

Detterman, Mark, Env. Health

From: Lee, Nathan [nlee@craworld.com]
Sent: Monday, June 13, 2011 4:49 PM
To: Shad Small; Detterman, Mark, Env. Health; Young, Glenn [FCL]; Don Wallis; Patten, David R.
Cc: Jeanine Kaufman; Kurt Lindquist; rcknappinc2@aol.com; Littleworth, Arthur Todd; Wilken, Brandon
Subject: RE: RE: 1633 Harrison St "3 wk look ahead schedule"
Attachments: 9-0020 ANALYTICAL Soil 2011-6-13.pdf

Shad,

I have attached the results form the samples collected from Friday June 10th over-excavation.

Sample OE-E2-C was collected from the base of the excavation.

Sample OE-E2-6 was collected from Eastern side wall.

Thanks,

Nathan Lee, P.G.
Conestoga-Rovers & Associates (CRA)

5900 Hollis Street, Suite A
Emeryville, CA 94608

Phone: 510.420.3333

Fax: 510.420.9170

Cell: 510.385.2499

Email: nlee@CRAworld.com

From: Shad Small [mailto:ssmall@Oakha.org]
Sent: Thursday, June 09, 2011 3:19 PM
To: Lee, Nathan; Detterman, Mark, Env. Health; Young, Glenn [FCL]; Don Wallis; Patten, David R.
Cc: Jeanine Kaufman; Kurt Lindquist; rcknappinc2@aol.com; Littleworth, Arthur Todd
Subject: RE: RE: 1633 Harrison St "3 wk look ahead schedule"

Thanks, Nathan! I'll see you in the morning.

Shad Small

Development Program Manager
Office of Real Estate Development
Oakland Housing Authority
1801 Harrison St., 2nd Floor
Oakland, CA 94612
(510) 587-2144
(510) 587-2145 (fax)

From: Lee, Nathan [mailto:nlee@craworld.com]
Sent: Thursday, June 09, 2011 2:20 PM
To: Shad Small; Detterman, Mark, Env. Health; Young, Glenn [FCL]; Don Wallis; Patten, David R.
Cc: Jeanine Kaufman; Kurt Lindquist; rcknappinc2@aol.com; Littleworth, Arthur Todd
Subject: RE: RE: 1633 Harrison St "3 wk look ahead schedule"

Shad,

CRA will be onsite tomorrow June 10th around 8 am for the over-excavation in the area of the elevator pit. I have communicated with Mark from ACEH and he will be there around 8 am as well.

Thanks,

Nathan Lee, P.G.
Conestoga-Rovers & Associates (CRA)

5900 Hollis Street, Suite A
Emeryville, CA 94608

Phone: 510.420.3333
Fax: 510.420.9170
Cell: 510.385.2499
Email: nlee@CRAworld.com

From: Shad Small [mailto:ssmall@Oakha.org]
Sent: Wednesday, June 08, 2011 1:24 PM
To: Detterman, Mark, Env. Health; Young, Glenn [FCL]; Don Wallis; Lee, Nathan
Cc: Jeanine Kaufman; Kurt Lindquist; rcknappinc2@aol.com
Subject: RE: RE: 1633 Harrison St "3 wk look ahead schedule"
Importance: High

Hi Mark,

Yes, this upcoming exercise will have a two-fold purpose. One will be a follow-through on the removal of the gasoline-contamination soil, and the other will involve the digging of the elevator pit. The removal of the gasoline-contaminated soil resumes, as may be needed. That work was suspended because of its then-unknown proximity to the elevator pit, which is to be dug by Friday.

Shad Small
Development Program Manager
Office of Real Estate Development
Oakland Housing Authority
1801 Harrison St., 2nd Floor
Oakland, CA 94612
(510) 587-2144
(510) 587-2145 (fax)

From: Detterman, Mark, Env. Health [mailto:Mark.Detterman@acgov.org]
Sent: Wednesday, June 08, 2011 11:36 AM
To: 'Young, Glenn [FCL]'; Don Wallis; Lee, Nathan; Shad Small
Cc: Jeanine Kaufman; Kurt Lindquist; rcknappinc2@aol.com
Subject: RE: RE: 1633 Harrison St "3 wk look ahead schedule"

To clarify for my (at times thick) mind, the excavation starting at 8 will be for the purpose of contaminated soil removal (with subsequent backfilling and excavation of the elevator pit)?

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

<http://www.acgov.org/aceh/lop/ust.htm>

From: Young, Glenn [FCL] [<mailto:gyoung@fugro.com>]
Sent: Wednesday, June 08, 2011 11:17 AM
To: Don Wallis; Lee, Nathan; Shad Small; Detterman, Mark, Env. Health
Cc: Jeanine Kaufman; Kurt Lindquist; rcknappinc2@aol.com
Subject: RE: RE: 1633 Harrison St "3 wk look ahead schedule"

Thanks Don.

Nathan. Please coordinate with Mark to see if Friday will work for you and let us know.

Glenn S. Young PG, LEED AP
Manager, Environmental Services

FUGRO CONSULTANTS, INC.

1000 Broadway, Suite 440
Oakland, CA 94607

Office: (510) 268-0461 Direct: (510) 267-4424 Cell: (510) 610-8057
gyoung@fugro.com / www.FugroWest.com / www.FugroConsultants.com

Fugro has integrated its North American operations serving clients with geotechnical, environmental, and marine survey needs for onshore and nearshore projects. The firm has 30 offices located along all three coasts and in major metropolitan areas.

From: Don Wallis [<mailto:don.wallis@jerocorp.com>]
Sent: Wednesday, June 08, 2011 11:16 AM
To: Young, Glenn [FCL]; Lee, Nathan; Shad Small; Detterman, Mark, Env. Health
Cc: Jeanine Kaufman; Kurt Lindquist; rcknappinc2@aol.com
Subject: RE: RE: 1633 Harrison St "3 wk look ahead schedule"

Guys,

We will be ready to remove the residual contaminated area of concern **this Fri 6-10-11 at 8:00am**. The area will be at sub grade when you arrive and are subcontractor will excavate as needed. Once we reach the limit of removal needed are subcontractor will have to back fill and compact the hole prior to cutting out the elevator pit section do to the pit having a sloped thickened edge. Are subcontractor will place the contaminated soil on plastic sheeting awaiting the off haul trucking supplied by CRA & Chevron. Are subcontractor will load the truck or trucks for CRA & Chevron as needed. We will need the soil removed ASAP so that we can start are under slab utility work on Thurs next week. Please let me know if you have any questions.

See you soon.

DW

Don Wallis

James E. Roberts-Obayashi Corp.
20 Oak Court Danville, Ca 94526
don.wallis@jerocorp.com
925-570-1006 cell

From: Don Wallis
Sent: Monday, June 06, 2011 3:13 PM
To: 'Young, Glenn [FCL]'; Lee, Nathan; Shad Small; Detterman, Mark, Env. Health
Cc: Jeanine Kaufman; Kurt Lindquist
Subject: RE: RE: 1633 Harrison St "3 wk look ahead schedule"

Sounds like a plan. I'll touch base on Wed to confirm for Fri or Mon.

Thanks,

Don Wallis

James E. Roberts-Obayashi Corp.
20 Oak Court Danville, Ca 94526
don.wallis@jrocorp.com
925-570-1006 cell

From: Young, Glenn [FCL] [mailto:gyoung@fugro.com]
Sent: Monday, June 06, 2011 2:58 PM
To: Don Wallis; Lee, Nathan; Shad Small; Detterman, Mark, Env. Health
Cc: Jeanine Kaufman; Kurt Lindquist
Subject: RE: RE: 1633 Harrison St "3 wk look ahead schedule"

Thanks Don – Based on our discussion, it sounds like excavation of the residual contaminated soil may occur either this Friday or Monday and is dependent on the backfill activities for the existing pit. I understand that you will hang plastic sheeting on the eastern wall to demarcate the eastern limit of the excavation.

Please note that Nathan at CRA will need to coordinate with Mark at ACEH to be onsite to observe the last bit of excavation and collect additional soil samples as directed. Therefore, please check your schedule on Wednesday and let us know which day you plan to complete the final bit of excavation so we can all do our best to finish the environmental work.

Glenn S. Young PG, LEED AP
Manager, Environmental Services

FUGRO CONSULTANTS, INC.

1000 Broadway, Suite 440
Oakland, CA 94607
Office: (510) 268-0461 Direct: (510) 267-4424 Cell: (510) 610-8057
gyoung@fugro.com / www.FugroWest.com / www.FugroConsultants.com

Fugro has integrated its North American operations serving clients with geotechnical, environmental, and marine survey needs for onshore and nearshore projects. The firm has 30 offices located along all three coasts and in major metropolitan areas.

From: Don Wallis [mailto:don.wallis@jrocorp.com]
Sent: Monday, June 06, 2011 2:24 PM
To: Steve Strawn; Chris Schmidt; Efen Lugtu; rcknappinc2@aol.com; Young, Glenn [FCL]; Jim Klinger; Dave Peters; dmoman@treadwellrollo.com; Arthur Lam; rcm@rcmfire.com
Cc: Jeanine Kaufman; Kurt Lindquist
Subject: RE: RE: 1633 Harrison St "3 wk look ahead schedule"

Team,

We are finally getting back to work on 1633 Harrison St this week. See attached 3 week look ahead schedule for your use.

Don Wallis

James E. Roberts-Obayashi Corp.

20 Oak Court Danville, Ca 94526
don.wallis@jerocorp.com
925-570-1006 cell



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #311956; Chevron 9.0020	Date Sampled: 06/10/11
		Date Received: 06/10/11
	Client Contact: Nathan Lee	Date Reported: 06/13/11
	Client P.O.:	Date Completed: 06/13/11

WorkOrder: 1106376

June 13, 2011

Dear Nathan:

Enclosed within are:

- 1) The results of the **2** analyzed samples from your project: **#311956; Chevron 9.0020**,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

1106374



McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701

Website: www.mccampbell.com Email: main@mccampbell.com

Telephone: (877) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

GeoTracker EDF PDF Excel Write On (DW)

Check if sample is effluent and "J" flag is required

Report To: **MR. NATHAN LEE** Bill To: *Nathan Lee CRA*
 Company: **CRA**
EMERYVILLE
 E-Mail: *nlee@craworld.com*
 Tele: *(510) 420-3333* Fax: *(510) 420-9170*
 Project #: *311956* Project Name: *CHEVRON 9.0020*
 Project Location: *1633 HARRISON ST, OAKLAND*
 Sampler Signature: *[Signature]*

Analysis Request

Other Comments

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED								
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other					
OE-E2-C		06.10.11	0900	1	TUBE	X					X								
OE-E2-6		06.10.11	0905	1	TUBE	X					X								

BTEX & TPH as Gas (602 / 8021 / 8015) / MTBE	<input checked="" type="checkbox"/>
TPH as Diesel (8015) SILICA GEL CLEANUP	<input checked="" type="checkbox"/>
Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	<input checked="" type="checkbox"/>
TPH as Gas (8015)	<input checked="" type="checkbox"/>
EPA 802.2 / 601 / 8010 / 8021 (HIVOCs)	
MTBE / BTEX ONLY (EPA 602 / 8021)	
EPA 505 / 608 / 8081 (CI Pesticides)	
EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	
EPA 507 / 8141 (NP Pesticides)	
EPA 515 / 8151 (Acidic CI Herbicides)	
EPA 524.2 / 624 / 8260 (VOCs)	
EPA 525.2 / 625 / 8270 (SVOCs)	
EPA 8270 SIM / 8310 (PAHs / PNAS)	
CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	
LUF 5 Metals (200.7 / 200.8 / 6010 / 6020)	<input checked="" type="checkbox"/>
Lead (200.7 / 200.8 / 6010 / 6020)	

** Indicate here if these samples are potentially dangerous to handle:
 * Please run TPH as motor oil by 8015 with silica gel cleanup

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By: <i>[Signature]</i>	Date: <i>06/10/11</i>	Time: <i>1045</i>	Received By: <i>Secure location</i>
Relinquished By: <i>[Signature]</i>	Date: <i>6/12/11</i>	Time: <i>1122</i>	Received By: <i>[Signature]</i>
Relinquished By: <i>[Signature]</i>	Date: <i>6/15/11</i>	Time: <i>1600</i>	Received By: <i>[Signature]</i>

ICE# *9.6* COMMENTS:
 GOOD CONDITION _____
 HEAD SPACE ABSENT _____
 DECHLORINATED IN LAB _____
 APPROPRIATE CONTAINERS _____
 PRESERVED IN LAB _____
 VOAS O&G METALS OTHER
 PRESERVATION pH<2

McC Campbell Analytical, Inc.



1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1106376

ClientCode: CETE

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:		Bill to:	Requested TAT: 1 day
Nathan Lee	Email: nlee@craworld.com	Accounts Payable	
Conestoga-Rovers & Associates	cc:	Conestoga-Rovers & Associates	<i>Date Received: 06/10/2011</i>
5900 Hollis St, Suite A	PO:	5900 Hollis St, Ste. A	<i>Date Printed: 06/10/2011</i>
Emeryville, CA 94608	ProjectNo: #311956; Chevron 9.0020	Emeryville, CA 94608	
(510) 420-3327 FAX (510) 420-9170			

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1106376-001	OE-E2-C	Soil	6/10/2011 9:00	<input type="checkbox"/>	A	A	A									
1106376-002	OE-E2-6	Soil	6/10/2011 9:05	<input type="checkbox"/>	A	A	A									

Test Legend:

1	G-MBTX_S	2	LUFT_S	3	TPH(DMO)WSG_S	4		5	
6		7		8		9		10	
11		12							

Prepared by: Ana Venegas

Comments: 24hr rush

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
 Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **Conestoga-Rovers & Associates**

Date and Time Received: **6/10/2011 4:13:00 PM**

Project Name: **#311956; Chevron 9.0020**

Checklist completed and reviewed by: **Ana Venegas**

WorkOrder N°: **1106376** Matrix Soil

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Sample IDs noted by Client on COC? Yes No
- Date and Time of collection noted by Client on COC? Yes No
- Sampler's name noted on COC? Yes No

Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes No NA
- Shipping container/cooler in good condition? Yes No
- Samples in proper containers/bottles? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No
 - Container/Temp Blank temperature Cooler Temp: 9.6°C NA
 - Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 - Sample labels checked for correct preservation? Yes No
 - Metal - pH acceptable upon receipt (pH<2)? Yes No NA
 - Samples Received on Ice? Yes No
- (Ice Type: WET ICE)

* NOTE: If the "No" box is checked, see comments below.

Client contacted:

Date contacted:

Contacted by:

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #311956; Chevron 9.0020	Date Sampled: 06/10/11
	Client Contact: Nathan Lee	Date Received: 06/10/11
	Client P.O.:	Date Extracted: 06/10/11
		Date Analyzed: 06/10/11

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1106376

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	OE-E2-C	S	ND	ND	ND	ND	ND	ND	1	95	
002A	OE-E2-6	S	ND	ND	ND	ND	ND	ND	1	93	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	0.5	ug/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #311956; Chevron 9.0020	Date Sampled: 06/10/11
	Client Contact: Nathan Lee	Date Received: 06/10/11
	Client P.O.:	Date Extracted: 06/10/11
		Date Analyzed: 06/13/11

LUFT 5 Metals*

Extraction method: SW3050B

Analytical methods: SW6010B

Work Order: 1106376

Lab ID	Client ID	Matrix	Extraction Type	Cadmium	Chromium	Lead	Nickel	Zinc	DF	% SS	Comments
001A	OE-E2-C	S	TOTAL	ND	68	ND	48	27	1	89	
002A	OE-E2-6	S	TOTAL	ND	51	ND	44	21	1	93	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	NA	NA	NA	NA	NA	NA
	S	TOTAL	1.5	1.5	5.0	1.5	5.0	mg/Kg	

*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

means surrogate diluted out of range; ND means not detected above the reporting limit/method detection limit; N/A means not applicable to this sample or instrument.

TOTAL = Hot acid digestion of a representative sample aliquot.
TRM = Total recoverable metals is the "direct analysis" of a sample aliquot taken from its acid-preserved container.
DISS = Dissolved metals by direct analysis of 0.45 µm filtered and acidified sample.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Conestoga-Rovers & Associates 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #311956; Chevron 9.0020	Date Sampled: 06/10/11
	Client Contact: Nathan Lee	Date Received: 06/10/11
	Client P.O.:	Date Extracted: 06/10/11
		Date Analyzed: 06/11/11

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3550B/3630C

Analytical methods: SW8015B

Work Order: 1106376

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	DF	% SS	Comments
1106376-001A	OE-E2-C	S	2.2	18	1	101	e7,e2
1106376-002A	OE-E2-6	S	ND	ND	1	101	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

%SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
e2) diesel range compounds are significant; no recognizable pattern
e7) oil range compounds are significant



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 58903

WorkOrder: 1106376

EPA Method: SW8021B/8015Bm		Extraction: SW5030B							Spiked Sample ID: 1106241-005A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) £	ND	0.60	109	108	0.689	107	107	0	70 - 130	20	70 - 130	20
MTBE	ND	0.10	103	105	2.06	103	103	0	70 - 130	20	70 - 130	20
Benzene	ND	0.10	93.1	97.2	4.33	93.5	93.4	0.0827	70 - 130	20	70 - 130	20
Toluene	ND	0.10	96.7	101	4.44	97	96.9	0.0534	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	103	108	4.49	103	102	0.332	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	101	106	4.53	103	102	0.349	70 - 130	20	70 - 130	20
%SS:	81	0.10	97	102	5.40	102	99	2.81	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 58903 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1106376-001A	06/10/11 9:00 AM	06/10/11	06/10/11 7:59 PM	1106376-002A	06/10/11 9:05 AM	06/10/11	06/10/11 8:30 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 £ TPH(btex) = sum of BTEX areas from the FID.
 # cluttered chromatogram; sample peak coelutes with surrogate peak.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



QC SUMMARY REPORT FOR 6010B

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder: 1106376

EPA Method: SW6010B		Extraction: SW3050B				BatchID: 58989		Spiked Sample ID: 1106376-002A					
Analyte	Sample	Spiked	MS	MSD	MS-MSD	Spiked	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	mg/Kg	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Cadmium	ND	50	91.1	92.7	1.69	10	94.8	94.1	0.715	75 - 125	25	75 - 125	25
Chromium	51	50	90.9	94.1	1.65	10	97.4	97.6	0.256	75 - 125	25	75 - 125	25
Lead	ND	50	94.4	91.2	3.45	10	87.8	85.6	2.60	75 - 125	25	75 - 125	25
Nickel	44	50	90.2	92	1.04	10	96.2	95.4	0.835	75 - 125	25	75 - 125	25
Zinc	21	500	94.9	96.5	1.65	100	103	101	1.54	75 - 125	25	75 - 125	25
%SS:	93	500	95	96	1.36	500	88	91	3.69	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 58989 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1106376-001A	06/10/11 9:00 AM	06/10/11	06/13/11 11:38 AM	1106376-002A	06/10/11 9:05 AM	06/10/11	06/13/11 11:28 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not applicable to this method.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 58977

WorkOrder: 1106376

EPA Method: SW8015B

Extraction: SW3550B/3630C

Spiked Sample ID: 1106376-002A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	ND	40	109	107	2.14	98.3	101	2.28	70 - 130	30	70 - 130	30
%SS:	101	25	94	92	1.78	78	81	4.17	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 58977 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1106376-001A	06/10/11 9:00 AM	06/10/11	06/11/11 8:28 AM	1106376-002A	06/10/11 9:05 AM	06/10/11	06/11/11 9:36 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.