

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: 7/11/11
 NOTE: Please include your Quote No. to ensure proper pricing of your project.

FOR LABORATORY USE ONLY:
 Method of Transport: Client ATL OnTrac
 FedEx 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: MACTEC Address: 5628 E. SLAUSON AVE State: CA Zip Code: 90040 TEL: _____ FAX: _____
Attn: MATT FRAYCHINEAUD City: LOS ANGELES State: CA Zip Code: _____

Project Name: METRO WESTSIDE EXTENSION Project #: 4953-10-1561 Sampler: DWAIN D. SHYDER Date: 7/16/11 Time: 7:00 AM
 Relinquished by: Dwain D. Snyder Date: 07-16-11 Time: 7:00
 Relinquished by: Matt Fraychineaud Date: 7/11/11 Time: 11:05 AM
 Relinquished by: Matt Fraychineaud Date: 7/11/11 Time: 11:05
 Relinquished by: Matt Fraychineaud Date: 7/11/11 Time: 11:30

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Matt Fraychineaud Date: _____
Matt Fraychineaud Date: _____
Matt Fraychineaud Date: _____

Special Instructions/Comments: FDOWA

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>118856-007</u>	<u>E-115-20</u>		<u>7/8</u>	<u>11:05</u>
	<u>1</u>	<u>E-115-40</u>		<u>7/8</u>	<u>13:10</u>
	<u>3</u>	<u>E-115-60</u>		<u>7/8</u>	<u>14:50</u>

Circle or Add Analysis(es) Requested

8082 (PCB)	<input checked="" type="checkbox"/>
8260B (Vollies)	<input checked="" type="checkbox"/>
8270C (BNA)	<input checked="" type="checkbox"/>
8015B (Total Metal)	<input checked="" type="checkbox"/>
8015B (GRO) / 8021 (BTEX)	<input checked="" type="checkbox"/>
8015B (DRO) / GRO	<input checked="" type="checkbox"/>
TITLE 22 / CAM 17 (6010 / 7000)	<input checked="" type="checkbox"/>

SPECIFY APPROPRIATE MATRIX

	SOIL	SEDIMENT	GROUND WATER	DRINKING WATER	WASTEWATER	STORMWATER	AQUEOUS
Container(s)							
TAT #	<u>7VT</u>						
Type	<u>T</u>						

QA/QC

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

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

Figure I-1.539

July 21, 2011



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

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

Workorder No.: 118898

RE: METRO WESTSIDE EXTENSION, 4953-10-1


Attention: Matt Fraychineaud

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

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

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

Sincerely,


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: 118898

CASE NARRATIVE

The sample for Acute Aquatic Toxicity analysis was subcontracted to Associated Laboratory with ELAP Cert.#1338.

All volatile analyses were performed using 5035 preservation requirements except sample E-116-55. Any high level dilutions were performed on a preserved methanol sample unless otherwise noted.

Analytical Comments for EPA 7471A

Samples 118836-003A-MS and 118836-003A-MSD, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Analytical Comments for EPA 8015B(M) (DRO/ORO)

Samples 118898-001G, 118898-002G, 118898-003G, 118898-006A, 118898-002GMS and 118898-002GMSD, surrogate diluted out.

Sample 118898-002GMSD, Matrix Spike Duplicate (MSD) is outside recovery criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Sample 118898-002GMSD, RPD for Matrix Spike Duplicate (MSD) is outside criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Analytical Comments for EPA 8015B(M)(GRO)/8021B

Sample 118898-006A, dilution was necessary due to oily layer.

Samples 118898-003E and 118898-006A, surrogate recovery biased high possibly due to matrix interferences.

Sample 118920-001AMSD, Matrix Spike Duplicate (MSD) is outside recovery criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).



CLIENT: Mactec
Project: METRO WESTSIDE EXTENSION, 4953-10-1
Lab Order: 118898

CASE NARRATIVE

Analytical Comments for EPA 8260B

Samples 118898-002A, 118898-003A and 118898-006A, surrogate recovery biased high possibly due to matrix interferences.

Analytical Comments for EPA 8270C

Samples 118898-001G, 118898-002G and 118898-003G, dilution was necessary due to high concentrations of non-target extractable analytes.

Samples 118898-001G, 118898-002G and 118898-003G, surrogates diluted out.



Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 21-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-116-25
Lab Order:	118898	Collection Date:	7/11/2011 11:55:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118898-001A		

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

EPA 8260B

RunID: MS4_110714A	QC Batch: K11VS186	PrepDate: 7/12/2011	Analyst: BD		
1,1,1,2-Tetrachloroethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,1,1-Trichloroethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,1,2,2-Tetrachloroethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,1,2-Trichloroethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,1-Dichloroethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,1-Dichloroethene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,1-Dichloropropene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,2,3-Trichlorobenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,2,3-Trichloropropane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,2,4-Trichlorobenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,2,4-Trimethylbenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,2-Dibromo-3-chloropropane	ND	8.0	µg/Kg	1	7/14/2011 01:27 PM
1,2-Dibromoethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,2-Dichlorobenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,2-Dichloroethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,2-Dichloropropane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,3,5-Trimethylbenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,3-Dichlorobenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,3-Dichloropropane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
1,4-Dichlorobenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
2,2-Dichloropropane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
2-Chlorotoluene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
4-Chlorotoluene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
4-Isopropyltoluene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Benzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Bromobenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Bromodichloromethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Bromoform	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Bromomethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Carbon tetrachloride	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Chlorobenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Chloroethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Chloroform	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Chloromethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
cis-1,2-Dichloroethene	ND	4.0	µg/Kg	1	7/14/2011 01:27 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	



Advanced Technology
Laboratories

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Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 21-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-116-25
Lab Order:	118898	Collection Date:	7/11/2011 11:55:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118898-001A		

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

EPA 8260B

RunID: MS4_110714A	QC Batch: K11VS186	PrepDate: 7/12/2011	Analyst: BD		
cis-1,3-Dichloropropene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Di-isopropyl ether	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Dibromochloromethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Dibromomethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Dichlorodifluoromethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Ethyl Tert-butyl ether	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Ethylbenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Hexachlorobutadiene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Isopropylbenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
m,p-Xylene	ND	8.0	µg/Kg	1	7/14/2011 01:27 PM
Methylene chloride	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
MTBE	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
n-Butylbenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
n-Propylbenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Naphthalene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
o-Xylene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
sec-Butylbenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Styrene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Tert-amyl methyl ether	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Tert-Butanol	ND	80	µg/Kg	1	7/14/2011 01:27 PM
tert-Butylbenzene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Tetrachloroethene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Toluene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
trans-1,2-Dichloroethene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Trichloroethene	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Trichlorofluoromethane	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Vinyl chloride	ND	4.0	µg/Kg	1	7/14/2011 01:27 PM
Surr: 1,2-Dichloroethane-d4	117	65-141	%REC	1	7/14/2011 01:27 PM
Surr: 4-Bromofluorobenzene	113	57-134	%REC	1	7/14/2011 01:27 PM
Surr: Dibromofluoromethane	108	70-128	%REC	1	7/14/2011 01:27 PM
Surr: Toluene-d8	92.1	72-123	%REC	1	7/14/2011 01:27 PM

Qualifiers:	B Analyte detected in the associated Method Blank	E Value above quantitation range
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	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: 21-Jul-11

CLIENT: Mactec	Client Sample ID: E-116-25
Lab Order: 118898	Collection Date: 7/11/2011 11:55:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118898-001E	

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

EPA 8015B(M)

RunID: GC2_110715A	QC Batch: E11VS259	PrepDate: 7/11/2011	Analyst: TP		
GRO	2.3	0.79	mg/Kg	1	7/15/2011 01:37 PM
Surr: Bromofluorobenzene (FID)	99.5	51-161	%REC	1	7/15/2011 01:37 PM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC2_110715A	QC Batch: E11VS259	PrepDate: 7/11/2011	Analyst: TP		
Benzene	ND	3.9	µg/Kg	1	7/15/2011 01:37 PM
Ethylbenzene	ND	3.9	µg/Kg	1	7/15/2011 01:37 PM
m,p-Xylene	ND	7.9	µg/Kg	1	7/15/2011 01:37 PM
o-Xylene	ND	3.9	µg/Kg	1	7/15/2011 01:37 PM
Toluene	ND	3.9	µg/Kg	1	7/15/2011 01:37 PM
Surr: Bromofluorobenzene (PID)	75.5	33-163	%REC	1	7/15/2011 01:37 PM

Qualifiers:	B Analyte detected in the associated Method Blank	E Value above quantitation range
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ANALYTICAL RESULTS
 Print Date: 21-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-116-25
Lab Order:	118898	Collection Date:	7/11/2011 11:55:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118898-001G		

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_110714C	QC Batch: 74262	PrepDate: 7/14/2011	Analyst: CBR		
DRO	3200	50	mg/Kg	5	7/14/2011 04:27 PM
ORO	4600	50	mg/Kg	5	7/14/2011 04:27 PM
Surr: p-Terphenyl	0	63-152	SDO %REC	5	7/14/2011 04:27 PM

SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 3550B

EPA 8270C

RunID: MS6_110715A	QC Batch: 74261	PrepDate: 7/14/2011	Analyst: JSD		
1,2,4-Trichlorobenzene	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
1,2-Dichlorobenzene	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
1,3-Dichlorobenzene	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
1,4-Dichlorobenzene	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
2,4,5-Trichlorophenol	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
2,4,6-Trichlorophenol	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
2,4-Dichlorophenol	ND	250000	µg/Kg	50	7/19/2011 01:49 PM
2,4-Dimethylphenol	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
2,4-Dinitrophenol	ND	250000	µg/Kg	50	7/19/2011 01:49 PM
2,4-Dinitrotoluene	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
2,6-Dinitrotoluene	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
2-Chloronaphthalene	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
2-Chlorophenol	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
2-Methylnaphthalene	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
2-Methylphenol	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
2-Nitroaniline	ND	250000	µg/Kg	50	7/19/2011 01:49 PM
2-Nitrophenol	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
3,3'-Dichlorobenzidine	ND	99000	µg/Kg	50	7/19/2011 01:49 PM
3-Nitroaniline	ND	250000	µg/Kg	50	7/19/2011 01:49 PM
4,6-Dinitro-2-methylphenol	ND	250000	µg/Kg	50	7/19/2011 01:49 PM
4-Bromophenyl-phenylether	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
4-Chloro-3-methylphenol	ND	99000	µg/Kg	50	7/19/2011 01:49 PM
4-Chloroaniline	ND	99000	µg/Kg	50	7/19/2011 01:49 PM
4-Chlorophenyl-phenylether	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
4-Methylphenol	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
4-Nitroaniline	ND	250000	µg/Kg	50	7/19/2011 01:49 PM
4-Nitrophenol	ND	250000	µg/Kg	50	7/19/2011 01:49 PM
Acenaphthene	ND	50000	µg/Kg	50	7/19/2011 01:49 PM
Acenaphthylene	ND	50000	µg/Kg	50	7/19/2011 01:49 PM

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



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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 21-Jul-11

CLIENT: Mactec **Client Sample ID:** E-116-25
Lab Order: 118898 **Collection Date:** 7/11/2011 11:55:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118898-001G

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS						
EPA 3550B			EPA 8270C			
RunID: MS6_110715A	QC Batch: 74261			PrepDate: 7/14/2011		Analyst: JSD
Anthracene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Benzidine (M)	ND	250000		µg/Kg	50	7/19/2011 01:49 PM
Benzo(a)anthracene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Benzo(a)pyrene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Benzo(b)fluoranthene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Benzo(g,h,i)perylene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Benzo(k)fluoranthene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Benzoic acid	ND	250000		µg/Kg	50	7/19/2011 01:49 PM
Benzyl alcohol	ND	99000		µg/Kg	50	7/19/2011 01:49 PM
Bis(2-chloroethoxy)methane	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Bis(2-chloroethyl)ether	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Bis(2-chloroisopropyl)ether	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Bis(2-ethylhexyl)phthalate	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Butylbenzylphthalate	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Chrysene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Di-n-butylphthalate	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Di-n-octylphthalate	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Dibenz(a,h)anthracene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Dibenzofuran	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Diethylphthalate	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Dimethylphthalate	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Fluoranthene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Fluorene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Hexachlorobenzene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Hexachlorobutadiene	ND	99000		µg/Kg	50	7/19/2011 01:49 PM
Hexachlorocyclopentadiene	ND	99000		µg/Kg	50	7/19/2011 01:49 PM
Hexachloroethane	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Indeno(1,2,3-cd)pyrene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Isophorone	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
N-Nitrosodi-n-propylamine	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
N-Nitrosodiphenylamine	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Naphthalene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Nitrobenzene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Pentachlorophenol	ND	250000		µg/Kg	50	7/19/2011 01:49 PM
Phenanthrene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM

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



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Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 21-Jul-11

CLIENT: Mactec	Client Sample ID: E-116-25
Lab Order: 118898	Collection Date: 7/11/2011 11:55:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118898-001G	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS						
EPA 3550B			EPA 8270C			
RunID: MS6_110715A	QC Batch: 74261				PrepDate: 7/14/2011	Analyst: JSD
Phenol	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Pyrene	ND	50000		µg/Kg	50	7/19/2011 01:49 PM
Surr: 1,2-Dichlorobenzene-d4	0	45-105	SDO	%REC	50	7/19/2011 01:49 PM
Surr: 2,4,6-Tribromophenol	0	41-129	SDO	%REC	50	7/19/2011 01:49 PM
Surr: 2-Chlorophenol-d4	0	55-108	SDO	%REC	50	7/19/2011 01:49 PM
Surr: 2-Fluorobiphenyl	0	56-114	SDO	%REC	50	7/19/2011 01:49 PM
Surr: 2-Fluorophenol	0	50-108	SDO	%REC	50	7/19/2011 01:49 PM
Surr: 4-Terphenyl-d14	0	59-141	SDO	%REC	50	7/19/2011 01:49 PM
Surr: Nitrobenzene-d5	0	45-114	SDO	%REC	50	7/19/2011 01:49 PM
Surr: Phenol-d5	0	46-118	SDO	%REC	50	7/19/2011 01:49 PM

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



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ANALYTICAL RESULTS
 Print Date: 21-Jul-11

CLIENT: Mactec **Client Sample ID:** E-116-45
Lab Order: 118898 **Collection Date:** 7/11/2011 1:12:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118898-002A

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

EPA 8260B

RunID:	MS4_110714A	QC Batch:	K11VS186	PrepDate:	7/12/2011	Analyst:	BD
1,1,1,2-Tetrachloroethane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,1,1-Trichloroethane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,1,2,2-Tetrachloroethane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,1,2-Trichloroethane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,1-Dichloroethane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,1-Dichloroethene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,1-Dichloropropene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,2,3-Trichlorobenzene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,2,3-Trichloropropane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,2,4-Trichlorobenzene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,2,4-Trimethylbenzene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,2-Dibromo-3-chloropropane	ND	8.1	µg/Kg	1	7/14/2011 01:45 PM		
1,2-Dibromoethane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,2-Dichlorobenzene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,2-Dichloroethane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,2-Dichloropropane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,3,5-Trimethylbenzene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,3-Dichlorobenzene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,3-Dichloropropane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
1,4-Dichlorobenzene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
2,2-Dichloropropane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
2-Chlorotoluene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
4-Chlorotoluene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
4-Isopropyltoluene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
Benzene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
Bromobenzene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
Bromodichloromethane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
Bromoform	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
Bromomethane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
Carbon tetrachloride	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
Chlorobenzene	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
Chloroethane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
Chloroform	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
Chloromethane	ND	4.0	µg/Kg	1	7/14/2011 01:45 PM		
cis-1,2-Dichloroethene	ND	4.0	µg/Kg	1	7/14/2011 01:45 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: 21-Jul-11

CLIENT: Mactec **Client Sample ID:** E-116-45
Lab Order: 118898 **Collection Date:** 7/11/2011 1:12:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118898-002A

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

EPA 8260B

RunID:	MS4_110714A	QC Batch:	K11VS186	PrepDate:	7/12/2011	Analyst:	BD
cis-1,3-Dichloropropene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Di-isopropyl ether	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Dibromochloromethane	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Dibromomethane	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Dichlorodifluoromethane	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Ethyl Tert-butyl ether	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Ethylbenzene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Hexachlorobutadiene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Isopropylbenzene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
m,p-Xylene	ND	8.1		µg/Kg	1	7/14/2011 01:45 PM	
Methylene chloride	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
MTBE	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
n-Butylbenzene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
n-Propylbenzene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Naphthalene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
o-Xylene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
sec-Butylbenzene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Styrene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Tert-amyl methyl ether	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Tert-Butanol	ND	81		µg/Kg	1	7/14/2011 01:45 PM	
tert-Butylbenzene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Tetrachloroethene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Toluene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
trans-1,2-Dichloroethene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Trichloroethene	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Trichlorofluoromethane	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Vinyl chloride	ND	4.0		µg/Kg	1	7/14/2011 01:45 PM	
Surr: 1,2-Dichloroethane-d4	112	65-141		%REC	1	7/14/2011 01:45 PM	
Surr: 4-Bromofluorobenzene	153	57-134	S	%REC	1	7/14/2011 01:45 PM	
Surr: Dibromofluoromethane	104	70-128		%REC	1	7/14/2011 01:45 PM	
Surr: Toluene-d8	86.6	72-123		%REC	1	7/14/2011 01:45 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: 21-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-116-45
Lab Order:	118898	Collection Date:	7/11/2011 1:12:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118898-002E		

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

EPA 8015B(M)

RunID: GC2_110715A	QC Batch: E11VS259	PrepDate: 7/11/2011	Analyst: TP		
GRO	6.9	0.76	mg/Kg	1	7/15/2011 01:53 PM
Surr: Bromofluorobenzene (FID)	130	51-161	%REC	1	7/15/2011 01:53 PM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC2_110715A	QC Batch: E11VS259	PrepDate: 7/11/2011	Analyst: TP		
Benzene	ND	3.8	µg/Kg	1	7/15/2011 01:53 PM
Ethylbenzene	ND	3.8	µg/Kg	1	7/15/2011 01:53 PM
m,p-Xylene	ND	7.6	µg/Kg	1	7/15/2011 01:53 PM
o-Xylene	ND	3.8	µg/Kg	1	7/15/2011 01:53 PM
Toluene	ND	3.8	µg/Kg	1	7/15/2011 01:53 PM
Surr: Bromofluorobenzene (PID)	81.3	33-163	%REC	1	7/15/2011 01:53 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: 21-Jul-11

CLIENT: Mactec **Client Sample ID:** E-116-45
Lab Order: 118898 **Collection Date:** 7/11/2011 1:12:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118898-002G

Analyses Result PQL Qual Units DF Date Analyzed

DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID

LUFT

EPA 8015B(M)

RunID: GC16_110714C QC Batch: 74262 PrepDate: 7/14/2011 Analyst: CBR
DRO 4700 100 mg/Kg 10 7/14/2011 04:36 PM
ORO 6600 100 mg/Kg 10 7/14/2011 04:36 PM
Surr: p-Terphenyl 0 63-152 SDO %REC 10 7/14/2011 04:36 PM

SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 3550B

EPA 8270C

RunID: MS6_110715A QC Batch: 74261 PrepDate: 7/14/2011 Analyst: JSD

1,2,4-Trichlorobenzene	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
1,2-Dichlorobenzene	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
1,3-Dichlorobenzene	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
1,4-Dichlorobenzene	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
2,4,5-Trichlorophenol	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
2,4,6-Trichlorophenol	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
2,4-Dichlorophenol	ND	250000	µg/Kg	50	7/19/2011 02:16 PM
2,4-Dimethylphenol	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
2,4-Dinitrophenol	ND	250000	µg/Kg	50	7/19/2011 02:16 PM
2,4-Dinitrotoluene	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
2,6-Dinitrotoluene	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
2-Chloronaphthalene	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
2-Chlorophenol	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
2-Methylnaphthalene	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
2-Methylphenol	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
2-Nitroaniline	ND	250000	µg/Kg	50	7/19/2011 02:16 PM
2-Nitrophenol	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
3,3'-Dichlorobenzidine	ND	99000	µg/Kg	50	7/19/2011 02:16 PM
3-Nitroaniline	ND	250000	µg/Kg	50	7/19/2011 02:16 PM
4,6-Dinitro-2-methylphenol	ND	250000	µg/Kg	50	7/19/2011 02:16 PM
4-Bromophenyl-phenylether	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
4-Chloro-3-methylphenol	ND	99000	µg/Kg	50	7/19/2011 02:16 PM
4-Chloroaniline	ND	99000	µg/Kg	50	7/19/2011 02:16 PM
4-Chlorophenyl-phenylether	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
4-Methylphenol	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
4-Nitroaniline	ND	250000	µg/Kg	50	7/19/2011 02:16 PM
4-Nitrophenol	ND	250000	µg/Kg	50	7/19/2011 02:16 PM
Acenaphthene	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
Acenaphthylene	ND	50000	µg/Kg	50	7/19/2011 02:16 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: 21-Jul-11

CLIENT: Mactec **Client Sample ID:** E-116-45
Lab Order: 118898 **Collection Date:** 7/11/2011 1:12:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118898-002G

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS						
	EPA 3550B			EPA 8270C		
RunID: MS6_110715A	QC Batch: 74261			PrepDate: 7/14/2011		Analyst: JSD
Anthracene	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Benzidine (M)	ND	250000		µg/Kg	50	7/19/2011 02:16 PM
Benzo(a)anthracene	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Benzo(a)pyrene	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Benzo(b)fluoranthene	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Benzo(g,h,i)perylene	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Benzo(k)fluoranthene	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Benzoic acid	ND	250000		µg/Kg	50	7/19/2011 02:16 PM
Benzyl alcohol	ND	99000		µg/Kg	50	7/19/2011 02:16 PM
Bis(2-chloroethoxy)methane	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Bis(2-chloroethyl)ether	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Bis(2-chloroisopropyl)ether	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Bis(2-ethylhexyl)phthalate	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Butylbenzylphthalate	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Chrysene	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Di-n-butylphthalate	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Di-n-octylphthalate	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Dibenz(a,h)anthracene	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Dibenzofuran	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Diethylphthalate	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Dimethylphthalate	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Fluoranthene	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Fluorene	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Hexachlorobenzene	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Hexachlorobutadiene	ND	99000		µg/Kg	50	7/19/2011 02:16 PM
Hexachlorocyclopentadiene	ND	99000		µg/Kg	50	7/19/2011 02:16 PM
Hexachloroethane	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Indeno(1,2,3-cd)pyrene	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Isophorone	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
N-Nitrosodi-n-propylamine	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
N-Nitrosodiphenylamine	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Naphthalene	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Nitrobenzene	ND	50000		µg/Kg	50	7/19/2011 02:16 PM
Pentachlorophenol	ND	250000		µg/Kg	50	7/19/2011 02:16 PM
Phenanthrene	ND	50000		µg/Kg	50	7/19/2011 02:16 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: 21-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-116-45
Lab Order:	118898	Collection Date:	7/11/2011 1:12:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118898-002G		

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

EPA 3550B

EPA 8270C

RunID: MS6_110715A	QC Batch: 74261	PrepDate: 7/14/2011	Analyst: JSD		
Phenol	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
Pyrene	ND	50000	µg/Kg	50	7/19/2011 02:16 PM
Surr: 1,2-Dichlorobenzene-d4	0	45-105	SDO %REC	50	7/19/2011 02:16 PM
Surr: 2,4,6-Tribromophenol	0	41-129	SDO %REC	50	7/19/2011 02:16 PM
Surr: 2-Chlorophenol-d4	0	55-108	SDO %REC	50	7/19/2011 02:16 PM
Surr: 2-Fluorobiphenyl	0	56-114	SDO %REC	50	7/19/2011 02:16 PM
Surr: 2-Fluorophenol	0	50-108	SDO %REC	50	7/19/2011 02:16 PM
Surr: 4-Terphenyl-d14	0	59-141	SDO %REC	50	7/19/2011 02:16 PM
Surr: Nitrobenzene-d5	0	45-114	SDO %REC	50	7/19/2011 02:16 PM
Surr: Phenol-d5	0	46-118	SDO %REC	50	7/19/2011 02:16 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: 21-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-116-65
Lab Order:	118898	Collection Date:	7/11/2011 2:49:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118898-003A		

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

EPA 8260B

RunID: MS4_110714A	QC Batch: K11VS186	PrepDate: 7/12/2011	Analyst: BD		
1,1,1,2-Tetrachloroethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,1,1-Trichloroethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,1,2,2-Tetrachloroethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,1,2-Trichloroethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,1-Dichloroethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,1-Dichloroethene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,1-Dichloropropene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,2,3-Trichlorobenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,2,3-Trichloropropane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,2,4-Trichlorobenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,2,4-Trimethylbenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,2-Dibromo-3-chloropropane	ND	8.3	µg/Kg	1	7/14/2011 02:02 PM
1,2-Dibromoethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,2-Dichlorobenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,2-Dichloroethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,2-Dichloropropane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,3,5-Trimethylbenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,3-Dichlorobenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,3-Dichloropropane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
1,4-Dichlorobenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
2,2-Dichloropropane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
2-Chlorotoluene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
4-Chlorotoluene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
4-Isopropyltoluene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Benzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Bromobenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Bromodichloromethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Bromoform	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Bromomethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Carbon tetrachloride	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Chlorobenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Chloroethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Chloroform	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Chloromethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
cis-1,2-Dichloroethene	ND	4.2	µg/Kg	1	7/14/2011 02:02 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: 21-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-116-65
Lab Order:	118898	Collection Date:	7/11/2011 2:49:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118898-003A		

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

EPA 8260B

RunID: MS4_110714A	QC Batch: K11VS186	PrepDate: 7/12/2011	Analyst: BD		
cis-1,3-Dichloropropene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Di-isopropyl ether	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Dibromochloromethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Dibromomethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Dichlorodifluoromethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Ethyl Tert-butyl ether	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Ethylbenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Hexachlorobutadiene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Isopropylbenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
m,p-Xylene	ND	8.3	µg/Kg	1	7/14/2011 02:02 PM
Methylene chloride	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
MTBE	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
n-Butylbenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
n-Propylbenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Naphthalene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
o-Xylene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
sec-Butylbenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Styrene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Tert-amyl methyl ether	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Tert-Butanol	ND	83	µg/Kg	1	7/14/2011 02:02 PM
tert-Butylbenzene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Tetrachloroethene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Toluene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
trans-1,2-Dichloroethene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Trichloroethene	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Trichlorofluoromethane	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Vinyl chloride	ND	4.2	µg/Kg	1	7/14/2011 02:02 PM
Surr: 1,2-Dichloroethane-d4	96.4	65-141	%REC	1	7/14/2011 02:02 PM
Surr: 4-Bromofluorobenzene	239	57-134	%REC	1	7/14/2011 02:02 PM
Surr: Dibromofluoromethane	88.9	70-128	%REC	1	7/14/2011 02:02 PM
Surr: Toluene-d8	93.3	72-123	%REC	1	7/14/2011 02:02 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: 21-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-116-65
Lab Order:	118898	Collection Date:	7/11/2011 2:49:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118898-003E		

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

EPA 8015B(M)

RunID: GC2_110715A	QC Batch: E11VS259	PrepDate: 7/11/2011	Analyst: TP		
GRO	4.1	0.83	mg/Kg	1	7/15/2011 02:24 PM
Surr: Bromofluorobenzene (FID)	185	51-161	%REC	1	7/15/2011 02:24 PM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC2_110715A	QC Batch: E11VS259	PrepDate: 7/11/2011	Analyst: TP		
Benzene	ND	4.1	µg/Kg	1	7/15/2011 02:24 PM
Ethylbenzene	ND	4.1	µg/Kg	1	7/15/2011 02:24 PM
m,p-Xylene	ND	8.3	µg/Kg	1	7/15/2011 02:24 PM
o-Xylene	ND	4.1	µg/Kg	1	7/15/2011 02:24 PM
Toluene	ND	4.1	µg/Kg	1	7/15/2011 02:24 PM
Surr: Bromofluorobenzene (PID)	88.1	33-163	%REC	1	7/15/2011 02:24 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: 21-Jul-11

CLIENT: Mactec **Client Sample ID:** E-116-65
Lab Order: 118898 **Collection Date:** 7/11/2011 2:49:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118898-003G

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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ICP METALS

EPA 3050B		EPA 6010B				
RunID: ICP8_110718E	QC Batch: 74329				PrepDate: 7/18/2011	Analyst: CBB
Antimony	ND	2.0		mg/Kg	1	7/18/2011 03:39 PM
Arsenic	ND	1.0		mg/Kg	1	7/18/2011 03:39 PM
Barium	29	1.0		mg/Kg	1	7/18/2011 03:39 PM
Beryllium	ND	1.0		mg/Kg	1	7/18/2011 03:39 PM
Cadmium	ND	1.0		mg/Kg	1	7/18/2011 03:39 PM
Chromium	9.5	1.0		mg/Kg	1	7/18/2011 03:39 PM
Cobalt	6.5	1.0		mg/Kg	1	7/18/2011 03:39 PM
Copper	ND	2.0		mg/Kg	1	7/18/2011 03:39 PM
Lead	1.6	1.0		mg/Kg	1	7/18/2011 03:39 PM
Molybdenum	ND	1.0		mg/Kg	1	7/18/2011 03:39 PM
Nickel	34	1.0		mg/Kg	1	7/18/2011 03:39 PM
Selenium	ND	1.0		mg/Kg	1	7/18/2011 03:39 PM
Silver	ND	1.0		mg/Kg	1	7/18/2011 03:39 PM
Thallium	ND	1.0		mg/Kg	1	7/18/2011 03:39 PM
Vanadium	26	1.0		mg/Kg	1	7/18/2011 03:39 PM
Zinc	20	1.0		mg/Kg	1	7/18/2011 03:39 PM

DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID

LUFT		EPA 8015B(M)				
RunID: GC16_110714C	QC Batch: 74262				PrepDate: 7/14/2011	Analyst: CBR
DRO	56000	500		mg/Kg	50	7/14/2011 07:53 PM
ORO	79000	500		mg/Kg	50	7/14/2011 07:53 PM
Surr: p-Terphenyl	0	63-152	SDO	%REC	50	7/14/2011 07:53 PM

MERCURY BY COLD VAPOR TECHNIQUE

EPA 7471A	
RunID: AA5_110718B	QC Batch: 74284
Mercury	ND 0.10 mg/Kg 1 7/18/2011 12:50 PM

SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 3550B		EPA 8270C				
RunID: MS6_110715A	QC Batch: 74261				PrepDate: 7/14/2011	Analyst: JSD
1,2,4-Trichlorobenzene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
1,2-Dichlorobenzene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
1,3-Dichlorobenzene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
1,4-Dichlorobenzene	ND	330000		µg/Kg	100	7/19/2011 02:43 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: 21-Jul-11

CLIENT: Mactec **Client Sample ID:** E-116-65
Lab Order: 118898 **Collection Date:** 7/11/2011 2:49:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118898-003G

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS						
	EPA 3550B			EPA 8270C		
RunID: MS6_110715A	QC Batch: 74261			PrepDate: 7/14/2011		Analyst: JSD
2,4,5-Trichlorophenol	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
2,4,6-Trichlorophenol	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
2,4-Dichlorophenol	ND	1600000		µg/Kg	100	7/19/2011 02:43 PM
2,4-Dimethylphenol	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
2,4-Dinitrophenol	ND	1600000		µg/Kg	100	7/19/2011 02:43 PM
2,4-Dinitrotoluene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
2,6-Dinitrotoluene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
2-Chloronaphthalene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
2-Chlorophenol	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
2-Methylnaphthalene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
2-Methylphenol	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
2-Nitroaniline	ND	1600000		µg/Kg	100	7/19/2011 02:43 PM
2-Nitrophenol	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
3,3'-Dichlorobenzidine	ND	660000		µg/Kg	100	7/19/2011 02:43 PM
3-Nitroaniline	ND	1600000		µg/Kg	100	7/19/2011 02:43 PM
4,6-Dinitro-2-methylphenol	ND	1600000		µg/Kg	100	7/19/2011 02:43 PM
4-Bromophenyl-phenylether	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
4-Chloro-3-methylphenol	ND	660000		µg/Kg	100	7/19/2011 02:43 PM
4-Chloroaniline	ND	660000		µg/Kg	100	7/19/2011 02:43 PM
4-Chlorophenyl-phenylether	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
4-Methylphenol	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
4-Nitroaniline	ND	1600000		µg/Kg	100	7/19/2011 02:43 PM
4-Nitrophenol	ND	1600000		µg/Kg	100	7/19/2011 02:43 PM
Acenaphthene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
Acenaphthylene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
Anthracene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
Benzidine (M)	ND	1600000		µg/Kg	100	7/19/2011 02:43 PM
Benzo(a)anthracene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
Benzo(a)pyrene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
Benzo(b)fluoranthene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
Benzo(g,h,i)perylene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
Benzo(k)fluoranthene	ND	330000		µg/Kg	100	7/19/2011 02:43 PM
Benzoic acid	ND	1600000		µg/Kg	100	7/19/2011 02:43 PM
Benzyl alcohol	ND	660000		µg/Kg	100	7/19/2011 02:43 PM
Bis(2-chloroethoxy)methane	ND	330000		µg/Kg	100	7/19/2011 02:43 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: 21-Jul-11

CLIENT: Mactec	Client Sample ID: E-116-65
Lab Order: 118898	Collection Date: 7/11/2011 2:49:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118898-003G	

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

EPA 3550B

EPA 8270C

RunID: MS6_110715A	QC Batch: 74261	PrepDate: 7/14/2011	Analyst: JSD			
Bis(2-chloroethyl)ether	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Bis(2-chloroisopropyl)ether	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Bis(2-ethylhexyl)phthalate	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Butylbenzylphthalate	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Chrysene	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Di-n-butylphthalate	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Di-n-octylphthalate	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Dibenz(a,h)anthracene	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Dibenzofuran	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Diethylphthalate	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Dimethylphthalate	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Fluoranthene	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Fluorene	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Hexachlorobenzene	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Hexachlorobutadiene	ND	660000	µg/Kg	100	7/19/2011 02:43 PM	
Hexachlorocyclopentadiene	ND	660000	µg/Kg	100	7/19/2011 02:43 PM	
Hexachloroethane	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Indeno(1,2,3-cd)pyrene	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Isophorone	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
N-Nitrosodi-n-propylamine	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
N-Nitrosodiphenylamine	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Naphthalene	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Nitrobenzene	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Pentachlorophenol	ND	1600000	µg/Kg	100	7/19/2011 02:43 PM	
Phenanthrene	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Phenol	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Pyrene	ND	330000	µg/Kg	100	7/19/2011 02:43 PM	
Surr: 1,2-Dichlorobenzene-d4	0	45-105	SDO	%REC	100	7/19/2011 02:43 PM
Surr: 2,4,6-Tribromophenol	0	41-129	SDO	%REC	100	7/19/2011 02:43 PM
Surr: 2-Chlorophenol-d4	0	55-108	SDO	%REC	100	7/19/2011 02:43 PM
Surr: 2-Fluorobiphenyl	0	56-114	SDO	%REC	100	7/19/2011 02:43 PM
Surr: 2-Fluorophenol	0	50-108	SDO	%REC	100	7/19/2011 02:43 PM
Surr: 4-Terphenyl-d14	0	59-141	SDO	%REC	100	7/19/2011 02:43 PM
Surr: Nitrobenzene-d5	0	45-114	SDO	%REC	100	7/19/2011 02:43 PM
Surr: Phenol-d5	0	46-118	SDO	%REC	100	7/19/2011 02:43 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: 21-Jul-11

CLIENT: Mactec **Client Sample ID:** E-116-55
Lab Order: 118898 **Collection Date:** 7/11/2011 1:58:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118898-006A

Analyses Result PQL Qual Units DF Date Analyzed

DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID

LUFT

EPA 8015B(M)

RunID: GC16_110714C QC Batch: 74262 PrepDate: 7/14/2011 Analyst: CBR
 DRO 40000 500 mg/Kg 50 7/14/2011 07:43 PM
 ORO 58000 500 mg/Kg 50 7/14/2011 07:43 PM
 Surr: p-Terphenyl 0 63-152 SDO %REC 50 7/14/2011 07:43 PM

GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_110719B QC Batch: E11VS265 PrepDate: Analyst: TP
 GRO 36 5.0 mg/Kg 5 7/20/2011 11:34 AM
 Surr: Bromofluorobenzene (FID) 164 62-153 S %REC 5 7/20/2011 11:34 AM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC2_110719B QC Batch: E11VS265 PrepDate: Analyst: TP
 Benzene ND 25 µg/Kg 5 7/20/2011 11:34 AM
 Ethylbenzene ND 25 µg/Kg 5 7/20/2011 11:34 AM
 m,p-Xylene ND 50 µg/Kg 5 7/20/2011 11:34 AM
 o-Xylene ND 25 µg/Kg 5 7/20/2011 11:34 AM
 Toluene ND 25 µg/Kg 5 7/20/2011 11:34 AM
 Surr: Bromofluorobenzene (PID) 88.1 65-140 %REC 5 7/20/2011 11:34 AM

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110715B QC Batch: K11VS189 PrepDate: Analyst: DDL
 1,1,1,2-Tetrachloroethane ND 250 µg/Kg 50 7/16/2011 02:12 AM
 1,1,1-Trichloroethane ND 250 µg/Kg 50 7/16/2011 02:12 AM
 1,1,2,2-Tetrachloroethane ND 250 µg/Kg 50 7/16/2011 02:12 AM
 1,1,2-Trichloroethane ND 250 µg/Kg 50 7/16/2011 02:12 AM
 1,1-Dichloroethane ND 250 µg/Kg 50 7/16/2011 02:12 AM
 1,1-Dichloroethene ND 250 µg/Kg 50 7/16/2011 02:12 AM
 1,1-Dichloropropene ND 250 µg/Kg 50 7/16/2011 02:12 AM
 1,2,3-Trichlorobenzene ND 250 µg/Kg 50 7/16/2011 02:12 AM
 1,2,3-Trichloropropane ND 250 µg/Kg 50 7/16/2011 02:12 AM
 1,2,4-Trichlorobenzene ND 250 µg/Kg 50 7/16/2011 02:12 AM
 1,2,4-Trimethylbenzene ND 250 µg/Kg 50 7/16/2011 02:12 AM
 1,2-Dibromo-3-chloropropane ND 500 µg/Kg 50 7/16/2011 02:12 AM
 1,2-Dibromoethane ND 250 µg/Kg 50 7/16/2011 02:12 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: 21-Jul-11

CLIENT: Mactec **Client Sample ID:** E-116-55
Lab Order: 118898 **Collection Date:** 7/11/2011 1:58:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118898-006A

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

EPA 8260B

RunID:	MS4_110715B	QC Batch:	K11VS189	PrepDate:	Analyst:	DDL
1,2-Dichlorobenzene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
1,2-Dichloroethane	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
1,2-Dichloropropane	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
1,3,5-Trimethylbenzene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
1,3-Dichlorobenzene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
1,3-Dichloropropane	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
1,4-Dichlorobenzene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
2,2-Dichloropropane	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
2-Chlorotoluene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
4-Chlorotoluene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
4-Isopropyltoluene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Benzene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Bromobenzene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Bromodichloromethane	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Bromoform	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Bromomethane	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Carbon tetrachloride	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Chlorobenzene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Chloroethane	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Chloroform	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Chloromethane	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
cis-1,2-Dichloroethene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
cis-1,3-Dichloropropene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Di-isopropyl ether	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Dibromochloromethane	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Dibromomethane	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Dichlorodifluoromethane	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Ethyl Tert-butyl ether	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Ethylbenzene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Hexachlorobutadiene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
Isopropylbenzene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
m,p-Xylene	ND	500	µg/Kg	50	7/16/2011 02:12 AM	
Methylene chloride	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
MTBE	ND	250	µg/Kg	50	7/16/2011 02:12 AM	
n-Butylbenzene	ND	250	µg/Kg	50	7/16/2011 02:12 AM	

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



Advanced Technology
 Laboratories

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

Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 21-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-116-55
Lab Order:	118898	Collection Date:	7/11/2011 1:58:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118898-006A		

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

EPA 8260B

RunID: MS4_110715B	QC Batch: K11VS189	PrepDate:	Analyst: DDL		
n-Propylbenzene	ND	250	µg/Kg	50	7/16/2011 02:12 AM
Naphthalene	ND	250	µg/Kg	50	7/16/2011 02:12 AM
o-Xylene	ND	250	µg/Kg	50	7/16/2011 02:12 AM
sec-Butylbenzene	ND	250	µg/Kg	50	7/16/2011 02:12 AM
Styrene	ND	250	µg/Kg	50	7/16/2011 02:12 AM
Tert-amyl methyl ether	ND	250	µg/Kg	50	7/16/2011 02:12 AM
Tert-Butanol	ND	5000	µg/Kg	50	7/16/2011 02:12 AM
tert-Butylbenzene	ND	250	µg/Kg	50	7/16/2011 02:12 AM
Tetrachloroethene	ND	250	µg/Kg	50	7/16/2011 02:12 AM
Toluene	ND	250	µg/Kg	50	7/16/2011 02:12 AM
trans-1,2-Dichloroethene	ND	250	µg/Kg	50	7/16/2011 02:12 AM
Trichloroethene	ND	250	µg/Kg	50	7/16/2011 02:12 AM
Trichlorofluoromethane	ND	250	µg/Kg	50	7/16/2011 02:12 AM
Vinyl chloride	ND	250	µg/Kg	50	7/16/2011 02:12 AM
Surr: 1,2-Dichloroethane-d4	102	70-130	%REC	50	7/16/2011 02:12 AM
Surr: 4-Bromofluorobenzene	163	70-130	S %REC	50	7/16/2011 02:12 AM
Surr: Dibromofluoromethane	98.5	70-130	%REC	50	7/16/2011 02:12 AM
Surr: Toluene-d8	96.4	70-130	%REC	50	7/16/2011 02:12 AM

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



Advanced Technology
Laboratories

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

CLIENT: Mactec
Work Order: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

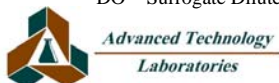
TestCode: 6010_S

Sample ID: MB-74329	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/18/2011	RunNo: 135039						
Client ID: PBS	Batch ID: 74329	TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/18/2011	SeqNo: 2209991						
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	0.711	1.0									

Sample ID: LCS-74329	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/18/2011	RunNo: 135039						
Client ID: LCSS	Batch ID: 74329	TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/18/2011	SeqNo: 2209992						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	45.734	2.0	50.00	0	91.5	80	120				
Arsenic	44.554	1.0	50.00	0	89.1	80	120				
Barium	47.143	1.0	50.00	0	94.3	80	120				
Beryllium	46.240	1.0	50.00	0	92.5	80	120				
Cadmium	44.343	1.0	50.00	0	88.7	80	120				
Chromium	43.499	1.0	50.00	0	87.0	80	120				
Cobalt	46.449	1.0	50.00	0	92.9	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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

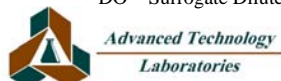
TestCode: 6010_S

Sample ID: LCS-74329		SampType: LCS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 7/18/2011		RunNo: 135039	
Client ID: LCSS		Batch ID: 74329		TestNo: EPA 6010B EPA 3050B				Analysis Date: 7/18/2011		SeqNo: 2209992	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	47.255	2.0	50.00	0	94.5	80	120				
Lead	45.423	1.0	50.00	0	90.8	80	120				
Molybdenum	47.501	1.0	50.00	0	95.0	80	120				
Nickel	44.000	1.0	50.00	0	88.0	80	120				
Selenium	41.942	1.0	50.00	0	83.9	80	120				
Silver	46.492	1.0	50.00	0	93.0	80	120				
Thallium	44.480	1.0	50.00	0	89.0	80	120				
Vanadium	46.966	1.0	50.00	0	93.9	80	120				
Zinc	45.105	1.0	50.00	0.7105	88.8	80	120				

Sample ID: 118836-003A-MS		SampType: MS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 7/18/2011		RunNo: 135039	
Client ID: ZZZZZ		Batch ID: 74329		TestNo: EPA 6010B EPA 3050B				Analysis Date: 7/18/2011		SeqNo: 2209995	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	96.284	2.0	125.0	0.4635	76.7	32	105				
Arsenic	108.269	1.0	125.0	2.626	84.5	49	106				
Barium	209.702	1.0	125.0	100.6	87.3	31	133				
Beryllium	108.353	1.0	125.0	0	86.7	56	106				
Cadmium	98.749	1.0	125.0	0.4624	78.6	51	103				
Chromium	112.653	1.0	125.0	12.50	80.1	45	114				
Cobalt	109.507	1.0	125.0	6.092	82.7	52	106				
Copper	139.230	2.0	125.0	18.08	96.9	54	125				
Lead	121.451	1.0	125.0	22.14	79.4	34	126				
Molybdenum	109.295	1.0	125.0	0	87.4	54	106				
Nickel	108.117	1.0	125.0	9.713	78.7	45	111				
Selenium	101.343	1.0	125.0	0	81.1	47	104				
Silver	113.285	1.0	125.0	0	90.6	56	112				
Thallium	92.957	1.0	125.0	0	74.4	46	101				
Vanadium	134.638	1.0	125.0	22.09	90.0	54	114				
Zinc	158.995	1.0	125.0	59.11	79.9	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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

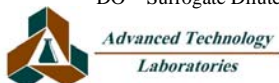
ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: 118836-003A-MSD		SampType: MSD		TestCode: 6010_S		Units: mg/Kg		Prep Date: 7/18/2011		RunNo: 135039	
Client ID: ZZZZZZ		Batch ID: 74329		TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/18/2011		SeqNo: 2209996			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	102.471	2.0	125.0	0.4635	81.6	32	105	96.28	6.23	20	
Arsenic	113.322	1.0	125.0	2.626	88.6	49	106	108.3	4.56	20	
Barium	213.053	1.0	125.0	100.6	89.9	31	133	209.7	1.59	20	
Beryllium	111.804	1.0	125.0	0	89.4	56	106	108.4	3.14	20	
Cadmium	103.348	1.0	125.0	0.4624	82.3	51	103	98.75	4.55	20	
Chromium	116.946	1.0	125.0	12.50	83.6	45	114	112.7	3.74	20	
Cobalt	114.241	1.0	125.0	6.092	86.5	52	106	109.5	4.23	20	
Copper	143.229	2.0	125.0	18.08	100	54	125	139.2	2.83	20	
Lead	124.567	1.0	125.0	22.14	81.9	34	126	121.5	2.53	20	
Molybdenum	114.022	1.0	125.0	0	91.2	54	106	109.3	4.23	20	
Nickel	112.787	1.0	125.0	9.713	82.5	45	111	108.1	4.23	20	
Selenium	106.115	1.0	125.0	0	84.9	47	104	101.3	4.60	20	
Silver	118.001	1.0	125.0	0	94.4	56	112	113.3	4.08	20	
Thallium	96.967	1.0	125.0	0	77.6	46	101	92.96	4.22	20	
Vanadium	138.999	1.0	125.0	22.09	93.5	54	114	134.6	3.19	20	
Zinc	162.022	1.0	125.0	59.11	82.3	28	125	159.0	1.89	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 | |



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

CLIENT: Mactec
Work Order: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: MB-74284	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/15/2011	RunNo: 135031						
Client ID: PBS	Batch ID: 74284	TestNo: EPA 7471A		Analysis Date: 7/18/2011	SeqNo: 2209825						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury ND 0.10

Sample ID: LCS-74284	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/15/2011	RunNo: 135031						
Client ID: LCSS	Batch ID: 74284	TestNo: EPA 7471A		Analysis Date: 7/18/2011	SeqNo: 2209826						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.743 0.10 0.8300 0 89.5 80 120

Sample ID: 118836-003A-MS	SampType: MS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/15/2011	RunNo: 135031						
Client ID: ZZZZZZ	Batch ID: 74284	TestNo: EPA 7471A		Analysis Date: 7/18/2011	SeqNo: 2209827						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

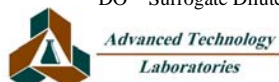
Mercury 2.009 0.10 0.8300 1.609 48.1 70 130 S

Sample ID: 118836-003A-MSD	SampType: MSD	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/15/2011	RunNo: 135031						
Client ID: ZZZZZZ	Batch ID: 74284	TestNo: EPA 7471A		Analysis Date: 7/18/2011	SeqNo: 2209828						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 2.037 0.10 0.8300 1.609 51.6 70 130 2.009 1.42 20 S

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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

Sample ID: MB-74262	SampType: MBLK	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/14/2011	RunNo: 134987						
Client ID: PBS	Batch ID: 74262	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/14/2011	SeqNo: 2208911						
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	106.180		80.00		133	63	152				

Sample ID: LCS-74262	SampType: LCS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/14/2011	RunNo: 134987						
Client ID: LCSS	Batch ID: 74262	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/14/2011	SeqNo: 2208912						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	1142.300	10	1000	0	114	76	139				
Surr: p-Terphenyl	100.310		80.00		125	63	152				

Sample ID: 118898-002GMS	SampType: MS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/14/2011	RunNo: 134987						
Client ID: E-116-45	Batch ID: 74262	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/14/2011	SeqNo: 2208916						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

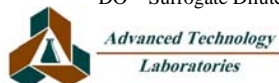
DRO	6263.500	100	1000	4698	157	60	158				
Surr: p-Terphenyl	0		80.00		0	63	152				SDO

Sample ID: 118898-002GMSD	SampType: MSD	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/14/2011	RunNo: 134987						
Client ID: E-116-45	Batch ID: 74262	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/14/2011	SeqNo: 2208917						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	2487.300	100	1000	4698	-221	60	158	6264	86.3	20	SR
Surr: p-Terphenyl	0		80.00		0	63	152		0	0	SDO

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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

Sample ID: E110715LC1	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135003						
Client ID: LCSS	Batch ID: E11VS259	TestNo: EPA 8015B(M)		Analysis Date: 7/15/2011	SeqNo: 2209551						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.935	1.0	5.000	0	98.7	70	130				
Surr: Bromofluorobenzene (FID)	112.716		100.0		113	51	161				

Sample ID: E110715MB1MS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135003						
Client ID: ZZZZZ	Batch ID: E11VS259	TestNo: EPA 8015B(M)		Analysis Date: 7/15/2011	SeqNo: 2209552						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.867	1.0	5.000	0	97.3	41	146				
Surr: Bromofluorobenzene (FID)	113.828		100.0		114	51	161				

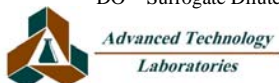
Sample ID: E110715MB1MSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135003						
Client ID: ZZZZZ	Batch ID: E11VS259	TestNo: EPA 8015B(M)		Analysis Date: 7/15/2011	SeqNo: 2209553						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.727	1.0	5.000	0	94.5	41	146	4.867	2.92	20	
Surr: Bromofluorobenzene (FID)	113.093		100.0		113	51	161		0	0	

Sample ID: E110715MB1	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135003						
Client ID: PBS	Batch ID: E11VS259	TestNo: EPA 8015B(M)		Analysis Date: 7/15/2011	SeqNo: 2209554						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	97.303		100.0		97.3	51	161				

Sample ID: 118920-001AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135003						
Client ID: ZZZZZ	Batch ID: E11VS259	TestNo: EPA 8015B(M)		Analysis Date: 7/15/2011	SeqNo: 2209560						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	3.649	1.0	5.000	0	73.0	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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

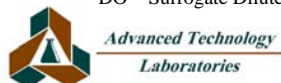
TestCode: 8015_S_G 5035P

Sample ID: 118920-001AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135003						
Client ID: ZZZZZZ	Batch ID: E11VS259	TestNo: EPA 8015B(M)	Analysis Date: 7/15/2011	SeqNo: 2209560							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Bromofluorobenzene (FID)	129.089		100.0		129	51	161				

Sample ID: 118920-001AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135003						
Client ID: ZZZZZZ	Batch ID: E11VS259	TestNo: EPA 8015B(M)	Analysis Date: 7/15/2011	SeqNo: 2209561							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.425	1.0	5.000	0	88.5	41	146	3.649	19.2	0	
Surr: Bromofluorobenzene (FID)	129.658		100.0		130	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 | |



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

CLIENT: Mactec
Work Order: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_GAS

Sample ID: E110715LC1	SampType: LCS	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 135003						
Client ID: LCSS	Batch ID: E11VS259	TestNo: EPA 8015B(M)		Analysis Date: 7/15/2011	SeqNo: 2209597						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	4.935	1.0	5.000	0	98.7	70	130				
Surr: Bromofluorobenzene (FID)	112.716		100.0		113	62	153				

Sample ID: E110715MB1MS	SampType: MS	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 135003						
Client ID: ZZZZZ	Batch ID: E11VS259	TestNo: EPA 8015B(M)		Analysis Date: 7/15/2011	SeqNo: 2209598						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	4.867	1.0	5.000	0	97.3	49	131				
Surr: Bromofluorobenzene (FID)	113.828		100.0		114	62	153				

Sample ID: E110715MB1MSD	SampType: MSD	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 135003						
Client ID: ZZZZZ	Batch ID: E11VS259	TestNo: EPA 8015B(M)		Analysis Date: 7/15/2011	SeqNo: 2209599						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	4.727	1.0	5.000	0	94.5	49	131	4.867	2.92	20	
Surr: Bromofluorobenzene (FID)	113.093		100.0		113	62	153		0	0	

Sample ID: E110715MB1	SampType: MBLK	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 135003						
Client ID: PBS	Batch ID: E11VS259	TestNo: EPA 8015B(M)		Analysis Date: 7/15/2011	SeqNo: 2209600						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

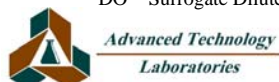
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	97.303		100.0		97.3	62	153				

Sample ID: 118920-001AMS	SampType: MS	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 135003						
Client ID: ZZZZZ	Batch ID: E11VS259	TestNo: EPA 8015B(M)		Analysis Date: 7/15/2011	SeqNo: 2209608						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	3.649	1.0	5.000	0	73.0	49	131				
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Qualifiers:

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|---|--|--|
| 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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

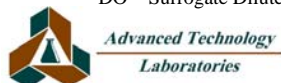
TestCode: 8015_S_GAS

Sample ID: 118920-001AMS	SampType: MS	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 135003						
Client ID: ZZZZZZ	Batch ID: E11VS259	TestNo: EPA 8015B(M)	Analysis Date: 7/15/2011	SeqNo: 2209608							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Bromofluorobenzene (FID)	129.089		100.0		129	62	153				

Sample ID: 118920-001AMSD	SampType: MSD	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 135003						
Client ID: ZZZZZZ	Batch ID: E11VS259	TestNo: EPA 8015B(M)	Analysis Date: 7/15/2011	SeqNo: 2209609							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.425	1.0	5.000	0	88.5	49	131	3.649	19.2	20	
Surr: Bromofluorobenzene (FID)	129.658		100.0		130	62	153		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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_GAS

Sample ID: E110719LC3	SampType: LCS	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 135119						
Client ID: LCSS	Batch ID: E11VS265	TestNo: EPA 8015B(M)		Analysis Date: 7/20/2011	SeqNo: 2211838						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.481	1.0	5.000	0	89.6	70	130				
Surr: Bromofluorobenzene (FID)	105.617		100.0		106	62	153				

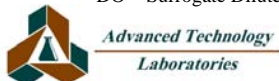
Sample ID: E110719MB2MS	SampType: MS	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 135119						
Client ID: ZZZZZZ	Batch ID: E11VS265	TestNo: EPA 8015B(M)		Analysis Date: 7/20/2011	SeqNo: 2211839						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.503	1.0	5.000	0	90.1	49	131				
Surr: Bromofluorobenzene (FID)	128.905		100.0		129	62	153				

Sample ID: E110719MB2MSD	SampType: MSD	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 135119						
Client ID: ZZZZZZ	Batch ID: E11VS265	TestNo: EPA 8015B(M)		Analysis Date: 7/20/2011	SeqNo: 2211840						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.723	1.0	5.000	0	94.5	49	131	4.503	4.77	20	
Surr: Bromofluorobenzene (FID)	113.605		100.0		114	62	153		0	0	

Sample ID: E110719MB2	SampType: MBLK	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 135119						
Client ID: PBS	Batch ID: E11VS265	TestNo: EPA 8015B(M)		Analysis Date: 7/20/2011	SeqNo: 2211841						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	99.358		100.0		99.4	62	153				

Qualifiers:

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



CLIENT: Mactec
Work Order: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021_S_B 5035P

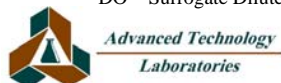
Sample ID: E110715LC2	SampType: LCS	TestCode: 8021_S_B 50	Units: µg/Kg	Prep Date:	RunNo: 135003						
Client ID: LCSS	Batch ID: E11VS259	TestNo: EPA 8021B		Analysis Date: 7/15/2011	SeqNo: 2209576						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	87.952	5.0	100.0	0	88.0	70	130				
Ethylbenzene	91.490	5.0	100.0	0	91.5	70	130				
m,p-Xylene	184.502	10	200.0	0	92.3	70	130				
o-Xylene	94.090	5.0	100.0	0	94.1	70	130				
Toluene	91.064	5.0	100.0	0	91.1	70	130				
Surr: Bromofluorobenzene (PID)	87.589		100.0		87.6	33	163				

Sample ID: E110715LC2	SampType: LCSD	TestCode: 8021_S_B 50	Units: µg/Kg	Prep Date:	RunNo: 135003						
Client ID: LCSS02	Batch ID: E11VS259	TestNo: EPA 8021B		Analysis Date: 7/15/2011	SeqNo: 2209579						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	83.681	5.0	100.0	0	83.7	70	130	87.95	4.98	20	
Ethylbenzene	87.226	5.0	100.0	0	87.2	70	130	91.49	4.77	20	
m,p-Xylene	176.351	10	200.0	0	88.2	70	130	184.5	4.52	20	
o-Xylene	88.654	5.0	100.0	0	88.7	70	130	94.09	5.95	20	
Toluene	86.636	5.0	100.0	0	86.6	70	130	91.06	4.98	20	
Surr: Bromofluorobenzene (PID)	79.295		100.0		79.3	33	163		0	0	

Sample ID: E110715MB1	SampType: MBLK	TestCode: 8021_S_B 50	Units: µg/Kg	Prep Date:	RunNo: 135003						
Client ID: PBS	Batch ID: E11VS259	TestNo: EPA 8021B		Analysis Date: 7/15/2011	SeqNo: 2209580						
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)	75.097		100.0		75.1	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 | |



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

CLIENT: Mactec
Work Order: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

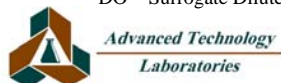
TestCode: 8021_S_B 5035P

Sample ID: 118920-001AMS	SampType: MS	TestCode: 8021_S_B 50	Units: µg/Kg	Prep Date:	RunNo: 135003						
Client ID: ZZZZZZ	Batch ID: E11VS259	TestNo: EPA 8021B		Analysis Date: 7/15/2011	SeqNo: 2209585						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	22.736	5.0	22.15	0	103	44	115				
Ethylbenzene	35.695	5.0	42.30	0	84.4	49	95				
m,p-Xylene	118.300	10	180.2	0	65.6	55	98				
o-Xylene	48.898	5.0	64.80	0	75.5	50	93				
Toluene	115.769	5.0	172.6	0	67.1	46	113				
Surr: Bromofluorobenzene (PID)	102.987		100.0		103	33	163				

Sample ID: 118920-001AMSD	SampType: MSD	TestCode: 8021_S_B 50	Units: µg/Kg	Prep Date:	RunNo: 135003						
Client ID: ZZZZZZ	Batch ID: E11VS259	TestNo: EPA 8021B		Analysis Date: 7/15/2011	SeqNo: 2209586						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	27.733	5.0	22.15	0	125	44	115	22.74	19.8	20	S
Ethylbenzene	43.172	5.0	42.30	0	102	49	95	35.70	19.0	20	S
m,p-Xylene	140.174	10	180.2	0	77.8	55	98	118.3	16.9	20	
o-Xylene	57.246	5.0	64.80	0	88.3	50	93	48.90	15.7	20	
Toluene	139.730	5.0	172.6	0	80.9	46	113	115.8	18.8	20	
Surr: Bromofluorobenzene (PID)	104.548		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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021_S_BTEX

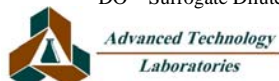
Sample ID: E110719LC4	SampType: LCS	TestCode: 8021_S_BTE	Units: µg/Kg	Prep Date:	RunNo: 135119						
Client ID: LCSS	Batch ID: E11VS265	TestNo: EPA 8021B		Analysis Date: 7/20/2011	SeqNo: 2211821						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	85.119	5.0	100.0	0	85.1	70	130				
Ethylbenzene	87.016	5.0	100.0	0	87.0	70	130				
m,p-Xylene	175.140	10	200.0	0	87.6	70	130				
o-Xylene	90.786	5.0	100.0	0	90.8	70	130				
Toluene	87.330	5.0	100.0	0	87.3	70	130				
Surr: Bromofluorobenzene (PID)	88.559		100.0		88.6	65	140				

Sample ID: E110719LC4	SampType: LCSD	TestCode: 8021_S_BTE	Units: µg/Kg	Prep Date:	RunNo: 135119						
Client ID: LCSS02	Batch ID: E11VS265	TestNo: EPA 8021B		Analysis Date: 7/20/2011	SeqNo: 2211822						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	81.417	5.0	100.0	0	81.4	70	130	85.12	4.45	20	
Ethylbenzene	83.922	5.0	100.0	0	83.9	70	130	87.02	3.62	20	
m,p-Xylene	168.869	10	200.0	0	84.4	70	130	175.1	3.65	20	
o-Xylene	86.873	5.0	100.0	0	86.9	70	130	90.79	4.41	20	
Toluene	84.090	5.0	100.0	0	84.1	70	130	87.33	3.78	20	
Surr: Bromofluorobenzene (PID)	83.365		100.0		83.4	65	140		0	0	

Sample ID: E110719MB2MS	SampType: MS	TestCode: 8021_S_BTE	Units: µg/Kg	Prep Date:	RunNo: 135119						
Client ID: ZZZZZ	Batch ID: E11VS265	TestNo: EPA 8021B		Analysis Date: 7/20/2011	SeqNo: 2211823						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	25.614	5.0	22.15	0	116	69	264				
Ethylbenzene	41.193	5.0	42.30	0	97.4	37	161				
m,p-Xylene	139.381	10	180.2	0	77.3	30	149				
o-Xylene	53.288	5.0	64.80	0	82.2	31	166				
Toluene	129.016	5.0	172.6	0	74.7	44	150				
Surr: Bromofluorobenzene (PID)	83.536		100.0		83.5	65	140				

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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

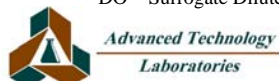
TestCode: 8021_S_BTEX

Sample ID: E110719MB2MSD	SampType: MSD	TestCode: 8021_S_BTE	Units: µg/Kg	Prep Date:	RunNo: 135119						
Client ID: ZZZZZZ	Batch ID: E11VS265	TestNo: EPA 8021B		Analysis Date: 7/20/2011	SeqNo: 2211824						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	27.054	5.0	22.15	0	122	69	264	25.61	5.47	20	
Ethylbenzene	42.215	5.0	42.30	0	99.8	37	161	41.19	2.45	20	
m,p-Xylene	142.733	10	180.2	0	79.2	30	149	139.4	2.38	20	
o-Xylene	55.130	5.0	64.80	0	85.1	31	166	53.29	3.40	20	
Toluene	134.532	5.0	172.6	0	77.9	44	150	129.0	4.19	20	
Surr: Bromofluorobenzene (PID)	86.775		100.0		86.8	65	140		0	20	

Sample ID: E110719MB2	SampType: MBLK	TestCode: 8021_S_BTE	Units: µg/Kg	Prep Date:	RunNo: 135119						
Client ID: PBS	Batch ID: E11VS265	TestNo: EPA 8021B		Analysis Date: 7/20/2011	SeqNo: 2211825						
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)	75.646		100.0		75.6	65	140				

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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S

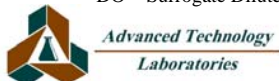
Sample ID: K110714LCS1		SampType: LCS		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 134957	
Client ID: LCSS		Batch ID: K11VS186		TestNo: EPA 8260B		Analysis Date: 7/14/2011				SeqNo: 2208500	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	46.950	5.0	50.00	0	93.9	70	130				
Benzene	98.120	5.0	100.0	0	98.1	70	130				
Chlorobenzene	52.940	5.0	50.00	0	106	82	130				
MTBE	55.670	5.0	50.00	0	111	70	130				
Toluene	97.620	5.0	100.0	0	97.6	70	130				
Trichloroethene	49.500	5.0	50.00	0	99.0	77	130				
Surr: 1,2-Dichloroethane-d4	51.230		50.00		102	70	130				
Surr: 4-Bromofluorobenzene	45.450		50.00		90.9	70	130				
Surr: Dibromofluoromethane	48.930		50.00		97.9	70	130				
Surr: Toluene-d8	47.400		50.00		94.8	70	130				

Sample ID: K110714MB1MS		SampType: MS		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 134957	
Client ID: ZZZZZ		Batch ID: K11VS186		TestNo: EPA 8260B		Analysis Date: 7/14/2011				SeqNo: 2208501	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	47.380	5.0	50.00	0	94.8	70	130				
Benzene	99.050	5.0	100.0	0	99.0	70	130				
Chlorobenzene	53.430	5.0	50.00	0	107	70	130				
MTBE	55.720	5.0	50.00	0	111	70	130				
Toluene	98.510	5.0	100.0	0	98.5	70	130				
Trichloroethene	50.440	5.0	50.00	0	101	70	130				
Surr: 1,2-Dichloroethane-d4	50.070		50.00		100	70	130				
Surr: 4-Bromofluorobenzene	45.850		50.00		91.7	70	130				
Surr: Dibromofluoromethane	48.850		50.00		97.7	70	130				
Surr: Toluene-d8	47.340		50.00		94.7	70	130				

Sample ID: K110714MB1MSD		SampType: MSD		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 134957	
Client ID: ZZZZZ		Batch ID: K11VS186		TestNo: EPA 8260B		Analysis Date: 7/14/2011				SeqNo: 2208502	
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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

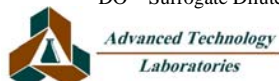
TestCode: 8260_S

Sample ID: K110714MB1MSD		SampType: MSD		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 134957	
Client ID: ZZZZZZ		Batch ID: K11VS186		TestNo: EPA 8260B		Analysis Date: 7/14/2011				SeqNo: 2208502	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	48.110	5.0	50.00	0	96.2	70	130	47.38	1.53	20	
Benzene	102.150	5.0	100.0	0	102	70	130	99.05	3.08	20	
Chlorobenzene	56.000	5.0	50.00	0	112	70	130	53.43	4.70	20	
MTBE	57.100	5.0	50.00	0	114	70	130	55.72	2.45	20	
Toluene	101.550	5.0	100.0	0	102	70	130	98.51	3.04	20	
Trichloroethene	52.940	5.0	50.00	0	106	70	130	50.44	4.84	20	
Surr: 1,2-Dichloroethane-d4	51.480		50.00		103	70	130		0	0	
Surr: 4-Bromofluorobenzene	48.210		50.00		96.4	70	130		0	0	
Surr: Dibromofluoromethane	49.800		50.00		99.6	70	130		0	0	
Surr: Toluene-d8	49.330		50.00		98.7	70	130		0	0	

Sample ID: K110714MB1		SampType: MBLK		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 134957	
Client ID: PBS		Batch ID: K11VS186		TestNo: EPA 8260B		Analysis Date: 7/14/2011				SeqNo: 2208503	
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 |
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| DO Surrogate Diluted Out | Calculations are based on raw values | |



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CLIENT: Mactec
Work Order: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

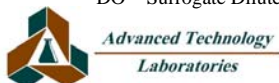
TestCode: 8260_S

Sample ID: K110714MB1	SampType: MBLK	TestCode: 8260_S	Units: µg/Kg	Prep Date:	RunNo: 134957
Client ID: PBS	Batch ID: K11VS186	TestNo: EPA 8260B		Analysis Date: 7/14/2011	SeqNo: 2208503

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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|---|--|--|
| 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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

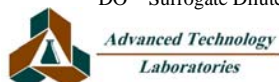
TestCode: 8260_S

Sample ID: K110714MB1	SampType: MBLK	TestCode: 8260_S	Units: µg/Kg	Prep Date:	RunNo: 134957						
Client ID: PBS	Batch ID: K11VS186	TestNo: EPA 8260B		Analysis Date: 7/14/2011	SeqNo: 2208503						
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	53.750		50.00		108	70	130				
Surr: 4-Bromofluorobenzene	44.810		50.00		89.6	70	130				
Surr: Dibromofluoromethane	52.060		50.00		104	70	130				
Surr: Toluene-d8	49.780		50.00		99.6	70	130				

Sample ID: 118927-001AMS	SampType: MS	TestCode: 8260_S	Units: µg/Kg	Prep Date:	RunNo: 134957						
Client ID: ZZZZZZ	Batch ID: K11VS186	TestNo: EPA 8260B		Analysis Date: 7/14/2011	SeqNo: 2209247						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	36.550	5.0	50.00	0	73.1	70	130				
Benzene	81.690	5.0	100.0	0	81.7	70	130				
Chlorobenzene	40.970	5.0	50.00	0	81.9	70	130				
MTBE	39.790	5.0	50.00	0	79.6	70	130				

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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

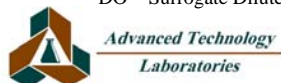
TestCode: 8260_S

Sample ID: 118927-001AMS		SampType: MS		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 134957	
Client ID: ZZZZZZ		Batch ID: K11VS186		TestNo: EPA 8260B		Analysis Date: 7/14/2011				SeqNo: 2209247	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	80.020	5.0	100.0	0	80.0	70	130				
Trichloroethene	42.730	5.0	50.00	0	85.5	70	130				
Surr: 1,2-Dichloroethane-d4	47.490		50.00		95.0	70	130				
Surr: 4-Bromofluorobenzene	46.670		50.00		93.3	70	130				
Surr: Dibromofluoromethane	47.690		50.00		95.4	70	130				
Surr: Toluene-d8	47.090		50.00		94.2	70	130				

Sample ID: 118927-001AMSD		SampType: MSD		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 134957	
Client ID: ZZZZZZ		Batch ID: K11VS186		TestNo: EPA 8260B		Analysis Date: 7/14/2011				SeqNo: 2209248	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	39.450	5.0	50.00	0	78.9	70	130	36.55	7.63	20	
Benzene	82.370	5.0	100.0	0	82.4	70	130	81.69	0.829	20	
Chlorobenzene	42.070	5.0	50.00	0	84.1	70	130	40.97	2.65	20	
MTBE	42.620	5.0	50.00	0	85.2	70	130	39.79	6.87	20	
Toluene	81.190	5.0	100.0	0	81.2	70	130	80.02	1.45	20	
Trichloroethene	43.040	5.0	50.00	0	86.1	70	130	42.73	0.723	20	
Surr: 1,2-Dichloroethane-d4	46.420		50.00		92.8	70	130		0	0	
Surr: 4-Bromofluorobenzene	46.930		50.00		93.9	70	130		0	0	
Surr: Dibromofluoromethane	48.230		50.00		96.5	70	130		0	0	
Surr: Toluene-d8	47.180		50.00		94.4	70	130		0	0	

Qualifiers:

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|---|--|--|
| 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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S

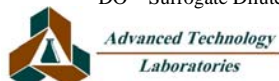
Sample ID: K110715LCS2		SampType: LCS		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: LCSS		Batch ID: K11VS189		TestNo: EPA 8260B				Analysis Date: 7/15/2011		SeqNo: 2209615	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	47.780	5.0	50.00	0	95.6	70	130				
Benzene	96.960	5.0	100.0	0	97.0	70	130				
Chlorobenzene	51.870	5.0	50.00	0	104	82	130				
MTBE	57.220	5.0	50.00	0	114	70	130				
Toluene	97.110	5.0	100.0	0	97.1	70	130				
Trichloroethene	48.720	5.0	50.00	0	97.4	77	130				
Surr: 1,2-Dichloroethane-d4	53.600		50.00		107	70	130				
Surr: 4-Bromofluorobenzene	46.230		50.00		92.5	70	130				
Surr: Dibromofluoromethane	50.770		50.00		102	70	130				
Surr: Toluene-d8	47.790		50.00		95.6	70	130				

Sample ID: K110715MB2MS		SampType: MS		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: ZZZZZ		Batch ID: K11VS189		TestNo: EPA 8260B				Analysis Date: 7/15/2011		SeqNo: 2209616	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	48.200	5.0	50.00	0	96.4	70	130				
Benzene	98.210	5.0	100.0	0	98.2	70	130				
Chlorobenzene	52.570	5.0	50.00	0	105	70	130				
MTBE	57.580	5.0	50.00	0	115	70	130				
Toluene	98.220	5.0	100.0	0	98.2	70	130				
Trichloroethene	50.520	5.0	50.00	0	101	70	130				
Surr: 1,2-Dichloroethane-d4	51.790		50.00		104	70	130				
Surr: 4-Bromofluorobenzene	46.080		50.00		92.2	70	130				
Surr: Dibromofluoromethane	50.250		50.00		101	70	130				
Surr: Toluene-d8	47.510		50.00		95.0	70	130				

Sample ID: K110715MB2MSD		SampType: MSD		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: ZZZZZ		Batch ID: K11VS189		TestNo: EPA 8260B				Analysis Date: 7/15/2011		SeqNo: 2209617	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

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|---|--|--|
| 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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

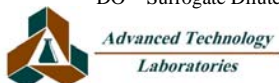
TestCode: 8260_S

Sample ID: K110715MB2MSD		SampType: MSD		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: ZZZZZZ		Batch ID: K11VS189		TestNo: EPA 8260B		Analysis Date: 7/15/2011				SeqNo: 2209617	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	47.870	5.0	50.00	0	95.7	70	130	48.20	0.687	20	
Benzene	98.070	5.0	100.0	0	98.1	70	130	98.21	0.143	20	
Chlorobenzene	52.930	5.0	50.00	0	106	70	130	52.57	0.682	20	
MTBE	58.280	5.0	50.00	0	117	70	130	57.58	1.21	20	
Toluene	97.220	5.0	100.0	0	97.2	70	130	98.22	1.02	20	
Trichloroethene	49.580	5.0	50.00	0	99.2	70	130	50.52	1.88	20	
Surr: 1,2-Dichloroethane-d4	52.830		50.00		106	70	130		0	0	
Surr: 4-Bromofluorobenzene	45.040		50.00		90.1	70	130		0	0	
Surr: Dibromofluoromethane	51.500		50.00		103	70	130		0	0	
Surr: Toluene-d8	47.650		50.00		95.3	70	130		0	0	

Sample ID: K110715MB2		SampType: MBLK		TestCode: 8260_S		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: PBS		Batch ID: K11VS189		TestNo: EPA 8260B		Analysis Date: 7/15/2011				SeqNo: 2209618	
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:

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|---|--|--|
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CLIENT: Mactec
Work Order: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

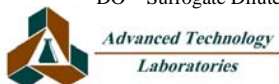
TestCode: 8260_S

Sample ID: K110715MB2	SampType: MBLK	TestCode: 8260_S	Units: µg/Kg	Prep Date:	RunNo: 135018						
Client ID: PBS	Batch ID: K11VS189	TestNo: EPA 8260B		Analysis Date: 7/15/2011	SeqNo: 2209618						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2-Dichloropropane	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Chlorotoluene	ND	5.0									
4-Chlorotoluene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
Benzene	ND	5.0									
Bromobenzene	ND	5.0									
Bromodichloromethane	ND	5.0									
Bromoform	ND	5.0									
Bromomethane	ND	5.0									
Carbon tetrachloride	ND	5.0									
Chlorobenzene	ND	5.0									
Chloroethane	ND	5.0									
Chloroform	ND	5.0									
Chloromethane	ND	5.0									
cis-1,2-Dichloroethene	ND	5.0									
cis-1,3-Dichloropropene	ND	5.0									
Di-isopropyl ether	ND	5.0									
Dibromochloromethane	ND	5.0									
Dibromomethane	ND	5.0									
Dichlorodifluoromethane	ND	5.0									
Ethyl Tert-butyl ether	ND	5.0									
Ethylbenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Isopropylbenzene	ND	5.0									
m,p-Xylene	ND	10									

Qualifiers:

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



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

CLIENT: Mactec
Work Order: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

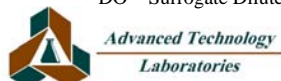
TestCode: 8260_S

Sample ID: K110715MB2	SampType: MBLK	TestCode: 8260_S	Units: µg/Kg	Prep Date:	RunNo: 135018						
Client ID: PBS	Batch ID: K11VS189	TestNo: EPA 8260B		Analysis Date: 7/15/2011	SeqNo: 2209618						
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	55.740		50.00		111	70	130				
Surr: 4-Bromofluorobenzene	45.990		50.00		92.0	70	130				
Surr: Dibromofluoromethane	53.820		50.00		108	70	130				
Surr: Toluene-d8	50.210		50.00		100	70	130				

Sample ID: 118968-001AMS	SampType: MS	TestCode: 8260_S	Units: µg/Kg	Prep Date:	RunNo: 135018						
Client ID: ZZZZZZ	Batch ID: K11VS189	TestNo: EPA 8260B		Analysis Date: 7/16/2011	SeqNo: 2209621						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	41.350	5.0	50.00	0	82.7	70	130				
Benzene	80.510	5.0	100.0	0	80.5	70	130				
Chlorobenzene	38.650	5.0	50.00	0	77.3	70	130				
MTBE	42.970	5.0	50.00	0	85.9	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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| 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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

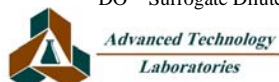
TestCode: 8260_S

Sample ID: 118968-001AMS	SampType: MS	TestCode: 8260_S	Units: µg/Kg	Prep Date:	RunNo: 135018						
Client ID: ZZZZZZ	Batch ID: K11VS189	TestNo: EPA 8260B		Analysis Date: 7/16/2011	SeqNo: 2209621						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	78.320	5.0	100.0	0	78.3	70	130				
Trichloroethene	40.920	5.0	50.00	0	81.8	70	130				
Surr: 1,2-Dichloroethane-d4	50.630		50.00		101	70	130				
Surr: 4-Bromofluorobenzene	45.350		50.00		90.7	70	130				
Surr: Dibromofluoromethane	49.480		50.00		99.0	70	130				
Surr: Toluene-d8	47.740		50.00		95.5	70	130				

Sample ID: 118968-001AMSD	SampType: MSD	TestCode: 8260_S	Units: µg/Kg	Prep Date:	RunNo: 135018						
Client ID: ZZZZZZ	Batch ID: K11VS189	TestNo: EPA 8260B		Analysis Date: 7/16/2011	SeqNo: 2209622						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	40.740	5.0	50.00	0	81.5	70	130	41.35	1.49	20	
Benzene	80.170	5.0	100.0	0	80.2	70	130	80.51	0.423	20	
Chlorobenzene	38.470	5.0	50.00	0	76.9	70	130	38.65	0.467	20	
MTBE	42.950	5.0	50.00	0	85.9	70	130	42.97	0.0466	20	
Toluene	77.360	5.0	100.0	0	77.4	70	130	78.32	1.23	20	
Trichloroethene	40.310	5.0	50.00	0	80.6	70	130	40.92	1.50	20	
Surr: 1,2-Dichloroethane-d4	52.210		50.00		104	70	130		0	0	
Surr: 4-Bromofluorobenzene	45.380		50.00		90.8	70	130		0	0	
Surr: Dibromofluoromethane	50.680		50.00		101	70	130		0	0	
Surr: Toluene-d8	48.370		50.00		96.7	70	130		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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

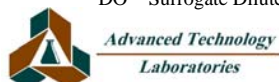
Sample ID: K110714LCS1		SampType: LCS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134957	
Client ID: LCSS		Batch ID: K11VS186		TestNo: EPA 8260B		Analysis Date: 7/14/2011				SeqNo: 2209269	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	46.950	5.0	50.00	0	93.9	70	130				
Benzene	98.120	5.0	100.0	0	98.1	70	130				
Chlorobenzene	52.940	5.0	50.00	0	106	70	130				
MTBE	55.670	5.0	50.00	0	111	70	130				
Toluene	97.620	5.0	100.0	0	97.6	70	130				
Trichloroethene	49.500	5.0	50.00	0	99.0	70	130				
Surr: 1,2-Dichloroethane-d4	51.230		50.00		102	65	141				
Surr: 4-Bromofluorobenzene	45.450		50.00		90.9	57	134				
Surr: Dibromofluoromethane	48.930		50.00		97.9	70	128				
Surr: Toluene-d8	47.400		50.00		94.8	72	123				

Sample ID: K110714MB1MS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134957	
Client ID: ZZZZZ		Batch ID: K11VS186		TestNo: EPA 8260B		Analysis Date: 7/14/2011				SeqNo: 2209270	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	47.380	5.0	50.00	0	94.8	70	130				
Benzene	99.050	5.0	100.0	0	99.0	70	130				
Chlorobenzene	53.430	5.0	50.00	0	107	70	130				
MTBE	55.720	5.0	50.00	0	111	70	130				
Toluene	98.510	5.0	100.0	0	98.5	70	130				
Trichloroethene	50.440	5.0	50.00	0	101	70	130				
Surr: 1,2-Dichloroethane-d4	50.070		50.00		100	65	141				
Surr: 4-Bromofluorobenzene	45.850		50.00		91.7	57	134				
Surr: Dibromofluoromethane	48.850		50.00		97.7	70	128				
Surr: Toluene-d8	47.340		50.00		94.7	72	123				

Sample ID: K110714MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134957	
Client ID: ZZZZZ		Batch ID: K11VS186		TestNo: EPA 8260B		Analysis Date: 7/14/2011				SeqNo: 2209271	
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: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

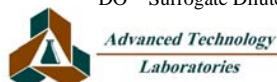
TestCode: 8260_S_5035

Sample ID: K110714MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134957	
Client ID: ZZZZZZ		Batch ID: K11VS186		TestNo: EPA 8260B				Analysis Date: 7/14/2011		SeqNo: 2209271	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	48.110	5.0	50.00	0	96.2	70	130	47.38	1.53	20	
Benzene	102.150	5.0	100.0	0	102	70	130	99.05	3.08	20	
Chlorobenzene	56.000	5.0	50.00	0	112	70	130	53.43	4.70	20	
MTBE	57.100	5.0	50.00	0	114	70	130	55.72	2.45	20	
Toluene	101.550	5.0	100.0	0	102	70	130	98.51	3.04	20	
Trichloroethene	52.940	5.0	50.00	0	106	70	130	50.44	4.84	20	
Surr: 1,2-Dichloroethane-d4	51.480		50.00		103	65	141		0	0	
Surr: 4-Bromofluorobenzene	48.210		50.00		96.4	57	134		0	0	
Surr: Dibromofluoromethane	49.800		50.00		99.6	70	128		0	0	
Surr: Toluene-d8	49.330		50.00		98.7	72	123		0	0	

Sample ID: K110714MB1		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 134957	
Client ID: PBS		Batch ID: K11VS186		TestNo: EPA 8260B				Analysis Date: 7/14/2011		SeqNo: 2209272	
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:

- | | | |
|---|--|--|
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Work Order: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110714MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 134957						
Client ID: PBS	Batch ID: K11VS186	TestNo: EPA 8260B		Analysis Date: 7/14/2011	SeqNo: 2209272						
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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Laboratories*

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CLIENT: Mactec
Work Order: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

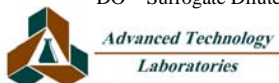
ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110714MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 134957						
Client ID: PBS	Batch ID: K11VS186	TestNo: EPA 8260B	Analysis Date: 7/14/2011	SeqNo: 2209272							
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	53.750		50.00		108	65	141				
Surr: 4-Bromofluorobenzene	44.810		50.00		89.6	57	134				
Surr: Dibromofluoromethane	52.060		50.00		104	70	128				
Surr: Toluene-d8	49.780		50.00		99.6	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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ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

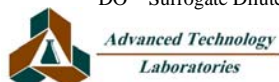
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Client ID: LCSS		Batch ID: K11VS189		TestNo: EPA 8260B		Analysis Date: 7/15/2011				SeqNo: 2209856	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	47.780	5.0	50.00	0	95.6	70	130				
Benzene	96.960	5.0	100.0	0	97.0	70	130				
Chlorobenzene	51.870	5.0	50.00	0	104	70	130				
MTBE	57.220	5.0	50.00	0	114	70	130				
Toluene	97.110	5.0	100.0	0	97.1	70	130				
Trichloroethene	48.720	5.0	50.00	0	97.4	70	130				
Surr: 1,2-Dichloroethane-d4	53.600		50.00		107	65	141				
Surr: 4-Bromofluorobenzene	46.230		50.00		92.5	57	134				
Surr: Dibromofluoromethane	50.770		50.00		102	70	128				
Surr: Toluene-d8	47.790		50.00		95.6	72	123				

Sample ID: K110715MB2MS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: ZZZZZ		Batch ID: K11VS189		TestNo: EPA 8260B		Analysis Date: 7/15/2011				SeqNo: 2209857	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	48.200	5.0	50.00	0	96.4	70	130				
Benzene	98.210	5.0	100.0	0	98.2	70	130				
Chlorobenzene	52.570	5.0	50.00	0	105	70	130				
MTBE	57.580	5.0	50.00	0	115	70	130				
Toluene	98.220	5.0	100.0	0	98.2	70	130				
Trichloroethene	50.520	5.0	50.00	0	101	70	130				
Surr: 1,2-Dichloroethane-d4	51.790		50.00		104	65	141				
Surr: 4-Bromofluorobenzene	46.080		50.00		92.2	57	134				
Surr: Dibromofluoromethane	50.250		50.00		101	70	128				
Surr: Toluene-d8	47.510		50.00		95.0	72	123				

Sample ID: K110715MB2MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: ZZZZZ		Batch ID: K11VS189		TestNo: EPA 8260B		Analysis Date: 7/15/2011				SeqNo: 2209858	
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
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ANALYTICAL QC SUMMARY REPORT

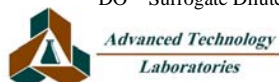
TestCode: 8260_S_5035

Sample ID: K110715MB2MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: ZZZZZZ		Batch ID: K11VS189		TestNo: EPA 8260B				Analysis Date: 7/15/2011		SeqNo: 2209858	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	47.870	5.0	50.00	0	95.7	70	130	48.20	0.687	20	
Benzene	98.070	5.0	100.0	0	98.1	70	130	98.21	0.143	20	
Chlorobenzene	52.930	5.0	50.00	0	106	70	130	52.57	0.682	20	
MTBE	58.280	5.0	50.00	0	117	70	130	57.58	1.21	20	
Toluene	97.220	5.0	100.0	0	97.2	70	130	98.22	1.02	20	
Trichloroethene	49.580	5.0	50.00	0	99.2	70	130	50.52	1.88	20	
Surr: 1,2-Dichloroethane-d4	52.830		50.00		106	65	141		0	0	
Surr: 4-Bromofluorobenzene	45.040		50.00		90.1	57	134		0	0	
Surr: Dibromofluoromethane	51.500		50.00		103	70	128		0	0	
Surr: Toluene-d8	47.650		50.00		95.3	72	123		0	0	

Sample ID: K110715MB2		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: PBS		Batch ID: K11VS189		TestNo: EPA 8260B				Analysis Date: 7/15/2011		SeqNo: 2209859	
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 | |



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CLIENT: Mactec
Work Order: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

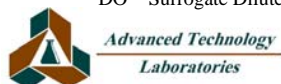
TestCode: 8260_S_5035

Sample ID: K110715MB2	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135018
Client ID: PBS	Batch ID: K11VS189	TestNo: EPA 8260B		Analysis Date: 7/15/2011	SeqNo: 2209859

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

Qualifiers:

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



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CLIENT: Mactec
Work Order: 118898
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ANALYTICAL QC SUMMARY REPORT

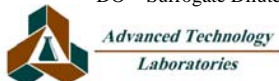
TestCode: 8260_S_5035

Sample ID: K110715MB2		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135018		
Client ID: PBS		Batch ID: K11VS189		TestNo: EPA 8260B				Analysis Date: 7/15/2011		SeqNo: 2209859		
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	55.740		50.00		111	65	141					
Surr: 4-Bromofluorobenzene	45.990		50.00		92.0	57	134					
Surr: Dibromofluoromethane	53.820		50.00		108	70	128					
Surr: Toluene-d8	50.210		50.00		100	72	123					

Sample ID: 118968-001AMS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135018		
Client ID: ZZZZZZ		Batch ID: K11VS189		TestNo: EPA 8260B				Analysis Date: 7/16/2011		SeqNo: 2209871		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	41.350	5.0	50.00	0	82.7	70	130					
Benzene	80.510	5.0	100.0	0	80.5	70	130					
Chlorobenzene	38.650	5.0	50.00	0	77.3	70	130					
MTBE	42.970	5.0	50.00	0	85.9	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 | |



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ANALYTICAL QC SUMMARY REPORT

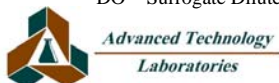
TestCode: 8260_S_5035

Sample ID: 118968-001AMS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: ZZZZZZ		Batch ID: K11VS189		TestNo: EPA 8260B		Analysis Date: 7/16/2011				SeqNo: 2209871	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	78.320	5.0	100.0	0	78.3	70	130				
Trichloroethene	40.920	5.0	50.00	0	81.8	70	130				
Surr: 1,2-Dichloroethane-d4	50.630		50.00		101	65	141				
Surr: 4-Bromofluorobenzene	45.350		50.00		90.7	57	134				
Surr: Dibromofluoromethane	49.480		50.00		99.0	70	128				
Surr: Toluene-d8	47.740		50.00		95.5	72	123				

Sample ID: 118968-001AMSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: ZZZZZZ		Batch ID: K11VS189		TestNo: EPA 8260B		Analysis Date: 7/16/2011				SeqNo: 2209872	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	40.740	5.0	50.00	0	81.5	70	130	41.35	1.49	20	
Benzene	80.170	5.0	100.0	0	80.2	70	130	80.51	0.423	20	
Chlorobenzene	38.470	5.0	50.00	0	76.9	70	130	38.65	0.467	20	
MTBE	42.950	5.0	50.00	0	85.9	70	130	42.97	0.0466	20	
Toluene	77.360	5.0	100.0	0	77.4	70	130	78.32	1.23	20	
Trichloroethene	40.310	5.0	50.00	0	80.6	70	130	40.92	1.50	20	
Surr: 1,2-Dichloroethane-d4	52.210		50.00		104	65	141		0	0	
Surr: 4-Bromofluorobenzene	45.380		50.00		90.8	57	134		0	0	
Surr: Dibromofluoromethane	50.680		50.00		101	70	128		0	0	
Surr: Toluene-d8	48.370		50.00		96.7	72	123		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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Work Order: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

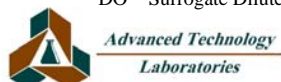
TestCode: 8270_S_FULL

Sample ID: MB-74261	SampType: MBLK	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 7/14/2011	RunNo: 135026
Client ID: PBS	Batch ID: 74261	TestNo: EPA 8270C EPA 3550B		Analysis Date: 7/18/2011	SeqNo: 2209840

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

Qualifiers:

- | | | |
|---|--|--|
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ANALYTICAL QC SUMMARY REPORT

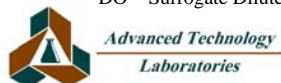
TestCode: 8270_S_FULL

Sample ID: MB-74261	SampType: MBLK	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 7/14/2011	RunNo: 135026
Client ID: PBS	Batch ID: 74261	TestNo: EPA 8270C EPA 3550B		Analysis Date: 7/18/2011	SeqNo: 2209840

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

Qualifiers:

- | | | |
|---|--|--|
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Work Order: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

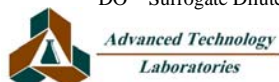
TestCode: 8270_S_FULL

Sample ID: MB-74261		SampType: MBLK		TestCode: 8270_S_FULL Units: µg/Kg		Prep Date: 7/14/2011		RunNo: 135026			
Client ID: PBS		Batch ID: 74261		TestNo: EPA 8270C EPA 3550B		Analysis Date: 7/18/2011		SeqNo: 2209840			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	330									
Nitrobenzene	ND	330									
Pentachlorophenol	ND	1600									
Phenanthrene	ND	330									
Phenol	ND	330									
Pyrene	ND	330									
Surr: 1,2-Dichlorobenzene-d4	2353.000		3330		70.7	45	105				
Surr: 2,4,6-Tribromophenol	1784.333		3330		53.6	41	129				
Surr: 2-Chlorophenol-d4	2460.000		3330		73.9	55	108				
Surr: 2-Fluorobiphenyl	2504.667		3330		75.2	56	114				
Surr: 2-Fluorophenol	2485.667		3330		74.6	50	108				
Surr: 4-Terphenyl-d14	2999.000		3330		90.1	59	141				
Surr: Nitrobenzene-d5	2553.667		3330		76.7	45	114				
Surr: Phenol-d5	2496.667		3330		75.0	46	118				

Sample ID: LCS-74261		SampType: LCS		TestCode: 8270_S_FULL Units: µg/Kg		Prep Date: 7/14/2011		RunNo: 135026			
Client ID: LCSS		Batch ID: 74261		TestNo: EPA 8270C EPA 3550B		Analysis Date: 7/18/2011		SeqNo: 2209841			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	2460.309	330	3330	0	73.9	67	107				
1,4-Dichlorobenzene	2345.310	330	3330	0	70.4	64	99				
2,4-Dinitrotoluene	3230.968	330	3330	0	97.0	81	122				
2-Chlorophenol	2333.977	330	3330	0	70.1	62	112				
4-Chloro-3-methylphenol	2767.972	660	3330	0	83.1	64	138				
4-Nitrophenol	3221.301	1600	3330	0	96.7	60	142				
Acenaphthene	2863.638	330	3330	0	86.0	70	116				
N-Nitrosodi-n-propylamine	2655.973	330	3330	0	79.8	73	115				
Pentachlorophenol	2350.643	1600	3330	0	70.6	59	135				
Phenol	2370.643	330	3330	0	71.2	61	120				
Pyrene	3034.970	330	3330	0	91.1	75	117				

Qualifiers:

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



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ANALYTICAL QC SUMMARY REPORT

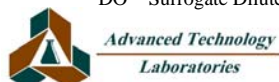
TestCode: 8270_S_FULL

Sample ID: LCS-74261	SampType: LCS	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 7/14/2011	RunNo: 135026						
Client ID: LCSS	Batch ID: 74261	TestNo: EPA 8270C	EPA 3550B	Analysis Date: 7/18/2011	SeqNo: 2209841						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1,2-Dichlorobenzene-d4	2275.977		3330		68.3	45	105				
Surr: 2,4,6-Tribromophenol	2942.971		3330		88.4	41	129				
Surr: 2-Chlorophenol-d4	2345.310		3330		70.4	55	108				
Surr: 2-Fluorobiphenyl	2607.641		3330		78.3	56	114				
Surr: 2-Fluorophenol	2377.976		3330		71.4	50	108				
Surr: 4-Terphenyl-d14	2981.304		3330		89.5	59	141				
Surr: Nitrobenzene-d5	2487.975		3330		74.7	45	114				
Surr: Phenol-d5	2458.309		3330		73.8	46	118				

Sample ID: 118895-014AMS	SampType: MS	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 7/14/2011	RunNo: 135026						
Client ID: ZZZZZZ	Batch ID: 74261	TestNo: EPA 8270C	EPA 3550B	Analysis Date: 7/18/2011	SeqNo: 2210024						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	2723.333	330	3330	0	81.8	62	109				
1,4-Dichlorobenzene	2562.333	330	3330	0	76.9	57	99				
2,4-Dinitrotoluene	3205.667	330	3330	0	96.3	76	126				
2-Chlorophenol	2632.333	330	3330	0	79.0	52	120				
4-Chloro-3-methylphenol	2888.333	660	3330	0	86.7	63	137				
4-Nitrophenol	3119.333	1600	3330	0	93.7	52	144				
Acenaphthene	2889.333	330	3330	0	86.8	61	121				
N-Nitrosodi-n-propylamine	2830.333	330	3330	0	85.0	67	116				
Pentachlorophenol	2464.667	1600	3330	0	74.0	47	143				
Phenol	2648.000	330	3330	0	79.5	54	126				
Pyrene	2965.000	330	3330	0	89.0	68	121				
Surr: 1,2-Dichlorobenzene-d4	2457.667		3330		73.8	45	105				
Surr: 2,4,6-Tribromophenol	2964.333		3330		89.0	41	129				
Surr: 2-Chlorophenol-d4	2609.333		3330		78.4	55	108				
Surr: 2-Fluorobiphenyl	2730.000		3330		82.0	56	114				
Surr: 2-Fluorophenol	2640.333		3330		79.3	50	108				
Surr: 4-Terphenyl-d14	2967.333		3330		89.1	59	141				

Qualifiers:

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



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

CLIENT: Mactec
Work Order: 118898
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

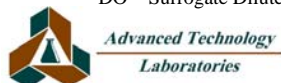
TestCode: 8270_S_FULL

Sample ID: 118895-014AMS	SampType: MS	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 7/14/2011	RunNo: 135026						
Client ID: ZZZZZZ	Batch ID: 74261	TestNo: EPA 8270C EPA 3550B		Analysis Date: 7/18/2011	SeqNo: 2210024						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	2679.667		3330		80.5	45	114				
Surr: Phenol-d5	2751.333		3330		82.6	46	118				

Sample ID: 118895-014AMSD	SampType: MSD	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 7/14/2011	RunNo: 135026						
Client ID: ZZZZZZ	Batch ID: 74261	TestNo: EPA 8270C EPA 3550B		Analysis Date: 7/18/2011	SeqNo: 2210025						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	2733.667	330	3330	0	82.1	62	109	2723	0.379	20	
1,4-Dichlorobenzene	2512.000	330	3330	0	75.4	57	99	2562	1.98	20	
2,4-Dinitrotoluene	3269.333	330	3330	0	98.2	76	126	3206	1.97	20	
2-Chlorophenol	2624.000	330	3330	0	78.8	52	120	2632	0.317	20	
4-Chloro-3-methylphenol	2887.333	660	3330	0	86.7	63	137	2888	0.0346	20	
4-Nitrophenol	3019.000	1600	3330	0	90.7	52	144	3119	3.27	20	
Acenaphthene	2899.000	330	3330	0	87.1	61	121	2889	0.334	20	
N-Nitrosodi-n-propylamine	2850.333	330	3330	0	85.6	67	116	2830	0.704	20	
Pentachlorophenol	2115.333	1600	3330	0	63.5	47	143	2465	15.3	20	
Phenol	2672.667	330	3330	0	80.3	54	126	2648	0.927	20	
Pyrene	3047.667	330	3330	0	91.5	68	121	2965	2.75	20	
Surr: 1,2-Dichlorobenzene-d4	2393.333		3330		71.9	45	105		0	0	
Surr: 2,4,6-Tribromophenol	2955.000		3330		88.7	41	129		0	0	
Surr: 2-Chlorophenol-d4	2604.000		3330		78.2	55	108		0	0	
Surr: 2-Fluorobiphenyl	2705.667		3330		81.3	56	114		0	0	
Surr: 2-Fluorophenol	2564.333		3330		77.0	50	108		0	0	
Surr: 4-Terphenyl-d14	2913.333		3330		87.5	59	141		0	0	
Surr: Nitrobenzene-d5	2648.667		3330		79.5	45	114		0	0	
Surr: Phenol-d5	2683.000		3330		80.6	46	118		0	0	

Qualifiers:

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



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

DRAFT

Lab. No. 278148

Date Received: 07/13/11
Date Reported: 07/18/11

Report To: Adv Tech Lab (217)

Bioassay Type

Static Continuous

Screening Definitive

LABORATORY WORKSHEET

JUL 21 2011

BY: [Signature]

Sample Description Soil - 118898 - 006B/E - 116-55

Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 16 Days @ 20 deg. C (F. B. - 1)

Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 240 umhos/cm

Organism Characteristics - Length (mm): 35 mm Max: 45 mm Weigh (gm): 0.48 gm Max: 0.68 gm Avg: 0.57 gm

Dilution water - Source: Soft Water Hardness - Initial: 40 mg/l Final: 55 mg/l Alkaline - Initial: 30 mg/l Final: 40 mg/l

Aeration: N/A Control Hardness Initial: 48 mg/l Final: 30 mg/l Control Alkaline Initial: 30 mg/l Final: 35 mg/l Control Conductivity 215 umhos/cm

Aeration Rate: N/A Aeration Duration: / Tanks: /

Bioassay Conditions	Date Time	Control		750			500			250			Dilution		
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	07/14	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	07/15	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	07/16	10	100	9	90	9	90	9	90	9	90	9	90	10	100
	07/17	10	100	9	90	9	90	10	100	10	100	8	80	10	100
	07/18	10	100	8	80	10	100	10	100	10	100	7	70	10	100
Dissolved Oxygen mg/l	10:40	6.7		6.2		6.2		6.2		6.2		6.2		6.2	
	15:10	7.1		6.6		6.5		6.7		6.7		6.6		6.5	
	09:00	6.8		6.4		6.7		6.9		6.9		6.4		6.7	
	11:20	6.9		6.5		6.6		6.8		6.8		6.5		6.9	
pH	14:30	7.0		6.3		6.9		7.1		7.1		6.3		6.9	
	Start	7.2	20.2°C	7.2	20.2°C	7.3	20.2°C	7.4	20.2°C	7.4	20.2°C	7.2	20.2°C	7.3	20.2°C
	24 Hr	7.4	19.5°C	7.0	19.5°C	7.1	19.5°C	7.2	19.5°C	7.2	19.5°C	7.0	19.5°C	7.1	19.5°C
	48 Hr	7.1	20.1°C	7.1	20.1°C	7.2	20.1°C	7.3	20.1°C	7.3	20.1°C	7.1	20.1°C	7.2	20.1°C
Temp	72 Hr	7.3	19.9°C	7.0	19.9°C	7.1	19.9°C	7.2	19.9°C	7.2	19.9°C	7.0	19.9°C	7.1	19.9°C
	96 Hr	7.3	20.3°C	6.9	20.3°C	7.0	20.3°C	7.1	20.3°C	7.1	20.3°C	6.9	20.3°C	7.0	20.3°C

Results - LC₅₀ = > 750 mg/l

> 750 mg/l

% Survival N/A

TP

Toxic Units T.U.

Observations/Remarks

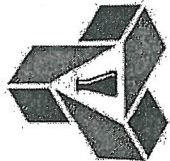
Method of Calculations

95% Confidence Limits

LC₅₀ Method

Laboratory Supervisor

[Signature]



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

CHAIN-OF-CUSTODY RECORD

QC Level: RTNE

Subcontractor:

Associated Laboratories
 806 N. Batavia
 Orange, CA 92868

TEL: (714) 771-6900
 FAX: (714) 538-1209
 Acct #:

Field Sampler: DWAIN D. SNYDER

13-Jul-11

Sample ID	Matrix	Date Collected	Bottle Type	Acute Toxicity	Requested Tests
118898-006B / E-116-55	Soil	7/11/2011 1:58:00 PM	4OZG	1	

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

Please use PO#: SC06558

Please fax results by: NORMAL TAT

ANALYZE THE SAMPLE FOR ACUTE AQUATIC TOXICITY

PLEASE SEND REPORT TO RACHELLE ARADA

	Date/Time
Relinquished by: <i>[Signature]</i>	7/13/11 12:50
Received by: <i>[Signature]</i>	7/13/11 12:50
Relinquished by: <i>[Signature]</i>	7/13/11 13:25
Received by: <i>[Signature]</i>	7/13/11 13:25

CHAIN OF CUSTODY RECORD

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

P.O.#: 201106374 Quote #: _____
 Logged By: [Signature] Date: 7/12/11

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. SLAYSON AVE State: CA Zip Code: 90040
 Attn: MATT FRAYCHINEAUD City: LOS ANGELES State: CA Zip Code: 90040

Project Name: METRO KLEESIDE EXTENSION Project #: 4953-10-1561 Sampler: DILAN D. SNYDER (Printed Name) Date: 07-11-11 Time: 18:00
 Relinquished by: [Signature] (Signature and Printed Name) Date: 07-11-11 Time: 18:00
 Relinquished by: [Signature] (Signature and Printed Name) Date: 7/12/11 Time: 14:02
 Relinquished by: [Signature] (Signature and Printed Name) Date: 7/12/11 Time: 16:20

I hereby authorize ATL to perform the work indicated below:
 Project Mgr /Submitter: Matt Fraychineaud 7/12/11
 Print Name: Matt Fraychineaud Date: 7/12/11
 Signature: [Signature]

Special Instructions/Comments:
FRDWA

Sample/Records - Archival & Disposal
 Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
 • Sample : \$2.00 / sample / mo (after 45 days)
 • Records : \$1.00 / ATL workorder / mo (after 1 year)

LAB USE ONLY: Batch #:	Lab No.	Sample I.D. / Location	Date	Time	Sample Description	SPECIFY APPROPRIATE MATRIX		PRESERVATION		QA/QC												
						Container(s)	Type	TAT	#		RTNE	CT	Legal	SWRCB	Logcode	OTHER	REMARKS					
118898	1	E-116-25	7/11	11:55		SEDIMENT																
	2	E-116-45	7/11	13:12		SEDIMENT																
	3	E-116-65	7/11	14:49		SEDIMENT																
	4	E-116-15	7/11	11:30		SEDIMENT																
	5	E-116-35	7/11	12:30		SEDIMENT																
	6	E-116-55	7/11	13:58		SEDIMENT																

LAB USE ONLY:
 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=Teclar 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-1.604

Fernando Diwa

From: Rachelle Arada
Sent: Wednesday, July 13, 2011 8:50 AM
To: Fernando Diwa
Cc: customer.relations
Subject: FW: Additional Analyses Request
Attachments: E-116 (Additional Analyses).pdf

Please log accordingly.

From: Fraychineaud, Matt [<mailto:MFRAYCHINEAUD@mactec.com>]
Sent: Wednesday, July 13, 2011 8:42 AM
To: Rachelle Arada
Subject: Additional Analyses Request

Hi Rachelle:

Please see the attached COC to this e-mail. I would like to analyze the designated sample (E-116-55) for the requested analyses. I've highlighted the modifications to the original COC. These samples were picked up yesterday at 2:00 PM.

Note: For some reason, I think there may have been two stainless steel sleeves for the subject sample. If so, can you make sure that you collect the sample from the sleeve that is completely full (the lower sleeve from the sampling barrel). I think the other sleeve is only partially full with soil. Also, I do realize that the sample was not preserved using method 5035 for volatile analyses. However, it has been well chilled in an ice chest since the time it was collected.

Thanks and please call if you have any questions.

Matt

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

CHAIN OF CUSTODY RECORD

ADVANCED TECHNOLOGY LABORATORIES
 3275 Walnut Ave., Signal Hill, CA 90755
 Tel: (562) 969-4040 • Fax: (562) 969-4040

P.O.#: 20106-374 Quote #:
 Logged By: [Signature] Date: 7/12/11
 NOTE: Please provide accurate information for proper pricing of your project.

FOR LABORATORY USE ONLY:
 Sample Condition Upon Receipt
 1. CHILLED NO 4. SEALED VOND
 2. CONTAINER INTACT NO 3. FREQUENTLY

Client: **MACTEC** Address: **5628 E. SLAYSON AVE** State: **CA** Zip Code: **90040** TEL: FAX:
 Attn: **MATT FRAYCHINEALD** City: **LOS ANGELES**
 Project Name: **METRO WESTSIDE EXTENSION** Project #: **4153-10-1561** Sampler: **DUAN D. SUNDEN** (Printed Name) (Signature) 07-11-11
 Relinquished by: (Signature and Printed Name) Date: 07-11-11 Time: 18:00 Received by: (Signature and Printed Name) Date: 7/12/11 Time: 18:00
 Relinquished by: (Signature and Printed Name) Date: 7/12/11 Time: Received by: (Signature and Printed Name) Date: 7/12/11 Time: 18:02
 Relinquished by: (Signature and Printed Name) Date: 7/12/11 Time: Received by: (Signature and Printed Name) Date: 7/12/11 Time: 18:02

Special Instructions/Comments:
 Bill To: Attn: Co: Addr: City: State: Zip:
 Send Report To: Attn: [Signature] Co: Addr: City: State: Zip:
 Project Mgr /Submitter: [Signature] Date: 7/12/11

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

LAB USE ONLY: Batch #:	Lab No.	Sample I.D. / Location	Date	Time	SPECIFY APPROPRIATE MATRIX										QA/QC RTNE <input type="checkbox"/> CT <input type="checkbox"/> Legal <input type="checkbox"/> SWRCB <input type="checkbox"/> Logcode <input type="checkbox"/> OTHER: <input type="checkbox"/> REMARKS		
					8081A (Pesticides)	8260B (Nitrates)	8270C (Am) SVOCs	8010B (Total Metal)	8015B (GRO) / 8021 (BTEX)	8015B (DRO) / 8020 (VOC)	TITLE 22 / CAM 17 (6010 / 7000)	SEDIMENT	SOLID	SOIL		DRINKING WATER	GROUND WATER
118898-1	E-116-25	7/11 11:55			X	X	X	X	X	X	X	X	X	X	X	E 7 VIT	
	E-116-45	7/11 13:12			X	X	X	X	X	X	X	X	X	X	X	E 8 VIT	
	E-116-65	7/11 14:49			X	X	X	X	X	X	X	X	X	X	X	E 9 VIT	
	E-116-15	7/11 11:30			X	X	X	X	X	X	X	X	X	X	X	E 1 IT	Hold
	E-116-35	7/11 12:30			X	X	X	X	X	X	X	X	X	X	X	E 1 IT	Hold
	E-116-55	7/11 13:58			X	X	X	X	X	X	X	X	X	X	X	E 2 IT	Hold

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=Teclat G=Glass P=Plastic M=Metal
 Preservatives: H=Hcl N=HNO₃ S=H₂SO₄ C=4°C Z=Zn(AC)₂ O=NaOH T=Na₂SO₃

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

Figure I-1.606

July 22, 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.: 118934

RE: METRO WESTSIDE EXTENSION, 4953-10-1

Attention: Matt Fraychineaud

Enclosed are the results for sample(s) received on July 14, 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: 118934

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)/8021B

Samples 118934-001D and 118934-002D, surrogate recovery biased low possibly due to matrix interferences.

Sample 118934-003E, surrogate recovery biased high possibly due to matrix interferences.

Analytical Comments for EPA 8015B(M) (DRO/ORO)

Samples 118934-001G, 118934-002D and 118934-003G, surrogate diluted out.

Analytical Comments for EPA 8260B

Samples 118934-002A and 118934-003A, surrogate recovery biased high possibly due to matrix interferences.

Analytical Comments for EPA 8270C

Sample 118934-003G, dilution was necessary due to high concentrations of non-target extractable analytes.

Sample 118934-003G, surrogates diluted out.

Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 22-Jul-11

CLIENT: Mactec **Client Sample ID:** E-117-42.5
Lab Order: 118934 **Collection Date:** 7/13/2011 1:05:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118934-001A

Analyses Result PQL Qual Units DF Date Analyzed

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID:	MS4_110715B	QC Batch:	K11VS189	PrepDate:	7/13/2011	Analyst:	DDL
1,1,1,2-Tetrachloroethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,1,1-Trichloroethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,1,2,2-Tetrachloroethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,1,2-Trichloroethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,1-Dichloroethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,1-Dichloroethene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,1-Dichloropropene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,2,3-Trichlorobenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,2,3-Trichloropropane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,2,4-Trichlorobenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,2,4-Trimethylbenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,2-Dibromo-3-chloropropane	ND	7.7	µg/Kg	1	7/16/2011 01:02 AM		
1,2-Dibromoethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,2-Dichlorobenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,2-Dichloroethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,2-Dichloropropane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,3,5-Trimethylbenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,3-Dichlorobenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,3-Dichloropropane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
1,4-Dichlorobenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
2,2-Dichloropropane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
2-Chlorotoluene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
4-Chlorotoluene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
4-Isopropyltoluene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
Benzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
Bromobenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
Bromodichloromethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
Bromoform	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
Bromomethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
Carbon tetrachloride	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
Chlorobenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
Chloroethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
Chloroform	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
Chloromethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		
cis-1,2-Dichloroethene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM		

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



Advanced Technology
Laboratories

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

Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 22-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-117-42.5
Lab Order:	118934	Collection Date:	7/13/2011 1:05:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118934-001A		

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

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS4_110715B	QC Batch: K11VS189	PrepDate: 7/13/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Di-isopropyl ether	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Dibromochloromethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Dibromomethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Dichlorodifluoromethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Ethyl Tert-butyl ether	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Ethylbenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Hexachlorobutadiene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Isopropylbenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
m,p-Xylene	ND	7.7	µg/Kg	1	7/16/2011 01:02 AM
Methylene chloride	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
MTBE	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
n-Butylbenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
n-Propylbenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Naphthalene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
o-Xylene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
sec-Butylbenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Styrene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Tert-amyl methyl ether	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Tert-Butanol	ND	77	µg/Kg	1	7/16/2011 01:02 AM
tert-Butylbenzene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Tetrachloroethene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Toluene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
trans-1,2-Dichloroethene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Trichloroethene	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Trichlorofluoromethane	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Vinyl chloride	ND	3.8	µg/Kg	1	7/16/2011 01:02 AM
Surr: 1,2-Dichloroethane-d4	133	65-141	%REC	1	7/16/2011 01:02 AM
Surr: 4-Bromofluorobenzene	124	57-134	%REC	1	7/16/2011 01:02 AM
Surr: Dibromofluoromethane	119	70-128	%REC	1	7/16/2011 01:02 AM
Surr: Toluene-d8	93.5	72-123	%REC	1	7/16/2011 01:02 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: 22-Jul-11

CLIENT: Mactec	Client Sample ID: E-117-42.5
Lab Order: 118934	Collection Date: 7/13/2011 1:05:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118934-001D	

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

EPA 8015B(M)

RunID: GC6_110721A	QC Batch: 111VS018	PrepDate: 7/13/2011	Analyst: TP		
GRO	1.5	0.73	mg/Kg	1	7/21/2011 04:20 PM
Surr: Bromofluorobenzene (FID)	47.6	51-161	S %REC	1	7/21/2011 04:20 PM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC6_110721A	QC Batch: 111VS018	PrepDate: 7/13/2011	Analyst: TP		
Benzene	ND	3.7	µg/Kg	1	7/21/2011 04:20 PM
Ethylbenzene	ND	3.7	µg/Kg	1	7/21/2011 04:20 PM
m,p-Xylene	ND	7.3	µg/Kg	1	7/21/2011 04:20 PM
o-Xylene	ND	3.7	µg/Kg	1	7/21/2011 04:20 PM
Toluene	ND	3.7	µg/Kg	1	7/21/2011 04:20 PM
Surr: Bromofluorobenzene (PID)	18.5	33-163	S %REC	1	7/21/2011 04:20 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: 22-Jul-11

CLIENT: Mactec	Client Sample ID: E-117-42.5
Lab Order: 118934	Collection Date: 7/13/2011 1:05:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118934-001G	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT	EPA 8015B(M)				
RunID: GC16_110718A	QC Batch: 74335				PrepDate: 7/18/2011	Analyst: CBR
DRO	7600	250		mg/Kg	25	7/19/2011 09:00 AM
ORO	12000	250		mg/Kg	25	7/19/2011 09:00 AM
Surr: p-Terphenyl	0	63-152	SDO	%REC	25	7/19/2011 09:00 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: 22-Jul-11

CLIENT: Mactec	Client Sample ID: E-117-50
Lab Order: 118934	Collection Date: 7/13/2011 1:45:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118934-002A	

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

EPA 8260B

RunID: MS4_110715B	QC Batch: K11VS189	PrepDate: 7/13/2011	Analyst: DDL
1,1,1,2-Tetrachloroethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,1,1-Trichloroethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,1,2,2-Tetrachloroethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,1,2-Trichloroethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,1-Dichloroethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,1-Dichloroethene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,1-Dichloropropene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,2,3-Trichlorobenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,2,3-Trichloropropane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,2,4-Trichlorobenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,2,4-Trimethylbenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,2-Dibromo-3-chloropropane	ND	7.7	µg/Kg 1 7/16/2011 01:19 AM
1,2-Dibromoethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,2-Dichlorobenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,2-Dichloroethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,2-Dichloropropane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,3,5-Trimethylbenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,3-Dichlorobenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,3-Dichloropropane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
1,4-Dichlorobenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
2,2-Dichloropropane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
2-Chlorotoluene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
4-Chlorotoluene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
4-Isopropyltoluene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Benzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Bromobenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Bromodichloromethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Bromoform	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Bromomethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Carbon tetrachloride	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Chlorobenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Chloroethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Chloroform	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Chloromethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
cis-1,2-Dichloroethene	ND	3.9	µg/Kg 1 7/16/2011 01:19 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: 22-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-117-50
Lab Order:	118934	Collection Date:	7/13/2011 1:45:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118934-002A		

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

EPA 8260B

RunID: MS4_110715B	QC Batch: K11VS189	PrepDate: 7/13/2011	Analyst: DDL
cis-1,3-Dichloropropene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Di-isopropyl ether	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Dibromochloromethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Dibromomethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Dichlorodifluoromethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Ethyl Tert-butyl ether	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Ethylbenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Hexachlorobutadiene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Isopropylbenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
m,p-Xylene	ND	7.7	µg/Kg 1 7/16/2011 01:19 AM
Methylene chloride	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
MTBE	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
n-Butylbenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
n-Propylbenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Naphthalene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
o-Xylene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
sec-Butylbenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Styrene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Tert-amyl methyl ether	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Tert-Butanol	ND	77	µg/Kg 1 7/16/2011 01:19 AM
tert-Butylbenzene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Tetrachloroethene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Toluene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
trans-1,2-Dichloroethene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Trichloroethene	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Trichlorofluoromethane	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Vinyl chloride	ND	3.9	µg/Kg 1 7/16/2011 01:19 AM
Surr: 1,2-Dichloroethane-d4	118	65-141	%REC 1 7/16/2011 01:19 AM
Surr: 4-Bromofluorobenzene	158	57-134	%REC 1 7/16/2011 01:19 AM
Surr: Dibromofluoromethane	107	70-128	%REC 1 7/16/2011 01:19 AM
Surr: Toluene-d8	95.7	72-123	%REC 1 7/16/2011 01:19 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: 22-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-117-50
Lab Order:	118934	Collection Date:	7/13/2011 1:45:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118934-002D		

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

EPA 8015B(M)

RunID: GC6_110721A	QC Batch: 111VS018	PrepDate: 7/13/2011	Analyst: TP		
GRO	2.5	0.81	mg/Kg	1	7/21/2011 04:42 PM
Surr: Bromofluorobenzene (FID)	98.1	51-161	%REC	1	7/21/2011 04:42 PM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC6_110721A	QC Batch: 111VS018	PrepDate: 7/13/2011	Analyst: TP		
Benzene	ND	4.0	µg/Kg	1	7/21/2011 04:42 PM
Ethylbenzene	ND	4.0	µg/Kg	1	7/21/2011 04:42 PM
m,p-Xylene	53	8.1	µg/Kg	1	7/21/2011 04:42 PM
o-Xylene	ND	4.0	µg/Kg	1	7/21/2011 04:42 PM
Toluene	ND	4.0	µg/Kg	1	7/21/2011 04:42 PM
Surr: Bromofluorobenzene (PID)	16.8	33-163	%REC	1	7/21/2011 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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ANALYTICAL RESULTS
 Print Date: 22-Jul-11

CLIENT: Mactec **Client Sample ID:** E-117-50
Lab Order: 118934 **Collection Date:** 7/13/2011 1:45:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118934-002G

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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ICP METALS

EPA 3050B		EPA 6010B				
RunID: ICP8_110719G	QC Batch: 74375			PrepDate: 7/20/2011		Analyst: CBB
Antimony	ND	2.0		mg/Kg	1	7/20/2011 03:27 PM
Arsenic	ND	1.0		mg/Kg	1	7/20/2011 03:27 PM
Barium	23	1.0		mg/Kg	1	7/20/2011 03:27 PM
Beryllium	ND	1.0		mg/Kg	1	7/20/2011 03:27 PM
Cadmium	ND	1.0		mg/Kg	1	7/20/2011 03:27 PM
Chromium	9.6	1.0		mg/Kg	1	7/20/2011 03:27 PM
Cobalt	2.4	1.0		mg/Kg	1	7/20/2011 03:27 PM
Copper	3.3	2.0		mg/Kg	1	7/20/2011 03:27 PM
Lead	1.3	1.0		mg/Kg	1	7/20/2011 03:27 PM
Molybdenum	ND	1.0		mg/Kg	1	7/20/2011 03:27 PM
Nickel	13	1.0		mg/Kg	1	7/20/2011 03:27 PM
Selenium	ND	1.0		mg/Kg	1	7/20/2011 03:27 PM
Silver	ND	1.0		mg/Kg	1	7/20/2011 03:27 PM
Thallium	ND	1.0		mg/Kg	1	7/20/2011 03:27 PM
Vanadium	20	1.0		mg/Kg	1	7/20/2011 03:27 PM
Zinc	7.2	1.0		mg/Kg	1	7/20/2011 03:27 PM

DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID

LUFT		EPA 8015B(M)				
RunID: GC16_110718A	QC Batch: 74335			PrepDate: 7/18/2011		Analyst: CBR
DRO	37000	500		mg/Kg	50	7/19/2011 07:04 AM
ORO	57000	500		mg/Kg	50	7/19/2011 07:04 AM
Surr: p-Terphenyl	0	63-152	SDO	%REC	50	7/19/2011 07:04 AM

MERCURY BY COLD VAPOR TECHNIQUE

EPA 7471A			
RunID: AA5_110720A	QC Batch: 74362	PrepDate: 7/19/2011	Analyst: VV
Mercury	ND	0.10	mg/Kg

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: 22-Jul-11

CLIENT: Mactec	Client Sample ID: E-117-55
Lab Order: 118934	Collection Date: 7/13/2011 2:25:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118934-003A	

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

EPA 8260B

RunID: MS4_110715B	QC Batch: K11VS189	PrepDate: 7/13/2011	Analyst: DDL		
1,1,1,2-Tetrachloroethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,1,1-Trichloroethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,1,2,2-Tetrachloroethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,1,2-Trichloroethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,1-Dichloroethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,1-Dichloroethene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,1-Dichloropropene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,2,3-Trichlorobenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,2,3-Trichloropropane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,2,4-Trichlorobenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,2,4-Trimethylbenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,2-Dibromo-3-chloropropane	ND	7.8	µg/Kg	1	7/16/2011 01:37 AM
1,2-Dibromoethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,2-Dichlorobenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,2-Dichloroethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,2-Dichloropropane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,3,5-Trimethylbenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,3-Dichlorobenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,3-Dichloropropane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
1,4-Dichlorobenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
2,2-Dichloropropane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
2-Chlorotoluene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
4-Chlorotoluene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
4-Isopropyltoluene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Benzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Bromobenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Bromodichloromethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Bromoform	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Bromomethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Carbon tetrachloride	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Chlorobenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Chloroethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Chloroform	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Chloromethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
cis-1,2-Dichloroethene	ND	3.9	µg/Kg	1	7/16/2011 01:37 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: 22-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-117-55
Lab Order:	118934	Collection Date:	7/13/2011 2:25:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118934-003A		

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

EPA 8260B

RunID: MS4_110715B	QC Batch: K11VS189	PrepDate: 7/13/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Di-isopropyl ether	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Dibromochloromethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Dibromomethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Dichlorodifluoromethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Ethyl Tert-butyl ether	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Ethylbenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Hexachlorobutadiene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Isopropylbenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
m,p-Xylene	ND	7.8	µg/Kg	1	7/16/2011 01:37 AM
Methylene chloride	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
MTBE	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
n-Butylbenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
n-Propylbenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Naphthalene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
o-Xylene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
sec-Butylbenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Styrene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Tert-amyl methyl ether	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Tert-Butanol	ND	78	µg/Kg	1	7/16/2011 01:37 AM
tert-Butylbenzene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Tetrachloroethene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Toluene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
trans-1,2-Dichloroethene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Trichloroethene	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Trichlorofluoromethane	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Vinyl chloride	ND	3.9	µg/Kg	1	7/16/2011 01:37 AM
Surr: 1,2-Dichloroethane-d4	115	65-141	%REC	1	7/16/2011 01:37 AM
Surr: 4-Bromofluorobenzene	366	57-134	%REC	1	7/16/2011 01:37 AM
Surr: Dibromofluoromethane	105	70-128	%REC	1	7/16/2011 01:37 AM
Surr: Toluene-d8	94.3	72-123	%REC	1	7/16/2011 01:37 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: 22-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-117-55
Lab Order:	118934	Collection Date:	7/13/2011 2:25:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118934-003E		

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

EPA 8015B(M)

RunID: GC6_110721A	QC Batch: 111VS018	PrepDate: 7/13/2011	Analyst: TP		
GRO	4.0	0.74	mg/Kg	1	7/21/2011 10:44 PM
Surr: Bromofluorobenzene (FID)	289	51-161	S %REC	1	7/21/2011 10:44 PM

VOLATILE ORGANIC COMPOUNDS BY GC/PID

EPA 8021B

RunID: GC6_110721A	QC Batch: 111VS018	PrepDate: 7/13/2011	Analyst: TP		
Benzene	ND	3.7	µg/Kg	1	7/21/2011 10:44 PM
Ethylbenzene	ND	3.7	µg/Kg	1	7/21/2011 10:44 PM
m,p-Xylene	ND	7.4	µg/Kg	1	7/21/2011 10:44 PM
o-Xylene	ND	3.7	µg/Kg	1	7/21/2011 10:44 PM
Toluene	ND	3.7	µg/Kg	1	7/21/2011 10:44 PM
Surr: Bromofluorobenzene (PID)	91.7	33-163	%REC	1	7/21/2011 10:44 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: 22-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-117-55
Lab Order:	118934	Collection Date:	7/13/2011 2:25:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118934-003G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
LUFT			EPA 8015B(M)			
RunID: GC16_110718A	QC Batch: 74335			PrepDate: 7/18/2011		Analyst: CBR
DRO	49000	500		mg/Kg	50	7/19/2011 08:32 AM
ORO	70000	500		mg/Kg	50	7/19/2011 08:32 AM
Surr: p-Terphenyl	0	63-152	SDO	%REC	50	7/19/2011 08:32 AM
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS						
EPA 3550B			EPA 8270C			
RunID: MS6_110721B	QC Batch: 74404			PrepDate: 7/20/2011		Analyst: JSD
1,2,4-Trichlorobenzene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
1,2-Dichlorobenzene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
1,3-Dichlorobenzene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
1,4-Dichlorobenzene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
2,4,5-Trichlorophenol	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
2,4,6-Trichlorophenol	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
2,4-Dichlorophenol	ND	820000		µg/Kg	50	7/22/2011 02:51 AM
2,4-Dimethylphenol	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
2,4-Dinitrophenol	ND	820000		µg/Kg	50	7/22/2011 02:51 AM
2,4-Dinitrotoluene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
2,6-Dinitrotoluene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
2-Chloronaphthalene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
2-Chlorophenol	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
2-Methylnaphthalene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
2-Methylphenol	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
2-Nitroaniline	ND	820000		µg/Kg	50	7/22/2011 02:51 AM
2-Nitrophenol	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
3,3'-Dichlorobenzidine	ND	330000		µg/Kg	50	7/22/2011 02:51 AM
3-Nitroaniline	ND	820000		µg/Kg	50	7/22/2011 02:51 AM
4,6-Dinitro-2-methylphenol	ND	820000		µg/Kg	50	7/22/2011 02:51 AM
4-Bromophenyl-phenylether	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
4-Chloro-3-methylphenol	ND	330000		µg/Kg	50	7/22/2011 02:51 AM
4-Chloroaniline	ND	330000		µg/Kg	50	7/22/2011 02:51 AM
4-Chlorophenyl-phenylether	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
4-Methylphenol	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
4-Nitroaniline	ND	820000		µg/Kg	50	7/22/2011 02:51 AM
4-Nitrophenol	ND	820000		µg/Kg	50	7/22/2011 02:51 AM
Acenaphthene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Acenaphthylene	ND	160000		µg/Kg	50	7/22/2011 02:51 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: 22-Jul-11

CLIENT: Mactec **Client Sample ID:** E-117-55
Lab Order: 118934 **Collection Date:** 7/13/2011 2:25:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118934-003G

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS						
	EPA 3550B			EPA 8270C		
RunID: MS6_110721B	QC Batch: 74404			PrepDate: 7/20/2011		Analyst: JSD
Anthracene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Benzidine (M)	ND	820000		µg/Kg	50	7/22/2011 02:51 AM
Benzo(a)anthracene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Benzo(a)pyrene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Benzo(b)fluoranthene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Benzo(g,h,i)perylene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Benzo(k)fluoranthene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Benzoic acid	ND	820000		µg/Kg	50	7/22/2011 02:51 AM
Benzyl alcohol	ND	330000		µg/Kg	50	7/22/2011 02:51 AM
Bis(2-chloroethoxy)methane	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Bis(2-chloroethyl)ether	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Bis(2-chloroisopropyl)ether	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Bis(2-ethylhexyl)phthalate	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Butylbenzylphthalate	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Chrysene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Di-n-butylphthalate	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Di-n-octylphthalate	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Dibenz(a,h)anthracene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Dibenzofuran	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Diethylphthalate	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Dimethylphthalate	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Fluoranthene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Fluorene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Hexachlorobenzene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Hexachlorobutadiene	ND	330000		µg/Kg	50	7/22/2011 02:51 AM
Hexachlorocyclopentadiene	ND	330000		µg/Kg	50	7/22/2011 02:51 AM
Hexachloroethane	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Indeno(1,2,3-cd)pyrene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Isophorone	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
N-Nitrosodi-n-propylamine	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
N-Nitrosodiphenylamine	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Naphthalene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Nitrobenzene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Pentachlorophenol	ND	820000		µg/Kg	50	7/22/2011 02:51 AM
Phenanthrene	ND	160000		µg/Kg	50	7/22/2011 02:51 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
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 DO Surrogate Diluted Out



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ANALYTICAL RESULTS
 Print Date: 22-Jul-11

CLIENT: Mactec	Client Sample ID: E-117-55
Lab Order: 118934	Collection Date: 7/13/2011 2:25:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118934-003G	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS						
	EPA 3550B			EPA 8270C		
RunID: MS6_110721B	QC Batch: 74404			PrepDate: 7/20/2011		Analyst: JSD
Phenol	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Pyrene	ND	160000		µg/Kg	50	7/22/2011 02:51 AM
Surr: 1,2-Dichlorobenzene-d4	0	45-105	SDO	%REC	50	7/22/2011 02:51 AM
Surr: 2,4,6-Tribromophenol	0	41-129	SDO	%REC	50	7/22/2011 02:51 AM
Surr: 2-Chlorophenol-d4	0	55-108	SDO	%REC	50	7/22/2011 02:51 AM
Surr: 2-Fluorobiphenyl	0	56-114	SDO	%REC	50	7/22/2011 02:51 AM
Surr: 2-Fluorophenol	0	50-108	SDO	%REC	50	7/22/2011 02:51 AM
Surr: 4-Terphenyl-d14	0	59-141	SDO	%REC	50	7/22/2011 02:51 AM
Surr: Nitrobenzene-d5	0	45-114	SDO	%REC	50	7/22/2011 02:51 AM
Surr: Phenol-d5	0	46-118	SDO	%REC	50	7/22/2011 02:51 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: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

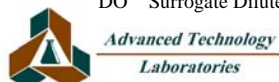
TestCode: 6010_S

Sample ID: MB-74375	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/20/2011	RunNo: 135152						
Client ID: PBS	Batch ID: 74375	TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/20/2011	SeqNo: 2212482						
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	0.243	1.0									

Sample ID: LCS-74375	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/20/2011	RunNo: 135152						
Client ID: LCSS	Batch ID: 74375	TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/20/2011	SeqNo: 2212483						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	45.286	2.0	50.00	0	90.6	80	120				
Arsenic	45.800	1.0	50.00	0	91.6	80	120				
Barium	47.111	1.0	50.00	0	94.2	80	120				
Beryllium	45.798	1.0	50.00	0	91.6	80	120				
Cadmium	46.473	1.0	50.00	0	92.9	80	120				
Chromium	43.384	1.0	50.00	0	86.8	80	120				
Cobalt	47.465	1.0	50.00	0	94.9	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: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

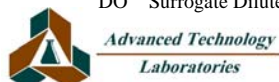
TestCode: 6010_S

Sample ID: LCS-74375	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/20/2011	RunNo: 135152						
Client ID: LCSS	Batch ID: 74375	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 7/20/2011	SeqNo: 2212483						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	45.849	2.0	50.00	0	91.7	80	120				
Lead	46.742	1.0	50.00	0	93.5	80	120				
Molybdenum	48.222	1.0	50.00	0	96.4	80	120				
Nickel	45.911	1.0	50.00	0	91.8	80	120				
Selenium	43.672	1.0	50.00	0	87.3	80	120				
Silver	43.511	1.0	50.00	0	87.0	80	120				
Thallium	44.595	1.0	50.00	0	89.2	80	120				
Vanadium	46.592	1.0	50.00	0	93.2	80	120				
Zinc	47.714	1.0	50.00	0.2432	94.9	80	120				

Sample ID: 118976-026A-MS	SampType: MS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/20/2011	RunNo: 135152						
Client ID: ZZZZZZ	Batch ID: 74375	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 7/20/2011	SeqNo: 2212497						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	114.221	2.0	125.0	0	91.4	32	105				
Arsenic	118.678	1.0	125.0	0	94.9	49	106				
Barium	153.993	1.0	125.0	46.99	85.6	31	133				
Beryllium	117.053	1.0	125.0	0	93.6	56	106				
Cadmium	118.095	1.0	125.0	0.1932	94.3	51	103				
Chromium	113.101	1.0	125.0	2.994	88.1	45	114				
Cobalt	123.562	1.0	125.0	4.311	95.4	52	106				
Copper	123.664	2.0	125.0	3.027	96.5	54	125				
Lead	120.463	1.0	125.0	1.191	95.4	34	126				
Molybdenum	121.094	1.0	125.0	0	96.9	54	106				
Nickel	117.584	1.0	125.0	2.092	92.4	45	111				
Selenium	114.650	1.0	125.0	0	91.7	47	104				
Silver	116.922	1.0	125.0	0	93.5	56	112				
Thallium	109.623	1.0	125.0	0	87.7	46	101				
Vanadium	137.728	1.0	125.0	22.02	92.6	54	114				
Zinc	133.858	1.0	125.0	19.03	91.9	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: 118934

Project: METRO WESTSIDE EXTENSION, 4953-10-1

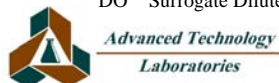
ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: 118976-026A-MSD		SampType: MSD		TestCode: 6010_S		Units: mg/Kg		Prep Date: 7/20/2011		RunNo: 135152	
Client ID: ZZZZZZ		Batch ID: 74375		TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/20/2011		SeqNo: 2212498			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	104.884	2.0	125.0	0	83.9	32	105	114.2	8.52	20	
Arsenic	108.562	1.0	125.0	0	86.8	49	106	118.7	8.90	20	
Barium	150.431	1.0	125.0	46.99	82.7	31	133	154.0	2.34	20	
Beryllium	109.915	1.0	125.0	0	87.9	56	106	117.1	6.29	20	
Cadmium	110.202	1.0	125.0	0.1932	88.0	51	103	118.1	6.91	20	
Chromium	105.954	1.0	125.0	2.994	82.4	45	114	113.1	6.53	20	
Cobalt	116.163	1.0	125.0	4.311	89.5	52	106	123.6	6.17	20	
Copper	116.853	2.0	125.0	3.027	91.1	54	125	123.7	5.66	20	
Lead	111.117	1.0	125.0	1.191	87.9	34	126	120.5	8.07	20	
Molybdenum	111.880	1.0	125.0	0	89.5	54	106	121.1	7.91	20	
Nickel	109.675	1.0	125.0	2.092	86.1	45	111	117.6	6.96	20	
Selenium	105.037	1.0	125.0	0	84.0	47	104	114.6	8.75	20	
Silver	109.550	1.0	125.0	0	87.6	56	112	116.9	6.51	20	
Thallium	98.865	1.0	125.0	0	79.1	46	101	109.6	10.3	20	
Vanadium	132.817	1.0	125.0	22.02	88.6	54	114	137.7	3.63	20	
Zinc	129.958	1.0	125.0	19.03	88.7	28	125	133.9	2.96	20	

Qualifiers:

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



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CLIENT: Mactec
Work Order: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: MB-74362	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/19/2011	RunNo: 135111						
Client ID: PBS	Batch ID: 74362	TestNo: EPA 7471A		Analysis Date: 7/20/2011	SeqNo: 2211490						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury ND 0.10

Sample ID: LCS-74362	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/19/2011	RunNo: 135111						
Client ID: LCSS	Batch ID: 74362	TestNo: EPA 7471A		Analysis Date: 7/20/2011	SeqNo: 2211491						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.919 0.10 0.8300 0 111 80 120

Sample ID: 119004-006A-MS	SampType: MS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/19/2011	RunNo: 135111						
Client ID: ZZZZZZ	Batch ID: 74362	TestNo: EPA 7471A		Analysis Date: 7/20/2011	SeqNo: 2211492						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

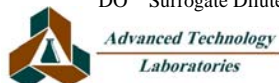
Mercury 0.894 0.10 0.8300 0 108 70 130

Sample ID: 119004-006A-MSD	SampType: MSD	TestCode: 7471_S	Units: mg/Kg	Prep Date: 7/19/2011	RunNo: 135111						
Client ID: ZZZZZZ	Batch ID: 74362	TestNo: EPA 7471A		Analysis Date: 7/20/2011	SeqNo: 2211493						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.925 0.10 0.8300 0 111 70 130 0.8937 3.39 20

Qualifiers:

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



CLIENT: Mactec
Work Order: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

Sample ID: MB-74335	SampType: MBLK	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/18/2011	RunNo: 135050						
Client ID: PBS	Batch ID: 74335	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/18/2011	SeqNo: 2210187						
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	114.670		80.00		143	63	152				

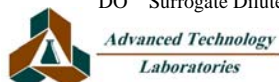
Sample ID: LCS-74335	SampType: LCS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/18/2011	RunNo: 135050						
Client ID: LCSS	Batch ID: 74335	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/18/2011	SeqNo: 2210188						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	1263.960	10	1000	0	126	76	139				
Surr: p-Terphenyl	106.490		80.00		133	63	152				

Sample ID: 118965-001GMS	SampType: MS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/18/2011	RunNo: 135050						
Client ID: ZZZZZ	Batch ID: 74335	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/18/2011	SeqNo: 2210192						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	1225.540	10	1000	0	123	60	158				
Surr: p-Terphenyl	108.820		80.00		136	63	152				

Sample ID: 118965-001GMSD	SampType: MSD	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/18/2011	RunNo: 135050						
Client ID: ZZZZZ	Batch ID: 74335	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/18/2011	SeqNo: 2210193						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	1243.910	10	1000	0	124	60	158	1226	1.49	20	
Surr: p-Terphenyl	105.910		80.00		132	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: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

Sample ID: I110721MB2MS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135210						
Client ID: ZZZZZZ	Batch ID: I11VS018	TestNo: EPA 8015B(M)	Analysis Date: 7/21/2011	SeqNo: 2213778							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.176	1.0	5.000	0	104	41	146				
Surr: Bromofluorobenzene (FID)	98.726		100.0		98.7	51	161				

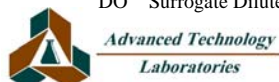
Sample ID: I110721LC2	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135210						
Client ID: LCSS	Batch ID: I11VS018	TestNo: EPA 8015B(M)	Analysis Date: 7/21/2011	SeqNo: 2213779							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	9.946	1.0	10.00	0	99.5	70	130				
Surr: Bromofluorobenzene (FID)	111.362		100.0		111	51	161				

Sample ID: I110721MB2	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135210						
Client ID: PBS	Batch ID: I11VS018	TestNo: EPA 8015B(M)	Analysis Date: 7/21/2011	SeqNo: 2213780							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	87.602		100.0		87.6	51	161				

Sample ID: I110721MB2MSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135210						
Client ID: ZZZZZZ	Batch ID: I11VS018	TestNo: EPA 8015B(M)	Analysis Date: 7/21/2011	SeqNo: 2213781							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.808	1.0	5.000	0	96.2	41	146	5.176	7.37	20	
Surr: Bromofluorobenzene (FID)	102.375		100.0		102	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: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021_S_B 5035P

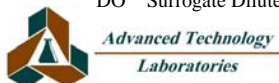
Sample ID: I110721LC1	SampType: LCS	TestCode: 8021_S_B 50	Units: µg/Kg	Prep Date:	RunNo: 135210						
Client ID: LCSS	Batch ID: I11VS018	TestNo: EPA 8021B	Analysis Date: 7/21/2011	SeqNo: 2213785							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	86.172	5.0	100.0	0	86.2	70	130				
Ethylbenzene	86.813	5.0	100.0	0	86.8	70	130				
m,p-Xylene	177.326	10	200.0	0	88.7	70	130				
o-Xylene	86.489	5.0	100.0	0	86.5	70	130				
Toluene	88.906	5.0	100.0	0	88.9	70	130				
Surr: Bromofluorobenzene (PID)	87.414		100.0		87.4	33	163				

Sample ID: I110721LC1	SampType: LCSD	TestCode: 8021_S_B 50	Units: µg/Kg	Prep Date:	RunNo: 135210						
Client ID: LCSS02	Batch ID: I11VS018	TestNo: EPA 8021B	Analysis Date: 7/21/2011	SeqNo: 2213786							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	87.785	5.0	100.0	0	87.8	70	130	86.17	1.85	20	
Ethylbenzene	89.500	5.0	100.0	0	89.5	70	130	86.81	3.05	20	
m,p-Xylene	184.235	10	200.0	0	92.1	70	130	177.3	3.82	20	
o-Xylene	91.228	5.0	100.0	0	91.2	70	130	86.49	5.33	20	
Toluene	90.950	5.0	100.0	0	91.0	70	130	88.91	2.27	20	
Surr: Bromofluorobenzene (PID)	83.899		100.0		83.9	33	163		0	0	

Sample ID: I110721MB2	SampType: MBLK	TestCode: 8021_S_B 50	Units: µg/Kg	Prep Date:	RunNo: 135210						
Client ID: PBS	Batch ID: I11VS018	TestNo: EPA 8021B	Analysis Date: 7/21/2011	SeqNo: 2213787							
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)	89.723		100.0		89.7	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: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

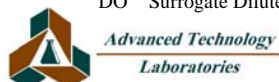
Sample ID: K110715LCS2	SampType: LCS	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135018						
Client ID: LCSS	Batch ID: K11VS189	TestNo: EPA 8260B		Analysis Date: 7/15/2011	SeqNo: 2209856						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	47.780	5.0	50.00	0	95.6	70	130				
Benzene	96.960	5.0	100.0	0	97.0	70	130				
Chlorobenzene	51.870	5.0	50.00	0	104	70	130				
MTBE	57.220	5.0	50.00	0	114	70	130				
Toluene	97.110	5.0	100.0	0	97.1	70	130				
Trichloroethene	48.720	5.0	50.00	0	97.4	70	130				
Surr: 1,2-Dichloroethane-d4	53.600		50.00		107	65	141				
Surr: 4-Bromofluorobenzene	46.230		50.00		92.5	57	134				
Surr: Dibromofluoromethane	50.770		50.00		102	70	128				
Surr: Toluene-d8	47.790		50.00		95.6	72	123				

Sample ID: K110715MB2MS	SampType: MS	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135018						
Client ID: ZZZZZ	Batch ID: K11VS189	TestNo: EPA 8260B		Analysis Date: 7/15/2011	SeqNo: 2209857						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	48.200	5.0	50.00	0	96.4	70	130				
Benzene	98.210	5.0	100.0	0	98.2	70	130				
Chlorobenzene	52.570	5.0	50.00	0	105	70	130				
MTBE	57.580	5.0	50.00	0	115	70	130				
Toluene	98.220	5.0	100.0	0	98.2	70	130				
Trichloroethene	50.520	5.0	50.00	0	101	70	130				
Surr: 1,2-Dichloroethane-d4	51.790		50.00		104	65	141				
Surr: 4-Bromofluorobenzene	46.080		50.00		92.2	57	134				
Surr: Dibromofluoromethane	50.250		50.00		101	70	128				
Surr: Toluene-d8	47.510		50.00		95.0	72	123				

Sample ID: K110715MB2MSD	SampType: MSD	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135018						
Client ID: ZZZZZ	Batch ID: K11VS189	TestNo: EPA 8260B		Analysis Date: 7/15/2011	SeqNo: 2209858						
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: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110715MB2MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: ZZZZZZ		Batch ID: K11VS189		TestNo: EPA 8260B		Analysis Date: 7/15/2011				SeqNo: 2209858	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	47.870	5.0	50.00	0	95.7	70	130	48.20	0.687	20	
Benzene	98.070	5.0	100.0	0	98.1	70	130	98.21	0.143	20	
Chlorobenzene	52.930	5.0	50.00	0	106	70	130	52.57	0.682	20	
MTBE	58.280	5.0	50.00	0	117	70	130	57.58	1.21	20	
Toluene	97.220	5.0	100.0	0	97.2	70	130	98.22	1.02	20	
Trichloroethene	49.580	5.0	50.00	0	99.2	70	130	50.52	1.88	20	
Surr: 1,2-Dichloroethane-d4	52.830		50.00		106	65	141		0	0	
Surr: 4-Bromofluorobenzene	45.040		50.00		90.1	57	134		0	0	
Surr: Dibromofluoromethane	51.500		50.00		103	70	128		0	0	
Surr: Toluene-d8	47.650		50.00		95.3	72	123		0	0	

Sample ID: K110715MB2		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: PBS		Batch ID: K11VS189		TestNo: EPA 8260B		Analysis Date: 7/15/2011				SeqNo: 2209859	
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 | |



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Laboratories*

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

CLIENT: Mactec
Work Order: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110715MB2	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135018						
Client ID: PBS	Batch ID: K11VS189	TestNo: EPA 8260B		Analysis Date: 7/15/2011	SeqNo: 2209859						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2-Dichloropropane	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Chlorotoluene	ND	5.0									
4-Chlorotoluene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
Benzene	ND	5.0									
Bromobenzene	ND	5.0									
Bromodichloromethane	ND	5.0									
Bromoform	ND	5.0									
Bromomethane	ND	5.0									
Carbon tetrachloride	ND	5.0									
Chlorobenzene	ND	5.0									
Chloroethane	ND	5.0									
Chloroform	ND	5.0									
Chloromethane	ND	5.0									
cis-1,2-Dichloroethene	ND	5.0									
cis-1,3-Dichloropropene	ND	5.0									
Di-isopropyl ether	ND	5.0									
Dibromochloromethane	ND	5.0									
Dibromomethane	ND	5.0									
Dichlorodifluoromethane	ND	5.0									
Ethyl Tert-butyl ether	ND	5.0									
Ethylbenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Isopropylbenzene	ND	5.0									
m,p-Xylene	ND	10									

Qualifiers:

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



*Advanced Technology
Laboratories*

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

CLIENT: Mactec
Work Order: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

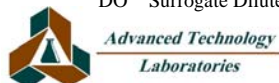
TestCode: 8260_S_5035

Sample ID: K110715MB2	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135018						
Client ID: PBS	Batch ID: K11VS189	TestNo: EPA 8260B		Analysis Date: 7/15/2011	SeqNo: 2209859						
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	55.740		50.00		111	65	141				
Surr: 4-Bromofluorobenzene	45.990		50.00		92.0	57	134				
Surr: Dibromofluoromethane	53.820		50.00		108	70	128				
Surr: Toluene-d8	50.210		50.00		100	72	123				

Sample ID: 118968-001AMS	SampType: MS	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135018						
Client ID: ZZZZZZ	Batch ID: K11VS189	TestNo: EPA 8260B		Analysis Date: 7/16/2011	SeqNo: 2209871						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	41.350	5.0	50.00	0	82.7	70	130				
Benzene	80.510	5.0	100.0	0	80.5	70	130				
Chlorobenzene	38.650	5.0	50.00	0	77.3	70	130				
MTBE	42.970	5.0	50.00	0	85.9	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: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

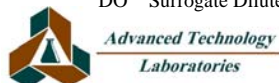
TestCode: 8260_S_5035

Sample ID: 118968-001AMS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: ZZZZZZ		Batch ID: K11VS189		TestNo: EPA 8260B		Analysis Date: 7/16/2011				SeqNo: 2209871	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	78.320	5.0	100.0	0	78.3	70	130				
Trichloroethene	40.920	5.0	50.00	0	81.8	70	130				
Surr: 1,2-Dichloroethane-d4	50.630		50.00		101	65	141				
Surr: 4-Bromofluorobenzene	45.350		50.00		90.7	57	134				
Surr: Dibromofluoromethane	49.480		50.00		99.0	70	128				
Surr: Toluene-d8	47.740		50.00		95.5	72	123				

Sample ID: 118968-001AMSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135018	
Client ID: ZZZZZZ		Batch ID: K11VS189		TestNo: EPA 8260B		Analysis Date: 7/16/2011				SeqNo: 2209872	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	40.740	5.0	50.00	0	81.5	70	130	41.35	1.49	20	
Benzene	80.170	5.0	100.0	0	80.2	70	130	80.51	0.423	20	
Chlorobenzene	38.470	5.0	50.00	0	76.9	70	130	38.65	0.467	20	
MTBE	42.950	5.0	50.00	0	85.9	70	130	42.97	0.0466	20	
Toluene	77.360	5.0	100.0	0	77.4	70	130	78.32	1.23	20	
Trichloroethene	40.310	5.0	50.00	0	80.6	70	130	40.92	1.50	20	
Surr: 1,2-Dichloroethane-d4	52.210		50.00		104	65	141		0	0	
Surr: 4-Bromofluorobenzene	45.380		50.00		90.8	57	134		0	0	
Surr: Dibromofluoromethane	50.680		50.00		101	70	128		0	0	
Surr: Toluene-d8	48.370		50.00		96.7	72	123		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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CLIENT: Mactec
Work Order: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

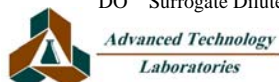
TestCode: 8270_S_FULL

Sample ID: LCS-74404	SampType: LCS	TestCode: 8270_S_FULL Units: µg/Kg			Prep Date: 7/20/2011	RunNo: 135242					
Client ID: LCSS	Batch ID: 74404	TestNo: EPA 8270C EPA 3550B		Analysis Date: 7/21/2011		SeqNo: 2213973					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	2525.975	330	3330	0	75.9	67	107				
1,4-Dichlorobenzene	2342.310	330	3330	0	70.3	64	99				
2,4-Dinitrotoluene	2889.304	330	3330	0	86.8	81	122				
2-Chlorophenol	2328.643	330	3330	0	69.9	62	112				
4-Chloro-3-methylphenol	2902.971	660	3330	0	87.2	64	138				
4-Nitrophenol	3221.968	1600	3330	0	96.8	60	142				
Acenaphthene	2516.308	330	3330	0	75.6	70	116				
N-Nitrosodi-n-propylamine	2735.639	330	3330	0	82.2	73	115				
Pentachlorophenol	2487.642	1600	3330	0	74.7	59	135				
Phenol	2488.975	330	3330	0	74.7	61	120				
Pyrene	2575.308	330	3330	0	77.3	75	117				
Surr: 1,2-Dichlorobenzene-d4	2220.311		3330		66.7	45	105				
Surr: 2,4,6-Tribromophenol	2501.642		3330		75.1	41	129				
Surr: 2-Chlorophenol-d4	2331.310		3330		70.0	55	108				
Surr: 2-Fluorobiphenyl	2368.643		3330		71.1	56	114				
Surr: 2-Fluorophenol	2390.976		3330		71.8	50	108				
Surr: 4-Terphenyl-d14	2541.308		3330		76.3	59	141				
Surr: Nitrobenzene-d5	2592.974		3330		77.9	45	114				
Surr: Phenol-d5	2506.308		3330		75.3	46	118				

Sample ID: 118977-001AMS	SampType: MS	TestCode: 8270_S_FULL Units: µg/Kg			Prep Date: 7/20/2011	RunNo: 135242					
Client ID: ZZZZZ	Batch ID: 74404	TestNo: EPA 8270C EPA 3550B		Analysis Date: 7/21/2011		SeqNo: 2213974					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	2378.667	330	3330	0	71.4	62	109				
1,4-Dichlorobenzene	2142.000	330	3330	0	64.3	57	99				
2,4-Dinitrotoluene	2960.000	330	3330	0	88.9	76	126				
2-Chlorophenol	2158.667	330	3330	0	64.8	52	120				
4-Chloro-3-methylphenol	2901.667	660	3330	0	87.1	63	137				
4-Nitrophenol	3210.667	1600	3330	0	96.4	52	144				

Qualifiers:

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

CLIENT: Mactec
Work Order: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

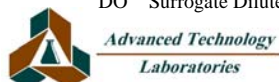
TestCode: 8270_S_FULL

Sample ID: 118977-001AMS	SampType: MS	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 7/20/2011	RunNo: 135242						
Client ID: ZZZZZ	Batch ID: 74404	TestNo: EPA 8270C	EPA 3550B	Analysis Date: 7/21/2011	SeqNo: 2213974						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	2530.667	330	3330	0	76.0	61	121				
N-Nitrosodi-n-propylamine	2739.000	330	3330	0	82.3	67	116				
Pentachlorophenol	2399.000	1600	3330	0	72.0	47	143				
Phenol	2355.333	330	3330	0	70.7	54	126				
Pyrene	2699.667	330	3330	0	81.1	68	121				
Surr: 1,2-Dichlorobenzene-d4	2004.000		3330		60.2	45	105				
Surr: 2,4,6-Tribromophenol	2478.333		3330		74.4	41	129				
Surr: 2-Chlorophenol-d4	2116.333		3330		63.6	55	108				
Surr: 2-Fluorobiphenyl	2320.000		3330		69.7	56	114				
Surr: 2-Fluorophenol	2122.333		3330		63.7	50	108				
Surr: 4-Terphenyl-d14	2568.667		3330		77.1	59	141				
Surr: Nitrobenzene-d5	2444.333		3330		73.4	45	114				
Surr: Phenol-d5	2313.000		3330		69.5	46	118				

Sample ID: 118977-001AMSD	SampType: MSD	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 7/20/2011	RunNo: 135242						
Client ID: ZZZZZ	Batch ID: 74404	TestNo: EPA 8270C	EPA 3550B	Analysis Date: 7/21/2011	SeqNo: 2213975						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	2741.333	330	3330	0	82.3	62	109	2379	14.2	20	
1,4-Dichlorobenzene	2463.667	330	3330	0	74.0	57	99	2142	14.0	20	
2,4-Dinitrotoluene	3428.000	330	3330	0	103	76	126	2960	14.7	20	
2-Chlorophenol	2463.667	330	3330	0	74.0	52	120	2159	13.2	20	
4-Chloro-3-methylphenol	3312.000	660	3330	0	99.5	63	137	2902	13.2	20	
4-Nitrophenol	3664.000	1600	3330	0	110	52	144	3211	13.2	20	
Acenaphthene	2876.000	330	3330	0	86.4	61	121	2531	12.8	20	
N-Nitrosodi-n-propylamine	3075.333	330	3330	0	92.4	67	116	2739	11.6	20	
Pentachlorophenol	2775.333	1600	3330	0	83.3	47	143	2399	14.5	20	
Phenol	2650.667	330	3330	0	79.6	54	126	2355	11.8	20	
Pyrene	3094.667	330	3330	0	92.9	68	121	2700	13.6	20	
Surr: 1,2-Dichlorobenzene-d4	2326.667		3330		69.9	45	105		0	0	

Qualifiers:

- | | | |
|---|--|--|
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CLIENT: Mactec
Work Order: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_S_FULL

Sample ID: 118977-001AMSD		SampType: MSD		TestCode: 8270_S_FULL Units: µg/Kg		Prep Date: 7/20/2011		RunNo: 135242			
Client ID: ZZZZZZ		Batch ID: 74404		TestNo: EPA 8270C EPA 3550B		Analysis Date: 7/21/2011		SeqNo: 2213975			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	2903.667		3330		87.2	41	129		0	0	
Surr: 2-Chlorophenol-d4	2448.333		3330		73.5	55	108		0	0	
Surr: 2-Fluorobiphenyl	2670.333		3330		80.2	56	114		0	0	
Surr: 2-Fluorophenol	2473.667		3330		74.3	50	108		0	0	
Surr: 4-Terphenyl-d14	3011.667		3330		90.4	59	141		0	0	
Surr: Nitrobenzene-d5	2852.667		3330		85.7	45	114		0	0	
Surr: Phenol-d5	2669.333		3330		80.2	46	118		0	0	

Sample ID: MB-74404		SampType: MBLK		TestCode: 8270_S_FULL Units: µg/Kg		Prep Date: 7/20/2011		RunNo: 135242			
Client ID: PBS		Batch ID: 74404		TestNo: EPA 8270C EPA 3550B		Analysis Date: 7/21/2011		SeqNo: 2214017			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	ND	330									
1,2-Dichlorobenzene	ND	330									
1,3-Dichlorobenzene	ND	330									
1,4-Dichlorobenzene	ND	330									
2,4,5-Trichlorophenol	ND	330									
2,4,6-Trichlorophenol	ND	330									
2,4-Dichlorophenol	ND	1600									
2,4-Dimethylphenol	ND	330									
2,4-Dinitrophenol	ND	1600									
2,4-Dinitrotoluene	ND	330									
2,6-Dinitrotoluene	ND	330									
2-Chloronaphthalene	ND	330									
2-Chlorophenol	ND	330									
2-Methylnaphthalene	ND	330									
2-Methylphenol	ND	330									
2-Nitroaniline	ND	1600									
2-Nitrophenol	ND	330									
3,3'-Dichlorobenzidine	ND	660									

Qualifiers:

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

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CLIENT: Mactec
Work Order: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

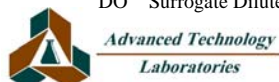
TestCode: 8270_S_FULL

Sample ID: MB-74404	SampType: MBLK	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 7/20/2011	RunNo: 135242
Client ID: PBS	Batch ID: 74404	TestNo: EPA 8270C	EPA 3550B	Analysis Date: 7/21/2011	SeqNo: 2214017

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
3-Nitroaniline	ND	1600									
4,6-Dinitro-2-methylphenol	ND	1600									
4-Bromophenyl-phenylether	ND	330									
4-Chloro-3-methylphenol	ND	660									
4-Chloroaniline	ND	660									
4-Chlorophenyl-phenylether	ND	330									
4-Methylphenol	ND	330									
4-Nitroaniline	ND	1600									
4-Nitrophenol	ND	1600									
Acenaphthene	ND	330									
Acenaphthylene	ND	330									
Anthracene	ND	330									
Benzidine (M)	ND	1600									
Benzo(a)anthracene	ND	330									
Benzo(a)pyrene	ND	330									
Benzo(b)fluoranthene	ND	330									
Benzo(g,h,i)perylene	ND	330									
Benzo(k)fluoranthene	ND	330									
Benzoic acid	ND	1600									
Benzyl alcohol	ND	660									
Bis(2-chloroethoxy)methane	ND	330									
Bis(2-chloroethyl)ether	ND	330									
Bis(2-chloroisopropyl)ether	ND	330									
Bis(2-ethylhexyl)phthalate	ND	330									
Butylbenzylphthalate	ND	330									
Chrysene	ND	330									
Di-n-butylphthalate	ND	330									
Di-n-octylphthalate	ND	330									
Dibenz(a,h)anthracene	ND	330									
Dibenzofuran	ND	330									

Qualifiers:

- | | | |
|---|--|--|
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CLIENT: Mactec
Work Order: 118934
Project: METRO WESTSIDE EXTENSION, 4953-10-1

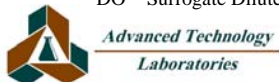
ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_S_FULL

Sample ID: MB-74404	SampType: MBLK	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 7/20/2011	RunNo: 135242						
Client ID: PBS	Batch ID: 74404	TestNo: EPA 8270C EPA 3550B	Analysis Date: 7/21/2011	SeqNo: 2214017							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diethylphthalate	ND	330									
Dimethylphthalate	ND	330									
Fluoranthene	ND	330									
Fluorene	ND	330									
Hexachlorobenzene	ND	330									
Hexachlorobutadiene	ND	660									
Hexachlorocyclopentadiene	ND	660									
Hexachloroethane	ND	330									
Indeno(1,2,3-cd)pyrene	ND	330									
Isophorone	ND	330									
N-Nitrosodi-n-propylamine	ND	330									
N-Nitrosodiphenylamine	ND	330									
Naphthalene	ND	330									
Nitrobenzene	ND	330									
Pentachlorophenol	ND	1600									
Phenanthrene	ND	330									
Phenol	ND	330									
Pyrene	ND	330									
Surr: 1,2-Dichlorobenzene-d4	1990.667		3330		59.8	45	105				
Surr: 2,4,6-Tribromophenol	1936.667		3330		58.2	41	129				
Surr: 2-Chlorophenol-d4	2132.000		3330		64.0	55	108				
Surr: 2-Fluorobiphenyl	2112.000		3330		63.4	56	114				
Surr: 2-Fluorophenol	2165.333		3330		65.0	50	108				
Surr: 4-Terphenyl-d14	2400.667		3330		72.1	59	141				
Surr: Nitrobenzene-d5	2352.000		3330		70.6	45	114				
Surr: Phenol-d5	2315.000		3330		69.5	46	118				

Qualifiers:

- | | | |
|---|--|--|
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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: 7/14/11
 NOTE: Please include your Quote No. to ensure proper pricing of your project.

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

Client: MACTEC Address: 5628 E. SLAVSON AVE State: CA Zip Code: 90040
 Attn: MATT FRAYCHINEAUD City: LOS ANGELES

Project Name: METRO WESTSIDE EXTENSION Project #: 4953-10-1561 Sampler: DHAN D. SAYER
 Relinquished by: [Signature] Date: 07-13-11 Time: 18:00 Received by: [Signature] Date: 7/13/11 Time: 18:00
 Relinquished by: [Signature] Date: 7/14/11 Time: 10:44 Received by: [Signature] Date: 7/14/11 Time: 10:44
 Relinquished by: [Signature] Date: 7/14/11 Time: 12:50 Received by: [Signature] Date: 7/14/11 Time: 12:50

I hereby authorize ATL to perform the work indicated below:
 Project Mgr / Submitter: Matt Fraychineaud Date: 7/14/11
[Signature] Date: _____
[Signature] Date: _____

Special Instructions/Comments: _____

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

ITEM	LAB USE ONLY:		Sample Description	Date	Time
	Batch #:	Lab No.			
	<u>118934-001</u>	<u>E-117-42.5</u>		<u>7/13</u>	<u>13:05</u>
		<u>E-117-50</u>		<u>7/13</u>	<u>13:45</u>
		<u>E-117-55</u>		<u>7/13</u>	<u>14:25</u>
		<u>E-117-20</u>		<u>7/13</u>	<u>11:25</u>
		<u>E-117-30</u>		<u>7/13</u>	<u>11:58</u>

Circle or Add Analysis(es) Requested:
808A (Pesticides) 8260B (Nitrates) 8270C (Total Metal) 8015B (GRO) / 8021 (BTEX) 8015B (DRO) / 8020 TITLE 22 / CAM 17 (6010 / 7000)

Specify Appropriate Matrix:
 SOIL DRINKING WATER GROUND WATER WASTEWATER STORMWATER AQUEOUS

Container(s):
 TAT # Type: E 7 TV E 7 TV E 7 TV 1 T 1 T

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=7 Workdays

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

Routine: 7 Workdays

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

Figure I-1.640

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.: 118996

RE: METRO WESTSIDE EXTENSION, 4953-10-1

Attention: Matt Fraychineaud

Enclosed are the results for sample(s) received on July 18, 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.

This is an addendum report. Please incorporate with documentation previously submitted.

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 is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.



Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-118-45
Lab Order: 118996	Collection Date: 7/15/2011 12:15:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118996-001D	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
LUFT			EPA 8015B(M)			
RunID: GC16_110727C	QC Batch: 74577				PrepDate: 7/27/2011	Analyst: CBR
DRO	ND	10		mg/Kg	1	7/27/2011 08:24 PM
ORO	ND	10		mg/Kg	1	7/27/2011 08:24 PM
Surr: p-Terphenyl	88.5	63-152		%REC	1	7/27/2011 08:24 PM
GASOLINE RANGE ORGANICS BY GC/FID						
			EPA 8015B(M)			
RunID: GC2_110727A	QC Batch: E11VS276				PrepDate:	Analyst: TP
GRO	ND	1.0		mg/Kg	1	7/27/2011 01:39 PM
Surr: Bromofluorobenzene (FID)	109	62-153		%REC	1	7/27/2011 01:39 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

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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-118-55
Lab Order:	118996	Collection Date:	7/15/2011 1:00:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118996-002D		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
LUFT			EPA 8015B(M)			
RunID: GC16_110727C	QC Batch: 74577				PrepDate: 7/27/2011	Analyst: CBR
DRO	5200	50		mg/Kg	5	7/28/2011 08:59 AM
ORO	9300	50		mg/Kg	5	7/28/2011 08:59 AM
Surr: p-Terphenyl	68.5	63-152		%REC	5	7/28/2011 08:59 AM
GASOLINE RANGE ORGANICS BY GC/FID						
			EPA 8015B(M)			
RunID: GC2_110727A	QC Batch: E11VS276				PrepDate:	Analyst: TP
GRO	2.5	1.0		mg/Kg	1	7/27/2011 01:55 PM
Surr: Bromofluorobenzene (FID)	79.2	62-153		%REC	1	7/27/2011 01:55 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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CLIENT: Mactec
Work Order: 118996
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

Sample ID: LCS-74577	SampType: LCS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/27/2011	RunNo: 135389						
Client ID: LCSS	Batch ID: 74577	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/27/2011	SeqNo: 2216550						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	946.040	10	1000	0	94.6	76	139				
Surr: p-Terphenyl	71.610		80.00		89.5	63	152				

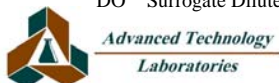
Sample ID: 119142-011AMS	SampType: MS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/27/2011	RunNo: 135389						
Client ID: ZZZZZZ	Batch ID: 74577	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/27/2011	SeqNo: 2216557						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	948.460	10	1000	0	94.8	60	158				
Surr: p-Terphenyl	85.730		80.00		107	63	152				

Sample ID: 119142-011AMSD	SampType: MSD	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/27/2011	RunNo: 135389						
Client ID: ZZZZZZ	Batch ID: 74577	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/27/2011	SeqNo: 2216558						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	961.690	10	1000	0	96.2	60	158	948.5	1.39	20	
Surr: p-Terphenyl	75.010		80.00		93.8	63	152		0	0	

Sample ID: MB-74577	SampType: MBLK	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/27/2011	RunNo: 135389						
Client ID: PBS	Batch ID: 74577	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/28/2011	SeqNo: 2216568						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	ND	10									
Surr: p-Terphenyl	75.640		80.00		94.6	63	152				

Qualifiers:

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



CLIENT: Mactec
Work Order: 118996
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_GAS

Sample ID: E110727LC1		SampType: LCS		TestCode: 8015_S_GAS		Units: mg/Kg		Prep Date:		RunNo: 135388		
Client ID: LCSS		Batch ID: E11VS276		TestNo: EPA 8015B(M)		Analysis Date: 7/27/2011		SeqNo: 2216570				
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	62	153					

Sample ID: E110727MB1MS		SampType: MS		TestCode: 8015_S_GAS		Units: mg/Kg		Prep Date:		RunNo: 135388		
Client ID: ZZZZZ		Batch ID: E11VS276		TestNo: EPA 8015B(M)		Analysis Date: 7/27/2011		SeqNo: 2216571				
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	49	131					
Surr: Bromofluorobenzene (FID)	124.985		100.0		125	62	153					

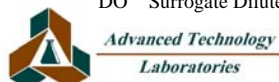
Sample ID: E110727MB1MSD		SampType: MSD		TestCode: 8015_S_GAS		Units: mg/Kg		Prep Date:		RunNo: 135388		
Client ID: ZZZZZ		Batch ID: E11VS276		TestNo: EPA 8015B(M)		Analysis Date: 7/27/2011		SeqNo: 2216572				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	4.758	1.0	5.000	0	95.2	49	131	4.908	3.10	20		
Surr: Bromofluorobenzene (FID)	121.855		100.0		122	62	153		0	0		

Sample ID: E110727MB1		SampType: MBLK		TestCode: 8015_S_GAS		Units: mg/Kg		Prep Date:		RunNo: 135388		
Client ID: PBS		Batch ID: E11VS276		TestNo: EPA 8015B(M)		Analysis Date: 7/27/2011		SeqNo: 2216573				
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	62	153					

Sample ID: 118996-001DMS		SampType: MS		TestCode: 8015_S_GAS		Units: mg/Kg		Prep Date:		RunNo: 135388		
Client ID: E-118-45		Batch ID: E11VS276		TestNo: EPA 8015B(M)		Analysis Date: 7/27/2011		SeqNo: 2216578				
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	49	131					

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: 118996
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

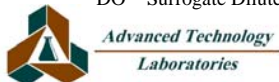
TestCode: 8015_S_GAS

Sample ID: 118996-001DMS	SampType: MS	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 135388						
Client ID: E-118-45	Batch ID: E11VS276	TestNo: EPA 8015B(M)	Analysis Date: 7/27/2011	SeqNo: 2216578							
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	62	153				

Sample ID: 118996-001DMSD	SampType: MSD	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	RunNo: 135388						
Client ID: E-118-45	Batch ID: E11VS276	TestNo: EPA 8015B(M)	Analysis Date: 7/27/2011	SeqNo: 2216579							
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	49	131	3.714	18.0	20	
Surr: Bromofluorobenzene (FID)	122.760		100.0		123	62	153		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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