

CHAIN OF CUSTODY RECORD

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

P.O.#: 301106374 Quote #: 1476
 Logged By: [Signature] Date: 8/16/11

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

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

NOTE: Please include your Quote No. to ensure proper pricing of your project.

Client: MACTEC
 Attn: Math Fraychineaud
 Address: 5628 E. Slavson Ave City: LA State: CA Zip Code: 90040
 TEL: 323-889-5300 FAX: _____

Project Name: _____
 Project #: _____
 Sampler: Paul Kane (Printed Name)
 Relinquished by: (Signature and Printed Name) [Signature] Date: 8/15/11 Time: 0730
 Relinquished by: (Signature and Printed Name) Math Fraychineaud Date: 8/15/11 Time: 1315
 Relinquished by: (Signature and Printed Name) [Signature] Date: 8/15/11 Time: 1650

I hereby authorize ATL to perform the work indicated below:
 Project Mgr /Submitter: Math Fraychineaud
 Bill To: _____
 Attn: _____
 Co: _____
 Address: _____
 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)

LAB USE ONLY: Batch #:	Lab No.	Sample Description	Sample I.D. / Location		Date	Time
			Sample I.D.	Location		
	119413-21		E-132-10'	✓	8/12/11	0758
	2		E-132-15'	✓		1000
	3		E-132-20'	✓		1008
	4		E-132-25'	✓		1015
	5		E-132-30'	✓		1020
	6		E-132-35'	✓		1035
	7		E-132-40'	✓		1045

Circle or Add Analysis(es) Requested:
 8081A (Pesticides) 8260B (PCB) 8270C (Volatiles) 8010B (Total Metal) 8015B (GRO) 8015B (DRO) TITLE 22 / CAM 17 (6010 / 7000)

Special Instructions/Comments: _____

SPECIFY APPROPRIATE MATRIX		CONTAINER(S)		TAT	Type	REMARKS
DRINKING WATER	GROUND WATER	WASTEWATER	STORMWATER			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		1 T	Hold
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	7 T V	Hold HSO+ MPOH
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		1 T	Hold
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	7 T V	Hold HSO+ MPOH
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	1 T	Hold
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		1 T	Hold

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

TAT: A= Overnight ≤ 24 hrs B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

DISTRIBUTION: White with report, Yellow to folder, Pink to submitter.

Figure I-1.992

August 26, 2011



Matt Fraychineaud
Mactec
5628 E. Slauson Avenue,
Los Angeles, CA 90040-2922
TEL: (323) 889-5300
FAX:

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

Workorder No.: 119469

RE: Metro Westside Extension, 4953101561

Attention: Matt Fraychineaud

Enclosed are the results for sample(s) received on August 19, 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.



CLIENT: Mactec
Project: Metro Westside Extension, 4953101561
Lab Order: 119469

CASE NARRATIVE

All volatile analyses were performed using 5035 preservation requirements. Any high level dilutions were performed on a preserved methanol sample unless otherwise noted.

Analytical Comments for EPA 8270C

Samples 119481-003GMS and 119481-003GMSD, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).



Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 26-Aug-11

CLIENT: Mactec
Lab Order: 119469
Project: Metro Westside Extension, 4953101561
Lab ID: 119469-001A

Client Sample ID: E-133-GW @ 25'
Collection Date: 8/19/2011 11:30:00 AM
Matrix: GROUNDWATER

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

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110822A	QC Batch: Q11VW159	PrepDate:	Analyst: BD		
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,1,1-Trichloroethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,1,2-Trichloroethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,1-Dichloroethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,1-Dichloroethene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,1-Dichloropropene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,2,3-Trichlorobenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,2,3-Trichloropropane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,2-Dibromo-3-chloropropane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,2-Dibromoethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,2-Dichlorobenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,2-Dichloroethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,2-Dichloropropane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,3-Dichlorobenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,3-Dichloropropane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
1,4-Dichlorobenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
2,2-Dichloropropane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
2-Chlorotoluene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
4-Chlorotoluene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
4-Isopropyltoluene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
Benzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
Bromobenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
Bromodichloromethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
Bromoform	ND	0.50	µg/L	1	8/22/2011 09:26 PM
Bromomethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
Carbon tetrachloride	ND	0.50	µg/L	1	8/22/2011 09:26 PM
Chlorobenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM
Chloroethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
Chloroform	ND	0.50	µg/L	1	8/22/2011 09:26 PM
Chloromethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM
cis-1,2-Dichloroethene	ND	0.50	µg/L	1	8/22/2011 09:26 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: 26-Aug-11

CLIENT:	Mactec	Client Sample ID:	E-133-GW @ 25'
Lab Order:	119469	Collection Date:	8/19/2011 11:30:00 AM
Project:	Metro Westside Extension, 4953101561	Matrix:	GROUNDWATER
Lab ID:	119469-001A		

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

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID:	MS2_110822A	QC Batch:	Q11VW159	PrepDate:	Analyst:	BD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Di-isopropyl ether	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Dibromochloromethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Dibromomethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Dichlorodifluoromethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Ethyl tert-butyl ether	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Ethylbenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Hexachlorobutadiene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Isopropylbenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
m,p-Xylene	ND	1.0	µg/L	1	8/22/2011 09:26 PM	
Methylene chloride	ND	1.0	µg/L	1	8/22/2011 09:26 PM	
MTBE	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
n-Butylbenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
n-Propylbenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Naphthalene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
o-Xylene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
sec-Butylbenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Styrene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Tert-amyl methyl ether	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Tert-Butanol	ND	10	µg/L	1	8/22/2011 09:26 PM	
tert-Butylbenzene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Tetrachloroethene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Toluene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
trans-1,2-Dichloroethene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Trichloroethene	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Trichlorofluoromethane	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Vinyl chloride	ND	0.50	µg/L	1	8/22/2011 09:26 PM	
Surr: 1,2-Dichloroethane-d4	87.8	70-130	%REC	1	8/22/2011 09:26 PM	
Surr: 4-Bromofluorobenzene	98.3	70-130	%REC	1	8/22/2011 09:26 PM	
Surr: Dibromofluoromethane	88.5	70-130	%REC	1	8/22/2011 09:26 PM	
Surr: Toluene-d8	87.2	70-130	%REC	1	8/22/2011 09:26 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: 26-Aug-11

CLIENT: Mactec	Client Sample ID: E-133-GW @ 25'
Lab Order: 119469	Collection Date: 8/19/2011 11:30:00 AM
Project: Metro Westside Extension, 4953101561	Matrix: GROUNDWATER
Lab ID: 119469-001B	

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

GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC19_110822A	QC Batch: M11VW162	PrepDate:	Analyst: BB		
GRO	ND	0.20	mg/L	1	8/22/2011 02:42 PM
Surr: Bromofluorobenzene (FID)	89.0	70-130	%REC	1	8/22/2011 02:42 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: 26-Aug-11

CLIENT: Mactec	Client Sample ID: E-133-GW @ 25'
Lab Order: 119469	Collection Date: 8/19/2011 11:30:00 AM
Project: Metro Westside Extension, 4953101561	Matrix: GROUNDWATER
Lab ID: 119469-001C	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3510C		EPA 8015B(M)			
RunID: GC16_110822B	QC Batch: 75038			PrepDate: 8/22/2011		Analyst: CBR
DRO	0.21	0.20		mg/L	1	8/22/2011 03:29 PM
ORO	0.24	0.20		mg/L	1	8/22/2011 03:29 PM
Surr: p-Terphenyl	68.2	36-126		%REC	1	8/22/2011 03:29 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: 26-Aug-11

CLIENT: Mactec
Lab Order: 119469
Project: Metro Westside Extension, 4953101561
Lab ID: 119469-002A

Client Sample ID: E-133-35'
Collection Date: 8/19/2011 1:20:00 PM
Matrix: SOIL

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

DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID

LUFT

EPA 8015B(M)

RunID: GC16_110822A	QC Batch: 75034				PrepDate: 8/22/2011	Analyst: CBR
DRO	ND	10		mg/Kg	1	8/22/2011 12:38 PM
ORO	ND	10		mg/Kg	1	8/22/2011 12:38 PM
Surr: p-Terphenyl	81.5	63-152		%REC	1	8/22/2011 12:38 PM

SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 3550B

EPA 8270C

RunID: MS 13_110823A	QC Batch: 75073				PrepDate: 8/23/2011	Analyst: DMP
1,2,4-Trichlorobenzene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
1,2-Dichlorobenzene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
1,3-Dichlorobenzene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
1,4-Dichlorobenzene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
2,4,5-Trichlorophenol	ND	330		µg/Kg	1	8/23/2011 12:35 PM
2,4,6-Trichlorophenol	ND	330		µg/Kg	1	8/23/2011 12:35 PM
2,4-Dichlorophenol	ND	1600		µg/Kg	1	8/23/2011 12:35 PM
2,4-Dimethylphenol	ND	330		µg/Kg	1	8/23/2011 12:35 PM
2,4-Dinitrophenol	ND	1600		µg/Kg	1	8/23/2011 12:35 PM
2,4-Dinitrotoluene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
2,6-Dinitrotoluene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
2-Chloronaphthalene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
2-Chlorophenol	ND	330		µg/Kg	1	8/23/2011 12:35 PM
2-Methylnaphthalene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
2-Methylphenol	ND	330		µg/Kg	1	8/23/2011 12:35 PM
2-Nitroaniline	ND	1600		µg/Kg	1	8/23/2011 12:35 PM
2-Nitrophenol	ND	330		µg/Kg	1	8/23/2011 12:35 PM
3,3'-Dichlorobenzidine	ND	660		µg/Kg	1	8/23/2011 12:35 PM
3-Nitroaniline	ND	1600		µg/Kg	1	8/23/2011 12:35 PM
4,6-Dinitro-2-methylphenol	ND	1600		µg/Kg	1	8/23/2011 12:35 PM
4-Bromophenyl-phenylether	ND	330		µg/Kg	1	8/23/2011 12:35 PM
4-Chloro-3-methylphenol	ND	660		µg/Kg	1	8/23/2011 12:35 PM
4-Chloroaniline	ND	660		µg/Kg	1	8/23/2011 12:35 PM
4-Chlorophenyl-phenylether	ND	330		µg/Kg	1	8/23/2011 12:35 PM
4-Methylphenol	ND	330		µg/Kg	1	8/23/2011 12:35 PM
4-Nitroaniline	ND	1600		µg/Kg	1	8/23/2011 12:35 PM
4-Nitrophenol	ND	1600		µg/Kg	1	8/23/2011 12:35 PM
Acenaphthene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Acenaphthylene	ND	330		µg/Kg	1	8/23/2011 12:35 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: 26-Aug-11

CLIENT: Mactec	Client Sample ID: E-133-35'
Lab Order: 119469	Collection Date: 8/19/2011 1:20:00 PM
Project: Metro Westside Extension, 4953101561	Matrix: SOIL
Lab ID: 119469-002A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS						
EPA 3550B			EPA 8270C			
RunID: MS 13_110823A	QC Batch: 75073			PrepDate:	8/23/2011	Analyst: DMP
Anthracene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Benzidine (M)	ND	1600		µg/Kg	1	8/23/2011 12:35 PM
Benzo(a)anthracene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Benzo(a)pyrene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Benzo(b)fluoranthene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Benzo(g,h,i)perylene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Benzo(k)fluoranthene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Benzoic acid	ND	1600		µg/Kg	1	8/23/2011 12:35 PM
Benzyl alcohol	ND	660		µg/Kg	1	8/23/2011 12:35 PM
Bis(2-chloroethoxy)methane	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Bis(2-chloroethyl)ether	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Bis(2-chloroisopropyl)ether	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Bis(2-ethylhexyl)phthalate	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Butylbenzylphthalate	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Chrysene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Di-n-butylphthalate	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Di-n-octylphthalate	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Dibenz(a,h)anthracene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Dibenzofuran	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Diethylphthalate	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Dimethylphthalate	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Fluoranthene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Fluorene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Hexachlorobenzene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Hexachlorobutadiene	ND	660		µg/Kg	1	8/23/2011 12:35 PM
Hexachlorocyclopentadiene	ND	660		µg/Kg	1	8/23/2011 12:35 PM
Hexachloroethane	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Indeno(1,2,3-cd)pyrene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Isophorone	ND	330		µg/Kg	1	8/23/2011 12:35 PM
N-Nitrosodi-n-propylamine	ND	330		µg/Kg	1	8/23/2011 12:35 PM
N-Nitrosodiphenylamine	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Naphthalene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Nitrobenzene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Pentachlorophenol	ND	1600		µg/Kg	1	8/23/2011 12:35 PM
Phenanthrene	ND	330		µg/Kg	1	8/23/2011 12:35 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: 26-Aug-11

CLIENT: Mactec	Client Sample ID: E-133-35'
Lab Order: 119469	Collection Date: 8/19/2011 1:20:00 PM
Project: Metro Westside Extension, 4953101561	Matrix: SOIL
Lab ID: 119469-002A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS						
	EPA 3550B		EPA 8270C			
RunID: MS 13_110823A	QC Batch: 75073			PrepDate:	8/23/2011	Analyst: DMP
Phenol	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Pyrene	ND	330		µg/Kg	1	8/23/2011 12:35 PM
Surr: 1,2-Dichlorobenzene-d4	73.6	45-105		%REC	1	8/23/2011 12:35 PM
Surr: 2,4,6-Tribromophenol	69.3	41-129		%REC	1	8/23/2011 12:35 PM
Surr: 2-Chlorophenol-d4	78.3	55-108		%REC	1	8/23/2011 12:35 PM
Surr: 2-Fluorobiphenyl	82.2	56-114		%REC	1	8/23/2011 12:35 PM
Surr: 2-Fluorophenol	80.2	50-108		%REC	1	8/23/2011 12:35 PM
Surr: 4-Terphenyl-d14	89.2	59-141		%REC	1	8/23/2011 12:35 PM
Surr: Nitrobenzene-d5	75.1	45-114		%REC	1	8/23/2011 12:35 PM
Surr: Phenol-d5	84.1	46-118		%REC	1	8/23/2011 12:35 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: 26-Aug-11

CLIENT: Mactec	Client Sample ID: E-133-35'
Lab Order: 119469	Collection Date: 8/19/2011 1:20:00 PM
Project: Metro Westside Extension, 4953101561	Matrix: SOIL
Lab ID: 119469-002B	

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

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_110822A	QC Batch: T11VS154	PrepDate: 8/19/2011	Analyst: DDL		
1,1,1,2-Tetrachloroethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,1,1-Trichloroethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,1,2,2-Tetrachloroethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,1,2-Trichloroethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,1-Dichloroethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,1-Dichloroethene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,1-Dichloropropene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,2,3-Trichlorobenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,2,3-Trichloropropane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,2,4-Trichlorobenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,2,4-Trimethylbenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,2-Dibromo-3-chloropropane	ND	9.5	µg/Kg	1	8/22/2011 05:06 PM
1,2-Dibromoethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,2-Dichlorobenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,2-Dichloroethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,2-Dichloropropane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,3,5-Trimethylbenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,3-Dichlorobenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,3-Dichloropropane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
1,4-Dichlorobenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
2,2-Dichloropropane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
2-Chlorotoluene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
4-Chlorotoluene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
4-Isopropyltoluene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Benzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Bromobenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Bromodichloromethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Bromoform	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Bromomethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Carbon tetrachloride	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Chlorobenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Chloroethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Chloroform	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Chloromethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
cis-1,2-Dichloroethene	ND	4.8	µg/Kg	1	8/22/2011 05:06 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	



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

Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 26-Aug-11

CLIENT: Mactec	Client Sample ID: E-133-35'
Lab Order: 119469	Collection Date: 8/19/2011 1:20:00 PM
Project: Metro Westside Extension, 4953101561	Matrix: SOIL
Lab ID: 119469-002B	

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

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_110822A	QC Batch: T11VS154	PrepDate: 8/19/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Di-isopropyl ether	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Dibromochloromethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Dibromomethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Dichlorodifluoromethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Ethyl Tert-butyl ether	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Ethylbenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Hexachlorobutadiene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Isopropylbenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
m,p-Xylene	ND	9.5	µg/Kg	1	8/22/2011 05:06 PM
Methylene chloride	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
MTBE	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
n-Butylbenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
n-Propylbenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Naphthalene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
o-Xylene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
sec-Butylbenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Styrene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Tert-amyl methyl ether	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Tert-Butanol	ND	95	µg/Kg	1	8/22/2011 05:06 PM
tert-Butylbenzene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Tetrachloroethene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Toluene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
trans-1,2-Dichloroethene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Trichloroethene	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Trichlorofluoromethane	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Vinyl chloride	ND	4.8	µg/Kg	1	8/22/2011 05:06 PM
Surr: 1,2-Dichloroethane-d4	102	65-141	%REC	1	8/22/2011 05:06 PM
Surr: 4-Bromofluorobenzene	87.9	57-134	%REC	1	8/22/2011 05:06 PM
Surr: Dibromofluoromethane	112	70-128	%REC	1	8/22/2011 05:06 PM
Surr: Toluene-d8	96.2	72-123	%REC	1	8/22/2011 05:06 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: 26-Aug-11

CLIENT:	Mactec	Client Sample ID:	E-133-35'
Lab Order:	119469	Collection Date:	8/19/2011 1:20:00 PM
Project:	Metro Westside Extension, 4953101561	Matrix:	SOIL
Lab ID:	119469-002E		

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

GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110824A	QC Batch: E11VS307	PrepDate: 8/19/2011	Analyst: TP		
GRO	ND	0.95	mg/Kg	1	8/24/2011 12:49 PM
Surr: Bromofluorobenzene (FID)	106	51-161	%REC	1	8/24/2011 12:49 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: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

Sample ID: LCS-75034	SampType: LCS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 8/22/2011	RunNo: 135973						
Client ID: LCSS	Batch ID: 75034	TestNo: EPA 8015B(M LUFT		Analysis Date: 8/22/2011	SeqNo: 2228122						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	928.390	10	1000	0	92.8	76	139				
Surr: p-Terphenyl	74.400		80.00		93.0	63	152				

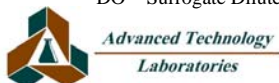
Sample ID: 119466-001AMS	SampType: MS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 8/22/2011	RunNo: 135973						
Client ID: ZZZZZ	Batch ID: 75034	TestNo: EPA 8015B(M LUFT		Analysis Date: 8/22/2011	SeqNo: 2228123						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	860.860	10	1000	0	86.1	60	158				
Surr: p-Terphenyl	75.070		80.00		93.8	63	152				

Sample ID: 119466-001AMSD	SampType: MSD	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 8/22/2011	RunNo: 135973						
Client ID: ZZZZZ	Batch ID: 75034	TestNo: EPA 8015B(M LUFT		Analysis Date: 8/22/2011	SeqNo: 2228124						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	847.470	10	1000	0	84.7	60	158	860.9	1.57	20	
Surr: p-Terphenyl	73.580		80.00		92.0	63	152		0	0	

Sample ID: MB-75034	SampType: MBLK	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 8/22/2011	RunNo: 135973						
Client ID: PBS	Batch ID: 75034	TestNo: EPA 8015B(M LUFT		Analysis Date: 8/22/2011	SeqNo: 2228127						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	ND	10									
ORO	ND	10									
Surr: p-Terphenyl	63.660		80.00		79.6	63	152				

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: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

Sample ID: E110824LC1	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 136058						
Client ID: LCSS	Batch ID: E11VS307	TestNo: EPA 8015B(M)	Analysis Date: 8/24/2011	SeqNo: 2229734							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.069	1.0	5.000	0	101	70	130				
Surr: Bromofluorobenzene (FID)	124.803		100.0		125	51	161				

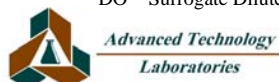
Sample ID: E110824MB1MS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 136058						
Client ID: ZZZZZZ	Batch ID: E11VS307	TestNo: EPA 8015B(M)	Analysis Date: 8/24/2011	SeqNo: 2229735							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.182	1.0	5.000	0	104	41	146				
Surr: Bromofluorobenzene (FID)	106.662		100.0		107	51	161				

Sample ID: E110824MB1MSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 136058						
Client ID: ZZZZZZ	Batch ID: E11VS307	TestNo: EPA 8015B(M)	Analysis Date: 8/24/2011	SeqNo: 2229736							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.227	1.0	5.000	0	105	41	146	5.182	0.865	20	
Surr: Bromofluorobenzene (FID)	108.159		100.0		108	51	161		0	0	

Sample ID: E110824MB1	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 136058						
Client ID: PBS	Batch ID: E11VS307	TestNo: EPA 8015B(M)	Analysis Date: 8/24/2011	SeqNo: 2229737							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	89.530		100.0		89.5	51	161				

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 | |



CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_DM

Sample ID: MB-75038	SampType: MBLK	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 8/22/2011	RunNo: 135984						
Client ID: PBW	Batch ID: 75038	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 8/22/2011	SeqNo: 2228373						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	ND	0.20									
ORO	ND	0.20									
Surr: p-Terphenyl	0.060		0.08000		75.2	36	126				

Sample ID: LCS-75038	SampType: LCS	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 8/22/2011	RunNo: 135984						
Client ID: LCSW	Batch ID: 75038	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 8/22/2011	SeqNo: 2228374						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	0.644	0.20	1.000	0	64.4	52	128				
Surr: p-Terphenyl	0.071		0.08000		88.7	36	126				

Sample ID: MB-75038MS	SampType: MS	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 8/22/2011	RunNo: 135984						
Client ID: ZZZZZ	Batch ID: 75038	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 8/22/2011	SeqNo: 2228375						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

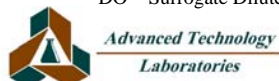
DRO	0.648	0.20	1.000	0	64.8	52	128				
Surr: p-Terphenyl	0.064		0.08000		79.5	36	126				

Sample ID: MB-75038MSD	SampType: MSD	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 8/22/2011	RunNo: 135984						
Client ID: ZZZZZ	Batch ID: 75038	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 8/22/2011	SeqNo: 2228376						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	0.559	0.20	1.000	0	55.9	52	128	0.6478	14.6	20	
Surr: p-Terphenyl	0.064		0.08000		79.4	36	126		0	0	

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 | |



CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_G PRES

Sample ID: M110822LCS2	SampType: LCS	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 135989						
Client ID: LCSW	Batch ID: M11VW162	TestNo: EPA 8015B(M)		Analysis Date: 8/22/2011	SeqNo: 2228492						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	1.009	0.20	1.000	0	101	70	130				
Surr: Bromofluorobenzene (FID)	91.309		100.0		91.3	70	130				

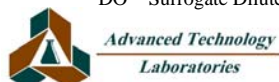
Sample ID: M110822MB1MS	SampType: MS	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 135989						
Client ID: ZZZZZ	Batch ID: M11VW162	TestNo: EPA 8015B(M)		Analysis Date: 8/22/2011	SeqNo: 2228494						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	1.035	0.20	1.000	0	104	70	130				
Surr: Bromofluorobenzene (FID)	92.408		100.0		92.4	70	130				

Sample ID: M110822MB1MSD	SampType: MSD	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 135989						
Client ID: ZZZZZ	Batch ID: M11VW162	TestNo: EPA 8015B(M)		Analysis Date: 8/22/2011	SeqNo: 2228495						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	1.039	0.20	1.000	0	104	70	130	1.035	0.386	20	
Surr: Bromofluorobenzene (FID)	93.112		100.0		93.1	70	130		0	0	

Sample ID: M110822MB1	SampType: MBLK	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 135989						
Client ID: PBW	Batch ID: M11VW162	TestNo: EPA 8015B(M)		Analysis Date: 8/22/2011	SeqNo: 2228496						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	0.20									
Surr: Bromofluorobenzene (FID)	89.015		100.0		89.0	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 | |



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

CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

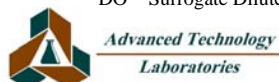
Sample ID: T110822LCS1		SampType: LCS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135975		
Client ID: LCSS		Batch ID: T11VS154		TestNo: EPA 8260B				Analysis Date: 8/22/2011		SeqNo: 2229081		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	41.470	5.0	50.00	0	82.9	70	130					
Benzene	90.530	5.0	100.0	0	90.5	70	130					
Chlorobenzene	51.970	5.0	50.00	0	104	70	130					
MTBE	50.710	5.0	50.00	0	101	70	130					
Toluene	96.040	5.0	100.0	0	96.0	70	130					
Trichloroethene	49.550	5.0	50.00	0	99.1	70	130					
Surr: 1,2-Dichloroethane-d4	45.040		50.00		90.1	65	141					
Surr: 4-Bromofluorobenzene	43.090		50.00		86.2	57	134					
Surr: Dibromofluoromethane	53.330		50.00		107	70	128					
Surr: Toluene-d8	47.020		50.00		94.0	72	123					

Sample ID: T110822MB1MS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135975		
Client ID: ZZZZZ		Batch ID: T11VS154		TestNo: EPA 8260B				Analysis Date: 8/22/2011		SeqNo: 2229082		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	44.950	5.0	50.00	0	89.9	70	130					
Benzene	96.580	5.0	100.0	0	96.6	70	130					
Chlorobenzene	53.450	5.0	50.00	0	107	70	130					
MTBE	53.630	5.0	50.00	0	107	70	130					
Toluene	104.210	5.0	100.0	0	104	70	130					
Trichloroethene	51.020	5.0	50.00	0	102	70	130					
Surr: 1,2-Dichloroethane-d4	43.770		50.00		87.5	65	141					
Surr: 4-Bromofluorobenzene	45.490		50.00		91.0	57	134					
Surr: Dibromofluoromethane	50.780		50.00		102	70	128					
Surr: Toluene-d8	48.890		50.00		97.8	72	123					

Sample ID: T110822MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135975		
Client ID: ZZZZZ		Batch ID: T11VS154		TestNo: EPA 8260B				Analysis Date: 8/22/2011		SeqNo: 2229083		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

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 | |



CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

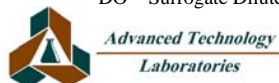
TestCode: 8260_S_5035

Sample ID: T110822MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135975	
Client ID: ZZZZZZ		Batch ID: T11VS154		TestNo: EPA 8260B		Analysis Date: 8/22/2011				SeqNo: 2229083	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	44.180	5.0	50.00	0	88.4	70	130	44.95	1.73	20	
Benzene	92.160	5.0	100.0	0	92.2	70	130	96.58	4.68	20	
Chlorobenzene	52.680	5.0	50.00	0	105	70	130	53.45	1.45	20	
MTBE	51.200	5.0	50.00	0	102	70	130	53.63	4.64	20	
Toluene	98.630	5.0	100.0	0	98.6	70	130	104.2	5.50	20	
Trichloroethene	48.770	5.0	50.00	0	97.5	70	130	51.02	4.51	20	
Surr: 1,2-Dichloroethane-d4	45.840		50.00		91.7	65	141		0	0	
Surr: 4-Bromofluorobenzene	44.200		50.00		88.4	57	134		0	0	
Surr: Dibromofluoromethane	52.840		50.00		106	70	128		0	0	
Surr: Toluene-d8	46.850		50.00		93.7	72	123		0	0	

Sample ID: T110822MB1		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135975	
Client ID: PBS		Batch ID: T11VS154		TestNo: EPA 8260B		Analysis Date: 8/22/2011				SeqNo: 2229084	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
1,1-Dichloroethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
1,1-Dichloropropene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	10									
1,2-Dibromoethane	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									

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 | |



CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

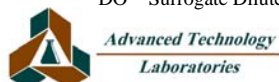
TestCode: 8260_S_5035

Sample ID: T110822MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135975
Client ID: PBS	Batch ID: T11VS154	TestNo: EPA 8260B		Analysis Date: 8/22/2011	SeqNo: 2229084

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Chlorotoluene	ND	5.0									
4-Chlorotoluene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
Benzene	ND	5.0									
Bromobenzene	ND	5.0									
Bromodichloromethane	ND	5.0									
Bromoform	ND	5.0									
Bromomethane	ND	5.0									
Carbon tetrachloride	ND	5.0									
Chlorobenzene	ND	5.0									
Chloroethane	ND	5.0									
Chloroform	ND	5.0									
Chloromethane	ND	5.0									
cis-1,2-Dichloroethene	ND	5.0									
cis-1,3-Dichloropropene	ND	5.0									
Di-isopropyl ether	ND	5.0									
Dibromochloromethane	ND	5.0									
Dibromomethane	ND	5.0									
Dichlorodifluoromethane	ND	5.0									
Ethyl Tert-butyl ether	ND	5.0									
Ethylbenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Isopropylbenzene	ND	5.0									
m,p-Xylene	ND	10									

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 | |



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

CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

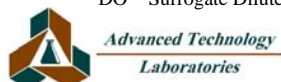
TestCode: 8260_S_5035

Sample ID: T110822MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135975
Client ID: PBS	Batch ID: T11VS154	TestNo: EPA 8260B		Analysis Date: 8/22/2011	SeqNo: 2229084

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	ND	5.0									
MTBE	ND	5.0									
n-Butylbenzene	ND	5.0									
n-Propylbenzene	ND	5.0									
Naphthalene	ND	5.0									
o-Xylene	ND	5.0									
sec-Butylbenzene	ND	5.0									
Styrene	ND	5.0									
Tert-amyl methyl ether	ND	5.0									
Tert-Butanol	ND	100									
tert-Butylbenzene	ND	5.0									
Tetrachloroethene	ND	5.0									
Toluene	ND	5.0									
trans-1,2-Dichloroethene	ND	5.0									
Trichloroethene	ND	5.0									
Trichlorofluoromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Surr: 1,2-Dichloroethane-d4	46.680		50.00		93.4	65	141				
Surr: 4-Bromofluorobenzene	42.270		50.00		84.5	57	134				
Surr: Dibromofluoromethane	49.940		50.00		99.9	70	128				
Surr: Toluene-d8	48.340		50.00		96.7	72	123				

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 | |



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

CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

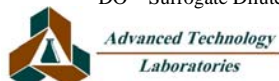
Sample ID: Q110822LCS1		SampType: LCS		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 136001		
Client ID: LCSW		Batch ID: Q11VW159		TestNo: EPA 8260B				Analysis Date: 8/22/2011		SeqNo: 2228571		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	18.720	0.50	20.00	0	93.6	70	130					
Benzene	38.700	0.50	40.00	0	96.8	70	130					
Chlorobenzene	20.260	0.50	20.00	0	101	70	130					
MTBE	21.010	0.50	20.00	0	105	70	130					
Toluene	40.750	0.50	40.00	0	102	70	130					
Trichloroethene	20.000	0.50	20.00	0	100	70	130					
Surr: 1,2-Dichloroethane-d4	22.860		25.00		91.4	70	130					
Surr: 4-Bromofluorobenzene	25.080		25.00		100	70	130					
Surr: Dibromofluoromethane	22.740		25.00		91.0	70	130					
Surr: Toluene-d8	23.560		25.00		94.2	70	130					

Sample ID: Q110822MB3MS		SampType: MS		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 136001		
Client ID: ZZZZZ		Batch ID: Q11VW159		TestNo: EPA 8260B				Analysis Date: 8/22/2011		SeqNo: 2228572		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	19.750	0.50	20.00	0	98.8	70	130					
Benzene	39.700	0.50	40.00	0	99.2	70	130					
Chlorobenzene	21.000	0.50	20.00	0	105	70	130					
MTBE	22.790	0.50	20.00	0	114	70	130					
Toluene	41.640	0.50	40.00	0	104	70	130					
Trichloroethene	20.770	0.50	20.00	0	104	70	130					
Surr: 1,2-Dichloroethane-d4	23.520		25.00		94.1	70	130					
Surr: 4-Bromofluorobenzene	25.040		25.00		100	70	130					
Surr: Dibromofluoromethane	23.420		25.00		93.7	70	130					
Surr: Toluene-d8	23.170		25.00		92.7	70	130					

Sample ID: Q110822MB3MSD		SampType: MSD		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 136001		
Client ID: ZZZZZ		Batch ID: Q11VW159		TestNo: EPA 8260B				Analysis Date: 8/22/2011		SeqNo: 2228573		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

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 | |



CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

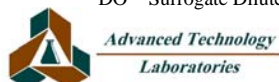
TestCode: 8260_WP_LL

Sample ID: Q110822MB3MSD	SampType: MSD	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 136001						
Client ID: ZZZZZZ	Batch ID: Q11VW159	TestNo: EPA 8260B		Analysis Date: 8/22/2011	SeqNo: 2228573						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.510	0.50	20.00	0	92.6	70	130	19.75	6.48	20	
Benzene	38.930	0.50	40.00	0	97.3	70	130	39.70	1.96	20	
Chlorobenzene	20.840	0.50	20.00	0	104	70	130	21.00	0.765	20	
MTBE	22.640	0.50	20.00	0	113	70	130	22.79	0.660	20	
Toluene	40.900	0.50	40.00	0	102	70	130	41.64	1.79	20	
Trichloroethene	19.990	0.50	20.00	0	100	70	130	20.77	3.83	20	
Surr: 1,2-Dichloroethane-d4	22.670		25.00		90.7	70	130		0	0	
Surr: 4-Bromofluorobenzene	25.210		25.00		101	70	130		0	0	
Surr: Dibromofluoromethane	23.030		25.00		92.1	70	130		0	0	
Surr: Toluene-d8	23.040		25.00		92.2	70	130		0	0	

Sample ID: Q110822MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 136001						
Client ID: PBW	Batch ID: Q11VW159	TestNo: EPA 8260B		Analysis Date: 8/22/2011	SeqNo: 2228574						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	0.50									
1,1-Dichloropropene	ND	0.50									
1,2,3-Trichlorobenzene	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromo-3-chloropropane	ND	0.50									
1,2-Dibromoethane	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									

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 | |



CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: Q110822MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 136001
Client ID: PBW	Batch ID: Q11VW159	TestNo: EPA 8260B		Analysis Date: 8/22/2011	SeqNo: 2228574

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	ND	0.50									
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Dichlorobenzene	ND	0.50									
1,3-Dichloropropane	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
2,2-Dichloropropane	ND	0.50									
2-Chlorotoluene	ND	0.50									
4-Chlorotoluene	ND	0.50									
4-Isopropyltoluene	ND	0.50									
Benzene	ND	0.50									
Bromobenzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Di-isopropyl ether	ND	0.50									
Dibromochloromethane	ND	0.50									
Dibromomethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Ethyl tert-butyl ether	ND	0.50									
Ethylbenzene	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Isopropylbenzene	ND	0.50									
m,p-Xylene	ND	1.0									

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 | |



*Advanced Technology
Laboratories*

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

CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

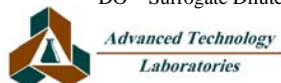
ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: Q110822MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 136001						
Client ID: PBW	Batch ID: Q11VW159	TestNo: EPA 8260B		Analysis Date: 8/22/2011	SeqNo: 2228574						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	ND	1.0									
MTBE	ND	0.50									
n-Butylbenzene	ND	0.50									
n-Propylbenzene	ND	0.50									
Naphthalene	ND	0.50									
o-Xylene	ND	0.50									
sec-Butylbenzene	ND	0.50									
Styrene	ND	0.50									
Tert-amyl methyl ether	ND	0.50									
Tert-Butanol	ND	10									
tert-Butylbenzene	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	27.030		25.00		108	70	130				
Surr: 4-Bromofluorobenzene	25.880		25.00		104	70	130				
Surr: Dibromofluoromethane	25.900		25.00		104	70	130				
Surr: Toluene-d8	22.700		25.00		90.8	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 | |



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

CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

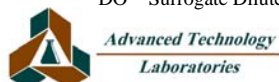
TestCode: 8270_S_FULL

Sample ID: MB-75073	SampType: MBLK	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 8/23/2011	RunNo: 136040
Client ID: PBS	Batch ID: 75073	TestNo: EPA 8270C EPA 3550B		Analysis Date: 8/23/2011	SeqNo: 2229226

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	ND	330									
1,2-Dichlorobenzene	ND	330									
1,3-Dichlorobenzene	ND	330									
1,4-Dichlorobenzene	ND	330									
2,4,5-Trichlorophenol	ND	330									
2,4,6-Trichlorophenol	ND	330									
2,4-Dichlorophenol	ND	1600									
2,4-Dimethylphenol	ND	330									
2,4-Dinitrophenol	ND	1600									
2,4-Dinitrotoluene	ND	330									
2,6-Dinitrotoluene	ND	330									
2-Chloronaphthalene	ND	330									
2-Chlorophenol	ND	330									
2-Methylnaphthalene	ND	330									
2-Methylphenol	ND	330									
2-Nitroaniline	ND	1600									
2-Nitrophenol	ND	330									
3,3'-Dichlorobenzidine	ND	660									
3-Nitroaniline	ND	1600									
4,6-Dinitro-2-methylphenol	ND	1600									
4-Bromophenyl-phenylether	ND	330									
4-Chloro-3-methylphenol	ND	660									
4-Chloroaniline	ND	660									
4-Chlorophenyl-phenylether	ND	330									
4-Methylphenol	ND	330									
4-Nitroaniline	ND	1600									
4-Nitrophenol	ND	1600									
Acenaphthene	ND	330									
Acenaphthylene	ND	330									
Anthracene	ND	330									

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 | |



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

CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

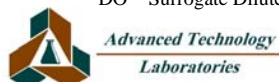
TestCode: 8270_S_FULL

Sample ID: MB-75073	SampType: MBLK	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 8/23/2011	RunNo: 136040
Client ID: PBS	Batch ID: 75073	TestNo: EPA 8270C EPA 3550B		Analysis Date: 8/23/2011	SeqNo: 2229226

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzidine (M)	ND	1600									
Benzo(a)anthracene	ND	330									
Benzo(a)pyrene	ND	330									
Benzo(b)fluoranthene	ND	330									
Benzo(g,h,i)perylene	ND	330									
Benzo(k)fluoranthene	ND	330									
Benzoic acid	ND	1600									
Benzyl alcohol	ND	660									
Bis(2-chloroethoxy)methane	ND	330									
Bis(2-chloroethyl)ether	ND	330									
Bis(2-chloroisopropyl)ether	ND	330									
Bis(2-ethylhexyl)phthalate	ND	330									
Butylbenzylphthalate	ND	330									
Chrysene	ND	330									
Di-n-butylphthalate	ND	330									
Di-n-octylphthalate	ND	330									
Dibenz(a,h)anthracene	ND	330									
Dibenzofuran	ND	330									
Diethylphthalate	ND	330									
Dimethylphthalate	ND	330									
Fluoranthene	ND	330									
Fluorene	ND	330									
Hexachlorobenzene	ND	330									
Hexachlorobutadiene	ND	660									
Hexachlorocyclopentadiene	ND	660									
Hexachloroethane	ND	330									
Indeno(1,2,3-cd)pyrene	ND	330									
Isophorone	ND	330									
N-Nitrosodi-n-propylamine	ND	330									
N-Nitrosodiphenylamine	ND	330									

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 | |



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

CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

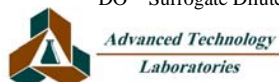
TestCode: 8270_S_FULL

Sample ID: MB-75073		SampType: MBLK		TestCode: 8270_S_FULL Units: µg/Kg		Prep Date: 8/23/2011		RunNo: 136040			
Client ID: PBS		Batch ID: 75073		TestNo: EPA 8270C EPA 3550B		Analysis Date: 8/23/2011		SeqNo: 2229226			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	330									
Nitrobenzene	ND	330									
Pentachlorophenol	ND	1600									
Phenanthrene	ND	330									
Phenol	ND	330									
Pyrene	ND	330									
Surr: 1,2-Dichlorobenzene-d4	2826.667		3330		84.9	45	105				
Surr: 2,4,6-Tribromophenol	1658.000		3330		49.8	41	129				
Surr: 2-Chlorophenol-d4	2927.333		3330		87.9	55	108				
Surr: 2-Fluorobiphenyl	3009.333		3330		90.4	56	114				
Surr: 2-Fluorophenol	2936.667		3330		88.2	50	108				
Surr: 4-Terphenyl-d14	3045.667		3330		91.5	59	141				
Surr: Nitrobenzene-d5	2806.000		3330		84.3	45	114				
Surr: Phenol-d5	3038.000		3330		91.2	46	118				

Sample ID: LCS-75073		SampType: LCS		TestCode: 8270_S_FULL Units: µg/Kg		Prep Date: 8/23/2011		RunNo: 136040			
Client ID: LCSS		Batch ID: 75073		TestNo: EPA 8270C EPA 3550B		Analysis Date: 8/23/2011		SeqNo: 2229227			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	2795.333	330	3330	0	83.9	67	107				
1,4-Dichlorobenzene	2732.000	330	3330	0	82.0	64	99				
2,4-Dinitrotoluene	3352.333	330	3330	0	101	81	122				
2-Chlorophenol	2691.333	330	3330	0	80.8	62	112				
4-Chloro-3-methylphenol	3116.000	660	3330	0	93.6	64	138				
4-Nitrophenol	3074.000	1600	3330	0	92.3	60	142				
Acenaphthene	3334.000	330	3330	0	100	70	116				
N-Nitrosodi-n-propylamine	2953.000	330	3330	0	88.7	73	115				
Pentachlorophenol	2173.000	1600	3330	0	65.3	59	135				
Phenol	2904.333	330	3330	0	87.2	61	120				
Pyrene	3581.000	330	3330	0	108	75	117				

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 | |



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

CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

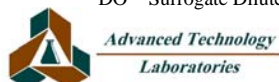
TestCode: 8270_S_FULL

Sample ID: LCS-75073		SampType: LCS		TestCode: 8270_S_FULL		Units: µg/Kg		Prep Date: 8/23/2011		RunNo: 136040	
Client ID: LCSS		Batch ID: 75073		TestNo: EPA 8270C EPA 3550B		Analysis Date: 8/23/2011				SeqNo: 2229227	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1,2-Dichlorobenzene-d4	2851.667		3330		85.6	45	105				
Surr: 2,4,6-Tribromophenol	3310.000		3330		99.4	41	129				
Surr: 2-Chlorophenol-d4	2967.000		3330		89.1	55	108				
Surr: 2-Fluorobiphenyl	3197.667		3330		96.0	56	114				
Surr: 2-Fluorophenol	3008.000		3330		90.3	50	108				
Surr: 4-Terphenyl-d14	3107.000		3330		93.3	59	141				
Surr: Nitrobenzene-d5	2980.333		3330		89.5	45	114				
Surr: Phenol-d5	3106.667		3330		93.3	46	118				

Sample ID: 119481-003GMS		SampType: MS		TestCode: 8270_S_FULL		Units: µg/Kg		Prep Date: 8/23/2011		RunNo: 136040	
Client ID: ZZZZZZ		Batch ID: 75073		TestNo: EPA 8270C EPA 3550B		Analysis Date: 8/23/2011				SeqNo: 2229229	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	2340.000	1600	3330	0	70.3	62	109				
1,4-Dichlorobenzene	2288.333	1600	3330	0	68.7	57	99				
2,4-Dinitrotoluene	1978.333	1600	3330	0	59.4	76	126				S
2-Chlorophenol	2170.000	1600	3330	0	65.2	52	120				
4-Chloro-3-methylphenol	2675.000	3300	3330	0	80.3	63	137				
4-Nitrophenol	1561.667	8200	3330	0	46.9	52	144				S
Acenaphthene	3143.333	1600	3330	0	94.4	61	121				
N-Nitrosodi-n-propylamine	2541.667	1600	3330	0	76.3	67	116				
Pentachlorophenol	ND	8200	3330	0	0	47	143				S
Phenol	2521.667	1600	3330	0	75.7	54	126				
Pyrene	3336.667	1600	3330	0	100	68	121				
Surr: 1,2-Dichlorobenzene-d4	2306.667		3330		69.3	45	105				
Surr: 2,4,6-Tribromophenol	2036.667		3330		61.2	41	129				
Surr: 2-Chlorophenol-d4	2230.000		3330		67.0	55	108				
Surr: 2-Fluorobiphenyl	2790.000		3330		83.8	56	114				
Surr: 2-Fluorophenol	2233.333		3330		67.1	50	108				
Surr: 4-Terphenyl-d14	2685.000		3330		80.6	59	141				

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 | |



CLIENT: Mactec
Work Order: 119469
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

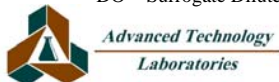
TestCode: 8270_S_FULL

Sample ID: 119481-003GMS	SampType: MS	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 8/23/2011	RunNo: 136040						
Client ID: ZZZZZZ	Batch ID: 75073	TestNo: EPA 8270C EPA 3550B		Analysis Date: 8/23/2011	SeqNo: 2229229						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	2113.333		3330		63.5	45	114				
Surr: Phenol-d5	2473.333		3330		74.3	46	118				

Sample ID: 119481-003GMSD	SampType: MSD	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 8/23/2011	RunNo: 136040						
Client ID: ZZZZZZ	Batch ID: 75073	TestNo: EPA 8270C EPA 3550B		Analysis Date: 8/23/2011	SeqNo: 2229230						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	2316.667	1600	3330	0	69.6	62	109	2340	1.00	20	
1,4-Dichlorobenzene	2235.000	1600	3330	0	67.1	57	99	2288	2.36	20	
2,4-Dinitrotoluene	1918.333	1600	3330	0	57.6	76	126	1978	3.08	20	S
2-Chlorophenol	2110.000	1600	3330	0	63.4	52	120	2170	2.80	20	
4-Chloro-3-methylphenol	2725.000	3300	3330	0	81.8	63	137	2675	0	20	
4-Nitrophenol	1560.000	8200	3330	0	46.8	52	144	1562	0	20	S
Acenaphthene	3186.667	1600	3330	0	95.7	61	121	3143	1.37	20	
N-Nitrosodi-n-propylamine	2536.667	1600	3330	0	76.2	67	116	2542	0.197	20	
Pentachlorophenol	ND	8200	3330	0	0	47	143	0	0	20	S
Phenol	2540.000	1600	3330	0	76.3	54	126	2522	0.724	20	
Pyrene	3416.667	1600	3330	0	103	68	121	3337	2.37	20	
Surr: 1,2-Dichlorobenzene-d4	2275.000		3330		68.3	45	105		0	0	
Surr: 2,4,6-Tribromophenol	1978.333		3330		59.4	41	129		0	0	
Surr: 2-Chlorophenol-d4	2221.667		3330		66.7	55	108		0	0	
Surr: 2-Fluorobiphenyl	2781.667		3330		83.5	56	114		0	0	
Surr: 2-Fluorophenol	2193.333		3330		65.9	50	108		0	0	
Surr: 4-Terphenyl-d14	2650.000		3330		79.6	59	141		0	0	
Surr: Nitrobenzene-d5	2091.667		3330		62.8	45	114		0	0	
Surr: Phenol-d5	2521.667		3330		75.7	46	118		0	0	

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 | |



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

CHAIN OF CUSTODY RECORD

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

Quote #: 201106374
 Logged By: [Signature] Date: 8/19/11
 NOTE: Please include your Quote No. to ensure proper pricing of your project.

FOR LABORATORY USE ONLY:
 Method of Transport: Client, ATL, FedEx, OnTrac, GSO, Other:
 Sample Condition Upon Receipt: 1. CHILLED, 2. HEADSPACE (VOA), 3. CONTAINER INTACT, 4. SEALED, 5. # OF SPLS MATCH COC, 6. PRESERVED

Client: MACTEC Address: 5678 C. Slavson Ave TEL: 383-889-5300
 Attn: Matt Fraychineard City: LA State: CA Zip Code: 90040 FAX:
 Project Name: metro westside Extension Project #: 4953101561 Sampler: Paul Kane (Signature)
 Relinquished by: Rachel Mills (Signature and Printed Name) Date: 8/19/11 Time: 16:21 Received by: [Signature] (Signature and Printed Name) Date: 8/19/11 Time: 16:21
 Relinquished by: Rachel Mills (Signature and Printed Name) Date: _____ Time: _____ Received by: _____ (Signature and Printed Name) Date: _____ Time: _____
 Relinquished by: _____ (Signature and Printed Name) Date: _____ Time: _____ Received by: _____ (Signature and Printed Name) Date: _____ Time: _____

Special Instructions/Comments:
 Bill To: _____
 Attn: Same as above
 Co: _____
 Addr: _____
 City: _____ State: _____ Zip: _____

Send Report To:
 Attn: Matt Fraychineard
 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)

LAB USE ONLY: Batch #:	LAB No.	Sample Description	Sample I.D. / Location	Date	Time	SPECIFY APPROPRIATE MATRIX		TAT	Type	Container(s)	REMARKS
						SOIL	SEDIMENT				
119469-017		E-133-6W @ 25'	8A	11:30			X				
2		E-133-35'		13:20			X				HOLD
3		E-133-10'		9:55			X				HOLD
4		E-133-15'		10:20			X				HOLD
5		E-133-20'		10:30			X				HOLD
6		E-133-30'		12:30			X				HOLD

Circle or Add Analysis(es) Requested:
 8081A (Pesticides)
 8250B (PCB)
 8270C (BMT - Nitrates)
 8010B (Total Metal)
 8015B (GRO) / 8021B (TEX)
 8015B (DPO) (0.020)
 TITLE 22 / CAM 17 (6010 / 7000)

QA/QC:
 RTNE
 CT
 Legal
 SWRCB
 Logcode
 OTHER

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

Figure I-1.1022

September 14, 2011



Matt Fraychineaud
Mactec
5628 E. Slauson Avenue,
Los Angeles, CA 90040-2922
TEL: (323) 889-5300
FAX:

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

Workorder No.: 119710

RE: Metro Westside Extention, 4953101567

Attention: Matt Fraychineaud

Enclosed are the results for sample(s) received on September 07, 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", is written over the typed name and title.

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: Metro Westside Extention, 4953101567
Lab Order: 119710

CASE NARRATIVE

Analytical Comments for EPA 6010B

Samples 119704-001A-MS and 119704-001A-MSD, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Analytical Comments for EPA 7471A

Samples 119706-001A-MS and 119706-001A-MSD, are specific samples that belong to a different work order were used as Matrix Spike (MS) and Matrix Spike Duplicate (MSD) and were analyzed beyond hold time.



Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 14-Sep-11

CLIENT: Mactec	Client Sample ID: E-134-20'
Lab Order: 119710	Collection Date: 9/6/2011 12:05:00 PM
Project: Metro Westside Extention, 4953101567	Matrix: SOIL
Lab ID: 119710-003A	

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

DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID

LUFT

EPA 8015B(M)

RunID: GC16_110913B	QC Batch: 75465	PrepDate: 9/12/2011	Analyst: CBR		
DRO	ND	10	mg/Kg	1	9/13/2011 10:30 AM
ORO	ND	10	mg/Kg	1	9/13/2011 10:30 AM
Surr: p-Terphenyl	71.0	63-152	%REC	1	9/13/2011 10:30 AM

GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110908A	QC Batch: E11VS320	PrepDate:	Analyst: TP		
GRO	ND	1.0	mg/Kg	1	9/8/2011 01:03 PM
Surr: Bromofluorobenzene (FID)	83.5	62-153	%REC	1	9/8/2011 01:03 PM

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110908A	QC Batch: K11VS212	PrepDate:	Analyst: DDL		
1,1,1,2-Tetrachloroethane	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,1,1-Trichloroethane	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,1,2,2-Tetrachloroethane	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,1,2-Trichloroethane	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,1-Dichloroethane	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,1-Dichloroethene	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,1-Dichloropropene	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,2,3-Trichlorobenzene	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,2,3-Trichloropropane	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,2,4-Trichlorobenzene	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,2,4-Trimethylbenzene	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,2-Dibromo-3-chloropropane	ND	10	µg/Kg	1	9/8/2011 09:19 PM
1,2-Dibromoethane	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,2-Dichlorobenzene	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,2-Dichloroethane	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,2-Dichloropropane	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,3,5-Trimethylbenzene	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,3-Dichlorobenzene	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,3-Dichloropropane	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
1,4-Dichlorobenzene	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
2,2-Dichloropropane	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
2-Chlorotoluene	ND	5.0	µg/Kg	1	9/8/2011 09:19 PM
4-Chlorotoluene	ND	5.0	µg/Kg	1	9/8/2011 09:19 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: 14-Sep-11

CLIENT: Mactec	Client Sample ID: E-134-20'
Lab Order: 119710	Collection Date: 9/6/2011 12:05:00 PM
Project: Metro Westside Extention, 4953101567	Matrix: SOIL
Lab ID: 119710-003A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
EPA 8260B						
RunID: MS4_110908A	QC Batch: K11VS212			PrepDate:		Analyst: DDL
4-Isopropyltoluene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Benzene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Bromobenzene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Bromodichloromethane	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Bromoform	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Bromomethane	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Carbon tetrachloride	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Chlorobenzene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Chloroethane	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Chloroform	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Chloromethane	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
cis-1,2-Dichloroethene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
cis-1,3-Dichloropropene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Di-isopropyl ether	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Dibromochloromethane	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Dibromomethane	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Dichlorodifluoromethane	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Ethyl Tert-butyl ether	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Ethylbenzene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Hexachlorobutadiene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Isopropylbenzene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
m,p-Xylene	ND	10		µg/Kg	1	9/8/2011 09:19 PM
Methylene chloride	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
MTBE	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
n-Butylbenzene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
n-Propylbenzene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Naphthalene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
o-Xylene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
sec-Butylbenzene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Styrene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Tert-amyl methyl ether	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Tert-Butanol	ND	100		µg/Kg	1	9/8/2011 09:19 PM
tert-Butylbenzene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Tetrachloroethene	ND	5.0		µg/Kg	1	9/8/2011 09:19 PM
Toluene	ND	5.0		µg/Kg	1	9/8/2011 09:19 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: 14-Sep-11

CLIENT: Mactec	Client Sample ID: E-134-20'
Lab Order: 119710	Collection Date: 9/6/2011 12:05:00 PM
Project: Metro Westside Extention, 4953101567	Matrix: SOIL
Lab ID: 119710-003A	

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

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110908A	QC Batch: K11VS212	PrepDate:	Analyst: DDL
trans-1,2-Dichloroethene	ND	5.0	µg/Kg 1 9/8/2011 09:19 PM
Trichloroethene	ND	5.0	µg/Kg 1 9/8/2011 09:19 PM
Trichlorofluoromethane	ND	5.0	µg/Kg 1 9/8/2011 09:19 PM
Vinyl chloride	ND	5.0	µg/Kg 1 9/8/2011 09:19 PM
Surr: 1,2-Dichloroethane-d4	96.7	70-130	%REC 1 9/8/2011 09:19 PM
Surr: 4-Bromofluorobenzene	91.8	70-130	%REC 1 9/8/2011 09:19 PM
Surr: Dibromofluoromethane	93.7	70-130	%REC 1 9/8/2011 09:19 PM
Surr: Toluene-d8	94.9	70-130	%REC 1 9/8/2011 09:19 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: 14-Sep-11

CLIENT: Mactec	Client Sample ID: E-134-25'
Lab Order: 119710	Collection Date: 9/6/2011 12:17:00 PM
Project: Metro Westside Extention, 4953101567	Matrix: SOIL
Lab ID: 119710-004A	

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

ICP METALS

	EPA 3050B		EPA 6010B			
RunID: ICP8_110912A	QC Batch: 75418		PrepDate: 9/9/2011		Analyst: SRB	
Antimony	ND	2.0	mg/Kg	1		9/12/2011 02:01 PM
Arsenic	7.2	1.0	mg/Kg	1		9/12/2011 02:01 PM
Barium	85	1.0	mg/Kg	1		9/12/2011 02:01 PM
Beryllium	ND	1.0	mg/Kg	1		9/12/2011 02:01 PM
Cadmium	ND	1.0	mg/Kg	1		9/12/2011 02:01 PM
Chromium	24	1.0	mg/Kg	1		9/12/2011 02:01 PM
Cobalt	6.7	1.0	mg/Kg	1		9/12/2011 02:01 PM
Copper	14	2.0	mg/Kg	1		9/12/2011 02:01 PM
Lead	4.8	1.0	mg/Kg	1		9/12/2011 02:01 PM
Molybdenum	ND	1.0	mg/Kg	1		9/12/2011 02:01 PM
Nickel	17	1.0	mg/Kg	1		9/12/2011 02:01 PM
Selenium	ND	1.0	mg/Kg	1		9/12/2011 02:01 PM
Silver	ND	1.0	mg/Kg	1		9/12/2011 02:01 PM
Thallium	ND	1.0	mg/Kg	1		9/12/2011 02:01 PM
Vanadium	45	1.0	mg/Kg	1		9/12/2011 02:01 PM
Zinc	36	1.0	mg/Kg	1		9/12/2011 02:01 PM

MERCURY BY COLD VAPOR TECHNIQUE

	EPA 7471A					
RunID: AA1_110912A	QC Batch: 75419		PrepDate: 9/9/2011		Analyst: VV	
Mercury	ND	0.10	mg/Kg	1		9/12/2011 11:32 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: 14-Sep-11

CLIENT: Mactec
Lab Order: 119710
Project: Metro Westside Extention, 4953101567
Lab ID: 119710-007A

Client Sample ID: E-134-40'
Collection Date: 9/6/2011 12:57:00 PM
Matrix: SOIL

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

DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID

LUFT

EPA 8015B(M)

RunID: GC16_110913B	QC Batch: 75465				PrepDate: 9/12/2011	Analyst: CBR
DRO	ND	10		mg/Kg	1	9/13/2011 10:40 AM
ORO	ND	10		mg/Kg	1	9/13/2011 10:40 AM
Surr: p-Terphenyl	70.8	63-152		%REC	1	9/13/2011 10:40 AM

GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110908A	QC Batch: E11VS320				PrepDate:	Analyst: TP
GRO	ND	1.0		mg/Kg	1	9/8/2011 01:19 PM
Surr: Bromofluorobenzene (FID)	95.6	62-153		%REC	1	9/8/2011 01:19 PM

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110908A	QC Batch: K11VS212				PrepDate:	Analyst: DDL
1,1,1,2-Tetrachloroethane	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,1,1-Trichloroethane	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,1,2-Trichloroethane	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,1-Dichloroethane	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,1-Dichloroethene	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,1-Dichloropropene	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,2,3-Trichloropropane	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,2,4-Trimethylbenzene	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/Kg	1	9/8/2011 09:37 PM
1,2-Dibromoethane	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,2-Dichlorobenzene	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,2-Dichloroethane	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,2-Dichloropropane	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,3-Dichlorobenzene	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,3-Dichloropropane	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
1,4-Dichlorobenzene	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
2,2-Dichloropropane	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
2-Chlorotoluene	ND	5.0		µg/Kg	1	9/8/2011 09:37 PM
4-Chlorotoluene	ND	5.0		µg/Kg	1	9/8/2011 09:37 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: 14-Sep-11

CLIENT: Mactec	Client Sample ID: E-134-40'
Lab Order: 119710	Collection Date: 9/6/2011 12:57:00 PM
Project: Metro Westside Extention, 4953101567	Matrix: SOIL
Lab ID: 119710-007A	

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

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110908A	QC Batch: K11VS212	PrepDate:	Analyst: DDL
4-Isopropyltoluene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Benzene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Bromobenzene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Bromodichloromethane	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Bromoform	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Bromomethane	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Carbon tetrachloride	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Chlorobenzene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Chloroethane	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Chloroform	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Chloromethane	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
cis-1,2-Dichloroethene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
cis-1,3-Dichloropropene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Di-isopropyl ether	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Dibromochloromethane	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Dibromomethane	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Dichlorodifluoromethane	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Ethyl Tert-butyl ether	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Ethylbenzene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Hexachlorobutadiene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Isopropylbenzene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
m,p-Xylene	ND	10	µg/Kg 1 9/8/2011 09:37 PM
Methylene chloride	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
MTBE	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
n-Butylbenzene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
n-Propylbenzene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Naphthalene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
o-Xylene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
sec-Butylbenzene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Styrene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Tert-amyl methyl ether	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Tert-Butanol	ND	100	µg/Kg 1 9/8/2011 09:37 PM
tert-Butylbenzene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Tetrachloroethene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Toluene	ND	5.0	µg/Kg 1 9/8/2011 09:37 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: 14-Sep-11

CLIENT: Mactec	Client Sample ID: E-134-40'
Lab Order: 119710	Collection Date: 9/6/2011 12:57:00 PM
Project: Metro Westside Extention, 4953101567	Matrix: SOIL
Lab ID: 119710-007A	

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

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110908A	QC Batch: K11VS212	PrepDate:	Analyst: DDL
trans-1,2-Dichloroethene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Trichloroethene	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Trichlorofluoromethane	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Vinyl chloride	ND	5.0	µg/Kg 1 9/8/2011 09:37 PM
Surr: 1,2-Dichloroethane-d4	94.5	70-130	%REC 1 9/8/2011 09:37 PM
Surr: 4-Bromofluorobenzene	94.0	70-130	%REC 1 9/8/2011 09:37 PM
Surr: Dibromofluoromethane	94.2	70-130	%REC 1 9/8/2011 09:37 PM
Surr: Toluene-d8	93.8	70-130	%REC 1 9/8/2011 09:37 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: 119710
Project: Metro Westside Extention, 4953101567

ANALYTICAL QC SUMMARY REPORT

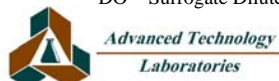
TestCode: 6010_S

Sample ID: MB-75418	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 9/9/2011	RunNo: 136534						
Client ID: PBS	Batch ID: 75418	TestNo: EPA 6010B EPA 3050B		Analysis Date: 9/12/2011	SeqNo: 2238701						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	2.0									
Arsenic	ND	1.0									
Barium	0.121	1.0									
Beryllium	ND	1.0									
Cadmium	ND	1.0									
Chromium	ND	1.0									
Cobalt	ND	1.0									
Copper	ND	2.0									
Lead	ND	1.0									
Molybdenum	ND	1.0									
Nickel	ND	1.0									
Selenium	ND	1.0									
Silver	ND	1.0									
Thallium	ND	1.0									
Vanadium	ND	1.0									
Zinc	ND	1.0									

Sample ID: LCS-75418	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 9/9/2011	RunNo: 136534						
Client ID: LCSS	Batch ID: 75418	TestNo: EPA 6010B EPA 3050B		Analysis Date: 9/12/2011	SeqNo: 2238702						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	46.070	2.0	50.00	0	92.1	80	120				
Arsenic	44.984	1.0	50.00	0	90.0	80	120				
Barium	47.452	1.0	50.00	0.1215	94.7	80	120				
Beryllium	46.558	1.0	50.00	0	93.1	80	120				
Cadmium	45.572	1.0	50.00	0	91.1	80	120				
Chromium	43.696	1.0	50.00	0	87.4	80	120				
Cobalt	46.977	1.0	50.00	0	94.0	80	120				

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: 119710
Project: Metro Westside Extention, 4953101567

ANALYTICAL QC SUMMARY REPORT

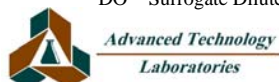
TestCode: 6010_S

Sample ID: LCS-75418		SampType: LCS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 9/9/2011		RunNo: 136534		
Client ID: LCSS		Batch ID: 75418		TestNo: EPA 6010B EPA 3050B				Analysis Date: 9/12/2011		SeqNo: 2238702		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Copper	46.761	2.0	50.00	0	93.5	80	120					
Lead	47.051	1.0	50.00	0	94.1	80	120					
Molybdenum	48.585	1.0	50.00	0	97.2	80	120					
Nickel	46.501	1.0	50.00	0	93.0	80	120					
Selenium	43.067	1.0	50.00	0	86.1	80	120					
Silver	46.126	1.0	50.00	0	92.3	80	120					
Thallium	44.603	1.0	50.00	0	89.2	80	120					
Vanadium	47.253	1.0	50.00	0	94.5	80	120					
Zinc	45.706	1.0	50.00	0	91.4	80	120					

Sample ID: 119704-001A-MS		SampType: MS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 9/9/2011		RunNo: 136534		
Client ID: ZZZZZZ		Batch ID: 75418		TestNo: EPA 6010B EPA 3050B				Analysis Date: 9/12/2011		SeqNo: 2238705		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Antimony	83.831	2.0	125.0	0.1776	66.9	32	105					
Arsenic	94.608	1.0	125.0	2.051	74.0	49	106					
Barium	233.157	1.0	125.0	210.1	18.5	31	133				S	
Beryllium	98.335	1.0	125.0	0.1592	78.5	56	106					
Cadmium	92.095	1.0	125.0	0.1944	73.5	51	103					
Chromium	97.724	1.0	125.0	4.854	74.3	45	114					
Cobalt	100.283	1.0	125.0	3.841	77.2	52	106					
Copper	108.650	2.0	125.0	5.454	82.6	54	125					
Lead	97.500	1.0	125.0	4.073	74.7	34	126					
Molybdenum	94.712	1.0	125.0	0	75.8	54	106					
Nickel	96.432	1.0	125.0	2.157	75.4	45	111					
Selenium	89.764	1.0	125.0	0	71.8	47	104					
Silver	98.164	1.0	125.0	0	78.5	56	112					
Thallium	91.215	1.0	125.0	0	73.0	46	101					
Vanadium	116.818	1.0	125.0	17.32	79.6	54	114					
Zinc	114.271	1.0	125.0	15.16	79.3	28	125					

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 | |



CLIENT: Mactec
Work Order: 119710
Project: Metro Westside Extention, 4953101567

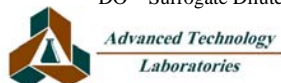
ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: 119704-001A-MSD	SampType: MSD	TestCode: 6010_S	Units: mg/Kg	Prep Date: 9/9/2011	RunNo: 136534						
Client ID: ZZZZZZ	Batch ID: 75418	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 9/12/2011	SeqNo: 2238706						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	86.429	2.0	125.0	0.1776	69.0	32	105	83.83	3.05	20	
Arsenic	99.197	1.0	125.0	2.051	77.7	49	106	94.61	4.74	20	
Barium	219.804	1.0	125.0	210.1	7.78	31	133	233.2	5.90	20	S
Beryllium	102.434	1.0	125.0	0.1592	81.8	56	106	98.33	4.08	20	
Cadmium	95.706	1.0	125.0	0.1944	76.4	51	103	92.09	3.85	20	
Chromium	102.226	1.0	125.0	4.854	77.9	45	114	97.72	4.50	20	
Cobalt	104.625	1.0	125.0	3.841	80.6	52	106	100.3	4.24	20	
Copper	114.850	2.0	125.0	5.454	87.5	54	125	108.7	5.55	20	
Lead	102.249	1.0	125.0	4.073	78.5	34	126	97.50	4.75	20	
Molybdenum	99.285	1.0	125.0	0	79.4	54	106	94.71	4.71	20	
Nickel	100.906	1.0	125.0	2.157	79.0	45	111	96.43	4.53	20	
Selenium	93.205	1.0	125.0	0	74.6	47	104	89.76	3.76	20	
Silver	102.510	1.0	125.0	0	82.0	56	112	98.16	4.33	20	
Thallium	95.317	1.0	125.0	0	76.3	46	101	91.22	4.40	20	
Vanadium	124.036	1.0	125.0	17.32	85.4	54	114	116.8	5.99	20	
Zinc	118.215	1.0	125.0	15.16	82.4	28	125	114.3	3.39	20	

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 | |



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

CLIENT: Mactec
Work Order: 119710
Project: Metro Westside Extention, 4953101567

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: MB-75419	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: 9/9/2011	RunNo: 136528						
Client ID: PBS	Batch ID: 75419	TestNo: EPA 7471A		Analysis Date: 9/12/2011	SeqNo: 2238486						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.10									

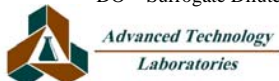
Sample ID: LCS-75419	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 9/9/2011	RunNo: 136528						
Client ID: LCSS	Batch ID: 75419	TestNo: EPA 7471A		Analysis Date: 9/12/2011	SeqNo: 2238487						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.909	0.10	0.8300	0	110	80	120				

Sample ID: 119706-001A-MS	SampType: MS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 9/9/2011	RunNo: 136528						
Client ID: ZZZZZZ	Batch ID: 75419	TestNo: EPA 7471A		Analysis Date: 9/12/2011	SeqNo: 2238488						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.957	0.10	0.8300	0.06439	107	70	130				H

Sample ID: 119706-001A-MSD	SampType: MSD	TestCode: 7471_S	Units: mg/Kg	Prep Date: 9/9/2011	RunNo: 136528						
Client ID: ZZZZZZ	Batch ID: 75419	TestNo: EPA 7471A		Analysis Date: 9/12/2011	SeqNo: 2238489						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.954	0.10	0.8300	0.06439	107	70	130	0.9565	0.311	20	H

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 | |



CLIENT: Mactec
Work Order: 119710
Project: Metro Westside Extention, 4953101567

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

Sample ID: MB-75465	SampType: MBLK	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 9/12/2011	RunNo: 136567						
Client ID: PBS	Batch ID: 75465	TestNo: EPA 8015B(M LUFT		Analysis Date: 9/13/2011	SeqNo: 2239313						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	ND	10									
ORO	ND	10									
Surr: p-Terphenyl	66.520		80.00		83.2	63	152				

Sample ID: LCS-75465	SampType: LCS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 9/12/2011	RunNo: 136567						
Client ID: LCSS	Batch ID: 75465	TestNo: EPA 8015B(M LUFT		Analysis Date: 9/13/2011	SeqNo: 2239314						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	924.970	10	1000	0	92.5	76	139				
Surr: p-Terphenyl	74.270		80.00		92.8	63	152				

Sample ID: 119787-003AMS	SampType: MS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 9/12/2011	RunNo: 136567						
Client ID: ZZZZZ	Batch ID: 75465	TestNo: EPA 8015B(M LUFT		Analysis Date: 9/13/2011	SeqNo: 2239315						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

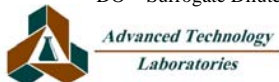
DRO	890.520	10	1000	0	89.1	60	158				
Surr: p-Terphenyl	64.730		80.00		80.9	63	152				

Sample ID: 119787-003AMSD	SampType: MSD	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 9/12/2011	RunNo: 136567						
Client ID: ZZZZZ	Batch ID: 75465	TestNo: EPA 8015B(M LUFT		Analysis Date: 9/13/2011	SeqNo: 2239316						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	890.670	10	1000	0	89.1	60	158	890.5	0.0168	20	
Surr: p-Terphenyl	65.530		80.00		81.9	63	152		0	0	

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 | |



CLIENT: Mactec
Work Order: 119710
Project: Metro Westside Extention, 4953101567

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_GAS

Sample ID: E110908LC1	SampType: LCS	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 136458						
Client ID: LCSS	Batch ID: E11VS320	TestNo: EPA 8015B(M)		Analysis Date: 9/8/2011	SeqNo: 2237189						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	5.337	1.0	5.000	0	107	70	130				
Surr: Bromofluorobenzene (FID)	124.921		100.0		125	62	153				

Sample ID: E110908MB1MS	SampType: MS	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 136458						
Client ID: ZZZZZZ	Batch ID: E11VS320	TestNo: EPA 8015B(M)		Analysis Date: 9/8/2011	SeqNo: 2237190						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	5.014	1.0	5.000	0	100	49	131				
Surr: Bromofluorobenzene (FID)	113.395		100.0		113	62	153				

Sample ID: E110908MB1MSD	SampType: MSD	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 136458						
Client ID: ZZZZZZ	Batch ID: E11VS320	TestNo: EPA 8015B(M)		Analysis Date: 9/8/2011	SeqNo: 2237191						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

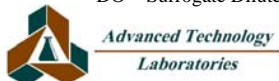
GRO	4.933	1.0	5.000	0	98.7	49	131	5.014	1.63	20	
Surr: Bromofluorobenzene (FID)	113.815		100.0		114	62	153		0	0	

Sample ID: E110908MB1	SampType: MBLK	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 136458						
Client ID: PBS	Batch ID: E11VS320	TestNo: EPA 8015B(M)		Analysis Date: 9/8/2011	SeqNo: 2237192						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	81.015		100.0		81.0	62	153				

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 | |



CLIENT: Mactec
Work Order: 119710
Project: Metro Westside Extention, 4953101567

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S

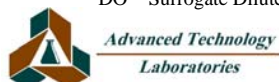
Sample ID: K110908LCS2		SampType: LCS		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 136478	
Client ID: LCSS		Batch ID: K11VS212		TestNo: EPA 8260B		Analysis Date: 9/8/2011				SeqNo: 2237595	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	45.180	5.0	50.00	0	90.4	70	130				
Benzene	102.300	5.0	100.0	0	102	70	130				
Chlorobenzene	53.630	5.0	50.00	0	107	82	130				
MTBE	52.140	5.0	50.00	0	104	70	130				
Toluene	105.530	5.0	100.0	0	106	70	130				
Trichloroethene	51.990	5.0	50.00	0	104	77	130				
Surr: 1,2-Dichloroethane-d4	42.070		50.00		84.1	70	130				
Surr: 4-Bromofluorobenzene	47.850		50.00		95.7	70	130				
Surr: Dibromofluoromethane	43.790		50.00		87.6	70	130				
Surr: Toluene-d8	46.280		50.00		92.6	70	130				

Sample ID: K110908MB1MS		SampType: MS		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 136478	
Client ID: ZZZZZ		Batch ID: K11VS212		TestNo: EPA 8260B		Analysis Date: 9/8/2011				SeqNo: 2237597	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	43.710	5.0	50.00	0	87.4	70	130				
Benzene	100.470	5.0	100.0	0	100	70	130				
Chlorobenzene	53.520	5.0	50.00	0	107	70	130				
MTBE	50.030	5.0	50.00	0	100	70	130				
Toluene	103.400	5.0	100.0	0	103	70	130				
Trichloroethene	51.420	5.0	50.00	0	103	70	130				
Surr: 1,2-Dichloroethane-d4	41.390		50.00		82.8	70	130				
Surr: 4-Bromofluorobenzene	47.950		50.00		95.9	70	130				
Surr: Dibromofluoromethane	43.460		50.00		86.9	70	130				
Surr: Toluene-d8	46.640		50.00		93.3	70	130				

Sample ID: K110908MB1MSD		SampType: MSD		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 136478	
Client ID: ZZZZZ		Batch ID: K11VS212		TestNo: EPA 8260B		Analysis Date: 9/8/2011				SeqNo: 2237598	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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 | |



CLIENT: Mactec
Work Order: 119710
Project: Metro Westside Extention, 4953101567

ANALYTICAL QC SUMMARY REPORT

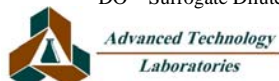
TestCode: 8260_S

Sample ID: K110908MB1MSD		SampType: MSD		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 136478	
Client ID: ZZZZZZ		Batch ID: K11VS212		TestNo: EPA 8260B		Analysis Date: 9/8/2011				SeqNo: 2237598	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	42.370	5.0	50.00	0	84.7	70	130	43.71	3.11	20	
Benzene	97.910	5.0	100.0	0	97.9	70	130	100.5	2.58	20	
Chlorobenzene	51.940	5.0	50.00	0	104	70	130	53.52	3.00	20	
MTBE	50.360	5.0	50.00	0	101	70	130	50.03	0.657	20	
Toluene	101.250	5.0	100.0	0	101	70	130	103.4	2.10	20	
Trichloroethene	49.940	5.0	50.00	0	99.9	70	130	51.42	2.92	20	
Surr: 1,2-Dichloroethane-d4	41.400		50.00		82.8	70	130		0	0	
Surr: 4-Bromofluorobenzene	47.350		50.00		94.7	70	130		0	0	
Surr: Dibromofluoromethane	43.830		50.00		87.7	70	130		0	0	
Surr: Toluene-d8	46.730		50.00		93.5	70	130		0	0	

Sample ID: K110908MB1		SampType: MBLK		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 136478	
Client ID: PBS		Batch ID: K11VS212		TestNo: EPA 8260B		Analysis Date: 9/8/2011				SeqNo: 2237599	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
1,1-Dichloroethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
1,1-Dichloropropene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	10									
1,2-Dibromoethane	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									

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 | |



CLIENT: Mactec
Work Order: 119710
Project: Metro Westside Extention, 4953101567

ANALYTICAL QC SUMMARY REPORT

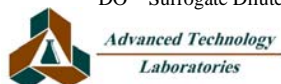
TestCode: 8260_S

Sample ID: K110908MB1	SampType: MBLK	TestCode: 8260_S	Units: µg/Kg	Prep Date:	RunNo: 136478
Client ID: PBS	Batch ID: K11VS212	TestNo: EPA 8260B		Analysis Date: 9/8/2011	SeqNo: 2237599

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Chlorotoluene	ND	5.0									
4-Chlorotoluene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
Benzene	ND	5.0									
Bromobenzene	ND	5.0									
Bromodichloromethane	ND	5.0									
Bromoform	ND	5.0									
Bromomethane	ND	5.0									
Carbon tetrachloride	ND	5.0									
Chlorobenzene	ND	5.0									
Chloroethane	ND	5.0									
Chloroform	ND	5.0									
Chloromethane	ND	5.0									
cis-1,2-Dichloroethene	ND	5.0									
cis-1,3-Dichloropropene	ND	5.0									
Di-isopropyl ether	ND	5.0									
Dibromochloromethane	ND	5.0									
Dibromomethane	ND	5.0									
Dichlorodifluoromethane	ND	5.0									
Ethyl Tert-butyl ether	ND	5.0									
Ethylbenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Isopropylbenzene	ND	5.0									
m,p-Xylene	ND	10									

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 | |



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

CLIENT: Mactec
Work Order: 119710
Project: Metro Westside Extention, 4953101567

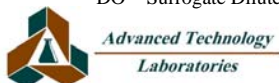
ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S

Sample ID: K110908MB1	SampType: MBLK	TestCode: 8260_S	Units: µg/Kg	Prep Date:	RunNo: 136478						
Client ID: PBS	Batch ID: K11VS212	TestNo: EPA 8260B		Analysis Date: 9/8/2011	SeqNo: 2237599						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	ND	5.0									
MTBE	ND	5.0									
n-Butylbenzene	ND	5.0									
n-Propylbenzene	ND	5.0									
Naphthalene	ND	5.0									
o-Xylene	ND	5.0									
sec-Butylbenzene	ND	5.0									
Styrene	ND	5.0									
Tert-amyl methyl ether	ND	5.0									
Tert-Butanol	ND	100									
tert-Butylbenzene	ND	5.0									
Tetrachloroethene	ND	5.0									
Toluene	ND	5.0									
trans-1,2-Dichloroethene	ND	5.0									
Trichloroethene	ND	5.0									
Trichlorofluoromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Surr: 1,2-Dichloroethane-d4	43.120		50.00		86.2	70	130				
Surr: 4-Bromofluorobenzene	46.390		50.00		92.8	70	130				
Surr: Dibromofluoromethane	43.620		50.00		87.2	70	130				
Surr: Toluene-d8	46.810		50.00		93.6	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 | |



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

CHAIN OF CUSTODY RECORD

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

P.O.#: 201106374 Quote #: _____
 Logged By: [Signature] Date: 9/7/11
 NOTE: Please include your Quote No. to ensure proper pricing of your project.

FOR LABORATORY USE ONLY:
 Method of Transport: Client, ATL, FedEx, OnTrac
 Sample Condition Upon Receipt: 2.0, 1. CHILLED, 4. SEALED, Y N
 2. HEADSPACE (VOA), 5. # OF SPLS MATCH COC, Y N
 3. CONTAINER INTACT, 6. PRESERVED, Y N

Client: MATTEC Address: 5628 E. Stawson Ave TEL: 323-889-5300
 Attn: Matt Fraychiread City: LA State: CA Zip Code: 90040 FAX: _____
 Project Name: Metsco Westside Extension Project #: 4453101561 Sampler: [Signature]
 Relinquished by: (Signature and Printed Name) Date: 9/7/11 Time: 10:10 Received by: (Signature and Printed Name) Date: 9/7/11 Time: 11:30
 Relinquished by: (Signature and Printed Name) Date: 9/7/11 Time: 11:56 Received by: (Signature and Printed Name) Date: 9/7/11 Time: 11:30
 Relinquished by: (Signature and Printed Name) Date: 9/7/11 Time: 11:56 Received by: (Signature and Printed Name) Date: 9/7/11 Time: 11:56

I hereby authorize ATL to perform the work indicated below:
 Project Mgr./Submitter: [Signature] Date: 9/7/11
 Print Name: Matt Fraychiread Signature: [Signature]
 Bill To: _____ Attn: _____
 Co: _____
 Address: _____ 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)

LAB USE ONLY:	Sample Description	Sample I.D. / Location	Date	Time
1 119710-007		E-134-10'	9/6/11	1145
2		E-134-15'		1155
3		E-134-20'		1205
4		E-134-25'		1217
5		E-134-30'		1230
6		E-134-35'		1245
7		E-134-40'		1257
8		E-134-45'		1330

Circle or Add Analysis(es) Requested

Analysis	Requested
8081A (Pesticides)	
8250B (PCB)	X
8270C (BNA)	
8010B (Total Metal)	X
8015B (GRO) / 8021 (BTEX)	X
8015B (DRO) (ORO)	
TITLE 22 / CAM 17 (6010 / 7000)	

SPECIFY APPROPRIATE MATRIX

Matrix	Container(s)	TAT #	Type
SEDIMENT			
SOLID			
DRINKING WATER			
GROUND WATER			
WASTEWATER			
STORMWATER			
AQUEOUS			

QA/QC

RTNE	CT	Legal	SWRCB Logcode	OTHER	REMARKS
					Hold
					"
					Hold
					"
					Hold

TAT starts 8 a.m. following day if samples received after 5 p.m. TAT: A= Overnight ≤ 24 hrs, B= Emergency Next workday, C= Critical 2 Workdays, D= Urgent 3 Workdays, E= Routine 7 Workdays
 Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal
 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. 2010-0925

September 21, 2011



Matt Fraychineaud
Mactec
5628 E. Slauson Avenue,
Los Angeles, CA 90040-2922
TEL: (323) 889-5300
FAX:

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003
Workorder No.: 119804

RE: Metro Westside Extension, 45951-10-1561


Attention: Matt Fraychineaud

Enclosed are the results for sample(s) received on September 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,


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: Metro Westside Extension, 45951-10-1561
Lab Order: 119804

CASE NARRATIVE

All volatile analyses were performed using 5035 preservation requirements. Any high level dilutions were performed on a preserved methanol sample unless otherwise noted.

Analytical Comments for EPA 8260B

Samples 119810-006CMS and 119810-006EMSD, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).



Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 21-Sep-11

CLIENT:	Mactec	Client Sample ID:	E-135-20'
Lab Order:	119804	Collection Date:	9/12/2011 11:25:00 AM
Project:	Metro Westside Extension, 45951-10-1561	Matrix:	SOIL
Lab ID:	119804-003A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110918A	QC Batch: 75615			PrepDate: 9/16/2011		Analyst: CBR
DRO	ND	10		mg/Kg	1	9/18/2011 05:12 PM
ORO	ND	10		mg/Kg	1	9/18/2011 05:12 PM
Surr: p-Terphenyl	88.3	62-136		%REC	1	9/18/2011 05:12 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

Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 21-Sep-11

CLIENT:	Mactec	Client Sample ID:	E-135-20'
Lab Order:	119804	Collection Date:	9/12/2011 11:25:00 AM
Project:	Metro Westside Extension, 45951-10-1561	Matrix:	SOIL
Lab ID:	119804-003B		

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

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_110916B	QC Batch: T11VS175	PrepDate: 9/12/2011	Analyst: DDL		
1,1,1,2-Tetrachloroethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,1,1-Trichloroethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,1,2,2-Tetrachloroethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,1,2-Trichloroethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,1-Dichloroethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,1-Dichloroethene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,1-Dichloropropene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,2,3-Trichlorobenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,2,3-Trichloropropane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,2,4-Trichlorobenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,2,4-Trimethylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,2-Dibromo-3-chloropropane	ND	8.9	µg/Kg	1	9/17/2011 12:30 AM
1,2-Dibromoethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,2-Dichlorobenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,2-Dichloroethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,2-Dichloropropane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,3,5-Trimethylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,3-Dichlorobenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,3-Dichloropropane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
1,4-Dichlorobenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
2,2-Dichloropropane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
2-Chlorotoluene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
4-Chlorotoluene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
4-Isopropyltoluene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Benzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Bromobenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Bromodichloromethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Bromoform	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Bromomethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Carbon tetrachloride	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Chlorobenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Chloroethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Chloroform	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Chloromethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
cis-1,2-Dichloroethene	ND	4.5	µg/Kg	1	9/17/2011 12:30 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: 21-Sep-11

CLIENT: Mactec	Client Sample ID: E-135-20'
Lab Order: 119804	Collection Date: 9/12/2011 11:25:00 AM
Project: Metro Westside Extension, 45951-10-1561	Matrix: SOIL
Lab ID: 119804-003B	

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

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_110916B	QC Batch: T11VS175	PrepDate: 9/12/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Di-isopropyl ether	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Dibromochloromethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Dibromomethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Dichlorodifluoromethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Ethyl Tert-butyl ether	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Ethylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Hexachlorobutadiene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Isopropylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
m,p-Xylene	ND	8.9	µg/Kg	1	9/17/2011 12:30 AM
Methylene chloride	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
MTBE	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
n-Butylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
n-Propylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Naphthalene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
o-Xylene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
sec-Butylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Styrene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Tert-amyl methyl ether	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Tert-Butanol	ND	89	µg/Kg	1	9/17/2011 12:30 AM
tert-Butylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Tetrachloroethene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Toluene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
trans-1,2-Dichloroethene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Trichloroethene	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Trichlorofluoromethane	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Vinyl chloride	ND	4.5	µg/Kg	1	9/17/2011 12:30 AM
Surr: 1,2-Dichloroethane-d4	95.5	65-135	%REC	1	9/17/2011 12:30 AM
Surr: 4-Bromofluorobenzene	90.3	57-126	%REC	1	9/17/2011 12:30 AM
Surr: Dibromofluoromethane	86.0	72-121	%REC	1	9/17/2011 12:30 AM
Surr: Toluene-d8	83.4	80-107	%REC	1	9/17/2011 12:30 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: 21-Sep-11

CLIENT: Mactec	Client Sample ID: E-135-20'
Lab Order: 119804	Collection Date: 9/12/2011 11:25:00 AM
Project: Metro Westside Extension, 45951-10-1561	Matrix: SOIL
Lab ID: 119804-003E	

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

GASOLINE RANGE ORGANICS BY GC/FID				EPA 8015B(M)		
RunID: GC2_110915A	QC Batch: E11VS326	PrepDate: 9/12/2011	Analyst: TP			
GRO	ND	0.93	mg/Kg	1		9/15/2011 12:17 PM
Surr: Bromofluorobenzene (FID)	106	44-168	%REC	1		9/15/2011 12:17 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: 21-Sep-11

CLIENT: Mactec	Client Sample ID: E-135-35'
Lab Order: 119804	Collection Date: 9/12/2011 12:00:00 PM
Project: Metro Westside Extension, 45951-10-1561	Matrix: SOIL
Lab ID: 119804-006A	

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

ICP METALS

	EPA 3050B		EPA 6010B			
RunID: ICP8_110920C	QC Batch: 75656		PrepDate: 9/19/2011		Analyst: IL	
Antimony	ND	2.0	mg/Kg	1		9/20/2011 01:44 PM
Arsenic	15	1.0	mg/Kg	1		9/20/2011 01:44 PM
Barium	110	1.0	mg/Kg	1		9/20/2011 01:44 PM
Beryllium	ND	1.0	mg/Kg	1		9/20/2011 01:44 PM
Cadmium	ND	1.0	mg/Kg	1		9/20/2011 01:44 PM
Chromium	31	1.0	mg/Kg	1		9/20/2011 01:44 PM
Cobalt	7.6	1.0	mg/Kg	1		9/20/2011 01:44 PM
Copper	20	2.0	mg/Kg	1		9/20/2011 01:44 PM
Lead	6.3	1.0	mg/Kg	1		9/20/2011 01:44 PM
Molybdenum	ND	1.0	mg/Kg	1		9/20/2011 01:44 PM
Nickel	21	1.0	mg/Kg	1		9/20/2011 01:44 PM
Selenium	ND	1.0	mg/Kg	1		9/20/2011 01:44 PM
Silver	ND	1.0	mg/Kg	1		9/20/2011 01:44 PM
Thallium	ND	1.0	mg/Kg	1		9/20/2011 01:44 PM
Vanadium	47	1.0	mg/Kg	1		9/20/2011 01:44 PM
Zinc	51	1.0	mg/Kg	1		9/20/2011 01:44 PM

MERCURY BY COLD VAPOR TECHNIQUE

	EPA 7471A					
RunID: AA1_110919B	QC Batch: 75636		PrepDate: 9/19/2011		Analyst: VV	
Mercury	ND	0.10	mg/Kg	1		9/19/2011 04:46 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: 21-Sep-11

CLIENT:	Mactec	Client Sample ID:	E-135-40'
Lab Order:	119804	Collection Date:	9/12/2011 12:10:00 PM
Project:	Metro Westside Extension, 45951-10-1561	Matrix:	SOIL
Lab ID:	119804-007A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110918A	QC Batch: 75615			PrepDate: 9/16/2011		Analyst: CBR
DRO	ND	10		mg/Kg	1	9/18/2011 05:22 PM
ORO	ND	10		mg/Kg	1	9/18/2011 05:22 PM
Surr: p-Terphenyl	87.3	62-136		%REC	1	9/18/2011 05:22 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: 21-Sep-11

CLIENT:	Mactec	Client Sample ID:	E-135-40'
Lab Order:	119804	Collection Date:	9/12/2011 12:10:00 PM
Project:	Metro Westside Extension, 45951-10-1561	Matrix:	SOIL
Lab ID:	119804-007B		

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

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_110916B	QC Batch: T11VS175	PrepDate: 9/12/2011	Analyst: DDL		
1,1,1,2-Tetrachloroethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,1,1-Trichloroethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,1,2,2-Tetrachloroethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,1,2-Trichloroethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,1-Dichloroethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,1-Dichloroethene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,1-Dichloropropene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,2,3-Trichlorobenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,2,3-Trichloropropane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,2,4-Trichlorobenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,2,4-Trimethylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,2-Dibromo-3-chloropropane	ND	9.1	µg/Kg	1	9/17/2011 12:49 AM
1,2-Dibromoethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,2-Dichlorobenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,2-Dichloroethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,2-Dichloropropane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,3,5-Trimethylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,3-Dichlorobenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,3-Dichloropropane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
1,4-Dichlorobenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
2,2-Dichloropropane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
2-Chlorotoluene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
4-Chlorotoluene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
4-Isopropyltoluene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Benzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Bromobenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Bromodichloromethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Bromoform	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Bromomethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Carbon tetrachloride	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Chlorobenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Chloroethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Chloroform	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Chloromethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
cis-1,2-Dichloroethene	ND	4.5	µg/Kg	1	9/17/2011 12:49 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: 21-Sep-11

CLIENT: Mactec	Client Sample ID: E-135-40'
Lab Order: 119804	Collection Date: 9/12/2011 12:10:00 PM
Project: Metro Westside Extension, 45951-10-1561	Matrix: SOIL
Lab ID: 119804-007B	

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

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_110916B	QC Batch: T11VS175	PrepDate: 9/12/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Di-isopropyl ether	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Dibromochloromethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Dibromomethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Dichlorodifluoromethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Ethyl Tert-butyl ether	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Ethylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Hexachlorobutadiene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Isopropylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
m,p-Xylene	ND	9.1	µg/Kg	1	9/17/2011 12:49 AM
Methylene chloride	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
MTBE	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
n-Butylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
n-Propylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Naphthalene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
o-Xylene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
sec-Butylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Styrene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Tert-amyl methyl ether	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Tert-Butanol	ND	91	µg/Kg	1	9/17/2011 12:49 AM
tert-Butylbenzene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Tetrachloroethene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Toluene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
trans-1,2-Dichloroethene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Trichloroethene	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Trichlorofluoromethane	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Vinyl chloride	ND	4.5	µg/Kg	1	9/17/2011 12:49 AM
Surr: 1,2-Dichloroethane-d4	98.0	65-135	%REC	1	9/17/2011 12:49 AM
Surr: 4-Bromofluorobenzene	96.1	57-126	%REC	1	9/17/2011 12:49 AM
Surr: Dibromofluoromethane	89.9	72-121	%REC	1	9/17/2011 12:49 AM
Surr: Toluene-d8	88.9	80-107	%REC	1	9/17/2011 12:49 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: 21-Sep-11

CLIENT: Mactec	Client Sample ID: E-135-40'
Lab Order: 119804	Collection Date: 9/12/2011 12:10:00 PM
Project: Metro Westside Extension, 45951-10-1561	Matrix: SOIL
Lab ID: 119804-007E	

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

GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110915A	QC Batch: E11VS326	PrepDate: 9/12/2011	Analyst: TP		
GRO	ND	0.82	mg/Kg	1	9/15/2011 12:32 PM
Surr: Bromofluorobenzene (FID)	109	44-168	%REC	1	9/15/2011 12:32 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

Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 21-Sep-11

CLIENT:	Mactec	Client Sample ID:	E-135-60'
Lab Order:	119804	Collection Date:	9/12/2011 2:00:00 PM
Project:	Metro Westside Extension, 45951-10-1561	Matrix:	SOIL
Lab ID:	119804-011A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110918A	QC Batch: 75615			PrepDate: 9/16/2011		Analyst: CBR
DRO	ND	10		mg/Kg	1	9/18/2011 05:32 PM
ORO	ND	10		mg/Kg	1	9/18/2011 05:32 PM
Surr: p-Terphenyl	81.2	62-136		%REC	1	9/18/2011 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

Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 21-Sep-11

CLIENT:	Mactec	Client Sample ID:	E-135-60'
Lab Order:	119804	Collection Date:	9/12/2011 2:00:00 PM
Project:	Metro Westside Extension, 45951-10-1561	Matrix:	SOIL
Lab ID:	119804-011B		

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

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_110916B	QC Batch: T11VS175	PrepDate: 9/12/2011	Analyst: DDL
1,1,1,2-Tetrachloroethane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,1,1-Trichloroethane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,1,2,2-Tetrachloroethane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,1,2-Trichloroethane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,1-Dichloroethane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,1-Dichloroethene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,1-Dichloropropene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,2,3-Trichlorobenzene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,2,3-Trichloropropane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,2,4-Trichlorobenzene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,2,4-Trimethylbenzene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,2-Dibromo-3-chloropropane	ND	9.4	µg/Kg 1 9/17/2011 01:07 AM
1,2-Dibromoethane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,2-Dichlorobenzene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,2-Dichloroethane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,2-Dichloropropane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,3,5-Trimethylbenzene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,3-Dichlorobenzene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,3-Dichloropropane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
1,4-Dichlorobenzene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
2,2-Dichloropropane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
2-Chlorotoluene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
4-Chlorotoluene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
4-Isopropyltoluene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
Benzene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
Bromobenzene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
Bromodichloromethane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
Bromoform	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
Bromomethane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
Carbon tetrachloride	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
Chlorobenzene	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
Chloroethane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
Chloroform	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
Chloromethane	ND	4.7	µg/Kg 1 9/17/2011 01:07 AM
cis-1,2-Dichloroethene	ND	4.7	µg/Kg 1 9/17/2011 01:07 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: 21-Sep-11

CLIENT:	Mactec	Client Sample ID:	E-135-60'
Lab Order:	119804	Collection Date:	9/12/2011 2:00:00 PM
Project:	Metro Westside Extension, 45951-10-1561	Matrix:	SOIL
Lab ID:	119804-011B		

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

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_110916B	QC Batch: T11VS175	PrepDate: 9/12/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Di-isopropyl ether	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Dibromochloromethane	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Dibromomethane	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Dichlorodifluoromethane	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Ethyl Tert-butyl ether	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Ethylbenzene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Hexachlorobutadiene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Isopropylbenzene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
m,p-Xylene	ND	9.4	µg/Kg	1	9/17/2011 01:07 AM
Methylene chloride	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
MTBE	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
n-Butylbenzene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
n-Propylbenzene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Naphthalene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
o-Xylene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
sec-Butylbenzene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Styrene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Tert-amyl methyl ether	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Tert-Butanol	ND	94	µg/Kg	1	9/17/2011 01:07 AM
tert-Butylbenzene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Tetrachloroethene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Toluene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
trans-1,2-Dichloroethene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Trichloroethene	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Trichlorofluoromethane	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Vinyl chloride	ND	4.7	µg/Kg	1	9/17/2011 01:07 AM
Surr: 1,2-Dichloroethane-d4	93.4	65-135	%REC	1	9/17/2011 01:07 AM
Surr: 4-Bromofluorobenzene	89.6	57-126	%REC	1	9/17/2011 01:07 AM
Surr: Dibromofluoromethane	88.2	72-121	%REC	1	9/17/2011 01:07 AM
Surr: Toluene-d8	87.3	80-107	%REC	1	9/17/2011 01:07 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: 21-Sep-11

CLIENT:	Mactec	Client Sample ID:	E-135-60'
Lab Order:	119804	Collection Date:	9/12/2011 2:00:00 PM
Project:	Metro Westside Extension, 45951-10-1561	Matrix:	SOIL
Lab ID:	119804-011E		

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

GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110915A	QC Batch: E11VS326	PrepDate: 9/12/2011	Analyst: TP		
GRO	ND	1.0	mg/Kg	1	9/15/2011 12:47 PM
Surr: Bromofluorobenzene (FID)	118	44-168	%REC	1	9/15/2011 12:47 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: 119804
Project: Metro Westside Extension, 45951-10-1561

ANALYTICAL QC SUMMARY REPORT

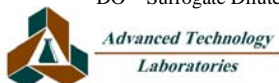
TestCode: 6010_S

Sample ID: MB-75656	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 9/19/2011	RunNo: 136824						
Client ID: PBS	Batch ID: 75656	TestNo: EPA 6010B EPA 3050B		Analysis Date: 9/20/2011	SeqNo: 2244055						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.162	2.0									
Arsenic	ND	1.0									
Barium	ND	1.0									
Beryllium	ND	1.0									
Cadmium	ND	1.0									
Chromium	ND	1.0									
Cobalt	ND	1.0									
Copper	ND	2.0									
Lead	ND	1.0									
Molybdenum	ND	1.0									
Nickel	ND	1.0									
Selenium	ND	1.0									
Silver	ND	1.0									
Thallium	ND	1.0									
Vanadium	ND	1.0									
Zinc	0.730	1.0									

Sample ID: LCS-75656	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 9/19/2011	RunNo: 136824						
Client ID: LCSS	Batch ID: 75656	TestNo: EPA 6010B EPA 3050B		Analysis Date: 9/20/2011	SeqNo: 2244056						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.878	2.0	50.00	0.1618	95.4	80	120				
Arsenic	46.007	1.0	50.00	0	92.0	80	120				
Barium	48.650	1.0	50.00	0	97.3	80	120				
Beryllium	48.033	1.0	50.00	0	96.1	80	120				
Cadmium	46.986	1.0	50.00	0	94.0	80	120				
Chromium	44.897	1.0	50.00	0	89.8	80	120				
Cobalt	47.816	1.0	50.00	0	95.6	80	120				

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: 119804
Project: Metro Westside Extension, 45951-10-1561

ANALYTICAL QC SUMMARY REPORT

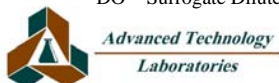
TestCode: 6010_S

Sample ID: LCS-75656	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 9/19/2011	RunNo: 136824						
Client ID: LCSS	Batch ID: 75656	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 9/20/2011	SeqNo: 2244056						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	47.863	2.0	50.00	0	95.7	80	120				
Lead	48.668	1.0	50.00	0	97.3	80	120				
Molybdenum	49.521	1.0	50.00	0	99.0	80	120				
Nickel	47.422	1.0	50.00	0	94.8	80	120				
Selenium	43.709	1.0	50.00	0	87.4	80	120				
Silver	47.492	1.0	50.00	0	95.0	80	120				
Thallium	46.643	1.0	50.00	0	93.3	80	120				
Vanadium	48.146	1.0	50.00	0	96.3	80	120				
Zinc	47.208	1.0	50.00	0.7296	93.0	80	120				

Sample ID: 119813-009A-MS	SampType: MS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 9/19/2011	RunNo: 136824						
Client ID: ZZZZZZ	Batch ID: 75656	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 9/20/2011	SeqNo: 2244078						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	85.182	2.0	125.0	1.901	66.6	44	105				
Arsenic	99.129	1.0	125.0	7.597	73.2	57	103				
Barium	214.254	1.0	125.0	78.40	109	36	134				
Beryllium	101.450	1.0	125.0	0	81.2	64	106				
Cadmium	97.946	1.0	125.0	0.7896	77.7	58	102				
Chromium	121.214	1.0	125.0	28.49	74.2	55	105				
Cobalt	108.562	1.0	125.0	7.270	81.0	59	105				
Copper	189.965	2.0	125.0	75.59	91.5	64	117				
Lead	203.244	1.0	125.0	93.63	87.7	46	116				
Molybdenum	98.994	1.0	125.0	0	79.2	59	108				
Nickel	121.590	1.0	125.0	28.58	74.4	52	109				
Selenium	92.205	1.0	125.0	0	73.8	56	100				
Silver	102.598	1.0	125.0	0	82.1	65	107				
Thallium	87.034	1.0	125.0	0	69.6	47	100				
Vanadium	147.472	1.0	125.0	34.31	90.5	64	110				
Zinc	433.428	1.0	125.0	357.8	60.5	37	123				

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 | |



CLIENT: Mactec
Work Order: 119804
Project: Metro Westside Extension, 45951-10-1561

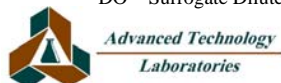
ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: 119813-009A-MSD	SampType: MSD	TestCode: 6010_S	Units: mg/Kg	Prep Date: 9/19/2011	RunNo: 136824						
Client ID: ZZZZZZ	Batch ID: 75656	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 9/20/2011	SeqNo: 2244079						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	89.548	2.0	125.0	1.901	70.1	44	105	85.18	5.00	20	
Arsenic	99.700	1.0	125.0	7.597	73.7	57	103	99.13	0.574	20	
Barium	223.769	1.0	125.0	78.40	116	36	134	214.3	4.34	20	
Beryllium	102.673	1.0	125.0	0	82.1	64	106	101.5	1.20	20	
Cadmium	98.441	1.0	125.0	0.7896	78.1	58	102	97.95	0.505	20	
Chromium	119.748	1.0	125.0	28.49	73.0	55	105	121.2	1.22	20	
Cobalt	109.116	1.0	125.0	7.270	81.5	59	105	108.6	0.509	20	
Copper	183.972	2.0	125.0	75.59	86.7	64	117	190.0	3.21	20	
Lead	201.488	1.0	125.0	93.63	86.3	46	116	203.2	0.868	20	
Molybdenum	99.873	1.0	125.0	0	79.9	59	108	98.99	0.884	20	
Nickel	119.849	1.0	125.0	28.58	73.0	52	109	121.6	1.44	20	
Selenium	93.005	1.0	125.0	0	74.4	56	100	92.21	0.864	20	
Silver	103.181	1.0	125.0	0	82.5	65	107	102.6	0.567	20	
Thallium	89.217	1.0	125.0	0	71.4	47	100	87.03	2.48	20	
Vanadium	145.051	1.0	125.0	34.31	88.6	64	110	147.5	1.66	20	
Zinc	415.531	1.0	125.0	357.8	46.2	37	123	433.4	4.22	20	

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 | |



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

CLIENT: Mactec
Work Order: 119804
Project: Metro Westside Extension, 45951-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: MB-75636	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: 9/19/2011	RunNo: 136791						
Client ID: PBS	Batch ID: 75636	TestNo: EPA 7471A		Analysis Date: 9/19/2011	SeqNo: 2243358						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury ND 0.10

Sample ID: LCS-75636	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 9/19/2011	RunNo: 136791						
Client ID: LCSS	Batch ID: 75636	TestNo: EPA 7471A		Analysis Date: 9/19/2011	SeqNo: 2243359						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.861 0.10 0.8300 0 104 80 120

Sample ID: 119813-011A-MS	SampType: MS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 9/19/2011	RunNo: 136791						
Client ID: ZZZZZZ	Batch ID: 75636	TestNo: EPA 7471A		Analysis Date: 9/19/2011	SeqNo: 2243360						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

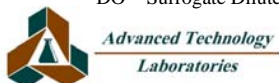
Mercury 0.855 0.10 0.8300 0.03076 99.3 70 130

Sample ID: 119813-011A-MSD	SampType: MSD	TestCode: 7471_S	Units: mg/Kg	Prep Date: 9/19/2011	RunNo: 136791						
Client ID: ZZZZZZ	Batch ID: 75636	TestNo: EPA 7471A		Analysis Date: 9/19/2011	SeqNo: 2243361						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.859 0.10 0.8300 0.03076 99.8 70 130 0.8550 0.460 20

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 | |



CLIENT: Mactec
Work Order: 119804
Project: Metro Westside Extension, 45951-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

Sample ID: MB-75615	SampType: MBLK	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 9/16/2011	RunNo: 136771						
Client ID: PBS	Batch ID: 75615	TestNo: EPA 8015B(M LUFT		Analysis Date: 9/18/2011	SeqNo: 2242869						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	ND	10									
ORO	ND	10									
Surr: p-Terphenyl	75.660		80.00		94.6	62	136				

Sample ID: LCS-75615	SampType: LCS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 9/16/2011	RunNo: 136771						
Client ID: LCSS	Batch ID: 75615	TestNo: EPA 8015B(M LUFT		Analysis Date: 9/18/2011	SeqNo: 2242870						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	979.200	10	1000	0	97.9	72	131				
Surr: p-Terphenyl	83.580		80.00		104	62	136				

Sample ID: 119804-011AMS	SampType: MS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 9/16/2011	RunNo: 136771						
Client ID: E-135-60'	Batch ID: 75615	TestNo: EPA 8015B(M LUFT		Analysis Date: 9/18/2011	SeqNo: 2242871						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

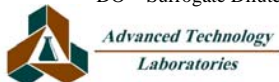
DRO	935.160	10	1000	0	93.5	64	131				
Surr: p-Terphenyl	81.530		80.00		102	62	136				

Sample ID: 119804-011AMSD	SampType: MSD	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 9/16/2011	RunNo: 136771						
Client ID: E-135-60'	Batch ID: 75615	TestNo: EPA 8015B(M LUFT		Analysis Date: 9/18/2011	SeqNo: 2242872						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	935.050	10	1000	0	93.5	64	131	935.2	0.0118	20	
Surr: p-Terphenyl	80.700		80.00		101	62	136		0	0	

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 | |



CLIENT: Mactec
Work Order: 119804
Project: Metro Westside Extension, 45951-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

Sample ID: E110915LC1	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 136755						
Client ID: LCSS	Batch ID: E11VS326	TestNo: EPA 8015B(M)		Analysis Date: 9/15/2011	SeqNo: 2242413						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.269	1.0	5.000	0	105	70	130				
Surr: Bromofluorobenzene (FID)	129.880		100.0		130	44	168				

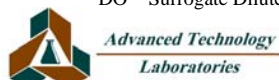
Sample ID: E110915MB1MS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 136755						
Client ID: ZZZZZZ	Batch ID: E11VS326	TestNo: EPA 8015B(M)		Analysis Date: 9/15/2011	SeqNo: 2242414						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.135	1.0	5.000	0	103	47	143				
Surr: Bromofluorobenzene (FID)	124.832		100.0		125	44	168				

Sample ID: E110915MB1MSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 136755						
Client ID: ZZZZZZ	Batch ID: E11VS326	TestNo: EPA 8015B(M)		Analysis Date: 9/15/2011	SeqNo: 2242415						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.219	1.0	5.000	0	104	47	143	5.135	1.62	20	
Surr: Bromofluorobenzene (FID)	109.227		100.0		109	44	168		0	0	

Sample ID: E110914MB1	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 136755						
Client ID: PBS	Batch ID: E11VS326	TestNo: EPA 8015B(M)		Analysis Date: 9/15/2011	SeqNo: 2242416						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	91.301		100.0		91.3	44	168				

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 | |



CLIENT: Mactec
Work Order: 119804
Project: Metro Westside Extension, 45951-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

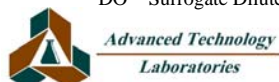
Sample ID: T110916LCS2		SampType: LCS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 136742	
Client ID: LCSS		Batch ID: T11VS175		TestNo: EPA 8260B				Analysis Date: 9/16/2011		SeqNo: 2242209	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	45.470	5.0	50.00	0	90.9	70	130				
Benzene	97.590	5.0	100.0	0	97.6	70	130				
Chlorobenzene	52.710	5.0	50.00	0	105	70	130				
MTBE	50.760	5.0	50.00	0	102	70	130				
Toluene	99.850	5.0	100.0	0	99.8	70	130				
Trichloroethene	48.650	5.0	50.00	0	97.3	70	130				
Surr: 1,2-Dichloroethane-d4	48.620		50.00		97.2	65	135				
Surr: 4-Bromofluorobenzene	47.260		50.00		94.5	57	126				
Surr: Dibromofluoromethane	43.240		50.00		86.5	72	121				
Surr: Toluene-d8	45.010		50.00		90.0	80	107				

Sample ID: T110916LCS2D		SampType: LCS2D		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 136742	
Client ID: LCSS02		Batch ID: T11VS175		TestNo: EPA 8260B				Analysis Date: 9/16/2011		SeqNo: 2242210	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	41.770	5.0	50.00	0	83.5	70	130	45.47	8.48	20	
Benzene	97.150	5.0	100.0	0	97.2	70	130	97.59	0.452	20	
Chlorobenzene	50.860	5.0	50.00	0	102	70	130	52.71	3.57	20	
MTBE	49.220	5.0	50.00	0	98.4	70	130	50.76	3.08	20	
Toluene	99.830	5.0	100.0	0	99.8	70	130	99.85	0.0200	20	
Trichloroethene	48.600	5.0	50.00	0	97.2	70	130	48.65	0.103	20	
Surr: 1,2-Dichloroethane-d4	45.280		50.00		90.6	65	135		0	0	
Surr: 4-Bromofluorobenzene	47.410		50.00		94.8	57	126		0	0	
Surr: Dibromofluoromethane	45.190		50.00		90.4	72	121		0	0	
Surr: Toluene-d8	46.430		50.00		92.9	80	107		0	0	

Sample ID: T110916MB2MS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 136742	
Client ID: ZZZZZ		Batch ID: T11VS175		TestNo: EPA 8260B				Analysis Date: 9/16/2011		SeqNo: 2242211	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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 | |



CLIENT: Mactec
Work Order: 119804
Project: Metro Westside Extension, 45951-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

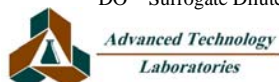
Sample ID: T110916MB2MS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 136742	
Client ID: ZZZZZZ		Batch ID: T11VS175		TestNo: EPA 8260B		Analysis Date: 9/16/2011				SeqNo: 2242211	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	44.340	5.0	50.00	0	88.7	70	130				
Benzene	99.930	5.0	100.0	0	99.9	70	130				
Chlorobenzene	53.280	5.0	50.00	0	107	70	130				
MTBE	53.270	5.0	50.00	0	107	70	130				
Toluene	100.750	5.0	100.0	0	101	70	130				
Trichloroethene	50.110	5.0	50.00	0	100	70	130				
Surr: 1,2-Dichloroethane-d4	50.500		50.00		101	65	135				
Surr: 4-Bromofluorobenzene	46.210		50.00		92.4	57	126				
Surr: Dibromofluoromethane	47.170		50.00		94.3	72	121				
Surr: Toluene-d8	45.440		50.00		90.9	80	107				

Sample ID: T110916MB2MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 136742	
Client ID: ZZZZZZ		Batch ID: T11VS175		TestNo: EPA 8260B		Analysis Date: 9/16/2011				SeqNo: 2242212	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	41.940	5.0	50.00	0	83.9	70	130	44.34	5.56	20	
Benzene	96.300	5.0	100.0	0	96.3	70	130	99.93	3.70	20	
Chlorobenzene	50.930	5.0	50.00	0	102	70	130	53.28	4.51	20	
MTBE	48.240	5.0	50.00	0	96.5	70	130	53.27	9.91	20	
Toluene	95.790	5.0	100.0	0	95.8	70	130	100.8	5.05	20	
Trichloroethene	45.940	5.0	50.00	0	91.9	70	130	50.11	8.68	20	
Surr: 1,2-Dichloroethane-d4	46.300		50.00		92.6	65	135		0	0	
Surr: 4-Bromofluorobenzene	44.780		50.00		89.6	57	126		0	0	
Surr: Dibromofluoromethane	46.260		50.00		92.5	72	121		0	0	
Surr: Toluene-d8	44.010		50.00		88.0	80	107		0	0	

Sample ID: T110916MB2		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 136742	
Client ID: PBS		Batch ID: T11VS175		TestNo: EPA 8260B		Analysis Date: 9/16/2011				SeqNo: 2242213	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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 | |



CLIENT: Mactec
Work Order: 119804
Project: Metro Westside Extension, 45951-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: T110916MB2	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 136742
Client ID: PBS	Batch ID: T11VS175	TestNo: EPA 8260B		Analysis Date: 9/16/2011	SeqNo: 2242213

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
1,1-Dichloroethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
1,1-Dichloropropene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	10									
1,2-Dibromoethane	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									
1,2-Dichloropropane	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Chlorotoluene	ND	5.0									
4-Chlorotoluene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
Benzene	ND	5.0									
Bromobenzene	ND	5.0									
Bromodichloromethane	ND	5.0									
Bromoform	ND	5.0									
Bromomethane	ND	5.0									
Carbon tetrachloride	ND	5.0									

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 | |



*Advanced Technology
Laboratories*

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

CLIENT: Mactec
Work Order: 119804
Project: Metro Westside Extension, 45951-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: T110916MB2	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 136742
Client ID: PBS	Batch ID: T11VS175	TestNo: EPA 8260B		Analysis Date: 9/16/2011	SeqNo: 2242213

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	ND	5.0									
Chloroethane	ND	5.0									
Chloroform	ND	5.0									
Chloromethane	ND	5.0									
cis-1,2-Dichloroethene	ND	5.0									
cis-1,3-Dichloropropene	ND	5.0									
Di-isopropyl ether	ND	5.0									
Dibromochloromethane	ND	5.0									
Dibromomethane	ND	5.0									
Dichlorodifluoromethane	ND	5.0									
Ethyl Tert-butyl ether	ND	5.0									
Ethylbenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Isopropylbenzene	ND	5.0									
m,p-Xylene	ND	10									
Methylene chloride	ND	5.0									
MTBE	ND	5.0									
n-Butylbenzene	ND	5.0									
n-Propylbenzene	ND	5.0									
Naphthalene	ND	5.0									
o-Xylene	ND	5.0									
sec-Butylbenzene	ND	5.0									
Styrene	ND	5.0									
Tert-amyl methyl ether	ND	5.0									
Tert-Butanol	ND	100									
tert-Butylbenzene	ND	5.0									
Tetrachloroethene	ND	5.0									
Toluene	ND	5.0									
trans-1,2-Dichloroethene	ND	5.0									
Trichloroethene	ND	5.0									

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 | |



*Advanced Technology
Laboratories*

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

CLIENT: Mactec
Work Order: 119804
Project: Metro Westside Extension, 45951-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

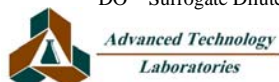
Sample ID: T110916MB2	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 136742						
Client ID: PBS	Batch ID: T11VS175	TestNo: EPA 8260B		Analysis Date: 9/16/2011	SeqNo: 2242213						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichlorofluoromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Surr: 1,2-Dichloroethane-d4	48.560		50.00		97.1	65	135				
Surr: 4-Bromofluorobenzene	41.940		50.00		83.9	57	126				
Surr: Dibromofluoromethane	45.500		50.00		91.0	72	121				
Surr: Toluene-d8	44.300		50.00		88.6	80	107				

Sample ID: 119810-006CMS	SampType: MS	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date: 9/13/2011	RunNo: 136742						
Client ID: ZZZZZ	Batch ID: T11VS175	TestNo: EPA 8260B		Analysis Date: 9/17/2011	SeqNo: 2242240						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	39.129	5.7	56.56	0	69.2	70	130				S
Benzene	90.271	5.7	113.1	0	79.8	70	130				
Chlorobenzene	47.421	5.7	56.56	0	83.8	70	130				
MTBE	51.482	5.7	56.56	0	91.0	70	130				
Toluene	92.104	5.7	113.1	0	81.4	70	130				
Trichloroethene	45.283	5.7	56.56	0	80.1	70	130				
Surr: 1,2-Dichloroethane-d4	53.043		56.56		93.8	65	135				
Surr: 4-Bromofluorobenzene	50.713		56.56		89.7	57	126				
Surr: Dibromofluoromethane	50.124		56.56		88.6	72	121				
Surr: Toluene-d8	48.394		56.56		85.6	80	107				

Sample ID: 119810-006EMSD	SampType: MSD	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date: 9/13/2011	RunNo: 136742						
Client ID: ZZZZZ	Batch ID: T11VS175	TestNo: EPA 8260B		Analysis Date: 9/17/2011	SeqNo: 2242241						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	35.949	5.8	57.87	0	62.1	70	130	39.13	8.47	20	S
Benzene	87.650	5.8	115.7	0	75.7	70	130	90.27	2.95	20	
Chlorobenzene	45.752	5.8	57.87	0	79.1	70	130	47.42	3.58	20	
MTBE	51.620	5.8	57.87	0	89.2	70	130	51.48	0.269	20	

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 | |



CLIENT: Mactec
Work Order: 119804
Project: Metro Westside Extension, 45951-10-1561

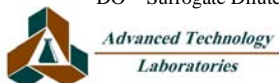
ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: 119810-006EMSD	SampType: MSD	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date: 9/13/2011	RunNo: 136742						
Client ID: ZZZZZZ	Batch ID: T11VS175	TestNo: EPA 8260B		Analysis Date: 9/17/2011	SeqNo: 2242241						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	90.162	5.8	115.7	0	77.9	70	130	92.10	2.13	20	
Trichloroethene	42.975	5.8	57.87	0	74.3	70	130	45.28	5.23	20	
Surr: 1,2-Dichloroethane-d4	52.454		57.87		90.6	65	135		0	0	
Surr: 4-Bromofluorobenzene	52.188		57.87		90.2	57	126		0	0	
Surr: Dibromofluoromethane	48.507		57.87		83.8	72	121		0	0	
Surr: Toluene-d8	50.602		57.87		87.4	80	107		0	0	

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

Client: **MACTEC**
 Attn: **math Fraychinead**

Project Name: **metro westside extension**

Relinquished by: (Signature and Printed Name) *[Signature]*
 Relinquished by: (Signature and Printed Name) *[Signature]*
 Relinquished by: (Signature and Printed Name) *[Signature]*

I hereby authorize ATL to perform the work indicated below:
Project Mgr / Submitter: *[Signature]*
 Print Name: **Paul Kane** Date: **9/13/11**

Quote #: **201106374** Date: _____
 Logged By: _____ Date: _____

NOTE: Please include your Quote No. to ensure proper pricing of your project.

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

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

Address: **5628 E Slanson Ave** City: **LA** State: **CA** Zip Code: **90040**
 TEL: **323-889-5300** FAX: _____
 Project #: **495-10-1861** Sampler: **Paul Kane** (Printed Name)
 Date: **9/13/11** Time: **11:50** Received by: *[Signature]* (Printed Name)
 Date: **9/13/11** Time: **12:12** Received by: *[Signature]* (Printed Name)
 Date: _____ Time: _____ Received by: _____ (Printed Name)

Bill To:
 Attn: _____
 Co: _____
 Addr: _____
 City: _____ State: _____ Zip: _____

Special Instructions/Comments:

LAB USE ONLY: Batch #:	Lab No.	Sample Description		Date	Time
		Sample I.D. / Location			
119804-1		E-135-10'	✓	9/12/11	1115
2		E-135-15'	✓		1120
3		E-135-20'	✓		1125
4		E-135-25'	✓		1130
5		E-135-30'	✓		1145
6		E-135-35'	✓		1200
7		E-135-40'	✓		1210
8		E-135-45'	✓		1225
9		E-135-50'	✓		1245
10		E-135-55'	✓		1305

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)

SPECIFY APPROPRIATE MATRIX		Container(s)	TAT	Type	REMARKS
SEDIMENT					
SOIL					
DRINKING WATER					
GROUND WATER					
WASTEWATER					
STORMWATER					
AQUEOUS					

Circle or Add Analysis(es) Requested:
 8081A (Pesticides) 8260B (PCB) 8270C (BNAs) 8010B (Total Metal) 8015B (GRO) / 8021 (BTEX) 8015B (DRO) (CORO) TITLE 22 / CAM 17 (6010 / 7000)

Preservatives:
 H=HCl N=HNO₃ S=H₂SO₄ C=4°C
 Z=Zn(AC)₂ O=NaOH T=Na₂SO₃

Emergency Next workday B=Overnight ≤ 24 hrs A=TAT starts 8 a.m. following day if samples received after 5 p.m.

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Urgent 3 Workdays D=Critical 2 Workdays E=Routine 7 Workdays

Figure I-1.1070

CHAIN OF CUSTODY RECORD

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

P.O.#: 201106374 Quote #: _____
 Logged By: _____ Date: _____

NOTE: Please include your Quote No. to ensure proper pricing of your project.

Method of Transport
 Client ATL
 FedEx OnTrac
 GSO
 Other: _____

Sample Condition Upon Receipt
 1. CHILLED 5.8 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: MACTEC
 Attn: Matt Fraychineaud
 Address: 5628 E. Slavson Ave City: LA State: CA Zip Code: 90040 FAX: _____
 Project Name: Metro Westside Extension Project #: 4953101561 Sampler: Paul Kane
 Relinquished by: (Signature and Printed Name) Paul Kane Date: 9/18/11 Time: 1150
 Relinquished by: (Signature and Printed Name) [Signature] Date: 9/13/11 Time: 1212
 Relinquished by: (Signature and Printed Name) _____ Date: _____ Time: _____

I hereby authorize ATL to perform the work indicated below:
 Project Mgr / Submitter: Paul Kane Date: 9/13/11
 Print Name: _____ Signature: _____
 Bill To: _____ Attn: _____
 Co: _____
 Address: _____
 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)

LAB USE ONLY: Batch #:	Lab No.	Sample Description		Date	Time
		Sample I.D. / Location	Container(s)		
<u>11604-11</u>		<u>E-135-60'</u>	<u>7T Vial</u>	<u>9/18/11</u>	<u>1400</u>
<u>↓ - 17</u>		<u>E-135-65'</u>	<u>1+</u>	<u>↓</u>	<u>1420</u>
<u>↓ - 13</u>		<u>E-135-75'</u>	<u>11"</u>	<u>↓</u>	<u>1450</u>

Special Instructions/Comments: _____

QA/QC
 RTNE CT Legal
 SWRCB Logcode _____
 OTHER _____

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

TAT: A= Overnight ≤ 24 hrs B= Emergency Next workday
 C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Figure I-1.1071