



AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services

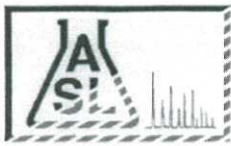
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# N° 56329 GLOBAL ID _____ **E REPORT:** PDF EDF EDD ASL JOB# 47126

Company: MACTEC Address: 2171 Campus Drive Skelton Irvine, CA Telephone: 949-274-0050 x21 Fax: 949-274-0050 x21 Special Instruction: E-mail:		Project Name: Site Address: Wilshire Blvd / Fairfax Ave LA, CA Project ID: 4453090473 Project Manager: Jay Neuhaus		Report To: Address: Jay Neuhaus Invoice To: Address:		ANALYSIS REQUESTED			
LAB USE ONLY Lab ID 258275 258276 258277	SAMPLE DESCRIPTION			Container(s) # Type 1 Red Bag ↓ ↓	Matrix GUS ↓	Preservation	X X X Methane Fixed gases	Remarks	
	Sample ID	Date	Time						
	G-7A-87	9/27/10	0919						
	G-7A-150	↓	0938						
G-7A-117	↓	0955							
Collected By: Paul Kase	Date	9/27/10	Time	0955	Relinquished By: Paul Kase	Date	9/27/10	Time	11:40
Relinquished By:	Date		Time		Received For Laboratory: Janet Chin	Date	9/22/10	Time	11:40
Received By:	Date		Time		Condition of Sample:				

White - Report, Yellow - Laboratory, Pink - Client

Figure G-1.35



AMERICAN SCIENTIFIC LABORATORIES, LLC

Environmental Testing Services

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Ordered By

Site

Mactec Engineerig & Cosulting
2171 Campus Dr. Suite # 100
Irvine, CA 92612-1422

Wilshire Blvd. / Fairfax Ave.
L.A., CA

Telephone: (949)224-0050

Attn: Jay Neuhaus

Page: 2

Project ID: 4953090473

ASL Job Number	Submitted	Client
47126	09/22/2010	MACIRV

Method: ASTM-D1946, Fixed Gases

QC Batch No: 092210-1

Our Lab I.D.		258275	258276	258277		
Client Sample I.D.		G-7A-87	G-7A-150	G-7A-117		
Date Sampled		09/22/2010	09/22/2010	09/22/2010		
Date Prepared		09/22/2010	09/22/2010	09/22/2010		
Preparation Method						
Date Analyzed		09/22/2010	09/22/2010	09/22/2010		
Matrix		Air	Air	Air		
Units		ppmv	ppmv	ppmv		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
Carbon Dioxide	1000	ND	ND	ND		
Methane	800	ND	8570	6940		
Nitrogen	1000	629000	647000	641000		
Oxygen/Argon	1000	167000	171000	171000		

QUALITY CONTROL REPORT

QC Batch No: 092210-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit				
Carbon Dioxide	82	84	2.4	70-130	<30				
Methane	75	77	2.6	70-130	<30				
Nitrogen	82	84	2.4	70-130	<30				
Oxygen/Argon	78	80	2.5	70-130	<30				

LABORATORY REPORT

September 24, 2010

Molky Brar
American Scientific Laboratories
2520 North San Fernando Road
Los Angeles, CA 90065

RE: 47126

Dear Molky:

Enclosed are the results of the samples submitted to our laboratory on September 23, 2010. For your reference, these analyses have been assigned our service request number P1003507.

All analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains 7 pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L10-3; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-09-TX; Minnesota Department of Health, Certificate No. 11495AA; Washington State Department of Ecology, ELAP Lab ID: C946. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.



Sue Anderson
Project Manager

Page
1 of 7

Client: American Scientific Laboratories
Project: 47126

CAS Project No: P1003507

CASE NARRATIVE

The samples were received intact under chain of custody on September 23, 2010 and were stored in accordance with the analytical method requirements. Samples 258275 (P1003507-001) and 258276 (P1003507-002) were received past the recommended holding time. Sample 258277 (P1003507-003) was received with insufficient hold time remaining to complete the analysis within the recommended limit. The analysis was performed as soon as possible after receipt by the laboratory. The data is flagged to indicate the holding time exceedances. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Hydrogen Sulfide Analysis

The samples were analyzed for hydrogen sulfide per ASTM D 5504-08 using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD).

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Client: American Scientific Laboratories
Project: 47126

Service Request: P1003507

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
P1003507-001	258275	9/22/10	09:19
P1003507-002	258276	9/22/10	09:38
P1003507-003	258277	9/22/10	09:55

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: American Scientific Laboratories

Work order: P1003507

Project: 47126

Sample(s) received on: 9/23/2010

Date opened: 9/23/2010

by: MZAMORA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

- | | | Yes | No | N/A |
|----|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 | Were sample containers properly marked with client sample ID? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | Container(s) supplied by CAS? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3 | Did sample containers arrive in good condition? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | Was a chain-of-custody provided? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | Was the chain-of-custody properly completed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | Did sample container labels and/or tags agree with custody papers? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 | Was sample volume received adequate for analysis? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8 | Are samples within specified holding times? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 9 | Was proper temperature (thermal preservation) of cooler at receipt adhered to? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Cooler Temperature _____ °C Blank Temperature _____ °C | | | |
| 10 | Was a trip blank received? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Trip blank supplied by CAS: _____ | | | |
| 11 | Were custody seals on outside of cooler/Box? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | Location of seal(s)? _____ Sealing Lid? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Were signature and date included? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Were seals intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Were custody seals on outside of sample container? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | Location of seal(s)? _____ Sealing Lid? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Were signature and date included? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Were seals intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 12 | Do containers have appropriate preservation , according to method/SOP or Client specified information? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Is there a client indication that the submitted samples are pH preserved? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Were VOA vials checked for presence/absence of air bubbles? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 13 | Tubes: Are the tubes capped and intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Do they contain moisture? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 14 | Badges: Are the badges properly capped and intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Are dual bed badges separated and individually capped and intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1003507-001.01	1.0 L Tedlar Bag					
P1003507-002.01	1.0 L Tedlar Bag					
P1003507-003.01	1.0 L Tedlar Bag					

Explain any discrepancies: (include lab sample ID numbers): _____
 Samples -001 & -002 received past hold time, -003 had insufficient time remaining to run within hold time.

*Required pH: Phenols/COD/NH3/TOC/TOX/NO3+NO2/TKN/T.PHOS, H2SO4 (pH<2); Metals, HNO3 (pH<2); CN (NaOH or NaOH/Asc Acid) (pH>12); Diss. Sulfide, NaOH (pH>12); T. Sulfide, NaOH/ZnAc (pH>12) RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: American Scientific Laboratories
Client Project ID: 47126

CAS Project ID: P1003507

Hydrogen Sulfide

Test Code: ASTM D 5504-08
Instrument ID: Agilent 7890A/GC22/SCD
Analyst: Zheng Wang
Sampling Media: 1.0 L Tedlar Bag(s)
Test Notes:

Date(s) Collected: 9/22/10
Date Received: 9/23/10
Date Analyzed: 9/23/10

Client Sample ID	CAS Sample ID	Injection		Result μg/m ³	MRL μg/m ³	Result ppbV	MRL ppbV	Data Qualifier
		Volume ml(s)	Time Analyzed					
258275	P1003507-001	1.0	10:18	ND	7.0	ND	5.0	H3
258276	P1003507-002	1.0	10:22	ND	7.0	ND	5.0	H3
258277	P1003507-003	1.0	10:27	ND	7.0	ND	5.0	H1
Method Blank	P100923-MB	1.0	09:15	ND	7.0	ND	5.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

H1 = Sample analysis performed past holding time. See case narrative.

H3 = Sample was received and analyzed past holding time.

Verified By: Re Date: 9/23/10

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

Client: American Scientific Laboratories
Client Sample ID: Lab Control Sample
Client Project ID: 47126

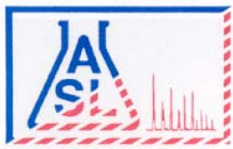
CAS Project ID: P1003507
CAS Sample ID: P100923-LCS

Test Code: ASTM D 5504-08
Instrument ID: Agilent 7890A/GC22/SCD
Analyst: Zheng Wang
Sampling Media: 1.0 L Tedlar Bag
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 9/23/10
Volume(s) Analyzed: NA ml(s)

CAS #	Compound	Spike Amount ppbV	Result ppbV	% Recovery	CAS Acceptance Limits	Data Qualifier
7783-06-4	Hydrogen Sulfide	1,920	1,970	103	71-129	

**FIGURES G-2.1 THROUGH G-2.28
ANALYTICAL TEST RESULTS (PE PHASE)**



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ANALYTICAL RESULTS

Ordered By

MACTEC Engineering & Consulting Inc
 5628 East Slauson Ave.
 Los Angeles, CA 90040-

Telephone: (323)889-5300

Attn: Marty Hudson

Page: **2**

Project ID: 4953-10-1531 G165-66

Project Name: MTA Westside Extension

Site

241 Moreno Drive
 Beverly Hills, CA

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 1664, Revision A, Oil and Grease (HEM)

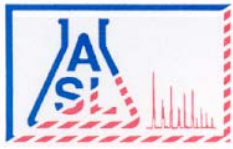
QC Batch No: 042611-1

Our Lab I.D.		267815	267817			
Client Sample I.D.		G-166-D	G-165-D			
Date Sampled		04/22/2011	04/22/2011			
Date Prepared		04/26/2011	04/26/2011			
Preparation Method						
Date Analyzed		04/26/2011	04/26/2011			
Matrix		Water	Water			
Units		mg/L	mg/L			
Dilution Factor		1	1			
Analytes	PQL	Results	Results			
Conventionals						
Oil and Grease	5.00	ND	ND			

QUALITY CONTROL REPORT

QC Batch No: 042611-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit				
Conventionals									
Oil and Grease	92	95	3.2	80-120	<20				



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ANALYTICAL RESULTS

Ordered By

MACTEC Engineering & Consulting Inc
 5628 East Slauson Ave.
 Los Angeles, CA 90040-

Telephone: (323)889-5300

Attn: Marty Hudson

Page: 3

Project ID: 4953-10-1531 G165-66

Project Name: MTA Westside Extension

Site

241 Moreno Drive
 Beverly Hills, CA

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 418.1, TRPH

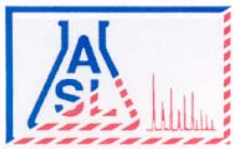
QC Batch No: W-042811-1

Our Lab I.D.		267815	267817			
Client Sample I.D.		G-166-D	G-165-D			
Date Sampled		04/22/2011	04/22/2011			
Date Prepared		04/27/2011	04/27/2011			
Preparation Method						
Date Analyzed		04/28/2011	04/28/2011			
Matrix		Water	Water			
Units		mg/L	mg/L			
Dilution Factor		1	1			
Analytes	PQL	Results	Results			
Total Recoverable Petroleum Hydrocarbons	0.500	ND	ND			

QUALITY CONTROL REPORT

QC Batch No: W-042811-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit				
Total Recoverable Petroleum Hydrocarbons	104	103	<1	70-130	15				



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ANALYTICAL RESULTS

Ordered By

MACTEC Engineering & Consulting Inc
 5628 East Slauson Ave.
 Los Angeles, CA 90040-

Site

241 Moreno Drive
 Beverly Hills, CA

Telephone: (323)889-5300

Attn: Marty Hudson

Page: 4

Project ID: 4953-10-1531 G165-66
 Project Name: MTA Westside Extension

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 600, General Minerals

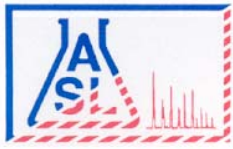
QC Batch No: 042211-1

Our Lab I.D.		267815	267816	267817		
Client Sample I.D.		G-166-D	G-166-S	G-165-D		
Date Sampled		04/22/2011	04/22/2011	04/22/2011		
Date Prepared		04/22/2011	04/22/2011	04/22/2011		
Preparation Method						
Date Analyzed		04/22/2011	04/22/2011	04/22/2011		
Matrix		Water	Water	Water		
Units		mg/L	mg/L	mg/L		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
Conventionals						
Alkalinity, Total	10.0	215	135	145		
Bicarbonate (as CaCO3)	10.0	215	135	145		
Carbonate (as CaCO3)	10.0	ND	ND	ND		
Hydroxide (as CaCO3)	10.0	ND	ND	ND		
Chloride	1.00	352	599	753		
Conductivity (umho/cm @77F)	1.00	1620	2350	2780		
Fluoride	0.100	0.500	1.15	1.25		
Hardness (Ca,Mg) as CaCO3	10.0	440	260	900		
Nitrate as N	0.100	4.17	1.18	6.95		
pH	1.00	7.53	8.01	7.10		
Sulfate	1.00	45.4	268	54.4		
Surfactants(MBAS)	0.0500	ND	ND	ND		
Total Dissolved Solids(TDS)	10.0	1070	1510	1800		
ICP Metals						
Calcium	1.00	715	644	394		
Copper	0.0100	ND	ND	0.0177		
Iron	0.0500	1.70	0.787	1.73		
Magnesium	0.250	95.2	10.6	7.70		
Manganese	0.0200	1.74	1.15	1.23		
Potassium	1.00	15.5	23.9	4.80		
Sodium	1.00	189	492	167		
Zinc	0.0100	0.0630	0.0198	0.0687		

QUALITY CONTROL REPORT

QC Batch No: 042211-1

Analytes	LCS % REC	LCS/LCSD % Limit							
Conventionals									



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ANALYTICAL RESULTS

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Project ID: 4953-10-1531 G165-66
 Project Name: MTA Westside Extension

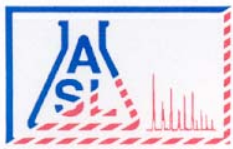
ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 600, General Minerals

QUALITY CONTROL REPORT

QC Batch No: 042211-1

Analytes	LCS % REC	LCS/LCSD % Limit								
Conventionals										
Alkalinity, Total	95	80-120								
Bicarbonate (as CaCO3)	95	80-120								
Carbonate (as CaCO3)	95	80-120								
Hydroxide (as CaCO3)	95	80-120								
Chloride	98	80-120								
Conductivity (umho/cm @77F)	97	80-120								
Fluoride	98	80-120								
Hardness (Ca,Mg) as CaCO3	100	80-120								
Nitrate as N	100	80-120								
pH	100	80-120								
Sulfate	95	80-120								
Surfactants(MBAS)	92	80-120								
Total Dissolved Solids(TDS)	102	80-120								
ICP Metals										
Calcium	106	80-120								
Copper	109	80-120								
Iron	105	80-120								
Magnesium	101	80-120								
Manganese	113	80-120								
Potassium	98	80-120								
Sodium	111	80-120								
Zinc	112	80-120								



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 Los Angeles, CA 90040-

Site

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 Beverly Hills, CA

Telephone: (323)889-5300

Attn: Marty Hudson

Page: 6

Project ID: 4953-10-1531 G165-66
 Project Name: MTA Westside Extension

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 6010B/7470A, CCR Title 22 Metals (TTLC)

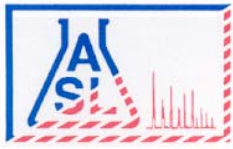
QC Batch No: 042611-1

Our Lab I.D.		267815	267816	267817		
Client Sample I.D.		G-166-D	G-166-S	G-165-D		
Date Sampled		04/22/2011	04/22/2011	04/22/2011		
Date Prepared		04/26/2011	04/26/2011	04/26/2011		
Preparation Method						
Date Analyzed		04/26/2011	04/26/2011	04/26/2011		
Matrix		Water	Water	Water		
Units		mg/L	mg/L	mg/L		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
AA Metals						
Mercury	0.0005	ND	ND	ND		
ICP Metals						
Antimony	0.0100	ND	ND	ND		
Arsenic	0.0100	0.0258	0.0267	0.0120		
Barium	0.0100	1.21	0.921	0.840		
Beryllium	0.0050	ND	ND	ND		
Cadmium	0.0050	ND	ND	ND		
Chromium	0.0100	ND	ND	ND		
Cobalt	0.0100	ND	0.0164	0.0160		
Copper	0.0100	ND	ND	0.0177		
Lead	0.0050	ND	ND	ND		
Molybdenum	0.0100	0.0260	0.0706	ND		
Nickel	0.0100	0.0646	0.0626	0.0490		
Selenium	0.0100	0.0209	0.0192	ND		
Silver	0.0100	ND	ND	ND		
Thallium	0.0100	ND	ND	ND		
Vanadium	0.0100	ND	ND	ND		
Zinc	0.0100	0.0630	0.0198	0.0687		

QUALITY CONTROL REPORT

QC Batch No: 042611-1

Analytes	LCS % REC	LCS/LCSD % Limit							
AA Metals									
Mercury	107	80-120							
ICP Metals									
Antimony	100	80-120							
Arsenic	101	80-120							



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ANALYTICAL RESULTS

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Project ID: 4953-10-1531 G165-66
 Project Name: MTA Westside Extension

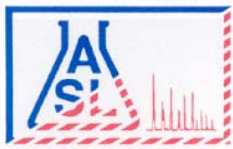
ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 6010B/7470A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

QC Batch No: 042611-1

Analytes	LCS % REC	LCS/LCSD % Limit								
ICP Metals										
Barium	105	80-120								
Beryllium	107	80-120								
Cadmium	104	80-120								
Chromium	103	80-120								
Cobalt	102	80-120								
Copper	104	80-120								
Lead	105	80-120								
Molybdenum	100	80-120								
Nickel	106	80-120								
Selenium	100	80-120								
Silver	100	80-120								
Thallium	104	80-120								
Vanadium	100	80-120								
Zinc	106	80-120								



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ANALYTICAL RESULTS

Ordered By

MACTEC Engineering & Consulting Inc
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 Los Angeles, CA 90040-

Telephone: (323)889-5300

Attn: Marty Hudson

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Project ID: 4953-10-1531 G165-66

Project Name: MTA Westside Extension

Site

241 Moreno Drive
 Beverly Hills, CA

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 8015B, TPH DROs and OROs (Diesel and Oil Range Organics)

QC Batch No: W-042711-1P

Our Lab I.D.		267815	267816	267817		
Client Sample I.D.		G-166-D	G-166-S	G-165-D		
Date Sampled		04/22/2011	04/22/2011	04/22/2011		
Date Prepared		04/27/2011	04/27/2011	04/27/2011		
Preparation Method						
Date Analyzed		04/27/2011	04/27/2011	04/27/2011		
Matrix		Water	Water	Water		
Units		mg/L	mg/L	mg/L		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
TPH DROs (C10 to C28)	0.500	ND	ND	ND		
TPH OROs (C28+)	0.500	ND	ND	ND		

Our Lab I.D.		267815	267816	267817		
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.		
Surrogate Percent Recovery						
Chlorobenzene	70-120	116	95	116		

QUALITY CONTROL REPORT

QC Batch No: W-042711-1P

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	102	101	<1	75-120	<20					



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Project ID: 4953-10-1531 G165-66

Project Name: MTA Westside Extension

Site

241 Moreno Drive
 Beverly Hills, CA

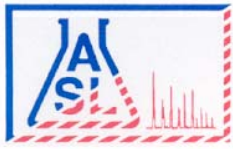
ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 8081A, Organochlorine Pesticides

QC Batch No: 042711-1

Our Lab I.D.		267815	267817		
Client Sample I.D.		G-166-D	G-165-D		
Date Sampled		04/22/2011	04/22/2011		
Date Prepared		04/27/2011	04/27/2011		
Preparation Method					
Date Analyzed		04/27/2011	04/27/2011		
Matrix		Water	Water		
Units		ug/L	ug/L		
Dilution Factor		1	1		
Analytes	PQL	Results	Results		
Aldrin	0.0400	ND	ND		
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.120	ND	ND		
Beta-Hexachlorocyclohexane (Beta-BHC)	0.110	ND	ND		
Gamma-Chlordane	0.400	ND	ND		
alpha-Chlordane	0.400	ND	ND		
4,4'-DDD (DDD)	0.100	ND	ND		
4,4'-DDE (DDE)	0.0900	ND	ND		
4,4'-DDT (DDT)	0.0400	ND	ND		
delta-Hexachlorocyclohexane (Delta-BHC)	0.110	ND	ND		
dieldrin	0.0500	ND	ND		
Endosulfan 1	0.0600	ND	ND		
Endosulfan 11	0.0900	ND	ND		
Endosulfan sulfate	0.0700	ND	ND		
Endrin	0.0800	ND	ND		
Endrin aldehyde	0.0900	ND	ND		
Endrin ketone	0.0700	ND	ND		
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.0600	ND	ND		
Heptachlor	0.0300	ND	ND		
Heptachlor epoxide	0.0700	ND	ND		
Methoxychlor	0.100	ND	ND		
Toxaphene	10.0	ND	ND		

Our Lab I.D.		267815	267817		
Surrogates	% Rec.Limit	% Rec.	% Rec.		
Surrogate Percent Recovery					
Decachlorobiphenyl	43-169	63	60		



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ANALYTICAL RESULTS

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Project ID: 4953-10-1531 G165-66
 Project Name: MTA Westside Extension

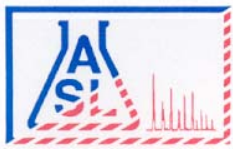
ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 8081A, Organochlorine Pesticides

QUALITY CONTROL REPORT

QC Batch No: 042711-1

Analytes	LCS	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD					
	% REC	% REC	% REC	% Limit	% Limit					
Aldrin	116	105	10.0	42-122	<30					
4,4'-DDT (DDT)	109	107	1.9	25-160	<30					
dieldrin	119	115	3.4	36-146	<30					
Endrin	115	113	1.8	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	106	113	6.4	32-127	<30					
Heptachlor	119	108	9.7	34-111	<30					



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Project ID: 4953-10-1531 G165-66

Project Name: MTA Westside Extension

Site

241 Moreno Drive
 Beverly Hills, CA

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 042711-1

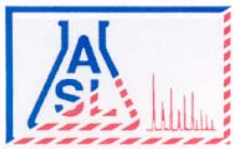
Our Lab I.D.		267815	267817			
Client Sample I.D.		G-166-D	G-165-D			
Date Sampled		04/22/2011	04/22/2011			
Date Prepared		04/27/2011	04/27/2011			
Preparation Method						
Date Analyzed		04/27/2011	04/27/2011			
Matrix		Water	Water			
Units		ug/L	ug/L			
Dilution Factor		1	1			
Analytes	PQL	Results	Results			
Aroclor-1016 (PCB-1016)	0.650	ND	ND			
Aroclor-1221 (PCB-1221)	1.00	ND	ND			
Aroclor-1232 (PCB-1232)	0.650	ND	ND			
Aroclor-1242 (PCB-1242)	0.650	ND	ND			
Aroclor-1248 (PCB-1248)	0.650	ND	ND			
Aroclor-1254 (PCB-1254)	0.650	ND	ND			
Aroclor-1260 (PCB-1260)	0.650	ND	ND			

Our Lab I.D.		267815	267817			
Surrogates	% Rec.Limit	% Rec.	% Rec.			
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	63	60			

QUALITY CONTROL REPORT

QC Batch No: 042711-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aroclor-1260 (PCB-1260)	106	100	5.8	39-150	<30					



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Site

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Project ID: 4953-10-1531 G165-66
 Project Name: MTA Westside Extension

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 8260B, Volatile Organic Compounds

QC Batch No: W-042611-2B

Our Lab I.D.		267814	267815	267816	267817	
Client Sample I.D.		G-165-S	G-166-D	G-166-S	G-165-D	
Date Sampled		04/22/2011	04/22/2011	04/22/2011	04/22/2011	
Date Prepared		04/27/2011	04/27/2011	04/27/2011	04/27/2011	
Preparation Method						
Date Analyzed		04/27/2011	04/27/2011	04/27/2011	04/27/2011	
Matrix		Water	Water	Water	Water	
Units		ug/L	ug/L	ug/L	ug/L	
Dilution Factor		1	1	1	1	
Analytes	PQL	Results	Results	Results	Results	
Acetone	5.00	ND	ND	ND	ND	
Benzene	1.00	ND	ND	ND	ND	
Bromobenzene (Phenyl bromide)	1.00	ND	ND	ND	ND	
Bromochloromethane (Chlorobromomethane)	1.00	ND	ND	ND	ND	
Bromodichloromethane (Dichlorobromomethane)	1.00	2.81	ND	1.23	ND	
Bromoform (Tribromomethane)	5.00	ND	ND	ND	ND	
Bromomethane (Methyl bromide)	3.00	ND	ND	ND	ND	
2-Butanone (MEK, Methyl ethyl ketone)	5.00	ND	ND	ND	ND	
n-Butylbenzene	1.00	ND	ND	ND	ND	
sec-Butylbenzene	1.00	ND	ND	ND	ND	
tert-Butylbenzene	1.00	ND	ND	ND	ND	
Carbon disulfide	1.00	ND	ND	ND	ND	
Carbon tetrachloride (Tetrachloromethane)	1.00	ND	ND	ND	ND	
Chlorobenzene	1.00	ND	ND	ND	ND	
Chloroethane	3.00	ND	ND	ND	ND	
2-Chloroethyl vinyl ether	5.00	ND	ND	ND	ND	
Chloroform (Trichloromethane)	1.00	2.87	1.14	1.47	ND	
Chloromethane (Methyl chloride)	3.00	ND	ND	ND	ND	
4-Chlorotoluene (p-Chlorotoluene)	1.00	ND	ND	ND	ND	
2-Chlorotoluene (o-Chlorotoluene)	1.00	ND	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	5.00	ND	ND	ND	ND	
Dibromochloromethane	1.00	4.32	ND	2.43	ND	
1,2-Dibromoethane (EDB, Ethylene dibromide)	1.00	ND	ND	ND	ND	
Dibromomethane	1.00	ND	ND	ND	ND	
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.00	ND	ND	ND	ND	
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.00	ND	ND	ND	ND	
1,4-Dichlorobenzene (p-Dichlorobenzene)	1.00	ND	ND	ND	ND	
Dichlorodifluoromethane	3.00	ND	ND	ND	ND	
1,1-Dichloroethane	1.00	ND	ND	ND	ND	



ANALYTICAL RESULTS

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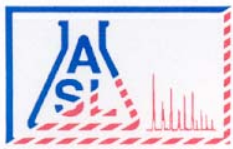
Project ID: 4953-10-1531 G165-66
 Project Name: MTA Westside Extension

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 8260B, Volatile Organic Compounds

QC Batch No: W-042611-2B

Our Lab I.D.		267814	267815	267816	267817	
Client Sample I.D.		G-165-S	G-166-D	G-166-S	G-165-D	
Date Sampled		04/22/2011	04/22/2011	04/22/2011	04/22/2011	
Date Prepared		04/27/2011	04/27/2011	04/27/2011	04/27/2011	
Preparation Method						
Date Analyzed		04/27/2011	04/27/2011	04/27/2011	04/27/2011	
Matrix		Water	Water	Water	Water	
Units		ug/L	ug/L	ug/L	ug/L	
Dilution Factor		1	1	1	1	
Analytes	PQL	Results	Results	Results	Results	
1,2-Dichloroethane	1.00	ND	ND	ND	ND	
1,1-Dichloroethene (1,1-Dichloroethylene)	1.00	ND	ND	ND	ND	
cis-1,2-Dichloroethene	1.00	ND	ND	ND	ND	
trans-1,2-Dichloroethene	1.00	ND	ND	ND	ND	
1,2-Dichloropropane	1.00	ND	ND	ND	ND	
1,3-Dichloropropane	1.00	ND	ND	ND	ND	
2,2-Dichloropropane	1.00	ND	ND	ND	ND	
1,1-Dichloropropene	1.00	ND	ND	ND	ND	
cis-1,3-Dichloropropene	1.00	ND	ND	ND	ND	
trans-1,3-Dichloropropene	1.00	ND	ND	ND	ND	
Ethylbenzene	1.00	ND	ND	ND	ND	
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	3.00	ND	ND	ND	ND	
2-Hexanone	5.00	ND	ND	ND	ND	
Isopropylbenzene	1.00	ND	ND	ND	ND	
p-Isopropyltoluene (4-Isopropyltoluene)	1.00	ND	ND	ND	ND	
MTBE	2.00	ND	ND	ND	ND	
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	5.00	ND	ND	ND	ND	
Methylene chloride (Dichloromethane, DCM)	5.00	ND	ND	ND	ND	
Naphthalene	1.00	ND	ND	ND	ND	
n-Propylbenzene	1.00	ND	ND	ND	ND	
Styrene	1.00	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	1.00	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	1.00	ND	ND	ND	ND	
Tetrachloroethene (Tetrachloroethylene)	1.00	ND	ND	ND	ND	
Toluene (Methyl benzene)	1.00	ND	ND	ND	ND	
1,2,3-Trichlorobenzene	1.00	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	1.00	ND	ND	ND	ND	
1,1,1-Trichloroethane	1.00	ND	ND	ND	ND	
1,1,2-Trichloroethane	1.00	ND	ND	ND	ND	
Trichloroethene (TCE)	1.00	ND	ND	ND	ND	
Trichlorofluoromethane	1.00	ND	ND	ND	ND	
1,2,3-Trichloropropane	1.00	ND	ND	ND	ND	
1,2,4-Trimethylbenzene	1.00	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	1.00	ND	ND	ND	ND	
Vinyl acetate	5.00	ND	ND	ND	ND	



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ANALYTICAL RESULTS

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Project ID: 4953-10-1531 G165-66
 Project Name: MTA Westside Extension

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 8260B, Volatile Organic Compounds

QC Batch No: W-042611-2B

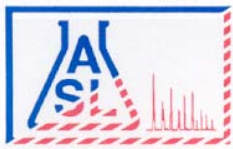
Our Lab I.D.		267814	267815	267816	267817	
Client Sample I.D.		G-165-S	G-166-D	G-166-S	G-165-D	
Date Sampled		04/22/2011	04/22/2011	04/22/2011	04/22/2011	
Date Prepared		04/27/2011	04/27/2011	04/27/2011	04/27/2011	
Preparation Method						
Date Analyzed		04/27/2011	04/27/2011	04/27/2011	04/27/2011	
Matrix		Water	Water	Water	Water	
Units		ug/L	ug/L	ug/L	ug/L	
Dilution Factor		1	1	1	1	
Analytes	PQL	Results	Results	Results	Results	
Vinyl chloride (Chloroethene)	3.00	ND	ND	ND	ND	
o-Xylene	1.00	ND	ND	ND	ND	
m- & p-Xylenes	2.00	ND	ND	ND	ND	

Our Lab I.D.		267814	267815	267816	267817	
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.	% Rec.	
Surrogate Percent Recovery						
Bromofluorobenzene	70-120	100	101	100	101	
Dibromofluoromethane	70-120	86	89	88	90	
Toluene-d8	70-120	96	97	96	98	

QUALITY CONTROL REPORT

QC Batch No: W-042611-2B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Benzene	91	85	6.8	75-120	15					
Chlorobenzene	111	105	5.6	75-120	15					
1,1-Dichloroethene (1,1-Dichloroethylene)	80	76	5.1	75-120	15					
MTBE	102	103	<1	75-120	15					
Toluene (Methyl benzene)	109	103	5.7	75-120	15					
Trichloroethene (TCE)	98	91	7.4	75-120	15					



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Project ID: 4953-10-1531 G165-66

Project Name: MTA Westside Extension

Site

241 Moreno Drive
 Beverly Hills, CA

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 8260B, TPH GROs(Gasoline Range Organics)

QC Batch No: W-042611-2B

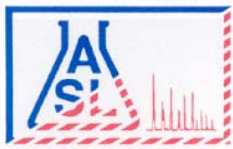
Our Lab I.D.		267814	267815	267816	267817	
Client Sample I.D.		G-165-S	G-166-D	G-166-S	G-165-D	
Date Sampled		04/22/2011	04/22/2011	04/22/2011	04/22/2011	
Date Prepared		04/27/2011	04/27/2011	04/27/2011	04/27/2011	
Preparation Method						
Date Analyzed		04/27/2011	04/27/2011	04/27/2011	04/27/2011	
Matrix		Water	Water	Water	Water	
Units		ug/L	ug/L	ug/L	ug/L	
Dilution Factor		1	1	1	1	
Analytes	PQL	Results	Results	Results	Results	
TPH GROs (C6 to C10)	50.0	ND	ND	ND	ND	

Our Lab I.D.		267814	267815	267816	267817	
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.	% Rec.	
Surrogate Percent Recovery						
Bromofluorobenzene	70-120	100	101	100	101	
Dibromofluoromethane	70-120	86	89	88	90	
Toluene-d8	70-120	96	97	96	98	

QUALITY CONTROL REPORT

QC Batch No: W-042611-2B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Benzene	91	85	6.8	75-120	15					
Chlorobenzene	111	105	5.6	75-120	15					
1,1-Dichloroethene (1,1-Dichloroethylene)	80	76	5.1	75-120	15					
Toluene (Methyl benzene)	109	103	5.7	75-120	15					
Trichloroethene (TCE)	98	91	7.4	75-120	15					



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Project ID: 4953-10-1531 G165-66

Project Name: MTA Westside Extension

Site

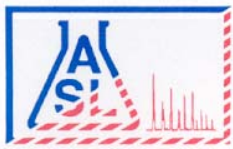
241 Moreno Drive
 Beverly Hills, CA

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 8270C, Semivolatile Organics

QC Batch No: 042711-1

Our Lab I.D.		267815	267816	267817		
Client Sample I.D.		G-166-D	G-166-S	G-165-D		
Date Sampled		04/22/2011	04/22/2011	04/22/2011		
Date Prepared		04/27/2011	04/27/2011	04/27/2011		
Preparation Method						
Date Analyzed		04/27/2011	04/27/2011	04/27/2011		
Matrix		Water	Water	Water		
Units		ug/L	ug/L	ug/L		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
Acenaphthene	10.0	ND	ND	ND		
Acenaphthylene	10.0	ND	ND	ND		
Anthracene	10.0	ND	ND	ND		
Benz(a)anthracene (Benzo(a)anthracene)	10.0	ND	ND	ND		
Benzo(a)pyrene	10.0	ND	ND	ND		
Benzo(b)fluoranthene	10.0	ND	ND	ND		
Benzo(ghi)perylene	10.0	ND	ND	ND		
Benzo(k)fluoranthene	10.0	ND	ND	ND		
Benzidine	20.0	ND	ND	ND		
Benzoic acid	10.0	ND	ND	ND		
Benzyl alcohol	10.0	ND	ND	ND		
Bis(2-chloroethoxy)methane	10.0	ND	ND	ND		
Bis(2-chloroethyl)ether	10.0	ND	ND	ND		
Bis(2-chloroisopropyl) ether	10.0	ND	ND	ND		
Bis(2-ethylhexyl) phthalate	10.0	ND	ND	ND		
4-Bromophenyl phenyl ether	10.0	ND	ND	ND		
Butyl benzyl phthalate (Benzyl butyl phthalate)	10.0	ND	ND	ND		
4-Chloro-3-methylphenol (p-Chloro-m-cresol)	1.00	ND	ND	ND		
4-Chloroaniline	10.0	ND	ND	ND		
2-Chloronaphthalene	10.0	ND	ND	ND		
2-Chlorophenol (o-Chlorophenol)	1.00	ND	ND	ND		
4-Chlorophenyl phenyl ether	10.0	ND	ND	ND		
Chrysene	10.0	ND	ND	ND		
Di-n-butyl phthalate	10.0	ND	ND	ND		
Di-n-octyl phthalate (Dioctyl ester)	10.0	ND	ND	ND		
Dibenz(a,h)anthracene	10.0	ND	ND	ND		
Dibenzofuran	10.0	ND	ND	ND		
1,3-Dichlorobenzene (m-Dichlorobenzene)	10.0	ND	ND	ND		
1,2-Dichlorobenzene (o-Dichlorobenzene)	10.0	ND	ND	ND		



AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

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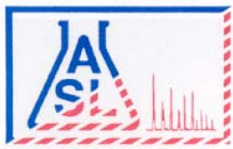
Project ID: 4953-10-1531 G165-66
 Project Name: MTA Westside Extension

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 8270C, Semivolatile Organics

QC Batch No: 042711-1

Our Lab I.D.		267815	267816	267817		
Client Sample I.D.		G-166-D	G-166-S	G-165-D		
Date Sampled		04/22/2011	04/22/2011	04/22/2011		
Date Prepared		04/27/2011	04/27/2011	04/27/2011		
Preparation Method						
Date Analyzed		04/27/2011	04/27/2011	04/27/2011		
Matrix		Water	Water	Water		
Units		ug/L	ug/L	ug/L		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
1,4-Dichlorobenzene	10.0	ND	ND	ND		
3,3'-Dichlorobenzidine	20.0	ND	ND	ND		
2,4-Dichlorophenol	1.00	ND	ND	ND		
Diethyl phthalate (Diethyl ester)	10.0	ND	ND	ND		
2,4-Dimethylphenol	1.00	ND	ND	ND		
Dimethyl phthalate (Dimethyl ester)	10.0	ND	ND	ND		
2,4-Dinitrophenol	1.00	ND	ND	ND		
2,4-Dinitrotoluene	10.0	ND	ND	ND		
2,6-Dinitrotoluene (2,6-DNT)	10.0	ND	ND	ND		
1,2-Diphenylhydrazine	10.0	ND	ND	ND		
Fluoranthene	10.0	ND	ND	ND		
Fluorene	10.0	ND	ND	ND		
Hexachlorobenzene	10.0	ND	ND	ND		
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	20.0	ND	ND	ND		
Hexachlorocyclopentadiene	10.0	ND	ND	ND		
Hexachloroethane	10.0	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	10.0	ND	ND	ND		
Isophorone	10.0	ND	ND	ND		
2-methyl-4,6-Dinitrophenol	1.00	ND	ND	ND		
2-Methylnaphthalene	10.0	ND	ND	ND		
2-Methylphenol (o-Cresol, 2-Cresol)	1.00	ND	ND	ND		
4-Methylphenol (p-Cresol, 4-Cresol)	1.00	ND	ND	ND		
N-Nitroso-Di-n-propylamine	10.0	ND	ND	ND		
N-Nitrosodimethylamine (NDMA)	10.0	ND	ND	ND		
N-Nitrosodiphenylamine	10.0	ND	ND	ND		
Naphthalene	10.0	ND	ND	ND		
2-Nitroaniline	10.0	ND	ND	ND		
3-Nitroaniline	10.0	ND	ND	ND		
4-Nitroaniline	10.0	ND	ND	ND		
Nitrobenzene (NB)	10.0	ND	ND	ND		
2-Nitrophenol (o-Nitrophenol)	1.00	ND	ND	ND		
4-Nitrophenol	1.00	ND	ND	ND		
Pentachlorophenol	1.00	ND	ND	ND		
Phenanthrene	10.0	ND	ND	ND		
Phenol	1.00	ND	ND	ND		



ANALYTICAL RESULTS

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Project ID: 4953-10-1531 G165-66
 Project Name: MTA Westside Extension

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: 8270C, Semivolatile Organics

QC Batch No: 042711-1

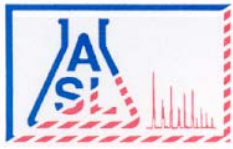
Our Lab I.D.		267815	267816	267817		
Client Sample I.D.		G-166-D	G-166-S	G-165-D		
Date Sampled		04/22/2011	04/22/2011	04/22/2011		
Date Prepared		04/27/2011	04/27/2011	04/27/2011		
Preparation Method						
Date Analyzed		04/27/2011	04/27/2011	04/27/2011		
Matrix		Water	Water	Water		
Units		ug/L	ug/L	ug/L		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
Pyrene	10.0	ND	ND	ND		
1,2,4-Trichlorobenzene	10.0	ND	ND	ND		
2,4,5-Trichlorophenol	1.00	ND	ND	ND		
2,4,6-Trichlorophenol	1.00	ND	ND	ND		

Our Lab I.D.		267815	267816	267817		
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.		
Surrogate Percent Recovery						
2-Fluorophenol	21-105	27	35	29		
Phenol-d6	10-107	29	34	29		
2,4,6-Tribromophenol	10-123	69	77	59		
Nitrobenzene-d5	35-114	64	55	53		
2-Fluorobiphenyl	18-116	52	54	52		
Terphenyl-d14	33-141	93	102	99		

QUALITY CONTROL REPORT

QC Batch No: 042711-1

Analytes	LCS	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD					
	% REC	% REC	% REC	% Limit	% Limit					
Acenaphthene	64	68	6.1	43-118	<30					
4-Chloro-3-methylphenol (p-Chloro-m-cresol)	65	64	1.6	23-117	<30					
2-Chlorophenol (o-Chlorophenol)	49	54	9.7	27-113	<30					
1,4-Dichlorobenzene	50	55	9.5	36-105	<30					
2,4-Dinitrotoluene	102	102	<1	24-120	<30					
N-Nitroso-Di-n-propylamine	75	81	7.7	41-116	<30					
4-Nitrophenol	63	56	11.8	10-133	<30					
Pentachlorophenol	64	65	1.6	9-118	<30					
Phenol	35	40	13.3	12-110	<30					
Pyrene	115	113	1.8	26-127	<30					
1,2,4-Trichlorobenzene	64	71	10.4	39-98	<30					



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ANALYTICAL RESULTS

Ordered By

MACTEC Engineering & Consulting Inc
 5628 East Slauson Ave.
 Los Angeles, CA 90040-

Telephone: (323)889-5300

Attn: Marty Hudson

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Project ID: 4953-10-1531 G165-66

Project Name: MTA Westside Extension

Site

241 Moreno Drive
 Beverly Hills, CA

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: RSKSOP-175, Dissolved Gases

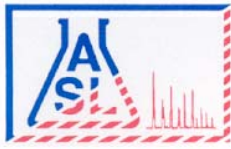
QC Batch No: 042911-1

Our Lab I.D.		267814	267815	267816	267817	
Client Sample I.D.		G-165-S	G-166-D	G-166-S	G-165-D	
Date Sampled		04/22/2011	04/22/2011	04/22/2011	04/22/2011	
Date Prepared		04/29/2011	04/29/2011	04/29/2011	04/29/2011	
Preparation Method						
Date Analyzed		04/29/2011	04/29/2011	04/29/2011	04/29/2011	
Matrix		Water	Water	Water	Water	
Units		ug/L	ug/L	ug/L	ug/L	
Dilution Factor		1	1	1	1	
Analytes	PQL	Results	Results	Results	Results	
Methane	1.00	ND	2.50	4.92	5.91	

QUALITY CONTROL REPORT

QC Batch No: 042911-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Methane	90	93	3.3	70-130	<30					



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Telephone: (323)889-5300

Attn: Marty Hudson

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Project ID: 4953-10-1531 G165-66

Project Name: MTA Westside Extension

Site

241 Moreno Drive
 Beverly Hills, CA

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: SM2540-D, Total Suspended Solids (TSS)

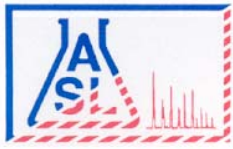
QC Batch No: 042711-1

Our Lab I.D.		267815	267816	267817		
Client Sample I.D.		G-166-D	G-166-S	G-165-D		
Date Sampled		04/22/2011	04/22/2011	04/22/2011		
Date Prepared		04/27/2011	04/27/2011	04/27/2011		
Preparation Method						
Date Analyzed		04/27/2011	04/27/2011	04/27/2011		
Matrix		Water	Water	Water		
Units		mg/L	mg/L	mg/L		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
Conventionals						
Solids, Total Suspended (TSS)	10.0	163000	164000	7970		

QUALITY CONTROL REPORT

QC Batch No: 042711-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit				
Conventionals									
Solids, Total Suspended (TSS)	104	101	2.9	80-120	20				



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 Los Angeles, CA 90040-

Telephone: (323)889-5300

Attn: Marty Hudson

Page: **21**

Project ID: 4953-10-1531 G165-66

Project Name: MTA Westside Extension

Site

241 Moreno Drive
 Beverly Hills, CA

ASL Job Number	Submitted	Client
49598	04/22/2011	MACTEC

Method: SM4500-S-2-D, Sulfide (Methylene Blue Method)

QC Batch No: 042211-1

Our Lab I.D.		267815	267816	267817		
Client Sample I.D.		G-166-D	G-166-S	G-165-D		
Date Sampled		04/22/2011	04/22/2011	04/22/2011		
Date Prepared		04/22/2011	04/22/2011	04/22/2011		
Preparation Method						
Date Analyzed		04/22/2011	04/22/2011	04/22/2011		
Matrix		Water	Water	Water		
Units		mg/L	mg/L	mg/L		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
Conventionals						
Sulfide, total	0.0200	ND	ND	ND		

QUALITY CONTROL REPORT

QC Batch No: 042211-1

Analytes	SM Result	SM DUP Result	RPD %	SM RPD % Limit					
Conventionals									
Sulfide, total	ND	ND	<1	20					

LABORATORY REPORT

May 6, 2011

Molky Brar
American Scientific Laboratories
2520 North San Fernando Road
Los Angeles, CA 90065

RE: 49598

Dear Molky:

Enclosed are the results of the samples submitted to our laboratory on April 25, 2011. For your reference, these analyses have been assigned our service request number P1101541.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L10-3; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-10-1; Minnesota Department of Health, NELAP Certificate No. 219474; Washington State Department of Ecology, ELAP Lab ID: C946. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Sue Anderson
Project Manager

Client: American Scientific Laboratories
Project: 49598

CAS Project No: P1101541

CASE NARRATIVE

The samples were received intact under chain of custody on April 25, 2011 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Hydrogen Sulfide Analysis

The samples were analyzed for hydrogen sulfide using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD).

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

DETAIL SUMMARY REPORT

Client: American Scientific Laboratories
 Project ID: 49598

Service Request: P1101541

Date Received: 4/25/2011
 Time Received: 11:10

Sulfur Liq - Sulfur

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Sulfur Liq - Sulfur
267814	P1101541-001	Water	4/22/2011	11:45	X
267815	P1101541-002	Water	4/22/2011	12:35	X
267816	P1101541-003	Water	4/22/2011	13:20	X
267817	P1101541-004	Water	4/22/2011	14:35	X



2655 Park Center Drive, Suite A
 Simi Valley, California 93065
 Phone (805) 526-7161
 Fax (805) 526-7270

Air - Chain of Custody Record & Analytical Service Request

Requested Turnaround Time in Business Days (Surcharges) please circle
 1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No. 1101541

Company Name & Address (Reporting Information)		Project Name		Project Number		P.O. # / Billing Information		Sampler (Print & Sign)		Analysis Method and/or Analytes		Comments	
American Scientific Labs 9500 N. San Fernando Road L.A. CA 90065		American Scientific Labs		49598		P.O. # / Billing Information		mckey @ asllab.com		Dissolved Hydrogen Sulfide		preserved	
Project Manager mckey Brian mckey @ asllab.com													
Phone 803 223 9700 Fax 803 223 9500													
Email Address for Result Reporting mckey @ asllab.com													
Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Sample Type (Air/Tube/Solid)	Canister ID (Bar Code # - AC, SC, etc.)	Flow Controller (Bar Code #)	Sample Volume						
267814	1	4-22-11	12:45	water			100ml						
267815	2	4-22-11	12:35	water									
267816	3	4-22-11	13:00	water									
267817	4	4-22-11	14:35	water									

Report Tier Levels - please select

Tier I: (Results Default if not specified) _____
 Tier II: (Results + QC) _____
 Tier III: (Data Validation Packages) 10% Surcharge _____
 Tier V: (Client specified) _____

EDD required: Yes / No _____
 EDD Units: _____

Project Requirements (MFLs, OAPP) _____

Reinquired by: (Signature) Allex Date: 4-25-11 Time: 11:10
 Reinquished by: (Signature) _____ Date: _____ Time: _____

Reinquired by: (Signature) _____ Date: _____ Time: _____
 Reinquished by: (Signature) _____ Date: _____ Time: _____

Project Temperature: 6 °C

FIGURE G-2.24

Sample Acceptance Check Form

Client: American Scientific Laboratories Work order: P1101541

Project: 49598

Sample(s) received on: 4/25/11 Date opened: 4/25/11 by: SSTAPLES

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

- | | | Yes | No | N/A |
|----|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 | Were sample containers properly marked with client sample ID? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | Container(s) supplied by CAS ? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3 | Did sample containers arrive in good condition? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | Were chain-of-custody papers used and filled out? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | Did sample container labels and/or tags agree with custody papers? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | Was sample volume received adequate for analysis? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 | Are samples within specified holding times? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8 | Was proper temperature (thermal preservation) of cooler at receipt adhered to? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Cooler Temperature <u>6</u> °C Blank Temperature _____ °C | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9 | Was a trip blank received? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10 | Were custody seals on outside of cooler/Box? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | Location of seal(s)? _____ Sealing Lid? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Were signature and date included? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Were seals intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Were custody seals on outside of sample container? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | Location of seal(s)? _____ Sealing Lid? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Were signature and date included? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Were seals intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11 | Do containers have appropriate preservation , according to method/SOP or Client specified information? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Is there a client indication that the submitted samples are pH preserved? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Were VOA vials checked for presence/absence of air bubbles? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 12 | Tubes: Are the tubes capped and intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Do they contain moisture? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 13 | Badges: Are the badges properly capped and intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | Are dual bed badges separated and individually capped and intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1101541-001.01	40mL VOA NP		6		P	
P1101541-001.02	40mL VOA NP				P	
P1101541-001.03	40mL VOA NP				P	
P1101541-002.01	40mL VOA NP		6		P	
P1101541-002.02	40mL VOA NP				P	
P1101541-002.03	40mL VOA NP				P	
P1101541-003.01	40mL VOA NP		6		P	
P1101541-003.02	40mL VOA NP				P	

Explain any discrepancies: (include lab sample ID numbers): _____
 Vials contained precipitate _____

Sample Acceptance Check FormClient: American Scientific Laboratories Work order: P1101541Project: 49598Sample(s) received on: 4/25/11 Date opened: 4/25/11 by: SSTAPLES

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1101541-003.03	40mL VOA NP				P	
P1101541-004.01	40mL VOA NP		6		A	
P1101541-004.02	40mL VOA NP				A	
P1101541-004.03	40mL VOA NP				A	

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Page 1 of 1

Client: American Scientific Laboratories

Client Project ID: 49598

CAS Project ID: P1101541

Hydrogen Sulfide
Test Code: GC/SCD Reduced Sulfur Analysis

Instrument ID: Agilent 6890A/GC13/SCD

Analyst: Wade Henton/Laurnyn Keeler

Matrix: Water

Test Notes:
Date(s) Collected: 4/22/11

Date Received: 4/25/11

Date Analyzed: 4/26/11

Client Sample ID	CAS Sample ID	Liquid Amount:	Purge	Injection	Result	MRL	Data
		Amount	Volume	Volume			
		ml(s)	Liter(s)	ml(s)	µg/L	µg/L	Qualifier
267814	P1101541-001	10.0	0.30	1.0	ND	0.84	
267815	P1101541-002	10.0	0.30	1.0	ND	0.84	
267816	P1101541-003	10.0	0.30	1.0	ND	0.84	
267817	P1101541-004	10.0	0.30	1.0	ND	0.84	
Method Blank	P110426-MB	10.0	0.30	1.0	ND	0.84	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

Client: American Scientific Laboratories
Client Sample ID: Duplicate Lab Control Sample
Client Project ID: 49598

CAS Project ID: P1101541
CAS Sample ID: P110426-DLCS

Test Code: GC/SCD Reduced Sulfur Analysis
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Wade Henton/Lauryn Keeler
Matrix: Water
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 4/26/11
Liquid Amount: 10.0 ml(s)
Purge Volume: 0.30 Liter(s)
Injection Volume: 0.20 ml(s)

CAS #	Compound	Spike Amount	Result		% Recovery		CAS	RPD	RPD	Data
		LCS / DLCS ug/L	LCS ug/L	DLCS ug/L	LCS	DLCS	Acceptance Limits			
7783-06-4	Hydrogen Sulfide	419	338	414	81	99	53-127	20	30	

**FIGURES G-3.1.1 THROUGH G-3.11.13
VAPOR SAMPLE DATA (PE PHASE)**

G-3.1

MTA Westside Extension PE Phase

Vapor Sample Data

Location: M-6

May 20, 2011



Jay Neuhaus
MACTEC
2171 Campus Drive, Suite 100
Irvine, CA 92612
TEL: (949) 224-0050
FAX:

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003
Workorder No.: 117843

RE: MTA WESTSIDE EXTENSION, 4953101561

Attention: Jay Neuhaus

Enclosed are the results for sample(s) received on May 13, 2011 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

A handwritten signature in black ink, appearing to read "E. Rodriguez".

Eddie F. Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.



Advanced Technology Laboratories

Date: 20-May-11

CLIENT: MACTEC
Project: MTA WESTSIDE EXTENSION, 4953101561
Lab Order: 117843

CASE NARRATIVE

The sample for EPA 1516 analysis was subcontracted to Air Technology Lab.



Advanced Technology Laboratories

ANALYTICAL RESULTS
Print Date: 20-May-11

CLIENT: MACTEC	Client Sample ID: M-6 / Wilshire
Lab Order: 117843	Collection Date: 5/13/2011 1:35:00 PM
Project: MTA WESTSIDE EXTENSION, 495310156	Matrix: AIR
Lab ID: 117843-001A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
-----------------	---------------	------------	-------------	--------------	-----------	----------------------

GASES BY GAS CHROMATOGRAPHY

ASTM D1946

RunID: GC18_110516A	QC Batch: Z11A018	PrepDate:	Analyst: BB	
Methane	ND	10 ppmv	1	5/16/2011 04:12 PM

Qualifiers:	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	ND Not Detected at the Reporting Limit
	S Spike/Surrogate outside of limits due to matrix interference	Results are wet unless otherwise specified
	DO Surrogate Diluted Out	



*Advanced Technology
Laboratories*

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

CLIENT: MACTEC
Work Order: 117843
Project: MTA WESTSIDE EXTENSION, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: D1946

Sample ID: MB-Z11A018	SampType: MBLK	TestCode: D1946	Units: ppmv	Prep Date:	RunNo: 133005						
Client ID: ZZZZZZ	Batch ID: Z11A018	TestNo: ASTM D1946		Analysis Date: 5/16/2011	SeqNo: 2169384						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methane ND 10

Sample ID: LCS-Z11A018	SampType: LCS	TestCode: D1946	Units: ppmv	Prep Date:	RunNo: 133005						
Client ID: ZZZZZZ	Batch ID: Z11A018	TestNo: ASTM D1946		Analysis Date: 5/16/2011	SeqNo: 2169385						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

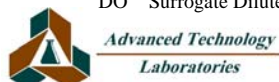
Methane 1069.919 10 1000 0 107 70 130

Sample ID: LCSD-Z11A018	SampType: LCSD	TestCode: D1946	Units: ppmv	Prep Date:	RunNo: 133005						
Client ID: ZZZZZZ	Batch ID: Z11A018	TestNo: ASTM D1946		Analysis Date: 5/16/2011	SeqNo: 2169386						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methane 1010.113 10 1000 0 101 70 130 1070 5.75 20

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference



May 26, 2011

Advanced Technology Laboratories
ATTN: Rachelle Arada
3275 Walnut Ave.
Signal Hill, CA 90755



ADE-1461
EPA Methods TO-3,
TO14A, TO15 SIM & Scan,
ASTM D1946



FL Cert E8784/LA Cert 04140
EPA Methods TO3, TO14A, TO15, 25C/3C,
RSK-175
TX Cert T104704450-09-TX
EPA Methods TO14A, TO15

LABORATORY TEST RESULTS

Project Reference: 117843
Lab Number: C051602-01

Enclosed are results for sample(s) received 5/16/11 by Air Technology Laboratories. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Sample analyses were performed within method performance criteria, and meet all requirements of the NELAC Standards.
- All results are reported without qualifications unless otherwise noted.
- The enclosed results relate only to the sample(s).

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

Note: The cover letter is an integral part of this analytical report.

Client: Advanced Technology Laboratories
 Attn: Rachelle Arada
 Project Name: NA
 Project No.: 117843
 Date Received: 05/16/11
 Matrix: Air
 Reporting Units: ppmv

EPA 15/16

Lab No.:	C051602-01				
Client Sample I.D.:	11783-001B / M-6 / Wilshire				
Date Sampled:	05/13/11				
Date Analyzed:	05/16/11				
QC Batch No.:	110516GC3A1				
Analyst Initials:	ZK				
Dilution Factor:	1.0				
ANALYTE	Result ppmv	RL ppmv			
Hydrogen Sulfide	ND	0.20			

ND = Not Detected (below RL)
 RL = Reporting Limit

Reviewed/Approved By: 
 Mark Johnson
 Operations Manager

Date 5-26-11

The cover letter is an integral part of this analytical report




QC Batch No.: 110516GC3A1
 Matrix: Air
 Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank	LCS	LCSD					
Date Analyzed:	05/16/11	05/16/11	05/16/11					
Analyst Initials:	ZK	ZK	ZK					
Datafile:	16may004	16may002	16may003					
Dilution Factor:	1.0	1.0	1.0					
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	117	70-130%	100	70-130%	15	<30

ND = Not Detected (Below RL)
 RL = Reporting Limit

Reviewed/Approved By: 
 Mark J. Johnson
 Operations Manager

Date: 5-26-11

The cover letter is an integral part of this analytical report.

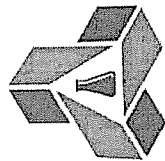


CO51602-01

CHAIN-OF-CUSTODY RECORD

Advanced Technology Laboratories

3275 Walnut Avenue, Signal Hill, CA 90755-5225
www.atlab.com
TEL: (562) 989-4045 FAX: (562) 989-4040



QC Level: RTNE

Subcontractor:

Air Technology Laboratories
18501 E. Gale Ave, Suite 130
City of Industry, CA 91748

TEL: (626) 964-4032
FAX: (626) 964-5832
Acct #:

Field Sampler: Anthony Marino


13-May-11

Sample ID	Matrix	Date Collected	Bottle Type	H2S	Requested Tests
117843-001B	M-6 / W/ishire	5/13/2011 1:35:00 PM	TEDLAR	1	

General Comments: Please email sample receipt acknowledgement to the PM. *RA*
 Please use PO#: SC06400 Please fax results : Normal TAT
 Please report Hydrogen Sulfide by EPA 1516. Send report to Rachelle Arada.

Relinquished by: <i>AM</i>	Date/Time: 5/11/11	Received by: <i>AM</i>	Date/Time: 5/11/11
Relinquished by:	Date/Time:	Received by:	Date/Time:

CHAIN OF CUSTODY RECORD

 <p>ADVANCED TECHNOLOGY LABORATORIES 3275 Walnut Ave., Signal Hill, CA 90755 Tel: (562) 989-4045 • Fax: (562) 989-4040</p>	<p>P.O.#: _____ Quote #: _____ Logged By: <u>SLR/11</u> Date: <u>5/13/11</u> NOTE: Please include your Quote No. to ensure proper pricing of your project.</p>	<p>FOR LABORATORY USE ONLY:</p> <p>Method of Transport <input type="checkbox"/> Client <input type="checkbox"/> ATL <input type="checkbox"/> FedEx <input type="checkbox"/> OnTrac <input type="checkbox"/> GSO <input type="checkbox"/> Other: _____</p> <p>Sample Condition Upon Receipt 1. CHILLED <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> 4. SEALED <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> 2. HEADSPACE (VOA) <input checked="" type="checkbox"/> X <input type="checkbox"/> N <input type="checkbox"/> 5. # OF SPLS MATCH COC <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> 3. CONTAINER INTACT <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> 6. PRESERVED <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/></p>	<p>Client: MACTEC ENGINEERING & CONSULTING, INC. Address: 2171 CAMPUS DRIVE TEL: 949-224-0050 Attn: JAY NEUHAUS City: IRVINE State: CA Zip Code: 92612 FAX: 949-224-0073</p> <p>Project Name: MTA WESTSIDE EXTENSION Project #: 4953101561 Sampler: ANTHONY MARINO (Signature) Relinquished by: (Signature and Printed Name) <u>ANTHONY MARINO</u> Date: <u>5/13/11</u> Time: <u>1:57</u> Relinquished by: (Signature and Printed Name) <u>ANTHONY MARINO</u> Date: <u>5/13/11</u> Time: <u>1:57</u> Relinquished by: (Signature and Printed Name) _____ Date: _____ Time: _____</p>																																														
<p>Send Report To: Attn: <u>JAY NEUHAUS</u> Co: <u>MACTEC</u> Addr: <u>2171 CAMPUS DRIVE</u> City: <u>IRVINE</u> State: <u>CA</u> Zip: <u>92612</u></p>	<p>Bill To: Attn: <u>TYLER THURMAN</u> Co: <u>MACTEC</u> Addr: <u>SLAVSON AVE</u> City: <u>LOS ANGELES</u> State: <u>CA</u> Zip: _____</p>	<p>Circle or Add Analysis(es) Requested <input checked="" type="checkbox"/> 8082 (PCB) <input checked="" type="checkbox"/> 8260B (Vollies) <input checked="" type="checkbox"/> 8270C (BNA) <input checked="" type="checkbox"/> 8010B (Total Metal) <input checked="" type="checkbox"/> 8015B (GRO) / 8021 (BTEX) <input checked="" type="checkbox"/> 8015B (DRO) <input checked="" type="checkbox"/> TITLE 22 / CAM 17 (6010 / 7000) <input checked="" type="checkbox"/> HYDROCARBON SULFIDE</p>	<p>Special Instructions/Comments: _____ _____ _____</p>																																														
<p>Sample/Records - Archival & Disposal Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.</p> <p>Storage Fees (applies when storage is requested): • Sample : \$2.00 / sample / mo (after 45 days) • Records : \$1.00 / ATL workorder / mo (after 1 year)</p>	<p>LAB USE ONLY: Batch #: _____ Lab No. <u>117807-01</u></p>	<p>Sample Description <u>M-6 / WILSHIRE</u></p>	<p>Date <u>5/13/11</u> Time <u>1335</u></p>																																														
<p>QA/QC</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>RTNE <input type="checkbox"/></td> <td>OTHER <input type="checkbox"/></td> </tr> <tr> <td>CT <input type="checkbox"/></td> <td>REMARKS</td> </tr> <tr> <td>Legal <input type="checkbox"/></td> <td></td> </tr> <tr> <td>SWRCB <input type="checkbox"/></td> <td></td> </tr> <tr> <td>Logcode <input type="checkbox"/></td> <td></td> </tr> </table>		RTNE <input type="checkbox"/>	OTHER <input type="checkbox"/>	CT <input type="checkbox"/>	REMARKS	Legal <input type="checkbox"/>		SWRCB <input type="checkbox"/>		Logcode <input type="checkbox"/>		<p>SPECIFY APPROPRIATE MATRIX</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>MATRIX</th> <th>Container(s)</th> <th>TAT</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>SEDIMENT</td> <td></td> <td></td> <td></td> </tr> <tr> <td>SOIL</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DRINKING WATER</td> <td></td> <td></td> <td></td> </tr> <tr> <td>GROUND WATER</td> <td></td> <td></td> <td></td> </tr> <tr> <td>WASTEWATER</td> <td></td> <td></td> <td></td> </tr> <tr> <td>STORMWATER</td> <td></td> <td></td> <td></td> </tr> <tr> <td>AQUEOUS</td> <td></td> <td></td> <td></td> </tr> <tr> <td>AIR</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		MATRIX	Container(s)	TAT	Type	SEDIMENT				SOIL				DRINKING WATER				GROUND WATER				WASTEWATER				STORMWATER				AQUEOUS				AIR			
RTNE <input type="checkbox"/>	OTHER <input type="checkbox"/>																																																
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<p>TAT starts 8 a.m. following day if samples received after 5 p.m.</p> <p>Container Types: T=Tube V=VOA L=Liter P=Pin J=Jar B=Tedlar G=Glass P=Plastic M=Metal TAT: <input type="checkbox"/> A= Overnight ≤ 24 hrs <input type="checkbox"/> B= Emergency Next workday <input type="checkbox"/> C= Critical 2 Workdays <input type="checkbox"/> D= Urgent 3 Workdays <input type="checkbox"/> E= Routine 7 Workdays</p> <p>Preservatives: H=HCl N=HNO₃ S=H₂SO₄ C=4°C Z=Zn(AC)₂ O=NaOH T=Na₂S₂O₃</p>		<p>DISTRIBUTION: White with report, Yellow to folder, Pink to submitter.</p>																																															

G-3.2

MTA Westside Extension PE Phase

Vapor Sample Data

Location: M-104 & M-105

May 31, 2011



Jay Neuhaus
MACTEC
2171 Campus Drive, Suite 100
Irvine, CA 92612
TEL: (949) 224-0050
FAX:

ELAP No.:1838
NELAP No.:02107CA
CSDLAC No.:10196
ORELAP No.:CA300003
Workorder No.: 117785

RE: MTA WESTSIDE EXTENTION. 4953101561

Attention: Jay Neuhaus

Enclosed are the results for sample(s) received on May 10, 2011 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

A handwritten signature in black ink, appearing to read "Eddie F. Rodriguez".

Eddie F. Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.



CLIENT: MACTEC
Project: MTA WESTSIDE EXTENTION. 4953101561
Lab Order: 117785

CASE NARRATIVE

Analytical Comments for EPA TO15

Samples 117785-001A and 117785-002A, dilution was necessary due to high concentration of unknown and non-target compounds.

Samples 117785-001A and 117785-002A, surrogate recovery biased high possibly due to matrix interferences.



Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 31-May-11

CLIENT: MACTEC	Client Sample ID: M-104-10'
Lab Order: 117785	Collection Date: 5/10/2011 10:00:00 AM
Project: MTA WESTSIDE EXTENTION. 495310156	Matrix: AIR
Lab ID: 117785-001A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASES BY GAS CHROMATOGRAPHY

ASTM D1946

RunID: GC18_110516A	QC Batch: Z11A018	PrepDate:	Analyst: BB
Methane	360000	10000	ppmv
			1000
			5/16/2011 01:59 PM

VOCS IN AIR BY GCMS

EPA TO15

RunID: MS14_110511A	QC Batch: W11A053	PrepDate:	Analyst: DMP
Hexane	17	5.0	ppbv
			20
			5/11/2011 04:56 PM
Surr: 4-Bromofluorobenzene	468	70-130	S %REC
			20
			5/11/2011 04:56 PM

Qualifiers:	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	ND Not Detected at the Reporting Limit
	S Spike/Surrogate outside of limits due to matrix interference	Results are wet unless otherwise specified
	DO Surrogate Diluted Out	



*Advanced Technology
Laboratories*

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 31-May-11

CLIENT: MACTEC	Client Sample ID: M-105-5'
Lab Order: 117785	Collection Date: 5/10/2011 11:05:00 AM
Project: MTA WESTSIDE EXTENTION. 495310156	Matrix: AIR
Lab ID: 117785-002A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASES BY GAS CHROMATOGRAPHY

ASTM D1946

RunID: GC18_110516A	QC Batch: Z11A018	PrepDate:	Analyst: BB
Methane	2200	10	ppmv
			1
			5/16/2011 02:27 PM

VOCS IN AIR BY GCMS

EPA TO15

RunID: MS14_110511A	QC Batch: W11A053	PrepDate:	Analyst: DMP
Hexane	ND	5.0	ppbv
			20
			5/11/2011 05:32 PM
Surr: 4-Bromofluorobenzene	1850	70-130	S %REC
			20
			5/11/2011 05:32 PM

Qualifiers:	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	ND Not Detected at the Reporting Limit
	S Spike/Surrogate outside of limits due to matrix interference	Results are wet unless otherwise specified
	DO Surrogate Diluted Out	



*Advanced Technology
Laboratories*

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

CLIENT: MACTEC
Work Order: 117785
Project: MTA WESTSIDE EXTENTION. 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: D1946

Sample ID: MB-Z11A018	SampType: MBLK	TestCode: D1946	Units: ppmv	Prep Date:	RunNo: 133005						
Client ID: ZZZZZZ	Batch ID: Z11A018	TestNo: ASTM D1946		Analysis Date: 5/16/2011	SeqNo: 2169384						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methane	ND	10									
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Sample ID: LCS-Z11A018	SampType: LCS	TestCode: D1946	Units: ppmv	Prep Date:	RunNo: 133005						
Client ID: ZZZZZZ	Batch ID: Z11A018	TestNo: ASTM D1946		Analysis Date: 5/16/2011	SeqNo: 2169385						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

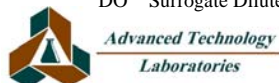
Methane	1069.919	10	1000	0	107	70	130				
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Sample ID: LCSD-Z11A018	SampType: LCSD	TestCode: D1946	Units: ppmv	Prep Date:	RunNo: 133005						
Client ID: ZZZZZZ	Batch ID: Z11A018	TestNo: ASTM D1946		Analysis Date: 5/16/2011	SeqNo: 2169386						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methane	1010.113	10	1000	0	101	70	130	1070	5.75	20	
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Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference



CLIENT: MACTEC
Work Order: 117785
Project: MTA WESTSIDE EXTENTION. 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: TO15

Sample ID: LCS-W11A053	SampType: LCS	TestCode: TO15	Units: ppbv	Prep Date:	RunNo: 132960						
Client ID: ZZZZZZ	Batch ID: W11A053	TestNo: EPA TO15		Analysis Date: 5/11/2011	SeqNo: 2168518						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: 4-Bromofluorobenzene	2.460	2.500	98.4	70	130
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Sample ID: LCSD-W11A053	SampType: LCSD	TestCode: TO15	Units: ppbv	Prep Date:	RunNo: 132960						
Client ID: ZZZZZZ	Batch ID: W11A053	TestNo: EPA TO15		Analysis Date: 5/11/2011	SeqNo: 2168519						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

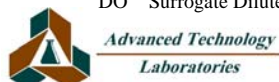
Surr: 4-Bromofluorobenzene	2.470	2.500	98.8	70	130	0	0
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Sample ID: MB-W11A053	SampType: MBLK	TestCode: TO15	Units: ppbv	Prep Date:	RunNo: 132960						
Client ID: ZZZZZZ	Batch ID: W11A053	TestNo: EPA TO15		Analysis Date: 5/11/2011	SeqNo: 2168520						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual


Hexane	ND	0.25			
Surr: 4-Bromofluorobenzene	2.260	2.500	90.4	70	130

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| ND Not Detected at the Reporting Limit | R RPD outside accepted recovery limits | S Spike/Surrogate outside of limits due to matrix interference |
| DO Surrogate Diluted Out | Calculations are based on raw values | |



CHAIN OF CUSTODY RECORD



ADVANCED LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

Quote #: _____
Logged By: [Signature] Date: 5/10/11
NOTE: Please include your Quote No. to ensure proper pricing of your project.

FOR LABORATORY USE ONLY:
Sample Condition Upon Receipt
1. CHILLED Y N 4. SEALED Y N
2. HEADSPACE (VOA) Y N 5. # OF SPLS MATCH COC Y N
3. CONTAINER INTACT Y N 6. PRESERVED Y N

Client: MAGTEC Address: 2171 Campus Dr Suite 100 TEL: 949 224 0050
 Attn: JAY NEUHAUS City: IRVINE State: CA Zip Code: 92612 FAX: _____

Project Name: MTA EASTSIDE EXTENSION Project #: 4953101561 Sampler: ED ARWITZ
 Relinquished by: (Signature and Printed Name) [Signature] Date: 5/10/11 Time: 12:48
 Relinquished by: (Signature and Printed Name) [Signature] Date: 5/10/11 Time: 16:33
 Relinquished by: (Signature and Printed Name) _____ Date: _____ Time: _____

I hereby authorize ATL to perform the work indicated below:
 Project Mgr / Submitter: ED ARWITZ Date: 5/10/11
 Print Name: ED ARWITZ Date: 5/10/11
 Signature: [Signature]

Send Report To:
 Attn: JAY NEUHAUS
 Co: MAGTEC
 Addr: same
 City: _____ State: _____ Zip: _____

Special Instructions/Comments:
Sample/Records - Archival & Disposal
 Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.
Storage Fees (applies when storage is requested):
 • Sample : \$2.00 / sample / mo (after 45 days)
 • Records : \$1.00 / ATL workorder / mo (after 1 year)

ITEM	LAB USE ONLY:		Sample Description	Date	Time
	Batch #:	Lab No.:			
	<u>17785-021</u>	<u>M-104-10</u>	<u>101-W</u>	<u>5/10/11</u>	<u>10:00</u>
	<u>1-2</u>	<u>M-105-5</u>	<u>101-W</u>	<u>5/11/11</u>	<u>11:05</u>
		<u>M-102-2</u>	<u>2WA</u>	<u>5/11/11</u>	<u>11:05</u>

Bill To:
 Attn: JAY NEUHAUS
 Co: MAGTEC
 Addr: same
 City: _____ State: _____ Zip: _____

Circle or Add Analysis(es) Requested:
8081A (Pesticides)
8260B (PCB)
8270C (BNAs)
6010B (Total Metal)
8015B (GRO) / 8021 (BTEX)
TITLE 22 / CAM 17 (6010 / 7000)
METHANE, H2S
Fixed Gases
HEXANE
SEDIMENT
SOIL
DRINKING WATER
GROUND WATER
WASTEWATER
STORMWATER
AQUEOUS

SPECIFY APPROPRIATE MATRIX	TAT	CONTAINER(S)		REMARKS
		#	Type	
	<u>E</u>	<u>1</u>	<u>B</u>	
	<u>E</u>	<u>1</u>	<u>B</u>	
	<u>E</u>	<u>1</u>	<u>B</u>	

Q A / Q C
 RTNE
 CT
 Legal
 SWRCB
 Logcode
 OTHER _____

Preservatives:
 H=HCl N=HNO₃ S=H₂SO₄ C=4°C
 Z=Zn(AC)₂ O=NaOH T=Na₂S₂O₃

DISTRIBUTION: White with report, Yellow to folder, Pink to submitter.
 Rev. 2010-0325

Figure G-3.2.7

May 31, 2011



Jay Neuhaus
MACTEC
2171 Campus Drive, Suite 100
Irvine, CA 92612
TEL: (949) 224-0050
FAX:

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003
Workorder No.: 117822

RE: MTA WESTSIDE EXTENTION, 4953101561

Attention: Jay Neuhaus

Enclosed are the results for sample(s) received on May 12, 2011 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

A handwritten signature in black ink, appearing to read "Eddie F. Rodriguez".

Eddie F. Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.



CLIENT: MACTEC
Project: MTA WESTSIDE EXTENTION, 4953101561
Lab Order: 117822

CASE NARRATIVE

The samples for EPA 1516 analysis were subcontracted to Air Technology Lab.

Analytical Comments for EPA TO15

Samples 117822-001A, 117822-002A and 117822-003A, dilution was necessary due to high concentration of unknown and non-target compounds.

Samples 117822-001A, 117822-002A and 117822-003A, surrogate recovery biased high possibly due to matrix interferences.



Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 31-May-11

CLIENT: MACTEC	Client Sample ID: M-104-10VP
Lab Order: 117822	Collection Date: 5/12/2011 10:00:00 AM
Project: MTA WESTSIDE EXTENTION, 495310156	Matrix: AIR
Lab ID: 117822-001A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	------	-------	----	---------------

GASES BY GAS CHROMATOGRAPHY

ASTM D1946

RunID: GC18_110516A	QC Batch: Z11A018	PrepDate:	Analyst: BB
Methane	450000	10000	ppmv
			1000
			5/16/2011 02:59 PM

VOCS IN AIR BY GCMS

EPA TO15

RunID: MS14_110512A	QC Batch: W11A054	PrepDate:	Analyst: DMP
Hexane	24	5.0	ppbv
			20
Surr: 4-Bromofluorobenzene	457	70-130	S %REC
			20
			5/13/2011 01:30 AM
			5/13/2011 01:30 AM

Qualifiers:	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	ND Not Detected at the Reporting Limit
	S Spike/Surrogate outside of limits due to matrix interference	Results are wet unless otherwise specified
	DO Surrogate Diluted Out	



*Advanced Technology
 Laboratories*

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 31-May-11

CLIENT: MACTEC **Client Sample ID:** M-104B-65
Lab Order: 117822 **Collection Date:** 5/12/2011 10:30:00 AM
Project: MTA WESTSIDE EXTENTION, 495310156 **Matrix:** AIR
Lab ID: 117822-002A

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	------	-------	----	---------------

GASES BY GAS CHROMATOGRAPHY

ASTM D1946

RunID: GC18_110516A	QC Batch: Z11A018				PrepDate:	Analyst: BB
Methane	590000	10000		ppmv	1000	5/16/2011 03:28 PM

VOCS IN AIR BY GCMS

EPA TO15

RunID: MS14_110512A	QC Batch: W11A054				PrepDate:	Analyst: DMP
Hexane	24	5.0		ppbv	20	5/13/2011 02:05 AM
Surr: 4-Bromofluorobenzene	1560	70-130	S	%REC	20	5/13/2011 02:05 AM

Qualifiers: B Analyte detected in the associated Method Blank E Value above quantitation range
 H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
 S Spike/Surrogate outside of limits due to matrix interference Results are wet unless otherwise specified
 DO Surrogate Diluted Out



*Advanced Technology
 Laboratories*

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 31-May-11

CLIENT: MACTEC	Client Sample ID: M-105-5VP
Lab Order: 117822	Collection Date: 5/12/2011 12:22:00 PM
Project: MTA WESTSIDE EXTENTION, 495310156	Matrix: AIR
Lab ID: 117822-003A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASES BY GAS CHROMATOGRAPHY

ASTM D1946

RunID: GC18_110516A	QC Batch: Z11A018	PrepDate:	Analyst: BB
Methane	290000	5000	ppmv
			500
			5/16/2011 03:57 PM

VOCS IN AIR BY GCMS

EPA TO15

RunID: MS14_110512A	QC Batch: W11A054	PrepDate:	Analyst: DMP
Hexane	ND	5.0	ppbv
			20
Surr: 4-Bromofluorobenzene	2070	70-130	S %REC
			20
			5/13/2011 02:41 AM
			5/13/2011 02:41 AM

Qualifiers:	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	ND Not Detected at the Reporting Limit
	S Spike/Surrogate outside of limits due to matrix interference	Results are wet unless otherwise specified
	DO Surrogate Diluted Out	



*Advanced Technology
 Laboratories*

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

CLIENT: MACTEC
Work Order: 117822
Project: MTA WESTSIDE EXTENTION, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: D1946

Sample ID: MB-Z11A018	SampType: MBLK	TestCode: D1946	Units: ppmv	Prep Date:	RunNo: 133005						
Client ID: ZZZZZZ	Batch ID: Z11A018	TestNo: ASTM D1946		Analysis Date: 5/16/2011	SeqNo: 2169384						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methane ND 10

Sample ID: LCS-Z11A018	SampType: LCS	TestCode: D1946	Units: ppmv	Prep Date:	RunNo: 133005						
Client ID: ZZZZZZ	Batch ID: Z11A018	TestNo: ASTM D1946		Analysis Date: 5/16/2011	SeqNo: 2169385						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

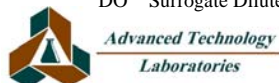
Methane 1069.919 10 1000 0 107 70 130

Sample ID: LCSD-Z11A018	SampType: LCSD	TestCode: D1946	Units: ppmv	Prep Date:	RunNo: 133005						
Client ID: ZZZZZZ	Batch ID: Z11A018	TestNo: ASTM D1946		Analysis Date: 5/16/2011	SeqNo: 2169386						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methane 1010.113 10 1000 0 101 70 130 1070 5.75 20

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference



CLIENT: MACTEC
Work Order: 117822
Project: MTA WESTSIDE EXTENTION, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: TO15

Sample ID: LCS-W11A054	SampType: LCS	TestCode: TO15	Units: ppbv	Prep Date:	RunNo: 132961						
Client ID: ZZZZZZ	Batch ID: W11A054	TestNo: EPA TO15		Analysis Date: 5/12/2011	SeqNo: 2168524						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: 4-Bromofluorobenzene	2.390	2.500	95.6	70	130
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Sample ID: LCSD-W11A054	SampType: LCSD	TestCode: TO15	Units: ppbv	Prep Date:	RunNo: 132961						
Client ID: ZZZZZZ	Batch ID: W11A054	TestNo: EPA TO15		Analysis Date: 5/12/2011	SeqNo: 2168525						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

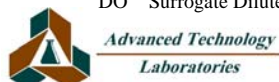
Surr: 4-Bromofluorobenzene	2.340	2.500	93.6	70	130	0	0
----------------------------	-------	-------	------	----	-----	---	---

Sample ID: MB-W11A054	SampType: MBLK	TestCode: TO15	Units: ppbv	Prep Date:	RunNo: 132961						
Client ID: ZZZZZZ	Batch ID: W11A054	TestNo: EPA TO15		Analysis Date: 5/12/2011	SeqNo: 2168526						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Hexane	ND	0.25			
Surr: 4-Bromofluorobenzene	2.410	2.500	96.4	70	130

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| ND Not Detected at the Reporting Limit | R RPD outside accepted recovery limits | S Spike/Surrogate outside of limits due to matrix interference |
| DO Surrogate Diluted Out | Calculations are based on raw values | |





May 26, 2011

Advanced Technology Laboratories
ATTN: Rachele Arada
3275 Walnut Ave.
Signal Hill, CA 90755



ADE-1461
EPA Methods TO-3,
TO14A, TO15 SIM & Scan.
ASTM D1946



FL Cert E8784/LA Cert 04140
EPA Methods TO3, TO14A, TO15, 25C/3C,
RSK-175

TX Cert T104704450-09-TX
EPA Methods TO14A, TO15

LABORATORY TEST RESULTS

Project Reference: 117822
Lab Number: C051301-01/03

Enclosed are results for sample(s) received 5/13/11 by Air Technology Laboratories. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Sample analyses were performed within method performance criteria, and meet all requirements of the NELAC Standards.
- All results are reported without qualifications unless otherwise noted.
- The enclosed results relate only to the sample(s).

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Johnson".

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com


Enclosures

Note: The cover letter is an integral part of this analytical report.

Client: Advanced Technology Laboratories
 Attn: Rachelle Arada
 Project Name: NA
 Project No.: 117822
 Date Received: 05/12/11
 Matrix: Air
 Reporting Units: ppmv

EPA 15/16							
Lab No.:	C051301-01		C051301-02		C051301-03		
Client Sample I.D.:	117822-001B / M-104-10VP		117822-002B / M-104B-65		117822-003B / M-105-5VP		
Date Sampled:	05/12/11		05/12/11		05/12/11		
Date Analyzed:	05/13/11		05/13/11		05/13/11		
QC Batch No.:	110513GC3A1		110513GC3A1		110513GC3A1		
Analyst Initials:	ZK		ZK		ZK		
Dilution Factor:	1.0		10		1.0		
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	
Hydrogen Sulfide	ND	0.20	47	2.0	0.65	0.20	

ND = Not Detected (below RL)
 RL = Reporting Limit

Reviewed/Approved By: 
 Mark Johnson
 Operations Manager

Date 5-26-11

The cover letter is an integral part of this analytical report

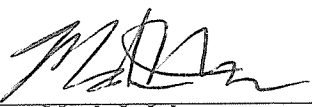


QC Batch No.: 110513GC3A1
 Matrix: Air
 Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date Analyzed:	05/13/11		05/13/11		05/13/11			
Analyst Initials:	ZK		ZK		ZK			
Datafile:	13may003		13may001		13may002			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	91	70-130%	90	70-130%	1.4	<30

ND = Not Detected (Below RL)
 RL = Reporting Limit

Reviewed/Approved By: 
 Mark J. Johnson
 Operations Manager

Date: 5-26-11

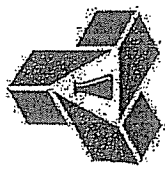
The cover letter is an integral part of this analytical report.

051301-0103

CHAIN-OF-CUSTODY RECORD

Advanced Technology Laboratories

3275 Walnut Avenue, Signal Hill, CA 90755-5225
www.atlabs.com
TEL: (562) 989-4045 FAX: (562) 989-4040



QC Level: RTNE

Subcontractor:

Air Technology Laboratories
18501 E. Gale Ave, Suite 130
City of Industry, CA 91748

TEL: (626) 964-4032
FAX: (626) 964-5832
Acct #:

Field Sampler: ED ARNITZ

12-May-11

Sample ID	Matrix	Date Collected	Bottle Type	Requested Tests	
				H2S	
117822-001B / M-104-10VP	Air	5/12/2011 10:00:00 AM	TEDLAR BAG	1	
117822-002B / M-104B-65	Air	5/12/2011 10:30:00 AM	TEDLAR BAG	1	
117822-003B / M-105-5VP	Air	5/12/2011 12:22:00 PM	TEDLAR BAG	1	

01
02
03

General Comments: Please email sample receipt acknowledgement to the PM.

Please use PO#: SC06999

Please fax results by: Normal TAT *EN*

Analyze the samples for Hydrogen Sulfide by *ERA KB w/d/1/11*

Please send report to Rachelle Arada

Relinquished by: <i>[Signature]</i>	Date/Time: 5/12/11 1700
Relinquished by: <i>[Signature]</i>	Date/Time: 5/12/11 1700

CHAIN OF CUSTODY RECORD

ADVANCED TECHNOLOGY LABORATORIES 3275 Walnut Ave., Signal Hill, CA 90755 Tel: (562) 989-4045 • Fax: (562) 989-4040 Client: MACTEC Attn: JAY NEUHAUS	P.O.#: _____ Quote #: _____ Logged By: <i>[Signature]</i> Date: 5/12/11 NOTE: Please include your Quote No. to ensure proper pricing of your project.	Method of Transport <input checked="" type="checkbox"/> Client <input type="checkbox"/> ATL <input type="checkbox"/> FedEx <input type="checkbox"/> OnTrac <input type="checkbox"/> GSO <input type="checkbox"/> Other: _____	Sample Condition Upon Receipt 1. CHILLED Y <input type="checkbox"/> N <input checked="" type="checkbox"/> 4. SEALED Y <input type="checkbox"/> N <input type="checkbox"/> 2. HEADSPACE (VOA) Y <input type="checkbox"/> N <input type="checkbox"/> 5. # OF SPLS MATCH COC Y <input type="checkbox"/> N <input type="checkbox"/> 3. CONTAINER INTACT Y <input type="checkbox"/> N <input type="checkbox"/> 6. PRESERVED Y <input type="checkbox"/> N <input type="checkbox"/>
Project Name: JAY NEUHAUS Project #: 4953101561 Relinquished by: <i>[Signature]</i> (Signature) ED ARNITZ (Printed Name) Date: 5/12/11 Relinquished by: <i>[Signature]</i> (Signature and Printed Name) Date: 5/12/11	Address: 2171 CAMPUS DRIVE SUITE 100 IRVINE, CA City: IRVINE State: CA Zip Code: 92612	Received by: <i>[Signature]</i> (Signature and Printed Name) Date: 5/17/11 Received by: <i>[Signature]</i> (Signature and Printed Name) Date: 5/17/11 Special Instructions/Comments: _____	
Bill To: SAME Attn: _____ Co: _____ Addr: _____ City: _____ State: _____ Zip: _____	Circle or Add Analysis(es) Requested 8081A (Pesticides) _____ 8082 (PCB) _____ 8260B (Votiles) _____ 8270C (BNA) _____ 8010B (Total Metal) _____ 8015B (DRO) _____ TITLE 22 / CAM 17 (6010 / 7000) _____ HEXANE, GAS METANE, GAS FIXED GASES		
I hereby authorize ATL to perform the work indicated below: Project Mgr /Submitter: ED ARNITZ 5/12/11 <i>[Signature]</i>	Send Report To: Attn: JAY NEUHAUS Co: MACTEC Addr: SAME City: _____ State: _____ Zip: _____	Storage Fees (applies when storage is requested): • Sample : \$2.00 / sample / mo (after 45 days) • Records : \$1.00 / ATL workorder / mo (after 1 year)	
LAB USE ONLY: Batch #: _____ Lab No. _____	Sample Description Sample I.D. / Location 117822 - 01 M-104-10VP M-104B-65 M-105-5VP	Date 5/12/11 10:00 10:30 12:22	Time
SPECIFY APPROPRIATE MATRIX SOLID _____ SEDIMENT _____ DRINKING WATER _____ GROUND WATER _____ WASTEWATER _____ STOMAWATER _____ AQUEOUS _____		TAT # Type E 3 B E 2 B E 2 B	
I T E M		QA/QC RTNE <input type="checkbox"/> CT <input type="checkbox"/> Legal <input type="checkbox"/> SWRCB <input type="checkbox"/> Logcode _____ OTHER _____ REMARKS _____	
• TAT starts 8 a.m. following day if samples received after 5 p.m.		Preservatives: H=HCl N=HNO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(AC) ₂ O=NaOH T=Na ₂ S ₂ O ₃	

G-3.3

MTA Westside Extension PE Phase

Vapor Sample Data

Locations: M-106, M-107, & M-109

June 02, 2011



Jay Neuhaus
MACTEC
2171 Campus Drive, Suite 100
Irvine, CA 92612
TEL: (949) 224-0050
FAX:

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

Workorder No.: 118028

RE:

Attention: Jay Neuhaus

Enclosed are the results for sample(s) received on May 24, 2011 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

A handwritten signature in black ink, appearing to read "Eddie F. Rodriguez". The signature is stylized and fluid.

Eddie F. Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.



CLIENT: MACTEC

Project:

Lab Order: 118028

CASE NARRATIVE

The samples for EPA 1516 analysis were subcontracted to Air Technology Lab.

Analytical Comments for EPA TO15

Samples 118028-001A, 118028-002A and 118028-003A, dilution was necessary due to high concentration of unknown and non-target compounds.

Samples 118028-001A, 118028-002A and 118028-003A, surrogate recovery biased high possibly due to matrix interferences.



Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 02-Jun-11

CLIENT: MACTEC	Client Sample ID: M-107-VP15
Lab Order: 118028	Collection Date: 5/24/2011 10:15:00 AM
Project:	Matrix: AIR
Lab ID: 118028-001A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASES BY GAS CHROMATOGRAPHY

ASTM D1946

RunID: GC18_110525A	QC Batch: Z11A024	PrepDate:	Analyst: BB
Methane	430000	5000	ppmv
			500
			5/27/2011 07:11 AM

VOCS IN AIR BY GCMS

EPA TO15

RunID: MS14_110524A	QC Batch: W11A058	PrepDate:	Analyst: DMP
Hexane	16	5.0	ppbv
			20
			5/25/2011 12:03 AM
Surr: 4-Bromofluorobenzene	564	70-130	S %REC
			20
			5/25/2011 12:03 AM

Qualifiers:	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	ND Not Detected at the Reporting Limit
	S Spike/Surrogate outside of limits due to matrix interference	Results are wet unless otherwise specified
	DO Surrogate Diluted Out	



*Advanced Technology
Laboratories*

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 02-Jun-11

CLIENT: MACTEC
Lab Order: 118028
Project:
Lab ID: 118028-002A

Client Sample ID: M-106-VP20
Collection Date: 5/24/2011 12:20:00 PM
Matrix: AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASES BY GAS CHROMATOGRAPHY

ASTM D1946

RunID: GC18_110525A	QC Batch: Z11A024				PrepDate:	Analyst: BB
Methane	430000	5000		ppmv	500	5/27/2011 07:39 AM

VOCS IN AIR BY GCMS

EPA TO15

RunID: MS14_110524A	QC Batch: W11A058				PrepDate:	Analyst: DMP
Hexane	12	5.0		ppbv	20	5/25/2011 12:39 AM
Surr: 4-Bromofluorobenzene	1880	70-130	S	%REC	20	5/25/2011 12:39 AM

Qualifiers: B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 S Spike/Surrogate outside of limits due to matrix interference
 DO Surrogate Diluted Out
 E Value above quantitation range
 ND Not Detected at the Reporting Limit
 Results are wet unless otherwise specified



*Advanced Technology
 Laboratories*

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 02-Jun-11

CLIENT: MACTEC	Client Sample ID: M-109A
Lab Order: 118028	Collection Date: 5/24/2011 1:40:00 PM
Project:	Matrix: AIR
Lab ID: 118028-003A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
-----------------	---------------	------------	-------------	--------------	-----------	----------------------

GASES BY GAS CHROMATOGRAPHY

ASTM D1946

RunID: GC18_110525A	QC Batch: Z11A024	PrepDate:	Analyst: BB
Methane	400000	5000	ppmv
		500	5/27/2011 07:56 AM

VOCS IN AIR BY GCMS

EPA TO15

RunID: MS14_110524A	QC Batch: W11A058	PrepDate:	Analyst: DMP
Hexane	18	5.0	ppbv
Surr: 4-Bromofluorobenzene	316	70-130	S %REC
			20
			5/25/2011 01:15 AM
			5/25/2011 01:15 AM

Qualifiers:	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	ND Not Detected at the Reporting Limit
	S Spike/Surrogate outside of limits due to matrix interference	Results are wet unless otherwise specified
	DO Surrogate Diluted Out	



*Advanced Technology
 Laboratories*

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

CLIENT: MACTEC

Work Order: 118028

Project:

ANALYTICAL QC SUMMARY REPORT

TestCode: D1946

Sample ID: MB-Z11A024	SampType: MBLK	TestCode: D1946	Units: ppmv	Prep Date:	RunNo: 133386						
Client ID: ZZZZZZ	Batch ID: Z11A024	TestNo: ASTM D1946		Analysis Date: 5/27/2011	SeqNo: 2176258						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methane ND 10

Sample ID: LCS-Z11A024	SampType: LCS	TestCode: D1946	Units: ppmv	Prep Date:	RunNo: 133386						
Client ID: ZZZZZZ	Batch ID: Z11A024	TestNo: ASTM D1946		Analysis Date: 5/27/2011	SeqNo: 2176259						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

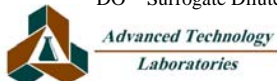
Methane 1134.789 10 1000 0 113 70 130

Sample ID: LCSD-Z11A024	SampType: LCSD	TestCode: D1946	Units: ppmv	Prep Date:	RunNo: 133386						
Client ID: ZZZZZZ	Batch ID: Z11A024	TestNo: ASTM D1946		Analysis Date: 5/27/2011	SeqNo: 2176260						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methane 1121.003 10 1000 0 112 70 130 1135 1.22 20

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference



CLIENT: MACTEC
 Work Order: 118028
 Project:

ANALYTICAL QC SUMMARY REPORT

TestCode: TO15

Sample ID: LCS-W11A058	SampType: LCS	TestCode: TO15	Units: ppbv	Prep Date:	RunNo: 133426						
Client ID: ZZZZZZ	Batch ID: W11A058	TestNo: EPA TO15		Analysis Date: 5/24/2011	SeqNo: 2176834						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: 4-Bromofluorobenzene	2.800	2.500	112	70	130
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Sample ID: LCSD-W11A058	SampType: LCSD	TestCode: TO15	Units: ppbv	Prep Date:	RunNo: 133426						
Client ID: ZZZZZZ	Batch ID: W11A058	TestNo: EPA TO15		Analysis Date: 5/24/2011	SeqNo: 2176835						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

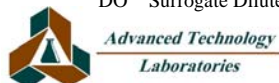
Surr: 4-Bromofluorobenzene	2.740	2.500	110	70	130	0	0
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Sample ID: MB-W11A058	SampType: MBLK	TestCode: TO15	Units: ppbv	Prep Date:	RunNo: 133426						
Client ID: ZZZZZZ	Batch ID: W11A058	TestNo: EPA TO15		Analysis Date: 5/24/2011	SeqNo: 2176836						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Hexane	ND	0.25			
Surr: 4-Bromofluorobenzene	2.630	2.500	105	70	130

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| ND Not Detected at the Reporting Limit | R RPD outside accepted recovery limits | S Spike/Surrogate outside of limits due to matrix interference |
| DO Surrogate Diluted Out | Calculations are based on raw values | |



June 7, 2011

Advanced Technology Laboratories
ATTN: Rachelle Arada
3275 Walnut Ave.
Signal Hill, CA 90755



ADE-1461
EPA Methods TO-3,
TO14A, TO15 SIM & Scan,
ASTM D1946



FL Cert E8784/LA Cert 04140
EPA Methods TO3, TO14A, TO15, 25C/3C,
RSK-175

TX Cert T104704450-09-TX
EPA Methods TO14A, TO15

LABORATORY TEST RESULTS

Project Reference: 118028
Lab Number: C052502-01/03

Enclosed are results for sample(s) received 5/25/11 by Air Technology Laboratories. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Sample analyses were performed within method performance criteria, and meet all requirements of the NELAC Standards.
- All results are reported without qualifications unless otherwise noted.
- The enclosed results relate only to the sample(s).

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Johnson'.

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

Note: The cover letter is an integral part of this analytical report.

Client: Advanced Technology Laboratories
 Attn: Rachelle Arada
 Project Name: NA
 Project No.: 118028
 Date Received: 05/25/11
 Matrix: Air
 Reporting Units: ppmv

EPA 15/16

Lab No.:	C052502-01	C052502-02	C052502-03					
Client Sample I.D.:	118028-001B / M-107-VP15	118028-002B / M-106-VP20	118028-003B / M-109A					
Date Sampled:	05/24/11	05/24/11	05/24/11					
Date Analyzed:	05/27/11	05/27/11	05/27/11					
QC Batch No.:	110527GC3A1	110527GC3A1	110527GC3A1					
Analyst Initials:	ZK	ZK	ZK					
Dilution Factor:	1.0	200	1.0					
	Result	RL	Result	RL	Result	RL		
	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv		
ANALYTE								
Hydrogen Sulfide	ND	0.20	290	40	ND	0.20		

ND = Not Detected (below RL)
 RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
 Mark Johnson
 Operations Manager

Date 6/7/11

The cover letter is an integral part of this analytical report



QC Batch No.: 110527GC3A1
Matrix: Air
Units: ppmv

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank	LCS	LCSD					
Date Analyzed:	05/27/11	05/27/11	05/27/11					
Analyst Initials:	ZK	ZK	ZK					
Datafile:	27may003	27may001	27may002					
Dilution Factor:	1.0	1.0	1.0					
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	97	70-130%	104	70-130%	6.3	<30

ND = Not Detected (Below RL)
RL = Reporting Limit

Reviewed/Approved By: Mark J. Johnson *MJ Johnson*
Operations Manager Date: 6/7/11

The cover letter is an integral part of this analytical report.



CHAIN-OF-CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755-5225
www.atsglobal.com

TEL: (562) 989-4045 FAX: (562) 989-4040

QC Level: RTNE

Subcontractor:

Air Technology Laboratories
18501 E. Gale Ave, Suite 130
City of Industry, CA 91748

TEL: (626) 964-4032
FAX: (626) 964-5832
Acct #:

Field Sampler: ED ARWITZ

24-May-11

Sample ID	Matrix	Date Collected	Bottle Type	H2S	Requested Tests	
118028-001B / M-107-VP15	Air	5/24/2011 10:15:00 AM	TEDLAR BAG	1		
118028-002B / M-106-VP20	Air	5/24/2011 12:20:00 PM	TEDLAR BAG	1		
118028-003B / M-109A	Air	5/24/2011 1:40:00 PM	TEDLAR BAG	1		

01
02
03

General Comments: Please email sample receipt acknowledgement to the PM. *(RT)*

Please use PO#: SC06424 Please fax results by: Normal TAT

Please analyze samples for Hydrogen Sulfide *by EPA 1516*

Please send report to Rachelle Arada

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	5/24/11 10:15	<i>[Signature]</i>	5/25/11 09:30
<i>[Signature]</i>	5/25/11 09:19	<i>[Signature]</i>	5/25/11 10:19

CHAIN OF CUSTODY RECORD

ADVANCED TECHNOLOGY LABORATORIES
 3275 Walnut Ave., Signal Hill, CA 90755
 Tel: (562) 989-4045 • Fax: (562) 989-4040

Quote #: _____
 Logged By: JS Date: 5/24/11
 NOTE: Please include your Quote No. to ensure proper pricing of your project.

FOR LABORATORY USE ONLY:
 Sample Condition Upon Receipt
 1. CHILLED Y N 4. SEALED Y N
 2. HEADSPACE (VOA) Y N 5. # OF SPLS MATCH COC Y N
 3. CONTAINER INTACT Y N 6. PRESERVED Y N

Client: MAGTEC Address: 2171 CAMPVIS DR SUITE 100 TEL: 949 224 0050
 Attn: JAY NEVHAUS City: IRVINE State: CA Zip Code: 92612 FAX: _____
 Project #: _____

Method of Transport: Client ATL FedEx OnTrac
 GSO Other: _____

Relinquished by: (Signature and Printed Name) ED ARWITZ Date: 5/24/11 Time: 1534
 Relinquished by: (Signature and Printed Name) [Signature] Date: _____ Time: _____
 Relinquished by: (Signature and Printed Name) _____ Date: _____ Time: _____

Sampler: ED ARWITZ (Printed Name)
 Received by: (Signature and Printed Name) [Signature] Date: 5/24/11 Time: 1534
 Received by: (Signature and Printed Name) _____ Date: _____ Time: _____

I hereby authorize ATL to perform the work indicated below:
 Project Mgr / Submitter: JAY NEVHAUS
 Print Name: ED ARWITZ Date: 5/24/11
 Signature: [Signature]

Special Instructions/Comments: _____
 Bill To: _____
 Attn: SAME
 Co: _____
 Addr: _____
 City: _____ State: _____ Zip: _____

Sample/Records - Archival & Disposal
 Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.
Storage Fees (applies when storage is requested):
 • Sample : \$2.00 / sample / mo (after 45 days)
 • Records : \$1.00 / ATL workorder / mo (after 1 year)

Send Report To:
 Attn: JAY NEVHAUS
 Co: MAGTEC
 Addr: SAME
 City: _____ State: _____ Zip: _____

ITEM	LAB USE ONLY:		Sample Description	Date	Time
	Batch #:	Lab No.			
	<u>118028-07</u>	<u>M-107-NP15</u>	<u>M-107-NP15</u>	<u>5/24/11</u>	<u>10:15</u>
	<u>1</u>	<u>M-106-V P20</u>	<u>M-106-V P20</u>	<u>17:20</u>	<u>17:20</u>
	<u>3</u>	<u>M-109-A</u>	<u>M-109-A</u>	<u>13:40</u>	<u>13:40</u>

Circle or Add Analysis(es) Requested
 8081A (Pesticides) _____
 8082 (PCB) _____
 8260B (Naltes) _____
 8270C (BNA) _____
 6010B (Total Metal) _____
 8015B (GRO) / 8021 (BTEX) _____
 8015B (DRO) _____
 TITLE 22 / CAM 17 (6010 / 7000) _____
 METHANE-H2S _____
 Fixed Gases _____
 Hexanes _____

SPECIFY APPROPRIATE MATRIX

	TAT	#	Type
SEDIMENT			
SOIL			
DRINKING WATER			
GROUND WATER			
WASTEWATER			
STORMWATER			
AQUEOUS			
AIR	<u>X</u>	<u>2</u>	<u>B</u>
	<u>X</u>	<u>2</u>	<u>B</u>
	<u>X</u>	<u>2</u>	<u>B</u>

QA/QC
 RTNE
 CT
 Legal
 SWRCB
 Logcode
 OTHER _____

REMARKS: _____

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal
 TAT: A=Overnight ≤ 24 hrs B=Emergency Next workday C=Critical 2 Workdays D=Urgent 3 Workdays E=Routine 7 Workdays

Preservatives: H=HCl N=HNO₃ S=H₂SO₄ C=4°C
 Z=Zn(AC)₂ O=NaOH T=Na₂S₂O₃

Figure G-3.3.12

G-3.4

MTA Westside Extension PE Phase

Vapor Sample Data

Locations: M-110, M-111, & M-113