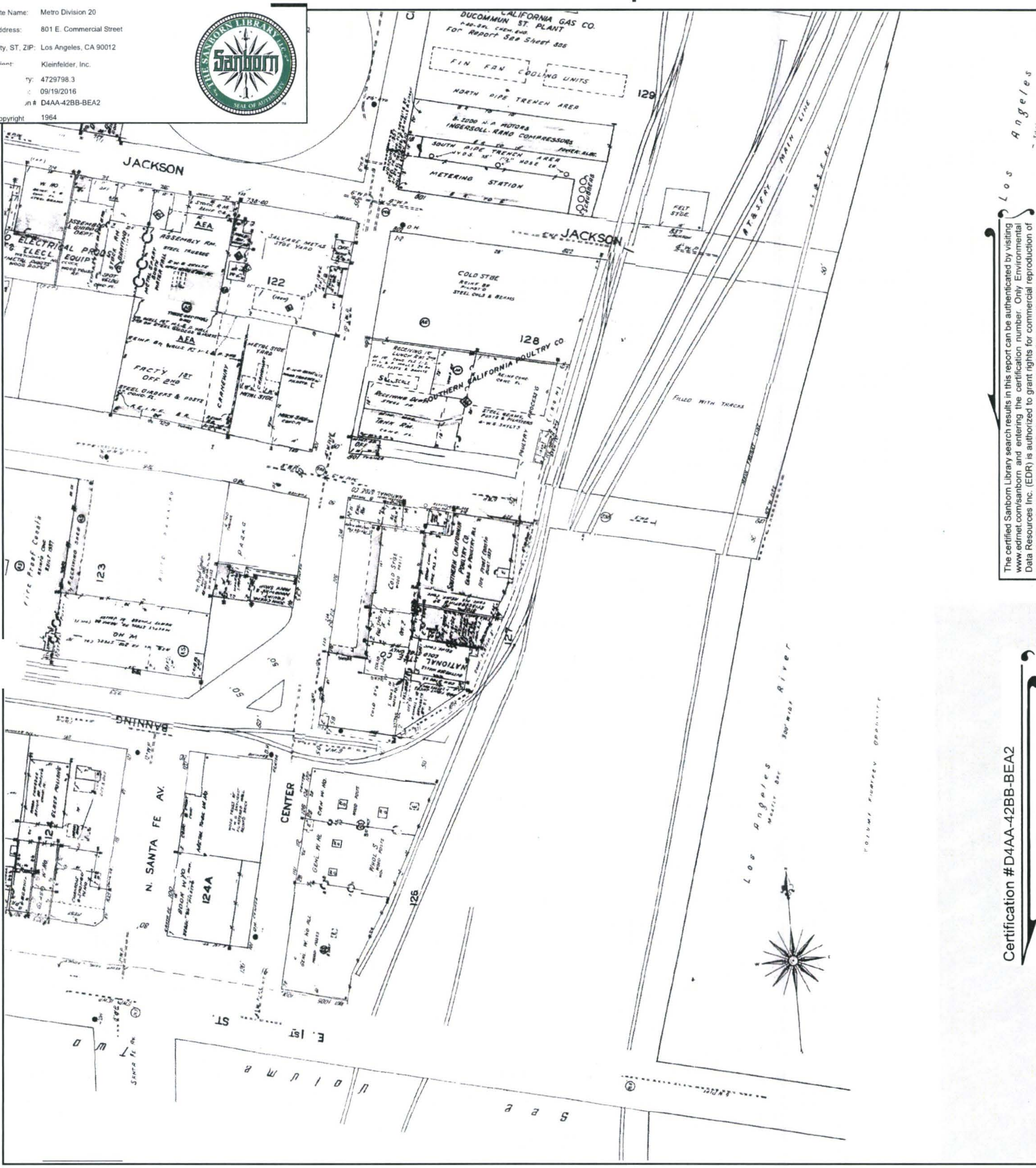
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
...ry: 4729798.3
...: 09/19/2016
...n #: D4AA-42BB-BEA2
Copyright 1964



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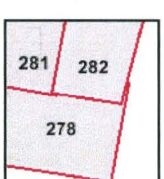

Volume 3, Sheet 282
Volume 3, Sheet 281
Volume 3, Sheet 278

Certified Sanborn® Map

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
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Certification # D4AA-42BB-BEA2

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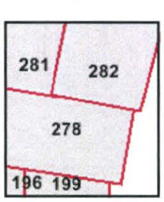

Volume 2, Sheet 199
Volume 3, Sheet 282
Volume 3, Sheet 281
Volume 3, Sheet 278

N

Certified Sanborn® Map

1959

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
Inquiry #: 4729798.3
Date: 09/19/2016
Certification #: D4AA-42BB-BEA2
Copyright 1959

Certification # D4AA-42BB-BEA2

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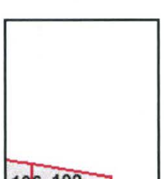

Volume 2, Sheet 199

Certified Sanborn® Map

1957

EDR®

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
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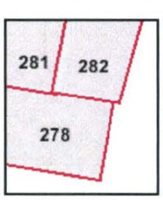

Volume 3, Sheet 282
Volume 3, Sheet 281
Volume 3, Sheet 278

0 Feet 150 300 600

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Certified Sanborn® Map

1954

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Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
y: 4729798.3
: 09/19/2016
n #: D4AA-42BB-BEA2
Copyright 1954

Certification # D4AA-42BB-BEA2

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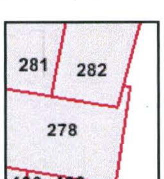


Volume 2, Sheet 199
Volume 3, Sheet 282
Volume 3, Sheet 281
Volume 3, Sheet 278

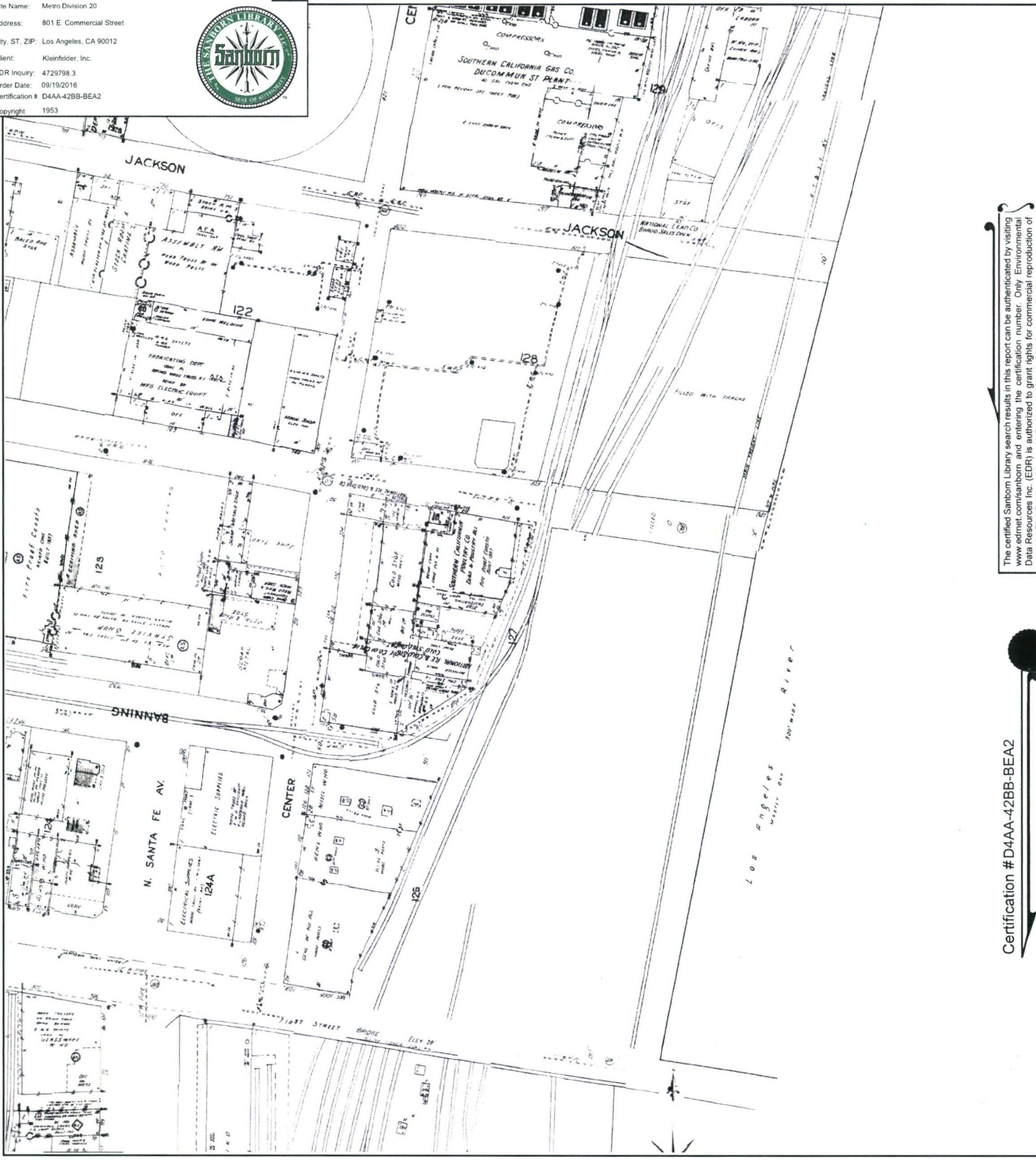
N

EDR

Certified Sanborn® Map

1953

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1953



Certification # D4AA-42BB-BEA2

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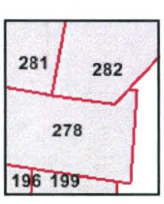

Volume 2, Sheet 199
Volume 3, Sheet 282
Volume 3, Sheet 281
Volume 3, Sheet 278
Volume 3, Sheet 282
Volume 3, Sheet 281
Volume 3, Sheet 278
Volume 2, Sheet 199

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EDR®

Certified Sanborn® Map

1950

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
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Copyright: 1950

Certification # D4AA-42BB-BEA2

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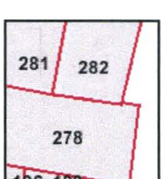
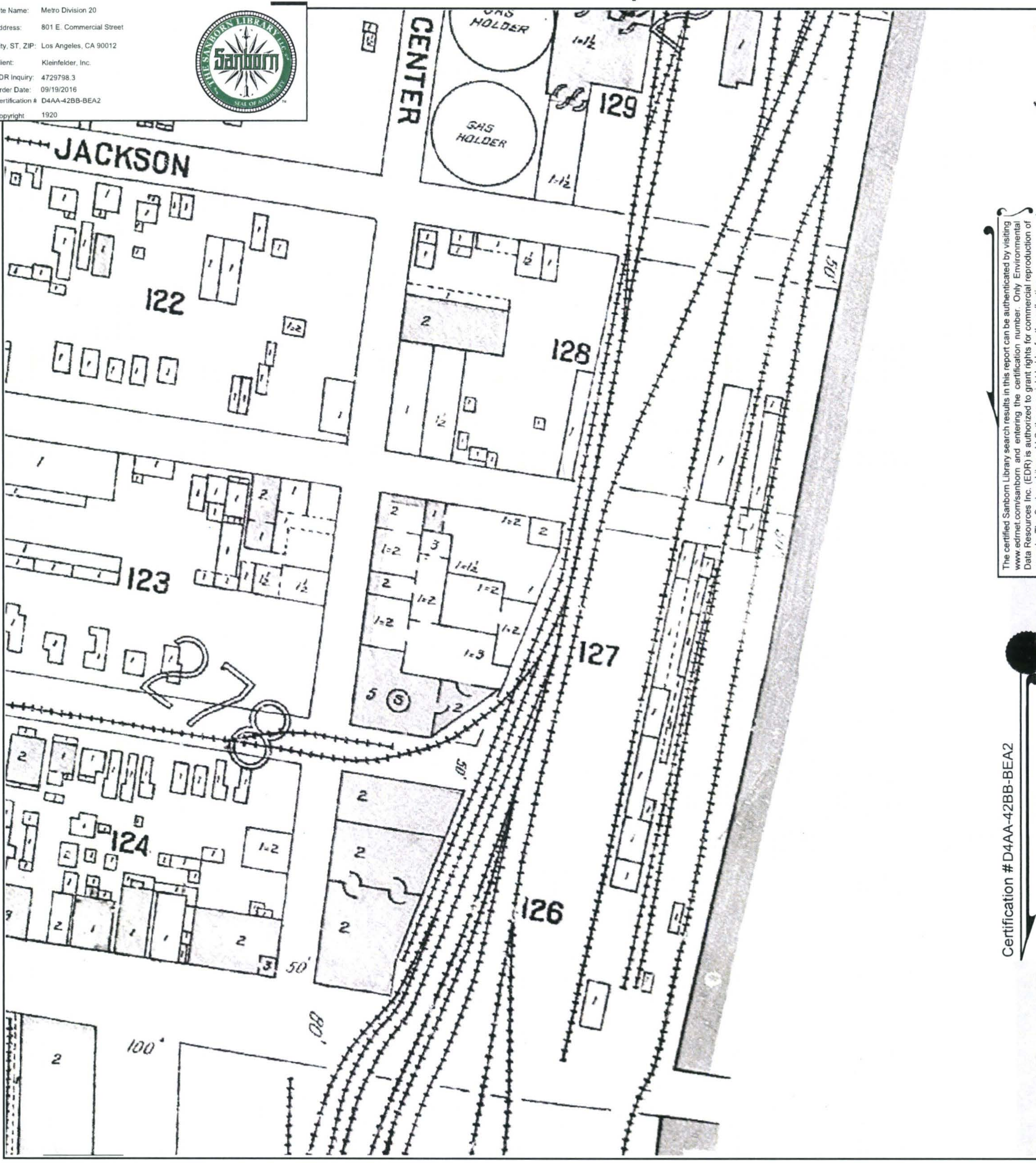


Volume 3, Sheet 282
Volume 3, Sheet 281
Volume 3, Sheet 278
Volume 2, Sheet 199
Volume 2, Sheet 199

Certified Sanborn® Map

1920

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1920



Certification # D4AA-42BB-BEA2

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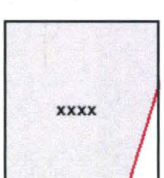


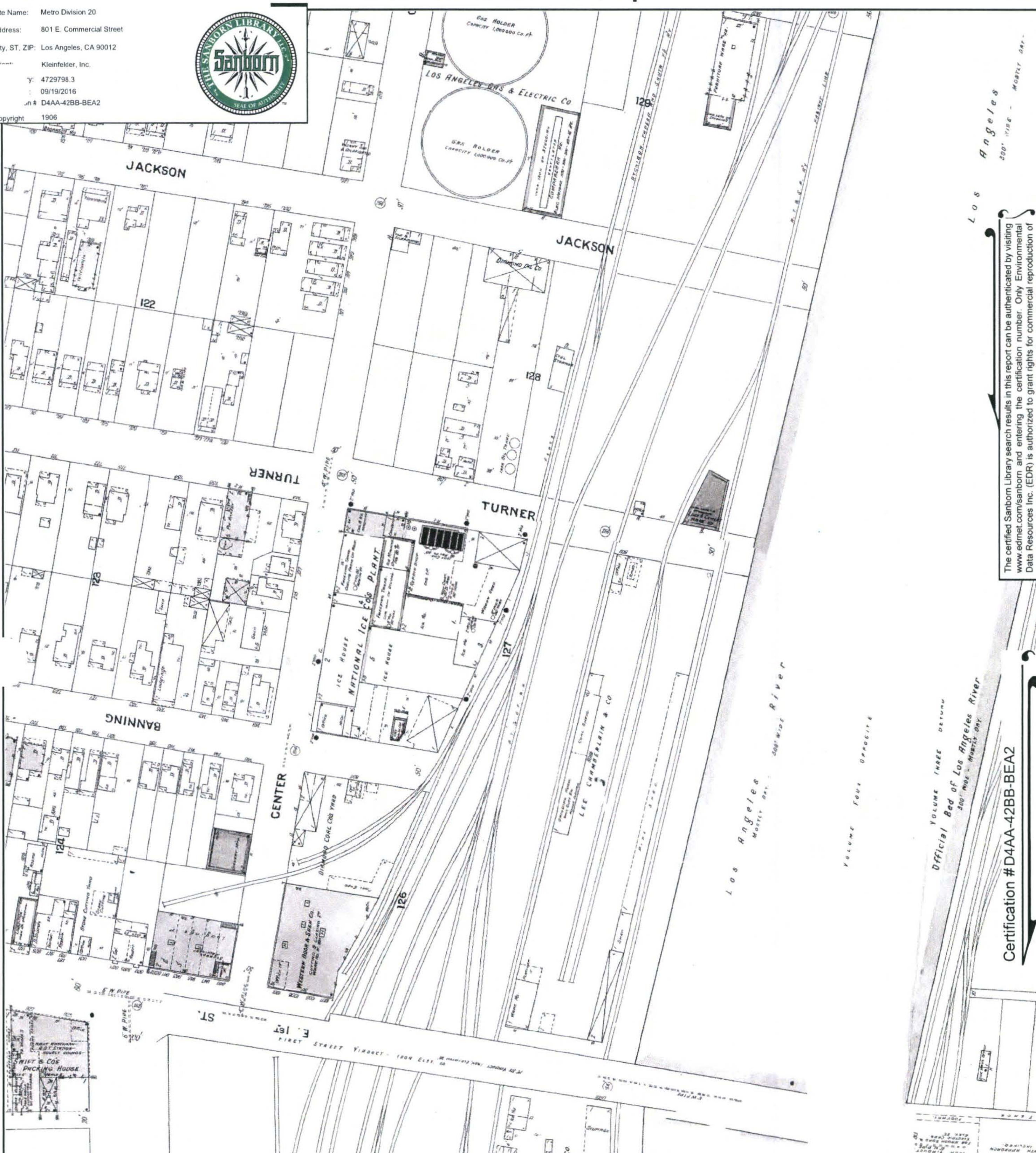
Volume Congested Business District, Sheet xxxx

N

Certified Sanborn® Map

1906

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
Inquiry: 4729798.3
Date: 09/19/2016
Certification #: D4AA-42BB-BEA2
Copyright: 1906



Certification # D4AA-42BB-BEA2

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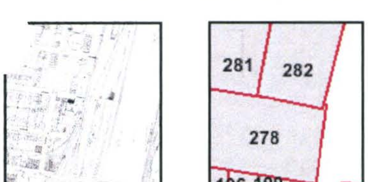


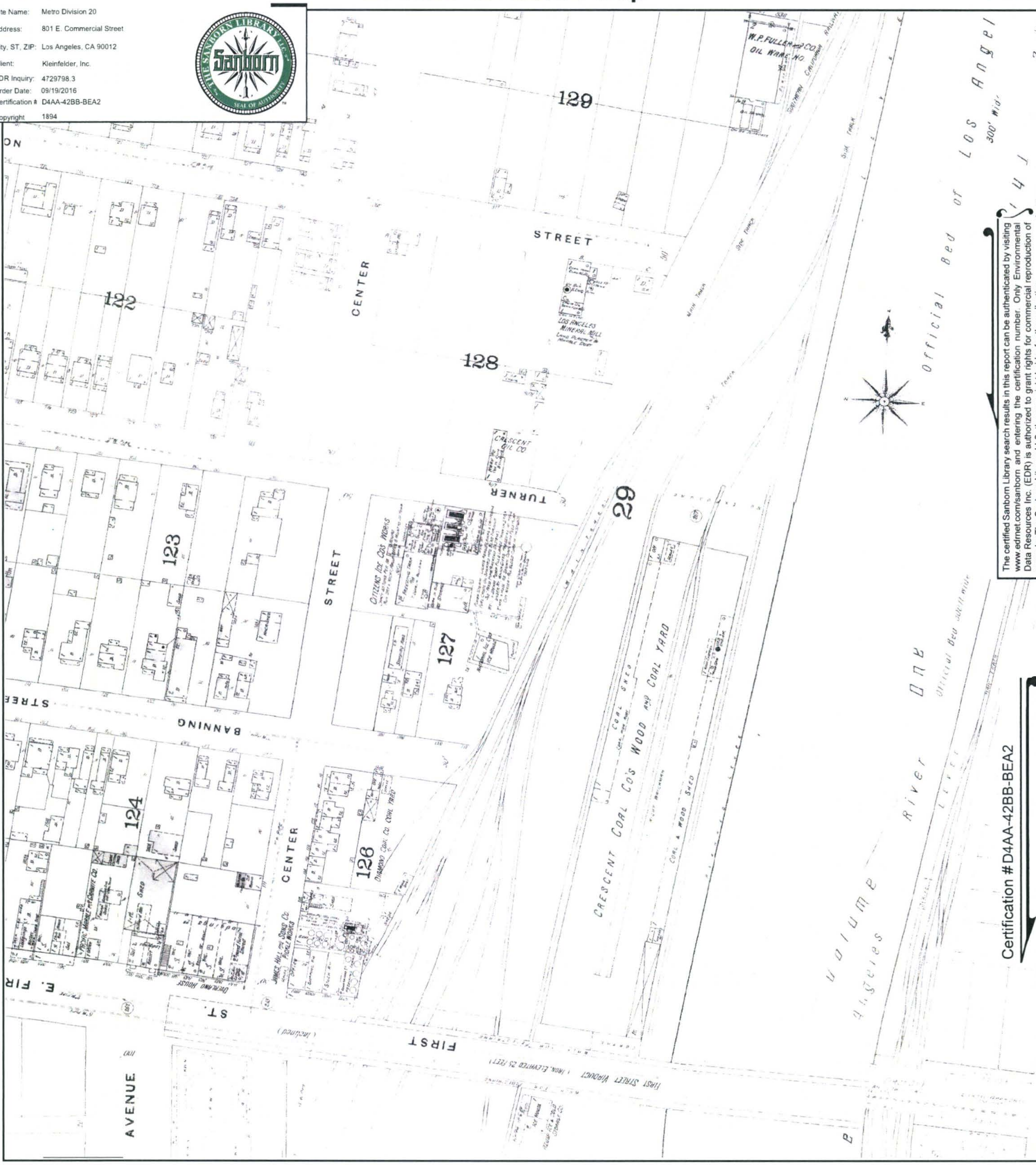
Volume 3, Sheet 282
Volume 3, Sheet 281
Volume 3, Sheet 278
Volume 2, Sheet 199

EDR

Certified Sanborn® Map

1894

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1894



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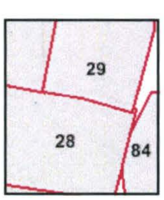

Volume 1, Sheet 29
Volume 1, Sheet 29
Volume 1, Sheet 28
Volume 2, Sheet 84

N

Certified Sanborn® Map

1888

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
Inquiry: 4729798.3
Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1888

Certification # D4AA-42BB-BEA2

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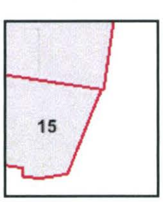

Volume 1, Sheet 15
Volume 1, Sheet 15

0 Feet 150 300 600

N

Metro Division 20
801 E. Commercial Street
Los Angeles, CA 90012

Inquiry Number: 4729798.3
September 19, 2016

Certified Sanborn® Map Report

EDR®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

09/19/16

Site Name:	Client Name:
Metro Division 20	Kleinfelder, Inc.
801 E. Commercial Street	2 Ada, Suite 250
Los Angeles, CA 90012	Irvine, CA 92618-0000
EDR Inquiry # 4729798.3	Contact: Margaret Carroll

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Kleinfelder, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # D4AA-42BB-BEA2

PO # NA

Project 20168300.025A/07-0000

Maps Provided:

1970	1954
1968	1953
1967	1950
1965	1920
1964	1906
1960	1894
1959	1888
1957	

Sanborn® Library search results

Certification #: D4AA-42BB-BEA2

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1970 Source Sheets

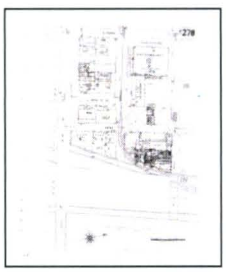

Volume 14, Sheet 1417


Volume 2, Sheet 196


Volume 2, Sheet 199


Volume 3, Sheet 278

1968 Source Sheets


Volume 3, Sheet 278

1967 Source Sheets


Volume 2, Sheet 199


Volume 2, Sheet 196

1965 Source Sheets


Volume 3, Sheet 278

Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

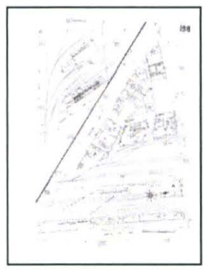
1964 Source Sheets

Volume 3, Sheet 278

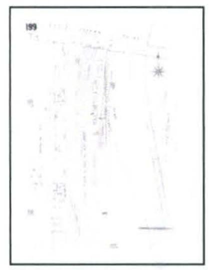
1960 Source Sheets

Volume 3, Sheet 278

Volume 2, Sheet 196



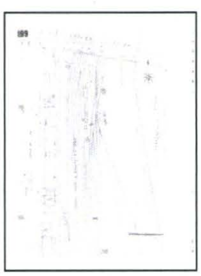
Volume 2, Sheet 198



Volume 2, Sheet 199

1959 Source Sheets

Volume 2, Sheet 198



Volume 2, Sheet 199

Volume 2, Sheet 196

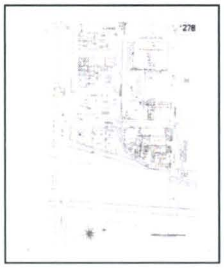
1957 Source Sheets

Volume 3, Sheet 278

Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1954 Source Sheets


Volume 3, Sheet 278


Volume 2, Sheet 196

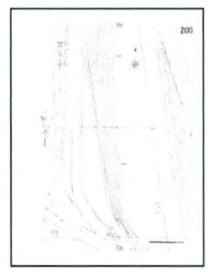

Volume 2, Sheet 199

1953 Source Sheets


Volume 3, Sheet 278


Volume 2, Sheet 198


Volume 2, Sheet 199


Volume 2, Sheet 200

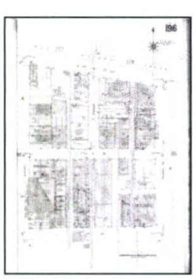

Volume 2, Sheet 196


Volume 3, Sheet 278

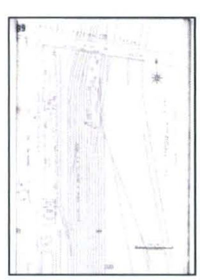

Volume 2, Sheet 196


Volume 2, Sheet 199

1950 Source Sheets


Volume 2, Sheet 196


Volume 2, Sheet 198

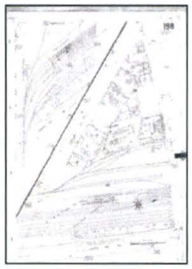

Volume 2, Sheet 199

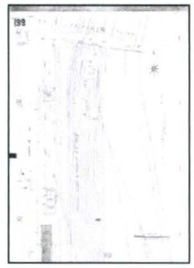
Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1950 Source Sheets

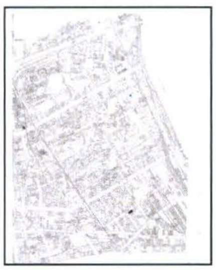

Volume 2, Sheet 196


Volume 2, Sheet 198

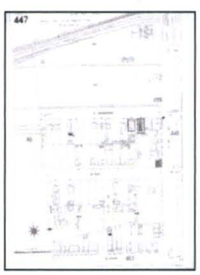

Volume 2, Sheet 199


Volume 3, Sheet 278

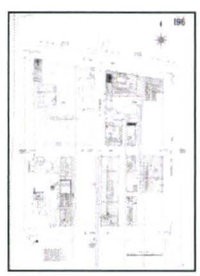
1920 Source Sheets

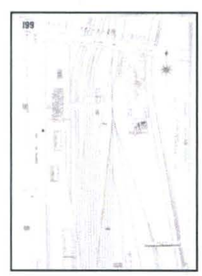

Volume Congested Business District, Sheet xxxx

1906 Source Sheets

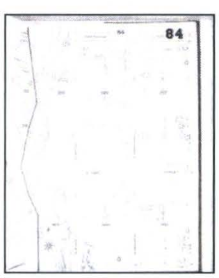

Volume 4, Sheet 447


Volume 3, Sheet 278

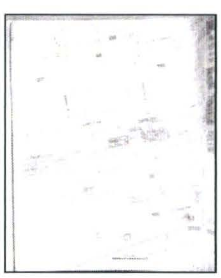

Volume 2, Sheet 196


Volume 2, Sheet 199

1894 Source Sheets



Volume 2, Sheet 84


Volume 1, Sheet 28

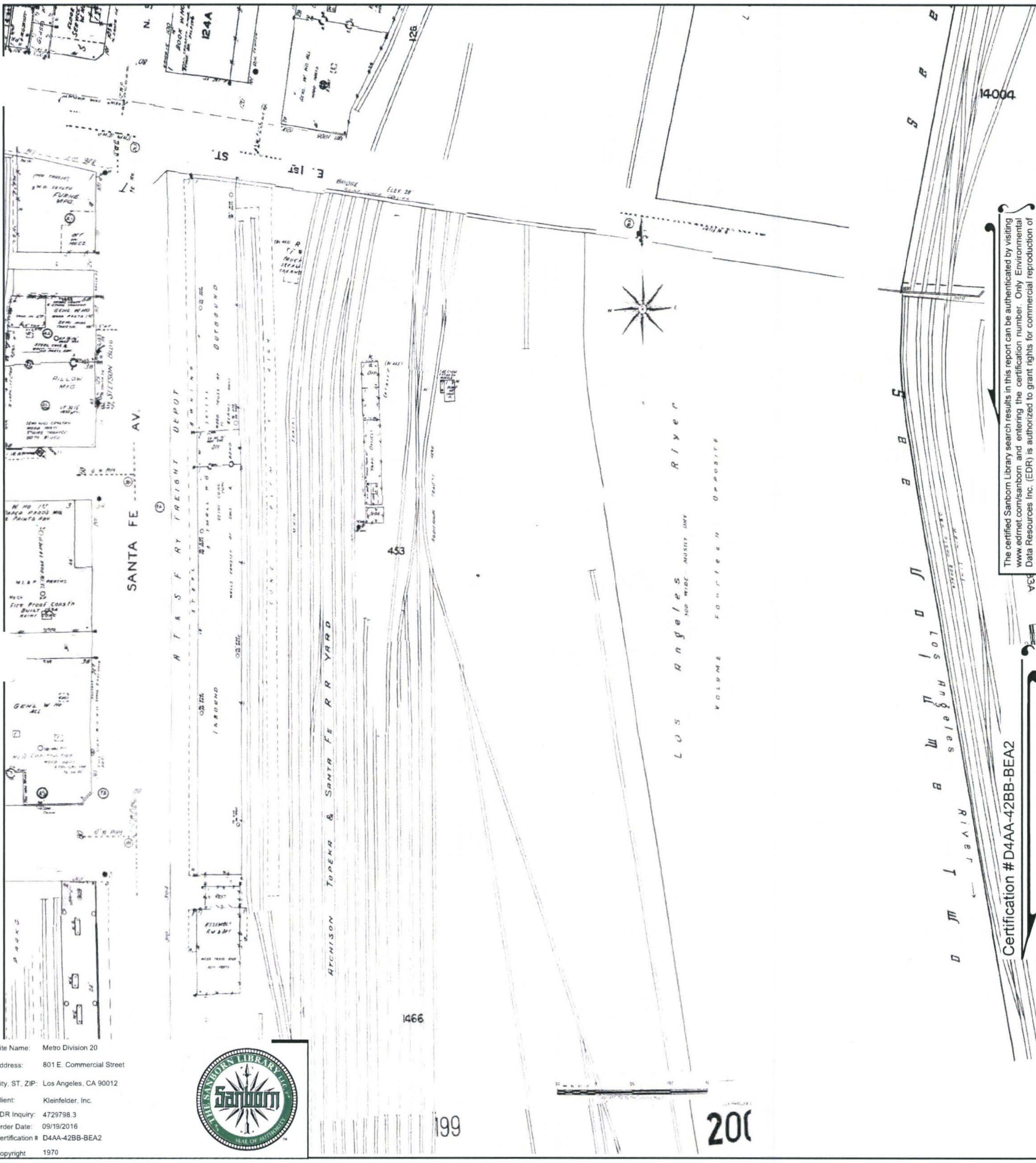
Volume 1, Sheet 28

Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1888 Source Sheets

Volume 1, Sheet 15



Site Name:	Metro Division 20
Address:	801 E. Commercial Street
City, ST, ZIP:	Los Angeles, CA 90012
Client:	Kleinfelder, Inc.
EDR Inquiry:	4729798.3
Order Date:	09/19/2016
Certification #:	D4AA-42BB-BEA2
Copyright	1970

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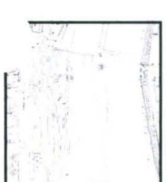

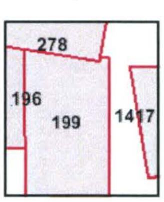

Volume 3, Sheet 278
Volume 2, Sheet 199
Volume 2, Sheet 196
Volume 14, Sheet 1417

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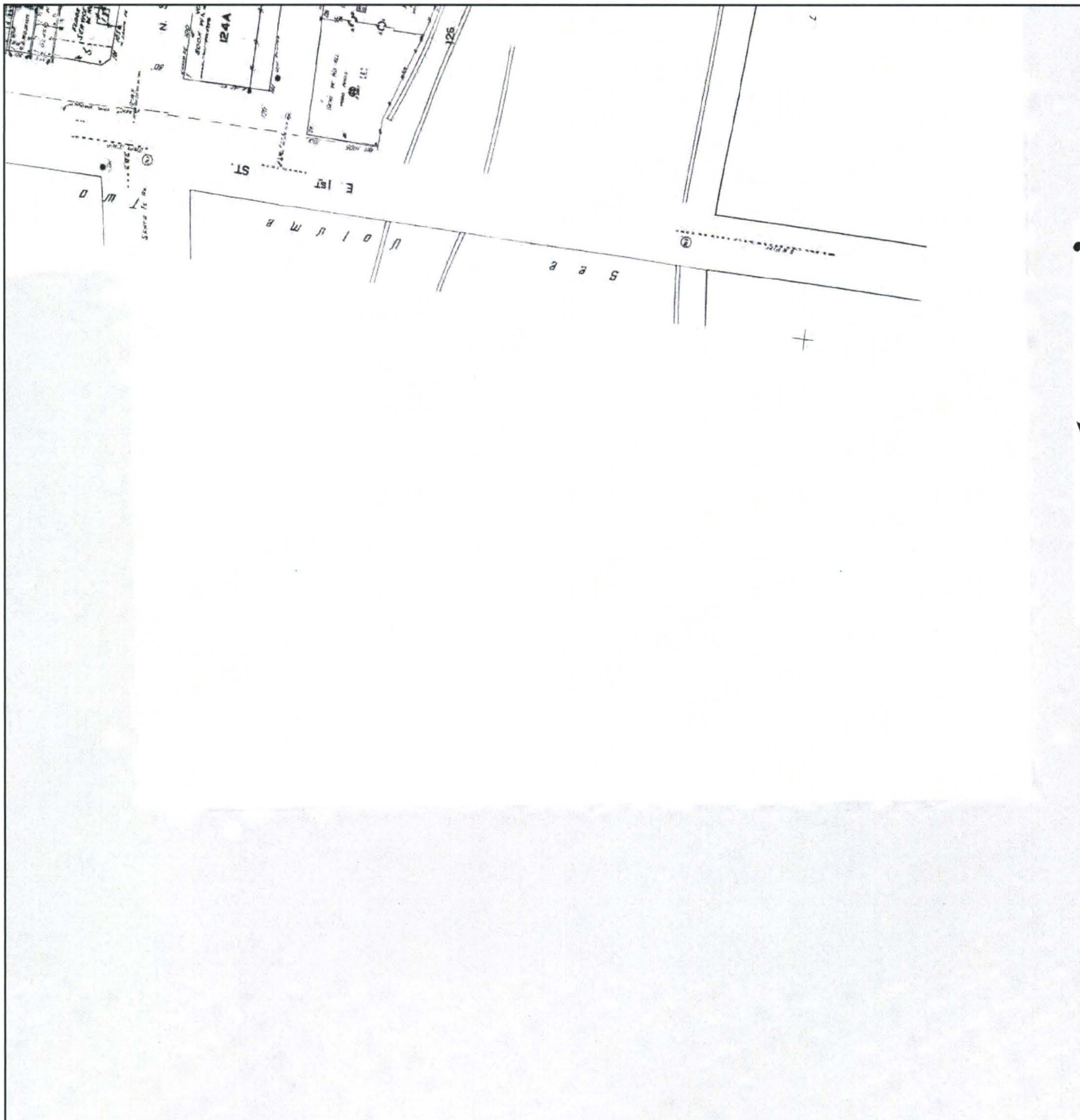

Certification # D4AA-42BB-BEA2

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
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Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
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Volume 3, Sheet 278

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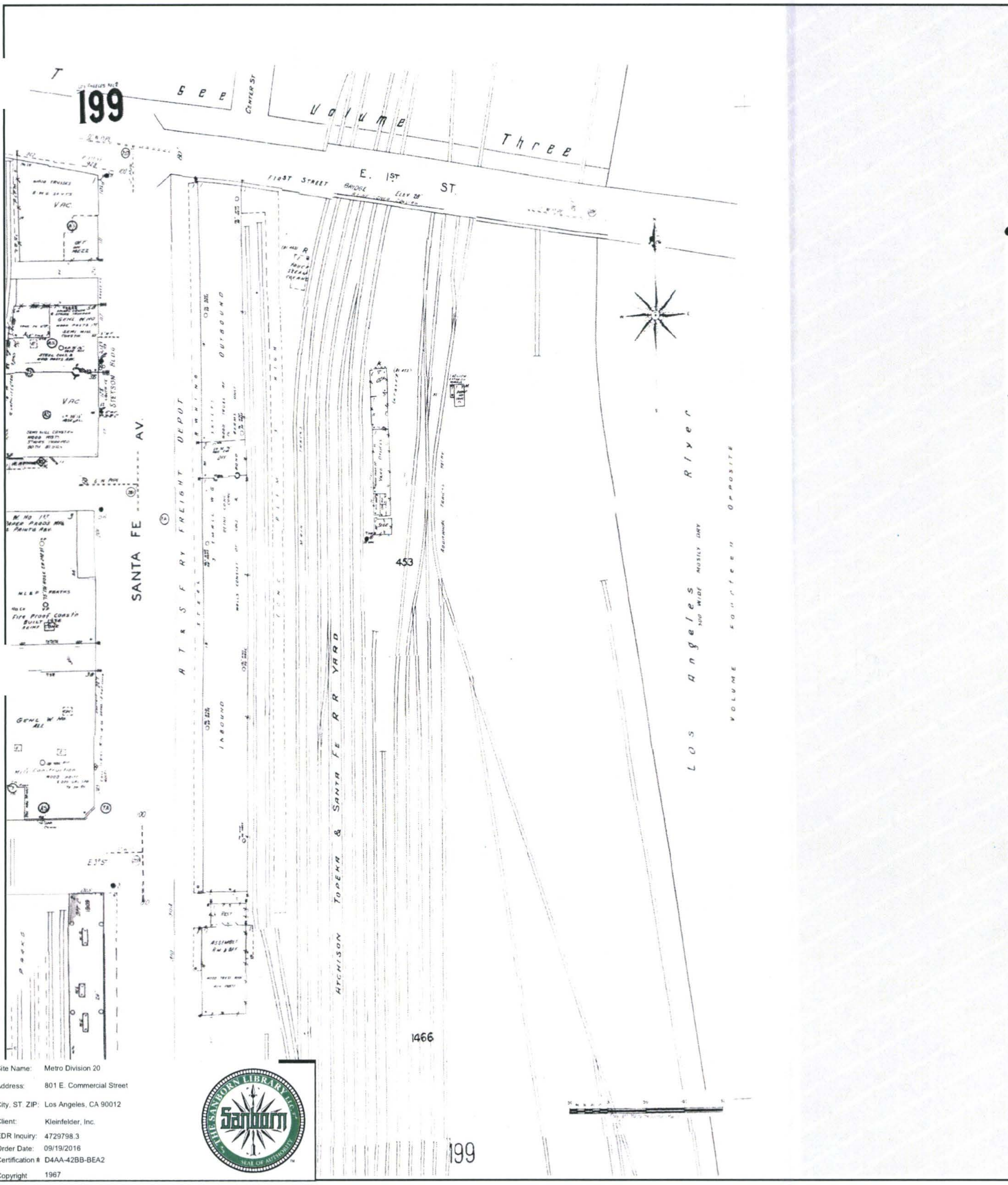

Certification # D4AA-42BB-BEA2

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
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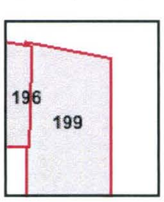

Volume 2, Sheet 196
Volume 2, Sheet 199

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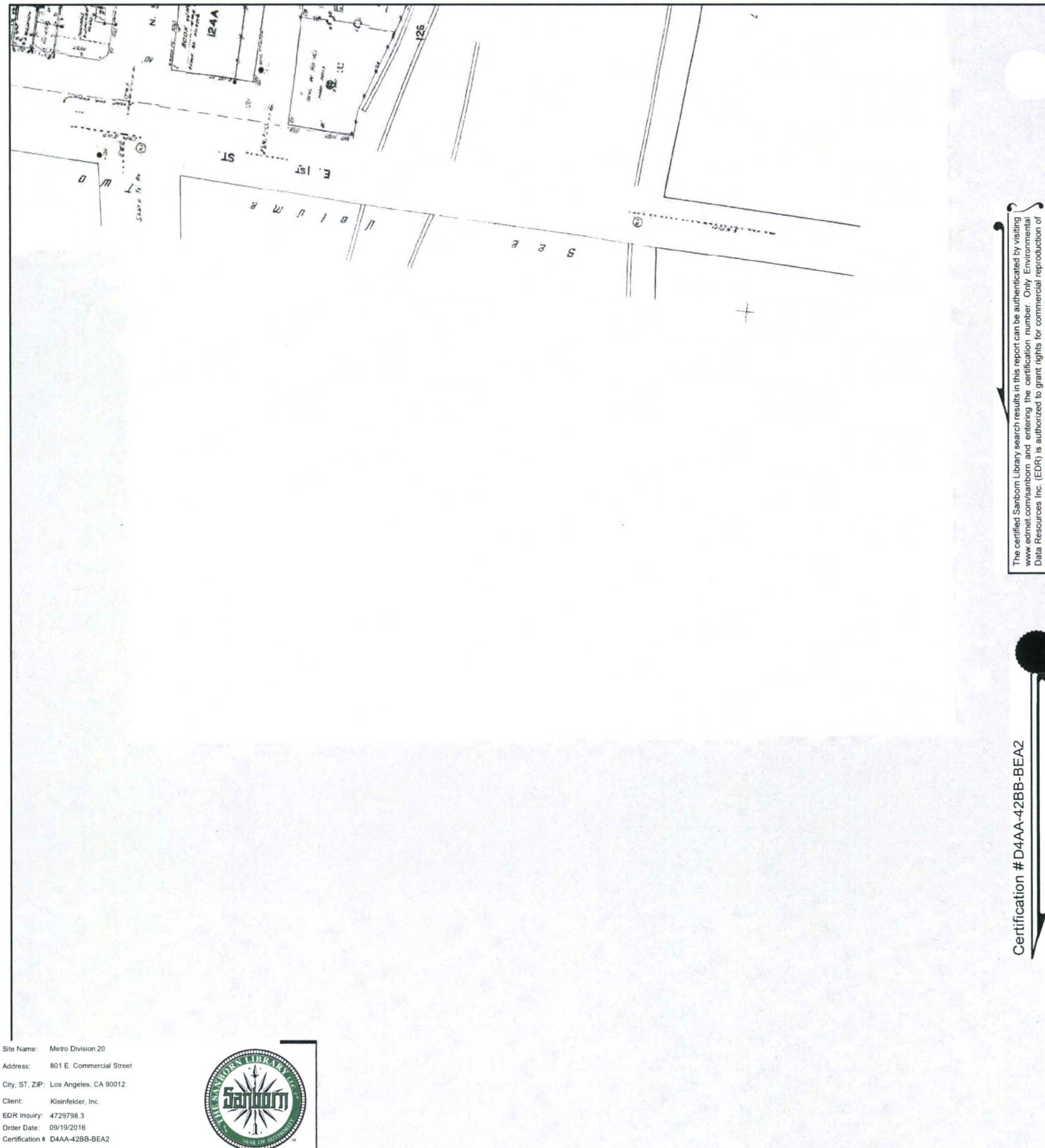

Site Name:	Metro Division 20
Address:	801 E. Commercial Street
City, ST, ZIP:	Los Angeles, CA 90012
Client:	Kleinfelder, Inc.
EDR Inquiry:	4729798.3
Order Date:	09/19/2016
Certification #	D4AA-42BB-BEA2
Copyright	1965

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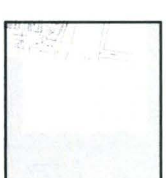
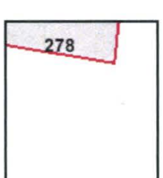
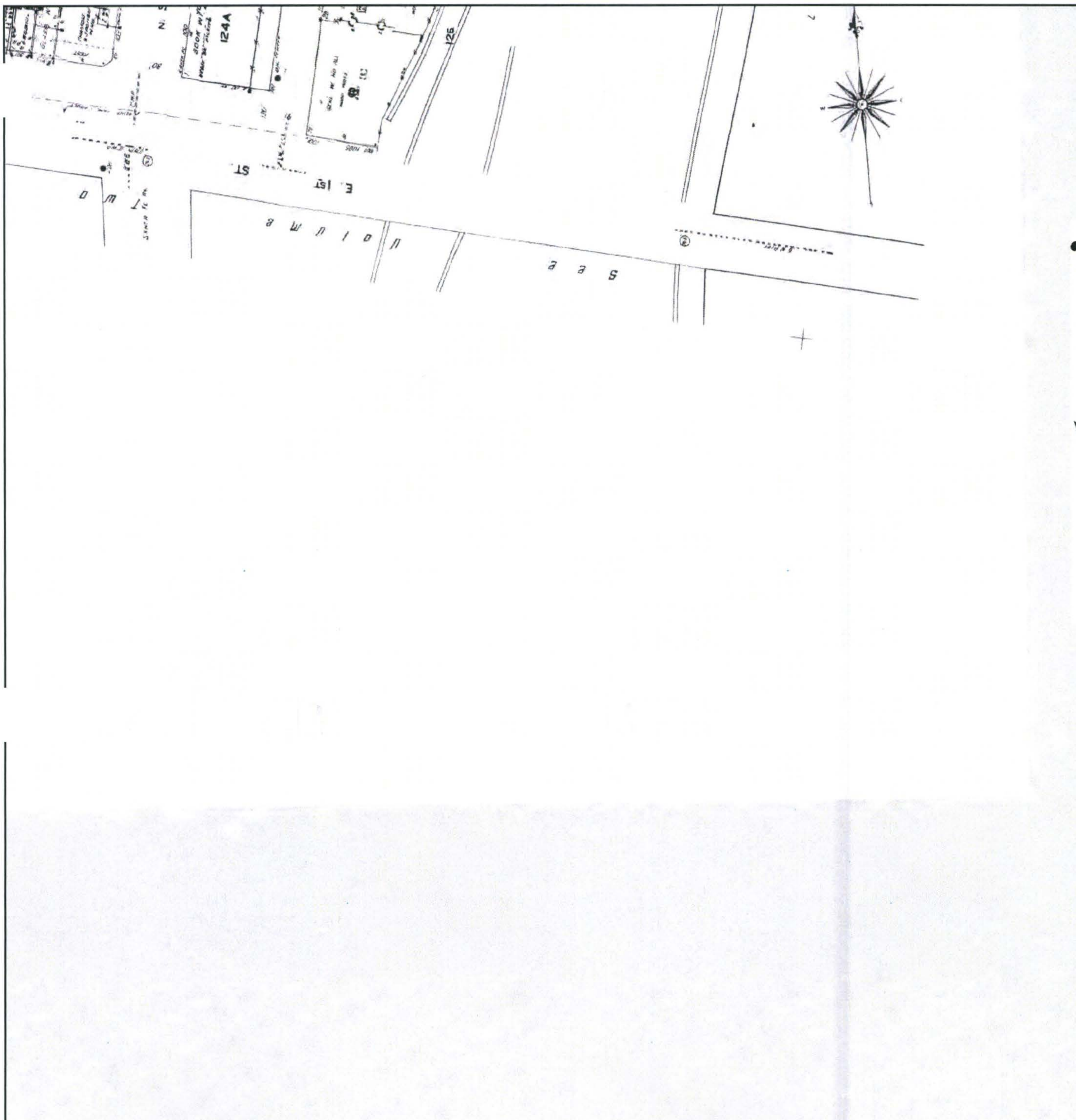




Volume 3, Sheet 278

N



Certification # D4AA-42BB-BEA2

Site Name:	Metro Division 20
Address:	801 E. Commercial Street
City, ST, ZIP:	Los Angeles, CA 90012
Client:	Kleinfelder, Inc.
EDR Inquiry:	4729798.3
Order Date:	09/19/2016
Certification #	D4AA-42BB-BEA2
Copyright	1964

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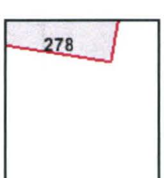
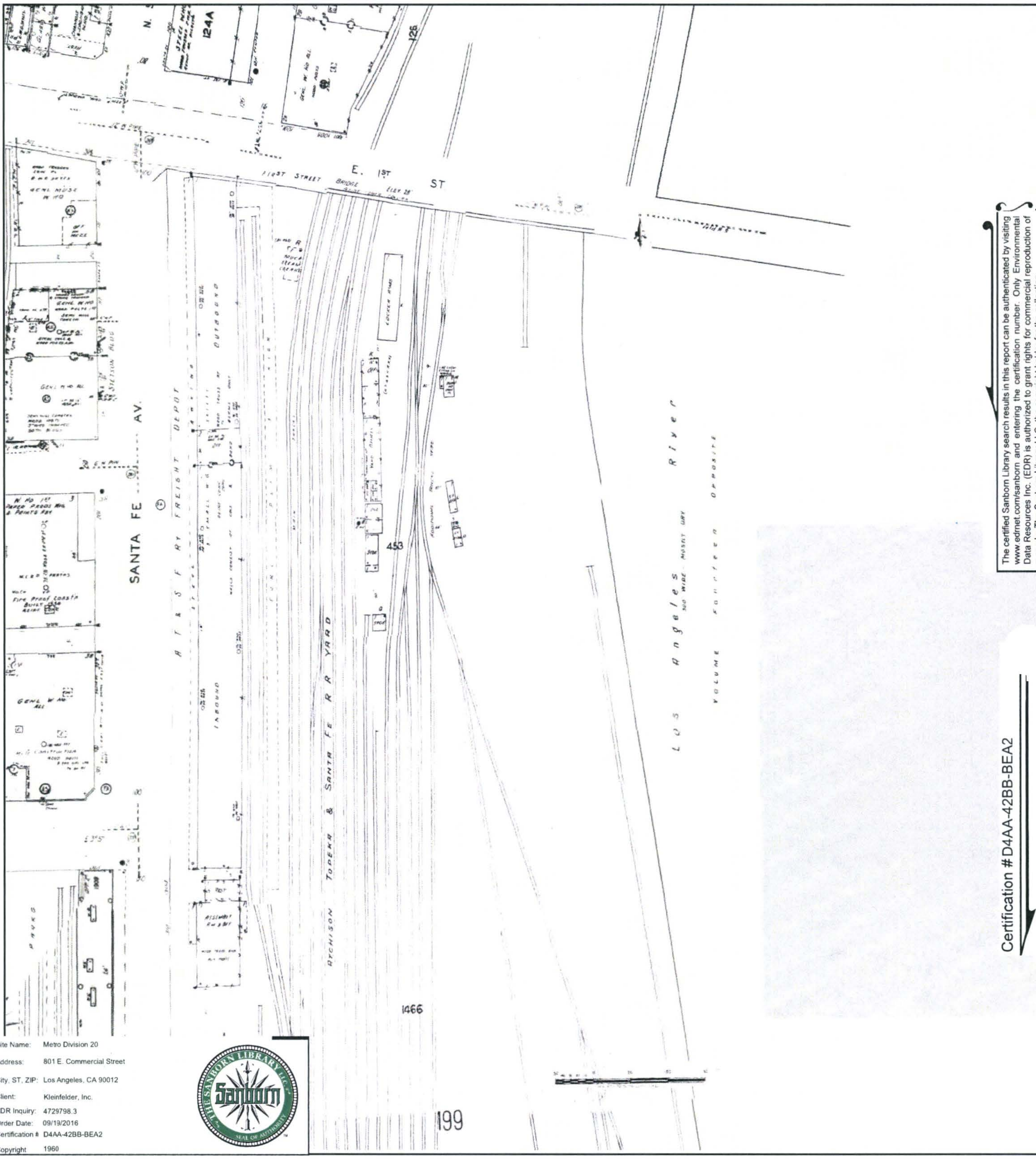


Volume 3, Sheet 278

N

Certified Sanborn® Map

1960



Certification # D4AA-42BB-BEA2

Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1960

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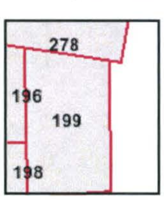
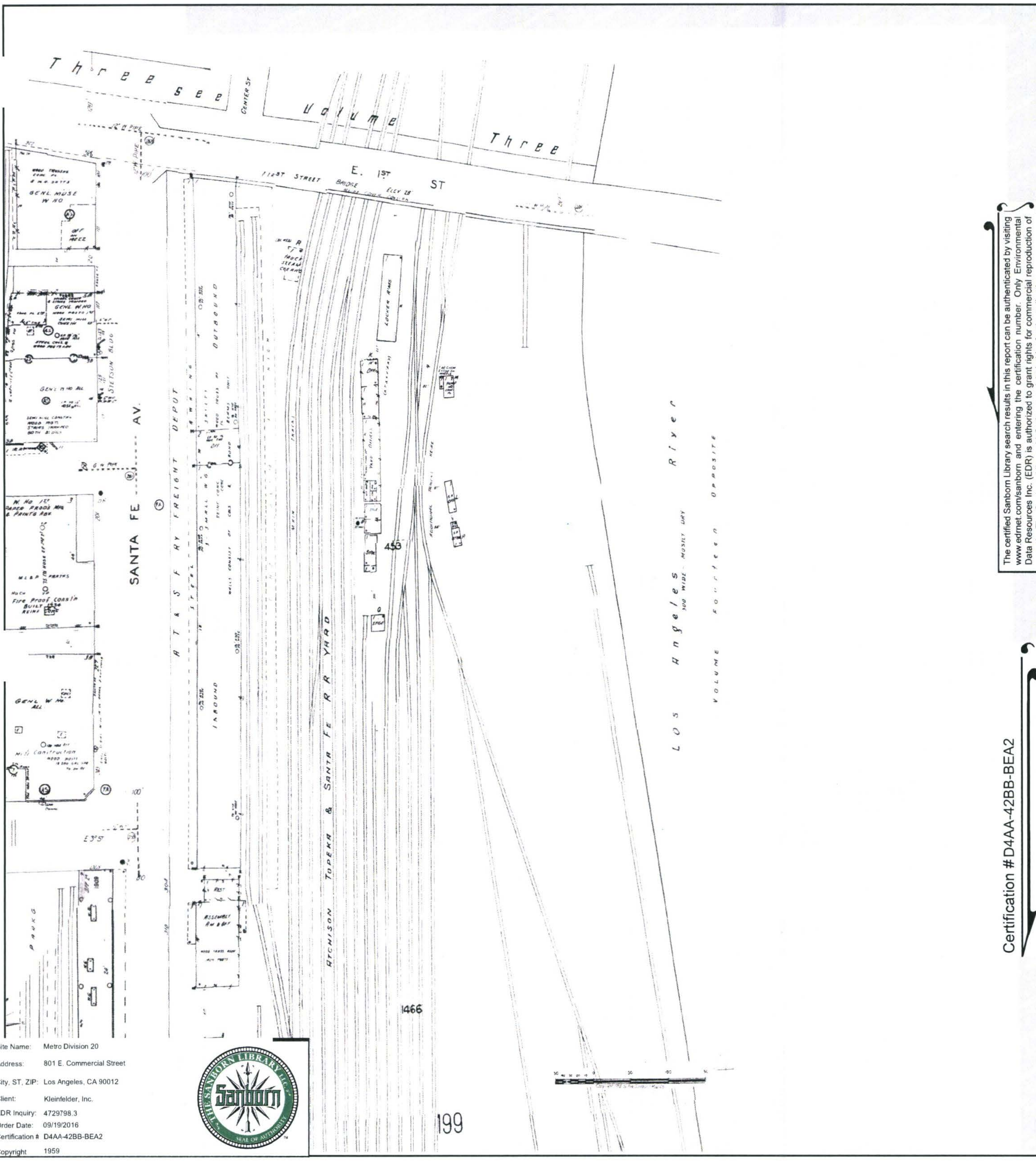


Volume 2, Sheet 199
Volume 2, Sheet 198
Volume 2, Sheet 196
Volume 3, Sheet 278

N

Certified Sanborn® Map

1959



Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1959

Certification # D4AA-42BB-BEA2

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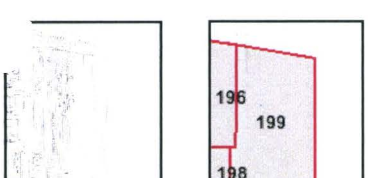

Volume 2, Sheet 196
Volume 2, Sheet 199
Volume 2, Sheet 198

0 Feet 150 300 600

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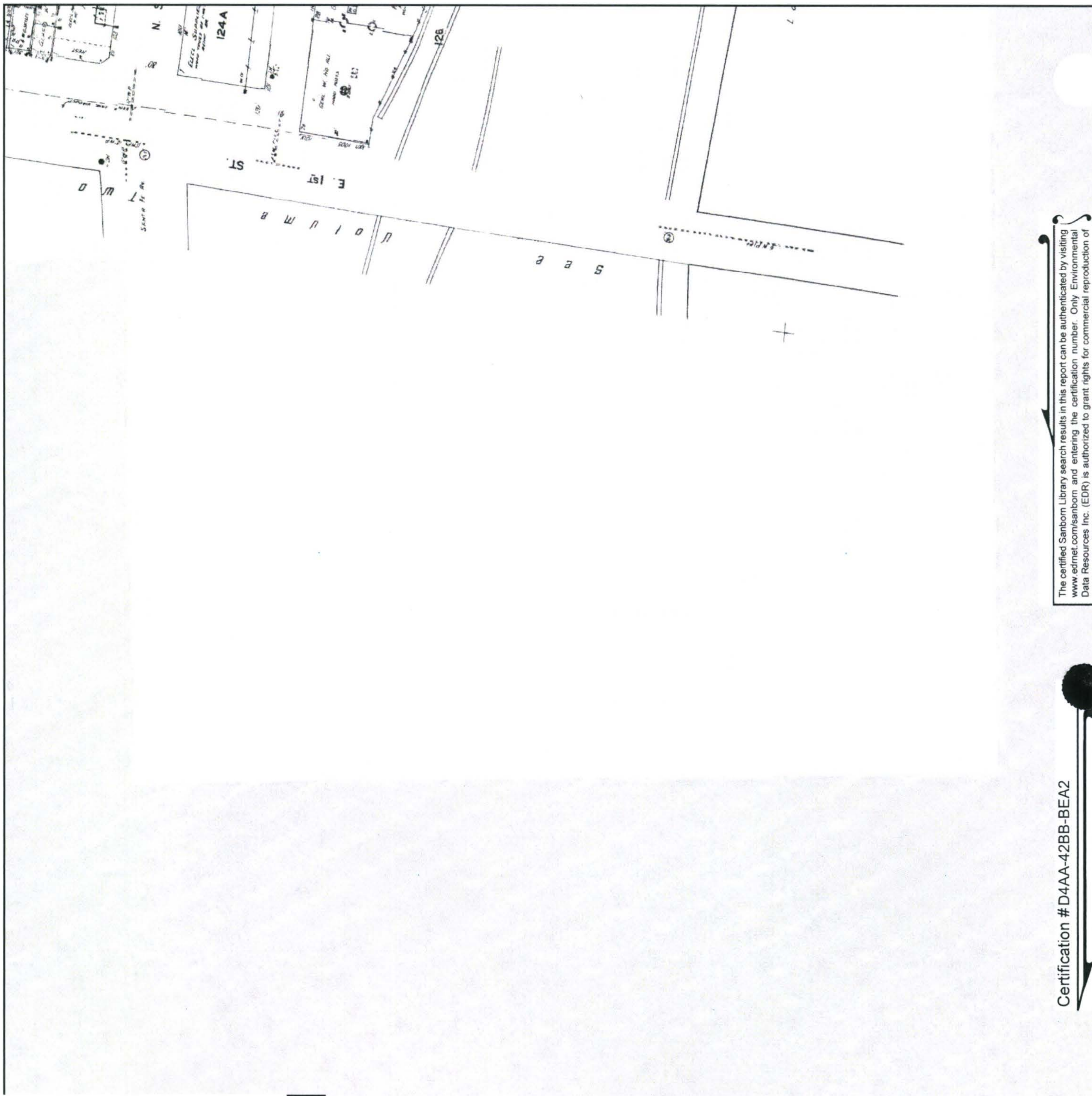

Certification # D4AA-42BB-BEA2

Site Name:	Metro Division 20
Address:	801 E. Commercial Street
City, ST, ZIP:	Los Angeles, CA 90012
Client:	Kleinfelder, Inc.
EDR Inquiry:	4729798.3
Order Date:	09/19/2016
Certification #	D4AA-42BB-BEA2
Copyright	1957

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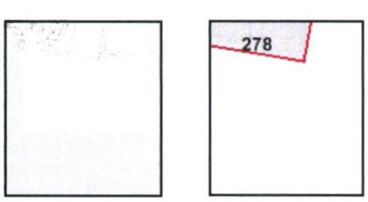
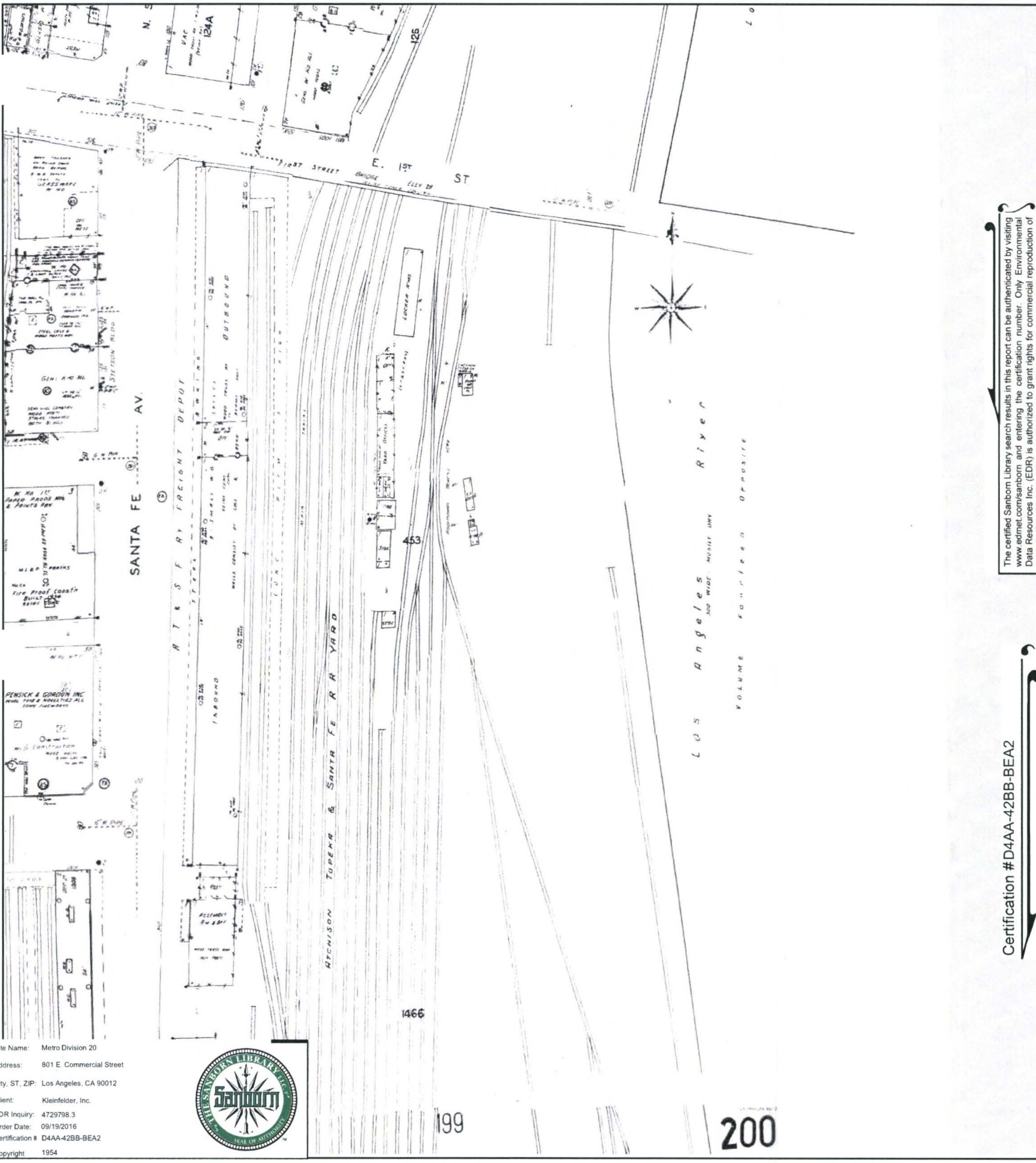


Volume 3, Sheet 278

N



Site Name: Metro Division 20
Address: 801 E. Commercial Street
City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1954

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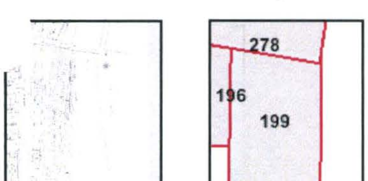
0 Feet 150 300 600



Volume 2, Sheet 199
Volume 2, Sheet 196
Volume 3, Sheet 278

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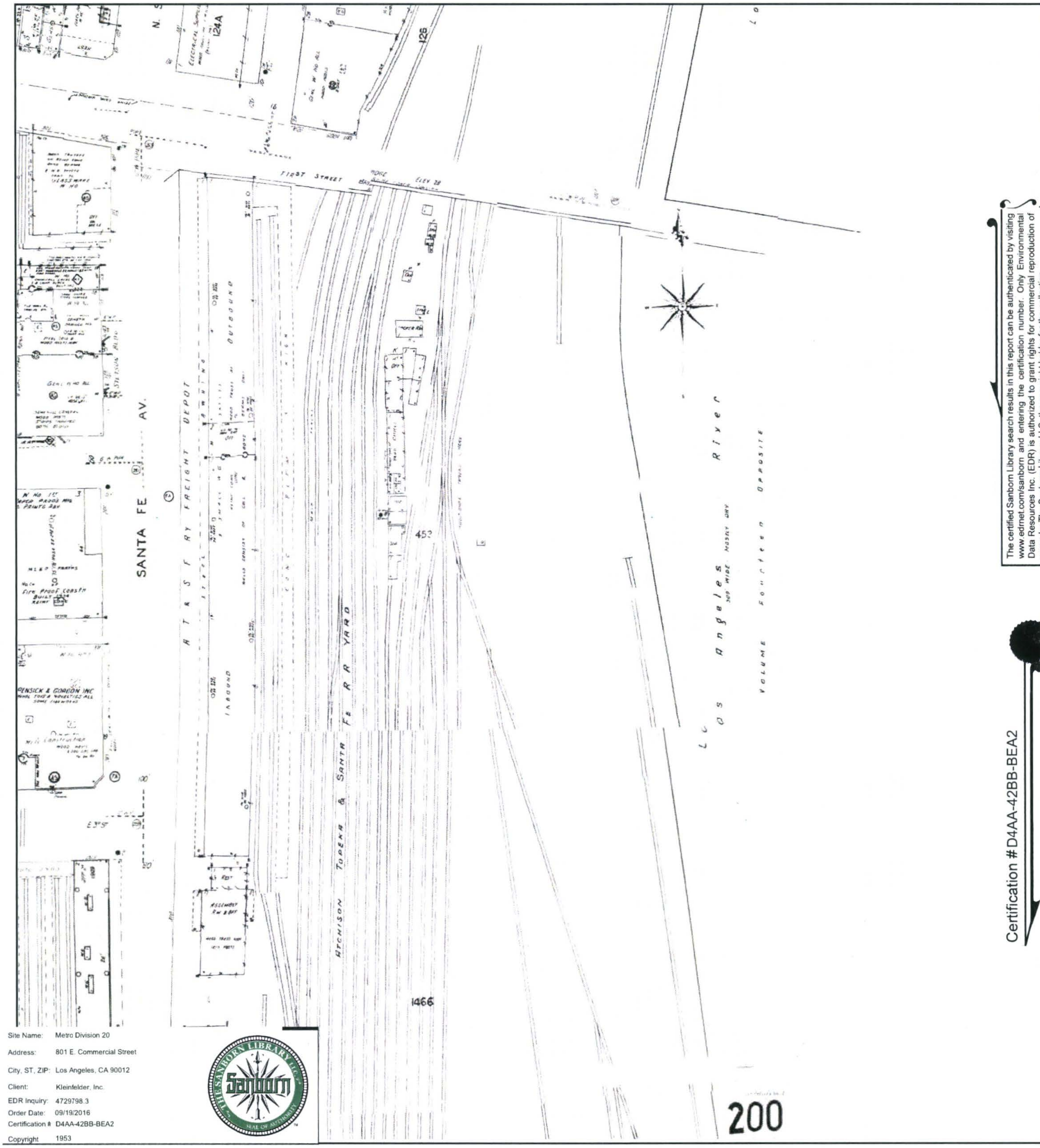

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City, ST, ZIP: Los Angeles, CA 90012
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1953

Certification # D4AA-42BB-BEA2

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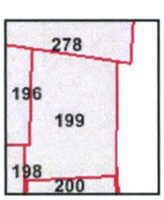

Volume 2, Sheet 199
Volume 2, Sheet 196
Volume 3, Sheet 278
Volume 2, Sheet 196
Volume 2, Sheet 200
Volume 2, Sheet 199
Volume 2, Sheet 198
Volume 3, Sheet 278

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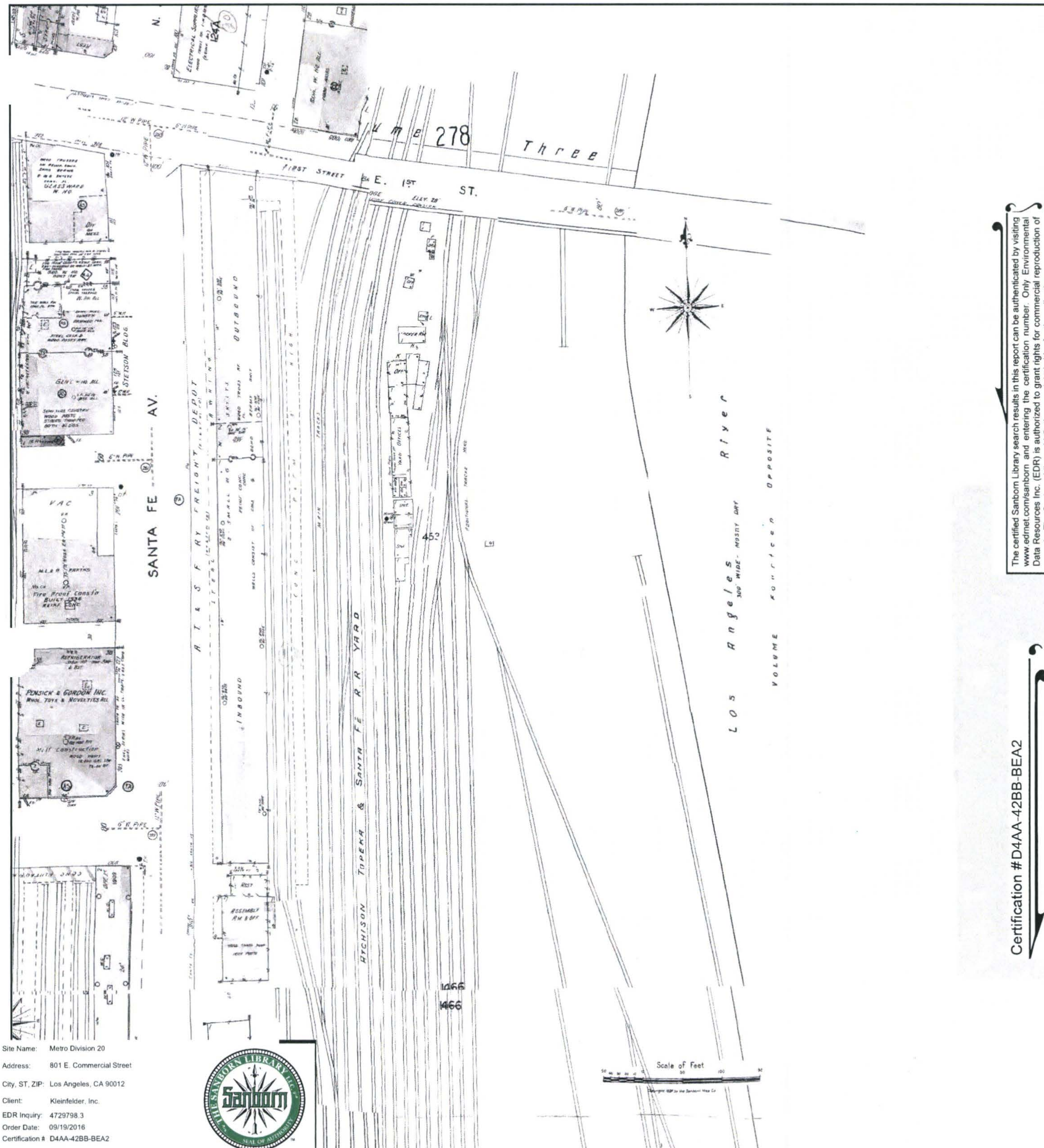

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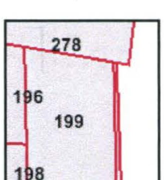
Client: Kleinfelder, Inc.
EDR Inquiry: 4729798.3
Order Date: 09/19/2016
Certification # D4AA-42BB-BEA2
Copyright 1950

Certification # D4AA-42BB-BEA2

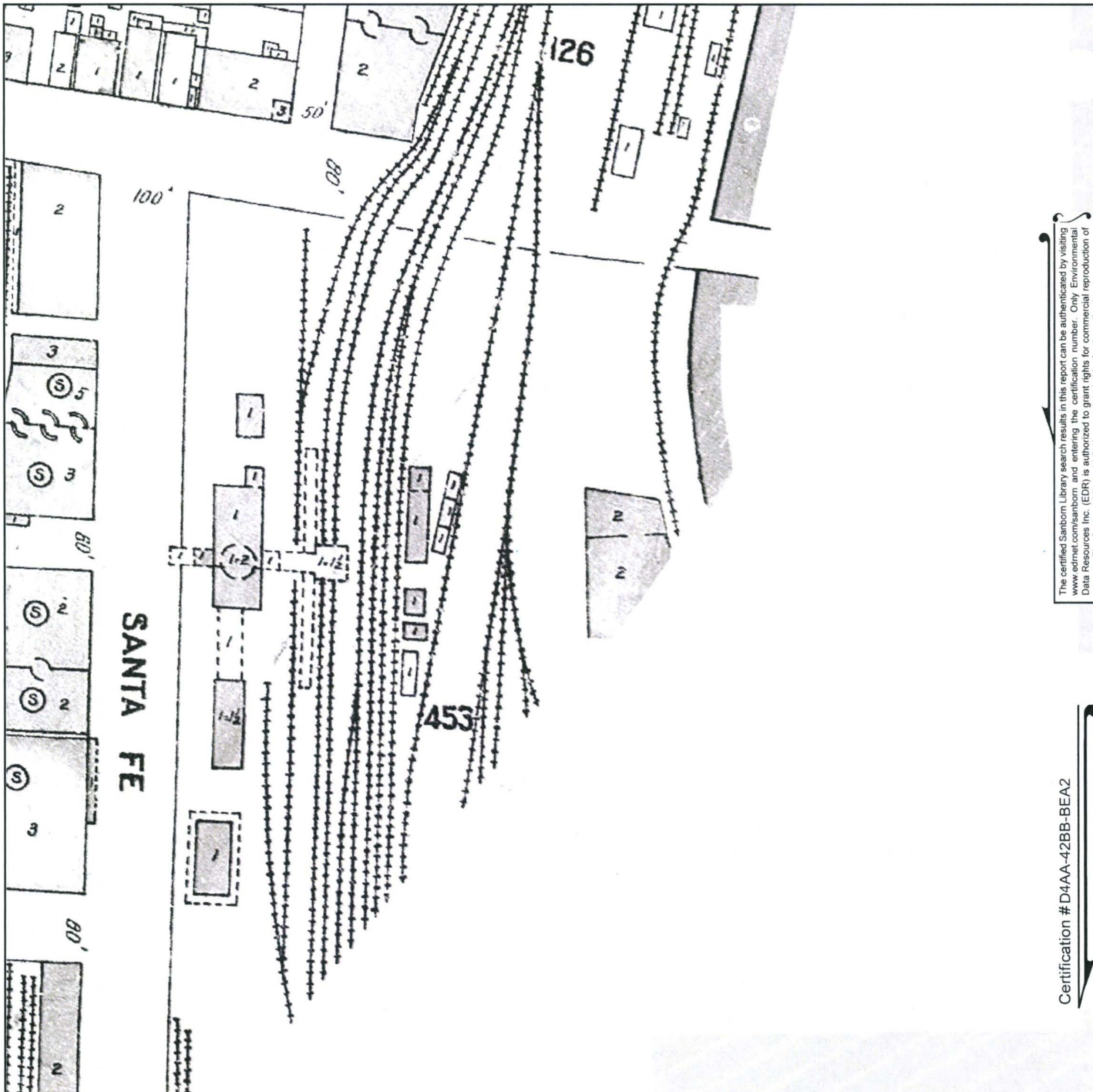
This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600



Volume 3, Sheet 278
Volume 2, Sheet 199
Volume 2, Sheet 198
Volume 2, Sheet 196
Volume 2, Sheet 199
Volume 2, Sheet 198
Volume 2, Sheet 196

N



Site Name:	Metro Division 20
Address:	801 E. Commercial Street
City, ST, ZIP:	Los Angeles, CA 90012
Client:	Kleinfelder, Inc.
EDR Inquiry:	4729798.3
Order Date:	09/19/2016
Certification #	D4AA-42BB-BEA2
Copyright	1920

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

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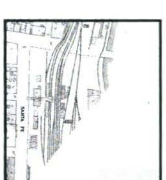

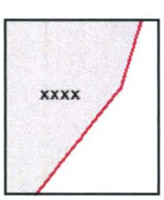

Volume Congested Business District, Sheet xxxx

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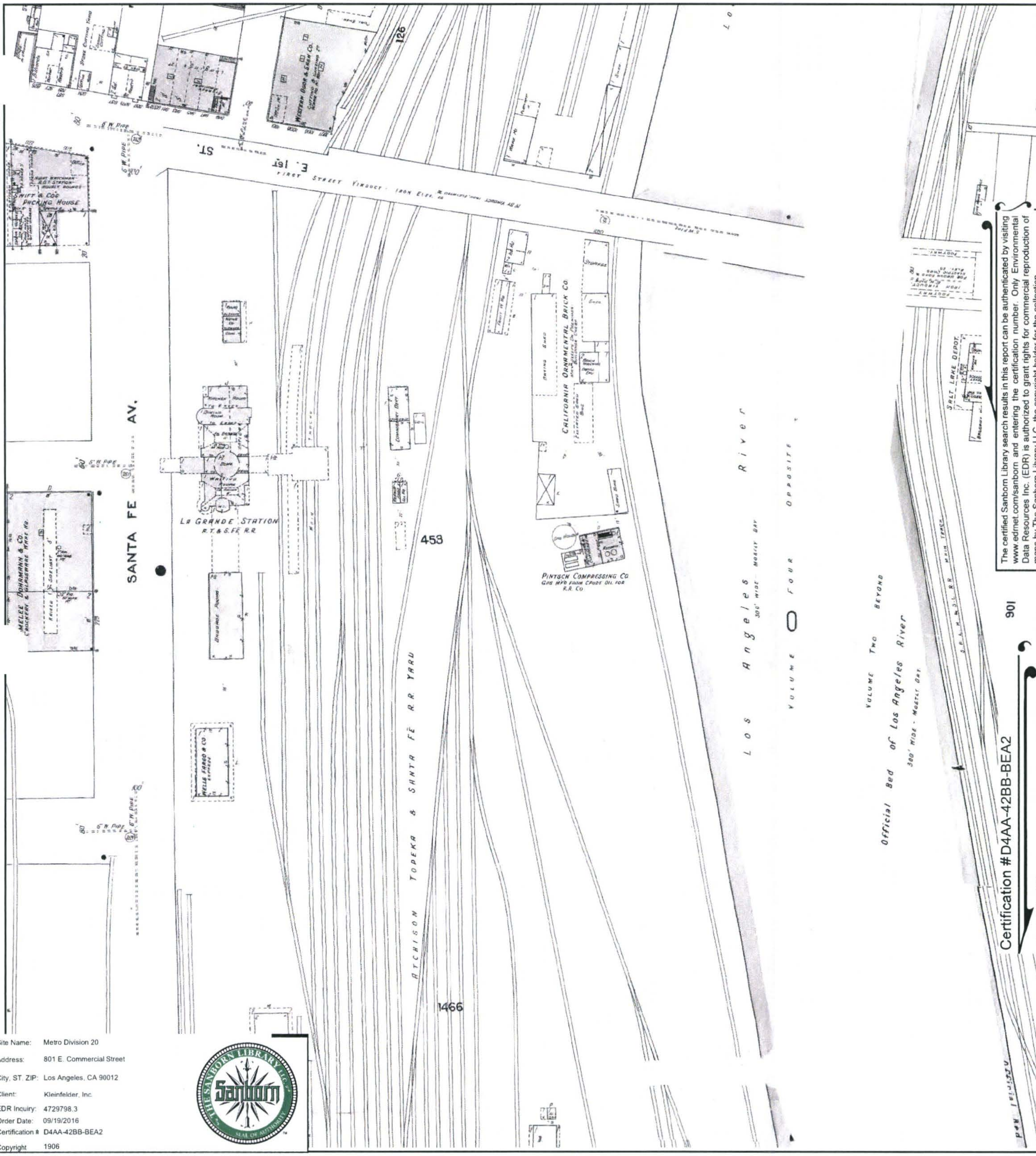
Certified Sanborn® Map

1906



Certification # D4AA-42BB-BEA2

Site Name:	Metro Division 20
Address:	801 E. Commercial Street
City, ST, ZIP:	Los Angeles, CA 90012
Client:	Kleinfelder, Inc.
EDR Inquiry:	4729798.3
Order Date:	09/19/2016
Certification #	D4AA-42BB-BEA2
Copyright	1906

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Outlined areas indicate map sheets within the collection.

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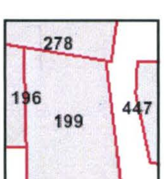
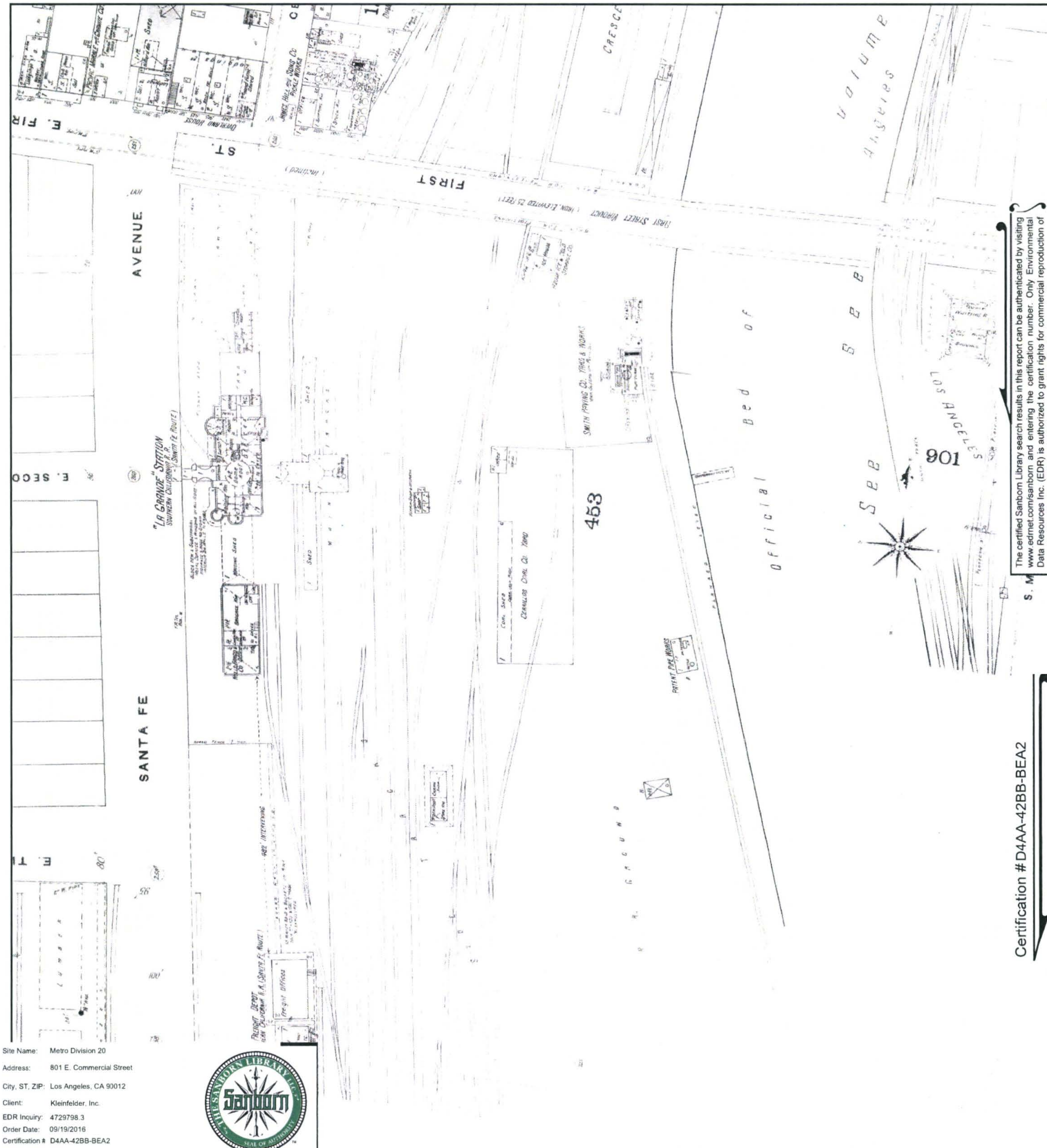


Volume 2, Sheet 199
Volume 2, Sheet 196
Volume 3, Sheet 278
Volume 4, Sheet 447

N

Certified Sanborn® Map

1894



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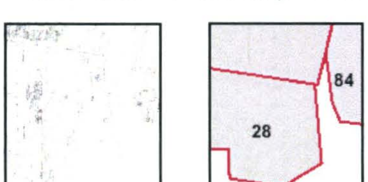
Certification # D4AA-42BB-BEA2

Site Name:	Metro Division 20
Address:	801 E. Commercial Street
City, ST, ZIP:	Los Angeles, CA 90012
Client:	Kleinfelder, Inc.
EDR Inquiry:	4729798.3
Order Date:	09/19/2016
Certification #	D4AA-42BB-BEA2
Copyright	1894

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



Volume 1, Sheet 28
Volume 1, Sheet 28
Volume 2, Sheet 84

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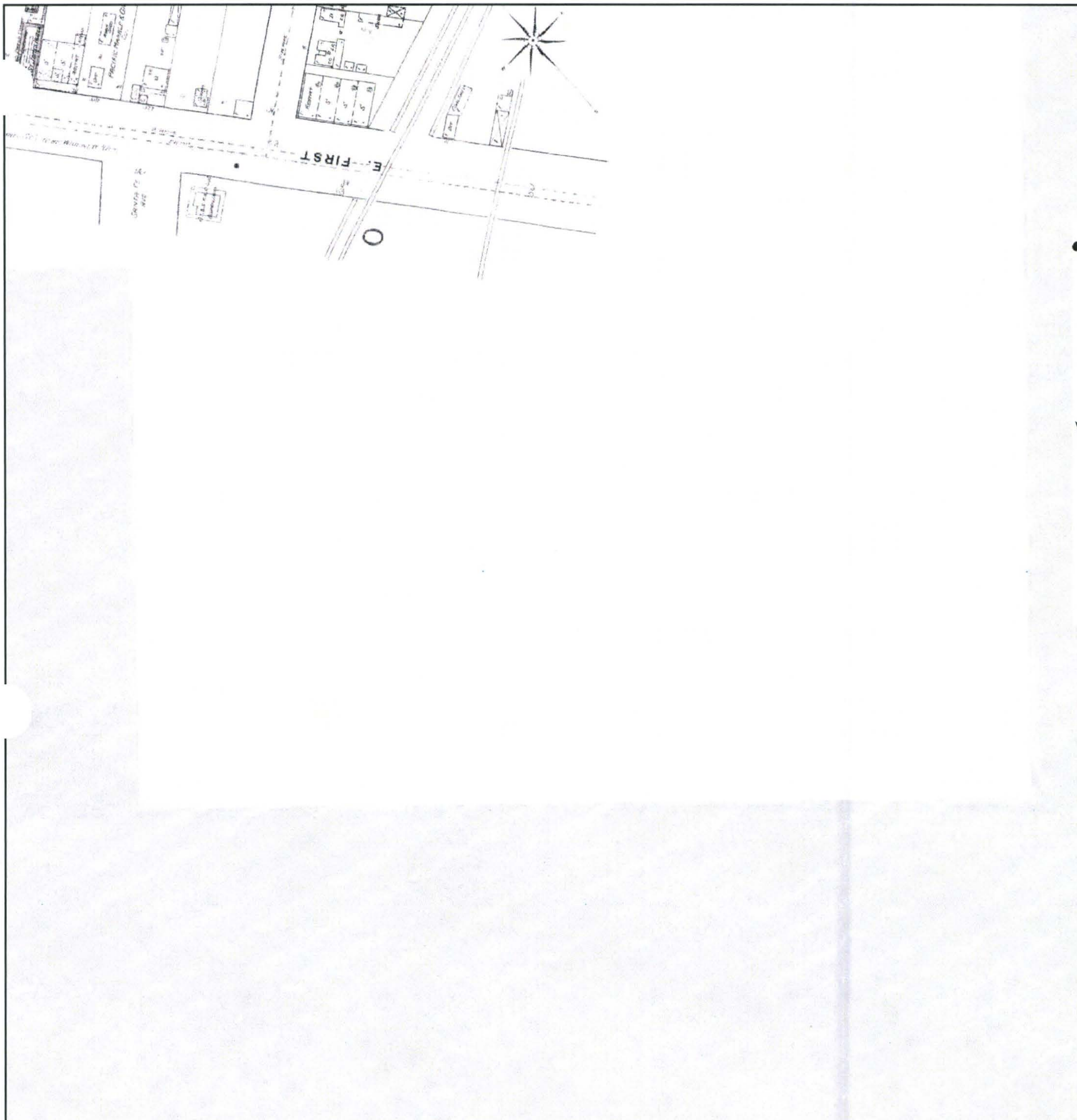
Certified Sanborn® Map

1888



Certification # D4AA-42BB-BEA2

Site Name:	Metro Division 20
Address:	801 E. Commercial Street
City, ST, ZIP:	Los Angeles, CA 90012
Client:	Kleinfelder, Inc.
EDR Inquiry:	4729798.3
Order Date:	09/19/2016
Certification #	D4AA-42BB-BEA2
Copyright	1888

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

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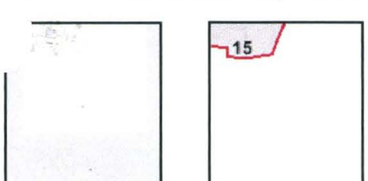


Volume 1, Sheet 15

N

Metro Division 20
801 E. Commercial Street
Los Angeles, CA 90012

Inquiry Number: 4729798.12
September 19, 2016

The EDR Aerial Photo Decade Package

EDR®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

09/19/16

Site Name:	Client Name:
Metro Division 20	Kleinfelder, Inc.
801 E. Commercial Street	2 Ada, Suite 250
Los Angeles, CA 90012	Irvine, CA 92618-0000
EDR Inquiry # 4729798.12	Contact: Margaret Carroll

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
2002	1"=500'	Flight Date: June 10, 2002	USDA
1994	1"=500'	Acquisition Date: May 31, 1994	USGS/DOQQ
1989	1"=500'	Flight Date: August 22, 1989	USDA
1983	1"=500'	Flight Date: November 19, 1983	EDR Proprietary Brewster Pacific
1977	1"=500'	Flight Date: April 25, 1977	EDR Proprietary Brewster Pacific
1972	1"=500'	Flight Date: November 21, 1972	EDR Proprietary Brewster Pacific
1970	1"=500'	Flight Date: February 17, 1970	EDR Proprietary Brewster Pacific
1964	1"=500'	Flight Date: July 28, 1964	USGS
1952	1"=500'	Flight Date: August 01, 1952	USGS
1948	1"=500'	Flight Date: July 10, 1948	USGS
1938	1"=500'	Flight Date: May 06, 1938	USDA
1928	1"=500'	Flight Date: January 01, 1928	USGS
1923	1"=500'	Flight Date: January 01, 1923	FAIR

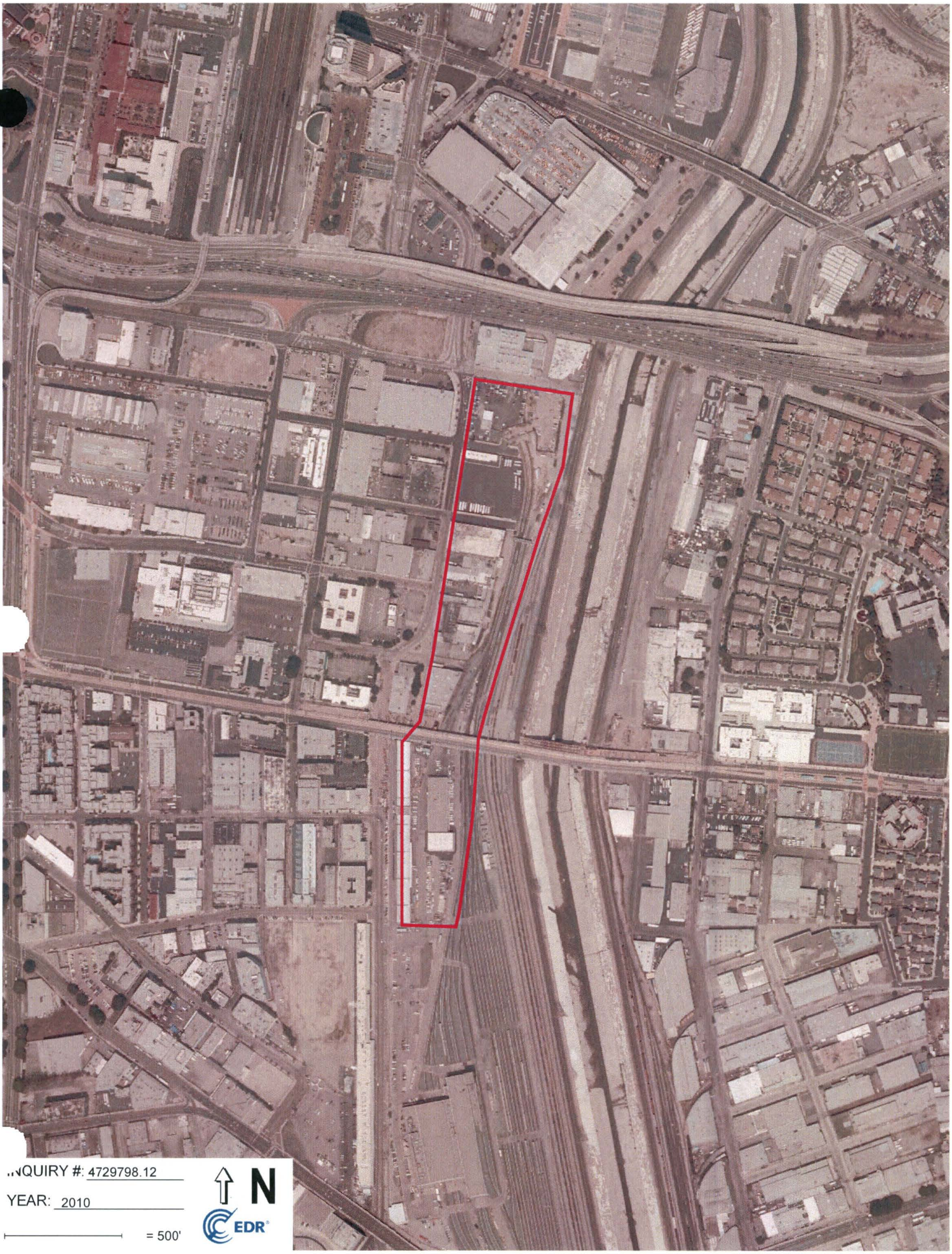
When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

INQUIRY #: 4729798.12

YEAR: 2012

= 500'

N


INQUIRY #: 4729798.12
YEAR: 2010
= 500'
N
EDR

INQUIRY #: 4729798.12

YEAR: 2009

= 500'

N

INQUIRY #: 4729798.12

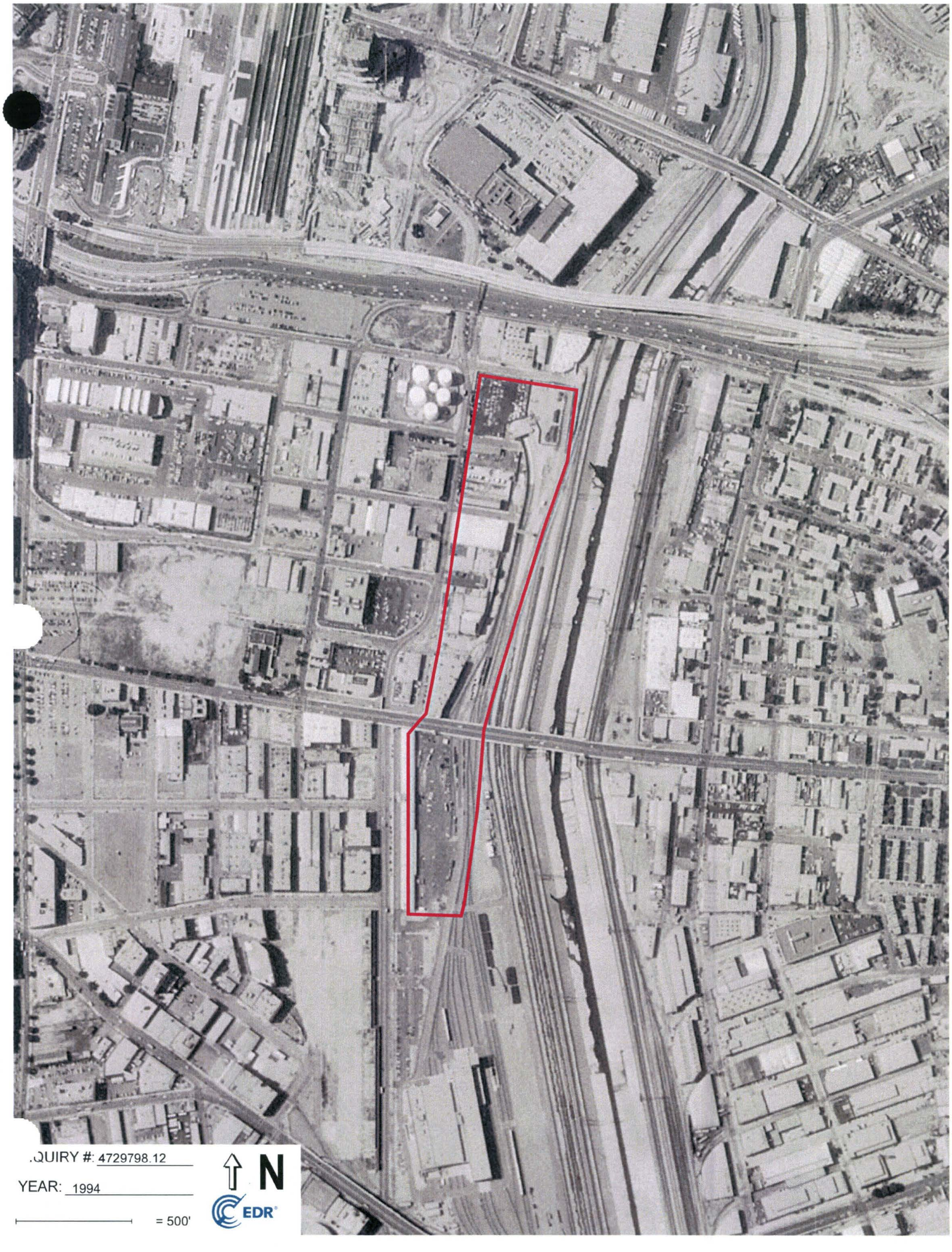
YEAR: 2005

= 500'

N

EDR

INQUIRY #: 4729798.12
YEAR: 2002
= 500'
N
EDR



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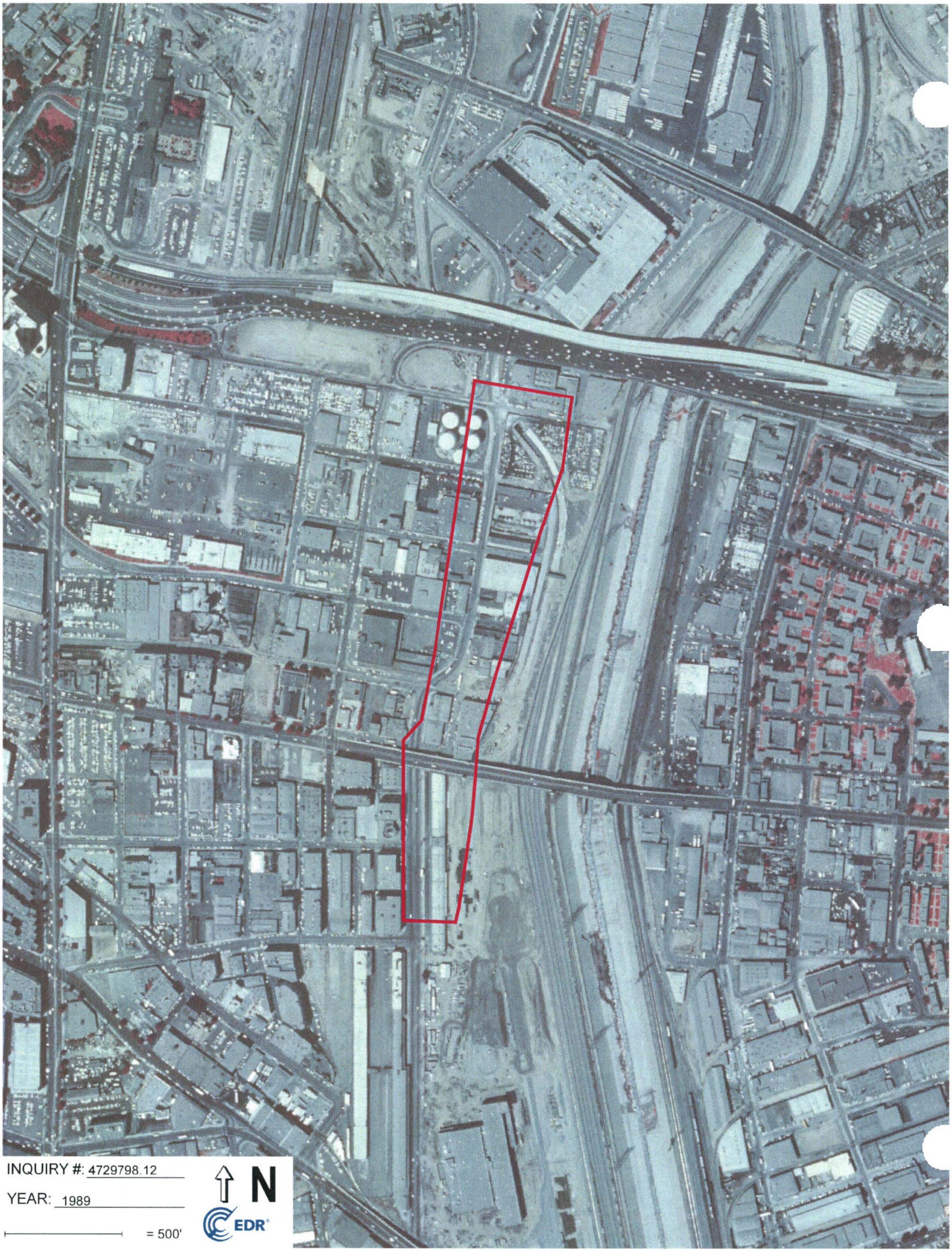
YEAR: 1994
= 500'
EDR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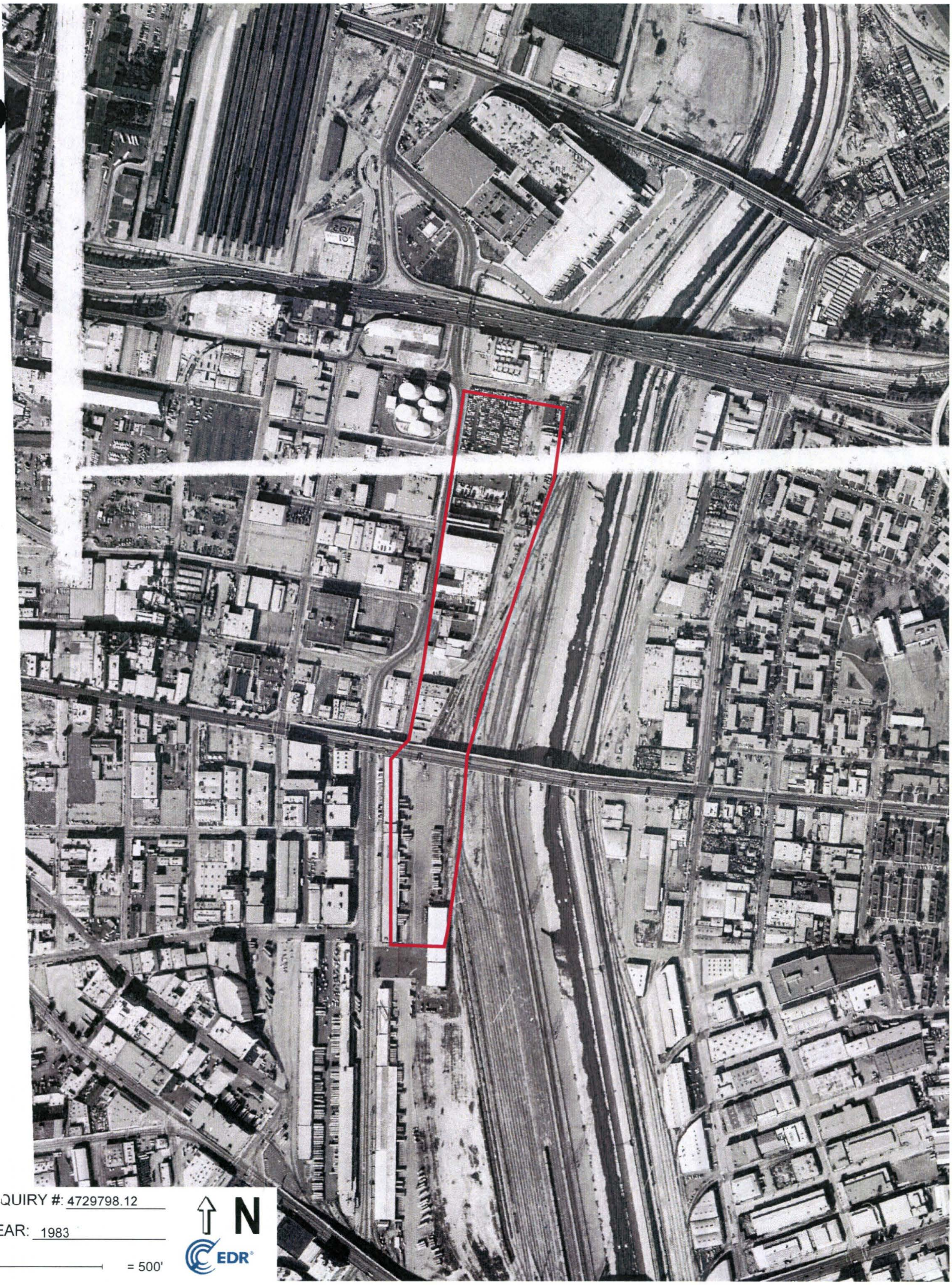
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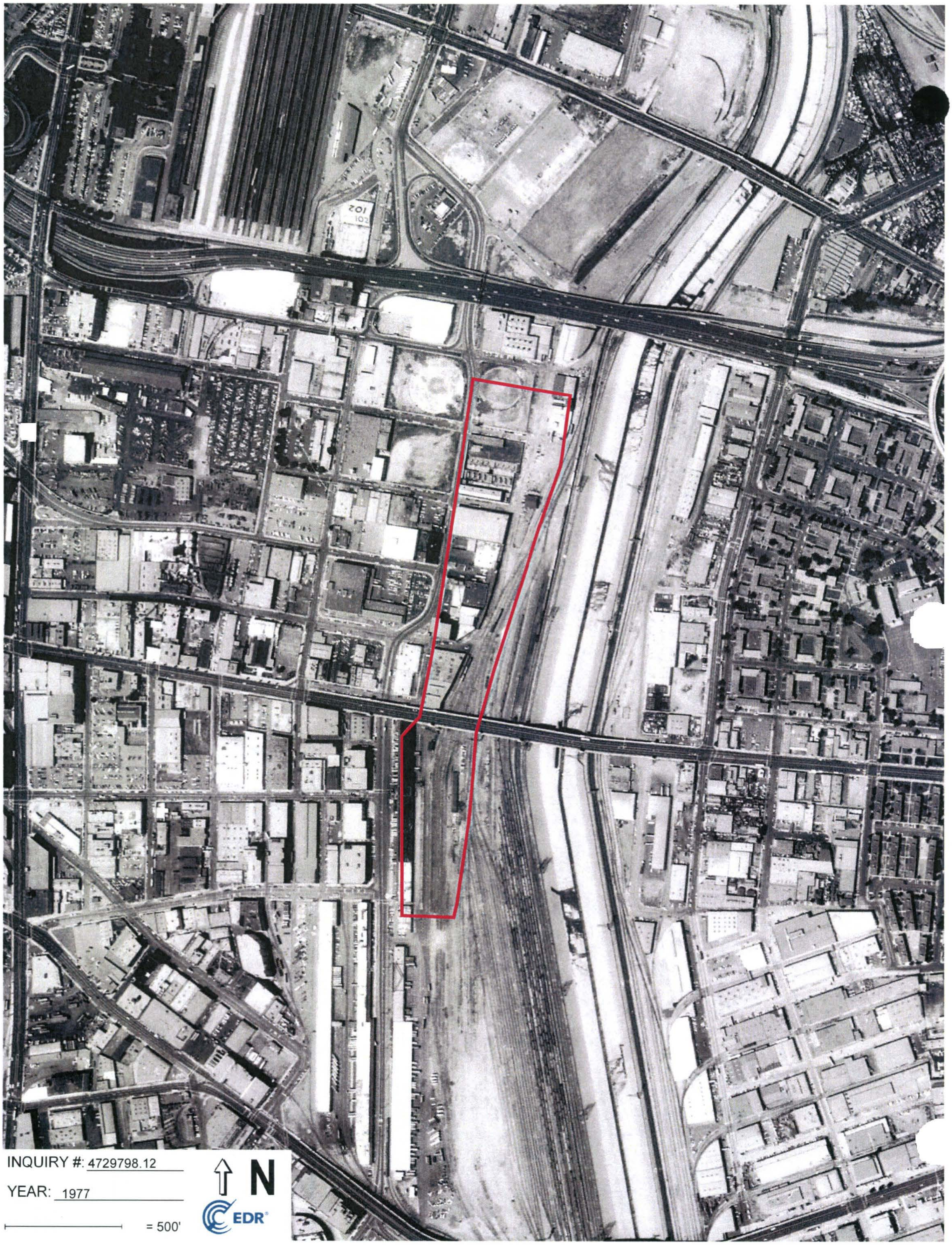

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YEAR: 1977

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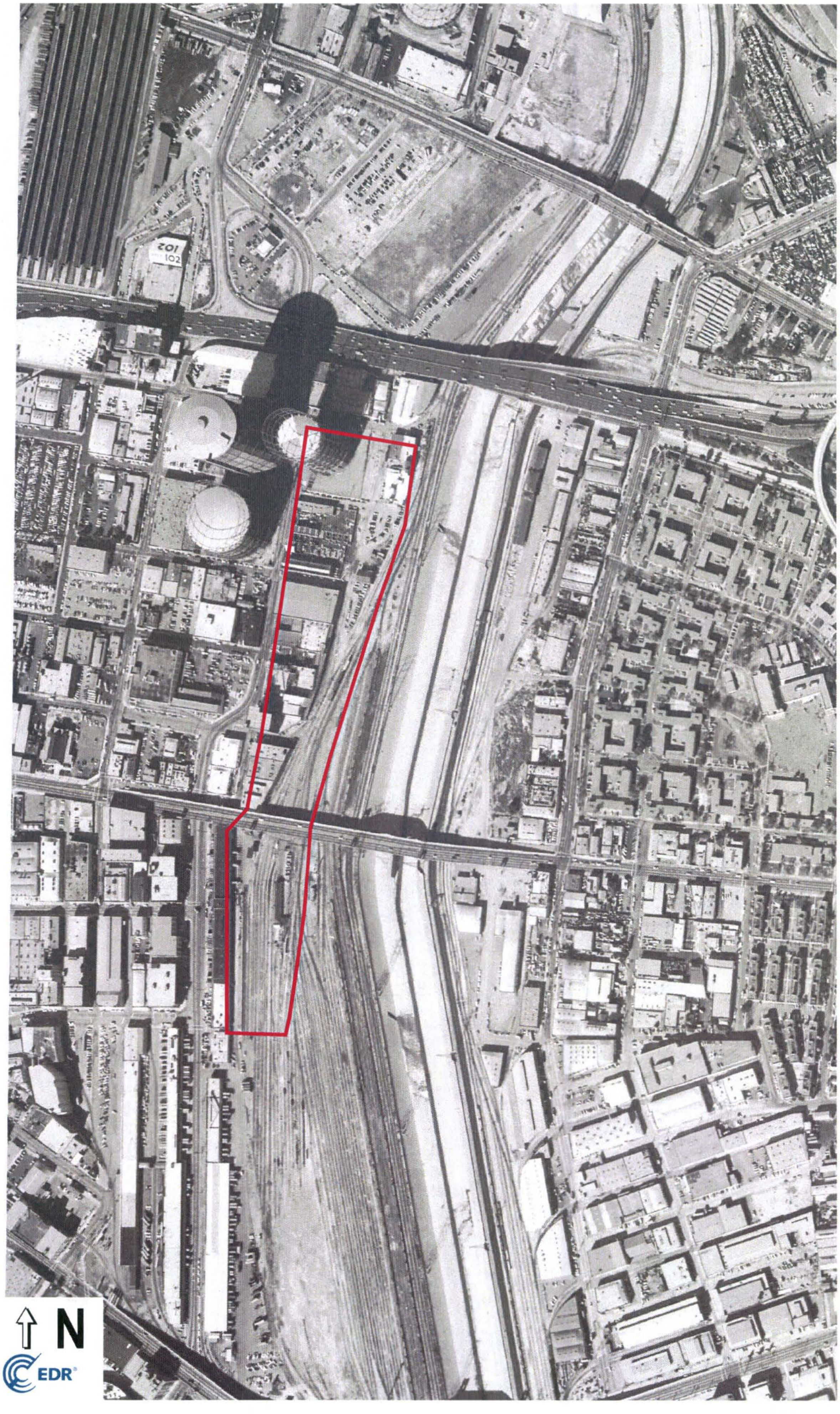
EDR



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YEAR: 1972

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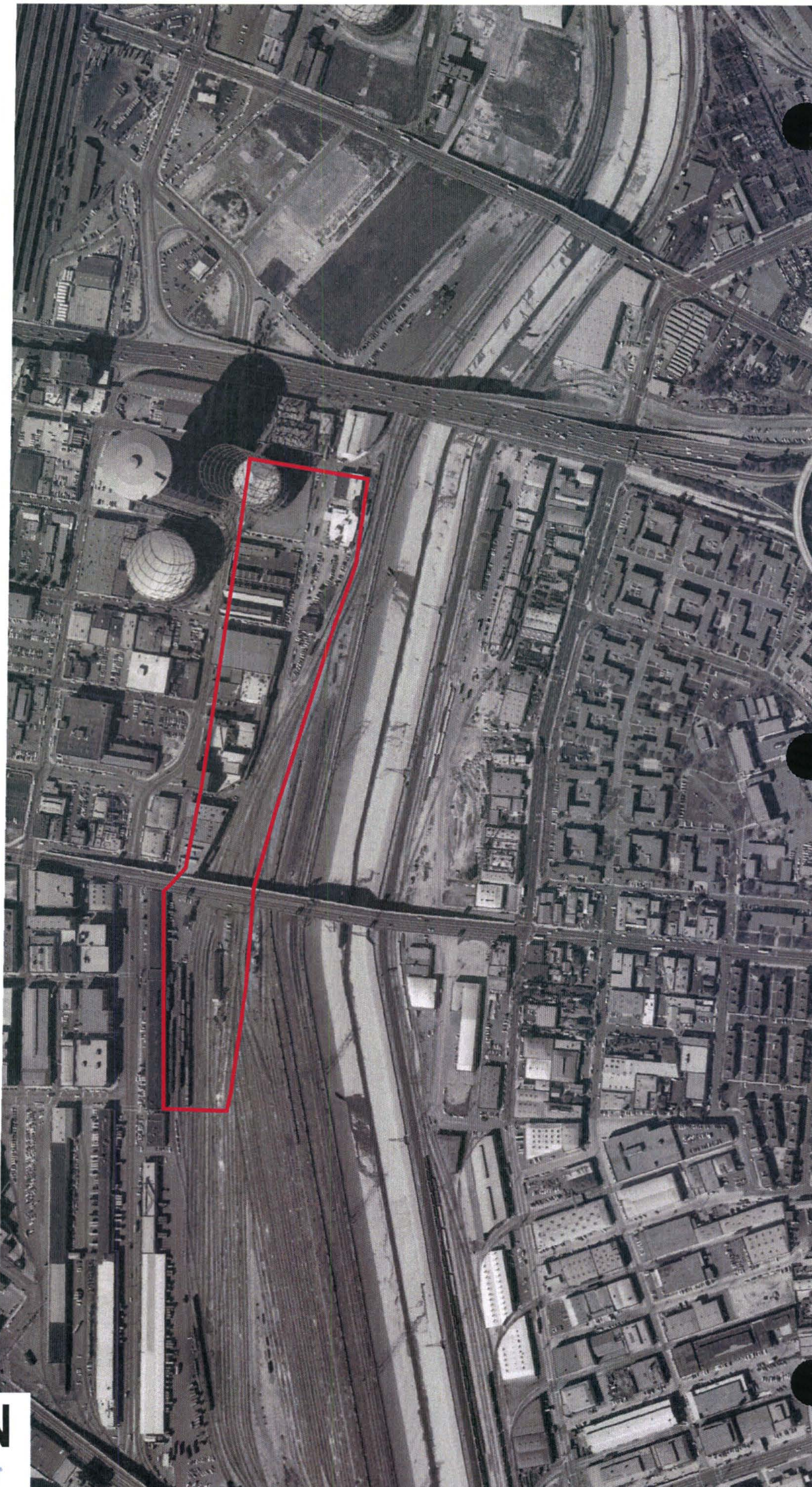
EDR



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YEAR: 1970

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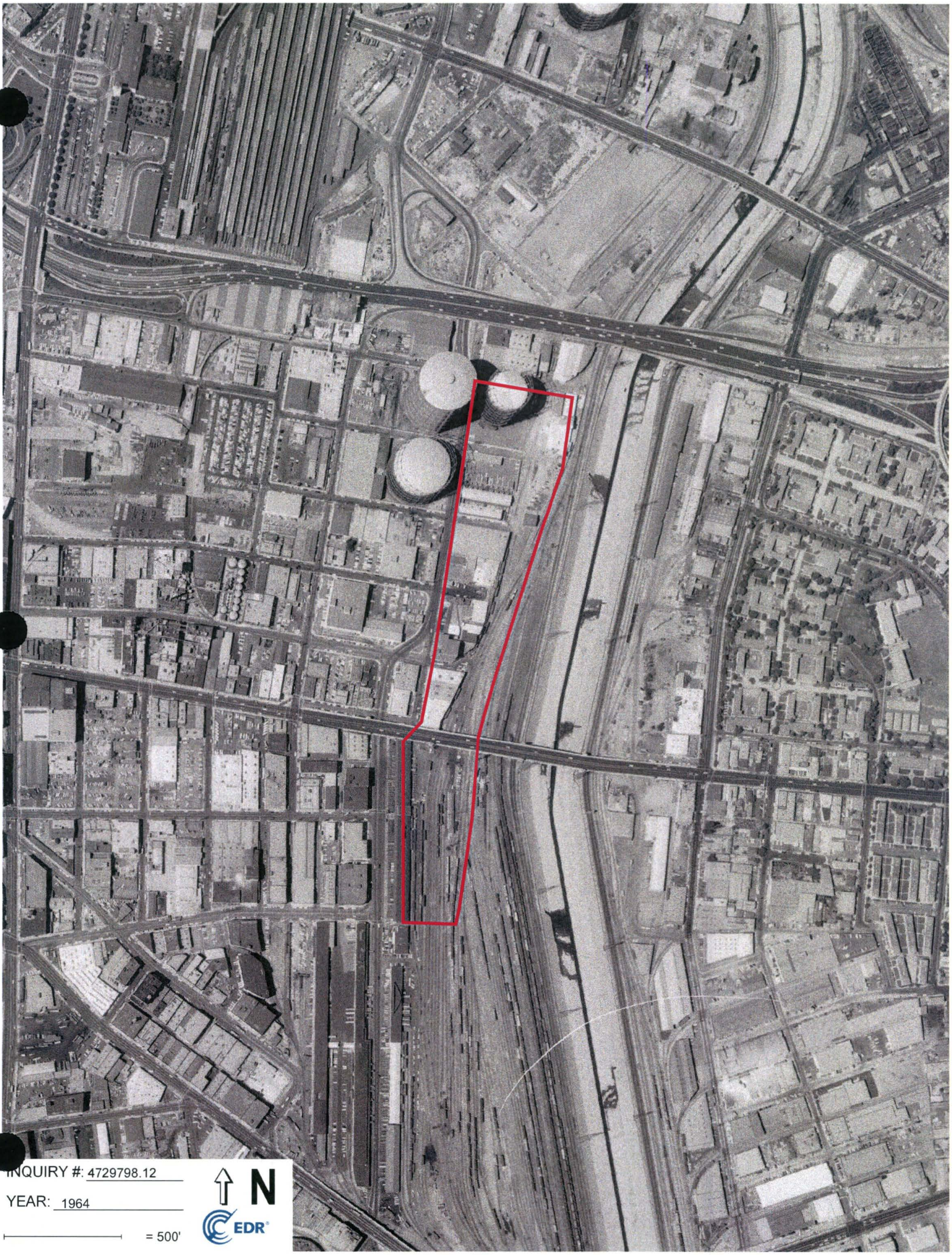

INQUIRY #: 4729798.12

YEAR: 1964

= 500'

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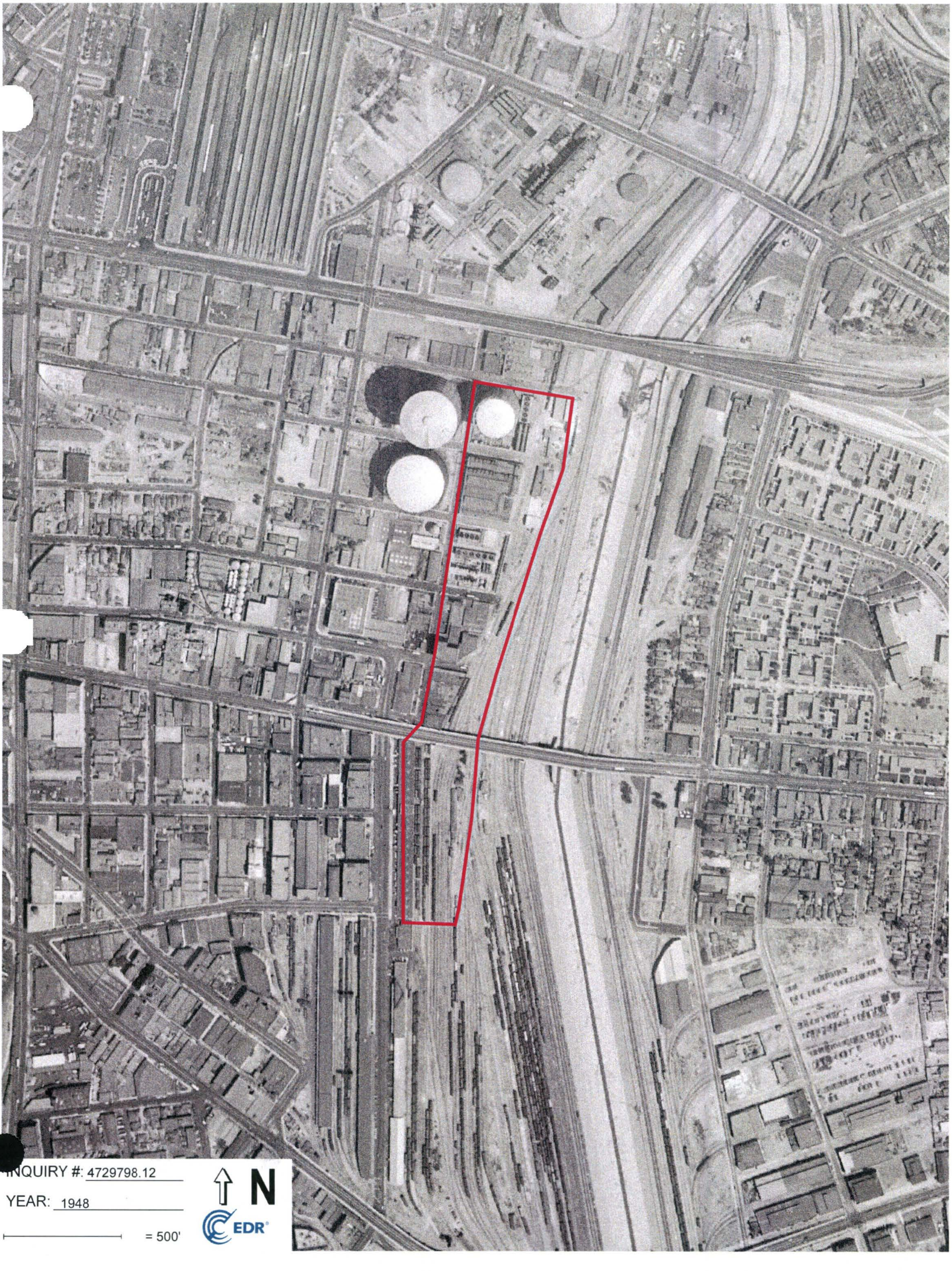
EDR


INQUIRY #: 4729798.12
YEAR: 1952
= 500'
N
EDR



INQUIRY #: 4729798.12

YEAR: 1948

= 500'

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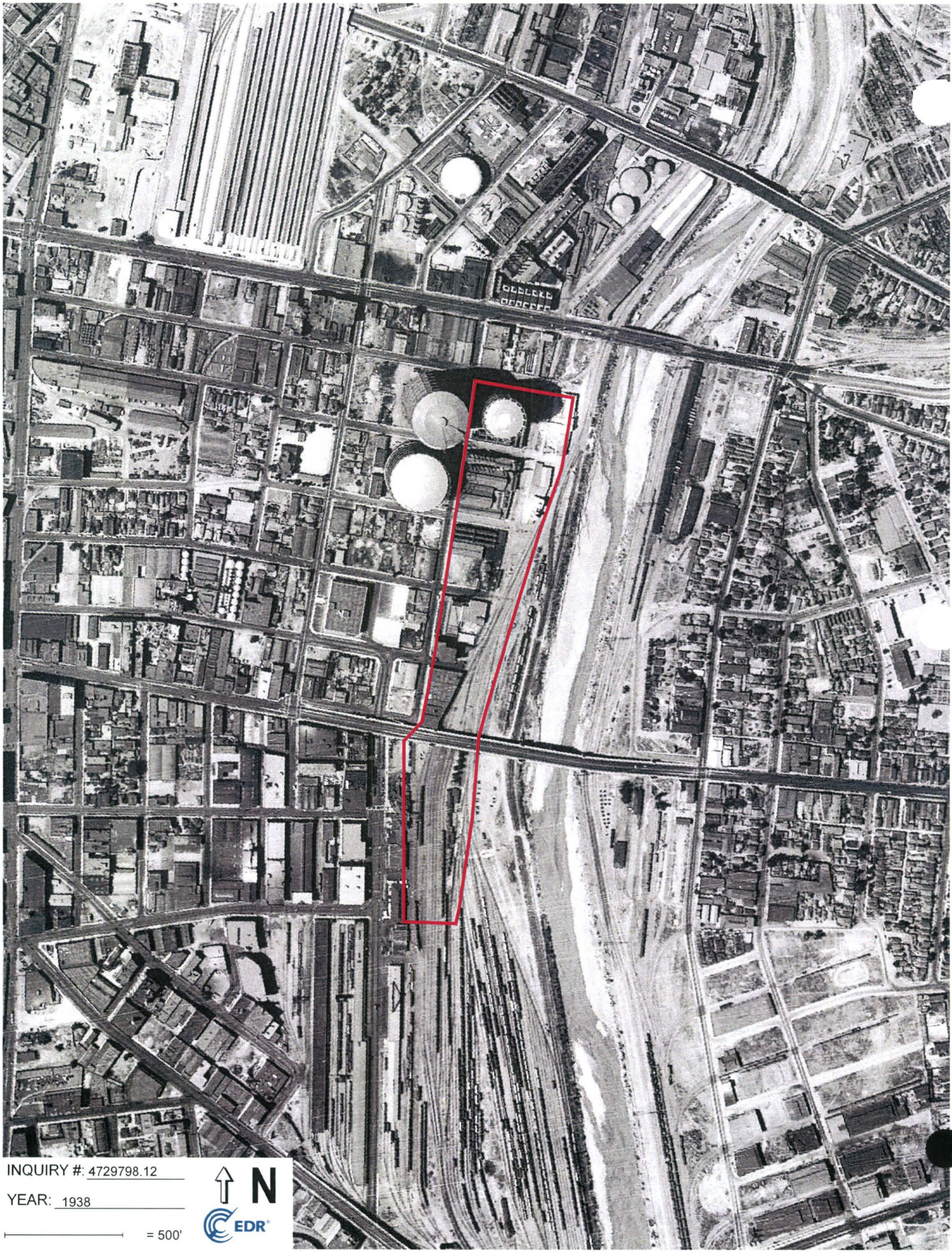
EDR



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YEAR: 1938

= 500'

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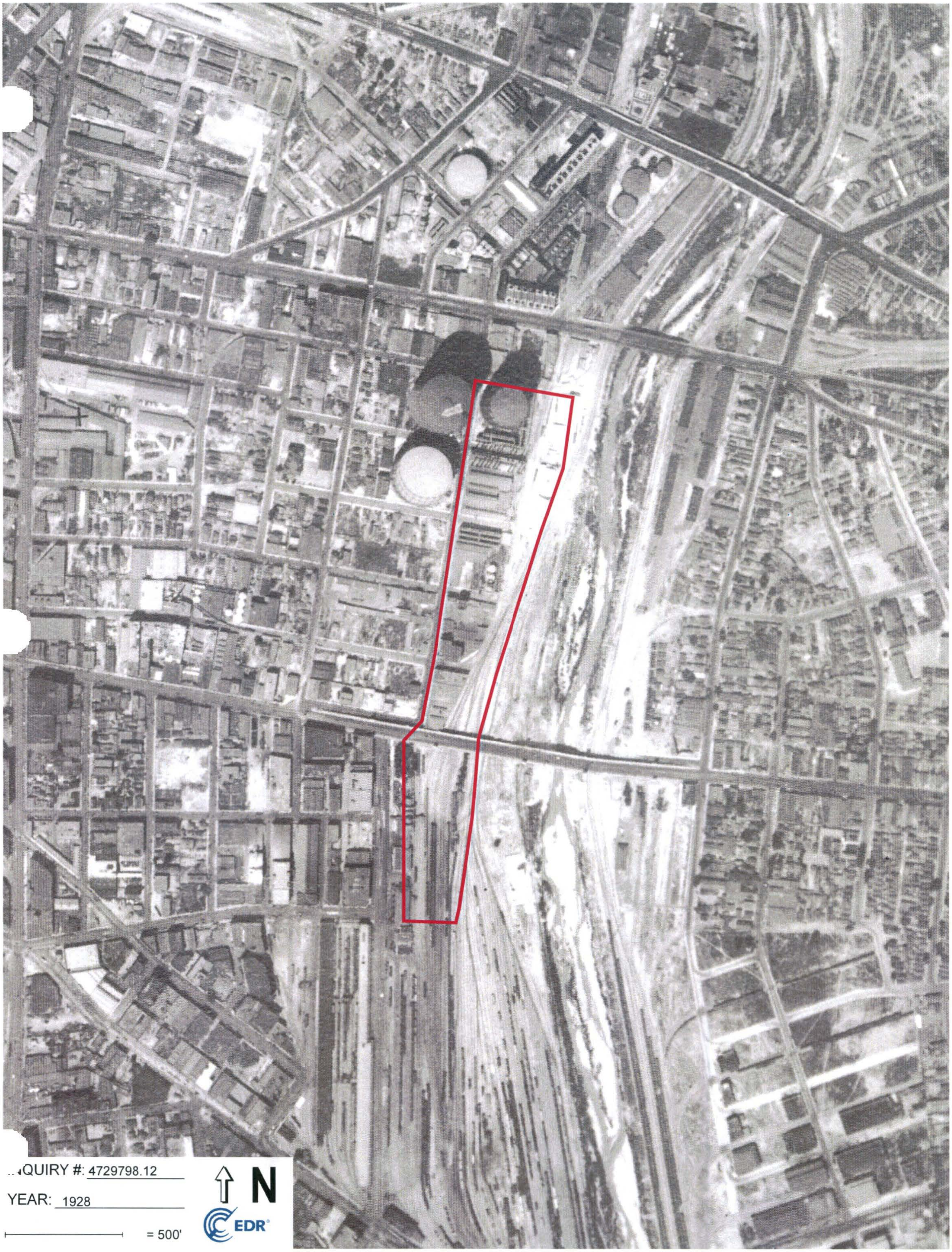
EDR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YEAR: 1928
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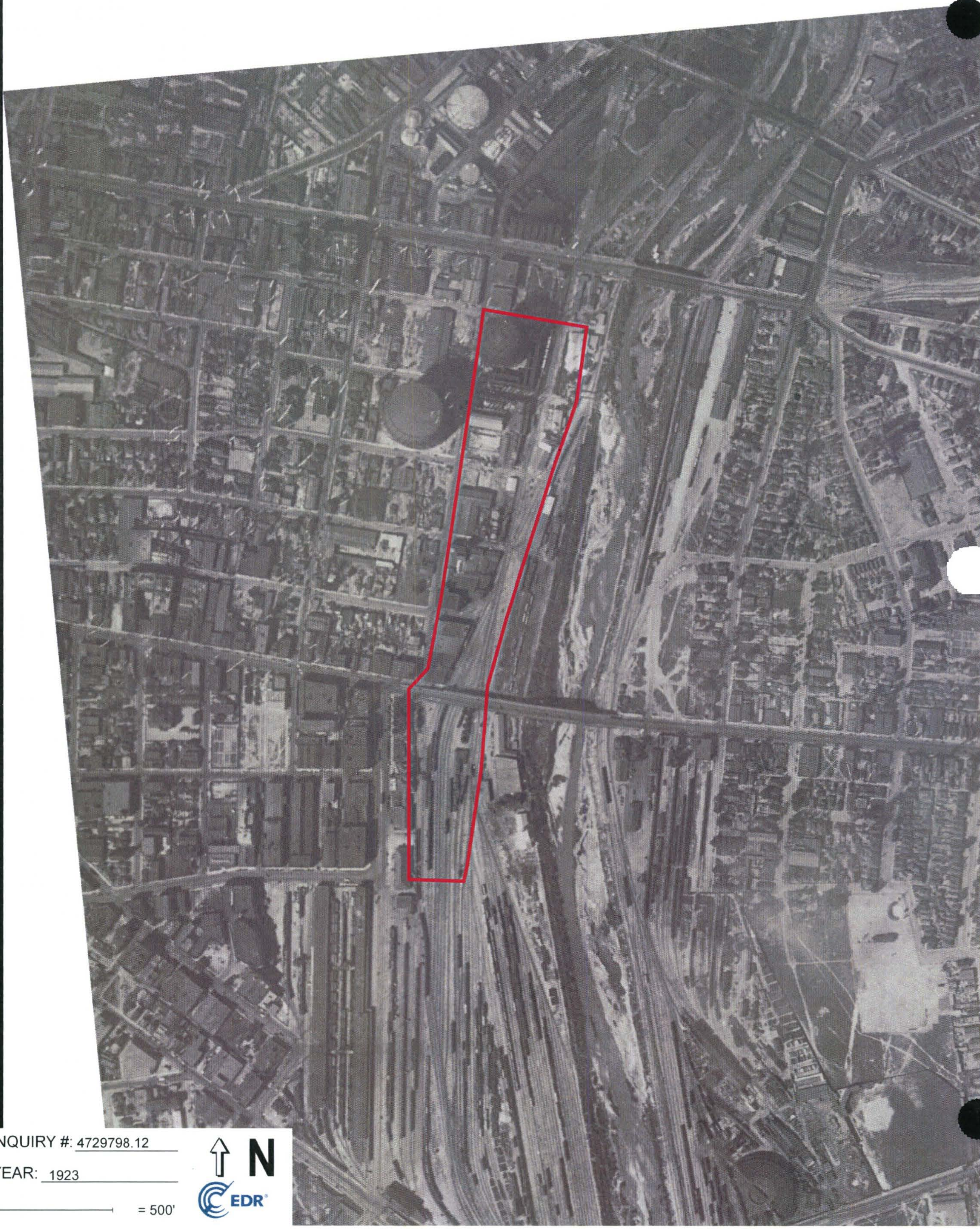
EDR



INQUIRY #: 4729798.12

YEAR: 1923

= 500'

N

Metro Division 20
801 E. Commercial Street
Los Angeles, CA 90012

Inquiry Number: 4729798.5
September 20, 2016

The EDR-City Directory Abstract

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2013. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 2640 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	*Source*	*TP*	*Adjoining*	*Text Abstract*	*Source Image*
2013	Cole Information Services	X	X	X	-
2008	Cole Information Services	X	X	X	-
2006	Haines Company, Inc.	X	X	X	-
2004	Haines Company	-	-	-	-
2003	Haines & Company	-	-	-	-
2001	Haines Company, Inc.	-	-	-	-
2000	Haines & Company	-	X	X	-
	Haines & Company	X	X	X	-
1999	Haines Company	-	X	X	-
1996	GTE	-	-	-	-
1995	Pacific Bell	-	-	-	-
1992	PACIFIC BELL WHITE PAGES	-	-	-	-
1991	Pacific Bell	-	-	-	-
1990	PACIFIC BELL WHITE PAGES	X	-	X	-
1986	Pacific Bell	X	-	X	-
1985	Pacific Bell	-	-	-	-
1981	Pacific Telephone	X	X	X	-
1980	Pacific Telephone	-	-	-	-
1976	Pacific Telephone	-	X	X	-
1975	Pacific Telephone	-	-	-	-
1972	R. L. Polk & Co.	-	-	-	-
1971	Pacific Telephone	X	X	X	-
1970	Pacific Telephone	-	-	-	-
1969	Pacific Telephone	-	-	-	-
1967	Pacific Telephone	X	X	X	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1966	Pacific Telephone	-	-	-	-
1965	GTE	-	-	-	-
1964	Pacific Telephone	-	-	-	-
1963	Pacific Telephone	-	-	-	-
1962	Pacific Telephone	-	X	X	-
1961	R. L. Polk & Co.	-	-	-	-
1960	Pacific Telephone	-	-	-	-
1958	Pacific Telephone	-	X	X	-
	Pacific Telephone	X	X	X	-
1957	Pacific Telephone	-	-	-	-
1956	Pacific Telephone	-	-	-	-
1955	R. L. Polk & Co.	-	-	-	-
1954	R. L. Polk & Co.	-	-	-	-
1952	Los Angeles Directory Co.	-	-	-	-
1951	Pacific Telephone & Telegraph Co.	-	X	X	-
	Pacific Telephone & Telegraph Co.	X	X	X	-
1950	Pacific Telephone	-	-	-	-
1949	Los Angeles Directory Co.	-	-	-	-
1948	Associated Telephone Company, Ltd.	-	-	-	-
1947	Pacific Directory Co.	-	-	-	-
1946	Southern California Telephone Co	-	-	-	-
1945	R. L. Polk & Co.	-	-	-	-
1944	R. L. Polk & Co.	-	-	-	-
1942	Los Angeles Directory Co.	-	X	X	-
1940	Los Angeles Directory Co.	-	-	-	-
1939	Los Angeles Directory Co.	-	-	-	-
1938	Los Angeles Directory Company Publishers	-	-	-	-
1937	Los Angeles Directory Co.	-	X	X	-
1936	Los Angeles Directory Co.	-	-	-	-
1935	Los Angeles Directory Co.	-	-	-	-
1934	Los Angeles Directory Co.	-	-	-	-
1933	Los Angeles Directory Co.	-	X	X	-
1932	Los Angeles Directory Co.	-	-	-	-
1931	TRIBUNE-NEWS PUBLISHING CO.	-	-	-	-
1930	Los Angeles Directory Co.	-	-	-	-
1929	Los Angeles Directory Co.	-	X	X	-
1928	Los Angeles Directory Co.	-	-	-	-
1927	Los Angeles Directory Co.	-	-	-	-
1926	Los Angeles Directory Co.	-	-	-	-
1925	Los Angeles Directory Co.	-	-	-	-
1924	Los Angeles Directory Co.	-	X	X	-
1923	Los Angeles Directory Co.	-	-	-	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1921	Los Angeles Directory Co.	-	-	-	-
1920	Los Angeles Directory Co.	-	-	-	-

EXECUTIVE SUMMARY

SELECTED ADDRESSES

The following addresses were selected by the client, for EDR to research. An "X" indicates where information was identified.

Address	***Type***	***Findings***
500 N. Center Street	Client Entered	X
840 E. Commercial Street	Client Entered	X
410 N. Center Street	Client Entered	X
815 E. Jackson Street	Client Entered	
830 E. Ducommun Street	Client Entered	X
836 E. Ducommun Street	Client Entered	
837 E. Jackson Street	Client Entered	
815 E. Temple Street	Client Entered	
820 E. Temple Street	Client Entered	

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

801 E. Commercial Street
Los Angeles, CA 90012

FINDINGS DETAIL

Target Property research detail.

COMMERCIAL ST E

840 COMMERCIAL ST E

Year	Uses	Source
1951	E Coml Jet Mfg Corp	Pacific Telephone & Telegraph Co.

E COMMERCIAL

801 E COMMERCIAL

Year	Uses	Source
1990	FRIEDMAN BAG COMPANY INC	Pacific Bell
1986	FRIEDMAN BAG COMPANY INC	Pacific Bell
1981	FULTON CONTAINER CO	Pacific Telephone
1967	Friedman Bag Company Inc	Pacific Telephone
	Fulton Container Co	Pacific Telephone

E COMMERCIAL ST

801 E COMMERCIAL ST

Year	Uses	Source
2013	DEVON SELF STORAGE	Cole Information Services
	FORMULA ONE AUTO COSMETICS INC	Cole Information Services
2008	DEVON SELF STORAGE	Cole Information Services
2006	COMPANY INC	Haines Company, Inc.
	DEVONSELF	Haines Company, Inc.
	FRIEDMAN BAG	Haines Company, Inc.
	STORAGE	Haines Company, Inc.
1971	Friedman Bag Company Inc	Pacific Telephone
	Fulton Container Co	Pacific Telephone

840 E COMMERCIAL ST

Year	*Uses*	*Source*
1971	Commercial Fertilizer Co	Pacific Telephone
	Consolidated Milling Co	Pacific Telephone
1958	Commercial Fertilizer Co	Pacific Telephone
	Consolidated Milling Co	Pacific Telephone

E. Commercial Street

840 E. Commercial Street

Year	*Uses*	*Source*
1971	Commercial Fertilizer Co	Pacific Telephone
	Consolidated Milling Co	Pacific Telephone
1958	Commercial Fertilizer Co	Pacific Telephone
	Consolidated Milling Co	Pacific Telephone
1951	E Coml Jet Mfg Corp	Pacific Telephone & Telegraph Co.

E. Ducommun Street

830 E. Ducommun Street

Year	*Uses*	*Source*
1951	Ducommun Baroid Sales Div Natl Lead Co	Pacific Telephone & Telegraph Co.
	Ducommun Calif Talc Co	Pacific Telephone & Telegraph Co.

836 E. Ducommun Street

Year	*Uses*	*Source*

E. Jackson Street

815 E. Jackson Street

Year	*Uses*	*Source*

837 E. Jackson Street

Year	*Uses*	*Source*

E. Temple Street

815 E. Temple Street

Year	*Uses*	*Source*

820 E. Temple Street

Year	*Uses*	*Source*

N. Center Street

410 N. Center Street

Year	*Uses*	*Source*
2006	BBGASSOCIATES	Haines Company, Inc.
2000	MANLEY OIL CO	Haines & Company

500 N. Center Street

Year	*Uses*	*Source*
2006	SERVICE	Haines Company, Inc.
	VIERTELSTOWING	Haines Company, Inc.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

CENTER ST

500 CENTER ST

Year	Uses	Source
2013	VEITELS CENTRAL DIVISION	Cole Information Services
	VEITELS CENTRAL DIVISION	Cole Information Services
2008	VIERTELS AUTOMOTIVE SERVICE	Cole Information Services
	VIERTELS AUTOMOTIVE SERVICE	Cole Information Services
2006	VIERTELSTOWING	Haines Company, Inc.
	SERVICE	Haines Company, Inc.

501 CENTER ST

Year	Uses	Source
2000	TOSCO DISTRIBUTION CO	Haines & Company
1999	CAMPBELL Lareal	Haines Company
	XXRLOS Erlinda D	Haines Company
	TRINH Henry	Haines Company

502 CENTER ST

Year	Uses	Source
1999	XXXX	Haines Company

503 CENTER ST

Year	Uses	Source
1999	LORENZ Jess	Haines Company

504 CENTER ST

Year	Uses	Source
1999	YU Peter	Haines Company
	PUENTE Gravel M	Haines Company
	YU Ping Kwan	Haines Company
	XU Yuan	Haines Company
	TSUI Cindy	Haines Company
	APARTMENTS LE Giang	Haines Company
	XXXX	Haines Company

FINDINGS

505 CENTER ST

Year	Uses	Source
1999	MILLER Elrene	Haines Company
	DELAFUENTE Esther C	Haines Company

506 CENTER ST

Year	Uses	Source
1999	XXXX	Haines Company
	AN Tae Jung	Haines Company
	APOLINAR Robert M	Haines Company
	CHAPEL AV S 91801 ALHAMBRA	Haines Company
	WEALTH CODE	Haines Company

507 CENTER ST

Year	Uses	Source
1999	CHEN Yoh Ren	Haines Company
	HAPPY DAY CAMP	Haines Company
	HAPPY DAY SCHOOL	Haines Company

508 CENTER ST

Year	Uses	Source
1999	XXXX	Haines Company
	FUENTES Sandra	Haines Company
	XXXX	Haines Company

509 CENTER ST

Year	Uses	Source
1999	PUENTE Lucio H	Haines Company
	PACHECO Modesta	Haines Company

510 CENTER ST

Year	Uses	Source
1999	RAMOS Rebecca	Haines Company
	VENEZIA Celia	Haines Company

511 CENTER ST

Year	Uses	Source
1999	XXXX	Haines Company
	FU Tseng	Haines Company
	XXXX	Haines Company

FINDINGS

512 CENTER ST

Year	Uses	Source
1999	SEVEN 11 FOOD	Haines Company

513 CENTER ST

Year	Uses	Source
1999	HAYAMI Walter M	Haines Company
	WONG Wan M	Haines Company
	KHA Hien Thuoc	Haines Company

514 CENTER ST

Year	Uses	Source
1999	XXXX	Haines Company
	WEALTH CODE	Haines Company
	CHANDLER PL 91108 SAN MARINO	Haines Company
	X GRAVES AV W	Haines Company
	XXXX	Haines Company
	MONGE Jose A	Haines Company

515 CENTER ST

Year	Uses	Source
1999	WANG Xiao Hui	Haines Company
	FENG Huamao	Haines Company
	PARTIDA A	Haines Company
	CENTRE PLZ DR 91754 MONTEREY PARK	Haines Company
	VANLE Quy	Haines Company
	FU Yan	Haines Company

516 CENTER ST

Year	Uses	Source
1999	MANCIA Jorge	Haines Company
	FLORES Santos Tomas	Haines Company
	X CALIFORNIA S	Haines Company
	XXXX	Haines Company
	XXXX	Haines Company

517 CENTER ST

Year	Uses	Source
1999	CHUN Steven Yee Kung	Haines Company
	CHUN Steven Yee	Haines Company

FINDINGS

Year	Uses	Source
1999	CHUN Steven Yee	Haines Company
	RUBIO Angelica	Haines Company
	LUNA Manuel	Haines Company
	NG Mason	Haines Company

519 CENTER ST

Year	Uses	Source
1999	XXXX	Haines Company
	CHI David	Haines Company

520 CENTER ST

Year	Uses	Source
1999	LU Jong Chen	Haines Company
	XXXX	Haines Company

521 CENTER ST

Year	Uses	Source
1999	XXXX	Haines Company
	CHIU Huonru	Haines Company

522 CENTER ST

Year	Uses	Source
1999	XXXX	Haines Company

524 CENTER ST

Year	Uses	Source
1999	XXXX	Haines Company

525 CENTER ST

Year	Uses	Source
1999	CHRISTMAS IN APRIL MONTERY PRK	Haines Company
	MERCI MNTLY RTDRD	Haines Company

526 CENTER ST

Year	Uses	Source
1999	XXXX	Haines Company
	XXXX	Haines Company

528 CENTER ST

Year	Uses	Source
1999	YEN Shih Hung	Haines Company

FINDINGS

Year	Uses	Source
1999	XXXX	Haines Company
	X HOLLAND ALY	Haines Company
	CHANDLER AV N 91754 MONTEREY PARK	Haines Company
	WEALTH CODE	Haines Company

529 CENTER ST

Year	Uses	Source
1999	XXXX	Haines Company

534 CENTER ST

Year	Uses	Source
1999	APARTMENTS AN Zhi Gang	Haines Company
	CHENG Winjo	Haines Company
	DUONG Quang	Haines Company
	HU Feng Yi	Haines Company
	QUACH Hoa	Haines Company
	TU Van Tieu	Haines Company

600 CENTER ST

Year	Uses	Source
2008	CORRIDOR ECONOMIC DEVELOPMENT	Cole Information Services
1999	ACCESS INTERNATL	Haines Company
	PRACTICAL PRODUCTS	Haines Company
	X CARTER AV W	Haines Company

602 CENTER ST

Year	Uses	Source
1999	YEE Steve W	Haines Company

604 CENTER ST

Year	Uses	Source
1999	XXXX	Haines Company

606 CENTER ST

Year	Uses	Source
2008	MSK DFW INC	Cole Information Services
1999	YANG Jian Bang	Haines Company
	APARTMENTS GOLDBERAG Robt	Haines Company
	HER Jiun Shien	Haines Company

FINDINGS

Year	Uses	Source
1999	KARTHIRAKUL Achariya	Haines Company
	WU Chao Hsin	Haines Company
	WANG Peichin	Haines Company
	CHANG Rita	Haines Company
	LABEACH Ins M	Haines Company

608 CENTER ST

Year	Uses	Source
1999	WU Edward	Haines Company
	X PINE S	Haines Company
	EISENBERG John A	Haines Company

612 CENTER ST

Year	Uses	Source
1999	AU Hernck Y	Haines Company
	FEI Tao Ying	Haines Company
	KOU David S	Haines Company
	NOVALAND ENTERPRISE INC	Haines Company
	XXXX	Haines Company

616 CENTER ST

Year	Uses	Source
1999	JOHNSON Otto	Haines Company
	LILYS GARDEN	Haines Company

620 CENTER ST

Year	Uses	Source
1999	XXXX	Haines Company
	BEHERENS Berbara	Haines Company
	HOYT Cathern V	Haines Company

622 CENTER ST

Year	Uses	Source
1999	BECERRA Anna	Haines Company
	CARDER Don	Haines Company
	1/2 MERCADO Hortencia	Haines Company
	BECERRA Mike	Haines Company

FINDINGS

626 CENTER ST

Year	Uses	Source
1999	LINK Alvin K	Haines Company
	HUANG Kay	Haines Company

632 CENTER ST

Year	Uses	Source
1999	LUU Karen H	Haines Company
	X PARK	Haines Company

642 CENTER ST

Year	Uses	Source
1999	HARALAMBOS K	Haines Company

648 CENTER ST

Year	Uses	Source
1999	MCDONNELL Bonnie L	Haines Company

658 CENTER ST

Year	Uses	Source
1999	JAMESON Barbara	Haines Company

660 CENTER ST

Year	Uses	Source
1999	RECHTSCHAFFEN Hanne	Haines Company

662 CENTER ST

Year	Uses	Source
1999	CHANDLER AV S 91754 MONTEREY PARK	Haines Company
	XXXX	Haines Company
	WEALTH CODE	Haines Company
	X GARVEY AV W	Haines Company

674 CENTER ST

Year	Uses	Source
1999	COGBILL Carne	Haines Company

680 CENTER ST

Year	Uses	Source
1999	LUE Shih Lin	Haines Company
	X LOMBARDY RD	Haines Company

681 CENTER ST

Year	Uses	Source
1999	GIERSBACH Robt R	Haines Company

685 CENTER ST

Year	Uses	Source
1999	VARGAS Georgia R	Haines Company

691 CENTER ST

Year	Uses	Source
1999	CHARIETTE AV 91770 ROSEMEAD	Haines Company
	X OAKCREST DR	Haines Company
	BEESLEY Bill	Haines Company
	WEALTH CODE	Haines Company

DUCOMMUN

841 DUCOMMUN

Year	Uses	Source
1981	CAL-TEX CORP PROCESSORS INC	Pacific Telephone
1967	ORO GRANDE LIME & STONE CO	Pacific Telephone
	Grand Canyon Lime & Cement Co	Pacific Telephone
	Grand Canyon Lime & Cement Co	Pacific Telephone
	Continental Chemical Products of L A Inc	Pacific Telephone
1962	Grand Canyon Lime & Cement Co	Pacific Telephone
	Continental Chemical Co	Pacific Telephone
1942	MISSION Lime Products Corp J S Schirm pres	Los Angeles Directory Co.
1937	MISSION Lime Products Co Louis Schirm pres J S Schirin v pres gen mgr Louis Schirm Jr sec	Los Angeles Directory Co.
1933	MISSION Schirm v pres J S Schirm sec Louis Schirm jr treas	Los Angeles Directory Co.
	MISSION Lime Products Corp Louis Schirm pres R jr treas	Los Angeles Directory Co.
	Schirm J S Commercial Co Louis Schirn pres R J Schirmn v pres Louis Schirm jr sec treas bldg Materials	Los Angeles Directory Co.
1929	Superior Cement Stucco Corp Louis Schirm pres R J Schirm v pres gen maer E H Humer v pres slsmgr	Los Angeles Directory Co.
	Schirm J S Commercial Co Louis Schirm pres R J Schirm v pres	Los Angeles Directory Co.

Year	Uses	Source
1929	Schirm Investment Co Louis Schirm pres R J Schirm sec	Los Angeles Directory Co.
	MISSION STUCCO Mission Lime Products Corp	Los Angeles Directory Co.
	MISSION Lime Products Corp Louis Schirm pres R J Schirm v pres gen mgr E H Rumer v pres sls mgr	Los Angeles Directory Co.
1924	AMERICAN Sand & Gravel Co R J Schirm pres mgr	Los Angeles Directory Co.

DUCOMMUN ST

841 DUCOMMUN ST

Year	Uses	Source
2000	XXXX	Haines & Company
1976	ORO GRAND LIME & STONE CO See Colton Lime & Stone Co	Pacific Telephone
	COLTON LIME & STONE CO	Pacific Telephone
1958	Tyd Dy Sales Co	Pacific Telephone
	Redford A A Aarco Co	Pacific Telephone
	Mc Gee W G L & M Tile Products Inc	Pacific Telephone
	L & M Tile Products Inc	Pacific Telephone
	JET MPG CORP	Pacific Telephone
	Grand Canyon LIme & Cement Co	Pacific Telephone
	Continental Chemical Co	Pacific Telephone
1951	Ducommun Grand Canyon Lime & Cement Co	Pacific Telephone & Telegraph Co.
	Ducommun Sugar Beet Products Co soap	Pacific Telephone & Telegraph Co.
	Ducommun Schirm Inv Co	Pacific Telephone & Telegraph Co.
	Ducommun Mission Lime Products Corp	Pacific Telephone & Telegraph Co.
	Ducommun Continental Chemical Co	Pacific Telephone & Telegraph Co.

E COMMERCIAL

830 E COMMERCIAL

Year	Uses	Source
1981	A & H GREENFIELD	Pacific Telephone
1967	A & H GREENFIELD INC	Pacific Telephone
	Greenfield A & H Inc	Pacific Telephone

837 E COMMERCIAL

Year	Uses	Source
1937	NEELEY Margt Mrs	Los Angeles Directory Co.

E COMMERCIAL ST

728 E COMMERCIAL ST

Year	Uses	Source
2013	URGENT GEAR	Cole Information Services
2008	URGENT GEAR INC	Cole Information Services
2006	URGENT GEAR	Haines Company, Inc.

830 E COMMERCIAL ST

Year	Uses	Source
1971	Greenfield A & H Inc	Pacific Telephone
	A & H GREENFIELD INC	Pacific Telephone

837 E COMMERCIAL ST

Year	Uses	Source
2013	AMAYS BAKERY & NOODLE CO	Cole Information Services
2008	AMAYS BAKERY & NOODLE CO	Cole Information Services
2006	NOODLE CO	Haines Company, Inc.
	AMAYS BAKERY	Haines Company, Inc.

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
801 E. Commercial Street	2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1985, 1980, 1976, 1975, 1972, 1970, 1969, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
500 CENTER ST	2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
500 CENTER ST	2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
500 CENTER ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
501 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
502 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
503 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
504 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
505 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
506 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
507 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
508 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
509 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
510 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
511 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
512 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
513 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
514 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
515 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
516 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
517 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
519 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
520 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
521 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
522 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
524 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
525 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
526 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
528 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
529 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
534 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
600 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
600 CENTER ST	2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
602 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
604 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
606 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
606 CENTER ST	2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
608 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
612 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
616 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
620 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
622 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
626 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
632 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
642 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
648 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
658 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
660 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
662 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
674 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
680 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
681 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
685 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
691 CENTER ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
728 E COMMERCIAL ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
728 E COMMERCIAL ST	2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
830 E COMMERCIAL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
830 E COMMERCIAL ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
837 E COMMERCIAL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
837 E COMMERCIAL ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
837 E COMMERCIAL ST	2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
841 DUCOMMUN	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
841 DUCOMMUN ST	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

Metro Division 20

801 E. Commercial Street

Los Angeles, CA 90012

Inquiry Number: 4729798.4

September 19, 2016

EDR Historical Topo Map Report

with QuadMatch™

EDR®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

09/19/16

Site Name:	Client Name:
Metro Division 20	Kleinfelder, Inc.
801 E. Commercial Street	2 Ada, Suite 250
Los Angeles, CA 90012	Irvine, CA 92618-0000
EDR Inquiry # 4729798.4	Contact: Margaret Carroll

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Kleinfelder, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:		***Coordinates:***	
P.O.#	NA	**Latitude:**	34.051242 34° 3' 4" North
Project:	20168300.025A/07-0000	**Longitude:**	-118.230786 -118° 13' 51" West
		UTM Zone:	Zone 11 North
		UTM X Meters:	386404.59
		UTM Y Meters:	3768520.84
		Elevation:	272.00' above sea level

Maps Provided:

2012
1991, 1994
1981
1972
1966
1953
1928
1900
1896
1894

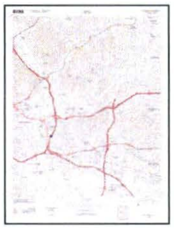
Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

Hollywood

7.5-minute, 24000



Los Angeles

7.5-minute, 24000

1991, 1994 Source Sheets

Hollywood

7.5-minute, 24000
Photo Inspected 1991
Photo Revised 1981

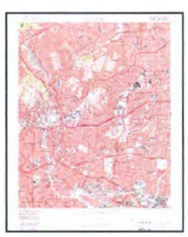
Los Angeles

7.5-minute, 24000
Photo Revised 1981
Aerial Photo Revised 1978

1981 Source Sheets

Hollywood

7.5-minute, 24000
Photo Revised 1981
Aerial Photo Revised 1978



Los Angeles

7.5-minute, 24000
Photo Revised 1981
Aerial Photo Revised 1978

1972 Source Sheets

Los Angeles

7.5-minute, 24000
Photo Revised 1972
Aerial Photo Revised 1972

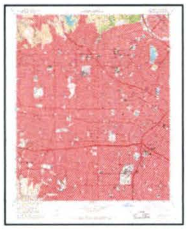
Hollywood

7.5-minute, 24000
Photo Revised 1972
Aerial Photo Revised 1972

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1966 Source Sheets



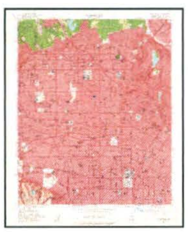
Hollywood

7.5-minute, 24000
Aerial Photo Revised 1964

Los Angeles

7.5-minute, 24000
Aerial Photo Revised 1964

1953 Source Sheets



Hollywood

7.5-minute, 24000
Aerial Photo Revised 1952

Los Angeles

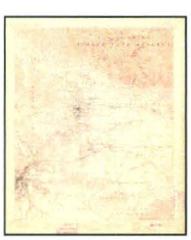
7.5-minute, 24000
Aerial Photo Revised 1952

1928 Source Sheets

Los Angeles

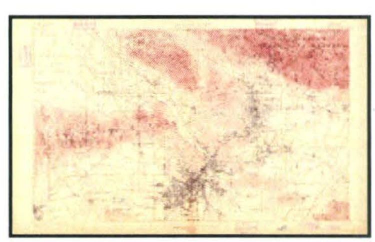
7.5-minute, 24000

1900 Source Sheets



Pasadena

15-minute, 62500



Los Angeles

15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1896 Source Sheets

Santa Monica

15-minute, 62500

Pasadena

15-minute, 62500

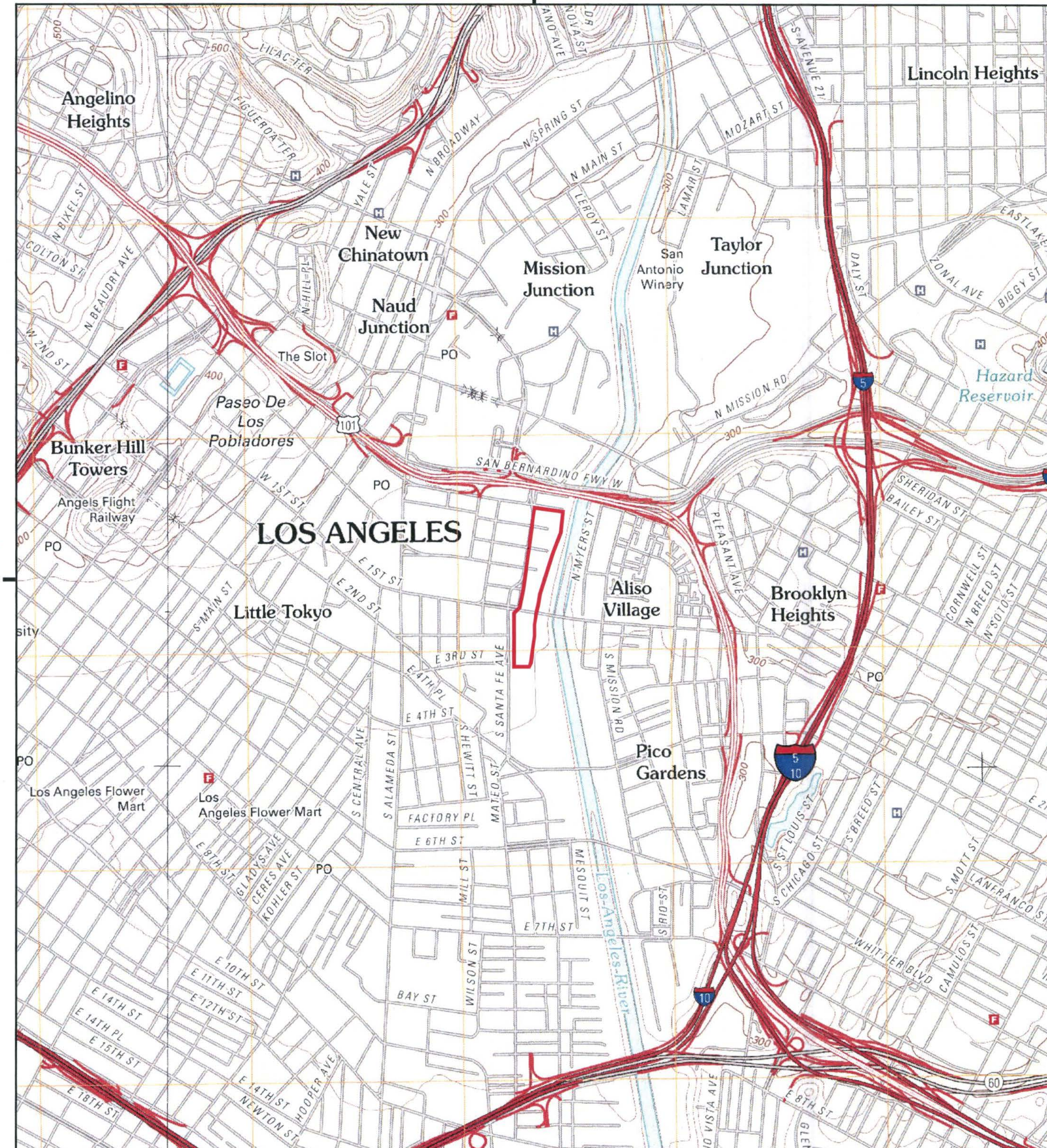
1894 Source Sheets

Los Angeles

15-minute, 62500

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

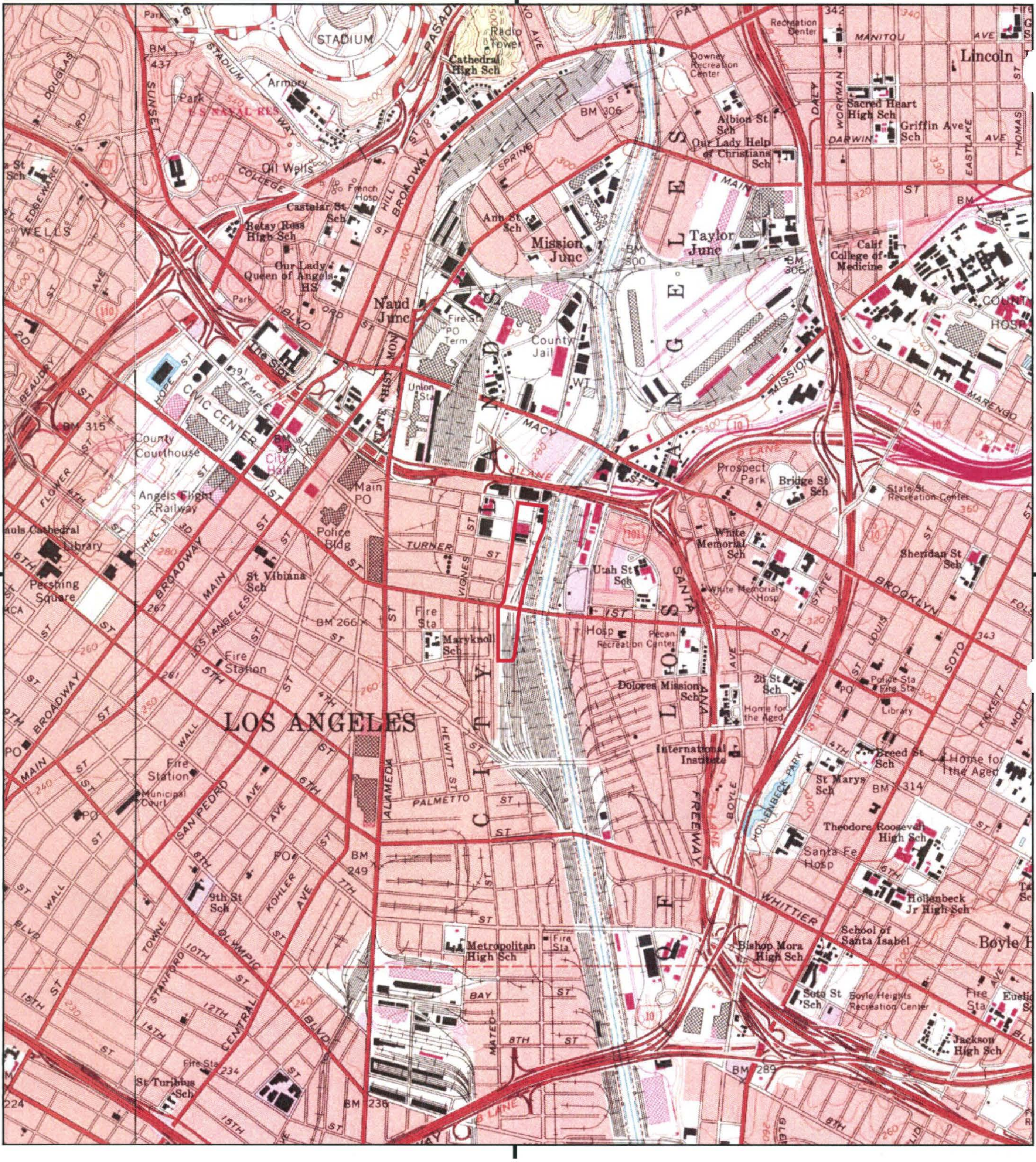
TP, Los Angeles, 2012, 7.5-minute
W, Hollywood, 2012, 7.5-minute

SITE NAME: Metro Division 20
ADDRESS: 801 E. Commercial Street
Los Angeles, CA 90012
CLIENT: Kleinfelder, Inc.

N

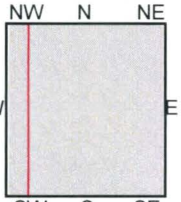
Historical Topo Map

1991, 1994



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



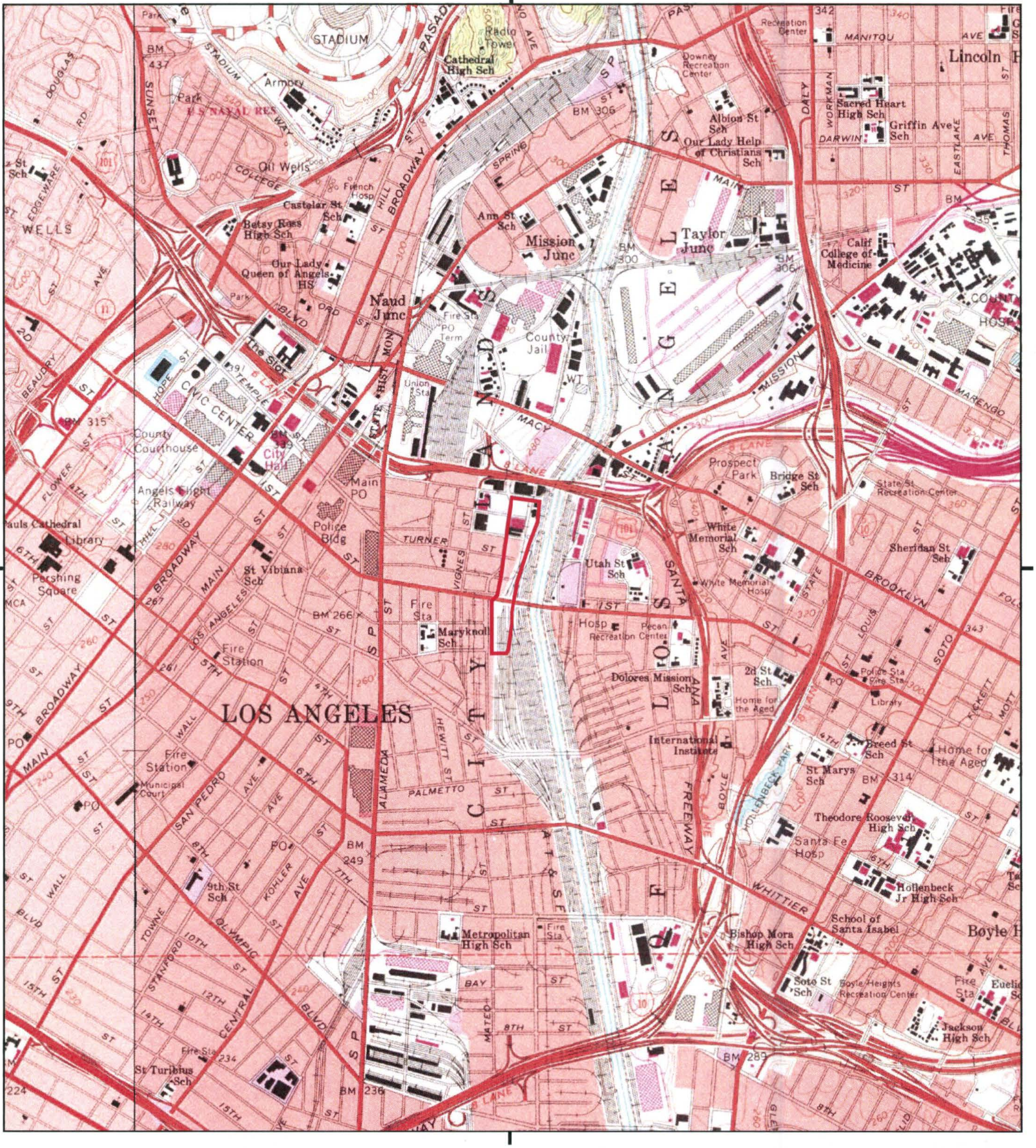
TP, Los Angeles, 1994, 7.5-minute
W, Hollywood, 1991, 7.5-minute

SITE NAME: Metro Division 20
ADDRESS: 801 E. Commercial Street
Los Angeles, CA 90012
CLIENT: Kleinfelder, Inc.

N

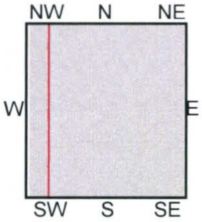
Historical Topo Map

1981



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

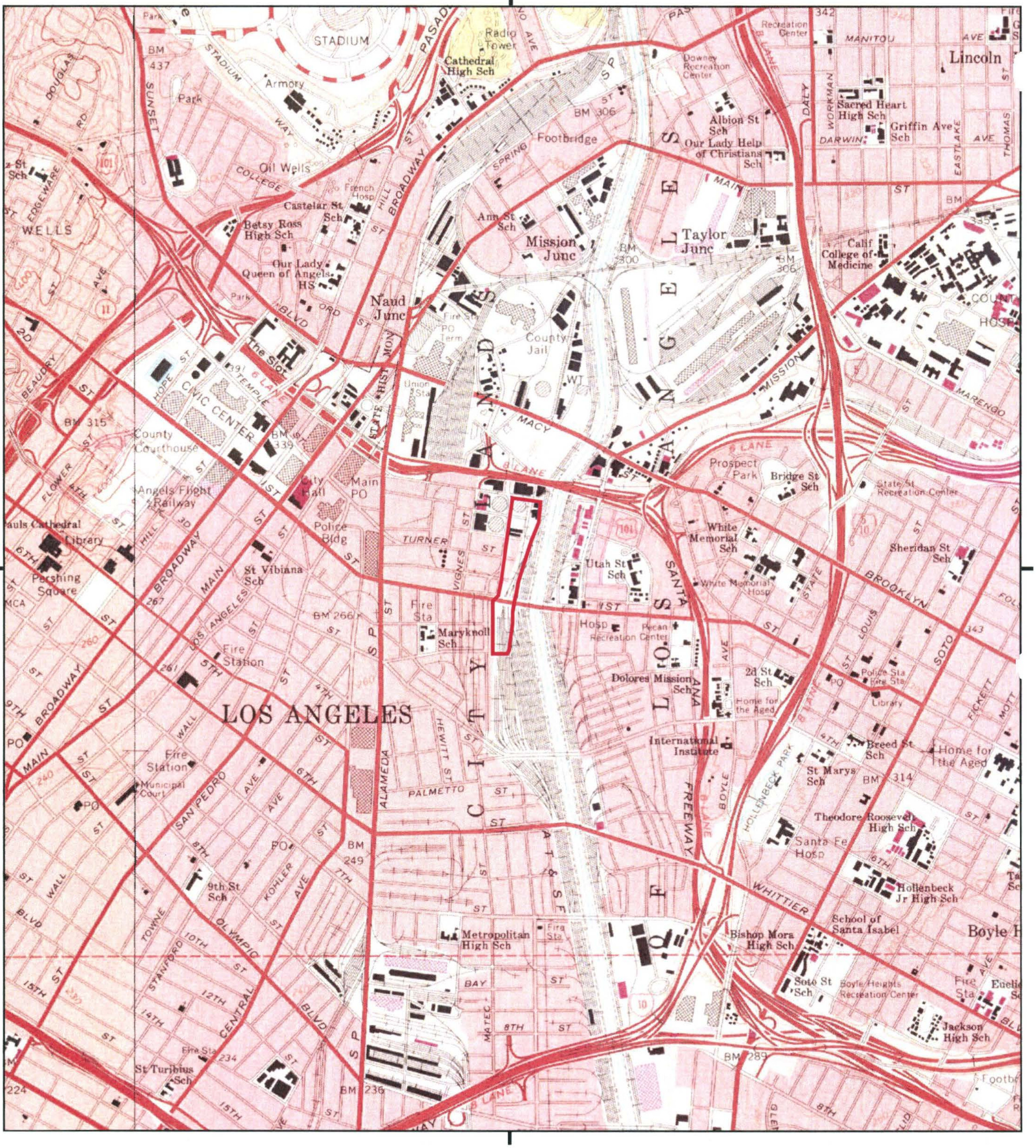


TP, Los Angeles, 1981, 7.5-minute
W, Hollywood, 1981, 7.5-minute

SITE NAME: Metro Division 20
ADDRESS: 801 E. Commercial Street
Los Angeles, CA 90012
CLIENT: Kleinfelder, Inc.

Historical Topo Map

1972



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

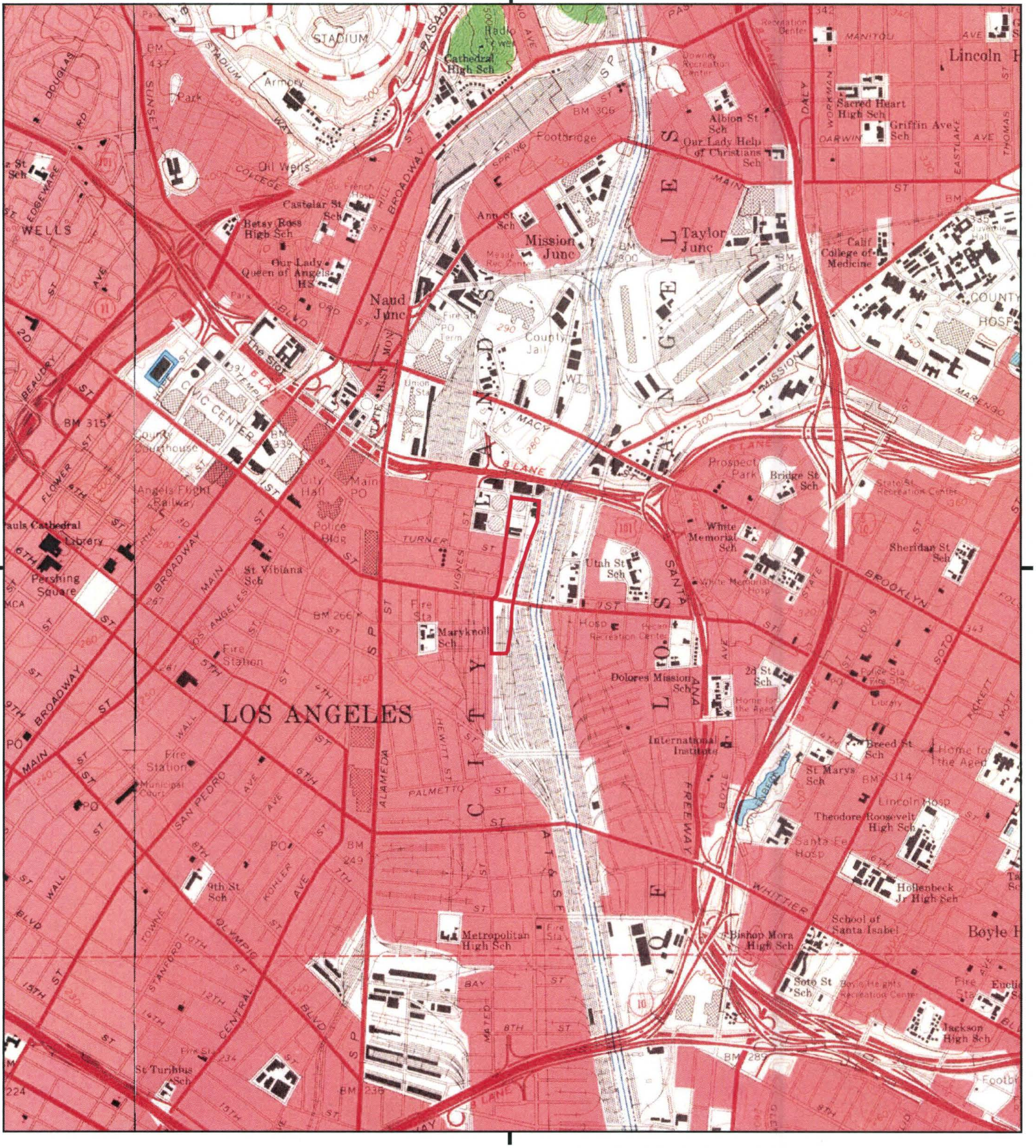
TP, Los Angeles, 1972, 7.5-minute
W, Hollywood, 1972, 7.5-minute

SITE NAME: Metro Division 20
ADDRESS: 801 E. Commercial Street
Los Angeles, CA 90012
CLIENT: Kleinfelder, Inc.

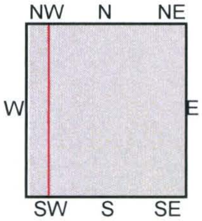
N

Historical Topo Map

1966



This report includes information from the following map sheet(s).



TP, Los Angeles, 1966, 7.5-minute
W, Hollywood, 1966, 7.5-minute

0 Miles 0.25 0.5 1 1.5

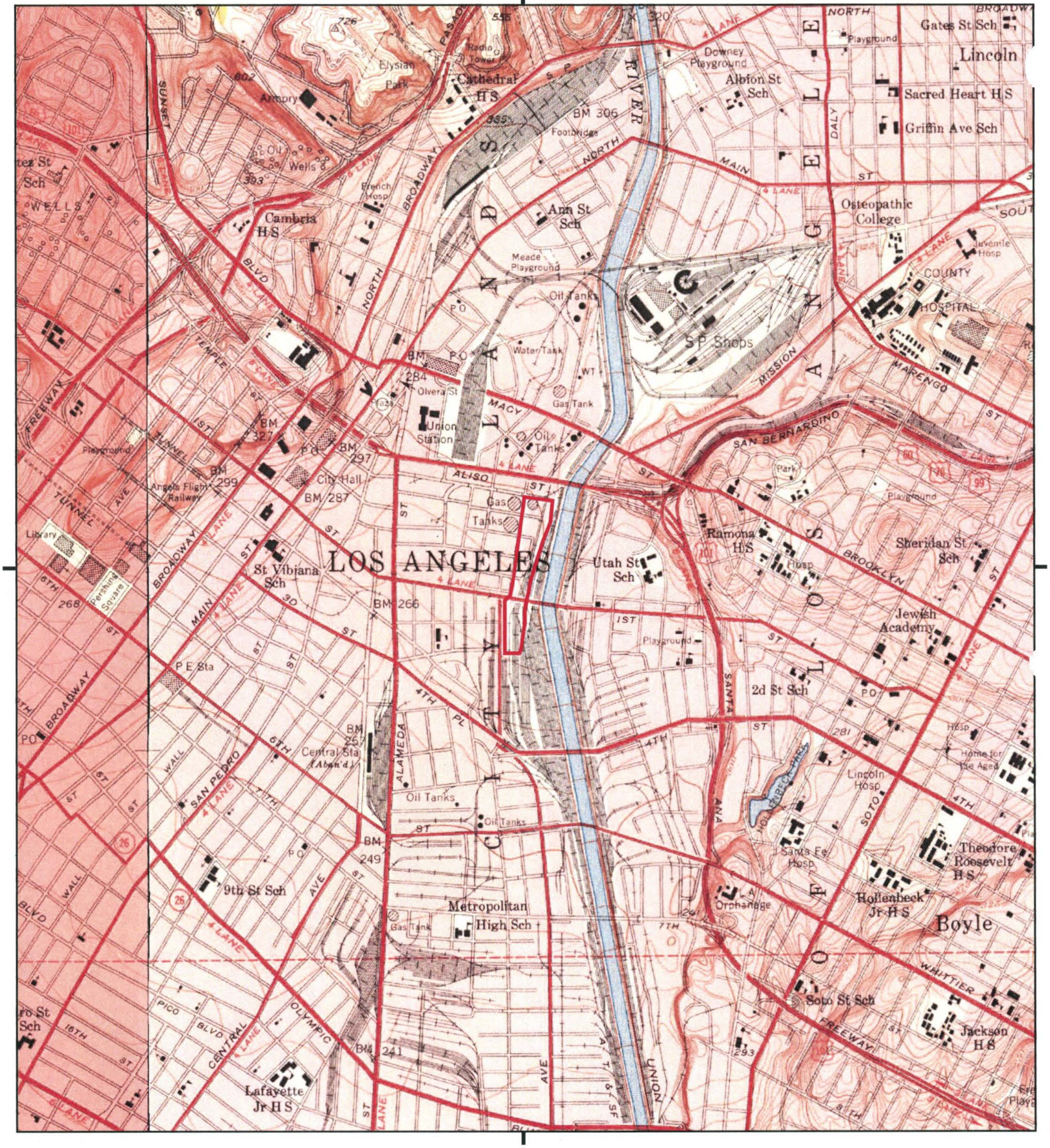
SITE NAME: Metro Division 20
ADDRESS: 801 E. Commercial Street
Los Angeles, CA 90012
CLIENT: Kleinfelder, Inc.

N

EDR

Historical Topo Map

1953



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE W E SW S SE

TP, Los Angeles, 1953, 7.5-minute
W, Hollywood, 1953, 7.5-minute

SITE NAME: Metro Division 20
ADDRESS: 801 E. Commercial Street
Los Angeles, CA 90012
CLIENT: Kleinfelder, Inc.

N

EDR

Historical Topo Map

1928

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

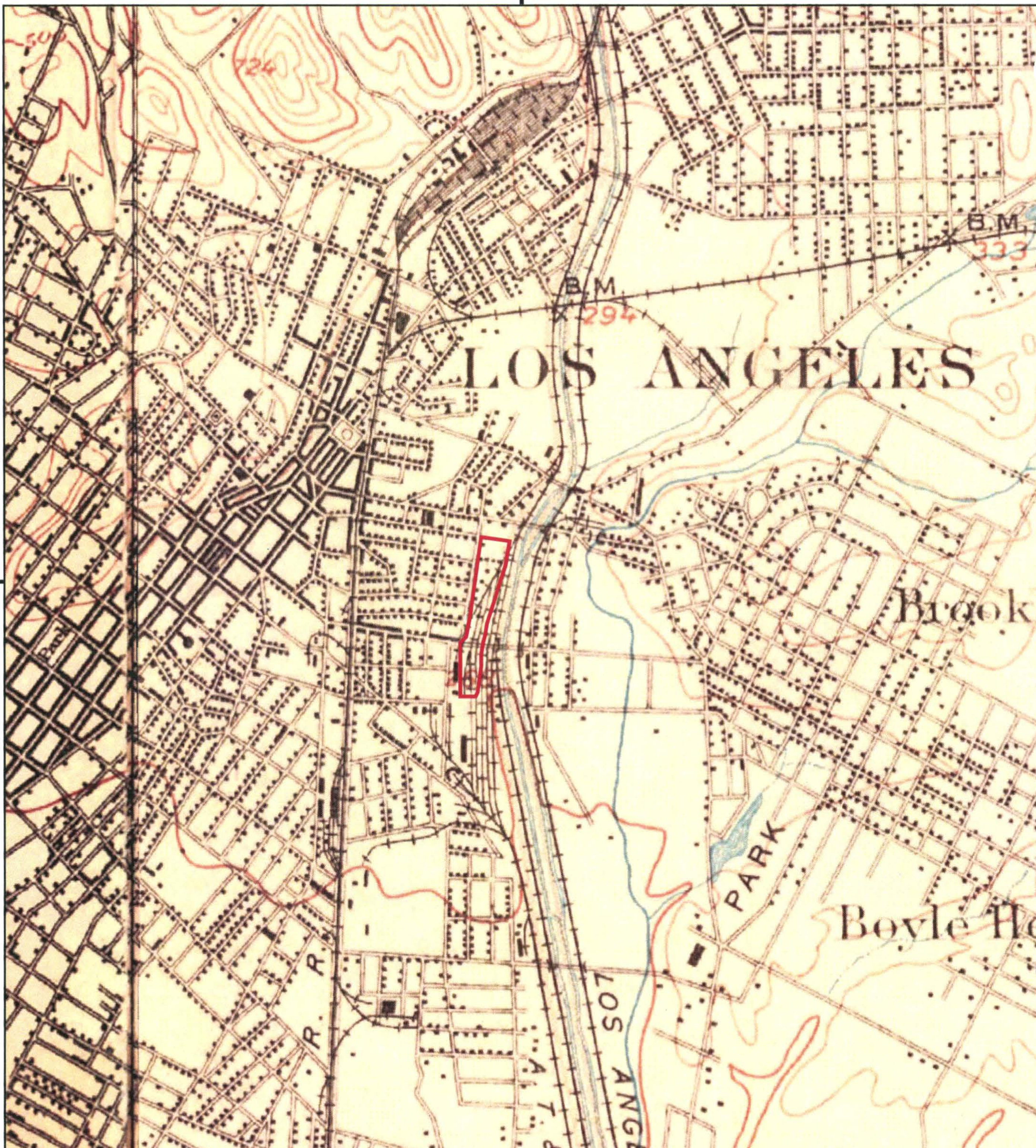
TP, Los Angeles, 1928, 7.5-minute

SITE NAME: Metro Division 20
ADDRESS: 801 E. Commercial Street
Los Angeles, CA 90012
CLIENT: Kleinfelder, Inc.

N

Historical Topo Map

1900



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW	N	NE
W		E
SW	S	SE

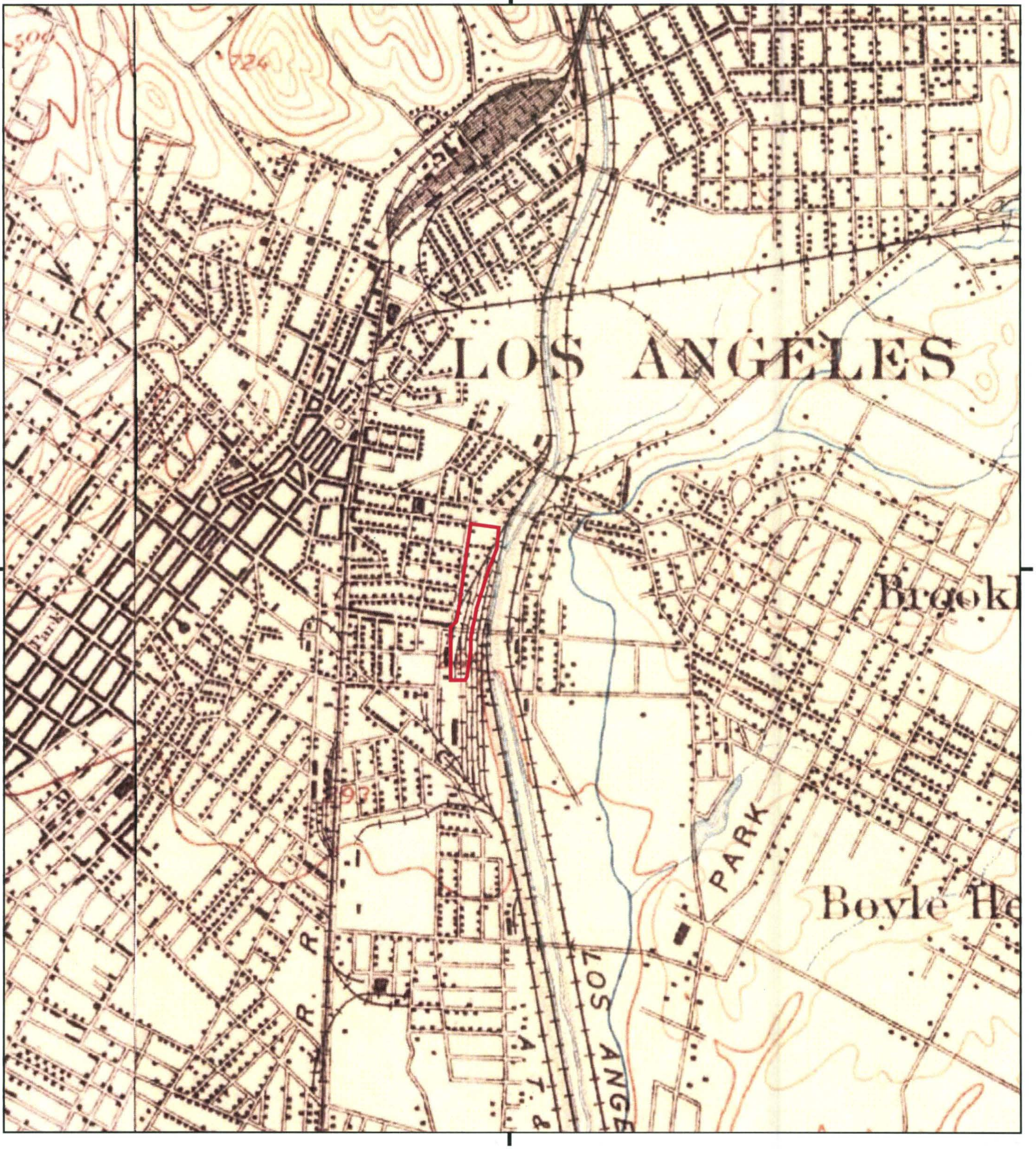
TP, Pasadena, 1900, 15-minute
TP, Los Angeles, 1900, 15-minute

SITE NAME: Metro Division 20
ADDRESS: 801 E. Commercial Street
Los Angeles, CA 90012
CLIENT: Kleinfelder, Inc.

N

Historical Topo Map

1896



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

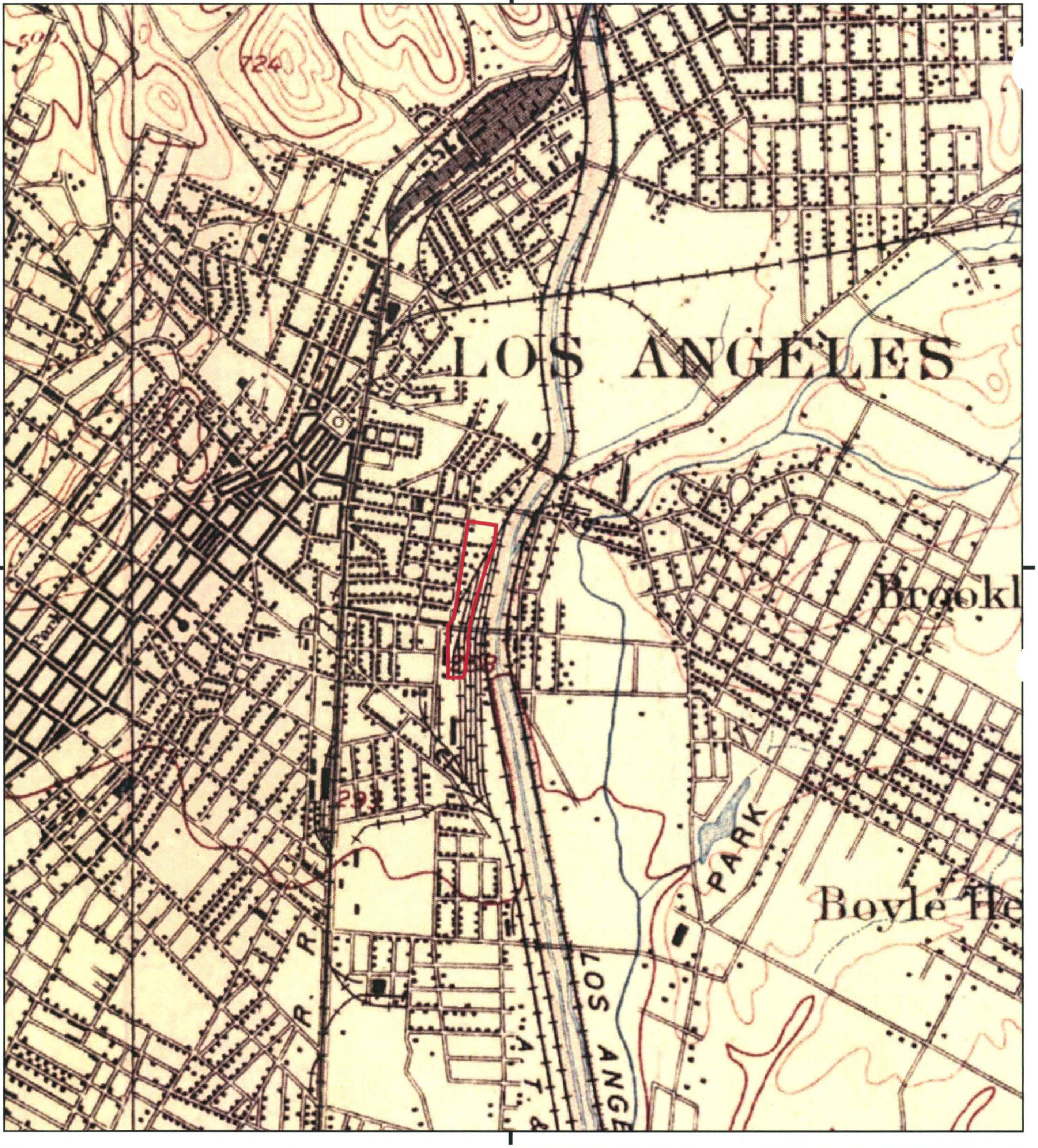
TP, Pasadena, 1896, 15-minute
NW, Santa Monica, 1896, 15-minute

SITE NAME: Metro Division 20
ADDRESS: 801 E. Commercial Street
Los Angeles, CA 90012
CLIENT: Kleinfelder, Inc.

N

Historical Topo Map

1894



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Los Angeles, 1894, 15-minute

SITE NAME: Metro Division 20
ADDRESS: 801 E. Commercial Street
Los Angeles, CA 90012
CLIENT: Kleinfelder, Inc.

N

APPENDIX E

Site Photographs

View facing south from 1st Street at Metro Division 20 Building 61A Warehouse and adjoining mixed-use (retail/apartments) building to the west (right in photograph).

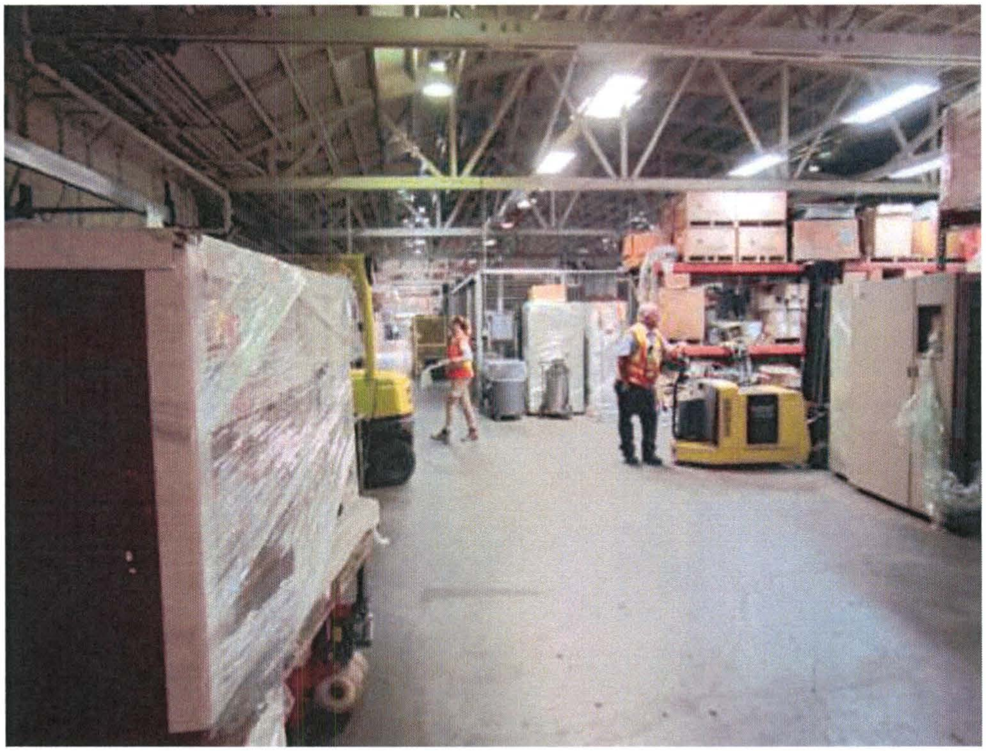
View facing south from 1st Street at Metro Division 20 Facility. Building 61A is shown right; Building 61B is shown left.

KLEINFELDER Bright People. Right Solutions.	PROJECT NO.	20168300	SITE PHOTOGRAPHS	FIGURE
	DRAWN BY:	MRC		
	CHECKED BY:	LS	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-1
	DATE:	12/2016		
	REVISED:	1/2017		

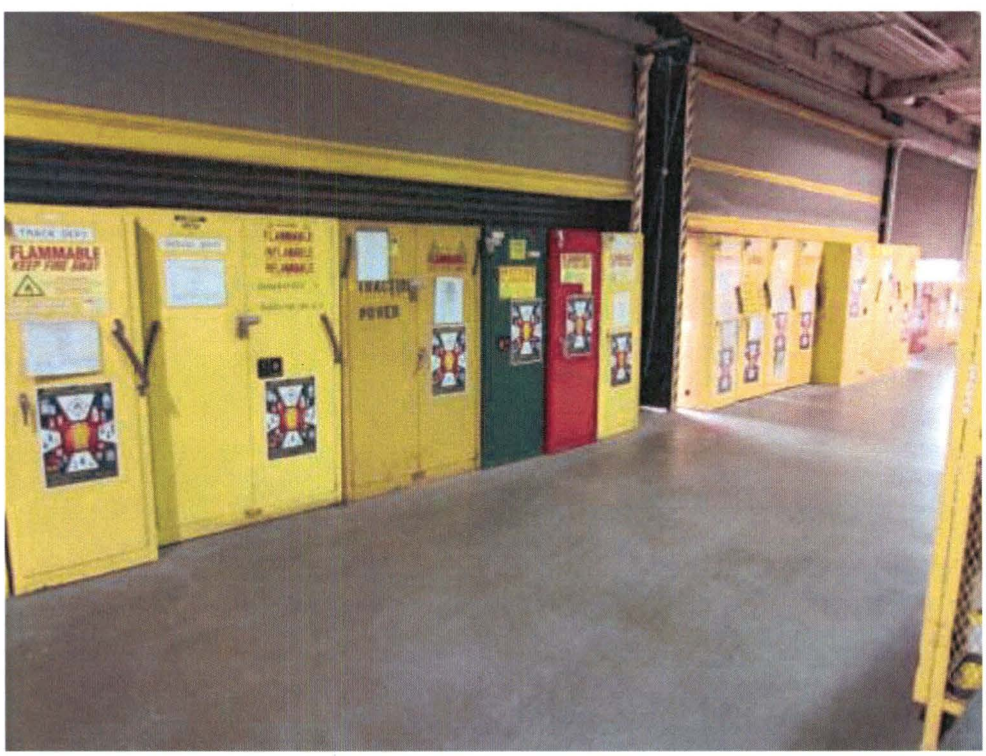
View of Metro Building 61B facing south from 1st Street. Repair shop service bays are shown at northern end of building. Rail spurs are shown on Site.

View facing south from 1st Street at Metro Division 20 Facility. Building 61B is shown right. Railroad tracks and rail yard electrical substation buildings are shown between the railroad tracks (left).

KLEINFELDER Bright People. Right Solutions.	PROJECT NO.	20168300	SITE PHOTOGRAPHS	FIGURE
	DRAWN BY:	MRC		
	CHECKED BY:	LS	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-2
	DATE:	12/2016		
	REVISED:	1/2017		



General view inside Metro Division 20 Building 61A at northern end.



Typical view of flammable storage containers within Metro Division 20 Building 61A.

KLEINFELDER Bright People. Right Solutions.	PROJECT NO.	20168300	SITE PHOTOGRAPHS	FIGURE
	DRAWN BY:	MRC		
	CHECKED BY:	LS	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-3
	DATE:	12/2016		
	REVISED:	1/2017		

View of machine shop area inside Metro Division 20 Building 61A. The 55-gallon drum shown contains waste oily rags.

Typical view of 55-gallon drum storage inside Metro Division 20 Building 61A. Drums shown contain Nicad and alkaline batteries, and waste aerosol cans.

KLEINFELDER Bright People. Right Solutions.	PROJECT NO.	20168300	SITE PHOTOGRAPHS	FIGURE
	DRAWN BY:	MRC		
	CHECKED BY:	LS	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-4
	DATE:	12/2016		
	REVISED:	1/2017		

Typical view of storage inside Metro Division 20 Building 61A.

Typical view inside Metro Division 20 Building 61A, facing south from offices.
Former scales shown in floor in foreground.

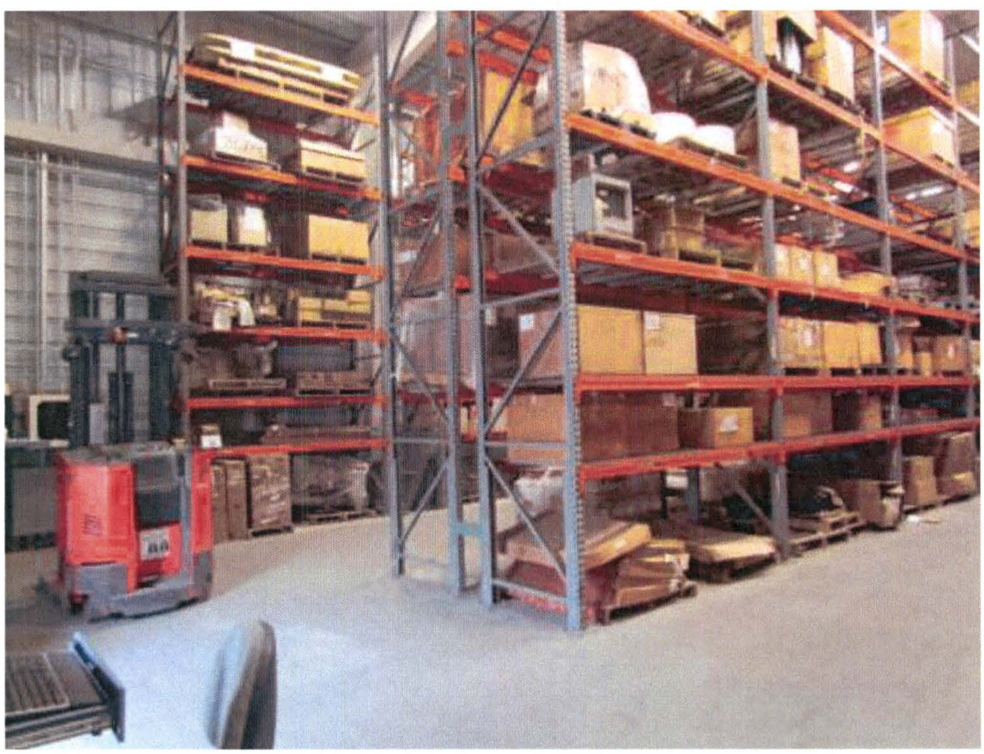
KLEINFELDER Bright People. Right Solutions.	PROJECT NO. 20168300 DRAWN BY: MRC	SITE PHOTOGRAPHS		FIGURE
	CHECKED BY: LS DATE: 12/2016 REVISED: 1/2017	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30		E-5

View of transformer station located just south of 1st Street at the Metro Division 20 Facility.

View of canopy-covered bins containing trash and recyclables.

KLEINFELDER Bright People. Right Solutions.	PROJECT NO.	20168300	SITE PHOTOGRAPHS	FIGURE
	DRAWN BY:	MRC		
	CHECKED BY:	LS	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-6
	DATE:	12/2016		
	REVISED:	1/2017		

View of 1,000-gallon diesel aboveground storage tank located south of Metro Division 20 Building 61B.



Typical view of storage inside the southern end of Metro Division 20 Building 61B.

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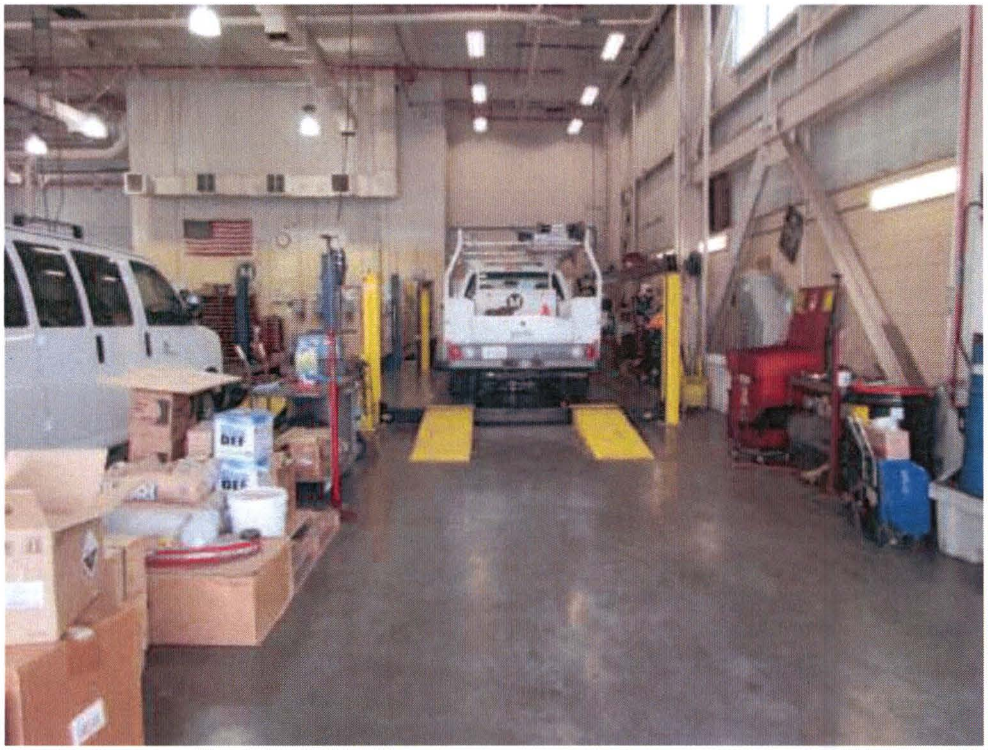
	CHECKED BY: LS DATE: 12/2016 REVISED: 1/2017	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-7

Typical view of storage inside the central portion of Metro Division 20 Building 61B.



View inside the western most service bay of the repair shop located in the northern end of Metro Division 20 Building 61B. 55-gallon drums and parts cleaning unit is shown (right) along the wall.

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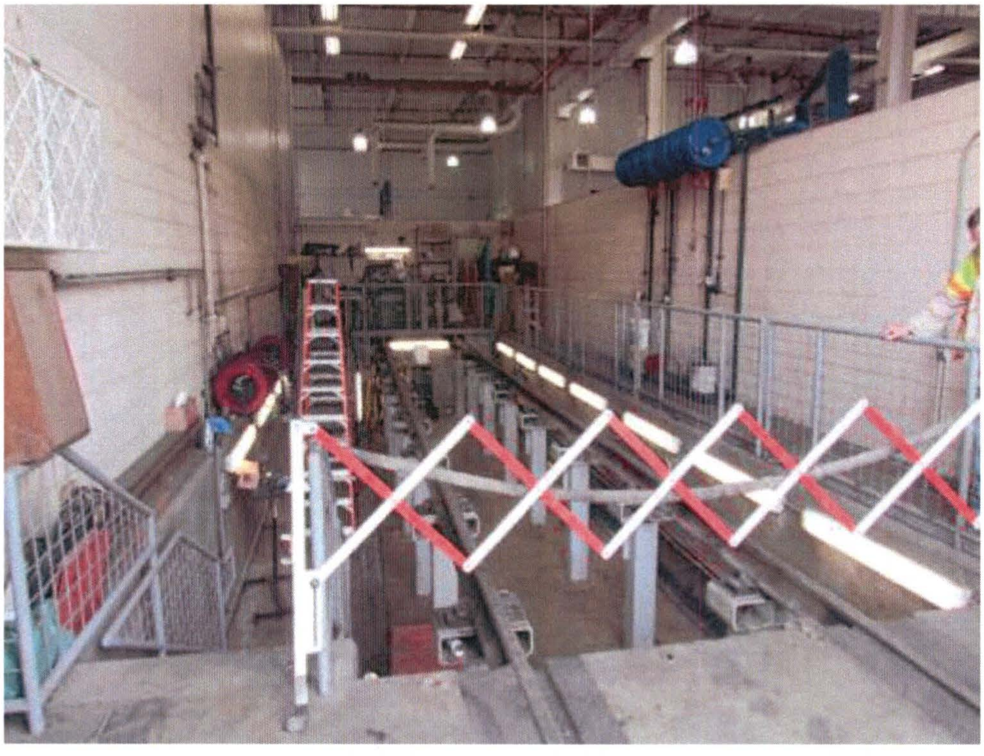
View of additional service bays within the Metro Division 20 Building 61B repair shop.



Hi-rail and rail-bourne (SP) equipment service bay inside the Metro Division 20 Building 61B repair shop.

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View of the hazardous materials storage area and battery charging station located outside the northeastern corner of Metro Division 20 Building 61 B.

Closer view of the hazardous materials storage area located outside the northeastern corner of Metro Division 20 Building 61B.

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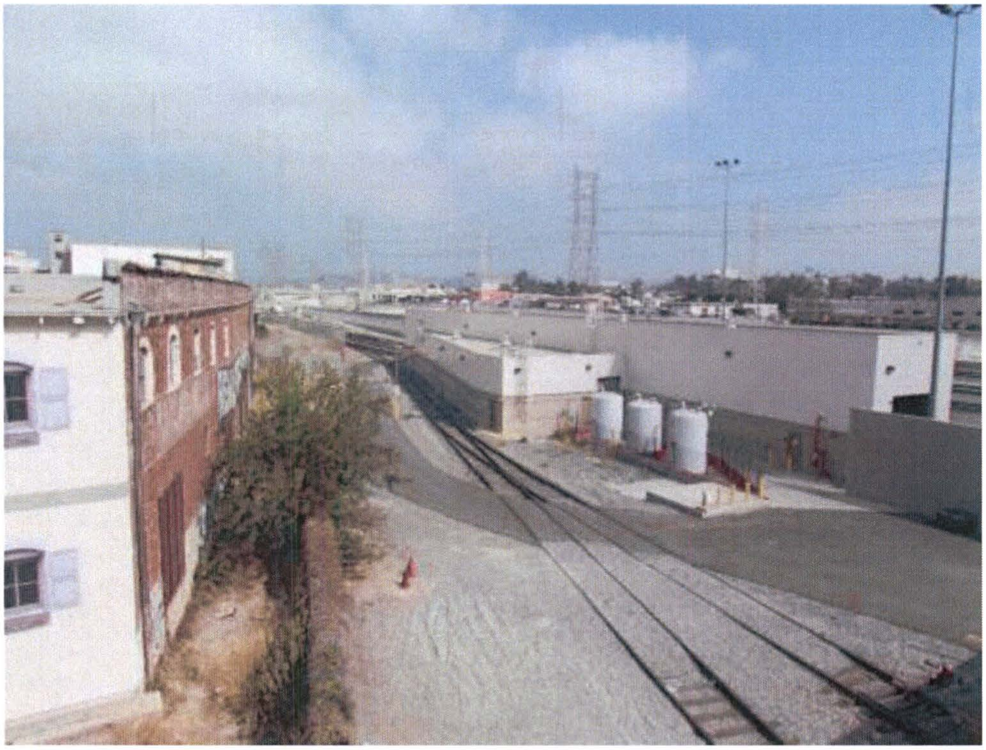

View of the rail car wash building facing north from 1st Street. The Site building located between Banning Street and 1st Street is shown left in photograph.

View facing north of the Metro Division 20 Facility from 1st Street. Rail car wash and tracks are shown. Railroad tracks and the Los Angeles, which adjoin to the east, are shown right, beyond fence.

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View of aboveground storage tanks outside the southwestern portion of the rail car wash building. The tanks contain acid soap and a cleaner foaming agent. One tank is empty.

View of caustic soap and sulfuric acid drums, and recirculating aboveground tanks located inside the rail car wash building.

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	DRAWN BY:	MRC		
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Clarifier pits located inside the Metro Division 20 rail car wash building.

Softener system located inside the Metro Division 20 rail car wash building.

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	DATE:	12/2016		
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Drums of cleaning soaps located near the softener system inside the Metro Division 20 rail car wash building.

View facing south inside the western portion of the Metro Division 20 rail car wash building.

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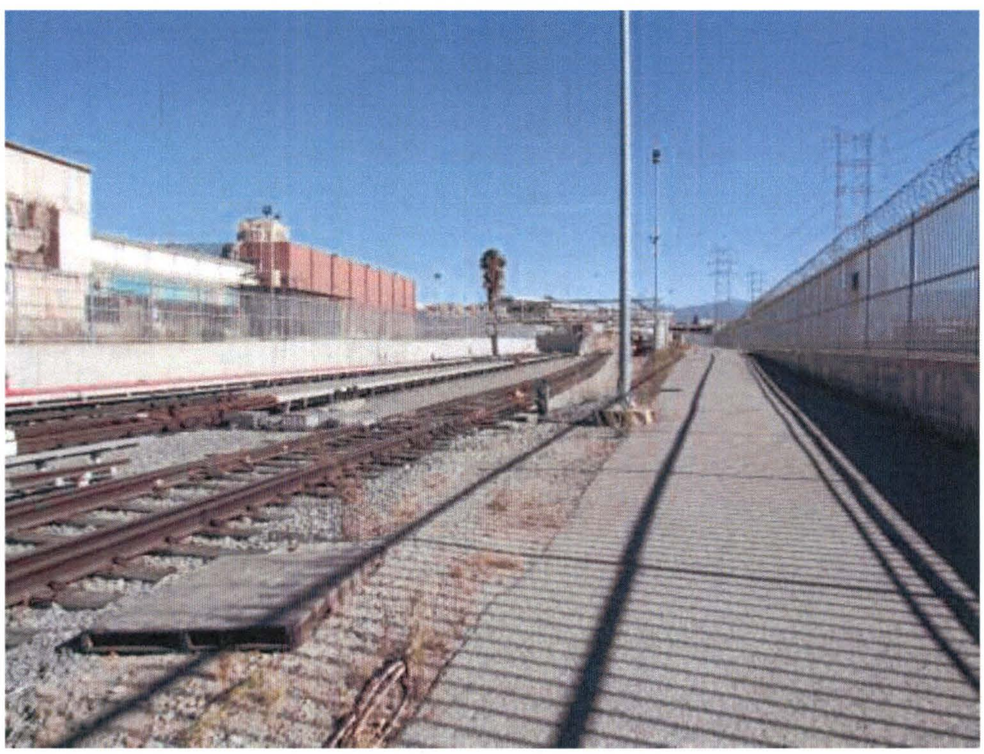
	CHECKED BY: LS DATE: 12/2016 REVISED: 1/2017	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-14

View facing south between the Metro Division 20 rail car wash building and on-Site building located between Banning Street and 1st Street (shown in background).



View facing north along the access road and tracks of the Metro Division 20 Facility. The National Ice & Cold Storage facility, located between Jackson Street and Banning Street, is shown left.

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	DRAWN BY:	MRC		
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	DATE:	12/2016		
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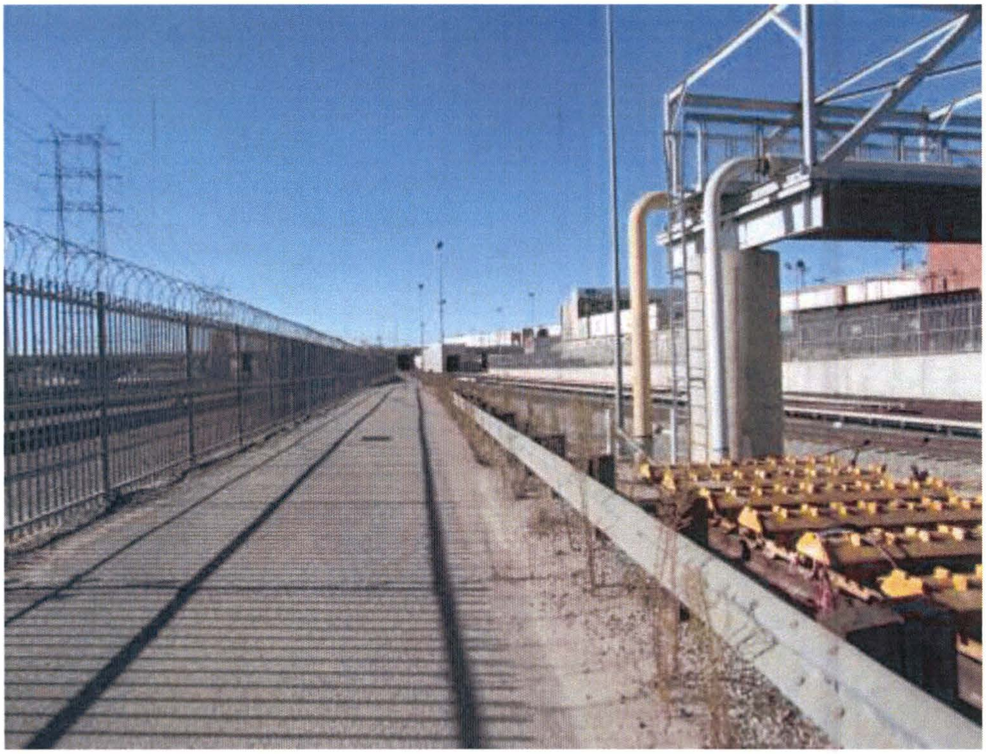
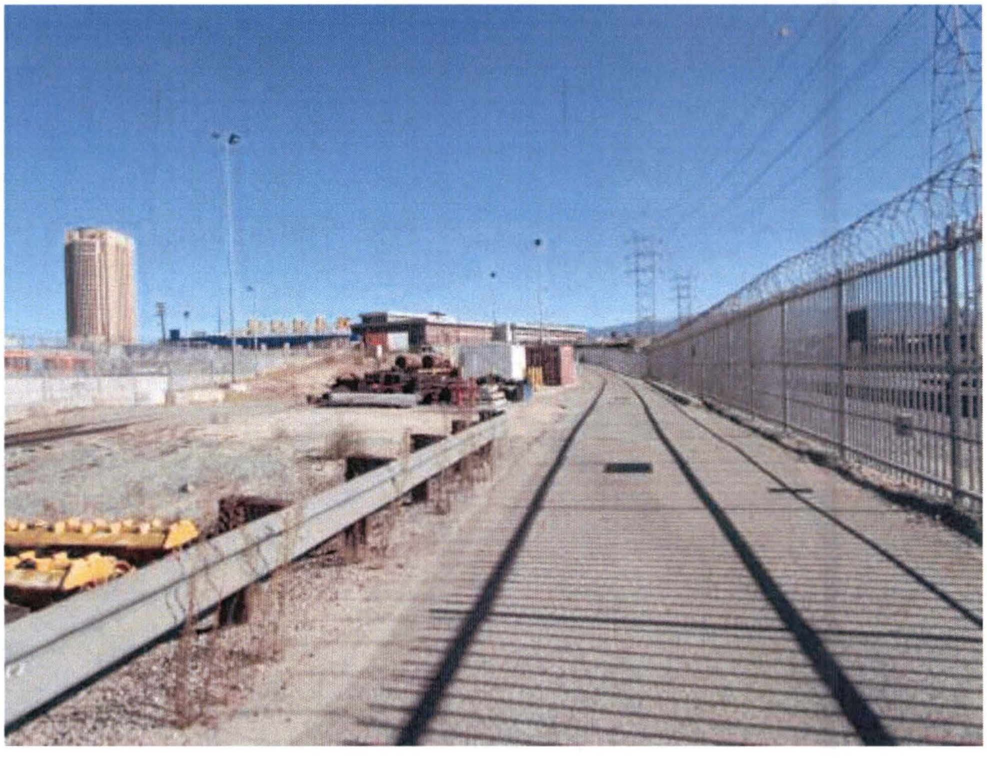


View facing south along Metro Division 20 access road (facing rail car wash in background). Two high-pressure natural gas pipelines are shown passing via an overhead structure over tracks (right).



View facing north from just north of the high-pressure natural gas pipelines along the Metro Division 20 access road. Outdoor storage and Conex storage containers are shown.

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	DRAWN BY:	MRC		
	CHECKED BY:	LS	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-16
	DATE:	12/2016		
	REVISED:	1/2017		

View facing south at Metro Red and Purple Line tracks and high-pressure natural gas pipeline structure over tracks.

View facing south at Metro Red and Purple Line railroad tracks from the Metro Red and Purple Line subway portal.

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	DRAWN BY:	MRC		
	CHECKED BY:	LS	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-17
	DATE:	12/2016		
	REVISED:	1/2017		

View north of the Metro Red and Purple Line subway portal.

View of outdoor storage area east of Metro Red and Purple Line subway portal area. Conex storage containers and numerous 55-gallon drums are shown stored in this area.

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	DRAWN BY: MRC		
	CHECKED BY: LS	Metro Division 20 Portal Widening and Turnback Facility	
	DATE: 12/2016	Commercial Street/Center Street	E-18
	REVISED: 1/2017	Los Angeles, California Metro Project No. PS3274-01-30	

View facing south at a rail platform (for unloading new rail cars), Traction and Power electric container, and Conex storage containers located on the northern portion of the Metro Division 20 Facility property.

Another view of the numerous 55-gallon drums stored on the northern portion of the Metro Division 20 Facility property.

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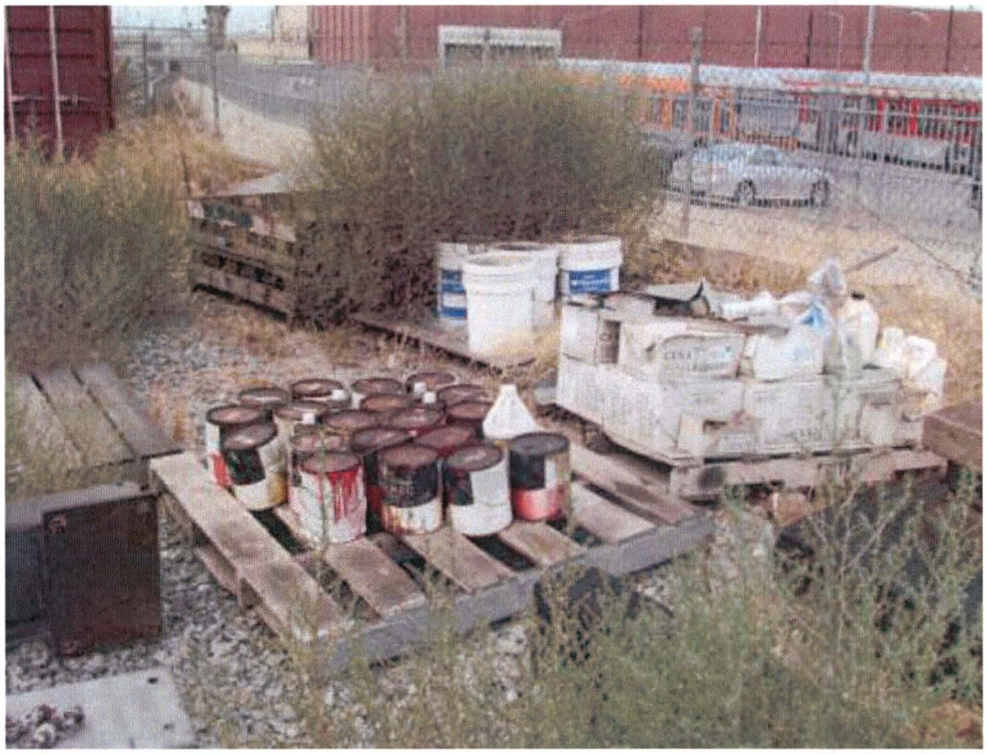
	CHECKED BY: LS DATE: 12/2016 REVISED: 1/2017	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-19



Ceramic tiles, paint cans and Rainstopper buckets located north of the Conex storage containers and 55-gallon drums.

View of the Metro Division 20 Facility access road facing south from near Commercial Street. A temporary storage yard is located to the west (right) of the access road.

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View facing west along Commercial Street at the northern end of the Site (right). Adjoining industrial facilities to the north are shown right.

View of the temporary storage yard located at 840 East Commercial Street. Photograph taken from the public right-of-way.

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	CHECKED BY: LS DATE: 12/2016 REVISED: 1/2017	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-21

View facing west along Ducommun Street. Viertel's Towing Service is located north (right), and the Metro bus layover facility is shown south (left).

View facing west along Jackson Street. The Metro bus layover facility is shown north (right) and the former National Ice & Cold Storage facility is shown south (left).

KLEINFELDER Bright People. Right Solutions.	PROJECT NO. 20168300 DRAWN BY: MRC	SITE PHOTOGRAPHS	FIGURE
	CHECKED BY: LS DATE: 12/2016 REVISED: 1/2017	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-22

View facing south along Center Street from Commercial Street. Center Street adjoins the Site to the west. Industrial buildings west of Center Street are shown (right).

View facing south along Center Street from near the southern portion of the National Ice & Cold Storage facility. The Site building at 1001 East First Street (just south of Banning Street) is shown in background.

KLEINFELDER Bright People. Right Solutions.	PROJECT NO.	20168300	SITE PHOTOGRAPHS	FIGURE
	DRAWN BY:	MRC		
	CHECKED BY:	LS	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-23
	DATE:	12/2016		
	REVISED:	1/2017		

View facing south from Jackson Street behind the National Ice & Cold Storage facility. The high-pressure natural gas line structure over the tracks (left) crosses behind this facility.

View of the southeastern portion of the National Ice & Cold Storage facility. Photograph is taken from Banning Street. A monitoring well is shown on this property.

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View facing east at Banning Street. The National Ice & Cold Storage facility is north (left) and the Site building at 1001 East 1st Street is shown south (right).

View of the National Ice & Cold Storage facility at the northeast corner of the intersection of Banning Street and Center Street. Railroad spur is shown in foreground and continues east along Banning Street.

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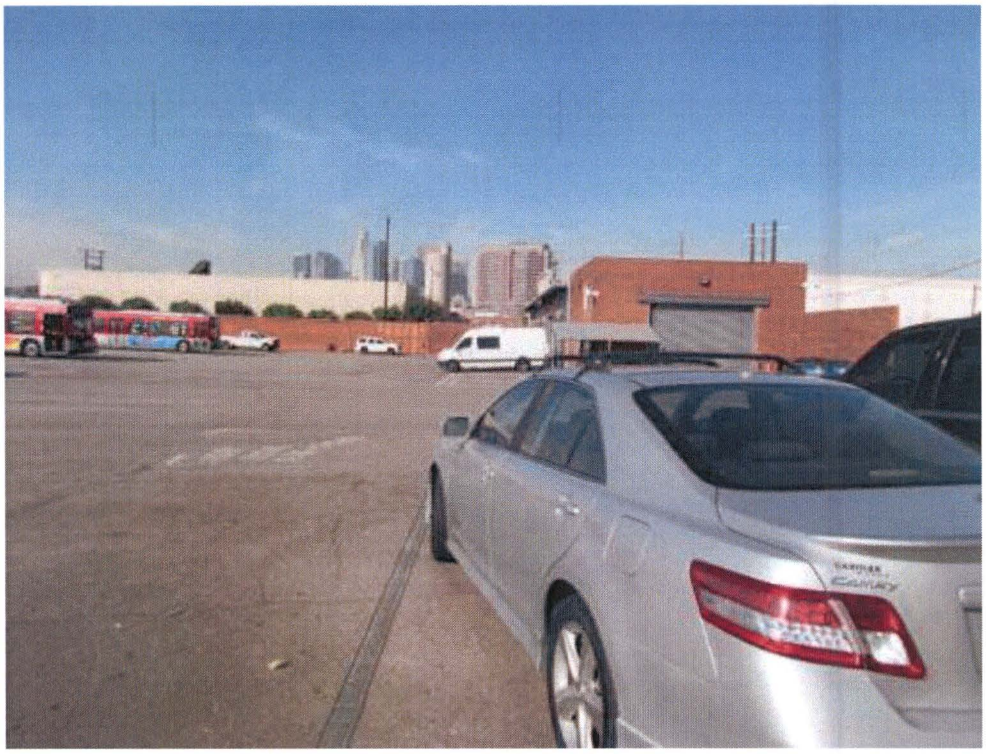
	CHECKED BY: LS DATE: 12/2016 REVISED: 1/2017	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-25



View of the nothern portion of the Metro Bus Layover Facility (410 North Center Street). Existing building is shown at northwestern portion of the property.

View facing southwest at the Metro Bus Layover Facility.

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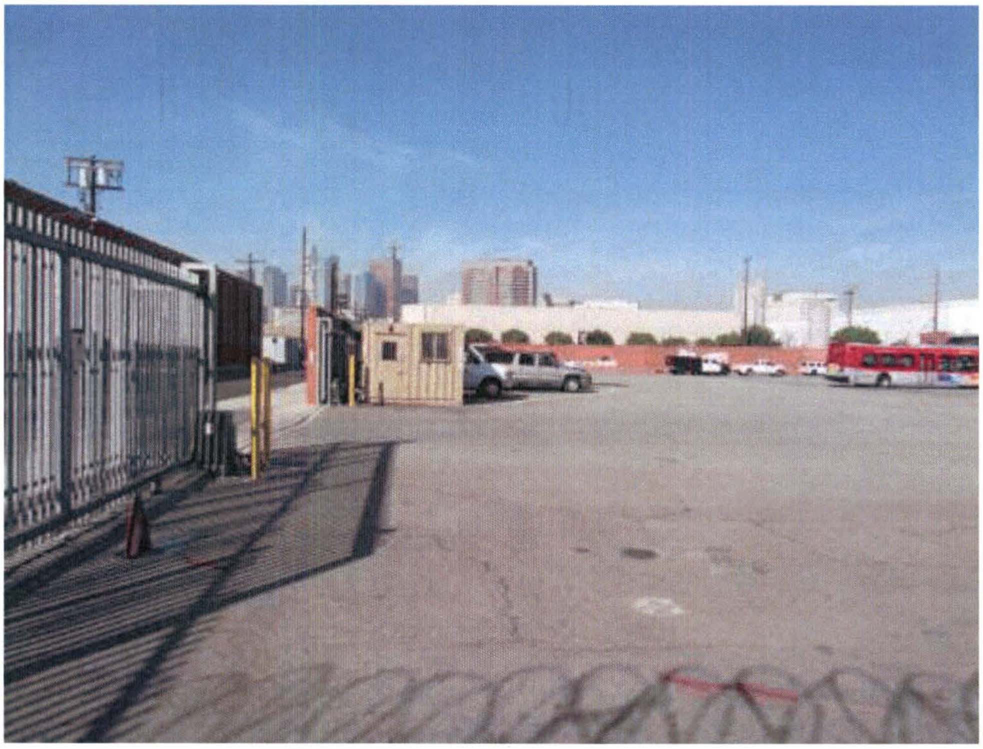
View facing north at the eastern portion of the Metro Bus Layover Facility. The Metro Division 20 Facility is east (right) beyond fence.



View facing west at the southern portion of the Metro Bus Layover Facility.

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	CHECKED BY: LS DATE: 12/2016 REVISED: 1/2017	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-27

View of northwestern corner of Metro Temporary Storage Lot (840 East Commercial Street). AST shown contains flood water that is being drained to the street curb and gutter system.

View of a "D-Watering Bag" through which water from the AST on the northwest corner of the property filters through prior to being discharged to the curb and gutter system.

KLEINFELDER Bright People. Right Solutions.	PROJECT NO.	20168300	SITE PHOTOGRAPHS	FIGURE
	DRAWN BY:	MRC		
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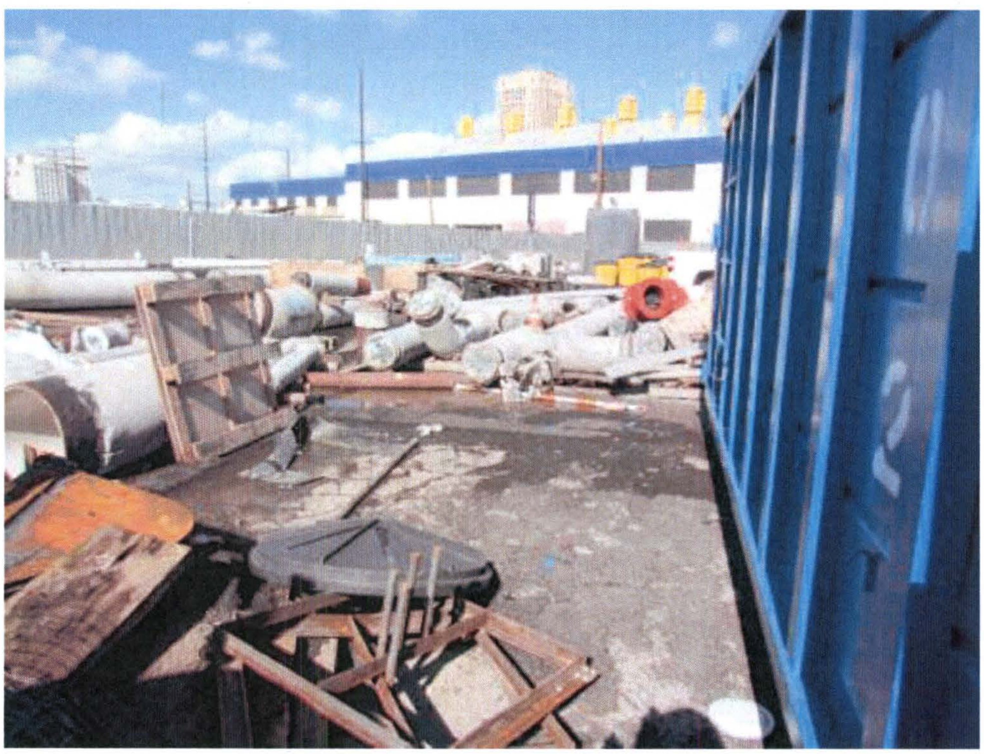
	DATE:	12/2016		
	REVISED:	1/2017		

View facing south at typical construction storage along the western side of the Metro Temporary Storage Yard.



View facing north at typical construction storage along the western side of the Metro Temporary Storage Yard.

KLEINFELDER Bright People. Right Solutions.	PROJECT NO.	20168300	SITE PHOTOGRAPHS	FIGURE
	DRAWN BY:	MRC		
	CHECKED BY:	LS	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-29
	DATE:	12/2016		
	REVISED:	1/2017		

View facing east from the property entrance, of typical traffic/construction related storage on the northeastern corner of the Metro Temporary Storage Yard.

View facing north at typical construction storage along the eastern side of the Metro Temporary Storage Yard.

KLEINFELDER Bright People. Right Solutions.	PROJECT NO. 20168300 DRAWN BY: MRC	SITE PHOTOGRAPHS	FIGURE
	CHECKED BY: LS DATE: 12/2016 REVISED: 1/2017	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-30

Covered stockpiled soil and gravel stockpile (right) located on the east-central side of the Metro Temporary Storage Yard.

View of southeastern corner of Site. Low-lying piles of asphalt are stored on this corner of the Metro Temporary Storage Yard.

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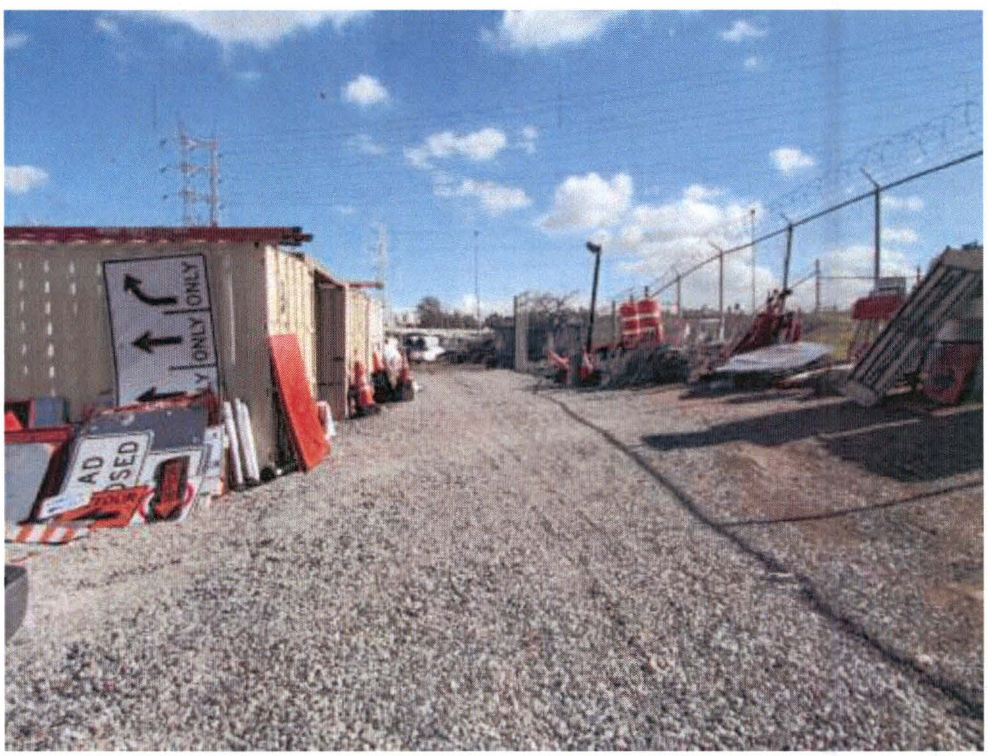
	DRAWN BY:	MRC		
	CHECKED BY:	LS	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-31
	DATE:	1/2017		
	REVISED:			

View of a storm drain/sump with pump located on the southwestern corner of the Metro Temporary Storage Yard.



Storage area on the Metro Temporary Storage Yard property overlying the Metro Division 20 Red and Purple Line Subway Portal.

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	DRAWN BY:	MRC		
	CHECKED BY:	LS	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-32
	DATE:	1/2017		
	REVISED:			

Inactive remediation equipment located on the east-central side of the Metro Temporary Storage Yard.

Drums of soil/sludge associated with street improvement projects, which are temporarily stored on the west-central portion of the Metro Temporary Storage Yard prior to off-Site disposal.

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	DRAWN BY:	MRC		
	CHECKED BY:	LS	Metro Division 20 Portal Widening and Turnback Facility Commercial Street/Center Street Los Angeles, California Metro Project No. PS3274-01-30	E-33
	DATE:	1/2017		
	REVISED:			