

CHAIN OF CUSTODY RECORD

FOR LABORATORY USE ONLY:

P.O.#: 201106374 Quote #: 1476

Method of Transport: ATL OnTrac

Client: 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

Logged By: _____ Date: 7/15/11

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

Client: MACTEC

Address: 5628 E. SLAUSON AVE City: LOS ANGELES State: CA Zip Code: 90040

Project Name: METRO WESTSIDE EXTENSION Project #: 495340-1561 Sampler: DWAYNE D. SNYDER (Printed Name)

Relinquished by: MATT FRAYCHINEAUD Date: 7-15-11 Time: 17:00 Received by: MATT FRAYCHINEAUD Date: 7/18/11 Time: 17:00

Relinquished by: MATT FRAYCHINEAUD Date: 7/18/11 Time: 14:40 Received by: MATT FRAYCHINEAUD Date: 7/18/11 Time: 14:40

Relinquished by: MATT FRAYCHINEAUD Date: 7/18/11 Time: 16:40 Received by: MATT FRAYCHINEAUD Date: 7/18/11 Time: 16:40

I hereby authorize ATL to perform the work indicated below:

Project Mgr / Submitter: Matt Fraychineaud Date: 7/18/11

Special Instructions/Comments: _____

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

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

LAB USE ONLY: Batch #:	Sample I.D. / Location	Date	Time	Analysis(es) Requested		SPECIFY APPROPRIATE MATRIX		PRESERVATION		Q / Q C								
				Circle or Add	Requested	Container(s)	Type	RTNE	CT		Legal	SWRCB Logcode	OTHER	REMARKS				
11377C-01	E-118-45	7/15	12:15	X	8015B (GRO) / 8015B (Total Metal)	SEDIMENT	SOIL	X	E	4	TV							
	E-118-55	7/15	13:00	X	8015B (GRO) / 8015B (Total Metal)	SEDIMENT	SOIL	X	E	4	TV							
	E-118-60	7/15	13:25	X	8015B (GRO) / 8015B (Total Metal)	SEDIMENT	SOIL	X	E	4	TV							
	E-118-30	7/15	11:40			SEDIMENT	SOIL			1	T						Hold	
	E-118-40	7/15	11:56			SEDIMENT	SOIL			1	T							Hold
	E-118-50	7/15	12:40			SEDIMENT	SOIL			1	T							Hold
	E-118-65	7/15	13:55			SEDIMENT	SOIL			1	T							Hold

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

Emergency Next workday: B= C= Critical D= Urgent E= Routine

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Bedlar 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-1.647

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.: 118965

RE: METRO WESTSIDE EXTENSION, 4953-10-1

Attention: Matt Fraychineaud

Enclosed are the results for sample(s) received on July 15, 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: 118965

CASE NARRATIVE

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



Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 22-Jul-11

CLIENT: Mactec	Client Sample ID: E-119-45
Lab Order: 118965	Collection Date: 7/14/2011 1:45:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118965-001A	

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

EPA 8260B

RunID: MS4_110718A	QC Batch: K11VS190	PrepDate: 7/14/2011	Analyst: DDL
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Compound	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,1,1-Trichloroethane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,1,2,2-Tetrachloroethane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,1,2-Trichloroethane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,1-Dichloroethane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,1-Dichloroethene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,1-Dichloropropene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,2,3-Trichlorobenzene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,2,3-Trichloropropane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,2,4-Trichlorobenzene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,2,4-Trimethylbenzene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,2-Dibromo-3-chloropropane	ND	7.8		µg/Kg	1	7/18/2011 02:26 PM
1,2-Dibromoethane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,2-Dichlorobenzene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,2-Dichloroethane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,2-Dichloropropane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,3,5-Trimethylbenzene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,3-Dichlorobenzene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,3-Dichloropropane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
1,4-Dichlorobenzene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
2,2-Dichloropropane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
2-Chlorotoluene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
4-Chlorotoluene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
4-Isopropyltoluene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
Benzene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
Bromobenzene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
Bromodichloromethane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
Bromoform	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
Bromomethane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
Carbon tetrachloride	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
Chlorobenzene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
Chloroethane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
Chloroform	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
Chloromethane	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM
cis-1,2-Dichloroethene	ND	3.9		µg/Kg	1	7/18/2011 02:26 PM

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



Advanced Technology
Laboratories

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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 22-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-119-45
Lab Order:	118965	Collection Date:	7/14/2011 1:45:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118965-001A		

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

EPA 8260B

RunID: MS4_110718A	QC Batch: K11VS190	PrepDate: 7/14/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Di-isopropyl ether	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Dibromochloromethane	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Dibromomethane	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Dichlorodifluoromethane	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Ethyl Tert-butyl ether	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Ethylbenzene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Hexachlorobutadiene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Isopropylbenzene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
m,p-Xylene	ND	7.8	µg/Kg	1	7/18/2011 02:26 PM
Methylene chloride	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
MTBE	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
n-Butylbenzene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
n-Propylbenzene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Naphthalene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
o-Xylene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
sec-Butylbenzene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Styrene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Tert-amyl methyl ether	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Tert-Butanol	ND	78	µg/Kg	1	7/18/2011 02:26 PM
tert-Butylbenzene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Tetrachloroethene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Toluene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
trans-1,2-Dichloroethene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Trichloroethene	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Trichlorofluoromethane	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Vinyl chloride	ND	3.9	µg/Kg	1	7/18/2011 02:26 PM
Surr: 1,2-Dichloroethane-d4	128	65-141	%REC	1	7/18/2011 02:26 PM
Surr: 4-Bromofluorobenzene	95.1	57-134	%REC	1	7/18/2011 02:26 PM
Surr: Dibromofluoromethane	117	70-128	%REC	1	7/18/2011 02:26 PM
Surr: Toluene-d8	98.5	72-123	%REC	1	7/18/2011 02:26 PM

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



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ANALYTICAL RESULTS
 Print Date: 22-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-119-45
Lab Order:	118965	Collection Date:	7/14/2011 1:45:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118965-001D		

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

EPA 8015B(M)

RunID: GC2_110720B	QC Batch: E11VS267	PrepDate: 7/14/2011	Analyst: TP		
GRO	ND	0.81	mg/Kg	1	7/21/2011 02:54 AM
Surr: Bromofluorobenzene (FID)	133	51-161	%REC	1	7/21/2011 02:54 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-119-45
Lab Order:	118965	Collection Date:	7/14/2011 1:45:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118965-001G		

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_110718A	QC Batch: 74335	PrepDate: 7/18/2011	Analyst: CBR		
DRO	ND	10	mg/Kg	1	7/18/2011 04:52 PM
ORO	ND	10	mg/Kg	1	7/18/2011 04:52 PM
Surr: p-Terphenyl	121	63-152	%REC	1	7/18/2011 04:52 PM

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	330	µg/Kg	1	7/22/2011 12:38 AM
1,2-Dichlorobenzene	ND	330	µg/Kg	1	7/22/2011 12:38 AM
1,3-Dichlorobenzene	ND	330	µg/Kg	1	7/22/2011 12:38 AM
1,4-Dichlorobenzene	ND	330	µg/Kg	1	7/22/2011 12:38 AM
2,4,5-Trichlorophenol	ND	330	µg/Kg	1	7/22/2011 12:38 AM
2,4,6-Trichlorophenol	ND	330	µg/Kg	1	7/22/2011 12:38 AM
2,4-Dichlorophenol	ND	1600	µg/Kg	1	7/22/2011 12:38 AM
2,4-Dimethylphenol	ND	330	µg/Kg	1	7/22/2011 12:38 AM
2,4-Dinitrophenol	ND	1600	µg/Kg	1	7/22/2011 12:38 AM
2,4-Dinitrotoluene	ND	330	µg/Kg	1	7/22/2011 12:38 AM
2,6-Dinitrotoluene	ND	330	µg/Kg	1	7/22/2011 12:38 AM
2-Chloronaphthalene	ND	330	µg/Kg	1	7/22/2011 12:38 AM
2-Chlorophenol	ND	330	µg/Kg	1	7/22/2011 12:38 AM
2-Methylnaphthalene	ND	330	µg/Kg	1	7/22/2011 12:38 AM
2-Methylphenol	ND	330	µg/Kg	1	7/22/2011 12:38 AM
2-Nitroaniline	ND	1600	µg/Kg	1	7/22/2011 12:38 AM
2-Nitrophenol	ND	330	µg/Kg	1	7/22/2011 12:38 AM
3,3'-Dichlorobenzidine	ND	660	µg/Kg	1	7/22/2011 12:38 AM
3-Nitroaniline	ND	1600	µg/Kg	1	7/22/2011 12:38 AM
4,6-Dinitro-2-methylphenol	ND	1600	µg/Kg	1	7/22/2011 12:38 AM
4-Bromophenyl-phenylether	ND	330	µg/Kg	1	7/22/2011 12:38 AM
4-Chloro-3-methylphenol	ND	660	µg/Kg	1	7/22/2011 12:38 AM
4-Chloroaniline	ND	660	µg/Kg	1	7/22/2011 12:38 AM
4-Chlorophenyl-phenylether	ND	330	µg/Kg	1	7/22/2011 12:38 AM
4-Methylphenol	ND	330	µg/Kg	1	7/22/2011 12:38 AM
4-Nitroaniline	ND	1600	µg/Kg	1	7/22/2011 12:38 AM
4-Nitrophenol	ND	1600	µg/Kg	1	7/22/2011 12:38 AM
Acenaphthene	ND	330	µg/Kg	1	7/22/2011 12:38 AM
Acenaphthylene	ND	330	µg/Kg	1	7/22/2011 12:38 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-119-45
Lab Order: 118965 **Collection Date:** 7/14/2011 1:45:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118965-001G

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	330		µg/Kg	1	7/22/2011 12:38 AM
Benzidine (M)	ND	1600		µg/Kg	1	7/22/2011 12:38 AM
Benzo(a)anthracene	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Benzo(a)pyrene	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Benzo(b)fluoranthene	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Benzo(g,h,i)perylene	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Benzo(k)fluoranthene	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Benzoic acid	ND	1600		µg/Kg	1	7/22/2011 12:38 AM
Benzyl alcohol	ND	660		µg/Kg	1	7/22/2011 12:38 AM
Bis(2-chloroethoxy)methane	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Bis(2-chloroethyl)ether	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Bis(2-chloroisopropyl)ether	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Bis(2-ethylhexyl)phthalate	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Butylbenzylphthalate	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Chrysene	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Di-n-butylphthalate	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Di-n-octylphthalate	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Dibenz(a,h)anthracene	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Dibenzofuran	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Diethylphthalate	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Dimethylphthalate	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Fluoranthene	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Fluorene	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Hexachlorobenzene	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Hexachlorobutadiene	ND	660		µg/Kg	1	7/22/2011 12:38 AM
Hexachlorocyclopentadiene	ND	660		µg/Kg	1	7/22/2011 12:38 AM
Hexachloroethane	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Indeno(1,2,3-cd)pyrene	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Isophorone	ND	330		µg/Kg	1	7/22/2011 12:38 AM
N-Nitrosodi-n-propylamine	ND	330		µg/Kg	1	7/22/2011 12:38 AM
N-Nitrosodiphenylamine	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Naphthalene	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Nitrobenzene	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Pentachlorophenol	ND	1600		µg/Kg	1	7/22/2011 12:38 AM
Phenanthrene	ND	330		µg/Kg	1	7/22/2011 12:38 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-119-45
Lab Order: 118965	Collection Date: 7/14/2011 1:45:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118965-001G	

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	330		µg/Kg	1	7/22/2011 12:38 AM
Pyrene	ND	330		µg/Kg	1	7/22/2011 12:38 AM
Surr: 1,2-Dichlorobenzene-d4	66.1	45-105		%REC	1	7/22/2011 12:38 AM
Surr: 2,4,6-Tribromophenol	74.9	41-129		%REC	1	7/22/2011 12:38 AM
Surr: 2-Chlorophenol-d4	68.4	55-108		%REC	1	7/22/2011 12:38 AM
Surr: 2-Fluorobiphenyl	73.3	56-114		%REC	1	7/22/2011 12:38 AM
Surr: 2-Fluorophenol	69.7	50-108		%REC	1	7/22/2011 12:38 AM
Surr: 4-Terphenyl-d14	87.3	59-141		%REC	1	7/22/2011 12:38 AM
Surr: Nitrobenzene-d5	76.7	45-114		%REC	1	7/22/2011 12:38 AM
Surr: Phenol-d5	74.4	46-118		%REC	1	7/22/2011 12:38 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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Laboratories

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Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 22-Jul-11

CLIENT: Mactec **Client Sample ID:** E-119-55
Lab Order: 118965 **Collection Date:** 7/14/2011 2:30:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118965-002A

Analyses Result PQL Qual Units DF Date Analyzed

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID:	MS4_110718A	QC Batch:	K11VS190	PrepDate:	7/14/2011	Analyst:	DDL
1,1,1,2-Tetrachloroethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,1,1-Trichloroethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,1,2,2-Tetrachloroethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,1,2-Trichloroethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,1-Dichloroethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,1-Dichloroethene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,1-Dichloropropene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,2,3-Trichlorobenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,2,3-Trichloropropane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,2,4-Trichlorobenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,2,4-Trimethylbenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,2-Dibromo-3-chloropropane	ND	7.1	µg/Kg	1	7/18/2011 02:44 PM		
1,2-Dibromoethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,2-Dichlorobenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,2-Dichloroethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,2-Dichloropropane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,3,5-Trimethylbenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,3-Dichlorobenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,3-Dichloropropane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
1,4-Dichlorobenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
2,2-Dichloropropane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
2-Chlorotoluene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
4-Chlorotoluene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
4-Isopropyltoluene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
Benzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
Bromobenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
Bromodichloromethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
Bromoform	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
Bromomethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
Carbon tetrachloride	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
Chlorobenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
Chloroethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
Chloroform	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
Chloromethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		
cis-1,2-Dichloroethene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM		

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



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ANALYTICAL RESULTS

Print Date: 22-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-119-55
Lab Order:	118965	Collection Date:	7/14/2011 2:30:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118965-002A		

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

EPA 8260B

RunID: MS4_110718A	QC Batch: K11VS190	PrepDate: 7/14/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Di-isopropyl ether	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Dibromochloromethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Dibromomethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Dichlorodifluoromethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Ethyl Tert-butyl ether	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Ethylbenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Hexachlorobutadiene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Isopropylbenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
m,p-Xylene	ND	7.1	µg/Kg	1	7/18/2011 02:44 PM
Methylene chloride	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
MTBE	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
n-Butylbenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
n-Propylbenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Naphthalene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
o-Xylene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
sec-Butylbenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Styrene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Tert-amyl methyl ether	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Tert-Butanol	ND	71	µg/Kg	1	7/18/2011 02:44 PM
tert-Butylbenzene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Tetrachloroethene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Toluene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
trans-1,2-Dichloroethene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Trichloroethene	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Trichlorofluoromethane	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Vinyl chloride	ND	3.5	µg/Kg	1	7/18/2011 02:44 PM
Surr: 1,2-Dichloroethane-d4	122	65-141	%REC	1	7/18/2011 02:44 PM
Surr: 4-Bromofluorobenzene	90.0	57-134	%REC	1	7/18/2011 02:44 PM
Surr: Dibromofluoromethane	112	70-128	%REC	1	7/18/2011 02:44 PM
Surr: Toluene-d8	96.2	72-123	%REC	1	7/18/2011 02:44 PM

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



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ANALYTICAL RESULTS
Print Date: 22-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-119-55
Lab Order:	118965	Collection Date:	7/14/2011 2:30:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118965-002D		

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

EPA 8015B(M)

RunID: GC2_110720B	QC Batch: E11VS267	PrepDate: 7/14/2011	Analyst: TP		
GRO	ND	0.74	mg/Kg	1	7/21/2011 03:10 AM
Surr: Bromofluorobenzene (FID)	126	51-161	%REC	1	7/21/2011 03:10 AM

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



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ANALYTICAL RESULTS

Print Date: 22-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-119-55
Lab Order:	118965	Collection Date:	7/14/2011 2:30:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118965-002G		

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	ND	10		mg/Kg	1	7/18/2011 05:02 PM
ORO	ND	10		mg/Kg	1	7/18/2011 05:02 PM
Surr: p-Terphenyl	123	63-152		%REC	1	7/18/2011 05:02 PM
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	330		µg/Kg	1	7/22/2011 01:04 AM
1,2-Dichlorobenzene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
1,3-Dichlorobenzene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
1,4-Dichlorobenzene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
2,4,5-Trichlorophenol	ND	330		µg/Kg	1	7/22/2011 01:04 AM
2,4,6-Trichlorophenol	ND	330		µg/Kg	1	7/22/2011 01:04 AM
2,4-Dichlorophenol	ND	1600		µg/Kg	1	7/22/2011 01:04 AM
2,4-Dimethylphenol	ND	330		µg/Kg	1	7/22/2011 01:04 AM
2,4-Dinitrophenol	ND	1600		µg/Kg	1	7/22/2011 01:04 AM
2,4-Dinitrotoluene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
2,6-Dinitrotoluene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
2-Chloronaphthalene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
2-Chlorophenol	ND	330		µg/Kg	1	7/22/2011 01:04 AM
2-Methylnaphthalene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
2-Methylphenol	ND	330		µg/Kg	1	7/22/2011 01:04 AM
2-Nitroaniline	ND	1600		µg/Kg	1	7/22/2011 01:04 AM
2-Nitrophenol	ND	330		µg/Kg	1	7/22/2011 01:04 AM
3,3'-Dichlorobenzidine	ND	660		µg/Kg	1	7/22/2011 01:04 AM
3-Nitroaniline	ND	1600		µg/Kg	1	7/22/2011 01:04 AM
4,6-Dinitro-2-methylphenol	ND	1600		µg/Kg	1	7/22/2011 01:04 AM
4-Bromophenyl-phenylether	ND	330		µg/Kg	1	7/22/2011 01:04 AM
4-Chloro-3-methylphenol	ND	660		µg/Kg	1	7/22/2011 01:04 AM
4-Chloroaniline	ND	660		µg/Kg	1	7/22/2011 01:04 AM
4-Chlorophenyl-phenylether	ND	330		µg/Kg	1	7/22/2011 01:04 AM
4-Methylphenol	ND	330		µg/Kg	1	7/22/2011 01:04 AM
4-Nitroaniline	ND	1600		µg/Kg	1	7/22/2011 01:04 AM
4-Nitrophenol	ND	1600		µg/Kg	1	7/22/2011 01:04 AM
Acenaphthene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Acenaphthylene	ND	330		µg/Kg	1	7/22/2011 01:04 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-119-55
Lab Order: 118965 **Collection Date:** 7/14/2011 2:30:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118965-002G

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	330		µg/Kg	1	7/22/2011 01:04 AM
Benzidine (M)	ND	1600		µg/Kg	1	7/22/2011 01:04 AM
Benzo(a)anthracene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Benzo(a)pyrene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Benzo(b)fluoranthene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Benzo(g,h,i)perylene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Benzo(k)fluoranthene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Benzoic acid	ND	1600		µg/Kg	1	7/22/2011 01:04 AM
Benzyl alcohol	ND	660		µg/Kg	1	7/22/2011 01:04 AM
Bis(2-chloroethoxy)methane	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Bis(2-chloroethyl)ether	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Bis(2-chloroisopropyl)ether	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Bis(2-ethylhexyl)phthalate	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Butylbenzylphthalate	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Chrysene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Di-n-butylphthalate	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Di-n-octylphthalate	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Dibenz(a,h)anthracene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Dibenzofuran	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Diethylphthalate	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Dimethylphthalate	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Fluoranthene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Fluorene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Hexachlorobenzene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Hexachlorobutadiene	ND	660		µg/Kg	1	7/22/2011 01:04 AM
Hexachlorocyclopentadiene	ND	660		µg/Kg	1	7/22/2011 01:04 AM
Hexachloroethane	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Indeno(1,2,3-cd)pyrene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Isophorone	ND	330		µg/Kg	1	7/22/2011 01:04 AM
N-Nitrosodi-n-propylamine	ND	330		µg/Kg	1	7/22/2011 01:04 AM
N-Nitrosodiphenylamine	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Naphthalene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Nitrobenzene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Pentachlorophenol	ND	1600		µg/Kg	1	7/22/2011 01:04 AM
Phenanthrene	ND	330		µg/Kg	1	7/22/2011 01:04 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-119-55
Lab Order: 118965	Collection Date: 7/14/2011 2:30:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118965-002G	

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	330		µg/Kg	1	7/22/2011 01:04 AM
Pyrene	ND	330		µg/Kg	1	7/22/2011 01:04 AM
Surr: 1,2-Dichlorobenzene-d4	64.5	45-105		%REC	1	7/22/2011 01:04 AM
Surr: 2,4,6-Tribromophenol	68.3	41-129		%REC	1	7/22/2011 01:04 AM
Surr: 2-Chlorophenol-d4	68.0	55-108		%REC	1	7/22/2011 01:04 AM
Surr: 2-Fluorobiphenyl	71.0	56-114		%REC	1	7/22/2011 01:04 AM
Surr: 2-Fluorophenol	70.4	50-108		%REC	1	7/22/2011 01:04 AM
Surr: 4-Terphenyl-d14	84.0	59-141		%REC	1	7/22/2011 01:04 AM
Surr: Nitrobenzene-d5	77.5	45-114		%REC	1	7/22/2011 01:04 AM
Surr: Phenol-d5	74.8	46-118		%REC	1	7/22/2011 01:04 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-119-60
Lab Order:	118965	Collection Date:	7/14/2011 2:50:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118965-003A		

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

EPA 8260B

RunID: MS4_110718A	QC Batch: K11VS190	PrepDate: 7/14/2011	Analyst: DDL
1,1,1,2-Tetrachloroethane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,1,1-Trichloroethane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,1,2,2-Tetrachloroethane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,1,2-Trichloroethane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,1-Dichloroethane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,1-Dichloroethene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,1-Dichloropropene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,2,3-Trichlorobenzene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,2,3-Trichloropropane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,2,4-Trichlorobenzene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,2,4-Trimethylbenzene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,2-Dibromo-3-chloropropane	ND	7.9	µg/Kg 1 7/18/2011 03:02 PM
1,2-Dibromoethane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,2-Dichlorobenzene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,2-Dichloroethane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,2-Dichloropropane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,3,5-Trimethylbenzene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,3-Dichlorobenzene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,3-Dichloropropane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
1,4-Dichlorobenzene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
2,2-Dichloropropane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
2-Chlorotoluene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
4-Chlorotoluene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
4-Isopropyltoluene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
Benzene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
Bromobenzene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
Bromodichloromethane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
Bromoform	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
Bromomethane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
Carbon tetrachloride	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
Chlorobenzene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
Chloroethane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
Chloroform	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
Chloromethane	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM
cis-1,2-Dichloroethene	ND	3.9	µg/Kg 1 7/18/2011 03:02 PM

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



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ANALYTICAL RESULTS

Print Date: 22-Jul-11

CLIENT: Mactec	Client Sample ID: E-119-60
Lab Order: 118965	Collection Date: 7/14/2011 2:50:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118965-003A	

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

EPA 8260B

RunID: MS4_110718A	QC Batch: K11VS190	PrepDate: 7/14/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Di-isopropyl ether	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Dibromochloromethane	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Dibromomethane	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Dichlorodifluoromethane	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Ethyl Tert-butyl ether	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Ethylbenzene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Hexachlorobutadiene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Isopropylbenzene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
m,p-Xylene	ND	7.9	µg/Kg	1	7/18/2011 03:02 PM
Methylene chloride	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
MTBE	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
n-Butylbenzene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
n-Propylbenzene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Naphthalene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
o-Xylene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
sec-Butylbenzene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Styrene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Tert-amyl methyl ether	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Tert-Butanol	ND	79	µg/Kg	1	7/18/2011 03:02 PM
tert-Butylbenzene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Tetrachloroethene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Toluene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
trans-1,2-Dichloroethene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Trichloroethene	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Trichlorofluoromethane	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Vinyl chloride	ND	3.9	µg/Kg	1	7/18/2011 03:02 PM
Surr: 1,2-Dichloroethane-d4	126	65-141	%REC	1	7/18/2011 03:02 PM
Surr: 4-Bromofluorobenzene	92.3	57-134	%REC	1	7/18/2011 03:02 PM
Surr: Dibromofluoromethane	112	70-128	%REC	1	7/18/2011 03:02 PM
Surr: Toluene-d8	95.9	72-123	%REC	1	7/18/2011 03:02 PM

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



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ANALYTICAL RESULTS
 Print Date: 22-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-119-60
Lab Order:	118965	Collection Date:	7/14/2011 2:50:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	118965-003D		

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

EPA 8015B(M)

RunID: GC2_110720B	QC Batch: E11VS267	PrepDate: 7/14/2011	Analyst: TP		
GRO	ND	0.78	mg/Kg	1	7/21/2011 03:26 AM
Surr: Bromofluorobenzene (FID)	129	51-161	%REC	1	7/21/2011 03:26 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-119-60
Lab Order: 118965	Collection Date: 7/14/2011 2:50:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118965-003G	

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	ND	10		mg/Kg	1	7/18/2011 05:12 PM
ORO	ND	10		mg/Kg	1	7/18/2011 05:12 PM
Surr: p-Terphenyl	124	63-152		%REC	1	7/18/2011 05:12 PM
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	330		µg/Kg	1	7/22/2011 01:31 AM
1,2-Dichlorobenzene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
1,3-Dichlorobenzene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
1,4-Dichlorobenzene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
2,4,5-Trichlorophenol	ND	330		µg/Kg	1	7/22/2011 01:31 AM
2,4,6-Trichlorophenol	ND	330		µg/Kg	1	7/22/2011 01:31 AM
2,4-Dichlorophenol	ND	1600		µg/Kg	1	7/22/2011 01:31 AM
2,4-Dimethylphenol	ND	330		µg/Kg	1	7/22/2011 01:31 AM
2,4-Dinitrophenol	ND	1600		µg/Kg	1	7/22/2011 01:31 AM
2,4-Dinitrotoluene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
2,6-Dinitrotoluene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
2-Chloronaphthalene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
2-Chlorophenol	ND	330		µg/Kg	1	7/22/2011 01:31 AM
2-Methylnaphthalene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
2-Methylphenol	ND	330		µg/Kg	1	7/22/2011 01:31 AM
2-Nitroaniline	ND	1600		µg/Kg	1	7/22/2011 01:31 AM
2-Nitrophenol	ND	330		µg/Kg	1	7/22/2011 01:31 AM
3,3'-Dichlorobenzidine	ND	660		µg/Kg	1	7/22/2011 01:31 AM
3-Nitroaniline	ND	1600		µg/Kg	1	7/22/2011 01:31 AM
4,6-Dinitro-2-methylphenol	ND	1600		µg/Kg	1	7/22/2011 01:31 AM
4-Bromophenyl-phenylether	ND	330		µg/Kg	1	7/22/2011 01:31 AM
4-Chloro-3-methylphenol	ND	660		µg/Kg	1	7/22/2011 01:31 AM
4-Chloroaniline	ND	660		µg/Kg	1	7/22/2011 01:31 AM
4-Chlorophenyl-phenylether	ND	330		µg/Kg	1	7/22/2011 01:31 AM
4-Methylphenol	ND	330		µg/Kg	1	7/22/2011 01:31 AM
4-Nitroaniline	ND	1600		µg/Kg	1	7/22/2011 01:31 AM
4-Nitrophenol	ND	1600		µg/Kg	1	7/22/2011 01:31 AM
Acenaphthene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Acenaphthylene	ND	330		µg/Kg	1	7/22/2011 01:31 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-119-60
Lab Order: 118965 **Collection Date:** 7/14/2011 2:50:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 118965-003G

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	330		µg/Kg	1	7/22/2011 01:31 AM
Benzidine (M)	ND	1600		µg/Kg	1	7/22/2011 01:31 AM
Benzo(a)anthracene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Benzo(a)pyrene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Benzo(b)fluoranthene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Benzo(g,h,i)perylene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Benzo(k)fluoranthene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Benzoic acid	ND	1600		µg/Kg	1	7/22/2011 01:31 AM
Benzyl alcohol	ND	660		µg/Kg	1	7/22/2011 01:31 AM
Bis(2-chloroethoxy)methane	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Bis(2-chloroethyl)ether	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Bis(2-chloroisopropyl)ether	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Bis(2-ethylhexyl)phthalate	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Butylbenzylphthalate	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Chrysene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Di-n-butylphthalate	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Di-n-octylphthalate	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Dibenz(a,h)anthracene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Dibenzofuran	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Diethylphthalate	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Dimethylphthalate	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Fluoranthene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Fluorene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Hexachlorobenzene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Hexachlorobutadiene	ND	660		µg/Kg	1	7/22/2011 01:31 AM
Hexachlorocyclopentadiene	ND	660		µg/Kg	1	7/22/2011 01:31 AM
Hexachloroethane	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Indeno(1,2,3-cd)pyrene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Isophorone	ND	330		µg/Kg	1	7/22/2011 01:31 AM
N-Nitrosodi-n-propylamine	ND	330		µg/Kg	1	7/22/2011 01:31 AM
N-Nitrosodiphenylamine	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Naphthalene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Nitrobenzene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Pentachlorophenol	ND	1600		µg/Kg	1	7/22/2011 01:31 AM
Phenanthrene	ND	330		µg/Kg	1	7/22/2011 01:31 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-119-60
Lab Order: 118965	Collection Date: 7/14/2011 2:50:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118965-003G	

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	330		µg/Kg	1	7/22/2011 01:31 AM
Pyrene	ND	330		µg/Kg	1	7/22/2011 01:31 AM
Surr: 1,2-Dichlorobenzene-d4	72.8	45-105		%REC	1	7/22/2011 01:31 AM
Surr: 2,4,6-Tribromophenol	72.4	41-129		%REC	1	7/22/2011 01:31 AM
Surr: 2-Chlorophenol-d4	75.9	55-108		%REC	1	7/22/2011 01:31 AM
Surr: 2-Fluorobiphenyl	76.5	56-114		%REC	1	7/22/2011 01:31 AM
Surr: 2-Fluorophenol	77.6	50-108		%REC	1	7/22/2011 01:31 AM
Surr: 4-Terphenyl-d14	83.3	59-141		%REC	1	7/22/2011 01:31 AM
Surr: Nitrobenzene-d5	86.9	45-114		%REC	1	7/22/2011 01:31 AM
Surr: Phenol-d5	83.2	46-118		%REC	1	7/22/2011 01:31 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-119-50
Lab Order: 118965	Collection Date: 7/14/2011 2:10:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10	Matrix: SOIL
Lab ID: 118965-006A	

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 03:30 PM
Arsenic	ND	1.0		mg/Kg	1	7/20/2011 03:30 PM
Barium	65	1.0		mg/Kg	1	7/20/2011 03:30 PM
Beryllium	ND	1.0		mg/Kg	1	7/20/2011 03:30 PM
Cadmium	2.1	1.0		mg/Kg	1	7/20/2011 03:30 PM
Chromium	35	1.0		mg/Kg	1	7/20/2011 03:30 PM
Cobalt	18	1.0		mg/Kg	1	7/20/2011 03:30 PM
Copper	18	2.0		mg/Kg	1	7/20/2011 03:30 PM
Lead	3.0	1.0		mg/Kg	1	7/20/2011 03:30 PM
Molybdenum	ND	1.0		mg/Kg	1	7/20/2011 03:30 PM
Nickel	44	1.0		mg/Kg	1	7/20/2011 03:30 PM
Selenium	ND	1.0		mg/Kg	1	7/20/2011 03:30 PM
Silver	ND	1.0		mg/Kg	1	7/20/2011 03:30 PM
Thallium	ND	1.0		mg/Kg	1	7/20/2011 03:30 PM
Vanadium	36	1.0		mg/Kg	1	7/20/2011 03:30 PM
Zinc	54	1.0		mg/Kg	1	7/20/2011 03:30 PM

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	1	7/20/2011 11:08 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: 118965
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

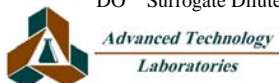
TestCode: 6010_S

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: 118965
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

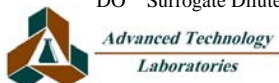
TestCode: 6010_S

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: 118965

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



Advanced Technology
Laboratories

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

CLIENT: Mactec
Work Order: 118965
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

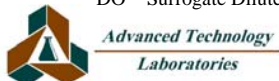
Mercury 0.894 0.10 0.8300 0 108 70 130

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: 118965
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				

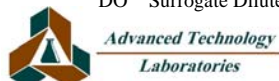
Sample ID: LCS-74335		SampType: LCS		TestCode: 8015_S_DM H Units: mg/Kg		Prep Date: 7/18/2011		RunNo: 135050			
Client ID: LCSS		Batch ID: 74335		TestNo: EPA 8015B(M LUFT		Analysis Date: 7/18/2011		SeqNo: 2210188			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	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: E-119-45		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: E-119-45		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: 118965
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

Sample ID: E110720LC3	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135168						
Client ID: LCSS	Batch ID: E11VS267	TestNo: EPA 8015B(M)	Analysis Date: 7/20/2011	SeqNo: 2212809							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.483	1.0	5.000	0	89.7	70	130				
Surr: Bromofluorobenzene (FID)	119.857		100.0		120	51	161				

Sample ID: E110720MB2MS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135168						
Client ID: ZZZZZZ	Batch ID: E11VS267	TestNo: EPA 8015B(M)	Analysis Date: 7/20/2011	SeqNo: 2212810							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.636	1.0	5.000	0	92.7	41	146				
Surr: Bromofluorobenzene (FID)	124.468		100.0		124	51	161				

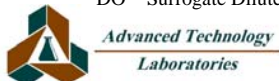
Sample ID: E110720MB2MSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135168						
Client ID: ZZZZZZ	Batch ID: E11VS267	TestNo: EPA 8015B(M)	Analysis Date: 7/20/2011	SeqNo: 2212811							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.375	1.0	5.000	0	87.5	41	146	4.636	5.79	20	
Surr: Bromofluorobenzene (FID)	120.394		100.0		120	51	161		0	0	

Sample ID: E110720MB2	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135168						
Client ID: PBS	Batch ID: E11VS267	TestNo: EPA 8015B(M)	Analysis Date: 7/20/2011	SeqNo: 2212812							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	96.740		100.0		96.7	51	161				

Sample ID: 118979-002AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135168						
Client ID: ZZZZZZ	Batch ID: E11VS267	TestNo: EPA 8015B(M)	Analysis Date: 7/21/2011	SeqNo: 2212817							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	3.585	1.0	5.000	0	71.7	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: 118965
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

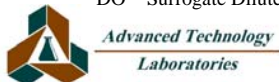
TestCode: 8015_S_G 5035P

Sample ID: 118979-002AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135168						
Client ID: ZZZZZZ	Batch ID: E11VS267	TestNo: EPA 8015B(M)	Analysis Date: 7/21/2011	SeqNo: 2212817							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Bromofluorobenzene (FID)	128.957		100.0		129	51	161				

Sample ID: 118979-002AMSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135168						
Client ID: ZZZZZZ	Batch ID: E11VS267	TestNo: EPA 8015B(M)	Analysis Date: 7/21/2011	SeqNo: 2212818							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	3.613	1.0	5.000	0	72.3	41	146	3.585	0.778	20	
Surr: Bromofluorobenzene (FID)	127.311		100.0		127	51	161		0	0	

Qualifiers:

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



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CLIENT: Mactec
Work Order: 118965
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

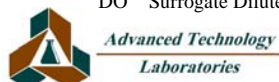
Sample ID: K110718LCS1		SampType: LCS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135146		
Client ID: LCSS		Batch ID: K11VS190		TestNo: EPA 8260B				Analysis Date: 7/18/2011		SeqNo: 2212983		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	45.790	5.0	50.00	0	91.6	70	130					
Benzene	94.150	5.0	100.0	0	94.2	70	130					
Chlorobenzene	50.080	5.0	50.00	0	100	70	130					
MTBE	55.210	5.0	50.00	0	110	70	130					
Toluene	93.830	5.0	100.0	0	93.8	70	130					
Trichloroethene	47.710	5.0	50.00	0	95.4	70	130					
Surr: 1,2-Dichloroethane-d4	51.690		50.00		103	65	141					
Surr: 4-Bromofluorobenzene	44.900		50.00		89.8	57	134					
Surr: Dibromofluoromethane	49.930		50.00		99.9	70	128					
Surr: Toluene-d8	47.290		50.00		94.6	72	123					

Sample ID: K110718MB1MS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135146		
Client ID: ZZZZZ		Batch ID: K11VS190		TestNo: EPA 8260B				Analysis Date: 7/18/2011		SeqNo: 2212984		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	47.000	5.0	50.00	0	94.0	70	130					
Benzene	97.630	5.0	100.0	0	97.6	70	130					
Chlorobenzene	52.060	5.0	50.00	0	104	70	130					
MTBE	56.550	5.0	50.00	0	113	70	130					
Toluene	97.180	5.0	100.0	0	97.2	70	130					
Trichloroethene	48.920	5.0	50.00	0	97.8	70	130					
Surr: 1,2-Dichloroethane-d4	51.840		50.00		104	65	141					
Surr: 4-Bromofluorobenzene	45.260		50.00		90.5	57	134					
Surr: Dibromofluoromethane	52.030		50.00		104	70	128					
Surr: Toluene-d8	47.490		50.00		95.0	72	123					

Sample ID: K110718MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135146		
Client ID: ZZZZZ		Batch ID: K11VS190		TestNo: EPA 8260B				Analysis Date: 7/18/2011		SeqNo: 2212985		
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: 118965
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

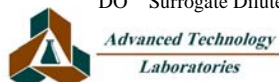
Sample ID: K110718MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135146	
Client ID: ZZZZZ		Batch ID: K11VS190		TestNo: EPA 8260B		Analysis Date: 7/18/2011				SeqNo: 2212985	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	46.240	5.0	50.00	0	92.5	70	130	47.00	1.63	20	
Benzene	95.330	5.0	100.0	0	95.3	70	130	97.63	2.38	20	
Chlorobenzene	51.520	5.0	50.00	0	103	70	130	52.06	1.04	20	
MTBE	55.430	5.0	50.00	0	111	70	130	56.55	2.00	20	
Toluene	94.930	5.0	100.0	0	94.9	70	130	97.18	2.34	20	
Trichloroethene	49.190	5.0	50.00	0	98.4	70	130	48.92	0.550	20	
Surr: 1,2-Dichloroethane-d4	50.500		50.00		101	65	141		0	0	
Surr: 4-Bromofluorobenzene	45.150		50.00		90.3	57	134		0	0	
Surr: Dibromofluoromethane	50.410		50.00		101	70	128		0	0	
Surr: Toluene-d8	47.020		50.00		94.0	72	123		0	0	

Sample ID: 118949-001AMS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135146	
Client ID: ZZZZZ		Batch ID: K11VS190		TestNo: EPA 8260B		Analysis Date: 7/18/2011				SeqNo: 2212986	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	47.660	5.0	50.00	0	95.3	70	130				
Benzene	96.920	5.0	100.0	0	96.9	70	130				
Chlorobenzene	50.640	5.0	50.00	0	101	70	130				
MTBE	52.240	5.0	50.00	0	104	70	130				
Toluene	96.680	5.0	100.0	0	96.7	70	130				
Trichloroethene	54.920	5.0	50.00	0	110	70	130				
Surr: 1,2-Dichloroethane-d4	52.530		50.00		105	65	141				
Surr: 4-Bromofluorobenzene	46.590		50.00		93.2	57	134				
Surr: Dibromofluoromethane	51.890		50.00		104	70	128				
Surr: Toluene-d8	49.170		50.00		98.3	72	123				

Sample ID: 118949-001AMSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135146	
Client ID: ZZZZZ		Batch ID: K11VS190		TestNo: EPA 8260B		Analysis Date: 7/18/2011				SeqNo: 2212987	
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: 118965
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

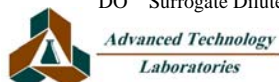
TestCode: 8260_S_5035

Sample ID: 118949-001AMSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135146	
Client ID: ZZZZZZ		Batch ID: K11VS190		TestNo: EPA 8260B		Analysis Date: 7/18/2011				SeqNo: 2212987	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	44.690	5.0	50.00	0	89.4	70	130	47.66	6.43	20	
Benzene	89.860	5.0	100.0	0	89.9	70	130	96.92	7.56	20	
Chlorobenzene	47.220	5.0	50.00	0	94.4	70	130	50.64	6.99	20	
MTBE	51.440	5.0	50.00	0	103	70	130	52.24	1.54	20	
Toluene	89.210	5.0	100.0	0	89.2	70	130	96.68	8.04	20	
Trichloroethene	52.950	5.0	50.00	0	106	70	130	54.92	3.65	20	
Surr: 1,2-Dichloroethane-d4	51.880		50.00		104	65	141		0	0	
Surr: 4-Bromofluorobenzene	45.130		50.00		90.3	57	134		0	0	
Surr: Dibromofluoromethane	50.250		50.00		101	70	128		0	0	
Surr: Toluene-d8	47.700		50.00		95.4	72	123		0	0	

Sample ID: K110718MB1		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135146	
Client ID: PBS		Batch ID: K11VS190		TestNo: EPA 8260B		Analysis Date: 7/18/2011				SeqNo: 2212988	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
1,1-Dichloroethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
1,1-Dichloropropene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	10									
1,2-Dibromoethane	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									

Qualifiers:

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



CLIENT: Mactec
Work Order: 118965
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110718MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135146						
Client ID: PBS	Batch ID: K11VS190	TestNo: EPA 8260B		Analysis Date: 7/18/2011	SeqNo: 2212988						
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: 118965
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110718MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135146						
Client ID: PBS	Batch ID: K11VS190	TestNo: EPA 8260B	Analysis Date: 7/18/2011	SeqNo: 2212988							
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	55.910		50.00		112	65	141				
Surr: 4-Bromofluorobenzene	47.670		50.00		95.3	57	134				
Surr: Dibromofluoromethane	54.670		50.00		109	70	128				
Surr: Toluene-d8	50.870		50.00		102	72	123				

Qualifiers:

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



*Advanced Technology
Laboratories*

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CLIENT: Mactec
Work Order: 118965
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

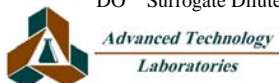
1,2,4-Trichlorobenzene	2525.975	330	3330	0	75.9	67	107				
1,4-Dichlorobenzene	2342.310	330	3330	0	70.3	64	99				
2,4-Dinitrotoluene	2889.304	330	3330	0	86.8	81	122				
2-Chlorophenol	2328.643	330	3330	0	69.9	62	112				
4-Chloro-3-methylphenol	2902.971	660	3330	0	87.2	64	138				
4-Nitrophenol	3221.968	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:

- | | | |
|---|--|--|
| B Analyte detected in 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: 118965
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

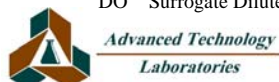
TestCode: 8270_S_FULL

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:

- | | | |
|---|--|--|
| 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: 118965
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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| DO Surrogate Diluted Out | Calculations are based on raw values | |



*Advanced Technology
Laboratories*

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CLIENT: Mactec
Work Order: 118965
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: 118965

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:

- 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



Advanced Technology
Laboratories

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

CHAIN OF CUSTODY RECORD

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

Quote #: 1476
 Logged By: [Signature] Date: 7/15/11

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

FOR LABORATORY USE ONLY:

2. 4/ 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. SLAVSON AVE State: CA Zip Code: 90040
 Attn: MAT FRAYCHINEAUD City: LOS ANGELES

Project #: 4953-10-1561 Sampler: DIAN D. SNYDER
 Relinquished by: [Signature] Date: 07-14-11 Time: 18:00
 Relinquished by: [Signature] Date: 7/15/11 Time: 0935
 Relinquished by: [Signature] Date: 7/15/11 Time: 1716

Special Instructions/Comments:
Send Report To: Matt Fraychineaud
Project Mgr /Submitter: Matt Fraychineaud 7/15/11
Print Name: Matt Fraychineaud
Signature: [Signature]

Circle or Add Analysis(es) Requested

8081A (Pesticides)	
8082 (PCB)	
8270C (Nitrates)	
6010B (Total Metal)	
8015B (GRO)	X
8015B (DRO)	X
TITLE 22 / CAM 17 (6010 / 7000)	

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

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

LAB USE ONLY:	Sample Description	Sample I.D. / Location	Date	Time
118965-01		E-119-45	7/14	13:45
- 2		E-119-55	7/14	14:30
- 3		E-119-60	7/14	14:50
- 4		E-119-30	7/14	13:00
- 5		E-119-40	7/14	13:25
- 6		E-119-50	7/14	14:10
- 7		E-119-65	7/14	15:10

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

Method of Transport
 Client ATL
 FedEx OnTrac
 GSO
 Other: _____

Method of Preservation
 RTNE CT Legal SWRCB Logcode OTHER

Specify Appropriate Matrix

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

QA/QC

QA/QC	REMARKS
RTNE	
CT	
Legal	
SWRCB	
Logcode	
OTHER	

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

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

Figure I-1.686

July 28, 2011



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

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

Workorder No.: 119065

RE: Metro Westside Extention, 4953101561

Attention: Matt Fraychineaud

Enclosed are the results for sample(s) received on July 21, 2011 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

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

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

Sincerely,

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

Eddie F. Rodriguez
Laboratory Director

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



CLIENT: Mactec
Project: Metro Westside Extention, 4953101561
Lab Order: 119065

CASE NARRATIVE

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

Sample Receiving / General Comments

Headspace <5-6 mm was noted on one voa vial.



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-120-50'
Lab Order: 119065	Collection Date: 7/20/2011 10:40:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119065-001A	

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

EPA 8260B

RunID: MS4_110722A	QC Batch: K11VS195	PrepDate: 7/20/2011	Analyst: DDL
1,1,1,2-Tetrachloroethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,1,1-Trichloroethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,1,2,2-Tetrachloroethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,1,2-Trichloroethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,1-Dichloroethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,1-Dichloroethene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,1-Dichloropropene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,2,3-Trichlorobenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,2,3-Trichloropropane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,2,4-Trichlorobenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,2,4-Trimethylbenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,2-Dibromo-3-chloropropane	ND	7.5	µg/Kg 1 7/22/2011 03:20 PM
1,2-Dibromoethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,2-Dichlorobenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,2-Dichloroethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,2-Dichloropropane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,3,5-Trimethylbenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,3-Dichlorobenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,3-Dichloropropane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
1,4-Dichlorobenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
2,2-Dichloropropane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
2-Chlorotoluene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
4-Chlorotoluene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
4-Isopropyltoluene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Benzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Bromobenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Bromodichloromethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Bromoform	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Bromomethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Carbon tetrachloride	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Chlorobenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Chloroethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Chloroform	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Chloromethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
cis-1,2-Dichloroethene	ND	3.7	µg/Kg 1 7/22/2011 03:20 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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3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-120-50'
Lab Order: 119065	Collection Date: 7/20/2011 10:40:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119065-001A	

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

EPA 8260B

RunID: MS4_110722A	QC Batch: K11VS195	PrepDate: 7/20/2011	Analyst: DDL
cis-1,3-Dichloropropene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Di-isopropyl ether	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Dibromochloromethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Dibromomethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Dichlorodifluoromethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Ethyl Tert-butyl ether	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Ethylbenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Hexachlorobutadiene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Isopropylbenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
m,p-Xylene	ND	7.5	µg/Kg 1 7/22/2011 03:20 PM
Methylene chloride	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
MTBE	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
n-Butylbenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
n-Propylbenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Naphthalene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
o-Xylene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
sec-Butylbenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Styrene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Tert-amyl methyl ether	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Tert-Butanol	ND	75	µg/Kg 1 7/22/2011 03:20 PM
tert-Butylbenzene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Tetrachloroethene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Toluene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
trans-1,2-Dichloroethene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Trichloroethene	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Trichlorofluoromethane	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Vinyl chloride	ND	3.7	µg/Kg 1 7/22/2011 03:20 PM
Surr: 1,2-Dichloroethane-d4	127	65-141	%REC 1 7/22/2011 03:20 PM
Surr: 4-Bromofluorobenzene	89.2	57-134	%REC 1 7/22/2011 03:20 PM
Surr: Dibromofluoromethane	110	70-128	%REC 1 7/22/2011 03:20 PM
Surr: Toluene-d8	98.2	72-123	%REC 1 7/22/2011 03:20 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: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-120-50'
Lab Order:	119065	Collection Date:	7/20/2011 10:40:00 AM
Project:	Metro Westside Extention, 4953101561	Matrix:	SOIL
Lab ID:	119065-001D		

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

EPA 8015B(M)

RunID: GC2_110725A	QC Batch: E11VS273	PrepDate: 7/20/2011	Analyst: TP		
GRO	ND	0.79	mg/Kg	1	7/25/2011 03:57 PM
Surr: Bromofluorobenzene (FID)	122	51-161	%REC	1	7/25/2011 03:57 PM

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



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ANALYTICAL RESULTS
 Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-120-50'
Lab Order: 119065	Collection Date: 7/20/2011 10:40:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119065-001G	

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_110725A	QC Batch: 74513				PrepDate: 7/25/2011	Analyst: CBR
DRO	ND	10		mg/Kg	1	7/25/2011 03:52 PM
ORO	ND	10		mg/Kg	1	7/25/2011 03:52 PM
Surr: p-Terphenyl	84.7	63-152		%REC	1	7/25/2011 03:52 PM

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



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ANALYTICAL RESULTS
 Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-120-55'
Lab Order: 119065	Collection Date: 7/20/2011 10:55:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119065-002A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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ICP METALS

EPA 3050B

EPA 6010B

RunID: ICP8_110725D	QC Batch: 74509			PrepDate: 7/25/2011	Analyst: CBB	
Antimony	ND	2.0		mg/Kg	1	7/25/2011 03:30 PM
Arsenic	ND	1.0		mg/Kg	1	7/25/2011 03:30 PM
Barium	31	1.0		mg/Kg	1	7/25/2011 03:30 PM
Beryllium	ND	1.0		mg/Kg	1	7/25/2011 03:30 PM
Cadmium	ND	1.0		mg/Kg	1	7/25/2011 03:30 PM
Chromium	9.5	1.0		mg/Kg	1	7/25/2011 03:30 PM
Cobalt	2.9	1.0		mg/Kg	1	7/25/2011 03:30 PM
Copper	ND	2.0		mg/Kg	1	7/25/2011 03:30 PM
Lead	1.0	1.0		mg/Kg	1	7/25/2011 03:30 PM
Molybdenum	ND	1.0		mg/Kg	1	7/25/2011 03:30 PM
Nickel	26	1.0		mg/Kg	1	7/25/2011 03:30 PM
Selenium	ND	1.0		mg/Kg	1	7/25/2011 03:30 PM
Silver	ND	1.0		mg/Kg	1	7/25/2011 03:30 PM
Thallium	ND	1.0		mg/Kg	1	7/25/2011 03:30 PM
Vanadium	28	1.0		mg/Kg	1	7/25/2011 03:30 PM
Zinc	13	1.0		mg/Kg	1	7/25/2011 03:30 PM

MERCURY BY COLD VAPOR TECHNIQUE

EPA 7471A

RunID: AA1_110726A	QC Batch: 74520			PrepDate: 7/25/2011	Analyst: VV	
Mercury	ND	0.10		mg/Kg	1	7/26/2011 11:42 AM

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



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-120-60'
Lab Order: 119065	Collection Date: 7/20/2011 11:13:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119065-003A	

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

EPA 8260B

RunID: MS4_110722A	QC Batch: K11VS195	PrepDate: 7/20/2011	Analyst: DDL
1,1,1,2-Tetrachloroethane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,1,1-Trichloroethane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,1,2,2-Tetrachloroethane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,1,2-Trichloroethane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,1-Dichloroethane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,1-Dichloroethene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,1-Dichloropropene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,2,3-Trichlorobenzene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,2,3-Trichloropropane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,2,4-Trichlorobenzene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,2,4-Trimethylbenzene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,2-Dibromo-3-chloropropane	ND	15	µg/Kg 1 7/22/2011 03:38 PM
1,2-Dibromoethane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,2-Dichlorobenzene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,2-Dichloroethane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,2-Dichloropropane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,3,5-Trimethylbenzene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,3-Dichlorobenzene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,3-Dichloropropane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
1,4-Dichlorobenzene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
2,2-Dichloropropane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
2-Chlorotoluene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
4-Chlorotoluene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
4-Isopropyltoluene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
Benzene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
Bromobenzene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
Bromodichloromethane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
Bromoform	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
Bromomethane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
Carbon tetrachloride	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
Chlorobenzene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
Chloroethane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
Chloroform	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
Chloromethane	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM
cis-1,2-Dichloroethene	ND	7.6	µg/Kg 1 7/22/2011 03:38 PM

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



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-120-60'
Lab Order:	119065	Collection Date:	7/20/2011 11:13:00 AM
Project:	Metro Westside Extention, 4953101561	Matrix:	SOIL
Lab ID:	119065-003A		

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

EPA 8260B

RunID: MS4_110722A	QC Batch: K11VS195	PrepDate: 7/20/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Di-isopropyl ether	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Dibromochloromethane	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Dibromomethane	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Dichlorodifluoromethane	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Ethyl Tert-butyl ether	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Ethylbenzene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Hexachlorobutadiene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Isopropylbenzene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
m,p-Xylene	ND	15	µg/Kg	1	7/22/2011 03:38 PM
Methylene chloride	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
MTBE	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
n-Butylbenzene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
n-Propylbenzene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Naphthalene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
o-Xylene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
sec-Butylbenzene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Styrene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Tert-amyl methyl ether	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Tert-Butanol	ND	150	µg/Kg	1	7/22/2011 03:38 PM
tert-Butylbenzene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Tetrachloroethene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Toluene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
trans-1,2-Dichloroethene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Trichloroethene	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Trichlorofluoromethane	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Vinyl chloride	ND	7.6	µg/Kg	1	7/22/2011 03:38 PM
Surr: 1,2-Dichloroethane-d4	128	65-141	%REC	1	7/22/2011 03:38 PM
Surr: 4-Bromofluorobenzene	90.5	57-134	%REC	1	7/22/2011 03:38 PM
Surr: Dibromofluoromethane	113	70-128	%REC	1	7/22/2011 03:38 PM
Surr: Toluene-d8	99.3	72-123	%REC	1	7/22/2011 03:38 PM

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



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Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-120-60'
Lab Order: 119065	Collection Date: 7/20/2011 11:13:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119065-003D	

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

EPA 8015B(M)

RunID: GC2_110725A	QC Batch: E11VS273	PrepDate: 7/20/2011	Analyst: TP		
GRO	ND	1.1	mg/Kg	1	7/25/2011 04:13 PM
Surr: Bromofluorobenzene (FID)	97.3	51-161	%REC	1	7/25/2011 04:13 PM

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



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Advanced Technology Laboratories

ANALYTICAL RESULTS
 Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-120-60'
Lab Order: 119065	Collection Date: 7/20/2011 11:13:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119065-003G	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110725A	QC Batch: 74513			PrepDate: 7/25/2011		Analyst: CBR
DRO	ND	10		mg/Kg	1	7/25/2011 04:02 PM
ORO	ND	10		mg/Kg	1	7/25/2011 04:02 PM
Surr: p-Terphenyl	82.8	63-152		%REC	1	7/25/2011 04:02 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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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-120-GW
Lab Order: 119065	Collection Date: 7/20/2011 11:45:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: GROUNDWATER
Lab ID: 119065-005A	

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

EPA 8260B

RunID: MS11_110725A	QC Batch: A11VW125	PrepDate:	Analyst: BD		
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,1,1-Trichloroethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,1,2-Trichloroethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,1-Dichloroethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,1-Dichloroethene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,1-Dichloropropene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,2,3-Trichlorobenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,2,3-Trichloropropane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,2-Dibromo-3-chloropropane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,2-Dibromoethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,2-Dichlorobenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,2-Dichloroethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,2-Dichloropropane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,3-Dichlorobenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,3-Dichloropropane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
1,4-Dichlorobenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
2,2-Dichloropropane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
2-Chlorotoluene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
4-Chlorotoluene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
4-Isopropyltoluene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Benzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Bromobenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Bromodichloromethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Bromoform	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Bromomethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Carbon tetrachloride	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Chlorobenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Chloroethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Chloroform	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Chloromethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
cis-1,2-Dichloroethene	1.8	0.50	µg/L	1	7/25/2011 01:13 PM

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



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-120-GW
Lab Order: 119065	Collection Date: 7/20/2011 11:45:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: GROUNDWATER
Lab ID: 119065-005A	

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

EPA 8260B

RunID: MS11_110725A	QC Batch: A11VW125	PrepDate:	Analyst: BD		
cis-1,3-Dichloropropene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Di-isopropyl ether	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Dibromochloromethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Dibromomethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Dichlorodifluoromethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Ethyl tert-butyl ether	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Ethylbenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Hexachlorobutadiene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Isopropylbenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
m,p-Xylene	ND	1.0	µg/L	1	7/25/2011 01:13 PM
Methylene chloride	ND	1.0	µg/L	1	7/25/2011 01:13 PM
MTBE	ND	0.50	µg/L	1	7/25/2011 01:13 PM
n-Butylbenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
n-Propylbenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Naphthalene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
o-Xylene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
sec-Butylbenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Styrene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Tert-amyl methyl ether	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Tert-Butanol	ND	10	µg/L	1	7/25/2011 01:13 PM
tert-Butylbenzene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Tetrachloroethene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Toluene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
trans-1,2-Dichloroethene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Trichloroethene	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Trichlorofluoromethane	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Vinyl chloride	ND	0.50	µg/L	1	7/25/2011 01:13 PM
Surr: 1,2-Dichloroethane-d4	88.2	70-130	%REC	1	7/25/2011 01:13 PM
Surr: 4-Bromofluorobenzene	101	70-130	%REC	1	7/25/2011 01:13 PM
Surr: Dibromofluoromethane	98.7	70-130	%REC	1	7/25/2011 01:13 PM
Surr: Toluene-d8	99.6	70-130	%REC	1	7/25/2011 01:13 PM

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



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-120-GW
Lab Order:	119065	Collection Date:	7/20/2011 11:45:00 AM
Project:	Metro Westside Extention, 4953101561	Matrix:	GROUNDWATER
Lab ID:	119065-005B		

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

EPA 8015B(M)

RunID: GC19_110722A	QC Batch: M11VW143	PrepDate:	Analyst: DDL		
GRO	ND	0.20	mg/L	1	7/22/2011 03:47 PM
Surr: Bromofluorobenzene (FID)	88.5	70-130	%REC	1	7/22/2011 03:47 PM

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



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ANALYTICAL RESULTS
 Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-120-GW
Lab Order: 119065	Collection Date: 7/20/2011 11:45:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: GROUNDWATER
Lab ID: 119065-005C	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3510C		EPA 8015B(M)			
RunID: GC16_110726B	QC Batch: 74531				PrepDate: 7/26/2011	Analyst: CBR
DRO	ND	0.25		mg/L	1	7/26/2011 01:40 PM
ORO	ND	0.25		mg/L	1	7/26/2011 01:40 PM
Surr: p-Terphenyl	79.7	36-126		%REC	1	7/26/2011 01:40 PM

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



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-120-70'
Lab Order: 119065	Collection Date: 7/20/2011 12:30:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119065-006A	

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

EPA 8260B

RunID: MS4_110722A	QC Batch: K11VS195	PrepDate: 7/20/2011	Analyst: DDL
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1,1,1,2-Tetrachloroethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,1,1-Trichloroethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,1,2,2-Tetrachloroethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,1,2-Trichloroethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,1-Dichloroethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,1-Dichloroethene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,1-Dichloropropene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,2,3-Trichlorobenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,2,3-Trichloropropane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,2,4-Trichlorobenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,2,4-Trimethylbenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,2-Dibromo-3-chloropropane	ND	11	µg/Kg	1	7/22/2011 03:55 PM
1,2-Dibromoethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,2-Dichlorobenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,2-Dichloroethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,2-Dichloropropane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,3,5-Trimethylbenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,3-Dichlorobenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,3-Dichloropropane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
1,4-Dichlorobenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
2,2-Dichloropropane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
2-Chlorotoluene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
4-Chlorotoluene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
4-Isopropyltoluene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Benzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Bromobenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Bromodichloromethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Bromoform	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Bromomethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Carbon tetrachloride	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Chlorobenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Chloroethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Chloroform	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Chloromethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
cis-1,2-Dichloroethene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM

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



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ANALYTICAL RESULTS

Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-120-70'
Lab Order: 119065	Collection Date: 7/20/2011 12:30:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119065-006A	

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

EPA 8260B

RunID: MS4_110722A	QC Batch: K11VS195	PrepDate: 7/20/2011	Analyst: DDL		
cis-1,3-Dichloropropene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Di-isopropyl ether	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Dibromochloromethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Dibromomethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Dichlorodifluoromethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Ethyl Tert-butyl ether	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Ethylbenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Hexachlorobutadiene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Isopropylbenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
m,p-Xylene	ND	11	µg/Kg	1	7/22/2011 03:55 PM
Methylene chloride	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
MTBE	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
n-Butylbenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
n-Propylbenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Naphthalene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
o-Xylene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
sec-Butylbenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Styrene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Tert-amyl methyl ether	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Tert-Butanol	ND	110	µg/Kg	1	7/22/2011 03:55 PM
tert-Butylbenzene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Tetrachloroethene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Toluene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
trans-1,2-Dichloroethene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Trichloroethene	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Trichlorofluoromethane	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Vinyl chloride	ND	5.7	µg/Kg	1	7/22/2011 03:55 PM
Surr: 1,2-Dichloroethane-d4	132	65-141	%REC	1	7/22/2011 03:55 PM
Surr: 4-Bromofluorobenzene	95.8	57-134	%REC	1	7/22/2011 03:55 PM
Surr: Dibromofluoromethane	117	70-128	%REC	1	7/22/2011 03:55 PM
Surr: Toluene-d8	102	72-123	%REC	1	7/22/2011 03:55 PM

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



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ANALYTICAL RESULTS
 Print Date: 28-Jul-11

CLIENT: Mactec	Client Sample ID: E-120-70'
Lab Order: 119065	Collection Date: 7/20/2011 12:30:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119065-006D	

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

EPA 8015B(M)

RunID: GC2_110725A	QC Batch: E11VS273	PrepDate: 7/20/2011	Analyst: TP		
GRO	ND	1.1	mg/Kg	1	7/25/2011 04:29 PM
Surr: Bromofluorobenzene (FID)	95.0	51-161	%REC	1	7/25/2011 04:29 PM

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



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ANALYTICAL RESULTS
 Print Date: 28-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-120-70'
Lab Order:	119065	Collection Date:	7/20/2011 12:30:00 PM
Project:	Metro Westside Extention, 4953101561	Matrix:	SOIL
Lab ID:	119065-006G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110725A	QC Batch: 74513			PrepDate: 7/25/2011		Analyst: CBR
DRO	ND	10		mg/Kg	1	7/25/2011 04:13 PM
ORO	ND	10		mg/Kg	1	7/25/2011 04:13 PM
Surr: p-Terphenyl	84.4	63-152		%REC	1	7/25/2011 04:13 PM

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



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CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

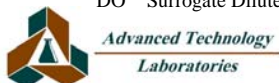
TestCode: 6010_S

Sample ID: MB-74509	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135302						
Client ID: PBS	Batch ID: 74509	TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/25/2011	SeqNo: 2215175						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	2.0									
Arsenic	ND	1.0									
Barium	ND	1.0									
Beryllium	ND	1.0									
Cadmium	ND	1.0									
Chromium	ND	1.0									
Cobalt	ND	1.0									
Copper	ND	2.0									
Lead	ND	1.0									
Molybdenum	ND	1.0									
Nickel	ND	1.0									
Selenium	ND	1.0									
Silver	ND	1.0									
Thallium	ND	1.0									
Vanadium	ND	1.0									
Zinc	0.461	1.0									

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

Qualifiers:

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



CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

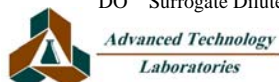
TestCode: 6010_S

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

Sample ID: 118919-007A-MS	SampType: MS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135302						
Client ID: ZZZZZZ	Batch ID: 74509	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 7/25/2011	SeqNo: 2215178						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	103.766	2.0	125.0	0	83.0	32	105				
Arsenic	98.353	1.0	125.0	0	78.7	49	106				
Barium	228.814	1.0	125.0	115.3	90.8	31	133				
Beryllium	111.642	1.0	125.0	0	89.3	56	106				
Cadmium	108.129	1.0	125.0	0.3535	86.2	51	103				
Chromium	114.288	1.0	125.0	5.679	86.9	45	114				
Cobalt	121.428	1.0	125.0	7.258	91.3	52	106				
Copper	122.531	2.0	125.0	0	98.0	54	125				
Lead	111.082	1.0	125.0	2.664	86.7	34	126				
Molybdenum	114.141	1.0	125.0	0	91.3	54	106				
Nickel	109.725	1.0	125.0	0.8731	87.1	45	111				
Selenium	104.222	1.0	125.0	0	83.4	47	104				
Silver	116.600	1.0	125.0	0	93.3	56	112				
Thallium	81.607	1.0	125.0	0	65.3	46	101				
Vanadium	162.211	1.0	125.0	45.78	93.1	54	114				
Zinc	153.966	1.0	125.0	49.83	83.3	28	125				

Qualifiers:

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



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CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

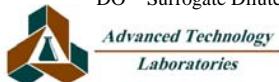
ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

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

Qualifiers:

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



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CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

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

Mercury ND 0.10

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

Mercury 0.878 0.10 0.8300 0 106 80 120

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

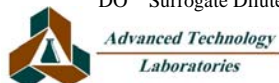
Mercury 0.823 0.10 0.8300 0 99.1 70 130

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

Mercury 0.822 0.10 0.8300 0 99.0 70 130 0.8229 0.129 20

Qualifiers:

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



CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

Sample ID: MB-74513	SampType: MBLK	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135317						
Client ID: PBS	Batch ID: 74513	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/25/2011	SeqNo: 2215380						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	ND	10									
ORO	ND	10									
Surr: p-Terphenyl	71.990		80.00		90.0	63	152				

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

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

Sample ID: 119065-001GMS	SampType: MS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135317						
Client ID: E-120-50'	Batch ID: 74513	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/25/2011	SeqNo: 2215382						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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

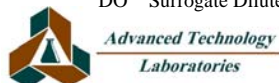
Sample ID: 119065-001GMSD	SampType: MSD	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135317						
Client ID: E-120-50'	Batch ID: 74513	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/25/2011	SeqNo: 2215383						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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

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

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 | |



CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

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

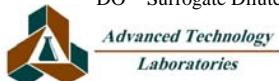
DRO	951.900	10	1000	0	95.2	60	158				
Surr: p-Terphenyl	74.710		80.00		93.4	63	152				

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

DRO	956.600	10	1000	0	95.7	60	158	951.9	0.493	20	
Surr: p-Terphenyl	74.370		80.00		93.0	63	152		0	0	

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
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CLIENT: Mactec
Work Order: 119065
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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

Sample ID: E110725LC1	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135299						
Client ID: LCSS	Batch ID: E11VS273	TestNo: EPA 8015B(M)	Analysis Date: 7/25/2011	SeqNo: 2215480							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.871	1.0	5.000	0	97.4	70	130				
Surr: Bromofluorobenzene (FID)	121.411		100.0		121	51	161				

Sample ID: E110725MB1MS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135299						
Client ID: ZZZZZ	Batch ID: E11VS273	TestNo: EPA 8015B(M)	Analysis Date: 7/25/2011	SeqNo: 2215481							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.927	1.0	5.000	0	98.5	41	146				
Surr: Bromofluorobenzene (FID)	121.400		100.0		121	51	161				

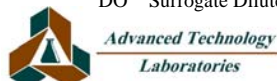
Sample ID: E110725MB1MSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135299						
Client ID: ZZZZZ	Batch ID: E11VS273	TestNo: EPA 8015B(M)	Analysis Date: 7/25/2011	SeqNo: 2215482							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.753	1.0	5.000	0	95.1	41	146	4.927	3.60	20	
Surr: Bromofluorobenzene (FID)	111.512		100.0		112	51	161		0	0	

Sample ID: E110725MB1	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135299						
Client ID: PBS	Batch ID: E11VS273	TestNo: EPA 8015B(M)	Analysis Date: 7/25/2011	SeqNo: 2215483							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	81.203		100.0		81.2	51	161				

Sample ID: 119034-001AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135299						
Client ID: ZZZZZ	Batch ID: E11VS273	TestNo: EPA 8015B(M)	Analysis Date: 7/25/2011	SeqNo: 2215488							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.328	1.0	5.000	0	86.6	41	146				

Qualifiers:

- | | | |
|---|--|--|
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CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

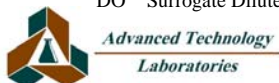
TestCode: 8015_S_G 5035P

Sample ID: 119034-001AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135299						
Client ID: ZZZZZZ	Batch ID: E11VS273	TestNo: EPA 8015B(M)	Analysis Date: 7/25/2011	SeqNo: 2215488							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Bromofluorobenzene (FID)	121.956		100.0		122	51	161				

Sample ID: 119034-001AMSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135299						
Client ID: ZZZZZZ	Batch ID: E11VS273	TestNo: EPA 8015B(M)	Analysis Date: 7/25/2011	SeqNo: 2215489							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	3.918	1.0	5.000	0	78.4	41	146	4.328	9.94	20	
Surr: Bromofluorobenzene (FID)	127.887		100.0		128	51	161		0	0	

Qualifiers:

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

TestCode: 8015_W_DM

Sample ID: MB-74531	SampType: MBLK	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 7/26/2011	RunNo: 135340						
Client ID: PBW	Batch ID: 74531	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 7/26/2011	SeqNo: 2215981						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	ND	0.20									
ORO	ND	0.20									
Surr: p-Terphenyl	0.043		0.08000		53.9	36	126				

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

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

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

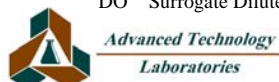
DRO	0.593	0.20	1.000	0	59.3	52	128				
Surr: p-Terphenyl	0.052		0.08000		65.6	36	126				

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

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

Qualifiers:

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



CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_G PRES

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

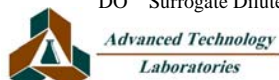
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Client ID: ZZZZZZ	Batch ID: M11VW143	TestNo: EPA 8015B(M)	Analysis Date: 7/22/2011	SeqNo: 2214731							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	1.099	0.20	1.000	0	110	70	130				
Surr: Bromofluorobenzene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

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

Sample ID: M110722MB1	SampType: MBLK	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 135283						
Client ID: PBW	Batch ID: M11VW143	TestNo: EPA 8015B(M)	Analysis Date: 7/22/2011	SeqNo: 2214733							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	0.20									
Surr: Bromofluorobenzene (FID)	89.141		100.0		89.1	70	130				

Qualifiers:

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



CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

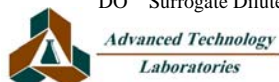
Sample ID: K110722LCS1		SampType: LCS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135269	
Client ID: LCSS		Batch ID: K11VS195		TestNo: EPA 8260B		Analysis Date: 7/22/2011				SeqNo: 2214454	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene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

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

Sample ID: K110722MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135269	
Client ID: ZZZZZ		Batch ID: K11VS195		TestNo: EPA 8260B		Analysis Date: 7/22/2011				SeqNo: 2214456	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

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



CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

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

Sample ID: K110722MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135269						
Client ID: PBS	Batch ID: K11VS195	TestNo: EPA 8260B	Analysis Date: 7/22/2011			SeqNo: 2214457					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
1,1-Dichloroethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
1,1-Dichloropropene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	10									
1,2-Dibromoethane	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									

Qualifiers:

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



*Advanced Technology
Laboratories*

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

CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

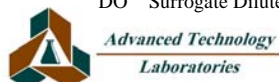
TestCode: 8260_S_5035

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

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

Qualifiers:

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

CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110722MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135269						
Client ID: PBS	Batch ID: K11VS195	TestNo: EPA 8260B	Analysis Date: 7/22/2011	SeqNo: 2214457							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	ND	5.0									
MTBE	ND	5.0									
n-Butylbenzene	ND	5.0									
n-Propylbenzene	ND	5.0									
Naphthalene	ND	5.0									
o-Xylene	ND	5.0									
sec-Butylbenzene	ND	5.0									
Styrene	ND	5.0									
Tert-amyl methyl ether	ND	5.0									
Tert-Butanol	ND	100									
tert-Butylbenzene	ND	5.0									
Tetrachloroethene	ND	5.0									
Toluene	ND	5.0									
trans-1,2-Dichloroethene	ND	5.0									
Trichloroethene	ND	5.0									
Trichlorofluoromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Surr: 1,2-Dichloroethane-d4	54.200		50.00		108	65	141				
Surr: 4-Bromofluorobenzene	43.370		50.00		86.7	57	134				
Surr: Dibromofluoromethane	52.050		50.00		104	70	128				
Surr: Toluene-d8	47.720		50.00		95.4	72	123				

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| 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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3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

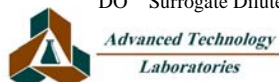
Sample ID: A110725LCS1		SampType: LCS		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135333		
Client ID: LCSW		Batch ID: A11VW125		TestNo: EPA 8260B		Analysis Date: 7/25/2011		SeqNo: 2215676				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene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

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

Sample ID: A110725MB3MSD		SampType: MSD		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135333		
Client ID: ZZZZZ		Batch ID: A11VW125		TestNo: EPA 8260B		Analysis Date: 7/25/2011		SeqNo: 2215678				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Qualifiers:

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



CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

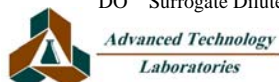
TestCode: 8260_WP_LL

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

Sample ID: A110725MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 135333						
Client ID: PBW	Batch ID: A11VW125	TestNo: EPA 8260B		Analysis Date: 7/25/2011	SeqNo: 2215679						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	0.50									
1,1-Dichloropropene	ND	0.50									
1,2,3-Trichlorobenzene	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromo-3-chloropropane	ND	0.50									
1,2-Dibromoethane	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									

Qualifiers:

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



CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: A110725MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 135333						
Client ID: PBW	Batch ID: A11VW125	TestNo: EPA 8260B		Analysis Date: 7/25/2011	SeqNo: 2215679						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2-Dichloropropane	ND	0.50									
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Dichlorobenzene	ND	0.50									
1,3-Dichloropropane	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
2,2-Dichloropropane	ND	0.50									
2-Chlorotoluene	ND	0.50									
4-Chlorotoluene	ND	0.50									
4-Isopropyltoluene	ND	0.50									
Benzene	ND	0.50									
Bromobenzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Di-isopropyl ether	ND	0.50									
Dibromochloromethane	ND	0.50									
Dibromomethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Ethyl tert-butyl ether	ND	0.50									
Ethylbenzene	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Isopropylbenzene	ND	0.50									
m,p-Xylene	ND	1.0									

Qualifiers:

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



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

CLIENT: Mactec
Work Order: 119065
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: A110725MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 135333						
Client ID: PBW	Batch ID: A11VW125	TestNo: EPA 8260B	Analysis Date: 7/25/2011	SeqNo: 2215679							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	ND	1.0									
MTBE	ND	0.50									
n-Butylbenzene	ND	0.50									
n-Propylbenzene	ND	0.50									
Naphthalene	ND	0.50									
o-Xylene	ND	0.50									
sec-Butylbenzene	ND	0.50									
Styrene	ND	0.50									
Tert-amyl methyl ether	ND	0.50									
Tert-Butanol	ND	10									
tert-Butylbenzene	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	21.700		25.00		86.8	70	130				
Surr: 4-Bromofluorobenzene	25.050		25.00		100	70	130				
Surr: Dibromofluoromethane	24.620		25.00		98.5	70	130				
Surr: Toluene-d8	25.020		25.00		100	70	130				

Qualifiers:

- | | | |
|---|--|--|
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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 #: 14716
 Logged By: [Signature] Date: 7/22/11

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

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

Client: MACTEC Address: 5628 C. Stinson Ave TEL: 383-889-5300
 Attn: Matt Freychineaud City: LA State: CA Zip Code: 90049 FAX: _____
 Project Name: Metro Westside Extension Project #: 4953101561 Sampler: [Signature]
 Relinquished by: (Signature and Printed Name) Date: 7/20/11 Time: 1430 Received by: (Signature and Printed Name) Date: 7/20/11 Time: 1430
 Relinquished by: (Signature and Printed Name) Date: 7/20/11 Time: 0700 Received by: (Signature and Printed Name) Date: 7/21/11 Time: 0700
 Relinquished by: (Signature and Printed Name) Date: 7/21/11 Time: 1609 Received by: (Signature and Printed Name) Date: 7/21/11 Time: 1604
 I hereby authorize ATL to perform the work indicated below:
 Project Mgr /Submitter: MACTEC Bill To: 717
 Attn: MACTEC Attn: _____
 Co: _____ Co: _____
 Address: _____ Address: _____
 City: _____ City: _____ State: _____ State: _____ Zip: _____ Zip: _____

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

ITEM	LAB USE ONLY:		Sample Description	Date	Time
	Batch #:	Lab No.			
	<u>119065-087</u>		<u>E-120-50'</u>	<u>7/20/11</u>	<u>1040</u>
	<u>1</u>		<u>E-120-55'</u>		<u>1055</u>
	<u>3</u>		<u>E-120-60'</u>		<u>1113</u>
	<u>4</u>		<u>E-120-65'</u>		<u>1130</u>
	<u>5</u>		<u>E-120-6W</u>		<u>1145</u>
	<u>6</u>		<u>E-120-70'</u>		<u>1230</u>

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

SPECIFY APPROPRIATE MATRIX

	Container(s)		PRESERVATION
	TAT	Type	
SEDIMENT			
SOIL			
GROUND WATER			
WASTEWATER			
STORMWATER			
AQUEOUS			

QA/QC: RTNE CT Legal SWRCB Logcode OTHER _____ REMARKS: Hold

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

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

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

Figure I-1.724

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.: 119093

RE: Metro Westside Extention, 4953101561

Attention: Matt Fraychineaud

Enclosed are the results for sample(s) received on July 22, 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 Extention, 4953101561
Lab Order: 119093

CASE NARRATIVE

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



Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-15'
Lab Order: 119093	Collection Date: 7/21/2011 10:30:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119093-002A	

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

EPA 8260B

RunID: MS4_110725A	QC Batch: K11VS196	PrepDate: 7/21/2011	Analyst: SLL
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1,1,1,2-Tetrachloroethane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,1,1-Trichloroethane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,1,2,2-Tetrachloroethane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,1,2-Trichloroethane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,1-Dichloroethane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,1-Dichloroethene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,1-Dichloropropene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,2,3-Trichlorobenzene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,2,3-Trichloropropane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,2,4-Trichlorobenzene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,2,4-Trimethylbenzene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,2-Dibromo-3-chloropropane	ND	7.8		µg/Kg	1	7/25/2011 11:52 AM
1,2-Dibromoethane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,2-Dichlorobenzene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,2-Dichloroethane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,2-Dichloropropane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,3,5-Trimethylbenzene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,3-Dichlorobenzene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,3-Dichloropropane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
1,4-Dichlorobenzene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
2,2-Dichloropropane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
2-Chlorotoluene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
4-Chlorotoluene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
4-Isopropyltoluene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
Benzene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
Bromobenzene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
Bromodichloromethane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
Bromoform	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
Bromomethane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
Carbon tetrachloride	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
Chlorobenzene	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
Chloroethane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
Chloroform	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
Chloromethane	ND	3.9		µg/Kg	1	7/25/2011 11:52 AM
cis-1,2-Dichloroethene	ND	3.9		µg/Kg	1	7/25/2011 11:52 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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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-15'
Lab Order: 119093	Collection Date: 7/21/2011 10:30:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119093-002A	

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

EPA 8260B

RunID: MS4_110725A	QC Batch: K11VS196	PrepDate: 7/21/2011	Analyst: SLL		
cis-1,3-Dichloropropene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Di-isopropyl ether	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Dibromochloromethane	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Dibromomethane	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Dichlorodifluoromethane	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Ethyl Tert-butyl ether	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Ethylbenzene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Hexachlorobutadiene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Isopropylbenzene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
m,p-Xylene	ND	7.8	µg/Kg	1	7/25/2011 11:52 AM
Methylene chloride	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
MTBE	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
n-Butylbenzene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
n-Propylbenzene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Naphthalene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
o-Xylene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
sec-Butylbenzene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Styrene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Tert-amyl methyl ether	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Tert-Butanol	ND	78	µg/Kg	1	7/25/2011 11:52 AM
tert-Butylbenzene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Tetrachloroethene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Toluene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
trans-1,2-Dichloroethene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Trichloroethene	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Trichlorofluoromethane	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Vinyl chloride	ND	3.9	µg/Kg	1	7/25/2011 11:52 AM
Surr: 1,2-Dichloroethane-d4	127	65-141	%REC	1	7/25/2011 11:52 AM
Surr: 4-Bromofluorobenzene	91.6	57-134	%REC	1	7/25/2011 11:52 AM
Surr: Dibromofluoromethane	114	70-128	%REC	1	7/25/2011 11:52 AM
Surr: Toluene-d8	97.1	72-123	%REC	1	7/25/2011 11:52 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: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-15'
Lab Order: 119093	Collection Date: 7/21/2011 10:30:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119093-002D	

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

EPA 8015B(M)

RunID: GC2_110726A	QC Batch: E11VS274	PrepDate: 7/21/2011	Analyst: TP		
GRO	ND	0.89	mg/Kg	1	7/26/2011 01:09 PM
Surr: Bromofluorobenzene (FID)	126	51-161	%REC	1	7/26/2011 01:09 PM

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



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-15'
Lab Order: 119093	Collection Date: 7/21/2011 10:30:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119093-002G	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT	EPA 8015B(M)				
RunID: GC16_110725A	QC Batch: 74513				PrepDate: 7/25/2011	Analyst: CBR
DRO	ND	10		mg/Kg	1	7/25/2011 05:08 PM
ORO	ND	10		mg/Kg	1	7/25/2011 05:08 PM
Surr: p-Terphenyl	80.3	63-152		%REC	1	7/25/2011 05:08 PM

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



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-35'
Lab Order: 119093	Collection Date: 7/21/2011 11:00:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119093-005A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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ICP METALS

EPA 3050B

EPA 6010B

RunID: ICP8_110725D	QC Batch: 74509			PrepDate: 7/25/2011	Analyst: CBB	
Antimony	ND	2.0		mg/Kg	1	7/25/2011 03:44 PM
Arsenic	3.2	1.0		mg/Kg	1	7/25/2011 03:44 PM
Barium	83	1.0		mg/Kg	1	7/25/2011 03:44 PM
Beryllium	ND	1.0		mg/Kg	1	7/25/2011 03:44 PM
Cadmium	ND	1.0		mg/Kg	1	7/25/2011 03:44 PM
Chromium	7.8	1.0		mg/Kg	1	7/25/2011 03:44 PM
Cobalt	1.7	1.0		mg/Kg	1	7/25/2011 03:44 PM
Copper	7.5	2.0		mg/Kg	1	7/25/2011 03:44 PM
Lead	6.0	1.0		mg/Kg	1	7/25/2011 03:44 PM
Molybdenum	ND	1.0		mg/Kg	1	7/25/2011 03:44 PM
Nickel	4.6	1.0		mg/Kg	1	7/25/2011 03:44 PM
Selenium	ND	1.0		mg/Kg	1	7/25/2011 03:44 PM
Silver	ND	1.0		mg/Kg	1	7/25/2011 03:44 PM
Thallium	ND	1.0		mg/Kg	1	7/25/2011 03:44 PM
Vanadium	9.5	1.0		mg/Kg	1	7/25/2011 03:44 PM
Zinc	21	1.0		mg/Kg	1	7/25/2011 03:44 PM

MERCURY BY COLD VAPOR TECHNIQUE

EPA 7471A

RunID: AA1_110726A	QC Batch: 74520			PrepDate: 7/25/2011	Analyst: VV	
Mercury	ND	0.10		mg/Kg	1	7/26/2011 11:50 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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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-45'
Lab Order: 119093	Collection Date: 7/21/2011 12:00:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119093-006A	

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

EPA 8260B

RunID: MS4_110725A	QC Batch: K11VS196	PrepDate: 7/21/2011	Analyst: SLL		
1,1,1,2-Tetrachloroethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,1,1-Trichloroethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,1,2,2-Tetrachloroethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,1,2-Trichloroethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,1-Dichloroethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,1-Dichloroethene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,1-Dichloropropene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,2,3-Trichlorobenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,2,3-Trichloropropane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,2,4-Trichlorobenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,2,4-Trimethylbenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,2-Dibromo-3-chloropropane	ND	17	µg/Kg	1	7/25/2011 12:10 PM
1,2-Dibromoethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,2-Dichlorobenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,2-Dichloroethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,2-Dichloropropane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,3,5-Trimethylbenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,3-Dichlorobenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,3-Dichloropropane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
1,4-Dichlorobenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
2,2-Dichloropropane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
2-Chlorotoluene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
4-Chlorotoluene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
4-Isopropyltoluene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Benzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Bromobenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Bromodichloromethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Bromoform	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Bromomethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Carbon tetrachloride	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Chlorobenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Chloroethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Chloroform	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Chloromethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
cis-1,2-Dichloroethene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM

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



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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-45'
Lab Order: 119093	Collection Date: 7/21/2011 12:00:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119093-006A	

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

EPA 8260B

RunID: MS4_110725A	QC Batch: K11VS196	PrepDate: 7/21/2011	Analyst: SLL		
cis-1,3-Dichloropropene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Di-isopropyl ether	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Dibromochloromethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Dibromomethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Dichlorodifluoromethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Ethyl Tert-butyl ether	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Ethylbenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Hexachlorobutadiene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Isopropylbenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
m,p-Xylene	ND	17	µg/Kg	1	7/25/2011 12:10 PM
Methylene chloride	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
MTBE	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
n-Butylbenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
n-Propylbenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Naphthalene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
o-Xylene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
sec-Butylbenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Styrene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Tert-amyl methyl ether	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Tert-Butanol	ND	170	µg/Kg	1	7/25/2011 12:10 PM
tert-Butylbenzene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Tetrachloroethene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Toluene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
trans-1,2-Dichloroethene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Trichloroethene	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Trichlorofluoromethane	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Vinyl chloride	ND	8.6	µg/Kg	1	7/25/2011 12:10 PM
Surr: 1,2-Dichloroethane-d4	128	65-141	%REC	1	7/25/2011 12:10 PM
Surr: 4-Bromofluorobenzene	92.0	57-134	%REC	1	7/25/2011 12:10 PM
Surr: Dibromofluoromethane	110	70-128	%REC	1	7/25/2011 12:10 PM
Surr: Toluene-d8	97.1	72-123	%REC	1	7/25/2011 12:10 PM

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



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-45'
Lab Order: 119093	Collection Date: 7/21/2011 12:00:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119093-006D	

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

EPA 8015B(M)

RunID: GC2_110726A	QC Batch: E11VS274	PrepDate: 7/21/2011	Analyst: TP		
GRO	ND	0.88	mg/Kg	1	7/26/2011 01:25 PM
Surr: Bromofluorobenzene (FID)	112	51-161	%REC	1	7/26/2011 01:25 PM

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



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-45'
Lab Order: 119093	Collection Date: 7/21/2011 12:00:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119093-006G	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110725A	QC Batch: 74513			PrepDate: 7/25/2011		Analyst: CBR
DRO	ND	10		mg/Kg	1	7/25/2011 05:18 PM
ORO	ND	10		mg/Kg	1	7/25/2011 05:18 PM
Surr: p-Terphenyl	83.4	63-152		%REC	1	7/25/2011 05:18 PM

Qualifiers:

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



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-65'
Lab Order: 119093	Collection Date: 7/21/2011 1:30:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119093-010A	

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

EPA 8260B

RunID: MS4_110725A	QC Batch: K11VS196	PrepDate: 7/21/2011	Analyst: SLL
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1,1,1,2-Tetrachloroethane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,1,1-Trichloroethane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,1,2,2-Tetrachloroethane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,1,2-Trichloroethane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,1-Dichloroethane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,1-Dichloroethene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,1-Dichloropropene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,2,3-Trichlorobenzene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,2,3-Trichloropropane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,2,4-Trichlorobenzene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,2,4-Trimethylbenzene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,2-Dibromo-3-chloropropane	ND	13		µg/Kg	1	7/25/2011 12:28 PM
1,2-Dibromoethane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,2-Dichlorobenzene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,2-Dichloroethane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,2-Dichloropropane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,3,5-Trimethylbenzene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,3-Dichlorobenzene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,3-Dichloropropane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
1,4-Dichlorobenzene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
2,2-Dichloropropane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
2-Chlorotoluene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
4-Chlorotoluene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
4-Isopropyltoluene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
Benzene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
Bromobenzene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
Bromodichloromethane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
Bromoform	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
Bromomethane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
Carbon tetrachloride	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
Chlorobenzene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
Chloroethane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
Chloroform	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
Chloromethane	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM
cis-1,2-Dichloroethene	ND	6.6		µg/Kg	1	7/25/2011 12:28 PM

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



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-65'
Lab Order: 119093	Collection Date: 7/21/2011 1:30:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119093-010A	

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

EPA 8260B

RunID: MS4_110725A	QC Batch: K11VS196	PrepDate: 7/21/2011	Analyst: SLL		
cis-1,3-Dichloropropene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Di-isopropyl ether	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Dibromochloromethane	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Dibromomethane	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Dichlorodifluoromethane	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Ethyl Tert-butyl ether	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Ethylbenzene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Hexachlorobutadiene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Isopropylbenzene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
m,p-Xylene	ND	13	µg/Kg	1	7/25/2011 12:28 PM
Methylene chloride	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
MTBE	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
n-Butylbenzene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
n-Propylbenzene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Naphthalene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
o-Xylene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
sec-Butylbenzene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Styrene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Tert-amyl methyl ether	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Tert-Butanol	ND	130	µg/Kg	1	7/25/2011 12:28 PM
tert-Butylbenzene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Tetrachloroethene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Toluene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
trans-1,2-Dichloroethene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Trichloroethene	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Trichlorofluoromethane	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Vinyl chloride	ND	6.6	µg/Kg	1	7/25/2011 12:28 PM
Surr: 1,2-Dichloroethane-d4	134	65-141	%REC	1	7/25/2011 12:28 PM
Surr: 4-Bromofluorobenzene	90.8	57-134	%REC	1	7/25/2011 12:28 PM
Surr: Dibromofluoromethane	114	70-128	%REC	1	7/25/2011 12:28 PM
Surr: Toluene-d8	97.8	72-123	%REC	1	7/25/2011 12:28 PM

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



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-121-65'
Lab Order:	119093	Collection Date:	7/21/2011 1:30:00 PM
Project:	Metro Westside Extention, 4953101561	Matrix:	SOIL
Lab ID:	119093-010D		

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

EPA 8015B(M)

RunID: GC2_110726A	QC Batch: E11VS274	PrepDate: 7/21/2011	Analyst: TP		
GRO	ND	0.79	mg/Kg	1	7/26/2011 01:40 PM
Surr: Bromofluorobenzene (FID)	94.8	51-161	%REC	1	7/26/2011 01:40 PM

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



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-121-65'
Lab Order:	119093	Collection Date:	7/21/2011 1:30:00 PM
Project:	Metro Westside Extention, 4953101561	Matrix:	SOIL
Lab ID:	119093-010G		

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_110725A	QC Batch: 74513				PrepDate: 7/25/2011	Analyst: CBR
DRO	ND	10		mg/Kg	1	7/25/2011 05:29 PM
ORO	ND	10		mg/Kg	1	7/25/2011 05:29 PM
Surr: p-Terphenyl	82.5	63-152		%REC	1	7/25/2011 05:29 PM

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



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-GW
Lab Order: 119093	Collection Date: 7/21/2011 1:45:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: GROUNDWATER
Lab ID: 119093-011A	

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

EPA 8260B

RunID: MS11_110725A	QC Batch: A11VW125	PrepDate:	Analyst: BD		
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,1,1-Trichloroethane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,1,2-Trichloroethane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,1-Dichloroethane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,1-Dichloroethene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,1-Dichloropropene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,2,3-Trichlorobenzene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,2,3-Trichloropropane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,2-Dibromo-3-chloropropane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,2-Dibromoethane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,2-Dichlorobenzene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,2-Dichloroethane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,2-Dichloropropane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,3-Dichlorobenzene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,3-Dichloropropane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
1,4-Dichlorobenzene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
2,2-Dichloropropane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
2-Chlorotoluene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
4-Chlorotoluene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
4-Isopropyltoluene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
Benzene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
Bromobenzene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
Bromodichloromethane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
Bromoform	ND	0.50	µg/L	1	7/25/2011 02:12 PM
Bromomethane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
Carbon tetrachloride	ND	0.50	µg/L	1	7/25/2011 02:12 PM
Chlorobenzene	ND	0.50	µg/L	1	7/25/2011 02:12 PM
Chloroethane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
Chloroform	ND	0.50	µg/L	1	7/25/2011 02:12 PM
Chloromethane	ND	0.50	µg/L	1	7/25/2011 02:12 PM
cis-1,2-Dichloroethene	ND	0.50	µg/L	1	7/25/2011 02:12 PM

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



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-GW
Lab Order: 119093	Collection Date: 7/21/2011 1:45:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: GROUNDWATER
Lab ID: 119093-011A	

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

EPA 8260B

RunID: MS11_110725A	QC Batch: A11VW125	PrepDate:	Analyst: BD
cis-1,3-Dichloropropene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Di-isopropyl ether	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Dibromochloromethane	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Dibromomethane	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Dichlorodifluoromethane	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Ethyl tert-butyl ether	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Ethylbenzene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Hexachlorobutadiene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Isopropylbenzene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
m,p-Xylene	ND	1.0	µg/L 1 7/25/2011 02:12 PM
Methylene chloride	ND	1.0	µg/L 1 7/25/2011 02:12 PM
MTBE	ND	0.50	µg/L 1 7/25/2011 02:12 PM
n-Butylbenzene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
n-Propylbenzene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Naphthalene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
o-Xylene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
sec-Butylbenzene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Styrene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Tert-amyl methyl ether	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Tert-Butanol	ND	10	µg/L 1 7/25/2011 02:12 PM
tert-Butylbenzene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Tetrachloroethene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Toluene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
trans-1,2-Dichloroethene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Trichloroethene	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Trichlorofluoromethane	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Vinyl chloride	ND	0.50	µg/L 1 7/25/2011 02:12 PM
Surr: 1,2-Dichloroethane-d4	88.0	70-130	%REC 1 7/25/2011 02:12 PM
Surr: 4-Bromofluorobenzene	99.9	70-130	%REC 1 7/25/2011 02:12 PM
Surr: Dibromofluoromethane	99.0	70-130	%REC 1 7/25/2011 02:12 PM
Surr: Toluene-d8	99.4	70-130	%REC 1 7/25/2011 02:12 PM

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



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-GW
Lab Order: 119093	Collection Date: 7/21/2011 1:45:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: GROUNDWATER
Lab ID: 119093-011B	

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

EPA 8015B(M)

RunID: GC19_110725A	QC Batch: M11VW144	PrepDate:	Analyst: BB		
GRO	ND	0.20	mg/L	1	7/25/2011 02:06 PM
Surr: Bromofluorobenzene (FID)	90.4	70-130	%REC	1	7/25/2011 02:06 PM

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



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-121-GW
Lab Order: 119093	Collection Date: 7/21/2011 1:45:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: GROUNDWATER
Lab ID: 119093-011C	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3510C		EPA 8015B(M)			
RunID: GC16_110726B	QC Batch: 74531				PrepDate: 7/26/2011	Analyst: CBR
DRO	ND	0.20		mg/L	1	7/26/2011 11:56 AM
ORO	ND	0.20		mg/L	1	7/26/2011 11:56 AM
Surr: p-Terphenyl	58.7	36-126		%REC	1	7/26/2011 11:56 AM

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



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CLIENT: Mactec
Work Order: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

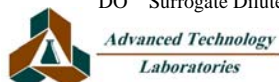
TestCode: 6010_S

Sample ID: MB-74509	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135302						
Client ID: PBS	Batch ID: 74509	TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/25/2011	SeqNo: 2215175						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	2.0									
Arsenic	ND	1.0									
Barium	ND	1.0									
Beryllium	ND	1.0									
Cadmium	ND	1.0									
Chromium	ND	1.0									
Cobalt	ND	1.0									
Copper	ND	2.0									
Lead	ND	1.0									
Molybdenum	ND	1.0									
Nickel	ND	1.0									
Selenium	ND	1.0									
Silver	ND	1.0									
Thallium	ND	1.0									
Vanadium	ND	1.0									
Zinc	0.461	1.0									

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

Qualifiers:

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



CLIENT: Mactec
Work Order: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

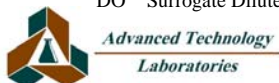
TestCode: 6010_S

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

Sample ID: 118919-007A-MS	SampType: MS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135302						
Client ID: ZZZZZZ	Batch ID: 74509	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 7/25/2011	SeqNo: 2215178						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	103.766	2.0	125.0	0	83.0	32	105				
Arsenic	98.353	1.0	125.0	0	78.7	49	106				
Barium	228.814	1.0	125.0	115.3	90.8	31	133				
Beryllium	111.642	1.0	125.0	0	89.3	56	106				
Cadmium	108.129	1.0	125.0	0.3535	86.2	51	103				
Chromium	114.288	1.0	125.0	5.679	86.9	45	114				
Cobalt	121.428	1.0	125.0	7.258	91.3	52	106				
Copper	122.531	2.0	125.0	0	98.0	54	125				
Lead	111.082	1.0	125.0	2.664	86.7	34	126				
Molybdenum	114.141	1.0	125.0	0	91.3	54	106				
Nickel	109.725	1.0	125.0	0.8731	87.1	45	111				
Selenium	104.222	1.0	125.0	0	83.4	47	104				
Silver	116.600	1.0	125.0	0	93.3	56	112				
Thallium	81.607	1.0	125.0	0	65.3	46	101				
Vanadium	162.211	1.0	125.0	45.78	93.1	54	114				
Zinc	153.966	1.0	125.0	49.83	83.3	28	125				

Qualifiers:

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



CLIENT: Mactec
Work Order: 119093
Project: Metro Westside Extention, 4953101561

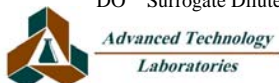
ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

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

Qualifiers:

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



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

CLIENT: Mactec
Work Order: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

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

Mercury ND 0.10

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

Mercury 0.878 0.10 0.8300 0 106 80 120

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

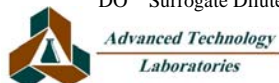
Mercury 0.823 0.10 0.8300 0 99.1 70 130

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

Mercury 0.822 0.10 0.8300 0 99.0 70 130 0.8229 0.129 20

Qualifiers:

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



CLIENT: Mactec
Work Order: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

Sample ID: MB-74513	SampType: MBLK	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135317						
Client ID: PBS	Batch ID: 74513	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/25/2011	SeqNo: 2215380						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	ND	10									
ORO	ND	10									
Surr: p-Terphenyl	71.990		80.00		90.0	63	152				

Sample ID: LCS-74513	SampType: LCS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135317						
Client ID: LCSS	Batch ID: 74513	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/25/2011	SeqNo: 2215381						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	938.900	10	1000	0	93.9	76	139				
Surr: p-Terphenyl	74.630		80.00		93.3	63	152				

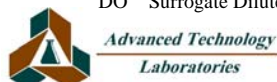
Sample ID: 119065-001GMS	SampType: MS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135317						
Client ID: ZZZZZ	Batch ID: 74513	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/25/2011	SeqNo: 2215382						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	832.320	10	1000	0	83.2	60	158				
Surr: p-Terphenyl	65.260		80.00		81.6	63	152				

Sample ID: 119065-001GMSD	SampType: MSD	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/25/2011	RunNo: 135317						
Client ID: ZZZZZ	Batch ID: 74513	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/25/2011	SeqNo: 2215383						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	840.690	10	1000	0	84.1	60	158	832.3	1.00	20	
Surr: p-Terphenyl	64.110		80.00		80.1	63	152		0	0	

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

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| 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: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

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

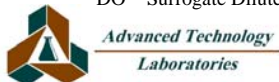
DRO	951.900	10	1000	0	95.2	60	158				
Surr: p-Terphenyl	74.710		80.00		93.4	63	152				

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

DRO	956.600	10	1000	0	95.7	60	158	951.9	0.493	20	
Surr: p-Terphenyl	74.370		80.00		93.0	63	152		0	0	

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| 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: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

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

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

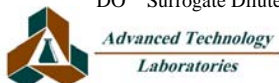
Sample ID: E110726MB1MSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135360						
Client ID: ZZZZZZ	Batch ID: E11VS274	TestNo: EPA 8015B(M)	Analysis Date: 7/26/2011	SeqNo: 2216094							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit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

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

Sample ID: 119099-001AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135360						
Client ID: ZZZZZZ	Batch ID: E11VS274	TestNo: EPA 8015B(M)	Analysis Date: 7/26/2011	SeqNo: 2216106							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.396	1.0	5.000	0.3600	80.7	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: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

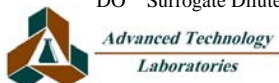
TestCode: 8015_S_G 5035P

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

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

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in 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: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_DM

Sample ID: MB-74531	SampType: MBLK	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 7/26/2011	RunNo: 135340						
Client ID: PBW	Batch ID: 74531	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 7/26/2011	SeqNo: 2215981						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	ND	0.20									
ORO	ND	0.20									
Surr: p-Terphenyl	0.043		0.08000		53.9	36	126				

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

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

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

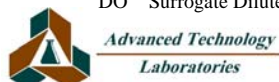
DRO	0.593	0.20	1.000	0	59.3	52	128				
Surr: p-Terphenyl	0.052		0.08000		65.6	36	126				

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

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

Qualifiers:

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



CLIENT: Mactec
Work Order: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_G PRES

Sample ID: M110725LCS2		SampType: LCS		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 135318		
Client ID: LCSW		Batch ID: M11VW144		TestNo: EPA 8015B(M)		Analysis Date: 7/25/2011		SeqNo: 2215493				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	0.929	0.20	1.000	0	92.9	70	130					
Surr: Bromofluorobenzene (FID)	91.503		100.0		91.5	70	130					

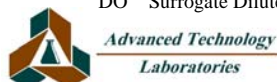
Sample ID: M110725MB1MS		SampType: MS		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 135318		
Client ID: ZZZZZZ		Batch ID: M11VW144		TestNo: EPA 8015B(M)		Analysis Date: 7/25/2011		SeqNo: 2215495				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	1.069	0.20	1.000	0	107	70	130					
Surr: Bromofluorobenzene (FID)	93.684		100.0		93.7	70	130					

Sample ID: M110725MB1MSD		SampType: MSD		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 135318		
Client ID: ZZZZZZ		Batch ID: M11VW144		TestNo: EPA 8015B(M)		Analysis Date: 7/25/2011		SeqNo: 2215496				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	1.088	0.20	1.000	0	109	70	130	1.069	1.76	20		
Surr: Bromofluorobenzene (FID)	93.078		100.0		93.1	70	130		0	0		

Sample ID: M110725MB1		SampType: MBLK		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 135318		
Client ID: PBW		Batch ID: M11VW144		TestNo: EPA 8015B(M)		Analysis Date: 7/25/2011		SeqNo: 2215497				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	ND	0.20										
Surr: Bromofluorobenzene (FID)	89.134		100.0		89.1	70	130					

Qualifiers:

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



CLIENT: Mactec
Work Order: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

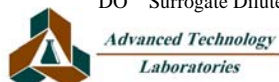
Sample ID: K110725LCS1		SampType: LCS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135313	
Client ID: LCSS		Batch ID: K11VS196		TestNo: EPA 8260B		Analysis Date: 7/25/2011				SeqNo: 2216476	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	46.080	5.0	50.00	0	92.2	70	130				
Benzene	93.170	5.0	100.0	0	93.2	70	130				
Chlorobenzene	49.430	5.0	50.00	0	98.9	70	130				
MTBE	58.120	5.0	50.00	0	116	70	130				
Toluene	95.480	5.0	100.0	0	95.5	70	130				
Trichloroethene	48.780	5.0	50.00	0	97.6	70	130				
Surr: 1,2-Dichloroethane-d4	54.960		50.00		110	65	141				
Surr: 4-Bromofluorobenzene	45.890		50.00		91.8	57	134				
Surr: Dibromofluoromethane	51.140		50.00		102	70	128				
Surr: Toluene-d8	47.800		50.00		95.6	72	123				

Sample ID: K110725MB1MS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135313	
Client ID: ZZZZZ		Batch ID: K11VS196		TestNo: EPA 8260B		Analysis Date: 7/25/2011				SeqNo: 2216477	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	49.370	5.0	50.00	0	98.7	70	130				
Benzene	98.430	5.0	100.0	0	98.4	70	130				
Chlorobenzene	50.870	5.0	50.00	0	102	70	130				
MTBE	60.900	5.0	50.00	0	122	70	130				
Toluene	100.180	5.0	100.0	0	100	70	130				
Trichloroethene	50.620	5.0	50.00	0	101	70	130				
Surr: 1,2-Dichloroethane-d4	56.100		50.00		112	65	141				
Surr: 4-Bromofluorobenzene	45.120		50.00		90.2	57	134				
Surr: Dibromofluoromethane	52.580		50.00		105	70	128				
Surr: Toluene-d8	48.800		50.00		97.6	72	123				

Sample ID: K110725MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135313	
Client ID: ZZZZZ		Batch ID: K11VS196		TestNo: EPA 8260B		Analysis Date: 7/25/2011				SeqNo: 2216478	
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: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

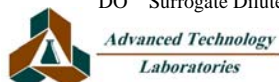
TestCode: 8260_S_5035

Sample ID: K110725MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135313	
Client ID: ZZZZZZ		Batch ID: K11VS196		TestNo: EPA 8260B		Analysis Date: 7/25/2011				SeqNo: 2216478	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	49.750	5.0	50.00	0	99.5	70	130	49.37	0.767	20	
Benzene	99.990	5.0	100.0	0	100	70	130	98.43	1.57	20	
Chlorobenzene	51.080	5.0	50.00	0	102	70	130	50.87	0.412	20	
MTBE	64.250	5.0	50.00	0	128	70	130	60.90	5.35	20	
Toluene	101.720	5.0	100.0	0	102	70	130	100.2	1.53	20	
Trichloroethene	50.580	5.0	50.00	0	101	70	130	50.62	0.0791	20	
Surr: 1,2-Dichloroethane-d4	55.010		50.00		110	65	141		0	0	
Surr: 4-Bromofluorobenzene	44.630		50.00		89.3	57	134		0	0	
Surr: Dibromofluoromethane	52.240		50.00		104	70	128		0	0	
Surr: Toluene-d8	48.520		50.00		97.0	72	123		0	0	

Sample ID: K110725MB1		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135313	
Client ID: PBS		Batch ID: K11VS196		TestNo: EPA 8260B		Analysis Date: 7/25/2011				SeqNo: 2216479	
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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CLIENT: Mactec
Work Order: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110725MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135313						
Client ID: PBS	Batch ID: K11VS196	TestNo: EPA 8260B		Analysis Date: 7/25/2011	SeqNo: 2216479						
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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*Advanced Technology
Laboratories*

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

CLIENT: Mactec
Work Order: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110725MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135313						
Client ID: PBS	Batch ID: K11VS196	TestNo: EPA 8260B		Analysis Date: 7/25/2011	SeqNo: 2216479						
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	58.380		50.00		117	65	141				
Surr: 4-Bromofluorobenzene	44.580		50.00		89.2	57	134				
Surr: Dibromofluoromethane	53.580		50.00		107	70	128				
Surr: Toluene-d8	47.640		50.00		95.3	72	123				

Qualifiers:

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



*Advanced Technology
Laboratories*

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

CLIENT: Mactec
Work Order: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

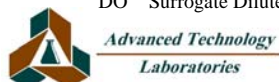
Sample ID: A110725LCS1		SampType: LCS		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135333	
Client ID: LCSW		Batch ID: A11VW125		TestNo: EPA 8260B		Analysis Date: 7/25/2011				SeqNo: 2215676	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene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

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

Sample ID: A110725MB3MSD		SampType: MSD		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135333	
Client ID: ZZZZZ		Batch ID: A11VW125		TestNo: EPA 8260B		Analysis Date: 7/25/2011				SeqNo: 2215678	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

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



CLIENT: Mactec
Work Order: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

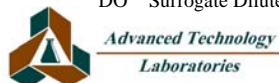
TestCode: 8260_WP_LL

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

Sample ID: A110725MB3		SampType: MBLK		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135333	
Client ID: PBW		Batch ID: A11VW125		TestNo: EPA 8260B		Analysis Date: 7/25/2011				SeqNo: 2215679	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	0.50									
1,1-Dichloropropene	ND	0.50									
1,2,3-Trichlorobenzene	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromo-3-chloropropane	ND	0.50									
1,2-Dibromoethane	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									

Qualifiers:

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



CLIENT: Mactec
Work Order: 119093
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: A110725MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 135333						
Client ID: PBW	Batch ID: A11VW125	TestNo: EPA 8260B		Analysis Date: 7/25/2011	SeqNo: 2215679						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2-Dichloropropane	ND	0.50									
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Dichlorobenzene	ND	0.50									
1,3-Dichloropropane	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
2,2-Dichloropropane	ND	0.50									
2-Chlorotoluene	ND	0.50									
4-Chlorotoluene	ND	0.50									
4-Isopropyltoluene	ND	0.50									
Benzene	ND	0.50									
Bromobenzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Di-isopropyl ether	ND	0.50									
Dibromochloromethane	ND	0.50									
Dibromomethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Ethyl tert-butyl ether	ND	0.50									
Ethylbenzene	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Isopropylbenzene	ND	0.50									
m,p-Xylene	ND	1.0									

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| 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: 119093
Project: Metro Westside Extention, 4953101561

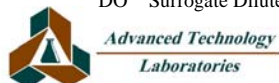
ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: A110725MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 135333						
Client ID: PBW	Batch ID: A11VW125	TestNo: EPA 8260B	Analysis Date: 7/25/2011	SeqNo: 2215679							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	ND	1.0									
MTBE	ND	0.50									
n-Butylbenzene	ND	0.50									
n-Propylbenzene	ND	0.50									
Naphthalene	ND	0.50									
o-Xylene	ND	0.50									
sec-Butylbenzene	ND	0.50									
Styrene	ND	0.50									
Tert-amyl methyl ether	ND	0.50									
Tert-Butanol	ND	10									
tert-Butylbenzene	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	21.700		25.00		86.8	70	130				
Surr: 4-Bromofluorobenzene	25.050		25.00		100	70	130				
Surr: Dibromofluoromethane	24.620		25.00		98.5	70	130				
Surr: Toluene-d8	25.020		25.00		100	70	130				

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| 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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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.: 119115

RE: Metro Westside Extention, 4953101561

Attention: Matt Fraychineaud

Enclosed are the results for sample(s) received on July 25, 2011 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

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

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

Sincerely,

Eddie F. Rodriguez
Laboratory Director

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



CLIENT: Mactec
Project: Metro Westside Extention, 4953101561
Lab Order: 119115

CASE NARRATIVE

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



Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-122-20'
Lab Order: 119115	Collection Date: 7/22/2011 10:25:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119115-003A	

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

EPA 8260B

RunID: MS4_110726A	QC Batch: K11VS197	PrepDate: 7/22/2011	Analyst: SLL
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1,1,1,2-Tetrachloroethane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,1,1-Trichloroethane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,1,2,2-Tetrachloroethane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,1,2-Trichloroethane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,1-Dichloroethane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,1-Dichloroethene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,1-Dichloropropene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,2,3-Trichlorobenzene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,2,3-Trichloropropane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,2,4-Trichlorobenzene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,2,4-Trimethylbenzene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,2-Dibromo-3-chloropropane	ND	21	µg/Kg	1	7/26/2011 02:13 PM
1,2-Dibromoethane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,2-Dichlorobenzene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,2-Dichloroethane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,2-Dichloropropane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,3,5-Trimethylbenzene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,3-Dichlorobenzene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,3-Dichloropropane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
1,4-Dichlorobenzene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
2,2-Dichloropropane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
2-Chlorotoluene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
4-Chlorotoluene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
4-Isopropyltoluene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
Benzene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
Bromobenzene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
Bromodichloromethane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
Bromoform	ND	10	µg/Kg	1	7/26/2011 02:13 PM
Bromomethane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
Carbon tetrachloride	ND	10	µg/Kg	1	7/26/2011 02:13 PM
Chlorobenzene	ND	10	µg/Kg	1	7/26/2011 02:13 PM
Chloroethane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
Chloroform	ND	10	µg/Kg	1	7/26/2011 02:13 PM
Chloromethane	ND	10	µg/Kg	1	7/26/2011 02:13 PM
cis-1,2-Dichloroethene	ND	10	µg/Kg	1	7/26/2011 02:13 PM

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



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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-122-20'
Lab Order: 119115	Collection Date: 7/22/2011 10:25:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119115-003A	

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

EPA 8260B

RunID: MS4_110726A	QC Batch: K11VS197	PrepDate: 7/22/2011	Analyst: SLL
cis-1,3-Dichloropropene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Di-isopropyl ether	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Dibromochloromethane	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Dibromomethane	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Dichlorodifluoromethane	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Ethyl Tert-butyl ether	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Ethylbenzene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Hexachlorobutadiene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Isopropylbenzene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
m,p-Xylene	ND	21	µg/Kg 1 7/26/2011 02:13 PM
Methylene chloride	ND	10	µg/Kg 1 7/26/2011 02:13 PM
MTBE	ND	10	µg/Kg 1 7/26/2011 02:13 PM
n-Butylbenzene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
n-Propylbenzene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Naphthalene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
o-Xylene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
sec-Butylbenzene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Styrene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Tert-amyl methyl ether	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Tert-Butanol	ND	210	µg/Kg 1 7/26/2011 02:13 PM
tert-Butylbenzene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Tetrachloroethene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Toluene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
trans-1,2-Dichloroethene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Trichloroethene	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Trichlorofluoromethane	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Vinyl chloride	ND	10	µg/Kg 1 7/26/2011 02:13 PM
Surr: 1,2-Dichloroethane-d4	139	65-141	%REC 1 7/26/2011 02:13 PM
Surr: 4-Bromofluorobenzene	98.4	57-134	%REC 1 7/26/2011 02:13 PM
Surr: Dibromofluoromethane	123	70-128	%REC 1 7/26/2011 02:13 PM
Surr: Toluene-d8	107	72-123	%REC 1 7/26/2011 02:13 PM

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



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-122-20'
Lab Order: 119115	Collection Date: 7/22/2011 10:25:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119115-003D	

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

EPA 8015B(M)

RunID: GC2_110727A	QC Batch: E11VS276	PrepDate: 7/22/2011	Analyst: TP		
GRO	ND	0.87	mg/Kg	1	7/27/2011 11:50 AM
Surr: Bromofluorobenzene (FID)	125	51-161	%REC	1	7/27/2011 11:50 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: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-122-20'
Lab Order: 119115	Collection Date: 7/22/2011 10:25:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119115-003G	

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

LUFT		EPA 8015B(M)				
RunID: GC16_110726A	QC Batch: 74530				PrepDate: 7/26/2011	Analyst: CBR
DRO	ND	10		mg/Kg	1	7/26/2011 03:02 PM
ORO	ND	10		mg/Kg	1	7/26/2011 03:02 PM
Surr: p-Terphenyl	72.9	63-152		%REC	1	7/26/2011 03:02 PM

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



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec
Lab Order: 119115
Project: Metro Westside Extention, 4953101561
Lab ID: 119115-004A

Client Sample ID: E-122-25'
Collection Date: 7/22/2011 10:33:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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ICP METALS

EPA 3050B

EPA 6010B

RunID:	ICP8_110727H	QC Batch:	74560	PrepDate:	7/27/2011	Analyst:	IL
Antimony	ND	2.0	mg/Kg	1	7/27/2011 04:15 PM		
Arsenic	ND	1.0	mg/Kg	1	7/27/2011 04:15 PM		
Barium	110	1.0	mg/Kg	1	7/27/2011 04:15 PM		
Beryllium	ND	1.0	mg/Kg	1	7/27/2011 04:15 PM		
Cadmium	1.7	1.0	mg/Kg	1	7/27/2011 04:15 PM		
Chromium	24	1.0	mg/Kg	1	7/27/2011 04:15 PM		
Cobalt	9.9	1.0	mg/Kg	1	7/27/2011 04:15 PM		
Copper	12	2.0	mg/Kg	1	7/27/2011 04:15 PM		
Lead	2.6	1.0	mg/Kg	1	7/27/2011 04:15 PM		
Molybdenum	ND	1.0	mg/Kg	1	7/27/2011 04:15 PM		
Nickel	15	1.0	mg/Kg	1	7/27/2011 04:15 PM		
Selenium	ND	1.0	mg/Kg	1	7/27/2011 04:15 PM		
Silver	ND	1.0	mg/Kg	1	7/27/2011 04:15 PM		
Thallium	ND	1.0	mg/Kg	1	7/27/2011 04:15 PM		
Vanadium	29	1.0	mg/Kg	1	7/27/2011 04:15 PM		
Zinc	47	1.0	mg/Kg	1	7/27/2011 04:15 PM		

MERCURY BY COLD VAPOR TECHNIQUE

EPA 7471A

RunID:	AA1_110726D	QC Batch:	74540	PrepDate:	7/26/2011	Analyst:	VV
Mercury	ND	0.10	mg/Kg	1	7/26/2011 04:47 PM		

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



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-122-40'
Lab Order: 119115	Collection Date: 7/22/2011 11:00:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119115-007A	

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

EPA 8260B

RunID: MS4_110726A	QC Batch: K11VS197	PrepDate: 7/22/2011	Analyst: SLL
1,1,1,2-Tetrachloroethane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,1,1-Trichloroethane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,1,2,2-Tetrachloroethane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,1,2-Trichloroethane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,1-Dichloroethane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,1-Dichloroethene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,1-Dichloropropene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,2,3-Trichlorobenzene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,2,3-Trichloropropane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,2,4-Trichlorobenzene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,2,4-Trimethylbenzene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,2-Dibromo-3-chloropropane	ND	7.4	µg/Kg 1 7/26/2011 02:31 PM
1,2-Dibromoethane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,2-Dichlorobenzene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,2-Dichloroethane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,2-Dichloropropane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,3,5-Trimethylbenzene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,3-Dichlorobenzene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,3-Dichloropropane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
1,4-Dichlorobenzene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
2,2-Dichloropropane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
2-Chlorotoluene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
4-Chlorotoluene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
4-Isopropyltoluene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
Benzene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
Bromobenzene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
Bromodichloromethane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
Bromoform	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
Bromomethane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
Carbon tetrachloride	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
Chlorobenzene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
Chloroethane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
Chloroform	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
Chloromethane	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM
cis-1,2-Dichloroethene	ND	3.7	µg/Kg 1 7/26/2011 02:31 PM

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



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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-122-40'
Lab Order:	119115	Collection Date:	7/22/2011 11:00:00 AM
Project:	Metro Westside Extention, 4953101561	Matrix:	SOIL
Lab ID:	119115-007A		

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

EPA 8260B

RunID: MS4_110726A	QC Batch: K11VS197	PrepDate: 7/22/2011	Analyst: SLL		
cis-1,3-Dichloropropene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Di-isopropyl ether	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Dibromochloromethane	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Dibromomethane	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Dichlorodifluoromethane	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Ethyl Tert-butyl ether	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Ethylbenzene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Hexachlorobutadiene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Isopropylbenzene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
m,p-Xylene	ND	7.4	µg/Kg	1	7/26/2011 02:31 PM
Methylene chloride	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
MTBE	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
n-Butylbenzene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
n-Propylbenzene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Naphthalene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
o-Xylene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
sec-Butylbenzene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Styrene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Tert-amyl methyl ether	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Tert-Butanol	ND	74	µg/Kg	1	7/26/2011 02:31 PM
tert-Butylbenzene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Tetrachloroethene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Toluene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
trans-1,2-Dichloroethene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Trichloroethene	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Trichlorofluoromethane	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Vinyl chloride	ND	3.7	µg/Kg	1	7/26/2011 02:31 PM
Surr: 1,2-Dichloroethane-d4	126	65-141	%REC	1	7/26/2011 02:31 PM
Surr: 4-Bromofluorobenzene	89.8	57-134	%REC	1	7/26/2011 02:31 PM
Surr: Dibromofluoromethane	115	70-128	%REC	1	7/26/2011 02:31 PM
Surr: Toluene-d8	98.9	72-123	%REC	1	7/26/2011 02:31 PM

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



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ANALYTICAL RESULTS
Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-122-40'
Lab Order:	119115	Collection Date:	7/22/2011 11:00:00 AM
Project:	Metro Westside Extention, 4953101561	Matrix:	SOIL
Lab ID:	119115-007D		

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

EPA 8015B(M)

RunID: GC2_110727A	QC Batch: E11VS276	PrepDate: 7/22/2011	Analyst: TP		
GRO	ND	0.88	mg/Kg	1	7/27/2011 12:05 PM
Surr: Bromofluorobenzene (FID)	92.4	51-161	%REC	1	7/27/2011 12:05 PM

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



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT:	Mactec	Client Sample ID:	E-122-40'
Lab Order:	119115	Collection Date:	7/22/2011 11:00:00 AM
Project:	Metro Westside Extention, 4953101561	Matrix:	SOIL
Lab ID:	119115-007G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
LUFT			EPA 8015B(M)			
RunID: GC16_110726A	QC Batch: 74530			PrepDate: 7/26/2011		Analyst: CBR
DRO	ND	10		mg/Kg	1	7/26/2011 03:13 PM
ORO	ND	10		mg/Kg	1	7/26/2011 03:13 PM
Surr: p-Terphenyl	77.4	63-152		%REC	1	7/26/2011 03:13 PM

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



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-122-GW
Lab Order: 119115	Collection Date: 7/22/2011 11:30:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: GROUNDWATER
Lab ID: 119115-008A	

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

EPA 8260B

RunID: MS2_110726A	QC Batch: Q11VW138	PrepDate:	Analyst: BD		
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,1,1-Trichloroethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,1,2-Trichloroethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,1-Dichloroethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,1-Dichloroethene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,1-Dichloropropene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,2,3-Trichlorobenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,2,3-Trichloropropane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,2-Dibromo-3-chloropropane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,2-Dibromoethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,2-Dichlorobenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,2-Dichloroethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,2-Dichloropropane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,3-Dichlorobenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,3-Dichloropropane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
1,4-Dichlorobenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
2,2-Dichloropropane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
2-Chlorotoluene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
4-Chlorotoluene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
4-Isopropyltoluene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Benzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Bromobenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Bromodichloromethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Bromoform	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Bromomethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Carbon tetrachloride	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Chlorobenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Chloroethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Chloroform	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Chloromethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
cis-1,2-Dichloroethene	ND	0.50	µg/L	1	7/26/2011 03:18 PM

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



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-122-GW
Lab Order: 119115	Collection Date: 7/22/2011 11:30:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: GROUNDWATER
Lab ID: 119115-008A	

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

EPA 8260B

RunID: MS2_110726A	QC Batch: Q11VW138	PrepDate:	Analyst: BD		
cis-1,3-Dichloropropene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Di-isopropyl ether	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Dibromochloromethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Dibromomethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Dichlorodifluoromethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Ethyl tert-butyl ether	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Ethylbenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Hexachlorobutadiene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Isopropylbenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
m,p-Xylene	ND	1.0	µg/L	1	7/26/2011 03:18 PM
Methylene chloride	ND	1.0	µg/L	1	7/26/2011 03:18 PM
MTBE	ND	0.50	µg/L	1	7/26/2011 03:18 PM
n-Butylbenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
n-Propylbenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Naphthalene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
o-Xylene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
sec-Butylbenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Styrene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Tert-amyl methyl ether	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Tert-Butanol	ND	10	µg/L	1	7/26/2011 03:18 PM
tert-Butylbenzene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Tetrachloroethene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Toluene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
trans-1,2-Dichloroethene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Trichloroethene	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Trichlorofluoromethane	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Vinyl chloride	ND	0.50	µg/L	1	7/26/2011 03:18 PM
Surr: 1,2-Dichloroethane-d4	90.2	70-130	%REC	1	7/26/2011 03:18 PM
Surr: 4-Bromofluorobenzene	94.5	70-130	%REC	1	7/26/2011 03:18 PM
Surr: Dibromofluoromethane	100	70-130	%REC	1	7/26/2011 03:18 PM
Surr: Toluene-d8	91.0	70-130	%REC	1	7/26/2011 03:18 PM

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



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-122-GW
Lab Order: 119115	Collection Date: 7/22/2011 11:30:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: GROUNDWATER
Lab ID: 119115-008B	

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

EPA 8015B(M)

RunID: GC19_110727A	QC Batch: M11VW146	PrepDate:	Analyst: BB		
GRO	ND	0.20	mg/L	1	7/27/2011 01:26 PM
Surr: Bromofluorobenzene (FID)	90.8	70-130	%REC	1	7/27/2011 01:26 PM

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



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-122-GW
Lab Order: 119115	Collection Date: 7/22/2011 11:30:00 AM
Project: Metro Westside Extention, 4953101561	Matrix: GROUNDWATER
Lab ID: 119115-008C	

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

EPA 3510C		EPA 8015B(M)				
RunID: GC16_110728B	QC Batch: 74588				PrepDate: 7/28/2011	Analyst: CBR
DRO	ND	0.20		mg/L	1	7/28/2011 02:21 PM
ORO	ND	0.20		mg/L	1	7/28/2011 02:21 PM
Surr: p-Terphenyl	81.2	36-126		%REC	1	7/28/2011 02:21 PM

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



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ANALYTICAL RESULTS

Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-122-60'
Lab Order: 119115	Collection Date: 7/22/2011 12:25:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119115-011A	

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

EPA 8260B

RunID: MS4_110726A	QC Batch: K11VS197	PrepDate: 7/22/2011	Analyst: SLL
1,1,1,2-Tetrachloroethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,1,1-Trichloroethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,1,2,2-Tetrachloroethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,1,2-Trichloroethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,1-Dichloroethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,1-Dichloroethene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,1-Dichloropropene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,2,3-Trichlorobenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,2,3-Trichloropropane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,2,4-Trichlorobenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,2,4-Trimethylbenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,2-Dibromo-3-chloropropane	ND	8.9	µg/Kg 1 7/26/2011 02:49 PM
1,2-Dibromoethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,2-Dichlorobenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,2-Dichloroethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,2-Dichloropropane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,3,5-Trimethylbenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,3-Dichlorobenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,3-Dichloropropane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
1,4-Dichlorobenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
2,2-Dichloropropane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
2-Chlorotoluene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
4-Chlorotoluene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
4-Isopropyltoluene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Benzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Bromobenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Bromodichloromethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Bromoform	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Bromomethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Carbon tetrachloride	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Chlorobenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Chloroethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Chloroform	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Chloromethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
cis-1,2-Dichloroethene	ND	4.5	µg/Kg 1 7/26/2011 02:49 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: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-122-60'
Lab Order: 119115	Collection Date: 7/22/2011 12:25:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119115-011A	

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

EPA 8260B

RunID: MS4_110726A	QC Batch: K11VS197	PrepDate: 7/22/2011	Analyst: SLL
cis-1,3-Dichloropropene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Di-isopropyl ether	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Dibromochloromethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Dibromomethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Dichlorodifluoromethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Ethyl Tert-butyl ether	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Ethylbenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Hexachlorobutadiene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Isopropylbenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
m,p-Xylene	ND	8.9	µg/Kg 1 7/26/2011 02:49 PM
Methylene chloride	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
MTBE	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
n-Butylbenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
n-Propylbenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Naphthalene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
o-Xylene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
sec-Butylbenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Styrene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Tert-amyl methyl ether	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Tert-Butanol	ND	89	µg/Kg 1 7/26/2011 02:49 PM
tert-Butylbenzene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Tetrachloroethene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Toluene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
trans-1,2-Dichloroethene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Trichloroethene	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Trichlorofluoromethane	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Vinyl chloride	ND	4.5	µg/Kg 1 7/26/2011 02:49 PM
Surr: 1,2-Dichloroethane-d4	134	65-141	%REC 1 7/26/2011 02:49 PM
Surr: 4-Bromofluorobenzene	90.6	57-134	%REC 1 7/26/2011 02:49 PM
Surr: Dibromofluoromethane	117	70-128	%REC 1 7/26/2011 02:49 PM
Surr: Toluene-d8	98.1	72-123	%REC 1 7/26/2011 02:49 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: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-122-60'
Lab Order: 119115	Collection Date: 7/22/2011 12:25:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119115-011D	

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

EPA 8015B(M)

RunID: GC2_110727A	QC Batch: E11VS276	PrepDate: 7/22/2011	Analyst: TP		
GRO	ND	0.93	mg/Kg	1	7/27/2011 12:21 PM
Surr: Bromofluorobenzene (FID)	95.0	51-161	%REC	1	7/27/2011 12:21 PM

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



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ANALYTICAL RESULTS
 Print Date: 29-Jul-11

CLIENT: Mactec	Client Sample ID: E-122-60'
Lab Order: 119115	Collection Date: 7/22/2011 12:25:00 PM
Project: Metro Westside Extention, 4953101561	Matrix: SOIL
Lab ID: 119115-011G	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
LUFT			EPA 8015B(M)			
RunID: GC16_110726A	QC Batch: 74530				PrepDate: 7/26/2011	Analyst: CBR
DRO	ND	10		mg/Kg	1	7/26/2011 03:23 PM
ORO	ND	10		mg/Kg	1	7/26/2011 03:23 PM
Surr: p-Terphenyl	84.2	63-152		%REC	1	7/26/2011 03:23 PM

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



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CLIENT: Mactec
Work Order: 119115
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

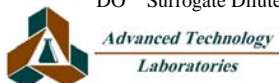
TestCode: 6010_S

Sample ID: MB-74560	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 7/27/2011	RunNo: 135351						
Client ID: PBS	Batch ID: 74560	TestNo: EPA 6010B EPA 3050B		Analysis Date: 7/27/2011	SeqNo: 2216357						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.243	2.0									
Arsenic	ND	1.0									
Barium	ND	1.0									
Beryllium	ND	1.0									
Cadmium	ND	1.0									
Chromium	ND	1.0									
Cobalt	ND	1.0									
Copper	ND	2.0									
Lead	ND	1.0									
Molybdenum	ND	1.0									
Nickel	ND	1.0									
Selenium	ND	1.0									
Silver	ND	1.0									
Thallium	ND	1.0									
Vanadium	ND	1.0									
Zinc	ND	1.0									

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

Qualifiers:

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



CLIENT: Mactec
Work Order: 119115
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

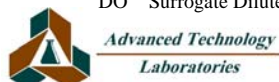
TestCode: 6010_S

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

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

Qualifiers:

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



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

CLIENT: Mactec
Work Order: 119115
Project: Metro Westside Extention, 4953101561

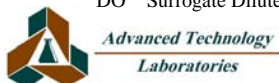
ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

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

Qualifiers:

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



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

CLIENT: Mactec
Work Order: 119115
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

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

Mercury ND 0.10

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

Mercury 0.763 0.10 0.8300 0 91.9 80 120

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

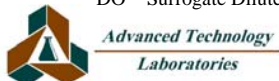
Mercury 0.779 0.10 0.8300 0.01089 92.6 70 130

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

Mercury 0.771 0.10 0.8300 0.01089 91.5 70 130 0.7795 1.15 20

Qualifiers:

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



CLIENT: Mactec
Work Order: 119115
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

Sample ID: MB-74530	SampType: MBLK	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 7/26/2011	RunNo: 135324						
Client ID: PBS	Batch ID: 74530	TestNo: EPA 8015B(M LUFT		Analysis Date: 7/26/2011	SeqNo: 2215558						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	ND	10									
ORO	ND	10									
Surr: p-Terphenyl	68.870		80.00		86.1	63	152				

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

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

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

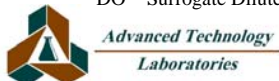
DRO	914.240	10	1000	19.31	89.5	60	158				
Surr: p-Terphenyl	69.850		80.00		87.3	63	152				

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

DRO	884.570	10	1000	19.31	86.5	60	158	914.2	3.30	20	
Surr: p-Terphenyl	84.270		80.00		105	63	152		0	0	

Qualifiers:

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



CLIENT: Mactec
Work Order: 119115
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

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

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

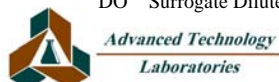
Sample ID: E110727MB1MSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135388						
Client ID: ZZZZZZ	Batch ID: E11VS276	TestNo: EPA 8015B(M)	Analysis Date: 7/27/2011	SeqNo: 2216738							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit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

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

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

Qualifiers:

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



CLIENT: Mactec
Work Order: 119115
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

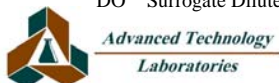
TestCode: 8015_S_G 5035P

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

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

Qualifiers:

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



CLIENT: Mactec
Work Order: 119115
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_DM

Sample ID: MB-74588	SampType: MBLK	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 7/28/2011	RunNo: 135420						
Client ID: PBW	Batch ID: 74588	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 7/28/2011	SeqNo: 2217044						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	ND	0.20									
ORO	ND	0.20									
Surr: p-Terphenyl	0.056		0.08000		69.6	36	126				

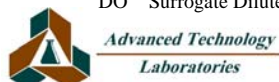
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Client ID: LCSW	Batch ID: 74588	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 7/28/2011	SeqNo: 2217045						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	0.671	0.20	1.000	0	67.1	52	128				
Surr: p-Terphenyl	0.057		0.08000		71.0	36	126				

Sample ID: MB-74588MS	SampType: MS	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 7/28/2011	RunNo: 135420						
Client ID: ZZZZZ	Batch ID: 74588	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 7/28/2011	SeqNo: 2217046						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	0.671	0.20	1.000	0	67.1	52	128				
Surr: p-Terphenyl	0.057		0.08000		71.6	36	126				

Sample ID: MB-74588MSD	SampType: MSD	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 7/28/2011	RunNo: 135420						
Client ID: ZZZZZ	Batch ID: 74588	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 7/28/2011	SeqNo: 2217092						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	0.691	0.20	1.000	0	69.1	52	128	0.6706	2.97	20	
Surr: p-Terphenyl	0.060		0.08000		74.9	36	126		0	0	

Qualifiers:

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



CLIENT: Mactec
Work Order: 119115
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_G PRES

Sample ID: M110727LCS2		SampType: LCS		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 135391		
Client ID: LCSW		Batch ID: M11VW146		TestNo: EPA 8015B(M)		Analysis Date: 7/27/2011		SeqNo: 2216639				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	1.090	0.20	1.000	0	109	70	130					
Surr: Bromofluorobenzene (FID)	91.257		100.0		91.3	70	130					

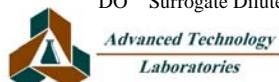
Sample ID: M110727MB1MS		SampType: MS		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 135391		
Client ID: ZZZZZZ		Batch ID: M11VW146		TestNo: EPA 8015B(M)		Analysis Date: 7/27/2011		SeqNo: 2216641				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	1.044	0.20	1.000	0	104	70	130					
Surr: Bromofluorobenzene (FID)	92.175		100.0		92.2	70	130					

Sample ID: M110727MB1MSD		SampType: MSD		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 135391		
Client ID: ZZZZZZ		Batch ID: M11VW146		TestNo: EPA 8015B(M)		Analysis Date: 7/27/2011		SeqNo: 2216642				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	1.079	0.20	1.000	0	108	70	130	1.044	3.30	20		
Surr: Bromofluorobenzene (FID)	92.875		100.0		92.9	70	130		0	0		

Sample ID: M110727MB1		SampType: MBLK		TestCode: 8015_W_G P		Units: mg/L		Prep Date:		RunNo: 135391		
Client ID: PBW		Batch ID: M11VW146		TestNo: EPA 8015B(M)		Analysis Date: 7/27/2011		SeqNo: 2216643				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
GRO	ND	0.20										
Surr: Bromofluorobenzene (FID)	89.259		100.0		89.3	70	130					

Qualifiers:

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



CLIENT: Mactec
Work Order: 119115
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

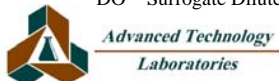
Sample ID: K110726LCS1		SampType: LCS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135326	
Client ID: LCSS		Batch ID: K11VS197		TestNo: EPA 8260B		Analysis Date: 7/26/2011				SeqNo: 2216694	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	52.570	5.0	50.00	0	105	70	130				
Benzene	104.580	5.0	100.0	0	105	70	130				
Chlorobenzene	53.490	5.0	50.00	0	107	70	130				
MTBE	62.180	5.0	50.00	0	124	70	130				
Toluene	103.920	5.0	100.0	0	104	70	130				
Trichloroethene	52.730	5.0	50.00	0	105	70	130				
Surr: 1,2-Dichloroethane-d4	53.260		50.00		107	65	141				
Surr: 4-Bromofluorobenzene	45.560		50.00		91.1	57	134				
Surr: Dibromofluoromethane	52.010		50.00		104	70	128				
Surr: Toluene-d8	48.320		50.00		96.6	72	123				

Sample ID: K110726MB1MS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135326	
Client ID: ZZZZZ		Batch ID: K11VS197		TestNo: EPA 8260B		Analysis Date: 7/26/2011				SeqNo: 2216695	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	52.830	5.0	50.00	0	106	70	130				
Benzene	104.920	5.0	100.0	0	105	70	130				
Chlorobenzene	53.550	5.0	50.00	0	107	70	130				
MTBE	62.930	5.0	50.00	0	126	70	130				
Toluene	104.890	5.0	100.0	0	105	70	130				
Trichloroethene	53.990	5.0	50.00	0	108	70	130				
Surr: 1,2-Dichloroethane-d4	53.180		50.00		106	65	141				
Surr: 4-Bromofluorobenzene	46.300		50.00		92.6	57	134				
Surr: Dibromofluoromethane	52.550		50.00		105	70	128				
Surr: Toluene-d8	48.780		50.00		97.6	72	123				

Sample ID: K110726MB1		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135326	
Client ID: PBS		Batch ID: K11VS197		TestNo: EPA 8260B		Analysis Date: 7/26/2011				SeqNo: 2216696	
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: 119115
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

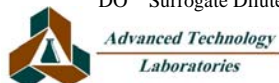
TestCode: 8260_S_5035

Sample ID: K110726MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135326
Client ID: PBS	Batch ID: K11VS197	TestNo: EPA 8260B		Analysis Date: 7/26/2011	SeqNo: 2216696

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

Qualifiers:

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



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CLIENT: Mactec
Work Order: 119115
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110726MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135326						
Client ID: PBS	Batch ID: K11VS197	TestNo: EPA 8260B		Analysis Date: 7/26/2011	SeqNo: 2216696						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chlorobenzene	ND	5.0									
Chloroethane	ND	5.0									
Chloroform	ND	5.0									
Chloromethane	ND	5.0									
cis-1,2-Dichloroethene	ND	5.0									
cis-1,3-Dichloropropene	ND	5.0									
Di-isopropyl ether	ND	5.0									
Dibromochloromethane	ND	5.0									
Dibromomethane	ND	5.0									
Dichlorodifluoromethane	ND	5.0									
Ethyl Tert-butyl ether	ND	5.0									
Ethylbenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Isopropylbenzene	ND	5.0									
m,p-Xylene	ND	10									
Methylene chloride	ND	5.0									
MTBE	ND	5.0									
n-Butylbenzene	ND	5.0									
n-Propylbenzene	ND	5.0									
Naphthalene	ND	5.0									
o-Xylene	ND	5.0									
sec-Butylbenzene	ND	5.0									
Styrene	ND	5.0									
Tert-amyl methyl ether	ND	5.0									
Tert-Butanol	ND	100									
tert-Butylbenzene	ND	5.0									
Tetrachloroethene	ND	5.0									
Toluene	ND	5.0									
trans-1,2-Dichloroethene	ND	5.0									
Trichloroethene	ND	5.0									

Qualifiers:

- | | | |
|---|--|--|
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CLIENT: Mactec
Work Order: 119115
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

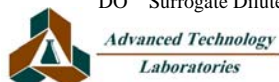
TestCode: 8260_S_5035

Sample ID: K110726MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135326						
Client ID: PBS	Batch ID: K11VS197	TestNo: EPA 8260B	Analysis Date: 7/26/2011	SeqNo: 2216696							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichlorofluoromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Surr: 1,2-Dichloroethane-d4	55.620		50.00		111	65	141				
Surr: 4-Bromofluorobenzene	44.990		50.00		90.0	57	134				
Surr: Dibromofluoromethane	54.100		50.00		108	70	128				
Surr: Toluene-d8	50.170		50.00		100	72	123				

Sample ID: K110726MB1MSD	SampType: MSD	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	RunNo: 135326						
Client ID: ZZZZZZ	Batch ID: K11VS197	TestNo: EPA 8260B	Analysis Date: 7/26/2011	SeqNo: 2216697							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	54.020	5.0	50.00	0	108	70	130	52.83	2.23	20	
Benzene	104.570	5.0	100.0	0	105	70	130	104.9	0.334	20	
Chlorobenzene	53.240	5.0	50.00	0	106	70	130	53.55	0.581	20	
MTBE	59.770	5.0	50.00	0	120	70	130	62.93	5.15	20	
Toluene	104.160	5.0	100.0	0	104	70	130	104.9	0.698	20	
Trichloroethene	53.780	5.0	50.00	0	108	70	130	53.99	0.390	20	
Surr: 1,2-Dichloroethane-d4	53.720		50.00		107	65	141		0	0	
Surr: 4-Bromofluorobenzene	44.130		50.00		88.3	57	134		0	0	
Surr: Dibromofluoromethane	51.610		50.00		103	70	128		0	0	
Surr: Toluene-d8	48.390		50.00		96.8	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: 119115
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

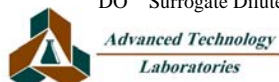
Sample ID: Q110726CS1		SampType: LCS		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135339	
Client ID: LCSW		Batch ID: Q11VW138		TestNo: EPA 8260B		Analysis Date: 7/26/2011				SeqNo: 2215768	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.920	0.50	20.00	0	94.6	70	130				
Benzene	38.610	0.50	40.00	0	96.5	70	130				
Chlorobenzene	20.250	0.50	20.00	0	101	70	130				
MTBE	22.280	0.50	20.00	0	111	70	130				
Toluene	40.860	0.50	40.00	0	102	70	130				
Trichloroethene	20.300	0.50	20.00	0	102	70	130				
Surr: 1,2-Dichloroethane-d4	20.760		25.00		83.0	70	130				
Surr: 4-Bromofluorobenzene	24.620		25.00		98.5	70	130				
Surr: Dibromofluoromethane	23.200		25.00		92.8	70	130				
Surr: Toluene-d8	22.870		25.00		91.5	70	130				

Sample ID: Q110726MB3MS		SampType: MS		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135339	
Client ID: ZZZZZ		Batch ID: Q11VW138		TestNo: EPA 8260B		Analysis Date: 7/26/2011				SeqNo: 2215769	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.000	0.50	20.00	0	95.0	70	130				
Benzene	39.230	0.50	40.00	0	98.1	70	130				
Chlorobenzene	20.780	0.50	20.00	0	104	70	130				
MTBE	22.560	0.50	20.00	0	113	70	130				
Toluene	41.130	0.50	40.00	0	103	70	130				
Trichloroethene	20.480	0.50	20.00	0	102	70	130				
Surr: 1,2-Dichloroethane-d4	20.150		25.00		80.6	70	130				
Surr: 4-Bromofluorobenzene	24.240		25.00		97.0	70	130				
Surr: Dibromofluoromethane	22.750		25.00		91.0	70	130				
Surr: Toluene-d8	22.670		25.00		90.7	70	130				

Sample ID: Q110726MB3MSD		SampType: MSD		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135339	
Client ID: ZZZZZ		Batch ID: Q11VW138		TestNo: EPA 8260B		Analysis Date: 7/26/2011				SeqNo: 2215770	
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: 119115
Project: Metro Westside Extention, 4953101561

ANALYTICAL QC SUMMARY REPORT

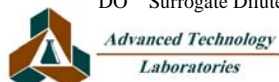
TestCode: 8260_WP_LL

Sample ID: Q110726MB3MSD		SampType: MSD		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135339	
Client ID: ZZZZZZ		Batch ID: Q11VW138		TestNo: EPA 8260B		Analysis Date: 7/26/2011				SeqNo: 2215770	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.450	0.50	20.00	0	92.2	70	130	19.00	2.94	20	
Benzene	39.250	0.50	40.00	0	98.1	70	130	39.23	0.0510	20	
Chlorobenzene	20.620	0.50	20.00	0	103	70	130	20.78	0.773	20	
MTBE	22.710	0.50	20.00	0	114	70	130	22.56	0.663	20	
Toluene	40.950	0.50	40.00	0	102	70	130	41.13	0.439	20	
Trichloroethene	20.470	0.50	20.00	0	102	70	130	20.48	0.0488	20	
Surr: 1,2-Dichloroethane-d4	20.390		25.00		81.6	70	130		0	0	
Surr: 4-Bromofluorobenzene	23.990		25.00		96.0	70	130		0	0	
Surr: Dibromofluoromethane	23.330		25.00		93.3	70	130		0	0	
Surr: Toluene-d8	23.300		25.00		93.2	70	130		0	0	

Sample ID: Q110726MB3		SampType: MBLK		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135339	
Client ID: PBW		Batch ID: Q11VW138		TestNo: EPA 8260B		Analysis Date: 7/26/2011				SeqNo: 2215771	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	0.50									
1,1-Dichloropropene	ND	0.50									
1,2,3-Trichlorobenzene	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromo-3-chloropropane	ND	0.50									
1,2-Dibromoethane	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									

Qualifiers:

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

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: Q110726MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 135339
Client ID: PBW	Batch ID: Q11VW138	TestNo: EPA 8260B		Analysis Date: 7/26/2011	SeqNo: 2215771

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

Qualifiers:

- | | | |
|---|--|--|
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CLIENT: Mactec
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ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: Q110726MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 135339						
Client ID: PBW	Batch ID: Q11VW138	TestNo: EPA 8260B	Analysis Date: 7/26/2011	SeqNo: 2215771							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	ND	1.0									
MTBE	ND	0.50									
n-Butylbenzene	ND	0.50									
n-Propylbenzene	ND	0.50									
Naphthalene	ND	0.50									
o-Xylene	ND	0.50									
sec-Butylbenzene	ND	0.50									
Styrene	ND	0.50									
Tert-amyl methyl ether	ND	0.50									
Tert-Butanol	ND	10									
tert-Butylbenzene	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	23.640		25.00		94.6	70	130				
Surr: 4-Bromofluorobenzene	25.430		25.00		102	70	130				
Surr: Dibromofluoromethane	26.120		25.00		104	70	130				
Surr: Toluene-d8	23.740		25.00		95.0	70	130				

Qualifiers:


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



*Advanced Technology
Laboratories*

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

CHAIN OF CUSTODY RECORD

 ADVANCED TECHNOLOGIES LABORATORIES 3275 Walnut Ave., Signal Hill, CA 90755 Tel: (562) 989-4045 • Fax: (562) 989-4040		P.O.#: <u>201106374</u> Quote #: <u>14716</u> Logged By: _____ Date: <u>7/29/11</u>		FOR LABORATORY USE ONLY: Method of Transport: <input checked="" type="checkbox"/> ATL <input type="checkbox"/> OnTrac <input type="checkbox"/> Client <input type="checkbox"/> FedEx <input type="checkbox"/> GSO <input type="checkbox"/> Other: _____ Sample Condition Upon Receipt: <input checked="" type="checkbox"/> 1. CHILLED <input type="checkbox"/> 4. SEALED <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> <input type="checkbox"/> 2. HEADSPACE (VOA) <input type="checkbox"/> 5. # OF SPLS MATCH COC <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> <input checked="" type="checkbox"/> 3. CONTAINER INTACT <input type="checkbox"/> 6. PRESERVED <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>																																																										
Client: <u>MACTEC</u> Attn: <u>Matt Fraychinnaud</u>		Address: <u>5628 E. Slavson Ave</u> State: <u>CA</u> City: <u>LA</u> Zip Code: <u>90040</u>		Project Name: _____ Relinquished by: (Signature and Printed Name) _____ Relinquished by: (Signature and Printed Name) _____ Relinquished by: (Signature and Printed Name) _____																																																										
Project # <u>4953101561</u> Date: <u>7/25/11</u> Time: <u>0730</u> Date: <u>7/25/11</u> Time: <u>1052</u> Date: <u>7/25/11</u> Time: <u>1645</u>		Sampler: <u>Paul Kane</u> Received by: (Signature and Printed Name) _____ Received by: (Signature and Printed Name) _____ Received by: (Signature and Printed Name) _____		TEL: <u>323-889-5300</u> FAX: _____																																																										
I hereby authorize ATL to perform the work indicated below: Project Mgr / Submitter: _____ Print Name: _____ Signature: _____ Date: <u>7/25/11</u>		Bill To: _____ Attn: _____ Co: _____ Address: _____ City: _____ State: _____ Zip: _____		Special Instructions/Comments: _____																																																										
Sample/Records - Archival & Disposal Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report. Storage Fees (applies when storage is requested): • Sample : \$2.00 / sample / mo (after 45 days) • Records : \$1.00 / ATL workorder / mo (after 1 year)		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">LAB USE ONLY: Batch #:</th> <th colspan="2">Sample Description</th> <th rowspan="2">Date</th> <th rowspan="2">Time</th> </tr> <tr> <th>Sample I.D. / Location</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>119115-001</td> <td>E-122-10'</td> <td>7/22/11</td> <td>1015</td> <td></td> </tr> <tr> <td>2</td> <td>E-122-15'</td> <td></td> <td>1022</td> <td></td> </tr> <tr> <td>3</td> <td>E-122-20'</td> <td></td> <td>1025</td> <td></td> </tr> <tr> <td>4</td> <td>E-122-25'</td> <td></td> <td>1033</td> <td></td> </tr> <tr> <td>5</td> <td>E-122-30'</td> <td></td> <td>1040</td> <td></td> </tr> <tr> <td>6</td> <td>E-122-35'</td> <td></td> <td>1050</td> <td></td> </tr> <tr> <td>7</td> <td>E-122-40'</td> <td></td> <td>1100</td> <td></td> </tr> <tr> <td>8</td> <td>E-122-40'</td> <td></td> <td>1130</td> <td></td> </tr> <tr> <td>9</td> <td>E-122-50'</td> <td></td> <td>1155</td> <td></td> </tr> <tr> <td>10</td> <td>E-122-55'</td> <td></td> <td>1210</td> <td></td> </tr> </tbody> </table>				LAB USE ONLY: Batch #:	Sample Description		Date	Time	Sample I.D. / Location	Time	119115-001	E-122-10'	7/22/11	1015		2	E-122-15'		1022		3	E-122-20'		1025		4	E-122-25'		1033		5	E-122-30'		1040		6	E-122-35'		1050		7	E-122-40'		1100		8	E-122-40'		1130		9	E-122-50'		1155		10	E-122-55'		1210	
LAB USE ONLY: Batch #:	Sample Description		Date	Time																																																										
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7	E-122-40'		1100																																																											
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9	E-122-50'		1155																																																											
10	E-122-55'		1210																																																											
TAT: <input type="checkbox"/> A= Overnight ≤ 24 hrs <input type="checkbox"/> B= Emergency Next workday Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal		Critical 2 Workdays <input type="checkbox"/> D= Urgent 3 Workdays <input checked="" type="checkbox"/> E= Routine 7 Workdays		Preservatives: H=HCl N=HNO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(AC) ₂ O=NaOH T=Na ₂ S ₂ O ₃																																																										

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

Figure I-1.799

CHAIN OF CUSTODY RECORD

ADVANCED TECHNOLOGY LABORATORIES
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 Tel: (562) 989-4045 • Fax: (562) 989-4040

P.O.#: 201106374 Quote #: 1476
 Logged By: _____ Date: _____
 NOTE: Please include your Quote No. to ensure proper pricing of your project.

FOR LABORATORY USE ONLY:

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

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

Client: MACTEC Address: 5678 E Slavson Ave State: CA Zip Code: 90010 TEL: 373-889-5300
 Attn: Math Feyschinpaud City: WA (Signature)

Project Name: Mico Westside Extension Project #: 4953101561 Sampler: Paul Kane
 Relinquished by: (Signature and Printed Name) Math Feyschinpaud Date: 7/25/11 Time: 0730 Received by: (Signature and Printed Name) Math Feyschinpaud Date: 7/25/11 Time: 0730
 Relinquished by: (Signature and Printed Name) Math Feyschinpaud Date: 7/25/11 Time: 1052 Received by: (Signature and Printed Name) Math Feyschinpaud Date: 7/25/11 Time: 1052
 Relinquished by: (Signature and Printed Name) Math Feyschinpaud Date: 7/25/11 Time: 1645 Received by: (Signature and Printed Name) Math Feyschinpaud Date: 7/25/11 Time: 1645

I hereby authorize ATL to perform the work indicated below:
 Project Mgr / Submitter: Math Feyschinpaud
 Signature: Math Feyschinpaud Date: 7/25/11

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

Circle or Add Analysis(es) Requested:
 8081A (Pesticides) 8082 (PCB) 8260B (Volatiles) 8270C (BNA) 8010B (Total Metal) 8015B (GRO) 8015B (PRO) TITLE 22 / CAM 17 (6010 / 7000) TOXY

Special Instructions/Comments: _____

LAB USE ONLY: Batch #:	Lab No.	Sample Description	Sample I.D. / Location	Date	Time	SPECIFY APPROPRIATE MATRIX							CONTAINER(S) Type	TAT #	REMARKS	
						SEDIMENT	SOIL	SOLID	GROUND WATER	WASTEWATER	STORMWATER	AQUEOUS				
119115	11	E-122-60'	1/22/15	1225												
	12	E-122-65'		1240												Hold
	13	E-122-70'		1300												Hold

QA/QC: RTNE CT Legal SWRCB Logcode _____ OTHER _____

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

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

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

Figure I-1.800

August 12, 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.: 119284

RE: METRO WESTSIDE EXTENSION, 4953-10-1


Attention: Matt Fraychineaud

Enclosed are the results for sample(s) received on August 05, 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: 119284

CASE NARRATIVE

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

Sample Receiving / General Comments

Voa vials for water sample were not labelled, sample ID was taken from ziplock.



Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 12-Aug-11

CLIENT: Mactec **Client Sample ID:** E-123-55
Lab Order: 119284 **Collection Date:** 8/4/2011 12:20:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 119284-001A

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

EPA 8260B

RunID:	MS4_110808A	QC Batch:	K11VS205	PrepDate:	8/4/2011	Analyst:	DDL
1,1,1,2-Tetrachloroethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,1,1-Trichloroethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,1,2,2-Tetrachloroethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,1,2-Trichloroethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,1-Dichloroethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,1-Dichloroethene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,1-Dichloropropene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,2,3-Trichlorobenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,2,3-Trichloropropane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,2,4-Trichlorobenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,2,4-Trimethylbenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,2-Dibromo-3-chloropropane	ND	7.3	µg/Kg	1	8/8/2011 11:01 AM		
1,2-Dibromoethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,2-Dichlorobenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,2-Dichloroethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,2-Dichloropropane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,3,5-Trimethylbenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,3-Dichlorobenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,3-Dichloropropane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
1,4-Dichlorobenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
2,2-Dichloropropane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
2-Chlorotoluene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
4-Chlorotoluene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
4-Isopropyltoluene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Benzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Bromobenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Bromodichloromethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Bromoform	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Bromomethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Carbon tetrachloride	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Chlorobenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Chloroethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Chloroform	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Chloromethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
cis-1,2-Dichloroethene	ND	3.7	µg/Kg	1	8/8/2011 11:01 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
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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 12-Aug-11

CLIENT: Mactec **Client Sample ID:** E-123-55
Lab Order: 119284 **Collection Date:** 8/4/2011 12:20:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 119284-001A

Analyses Result PQL Qual Units DF Date Analyzed

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID:	MS4_110808A	QC Batch:	K11VS205	PrepDate:	8/4/2011	Analyst:	DDL
cis-1,3-Dichloropropene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Di-isopropyl ether	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Dibromochloromethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Dibromomethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Dichlorodifluoromethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Ethyl Tert-butyl ether	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Ethylbenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Hexachlorobutadiene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Isopropylbenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
m,p-Xylene	ND	7.3	µg/Kg	1	8/8/2011 11:01 AM		
Methylene chloride	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
MTBE	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
n-Butylbenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
n-Propylbenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Naphthalene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
o-Xylene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
sec-Butylbenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Styrene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Tert-amyl methyl ether	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Tert-Butanol	ND	73	µg/Kg	1	8/8/2011 11:01 AM		
tert-Butylbenzene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Tetrachloroethene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Toluene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
trans-1,2-Dichloroethene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Trichloroethene	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Trichlorofluoromethane	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Vinyl chloride	ND	3.7	µg/Kg	1	8/8/2011 11:01 AM		
Surr: 1,2-Dichloroethane-d4	102	65-141	%REC	1	8/8/2011 11:01 AM		
Surr: 4-Bromofluorobenzene	92.9	57-134	%REC	1	8/8/2011 11:01 AM		
Surr: Dibromofluoromethane	94.5	70-128	%REC	1	8/8/2011 11:01 AM		
Surr: Toluene-d8	97.5	72-123	%REC	1	8/8/2011 11:01 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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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 12-Aug-11

CLIENT:	Mactec	Client Sample ID:	E-123-55
Lab Order:	119284	Collection Date:	8/4/2011 12:20:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119284-001D		

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

EPA 8015B(M)

RunID: GC2_110808A	QC Batch: E11VS290	PrepDate: 8/4/2011	Analyst: TP		
GRO	ND	0.72	mg/Kg	1	8/8/2011 02:14 PM
Surr: Bromofluorobenzene (FID)	123	51-161	%REC	1	8/8/2011 02:14 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: 12-Aug-11

CLIENT: Mactec **Client Sample ID:** E-123-55
Lab Order: 119284 **Collection Date:** 8/4/2011 12:20:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 119284-001G

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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ICP METALS

		EPA 3050B		EPA 6010B		
RunID:	ICP8_110810B	QC Batch:	74814	PrepDate:	8/9/2011	Analyst: IL
Antimony		ND	2.0	mg/Kg	1	8/10/2011 11:03 AM
Arsenic		ND	1.0	mg/Kg	1	8/10/2011 11:03 AM
Barium		130	1.0	mg/Kg	1	8/10/2011 11:03 AM
Beryllium		ND	1.0	mg/Kg	1	8/10/2011 11:03 AM
Cadmium		ND	1.0	mg/Kg	1	8/10/2011 11:03 AM
Chromium		21	1.0	mg/Kg	1	8/10/2011 11:03 AM
Cobalt		6.5	1.0	mg/Kg	1	8/10/2011 11:03 AM
Copper		8.5	2.0	mg/Kg	1	8/10/2011 11:03 AM
Lead		2.0	1.0	mg/Kg	1	8/10/2011 11:03 AM
Molybdenum		ND	1.0	mg/Kg	1	8/10/2011 11:03 AM
Nickel		16	1.0	mg/Kg	1	8/10/2011 11:03 AM
Selenium		ND	1.0	mg/Kg	1	8/10/2011 11:03 AM
Silver		ND	1.0	mg/Kg	1	8/10/2011 11:03 AM
Thallium		ND	1.0	mg/Kg	1	8/10/2011 11:03 AM
Vanadium		14	1.0	mg/Kg	1	8/10/2011 11:03 AM
Zinc		23	1.0	mg/Kg	1	8/10/2011 11:03 AM

DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID LUFT

		EPA 8015B(M)				
RunID:	GC16_110810A	QC Batch:	74806	PrepDate:	8/9/2011	Analyst: CBR
DRO		ND	10	mg/Kg	1	8/10/2011 10:38 AM
ORO		ND	10	mg/Kg	1	8/10/2011 10:38 AM
Surr: p-Terphenyl		91.6	63-152	%REC	1	8/10/2011 10:38 AM

MERCURY BY COLD VAPOR TECHNIQUE

		EPA 7471A				
RunID:	AA1_110810C	QC Batch:	74816	PrepDate:	8/9/2011	Analyst: VV
Mercury		ND	0.10	mg/Kg	1	8/10/2011 12:50 PM

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



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: 12-Aug-11

CLIENT: Mactec **Client Sample ID:** E-123-60
Lab Order: 119284 **Collection Date:** 8/4/2011 12:55:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 119284-002A

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

EPA 8260B

RunID:	MS4_110808A	QC Batch:	K11VS205	PrepDate:	8/4/2011	Analyst:	DDL
1,1,1,2-Tetrachloroethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,1,1-Trichloroethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,1,2,2-Tetrachloroethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,1,2-Trichloroethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,1-Dichloroethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,1-Dichloroethene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,1-Dichloropropene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,2,3-Trichlorobenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,2,3-Trichloropropane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,2,4-Trichlorobenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,2,4-Trimethylbenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,2-Dibromo-3-chloropropane	ND	7.5	µg/Kg	1	8/8/2011 11:19 AM		
1,2-Dibromoethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,2-Dichlorobenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,2-Dichloroethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,2-Dichloropropane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,3,5-Trimethylbenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,3-Dichlorobenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,3-Dichloropropane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
1,4-Dichlorobenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
2,2-Dichloropropane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
2-Chlorotoluene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
4-Chlorotoluene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
4-Isopropyltoluene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Benzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Bromobenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Bromodichloromethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Bromoform	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Bromomethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Carbon tetrachloride	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Chlorobenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Chloroethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Chloroform	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Chloromethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
cis-1,2-Dichloroethene	ND	3.8	µg/Kg	1	8/8/2011 11:19 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: 12-Aug-11

CLIENT: Mactec **Client Sample ID:** E-123-60
Lab Order: 119284 **Collection Date:** 8/4/2011 12:55:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 119284-002A

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

EPA 8260B

RunID:	MS4_110808A	QC Batch:	K11VS205	PrepDate:	8/4/2011	Analyst:	DDL
cis-1,3-Dichloropropene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Di-isopropyl ether	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Dibromochloromethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Dibromomethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Dichlorodifluoromethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Ethyl Tert-butyl ether	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Ethylbenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Hexachlorobutadiene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Isopropylbenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
m,p-Xylene	ND	7.5	µg/Kg	1	8/8/2011 11:19 AM		
Methylene chloride	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
MTBE	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
n-Butylbenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
n-Propylbenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Naphthalene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
o-Xylene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
sec-Butylbenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Styrene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Tert-amyl methyl ether	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Tert-Butanol	ND	75	µg/Kg	1	8/8/2011 11:19 AM		
tert-Butylbenzene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Tetrachloroethene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Toluene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
trans-1,2-Dichloroethene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Trichloroethene	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Trichlorofluoromethane	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Vinyl chloride	ND	3.8	µg/Kg	1	8/8/2011 11:19 AM		
Surr: 1,2-Dichloroethane-d4	99.0	65-141	%REC	1	8/8/2011 11:19 AM		
Surr: 4-Bromofluorobenzene	90.2	57-134	%REC	1	8/8/2011 11:19 AM		
Surr: Dibromofluoromethane	93.0	70-128	%REC	1	8/8/2011 11:19 AM		
Surr: Toluene-d8	96.1	72-123	%REC	1	8/8/2011 11:19 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: 12-Aug-11

CLIENT:	Mactec	Client Sample ID:	E-123-60
Lab Order:	119284	Collection Date:	8/4/2011 12:55:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119284-002D		

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

EPA 8015B(M)

RunID: GC2_110808A	QC Batch: E11VS290	PrepDate: 8/4/2011	Analyst: TP		
GRO	ND	0.77	mg/Kg	1	8/8/2011 02:52 PM
Surr: Bromofluorobenzene (FID)	132	51-161	%REC	1	8/8/2011 02:52 PM

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



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ANALYTICAL RESULTS

Print Date: 12-Aug-11

CLIENT:	Mactec	Client Sample ID:	E-123-60
Lab Order:	119284	Collection Date:	8/4/2011 12:55:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119284-002G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110810A	QC Batch: 74806			PrepDate: 8/9/2011		Analyst: CBR
DRO	ND	10		mg/Kg	1	8/10/2011 10:50 AM
ORO	ND	10		mg/Kg	1	8/10/2011 10:50 AM
Surr: p-Terphenyl	90.0	63-152		%REC	1	8/10/2011 10:50 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: 12-Aug-11

CLIENT: Mactec **Client Sample ID:** E-123-70
Lab Order: 119284 **Collection Date:** 8/4/2011 2:05:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 119284-003A

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

EPA 8260B

RunID:	MS4_110808A	QC Batch:	K11VS205	PrepDate:	8/4/2011	Analyst:	DDL
1,1,1,2-Tetrachloroethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,1,1-Trichloroethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,1,2,2-Tetrachloroethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,1,2-Trichloroethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,1-Dichloroethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,1-Dichloroethene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,1-Dichloropropene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,2,3-Trichlorobenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,2,3-Trichloropropane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,2,4-Trichlorobenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,2,4-Trimethylbenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,2-Dibromo-3-chloropropane	ND	7.2	µg/Kg	1	8/8/2011 11:37 AM		
1,2-Dibromoethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,2-Dichlorobenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,2-Dichloroethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,2-Dichloropropane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,3,5-Trimethylbenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,3-Dichlorobenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,3-Dichloropropane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
1,4-Dichlorobenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
2,2-Dichloropropane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
2-Chlorotoluene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
4-Chlorotoluene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
4-Isopropyltoluene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Benzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Bromobenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Bromodichloromethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Bromoform	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Bromomethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Carbon tetrachloride	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Chlorobenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Chloroethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Chloroform	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Chloromethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
cis-1,2-Dichloroethene	ND	3.6	µg/Kg	1	8/8/2011 11:37 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: 12-Aug-11

CLIENT: Mactec **Client Sample ID:** E-123-70
Lab Order: 119284 **Collection Date:** 8/4/2011 2:05:00 PM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** SOIL
Lab ID: 119284-003A

Analyses Result PQL Qual Units DF Date Analyzed

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID:	MS4_110808A	QC Batch:	K11VS205	PrepDate:	8/4/2011	Analyst:	DDL
cis-1,3-Dichloropropene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Di-isopropyl ether	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Dibromochloromethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Dibromomethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Dichlorodifluoromethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Ethyl Tert-butyl ether	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Ethylbenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Hexachlorobutadiene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Isopropylbenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
m,p-Xylene	ND	7.2	µg/Kg	1	8/8/2011 11:37 AM		
Methylene chloride	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
MTBE	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
n-Butylbenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
n-Propylbenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Naphthalene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
o-Xylene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
sec-Butylbenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Styrene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Tert-amyl methyl ether	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Tert-Butanol	ND	72	µg/Kg	1	8/8/2011 11:37 AM		
tert-Butylbenzene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Tetrachloroethene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Toluene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
trans-1,2-Dichloroethene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Trichloroethene	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Trichlorofluoromethane	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Vinyl chloride	ND	3.6	µg/Kg	1	8/8/2011 11:37 AM		
Surr: 1,2-Dichloroethane-d4	108	65-141	%REC	1	8/8/2011 11:37 AM		
Surr: 4-Bromofluorobenzene	91.3	57-134	%REC	1	8/8/2011 11:37 AM		
Surr: Dibromofluoromethane	104	70-128	%REC	1	8/8/2011 11:37 AM		
Surr: Toluene-d8	95.4	72-123	%REC	1	8/8/2011 11:37 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: 12-Aug-11

CLIENT:	Mactec	Client Sample ID:	E-123-70
Lab Order:	119284	Collection Date:	8/4/2011 2:05:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119284-003D		

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

EPA 8015B(M)

RunID: GC2_110808A	QC Batch: E11VS290	PrepDate: 8/4/2011	Analyst: TP		
GRO	ND	0.74	mg/Kg	1	8/8/2011 03:08 PM
Surr: Bromofluorobenzene (FID)	116	51-161	%REC	1	8/8/2011 03:08 PM

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



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ANALYTICAL RESULTS

Print Date: 12-Aug-11

CLIENT:	Mactec	Client Sample ID:	E-123-70
Lab Order:	119284	Collection Date:	8/4/2011 2:05:00 PM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	SOIL
Lab ID:	119284-003G		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	LUFT			EPA 8015B(M)		
RunID: GC16_110810A	QC Batch: 74806			PrepDate: 8/9/2011		Analyst: CBR
DRO	ND	10		mg/Kg	1	8/10/2011 11:00 AM
ORO	ND	10		mg/Kg	1	8/10/2011 11:00 AM
Surr: p-Terphenyl	110	63-152		%REC	1	8/10/2011 11:00 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: 12-Aug-11

CLIENT: Mactec **Client Sample ID:** E-123-GW
Lab Order: 119284 **Collection Date:** 8/4/2011 11:05:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** GROUNDWATER
Lab ID: 119284-004A

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

EPA 8260B

RunID:	MS11_110811A	QC Batch:	A11VW136	PrepDate:	Analyst:	BD
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,1,1-Trichloroethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,1,2-Trichloroethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,1-Dichloroethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,1-Dichloroethene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,1-Dichloropropene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,2,3-Trichlorobenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,2,3-Trichloropropane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,2-Dibromo-3-chloropropane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,2-Dibromoethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,2-Dichlorobenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,2-Dichloroethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,2-Dichloropropane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,3-Dichlorobenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,3-Dichloropropane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
1,4-Dichlorobenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
2,2-Dichloropropane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
2-Chlorotoluene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
4-Chlorotoluene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
4-Isopropyltoluene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Benzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Bromobenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Bromodichloromethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Bromoform	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Bromomethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Carbon tetrachloride	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Chlorobenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Chloroethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Chloroform	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Chloromethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
cis-1,2-Dichloroethene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	

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



Advanced Technology
Laboratories

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

Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: 12-Aug-11

CLIENT: Mactec **Client Sample ID:** E-123-GW
Lab Order: 119284 **Collection Date:** 8/4/2011 11:05:00 AM
Project: METRO WESTSIDE EXTENSION, 4953-10 **Matrix:** GROUNDWATER
Lab ID: 119284-004A

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

EPA 8260B

RunID:	MS11_110811A	QC Batch:	A11VW136	PrepDate:	Analyst:	BD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Di-isopropyl ether	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Dibromochloromethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Dibromomethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Dichlorodifluoromethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Ethyl tert-butyl ether	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Ethylbenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Hexachlorobutadiene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Isopropylbenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
m,p-Xylene	ND	1.0	µg/L	1	8/11/2011 12:56 PM	
Methylene chloride	ND	1.0	µg/L	1	8/11/2011 12:56 PM	
MTBE	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
n-Butylbenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
n-Propylbenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Naphthalene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
o-Xylene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
sec-Butylbenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Styrene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Tert-amyl methyl ether	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Tert-Butanol	ND	10	µg/L	1	8/11/2011 12:56 PM	
tert-Butylbenzene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Tetrachloroethene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Toluene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
trans-1,2-Dichloroethene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Trichloroethene	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Trichlorofluoromethane	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Vinyl chloride	ND	0.50	µg/L	1	8/11/2011 12:56 PM	
Surr: 1,2-Dichloroethane-d4	103	70-130	%REC	1	8/11/2011 12:56 PM	
Surr: 4-Bromofluorobenzene	95.2	70-130	%REC	1	8/11/2011 12:56 PM	
Surr: Dibromofluoromethane	113	70-130	%REC	1	8/11/2011 12:56 PM	
Surr: Toluene-d8	107	70-130	%REC	1	8/11/2011 12:56 PM	

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



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ANALYTICAL RESULTS

Print Date: 12-Aug-11

CLIENT:	Mactec	Client Sample ID:	E-123-GW
Lab Order:	119284	Collection Date:	8/4/2011 11:05:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	GROUNDWATER
Lab ID:	119284-004B		

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

EPA 8015B(M)

RunID: GC19_110808A	QC Batch: M11VW155	PrepDate:	Analyst: BB		
GRO	ND	0.20	mg/L	1	8/8/2011 01:09 PM
Surr: Bromofluorobenzene (FID)	88.9	70-130	%REC	1	8/8/2011 01:09 PM

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



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ANALYTICAL RESULTS

Print Date: 12-Aug-11

CLIENT:	Mactec	Client Sample ID:	E-123-GW
Lab Order:	119284	Collection Date:	8/4/2011 11:05:00 AM
Project:	METRO WESTSIDE EXTENSION, 4953-10	Matrix:	GROUNDWATER
Lab ID:	119284-004C		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3510C			EPA 8015B(M)		
RunID: GC16_110810D	QC Batch: 74826			PrepDate: 8/10/2011		Analyst: CBR
DRO	ND	0.25		mg/L	1	8/10/2011 10:57 PM
ORO	ND	0.25		mg/L	1	8/10/2011 10:57 PM
Surr: p-Terphenyl	76.4	36-126		%REC	1	8/10/2011 10:57 PM

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



Advanced Technology
Laboratories

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

CLIENT: Mactec
 Work Order: 119284
 Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: MB-74814	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 8/9/2011	RunNo: 135712						
Client ID: PBS	Batch ID: 74814	TestNo: EPA 6010B EPA 3050B		Analysis Date: 8/10/2011	SeqNo: 2222616						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	ND	2.0									
Arsenic	ND	1.0									
Barium	ND	1.0									
Beryllium	ND	1.0									
Cadmium	ND	1.0									
Chromium	ND	1.0									
Cobalt	ND	1.0									
Copper	ND	2.0									
Lead	ND	1.0									
Molybdenum	ND	1.0									
Nickel	ND	1.0									
Selenium	ND	1.0									
Silver	ND	1.0									
Thallium	ND	1.0									
Vanadium	ND	1.0									
Zinc	ND	1.0									

Sample ID: LCS-74814	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 8/9/2011	RunNo: 135712						
Client ID: LCSS	Batch ID: 74814	TestNo: EPA 6010B EPA 3050B		Analysis Date: 8/10/2011	SeqNo: 2222617						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	50.271	2.0	50.00	0	101	80	120				
Arsenic	49.179	1.0	50.00	0	98.4	80	120				
Barium	51.544	1.0	50.00	0	103	80	120				
Beryllium	50.766	1.0	50.00	0	102	80	120				
Cadmium	50.242	1.0	50.00	0	100	80	120				
Chromium	47.963	1.0	50.00	0	95.9	80	120				
Cobalt	51.548	1.0	50.00	0	103	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: 119284
 Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: LCS-74814		SampType: LCS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 8/9/2011		RunNo: 135712		
Client ID: LCSS		Batch ID: 74814		TestNo: EPA 6010B EPA 3050B				Analysis Date: 8/10/2011		SeqNo: 2222617		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Copper	52.061	2.0	50.00	0	104	80	120					
Lead	50.782	1.0	50.00	0	102	80	120					
Molybdenum	53.077	1.0	50.00	0	106	80	120					
Nickel	50.644	1.0	50.00	0	101	80	120					
Selenium	47.021	1.0	50.00	0	94.0	80	120					
Silver	51.394	1.0	50.00	0	103	80	120					
Thallium	48.489	1.0	50.00	0	97.0	80	120					
Vanadium	50.978	1.0	50.00	0	102	80	120					
Zinc	50.981	1.0	50.00	0	102	80	120					

Sample ID: 119278-034A-MS		SampType: MS		TestCode: 6010_S		Units: mg/Kg		Prep Date: 8/9/2011		RunNo: 135712		
Client ID: ZZZZZZ		Batch ID: 74814		TestNo: EPA 6010B EPA 3050B				Analysis Date: 8/10/2011		SeqNo: 2222621		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Antimony	92.389	2.0	125.0	1.548	72.7	32	105					
Arsenic	166.044	1.0	125.0	53.33	90.2	49	106					
Barium	225.663	1.0	125.0	119.0	85.3	31	133					
Beryllium	104.675	1.0	125.0	0.4215	83.4	56	106					
Cadmium	100.095	1.0	125.0	1.131	79.2	51	103					
Chromium	125.636	1.0	125.0	25.22	80.3	45	114					
Cobalt	114.206	1.0	125.0	7.791	85.1	52	106					
Copper	131.374	2.0	125.0	15.49	92.7	54	125					
Lead	116.528	1.0	125.0	14.30	81.8	34	126					
Molybdenum	106.289	1.0	125.0	0	85.0	54	106					
Nickel	135.859	1.0	125.0	32.81	82.4	45	111					
Selenium	100.711	1.0	125.0	0	80.6	47	104					
Silver	109.520	1.0	125.0	0	87.6	56	112					
Thallium	99.572	1.0	125.0	0	79.7	46	101					
Vanadium	132.377	1.0	125.0	24.77	86.1	54	114					
Zinc	160.699	1.0	125.0	56.44	83.4	28	125					

Qualifiers:

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



CLIENT: Mactec
Work Order: 119284
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: 119278-034A-MSD		SampType: MSD		TestCode: 6010_S		Units: mg/Kg		Prep Date: 8/9/2011		RunNo: 135712	
Client ID: ZZZZZZ		Batch ID: 74814		TestNo: EPA 6010B EPA 3050B		Analysis Date: 8/10/2011		SeqNo: 2222622			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	96.404	2.0	125.0	1.548	75.9	32	105	92.39	4.25	20	
Arsenic	150.340	1.0	125.0	53.33	77.6	49	106	166.0	9.93	20	
Barium	193.918	1.0	125.0	119.0	59.9	31	133	225.7	15.1	20	
Beryllium	106.839	1.0	125.0	0.4215	85.1	56	106	104.7	2.05	20	
Cadmium	102.365	1.0	125.0	1.131	81.0	51	103	100.1	2.24	20	
Chromium	124.288	1.0	125.0	25.22	79.3	45	114	125.6	1.08	20	
Cobalt	115.689	1.0	125.0	7.791	86.3	52	106	114.2	1.29	20	
Copper	129.770	2.0	125.0	15.49	91.4	54	125	131.4	1.23	20	
Lead	115.278	1.0	125.0	14.30	80.8	34	126	116.5	1.08	20	
Molybdenum	108.972	1.0	125.0	0	87.2	54	106	106.3	2.49	20	
Nickel	133.463	1.0	125.0	32.81	80.5	45	111	135.9	1.78	20	
Selenium	101.675	1.0	125.0	0	81.3	47	104	100.7	0.953	20	
Silver	112.161	1.0	125.0	0	89.7	56	112	109.5	2.38	20	
Thallium	102.337	1.0	125.0	0	81.9	46	101	99.57	2.74	20	
Vanadium	129.397	1.0	125.0	24.77	83.7	54	114	132.4	2.28	20	
Zinc	152.610	1.0	125.0	56.44	76.9	28	125	160.7	5.16	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: 119284
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: MB-74816	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: 8/9/2011	RunNo: 135723						
Client ID: PBS	Batch ID: 74816	TestNo: EPA 7471A		Analysis Date: 8/10/2011	SeqNo: 2222793						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury ND 0.10

Sample ID: LCS-74816	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 8/9/2011	RunNo: 135723						
Client ID: LCSS	Batch ID: 74816	TestNo: EPA 7471A		Analysis Date: 8/10/2011	SeqNo: 2222794						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.754 0.10 0.8300 0 90.9 80 120

Sample ID: 119278-031A-MS	SampType: MS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 8/9/2011	RunNo: 135723						
Client ID: ZZZZZZ	Batch ID: 74816	TestNo: EPA 7471A		Analysis Date: 8/10/2011	SeqNo: 2222795						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.675 0.10 0.8300 0.03265 77.4 70 130

Sample ID: 119278-031A-MSD	SampType: MSD	TestCode: 7471_S	Units: mg/Kg	Prep Date: 8/9/2011	RunNo: 135723						
Client ID: ZZZZZZ	Batch ID: 74816	TestNo: EPA 7471A		Analysis Date: 8/10/2011	SeqNo: 2222796						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.673 0.10 0.8300 0.03265 77.1 70 130 0.6751 0.361 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: 119284
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM H

Sample ID: MB-74806	SampType: MBLK	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 8/9/2011	RunNo: 135722						
Client ID: PBS	Batch ID: 74806	TestNo: EPA 8015B(M LUFT		Analysis Date: 8/10/2011	SeqNo: 2222779						
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	77.440		80.00		96.8	63	152				

Sample ID: LCS-74806	SampType: LCS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 8/9/2011	RunNo: 135722						
Client ID: LCSS	Batch ID: 74806	TestNo: EPA 8015B(M LUFT		Analysis Date: 8/10/2011	SeqNo: 2222780						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	959.480	10	1000	0	95.9	76	139				
Surr: p-Terphenyl	99.220		80.00		124	63	152				

Sample ID: 119284-001GMS	SampType: MS	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 8/9/2011	RunNo: 135722						
Client ID: E-123-55	Batch ID: 74806	TestNo: EPA 8015B(M LUFT		Analysis Date: 8/10/2011	SeqNo: 2222784						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	896.780	10	1000	0	89.7	60	158				
Surr: p-Terphenyl	71.030		80.00		88.8	63	152				

Sample ID: 119284-001GMSD	SampType: MSD	TestCode: 8015_S_DM H	Units: mg/Kg	Prep Date: 8/9/2011	RunNo: 135722						
Client ID: E-123-55	Batch ID: 74806	TestNo: EPA 8015B(M LUFT		Analysis Date: 8/10/2011	SeqNo: 2222785						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	962.190	10	1000	0	96.2	60	158	896.8	7.04	20	
Surr: p-Terphenyl	79.480		80.00		99.4	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: 119284
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

Sample ID: E110808LC1		SampType: LCS		TestCode: 8015_S_G 50 Units: mg/Kg		Prep Date:		RunNo: 135684			
Client ID: LCSS		Batch ID: E11VS290		TestNo: EPA 8015B(M)		Analysis Date: 8/8/2011		SeqNo: 2223329			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.153	1.0	5.000	0	103	70	130				
Surr: Bromofluorobenzene (FID)	128.728		100.0		129	51	161				

Sample ID: E110808MB1MS		SampType: MS		TestCode: 8015_S_G 50 Units: mg/Kg		Prep Date:		RunNo: 135684			
Client ID: ZZZZZ		Batch ID: E11VS290		TestNo: EPA 8015B(M)		Analysis Date: 8/8/2011		SeqNo: 2223330			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.274	1.0	5.000	0	105	41	146				
Surr: Bromofluorobenzene (FID)	127.053		100.0		127	51	161				

Sample ID: E110808MB1MSD		SampType: MSD		TestCode: 8015_S_G 50 Units: mg/Kg		Prep Date:		RunNo: 135684			
Client ID: ZZZZZ		Batch ID: E11VS290		TestNo: EPA 8015B(M)		Analysis Date: 8/8/2011		SeqNo: 2223331			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.008	1.0	5.000	0	100	41	146	5.274	5.17	20	
Surr: Bromofluorobenzene (FID)	120.489		100.0		120	51	161		0	0	

Sample ID: E110808MB1		SampType: MBLK		TestCode: 8015_S_G 50 Units: mg/Kg		Prep Date:		RunNo: 135684			
Client ID: PBS		Batch ID: E11VS290		TestNo: EPA 8015B(M)		Analysis Date: 8/8/2011		SeqNo: 2223332			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	86.705		100.0		86.7	51	161				

Sample ID: 119278-037AMS		SampType: MS		TestCode: 8015_S_G 50 Units: mg/Kg		Prep Date:		RunNo: 135684			
Client ID: ZZZZZ		Batch ID: E11VS290		TestNo: EPA 8015B(M)		Analysis Date: 8/8/2011		SeqNo: 2223337			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.534	1.0	5.000	0	90.7	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: 119284
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_G 5035P

Sample ID: 119278-037AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135684						
Client ID: ZZZZZZ	Batch ID: E11VS290	TestNo: EPA 8015B(M)	Analysis Date: 8/8/2011	SeqNo: 2223337							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Bromofluorobenzene (FID)	128.781		100.0		129	51	161				

Sample ID: 119278-037AMSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	RunNo: 135684						
Client ID: ZZZZZZ	Batch ID: E11VS290	TestNo: EPA 8015B(M)	Analysis Date: 8/8/2011	SeqNo: 2223338							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.797	1.0	5.000	0	95.9	41	146	4.534	5.64	20	
Surr: Bromofluorobenzene (FID)	121.041		100.0		121	51	161		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 |
| 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: 119284
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_DM

Sample ID: MB-74826	SampType: MBLK	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 8/10/2011	RunNo: 135740						
Client ID: PBW	Batch ID: 74826	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 8/10/2011	SeqNo: 2223252						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	ND	0.20									
ORO	ND	0.20									
Surr: p-Terphenyl	0.042		0.08000		52.0	36	126				

Sample ID: LCS-74826	SampType: LCS	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 8/10/2011	RunNo: 135740						
Client ID: LCSW	Batch ID: 74826	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 8/10/2011	SeqNo: 2223253						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	0.573	0.20	1.000	0	57.3	52	128				
Surr: p-Terphenyl	0.058		0.08000		73.1	36	126				

Sample ID: MB-74826MS	SampType: MS	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 8/10/2011	RunNo: 135740						
Client ID: ZZZZZ	Batch ID: 74826	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 8/10/2011	SeqNo: 2223254						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	0.627	0.20	1.000	0	62.7	52	128				
Surr: p-Terphenyl	0.062		0.08000		77.4	36	126				

Sample ID: MB-74826MSD	SampType: MSD	TestCode: 8015_W_DM	Units: mg/L	Prep Date: 8/10/2011	RunNo: 135740						
Client ID: ZZZZZ	Batch ID: 74826	TestNo: EPA 8015B(M EPA 3510C		Analysis Date: 8/11/2011	SeqNo: 2223268						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

DRO	0.668	0.20	1.000	0	66.8	52	128	0.6271	6.33	20	
Surr: p-Terphenyl	0.049		0.08000		60.8	36	126		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 |
| 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: 119284
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_G PRES

Sample ID: M110808LCS2	SampType: LCS	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 135673						
Client ID: LCSW	Batch ID: M11VW155	TestNo: EPA 8015B(M)	Analysis Date: 8/8/2011	SeqNo: 2222112							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	1.000	0.20	1.000	0	100	70	130				
Surr: Bromofluorobenzene (FID)	92.317		100.0		92.3	70	130				

Sample ID: M110808MB1MS	SampType: MS	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 135673						
Client ID: ZZZZZZ	Batch ID: M11VW155	TestNo: EPA 8015B(M)	Analysis Date: 8/8/2011	SeqNo: 2222114							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	1.063	0.20	1.000	0	106	70	130				
Surr: Bromofluorobenzene (FID)	92.075		100.0		92.1	70	130				

Sample ID: M110808MB1MSD	SampType: MSD	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 135673						
Client ID: ZZZZZZ	Batch ID: M11VW155	TestNo: EPA 8015B(M)	Analysis Date: 8/8/2011	SeqNo: 2222115							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	1.097	0.20	1.000	0	110	70	130	1.063	3.15	20	
Surr: Bromofluorobenzene (FID)	91.396		100.0		91.4	70	130		0	0	

Sample ID: M110808MB1	SampType: MBLK	TestCode: 8015_W_G P	Units: mg/L	Prep Date:	RunNo: 135673						
Client ID: PBW	Batch ID: M11VW155	TestNo: EPA 8015B(M)	Analysis Date: 8/8/2011	SeqNo: 2222116							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	ND	0.20									
Surr: Bromofluorobenzene (FID)	89.326		100.0		89.3	70	130				

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: 119284
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110808LCS1		SampType: LCS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135586		
Client ID: LCSS		Batch ID: K11VS205		TestNo: EPA 8260B				Analysis Date: 8/8/2011		SeqNo: 2221937		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	43.150	5.0	50.00	0	86.3	70	130					
Benzene	98.070	5.0	100.0	0	98.1	70	130					
Chlorobenzene	52.040	5.0	50.00	0	104	70	130					
MTBE	49.550	5.0	50.00	0	99.1	70	130					
Toluene	101.200	5.0	100.0	0	101	70	130					
Trichloroethene	49.370	5.0	50.00	0	98.7	70	130					
Surr: 1,2-Dichloroethane-d4	43.940		50.00		87.9	65	141					
Surr: 4-Bromofluorobenzene	55.310		50.00		111	57	134					
Surr: Dibromofluoromethane	43.550		50.00		87.1	70	128					
Surr: Toluene-d8	46.890		50.00		93.8	72	123					

Sample ID: K110808MB1MS		SampType: MS		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135586		
Client ID: ZZZZZ		Batch ID: K11VS205		TestNo: EPA 8260B				Analysis Date: 8/8/2011		SeqNo: 2221938		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	46.270	5.0	50.00	0	92.5	70	130					
Benzene	110.080	5.0	100.0	0	110	70	130					
Chlorobenzene	58.150	5.0	50.00	0	116	70	130					
MTBE	54.490	5.0	50.00	0	109	70	130					
Toluene	113.270	5.0	100.0	0	113	70	130					
Trichloroethene	54.990	5.0	50.00	0	110	70	130					
Surr: 1,2-Dichloroethane-d4	46.290		50.00		92.6	65	141					
Surr: 4-Bromofluorobenzene	57.100		50.00		114	57	134					
Surr: Dibromofluoromethane	46.790		50.00		93.6	70	128					
Surr: Toluene-d8	50.580		50.00		101	72	123					

Sample ID: K110808MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135586		
Client ID: ZZZZZ		Batch ID: K11VS205		TestNo: EPA 8260B				Analysis Date: 8/8/2011		SeqNo: 2221939		
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 |
| 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: 119284
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110808MB1MSD		SampType: MSD		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135586	
Client ID: ZZZZZZ		Batch ID: K11VS205		TestNo: EPA 8260B		Analysis Date: 8/8/2011				SeqNo: 2221939	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	43.210	5.0	50.00	0	86.4	70	130	46.27	6.84	20	
Benzene	101.970	5.0	100.0	0	102	70	130	110.1	7.65	20	
Chlorobenzene	54.950	5.0	50.00	0	110	70	130	58.15	5.66	20	
MTBE	50.820	5.0	50.00	0	102	70	130	54.49	6.97	20	
Toluene	104.690	5.0	100.0	0	105	70	130	113.3	7.87	20	
Trichloroethene	50.970	5.0	50.00	0	102	70	130	54.99	7.59	20	
Surr: 1,2-Dichloroethane-d4	43.460		50.00		86.9	65	141		0	0	
Surr: 4-Bromofluorobenzene	45.630		50.00		91.3	57	134		0	0	
Surr: Dibromofluoromethane	44.560		50.00		89.1	70	128		0	0	
Surr: Toluene-d8	47.310		50.00		94.6	72	123		0	0	

Sample ID: K110808MB1		SampType: MBLK		TestCode: 8260_S_5035		Units: µg/Kg		Prep Date:		RunNo: 135586	
Client ID: PBS		Batch ID: K11VS205		TestNo: EPA 8260B		Analysis Date: 8/8/2011				SeqNo: 2221940	
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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|---|--|--|
| B Analyte detected in 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: 119284
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110808MB1		SampType: MBLK		TestCode: 8260_S_5035 Units: µg/Kg		Prep Date:		RunNo: 135586			
Client ID: PBS		Batch ID: K11VS205		TestNo: EPA 8260B		Analysis Date: 8/8/2011		SeqNo: 2221940			
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 | |



CLIENT: Mactec
Work Order: 119284
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S_5035

Sample ID: K110808MB1		SampType: MBLK		TestCode: 8260_S_5035 Units: µg/Kg		Prep Date:		RunNo: 135586			
Client ID: PBS		Batch ID: K11VS205		TestNo: EPA 8260B		Analysis Date: 8/8/2011		SeqNo: 2221940			
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	44.980		50.00		90.0	65	141				
Surr: 4-Bromofluorobenzene	44.020		50.00		88.0	57	134				
Surr: Dibromofluoromethane	45.350		50.00		90.7	70	128				
Surr: Toluene-d8	48.320		50.00		96.6	72	123				

Qualifiers:

- | | | |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| 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: 119284
Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: A110811LCS1		SampType: LCS		TestCode: 8260_WP_LL Units: µg/L		Prep Date:		RunNo: 135768			
Client ID: LCSW		Batch ID: A11VW136		TestNo: EPA 8260B		Analysis Date: 8/11/2011		SeqNo: 2223787			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23.140	0.50	20.00	0	116	70	130				
Benzene	41.580	0.50	40.00	0	104	70	130				
Chlorobenzene	20.510	0.50	20.00	0	103	70	130				
MTBE	21.410	0.50	20.00	0	107	70	130				
Toluene	41.630	0.50	40.00	0	104	70	130				
Trichloroethene	19.920	0.50	20.00	0	99.6	70	130				
Surr: 1,2-Dichloroethane-d4	25.610		25.00		102	70	130				
Surr: 4-Bromofluorobenzene	24.150		25.00		96.6	70	130				
Surr: Dibromofluoromethane	28.050		25.00		112	70	130				
Surr: Toluene-d8	26.780		25.00		107	70	130				

Sample ID: A110811MB3MS		SampType: MS		TestCode: 8260_WP_LL Units: µg/L		Prep Date:		RunNo: 135768			
Client ID: ZZZZZ		Batch ID: A11VW136		TestNo: EPA 8260B		Analysis Date: 8/11/2011		SeqNo: 2223788			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22.500	0.50	20.00	0	112	70	130				
Benzene	41.370	0.50	40.00	0	103	70	130				
Chlorobenzene	20.280	0.50	20.00	0	101	70	130				
MTBE	20.960	0.50	20.00	0	105	70	130				
Toluene	41.250	0.50	40.00	0	103	70	130				
Trichloroethene	19.770	0.50	20.00	0	98.8	70	130				
Surr: 1,2-Dichloroethane-d4	25.480		25.00		102	70	130				
Surr: 4-Bromofluorobenzene	24.010		25.00		96.0	70	130				
Surr: Dibromofluoromethane	27.810		25.00		111	70	130				
Surr: Toluene-d8	26.630		25.00		107	70	130				

Sample ID: A110811MB3MSD		SampType: MSD		TestCode: 8260_WP_LL Units: µg/L		Prep Date:		RunNo: 135768			
Client ID: ZZZZZ		Batch ID: A11VW136		TestNo: EPA 8260B		Analysis Date: 8/11/2011		SeqNo: 2223789			
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 |
| 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: 119284
 Project: METRO WESTSIDE EXTENSION, 4953-10-1

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: A110811MB3MSD		SampType: MSD		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135768	
Client ID: ZZZZZ		Batch ID: A11VW136		TestNo: EPA 8260B		Analysis Date: 8/11/2011				SeqNo: 2223789	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22.690	0.50	20.00	0	113	70	130	22.50	0.841	20	
Benzene	42.200	0.50	40.00	0	106	70	130	41.37	1.99	20	
Chlorobenzene	20.840	0.50	20.00	0	104	70	130	20.28	2.72	20	
MTBE	22.130	0.50	20.00	0	111	70	130	20.96	5.43	20	
Toluene	42.130	0.50	40.00	0	105	70	130	41.25	2.11	20	
Trichloroethene	20.130	0.50	20.00	0	101	70	130	19.77	1.80	20	
Surr: 1,2-Dichloroethane-d4	25.630		25.00		103	70	130		0	0	
Surr: 4-Bromofluorobenzene	24.340		25.00		97.4	70	130		0	0	
Surr: Dibromofluoromethane	27.700		25.00		111	70	130		0	0	
Surr: Toluene-d8	26.710		25.00		107	70	130		0	0	

Sample ID: A110811MB3		SampType: MBLK		TestCode: 8260_WP_LL		Units: µg/L		Prep Date:		RunNo: 135768	
Client ID: PBW		Batch ID: A11VW136		TestNo: EPA 8260B		Analysis Date: 8/11/2011				SeqNo: 2223790	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	0.50									
1,1-Dichloropropene	ND	0.50									
1,2,3-Trichlorobenzene	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromo-3-chloropropane	ND	0.50									
1,2-Dibromoethane	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									

Qualifiers:

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

