

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.

FOR LABORATORY USE ONLY:

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

Client: MAN TEL
 Attn: MATT FRANKLIN
 Address: 5428 E. LAWSON AVE
 City: LOS ANGELES State: CA Zip Code: 90040
 Project Name: Metro Westside Extension Sampler: _____
 Relinquished by: (Signature and Printed Name) _____ Date: 4/23/11
 Relinquished by: (Signature and Printed Name) _____ Date: 4/23/11
 Relinquished by: (Signature and Printed Name) _____ Date: _____

Received by: (Signature and Printed Name) _____ Date: _____
 Received by: (Signature and Printed Name) _____ Date: _____
 Received by: (Signature and Printed Name) _____ Date: _____

Special Instructions/Comments: _____

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

Send Report To: _____
 Attn: _____
 Co: _____
 Addr: _____
 City: _____ State: _____ Zip: _____

Circle or Add Analysis(es) Requested

8081A (Pesticides)	<input checked="" type="checkbox"/>
8082 (PCB)	<input checked="" type="checkbox"/>
8260B (Nitrates) + Nitrites	<input checked="" type="checkbox"/>
8270C (BNA)	<input checked="" type="checkbox"/>
8010B (Total Metal)	<input checked="" type="checkbox"/>
8015B (GRO) / 8021 (BTEX)	<input checked="" type="checkbox"/>
8015B (DRO)	<input checked="" type="checkbox"/>
8015B (DRO)	<input checked="" type="checkbox"/>
TITLE 22 / CAM 17 (6010 / 7000)	<input checked="" type="checkbox"/>

I hereby authorize ATL to perform the work indicated below:
 Project Mgr /Submitter: _____
 Print Name: _____ Date: _____
 Signature: _____

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 #:	Sample Description	Sample I.D. / Location	Date	Time
		E-103-40	4/22	11:00
		E-103-50	4/22	11:20
		E-103-55	4/22	11:35
		E-103-50	4/22	12:35

SPECIFY APPROPRIATE MATRIX

	Container(s)		TAT	Type	REMARKS
	#	Type			
SEDIMENT					
SOIL					
DRINKING WATER					
WASTEWATER					
STORMWATER					
AQUEOUS					

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

Container Types: T=Tube V=VOA L=Liter P=Pin 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.

Figure I-1.108

Carmen Aguila

From: Fraychineaud, Matt [MFRAYCHINEAUD@mactec.com]
Sent: Tuesday, June 28, 2011 8:58 AM
To: Carmen Aguila
Subject: COC for Thursday, June 23, 2011 (Metro Westside Extension Project)

Hi Carmen:

I just talked to Margo about the chain-of-custody form for the referenced project dated June 23, 2011. I asked Margo to add the trip blank onto the COC and place it on-hold. She asked me to notify you about this.

Question: What is the hold time for analyzing the trip blank....14 days? I'm thinking that we'd only analyze the trip blank if we get VOC hits in one or more of the soil samples.

Thanks.

Matt

Matt Fraychineaud
Principal Geologist
AMEC (formerly MACTEC Engineering and Consulting, Inc.)
5628 East Slauson Avenue
Los Angeles, CA 90040
(323) 889-5310
mfraychineaud@mactec.com

July 01, 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.: 118647

RE: Metro Westside Extension, 4953101561


Attention: Matt Fraychineaud

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

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

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

Sincerely,


for 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: 118647

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 8021B

Samples 118658-009AMS and 118658-009AMSD, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Sample 118658-009AMSD, RPD for Matrix Spike Duplicate (MSD) is outside criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).



Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-104-40
Lab Order: 118647	Collection Date: 6/23/2011 11:00:00 AM
Project: Metro Westside Extension, 4953101561	Matrix: SOIL
Lab ID: 118647-001A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110627A	QC Batch: K11VS180	PrepDate: 6/24/2011	Analyst: BD
1,1,1,2-Tetrachloroethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,1,1-Trichloroethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,1,2,2-Tetrachloroethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,1,2-Trichloroethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,1-Dichloroethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,1-Dichloroethene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,1-Dichloropropene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,2,3-Trichlorobenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,2,3-Trichloropropane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,2,4-Trichlorobenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,2,4-Trimethylbenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,2-Dibromo-3-chloropropane	ND	15	µg/Kg 1 6/27/2011 10:13 PM
1,2-Dibromoethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,2-Dichlorobenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,2-Dichloroethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,2-Dichloropropane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,3,5-Trimethylbenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,3-Dichlorobenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,3-Dichloropropane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
1,4-Dichlorobenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
2,2-Dichloropropane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
2-Chlorotoluene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
4-Chlorotoluene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
4-Isopropyltoluene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Benzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Bromobenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Bromodichloromethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Bromoform	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Bromomethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Carbon tetrachloride	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Chlorobenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Chloroethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Chloroform	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Chloromethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
cis-1,2-Dichloroethene	ND	7.6	µg/Kg 1 6/27/2011 10:13 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

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ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-104-40
Lab Order: 118647	Collection Date: 6/23/2011 11:00:00 AM
Project: Metro Westside Extension, 4953101561	Matrix: SOIL
Lab ID: 118647-001A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110627A	QC Batch: K11VS180	PrepDate: 6/24/2011	Analyst: BD
cis-1,3-Dichloropropene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Di-isopropyl ether	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Dibromochloromethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Dibromomethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Dichlorodifluoromethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Ethyl Tert-butyl ether	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Ethylbenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Hexachlorobutadiene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Isopropylbenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
m,p-Xylene	ND	15	µg/Kg 1 6/27/2011 10:13 PM
Methylene chloride	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
MTBE	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
n-Butylbenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
n-Propylbenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Naphthalene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
o-Xylene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
sec-Butylbenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Styrene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Tert-amyl methyl ether	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Tert-Butanol	ND	150	µg/Kg 1 6/27/2011 10:13 PM
tert-Butylbenzene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Tetrachloroethene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Toluene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
trans-1,2-Dichloroethene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Trichloroethene	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Trichlorofluoromethane	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Vinyl chloride	ND	7.6	µg/Kg 1 6/27/2011 10:13 PM
Surr: 1,2-Dichloroethane-d4	116	65-141	%REC 1 6/27/2011 10:13 PM
Surr: 4-Bromofluorobenzene	100	57-134	%REC 1 6/27/2011 10:13 PM
Surr: Dibromofluoromethane	106	70-128	%REC 1 6/27/2011 10:13 PM
Surr: Toluene-d8	103	72-123	%REC 1 6/27/2011 10:13 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	



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ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-104-40
Lab Order: 118647	Collection Date: 6/23/2011 11:00:00 AM
Project: Metro Westside Extension, 4953101561	Matrix: SOIL
Lab ID: 118647-001D	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110628A	QC Batch: E11VS239	PrepDate: 6/23/2011	Analyst: TP		
GRO	ND	0.94	mg/Kg	1	6/28/2011 11:09 AM
Surr: Bromofluorobenzene (FID)	117	51-161	%REC	1	6/28/2011 11:09 AM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC2_110628A	QC Batch: E11VS239	PrepDate: 6/23/2011	Analyst: TP		
Benzene	ND	4.7	µg/Kg	1	6/28/2011 11:09 AM
Ethylbenzene	ND	4.7	µg/Kg	1	6/28/2011 11:09 AM
m,p-Xylene	ND	9.4	µg/Kg	1	6/28/2011 11:09 AM
o-Xylene	ND	4.7	µg/Kg	1	6/28/2011 11:09 AM
Toluene	ND	4.7	µg/Kg	1	6/28/2011 11:09 AM
Surr: Bromofluorobenzene (PID)	95.8	33-163	%REC	1	6/28/2011 11:09 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	



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ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-104-40
Lab Order:	118647	Collection Date:	6/23/2011 11:00:00 AM
Project:	Metro Westside Extension, 4953101561	Matrix:	SOIL
Lab ID:	118647-001G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS BY GC/FID						
	LUFT	EPA 8015B(M)				
RunID: GC16_110628B	QC Batch: 73941				PrepDate: 6/28/2011	Analyst: CBR
DRO	ND	10		mg/Kg	1	6/28/2011 04:38 PM
Surr: p-Terphenyl	113	63-152		%REC	1	6/28/2011 04:38 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		



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ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-104-50
Lab Order: 118647	Collection Date: 6/23/2011 11:30:00 AM
Project: Metro Westside Extension, 4953101561	Matrix: SOIL
Lab ID: 118647-002A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110627A	QC Batch: K11VS180	PrepDate: 6/24/2011	Analyst: BD
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Compound	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,1,1-Trichloroethane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,1,2,2-Tetrachloroethane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,1,2-Trichloroethane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,1-Dichloroethane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,1-Dichloroethene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,1-Dichloropropene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,2,3-Trichlorobenzene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,2,3-Trichloropropane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,2,4-Trichlorobenzene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,2,4-Trimethylbenzene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,2-Dibromo-3-chloropropane	ND	11		µg/Kg	1	6/27/2011 10:30 PM
1,2-Dibromoethane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,2-Dichlorobenzene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,2-Dichloroethane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,2-Dichloropropane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,3,5-Trimethylbenzene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,3-Dichlorobenzene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,3-Dichloropropane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
1,4-Dichlorobenzene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
2,2-Dichloropropane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
2-Chlorotoluene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
4-Chlorotoluene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
4-Isopropyltoluene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
Benzene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
Bromobenzene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
Bromodichloromethane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
Bromoform	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
Bromomethane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
Carbon tetrachloride	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
Chlorobenzene	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
Chloroethane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
Chloroform	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
Chloromethane	ND	5.4		µg/Kg	1	6/27/2011 10:30 PM
cis-1,2-Dichloroethene	ND	5.4		µg/Kg	1	6/27/2011 10:30 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	



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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-104-50
Lab Order: 118647	Collection Date: 6/23/2011 11:30:00 AM
Project: Metro Westside Extension, 4953101561	Matrix: SOIL
Lab ID: 118647-002A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110627A	QC Batch: K11VS180	PrepDate: 6/24/2011	Analyst: BD
cis-1,3-Dichloropropene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Di-isopropyl ether	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Dibromochloromethane	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Dibromomethane	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Dichlorodifluoromethane	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Ethyl Tert-butyl ether	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Ethylbenzene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Hexachlorobutadiene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Isopropylbenzene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
m,p-Xylene	ND	11	µg/Kg 1 6/27/2011 10:30 PM
Methylene chloride	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
MTBE	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
n-Butylbenzene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
n-Propylbenzene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Naphthalene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
o-Xylene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
sec-Butylbenzene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Styrene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Tert-amyl methyl ether	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Tert-Butanol	ND	110	µg/Kg 1 6/27/2011 10:30 PM
tert-Butylbenzene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Tetrachloroethene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Toluene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
trans-1,2-Dichloroethene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Trichloroethene	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Trichlorofluoromethane	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Vinyl chloride	ND	5.4	µg/Kg 1 6/27/2011 10:30 PM
Surr: 1,2-Dichloroethane-d4	102	65-141	%REC 1 6/27/2011 10:30 PM
Surr: 4-Bromofluorobenzene	91.8	57-134	%REC 1 6/27/2011 10:30 PM
Surr: Dibromofluoromethane	96.5	70-128	%REC 1 6/27/2011 10:30 PM
Surr: Toluene-d8	93.6	72-123	%REC 1 6/27/2011 10:30 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
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Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-104-50
Lab Order: 118647	Collection Date: 6/23/2011 11:30:00 AM
Project: Metro Westside Extension, 4953101561	Matrix: SOIL
Lab ID: 118647-002D	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110628A	QC Batch: E11VS239	PrepDate: 6/23/2011	Analyst: TP		
GRO	ND	1.4	mg/Kg	1	6/28/2011 11:25 AM
Surr: Bromofluorobenzene (FID)	87.2	51-161	%REC	1	6/28/2011 11:25 AM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC2_110628A	QC Batch: E11VS239	PrepDate: 6/23/2011	Analyst: TP		
Benzene	ND	6.8	µg/Kg	1	6/28/2011 11:25 AM
Ethylbenzene	ND	6.8	µg/Kg	1	6/28/2011 11:25 AM
m,p-Xylene	ND	14	µg/Kg	1	6/28/2011 11:25 AM
o-Xylene	ND	6.8	µg/Kg	1	6/28/2011 11:25 AM
Toluene	ND	6.8	µg/Kg	1	6/28/2011 11:25 AM
Surr: Bromofluorobenzene (PID)	70.3	33-163	%REC	1	6/28/2011 11:25 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	



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ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec
Lab Order: 118647
Project: Metro Westside Extension, 4953101561
Lab ID: 118647-002G

Client Sample ID: E-104-50
Collection Date: 6/23/2011 11:30:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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ICP METALS

EPA 3050B

EPA 6010B

RunID:	ICP8_110629A	QC Batch:	73935	PrepDate:	6/28/2011	Analyst:	IL
Antimony	ND	2.0	mg/Kg	1	6/29/2011 10:53 AM		
Arsenic	8.0	1.0	mg/Kg	1	6/29/2011 10:53 AM		
Barium	60	1.0	mg/Kg	1	6/29/2011 10:53 AM		
Beryllium	ND	1.0	mg/Kg	1	6/29/2011 10:53 AM		
Cadmium	1.9	1.0	mg/Kg	1	6/29/2011 10:53 AM		
Chromium	20	1.0	mg/Kg	1	6/29/2011 10:53 AM		
Cobalt	9.6	1.0	mg/Kg	1	6/29/2011 10:53 AM		
Copper	3.9	2.0	mg/Kg	1	6/29/2011 10:53 AM		
Lead	1.7	1.0	mg/Kg	1	6/29/2011 10:53 AM		
Molybdenum	ND	1.0	mg/Kg	1	6/29/2011 10:53 AM		
Nickel	24	1.0	mg/Kg	1	6/29/2011 10:53 AM		
Selenium	ND	1.0	mg/Kg	1	6/29/2011 10:53 AM		
Silver	ND	1.0	mg/Kg	1	6/29/2011 10:53 AM		
Thallium	ND	1.0	mg/Kg	1	6/29/2011 10:53 AM		
Vanadium	22	1.0	mg/Kg	1	6/29/2011 10:53 AM		
Zinc	24	1.0	mg/Kg	1	6/29/2011 10:53 AM		

DIESEL RANGE ORGANICS BY GC/FID

LUFT

EPA 8015B(M)

RunID:	GC16_110628B	QC Batch:	73941	PrepDate:	6/28/2011	Analyst:	CBR
DRO	ND	10	mg/Kg	1	6/28/2011 04:49 PM		
Surr: p-Terphenyl	101	63-152	%REC	1	6/28/2011 04:49 PM		

MERCURY BY COLD VAPOR TECHNIQUE

EPA 7471A

RunID:	AA1_110629A	QC Batch:	73932	PrepDate:	6/28/2011	Analyst:	VV
Mercury	ND	0.10	mg/Kg	1	6/29/2011 11:23 AM		

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



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ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-104-60
Lab Order: 118647	Collection Date: 6/23/2011 12:00:00 PM
Project: Metro Westside Extension, 4953101561	Matrix: SOIL
Lab ID: 118647-003A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110627A	QC Batch: K11VS180	PrepDate: 6/24/2011	Analyst: BD
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Compound	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,1,1-Trichloroethane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,1,2,2-Tetrachloroethane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,1,2-Trichloroethane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,1-Dichloroethane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,1-Dichloroethene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,1-Dichloropropene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,2,3-Trichlorobenzene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,2,3-Trichloropropane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,2,4-Trichlorobenzene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,2,4-Trimethylbenzene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/Kg	1	6/27/2011 10:48 PM
1,2-Dibromoethane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,2-Dichlorobenzene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,2-Dichloroethane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,2-Dichloropropane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,3,5-Trimethylbenzene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,3-Dichlorobenzene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,3-Dichloropropane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
1,4-Dichlorobenzene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
2,2-Dichloropropane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
2-Chlorotoluene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
4-Chlorotoluene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
4-Isopropyltoluene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
Benzene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
Bromobenzene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
Bromodichloromethane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
Bromoform	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
Bromomethane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
Carbon tetrachloride	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
Chlorobenzene	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
Chloroethane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
Chloroform	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
Chloromethane	ND	5.1		µg/Kg	1	6/27/2011 10:48 PM
cis-1,2-Dichloroethene	ND	5.1		µg/Kg	1	6/27/2011 10:48 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	



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ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-104-60
Lab Order: 118647	Collection Date: 6/23/2011 12:00:00 PM
Project: Metro Westside Extension, 4953101561	Matrix: SOIL
Lab ID: 118647-003A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110627A	QC Batch: K11VS180	PrepDate: 6/24/2011	Analyst: BD		
cis-1,3-Dichloropropene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Di-isopropyl ether	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Dibromochloromethane	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Dibromomethane	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Dichlorodifluoromethane	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Ethyl Tert-butyl ether	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Ethylbenzene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Hexachlorobutadiene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Isopropylbenzene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
m,p-Xylene	ND	10	µg/Kg	1	6/27/2011 10:48 PM
Methylene chloride	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
MTBE	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
n-Butylbenzene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
n-Propylbenzene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Naphthalene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
o-Xylene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
sec-Butylbenzene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Styrene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Tert-amyl methyl ether	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Tert-Butanol	ND	100	µg/Kg	1	6/27/2011 10:48 PM
tert-Butylbenzene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Tetrachloroethene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Toluene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
trans-1,2-Dichloroethene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Trichloroethene	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Trichlorofluoromethane	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Vinyl chloride	ND	5.1	µg/Kg	1	6/27/2011 10:48 PM
Surr: 1,2-Dichloroethane-d4	101	65-141	%REC	1	6/27/2011 10:48 PM
Surr: 4-Bromofluorobenzene	91.1	57-134	%REC	1	6/27/2011 10:48 PM
Surr: Dibromofluoromethane	93.7	70-128	%REC	1	6/27/2011 10:48 PM
Surr: Toluene-d8	95.7	72-123	%REC	1	6/27/2011 10:48 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	



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ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-104-60
Lab Order: 118647	Collection Date: 6/23/2011 12:00:00 PM
Project: Metro Westside Extension, 4953101561	Matrix: SOIL
Lab ID: 118647-003D	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110628A	QC Batch: E11VS239	PrepDate: 6/23/2011	Analyst: TP		
GRO	ND	0.90	mg/Kg	1	6/28/2011 11:41 AM
Surr: Bromofluorobenzene (FID)	90.5	51-161	%REC	1	6/28/2011 11:41 AM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC2_110628A	QC Batch: E11VS239	PrepDate: 6/23/2011	Analyst: TP		
Benzene	ND	4.5	µg/Kg	1	6/28/2011 11:41 AM
Ethylbenzene	ND	4.5	µg/Kg	1	6/28/2011 11:41 AM
m,p-Xylene	ND	9.0	µg/Kg	1	6/28/2011 11:41 AM
o-Xylene	ND	4.5	µg/Kg	1	6/28/2011 11:41 AM
Toluene	ND	4.5	µg/Kg	1	6/28/2011 11:41 AM
Surr: Bromofluorobenzene (PID)	73.7	33-163	%REC	1	6/28/2011 11:41 AM

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



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ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-104-60
Lab Order:	118647	Collection Date:	6/23/2011 12:00:00 PM
Project:	Metro Westside Extension, 4953101561	Matrix:	SOIL
Lab ID:	118647-003G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS BY GC/FID						
	LUFT	EPA 8015B(M)				
RunID: GC16_110628B	QC Batch: 73941				PrepDate: 6/28/2011	Analyst: CBR
DRO	ND	10		mg/Kg	1	6/28/2011 04:59 PM
Surr: p-Terphenyl	92.5	63-152		%REC	1	6/28/2011 04:59 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		



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ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-104-GW
Lab Order: 118647	Collection Date: 6/23/2011 12:45:00 PM
Project: Metro Westside Extension, 4953101561	Matrix: GROUNDWATER
Lab ID: 118647-004A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_110628A	QC Batch: A11VW109	PrepDate:	Analyst: SLL
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,1,1-Trichloroethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,1,2-Trichloroethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,1-Dichloroethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,1-Dichloroethene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,1-Dichloropropene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,2,3-Trichlorobenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,2,3-Trichloropropane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,2,4-Trichlorobenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,2,4-Trimethylbenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,2-Dibromo-3-chloropropane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,2-Dibromoethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,2-Dichlorobenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,2-Dichloroethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,2-Dichloropropane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,3,5-Trimethylbenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,3-Dichlorobenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,3-Dichloropropane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
1,4-Dichlorobenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
2,2-Dichloropropane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
2-Chlorotoluene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
4-Chlorotoluene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
4-Isopropyltoluene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Benzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Bromobenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Bromodichloromethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Bromoform	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Bromomethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Carbon tetrachloride	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Chlorobenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Chloroethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Chloroform	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Chloromethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
cis-1,2-Dichloroethene	ND	0.50	µg/L 1 6/28/2011 03:06 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	



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ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-104-GW
Lab Order: 118647	Collection Date: 6/23/2011 12:45:00 PM
Project: Metro Westside Extension, 4953101561	Matrix: GROUNDWATER
Lab ID: 118647-004A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_110628A	QC Batch: A11VW109	PrepDate:	Analyst: SLL
cis-1,3-Dichloropropene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Di-isopropyl ether	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Dibromochloromethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Dibromomethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Dichlorodifluoromethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Ethyl tert-butyl ether	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Ethylbenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Hexachlorobutadiene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Isopropylbenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
m,p-Xylene	ND	1.0	µg/L 1 6/28/2011 03:06 PM
Methylene chloride	ND	1.0	µg/L 1 6/28/2011 03:06 PM
MTBE	ND	0.50	µg/L 1 6/28/2011 03:06 PM
n-Butylbenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
n-Propylbenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Naphthalene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
o-Xylene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
sec-Butylbenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Styrene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Tert-amyl methyl ether	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Tert-Butanol	ND	10	µg/L 1 6/28/2011 03:06 PM
tert-Butylbenzene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Tetrachloroethene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Toluene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
trans-1,2-Dichloroethene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Trichloroethene	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Trichlorofluoromethane	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Vinyl chloride	ND	0.50	µg/L 1 6/28/2011 03:06 PM
Surr: 1,2-Dichloroethane-d4	91.6	70-130	%REC 1 6/28/2011 03:06 PM
Surr: 4-Bromofluorobenzene	93.8	70-130	%REC 1 6/28/2011 03:06 PM
Surr: Dibromofluoromethane	95.3	70-130	%REC 1 6/28/2011 03:06 PM
Surr: Toluene-d8	103	70-130	%REC 1 6/28/2011 03:06 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	



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ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-104-GW
Lab Order: 118647	Collection Date: 6/23/2011 12:45:00 PM
Project: Metro Westside Extension, 4953101561	Matrix: GROUNDWATER
Lab ID: 118647-004B	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC19_110629A	QC Batch: M11VW129	PrepDate:	Analyst: TP		
GRO	ND	0.20	mg/L	1	6/30/2011 01:10 AM
Surr: Bromofluorobenzene (FID)	94.8	70-130	%REC	1	6/30/2011 01:10 AM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC19_110629A	QC Batch: M11VW129	PrepDate:	Analyst: TP		
Benzene	ND	0.50	µg/L	1	6/30/2011 01:10 AM
Ethylbenzene	ND	0.50	µg/L	1	6/30/2011 01:10 AM
m,p-Xylene	ND	1.0	µg/L	1	6/30/2011 01:10 AM
o-Xylene	ND	0.50	µg/L	1	6/30/2011 01:10 AM
Toluene	ND	0.50	µg/L	1	6/30/2011 01:10 AM
Surr: Bromofluorobenzene (PID)	87.5	70-130	%REC	1	6/30/2011 01:10 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	



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ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-104-GW
Lab Order: 118647	Collection Date: 6/23/2011 12:45:00 PM
Project: Metro Westside Extension, 4953101561	Matrix: GROUNDWATER
Lab ID: 118647-004C	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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DIESEL RANGE ORGANICS BY GC/FID

		EPA 3510C		EPA 8015B(M)			
RunID: GC16_110628A	QC Batch: 73912			PrepDate: 6/27/2011	Analyst: CBR		
DRO	ND	0.20	mg/L	1	6/28/2011 10:55 AM		
Surr: p-Terphenyl	87.8	36-126	%REC	1	6/28/2011 10:55 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	



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CLIENT: Mactec
Work Order: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

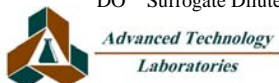
TestCode: 6010_S

Sample ID: MB-73935	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134499						
Client ID: PBS	Batch ID: 73935	TestNo: EPA 6010B EPA 3050B		Analysis Date: 6/29/2011	SeqNo: 2199100						
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	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	0.212	1.0									

Sample ID: LCS-73935	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134499						
Client ID: LCSS	Batch ID: 73935	TestNo: EPA 6010B EPA 3050B		Analysis Date: 6/29/2011	SeqNo: 2199101						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.163	2.0	50.00	0	94.3	80	120				
Arsenic	47.469	1.0	50.00	0	94.9	80	120				
Barium	48.281	1.0	50.00	0	96.6	80	120				
Beryllium	47.321	1.0	50.00	0	94.6	80	120				
Cadmium	46.939	1.0	50.00	0	93.9	80	120				
Chromium	44.770	1.0	50.00	0	89.5	80	120				
Cobalt	48.562	1.0	50.00	0	97.1	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: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

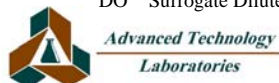
TestCode: 6010_S

Sample ID: LCS-73935		SampType: LCS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 6/28/2011		RunNo: 134499		
Client ID: LCSS		Batch ID: 73935		TestNo: EPA 6010B EPA 3050B				Analysis Date: 6/29/2011		SeqNo: 2199101		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Copper	48.530	2.0	50.00	0	97.1	80	120					
Lead	47.797	1.0	50.00	0	95.6	80	120					
Molybdenum	49.718	1.0	50.00	0	99.4	80	120					
Nickel	47.117	1.0	50.00	0	94.2	80	120					
Selenium	44.660	1.0	50.00	0	89.3	80	120					
Silver	47.861	1.0	50.00	0	95.7	80	120					
Thallium	45.663	1.0	50.00	0	91.3	80	120					
Vanadium	48.861	1.0	50.00	0	97.7	80	120					
Zinc	47.972	1.0	50.00	0.2116	95.5	80	120					

Sample ID: 118606-005A-MS		SampType: MS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 6/28/2011		RunNo: 134499		
Client ID: ZZZZZZ		Batch ID: 73935		TestNo: EPA 6010B EPA 3050B				Analysis Date: 6/29/2011		SeqNo: 2199103		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Antimony	85.126	2.0	125.0	0.9440	67.3	32	105					
Arsenic	105.631	1.0	125.0	1.583	83.2	49	106					
Barium	225.784	1.0	125.0	127.2	78.9	31	133					
Beryllium	104.889	1.0	125.0	0	83.9	56	106					
Cadmium	100.148	1.0	125.0	0.6001	79.6	51	103					
Chromium	133.015	1.0	125.0	37.03	76.8	45	114					
Cobalt	110.853	1.0	125.0	10.46	80.3	52	106					
Copper	129.634	2.0	125.0	18.50	88.9	54	125					
Lead	106.275	1.0	125.0	6.342	79.9	34	126					
Molybdenum	105.169	1.0	125.0	0	84.1	54	106					
Nickel	148.852	1.0	125.0	73.93	59.9	45	111					
Selenium	99.770	1.0	125.0	0	79.8	47	104					
Silver	109.012	1.0	125.0	0	87.2	56	112					
Thallium	94.677	1.0	125.0	0	75.7	46	101					
Vanadium	135.921	1.0	125.0	30.15	84.6	54	114					
Zinc	136.681	1.0	125.0	35.91	80.6	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: 118647
Project: Metro Westside Extension, 4953101561

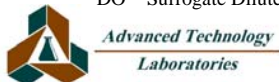
ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: 118606-005A-MSD		SampType: MSD		TestCode: 6010_S		Units: mg/Kg		Prep Date: 6/28/2011		RunNo: 134499	
Client ID: ZZZZZZ		Batch ID: 73935		TestNo: EPA 6010B EPA 3050B		Analysis Date: 6/29/2011				SeqNo: 2199104	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	82.156	2.0	125.0	0.9440	65.0	32	105	85.13	3.55	20	
Arsenic	104.421	1.0	125.0	1.583	82.3	49	106	105.6	1.15	20	
Barium	253.610	1.0	125.0	127.2	101	31	133	225.8	11.6	20	
Beryllium	105.409	1.0	125.0	0	84.3	56	106	104.9	0.495	20	
Cadmium	100.020	1.0	125.0	0.6001	79.5	51	103	100.1	0.127	20	
Chromium	137.258	1.0	125.0	37.03	80.2	45	114	133.0	3.14	20	
Cobalt	111.469	1.0	125.0	10.46	80.8	52	106	110.9	0.554	20	
Copper	131.544	2.0	125.0	18.50	90.4	54	125	129.6	1.46	20	
Lead	105.108	1.0	125.0	6.342	79.0	34	126	106.3	1.10	20	
Molybdenum	103.785	1.0	125.0	0	83.0	54	106	105.2	1.32	20	
Nickel	153.487	1.0	125.0	73.93	63.6	45	111	148.9	3.07	20	
Selenium	97.866	1.0	125.0	0	78.3	47	104	99.77	1.93	20	
Silver	109.474	1.0	125.0	0	87.6	56	112	109.0	0.423	20	
Thallium	94.136	1.0	125.0	0	75.3	46	101	94.68	0.573	20	
Vanadium	137.507	1.0	125.0	30.15	85.9	54	114	135.9	1.16	20	
Zinc	137.550	1.0	125.0	35.91	81.3	28	125	136.7	0.634	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 | |



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CLIENT: Mactec
Work Order: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: MB-73932	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134510						
Client ID: PBS	Batch ID: 73932	TestNo: EPA 7471A		Analysis Date: 6/29/2011	SeqNo: 2199223						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury ND 0.10

Sample ID: LCS-73932	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134510						
Client ID: LCSS	Batch ID: 73932	TestNo: EPA 7471A		Analysis Date: 6/29/2011	SeqNo: 2199224						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.796 0.10 0.8300 0 95.9 80 120

Sample ID: 118606-005A-MS	SampType: MS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134510						
Client ID: ZZZZZZ	Batch ID: 73932	TestNo: EPA 7471A		Analysis Date: 6/29/2011	SeqNo: 2199225						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

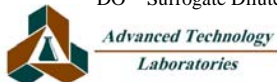
Mercury 0.891 0.10 0.8300 0.05640 101 70 130

Sample ID: 118606-005A-MSD	SampType: MSD	TestCode: 7471_S	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134510						
Client ID: ZZZZZZ	Batch ID: 73932	TestNo: EPA 7471A		Analysis Date: 6/29/2011	SeqNo: 2199226						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.857 0.10 0.8300 0.05640 96.5 70 130 0.8910 3.89 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: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DSL H

Sample ID: MB-73941	SampType: MBLK	TestCode: 8015_S_DSL	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134496						
Client ID: PBS	Batch ID: 73941	TestNo: EPA 8015B(M LUFT		Analysis Date: 6/28/2011	SeqNo: 2198952						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	ND	10									
Surr: p-Terphenyl	101.280		80.00		127	63	152				

Sample ID: LCS-73941	SampType: LCS	TestCode: 8015_S_DSL	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134496						
Client ID: LCSS	Batch ID: 73941	TestNo: EPA 8015B(M LUFT		Analysis Date: 6/28/2011	SeqNo: 2198953						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	1077.800	10	1000	0	108	76	139				
Surr: p-Terphenyl	100.940		80.00		126	63	152				

Sample ID: 118666-002AMS	SampType: MS	TestCode: 8015_S_DSL	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134496						
Client ID: ZZZZZZ	Batch ID: 73941	TestNo: EPA 8015B(M LUFT		Analysis Date: 6/28/2011	SeqNo: 2198954						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

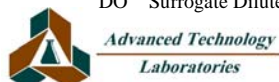
DRO	1344.440	10	1000	291.7	105	60	158				
Surr: p-Terphenyl	83.500		80.00		104	63	152				

Sample ID: 118666-002AMSD	SampType: MSD	TestCode: 8015_S_DSL	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134496						
Client ID: ZZZZZZ	Batch ID: 73941	TestNo: EPA 8015B(M LUFT		Analysis Date: 6/28/2011	SeqNo: 2198955						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	1429.670	10	1000	291.7	114	60	158	1344	6.14	20	
Surr: p-Terphenyl	98.830		80.00		124	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: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

Sample ID: E110628LC1	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 134491						
Client ID: LCSS	Batch ID: E11VS239	TestNo: EPA 8015B(M)	Analysis Date: 6/28/2011	SeqNo: 2198994							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.302	1.0	5.000	0	106	70	130				
Surr: Bromofluorobenzene (FID)	121.052		100.0		121	51	161				

Sample ID: E110628MB1MS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 134491						
Client ID: ZZZZZ	Batch ID: E11VS239	TestNo: EPA 8015B(M)	Analysis Date: 6/28/2011	SeqNo: 2198995							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.224	1.0	5.000	0	104	41	146				
Surr: Bromofluorobenzene (FID)	119.011		100.0		119	51	161				

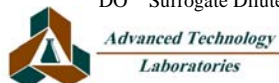
Sample ID: E110628MB1MSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 134491						
Client ID: ZZZZZ	Batch ID: E11VS239	TestNo: EPA 8015B(M)	Analysis Date: 6/28/2011	SeqNo: 2198996							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.292	1.0	5.000	0	106	41	146	5.224	1.29	20	
Surr: Bromofluorobenzene (FID)	118.146		100.0		118	51	161		0	0	

Sample ID: E110628MB1	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 134491						
Client ID: PBS	Batch ID: E11VS239	TestNo: EPA 8015B(M)	Analysis Date: 6/28/2011	SeqNo: 2198997							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	101.699		100.0		102	51	161				

Sample ID: 118658-009AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 134491						
Client ID: ZZZZZ	Batch ID: E11VS239	TestNo: EPA 8015B(M)	Analysis Date: 6/28/2011	SeqNo: 2199010							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.005	1.0	5.000	0	80.1	41	146				

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: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

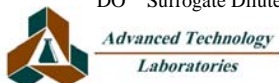
TestCode: 8015_S_G 5035P

Sample ID: 118658-009AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 134491						
Client ID: ZZZZZ	Batch ID: E11VS239	TestNo: EPA 8015B(M)	Analysis Date: 6/28/2011	SeqNo: 2199010							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Bromofluorobenzene (FID)	129.992		100.0		130	51	161				

Sample ID: 118658-009AMSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 134491						
Client ID: ZZZZZ	Batch ID: E11VS239	TestNo: EPA 8015B(M)	Analysis Date: 6/28/2011	SeqNo: 2199011							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.839	1.0	5.000	0	96.8	41	146	4.005	18.9	20	
Surr: Bromofluorobenzene (FID)	129.251		100.0		129	51	161		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 | |



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CLIENT: Mactec
Work Order: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_DSL H

Sample ID: MB-73912	SampType: MBLK	TestCode: 8015_W_DSL	Units: mg/L	Prep Date: 6/27/2011	RunNo: 134463						
Client ID: PBW	Batch ID: 73912	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 6/28/2011	SeqNo: 2198409						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	ND	0.20									
Surr: p-Terphenyl	0.050		0.08000		62.4	36	126				

Sample ID: LCS-73912	SampType: LCS	TestCode: 8015_W_DSL	Units: mg/L	Prep Date: 6/27/2011	RunNo: 134463						
Client ID: LCSW	Batch ID: 73912	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 6/28/2011	SeqNo: 2198410						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	0.630	0.20	1.000	0	63.0	52	128				
Surr: p-Terphenyl	0.063		0.08000		79.2	36	126				

Sample ID: MB-73912MS	SampType: MS	TestCode: 8015_W_DSL	Units: mg/L	Prep Date: 6/27/2011	RunNo: 134463						
Client ID: ZZZZZZ	Batch ID: 73912	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 6/28/2011	SeqNo: 2198411						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

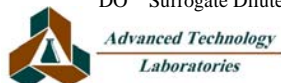
DRO	0.663	0.20	1.000	0	66.3	52	128				
Surr: p-Terphenyl	0.060		0.08000		75.4	36	126				

Sample ID: MB-73912MSD	SampType: MSD	TestCode: 8015_W_DSL	Units: mg/L	Prep Date: 6/27/2011	RunNo: 134463						
Client ID: ZZZZZZ	Batch ID: 73912	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 6/28/2011	SeqNo: 2198412						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	0.693	0.20	1.000	0	69.3	52	128	0.6628	4.50	20	
Surr: p-Terphenyl	0.064		0.08000		79.7	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: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_G PRES

Sample ID: M110629LC1	SampType: LCS	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 134575						
Client ID: LCSW	Batch ID: M11VW129	TestNo: EPA 8015B(M)	Analysis Date: 6/29/2011	SeqNo: 2200400							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	0.844	0.20	1.000	0	84.4	70	130				
Surr: Bromofluorobenzene (FID)	97.396		100.0		97.4	70	130				

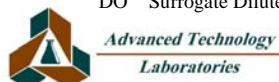
Sample ID: M110629MB1MS	SampType: MS	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 134575						
Client ID: ZZZZZZ	Batch ID: M11VW129	TestNo: EPA 8015B(M)	Analysis Date: 6/29/2011	SeqNo: 2200401							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	0.911	0.20	1.000	0	91.1	70	130				
Surr: Bromofluorobenzene (FID)	97.334		100.0		97.3	70	130				

Sample ID: M110629MB1MSD	SampType: MSD	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 134575						
Client ID: ZZZZZZ	Batch ID: M11VW129	TestNo: EPA 8015B(M)	Analysis Date: 6/29/2011	SeqNo: 2200402							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	0.896	0.20	1.000	0	89.6	70	130	0.9110	1.66	20	
Surr: Bromofluorobenzene (FID)	97.774		100.0		97.8	70	130		0	0	

Sample ID: M110629MB1MS	SampType: MBLK	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 134575						
Client ID: PBW	Batch ID: M11VW129	TestNo: EPA 8015B(M)	Analysis Date: 6/29/2011	SeqNo: 2200403							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	0.20									
Surr: Bromofluorobenzene (FID)	94.717		100.0		94.7	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 | |



CLIENT: Mactec
Work Order: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021_S_B 5035P

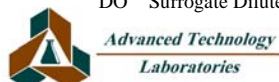
Sample ID: E110628LC2	SampType: LCS	TestCode: 8021_S_B 50	Units: µg/Kg	Prep Date:	RunNo: 134491						
Client ID: LCSS	Batch ID: E11VS239	TestNo: EPA 8021B		Analysis Date: 6/28/2011	SeqNo: 2199054						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	94.337	5.0	100.0	0	94.3	70	130				
Ethylbenzene	96.658	5.0	100.0	0	96.7	70	130				
m,p-Xylene	195.503	10	200.0	0	97.8	70	130				
o-Xylene	100.010	5.0	100.0	0	100	70	130				
Toluene	96.928	5.0	100.0	0	96.9	70	130				
Surr: Bromofluorobenzene (PID)	90.946		100.0		90.9	33	163				

Sample ID: E110628LC2	SampType: LCSD	TestCode: 8021_S_B 50	Units: µg/Kg	Prep Date:	RunNo: 134491						
Client ID: LCSS02	Batch ID: E11VS239	TestNo: EPA 8021B		Analysis Date: 6/28/2011	SeqNo: 2199055						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	91.832	5.0	100.0	0	91.8	70	130	94.34	2.69	20	
Ethylbenzene	94.472	5.0	100.0	0	94.5	70	130	96.66	2.29	20	
m,p-Xylene	190.858	10	200.0	0	95.4	70	130	195.5	2.40	20	
o-Xylene	97.445	5.0	100.0	0	97.4	70	130	100.0	2.60	20	
Toluene	94.693	5.0	100.0	0	94.7	70	130	96.93	2.33	20	
Surr: Bromofluorobenzene (PID)	89.120		100.0		89.1	33	163		0	0	

Sample ID: E110628MB1	SampType: MBLK	TestCode: 8021_S_B 50	Units: µg/Kg	Prep Date:	RunNo: 134491						
Client ID: PBS	Batch ID: E11VS239	TestNo: EPA 8021B		Analysis Date: 6/28/2011	SeqNo: 2199058						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	5.0									
Ethylbenzene	ND	5.0									
m,p-Xylene	ND	10									
o-Xylene	ND	5.0									
Toluene	ND	5.0									
Surr: Bromofluorobenzene (PID)	82.520		100.0		82.5	33	163				

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: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

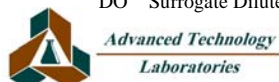
TestCode: 8021_S_B 5035P

Sample ID: 118658-009AMS		SampType: MS		TestCode: 8021_S_B 50		Units: µg/Kg		Prep Date:		RunNo: 134491		
Client ID: ZZZZZZ		Batch ID: E11VS239		TestNo: EPA 8021B		Analysis Date: 6/28/2011		SeqNo: 2199071				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	26.567	5.0	22.15	0	120	44	115				S	
Ethylbenzene	38.951	5.0	42.30	0	92.1	49	95					
m,p-Xylene	132.828	10	180.2	0	73.7	55	98					
o-Xylene	50.760	5.0	64.80	0	78.3	50	93					
Toluene	130.255	5.0	172.6	0	75.4	46	113					
Surr: Bromofluorobenzene (PID)	105.279		100.0		105	33	163					

Sample ID: 118658-009AMSD		SampType: MSD		TestCode: 8021_S_B 50		Units: µg/Kg		Prep Date:		RunNo: 134491		
Client ID: ZZZZZZ		Batch ID: E11VS239		TestNo: EPA 8021B		Analysis Date: 6/28/2011		SeqNo: 2199072				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	31.500	5.0	22.15	0	142	44	115	26.57	17.0	20	S	
Ethylbenzene	47.924	5.0	42.30	0	113	49	95	38.95	20.7	20	SR	
m,p-Xylene	163.790	10	180.2	0	90.9	55	98	132.8	20.9	20	R	
o-Xylene	63.270	5.0	64.80	0	97.6	50	93	50.76	21.9	20	SR	
Toluene	155.697	5.0	172.6	0	90.2	46	113	130.3	17.8	20		
Surr: Bromofluorobenzene (PID)	105.250		100.0		105	33	163		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

CLIENT: Mactec
Work Order: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021_WP_BTEX

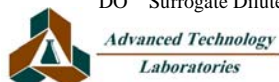
Sample ID: M110629LC2	SampType: LCS	TestCode: 8021_WP_BT	Units: µg/L	Prep Date:	RunNo: 134575						
Client ID: LCSW	Batch ID: M11VW129	TestNo: EPA 8021B		Analysis Date: 6/29/2011	SeqNo: 2200443						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	93.838	0.50	100.0	0	93.8	70	130				
Toluene	95.667	0.50	100.0	0	95.7	70	130				
Ethylbenzene	93.767	0.50	100.0	0	93.8	70	130				
m,p-Xylene	188.496	1.0	200.0	0	94.2	70	130				
o-Xylene	97.213	0.50	100.0	0	97.2	70	130				
Surr: Bromofluorobenzene (PID)	89.209		100.0		89.2	70	130				

Sample ID: M110629LC2	SampType: LCS	TestCode: 8021_WP_BT	Units: µg/L	Prep Date:	RunNo: 134575						
Client ID: LCSW	Batch ID: M11VW129	TestNo: EPA 8021B		Analysis Date: 6/29/2011	SeqNo: 2200444						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	94.306	0.50	100.0	0	94.3	70	130	93.84	0.497	20	
Toluene	95.388	0.50	100.0	0	95.4	70	130	95.67	0.292	20	
Ethylbenzene	94.285	0.50	100.0	0	94.3	70	130	93.77	0.551	20	
m,p-Xylene	189.514	1.0	200.0	0	94.8	70	130	188.5	0.539	20	
o-Xylene	97.668	0.50	100.0	0	97.7	70	130	97.21	0.467	20	
Surr: Bromofluorobenzene (PID)	89.182		100.0		89.2	70	130		0	0	

Sample ID: M110629MB1MS	SampType: MS	TestCode: 8021_WP_BT	Units: µg/L	Prep Date:	RunNo: 134575						
Client ID: ZZZZZ	Batch ID: M11VW129	TestNo: EPA 8021B		Analysis Date: 6/29/2011	SeqNo: 2200445						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	6.945	0.50	6.400	0	109	70	130				
Toluene	37.036	0.50	33.85	0	109	70	130				
Ethylbenzene	11.466	0.50	10.95	0	105	70	130				
m,p-Xylene	40.454	1.0	42.40	0	95.4	70	130				
o-Xylene	15.910	0.50	13.35	0	119	70	130				
Surr: Bromofluorobenzene (PID)	89.764		100.0		89.8	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 | |



CLIENT: Mactec
Work Order: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

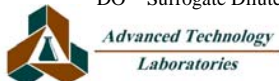
TestCode: 8021_WP_BTEX

Sample ID: M110629MB1MSD		SampType: MSD		TestCode: 8021_WP_BT		Units: µg/L		Prep Date:		RunNo: 134575	
Client ID: ZZZZZZ		Batch ID: M11VW129		TestNo: EPA 8021B		Analysis Date: 6/29/2011				SeqNo: 2200446	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	6.656	0.50	6.400	0	104	70	130	6.945	4.25	20	
Toluene	36.430	0.50	33.85	0	108	70	130	37.04	1.65	20	
Ethylbenzene	11.098	0.50	10.95	0	101	70	130	11.47	3.26	20	
m,p-Xylene	39.600	1.0	42.40	0	93.4	70	130	40.45	2.13	20	
o-Xylene	15.476	0.50	13.35	0	116	70	130	15.91	2.77	20	
Surr: Bromofluorobenzene (PID)	88.949		100.0		88.9	70	130		0	0	

Sample ID: M110629MB1		SampType: MBLK		TestCode: 8021_WP_BT		Units: µg/L		Prep Date:		RunNo: 134575	
Client ID: PBW		Batch ID: M11VW129		TestNo: EPA 8021B		Analysis Date: 6/29/2011				SeqNo: 2200447	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
m,p-Xylene	ND	1.0									
o-Xylene	ND	0.50									
Surr: Bromofluorobenzene (PID)	87.272		100.0		87.3	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 | |



CLIENT: Mactec
Work Order: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

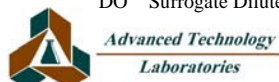
Sample ID: K110627LCS2		SampType: LCS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466	
Client ID: LCSS		Batch ID: K11VS180		TestNo: EPA 8260B		Analysis Date: 6/27/2011				SeqNo: 2198426	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	48.260	5.0	50.00	0	96.5	70	130				
Benzene	105.010	5.0	100.0	0	105	70	130				
Chlorobenzene	54.670	5.0	50.00	0	109	70	130				
MTBE	54.440	5.0	50.00	0	109	70	130				
Toluene	108.490	5.0	100.0	0	108	70	130				
Trichloroethene	51.610	5.0	50.00	0	103	70	130				
Surr: 1,2-Dichloroethane-d4	46.850		50.00		93.7	65	141				
Surr: 4-Bromofluorobenzene	46.920		50.00		93.8	57	134				
Surr: Dibromofluoromethane	45.450		50.00		90.9	70	128				
Surr: Toluene-d8	48.250		50.00		96.5	72	123				

Sample ID: 118639-001AMS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466	
Client ID: ZZZZZ		Batch ID: K11VS180		TestNo: EPA 8260B		Analysis Date: 6/27/2011				SeqNo: 2198427	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	45.550	5.0	50.00	0	91.1	70	130				
Benzene	98.910	5.0	100.0	0	98.9	70	130				
Chlorobenzene	52.100	5.0	50.00	0	104	70	130				
MTBE	49.320	5.0	50.00	0	98.6	70	130				
Toluene	101.360	5.0	100.0	0	101	70	130				
Trichloroethene	48.990	5.0	50.00	0	98.0	70	130				
Surr: 1,2-Dichloroethane-d4	43.660		50.00		87.3	65	141				
Surr: 4-Bromofluorobenzene	45.880		50.00		91.8	57	134				
Surr: Dibromofluoromethane	44.400		50.00		88.8	70	128				
Surr: Toluene-d8	46.060		50.00		92.1	72	123				

Sample ID: 118639-001AMSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466	
Client ID: ZZZZZ		Batch ID: K11VS180		TestNo: EPA 8260B		Analysis Date: 6/27/2011				SeqNo: 2198428	
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: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

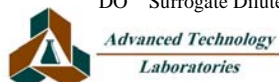
Sample ID: 118639-001AMSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466	
Client ID: ZZZZZ		Batch ID: K11VS180		TestNo: EPA 8260B		Analysis Date: 6/27/2011				SeqNo: 2198428	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	45.780	5.0	50.00	0	91.6	70	130	45.55	0.504	20	
Benzene	99.710	5.0	100.0	0	99.7	70	130	98.91	0.806	20	
Chlorobenzene	51.380	5.0	50.00	0	103	70	130	52.10	1.39	20	
MTBE	50.020	5.0	50.00	0	100	70	130	49.32	1.41	20	
Toluene	102.620	5.0	100.0	0	103	70	130	101.4	1.24	20	
Trichloroethene	50.480	5.0	50.00	0	101	70	130	48.99	3.00	20	
Surr: 1,2-Dichloroethane-d4	42.330		50.00		84.7	65	141		0	0	
Surr: 4-Bromofluorobenzene	46.670		50.00		93.3	57	134		0	0	
Surr: Dibromofluoromethane	44.220		50.00		88.4	70	128		0	0	
Surr: Toluene-d8	45.590		50.00		91.2	72	123		0	0	

Sample ID: K110627MB4MS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466	
Client ID: ZZZZZ		Batch ID: K11VS180		TestNo: EPA 8260B		Analysis Date: 6/27/2011				SeqNo: 2198429	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	40.370	5.0	50.00	0	80.7	70	130				
Benzene	83.190	5.0	100.0	0	83.2	70	130				
Chlorobenzene	40.750	5.0	50.00	0	81.5	70	130				
MTBE	41.650	5.0	50.00	0	83.3	70	130				
Toluene	83.950	5.0	100.0	0	84.0	70	130				
Trichloroethene	41.570	5.0	50.00	0	83.1	70	130				
Surr: 1,2-Dichloroethane-d4	43.760		50.00		87.5	65	141				
Surr: 4-Bromofluorobenzene	45.600		50.00		91.2	57	134				
Surr: Dibromofluoromethane	44.050		50.00		88.1	70	128				
Surr: Toluene-d8	43.840		50.00		87.7	72	123				

Sample ID: K110627MB4MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466	
Client ID: ZZZZZ		Batch ID: K11VS180		TestNo: EPA 8260B		Analysis Date: 6/27/2011				SeqNo: 2198430	
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: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

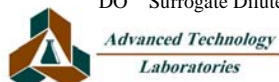
TestCode: 8260_S_5035

Sample ID: K110627MB4MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466	
Client ID: ZZZZZZ		Batch ID: K11VS180		TestNo: EPA 8260B		Analysis Date: 6/27/2011				SeqNo: 2198430	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	40.210	5.0	50.00	0	80.4	70	130	40.37	0.397	20	
Benzene	84.010	5.0	100.0	0	84.0	70	130	83.19	0.981	20	
Chlorobenzene	41.900	5.0	50.00	0	83.8	70	130	40.75	2.78	20	
MTBE	41.930	5.0	50.00	0	83.9	70	130	41.65	0.670	20	
Toluene	85.360	5.0	100.0	0	85.4	70	130	83.95	1.67	20	
Trichloroethene	40.850	5.0	50.00	0	81.7	70	130	41.57	1.75	20	
Surr: 1,2-Dichloroethane-d4	45.120		50.00		90.2	65	141		0	0	
Surr: 4-Bromofluorobenzene	49.640		50.00		99.3	57	134		0	0	
Surr: Dibromofluoromethane	46.620		50.00		93.2	70	128		0	0	
Surr: Toluene-d8	47.110		50.00		94.2	72	123		0	0	

Sample ID: K110627MB4		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466	
Client ID: PBS		Batch ID: K11VS180		TestNo: EPA 8260B		Analysis Date: 6/27/2011				SeqNo: 2198431	
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: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110627MB4	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 134466						
Client ID: PBS	Batch ID: K11VS180	TestNo: EPA 8260B		Analysis Date: 6/27/2011	SeqNo: 2198431						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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:

- | | | |
|---|--|--|
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| 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: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110627MB4	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 134466						
Client ID: PBS	Batch ID: K11VS180	TestNo: EPA 8260B	Analysis Date: 6/27/2011	SeqNo: 2198431							
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	45.270		50.00		90.5	65	141				
Surr: 4-Bromofluorobenzene	44.110		50.00		88.2	57	134				
Surr: Dibromofluoromethane	44.680		50.00		89.4	70	128				
Surr: Toluene-d8	44.550		50.00		89.1	72	123				

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
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| 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: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

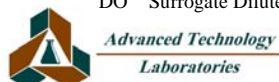
Sample ID: A110628LCS1		SampType: LCS		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 134538		
Client ID: LCSW		Batch ID: A11VW109		TestNo: EPA 8260B		Analysis Date: 6/28/2011		SeqNo: 2199743				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	18.040	0.50	20.00	0	90.2	70	130					
Benzene	37.990	0.50	40.00	0	95.0	70	130					
Chlorobenzene	20.000	0.50	20.00	0	100	70	130					
MTBE	20.470	0.50	20.00	0	102	70	130					
Toluene	38.870	0.50	40.00	0	97.2	70	130					
Trichloroethene	19.490	0.50	20.00	0	97.5	70	130					
Surr: 1,2-Dichloroethane-d4	23.860		25.00		95.4	70	130					
Surr: 4-Bromofluorobenzene	24.290		25.00		97.2	70	130					
Surr: Dibromofluoromethane	25.530		25.00		102	70	130					
Surr: Toluene-d8	25.730		25.00		103	70	130					

Sample ID: A110628MB2MS		SampType: MS		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 134538		
Client ID: ZZZZZ		Batch ID: A11VW109		TestNo: EPA 8260B		Analysis Date: 6/28/2011		SeqNo: 2199744				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	18.070	0.50	20.00	0	90.4	70	130					
Benzene	38.400	0.50	40.00	0	96.0	70	130					
Chlorobenzene	20.470	0.50	20.00	0	102	70	130					
MTBE	20.690	0.50	20.00	0	103	70	130					
Toluene	39.500	0.50	40.00	0	98.8	70	130					
Trichloroethene	19.680	0.50	20.00	0	98.4	70	130					
Surr: 1,2-Dichloroethane-d4	23.460		25.00		93.8	70	130					
Surr: 4-Bromofluorobenzene	24.210		25.00		96.8	70	130					
Surr: Dibromofluoromethane	25.100		25.00		100	70	130					
Surr: Toluene-d8	25.450		25.00		102	70	130					

Sample ID: A110628MB2MSD		SampType: MSD		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 134538		
Client ID: ZZZZZ		Batch ID: A11VW109		TestNo: EPA 8260B		Analysis Date: 6/28/2011		SeqNo: 2199745				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Qualifiers:

- | | | |
|---|--|--|
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| 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: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

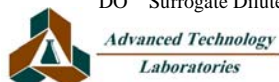
TestCode: 8260_WP_LL

Sample ID: A110628MB2MSD		SampType: MSD		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 134538	
Client ID: ZZZZZZ		Batch ID: A11VW109		TestNo: EPA 8260B		Analysis Date: 6/28/2011				SeqNo: 2199745	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.360	0.50	20.00	0	91.8	70	130	18.07	1.59	20	
Benzene	38.460	0.50	40.00	0	96.2	70	130	38.40	0.156	20	
Chlorobenzene	20.590	0.50	20.00	0	103	70	130	20.47	0.585	20	
MTBE	20.690	0.50	20.00	0	103	70	130	20.69	0	20	
Toluene	39.530	0.50	40.00	0	98.8	70	130	39.50	0.0759	20	
Trichloroethene	19.700	0.50	20.00	0	98.5	70	130	19.68	0.102	20	
Surr: 1,2-Dichloroethane-d4	23.530		25.00		94.1	70	130		0	0	
Surr: 4-Bromofluorobenzene	24.280		25.00		97.1	70	130		0	0	
Surr: Dibromofluoromethane	23.610		25.00		94.4	70	130		0	0	
Surr: Toluene-d8	25.660		25.00		103	70	130		0	0	

Sample ID: A110628MB2		SampType: MBLK		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 134538	
Client ID: PBW		Batch ID: A11VW109		TestNo: EPA 8260B		Analysis Date: 6/28/2011				SeqNo: 2199746	
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:

- | | | |
|---|--|--|
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| DO Surrogate Diluted Out | Calculations are based on raw values | |



CLIENT: Mactec
Work Order: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: A110628MB2	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 134538
Client ID: PBW	Batch ID: A11VW109	TestNo: EPA 8260B		Analysis Date: 6/28/2011	SeqNo: 2199746

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 |
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Laboratories*

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

CLIENT: Mactec
Work Order: 118647
Project: Metro Westside Extension, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: A110628MB2	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 134538						
Client ID: PBW	Batch ID: A11VW109	TestNo: EPA 8260B	Analysis Date: 6/28/2011	SeqNo: 2199746							
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	22.560		25.00		90.2	70	130				
Surr: 4-Bromofluorobenzene	23.390		25.00		93.6	70	130				
Surr: Dibromofluoromethane	25.620		25.00		102	70	130				
Surr: Toluene-d8	25.460		25.00		102	70	130				

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
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*Advanced Technology
Laboratories*

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: 6/25/11
 NOTE: Please include your Quote No. to ensure proper pricing of your project.

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

Client: MACTEC Address: 323-889-5300 State: _____ Zip Code: _____
 City: _____ State: _____ Zip: _____
 Project Name: MCTKO Westside Extension Project #: 4953101561 Sampler: [Signature]
 Relinquished by: (Signature and Printed Name) Paul Kane Received by: (Signature and Printed Name) [Signature] Date: 6/24/11 Time: 1330
 Relinquished by: (Signature and Printed Name) [Signature] Received by: (Signature and Printed Name) [Signature] Date: 6/24/11 Time: 1445
 Relinquished by: (Signature and Printed Name) [Signature] Received by: (Signature and Printed Name) [Signature] Date: 6/24/11 Time: 1521

I hereby authorize ATL to perform the work indicated below:
 Project Mgr /Submitter: Paul Kane Date: 6/23/11
 Print Name: Paul Kane Signature: [Signature]
 Send Report To: _____
 Attn: Math Freybinand
 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)

ITEM	LAB USE ONLY:		Sample Description	Date	Time
	Batch #:	Lab No.			
	<u>118647-07</u>	<u>E-104-40</u>		<u>6/23/11</u>	<u>1100</u>
	<u>2</u>	<u>E-104-50</u>		<u>1130</u>	
	<u>3</u>	<u>E-104-60</u>		<u>1200</u>	
	<u>4</u>	<u>E-104-6W</u>		<u>1245</u>	
	<u>5</u>	<u>QC TB</u>			
	<u>6</u>	<u>E-104-45</u>		<u>1115</u>	
	<u>7</u>	<u>E-104-55</u>		<u>1143</u>	

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

SPECIFY APPROPRIATE MATRIX

	Container(s)	TAT	Type	REMARKS
SEDIMENT		<input checked="" type="checkbox"/>		
SOIL		<input checked="" type="checkbox"/>		
DRINKING WATER		<input checked="" type="checkbox"/>		
GROUND WATER		<input checked="" type="checkbox"/>		
WASTEWATER				
STORMWATER				
AQUEOUS				

QA / QC

RTNE	CT	Legal	SWRCB	Logcode	OTHER	REMARKS
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

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.

Figure I-1.150

July 01, 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.: 118648

RE: Metro Westside Extension, 4953-10-1561


Attention: Matt Fraychineaud

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

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

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

Sincerely,


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, 4953-10-1561
Lab Order: 118648

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.

Sample Receiving / General Comments

Headspace <5-6mm was noted on 4 voa vials of sample E-105-GW.

Analytical Comments for EPA 8021B

Samples 118658-009AMS and 118658-009AMSD, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Sample 118658-009AMSD, RPD for Matrix Spike Duplicate (MSD) is outside criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).



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ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-105-40
Lab Order: 118648	Collection Date: 6/24/2011 10:29:00 AM
Project: Metro Westside Extension, 4953-10-1561	Matrix: SOIL
Lab ID: 118648-002A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110627A	QC Batch: K11VS180	PrepDate: 6/24/2011	Analyst: BD
1,1,1,2-Tetrachloroethane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,1,1-Trichloroethane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,1,2,2-Tetrachloroethane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,1,2-Trichloroethane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,1-Dichloroethane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,1-Dichloroethene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,1-Dichloropropene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,2,3-Trichlorobenzene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,2,3-Trichloropropane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,2,4-Trichlorobenzene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,2,4-Trimethylbenzene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,2-Dibromo-3-chloropropane	ND	11	µg/Kg 1 6/27/2011 11:06 PM
1,2-Dibromoethane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,2-Dichlorobenzene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,2-Dichloroethane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,2-Dichloropropane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,3,5-Trimethylbenzene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,3-Dichlorobenzene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,3-Dichloropropane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
1,4-Dichlorobenzene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
2,2-Dichloropropane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
2-Chlorotoluene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
4-Chlorotoluene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
4-Isopropyltoluene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
Benzene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
Bromobenzene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
Bromodichloromethane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
Bromoform	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
Bromomethane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
Carbon tetrachloride	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
Chlorobenzene	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
Chloroethane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
Chloroform	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
Chloromethane	ND	5.4	µg/Kg 1 6/27/2011 11:06 PM
cis-1,2-Dichloroethene	ND	5.4	µg/Kg 1 6/27/2011 11:06 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	



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ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-105-40
Lab Order: 118648	Collection Date: 6/24/2011 10:29:00 AM
Project: Metro Westside Extension, 4953-10-1561	Matrix: SOIL
Lab ID: 118648-002A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110627A	QC Batch: K11VS180	PrepDate: 6/24/2011	Analyst: BD		
cis-1,3-Dichloropropene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Di-isopropyl ether	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Dibromochloromethane	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Dibromomethane	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Dichlorodifluoromethane	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Ethyl Tert-butyl ether	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Ethylbenzene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Hexachlorobutadiene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Isopropylbenzene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
m,p-Xylene	ND	11	µg/Kg	1	6/27/2011 11:06 PM
Methylene chloride	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
MTBE	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
n-Butylbenzene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
n-Propylbenzene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Naphthalene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
o-Xylene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
sec-Butylbenzene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Styrene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Tert-amyl methyl ether	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Tert-Butanol	ND	110	µg/Kg	1	6/27/2011 11:06 PM
tert-Butylbenzene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Tetrachloroethene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Toluene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
trans-1,2-Dichloroethene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Trichloroethene	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Trichlorofluoromethane	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Vinyl chloride	ND	5.4	µg/Kg	1	6/27/2011 11:06 PM
Surr: 1,2-Dichloroethane-d4	98.3	65-141	%REC	1	6/27/2011 11:06 PM
Surr: 4-Bromofluorobenzene	91.8	57-134	%REC	1	6/27/2011 11:06 PM
Surr: Dibromofluoromethane	92.5	70-128	%REC	1	6/27/2011 11:06 PM
Surr: Toluene-d8	90.7	72-123	%REC	1	6/27/2011 11:06 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	



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ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-105-40
Lab Order: 118648	Collection Date: 6/24/2011 10:29:00 AM
Project: Metro Westside Extension, 4953-10-1561	Matrix: SOIL
Lab ID: 118648-002D	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110628A	QC Batch: E11VS239	PrepDate: 6/24/2011	Analyst: TP		
GRO	ND	1.2	mg/Kg	1	6/28/2011 11:56 AM
Surr: Bromofluorobenzene (FID)	139	51-161	%REC	1	6/28/2011 11:56 AM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC2_110628A	QC Batch: E11VS239	PrepDate: 6/24/2011	Analyst: TP		
Benzene	ND	6.0	µg/Kg	1	6/28/2011 11:56 AM
Ethylbenzene	ND	6.0	µg/Kg	1	6/28/2011 11:56 AM
m,p-Xylene	ND	12	µg/Kg	1	6/28/2011 11:56 AM
o-Xylene	ND	6.0	µg/Kg	1	6/28/2011 11:56 AM
Toluene	ND	6.0	µg/Kg	1	6/28/2011 11:56 AM
Surr: Bromofluorobenzene (PID)	113	33-163	%REC	1	6/28/2011 11:56 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	



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ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-105-40
Lab Order:	118648	Collection Date:	6/24/2011 10:29:00 AM
Project:	Metro Westside Extension, 4953-10-1561	Matrix:	SOIL
Lab ID:	118648-002G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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DIESEL RANGE ORGANICS BY GC/FID

	LUFT	EPA 8015B(M)				
RunID: GC16_110628B	QC Batch: 73941	PrepDate:	6/28/2011	Analyst:	CBR	
DRO	ND	10	mg/Kg	1	6/28/2011 05:09 PM	
Surr: p-Terphenyl	102	63-152	%REC	1	6/28/2011 05:09 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		



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ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-105-60
Lab Order: 118648	Collection Date: 6/24/2011 10:54:00 AM
Project: Metro Westside Extension, 4953-10-1561	Matrix: SOIL
Lab ID: 118648-004A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110627A	QC Batch: K11VS180	PrepDate: 6/24/2011	Analyst: BD
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Compound	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,1,1-Trichloroethane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,1,2-Trichloroethane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,1-Dichloroethane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,1-Dichloroethene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,1-Dichloropropene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,2,3-Trichloropropane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,2,4-Trimethylbenzene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/Kg	1	6/27/2011 11:23 PM
1,2-Dibromoethane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,2-Dichlorobenzene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,2-Dichloroethane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,2-Dichloropropane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,3-Dichlorobenzene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,3-Dichloropropane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
1,4-Dichlorobenzene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
2,2-Dichloropropane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
2-Chlorotoluene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
4-Chlorotoluene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
4-Isopropyltoluene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
Benzene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
Bromobenzene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
Bromodichloromethane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
Bromoform	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
Bromomethane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
Carbon tetrachloride	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
Chlorobenzene	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
Chloroethane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
Chloroform	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
Chloromethane	ND	5.0		µg/Kg	1	6/27/2011 11:23 PM
cis-1,2-Dichloroethene	ND	5.0		µg/Kg	1	6/27/2011 11:23 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	



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ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-105-60
Lab Order:	118648	Collection Date:	6/24/2011 10:54:00 AM
Project:	Metro Westside Extension, 4953-10-1561	Matrix:	SOIL
Lab ID:	118648-004A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110627A	QC Batch: K11VS180	PrepDate: 6/24/2011	Analyst: BD		
cis-1,3-Dichloropropene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Di-isopropyl ether	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Dibromochloromethane	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Dibromomethane	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Dichlorodifluoromethane	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Ethyl Tert-butyl ether	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Ethylbenzene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Hexachlorobutadiene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Isopropylbenzene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
m,p-Xylene	ND	10	µg/Kg	1	6/27/2011 11:23 PM
Methylene chloride	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
MTBE	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
n-Butylbenzene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
n-Propylbenzene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Naphthalene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
o-Xylene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
sec-Butylbenzene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Styrene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Tert-amyl methyl ether	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Tert-Butanol	ND	100	µg/Kg	1	6/27/2011 11:23 PM
tert-Butylbenzene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Tetrachloroethene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Toluene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
trans-1,2-Dichloroethene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Trichloroethene	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Trichlorofluoromethane	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Vinyl chloride	ND	5.0	µg/Kg	1	6/27/2011 11:23 PM
Surr: 1,2-Dichloroethane-d4	102	65-141	%REC	1	6/27/2011 11:23 PM
Surr: 4-Bromofluorobenzene	90.6	57-134	%REC	1	6/27/2011 11:23 PM
Surr: Dibromofluoromethane	93.9	70-128	%REC	1	6/27/2011 11:23 PM
Surr: Toluene-d8	90.7	72-123	%REC	1	6/27/2011 11:23 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	



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ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-105-60
Lab Order:	118648	Collection Date:	6/24/2011 10:54:00 AM
Project:	Metro Westside Extension, 4953-10-1561	Matrix:	SOIL
Lab ID:	118648-004D		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110628A	QC Batch: E11VS239	PrepDate: 6/24/2011	Analyst: TP		
GRO	ND	0.83	mg/Kg	1	6/28/2011 12:12 PM
Surr: Bromofluorobenzene (FID)	142	51-161	%REC	1	6/28/2011 12:12 PM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC2_110628A	QC Batch: E11VS239	PrepDate: 6/24/2011	Analyst: TP		
Benzene	ND	4.1	µg/Kg	1	6/28/2011 12:12 PM
Ethylbenzene	ND	4.1	µg/Kg	1	6/28/2011 12:12 PM
m,p-Xylene	ND	8.3	µg/Kg	1	6/28/2011 12:12 PM
o-Xylene	ND	4.1	µg/Kg	1	6/28/2011 12:12 PM
Toluene	ND	4.1	µg/Kg	1	6/28/2011 12:12 PM
Surr: Bromofluorobenzene (PID)	115	33-163	%REC	1	6/28/2011 12:12 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	



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ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-105-60
Lab Order:	118648	Collection Date:	6/24/2011 10:54:00 AM
Project:	Metro Westside Extension, 4953-10-1561	Matrix:	SOIL
Lab ID:	118648-004G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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DIESEL RANGE ORGANICS BY GC/FID

LUFT

EPA 8015B(M)

RunID: GC16_110628B	QC Batch: 73941	PrepDate: 6/28/2011	Analyst: CBR		
DRO	ND	10	mg/Kg	1	6/28/2011 05:19 PM
Surr: p-Terphenyl	100	63-152	%REC	1	6/28/2011 05:19 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		



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ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-105-65
Lab Order: 118648	Collection Date: 6/24/2011 11:11:00 AM
Project: Metro Westside Extension, 4953-10-1561	Matrix: SOIL
Lab ID: 118648-005A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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ICP METALS

EPA 3050B

EPA 6010B

RunID: ICP8_110629A	QC Batch: 73935			PrepDate: 6/28/2011	Analyst: IL	
Antimony	ND	2.0		mg/Kg	1	6/29/2011 10:57 AM
Arsenic	2.7	1.0		mg/Kg	1	6/29/2011 10:57 AM
Barium	19	1.0		mg/Kg	1	6/29/2011 10:57 AM
Beryllium	ND	1.0		mg/Kg	1	6/29/2011 10:57 AM
Cadmium	ND	1.0		mg/Kg	1	6/29/2011 10:57 AM
Chromium	16	1.0		mg/Kg	1	6/29/2011 10:57 AM
Cobalt	4.6	1.0		mg/Kg	1	6/29/2011 10:57 AM
Copper	6.5	2.0		mg/Kg	1	6/29/2011 10:57 AM
Lead	1.7	1.0		mg/Kg	1	6/29/2011 10:57 AM
Molybdenum	1.9	1.0		mg/Kg	1	6/29/2011 10:57 AM
Nickel	15	1.0		mg/Kg	1	6/29/2011 10:57 AM
Selenium	ND	1.0		mg/Kg	1	6/29/2011 10:57 AM
Silver	ND	1.0		mg/Kg	1	6/29/2011 10:57 AM
Thallium	ND	1.0		mg/Kg	1	6/29/2011 10:57 AM
Vanadium	15	1.0		mg/Kg	1	6/29/2011 10:57 AM
Zinc	19	1.0		mg/Kg	1	6/29/2011 10:57 AM

MERCURY BY COLD VAPOR TECHNIQUE

EPA 7471A

RunID: AA1_110629A	QC Batch: 73932			PrepDate: 6/28/2011	Analyst: VV	
Mercury	ND	0.10		mg/Kg	1	6/29/2011 11:25 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	



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ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-105-70
Lab Order: 118648	Collection Date: 6/24/2011 11:28:00 AM
Project: Metro Westside Extension, 4953-10-1561	Matrix: SOIL
Lab ID: 118648-006A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110627A	QC Batch: K11VS180	PrepDate: 6/24/2011	Analyst: BD
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1,1,1,2-Tetrachloroethane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,1,1-Trichloroethane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,1,2,2-Tetrachloroethane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,1,2-Trichloroethane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,1-Dichloroethane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,1-Dichloroethene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,1-Dichloropropene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,2,3-Trichlorobenzene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,2,3-Trichloropropane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,2,4-Trichlorobenzene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,2,4-Trimethylbenzene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,2-Dibromo-3-chloropropane	ND	7.5		µg/Kg	1	6/27/2011 11:41 PM
1,2-Dibromoethane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,2-Dichlorobenzene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,2-Dichloroethane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,2-Dichloropropane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,3,5-Trimethylbenzene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,3-Dichlorobenzene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,3-Dichloropropane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
1,4-Dichlorobenzene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
2,2-Dichloropropane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
2-Chlorotoluene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
4-Chlorotoluene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
4-Isopropyltoluene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
Benzene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
Bromobenzene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
Bromodichloromethane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
Bromoform	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
Bromomethane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
Carbon tetrachloride	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
Chlorobenzene	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
Chloroethane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
Chloroform	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
Chloromethane	ND	3.8		µg/Kg	1	6/27/2011 11:41 PM
cis-1,2-Dichloroethene	ND	3.8		µg/Kg	1	6/27/2011 11:41 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	



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ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-105-70
Lab Order: 118648	Collection Date: 6/24/2011 11:28:00 AM
Project: Metro Westside Extension, 4953-10-1561	Matrix: SOIL
Lab ID: 118648-006A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110627A	QC Batch: K11VS180	PrepDate: 6/24/2011	Analyst: BD		
cis-1,3-Dichloropropene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Di-isopropyl ether	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Dibromochloromethane	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Dibromomethane	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Dichlorodifluoromethane	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Ethyl Tert-butyl ether	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Ethylbenzene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Hexachlorobutadiene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Isopropylbenzene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
m,p-Xylene	ND	7.5	µg/Kg	1	6/27/2011 11:41 PM
Methylene chloride	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
MTBE	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
n-Butylbenzene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
n-Propylbenzene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Naphthalene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
o-Xylene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
sec-Butylbenzene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Styrene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Tert-amyl methyl ether	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Tert-Butanol	ND	75	µg/Kg	1	6/27/2011 11:41 PM
tert-Butylbenzene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Tetrachloroethene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Toluene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
trans-1,2-Dichloroethene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Trichloroethene	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Trichlorofluoromethane	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Vinyl chloride	ND	3.8	µg/Kg	1	6/27/2011 11:41 PM
Surr: 1,2-Dichloroethane-d4	101	65-141	%REC	1	6/27/2011 11:41 PM
Surr: 4-Bromofluorobenzene	92.8	57-134	%REC	1	6/27/2011 11:41 PM
Surr: Dibromofluoromethane	98.0	70-128	%REC	1	6/27/2011 11:41 PM
Surr: Toluene-d8	96.8	72-123	%REC	1	6/27/2011 11:41 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	



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ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-105-70
Lab Order: 118648	Collection Date: 6/24/2011 11:28:00 AM
Project: Metro Westside Extension, 4953-10-1561	Matrix: SOIL
Lab ID: 118648-006D	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110628A	QC Batch: E11VS239	PrepDate: 6/24/2011	Analyst: TP		
GRO	ND	0.86	mg/Kg	1	6/28/2011 01:15 PM
Surr: Bromofluorobenzene (FID)	112	51-161	%REC	1	6/28/2011 01:15 PM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC2_110628A	QC Batch: E11VS239	PrepDate: 6/24/2011	Analyst: TP		
Benzene	ND	4.3	µg/Kg	1	6/28/2011 01:15 PM
Ethylbenzene	ND	4.3	µg/Kg	1	6/28/2011 01:15 PM
m,p-Xylene	ND	8.6	µg/Kg	1	6/28/2011 01:15 PM
o-Xylene	ND	4.3	µg/Kg	1	6/28/2011 01:15 PM
Toluene	ND	4.3	µg/Kg	1	6/28/2011 01:15 PM
Surr: Bromofluorobenzene (PID)	90.4	33-163	%REC	1	6/28/2011 01:15 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	



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ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-105-70
Lab Order:	118648	Collection Date:	6/24/2011 11:28:00 AM
Project:	Metro Westside Extension, 4953-10-1561	Matrix:	SOIL
Lab ID:	118648-006G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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DIESEL RANGE ORGANICS BY GC/FID

LUFT

EPA 8015B(M)

RunID: GC16_110628B	QC Batch: 73941	PrepDate: 6/28/2011	Analyst: CBR		
DRO	ND	10	mg/Kg	1	6/28/2011 05:29 PM
Surr: p-Terphenyl	94.0	63-152	%REC	1	6/28/2011 05:29 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	



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ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-105-GW
Lab Order: 118648	Collection Date: 6/24/2011 12:30:00 PM
Project: Metro Westside Extension, 4953-10-1561	Matrix: GROUNDWATER
Lab ID: 118648-007A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_110628A	QC Batch: A11VW109	PrepDate:	Analyst: SLL		
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,1,1-Trichloroethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,1,2-Trichloroethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,1-Dichloroethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,1-Dichloroethene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,1-Dichloropropene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,2,3-Trichlorobenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,2,3-Trichloropropane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,2-Dibromo-3-chloropropane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,2-Dibromoethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,2-Dichlorobenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,2-Dichloroethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,2-Dichloropropane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,3-Dichlorobenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,3-Dichloropropane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
1,4-Dichlorobenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
2,2-Dichloropropane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
2-Chlorotoluene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
4-Chlorotoluene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
4-Isopropyltoluene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Benzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Bromobenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Bromodichloromethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Bromoform	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Bromomethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Carbon tetrachloride	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Chlorobenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Chloroethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Chloroform	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Chloromethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
cis-1,2-Dichloroethene	ND	0.50	µg/L	1	6/28/2011 03:26 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	



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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-105-GW
Lab Order: 118648	Collection Date: 6/24/2011 12:30:00 PM
Project: Metro Westside Extension, 4953-10-1561	Matrix: GROUNDWATER
Lab ID: 118648-007A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_110628A	QC Batch: A11VW109	PrepDate:	Analyst: SLL		
cis-1,3-Dichloropropene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Di-isopropyl ether	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Dibromochloromethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Dibromomethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Dichlorodifluoromethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Ethyl tert-butyl ether	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Ethylbenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Hexachlorobutadiene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Isopropylbenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
m,p-Xylene	ND	1.0	µg/L	1	6/28/2011 03:26 PM
Methylene chloride	ND	1.0	µg/L	1	6/28/2011 03:26 PM
MTBE	ND	0.50	µg/L	1	6/28/2011 03:26 PM
n-Butylbenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
n-Propylbenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Naphthalene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
o-Xylene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
sec-Butylbenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Styrene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Tert-amyl methyl ether	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Tert-Butanol	ND	10	µg/L	1	6/28/2011 03:26 PM
tert-Butylbenzene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Tetrachloroethene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Toluene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
trans-1,2-Dichloroethene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Trichloroethene	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Trichlorofluoromethane	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Vinyl chloride	ND	0.50	µg/L	1	6/28/2011 03:26 PM
Surr: 1,2-Dichloroethane-d4	92.2	70-130	%REC	1	6/28/2011 03:26 PM
Surr: 4-Bromofluorobenzene	94.1	70-130	%REC	1	6/28/2011 03:26 PM
Surr: Dibromofluoromethane	95.8	70-130	%REC	1	6/28/2011 03:26 PM
Surr: Toluene-d8	103	70-130	%REC	1	6/28/2011 03:26 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	



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Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-105-GW
Lab Order: 118648	Collection Date: 6/24/2011 12:30:00 PM
Project: Metro Westside Extension, 4953-10-1561	Matrix: GROUNDWATER
Lab ID: 118648-007B	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC19_110630A	QC Batch: M11VW130	PrepDate:	Analyst: TP		
GRO	ND	0.20	mg/L	1	6/30/2011 02:11 PM
Surr: Bromofluorobenzene (FID)	97.0	70-130	%REC	1	6/30/2011 02:11 PM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC19_110630A	QC Batch: M11VW130	PrepDate:	Analyst: TP		
Benzene	ND	0.50	µg/L	1	6/30/2011 02:11 PM
Ethylbenzene	ND	0.50	µg/L	1	6/30/2011 02:11 PM
m,p-Xylene	ND	1.0	µg/L	1	6/30/2011 02:11 PM
o-Xylene	ND	0.50	µg/L	1	6/30/2011 02:11 PM
Toluene	ND	0.50	µg/L	1	6/30/2011 02:11 PM
Surr: Bromofluorobenzene (PID)	89.1	70-130	%REC	1	6/30/2011 02:11 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	



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Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 01-Jul-11

CLIENT: Mactec	Client Sample ID: E-105-GW
Lab Order: 118648	Collection Date: 6/24/2011 12:30:00 PM
Project: Metro Westside Extension, 4953-10-1561	Matrix: GROUNDWATER
Lab ID: 118648-007C	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS BY GC/FID						
	EPA 3510C		EPA 8015B(M)			
RunID: GC16_110628A	QC Batch: 73912				PrepDate: 6/27/2011	Analyst: CBR
DRO	ND	0.20		mg/L	1	6/28/2011 10:45 AM
Surr: p-Terphenyl	79.4	36-126		%REC	1	6/28/2011 10:45 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		



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CLIENT: Mactec
Work Order: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

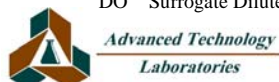
TestCode: 6010_S

Sample ID: MB-73935	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134499						
Client ID: PBS	Batch ID: 73935	TestNo: EPA 6010B EPA 3050B		Analysis Date: 6/29/2011	SeqNo: 2199100						
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	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	0.212	1.0									

Sample ID: LCS-73935	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134499						
Client ID: LCSS	Batch ID: 73935	TestNo: EPA 6010B EPA 3050B		Analysis Date: 6/29/2011	SeqNo: 2199101						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.163	2.0	50.00	0	94.3	80	120				
Arsenic	47.469	1.0	50.00	0	94.9	80	120				
Barium	48.281	1.0	50.00	0	96.6	80	120				
Beryllium	47.321	1.0	50.00	0	94.6	80	120				
Cadmium	46.939	1.0	50.00	0	93.9	80	120				
Chromium	44.770	1.0	50.00	0	89.5	80	120				
Cobalt	48.562	1.0	50.00	0	97.1	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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

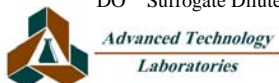
TestCode: 6010_S

Sample ID: LCS-73935		SampType: LCS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 6/28/2011		RunNo: 134499	
Client ID: LCSS		Batch ID: 73935		TestNo: EPA 6010B EPA 3050B		Analysis Date: 6/29/2011				SeqNo: 2199101	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	48.530	2.0	50.00	0	97.1	80	120				
Lead	47.797	1.0	50.00	0	95.6	80	120				
Molybdenum	49.718	1.0	50.00	0	99.4	80	120				
Nickel	47.117	1.0	50.00	0	94.2	80	120				
Selenium	44.660	1.0	50.00	0	89.3	80	120				
Silver	47.861	1.0	50.00	0	95.7	80	120				
Thallium	45.663	1.0	50.00	0	91.3	80	120				
Vanadium	48.861	1.0	50.00	0	97.7	80	120				
Zinc	47.972	1.0	50.00	0.2116	95.5	80	120				

Sample ID: 118606-005A-MS		SampType: MS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 6/28/2011		RunNo: 134499	
Client ID: ZZZZZZ		Batch ID: 73935		TestNo: EPA 6010B EPA 3050B		Analysis Date: 6/29/2011				SeqNo: 2199103	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	85.126	2.0	125.0	0.9440	67.3	32	105				
Arsenic	105.631	1.0	125.0	1.583	83.2	49	106				
Barium	225.784	1.0	125.0	127.2	78.9	31	133				
Beryllium	104.889	1.0	125.0	0	83.9	56	106				
Cadmium	100.148	1.0	125.0	0.6001	79.6	51	103				
Chromium	133.015	1.0	125.0	37.03	76.8	45	114				
Cobalt	110.853	1.0	125.0	10.46	80.3	52	106				
Copper	129.634	2.0	125.0	18.50	88.9	54	125				
Lead	106.275	1.0	125.0	6.342	79.9	34	126				
Molybdenum	105.169	1.0	125.0	0	84.1	54	106				
Nickel	148.852	1.0	125.0	73.93	59.9	45	111				
Selenium	99.770	1.0	125.0	0	79.8	47	104				
Silver	109.012	1.0	125.0	0	87.2	56	112				
Thallium	94.677	1.0	125.0	0	75.7	46	101				
Vanadium	135.921	1.0	125.0	30.15	84.6	54	114				
Zinc	136.681	1.0	125.0	35.91	80.6	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: 118648
Project: Metro Westside Extension, 4953-10-1561

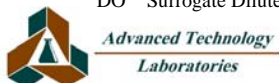
ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: 118606-005A-MSD		SampType: MSD		TestCode: 6010_S		Units: mg/Kg		Prep Date: 6/28/2011		RunNo: 134499	
Client ID: ZZZZZZ		Batch ID: 73935		TestNo: EPA 6010B EPA 3050B		Analysis Date: 6/29/2011		SeqNo: 2199104			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	82.156	2.0	125.0	0.9440	65.0	32	105	85.13	3.55	20	
Arsenic	104.421	1.0	125.0	1.583	82.3	49	106	105.6	1.15	20	
Barium	253.610	1.0	125.0	127.2	101	31	133	225.8	11.6	20	
Beryllium	105.409	1.0	125.0	0	84.3	56	106	104.9	0.495	20	
Cadmium	100.020	1.0	125.0	0.6001	79.5	51	103	100.1	0.127	20	
Chromium	137.258	1.0	125.0	37.03	80.2	45	114	133.0	3.14	20	
Cobalt	111.469	1.0	125.0	10.46	80.8	52	106	110.9	0.554	20	
Copper	131.544	2.0	125.0	18.50	90.4	54	125	129.6	1.46	20	
Lead	105.108	1.0	125.0	6.342	79.0	34	126	106.3	1.10	20	
Molybdenum	103.785	1.0	125.0	0	83.0	54	106	105.2	1.32	20	
Nickel	153.487	1.0	125.0	73.93	63.6	45	111	148.9	3.07	20	
Selenium	97.866	1.0	125.0	0	78.3	47	104	99.77	1.93	20	
Silver	109.474	1.0	125.0	0	87.6	56	112	109.0	0.423	20	
Thallium	94.136	1.0	125.0	0	75.3	46	101	94.68	0.573	20	
Vanadium	137.507	1.0	125.0	30.15	85.9	54	114	135.9	1.16	20	
Zinc	137.550	1.0	125.0	35.91	81.3	28	125	136.7	0.634	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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: MB-73932	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134510						
Client ID: PBS	Batch ID: 73932	TestNo: EPA 7471A		Analysis Date: 6/29/2011	SeqNo: 2199223						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	ND	0.10									
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Sample ID: LCS-73932	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134510						
Client ID: LCSS	Batch ID: 73932	TestNo: EPA 7471A		Analysis Date: 6/29/2011	SeqNo: 2199224						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.796	0.10	0.8300	0	95.9	80	120				
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Sample ID: 118606-005A-MS	SampType: MS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134510						
Client ID: ZZZZZ	Batch ID: 73932	TestNo: EPA 7471A		Analysis Date: 6/29/2011	SeqNo: 2199225						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

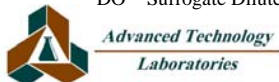
Mercury	0.891	0.10	0.8300	0.05640	101	70	130				
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Sample ID: 118606-005A-MSD	SampType: MSD	TestCode: 7471_S	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134510						
Client ID: ZZZZZ	Batch ID: 73932	TestNo: EPA 7471A		Analysis Date: 6/29/2011	SeqNo: 2199226						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.857	0.10	0.8300	0.05640	96.5	70	130	0.8910	3.89	20	
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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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DSL H

Sample ID: MB-73941	SampType: MBLK	TestCode: 8015_S_DSL	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134496						
Client ID: PBS	Batch ID: 73941	TestNo: EPA 8015B(M LUFT		Analysis Date: 6/28/2011	SeqNo: 2198952						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	ND	10									
Surr: p-Terphenyl	101.280		80.00		127	63	152				

Sample ID: LCS-73941	SampType: LCS	TestCode: 8015_S_DSL	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134496						
Client ID: LCSS	Batch ID: 73941	TestNo: EPA 8015B(M LUFT		Analysis Date: 6/28/2011	SeqNo: 2198953						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	1077.800	10	1000	0	108	76	139				
Surr: p-Terphenyl	100.940		80.00		126	63	152				

Sample ID: 118666-002AMS	SampType: MS	TestCode: 8015_S_DSL	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134496						
Client ID: ZZZZZZ	Batch ID: 73941	TestNo: EPA 8015B(M LUFT		Analysis Date: 6/28/2011	SeqNo: 2198954						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

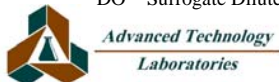
DRO	1344.440	10	1000	291.7	105	60	158				
Surr: p-Terphenyl	83.500		80.00		104	63	152				

Sample ID: 118666-002AMSD	SampType: MSD	TestCode: 8015_S_DSL	Units: mg/Kg	Prep Date: 6/28/2011	RunNo: 134496						
Client ID: ZZZZZZ	Batch ID: 73941	TestNo: EPA 8015B(M LUFT		Analysis Date: 6/28/2011	SeqNo: 2198955						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	1429.670	10	1000	291.7	114	60	158	1344	6.14	20	
Surr: p-Terphenyl	98.830		80.00		124	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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

Sample ID: E110628LC1	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 134491						
Client ID: LCSS	Batch ID: E11VS239	TestNo: EPA 8015B(M)	Analysis Date: 6/28/2011	SeqNo: 2198994							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.302	1.0	5.000	0	106	70	130				
Surr: Bromofluorobenzene (FID)	121.052		100.0		121	51	161				

Sample ID: E110628MB1MS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 134491						
Client ID: ZZZZZ	Batch ID: E11VS239	TestNo: EPA 8015B(M)	Analysis Date: 6/28/2011	SeqNo: 2198995							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.224	1.0	5.000	0	104	41	146				
Surr: Bromofluorobenzene (FID)	119.011		100.0		119	51	161				

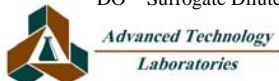
Sample ID: E110628MB1MSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 134491						
Client ID: ZZZZZ	Batch ID: E11VS239	TestNo: EPA 8015B(M)	Analysis Date: 6/28/2011	SeqNo: 2198996							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.292	1.0	5.000	0	106	41	146	5.224	1.29	20	
Surr: Bromofluorobenzene (FID)	118.146		100.0		118	51	161		0	0	

Sample ID: E110628MB1	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 134491						
Client ID: PBS	Batch ID: E11VS239	TestNo: EPA 8015B(M)	Analysis Date: 6/28/2011	SeqNo: 2198997							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	101.699		100.0		102	51	161				

Sample ID: 118658-009AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 134491						
Client ID: ZZZZZ	Batch ID: E11VS239	TestNo: EPA 8015B(M)	Analysis Date: 6/28/2011	SeqNo: 2199010							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.005	1.0	5.000	0	80.1	41	146				

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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

Sample ID: 118658-009AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 134491						
Client ID: ZZZZZZ	Batch ID: E11VS239	TestNo: EPA 8015B(M)	Analysis Date: 6/28/2011	SeqNo: 2199010							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

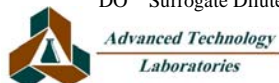
Surr: Bromofluorobenzene (FID)	129.992		100.0		130	51	161				
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Sample ID: 118658-009AMSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 134491						
Client ID: ZZZZZZ	Batch ID: E11VS239	TestNo: EPA 8015B(M)	Analysis Date: 6/28/2011	SeqNo: 2199011							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	4.839	1.0	5.000	0	96.8	41	146	4.005	18.9	20	
Surr: Bromofluorobenzene (FID)	129.251		100.0		129	51	161		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 | |



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CLIENT: Mactec
Work Order: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_DSL H

Sample ID: MB-73912	SampType: MBLK	TestCode: 8015_W_DSL	Units: mg/L	Prep Date: 6/27/2011	RunNo: 134463						
Client ID: PBW	Batch ID: 73912	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 6/28/2011	SeqNo: 2198409						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	ND	0.20									
Surr: p-Terphenyl	0.050		0.08000		62.4	36	126				

Sample ID: LCS-73912	SampType: LCS	TestCode: 8015_W_DSL	Units: mg/L	Prep Date: 6/27/2011	RunNo: 134463						
Client ID: LCSW	Batch ID: 73912	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 6/28/2011	SeqNo: 2198410						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	0.630	0.20	1.000	0	63.0	52	128				
Surr: p-Terphenyl	0.063		0.08000		79.2	36	126				

Sample ID: MB-73912MS	SampType: MS	TestCode: 8015_W_DSL	Units: mg/L	Prep Date: 6/27/2011	RunNo: 134463						
Client ID: ZZZZZZ	Batch ID: 73912	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 6/28/2011	SeqNo: 2198411						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

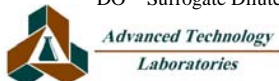
DRO	0.663	0.20	1.000	0	66.3	52	128				
Surr: p-Terphenyl	0.060		0.08000		75.4	36	126				

Sample ID: MB-73912MSD	SampType: MSD	TestCode: 8015_W_DSL	Units: mg/L	Prep Date: 6/27/2011	RunNo: 134463						
Client ID: ZZZZZZ	Batch ID: 73912	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 6/28/2011	SeqNo: 2198412						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	0.693	0.20	1.000	0	69.3	52	128	0.6628	4.50	20	
Surr: p-Terphenyl	0.064		0.08000		79.7	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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_G PRES

Sample ID: M110630LC1		SampType: LCS		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 134577		
Client ID: LCSW		Batch ID: M11VW130		TestNo: EPA 8015B(M)		Analysis Date: 6/30/2011		SeqNo: 2200562				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	0.902	0.20	1.000	0	90.2	70	130					
Surr: Bromofluorobenzene (FID)	98.071		100.0		98.1	70	130					

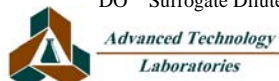
Sample ID: M110630MB1MS		SampType: MS		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 134577		
Client ID: ZZZZZ		Batch ID: M11VW130		TestNo: EPA 8015B(M)		Analysis Date: 6/30/2011		SeqNo: 2200565				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	0.886	0.20	1.000	0	88.6	70	130					
Surr: Bromofluorobenzene (FID)	97.429		100.0		97.4	70	130					

Sample ID: M110630MB1MSD		SampType: MSD		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 134577		
Client ID: ZZZZZ		Batch ID: M11VW130		TestNo: EPA 8015B(M)		Analysis Date: 6/30/2011		SeqNo: 2200566				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	0.889	0.20	1.000	0	88.9	70	130	0.8860	0.338	20		
Surr: Bromofluorobenzene (FID)	97.762		100.0		97.8	70	130		0	0		

Sample ID: M110630MB1		SampType: MBLK		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 134577		
Client ID: PBW		Batch ID: M11VW130		TestNo: EPA 8015B(M)		Analysis Date: 6/30/2011		SeqNo: 2200567				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	ND	0.20										
Surr: Bromofluorobenzene (FID)	96.046		100.0		96.0	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 | |



CLIENT: Mactec
Work Order: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021_S_B 5035P

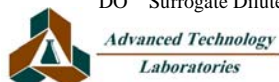
Sample ID: E110628LC2	SampType: LCS	TestCode: 8021_S_B 50	Units: µg/Kg	Prep Date:	RunNo: 134491						
Client ID: LCSS	Batch ID: E11VS239	TestNo: EPA 8021B		Analysis Date: 6/28/2011	SeqNo: 2199054						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	94.337	5.0	100.0	0	94.3	70	130				
Ethylbenzene	96.658	5.0	100.0	0	96.7	70	130				
m,p-Xylene	195.503	10	200.0	0	97.8	70	130				
o-Xylene	100.010	5.0	100.0	0	100	70	130				
Toluene	96.928	5.0	100.0	0	96.9	70	130				
Surr: Bromofluorobenzene (PID)	90.946		100.0		90.9	33	163				

Sample ID: E110628LC2	SampType: LCSD	TestCode: 8021_S_B 50	Units: µg/Kg	Prep Date:	RunNo: 134491						
Client ID: LCSS02	Batch ID: E11VS239	TestNo: EPA 8021B		Analysis Date: 6/28/2011	SeqNo: 2199055						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	91.832	5.0	100.0	0	91.8	70	130	94.34	2.69	20	
Ethylbenzene	94.472	5.0	100.0	0	94.5	70	130	96.66	2.29	20	
m,p-Xylene	190.858	10	200.0	0	95.4	70	130	195.5	2.40	20	
o-Xylene	97.445	5.0	100.0	0	97.4	70	130	100.0	2.60	20	
Toluene	94.693	5.0	100.0	0	94.7	70	130	96.93	2.33	20	
Surr: Bromofluorobenzene (PID)	89.120		100.0		89.1	33	163		0	0	

Sample ID: E110628MB1	SampType: MBLK	TestCode: 8021_S_B 50	Units: µg/Kg	Prep Date:	RunNo: 134491						
Client ID: PBS	Batch ID: E11VS239	TestNo: EPA 8021B		Analysis Date: 6/28/2011	SeqNo: 2199058						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	5.0									
Ethylbenzene	ND	5.0									
m,p-Xylene	ND	10									
o-Xylene	ND	5.0									
Toluene	ND	5.0									
Surr: Bromofluorobenzene (PID)	82.520		100.0		82.5	33	163				

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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

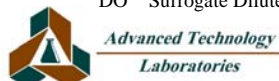
TestCode: 8021_S_B 5035P

Sample ID: 118658-009AMS		SampType: MS		TestCode: 8021_S_B 50		Units: µg/Kg		Prep Date:		RunNo: 134491		
Client ID: ZZZZZZ		Batch ID: E11VS239		TestNo: EPA 8021B				Analysis Date: 6/28/2011		SeqNo: 2199071		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	26.567	5.0	22.15	0	120	44	115				S	
Ethylbenzene	38.951	5.0	42.30	0	92.1	49	95					
m,p-Xylene	132.828	10	180.2	0	73.7	55	98					
o-Xylene	50.760	5.0	64.80	0	78.3	50	93					
Toluene	130.255	5.0	172.6	0	75.4	46	113					
Surr: Bromofluorobenzene (PID)	105.279		100.0		105	33	163					

Sample ID: 118658-009AMSD		SampType: MSD		TestCode: 8021_S_B 50		Units: µg/Kg		Prep Date:		RunNo: 134491		
Client ID: ZZZZZZ		Batch ID: E11VS239		TestNo: EPA 8021B				Analysis Date: 6/28/2011		SeqNo: 2199072		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	31.500	5.0	22.15	0	142	44	115	26.57	17.0	20	S	
Ethylbenzene	47.924	5.0	42.30	0	113	49	95	38.95	20.7	20	SR	
m,p-Xylene	163.790	10	180.2	0	90.9	55	98	132.8	20.9	20	R	
o-Xylene	63.270	5.0	64.80	0	97.6	50	93	50.76	21.9	20	SR	
Toluene	155.697	5.0	172.6	0	90.2	46	113	130.3	17.8	20		
Surr: Bromofluorobenzene (PID)	105.250		100.0		105	33	163		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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021_WP_BTEX

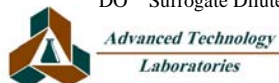
Sample ID: M110630LC2		SampType: LCS		TestCode: 8021_WP_BT		Units: µg/L		Prep Date:		RunNo: 134577		
Client ID: LCSW		Batch ID: M11VW130		TestNo: EPA 8021B				Analysis Date: 6/30/2011		SeqNo: 2200592		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	94.552	0.50	100.0	0	94.6	70	130					
Toluene	95.763	0.50	100.0	0	95.8	70	130					
Ethylbenzene	94.565	0.50	100.0	0	94.6	70	130					
m,p-Xylene	190.216	1.0	200.0	0	95.1	70	130					
o-Xylene	98.150	0.50	100.0	0	98.2	70	130					
Surr: Bromofluorobenzene (PID)	90.399		100.0		90.4	70	130					

Sample ID: M110630LC2		SampType: LCS		TestCode: 8021_WP_BT		Units: µg/L		Prep Date:		RunNo: 134577		
Client ID: LCSW		Batch ID: M11VW130		TestNo: EPA 8021B				Analysis Date: 6/30/2011		SeqNo: 2200592		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	93.912	0.50	100.0	0	93.9	70	130	94.55	0.679	20		
Toluene	94.864	0.50	100.0	0	94.9	70	130	95.76	0.943	20		
Ethylbenzene	92.886	0.50	100.0	0	92.9	70	130	94.56	1.79	20		
m,p-Xylene	186.977	1.0	200.0	0	93.5	70	130	190.2	1.72	20		
o-Xylene	96.680	0.50	100.0	0	96.7	70	130	98.15	1.51	20		
Surr: Bromofluorobenzene (PID)	89.953		100.0		90.0	70	130		0	0		

Sample ID: M110630MB1MS		SampType: MS		TestCode: 8021_WP_BT		Units: µg/L		Prep Date:		RunNo: 134577		
Client ID: ZZZZZ		Batch ID: M11VW130		TestNo: EPA 8021B				Analysis Date: 6/30/2011		SeqNo: 2200594		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	6.704	0.50	6.400	0	105	70	130					
Toluene	36.104	0.50	33.85	0	107	70	130					
Ethylbenzene	11.216	0.50	10.95	0	102	70	130					
m,p-Xylene	39.712	1.0	42.40	0	93.7	70	130					
o-Xylene	15.620	0.50	13.35	0	117	70	130					
Surr: Bromofluorobenzene (PID)	89.310		100.0		89.3	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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

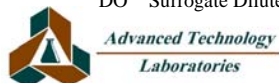
TestCode: 8021_WP_BTEX

Sample ID: M110630MB1MSD		SampType: MSD		TestCode: 8021_WP_BT		Units: µg/L		Prep Date:		RunNo: 134577	
Client ID: ZZZZZZ		Batch ID: M11VW130		TestNo: EPA 8021B		Analysis Date: 6/30/2011				SeqNo: 2200595	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	6.636	0.50	6.400	0	104	70	130	6.704	1.02	20	
Toluene	36.601	0.50	33.85	0	108	70	130	36.10	1.37	20	
Ethylbenzene	11.213	0.50	10.95	0	102	70	130	11.22	0.0268	20	
m,p-Xylene	39.956	1.0	42.40	0	94.2	70	130	39.71	0.613	20	
o-Xylene	15.646	0.50	13.35	0	117	70	130	15.62	0.166	20	
Surr: Bromofluorobenzene (PID)	89.103		100.0		89.1	70	130		0	0	

Sample ID: M110630MB1		SampType: MBLK		TestCode: 8021_WP_BT		Units: µg/L		Prep Date:		RunNo: 134577	
Client ID: PBW		Batch ID: M11VW130		TestNo: EPA 8021B		Analysis Date: 6/30/2011				SeqNo: 2200596	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
m,p-Xylene	ND	1.0									
o-Xylene	ND	0.50									
Surr: Bromofluorobenzene (PID)	88.066		100.0		88.1	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 | |



CLIENT: Mactec
Work Order: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

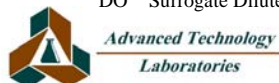
Sample ID: K110627LCS2		SampType: LCS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466		
Client ID: LCSS		Batch ID: K11VS180		TestNo: EPA 8260B				Analysis Date: 6/27/2011		SeqNo: 2198426		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	48.260	5.0	50.00	0	96.5	70	130					
Benzene	105.010	5.0	100.0	0	105	70	130					
Chlorobenzene	54.670	5.0	50.00	0	109	70	130					
MTBE	54.440	5.0	50.00	0	109	70	130					
Toluene	108.490	5.0	100.0	0	108	70	130					
Trichloroethene	51.610	5.0	50.00	0	103	70	130					
Surr: 1,2-Dichloroethane-d4	46.850		50.00		93.7	65	141					
Surr: 4-Bromofluorobenzene	46.920		50.00		93.8	57	134					
Surr: Dibromofluoromethane	45.450		50.00		90.9	70	128					
Surr: Toluene-d8	48.250		50.00		96.5	72	123					

Sample ID: 118639-001AMS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466		
Client ID: ZZZZZ		Batch ID: K11VS180		TestNo: EPA 8260B				Analysis Date: 6/27/2011		SeqNo: 2198427		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	45.550	5.0	50.00	0	91.1	70	130					
Benzene	98.910	5.0	100.0	0	98.9	70	130					
Chlorobenzene	52.100	5.0	50.00	0	104	70	130					
MTBE	49.320	5.0	50.00	0	98.6	70	130					
Toluene	101.360	5.0	100.0	0	101	70	130					
Trichloroethene	48.990	5.0	50.00	0	98.0	70	130					
Surr: 1,2-Dichloroethane-d4	43.660		50.00		87.3	65	141					
Surr: 4-Bromofluorobenzene	45.880		50.00		91.8	57	134					
Surr: Dibromofluoromethane	44.400		50.00		88.8	70	128					
Surr: Toluene-d8	46.060		50.00		92.1	72	123					

Sample ID: 118639-001AMSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466		
Client ID: ZZZZZ		Batch ID: K11VS180		TestNo: EPA 8260B				Analysis Date: 6/27/2011		SeqNo: 2198428		
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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

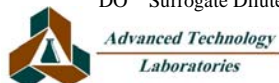
Sample ID: 118639-001AMSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466	
Client ID: ZZZZZ		Batch ID: K11VS180		TestNo: EPA 8260B		Analysis Date: 6/27/2011				SeqNo: 2198428	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	45.780	5.0	50.00	0	91.6	70	130	45.55	0.504	20	
Benzene	99.710	5.0	100.0	0	99.7	70	130	98.91	0.806	20	
Chlorobenzene	51.380	5.0	50.00	0	103	70	130	52.10	1.39	20	
MTBE	50.020	5.0	50.00	0	100	70	130	49.32	1.41	20	
Toluene	102.620	5.0	100.0	0	103	70	130	101.4	1.24	20	
Trichloroethene	50.480	5.0	50.00	0	101	70	130	48.99	3.00	20	
Surr: 1,2-Dichloroethane-d4	42.330		50.00		84.7	65	141		0	0	
Surr: 4-Bromofluorobenzene	46.670		50.00		93.3	57	134		0	0	
Surr: Dibromofluoromethane	44.220		50.00		88.4	70	128		0	0	
Surr: Toluene-d8	45.590		50.00		91.2	72	123		0	0	

Sample ID: K110627MB4MS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466	
Client ID: ZZZZZ		Batch ID: K11VS180		TestNo: EPA 8260B		Analysis Date: 6/27/2011				SeqNo: 2198429	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	40.370	5.0	50.00	0	80.7	70	130				
Benzene	83.190	5.0	100.0	0	83.2	70	130				
Chlorobenzene	40.750	5.0	50.00	0	81.5	70	130				
MTBE	41.650	5.0	50.00	0	83.3	70	130				
Toluene	83.950	5.0	100.0	0	84.0	70	130				
Trichloroethene	41.570	5.0	50.00	0	83.1	70	130				
Surr: 1,2-Dichloroethane-d4	43.760		50.00		87.5	65	141				
Surr: 4-Bromofluorobenzene	45.600		50.00		91.2	57	134				
Surr: Dibromofluoromethane	44.050		50.00		88.1	70	128				
Surr: Toluene-d8	43.840		50.00		87.7	72	123				

Sample ID: K110627MB4MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466	
Client ID: ZZZZZ		Batch ID: K11VS180		TestNo: EPA 8260B		Analysis Date: 6/27/2011				SeqNo: 2198430	
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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

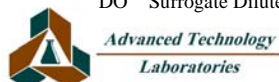
TestCode: 8260_S_5035

Sample ID: K110627MB4MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466	
Client ID: ZZZZZZ		Batch ID: K11VS180		TestNo: EPA 8260B		Analysis Date: 6/27/2011				SeqNo: 2198430	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	40.210	5.0	50.00	0	80.4	70	130	40.37	0.397	20	
Benzene	84.010	5.0	100.0	0	84.0	70	130	83.19	0.981	20	
Chlorobenzene	41.900	5.0	50.00	0	83.8	70	130	40.75	2.78	20	
MTBE	41.930	5.0	50.00	0	83.9	70	130	41.65	0.670	20	
Toluene	85.360	5.0	100.0	0	85.4	70	130	83.95	1.67	20	
Trichloroethene	40.850	5.0	50.00	0	81.7	70	130	41.57	1.75	20	
Surr: 1,2-Dichloroethane-d4	45.120		50.00		90.2	65	141		0	0	
Surr: 4-Bromofluorobenzene	49.640		50.00		99.3	57	134		0	0	
Surr: Dibromofluoromethane	46.620		50.00		93.2	70	128		0	0	
Surr: Toluene-d8	47.110		50.00		94.2	72	123		0	0	

Sample ID: K110627MB4		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134466	
Client ID: PBS		Batch ID: K11VS180		TestNo: EPA 8260B		Analysis Date: 6/27/2011				SeqNo: 2198431	
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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110627MB4	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 134466						
Client ID: PBS	Batch ID: K11VS180	TestNo: EPA 8260B		Analysis Date: 6/27/2011	SeqNo: 2198431						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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 |
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| 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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110627MB4	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 134466						
Client ID: PBS	Batch ID: K11VS180	TestNo: EPA 8260B		Analysis Date: 6/27/2011	SeqNo: 2198431						
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	45.270		50.00		90.5	65	141				
Surr: 4-Bromofluorobenzene	44.110		50.00		88.2	57	134				
Surr: Dibromofluoromethane	44.680		50.00		89.4	70	128				
Surr: Toluene-d8	44.550		50.00		89.1	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 | |



*Advanced Technology
Laboratories*

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

CLIENT: Mactec
Work Order: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

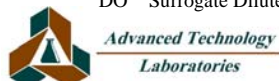
Sample ID: A110628LCS1		SampType: LCS		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 134538	
Client ID: LCSW		Batch ID: A11VW109		TestNo: EPA 8260B		Analysis Date: 6/28/2011				SeqNo: 2199743	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.040	0.50	20.00	0	90.2	70	130				
Benzene	37.990	0.50	40.00	0	95.0	70	130				
Chlorobenzene	20.000	0.50	20.00	0	100	70	130				
MTBE	20.470	0.50	20.00	0	102	70	130				
Toluene	38.870	0.50	40.00	0	97.2	70	130				
Trichloroethene	19.490	0.50	20.00	0	97.5	70	130				
Surr: 1,2-Dichloroethane-d4	23.860		25.00		95.4	70	130				
Surr: 4-Bromofluorobenzene	24.290		25.00		97.2	70	130				
Surr: Dibromofluoromethane	25.530		25.00		102	70	130				
Surr: Toluene-d8	25.730		25.00		103	70	130				

Sample ID: A110628MB2MS		SampType: MS		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 134538	
Client ID: ZZZZZ		Batch ID: A11VW109		TestNo: EPA 8260B		Analysis Date: 6/28/2011				SeqNo: 2199744	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.070	0.50	20.00	0	90.4	70	130				
Benzene	38.400	0.50	40.00	0	96.0	70	130				
Chlorobenzene	20.470	0.50	20.00	0	102	70	130				
MTBE	20.690	0.50	20.00	0	103	70	130				
Toluene	39.500	0.50	40.00	0	98.8	70	130				
Trichloroethene	19.680	0.50	20.00	0	98.4	70	130				
Surr: 1,2-Dichloroethane-d4	23.460		25.00		93.8	70	130				
Surr: 4-Bromofluorobenzene	24.210		25.00		96.8	70	130				
Surr: Dibromofluoromethane	25.100		25.00		100	70	130				
Surr: Toluene-d8	25.450		25.00		102	70	130				

Sample ID: A110628MB2MSD		SampType: MSD		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 134538	
Client ID: ZZZZZ		Batch ID: A11VW109		TestNo: EPA 8260B		Analysis Date: 6/28/2011				SeqNo: 2199745	
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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

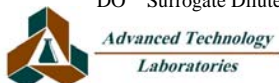
TestCode: 8260_WP_LL

Sample ID: A110628MB2MSD		SampType: MSD		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 134538	
Client ID: ZZZZZZ		Batch ID: A11VW109		TestNo: EPA 8260B		Analysis Date: 6/28/2011				SeqNo: 2199745	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.360	0.50	20.00	0	91.8	70	130	18.07	1.59	20	
Benzene	38.460	0.50	40.00	0	96.2	70	130	38.40	0.156	20	
Chlorobenzene	20.590	0.50	20.00	0	103	70	130	20.47	0.585	20	
MTBE	20.690	0.50	20.00	0	103	70	130	20.69	0	20	
Toluene	39.530	0.50	40.00	0	98.8	70	130	39.50	0.0759	20	
Trichloroethene	19.700	0.50	20.00	0	98.5	70	130	19.68	0.102	20	
Surr: 1,2-Dichloroethane-d4	23.530		25.00		94.1	70	130		0	0	
Surr: 4-Bromofluorobenzene	24.280		25.00		97.1	70	130		0	0	
Surr: Dibromofluoromethane	23.610		25.00		94.4	70	130		0	0	
Surr: Toluene-d8	25.660		25.00		103	70	130		0	0	

Sample ID: A110628MB2		SampType: MBLK		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 134538	
Client ID: PBW		Batch ID: A11VW109		TestNo: EPA 8260B		Analysis Date: 6/28/2011				SeqNo: 2199746	
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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

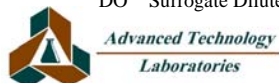
TestCode: 8260_WP_LL

Sample ID: A110628MB2	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 134538
Client ID: PBW	Batch ID: A11VW109	TestNo: EPA 8260B		Analysis Date: 6/28/2011	SeqNo: 2199746

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 |
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| 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: 118648
Project: Metro Westside Extension, 4953-10-1561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: A110628MB2	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 134538						
Client ID: PBW	Batch ID: A11VW109	TestNo: EPA 8260B	Analysis Date: 6/28/2011	SeqNo: 2199746							
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	22.560		25.00		90.2	70	130				
Surr: 4-Bromofluorobenzene	23.390		25.00		93.6	70	130				
Surr: Dibromofluoromethane	25.620		25.00		102	70	130				
Surr: Toluene-d8	25.460		25.00		102	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 | |



*Advanced Technology
Laboratories*

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: 6/25/11
 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: 4.8
 1. CHILLED: Y N 4. SEALED: Y N
 2. HEADSPACE (VOA): Y N 5. # OF SPLS MATCH COC: Y N
 3. CONTAINER INTACT: Y N 6. PRESERVED: Y N

Client: MACTEC Engineering
 Attn: Matt Traychineaud
 Address: 5628 E. Skouson Ave City: Los Angeles State: CA Zip Code: 90040
 TEL: (323) 889-5310 FAX: _____

Project Name: Hydro Westside Extension Project #: 4953-10-1361 Sampler: Matt Traychineaud
 Relinquished by: [Signature] Date: 6/24/11 Time: 2:49 Received by: [Signature] Date: 6/24/11 Time: 14:49
 Relinquished by: [Signature] Date: 6/24/11 Time: 15:21 Received by: [Signature] Date: 6/24/11 Time: 15:27
 Relinquished by: [Signature] Date: _____ Time: _____ Received by: [Signature] Date: _____ Time: _____

I hereby authorize ATL to perform the work indicated below:
 Project Mgr / Submitter: Matt Traychineaud Date: 6/24/11
[Signature] Date: [Signature]

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

Send Report To:
 Attn: Matt Traychineaud
 Co: _____
 Addr: _____
 City: _____ State: _____ Zip: _____

Circle or Add Analysis(es) Requested:
 8081A (Pesticides) 8082 (PCB) 8270C (BNAs) 6010B (Total Metal) 8015B (GRO) / 8021 (BTEX) 8015B (DRO) TITLE 22 / CAM 17 (6010 / 7000)

Special Instructions/Comments:
None

LAB USE ONLY: Batch #:	Lab No.	Sample I.D. / Location	Date	Time	SPECIFY APPROPRIATE MATRIX							TAT	Type	Container(s)	REMARKS
					SEDIMENT	SOIL	DRINKING WATER	GROUND WATER	WASTEWATER	STORMWATER	AQUEOUS				
1	11848	E-105-30	9/24/11	1019	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2 T	Hold		
2		E-105-40	"	1029	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8 T V	Hold		
3		E-105-50	"	1042	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2 T	Hold		
4		E-105-60	"	1054	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8 T V			
5		E-105-65	"	1111	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2 T			
6		E-105-70	"	1128	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	7 T V			
7		E-105-GW	"	1230	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
8		Trip Blank	-	-											

Preservatives:
 H=HCl N=HNO₃ S=H₂SO₄ C=4°C
 Z=Zn(AC)₂ O=NaOH T=Nas₂O₃

Figure I-1.192

July 27, 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.: 119041

RE: METRO WESTSIDE EXTENSION, 4953-10-1

Attention: Matt Fraychineaud

Enclosed are the results for sample(s) received on July 20, 2011 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

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

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

Sincerely,

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

Eddie F. Rodriguez
Laboratory Director

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



CLIENT: Mactec
Project: METRO WESTSIDE EXTENSION, 4953-10-1
Lab Order: 119041

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 8015B(M) DRO

Samples 118979-002AMS and 118979-002AMSD, surrogate recovery biased high possibly due to matrix interferences.

Sample 118979-002AMSD, Matrix Spike Duplicate (MSD) is outside recovery criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Sample 118979-002AMSD, RPD for Matrix Spike Duplicate (MSD) is outside criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).



Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 27-Jul-11

CLIENT: Mactec	Client Sample ID: E-106-55
Lab Order: 119041	Collection Date: 7/19/2011 11:40:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 119041-001A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110721A	QC Batch: K11VS194	PrepDate: 7/19/2011	Analyst: DDL
1,1,1,2-Tetrachloroethane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,1,1-Trichloroethane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,1,2,2-Tetrachloroethane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,1,2-Trichloroethane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,1-Dichloroethane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,1-Dichloroethene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,1-Dichloropropene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,2,3-Trichlorobenzene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,2,3-Trichloropropane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,2,4-Trichlorobenzene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,2,4-Trimethylbenzene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,2-Dibromo-3-chloropropane	ND	7.1	µg/Kg 1 7/21/2011 05:24 PM
1,2-Dibromoethane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,2-Dichlorobenzene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,2-Dichloroethane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,2-Dichloropropane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,3,5-Trimethylbenzene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,3-Dichlorobenzene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,3-Dichloropropane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
1,4-Dichlorobenzene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
2,2-Dichloropropane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
2-Chlorotoluene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
4-Chlorotoluene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
4-Isopropyltoluene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
Benzene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
Bromobenzene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
Bromodichloromethane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
Bromoform	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
Bromomethane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
Carbon tetrachloride	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
Chlorobenzene	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
Chloroethane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
Chloroform	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
Chloromethane	ND	3.5	µg/Kg 1 7/21/2011 05:24 PM
cis-1,2-Dichloroethene	ND	3.5	µg/Kg 1 7/21/2011 05:24 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



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ANALYTICAL RESULTS

Print Date: 27-Jul-11

CLIENT: Mactec **Client Sample ID:** E-106-55
Lab Order: 119041 **Collection Date:** 7/19/2011 11:40:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 119041-001A

Analyses Result PQL Qual Units DF Date Analyzed

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID:	MS4_110721A	QC Batch:	K11VS194	PrepDate:	7/19/2011	Analyst:	DDL
cis-1,3-Dichloropropene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Di-isopropyl ether	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Dibromochloromethane	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Dibromomethane	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Dichlorodifluoromethane	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Ethyl Tert-butyl ether	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Ethylbenzene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Hexachlorobutadiene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Isopropylbenzene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
m,p-Xylene	ND	7.1	µg/Kg	1	7/21/2011 05:24 PM		
Methylene chloride	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
MTBE	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
n-Butylbenzene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
n-Propylbenzene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Naphthalene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
o-Xylene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
sec-Butylbenzene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Styrene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Tert-amyl methyl ether	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Tert-Butanol	ND	71	µg/Kg	1	7/21/2011 05:24 PM		
tert-Butylbenzene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Tetrachloroethene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Toluene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
trans-1,2-Dichloroethene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Trichloroethene	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Trichlorofluoromethane	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Vinyl chloride	ND	3.5	µg/Kg	1	7/21/2011 05:24 PM		
Surr: 1,2-Dichloroethane-d4	119	65-141	%REC	1	7/21/2011 05:24 PM		
Surr: 4-Bromofluorobenzene	94.0	57-134	%REC	1	7/21/2011 05:24 PM		
Surr: Dibromofluoromethane	113	70-128	%REC	1	7/21/2011 05:24 PM		
Surr: Toluene-d8	102	72-123	%REC	1	7/21/2011 05:24 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



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ANALYTICAL RESULTS
 Print Date: 27-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-106-55
Lab Order:	119041	Collection Date:	7/19/2011 11:40:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119041-001D		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC6_110722A	QC Batch: 111VS019	PrepDate: 7/19/2011	Analyst: TP		
GRO	ND	0.70	mg/Kg	1	7/22/2011 01:12 PM
Surr: Bromofluorobenzene (FID)	110	51-161	%REC	1	7/22/2011 01:12 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		



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ANALYTICAL RESULTS

Print Date: 27-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-106-55
Lab Order:	119041	Collection Date:	7/19/2011 11:40:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119041-001G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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ICP METALS

EPA 3050B

EPA 6010B

RunID: ICP8_110722J	QC Batch: 74487			PrepDate: 7/22/2011	Analyst: CBB
Antimony	ND	2.0		mg/Kg	1 7/25/2011 10:23 AM
Arsenic	ND	1.0		mg/Kg	1 7/25/2011 10:23 AM
Barium	14	1.0		mg/Kg	1 7/25/2011 10:23 AM
Beryllium	ND	1.0		mg/Kg	1 7/25/2011 10:23 AM
Cadmium	ND	1.0		mg/Kg	1 7/25/2011 10:23 AM
Chromium	15	1.0		mg/Kg	1 7/25/2011 10:23 AM
Cobalt	2.5	1.0		mg/Kg	1 7/25/2011 10:23 AM
Copper	3.8	2.0		mg/Kg	1 7/25/2011 10:23 AM
Lead	1.3	1.0		mg/Kg	1 7/25/2011 10:23 AM
Molybdenum	ND	1.0		mg/Kg	1 7/25/2011 10:23 AM
Nickel	9.8	1.0		mg/Kg	1 7/25/2011 10:23 AM
Selenium	1.1	1.0		mg/Kg	1 7/25/2011 10:23 AM
Silver	ND	1.0		mg/Kg	1 7/25/2011 10:23 AM
Thallium	ND	1.0		mg/Kg	1 7/25/2011 10:23 AM
Vanadium	29	1.0		mg/Kg	1 7/25/2011 10:23 AM
Zinc	11	1.0		mg/Kg	1 7/25/2011 10:23 AM

DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID

LUFT

EPA 8015B(M)

RunID: GC16_110721C	QC Batch: 74470			PrepDate: 7/21/2011	Analyst: HL
DRO	ND	10		mg/Kg	1 7/23/2011 06:40 PM
ORO	ND	10		mg/Kg	1 7/23/2011 06:40 PM
Surr: p-Terphenyl	86.4	63-152		%REC	1 7/23/2011 06:40 PM

MERCURY BY COLD VAPOR TECHNIQUE

EPA 7471A

RunID: AA5_110721B	QC Batch: 74448			PrepDate: 7/21/2011	Analyst: VV
Mercury	ND	0.10		mg/Kg	1 7/21/2011 05:27 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	



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ANALYTICAL RESULTS

Print Date: 27-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-106-60
Lab Order:	119041	Collection Date:	7/19/2011 1:00:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119041-002A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110721A	QC Batch: K11VS194	PrepDate: 7/19/2011	Analyst: DDL		
1,1,1,2-Tetrachloroethane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,1,1-Trichloroethane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,1,2,2-Tetrachloroethane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,1,2-Trichloroethane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,1-Dichloroethane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,1-Dichloroethene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,1-Dichloropropene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,2,3-Trichlorobenzene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,2,3-Trichloropropane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,2,4-Trichlorobenzene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,2,4-Trimethylbenzene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,2-Dibromo-3-chloropropane	ND	7.3	µg/Kg	1	7/21/2011 05:41 PM
1,2-Dibromoethane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,2-Dichlorobenzene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,2-Dichloroethane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,2-Dichloropropane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,3,5-Trimethylbenzene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,3-Dichlorobenzene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,3-Dichloropropane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
1,4-Dichlorobenzene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
2,2-Dichloropropane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
2-Chlorotoluene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
4-Chlorotoluene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
4-Isopropyltoluene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
Benzene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
Bromobenzene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
Bromodichloromethane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
Bromoform	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
Bromomethane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
Carbon tetrachloride	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
Chlorobenzene	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
Chloroethane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
Chloroform	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
Chloromethane	ND	3.6	µg/Kg	1	7/21/2011 05:41 PM
cis-1,2-Dichloroethene	ND	3.6	µg/Kg	1	7/21/2011 05:41 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	



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ANALYTICAL RESULTS

Print Date: 27-Jul-11

CLIENT: Mactec	Client Sample ID: E-106-60
Lab Order: 119041	Collection Date: 7/19/2011 1:00:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 119041-002A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110721A	QC Batch: K11VS194	PrepDate: 7/19/2011	Analyst: DDL
cis-1,3-Dichloropropene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Di-isopropyl ether	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Dibromochloromethane	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Dibromomethane	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Dichlorodifluoromethane	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Ethyl Tert-butyl ether	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Ethylbenzene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Hexachlorobutadiene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Isopropylbenzene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
m,p-Xylene	ND	7.3	µg/Kg 1 7/21/2011 05:41 PM
Methylene chloride	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
MTBE	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
n-Butylbenzene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
n-Propylbenzene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Naphthalene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
o-Xylene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
sec-Butylbenzene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Styrene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Tert-amyl methyl ether	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Tert-Butanol	ND	73	µg/Kg 1 7/21/2011 05:41 PM
tert-Butylbenzene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Tetrachloroethene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Toluene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
trans-1,2-Dichloroethene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Trichloroethene	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Trichlorofluoromethane	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Vinyl chloride	ND	3.6	µg/Kg 1 7/21/2011 05:41 PM
Surr: 1,2-Dichloroethane-d4	112	65-141	%REC 1 7/21/2011 05:41 PM
Surr: 4-Bromofluorobenzene	87.8	57-134	%REC 1 7/21/2011 05:41 PM
Surr: Dibromofluoromethane	107	70-128	%REC 1 7/21/2011 05:41 PM
Surr: Toluene-d8	94.8	72-123	%REC 1 7/21/2011 05:41 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	



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ANALYTICAL RESULTS
 Print Date: 27-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-106-60
Lab Order:	119041	Collection Date:	7/19/2011 1:00:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119041-002D		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC6_110722A	QC Batch: 111VS019	PrepDate: 7/19/2011	Analyst: TP		
GRO	ND	0.69	mg/Kg	1	7/22/2011 01:35 PM
Surr: Bromofluorobenzene (FID)	97.2	51-161	%REC	1	7/22/2011 01:35 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	



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ANALYTICAL RESULTS
 Print Date: 27-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-106-60
Lab Order:	119041	Collection Date:	7/19/2011 1:00:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119041-002G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110721C	QC Batch: 74470			PrepDate: 7/21/2011		Analyst: HL
DRO	ND	10		mg/Kg	1	7/23/2011 06:50 PM
ORO	ND	10		mg/Kg	1	7/23/2011 06:50 PM
Surr: p-Terphenyl	84.3	63-152		%REC	1	7/23/2011 06:50 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		



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ANALYTICAL RESULTS

Print Date: 27-Jul-11

CLIENT: Mactec **Client Sample ID:** E-106-65
Lab Order: 119041 **Collection Date:** 7/19/2011 1:45:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 119041-003A

Analyses Result PQL Qual Units DF Date Analyzed

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110721A	QC Batch: K11VS194	PrepDate: 7/19/2011	Analyst: DDL
1,1,1,2-Tetrachloroethane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,1,1-Trichloroethane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,1,2,2-Tetrachloroethane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,1,2-Trichloroethane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,1-Dichloroethane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,1-Dichloroethene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,1-Dichloropropene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,2,3-Trichlorobenzene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,2,3-Trichloropropane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,2,4-Trichlorobenzene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,2,4-Trimethylbenzene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,2-Dibromo-3-chloropropane	ND	7.5	µg/Kg 1 7/21/2011 05:59 PM
1,2-Dibromoethane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,2-Dichlorobenzene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,2-Dichloroethane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,2-Dichloropropane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,3,5-Trimethylbenzene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,3-Dichlorobenzene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,3-Dichloropropane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
1,4-Dichlorobenzene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
2,2-Dichloropropane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
2-Chlorotoluene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
4-Chlorotoluene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
4-Isopropyltoluene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
Benzene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
Bromobenzene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
Bromodichloromethane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
Bromoform	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
Bromomethane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
Carbon tetrachloride	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
Chlorobenzene	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
Chloroethane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
Chloroform	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
Chloromethane	ND	3.7	µg/Kg 1 7/21/2011 05:59 PM
cis-1,2-Dichloroethene	ND	3.7	µg/Kg 1 7/21/2011 05:59 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



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ANALYTICAL RESULTS

Print Date: 27-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-106-65
Lab Order:	119041	Collection Date:	7/19/2011 1:45:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119041-003A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110721A	QC Batch: K11VS194	PrepDate: 7/19/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Di-isopropyl ether	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Dibromochloromethane	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Dibromomethane	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Dichlorodifluoromethane	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Ethyl Tert-butyl ether	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Ethylbenzene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Hexachlorobutadiene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Isopropylbenzene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
m,p-Xylene	ND	7.5	µg/Kg	1	7/21/2011 05:59 PM
Methylene chloride	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
MTBE	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
n-Butylbenzene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
n-Propylbenzene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Naphthalene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
o-Xylene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
sec-Butylbenzene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Styrene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Tert-amyl methyl ether	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Tert-Butanol	ND	75	µg/Kg	1	7/21/2011 05:59 PM
tert-Butylbenzene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Tetrachloroethene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Toluene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
trans-1,2-Dichloroethene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Trichloroethene	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Trichlorofluoromethane	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Vinyl chloride	ND	3.7	µg/Kg	1	7/21/2011 05:59 PM
Surr: 1,2-Dichloroethane-d4	115	65-141	%REC	1	7/21/2011 05:59 PM
Surr: 4-Bromofluorobenzene	92.3	57-134	%REC	1	7/21/2011 05:59 PM
Surr: Dibromofluoromethane	108	70-128	%REC	1	7/21/2011 05:59 PM
Surr: Toluene-d8	98.2	72-123	%REC	1	7/21/2011 05:59 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	



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ANALYTICAL RESULTS

Print Date: 27-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-106-65
Lab Order:	119041	Collection Date:	7/19/2011 1:45:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119041-003D		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC6_110722A	QC Batch: 111VS019	PrepDate: 7/19/2011	Analyst: TP		
GRO	ND	0.73	mg/Kg	1	7/22/2011 01:58 PM
Surr: Bromofluorobenzene (FID)	93.0	51-161	%REC	1	7/22/2011 01:58 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		



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ANALYTICAL RESULTS
 Print Date: 27-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-106-65
Lab Order:	119041	Collection Date:	7/19/2011 1:45:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119041-003G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110721C	QC Batch: 74470			PrepDate: 7/21/2011		Analyst: HL
DRO	ND	10		mg/Kg	1	7/23/2011 07:00 PM
ORO	ND	10		mg/Kg	1	7/23/2011 07:00 PM
Surr: p-Terphenyl	87.0	63-152		%REC	1	7/23/2011 07:00 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		



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ANALYTICAL RESULTS

Print Date: 27-Jul-11

CLIENT: Mactec	Client Sample ID: E-106-GW
Lab Order: 119041	Collection Date: 7/19/2011 12:00:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: GROUNDWATER
Lab ID: 119041-004A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_110722A	QC Batch: A11VW124	PrepDate:	Analyst: BD
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,1,1-Trichloroethane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,1,2-Trichloroethane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,1-Dichloroethane	0.61	0.50	µg/L 1 7/22/2011 01:12 PM
1,1-Dichloroethene	2.2	0.50	µg/L 1 7/22/2011 01:12 PM
1,1-Dichloropropene	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,2,3-Trichlorobenzene	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,2,3-Trichloropropane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,2,4-Trichlorobenzene	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,2,4-Trimethylbenzene	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,2-Dibromo-3-chloropropane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,2-Dibromoethane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,2-Dichlorobenzene	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,2-Dichloroethane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,2-Dichloropropane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,3,5-Trimethylbenzene	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,3-Dichlorobenzene	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,3-Dichloropropane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
1,4-Dichlorobenzene	ND	0.50	µg/L 1 7/22/2011 01:12 PM
2,2-Dichloropropane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
2-Chlorotoluene	ND	0.50	µg/L 1 7/22/2011 01:12 PM
4-Chlorotoluene	ND	0.50	µg/L 1 7/22/2011 01:12 PM
4-Isopropyltoluene	ND	0.50	µg/L 1 7/22/2011 01:12 PM
Benzene	ND	0.50	µg/L 1 7/22/2011 01:12 PM
Bromobenzene	ND	0.50	µg/L 1 7/22/2011 01:12 PM
Bromodichloromethane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
Bromoform	ND	0.50	µg/L 1 7/22/2011 01:12 PM
Bromomethane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
Carbon tetrachloride	ND	0.50	µg/L 1 7/22/2011 01:12 PM
Chlorobenzene	ND	0.50	µg/L 1 7/22/2011 01:12 PM
Chloroethane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
Chloroform	ND	0.50	µg/L 1 7/22/2011 01:12 PM
Chloromethane	ND	0.50	µg/L 1 7/22/2011 01:12 PM
cis-1,2-Dichloroethene	0.75	0.50	µg/L 1 7/22/2011 01:12 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	



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ANALYTICAL RESULTS

Print Date: 27-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-106-GW
Lab Order:	119041	Collection Date:	7/19/2011 12:00:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	GROUNDWATER
Lab ID:	119041-004A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_110722A	QC Batch: A11VW124	PrepDate:	Analyst: BD		
cis-1,3-Dichloropropene	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Di-isopropyl ether	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Dibromochloromethane	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Dibromomethane	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Dichlorodifluoromethane	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Ethyl tert-butyl ether	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Ethylbenzene	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Hexachlorobutadiene	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Isopropylbenzene	ND	0.50	µg/L	1	7/22/2011 01:12 PM
m,p-Xylene	ND	1.0	µg/L	1	7/22/2011 01:12 PM
Methylene chloride	ND	1.0	µg/L	1	7/22/2011 01:12 PM
MTBE	ND	0.50	µg/L	1	7/22/2011 01:12 PM
n-Butylbenzene	ND	0.50	µg/L	1	7/22/2011 01:12 PM
n-Propylbenzene	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Naphthalene	ND	0.50	µg/L	1	7/22/2011 01:12 PM
o-Xylene	ND	0.50	µg/L	1	7/22/2011 01:12 PM
sec-Butylbenzene	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Styrene	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Tert-amyl methyl ether	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Tert-Butanol	ND	10	µg/L	1	7/22/2011 01:12 PM
tert-Butylbenzene	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Tetrachloroethene	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Toluene	0.52	0.50	µg/L	1	7/22/2011 01:12 PM
trans-1,2-Dichloroethene	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Trichloroethene	1.3	0.50	µg/L	1	7/22/2011 01:12 PM
Trichlorofluoromethane	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Vinyl chloride	ND	0.50	µg/L	1	7/22/2011 01:12 PM
Surr: 1,2-Dichloroethane-d4	87.2	70-130	%REC	1	7/22/2011 01:12 PM
Surr: 4-Bromofluorobenzene	100	70-130	%REC	1	7/22/2011 01:12 PM
Surr: Dibromofluoromethane	98.9	70-130	%REC	1	7/22/2011 01:12 PM
Surr: Toluene-d8	100	70-130	%REC	1	7/22/2011 01:12 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	



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ANALYTICAL RESULTS
 Print Date: 27-Jul-11

CLIENT: Mactec	Client Sample ID: E-106-GW
Lab Order: 119041	Collection Date: 7/19/2011 12:00:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: GROUNDWATER
Lab ID: 119041-004B	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC19_110721A	QC Batch: M11VW142	PrepDate:	Analyst: DDL		
GRO	ND	0.20	mg/L	1	7/21/2011 02:30 PM
Surr: Bromofluorobenzene (FID)	85.2	70-130	%REC	1	7/21/2011 02:30 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	



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ANALYTICAL RESULTS
 Print Date: 27-Jul-11

CLIENT: Mactec	Client Sample ID: E-106-GW
Lab Order: 119041	Collection Date: 7/19/2011 12:00:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: GROUNDWATER
Lab ID: 119041-004C	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID

		EPA 3510C			EPA 8015B(M)		
RunID: GC16_110726B	QC Batch: 74531				PrepDate: 7/26/2011	Analyst: CBR	
DRO		1.2	0.25	mg/L	1	7/26/2011 12:26 PM	
ORO		0.63	0.25	mg/L	1	7/26/2011 12:26 PM	
Surr: p-Terphenyl		71.7	36-126	%REC	1	7/26/2011 12:26 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	



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CLIENT: Mactec
Work Order: 119041
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

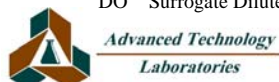
TestCode: 6010_S

Sample ID: MB-74487	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/22/2011	RunNo: 135281						
Client ID: PBS	Batch ID: 74487	TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/22/2011	SeqNo: 2214700						
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	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	ND	1.0									

Sample ID: LCS-74487	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/22/2011	RunNo: 135281						
Client ID: LCSS	Batch ID: 74487	TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/22/2011	SeqNo: 2214701						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	46.758	2.0	50.00	0	93.5	80	120				
Arsenic	44.962	1.0	50.00	0	89.9	80	120				
Barium	48.827	1.0	50.00	0	97.7	80	120				
Beryllium	47.862	1.0	50.00	0	95.7	80	120				
Cadmium	44.984	1.0	50.00	0	90.0	80	120				
Chromium	44.091	1.0	50.00	0	88.2	80	120				
Cobalt	47.172	1.0	50.00	0	94.3	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: 119041
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

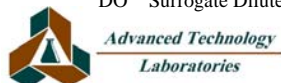
TestCode: 6010_S

Sample ID: LCS-74487		SampType: LCS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 7/22/2011		RunNo: 135281		
Client ID: LCSS		Batch ID: 74487		TestNo: EPA 6010B EPA 3050B				Analysis Date: 7/22/2011		SeqNo: 2214701		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Copper	49.154	2.0	50.00	0	98.3	80	120					
Lead	45.422	1.0	50.00	0	90.8	80	120					
Molybdenum	48.596	1.0	50.00	0	97.2	80	120					
Nickel	45.592	1.0	50.00	0	91.2	80	120					
Selenium	42.795	1.0	50.00	0	85.6	80	120					
Silver	49.157	1.0	50.00	0	98.3	80	120					
Thallium	45.259	1.0	50.00	0	90.5	80	120					
Vanadium	46.726	1.0	50.00	0	93.5	80	120					
Zinc	45.678	1.0	50.00	0	91.4	80	120					

Sample ID: 119042-003A-MS		SampType: MS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 7/22/2011		RunNo: 135281		
Client ID: ZZZZZZ		Batch ID: 74487		TestNo: EPA 6010B EPA 3050B				Analysis Date: 7/22/2011		SeqNo: 2214711		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Antimony	83.260	2.0	125.0	0.8865	65.9	32	105					
Arsenic	98.044	1.0	125.0	4.075	75.2	49	106					
Barium	220.494	1.0	125.0	126.2	75.4	31	133					
Beryllium	97.653	1.0	125.0	0	78.1	56	106					
Cadmium	90.441	1.0	125.0	0.8168	71.7	51	103					
Chromium	131.512	1.0	125.0	43.47	70.4	45	114					
Cobalt	112.520	1.0	125.0	16.29	77.0	52	106					
Copper	131.096	2.0	125.0	18.17	90.3	54	125					
Lead	94.118	1.0	125.0	4.182	71.9	34	126					
Molybdenum	94.629	1.0	125.0	0	75.7	54	106					
Nickel	115.383	1.0	125.0	23.45	73.6	45	111					
Selenium	88.166	1.0	125.0	0	70.5	47	104					
Silver	106.177	1.0	125.0	0	84.9	56	112					
Thallium	79.456	1.0	125.0	0	63.6	46	101					
Vanadium	165.147	1.0	125.0	73.32	73.5	54	114					
Zinc	146.694	1.0	125.0	59.97	69.4	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: 119041
Project: METRO WESTSIDE EXTENSION, 4953-10-1

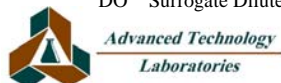
ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: 119042-003A-MSD	SampType: MSD	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/22/2011	RunNo: 135281						
Client ID: ZZZZZZ	Batch ID: 74487	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 7/22/2011	SeqNo: 2214712						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	84.038	2.0	125.0	0.8865	66.5	32	105	83.26	0.931	20	
Arsenic	98.425	1.0	125.0	4.075	75.5	49	106	98.04	0.388	20	
Barium	225.586	1.0	125.0	126.2	79.5	31	133	220.5	2.28	20	
Beryllium	99.773	1.0	125.0	0	79.8	56	106	97.65	2.15	20	
Cadmium	91.353	1.0	125.0	0.8168	72.4	51	103	90.44	1.00	20	
Chromium	133.464	1.0	125.0	43.47	72.0	45	114	131.5	1.47	20	
Cobalt	113.317	1.0	125.0	16.29	77.6	52	106	112.5	0.705	20	
Copper	132.463	2.0	125.0	18.17	91.4	54	125	131.1	1.04	20	
Lead	94.664	1.0	125.0	4.182	72.4	34	126	94.12	0.579	20	
Molybdenum	95.098	1.0	125.0	0	76.1	54	106	94.63	0.494	20	
Nickel	116.718	1.0	125.0	23.45	74.6	45	111	115.4	1.15	20	
Selenium	87.424	1.0	125.0	0	69.9	47	104	88.17	0.845	20	
Silver	107.940	1.0	125.0	0	86.4	56	112	106.2	1.65	20	
Thallium	79.968	1.0	125.0	0	64.0	46	101	79.46	0.642	20	
Vanadium	170.174	1.0	125.0	73.32	77.5	54	114	165.1	3.00	20	
Zinc	152.091	1.0	125.0	59.97	73.7	28	125	146.7	3.61	20	

Qualifiers:

- | | | |
|---|--|--|
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| 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: 119041
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: MB-74448	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/21/2011	RunNo: 135232						
Client ID: PBS	Batch ID: 74448	TestNo: EPA 7471A		Analysis Date: 7/21/2011	SeqNo: 2213722						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	ND	0.10									
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Sample ID: LCS-74448	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/21/2011	RunNo: 135232						
Client ID: LCSS	Batch ID: 74448	TestNo: EPA 7471A		Analysis Date: 7/21/2011	SeqNo: 2213723						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.893	0.10	0.8300	0	108	80	120				
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Sample ID: 119005-001A-MS	SampType: MS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/21/2011	RunNo: 135232						
Client ID: ZZZZZ	Batch ID: 74448	TestNo: EPA 7471A		Analysis Date: 7/21/2011	SeqNo: 2213724						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

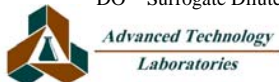
Mercury	1.001	0.10	0.8300	0.09211	109	70	130				
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Sample ID: 119005-001A-MSD	SampType: MSD	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/21/2011	RunNo: 135232						
Client ID: ZZZZZ	Batch ID: 74448	TestNo: EPA 7471A		Analysis Date: 7/21/2011	SeqNo: 2213725						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.996	0.10	0.8300	0.09211	109	70	130	1.001	0.421	20	
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Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
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| DO Surrogate Diluted Out | Calculations are based on raw values | |



CLIENT: Mactec
Work Order: 119041
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

Sample ID: LCS-74470	SampType: LCS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/21/2011	RunNo: 135258						
Client ID: LCSS	Batch ID: 74470	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/22/2011	SeqNo: 2214131						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	873.150	10	1000	0	87.3	76	139				
Surr: p-Terphenyl	85.250		80.00		107	63	152				

Sample ID: MB-74470	SampType: MBLK	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/21/2011	RunNo: 135258						
Client ID: PBS	Batch ID: 74470	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/22/2011	SeqNo: 2214132						
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	59.030		80.00		73.8	63	152				

Sample ID: 118979-002AMS	SampType: MS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/21/2011	RunNo: 135258						
Client ID: ZZZZZ	Batch ID: 74470	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/22/2011	SeqNo: 2214138						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

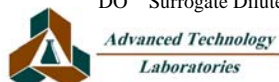
DRO	1876.360	10	1000	354.3	152	60	158				
Surr: p-Terphenyl	122.370		80.00		153	63	152				S

Sample ID: 118979-002AMSD	SampType: MSD	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/21/2011	RunNo: 135258						
Client ID: ZZZZZ	Batch ID: 74470	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/22/2011	SeqNo: 2214139						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	2466.230	10	1000	354.3	211	60	158	1876	27.2	20	SR
Surr: p-Terphenyl	126.940		80.00		159	63	152		0	0	S

Qualifiers:

- | | | |
|---|--|--|
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CLIENT: Mactec
Work Order: 119041
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

Sample ID: I110722LC2	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135288						
Client ID: LCSS	Batch ID: I11VS019	TestNo: EPA 8015B(M)	Analysis Date: 7/22/2011	SeqNo: 2215439							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	4.575	1.0	5.000	0	91.5	70	130				
Surr: Bromofluorobenzene (FID)	95.783		100.0		95.8	51	161				

Sample ID: I110722MB2MS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135288						
Client ID: ZZZZZZ	Batch ID: I11VS019	TestNo: EPA 8015B(M)	Analysis Date: 7/22/2011	SeqNo: 2215441							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	4.822	1.0	5.000	0	96.4	41	146				
Surr: Bromofluorobenzene (FID)	99.690		100.0		99.7	51	161				

Sample ID: I110722MB2MSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135288						
Client ID: ZZZZZZ	Batch ID: I11VS019	TestNo: EPA 8015B(M)	Analysis Date: 7/22/2011	SeqNo: 2215442							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

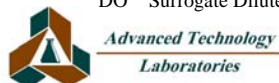
GRO	4.737	1.0	5.000	0	94.7	41	146	4.822	1.78	20	
Surr: Bromofluorobenzene (FID)	99.271		100.0		99.3	51	161		0	0	

Sample ID: I110722MB2	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135288						
Client ID: PBS	Batch ID: I11VS019	TestNo: EPA 8015B(M)	Analysis Date: 7/22/2011	SeqNo: 2215443							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	98.391		100.0		98.4	51	161				

Qualifiers:

- | | | |
|---|--|--|
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CLIENT: Mactec
Work Order: 119041
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_DM

Sample ID: MB-74531	SampType: MBLK	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 7/26/2011	RunNo: 135340						
Client ID: PBW	Batch ID: 74531	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 7/26/2011	SeqNo: 2215981						
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	0.043		0.08000		53.9	36	126				

Sample ID: LCS-74531	SampType: LCS	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 7/26/2011	RunNo: 135340						
Client ID: LCSW	Batch ID: 74531	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 7/26/2011	SeqNo: 2215982						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	0.532	0.20	1.000	0	53.2	52	128				
Surr: p-Terphenyl	0.050		0.08000		62.6	36	126				

Sample ID: MB-74531MS	SampType: MS	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 7/26/2011	RunNo: 135340						
Client ID: ZZZZZ	Batch ID: 74531	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 7/26/2011	SeqNo: 2215983						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

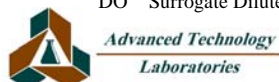
DRO	0.593	0.20	1.000	0	59.3	52	128				
Surr: p-Terphenyl	0.052		0.08000		65.6	36	126				

Sample ID: MB-74531MSD	SampType: MSD	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 7/26/2011	RunNo: 135340						
Client ID: ZZZZZ	Batch ID: 74531	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 7/26/2011	SeqNo: 2215999						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	0.629	0.20	1.000	0	62.9	52	128	0.5926	5.89	20	
Surr: p-Terphenyl	0.045		0.08000		56.0	36	126		0	0	

Qualifiers:

- | | | |
|---|--|--|
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CLIENT: Mactec
Work Order: 119041
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_G PRES

Sample ID: M110721LCS2		SampType: LCS		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 135229		
Client ID: LCSW		Batch ID: M11VW142		TestNo: EPA 8015B(M)		Analysis Date: 7/21/2011		SeqNo: 2213681				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	1.089	0.20	1.000	0	109	70	130					
Surr: Bromofluorobenzene (FID)	90.531		100.0		90.5	70	130					

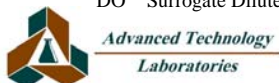
Sample ID: M110721MB1MS		SampType: MS		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 135229		
Client ID: ZZZZZ		Batch ID: M11VW142		TestNo: EPA 8015B(M)		Analysis Date: 7/21/2011		SeqNo: 2213682				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	1.115	0.20	1.000	0	112	70	130					
Surr: Bromofluorobenzene (FID)	89.651		100.0		89.7	70	130					

Sample ID: M110721MB1MSD		SampType: MSD		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 135229		
Client ID: ZZZZZ		Batch ID: M11VW142		TestNo: EPA 8015B(M)		Analysis Date: 7/21/2011		SeqNo: 2213683				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	1.123	0.20	1.000	0	112	70	130	1.115	0.715	20		
Surr: Bromofluorobenzene (FID)	91.368		100.0		91.4	70	130		0	0		

Sample ID: M110721MB1		SampType: MBLK		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 135229		
Client ID: PBW		Batch ID: M11VW142		TestNo: EPA 8015B(M)		Analysis Date: 7/21/2011		SeqNo: 2213684				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	ND	0.20										
Surr: Bromofluorobenzene (FID)	87.509		100.0		87.5	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 | |



CLIENT: Mactec
Work Order: 119041
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

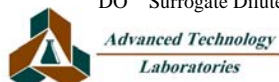
Sample ID: K110721LCS1		SampType: LCS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135240	
Client ID: LCSS		Batch ID: K11VS194		TestNo: EPA 8260B		Analysis Date: 7/21/2011				SeqNo: 2214303	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	48.840	5.0	50.00	0	97.7	70	130				
Benzene	104.910	5.0	100.0	0	105	70	130				
Chlorobenzene	55.460	5.0	50.00	0	111	70	130				
MTBE	58.230	5.0	50.00	0	116	70	130				
Toluene	104.470	5.0	100.0	0	104	70	130				
Trichloroethene	54.430	5.0	50.00	0	109	70	130				
Surr: 1,2-Dichloroethane-d4	52.870		50.00		106	65	141				
Surr: 4-Bromofluorobenzene	47.780		50.00		95.6	57	134				
Surr: Dibromofluoromethane	52.300		50.00		105	70	128				
Surr: Toluene-d8	51.210		50.00		102	72	123				

Sample ID: K110721MB1MS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135240	
Client ID: ZZZZZ		Batch ID: K11VS194		TestNo: EPA 8260B		Analysis Date: 7/21/2011				SeqNo: 2214304	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	50.660	5.0	50.00	0	101	70	130				
Benzene	104.960	5.0	100.0	0	105	70	130				
Chlorobenzene	55.490	5.0	50.00	0	111	70	130				
MTBE	59.640	5.0	50.00	0	119	70	130				
Toluene	105.390	5.0	100.0	0	105	70	130				
Trichloroethene	53.610	5.0	50.00	0	107	70	130				
Surr: 1,2-Dichloroethane-d4	52.340		50.00		105	65	141				
Surr: 4-Bromofluorobenzene	47.460		50.00		94.9	57	134				
Surr: Dibromofluoromethane	53.190		50.00		106	70	128				
Surr: Toluene-d8	51.000		50.00		102	72	123				

Sample ID: K110721MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135240	
Client ID: ZZZZZ		Batch ID: K11VS194		TestNo: EPA 8260B		Analysis Date: 7/21/2011				SeqNo: 2214305	
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 |
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CLIENT: Mactec
Work Order: 119041
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

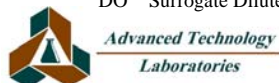
TestCode: 8260_S_5035

Sample ID: K110721MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135240	
Client ID: ZZZZZZ		Batch ID: K11VS194		TestNo: EPA 8260B		Analysis Date: 7/21/2011				SeqNo: 2214305	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	46.820	5.0	50.00	0	93.6	70	130	50.66	7.88	20	
Benzene	97.070	5.0	100.0	0	97.1	70	130	105.0	7.81	20	
Chlorobenzene	51.410	5.0	50.00	0	103	70	130	55.49	7.63	20	
MTBE	54.870	5.0	50.00	0	110	70	130	59.64	8.33	20	
Toluene	97.270	5.0	100.0	0	97.3	70	130	105.4	8.01	20	
Trichloroethene	50.090	5.0	50.00	0	100	70	130	53.61	6.79	20	
Surr: 1,2-Dichloroethane-d4	49.240		50.00		98.5	65	141		0	0	
Surr: 4-Bromofluorobenzene	45.060		50.00		90.1	57	134		0	0	
Surr: Dibromofluoromethane	48.920		50.00		97.8	70	128		0	0	
Surr: Toluene-d8	48.020		50.00		96.0	72	123		0	0	

Sample ID: K110721MB1		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135240	
Client ID: PBS		Batch ID: K11VS194		TestNo: EPA 8260B		Analysis Date: 7/21/2011				SeqNo: 2214320	
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: 119041

Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110721MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135240						
Client ID: PBS	Batch ID: K11VS194	TestNo: EPA 8260B		Analysis Date: 7/21/2011	SeqNo: 2214320						
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
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- 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: 119041
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110721MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135240						
Client ID: PBS	Batch ID: K11VS194	TestNo: EPA 8260B	Analysis Date: 7/21/2011	SeqNo: 2214320							
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	53.070		50.00		106	65	141				
Surr: 4-Bromofluorobenzene	46.320		50.00		92.6	57	134				
Surr: Dibromofluoromethane	52.110		50.00		104	70	128				
Surr: Toluene-d8	50.150		50.00		100	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 | |



*Advanced Technology
Laboratories*

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

CLIENT: Mactec
Work Order: 119041
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

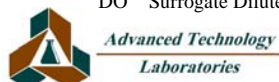
Sample ID: A110722LCS1		SampType: LCS		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135290	
Client ID: LCSW		Batch ID: A11VW124		TestNo: EPA 8260B		Analysis Date: 7/22/2011				SeqNo: 2214810	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.150	0.50	20.00	0	95.8	70	130				
Benzene	40.180	0.50	40.00	0	100	70	130				
Chlorobenzene	20.570	0.50	20.00	0	103	70	130				
MTBE	21.770	0.50	20.00	0	109	70	130				
Toluene	40.690	0.50	40.00	0	102	70	130				
Trichloroethene	19.180	0.50	20.00	0	95.9	70	130				
Surr: 1,2-Dichloroethane-d4	22.710		25.00		90.8	70	130				
Surr: 4-Bromofluorobenzene	25.450		25.00		102	70	130				
Surr: Dibromofluoromethane	24.950		25.00		99.8	70	130				
Surr: Toluene-d8	25.200		25.00		101	70	130				

Sample ID: A110722MB3MS		SampType: MS		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135290	
Client ID: ZZZZZ		Batch ID: A11VW124		TestNo: EPA 8260B		Analysis Date: 7/22/2011				SeqNo: 2214811	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20.590	0.50	20.00	0	103	70	130				
Benzene	41.310	0.50	40.00	0	103	70	130				
Chlorobenzene	20.970	0.50	20.00	0	105	70	130				
MTBE	22.060	0.50	20.00	0	110	70	130				
Toluene	42.150	0.50	40.00	0	105	70	130				
Trichloroethene	20.170	0.50	20.00	0	101	70	130				
Surr: 1,2-Dichloroethane-d4	22.670		25.00		90.7	70	130				
Surr: 4-Bromofluorobenzene	25.300		25.00		101	70	130				
Surr: Dibromofluoromethane	24.830		25.00		99.3	70	130				
Surr: Toluene-d8	25.030		25.00		100	70	130				

Sample ID: A110722MB3MSD		SampType: MSD		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135290	
Client ID: ZZZZZ		Batch ID: A11VW124		TestNo: EPA 8260B		Analysis Date: 7/22/2011				SeqNo: 2214812	
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: 119041

Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

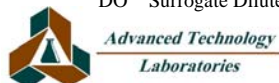
TestCode: 8260_WP_LL

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.260	0.50	20.00	0	96.3	70	130	20.59	6.68	20	
Benzene	40.580	0.50	40.00	0	101	70	130	41.31	1.78	20	
Chlorobenzene	20.770	0.50	20.00	0	104	70	130	20.97	0.958	20	
MTBE	21.790	0.50	20.00	0	109	70	130	22.06	1.23	20	
Toluene	41.150	0.50	40.00	0	103	70	130	42.15	2.40	20	
Trichloroethene	19.750	0.50	20.00	0	98.8	70	130	20.17	2.10	20	
Surr: 1,2-Dichloroethane-d4	22.100		25.00		88.4	70	130		0	0	
Surr: 4-Bromofluorobenzene	25.390		25.00		102	70	130		0	0	
Surr: Dibromofluoromethane	24.860		25.00		99.4	70	130		0	0	
Surr: Toluene-d8	24.900		25.00		99.6	70	130		0	0	

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:

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- 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: 119041
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: A110722MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 135290
Client ID: PBW	Batch ID: A11VW124	TestNo: EPA 8260B		Analysis Date: 7/22/2011	SeqNo: 2214813

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 |
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| DO Surrogate Diluted Out | Calculations are based on raw values | |



*Advanced Technology
Laboratories*

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CLIENT: Mactec
Work Order: 119041
Project: METRO WESTSIDE EXTENSION, 4953-10-1

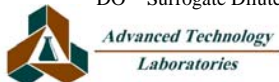
ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: A110722MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 135290						
Client ID: PBW	Batch ID: A11VW124	TestNo: EPA 8260B	Analysis Date: 7/22/2011	SeqNo: 2214813							
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	22.020		25.00		88.1	70	130				
Surr: 4-Bromofluorobenzene	24.420		25.00		97.7	70	130				
Surr: Dibromofluoromethane	24.990		25.00		100	70	130				
Surr: Toluene-d8	25.030		25.00		100	70	130				

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
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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 #: 1476
 Logged By: [Signature] Date: 7/19/11

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

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

Client: MACTEC Address: 5628 E. SLAUSON AVE State: CA Zip Code: 90040
 Attn: MATT PRAYCHINEAUD City: LOS ANGELES State: CA Zip Code: 90040
 Project Name: METRO WESTSIDE EXTENSION Project #: 4453-10-1561 Sampler: DWAYN D. SNYDER
 Relinquished by: (Signature and Printed Name) [Signature] DWAYN D. SNYDER Date: 07-19-11 Time: 10:00
 Relinquished by: (Signature and Printed Name) [Signature] MATT PRAYCHINEAUD Date: 7/20/11 Time: 1:30
 Relinquished by: (Signature and Printed Name) [Signature] MATT PRAYCHINEAUD Date: 7/20/11 Time: 1:50

I hereby authorize ATL to perform the work indicated below:
 Project Mgr / Submitter: Matt Praychineaud Date: 7/20/11
 Bill To: Matt Praychineaud 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)

ITEM	LAB USE ONLY:		Sample Description		Date	Time
	Batch #:	Lab No.	Sample I.D. / Location			
	19041-01	E-106-55			7/19	11:40
		E-106-60			7/19	13:00
		E-106-65			7/19	13:45
		E-106-64			7/19	12:00
		E-106-30			7/19	10:20
		E-106-40			7/19	10:42
		E-106-50			7/19	11:15

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

Special Instructions/Comments: _____

SPECIFY APPROPRIATE MATRIX		CONTAINER(S)		TAT	Type	REMARKS
SEDIMENT	SOLID	GROUND WATER	STORMWATER			
	<input checked="" type="checkbox"/>			E	7 TV	
	<input checked="" type="checkbox"/>			E	7 TV	
	<input checked="" type="checkbox"/>			E	7 TV	
		<input checked="" type="checkbox"/>		E	6 JV	Hold
	<input checked="" type="checkbox"/>			1 T	1 T	Hold
	<input checked="" type="checkbox"/>			1 T	1 T	Hold

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-1.227

July 28, 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.: 119066

RE: METRO WESTSIDE EXTENSION, 4953-10-1

Attention: Matt Fraychineaud

Enclosed are the results for sample(s) received on July 21, 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, 4953-10-1
Lab Order: 119066

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.



Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-107-55
Lab Order:	119066	Collection Date:	7/20/2011 10:50:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119066-001A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110722A	QC Batch: K11VS195	PrepDate: 7/20/2011	Analyst: DDL
--------------------	--------------------	---------------------	--------------

Compound	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,1,1-Trichloroethane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,1,2,2-Tetrachloroethane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,1,2-Trichloroethane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,1-Dichloroethane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,1-Dichloroethene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,1-Dichloropropene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,2,3-Trichlorobenzene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,2,3-Trichloropropane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,2,4-Trichlorobenzene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,2,4-Trimethylbenzene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,2-Dibromo-3-chloropropane	ND	7.0		µg/Kg	1	7/22/2011 02:26 PM
1,2-Dibromoethane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,2-Dichlorobenzene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,2-Dichloroethane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,2-Dichloropropane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,3,5-Trimethylbenzene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,3-Dichlorobenzene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,3-Dichloropropane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
1,4-Dichlorobenzene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
2,2-Dichloropropane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
2-Chlorotoluene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
4-Chlorotoluene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
4-Isopropyltoluene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
Benzene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
Bromobenzene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
Bromodichloromethane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
Bromoform	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
Bromomethane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
Carbon tetrachloride	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
Chlorobenzene	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
Chloroethane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
Chloroform	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
Chloromethane	ND	3.5		µg/Kg	1	7/22/2011 02:26 PM
cis-1,2-Dichloroethene	ND	3.5		µg/Kg	1	7/22/2011 02:26 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	



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-107-55
Lab Order:	119066	Collection Date:	7/20/2011 10:50:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119066-001A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110722A	QC Batch: K11VS195	PrepDate: 7/20/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Di-isopropyl ether	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Dibromochloromethane	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Dibromomethane	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Dichlorodifluoromethane	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Ethyl Tert-butyl ether	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Ethylbenzene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Hexachlorobutadiene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Isopropylbenzene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
m,p-Xylene	ND	7.0	µg/Kg	1	7/22/2011 02:26 PM
Methylene chloride	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
MTBE	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
n-Butylbenzene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
n-Propylbenzene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Naphthalene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
o-Xylene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
sec-Butylbenzene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Styrene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Tert-amyl methyl ether	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Tert-Butanol	ND	70	µg/Kg	1	7/22/2011 02:26 PM
tert-Butylbenzene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Tetrachloroethene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Toluene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
trans-1,2-Dichloroethene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Trichloroethene	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Trichlorofluoromethane	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Vinyl chloride	ND	3.5	µg/Kg	1	7/22/2011 02:26 PM
Surr: 1,2-Dichloroethane-d4	133	65-141	%REC	1	7/22/2011 02:26 PM
Surr: 4-Bromofluorobenzene	99.3	57-134	%REC	1	7/22/2011 02:26 PM
Surr: Dibromofluoromethane	122	70-128	%REC	1	7/22/2011 02:26 PM
Surr: Toluene-d8	106	72-123	%REC	1	7/22/2011 02:26 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	



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ANALYTICAL RESULTS
 Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-107-55
Lab Order: 119066	Collection Date: 7/20/2011 10:50:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 119066-001D	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110726A	QC Batch: E11VS274	PrepDate: 7/20/2011	Analyst: TP		
GRO	ND	0.72	mg/Kg	1	7/26/2011 12:22 PM
Surr: Bromofluorobenzene (FID)	99.7	51-161	%REC	1	7/26/2011 12:22 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	



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ANALYTICAL RESULTS
 Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-107-55
Lab Order:	119066	Collection Date:	7/20/2011 10:50:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119066-001G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110725A	QC Batch: 74513			PrepDate: 7/25/2011		Analyst: CBR
DRO	ND	10		mg/Kg	1	7/25/2011 04:24 PM
ORO	ND	10		mg/Kg	1	7/25/2011 04:24 PM
Surr: p-Terphenyl	76.3	63-152		%REC	1	7/25/2011 04:24 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	



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-107-60
Lab Order:	119066	Collection Date:	7/20/2011 1:30:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119066-002A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110722A	QC Batch: K11VS195	PrepDate: 7/20/2011	Analyst: DDL
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Compound	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,1,1-Trichloroethane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,1,2,2-Tetrachloroethane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,1,2-Trichloroethane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,1-Dichloroethane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,1-Dichloroethene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,1-Dichloropropene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,2,3-Trichlorobenzene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,2,3-Trichloropropane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,2,4-Trichlorobenzene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,2,4-Trimethylbenzene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,2-Dibromo-3-chloropropane	ND	7.8		µg/Kg	1	7/22/2011 02:44 PM
1,2-Dibromoethane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,2-Dichlorobenzene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,2-Dichloroethane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,2-Dichloropropane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,3,5-Trimethylbenzene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,3-Dichlorobenzene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,3-Dichloropropane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
1,4-Dichlorobenzene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
2,2-Dichloropropane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
2-Chlorotoluene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
4-Chlorotoluene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
4-Isopropyltoluene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
Benzene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
Bromobenzene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
Bromodichloromethane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
Bromoform	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
Bromomethane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
Carbon tetrachloride	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
Chlorobenzene	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
Chloroethane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
Chloroform	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
Chloromethane	ND	3.9		µg/Kg	1	7/22/2011 02:44 PM
cis-1,2-Dichloroethene	ND	3.9		µg/Kg	1	7/22/2011 02:44 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	



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-107-60
Lab Order:	119066	Collection Date:	7/20/2011 1:30:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119066-002A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110722A	QC Batch: K11VS195	PrepDate: 7/20/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Di-isopropyl ether	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Dibromochloromethane	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Dibromomethane	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Dichlorodifluoromethane	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Ethyl Tert-butyl ether	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Ethylbenzene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Hexachlorobutadiene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Isopropylbenzene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
m,p-Xylene	ND	7.8	µg/Kg	1	7/22/2011 02:44 PM
Methylene chloride	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
MTBE	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
n-Butylbenzene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
n-Propylbenzene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Naphthalene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
o-Xylene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
sec-Butylbenzene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Styrene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Tert-amyl methyl ether	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Tert-Butanol	ND	78	µg/Kg	1	7/22/2011 02:44 PM
tert-Butylbenzene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Tetrachloroethene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Toluene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
trans-1,2-Dichloroethene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Trichloroethene	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Trichlorofluoromethane	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Vinyl chloride	ND	3.9	µg/Kg	1	7/22/2011 02:44 PM
Surr: 1,2-Dichloroethane-d4	121	65-141	%REC	1	7/22/2011 02:44 PM
Surr: 4-Bromofluorobenzene	89.4	57-134	%REC	1	7/22/2011 02:44 PM
Surr: Dibromofluoromethane	110	70-128	%REC	1	7/22/2011 02:44 PM
Surr: Toluene-d8	97.9	72-123	%REC	1	7/22/2011 02:44 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	



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-107-60
Lab Order:	119066	Collection Date:	7/20/2011 1:30:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119066-002D		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110726A	QC Batch: E11VS274	PrepDate: 7/20/2011	Analyst: TP		
GRO	ND	0.75	mg/Kg	1	7/26/2011 12:37 PM
Surr: Bromofluorobenzene (FID)	99.3	51-161	%REC	1	7/26/2011 12:37 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	



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-107-60
Lab Order:	119066	Collection Date:	7/20/2011 1:30:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119066-002G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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ICP METALS

EPA 3050B

EPA 6010B

RunID: ICP8_110725D	QC Batch: 74509			PrepDate: 7/25/2011	Analyst: CBB	
Antimony	ND	2.0		mg/Kg	1	7/25/2011 03:33 PM
Arsenic	ND	1.0		mg/Kg	1	7/25/2011 03:33 PM
Barium	120	1.0		mg/Kg	1	7/25/2011 03:33 PM
Beryllium	ND	1.0		mg/Kg	1	7/25/2011 03:33 PM
Cadmium	ND	1.0		mg/Kg	1	7/25/2011 03:33 PM
Chromium	6.9	1.0		mg/Kg	1	7/25/2011 03:33 PM
Cobalt	11	1.0		mg/Kg	1	7/25/2011 03:33 PM
Copper	14	2.0		mg/Kg	1	7/25/2011 03:33 PM
Lead	1.8	1.0		mg/Kg	1	7/25/2011 03:33 PM
Molybdenum	ND	1.0		mg/Kg	1	7/25/2011 03:33 PM
Nickel	3.5	1.0		mg/Kg	1	7/25/2011 03:33 PM
Selenium	ND	1.0		mg/Kg	1	7/25/2011 03:33 PM
Silver	ND	1.0		mg/Kg	1	7/25/2011 03:33 PM
Thallium	ND	1.0		mg/Kg	1	7/25/2011 03:33 PM
Vanadium	47	1.0		mg/Kg	1	7/25/2011 03:33 PM
Zinc	44	1.0		mg/Kg	1	7/25/2011 03:33 PM

DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID

LUFT

EPA 8015B(M)

RunID: GC16_110725A	QC Batch: 74513			PrepDate: 7/25/2011	Analyst: CBR	
DRO	ND	10		mg/Kg	1	7/25/2011 04:46 PM
ORO	ND	10		mg/Kg	1	7/25/2011 04:46 PM
Surr: p-Terphenyl	85.9	63-152		%REC	1	7/25/2011 04:46 PM

MERCURY BY COLD VAPOR TECHNIQUE

EPA 7471A

RunID: AA1_110726A	QC Batch: 74520			PrepDate: 7/25/2011	Analyst: VV	
Mercury	ND	0.10		mg/Kg	1	7/26/2011 11:48 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	



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-107-65
Lab Order:	119066	Collection Date:	7/20/2011 2:55:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119066-003A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110722A	QC Batch: K11VS195	PrepDate: 7/20/2011	Analyst: DDL
1,1,1,2-Tetrachloroethane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,1,1-Trichloroethane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,1,2,2-Tetrachloroethane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,1,2-Trichloroethane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,1-Dichloroethane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,1-Dichloroethene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,1-Dichloropropene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,2,3-Trichlorobenzene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,2,3-Trichloropropane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,2,4-Trichlorobenzene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,2,4-Trimethylbenzene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,2-Dibromo-3-chloropropane	ND	7.4	µg/Kg 1 7/22/2011 03:02 PM
1,2-Dibromoethane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,2-Dichlorobenzene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,2-Dichloroethane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,2-Dichloropropane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,3,5-Trimethylbenzene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,3-Dichlorobenzene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,3-Dichloropropane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
1,4-Dichlorobenzene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
2,2-Dichloropropane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
2-Chlorotoluene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
4-Chlorotoluene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
4-Isopropyltoluene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
Benzene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
Bromobenzene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
Bromodichloromethane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
Bromoform	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
Bromomethane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
Carbon tetrachloride	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
Chlorobenzene	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
Chloroethane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
Chloroform	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
Chloromethane	ND	3.7	µg/Kg 1 7/22/2011 03:02 PM
cis-1,2-Dichloroethene	ND	3.7	µg/Kg 1 7/22/2011 03:02 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	



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-107-65
Lab Order:	119066	Collection Date:	7/20/2011 2:55:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119066-003A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110722A	QC Batch: K11VS195	PrepDate: 7/20/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Di-isopropyl ether	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Dibromochloromethane	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Dibromomethane	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Dichlorodifluoromethane	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Ethyl Tert-butyl ether	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Ethylbenzene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Hexachlorobutadiene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Isopropylbenzene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
m,p-Xylene	ND	7.4	µg/Kg	1	7/22/2011 03:02 PM
Methylene chloride	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
MTBE	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
n-Butylbenzene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
n-Propylbenzene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Naphthalene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
o-Xylene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
sec-Butylbenzene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Styrene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Tert-amyl methyl ether	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Tert-Butanol	ND	74	µg/Kg	1	7/22/2011 03:02 PM
tert-Butylbenzene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Tetrachloroethene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Toluene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
trans-1,2-Dichloroethene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Trichloroethene	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Trichlorofluoromethane	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Vinyl chloride	ND	3.7	µg/Kg	1	7/22/2011 03:02 PM
Surr: 1,2-Dichloroethane-d4	127	65-141	%REC	1	7/22/2011 03:02 PM
Surr: 4-Bromofluorobenzene	96.8	57-134	%REC	1	7/22/2011 03:02 PM
Surr: Dibromofluoromethane	116	70-128	%REC	1	7/22/2011 03:02 PM
Surr: Toluene-d8	102	72-123	%REC	1	7/22/2011 03:02 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	



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ANALYTICAL RESULTS
 Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-107-65
Lab Order:	119066	Collection Date:	7/20/2011 2:55:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119066-003D		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110726A	QC Batch: E11VS274	PrepDate: 7/20/2011	Analyst: TP		
GRO	ND	0.72	mg/Kg	1	7/26/2011 12:53 PM
Surr: Bromofluorobenzene (FID)	102	51-161	%REC	1	7/26/2011 12:53 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	



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ANALYTICAL RESULTS
 Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-107-65
Lab Order:	119066	Collection Date:	7/20/2011 2:55:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119066-003G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110725A	QC Batch: 74513			PrepDate: 7/25/2011		Analyst: CBR
DRO	ND	10		mg/Kg	1	7/25/2011 04:57 PM
ORO	ND	10		mg/Kg	1	7/25/2011 04:57 PM
Surr: p-Terphenyl	86.9	63-152		%REC	1	7/25/2011 04:57 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	



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-107-GW
Lab Order: 119066	Collection Date: 7/20/2011 11:40:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: GROUNDWATER
Lab ID: 119066-004A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_110725A	QC Batch: A11VW125	PrepDate:	Analyst: BD		
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,1,1-Trichloroethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,1,2-Trichloroethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,1-Dichloroethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,1-Dichloroethene	0.51	0.50	µg/L	1	7/25/2011 01:52 PM
1,1-Dichloropropene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,2,3-Trichlorobenzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,2,3-Trichloropropane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,2-Dibromo-3-chloropropane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,2-Dibromoethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,2-Dichlorobenzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,2-Dichloroethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,2-Dichloropropane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,3-Dichlorobenzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,3-Dichloropropane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
1,4-Dichlorobenzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
2,2-Dichloropropane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
2-Chlorotoluene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
4-Chlorotoluene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
4-Isopropyltoluene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Benzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Bromobenzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Bromodichloromethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Bromoform	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Bromomethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Carbon tetrachloride	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Chlorobenzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Chloroethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Chloroform	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Chloromethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
cis-1,2-Dichloroethene	ND	0.50	µg/L	1	7/25/2011 01:52 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	



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-107-GW
Lab Order: 119066	Collection Date: 7/20/2011 11:40:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: GROUNDWATER
Lab ID: 119066-004A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_110725A	QC Batch: A11VW125	PrepDate:	Analyst: BD		
cis-1,3-Dichloropropene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Di-isopropyl ether	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Dibromochloromethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Dibromomethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Dichlorodifluoromethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Ethyl tert-butyl ether	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Ethylbenzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Hexachlorobutadiene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Isopropylbenzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
m,p-Xylene	ND	1.0	µg/L	1	7/25/2011 01:52 PM
Methylene chloride	ND	1.0	µg/L	1	7/25/2011 01:52 PM
MTBE	ND	0.50	µg/L	1	7/25/2011 01:52 PM
n-Butylbenzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
n-Propylbenzene	0.78	0.50	µg/L	1	7/25/2011 01:52 PM
Naphthalene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
o-Xylene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
sec-Butylbenzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Styrene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Tert-amyl methyl ether	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Tert-Butanol	ND	10	µg/L	1	7/25/2011 01:52 PM
tert-Butylbenzene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Tetrachloroethene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Toluene	0.63	0.50	µg/L	1	7/25/2011 01:52 PM
trans-1,2-Dichloroethene	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Trichloroethene	0.53	0.50	µg/L	1	7/25/2011 01:52 PM
Trichlorofluoromethane	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Vinyl chloride	ND	0.50	µg/L	1	7/25/2011 01:52 PM
Surr: 1,2-Dichloroethane-d4	86.0	70-130	%REC	1	7/25/2011 01:52 PM
Surr: 4-Bromofluorobenzene	100	70-130	%REC	1	7/25/2011 01:52 PM
Surr: Dibromofluoromethane	97.0	70-130	%REC	1	7/25/2011 01:52 PM
Surr: Toluene-d8	99.2	70-130	%REC	1	7/25/2011 01:52 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	



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ANALYTICAL RESULTS
 Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-107-GW
Lab Order:	119066	Collection Date:	7/20/2011 11:40:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	GROUNDWATER
Lab ID:	119066-004B		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC19_110722A	QC Batch: M11VW143	PrepDate:	Analyst: DDL		
GRO	ND	0.20	mg/L	1	7/22/2011 03:08 PM
Surr: Bromofluorobenzene (FID)	88.9	70-130	%REC	1	7/22/2011 03:08 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		



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ANALYTICAL RESULTS
 Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-107-GW
Lab Order: 119066	Collection Date: 7/20/2011 11:40:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: GROUNDWATER
Lab ID: 119066-004C	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID

		EPA 3510C			EPA 8015B(M)		
RunID: GC16_110726B	QC Batch: 74531				PrepDate: 7/26/2011	Analyst: CBR	
DRO		0.39	0.20	mg/L	1	7/26/2011 12:37 PM	
ORO		0.29	0.20	mg/L	1	7/26/2011 12:37 PM	
Surr: p-Terphenyl		60.3	36-126	%REC	1	7/26/2011 12:37 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	



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CLIENT: Mactec
Work Order: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

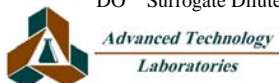
TestCode: 6010_S

Sample ID: MB-74509	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135302						
Client ID: PBS	Batch ID: 74509	TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/25/2011	SeqNo: 2215175						
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	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	0.461	1.0									

Sample ID: LCS-74509	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135302						
Client ID: LCSS	Batch ID: 74509	TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/25/2011	SeqNo: 2215176						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	46.173	2.0	50.00	0	92.3	80	120				
Arsenic	45.939	1.0	50.00	0	91.9	80	120				
Barium	47.794	1.0	50.00	0	95.6	80	120				
Beryllium	47.191	1.0	50.00	0	94.4	80	120				
Cadmium	45.821	1.0	50.00	0	91.6	80	120				
Chromium	44.562	1.0	50.00	0	89.1	80	120				
Cobalt	47.845	1.0	50.00	0	95.7	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: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

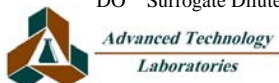
TestCode: 6010_S

Sample ID: LCS-74509		SampType: LCS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 7/25/2011		RunNo: 135302	
Client ID: LCSS		Batch ID: 74509		TestNo: EPA 6010B EPA 3050B				Analysis Date: 7/25/2011		SeqNo: 2215176	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	47.937	2.0	50.00	0	95.9	80	120				
Lead	47.096	1.0	50.00	0	94.2	80	120				
Molybdenum	49.615	1.0	50.00	0	99.2	80	120				
Nickel	47.727	1.0	50.00	0	95.5	80	120				
Selenium	43.352	1.0	50.00	0	86.7	80	120				
Silver	47.062	1.0	50.00	0	94.1	80	120				
Thallium	45.685	1.0	50.00	0	91.4	80	120				
Vanadium	47.437	1.0	50.00	0	94.9	80	120				
Zinc	46.705	1.0	50.00	0.4612	92.5	80	120				

Sample ID: 118919-007A-MS		SampType: MS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 7/25/2011		RunNo: 135302	
Client ID: ZZZZZZ		Batch ID: 74509		TestNo: EPA 6010B EPA 3050B				Analysis Date: 7/25/2011		SeqNo: 2215178	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	103.766	2.0	125.0	0	83.0	32	105				
Arsenic	98.353	1.0	125.0	0	78.7	49	106				
Barium	228.814	1.0	125.0	115.3	90.8	31	133				
Beryllium	111.642	1.0	125.0	0	89.3	56	106				
Cadmium	108.129	1.0	125.0	0.3535	86.2	51	103				
Chromium	114.288	1.0	125.0	5.679	86.9	45	114				
Cobalt	121.428	1.0	125.0	7.258	91.3	52	106				
Copper	122.531	2.0	125.0	0	98.0	54	125				
Lead	111.082	1.0	125.0	2.664	86.7	34	126				
Molybdenum	114.141	1.0	125.0	0	91.3	54	106				
Nickel	109.725	1.0	125.0	0.8731	87.1	45	111				
Selenium	104.222	1.0	125.0	0	83.4	47	104				
Silver	116.600	1.0	125.0	0	93.3	56	112				
Thallium	81.607	1.0	125.0	0	65.3	46	101				
Vanadium	162.211	1.0	125.0	45.78	93.1	54	114				
Zinc	153.966	1.0	125.0	49.83	83.3	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: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

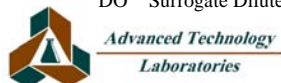
ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: 118919-007A-MSD		SampType: MSD		TestCode: 6010_S		Units: mg/Kg		Prep Date: 7/25/2011		RunNo: 135302	
Client ID: ZZZZZZ		Batch ID: 74509		TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/25/2011		SeqNo: 2215179			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	102.841	2.0	125.0	0	82.3	32	105	103.8	0.896	20	
Arsenic	99.365	1.0	125.0	0	79.5	49	106	98.35	1.02	20	
Barium	200.372	1.0	125.0	115.3	68.1	31	133	228.8	13.3	20	
Beryllium	110.176	1.0	125.0	0	88.1	56	106	111.6	1.32	20	
Cadmium	105.839	1.0	125.0	0.3535	84.4	51	103	108.1	2.14	20	
Chromium	110.457	1.0	125.0	5.679	83.8	45	114	114.3	3.41	20	
Cobalt	117.514	1.0	125.0	7.258	88.2	52	106	121.4	3.28	20	
Copper	118.964	2.0	125.0	0	95.2	54	125	122.5	2.95	20	
Lead	109.823	1.0	125.0	2.664	85.7	34	126	111.1	1.14	20	
Molybdenum	113.189	1.0	125.0	0	90.6	54	106	114.1	0.838	20	
Nickel	107.281	1.0	125.0	0.8731	85.1	45	111	109.7	2.25	20	
Selenium	103.349	1.0	125.0	0	82.7	47	104	104.2	0.841	20	
Silver	113.600	1.0	125.0	0	90.9	56	112	116.6	2.61	20	
Thallium	87.139	1.0	125.0	0	69.7	46	101	81.61	6.56	20	
Vanadium	146.124	1.0	125.0	45.78	80.3	54	114	162.2	10.4	20	
Zinc	140.185	1.0	125.0	49.83	72.3	28	125	154.0	9.37	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 | |



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CLIENT: Mactec
Work Order: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: MB-74520	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135330						
Client ID: PBS	Batch ID: 74520	TestNo: EPA 7471A		Analysis Date: 7/26/2011	SeqNo: 2215636						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury ND 0.10

Sample ID: LCS-74520	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135330						
Client ID: LCSS	Batch ID: 74520	TestNo: EPA 7471A		Analysis Date: 7/26/2011	SeqNo: 2215637						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.878 0.10 0.8300 0 106 80 120

Sample ID: 119094-003G-MS	SampType: MS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135330						
Client ID: ZZZZZ	Batch ID: 74520	TestNo: EPA 7471A		Analysis Date: 7/26/2011	SeqNo: 2215638						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

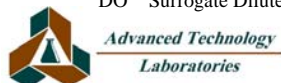
Mercury 0.823 0.10 0.8300 0 99.1 70 130

Sample ID: 119094-003G-MSD	SampType: MSD	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135330						
Client ID: ZZZZZ	Batch ID: 74520	TestNo: EPA 7471A		Analysis Date: 7/26/2011	SeqNo: 2215639						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.822 0.10 0.8300 0 99.0 70 130 0.8229 0.129 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: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

Sample ID: MB-74513	SampType: MBLK	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135317						
Client ID: PBS	Batch ID: 74513	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/25/2011	SeqNo: 2215380						
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	71.990		80.00		90.0	63	152				

Sample ID: LCS-74513	SampType: LCS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135317						
Client ID: LCSS	Batch ID: 74513	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/25/2011	SeqNo: 2215381						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	938.900	10	1000	0	93.9	76	139				
Surr: p-Terphenyl	74.630		80.00		93.3	63	152				

Sample ID: 119065-001GMS	SampType: MS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135317						
Client ID: ZZZZZ	Batch ID: 74513	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/25/2011	SeqNo: 2215382						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	832.320	10	1000	0	83.2	60	158				
Surr: p-Terphenyl	65.260		80.00		81.6	63	152				

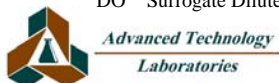
Sample ID: 119065-001GMSD	SampType: MSD	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135317						
Client ID: ZZZZZ	Batch ID: 74513	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/25/2011	SeqNo: 2215383						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	840.690	10	1000	0	84.1	60	158	832.3	1.00	20	
Surr: p-Terphenyl	64.110		80.00		80.1	63	152		0	0	

Sample ID: 119111-002AMS	SampType: MS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135317						
Client ID: ZZZZZ	Batch ID: 74513	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/25/2011	SeqNo: 2215399						
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 |
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| DO Surrogate Diluted Out | Calculations are based on raw values | |



CLIENT: Mactec
Work Order: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

Sample ID: 119111-002AMS	SampType: MS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135317						
Client ID: ZZZZZZ	Batch ID: 74513	TestNo: EPA 8015B(M LUFT	Analysis Date: 7/25/2011	SeqNo: 2215399							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

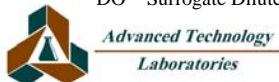
DRO	951.900	10	1000	0	95.2	60	158				
Surr: p-Terphenyl	74.710		80.00		93.4	63	152				

Sample ID: 119111-002AMSD	SampType: MSD	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135317						
Client ID: ZZZZZZ	Batch ID: 74513	TestNo: EPA 8015B(M LUFT	Analysis Date: 7/25/2011	SeqNo: 2215400							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	956.600	10	1000	0	95.7	60	158	951.9	0.493	20	
Surr: p-Terphenyl	74.370		80.00		93.0	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 |
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| DO Surrogate Diluted Out | Calculations are based on raw values | |



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CLIENT: Mactec
Work Order: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

Sample ID: E110726LC1	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135360						
Client ID: LCSS	Batch ID: E11VS274	TestNo: EPA 8015B(M)	Analysis Date: 7/26/2011	SeqNo: 2216092							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.689	1.0	5.000	0	93.8	70	130				
Surr: Bromofluorobenzene (FID)	118.212		100.0		118	51	161				

Sample ID: E110726MB1MS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135360						
Client ID: ZZZZZ	Batch ID: E11VS274	TestNo: EPA 8015B(M)	Analysis Date: 7/26/2011	SeqNo: 2216093							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.623	1.0	5.000	0	92.5	41	146				
Surr: Bromofluorobenzene (FID)	114.698		100.0		115	51	161				

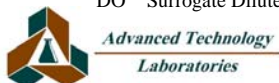
Sample ID: E110726MB1MSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135360						
Client ID: ZZZZZ	Batch ID: E11VS274	TestNo: EPA 8015B(M)	Analysis Date: 7/26/2011	SeqNo: 2216094							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.613	1.0	5.000	0	92.3	41	146	4.623	0.217	20	
Surr: Bromofluorobenzene (FID)	123.354		100.0		123	51	161		0	0	

Sample ID: E110726MB1	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135360						
Client ID: PBS	Batch ID: E11VS274	TestNo: EPA 8015B(M)	Analysis Date: 7/26/2011	SeqNo: 2216095							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	86.392		100.0		86.4	51	161				

Sample ID: 119099-001AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135360						
Client ID: ZZZZZ	Batch ID: E11VS274	TestNo: EPA 8015B(M)	Analysis Date: 7/26/2011	SeqNo: 2216106							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.396	1.0	5.000	0.3600	80.7	41	146				

Qualifiers:

- | | | |
|---|--|--|
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| ND Not Detected at the Reporting Limit | R RPD outside accepted recovery limits | S Spike/Surrogate outside of limits due to matrix interference |
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CLIENT: Mactec
Work Order: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

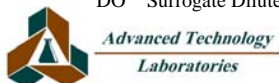
TestCode: 8015_S_G 5035P

Sample ID: 119099-001AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135360						
Client ID: ZZZZZZ	Batch ID: E11VS274	TestNo: EPA 8015B(M)	Analysis Date: 7/26/2011	SeqNo: 2216106							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Bromofluorobenzene (FID)	126.109		100.0		126	51	161				

Sample ID: 119099-001AMSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135360						
Client ID: ZZZZZZ	Batch ID: E11VS274	TestNo: EPA 8015B(M)	Analysis Date: 7/26/2011	SeqNo: 2216107							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.482	1.0	5.000	0.3600	82.4	41	146	4.396	1.94	20	
Surr: Bromofluorobenzene (FID)	126.627		100.0		127	51	161		0	0	

Qualifiers:

- | | | |
|---|--|--|
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CLIENT: Mactec
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Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_DM

Sample ID: MB-74531	SampType: MBLK	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 7/26/2011	RunNo: 135340						
Client ID: PBW	Batch ID: 74531	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 7/26/2011	SeqNo: 2215981						
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	0.043		0.08000		53.9	36	126				

Sample ID: LCS-74531	SampType: LCS	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 7/26/2011	RunNo: 135340						
Client ID: LCSW	Batch ID: 74531	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 7/26/2011	SeqNo: 2215982						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	0.532	0.20	1.000	0	53.2	52	128				
Surr: p-Terphenyl	0.050		0.08000		62.6	36	126				

Sample ID: MB-74531MS	SampType: MS	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 7/26/2011	RunNo: 135340						
Client ID: ZZZZZ	Batch ID: 74531	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 7/26/2011	SeqNo: 2215983						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

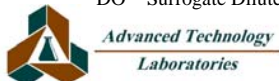
DRO	0.593	0.20	1.000	0	59.3	52	128				
Surr: p-Terphenyl	0.052		0.08000		65.6	36	126				

Sample ID: MB-74531MSD	SampType: MSD	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 7/26/2011	RunNo: 135340						
Client ID: ZZZZZ	Batch ID: 74531	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 7/26/2011	SeqNo: 2215999						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	0.629	0.20	1.000	0	62.9	52	128	0.5926	5.89	20	
Surr: p-Terphenyl	0.045		0.08000		56.0	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: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_G PRES

Sample ID: M110722LCS2	SampType: LCS	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 135283						
Client ID: LCSW	Batch ID: M11VW143	TestNo: EPA 8015B(M)	Analysis Date: 7/22/2011	SeqNo: 2214730							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	1.057	0.20	1.000	0	106	70	130				
Surr: Bromofluorobenzene (FID)	91.861		100.0		91.9	70	130				

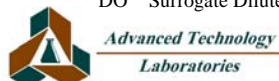
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Client ID: ZZZZZZ	Batch ID: M11VW143	TestNo: EPA 8015B(M)	Analysis Date: 7/22/2011	SeqNo: 2214731							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	1.099	0.20	1.000	0	110	70	130				
Surr: Bromofluorobenzene (FID)	91.562		100.0		91.6	70	130				

Sample ID: M110722MB1MSD	SampType: MSD	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 135283						
Client ID: ZZZZZZ	Batch ID: M11VW143	TestNo: EPA 8015B(M)	Analysis Date: 7/22/2011	SeqNo: 2214732							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	1.091	0.20	1.000	0	109	70	130	1.099	0.731	20	
Surr: Bromofluorobenzene (FID)	92.568		100.0		92.6	70	130		0	0	

Sample ID: M110722MB1	SampType: MBLK	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 135283						
Client ID: PBW	Batch ID: M11VW143	TestNo: EPA 8015B(M)	Analysis Date: 7/22/2011	SeqNo: 2214733							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	0.20									
Surr: Bromofluorobenzene (FID)	89.141		100.0		89.1	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 | |



CLIENT: Mactec
Work Order: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

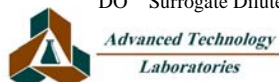
Sample ID: K110722LCS1		SampType: LCS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135269	
Client ID: LCSS		Batch ID: K11VS195		TestNo: EPA 8260B		Analysis Date: 7/22/2011				SeqNo: 2214454	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	45.730	5.0	50.00	0	91.5	70	130				
Benzene	95.000	5.0	100.0	0	95.0	70	130				
Chlorobenzene	50.510	5.0	50.00	0	101	70	130				
MTBE	57.620	5.0	50.00	0	115	70	130				
Toluene	95.710	5.0	100.0	0	95.7	70	130				
Trichloroethene	47.920	5.0	50.00	0	95.8	70	130				
Surr: 1,2-Dichloroethane-d4	52.830		50.00		106	65	141				
Surr: 4-Bromofluorobenzene	45.390		50.00		90.8	57	134				
Surr: Dibromofluoromethane	50.660		50.00		101	70	128				
Surr: Toluene-d8	47.900		50.00		95.8	72	123				

Sample ID: K110722MB1MS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135269	
Client ID: ZZZZZ		Batch ID: K11VS195		TestNo: EPA 8260B		Analysis Date: 7/22/2011				SeqNo: 2214455	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	46.060	5.0	50.00	0	92.1	70	130				
Benzene	95.990	5.0	100.0	0	96.0	70	130				
Chlorobenzene	50.870	5.0	50.00	0	102	70	130				
MTBE	57.650	5.0	50.00	0	115	70	130				
Toluene	96.760	5.0	100.0	0	96.8	70	130				
Trichloroethene	48.410	5.0	50.00	0	96.8	70	130				
Surr: 1,2-Dichloroethane-d4	52.790		50.00		106	65	141				
Surr: 4-Bromofluorobenzene	45.950		50.00		91.9	57	134				
Surr: Dibromofluoromethane	51.880		50.00		104	70	128				
Surr: Toluene-d8	47.850		50.00		95.7	72	123				

Sample ID: K110722MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135269	
Client ID: ZZZZZ		Batch ID: K11VS195		TestNo: EPA 8260B		Analysis Date: 7/22/2011				SeqNo: 2214456	
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 | |



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

CLIENT: Mactec
Work Order: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

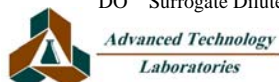
TestCode: 8260_S_5035

Sample ID: K110722MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135269	
Client ID: ZZZZZ		Batch ID: K11VS195		TestNo: EPA 8260B		Analysis Date: 7/22/2011				SeqNo: 2214456	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	48.510	5.0	50.00	0	97.0	70	130	46.06	5.18	20	
Benzene	101.910	5.0	100.0	0	102	70	130	95.99	5.98	20	
Chlorobenzene	53.320	5.0	50.00	0	107	70	130	50.87	4.70	20	
MTBE	61.810	5.0	50.00	0	124	70	130	57.65	6.96	20	
Toluene	102.500	5.0	100.0	0	103	70	130	96.76	5.76	20	
Trichloroethene	52.180	5.0	50.00	0	104	70	130	48.41	7.50	20	
Surr: 1,2-Dichloroethane-d4	55.340		50.00		111	65	141		0	0	
Surr: 4-Bromofluorobenzene	48.780		50.00		97.6	57	134		0	0	
Surr: Dibromofluoromethane	53.950		50.00		108	70	128		0	0	
Surr: Toluene-d8	50.850		50.00		102	72	123		0	0	

Sample ID: K110722MB1		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135269	
Client ID: PBS		Batch ID: K11VS195		TestNo: EPA 8260B		Analysis Date: 7/22/2011				SeqNo: 2214457	
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: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110722MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135269						
Client ID: PBS	Batch ID: K11VS195	TestNo: EPA 8260B		Analysis Date: 7/22/2011	SeqNo: 2214457						
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:

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

CLIENT: Mactec
Work Order: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110722MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135269						
Client ID: PBS	Batch ID: K11VS195	TestNo: EPA 8260B	Analysis Date: 7/22/2011	SeqNo: 2214457							
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	54.200		50.00		108	65	141				
Surr: 4-Bromofluorobenzene	43.370		50.00		86.7	57	134				
Surr: Dibromofluoromethane	52.050		50.00		104	70	128				
Surr: Toluene-d8	47.720		50.00		95.4	72	123				

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
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CLIENT: Mactec
Work Order: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

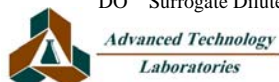
Sample ID: A110725LCS1		SampType: LCS		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135333	
Client ID: LCSW		Batch ID: A11VW125		TestNo: EPA 8260B		Analysis Date: 7/25/2011				SeqNo: 2215676	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	17.360	0.50	20.00	0	86.8	70	130				
Benzene	39.870	0.50	40.00	0	99.7	70	130				
Chlorobenzene	20.530	0.50	20.00	0	103	70	130				
MTBE	21.480	0.50	20.00	0	107	70	130				
Toluene	40.160	0.50	40.00	0	100	70	130				
Trichloroethene	19.030	0.50	20.00	0	95.2	70	130				
Surr: 1,2-Dichloroethane-d4	21.760		25.00		87.0	70	130				
Surr: 4-Bromofluorobenzene	25.090		25.00		100	70	130				
Surr: Dibromofluoromethane	24.260		25.00		97.0	70	130				
Surr: Toluene-d8	24.730		25.00		98.9	70	130				

Sample ID: A110725MB3MS		SampType: MS		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135333	
Client ID: ZZZZZ		Batch ID: A11VW125		TestNo: EPA 8260B		Analysis Date: 7/25/2011				SeqNo: 2215677	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	15.380	0.50	20.00	0	76.9	70	130				
Benzene	38.470	0.50	40.00	0	96.2	70	130				
Chlorobenzene	20.340	0.50	20.00	0	102	70	130				
MTBE	21.010	0.50	20.00	0	105	70	130				
Toluene	38.750	0.50	40.00	0	96.9	70	130				
Trichloroethene	17.690	0.50	20.00	0	88.4	70	130				
Surr: 1,2-Dichloroethane-d4	21.040		25.00		84.2	70	130				
Surr: 4-Bromofluorobenzene	24.880		25.00		99.5	70	130				
Surr: Dibromofluoromethane	23.850		25.00		95.4	70	130				
Surr: Toluene-d8	24.420		25.00		97.7	70	130				

Sample ID: A110725MB3MSD		SampType: MSD		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135333	
Client ID: ZZZZZ		Batch ID: A11VW125		TestNo: EPA 8260B		Analysis Date: 7/25/2011				SeqNo: 2215678	
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: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

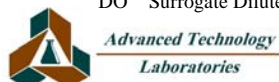
TestCode: 8260_WP_LL

Sample ID: A110725MB3MSD		SampType: MSD		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135333	
Client ID: ZZZZZZ		Batch ID: A11VW125		TestNo: EPA 8260B		Analysis Date: 7/25/2011				SeqNo: 2215678	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	16.370	0.50	20.00	0	81.8	70	130	15.38	6.24	20	
Benzene	39.180	0.50	40.00	0	98.0	70	130	38.47	1.83	20	
Chlorobenzene	20.270	0.50	20.00	0	101	70	130	20.34	0.345	20	
MTBE	21.510	0.50	20.00	0	108	70	130	21.01	2.35	20	
Toluene	39.460	0.50	40.00	0	98.6	70	130	38.75	1.82	20	
Trichloroethene	18.330	0.50	20.00	0	91.7	70	130	17.69	3.55	20	
Surr: 1,2-Dichloroethane-d4	21.820		25.00		87.3	70	130		0	0	
Surr: 4-Bromofluorobenzene	25.210		25.00		101	70	130		0	0	
Surr: Dibromofluoromethane	23.930		25.00		95.7	70	130		0	0	
Surr: Toluene-d8	24.600		25.00		98.4	70	130		0	0	

Sample ID: A110725MB3		SampType: MBLK		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135333	
Client ID: PBW		Batch ID: A11VW125		TestNo: EPA 8260B		Analysis Date: 7/25/2011				SeqNo: 2215679	
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: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: A110725MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 135333
Client ID: PBW	Batch ID: A11VW125	TestNo: EPA 8260B		Analysis Date: 7/25/2011	SeqNo: 2215679

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 |
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| DO Surrogate Diluted Out | Calculations are based on raw values | |



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CLIENT: Mactec
Work Order: 119066
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: A110725MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 135333						
Client ID: PBW	Batch ID: A11VW125	TestNo: EPA 8260B		Analysis Date: 7/25/2011	SeqNo: 2215679						
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	21.700		25.00		86.8	70	130				
Surr: 4-Bromofluorobenzene	25.050		25.00		100	70	130				
Surr: Dibromofluoromethane	24.620		25.00		98.5	70	130				
Surr: Toluene-d8	25.020		25.00		100	70	130				

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
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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

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

P.O.#: 201106374 Quote #: 1476
 Logged By: [Signature] Date: 7/22/11
 NOTE: Please include your Quote No. to ensure proper pricing of your project.

Client: MACTEC Address: 5628 E. SLAUSON AVE TEL: _____
Attn: MATT FRAYCHINEAUD City: LOS ANGELES State: CA Zip Code: 90040 FAX: _____

Project Name: METRO WESTSIDE EXTENSION Project #: 4953-10-1561 Sampler: DUAN D. SWYDER
 Relinquished by: [Signature] Date: 7/21/11 Time: 7:00 Received by: [Signature] Date: 7/21/11 Time: 0700
 Relinquished by: [Signature] Date: 7/21/11 Time: 1004 Received by: [Signature] Date: 7/21/11 Time: 1604
 Relinquished by: [Signature] Date: 7/21/11 Time: 1717 Received by: [Signature] Date: 7/21/11 Time: 1717

I hereby authorize ATL to perform the work indicated below:
 Project Mgr / Submitter: Matt Fraychineaud Date: 7/21/11
[Signature] Date: 7/21/11

Special Instructions/Comments: _____
 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)

ITEM	LAB USE ONLY: Batch #:	Lab No.	Sample Description	Sample I.D. / Location		Date		Time	SPECIFY APPROPRIATE MATRIX	PRESERVATION	Q A / Q C
				Sample I.D.	Location	Date	Time				
	119066 / 007	E-107-55			7/20	10:50			SEDIMENT		RTNE <input type="checkbox"/> CT <input type="checkbox"/> Legal <input type="checkbox"/> SWRCB <input type="checkbox"/> Logcode <input type="checkbox"/> OTHER _____
	2	E-107-60			7/20	13:30			SOIL		
	3	E-107-65			7/20	14:55			GROUND WATER		
	4	E-107-6W			7/20	11:40			WASTEWATER		
	5	E-107-30			7/19	14:25			DRINKING WATER		
	6	E-107-40			7/19	14:50			STORMWATER		
	7	E-107-50			7/19	15:10			AQUEOUS		

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=Pin 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

Figure I-1.264

July 29, 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.: 119116

RE: METRO WESTSIDE EXTENSION, 4953-10-1

Attention: Matt Fraychineaud

Enclosed are the results for sample(s) received on July 25, 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, 4953-10-1
Lab Order: 119116

CASE NARRATIVE

Sample Receiving / General Comments

Sample E-108-60 was not received, client was notified on 07/26/11.

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



Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-108-15
Lab Order:	119116	Collection Date:	7/22/2011 10:12:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119116-001A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110727A	QC Batch: K11VS198	PrepDate: 7/22/2011	Analyst: SLL		
1,1,1,2-Tetrachloroethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,1,1-Trichloroethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,1,2,2-Tetrachloroethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,1,2-Trichloroethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,1-Dichloroethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,1-Dichloroethene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,1-Dichloropropene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,2,3-Trichlorobenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,2,3-Trichloropropane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,2,4-Trichlorobenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,2,4-Trimethylbenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,2-Dibromo-3-chloropropane	ND	7.5	µg/Kg	1	7/27/2011 12:43 PM
1,2-Dibromoethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,2-Dichlorobenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,2-Dichloroethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,2-Dichloropropane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,3,5-Trimethylbenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,3-Dichlorobenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,3-Dichloropropane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
1,4-Dichlorobenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
2,2-Dichloropropane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
2-Chlorotoluene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
4-Chlorotoluene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
4-Isopropyltoluene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Benzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Bromobenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Bromodichloromethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Bromoform	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Bromomethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Carbon tetrachloride	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Chlorobenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Chloroethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Chloroform	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Chloromethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
cis-1,2-Dichloroethene	ND	3.7	µg/Kg	1	7/27/2011 12:43 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	



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-108-15
Lab Order:	119116	Collection Date:	7/22/2011 10:12:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119116-001A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110727A	QC Batch: K11VS198	PrepDate: 7/22/2011	Analyst: SLL		
cis-1,3-Dichloropropene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Di-isopropyl ether	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Dibromochloromethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Dibromomethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Dichlorodifluoromethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Ethyl Tert-butyl ether	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Ethylbenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Hexachlorobutadiene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Isopropylbenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
m,p-Xylene	ND	7.5	µg/Kg	1	7/27/2011 12:43 PM
Methylene chloride	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
MTBE	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
n-Butylbenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
n-Propylbenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Naphthalene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
o-Xylene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
sec-Butylbenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Styrene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Tert-amyl methyl ether	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Tert-Butanol	ND	75	µg/Kg	1	7/27/2011 12:43 PM
tert-Butylbenzene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Tetrachloroethene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Toluene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
trans-1,2-Dichloroethene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Trichloroethene	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Trichlorofluoromethane	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Vinyl chloride	ND	3.7	µg/Kg	1	7/27/2011 12:43 PM
Surr: 1,2-Dichloroethane-d4	127	65-141	%REC	1	7/27/2011 12:43 PM
Surr: 4-Bromofluorobenzene	89.0	57-134	%REC	1	7/27/2011 12:43 PM
Surr: Dibromofluoromethane	111	70-128	%REC	1	7/27/2011 12:43 PM
Surr: Toluene-d8	94.8	72-123	%REC	1	7/27/2011 12:43 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	



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-108-15
Lab Order: 119116	Collection Date: 7/22/2011 10:12:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 119116-001D	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110727A	QC Batch: E11VS276	PrepDate: 7/22/2011	Analyst: TP		
GRO	ND	0.74	mg/Kg	1	7/27/2011 12:36 PM
Surr: Bromofluorobenzene (FID)	101	51-161	%REC	1	7/27/2011 12:36 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	



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-108-15
Lab Order: 119116	Collection Date: 7/22/2011 10:12:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 119116-001G	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110726A	QC Batch: 74530			PrepDate: 7/26/2011		Analyst: CBR
DRO	ND	10		mg/Kg	1	7/26/2011 03:34 PM
ORO	ND	10		mg/Kg	1	7/26/2011 03:34 PM
Surr: p-Terphenyl	80.6	63-152		%REC	1	7/26/2011 03:34 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	



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-108-30
Lab Order: 119116	Collection Date: 7/22/2011 11:10:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 119116-002A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110727A	QC Batch: K11VS198	PrepDate: 7/22/2011	Analyst: SLL		
1,1,1,2-Tetrachloroethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,1,1-Trichloroethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,1,2,2-Tetrachloroethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,1,2-Trichloroethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,1-Dichloroethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,1-Dichloroethene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,1-Dichloropropene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,2,3-Trichlorobenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,2,3-Trichloropropane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,2,4-Trichlorobenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,2,4-Trimethylbenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,2-Dibromo-3-chloropropane	ND	7.6	µg/Kg	1	7/27/2011 01:01 PM
1,2-Dibromoethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,2-Dichlorobenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,2-Dichloroethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,2-Dichloropropane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,3,5-Trimethylbenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,3-Dichlorobenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,3-Dichloropropane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
1,4-Dichlorobenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
2,2-Dichloropropane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
2-Chlorotoluene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
4-Chlorotoluene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
4-Isopropyltoluene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Benzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Bromobenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Bromodichloromethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Bromoform	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Bromomethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Carbon tetrachloride	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Chlorobenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Chloroethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Chloroform	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Chloromethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
cis-1,2-Dichloroethene	ND	3.8	µg/Kg	1	7/27/2011 01:01 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	



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-108-30
Lab Order:	119116	Collection Date:	7/22/2011 11:10:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119116-002A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110727A	QC Batch: K11VS198	PrepDate: 7/22/2011	Analyst: SLL		
cis-1,3-Dichloropropene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Di-isopropyl ether	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Dibromochloromethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Dibromomethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Dichlorodifluoromethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Ethyl Tert-butyl ether	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Ethylbenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Hexachlorobutadiene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Isopropylbenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
m,p-Xylene	ND	7.6	µg/Kg	1	7/27/2011 01:01 PM
Methylene chloride	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
MTBE	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
n-Butylbenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
n-Propylbenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Naphthalene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
o-Xylene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
sec-Butylbenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Styrene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Tert-amyl methyl ether	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Tert-Butanol	ND	76	µg/Kg	1	7/27/2011 01:01 PM
tert-Butylbenzene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Tetrachloroethene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Toluene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
trans-1,2-Dichloroethene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Trichloroethene	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Trichlorofluoromethane	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Vinyl chloride	ND	3.8	µg/Kg	1	7/27/2011 01:01 PM
Surr: 1,2-Dichloroethane-d4	123	65-141	%REC	1	7/27/2011 01:01 PM
Surr: 4-Bromofluorobenzene	89.8	57-134	%REC	1	7/27/2011 01:01 PM
Surr: Dibromofluoromethane	109	70-128	%REC	1	7/27/2011 01:01 PM
Surr: Toluene-d8	94.8	72-123	%REC	1	7/27/2011 01:01 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	



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Advanced Technology Laboratories

ANALYTICAL RESULTS
Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-108-30
Lab Order: 119116	Collection Date: 7/22/2011 11:10:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 119116-002D	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110727A	QC Batch: E11VS276	PrepDate: 7/22/2011	Analyst: TP		
GRO	ND	0.74	mg/Kg	1	7/27/2011 12:52 PM
Surr: Bromofluorobenzene (FID)	103	51-161	%REC	1	7/27/2011 12:52 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	



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Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-108-30
Lab Order:	119116	Collection Date:	7/22/2011 11:10:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119116-002G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110726A	QC Batch: 74530			PrepDate: 7/26/2011		Analyst: CBR
DRO	ND	10		mg/Kg	1	7/26/2011 03:44 PM
ORO	ND	10		mg/Kg	1	7/26/2011 03:44 PM
Surr: p-Terphenyl	102	63-152		%REC	1	7/26/2011 03:44 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	



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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-108-50
Lab Order: 119116	Collection Date: 7/22/2011 12:55:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 119116-003A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110727A	QC Batch: K11VS198	PrepDate: 7/22/2011	Analyst: SLL
1,1,1,2-Tetrachloroethane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,1,1-Trichloroethane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,1,2,2-Tetrachloroethane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,1,2-Trichloroethane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,1-Dichloroethane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,1-Dichloroethene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,1-Dichloropropene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,2,3-Trichlorobenzene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,2,3-Trichloropropane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,2,4-Trichlorobenzene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,2,4-Trimethylbenzene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,2-Dibromo-3-chloropropane	ND	7.8	µg/Kg 1 7/27/2011 01:19 PM
1,2-Dibromoethane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,2-Dichlorobenzene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,2-Dichloroethane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,2-Dichloropropane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,3,5-Trimethylbenzene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,3-Dichlorobenzene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,3-Dichloropropane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
1,4-Dichlorobenzene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
2,2-Dichloropropane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
2-Chlorotoluene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
4-Chlorotoluene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
4-Isopropyltoluene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
Benzene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
Bromobenzene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
Bromodichloromethane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
Bromoform	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
Bromomethane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
Carbon tetrachloride	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
Chlorobenzene	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
Chloroethane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
Chloroform	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
Chloromethane	ND	3.9	µg/Kg 1 7/27/2011 01:19 PM
cis-1,2-Dichloroethene	ND	3.9	µg/Kg 1 7/27/2011 01:19 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



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-108-50
Lab Order:	119116	Collection Date:	7/22/2011 12:55:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119116-003A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110727A	QC Batch: K11VS198	PrepDate: 7/22/2011	Analyst: SLL		
cis-1,3-Dichloropropene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Di-isopropyl ether	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Dibromochloromethane	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Dibromomethane	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Dichlorodifluoromethane	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Ethyl Tert-butyl ether	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Ethylbenzene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Hexachlorobutadiene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Isopropylbenzene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
m,p-Xylene	ND	7.8	µg/Kg	1	7/27/2011 01:19 PM
Methylene chloride	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
MTBE	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
n-Butylbenzene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
n-Propylbenzene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Naphthalene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
o-Xylene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
sec-Butylbenzene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Styrene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Tert-amyl methyl ether	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Tert-Butanol	ND	78	µg/Kg	1	7/27/2011 01:19 PM
tert-Butylbenzene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Tetrachloroethene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Toluene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
trans-1,2-Dichloroethene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Trichloroethene	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Trichlorofluoromethane	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Vinyl chloride	ND	3.9	µg/Kg	1	7/27/2011 01:19 PM
Surr: 1,2-Dichloroethane-d4	129	65-141	%REC	1	7/27/2011 01:19 PM
Surr: 4-Bromofluorobenzene	89.6	57-134	%REC	1	7/27/2011 01:19 PM
Surr: Dibromofluoromethane	113	70-128	%REC	1	7/27/2011 01:19 PM
Surr: Toluene-d8	95.4	72-123	%REC	1	7/27/2011 01:19 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	



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ANALYTICAL RESULTS
Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-108-50
Lab Order:	119116	Collection Date:	7/22/2011 12:55:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119116-003D		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110727A	QC Batch: E11VS276	PrepDate: 7/22/2011	Analyst: TP		
GRO	ND	0.75	mg/Kg	1	7/27/2011 01:08 PM
Surr: Bromofluorobenzene (FID)	113	51-161	%REC	1	7/27/2011 01:08 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		



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-108-50
Lab Order: 119116	Collection Date: 7/22/2011 12:55:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 119116-003G	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110726A	QC Batch: 74530			PrepDate: 7/26/2011		Analyst: CBR
DRO	ND	10		mg/Kg	1	7/26/2011 03:55 PM
ORO	ND	10		mg/Kg	1	7/26/2011 03:55 PM
Surr: p-Terphenyl	85.9	63-152		%REC	1	7/26/2011 03:55 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	



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-108-70
Lab Order:	119116	Collection Date:	7/22/2011 3:00:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119116-004A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110727A	QC Batch: K11VS198	PrepDate: 7/22/2011	Analyst: SLL		
1,1,1,2-Tetrachloroethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,1,1-Trichloroethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,1,2,2-Tetrachloroethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,1,2-Trichloroethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,1-Dichloroethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,1-Dichloroethene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,1-Dichloropropene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,2,3-Trichlorobenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,2,3-Trichloropropane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,2,4-Trichlorobenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,2,4-Trimethylbenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,2-Dibromo-3-chloropropane	ND	6.9	µg/Kg	1	7/27/2011 01:37 PM
1,2-Dibromoethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,2-Dichlorobenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,2-Dichloroethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,2-Dichloropropane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,3,5-Trimethylbenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,3-Dichlorobenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,3-Dichloropropane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
1,4-Dichlorobenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
2,2-Dichloropropane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
2-Chlorotoluene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
4-Chlorotoluene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
4-Isopropyltoluene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Benzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Bromobenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Bromodichloromethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Bromoform	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Bromomethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Carbon tetrachloride	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Chlorobenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Chloroethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Chloroform	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Chloromethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
cis-1,2-Dichloroethene	ND	3.4	µg/Kg	1	7/27/2011 01:37 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	



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-108-70
Lab Order:	119116	Collection Date:	7/22/2011 3:00:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119116-004A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110727A	QC Batch: K11VS198	PrepDate: 7/22/2011	Analyst: SLL		
cis-1,3-Dichloropropene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Di-isopropyl ether	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Dibromochloromethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Dibromomethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Dichlorodifluoromethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Ethyl Tert-butyl ether	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Ethylbenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Hexachlorobutadiene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Isopropylbenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
m,p-Xylene	ND	6.9	µg/Kg	1	7/27/2011 01:37 PM
Methylene chloride	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
MTBE	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
n-Butylbenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
n-Propylbenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Naphthalene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
o-Xylene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
sec-Butylbenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Styrene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Tert-amyl methyl ether	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Tert-Butanol	ND	69	µg/Kg	1	7/27/2011 01:37 PM
tert-Butylbenzene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Tetrachloroethene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Toluene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
trans-1,2-Dichloroethene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Trichloroethene	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Trichlorofluoromethane	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Vinyl chloride	ND	3.4	µg/Kg	1	7/27/2011 01:37 PM
Surr: 1,2-Dichloroethane-d4	130	65-141	%REC	1	7/27/2011 01:37 PM
Surr: 4-Bromofluorobenzene	90.4	57-134	%REC	1	7/27/2011 01:37 PM
Surr: Dibromofluoromethane	113	70-128	%REC	1	7/27/2011 01:37 PM
Surr: Toluene-d8	96.7	72-123	%REC	1	7/27/2011 01:37 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	



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-108-70
Lab Order:	119116	Collection Date:	7/22/2011 3:00:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119116-004D		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110727A	QC Batch: E11VS276	PrepDate: 7/22/2011	Analyst: TP		
GRO	ND	0.70	mg/Kg	1	7/27/2011 01:23 PM
Surr: Bromofluorobenzene (FID)	100	51-161	%REC	1	7/27/2011 01:23 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	



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-108-70
Lab Order:	119116	Collection Date:	7/22/2011 3:00:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119116-004G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID

LUFT

EPA 8015B(M)

RunID: GC16_110726A	QC Batch: 74530	PrepDate: 7/26/2011	Analyst: CBR		
DRO	ND	10	mg/Kg	1	7/26/2011 04:05 PM
ORO	ND	10	mg/Kg	1	7/26/2011 04:05 PM
Surr: p-Terphenyl	77.0	63-152	%REC	1	7/26/2011 04:05 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	



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-108-40
Lab Order: 119116	Collection Date: 7/22/2011 11:55:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 119116-009A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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ICP METALS

	EPA 3050B		EPA 6010B			
RunID: ICP8_110727H	QC Batch: 74560		PrepDate: 7/27/2011		Analyst: IL	
Antimony	ND	2.0	mg/Kg	1	7/27/2011 04:19 PM	
Arsenic	ND	1.0	mg/Kg	1	7/27/2011 04:19 PM	
Barium	54	1.0	mg/Kg	1	7/27/2011 04:19 PM	
Beryllium	ND	1.0	mg/Kg	1	7/27/2011 04:19 PM	
Cadmium	2.2	1.0	mg/Kg	1	7/27/2011 04:19 PM	
Chromium	17	1.0	mg/Kg	1	7/27/2011 04:19 PM	
Cobalt	8.4	1.0	mg/Kg	1	7/27/2011 04:19 PM	
Copper	16	2.0	mg/Kg	1	7/27/2011 04:19 PM	
Lead	3.3	1.0	mg/Kg	1	7/27/2011 04:19 PM	
Molybdenum	ND	1.0	mg/Kg	1	7/27/2011 04:19 PM	
Nickel	18	1.0	mg/Kg	1	7/27/2011 04:19 PM	
Selenium	ND	1.0	mg/Kg	1	7/27/2011 04:19 PM	
Silver	ND	1.0	mg/Kg	1	7/27/2011 04:19 PM	
Thallium	ND	1.0	mg/Kg	1	7/27/2011 04:19 PM	
Vanadium	29	1.0	mg/Kg	1	7/27/2011 04:19 PM	
Zinc	47	1.0	mg/Kg	1	7/27/2011 04:19 PM	

MERCURY BY COLD VAPOR TECHNIQUE

	EPA 7471A					
RunID: AA1_110726D	QC Batch: 74540		PrepDate: 7/26/2011		Analyst: VV	
Mercury	ND	0.10	mg/Kg	1	7/26/2011 04:42 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



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

CLIENT: Mactec
Work Order: 119116
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

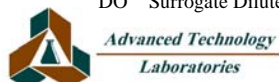
TestCode: 6010_S

Sample ID: MB-74560	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/27/2011	RunNo: 135351						
Client ID: PBS	Batch ID: 74560	TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/27/2011	SeqNo: 2216357						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.243	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	ND	1.0									

Sample ID: 119116-009A-MS	SampType: MS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/27/2011	RunNo: 135351						
Client ID: E-108-40	Batch ID: 74560	TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/27/2011	SeqNo: 2216361						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	72.143	2.0	125.0	0	57.7	32	105				
Arsenic	94.179	1.0	125.0	0	75.3	49	106				
Barium	157.634	1.0	125.0	54.29	82.7	31	133				
Beryllium	99.122	1.0	125.0	0	79.3	56	106				
Cadmium	97.249	1.0	125.0	2.162	76.1	51	103				
Chromium	112.758	1.0	125.0	16.66	76.9	45	114				
Cobalt	108.257	1.0	125.0	8.413	79.9	52	106				

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: 119116
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

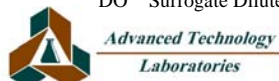
TestCode: 6010_S

Sample ID: 119116-009A-MS		SampType: MS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 7/27/2011		RunNo: 135351	
Client ID: E-108-40		Batch ID: 74560		TestNo: EPA 6010B EPA 3050B				Analysis Date: 7/27/2011		SeqNo: 2216361	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	128.221	2.0	125.0	16.41	89.4	54	125				
Lead	100.595	1.0	125.0	3.309	77.8	34	126				
Molybdenum	96.622	1.0	125.0	0	77.3	54	106				
Nickel	111.664	1.0	125.0	18.07	74.9	45	111				
Selenium	88.893	1.0	125.0	0	71.1	47	104				
Silver	101.767	1.0	125.0	0	81.4	56	112				
Thallium	89.936	1.0	125.0	0	71.9	46	101				
Vanadium	134.783	1.0	125.0	28.60	84.9	54	114				
Zinc	147.579	1.0	125.0	46.88	80.6	28	125				

Sample ID: 119116-009A-MSD		SampType: MSD		TestCode: 6010_S		Units: mg/Kg		Prep Date: 7/27/2011		RunNo: 135351	
Client ID: E-108-40		Batch ID: 74560		TestNo: EPA 6010B EPA 3050B				Analysis Date: 7/27/2011		SeqNo: 2216362	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	72.285	2.0	125.0	0	57.8	32	105	72.14	0.196	20	
Arsenic	92.273	1.0	125.0	0	73.8	49	106	94.18	2.04	20	
Barium	151.685	1.0	125.0	54.29	77.9	31	133	157.6	3.85	20	
Beryllium	95.956	1.0	125.0	0	76.8	56	106	99.12	3.25	20	
Cadmium	93.963	1.0	125.0	2.162	73.4	51	103	97.25	3.44	20	
Chromium	109.335	1.0	125.0	16.66	74.1	45	114	112.8	3.08	20	
Cobalt	105.348	1.0	125.0	8.413	77.5	52	106	108.3	2.72	20	
Copper	124.651	2.0	125.0	16.41	86.6	54	125	128.2	2.82	20	
Lead	98.415	1.0	125.0	3.309	76.1	34	126	100.6	2.19	20	
Molybdenum	95.405	1.0	125.0	0	76.3	54	106	96.62	1.27	20	
Nickel	108.071	1.0	125.0	18.07	72.0	45	111	111.7	3.27	20	
Selenium	87.673	1.0	125.0	0	70.1	47	104	88.89	1.38	20	
Silver	99.589	1.0	125.0	0	79.7	56	112	101.8	2.16	20	
Thallium	87.785	1.0	125.0	0	70.2	46	101	89.94	2.42	20	
Vanadium	131.612	1.0	125.0	28.60	82.4	54	114	134.8	2.38	20	
Zinc	138.265	1.0	125.0	46.88	73.1	28	125	147.6	6.52	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: 119116
Project: METRO WESTSIDE EXTENSION, 4953-10-1

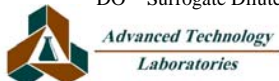
ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: LCS-74560	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/27/2011	RunNo: 135351						
Client ID: LCSS	Batch ID: 74560	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 7/27/2011	SeqNo: 2216364						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	49.667	2.0	50.00	0.2432	98.8	80	120				
Arsenic	49.456	1.0	50.00	0	98.9	80	120				
Barium	51.354	1.0	50.00	0	103	80	120				
Beryllium	51.180	1.0	50.00	0	102	80	120				
Cadmium	49.810	1.0	50.00	0	99.6	80	120				
Chromium	47.703	1.0	50.00	0	95.4	80	120				
Cobalt	51.312	1.0	50.00	0	103	80	120				
Copper	51.479	2.0	50.00	0	103	80	120				
Lead	51.286	1.0	50.00	0	103	80	120				
Molybdenum	52.698	1.0	50.00	0	105	80	120				
Nickel	49.918	1.0	50.00	0	99.8	80	120				
Selenium	46.111	1.0	50.00	0	92.2	80	120				
Silver	50.138	1.0	50.00	0	100	80	120				
Thallium	49.589	1.0	50.00	0	99.2	80	120				
Vanadium	50.702	1.0	50.00	0	101	80	120				
Zinc	50.720	1.0	50.00	0	101	80	120				

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: 119116
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: MB-74540	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/26/2011	RunNo: 135352						
Client ID: PBS	Batch ID: 74540	TestNo: EPA 7471A		Analysis Date: 7/26/2011	SeqNo: 2215894						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury ND 0.10

Sample ID: LCS-74540	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/26/2011	RunNo: 135352						
Client ID: LCSS	Batch ID: 74540	TestNo: EPA 7471A		Analysis Date: 7/26/2011	SeqNo: 2215895						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.763 0.10 0.8300 0 91.9 80 120

Sample ID: 119116-009A-MS	SampType: MS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/26/2011	RunNo: 135352						
Client ID: E-108-40	Batch ID: 74540	TestNo: EPA 7471A		Analysis Date: 7/26/2011	SeqNo: 2215896						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

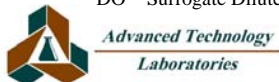
Mercury 0.779 0.10 0.8300 0.01089 92.6 70 130

Sample ID: 119116-009A-MSD	SampType: MSD	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/26/2011	RunNo: 135352						
Client ID: E-108-40	Batch ID: 74540	TestNo: EPA 7471A		Analysis Date: 7/26/2011	SeqNo: 2215897						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.771 0.10 0.8300 0.01089 91.5 70 130 0.7795 1.15 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: 119116
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

Sample ID: MB-74530	SampType: MBLK	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/26/2011	RunNo: 135324						
Client ID: PBS	Batch ID: 74530	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/26/2011	SeqNo: 2215558						
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	68.870		80.00		86.1	63	152				

Sample ID: LCS-74530	SampType: LCS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/26/2011	RunNo: 135324						
Client ID: LCSS	Batch ID: 74530	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/26/2011	SeqNo: 2215559						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	964.250	10	1000	0	96.4	76	139				
Surr: p-Terphenyl	83.780		80.00		105	63	152				

Sample ID: 119112-001AMS	SampType: MS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/26/2011	RunNo: 135324						
Client ID: ZZZZZ	Batch ID: 74530	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/26/2011	SeqNo: 2215560						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

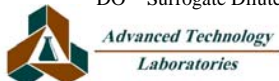
DRO	914.240	10	1000	19.31	89.5	60	158				
Surr: p-Terphenyl	69.850		80.00		87.3	63	152				

Sample ID: 119112-001AMSD	SampType: MSD	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/26/2011	RunNo: 135324						
Client ID: ZZZZZ	Batch ID: 74530	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/26/2011	SeqNo: 2215561						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	884.570	10	1000	19.31	86.5	60	158	914.2	3.30	20	
Surr: p-Terphenyl	84.270		80.00		105	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: 119116
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

Sample ID: E110727LC1	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135388						
Client ID: LCSS	Batch ID: E11VS276	TestNo: EPA 8015B(M)	Analysis Date: 7/27/2011	SeqNo: 2216736							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.830	1.0	5.000	0	96.6	70	130				
Surr: Bromofluorobenzene (FID)	125.597		100.0		126	51	161				

Sample ID: E110727MB1MS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135388						
Client ID: ZZZZZ	Batch ID: E11VS276	TestNo: EPA 8015B(M)	Analysis Date: 7/27/2011	SeqNo: 2216737							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.908	1.0	5.000	0	98.2	41	146				
Surr: Bromofluorobenzene (FID)	124.985		100.0		125	51	161				

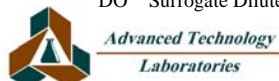
Sample ID: E110727MB1MSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135388						
Client ID: ZZZZZ	Batch ID: E11VS276	TestNo: EPA 8015B(M)	Analysis Date: 7/27/2011	SeqNo: 2216738							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.758	1.0	5.000	0	95.2	41	146	4.908	3.10	20	
Surr: Bromofluorobenzene (FID)	121.855		100.0		122	51	161		0	0	

Sample ID: E110727MB1	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135388						
Client ID: PBS	Batch ID: E11VS276	TestNo: EPA 8015B(M)	Analysis Date: 7/27/2011	SeqNo: 2216739							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	85.409		100.0		85.4	51	161				

Sample ID: 118996-001DMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135388						
Client ID: ZZZZZ	Batch ID: E11VS276	TestNo: EPA 8015B(M)	Analysis Date: 7/27/2011	SeqNo: 2216748							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	3.714	1.0	5.000	0	74.3	41	146				

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: 119116
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

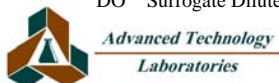
TestCode: 8015_S_G 5035P

Sample ID: 118996-001DMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135388						
Client ID: ZZZZZZ	Batch ID: E11VS276	TestNo: EPA 8015B(M)	Analysis Date: 7/27/2011	SeqNo: 2216748							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Bromofluorobenzene (FID)	122.454		100.0		122	51	161				

Sample ID: 118996-001DMSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135388						
Client ID: ZZZZZZ	Batch ID: E11VS276	TestNo: EPA 8015B(M)	Analysis Date: 7/27/2011	SeqNo: 2216749							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.449	1.0	5.000	0	89.0	41	146	3.714	18.0	20	
Surr: Bromofluorobenzene (FID)	122.760		100.0		123	51	161		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: 119116
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

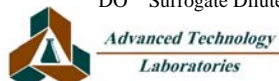
Sample ID: K110727LCS1		SampType: LCS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135384		
Client ID: LCSS		Batch ID: K11VS198		TestNo: EPA 8260B				Analysis Date: 7/27/2011		SeqNo: 2216717		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	49.500	5.0	50.00	0	99.0	70	130					
Benzene	96.790	5.0	100.0	0	96.8	70	130					
Chlorobenzene	51.620	5.0	50.00	0	103	70	130					
MTBE	57.870	5.0	50.00	0	116	70	130					
Toluene	97.030	5.0	100.0	0	97.0	70	130					
Trichloroethene	48.990	5.0	50.00	0	98.0	70	130					
Surr: 1,2-Dichloroethane-d4	54.890		50.00		110	65	141					
Surr: 4-Bromofluorobenzene	46.120		50.00		92.2	57	134					
Surr: Dibromofluoromethane	52.420		50.00		105	70	128					
Surr: Toluene-d8	48.420		50.00		96.8	72	123					

Sample ID: K110727MB1MS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135384		
Client ID: ZZZZZ		Batch ID: K11VS198		TestNo: EPA 8260B				Analysis Date: 7/27/2011		SeqNo: 2216718		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	48.500	5.0	50.00	0	97.0	70	130					
Benzene	96.100	5.0	100.0	0	96.1	70	130					
Chlorobenzene	50.300	5.0	50.00	0	101	70	130					
MTBE	58.160	5.0	50.00	0	116	70	130					
Toluene	95.740	5.0	100.0	0	95.7	70	130					
Trichloroethene	48.230	5.0	50.00	0	96.5	70	130					
Surr: 1,2-Dichloroethane-d4	52.990		50.00		106	65	141					
Surr: 4-Bromofluorobenzene	45.040		50.00		90.1	57	134					
Surr: Dibromofluoromethane	50.560		50.00		101	70	128					
Surr: Toluene-d8	47.170		50.00		94.3	72	123					

Sample ID: K110727MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135384		
Client ID: ZZZZZ		Batch ID: K11VS198		TestNo: EPA 8260B				Analysis Date: 7/27/2011		SeqNo: 2216719		
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: 119116
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

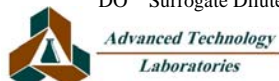
TestCode: 8260_S_5035

Sample ID: K110727MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135384	
Client ID: ZZZZZZ		Batch ID: K11VS198		TestNo: EPA 8260B		Analysis Date: 7/27/2011				SeqNo: 2216719	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	50.330	5.0	50.00	0	101	70	130	48.50	3.70	20	
Benzene	98.130	5.0	100.0	0	98.1	70	130	96.10	2.09	20	
Chlorobenzene	51.650	5.0	50.00	0	103	70	130	50.30	2.65	20	
MTBE	60.460	5.0	50.00	0	121	70	130	58.16	3.88	20	
Toluene	98.090	5.0	100.0	0	98.1	70	130	95.74	2.42	20	
Trichloroethene	49.450	5.0	50.00	0	98.9	70	130	48.23	2.50	20	
Surr: 1,2-Dichloroethane-d4	53.030		50.00		106	65	141		0	0	
Surr: 4-Bromofluorobenzene	45.840		50.00		91.7	57	134		0	0	
Surr: Dibromofluoromethane	50.780		50.00		102	70	128		0	0	
Surr: Toluene-d8	47.490		50.00		95.0	72	123		0	0	

Sample ID: K110727MB1		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135384	
Client ID: PBS		Batch ID: K11VS198		TestNo: EPA 8260B		Analysis Date: 7/27/2011				SeqNo: 2216720	
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: 119116
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110727MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135384						
Client ID: PBS	Batch ID: K11VS198	TestNo: EPA 8260B		Analysis Date: 7/27/2011	SeqNo: 2216720						
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:

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|---|--|--|
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*Advanced Technology
Laboratories*

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

CLIENT: Mactec
Work Order: 119116
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110727MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135384						
Client ID: PBS	Batch ID: K11VS198	TestNo: EPA 8260B	Analysis Date: 7/27/2011	SeqNo: 2216720							
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	54.110		50.00		108	65	141				
Surr: 4-Bromofluorobenzene	43.210		50.00		86.4	57	134				
Surr: Dibromofluoromethane	51.490		50.00		103	70	128				
Surr: Toluene-d8	47.800		50.00		95.6	72	123				

Qualifiers:

- | | | |
|---|--|--|
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