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May 22, 2015

660221.PM.01

Mr. Paul Cho  
Regional Water Quality Control Board,  
Los Angeles Region  
320 West 4th Street, Suite 200  
Los Angeles, California 90013

Subject: Response to RWQCB Request for Additional Soil Sampling to Support Shallow Soil Closure  
SFPP Norwalk Pump Station, Norwalk, California

Dear Mr. Cho:

This letter has been prepared by CH2M HILL Engineers, Inc. (CH2M HILL) on behalf of SFPP, L.P. (SFPP), an operating partner of Kinder Morgan Energy Partners, L.P. (KMEP), to provide details on the proposed collection and analysis of additional shallow soil samples at the SFPP Norwalk Pump Station to support shallow soil closure. The Norwalk Pump Station is located within the Defense Fuel Support Point Norwalk, at 15306 Norwalk Boulevard, Norwalk, California. Figure 1 shows the location of the site.

## Background

A request for No Further Action (NFA) in shallow soils (0 to 10 feet below ground surface [bgs]) was prepared by CH2M HILL and submitted on behalf of KMEP to the Regional Water Quality Control Board, Los Angeles Region (RWQCB) on March 25, 2014<sup>1</sup>. In the request, the results of SFPP's 2012 Soil Boring Investigation<sup>2</sup> were presented, which provided a thorough characterization of subsurface soil conditions. Analytical data collected as part of that investigation included volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH), and other analytical results including total metals for investigative-derived waste (IDW) profiling. The VOCs and TPH results showed that hydrocarbon impacts in soils are generally limited to the smear zone near the groundwater surface that occurs deeper than 15 feet bgs.

Soil vapor data that are collected annually at the site are consistent with the results from the 2012 Soil Boring Investigation, which further supports shallow soil closure. Soil vapor samples are collected annually from a thorough network of 16 multidepth probes. Results of the 2014 annual soil vapor sampling event were presented to the RWQCB in a letter dated February 25, 2015<sup>3</sup>. As cited in the report, detectable hydrocarbons were generally limited to depths greater than 15 feet bgs and were highest at the deepest sample depth of 22 feet bgs, just above the groundwater surface. All detectable hydrocarbons in soil vapor shallower than 15 feet bgs were below residential and commercial risk-based screening levels.

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<sup>1</sup> CH2M HILL. 2014. *Request for No Further Action – Shallow Soil, SFPP Norwalk Pump Station, 15306 Norwalk Boulevard, Norwalk, California*. March 25.

<sup>2</sup> CH2M HILL. 2012. *Results of Soil Boring Investigation, SFPP Norwalk Pump Station, 15306 Norwalk Boulevard, Norwalk, California*. December 5.

<sup>3</sup> CH2M HILL. 2015. *Results of October 2014 Soil Vapor Monitoring at the South-Central and Southeastern Offsite Areas of the SFPP Norwalk Pump Station*. February 24.

## **RWQCB Request for Additional Soil Samples**

The RWQCB recently requested collection of additional soil samples during a teleconference meeting with KMEP on April 21, 2015, to support the NFA request for shallow soils (0 to 10 feet bgs). The number, depth, and location of soil samples was left for KMEP's discretion; however, the RWQCB indicated that up to three sample locations would be sufficient. The RWQCB requested that analyses should include total metals, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs). KMEP was given the option to use historical sample results to satisfy the RWQCB's request in lieu of collecting additional soil samples. Therefore, KMEP proposes to fulfill the RWQCB request as follows:

- Use previous metals data collected from the 2012 Soil Boring Investigation to satisfy RWQCB's request for metals data. These data are summarized in Table 1; the laboratory analytical report is provided in Attachment A. The initial purpose of the metals data was to assist with profiling the residual soil generated from direct-push activities, which were used to facilitate the collection of discrete-depth soil samples. The composite sample included residual soil from each of the investigative borings, and therefore is representative of subsurface conditions at the site. As shown in Table 1, the metals concentrations are below screening levels (California Human Health Screening Level [CHHSL] and Department of Toxic Substances Control [DTSC]) with the exception of arsenic. Arsenic was measured at a concentration of 5.4 milligrams per kilogram (mg/kg) and is considered to be representative of background soil concentrations.
- Collect discrete-depth soil samples for PAHs and PCBs analysis since these data were not collected during previous investigations.

Further discussion of the additional soil sampling activities are provided below.

## **Proposed Activities**

KMEP proposes to collect discrete-depth soil samples from two locations in the south-central area (SB-10 and SB-11) and one location in the southeastern area (SB-12), as shown in Figure 2. SB-10 is located south of the remediation pad and north of the Southern California Edison substation. SB-11 is located near legacy boring SB-6 south of the SFPP control room. SB-12 is located near legacy borings SB-8 and SB-9 in the southeastern 24-inch block valve area. Soil samples will be collected by hand auger methods to a maximum depth of 10 feet bgs. Discrete samples will be collected at 5 feet and 10 feet bgs for laboratory analysis.

## **Pre-field Activities**

CH2M HILL will perform the following field preparation activities, prior to commencement of the soil sampling:

- Update the existing site-specific health and safety plan to incorporate the planned field work.
- Mark the proposed boring locations.
- Notify Underground Service Alert (USA). As required by USA, the borings will be called-in and marked-out in white paint at least 2 business days prior to boring advancement.
- Perform an underground utility check using a private utility-locating subcontractor. CH2M HILL and a private utility-locating subcontractor will meet with KMEP operations staff, mark-out the three investigation locations, and clear the locations of potential underground utilities and other infrastructure.
- Coordinate with KMEP personnel to arrange for a KMEP field inspector to be present during field activities in the vicinity of KMEP pipelines, if necessary.

The proposed sampling locations will be finalized in the field based on the results of the private utility-locating surveys and USA mark-outs.

### **Sampling Activities**

CH2M HILL will use hand auger methods to collect soil samples for lithologic logging, field screening with a photoionization detector (PID), and laboratory analysis. The lithology will be described by a CH2M HILL field geologist under the direction of a State of California Licensed Professional Geologist. Soil will be described using visual manual procedures of ASTM International Method D2488, which are based on the Unified Soil Classification System for guidance. Color, moisture content, grain size, and other pertinent soil characteristics will be recorded on boring logs. Soil will be screened in the field for the potential presence of VOCs using a PID.

Discrete-depth soil samples will be collected at each boring location (SB-10, SB-11, and SB-12) for field screening using a PID and laboratory analysis as follows:

- Soil samples will be collected at approximately 5 feet and 10 feet bgs during hand augering activities.
- For quality assurance/quality control purposes, one field duplicate soil sample and one equipment blank (water sample) will be collected.
- Samples will be placed in an ice-chilled cooler and submitted under chain-of-custody procedures to an analytical laboratory certified under the California Environmental Laboratory Accreditation Program.

The soil samples (including field duplicate sample) and equipment blank sample will be analyzed for:

- PAHs using U.S. Environmental Protection Agency (EPA) Method 8270 SIM
- PCBs using EPA Method 8082

### **Boring Destruction and Survey**

After lithologic logging and soil sampling is complete, each temporary soil boring will be destroyed by backfilling with bentonite chips and hydrated in place. The locations of the borings will be surveyed by CH2M HILL staff using a hand-held global positioning system (GPS) unit.

### **Equipment Decontamination**

Sampling equipment will be cleaned before use and between boring locations and discrete-depths by washing with an Alconox-water solution and double-rinsing with potable water.

### **Investigation-Derived Waste Management**

Waste generated during the investigation, including equipment wash/rinse water and soil cuttings, will be separately contained in Department of Transportation (DOT)-approved 55-gallon steel drums. The drums will be transported to SFPP's groundwater treatment system containment pad at the end of each day. Equipment wash and rinse water will then be transferred to the containment pad sump for eventual treatment and discharge.

A composite sample of the soil cuttings will be collected and sent to a certified laboratory for waste disposal profiling purposes. The drummed soil cuttings will be disposed at an offsite, permitted facility. CH2M HILL will coordinate with the waste hauler to verify the laboratory parameters that need to be analyzed to meet waste profiling requirements.

## Schedule

CH2M HILL anticipates initiating implementation of the work outlined in this letter upon receiving approval from the RWQCB. A report summarizing the results of this investigation will be prepared and submitted to the RWQCB within 60 days of receiving final laboratory analytical results.

If you have any questions regarding this letter, please contact Mr. Dan Jablonski of CH2M HILL at (213) 228-8271 or Mr. Steve Defibaugh of KMEP at (714) 560-4802.

Sincerely,

CH2M HILL Engineers, Inc.



Dan Jablonski  
Project Manager

### Attachments:

- Table 1 – IDW Soil Metals Results, 2012 Soil Boring Investigation
- Figure 1 – Site Location Map
- Figure 2 – Proposed Soil Boring Locations
- Attachment A – IDW Soil Laboratory Analytical Report, 2012 Soil Boring Investigation

### Distribution:

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- Mary Jane McIntosh, RAB Co-Chair (electronic only)
- Tracy Winkler, RAB (electronic only)
- Adriana Figueroa, City of Norwalk (electronic only)
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## Table

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**Table 1**

IDW Soil Metals Results, 2012 Soil Boring Investigation  
 SFPP Norwalk Pump Station, Norwalk, California

Soil IDW-SB Analyte	Result (mg/kg)	MDL (mg/kg)	RL (mg/kg)	CHHSL (mg/kg)	DTSC Screening Levels (mg/kg)	Below Screening Levels (Yes/No)	Comments
Antimony	ND	0.17	2.1	30	31	Yes	-
Arsenic	5.4	0.16	1.0	0.07	0.062	No	Representative of background
Barium	75	0.17	1.0	5,200	15,000	Yes	-
Beryllium	ND	0.15	1.0	150	152	Yes	-
Cadmium	0.38 J	0.16	1.0	1.7	4.58	Yes	-
Chromium	13	0.17	1.0	100,000	125,000	Yes	-
Cobalt	5.9	0.17	1.0	660	23	Yes	-
Copper	13	0.15	2.1	3,000	3,100	Yes	-
Lead	5.5	0.14	1.0	150	80	Yes	-
Mercury	ND	0.03	0.1	18	23	Yes	-
Molybdenum	ND	0.16	1.0	380	390	Yes	-
Nickel	10	0.17	1.0	1,600	1,500	Yes	-
Selenium	ND	0.29	1.0	380	390	Yes	-
Silver	ND	0.15	1.0	380	390	Yes	-
Thallium	ND	0.15	2.1	5	0.78	Yes	-
Vanadium	24	0.17	1.0	530	390	Yes	-
Zinc	39	0.16	1.0	23,000	23,000	Yes	-

## Notes:

Soil-IDW-SB = sample ID

Sample collected on September 27, 2012.

Soil sample is composite sample from soil borings SB-1 to SB-9.

From 2012 Soil Boring Investigation (CH2M HILL. 2012. *Results of Soil Boring Investigation, SFPP Norwalk Pump Station, 15306 Norwalk Boulevard, Norwalk, California*. December 5).

Results have been compared to CHHSLs (OEHHA, 2010)<sup>1</sup> and screening levels recommended by DTSC (DTSC, 2014)<sup>2</sup> based on residential land use.

## Abbreviations:

IDW - investigation-derived waste

CHHSL - California Human Health Screening Level

DTSC - California Department of Toxic Substances Control

mg/kg - milligrams per kilogram (dry weight)

MDL - laboratory minimum detection limit

RL - laboratory reporting limit

ND - not detected above the laboratory minimum detection limit

J - estimated, result is above laboratory minimum detection limit but below laboratory reporting limit

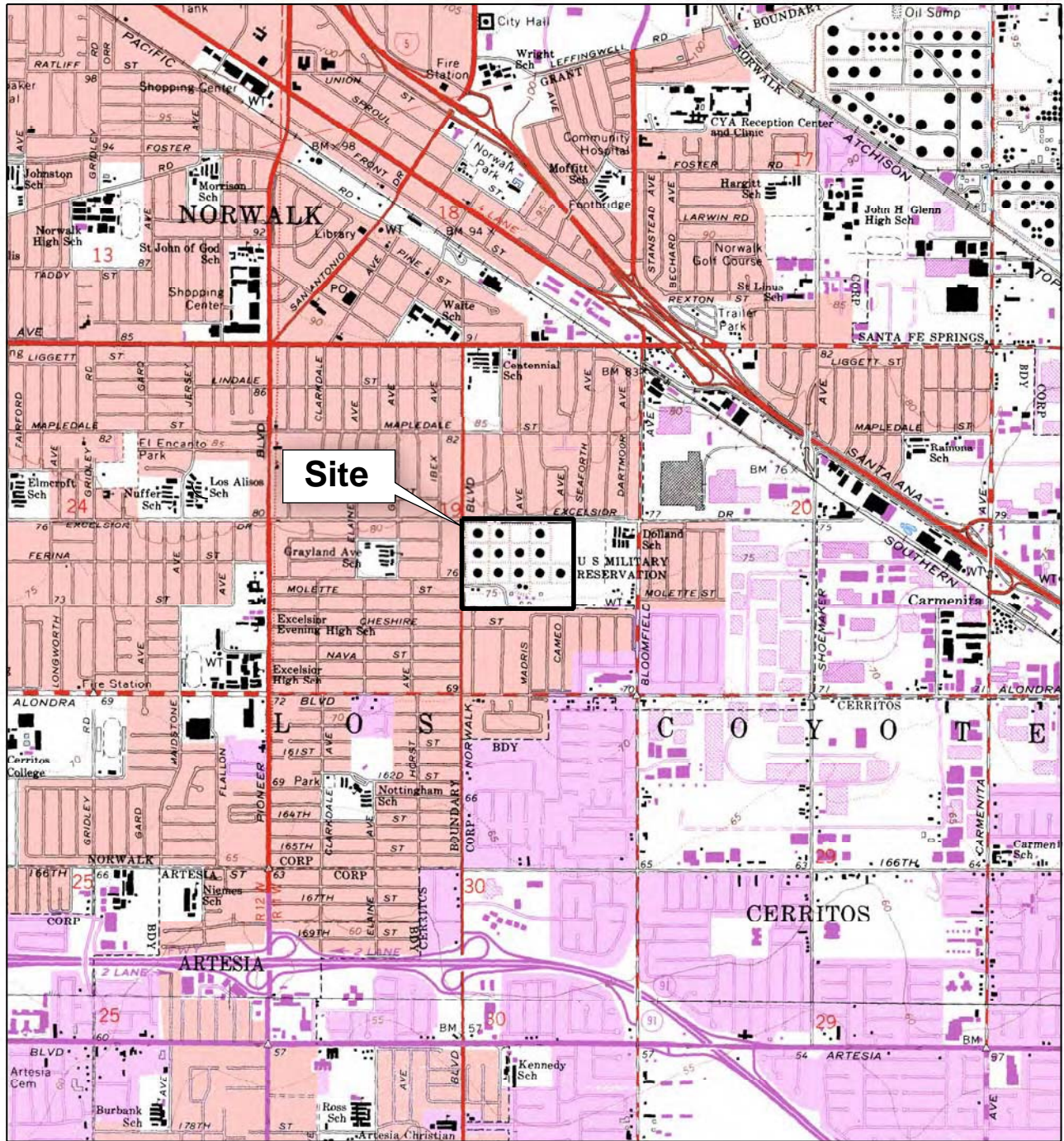
## References:

<sup>1</sup> Office of Environmental Health Hazard Assessment (OEHHA), 2010. <http://oehha.ca.gov/risk/soil.html>

<sup>2</sup> Department of Toxic Substances Control (DTSC), 2014. <http://www.dtsc.ca.gov/AssessingRisk/upload/HHRA-Note-3-2.pdf>

## Figures

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Approximate Scale in Feet

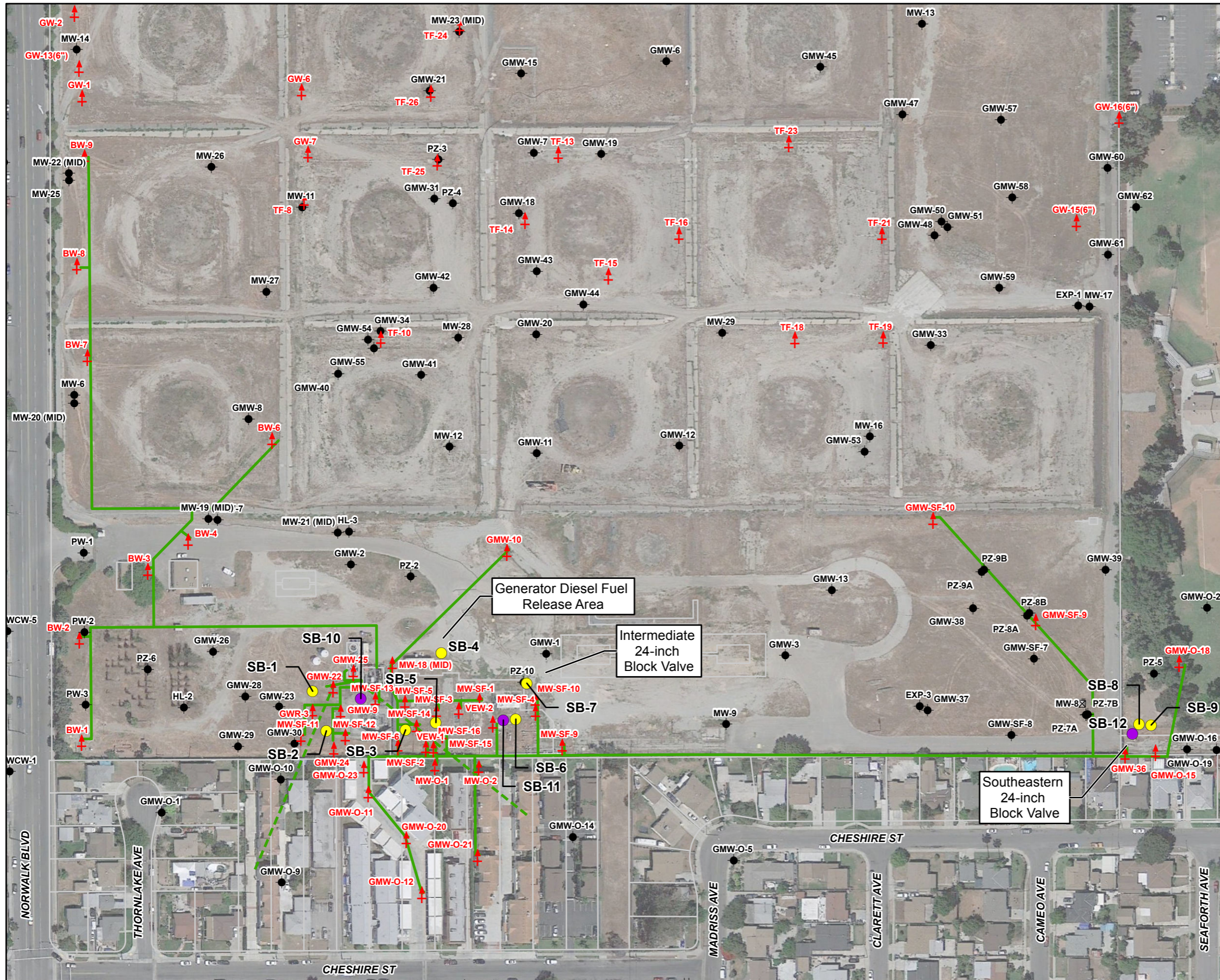
0 1200 2400



Approximate Scale in Meters

FIGURE 1  
 Site Location Map  
 SFPF Norwalk Pump Station  
 Norwalk, California





**Legend**

- 2012 Legacy Soil boring Location
- Proposed Soil Boring Location
- Existing Groundwater Monitoring Well
- + Existing Remediation Well
- KMEP Remediation Piping Layout (above ground and below ground)
- - - Horizontal Vapor Extraction Well Piping

Imagery Source:  
Google Earth April 17, 2013.

**Figure 2**  
Proposed Soil Boring Locations  
SFPP Norwalk Pump Station  
Norwalk, California

**Attachment A**  
**IDW Soil Laboratory Analytical Report**  
**2012 Soil Boring Investigation**

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October 10, 2012

Daniel Jablonski  
CH2M HILL  
155 Grand Avenue, Suite 1000  
Oakland, CA 94612

TEL: (213)228-8271  
FAX: (510) 622-9129

CA-ELAP No.:2676  
NV Cert. No.:NV-009222007A

Workorder No.: N008590

RE: Kinder Morgan - Norwalk

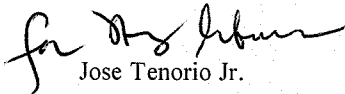
Attention: Daniel Jablonski

Enclosed are the results for sample(s) received on September 28, 2012 by Advanced Technology Laboratories, Inc. . 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 (702) 307-2659 if I can be of further assistance to your company.

Sincerely,



Jose Tenorio Jr.  
Laboratory Director

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



**Advanced Technology  
Laboratories, Inc.**

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

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**CLIENT:** CH2M HILL  
**Project:** Kinder Morgan - Norwalk  
**Lab Order:** N008590

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**CASE NARRATIVE**

**SAMPLE RECEIVING/GENERAL COMMENTS:**

Samples were received intact with proper chain of custody documentation.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Samples were analyzed within method holding time.

Results were J-Flag. "J" is used to flag those results that are between the PQL (Practical Quantitation Limit) and the calculated MDL (Method Detection Limit). Results that are "J" Flagged are estimated values since it becomes difficult to accurately quantitate the analyte near the MDL.

**Subcontracted Analyses:**

Ignitability was subcontracted to Associated Laboratories-Orange, CA .

**Analytical Comments for EPA 6010B:**

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

**Analytical Comments for EPA 8015B\_Jet Fuel:**

Matrix Spike (MS) is outside recovery criteria possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

**Analytical Comments for EPA 8270C:**

Matrix Spike Duplicate (MSD) is outside recovery criteria for Benzoic acid possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.



**CLIENT:** CH2M HILL  
**Project:** Kinder Morgan - Norwalk  
**Lab Order:** N008590  
**Contract No:**

**Work Order Sample Summary**

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N008590-001A	Soil IDW - MW	Soil	9/27/2012 11:45:00 AM	9/28/2012	10/10/2012
N008590-001B	Soil IDW - MW	Soil	9/27/2012 11:45:00 AM	9/28/2012	10/10/2012
N008590-001C	Soil IDW - MW	Soil	9/27/2012 11:45:00 AM	9/28/2012	10/10/2012
N008590-001D	Soil IDW - MW	Soil	9/27/2012 11:45:00 AM	9/28/2012	10/10/2012
N008590-002A	Soil IDW - SB	Soil	9/27/2012 12:00:00 PM	9/28/2012	10/10/2012
N008590-002B	Soil IDW - SB	Soil	9/27/2012 12:00:00 PM	9/28/2012	10/10/2012
N008590-002C	Soil IDW - SB	Soil	9/27/2012 12:00:00 PM	9/28/2012	10/10/2012
N008590-002D	Soil IDW - SB	Soil	9/27/2012 12:00:00 PM	9/28/2012	10/10/2012



<b>CLIENT:</b> CH2M HILL	<b>Client Sample ID:</b> Soil IDW - MW
<b>Lab Order:</b> N008590	<b>Collection Date:</b> 9/27/2012 11:45:00 AM
<b>Project:</b> Kinder Morgan - Norwalk	<b>Matrix:</b> SOIL
<b>Lab ID:</b> N008590-001	

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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**PERCENT MOISTURE**

**D2216**

RunID: <b>WETCHEM_120928C</b>	QC Batch: <b>R85747</b>	PrepDate:	Analyst: <b>KAB</b>
Percent Moisture	18.59 0.1000	0.1000	wt%
			1
			9/28/2012

**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS**  
**EPA 3550B**

**EPA 8270C**

RunID: <b>MS4_121002B</b>	QC Batch: <b>40838</b>	PrepDate: <b>10/1/2012</b>	Analyst: <b>MDM</b>
1,2,4-Trichlorobenzene	ND 52	410	ug/Kg-dry 1 10/2/2012 08:15 PM
1,2-Dichlorobenzene	ND 51	410	ug/Kg-dry 1 10/2/2012 08:15 PM
1,3-Dichlorobenzene	ND 61	410	ug/Kg-dry 1 10/2/2012 08:15 PM
1,4-Dichlorobenzene	ND 58	410	ug/Kg-dry 1 10/2/2012 08:15 PM
2,4,5-Trichlorophenol	ND 83	410	ug/Kg-dry 1 10/2/2012 08:15 PM
2,4,6-Trichlorophenol	ND 48	410	ug/Kg-dry 1 10/2/2012 08:15 PM
2,4-Dichlorophenol	ND 50	2000	ug/Kg-dry 1 10/2/2012 08:15 PM
2,4-Dimethylphenol	ND 110	410	ug/Kg-dry 1 10/2/2012 08:15 PM
2,4-Dinitrophenol	ND 50	2000	ug/Kg-dry 1 10/2/2012 08:15 PM
2,4-Dinitrotoluene	ND 54	410	ug/Kg-dry 1 10/2/2012 08:15 PM
2,6-Dinitrotoluene	ND 53	410	ug/Kg-dry 1 10/2/2012 08:15 PM
2-Chloronaphthalene	ND 55	410	ug/Kg-dry 1 10/2/2012 08:15 PM
2-Chlorophenol	ND 53	410	ug/Kg-dry 1 10/2/2012 08:15 PM
2-Methylnaphthalene	ND 49	410	ug/Kg-dry 1 10/2/2012 08:15 PM
2-Methylphenol	ND 59	410	ug/Kg-dry 1 10/2/2012 08:15 PM
2-Nitroaniline	ND 66	2000	ug/Kg-dry 1 10/2/2012 08:15 PM
2-Nitrophenol	ND 55	410	ug/Kg-dry 1 10/2/2012 08:15 PM
3,3'-Dichlorobenzidine	ND 53	810	ug/Kg-dry 1 10/2/2012 08:15 PM
3-Nitroaniline	ND 59	2000	ug/Kg-dry 1 10/2/2012 08:15 PM
4,6-Dinitro-2-methylphenol	ND 64	2000	ug/Kg-dry 1 10/2/2012 08:15 PM
4-Bromophenyl-phenylether	ND 99	410	ug/Kg-dry 1 10/2/2012 08:15 PM
4-Chloro-3-methylphenol	ND 50	810	ug/Kg-dry 1 10/2/2012 08:15 PM
4-Chloroaniline	ND 54	810	ug/Kg-dry 1 10/2/2012 08:15 PM
4-Chlorophenyl-phenylether	ND 75	410	ug/Kg-dry 1 10/2/2012 08:15 PM
4-Methylphenol	ND 44	410	ug/Kg-dry 1 10/2/2012 08:15 PM
4-Nitroaniline	ND 130	2000	ug/Kg-dry 1 10/2/2012 08:15 PM
4-Nitrophenol	ND 190	2000	ug/Kg-dry 1 10/2/2012 08:15 PM
Acenaphthene	ND 50	410	ug/Kg-dry 1 10/2/2012 08:15 PM
Acenaphthylene	ND 49	410	ug/Kg-dry 1 10/2/2012 08:15 PM
Anthracene	ND 82	410	ug/Kg-dry 1 10/2/2012 08:15 PM
Benzo(a)anthracene	ND 92	410	ug/Kg-dry 1 10/2/2012 08:15 PM

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	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, Inc.

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

**CLIENT:** CH2M HILL  
**Lab Order:** N008590  
**Project:** Kinder Morgan - Norwalk  
**Lab ID:** N008590-001

**Client Sample ID:** Soil IDW - MW  
**Collection Date:** 9/27/2012 11:45:00 AM  
**Matrix:** SOIL

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

**EPA 3550B**

**EPA 8270C**

RunID: <b>MS4_121002B</b>	QC Batch: <b>40838</b>	PrepDate: <b>10/1/2012</b>	Analyst: <b>MDM</b>			
Benzo(a)pyrene	ND	79	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Benzo(b)fluoranthene	ND	58	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Benzo(g,h,i)perylene	ND	70	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Benzo(k)fluoranthene	ND	70	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Benzoic acid	ND	180	2000	ug/Kg-dry	1	10/2/2012 08:15 PM
Benzyl alcohol	ND	83	810	ug/Kg-dry	1	10/2/2012 08:15 PM
Bis(2-chloroethoxy)methane	ND	79	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Bis(2-chloroethyl)ether	ND	76	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Bis(2-chloroisopropyl)ether	ND	70	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Bis(2-ethylhexyl)phthalate	ND	99	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Butylbenzylphthalate	ND	83	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Chrysene	ND	98	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Di-n-butylphthalate	ND	75	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Di-n-octylphthalate	ND	63	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Dibenz(a,h)anthracene	ND	110	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Dibenzofuran	ND	50	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Diethylphthalate	ND	60	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Dimethylphthalate	ND	68	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Fluoranthene	ND	86	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Fluorene	ND	89	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Hexachlorobenzene	ND	58	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Hexachlorobutadiene	ND	74	810	ug/Kg-dry	1	10/2/2012 08:15 PM
Hexachloroethane	ND	58	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Indeno(1,2,3-cd)pyrene	ND	81	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Isophorone	ND	72	410	ug/Kg-dry	1	10/2/2012 08:15 PM
N-Nitrosodi-n-propylamine	ND	57	410	ug/Kg-dry	1	10/2/2012 08:15 PM
N-Nitrosodiphenylamine	ND	65	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Naphthalene	ND	59	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Nitrobenzene	ND	70	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Pentachlorophenol	ND	42	2000	ug/Kg-dry	1	10/2/2012 08:15 PM
Phenanthrene	ND	100	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Phenol	ND	46	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Pyrene	ND	81	410	ug/Kg-dry	1	10/2/2012 08:15 PM
Surr: 1,2-Dichlorobenzene-d4	68.5	0	25-110	%REC	1	10/2/2012 08:15 PM
Surr: 2,4,6-Tribromophenol	82.1	0	36-126	%REC	1	10/2/2012 08:15 PM
Surr: 2-Chlorophenol-d4	75.6	0	30-100	%REC	1	10/2/2012 08:15 PM

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



Advanced Technology  
 Laboratories, Inc.

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

**CLIENT:** CH2M HILL  
**Lab Order:** N008590  
**Project:** Kinder Morgan - Norwalk  
**Lab ID:** N008590-001

**Client Sample ID:** Soil IDW - MW  
**Collection Date:** 9/27/2012 11:45:00 AM  
**Matrix:** SOIL

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

**EPA 3550B**

**EPA 8270C**

RunID: <b>MS4_121002B</b>	QC Batch: <b>40838</b>	PrepDate: <b>10/1/2012</b>	Analyst: <b>MDM</b>
Surr: 2-Fluorobiphenyl	80.1 0	43-125 %REC	1 10/2/2012 08:15 PM
Surr: 2-Fluorophenol	75.3 0	37-125 %REC	1 10/2/2012 08:15 PM
Surr: 4-Terphenyl-d14	100 0	32-125 %REC	1 10/2/2012 08:15 PM
Surr: Nitrobenzene-d5	82.6 0	37-125 %REC	1 10/2/2012 08:15 PM
Surr: Phenol-d5	76.6 0	40-125 %REC	1 10/2/2012 08:15 PM

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: <b>MS1_121001A</b>	QC Batch: <b>D12VS072</b>	PrepDate:	Analyst: <b>QBM</b>
1,1,1,2-Tetrachloroethane	ND 0.29	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,1,1-Trichloroethane	ND 0.39	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,1,1,2,2-Tetrachloroethane	ND 0.36	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,1,2-Trichloroethane	ND 0.54	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,1-Dichloroethane	ND 0.46	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,1-Dichloroethene	ND 0.93	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,1-Dichloropropene	ND 0.37	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,2,3-Trichlorobenzene	ND 0.42	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,2,3-Trichloropropane	ND 0.30	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,2,4-Trichlorobenzene	ND 0.50	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,2,4-Trimethylbenzene	ND 0.16	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,2-Dibromo-3-chloropropane	ND 1.1	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,2-Dibromoethane	ND 0.51	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,2-Dichlorobenzene	ND 0.23	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,2-Dichloroethane	ND 0.40	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,2-Dichloropropane	ND 0.55	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,3,5-Trimethylbenzene	ND 0.27	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,3-Dichlorobenzene	ND 0.34	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,3-Dichloropropane	ND 0.26	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
1,4-Dichlorobenzene	ND 0.21	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
2,2-Dichloropropane	ND 0.81	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
2-Butanone	ND 3.4	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
2-Chlorotoluene	ND 0.22	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
4-Chlorotoluene	ND 0.33	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
4-Isopropyltoluene	ND 0.23	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
4-Methyl-2-pentanone	ND 1.5	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM
Acetone	ND 5.1	6.1 ug/Kg-dry	1 10/1/2012 04:58 PM

**Qualifiers:** B Analyte detected in the associated Method Blank E Value above quantitation range  
 H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits  
 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:** CH2M HILL  
**Lab Order:** N008590  
**Project:** Kinder Morgan - Norwalk  
**Lab ID:** N008590-001

**Client Sample ID:** Soil IDW - MW  
**Collection Date:** 9/27/2012 11:45:00 AM  
**Matrix:** SOIL

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

**EPA 8260B**

RunID: MS1_121001A	QC Batch: D12VS072	PrepDate:	Analyst: QBM
Acrolein	ND 12	120	ug/Kg-dry 1 10/1/2012 04:58 PM
Acrylonitrile	ND 5.2	61	ug/Kg-dry 1 10/1/2012 04:58 PM
Benzene	ND 0.22	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Bromobenzene	ND 0.38	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Bromochloromethane	ND 0.38	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Bromodichloromethane	ND 0.39	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Bromoform	ND 0.46	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Bromomethane	ND 1.1	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Carbon disulfide	ND 0.42	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Carbon tetrachloride	ND 0.29	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Chlorobenzene	ND 0.23	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Chloroethane	ND 0.55	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Chloroform	ND 0.43	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Chloromethane	ND 0.61	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
cis-1,2-Dichloroethene	ND 0.59	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
cis-1,3-Dichloropropene	ND 0.24	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Di-isopropyl ether	ND 0.40	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Dibromochloromethane	ND 0.46	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Dibromomethane	ND 0.41	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Dichlorodifluoromethane	ND 0.28	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Ethyl Tert-butyl ether	ND 0.62	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Ethylbenzene	ND 0.16	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Freon-113	ND 1.5	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Hexachlorobutadiene	ND 1.2	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Isopropylbenzene	ND 0.38	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
m,p-Xylene	ND 0.24	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Methylene chloride	4.9 1.7	6.1	J ug/Kg-dry 1 10/1/2012 04:58 PM
MTBE	ND 0.39	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
n-Butylbenzene	ND 0.26	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
n-Propylbenzene	ND 0.14	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Naphthalene	ND 0.29	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
o-Xylene	ND 0.30	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
sec-Butylbenzene	ND 0.30	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Styrene	ND 0.69	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Tert-amyl methyl ether	ND 0.42	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Tert-Butanol	ND 8.2	31	ug/Kg-dry 1 10/1/2012 04:58 PM

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 ND Not Detected at the Reporting Limit  
 Results are wet unless otherwise specified

E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike/Surrogate outside of limits due to matrix interference  
 DO Surrogate Diluted Out



<b>CLIENT:</b> CH2M HILL	<b>Client Sample ID:</b> Soil IDW - MW
<b>Lab Order:</b> N008590	<b>Collection Date:</b> 9/27/2012 11:45:00 AM
<b>Project:</b> Kinder Morgan - Norwalk	<b>Matrix:</b> SOIL
<b>Lab ID:</b> N008590-001	

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

**EPA 8260B**

RunID: <b>MS1_121001A</b>	QC Batch: <b>D12VS072</b>	PrepDate:	Analyst: <b>QBM</b>
tert-Butylbenzene	ND 0.73	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Tetrachloroethene	ND 0.29	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Toluene	ND 0.17	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
trans-1,2-Dichloroethene	ND 0.71	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
trans-1,3-Dichloropropene	ND 0.28	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Trichloroethene	ND 0.15	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Trichlorofluoromethane	ND 0.80	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Vinyl chloride	ND 0.44	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Xylenes, Total	ND 6.1	6.1	ug/Kg-dry 1 10/1/2012 04:58 PM
Surr: 1,2-Dichloroethane-d4	83.6 0	52-149	%REC 1 10/1/2012 04:58 PM
Surr: 4-Bromofluorobenzene	94.2 0	65-135	%REC 1 10/1/2012 04:58 PM
Surr: Dibromofluoromethane	96.6 0	65-135	%REC 1 10/1/2012 04:58 PM
Surr: Toluene-d8	108 0	75-125	%REC 1 10/1/2012 04:58 PM

**DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID**

**EPA 3550B**

**EPA 8015B**

RunID: <b>GC3_121003B</b>	QC Batch: <b>40849</b>	PrepDate: <b>10/2/2012</b>	Analyst: <b>MDM</b>
TPH-Diesel	3.3 1.0	12	J mg/Kg-dry 1 10/3/2012 09:00 PM
Surr: Octacosane	99.2 0	25-162	%REC 1 10/3/2012 09:00 PM
Surr: p-Terphenyl	99.2 0	47-142	%REC 1 10/3/2012 09:00 PM

**JET FUEL BY GC/FID**

**EPA 3550B**

**EPA 8015B**

RunID: <b>GC3_121008A</b>	QC Batch: <b>40849</b>	PrepDate: <b>10/2/2012</b>	Analyst: <b>MDM</b>
Jet Fuel	ND 12	12	mg/Kg-dry 1 10/8/2012 11:28 AM
Surr: p-Terphenyl	102 0	56-116	%REC 1 10/8/2012 11:28 AM

**GASOLINE RANGE ORGANICS BY GC/FID**

**EPA 8015B**

RunID: <b>GC4_121002A</b>	QC Batch: <b>E12VS152</b>	PrepDate:	Analyst: <b>QBM</b>
TPH-Gasoline	75 35	1200	J ug/Kg-dry 1 10/2/2012 01:03 PM
Surr: Chlorobenzene - d5	92.7 0	64-148	%REC 1 10/2/2012 01:03 PM

**MERCURY BY COLD VAPOR TECHNIQUE**

**EPA 7471**

**EPA 7471A**

RunID: <b>AA1_121001A</b>	QC Batch: <b>40829</b>	PrepDate: <b>9/28/2012</b>	Analyst: <b>CEI</b>
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<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	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



**CLIENT:** CH2M HILL  
**Lab Order:** N008590  
**Project:** Kinder Morgan - Norwalk  
**Lab ID:** N008590-001

**Client Sample ID:** Soil IDW - MW  
**Collection Date:** 9/27/2012 11:45:00 AM  
**Matrix:** SOIL

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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**MERCURY BY COLD VAPOR TECHNIQUE**

**EPA 7471**

**EPA 7471A**

RunID: <b>AA1_121001A</b>	QC Batch: <b>40829</b>				PrepDate: <b>9/28/2012</b>		Analyst: <b>CEI</b>
Mercury	ND	0.035	0.12		mg/Kg-dry	1	10/1/2012

**ICP METALS**

**EPA 3050B**

**EPA 6010B**

RunID: <b>ICP2_121001A</b>	QC Batch: <b>40828</b>				PrepDate: <b>9/28/2012</b>		Analyst: <b>JT</b>
Antimony	ND	0.21	2.5		mg/Kg-dry	1	10/1/2012 10:07 AM
Arsenic	1.7	0.19	1.2		mg/Kg-dry	1	10/1/2012 10:07 AM
Barium	79	0.20	1.2		mg/Kg-dry	1	10/1/2012 10:07 AM
Beryllium	ND	0.18	1.2		mg/Kg-dry	1	10/1/2012 10:07 AM
Cadmium	ND	0.19	1.2		mg/Kg-dry	1	10/1/2012 10:07 AM
Chromium	11	0.20	1.2		mg/Kg-dry	1	10/1/2012 10:07 AM
Cobalt	4.9	0.20	1.2		mg/Kg-dry	1	10/1/2012 10:07 AM
Copper	8.1	0.18	2.5		mg/Kg-dry	1	10/1/2012 10:07 AM
Lead	1.8	0.17	1.2		mg/Kg-dry	1	10/1/2012 10:07 AM
Molybdenum	ND	0.19	1.2		mg/Kg-dry	1	10/1/2012 10:07 AM
Nickel	8.1	0.20	1.2		mg/Kg-dry	1	10/1/2012 10:07 AM
Selenium	ND	0.34	1.2		mg/Kg-dry	1	10/1/2012 10:07 AM
Silver	ND	0.18	1.2		mg/Kg-dry	1	10/1/2012 10:07 AM
Thallium	ND	0.17	2.5		mg/Kg-dry	1	10/1/2012 10:07 AM
Vanadium	20	0.20	1.2		mg/Kg-dry	1	10/1/2012 10:07 AM
Zinc	28	0.19	1.2		mg/Kg-dry	1	10/1/2012 10:07 AM

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 DO Surrogate Diluted Out



**CLIENT:** CH2M HILL  
**Lab Order:** N008590  
**Project:** Kinder Morgan - Norwalk  
**Lab ID:** N008590-002

**Client Sample ID:** Soil IDW - SB  
**Collection Date:** 9/27/2012 12:00:00 PM  
**Matrix:** SOIL

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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**PERCENT MOISTURE**

**D2216**

RunID: **WETCHEM\_120928C**      QC Batch: **R85747**      PrepDate:      Analyst: **KAB**  
Percent Moisture      3.943    0.1000      0.1000      wt%      1      9/28/2012

**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS**  
**EPA 3550B**

**EPA 8270C**

RunID: <b>MS4_121002B</b>	QC Batch: <b>40838</b>	PrepDate: <b>10/1/2012</b>	Analyst: <b>MDM</b>
1,2,4-Trichlorobenzene	ND 44	340	ug/Kg-dry 1 10/2/2012 08:44 PM
1,2-Dichlorobenzene	ND 43	340	ug/Kg-dry 1 10/2/2012 08:44 PM
1,3-Dichlorobenzene	ND 52	340	ug/Kg-dry 1 10/2/2012 08:44 PM
1,4-Dichlorobenzene	ND 49	340	ug/Kg-dry 1 10/2/2012 08:44 PM
2,4,5-Trichlorophenol	ND 70	340	ug/Kg-dry 1 10/2/2012 08:44 PM
2,4,6-Trichlorophenol	ND 41	340	ug/Kg-dry 1 10/2/2012 08:44 PM
2,4-Dichlorophenol	ND 42	1700	ug/Kg-dry 1 10/2/2012 08:44 PM
2,4-Dimethylphenol	ND 95	340	ug/Kg-dry 1 10/2/2012 08:44 PM
2,4-Dinitrophenol	ND 43	1700	ug/Kg-dry 1 10/2/2012 08:44 PM
2,4-Dinitrotoluene	ND 46	340	ug/Kg-dry 1 10/2/2012 08:44 PM
2,6-Dinitrotoluene	ND 45	340	ug/Kg-dry 1 10/2/2012 08:44 PM
2-Chloronaphthalene	ND 47	340	ug/Kg-dry 1 10/2/2012 08:44 PM
2-Chlorophenol	ND 45	340	ug/Kg-dry 1 10/2/2012 08:44 PM
2-Methylnaphthalene	6700 41	340	ug/Kg-dry 1 10/2/2012 08:44 PM
2-Methylphenol	ND 50	340	ug/Kg-dry 1 10/2/2012 08:44 PM
2-Nitroaniline	ND 55	1700	ug/Kg-dry 1 10/2/2012 08:44 PM
2-Nitrophenol	ND 47	340	ug/Kg-dry 1 10/2/2012 08:44 PM
3,3'-Dichlorobenzidine	ND 45	690	ug/Kg-dry 1 10/2/2012 08:44 PM
3-Nitroaniline	ND 50	1700	ug/Kg-dry 1 10/2/2012 08:44 PM
4,6-Dinitro-2-methylphenol	ND 54	1700	ug/Kg-dry 1 10/2/2012 08:44 PM
4-Bromophenyl-phenylether	ND 84	340	ug/Kg-dry 1 10/2/2012 08:44 PM
4-Chloro-3-methylphenol	ND 42	690	ug/Kg-dry 1 10/2/2012 08:44 PM
4-Chloroaniline	ND 45	690	ug/Kg-dry 1 10/2/2012 08:44 PM
4-Chlorophenyl-phenylether	ND 64	340	ug/Kg-dry 1 10/2/2012 08:44 PM
4-Methylphenol	ND 37	340	ug/Kg-dry 1 10/2/2012 08:44 PM
4-Nitroaniline	ND 110	1700	ug/Kg-dry 1 10/2/2012 08:44 PM
4-Nitrophenol	ND 160	1700	ug/Kg-dry 1 10/2/2012 08:44 PM
Acenaphthene	120 42	340	J ug/Kg-dry 1 10/2/2012 08:44 PM
Acenaphthylene	ND 42	340	ug/Kg-dry 1 10/2/2012 08:44 PM
Anthracene	ND 69	340	ug/Kg-dry 1 10/2/2012 08:44 PM
Benzo(a)anthracene	ND 78	340	ug/Kg-dry 1 10/2/2012 08:44 PM

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<b>CLIENT:</b> CH2M HILL	<b>Client Sample ID:</b> Soil IDW - SB
<b>Lab Order:</b> N008590	<b>Collection Date:</b> 9/27/2012 12:00:00 PM
<b>Project:</b> Kinder Morgan - Norwalk	<b>Matrix:</b> SOIL
<b>Lab ID:</b> N008590-002	

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
<b>SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS</b>							
	<b>EPA 3550B</b>			<b>EPA 8270C</b>			
RunID: <b>MS4_121002B</b>	QC Batch: <b>40838</b>			PrepDate: <b>10/1/2012</b>	Analyst: <b>MDM</b>		
Benzo(a)pyrene	ND	67	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Benzo(b)fluoranthene	ND	49	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Benzo(g,h,i)perylene	ND	59	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Benzo(k)fluoranthene	ND	59	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Benzoic acid	ND	150	1700		ug/Kg-dry	1	10/2/2012 08:44 PM
Benzyl alcohol	ND	71	690		ug/Kg-dry	1	10/2/2012 08:44 PM
Bis(2-chloroethoxy)methane	ND	67	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Bis(2-chloroethyl)ether	ND	64	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Bis(2-chloroisopropyl)ether	ND	59	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Bis(2-ethylhexyl)phthalate	ND	83	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Butylbenzylphthalate	ND	70	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Chrysene	ND	83	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Di-n-butylphthalate	ND	63	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Di-n-octylphthalate	ND	53	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Dibenz(a,h)anthracene	ND	97	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Dibenzofuran	150	43	340	J	ug/Kg-dry	1	10/2/2012 08:44 PM
Diethylphthalate	ND	51	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Dimethylphthalate	ND	57	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Fluoranthene	ND	73	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Fluorene	ND	75	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Hexachlorobenzene	ND	49	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Hexachlorobutadiene	ND	63	690		ug/Kg-dry	1	10/2/2012 08:44 PM
Hexachloroethane	ND	49	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Indeno(1,2,3-cd)pyrene	ND	68	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Isophorone	ND	61	340		ug/Kg-dry	1	10/2/2012 08:44 PM
N-Nitrosodi-n-propylamine	ND	48	340		ug/Kg-dry	1	10/2/2012 08:44 PM
N-Nitrosodiphenylamine	290	55	340	J	ug/Kg-dry	1	10/2/2012 08:44 PM
Naphthalene	4100	50	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Nitrobenzene	ND	59	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Pentachlorophenol	ND	36	1700		ug/Kg-dry	1	10/2/2012 08:44 PM
Phenanthrene	540	87	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Phenol	ND	39	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Pyrene	ND	68	340		ug/Kg-dry	1	10/2/2012 08:44 PM
Surr: 1,2-Dichlorobenzene-d4	72.4	0	25-110		%REC	1	10/2/2012 08:44 PM
Surr: 2,4,6-Tribromophenol	93.7	0	36-126		%REC	1	10/2/2012 08:44 PM
Surr: 2-Chlorophenol-d4	77.5	0	30-100		%REC	1	10/2/2012 08:44 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 Results are wet unless otherwise specified

E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike/Surrogate outside of limits due to matrix interference  
 DO Surrogate Diluted Out



**CLIENT:** CH2M HILL  
**Lab Order:** N008590  
**Project:** Kinder Morgan - Norwalk  
**Lab ID:** N008590-002

**Client Sample ID:** Soil IDW - SB  
**Collection Date:** 9/27/2012 12:00:00 PM  
**Matrix:** SOIL

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

**EPA 3550B**

**EPA 8270C**

RunID:	MS4_121002B	QC Batch:	40838	PrepDate:	10/1/2012	Analyst:	MDM
Surr:	2-Fluorobiphenyl	84.8	0	43-125	%REC	1	10/2/2012 08:44 PM
Surr:	2-Fluorophenol	77.2	0	37-125	%REC	1	10/2/2012 08:44 PM
Surr:	4-Terphenyl-d14	96.3	0	32-125	%REC	1	10/2/2012 08:44 PM
Surr:	Nitrobenzene-d5	79.3	0	37-125	%REC	1	10/2/2012 08:44 PM
Surr:	Phenol-d5	74.8	0	40-125	%REC	1	10/2/2012 08:44 PM

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID:	MS1_121001A	QC Batch:	D12VS072	PrepDate:	Analyst:	QBM
1,1,1,2-Tetrachloroethane	ND	0.25	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,1,1-Trichloroethane	ND	0.33	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,1,1,2,2-Tetrachloroethane	ND	0.31	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,1,2-Trichloroethane	ND	0.46	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,1-Dichloroethane	ND	0.39	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,1-Dichloroethene	ND	0.79	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,1-Dichloropropene	ND	0.31	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,2,3-Trichlorobenzene	ND	0.35	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,2,3-Trichloropropane	ND	0.26	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,2,4-Trichlorobenzene	ND	0.43	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,2,4-Trimethylbenzene	21000	34	1300	ug/Kg-dry	250	10/1/2012 03:26 PM
1,2-Dibromo-3-chloropropane	ND	0.93	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,2-Dibromoethane	ND	0.43	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,2-Dichlorobenzene	ND	0.20	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,2-Dichloroethane	ND	0.34	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,2-Dichloropropane	ND	0.47	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,3,5-Trimethylbenzene	6200	11	260	ug/Kg-dry	50	10/1/2012 02:37 PM
1,3-Dichlorobenzene	ND	0.29	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,3-Dichloropropane	ND	0.22	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
1,4-Dichlorobenzene	ND	0.18	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
2,2-Dichloropropane	ND	0.68	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
2-Butanone	ND	2.9	52	ug/Kg-dry	1	10/1/2012 01:04 PM
2-Chlorotoluene	ND	0.19	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
4-Chlorotoluene	ND	0.28	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
4-Isopropyltoluene	55	0.19	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
4-Methyl-2-pentanone	ND	1.3	52	ug/Kg-dry	1	10/1/2012 01:04 PM
Acetone	ND	4.3	52	ug/Kg-dry	1	10/1/2012 01:04 PM

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



**CLIENT:** CH2M HILL  
**Lab Order:** N008590  
**Project:** Kinder Morgan - Norwalk  
**Lab ID:** N008590-002

**Client Sample ID:** Soil IDW - SB  
**Collection Date:** 9/27/2012 12:00:00 PM  
**Matrix:** SOIL

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

**EPA 8260B**

RunID: MS1_121001A	QC Batch: D12VS072	PrepDate:	Analyst: QBM
Acrolein	ND 10	100	ug/Kg-dry 1 10/1/2012 01:04 PM
Acrylonitrile	ND 4.4	52	ug/Kg-dry 1 10/1/2012 01:04 PM
Benzene	1.6 0.19	5.2	J ug/Kg-dry 1 10/1/2012 01:04 PM
Bromobenzene	ND 0.32	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Bromochloromethane	ND 0.32	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Bromodichloromethane	ND 0.33	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Bromoform	ND 0.39	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Bromomethane	ND 0.91	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Carbon disulfide	ND 0.35	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Carbon tetrachloride	ND 0.24	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Chlorobenzene	ND 0.19	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Chloroethane	ND 0.47	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Chloroform	ND 0.36	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Chloromethane	ND 0.52	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
cis-1,2-Dichloroethene	ND 0.50	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
cis-1,3-Dichloropropene	ND 0.21	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Di-isopropyl ether	ND 0.34	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Dibromochloromethane	ND 0.39	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Dibromomethane	ND 0.35	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Dichlorodifluoromethane	ND 0.24	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Ethyl Tert-butyl ether	ND 0.52	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Ethylbenzene	1500 6.9	260	ug/Kg-dry 50 10/1/2012 02:37 PM
Freon-113	ND 1.3	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Hexachlorobutadiene	ND 1.0	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Isopropylbenzene	290 16	260	ug/Kg-dry 50 10/1/2012 02:37 PM
m,p-Xylene	12000 10	260	ug/Kg-dry 50 10/1/2012 02:37 PM
Methylene chloride	4.9 1.5	5.2	J ug/Kg-dry 1 10/1/2012 01:04 PM
MTBE	33 0.33	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
n-Butylbenzene	1300 11	260	ug/Kg-dry 50 10/1/2012 02:37 PM
n-Propylbenzene	1700 6.1	260	ug/Kg-dry 50 10/1/2012 02:37 PM
Naphthalene	6200 12	260	ug/Kg-dry 50 10/1/2012 02:37 PM
o-Xylene	6100 13	260	ug/Kg-dry 50 10/1/2012 02:37 PM
sec-Butylbenzene	80 0.25	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Styrene	ND 0.58	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Tert-amyl methyl ether	ND 0.35	5.2	ug/Kg-dry 1 10/1/2012 01:04 PM
Tert-Butanol	42 7.0	26	ug/Kg-dry 1 10/1/2012 01:04 PM

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 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike/Surrogate outside of limits due to matrix interference  
 DO Surrogate Diluted Out



Advanced Technology  
 Laboratories, Inc.

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

**CLIENT:** CH2M HILL  
**Lab Order:** N008590  
**Project:** Kinder Morgan - Norwalk  
**Lab ID:** N008590-002

**Client Sample ID:** Soil IDW - SB  
**Collection Date:** 9/27/2012 12:00:00 PM  
**Matrix:** SOIL

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

**EPA 8260B**

RunID:	MS1_121001A	QC Batch:	D12VS072	PrepDate:	Analyst:	QBM
tert-Butylbenzene	ND	0.62	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
Tetrachloroethene	ND	0.25	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
Toluene	1400	7.2	260	ug/Kg-dry	50	10/1/2012 02:37 PM
trans-1,2-Dichloroethene	ND	0.60	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
trans-1,3-Dichloropropene	ND	0.24	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
Trichloroethene	ND	0.13	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
Trichlorofluoromethane	ND	0.67	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
Vinyl chloride	ND	0.37	5.2	ug/Kg-dry	1	10/1/2012 01:04 PM
Xylenes, Total	18000	260	260	ug/Kg-dry	50	10/1/2012 02:37 PM
Surr: 1,2-Dichloroethane-d4	81.7	0	52-149	%REC	50	10/1/2012 02:37 PM
Surr: 1,2-Dichloroethane-d4	66.2	0	52-149	%REC	250	10/1/2012 03:26 PM
Surr: 1,2-Dichloroethane-d4	89.0	0	52-149	%REC	1	10/1/2012 01:04 PM
Surr: 4-Bromofluorobenzene	121	0	65-135	%REC	1	10/1/2012 01:04 PM
Surr: 4-Bromofluorobenzene	107	0	65-135	%REC	50	10/1/2012 02:37 PM
Surr: 4-Bromofluorobenzene	109	0	65-135	%REC	250	10/1/2012 03:26 PM
Surr: Dibromofluoromethane	89.9	0	65-135	%REC	1	10/1/2012 01:04 PM
Surr: Dibromofluoromethane	98.2	0	65-135	%REC	50	10/1/2012 02:37 PM
Surr: Dibromofluoromethane	82.9	0	65-135	%REC	250	10/1/2012 03:26 PM
Surr: Toluene-d8	108	0	75-125	%REC	1	10/1/2012 01:04 PM
Surr: Toluene-d8	113	0	75-125	%REC	50	10/1/2012 02:37 PM
Surr: Toluene-d8	113	0	75-125	%REC	250	10/1/2012 03:26 PM

**DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID**

**EPA 3550B**

**EPA 8015B**

RunID:	GC3_121003B	QC Batch:	40849	PrepDate:	10/2/2012	Analyst:	MDM
TPH-Diesel	1100	0.86	10	mg/Kg-dry	1	10/3/2012 09:26 PM	
Surr: Octacosane	96.1	0	25-162	%REC	1	10/3/2012 09:26 PM	
Surr: p-Terphenyl	97.0	0	47-142	%REC	1	10/3/2012 09:26 PM	

**JET FUEL BY GC/FID**

**EPA 3550B**

**EPA 8015B**

RunID:	GC3_121008A	QC Batch:	40849	PrepDate:	10/2/2012	Analyst:	MDM
Jet Fuel	930	10	10	mg/Kg-dry	1	10/8/2012 12:13 PM	
Surr: p-Terphenyl	101	0	56-116	%REC	1	10/8/2012 12:13 PM	

**Qualifiers:** B Analyte detected in the associated Method Blank E Value above quantitation range  
H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits  
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





**CLIENT:** CH2M HILL  
**Lab Order:** N008590  
**Project:** Kinder Morgan - Norwalk  
**Lab ID:** N008590-002

**Client Sample ID:** Soil IDW - SB  
**Collection Date:** 9/27/2012 12:00:00 PM  
**Matrix:** SOIL

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

**EPA 8015B**

RunID: <b>GC4_121002A</b>	QC Batch: <b>E12VS152</b>				PrepDate:		Analyst: <b>QBM</b>
TPH-Gasoline	220000	1500	52000		ug/Kg-dry	50	10/2/2012 12:34 PM
Surr: Chlorobenzene - d5	96.6	0	64-148		%REC	50	10/2/2012 12:34 PM

**MERCURY BY COLD VAPOR TECHNIQUE**

**EPA 7471**

**EPA 7471A**

RunID: <b>AA1_121001A</b>	QC Batch: <b>40829</b>				PrepDate: <b>9/28/2012</b>		Analyst: <b>CEI</b>
Mercury	ND	0.030	0.10		mg/Kg-dry	1	10/1/2012

**ICP METALS**

**EPA 3050B**

**EPA 6010B**

RunID: <b>ICP2_121001A</b>	QC Batch: <b>40828</b>				PrepDate: <b>9/28/2012</b>		Analyst: <b>JT</b>
Antimony	ND	0.17	2.1		mg/Kg-dry	1	10/1/2012 10:14 AM
Arsenic	5.4	0.16	1.0		mg/Kg-dry	1	10/1/2012 10:14 AM
Barium	75	0.17	1.0		mg/Kg-dry	1	10/1/2012 10:14 AM
Beryllium	ND	0.15	1.0		mg/Kg-dry	1	10/1/2012 10:14 AM
Cadmium	0.38	0.16	1.0	J	mg/Kg-dry	1	10/1/2012 10:14 AM
Chromium	13	0.17	1.0		mg/Kg-dry	1	10/1/2012 10:14 AM
Cobalt	5.9	0.17	1.0		mg/Kg-dry	1	10/1/2012 10:14 AM
Copper	13	0.15	2.1		mg/Kg-dry	1	10/1/2012 10:14 AM
Lead	5.5	0.14	1.0		mg/Kg-dry	1	10/1/2012 10:14 AM
Molybdenum	ND	0.16	1.0		mg/Kg-dry	1	10/1/2012 10:14 AM
Nickel	10	0.17	1.0		mg/Kg-dry	1	10/1/2012 10:14 AM
Selenium	ND	0.29	1.0		mg/Kg-dry	1	10/1/2012 10:14 AM
Silver	ND	0.15	1.0		mg/Kg-dry	1	10/1/2012 10:14 AM
Thallium	ND	0.15	2.1		mg/Kg-dry	1	10/1/2012 10:14 AM
Vanadium	24	0.17	1.0		mg/Kg-dry	1	10/1/2012 10:14 AM
Zinc	39	0.16	1.0		mg/Kg-dry	1	10/1/2012 10:14 AM

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



**CLIENT:** CH2M HILL  
**Work Order:** N008590  
**Project:** Kinder Morgan - Norwalk

**ANALYTICAL QC SUMMARY REPORT**

**TestCode: 6010\_SPGE**

Sample ID: <b>MB-40828</b>	SampType: <b>MBLK</b>	TestCode: <b>6010_SPGE</b>	Units: <b>mg/Kg</b>	Prep Date: <b>9/28/2012</b>	RunNo: <b>85758</b>						
Client ID: <b>PBS</b>	Batch ID: <b>40828</b>	TestNo: <b>EPA 6010B EPA 3050B</b>		Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1450916</b>						
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	2.0									
Vanadium	ND	1.0									
Zinc	ND	1.0									

Sample ID: <b>LCS-40828</b>	SampType: <b>LCS</b>	TestCode: <b>6010_SPGE</b>	Units: <b>mg/Kg</b>	Prep Date: <b>9/28/2012</b>	RunNo: <b>85758</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>40828</b>	TestNo: <b>EPA 6010B EPA 3050B</b>		Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1450917</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	51.551	2.0	50.00	0	103	85	115				
Arsenic	49.522	1.0	50.00	0	99.0	85	115				
Barium	50.696	1.0	50.00	0	101	85	115				
Beryllium	49.601	1.0	50.00	0	99.2	85	115				
Cadmium	49.109	1.0	50.00	0	98.2	85	115				
Chromium	51.282	1.0	50.00	0	103	85	115				
Cobalt	49.439	1.0	50.00	0	98.9	85	115				

**Qualifiers:**

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



CLIENT: CH2M HILL  
 Work Order: N008590  
 Project: Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010\_SPGE

Sample ID: <b>LCS-40828</b>	SampType: <b>LCS</b>	TestCode: <b>6010_SPGE</b>	Units: <b>mg/Kg</b>	Prep Date: <b>9/28/2012</b>	RunNo: <b>85758</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>40828</b>	TestNo: <b>EPA 6010B</b>	<b>EPA 3050B</b>	Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1450917</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	50.762	2.0	50.00	0	102	85	115				
Lead	50.797	1.0	50.00	0	102	85	115				
Molybdenum	49.142	1.0	50.00	0	98.3	85	115				
Nickel	48.735	1.0	50.00	0	97.5	85	115				
Selenium	47.227	1.0	50.00	0	94.5	85	115				
Silver	47.791	1.0	50.00	0	95.6	85	115				
Thallium	48.932	2.0	50.00	0	97.9	85	115				
Vanadium	50.728	1.0	50.00	0	101	85	115				
Zinc	48.727	1.0	50.00	0	97.5	85	115				

Sample ID: <b>N008590-002B-MS</b>	SampType: <b>MS</b>	TestCode: <b>6010_SPGE</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>9/28/2012</b>	RunNo: <b>85758</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>40828</b>	TestNo: <b>EPA 6010B</b>	<b>EPA 3050B</b>	Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1450921</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	102.873	2.1	130.4	0	78.9	75	125				
Arsenic	110.043	1.0	130.4	5.390	80.3	75	125				
Barium	185.104	1.0	130.4	75.31	84.2	75	125				
Beryllium	103.093	1.0	130.4	0	79.1	75	125				
Cadmium	98.399	1.0	130.4	0.3773	75.2	75	125				
Chromium	117.688	1.0	130.4	12.99	80.3	75	125				
Cobalt	105.721	1.0	130.4	5.868	76.6	75	125				
Copper	125.165	2.1	130.4	13.09	86.0	75	125				
Lead	103.877	1.0	130.4	5.502	75.4	75	125				
Molybdenum	103.952	1.0	130.4	0	79.7	75	125				
Nickel	107.795	1.0	130.4	10.23	74.8	75	125				S
Selenium	99.308	1.0	130.4	0	76.2	75	125				
Silver	111.699	1.0	130.4	0	85.7	75	125				
Thallium	94.080	2.1	130.4	0	72.2	75	125				S
Vanadium	130.372	1.0	130.4	23.56	81.9	75	125				
Zinc	134.235	1.0	52.16	38.79	183	75	125				S

**Qualifiers:**

- |  |  |  |
|--|--|--|
| B Analyte detected in the associated Method Blank              | E Value above quantitation range       | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits                   | 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, Inc.**

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

**CLIENT:** CH2M HILL  
**Work Order:** N008590  
**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010\_SPGE**

Sample ID: <b>N008590-002B-MSD</b>	SampType: <b>MSD</b>	TestCode: <b>6010_SPGE</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>9/28/2012</b>	RunNo: <b>85758</b>
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>40828</b>	TestNo: <b>EPA 6010B</b>	<b>EPA 3050B</b>	Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1450943</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	104.554	2.1	129.8	0	80.5	75	125	102.9	1.62	20	
Arsenic	110.539	1.0	129.8	5.390	81.0	75	125	110.0	0.450	20	
Barium	183.673	1.0	129.8	75.31	83.5	75	125	185.1	0.776	20	
Beryllium	103.888	1.0	129.8	0	80.0	75	125	103.1	0.768	20	
Cadmium	99.206	1.0	129.8	0.3773	76.1	75	125	98.40	0.817	20	
Chromium	118.793	1.0	129.8	12.99	81.5	75	125	117.7	0.935	20	
Cobalt	106.460	1.0	129.8	5.868	77.5	75	125	105.7	0.696	20	
Copper	127.036	2.1	129.8	13.09	87.8	75	125	125.2	1.48	20	
Lead	104.293	1.0	129.8	5.502	76.1	75	125	103.9	0.399	20	
Molybdenum	104.470	1.0	129.8	0	80.5	75	125	104.0	0.497	20	
Nickel	107.598	1.0	129.8	10.23	75.0	75	125	107.8	0.183	20	
Selenium	99.454	1.0	129.8	0	76.6	75	125	99.31	0.148	20	
Silver	111.048	1.0	129.8	0	85.5	75	125	111.7	0.585	20	
Thallium	94.976	2.1	129.8	0	73.2	75	125	94.08	0.948	20	S
Vanadium	131.439	1.0	129.8	23.56	83.1	75	125	130.4	0.815	20	
Zinc	134.197	1.0	51.92	38.79	184	75	125	134.2	0.0282	20	S

**Qualifiers:**

- |  |  |  |
|--|--|--|
| B Analyte detected in the associated Method Blank              | E Value above quantitation range       | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits                   | 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:** CH2M HILL  
**Work Order:** N008590  
**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 7471\_S\_PGE**

Sample ID: <b>LCS-40829</b>	SampType: <b>LCS</b>	TestCode: <b>7471_S_PGE</b>	Units: <b>mg/Kg</b>	Prep Date: <b>9/28/2012</b>	RunNo: <b>85767</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>40829</b>	TestNo: <b>EPA 7471A EPA 7471</b>		Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1451340</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.413	0.10	0.4165	0	99.1	75	125				

Sample ID: <b>MB-40829</b>	SampType: <b>MBLK</b>	TestCode: <b>7471_S_PGE</b>	Units: <b>mg/Kg</b>	Prep Date: <b>9/28/2012</b>	RunNo: <b>85767</b>						
Client ID: <b>PBS</b>	Batch ID: <b>40829</b>	TestNo: <b>EPA 7471A EPA 7471</b>		Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1451341</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.10									

Sample ID: <b>N008590-002B-MS</b>	SampType: <b>MS</b>	TestCode: <b>7471_S_PGE</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>9/28/2012</b>	RunNo: <b>85767</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>40829</b>	TestNo: <b>EPA 7471A EPA 7471</b>		Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1451345</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.458	0.10	0.4300	0	106	75	125				

Sample ID: <b>N008590-002B-MSD</b>	SampType: <b>MSD</b>	TestCode: <b>7471_S_PGE</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>9/28/2012</b>	RunNo: <b>85767</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>40829</b>	TestNo: <b>EPA 7471A EPA 7471</b>		Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1451346</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.460	0.10	0.4358	0	106	75	125	0.4575	0.591	20	

**Qualifiers:**

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|--|--|--|
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| J Analyte detected below quantitation limits                   | ND Not Detected at the Reporting Limit | R RPD outside accepted recovery limits               |
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CLIENT: CH2M HILL  
 Work Order: N008590  
 Project: Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8015\_S\_DM HPGE

Sample ID: <b>LCS-40849_DRO</b>	SampType: <b>LCS</b>	TestCode: <b>8015_S_DM H</b>	Units: <b>mg/Kg</b>	Prep Date: <b>10/2/2012</b>	RunNo: <b>85805</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>40849</b>	TestNo: <b>EPA 8015B</b>	<b>EPA 3550B</b>	Analysis Date: <b>10/3/2012</b>	SeqNo: <b>1452391</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Diesel	251.787	10	333.3	0	75.5	51	153				
Surr: Octacosane	26.109		26.67		97.9	25	162				
Surr: p-Terphenyl	28.091		26.67		105	47	142				

Sample ID: <b>MB-40849</b>	SampType: <b>MBLK</b>	TestCode: <b>8015_S_DM H</b>	Units: <b>mg/Kg</b>	Prep Date: <b>10/2/2012</b>	RunNo: <b>85805</b>						
Client ID: <b>PBS</b>	Batch ID: <b>40849</b>	TestNo: <b>EPA 8015B</b>	<b>EPA 3550B</b>	Analysis Date: <b>10/3/2012</b>	SeqNo: <b>1452393</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Diesel	2.497	10									J
Surr: Octacosane	25.184		26.67		94.4	25	162				
Surr: p-Terphenyl	25.497		26.67		95.6	47	142				

Sample ID: <b>N008589-001D-MS</b>	SampType: <b>MS</b>	TestCode: <b>8015_S_DM H</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>10/2/2012</b>	RunNo: <b>85805</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>40849</b>	TestNo: <b>EPA 8015B</b>	<b>EPA 3550B</b>	Analysis Date: <b>10/3/2012</b>	SeqNo: <b>1452397</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Diesel	354.593	11	366.2	7.549	94.8	51	153				
Surr: Octacosane	30.670		29.30		105	25	162				
Surr: p-Terphenyl	30.461		29.30		104	47	142				

Sample ID: <b>N008589-001D-MSD</b>	SampType: <b>MSD</b>	TestCode: <b>8015_S_DM H</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>10/2/2012</b>	RunNo: <b>85805</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>40849</b>	TestNo: <b>EPA 8015B</b>	<b>EPA 3550B</b>	Analysis Date: <b>10/3/2012</b>	SeqNo: <b>1452398</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Diesel	347.297	11	366.7	7.549	92.6	51	153	354.6	2.08	50	
Surr: Octacosane	26.866		29.34		91.6	25	162		0		
Surr: p-Terphenyl	30.871		29.34		105	47	142		0		

**Qualifiers:**

- |  |  |  |
|--|--|--|
| B Analyte detected in the associated Method Blank              | E Value above quantitation range       | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits                   | ND Not Detected at the Reporting Limit | R RPD outside accepted recovery limits               |
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**Work Order:** N008590  
**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8015\_S\_GASPGE**

Sample ID: <b>E121002LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8015_S_GAS</b>	Units: <b>ug/Kg</b>	Prep Date:	RunNo: <b>85839</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>E12VS152</b>	TestNo: <b>EPA 8015B</b>	Analysis Date: <b>10/2/2012</b>	SeqNo: <b>1454153</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH-Gasoline	5121.000	1000	5000	0	102	57	146				
Surr: Chlorobenzene - d5	98177.000		100000		98.2	64	148				

Sample ID: <b>N008590-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>8015_S_GAS</b>	Units: <b>ug/Kg-dry</b>	Prep Date:	RunNo: <b>85839</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>E12VS152</b>	TestNo: <b>EPA 8015B</b>	Analysis Date: <b>10/2/2012</b>	SeqNo: <b>1454154</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH-Gasoline	6251.075	1200	6142	74.93	101	57	146	6254	0.0393	50	
Surr: Chlorobenzene - d5	118572.653		122800		96.5	64	148		0	0	

Sample ID: <b>E121002MB1</b>	SampType: <b>MBLK</b>	TestCode: <b>8015_S_GAS</b>	Units: <b>ug/Kg</b>	Prep Date:	RunNo: <b>85839</b>						
Client ID: <b>PBS</b>	Batch ID: <b>E12VS152</b>	TestNo: <b>EPA 8015B</b>	Analysis Date: <b>10/2/2012</b>	SeqNo: <b>1454155</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH-Gasoline	112.000	1000									J
Surr: Chlorobenzene - d5	94599.000		100000		94.6	64	148				

Sample ID: <b>N008590-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>8015_S_GAS</b>	Units: <b>ug/Kg-dry</b>	Prep Date:	RunNo: <b>85839</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>E12VS152</b>	TestNo: <b>EPA 8015B</b>	Analysis Date: <b>10/2/2012</b>	SeqNo: <b>1454159</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH-Gasoline	6253.531	1200	6142	74.93	101	57	146				
Surr: Chlorobenzene - d5	122229.451		122800		99.5	64	148				

**Qualifiers:**

- |  |  |  |
|--|--|--|
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**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8015\_S\_JF**

Sample ID: <b>LCS-40849_JF</b>	SampType: <b>LCS</b>	TestCode: <b>8015_S_JF</b>	Units: <b>mg/Kg</b>	Prep Date: <b>10/2/2012</b>	RunNo: <b>85855</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>40849</b>	TestNo: <b>EPA 8015B</b>	<b>EPA 3550B</b>	Analysis Date: <b>10/8/2012</b>	SeqNo: <b>1455444</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Jet Fuel	290.773	10	333.3	0	87.2	70	130				
Surr: p-Terphenyl	27.096		26.67		102	56	116				

Sample ID: <b>MB-40849</b>	SampType: <b>MBLK</b>	TestCode: <b>8015_S_JF</b>	Units: <b>mg/Kg</b>	Prep Date: <b>10/2/2012</b>	RunNo: <b>85855</b>						
Client ID: <b>PBS</b>	Batch ID: <b>40849</b>	TestNo: <b>EPA 8015B</b>	<b>EPA 3550B</b>	Analysis Date: <b>10/8/2012</b>	SeqNo: <b>1455445</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Jet Fuel	ND	10									
Surr: p-Terphenyl	25.658		26.67		96.2	56	116				

Sample ID: <b>N008590-002C-MS</b>	SampType: <b>MS</b>	TestCode: <b>8015_S_JF</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>10/2/2012</b>	RunNo: <b>85855</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>40849</b>	TestNo: <b>EPA 8015B</b>	<b>EPA 3550B</b>	Analysis Date: <b>10/8/2012</b>	SeqNo: <b>1455449</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Jet Fuel	1411.977	10	346.8	927.5	140	70	130				S
Surr: p-Terphenyl	29.605		27.75		107	56	116				

Sample ID: <b>N008590-002C-MSD</b>	SampType: <b>MSD</b>	TestCode: <b>8015_S_JF</b>	Units: <b>mg/Kg-dry</b>	Prep Date: <b>10/2/2012</b>	RunNo: <b>85855</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>40849</b>	TestNo: <b>EPA 8015B</b>	<b>EPA 3550B</b>	Analysis Date: <b>10/8/2012</b>	SeqNo: <b>1455450</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Jet Fuel	1265.890	10	346.6	927.5	97.6	70	130	1412	10.9	30	
Surr: p-Terphenyl	28.499		27.73		103	56	116		0	0	

**Qualifiers:**

- |  |  |  |
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**CLIENT:** CH2M HILL  
**Work Order:** N008590  
**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_S\_PG&E**

Sample ID: <b>D121001LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8260_S_PG&amp;</b>	Units: <b>ug/Kg</b>	Prep Date:	RunNo: <b>85794</b>
Client ID: <b>LCSS</b>	Batch ID: <b>D12VS072</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1452153</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	41.090	5.0	40.00	0	103	74	125				
1,1,1-Trichloroethane	37.420	5.0	40.00	0	93.6	68	130				
1,1,2,2-Tetrachloroethane	43.950	5.0	40.00	0	110	59	140				
1,1,2-Trichloroethane	40.010	5.0	40.00	0	100	62	127				
1,1-Dichloroethane	42.410	5.0	40.00	0	106	73	125				
1,1-Dichloroethene	43.190	5.0	40.00	0	108	65	136				
1,1-Dichloropropene	36.880	5.0	40.00	0	92.2	70	135				
1,2,3-Trichlorobenzene	44.700	5.0	40.00	0	112	62	133				
1,2,3-Trichloropropane	41.440	5.0	40.00	0	104	63	130				
1,2,4-Trichlorobenzene	43.970	5.0	40.00	0	110	65	131				
1,2,4-Trimethylbenzene	43.940	5.0	40.00	0	110	65	135				
1,2-Dibromo-3-chloropropane	37.700	5.0	40.00	0	94.3	49	135				
1,2-Dibromoethane	39.510	5.0	40.00	0	98.8	70	124				
1,2-Dichlorobenzene	44.720	5.0	40.00	0	112	74	120				
1,2-Dichloroethane	42.260	5.0	40.00	0	106	72	137				
1,2-Dichloropropane	38.140	5.0	40.00	0	95.4	71	120				
1,3,5-Trimethylbenzene	43.950	5.0	40.00	0	110	65	133				
1,3-Dichlorobenzene	44.110	5.0	40.00	0	110	72	124				
1,3-Dichloropropane	37.110	5.0	40.00	0	92.8	76	123				
1,4-Dichlorobenzene	43.980	5.0	40.00	0	110	72	125				
2,2-Dichloropropane	41.080	5.0	40.00	0	103	67	134				
2-Butanone	298.680	50	400.0	0	74.7	40	135				
2-Chlorotoluene	43.920	5.0	40.00	0	110	69	128				
4-Chlorotoluene	44.110	5.0	40.00	0	110	73	126				
4-Isopropyltoluene	44.260	5.0	40.00	0	111	70	130				
4-Methyl-2-pentanone	354.860	50	400.0	0	88.7	65	135				
Acetone	298.910	50	400.0	0	74.7	40	141				
Acrolein	335.470	100	400.0	0	83.9	65	135				
Acrylonitrile	486.660	50	400.0	0	122	65	135				
Benzene	39.670	5.0	40.00	0	99.2	73	126				

**Qualifiers:**

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**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_S\_PG&E**

Sample ID: <b>D121001LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8260_S_PG&amp;</b>	Units: <b>ug/Kg</b>	Prep Date:	RunNo: <b>85794</b>
Client ID: <b>LCSS</b>	Batch ID: <b>D12VS072</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1452153</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	45.590	5.0	40.00	0	114	66	121				
Bromochloromethane	45.560	5.0	40.00	0	114	71	127				
Bromodichloromethane	39.760	5.0	40.00	0	99.4	72	128				
Bromoform	41.260	5.0	40.00	0	103	66	137				
Bromomethane	47.640	5.0	40.00	0	119	45	141				
Carbon disulfide	44.030	5.0	40.00	0	110	66	135				
Carbon tetrachloride	37.570	5.0	40.00	0	93.9	67	133				
Chlorobenzene	41.600	5.0	40.00	0	104	75	123				
Chloroethane	43.070	5.0	40.00	0	108	41	141				
Chloroform	42.240	5.0	40.00	0	106	72	124				
Chloromethane	41.850	5.0	40.00	0	105	51	129				
cis-1,2-Dichloroethene	44.020	5.0	40.00	0	110	67	125				
cis-1,3-Dichloropropene	38.660	5.0	40.00	0	96.7	72	126				
Di-isopropyl ether	39.580	5.0	40.00	0	99.0	70	130				
Dibromochloromethane	38.440	5.0	40.00	0	96.1	66	130				
Dibromomethane	42.240	5.0	40.00	0	106	73	128				
Dichlorodifluoromethane	41.340	5.0	40.00	0	103	34	136				
Ethyl Tert-butyl ether	40.200	5.0	40.00	0	101	70	130				
Ethylbenzene	40.900	5.0	40.00	0	102	74	127				
Freon-113	46.120	5.0	40.00	0	115	65	135				
Hexachlorobutadiene	41.650	5.0	40.00	0	104	53	142				
Isopropylbenzene	43.810	5.0	40.00	0	110	77	129				
m,p-Xylene	81.950	5.0	80.00	0	102	79	126				
Methylene chloride	40.900	5.0	40.00	0	102	63	137				
MTBE	36.570	5.0	40.00	0	91.4	50	135				
n-Butylbenzene	43.500	5.0	40.00	0	109	65	138				
n-Propylbenzene	43.740	5.0	40.00	0	109	63	135				
Naphthalene	41.260	5.0	40.00	0	103	51	135				
o-Xylene	41.180	5.0	40.00	0	103	77	125				
sec-Butylbenzene	44.400	5.0	40.00	0	111	63	132				

**Qualifiers:**

- |  |  |  |
|--|--|--|
| B Analyte detected in the associated Method Blank              | E Value above quantitation range       | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits                   | 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, Inc.**

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL  
 Work Order: N008590  
 Project: Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_S\_PG&E

Sample ID: <b>D121001LCS</b>		SampType: <b>LCS</b>		TestCode: <b>8260_S_PG&amp;</b> Units: <b>ug/Kg</b>		Prep Date:		RunNo: <b>85794</b>			
Client ID: <b>LCSS</b>		Batch ID: <b>D12VS072</b>		TestNo: <b>EPA 8260B</b>		Analysis Date: <b>10/1/2012</b>		SeqNo: <b>1452153</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	42.280	5.0	40.00	0	106	74	128				
Tert-amyl methyl ether	39.490	5.0	40.00	0	98.7	70	130				
Tert-Butanol	151.130	25	200.0	0	75.6	70	130				
tert-Butylbenzene	43.890	5.0	40.00	0	110	65	132				
Tetrachloroethene	39.890	5.0	40.00	0	99.7	67	139				
Toluene	44.280	5.0	40.00	0	111	71	127				
trans-1,2-Dichloroethene	43.800	5.0	40.00	0	110	66	134				
trans-1,3-Dichloropropene	41.560	5.0	40.00	0	104	65	127				
Trichloroethene	37.230	5.0	40.00	0	93.1	77	124				
Trichlorofluoromethane	40.340	5.0	40.00	0	101	49	139				
Vinyl chloride	42.120	5.0	40.00	0	105	58	126				
Xylenes, Total	123.130	5.0	120.0	0	103	65	125				
Surr: 1,2-Dichloroethane-d4	45.720		50.00		91.4	52	149				
Surr: 4-Bromofluorobenzene	51.630		50.00		103	65	135				
Surr: Dibromofluoromethane	50.020		50.00		100	65	135				
Surr: Toluene-d8	50.820		50.00		102	75	125				

Sample ID: <b>D121001LCSD</b>		SampType: <b>LCSD</b>		TestCode: <b>8260_S_PG&amp;</b> Units: <b>ug/Kg</b>		Prep Date:		RunNo: <b>85794</b>			
Client ID: <b>LCSS02</b>		Batch ID: <b>D12VS072</b>		TestNo: <b>EPA 8260B</b>		Analysis Date: <b>10/1/2012</b>		SeqNo: <b>1452154</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	40.300	5.0	40.00	0	101	74	125	41.09	1.94	30	
1,1,1-Trichloroethane	38.410	5.0	40.00	0	96.0	68	130	37.42	2.61	30	
1,1,2,2-Tetrachloroethane	43.570	5.0	40.00	0	109	59	140	43.95	0.868	30	
1,1,2-Trichloroethane	39.850	5.0	40.00	0	99.6	62	127	40.01	0.401	30	
1,1-Dichloroethane	42.870	5.0	40.00	0	107	73	125	42.41	1.08	30	
1,1-Dichloroethene	44.780	5.0	40.00	0	112	65	136	43.19	3.61	30	
1,1-Dichloropropene	38.080	5.0	40.00	0	95.2	70	135	36.88	3.20	30	
1,2,3-Trichlorobenzene	44.210	5.0	40.00	0	111	62	133	44.70	1.10	30	
1,2,3-Trichloropropane	39.940	5.0	40.00	0	99.8	63	130	41.44	3.69	30	

**Qualifiers:**

- |  |  |  |
|--|--|--|
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| S Spike/Surrogate outside of limits due to matrix interference | DO Surrogate Diluted Out               | Calculations are based on raw values                 |



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Laboratories, Inc.**

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL  
 Work Order: N008590  
 Project: Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_S\_PG&E

Sample ID: <b>D121001LCSD</b>	SampType: <b>LCSD</b>	TestCode: <b>8260_S_PG&amp;</b>	Units: <b>ug/Kg</b>	Prep Date:	RunNo: <b>85794</b>
Client ID: <b>LCSS02</b>	Batch ID: <b>D12VS072</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1452154</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	43.040	5.0	40.00	0	108	65	131	43.97	2.14	30	
1,2,4-Trimethylbenzene	44.230	5.0	40.00	0	111	65	135	43.94	0.658	30	
1,2-Dibromo-3-chloropropane	37.070	5.0	40.00	0	92.7	49	135	37.70	1.69	30	
1,2-Dibromoethane	39.190	5.0	40.00	0	98.0	70	124	39.51	0.813	30	
1,2-Dichlorobenzene	44.490	5.0	40.00	0	111	74	120	44.72	0.516	30	
1,2-Dichloroethane	42.480	5.0	40.00	0	106	72	137	42.26	0.519	30	
1,2-Dichloropropane	38.740	5.0	40.00	0	96.9	71	120	38.14	1.56	30	
1,3,5-Trimethylbenzene	44.100	5.0	40.00	0	110	65	133	43.95	0.341	30	
1,3-Dichlorobenzene	43.960	5.0	40.00	0	110	72	124	44.11	0.341	30	
1,3-Dichloropropane	36.680	5.0	40.00	0	91.7	76	123	37.11	1.17	30	
1,4-Dichlorobenzene	44.030	5.0	40.00	0	110	72	125	43.98	0.114	30	
2,2-Dichloropropane	42.230	5.0	40.00	0	106	67	134	41.08	2.76	30	
2-Butanone	327.160	50	400.0	0	81.8	40	135	298.7	9.10	30	
2-Chlorotoluene	43.710	5.0	40.00	0	109	69	128	43.92	0.479	30	
4-Chlorotoluene	43.550	5.0	40.00	0	109	73	126	44.11	1.28	30	
4-Isopropyltoluene	43.960	5.0	40.00	0	110	70	130	44.26	0.680	30	
4-Methyl-2-pentanone	355.220	50	400.0	0	88.8	65	135	354.9	0.101	30	
Acetone	332.260	50	400.0	0	83.1	40	141	298.9	10.6	30	
Acrolein	332.800	100	400.0	0	83.2	65	135	335.5	0.799	30	
Acrylonitrile	492.070	50	400.0	0	123	65	135	486.7	1.11	30	
Benzene	40.420	5.0	40.00	0	101	73	126	39.67	1.87	30	
Bromobenzene	45.210	5.0	40.00	0	113	66	121	45.59	0.837	30	
Bromochloromethane	46.090	5.0	40.00	0	115	71	127	45.56	1.16	30	
Bromodichloromethane	40.100	5.0	40.00	0	100	72	128	39.76	0.851	30	
Bromoform	40.840	5.0	40.00	0	102	66	137	41.26	1.02	30	
Bromomethane	47.460	5.0	40.00	0	119	45	141	47.64	0.379	30	
Carbon disulfide	44.500	5.0	40.00	0	111	66	135	44.03	1.06	30	
Carbon tetrachloride	37.800	5.0	40.00	0	94.5	67	133	37.57	0.610	30	
Chlorobenzene	41.230	5.0	40.00	0	103	75	123	41.60	0.893	30	
Chloroethane	43.690	5.0	40.00	0	109	41	141	43.07	1.43	30	

**Qualifiers:**

- |  |  |  |
|--|--|--|
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Laboratories, Inc.**

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL  
 Work Order: N008590  
 Project: Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_S\_PG&E

Sample ID: <b>D121001LCSD</b>	SampType: <b>LCSD</b>	TestCode: <b>8260_S_PG&amp;</b>	Units: <b>ug/Kg</b>	Prep Date:	RunNo: <b>85794</b>						
Client ID: <b>LCSS02</b>	Batch ID: <b>D12VS072</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1452154</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	42.930	5.0	40.00	0	107	72	124	42.24	1.62	30	
Chloromethane	42.080	5.0	40.00	0	105	51	129	41.85	0.548	30	
cis-1,2-Dichloroethene	44.970	5.0	40.00	0	112	67	125	44.02	2.14	30	
cis-1,3-Dichloropropene	38.030	5.0	40.00	0	95.1	72	126	38.66	1.64	30	
Di-isopropyl ether	40.110	5.0	40.00	0	100	70	130	39.58	1.33	30	
Dibromochloromethane	38.570	5.0	40.00	0	96.4	66	130	38.44	0.338	30	
Dibromomethane	42.250	5.0	40.00	0	106	73	128	42.24	0.0237	30	
Dichlorodifluoromethane	41.330	5.0	40.00	0	103	34	136	41.34	0.0242	30	
Ethyl Tert-butyl ether	40.000	5.0	40.00	0	100	70	130	40.20	0.499	30	
Ethylbenzene	40.210	5.0	40.00	0	101	74	127	40.90	1.70	30	
Freon-113	47.470	5.0	40.00	0	119	65	135	46.12	2.88	30	
Hexachlorobutadiene	41.570	5.0	40.00	0	104	53	142	41.65	0.192	30	
Isopropylbenzene	44.000	5.0	40.00	0	110	77	129	43.81	0.433	30	
m,p-Xylene	80.860	5.0	80.00	0	101	79	126	81.95	1.34	30	
Methylene chloride	41.780	5.0	40.00	0	104	63	137	40.90	2.13	30	
MTBE	37.140	5.0	40.00	0	92.8	50	135	36.57	1.55	30	
n-Butylbenzene	43.290	5.0	40.00	0	108	65	138	43.50	0.484	30	
n-Propylbenzene	44.150	5.0	40.00	0	110	63	135	43.74	0.933	30	
Naphthalene	41.220	5.0	40.00	0	103	51	135	41.26	0.0970	30	
o-Xylene	40.520	5.0	40.00	0	101	77	125	41.18	1.62	30	
sec-Butylbenzene	44.200	5.0	40.00	0	110	63	132	44.40	0.451	30	
Styrene	41.710	5.0	40.00	0	104	74	128	42.28	1.36	30	
Tert-amyl methyl ether	38.610	5.0	40.00	0	96.5	70	130	39.49	2.25	30	
Tert-Butanol	144.780	25	200.0	0	72.4	70	130	151.1	4.29	30	
tert-Butylbenzene	43.790	5.0	40.00	0	109	65	132	43.89	0.228	30	
Tetrachloroethene	39.120	5.0	40.00	0	97.8	67	139	39.89	1.95	30	
Toluene	43.440	5.0	40.00	0	109	71	127	44.28	1.92	30	
trans-1,2-Dichloroethene	44.320	5.0	40.00	0	111	66	134	43.80	1.18	30	
trans-1,3-Dichloropropene	40.650	5.0	40.00	0	102	65	127	41.56	2.21	30	
Trichloroethene	37.380	5.0	40.00	0	93.5	77	124	37.23	0.402	30	

**Qualifiers:**

- |  |  |  |
|--|--|--|
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3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL  
 Work Order: N008590  
 Project: Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_S\_PG&E

Sample ID: <b>D121001LCSD</b>	SampType: <b>LCSD</b>	TestCode: <b>8260_S_PG&amp;</b>	Units: <b>ug/Kg</b>	Prep Date:	RunNo: <b>85794</b>						
Client ID: <b>LCSS02</b>	Batch ID: <b>D12VS072</b>	TestNo: <b>EPA 8260B</b>	Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1452154</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichlorofluoromethane	41.330	5.0	40.00	0	103	49	139	40.34	2.42	30	
Vinyl chloride	42.240	5.0	40.00	0	106	58	126	42.12	0.284	30	
Xylenes, Total	121.380	5.0	120.0	0	101	65	125	123.1	1.43	30	
Surr: 1,2-Dichloroethane-d4	46.880		50.00		93.8	52	149		0	0	
Surr: 4-Bromofluorobenzene	51.170		50.00		102	65	135		0	0	
Surr: Dibromofluoromethane	51.490		50.00		103	65	135		0	0	
Surr: Toluene-d8	51.130		50.00		102	75	125		0	0	

Sample ID: <b>D121001MB2</b>	SampType: <b>MBLK</b>	TestCode: <b>8260_S_PG&amp;</b>	Units: <b>ug/Kg</b>	Prep Date:	RunNo: <b>85794</b>						
Client ID: <b>PBS</b>	Batch ID: <b>D12VS072</b>	TestNo: <b>EPA 8260B</b>	Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1452155</b>							
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	5.0									
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									

**Qualifiers:**

- |  |  |  |
|--|--|--|
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**CLIENT:** CH2M HILL  
**Work Order:** N008590  
**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_S\_PG&E**

Sample ID: <b>D121001MB2</b>	SampType: <b>MBLK</b>	TestCode: <b>8260_S_PG&amp;</b>	Units: <b>ug/Kg</b>	Prep Date:	RunNo: <b>85794</b>						
Client ID: <b>PBS</b>	Batch ID: <b>D12VS072</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1452155</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichloropropane	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Butanone	ND	50									
2-Chlorotoluene	ND	5.0									
4-Chlorotoluene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
4-Methyl-2-pentanone	ND	50									
Acetone	ND	50									
Acrolein	ND	100									
Acrylonitrile	ND	50									
Benzene	ND	5.0									
Bromobenzene	ND	5.0									
Bromochloromethane	ND	5.0									
Bromodichloromethane	ND	5.0									
Bromoform	ND	5.0									
Bromomethane	ND	5.0									
Carbon disulfide	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									

**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:** CH2M HILL  
**Work Order:** N008590  
**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_S\_PG&E**

Sample ID: <b>D121001MB2</b>	SampType: <b>MBLK</b>	TestCode: <b>8260_S_PG&amp;</b> Units: <b>ug/Kg</b>	Prep Date:	RunNo: <b>85794</b>							
Client ID: <b>PBS</b>	Batch ID: <b>D12VS072</b>	TestNo: <b>EPA 8260B</b>	Analysis Date: <b>10/1/2012</b>	SeqNo: <b>1452155</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	ND	5.0									
Freon-113	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Isopropylbenzene	ND	5.0									
m,p-Xylene	ND	5.0									
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	25									
tert-Butylbenzene	ND	5.0									
Tetrachloroethene	ND	5.0									
Toluene	ND	5.0									
trans-1,2-Dichloroethene	ND	5.0									
trans-1,3-Dichloropropene	ND	5.0									
Trichloroethene	ND	5.0									
Trichlorofluoromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Xylenes, Total	ND	5.0									
Surr: 1,2-Dichloroethane-d4	40.710		50.00		81.4	52	149				
Surr: 4-Bromofluorobenzene	47.940		50.00		95.9	65	135				
Surr: Dibromofluoromethane	44.200		50.00		88.4	65	135				
Surr: Toluene-d8	48.660		50.00		97.3	75	125				

**Qualifiers:**

- |  |  |  |
|--|--|--|
| B Analyte detected in the associated Method Blank              | E Value above quantitation range       | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits                   | 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, Inc.**

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**CLIENT:** CH2M HILL  
**Work Order:** N008590  
**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270\_S\_PGE**

Sample ID: <b>LCS-40838</b>	SampType: <b>LCS</b>	TestCode: <b>8270_S_PGE</b>	Units: <b>ug/Kg</b>	Prep Date: <b>10/1/2012</b>	RunNo: <b>85788</b>
Client ID: <b>LCSS</b>	Batch ID: <b>40838</b>	TestNo: <b>EPA 8270C EPA 3550B</b>		Analysis Date: <b>10/2/2012</b>	SeqNo: <b>1452003</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	2713.000	330	3330	0	81.5	44	125				
1,2-Dichlorobenzene	2666.333	330	3330	0	80.1	45	125				
1,3-Dichlorobenzene	2540.667	330	3330	0	76.3	39	125				
1,4-Dichlorobenzene	2591.000	330	3330	0	77.8	35	125				
2,4,5-Trichlorophenol	2969.667	330	3330	0	89.2	49	125				
2,4,6-Trichlorophenol	3081.333	330	3330	0	92.5	43	125				
2,4-Dichlorophenol	2851.000	1600	3330	0	85.6	45	125				
2,4-Dimethylphenol	2552.333	330	3330	0	76.6	32	125				
2,4-Dinitrophenol	2623.000	1600	3330	0	78.8	25	132				
2,4-Dinitrotoluene	3030.667	330	3330	0	91.0	48	125				
2,6-Dinitrotoluene	3031.667	330	3330	0	91.0	48	125				
2-Chloronaphthalene	2902.667	330	3330	0	87.2	45	125				
2-Chlorophenol	2671.333	330	3330	0	80.2	44	125				
2-Methylnaphthalene	2752.667	330	3330	0	82.7	47	125				
2-Methylphenol	2685.333	330	3330	0	80.6	40	125				
2-Nitroaniline	3285.000	1600	3330	0	98.6	44	125				
2-Nitrophenol	2836.000	330	3330	0	85.2	42	125				
3,3'-Dichlorobenzidine	4876.333	660	6660	0	73.2	25	128				
3-Nitroaniline	3256.667	1600	3330	0	97.8	27	125				
4,6-Dinitro-2-methylphenol	3049.667	1600	3330	0	91.6	29	137				
4-Bromophenyl-phenylether	3316.333	330	3330	0	99.6	46	125				
4-Chloro-3-methylphenol	2919.000	660	3330	0	87.7	46	125				
4-Chloroaniline	2350.667	660	3330	0	70.6	10	125				
4-Chlorophenyl-phenylether	2937.333	330	3330	0	88.2	47	125				
4-Methylphenol	2765.667	330	3330	0	83.1	41	125				
4-Nitroaniline	2965.333	1600	3330	0	89.0	34	125				
4-Nitrophenol	2758.333	1600	3330	0	82.8	25	138				
Acenaphthene	2946.667	330	3330	0	88.5	46	125				
Acenaphthylene	3064.000	330	3330	0	92.0	44	125				
Anthracene	3094.000	330	3330	0	92.9	53	125				

**Qualifiers:**

- |  |  |  |
|--|--|--|
| B Analyte detected in the associated Method Blank              | E Value above quantitation range       | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits                   | 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:** CH2M HILL  
**Work Order:** N008590  
**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270\_S\_PGE**

Sample ID: <b>LCS-40838</b>	SampType: <b>LCS</b>	TestCode: <b>8270_S_PGE</b>	Units: <b>ug/Kg</b>	Prep Date: <b>10/1/2012</b>	RunNo: <b>85788</b>
Client ID: <b>LCSS</b>	Batch ID: <b>40838</b>	TestNo: <b>EPA 8270C EPA 3550B</b>		Analysis Date: <b>10/2/2012</b>	SeqNo: <b>1452003</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)anthracene	3232.000	330	3330	0	97.1	52	125				
Benzo(a)pyrene	3232.333	330	3330	0	97.1	50	125				
Benzo(b)fluoranthene	3152.667	330	3330	0	94.7	45	125				
Benzo(g,h,i)perylene	3159.000	330	3330	0	94.9	38	126				
Benzo(k)fluoranthene	3226.667	330	3330	0	96.9	45	125				
Benzoic acid	1746.667	1600	3330	0	52.5	25	125				
Benzyl alcohol	2893.667	660	3330	0	86.9	25	125				
Bis(2-chloroethoxy)methane	2973.000	330	3330	0	89.3	43	125				
Bis(2-chloroethyl)ether	2712.333	330	3330	0	81.5	38	125				
Bis(2-chloroisopropyl)ether	2635.333	330	3330	0	79.1	25	125				
Bis(2-ethylhexyl)phthalate	3912.667	330	3330	0	117	47	127				
Butylbenzylphthalate	3973.333	330	3330	0	119	49	125				
Chrysene	3819.667	330	3330	0	115	53	125				
Di-n-butylphthalate	3409.000	330	3330	0	102	56	125				
Di-n-octylphthalate	3995.667	330	3330	0	120	41	132				
Dibenz(a,h)anthracene	3264.333	330	3330	0	98.0	41	125				
Dibenzofuran	2958.333	330	3330	0	88.8	51	125				
Diethylphthalate	3255.000	330	3330	0	97.7	50	125				
Dimethylphthalate	3141.000	330	3330	0	94.3	49	125				
Fluoranthene	2974.667	330	3330	0	89.3	54	125				
Fluorene	2965.333	330	3330	0	89.0	49	125				
Hexachlorobenzene	3061.000	330	3330	0	91.9	47	125				
Hexachlorobutadiene	3066.667	660	3330	0	92.1	40	125				
Hexachloroethane	2649.000	330	3330	0	79.5	34	125				
Indeno(1,2,3-cd)pyrene	3263.333	330	3330	0	98.0	38	125				
Isophorone	3339.333	330	3330	0	100	43	125				
N-Nitrosodi-n-propylamine	2987.000	330	3330	0	89.7	40	125				
N-Nitrosodiphenylamine	3137.667	330	3330	0	94.2	49	125				
Naphthalene	2761.667	330	3330	0	82.9	40	125				
Nitrobenzene	2720.000	330	3330	0	81.7	41	125				

**Qualifiers:**

- |  |  |  |
|--|--|--|
| B Analyte detected in the associated Method Blank              | E Value above quantitation range       | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits                   | 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:** CH2M HILL  
**Work Order:** N008590  
**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270\_S\_PGE**

Sample ID: <b>LCS-40838</b>	SampType: <b>LCS</b>	TestCode: <b>8270_S_PGE</b>	Units: <b>ug/Kg</b>	Prep Date: <b>10/1/2012</b>	RunNo: <b>85788</b>
Client ID: <b>LCSS</b>	Batch ID: <b>40838</b>	TestNo: <b>EPA 8270C EPA 3550B</b>		Analysis Date: <b>10/2/2012</b>	SeqNo: <b>1452003</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	2705.000	1600	3330	0	81.2	25	125				
Phenanthrene	3038.000	330	3330	0	91.2	50	125				
Phenol	2664.000	330	3330	0	80.0	39	125				
Pyrene	2893.000	330	3330	0	86.9	46	125				
Surr: 1,2-Dichlorobenzene-d4	2575.333		3330		77.3	25	110				
Surr: 2,4,6-Tribromophenol	2986.333		3330		89.7	36	126				
Surr: 2-Chlorophenol-d4	2610.333		3330		78.4	30	100				
Surr: 2-Fluorobiphenyl	2904.333		3330		87.2	43	125				
Surr: 2-Fluorophenol	2652.000		3330		79.6	37	125				
Surr: 4-Terphenyl-d14	3407.000		3330		102	32	125				
Surr: Nitrobenzene-d5	2853.000		3330		85.7	37	125				
Surr: Phenol-d5	2694.000		3330		80.9	40	125				

Sample ID: <b>N008590-001C-MS</b>	SampType: <b>MS</b>	TestCode: <b>8270_S_PGE</b>	Units: <b>ug/Kg-dry</b>	Prep Date: <b>10/1/2012</b>	RunNo: <b>85788</b>
Client ID: <b>ZZZZZ</b>	Batch ID: <b>40838</b>	TestNo: <b>EPA 8270C EPA 3550B</b>		Analysis Date: <b>10/2/2012</b>	SeqNo: <b>1452004</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	2847.316	410	4090	0	69.6	44	125				
1,2-Dichlorobenzene	2787.946	410	4090	0	68.2	45	125				
1,3-Dichlorobenzene	2617.614	410	4090	0	64.0	39	125				
1,4-Dichlorobenzene	2681.079	410	4090	0	65.5	35	125				
2,4,5-Trichlorophenol	3686.279	410	4090	0	90.1	49	125				
2,4,6-Trichlorophenol	3678.090	410	4090	0	89.9	43	125				
2,4-Dichlorophenol	3186.750	2000	4090	0	77.9	45	125				
2,4-Dimethylphenol	2774.434	410	4090	0	67.8	32	125				
2,4-Dinitrophenol	2864.513	2000	4090	0	70.0	25	132				
2,4-Dinitrotoluene	3766.122	410	4090	0	92.1	48	125				
2,6-Dinitrotoluene	3697.334	410	4090	0	90.4	48	125				
2-Chloronaphthalene	3199.443	410	4090	0	78.2	45	125				
2-Chlorophenol	2954.182	410	4090	0	72.2	44	125				

**Qualifiers:**

- |  |  |  |
|--|--|--|
| B Analyte detected in the associated Method Blank              | E Value above quantitation range       | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits                   | ND Not Detected at the Reporting Limit | R RPD outside accepted recovery limits               |
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CLIENT: CH2M HILL  
 Work Order: N008590  
 Project: Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8270\_S\_PGE

Sample ID: <b>N008590-001C-MS</b>	SampType: <b>MS</b>	TestCode: <b>8270_S_PGE</b>	Units: <b>ug/Kg-dry</b>	Prep Date: <b>10/1/2012</b>	RunNo: <b>85788</b>
Client ID: <b>ZZZZZ</b>	Batch ID: <b>40838</b>	TestNo: <b>EPA 8270C</b>	<b>EPA 3550B</b>	Analysis Date: <b>10/2/2012</b>	SeqNo: <b>1452004</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Methylnaphthalene	2956.639	410	4090	0	72.3	47	125				
2-Methylphenol	3016.009	410	4090	0	73.7	40	125				
2-Nitroaniline	4001.556	2000	4090	0	97.8	44	125				
2-Nitrophenol	3139.254	410	4090	0	76.7	42	125				
3,3'-Dichlorobenzidine	6118.413	810	8181	0	74.8	25	128				
3-Nitroaniline	3864.799	2000	4090	0	94.5	27	125				
4,6-Dinitro-2-methylphenol	3829.996	2000	4090	0	93.6	29	137				
4-Bromophenyl-phenylether	4045.367	410	4090	0	98.9	46	125				
4-Chloro-3-methylphenol	3442.656	810	4090	0	84.2	46	125				
4-Chloroaniline	2685.174	810	4090	0	65.6	10	125				
4-Chlorophenyl-phenylether	3447.570	410	4090	0	84.3	47	125				
4-Methylphenol	3046.718	410	4090	0	74.5	41	125				
4-Nitroaniline	3643.287	2000	4090	0	89.1	34	125				
4-Nitrophenol	3588.830	2000	4090	0	87.7	25	138				
Acenaphthene	3387.790	410	4090	0	82.8	46	125				
Acenaphthylene	3533.145	410	4090	0	86.4	44	125				
Anthracene	3848.012	410	4090	0	94.1	53	125				
Benzo(a)anthracene	3973.304	410	4090	0	97.1	52	125				
Benzo(a)pyrene	4016.296	410	4090	0	98.2	50	125				
Benzo(b)fluoranthene	3972.075	410	4090	0	97.1	45	125				
Benzo(g,h,i)perylene	4009.335	410	4090	0	98.0	38	126				
Benzo(k)fluoranthene	4031.855	410	4090	0	98.6	45	125				
Benzoic acid	1173.893	2000	4090	0	28.7	25	125				J
Benzyl alcohol	3108.136	810	4090	0	76.0	25	125				
Bis(2-chloroethoxy)methane	3123.285	410	4090	0	76.4	43	125				
Bis(2-chloroethyl)ether	2923.883	410	4090	0	71.5	38	125				
Bis(2-chloroisopropyl)ether	2789.583	410	4090	0	68.2	25	125				
Bis(2-ethylhexyl)phthalate	4781.149	410	4090	0	117	47	127				
Butylbenzylphthalate	4769.275	410	4090	0	117	49	125				
Chrysene	4700.078	410	4090	0	115	53	125				

**Qualifiers:**

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|--|--|--|
| B Analyte detected in the associated Method Blank              | E Value above quantitation range       | H Holding times for preparation or analysis exceeded |
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**CLIENT:** CH2M HILL  
**Work Order:** N008590  
**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270\_S\_PGE**

Sample ID: <b>N008590-001C-MS</b>	SampType: <b>MS</b>	TestCode: <b>8270_S_PGE</b>	Units: <b>ug/Kg-dry</b>	Prep Date: <b>10/1/2012</b>	RunNo: <b>85788</b>
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>40838</b>	TestNo: <b>EPA 8270C</b>	<b>EPA 3550B</b>	Analysis Date: <b>10/2/2012</b>	SeqNo: <b>1452004</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Di-n-butylphthalate	4194.407	410	4090	0	103	56	125				
Di-n-octylphthalate	4697.211	410	4090	0	115	41	132				
Dibenz(a,h)anthracene	4121.934	410	4090	0	101	41	125				
Dibenzofuran	3464.767	410	4090	0	84.7	51	125				
Diethylphthalate	4008.926	410	4090	0	98.0	50	125				
Dimethylphthalate	3797.650	410	4090	0	92.8	49	125				
Fluoranthene	3703.476	410	4090	0	90.5	54	125				
Fluorene	3522.090	410	4090	0	86.1	49	125				
Hexachlorobenzene	3808.705	410	4090	0	93.1	47	125				
Hexachlorobutadiene	3161.364	810	4090	0	77.3	40	125				
Hexachloroethane	2769.111	410	4090	0	67.7	34	125				
Indeno(1,2,3-cd)pyrene	4139.131	410	4090	0	101	38	125				
Isophorone	3628.137	410	4090	0	88.7	43	125				
N-Nitrosodi-n-propylamine	3051.632	410	4090	0	74.6	40	125				
N-Nitrosodiphenylamine	3848.421	410	4090	0	94.1	49	125				
Naphthalene	2985.710	410	4090	0	73.0	40	125				
Nitrobenzene	2904.230	410	4090	0	71.0	41	125				
Pentachlorophenol	3621.586	2000	4090	0	88.5	25	125				
Phenanthrene	3785.776	410	4090	0	92.6	50	125				
Phenol	2985.710	410	4090	0	73.0	39	125				
Pyrene	3593.743	410	4090	0	87.9	46	125				
Surr: 1,2-Dichlorobenzene-d4	2195.881		4090		53.7	25	110				
Surr: 2,4,6-Tribromophenol	3572.862		4090		87.3	36	126				
Surr: 2-Chlorophenol-d4	2749.457		4090		67.2	30	100				
Surr: 2-Fluorobiphenyl	2912.828		4090		71.2	43	125				
Surr: 2-Fluorophenol	2780.166		4090		68.0	37	125				
Surr: 4-Terphenyl-d14	3873.807		4090		94.7	32	125				
Surr: Nitrobenzene-d5	2900.954		4090		70.9	37	125				
Surr: Phenol-d5	2866.560		4090		70.1	40	125				

**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 |
| J Analyte detected below quantitation limits                   | 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: CH2M HILL  
 Work Order: N008590  
 Project: Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8270\_S\_PGE

Sample ID: <b>N008590-001C-MSD</b>	SampType: <b>MSD</b>	TestCode: <b>8270_S_PGE</b>	Units: <b>ug/Kg-dry</b>	Prep Date: <b>10/1/2012</b>	RunNo: <b>85788</b>
Client ID: <b>ZZZZZ</b>	Batch ID: <b>40838</b>	TestNo: <b>EPA 8270C EPA 3550B</b>		Analysis Date: <b>10/2/2012</b>	SeqNo: <b>1452005</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	2987.923	400	4082	0	73.2	44	125	2847	4.82	30	
1,2-Dichlorobenzene	2841.224	400	4082	0	69.6	45	125	2788	1.89	30	
1,3-Dichlorobenzene	2682.266	400	4082	0	65.7	39	125	2618	2.44	30	
1,4-Dichlorobenzene	2786.059	400	4082	0	68.2	35	125	2681	3.84	30	
2,4,5-Trichlorophenol	3792.521	400	4082	0	92.9	49	125	3686	2.84	30	
2,4,6-Trichlorophenol	3805.189	400	4082	0	93.2	43	125	3678	3.40	30	
2,4-Dichlorophenol	3426.386	2000	4082	0	83.9	45	125	3187	7.25	30	
2,4-Dimethylphenol	2918.047	400	4082	0	71.5	32	125	2774	5.05	30	
2,4-Dinitrophenol	2741.518	2000	4082	0	67.2	25	132	2865	4.39	30	
2,4-Dinitrotoluene	3582.484	400	4082	0	87.8	48	125	3766	5.00	30	
2,6-Dinitrotoluene	3600.872	400	4082	0	88.2	48	125	3697	2.64	30	
2-Chloronaphthalene	3390.018	400	4082	0	83.0	45	125	3199	5.78	30	
2-Chlorophenol	3086.404	400	4082	0	75.6	44	125	2954	4.38	30	
2-Methylnaphthalene	3099.480	400	4082	0	75.9	47	125	2957	4.72	30	
2-Methylphenol	3138.709	400	4082	0	76.9	40	125	3016	3.99	30	
2-Nitroaniline	3896.723	2000	4082	0	95.5	44	125	4002	2.65	30	
2-Nitrophenol	3340.573	400	4082	0	81.8	42	125	3139	6.21	30	
3,3'-Dichlorobenzidine	6459.259	810	8164	0	79.1	25	128	6118	5.42	30	
3-Nitroaniline	3816.631	2000	4082	0	93.5	27	125	3865	1.25	30	
4,6-Dinitro-2-methylphenol	3803.554	2000	4082	0	93.2	29	137	3830	0.693	30	
4-Bromophenyl-phenylether	4038.927	400	4082	0	98.9	46	125	4045	0.159	30	
4-Chloro-3-methylphenol	3567.773	810	4082	0	87.4	46	125	3443	3.57	30	
4-Chloroaniline	2874.732	810	4082	0	70.4	10	125	2685	6.82	30	
4-Chlorophenyl-phenylether	3496.262	400	4082	0	85.6	47	125	3448	1.40	30	
4-Methylphenol	3236.781	400	4082	0	79.3	41	125	3047	6.05	30	
4-Nitroaniline	3473.788	2000	4082	0	85.1	34	125	3643	4.76	30	
4-Nitrophenol	3580.441	2000	4082	0	87.7	25	138	3589	0.234	30	
Acenaphthene	3468.067	400	4082	0	85.0	46	125	3388	2.34	30	
Acenaphthylene	3636.015	400	4082	0	89.1	44	125	3533	2.87	30	
Anthracene	3783.940	400	4082	0	92.7	53	125	3848	1.68	30	

**Qualifiers:**

- |  |  |  |
|--|--|--|
| B Analyte detected in the associated Method Blank              | E Value above quantitation range       | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits                   | 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, Inc.**

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL  
 Work Order: N008590  
 Project: Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8270\_S\_PGE

Sample ID: <b>N008590-001C-MSD</b>	SampType: <b>MSD</b>	TestCode: <b>8270_S_PGE</b>	Units: <b>ug/Kg-dry</b>	Prep Date: <b>10/1/2012</b>	RunNo: <b>85788</b>
Client ID: <b>ZZZZZ</b>	Batch ID: <b>40838</b>	TestNo: <b>EPA 8270C</b>	<b>EPA 3550B</b>	Analysis Date: <b>10/2/2012</b>	SeqNo: <b>1452005</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)anthracene	3849.730	400	4082	0	94.3	52	125	3973	3.16	30	
Benzo(a)pyrene	3947.802	400	4082	0	96.7	50	125	4016	1.72	30	
Benzo(b)fluoranthene	3932.682	400	4082	0	96.3	45	125	3972	0.997	30	
Benzo(g,h,i)perylene	3953.114	400	4082	0	96.8	38	126	4009	1.41	30	
Benzo(k)fluoranthene	3982.536	400	4082	0	97.6	45	125	4032	1.23	30	
Benzoic acid	919.424	2000	4082	0	22.5	25	125	1174	0	30	JS
Benzyl alcohol	3278.461	810	4082	0	80.3	25	125	3108	5.33	30	
Bis(2-chloroethoxy)methane	3409.224	400	4082	0	83.5	43	125	3123	8.75	30	
Bis(2-chloroethyl)ether	3136.666	400	4082	0	76.8	38	125	2924	7.02	30	
Bis(2-chloroisopropyl)ether	2927.446	400	4082	0	71.7	25	125	2790	4.82	30	
Bis(2-ethylhexyl)phthalate	4698.869	400	4082	0	115	47	127	4781	1.74	30	
Butylbenzylphthalate	4772.014	400	4082	0	117	49	125	4769	0.0574	30	
Chrysene	4588.538	400	4082	0	112	53	125	4700	2.40	30	
Di-n-butylphthalate	4130.461	400	4082	0	101	56	125	4194	1.54	30	
Di-n-octylphthalate	4673.942	400	4082	0	114	41	132	4697	0.497	30	
Dibenz(a,h)anthracene	4054.455	400	4082	0	99.3	41	125	4122	1.65	30	
Dibenzofuran	3490.542	400	4082	0	85.5	51	125	3465	0.741	30	
Diethylphthalate	3876.700	400	4082	0	95.0	50	125	4009	3.35	30	
Dimethylphthalate	3755.744	400	4082	0	92.0	49	125	3798	1.11	30	
Fluoranthene	3606.593	400	4082	0	88.3	54	125	3703	2.65	30	
Fluorene	3507.296	400	4082	0	85.9	49	125	3522	0.421	30	
Hexachlorobenzene	3798.242	400	4082	0	93.0	47	125	3809	0.275	30	
Hexachlorobutadiene	3344.251	810	4082	0	81.9	40	125	3161	5.62	30	
Hexachloroethane	2815.480	400	4082	0	69.0	34	125	2769	1.66	30	
Indeno(1,2,3-cd)pyrene	4052.820	400	4082	0	99.3	38	125	4139	2.11	30	
Isophorone	3824.803	400	4082	0	93.7	43	125	3628	5.28	30	
N-Nitrosodi-n-propylamine	3237.598	400	4082	0	79.3	40	125	3052	5.91	30	
N-Nitrosodiphenylamine	3873.839	400	4082	0	94.9	49	125	3848	0.658	30	
Naphthalene	3132.579	400	4082	0	76.7	40	125	2986	4.80	30	
Nitrobenzene	3053.713	400	4082	0	74.8	41	125	2904	5.02	30	

**Qualifiers:**

- |  |  |  |
|--|--|--|
| B Analyte detected in the associated Method Blank              | E Value above quantitation range       | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits                   | 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, Inc.**

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL  
 Work Order: N008590  
 Project: Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8270\_S\_PGE

Sample ID: N008590-001C-MSD		SampType: MSD		TestCode: 8270_S_PGE		Units: ug/Kg-dry		Prep Date: 10/1/2012		RunNo: 85788	
Client ID: ZZZZZZ		Batch ID: 40838		TestNo: EPA 8270C EPA 3550B		Analysis Date: 10/2/2012		SeqNo: 1452005			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	3471.336	2000	4082	0	85.0	25	125	3622	4.24	30	
Phenanthrene	3726.323	400	4082	0	91.3	50	125	3786	1.58	30	
Phenol	3139.935	400	4082	0	76.9	39	125	2986	5.04	30	
Pyrene	3507.704	400	4082	0	85.9	46	125	3594	2.42	30	
Surr: 1,2-Dichlorobenzene-d4	2415.837		4082		59.2	25	110		0	30	
Surr: 2,4,6-Tribromophenol	3524.458		4082		86.3	36	126		0	30	
Surr: 2-Chlorophenol-d4	2904.154		4082		71.1	30	100		0	30	
Surr: 2-Fluorobiphenyl	3138.709		4082		76.9	43	125		0	30	
Surr: 2-Fluorophenol	2934.801		4082		71.9	37	125		0	30	
Surr: 4-Terphenyl-d14	3973.954		4082		97.3	32	125		0	30	
Surr: Nitrobenzene-d5	3071.284		4082		75.2	37	125		0	30	
Surr: Phenol-d5	3073.736		4082		75.3	40	125		0	30	

Sample ID: MB-40838		SampType: MBLK		TestCode: 8270_S_PGE		Units: ug/Kg		Prep Date: 10/1/2012		RunNo: 85788	
Client ID: PBS		Batch ID: 40838		TestNo: EPA 8270C EPA 3550B		Analysis Date: 10/2/2012		SeqNo: 1452005			
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									

**Qualifiers:**

- |  |  |  |
|--|--|--|
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**CLIENT:** CH2M HILL  
**Work Order:** N008590  
**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270\_S\_PGE**

Sample ID: <b>MB-40838</b>	SampType: <b>MBLK</b>	TestCode: <b>8270_S_PGE</b>	Units: <b>ug/Kg</b>	Prep Date: <b>10/1/2012</b>	RunNo: <b>85788</b>						
Client ID: <b>PBS</b>	Batch ID: <b>40838</b>	TestNo: <b>EPA 8270C EPA 3550B</b>		Analysis Date: <b>10/2/2012</b>	SeqNo: <b>1452006</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Methylnaphthalene	ND	330									
2-Methylphenol	ND	330									
2-Nitroaniline	ND	1600									
2-Nitrophenol	ND	330									
3,3'-Dichlorobenzidine	ND	660									
3-Nitroaniline	ND	1600									
4,6-Dinitro-2-methylphenol	ND	1600									
4-Bromophenyl-phenylether	ND	330									
4-Chloro-3-methylphenol	ND	660									
4-Chloroaniline	ND	660									
4-Chlorophenyl-phenylether	ND	330									
4-Methylphenol	ND	330									
4-Nitroaniline	ND	1600									
4-Nitrophenol	ND	1600									
Acenaphthene	ND	330									
Acenaphthylene	ND	330									
Anthracene	ND	330									
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									

**Qualifiers:**

- |  |  |  |
|--|--|--|
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Laboratories, Inc.**

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

**CLIENT:** CH2M HILL  
**Work Order:** N008590  
**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270\_S\_PGE**

Sample ID: <b>MB-40838</b>	SampType: <b>MBLK</b>	TestCode: <b>8270_S_PGE</b>	Units: <b>ug/Kg</b>	Prep Date: <b>10/1/2012</b>	RunNo: <b>85788</b>						
Client ID: <b>PBS</b>	Batch ID: <b>40838</b>	TestNo: <b>EPA 8270C EPA 3550B</b>		Analysis Date: <b>10/2/2012</b>	SeqNo: <b>1452006</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Di-n-butylphthalate	ND	330									
Di-n-octylphthalate	ND	330									
Dibenz(a,h)anthracene	ND	330									
Dibenzofuran	ND	330									
Diethylphthalate	ND	330									
Dimethylphthalate	ND	330									
Fluoranthene	ND	330									
Fluorene	ND	330									
Hexachlorobenzene	ND	330									
Hexachlorobutadiene	ND	660									
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	2670.333		3330		80.2	25	110				
Surr: 2,4,6-Tribromophenol	2653.333		3330		79.7	36	126				
Surr: 2-Chlorophenol-d4	2713.333		3330		81.5	30	100				
Surr: 2-Fluorobiphenyl	2961.667		3330		88.9	43	125				
Surr: 2-Fluorophenol	2666.000		3330		80.1	37	125				
Surr: 4-Terphenyl-d14	3629.667		3330		109	32	125				
Surr: Nitrobenzene-d5	2983.667		3330		89.6	37	125				
Surr: Phenol-d5	2738.333		3330		82.2	40	125				

**Qualifiers:**

- |  |  |  |
|--|--|--|
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**Advanced Technology  
Laboratories, Inc.**

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**CLIENT:** CH2M HILL  
**Work Order:** N008590  
**Project:** Kinder Morgan - Norwalk

## ANALYTICAL QC SUMMARY REPORT

**TestCode: PMOIST**

Sample ID: <b>MB-R85747</b>	SampType: <b>MBLK</b>	TestCode: <b>PMOIST</b>	Units: <b>wt%</b>	Prep Date:	RunNo: <b>85747</b>						
Client ID: <b>PBS</b>	Batch ID: <b>R85747</b>	TestNo: <b>D2216</b>		Analysis Date: <b>9/28/2012</b>	SeqNo: <b>1450569</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	ND	0.1000									

Sample ID: <b>N008590-002B-DUP</b>	SampType: <b>DUP</b>	TestCode: <b>PMOIST</b>	Units: <b>wt%</b>	Prep Date:	RunNo: <b>85747</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>R85747</b>	TestNo: <b>D2216</b>		Analysis Date: <b>9/28/2012</b>	SeqNo: <b>1450573</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	3.913	0.1000						3.943	0.764	30	

**Qualifiers:**

- |  |  |  |
|--|--|--|
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| J Analyte detected below quantitation limits                   | ND Not Detected at the Reporting Limit | R RPD outside accepted recovery limits               |
| S Spike/Surrogate outside of limits due to matrix interference | DO Surrogate Diluted Out               | Calculations are based on raw values                 |



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Laboratories, Inc.**

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

# CHAIN OF CUSTODY RECORD

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

P.O.#: \_\_\_\_\_ Quote #: \_\_\_\_\_  
 Logged By: \_\_\_\_\_ Date: \_\_\_\_\_

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

**FOR LABORATORY USE ONLY:**

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

Client: **CH2M HILL** Address: **6 Hutton Centre Dr Suite 700** TEL: **818 257 3630**  
 Attn: **Dan Jablonski** City: **Santa Ana** State: **CA** Zip Code: **92707** FAX: \_\_\_\_\_

Project Name: **Kinder Morgan - Norwalk** Project #: \_\_\_\_\_  
 Relinquished by: **[Signature] Jeff Ockerman** Received by: **[Signature] Jeff Ockerman** Date: **9/27/12** Time: **12:05**  
 Relinquished by: **[Signature] Jeff Ockerman** Received by: **[Signature] Mingo** Date: **9/27/12** Time: **12:31**  
 Relinquished by: **[Signature] FedEx** Received by: **[Signature] Dan Jablonski** Date: **9/27/12** Time: \_\_\_\_\_

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

Bill To: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Attn: \_\_\_\_\_  
 Co: \_\_\_\_\_  
 Addr: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Circle or Add Analysis(es) Requested: \_\_\_\_\_

Special Instructions/Comments: \_\_\_\_\_

**LAB USE ONLY:**

LAB Batch #:	Sample Description	Sample I.D. / Location	Date	Time
NO20590-1	Soil IDW - MW		9-27-12	11:35
-2	Soil IDW - SB		9-27-12	12:00

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

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

SPECIFY APPROPRIATE MATRIX		PRESERVATION		QA/QC
Container(s)	TAT #	Type	REMARKS	
SEDIMENT				RTNE <input type="checkbox"/>
SOIL				CT <input type="checkbox"/>
DRINKING WATER				Legal <input type="checkbox"/>
GROUND WATER				SWRCB <input type="checkbox"/>
WASTEWATER				Logcode <input type="checkbox"/>
STORMWATER				OTHER <input type="checkbox"/>
AQUEOUS				
	E 436			
	E 436			

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

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

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

Routine:  Routine 7 Workdays

# Advanced Technology Laboratories, Inc.

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On: 9/27/2012 Workorder: N008590  
 Rep sample Temp (Deg C): 1.8 IR Gun ID: 1  
 Temp Blank:  Yes  No  
 Carrier name: ONTRAC  
 Last 4 digits of Tracking No.: 1039 Packing Material Used: Carton  
 Cooling process:  Ice  Ice Pack  Dry Ice  Other  None

## Sample Receipt Checklist

- |   |   |                             |   |
|---|---|-----------------------------|---|
| 1. Shipping container/cooler in good condition?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| 2. Custody seals intact, signed, dated on shipping container/cooler?                    | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 3. Custody seals intact on sample bottles?  | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 4. Chain of custody present?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 5. Sampler's name present in COC?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 6. Chain of custody signed when relinquished and received?                              | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 7. Chain of custody agrees with sample labels?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 8. Samples in proper container/bottle?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 9. Sample containers intact?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 10. Sufficient sample volume for indicated test?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 11. All samples received within holding time?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 12. Temperature of rep sample or Temp Blank within acceptable limit?                    | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/>                     |
| 13. Water - VOA vials have zero headspace?  | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/>          |
| 14. Water - pH acceptable upon receipt?<br>Example: pH > 12 for (CN,S); pH<2 for Metals | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/>          |
| 15. Did the bottle labels indicate correct preservatives used?                          | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/>          |
| 16. Were there Non-Conformance issues at login?<br>Was Client notified?                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/>          |
|   | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/>          |

Comments:

Checklist Completed By MBC *[Signature]*

Reviewed By: *[Signature]*

# Advanced Technology Laboratories, Inc.

## WORK ORDER Summary

01-Oct-12

WorkOrder: N008590

Client ID: CH2HI01

Project: Kinder Morgan - Norwalk

QC Level: RTNE

Date Received: 9/28/2012

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N008590-001A	Soil IDW - MW	9/27/2012 11:45:00 AM	10/9/2012	Soil	EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS
			10/9/2012		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS
N008590-001B			10/9/2012	EPA 3050B	SOPREP TOTAL METALS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
			10/9/2012	EPA 6010B	ICP METALS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
			10/9/2012	EPA 7471	MERCURY PREP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
			10/9/2012	EPA 7471A	MERCURY BY COLD VAPOR TECHNIQUE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
N008590-001C			10/9/2012	D2216	PERCENT MOISTURE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
			10/9/2012	EPA 3550B	ULTRASONIC EXTRACTION: 8270C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
			10/9/2012	EPA 3550B	ULTRASONIC EXTRACTION: EXTRACTABLE FUELS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
			10/9/2012	EPA 8015B	DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
			10/9/2012	EPA 8015B	JET FUEL BY GC/FID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
N008590-001D			10/9/2012	EPA 8270C	SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
			10/9/2012	EPA 3550B	SHAKE-OUT METHOD: EXTRACTABLE FUELS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
			10/9/2012	EPA 1030	IGNITABILITY OF SOLIDS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SUB	
N008590-002A	Soil IDW - SB	9/27/2012 12:00:00 PM	10/9/2012	EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
			10/9/2012	EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
N008590-002B			10/9/2012	EPA 3050B	SOPREP TOTAL METALS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
			10/9/2012	EPA 6010B	ICP METALS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	
			10/9/2012	EPA 7471	MERCURY PREP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS	

# Advanced Technology Laboratories, Inc.

## WORK ORDER Summary

01-Oct-12

WorkOrder: N008590

Client ID: CH2HI01

Project: Kinder Morgan - Norwalk

QC Level: RTNE

Date Received: 9/28/2012

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N008590-002B	Soil IDW - SB	9/27/2012 12:00:00 PM	10/9/2012	Soil	EPA 7471A	MERCURY BY COLD VAPOR TECHNIQUE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS
			10/9/2012		D2216	PERCENT MOISTURE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS
N008590-002C			10/9/2012		EPA 3550B	ULTRASONIC EXTRACTION: 8270C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS
			10/9/2012		EPA 3550B	ULTRASONIC EXTRACTION: EXTRACTABLE FUELS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS
			10/9/2012		EPA 8015B	DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS
			10/9/2012		EPA 8015B	JET FUEL BY GC/FID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS
			10/9/2012		EPA 8270C	SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS
			10/9/2012		EPA 3550B	SHAKE-OUT METHOD: EXTRACTABLE FUELS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WS
N008590-002D			10/9/2012		EPA 1030	IGNITABILITY OF SOLIDS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SUB
N008590-003A	FOLDER		10/9/2012		Folder	Folder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LAB



**Advanced Technology Laboratories**  
 3151-3153 W Post Rd., Las Vegas, NV 89118  
 www.atlglobal.com  
 TEL: 7023072659 FAX: 7023072691

# CHAIN-OF-CUSTODY RECORD

**QC Level: RTNE**

**Subcontractor:**

Associated Laboratories  
 806 N. Batavia  
 Orange, CA 92868

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

Field Sampler: Jeff Ockerman

**28-Sep-12**

Sample ID	Matrix	Date Collected	Bottle Type	Requested Tests
N008590-001D / Soil IDW - MW	Soil	9/27/2012 11:45:00 AM	4OZG	EPA 1030 1
N008590-002D / Soil IDW - SB	Soil	9/27/2012 12:00:00 PM	4OZG	1

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

Please use PO#: N008590

Please fax results by: Normal TAT

	Date/Time
Relinquished by: _____	9/28/12 4:70
Relinquished by: _____	Received by: _____
Relinquished by: _____	Received by: _____





**800-334-5000**  
Call For A Pickup!

FROM (Company)

Street Address: ENVIRO TREATMENT & TECHNOLOGY\*  
 3875 WALNUT AVE SUITE  
 City: SIGNAL HILL  
 State: CA Zip Code (Required): 90755  
 Phone Number: 562-489-4045

**PLEASE PRINT IN BLOCK LETTERS with Blue / Black Ink**  
TO (Company) WE CANNOT DELIVER TO A P.O. BOX.

Street Address: ATLANTAS VEGAS  
 BISON POST ROAD  
 City: LAS VEGAS  
 State: NV Zip Code (Required): 702-307-2659  
 Recipient's Name: MARRON, MARTIN  
 Shipper's Ref. #: CUMMILL

Account Number

**B10246441039**

Date

07 27 12



B10246441039

<b>Service Options</b> <small>*If no box is checked, Surplus Service will be applied. Minimum charge weight is 300 lbs. - Delivery by 5:00 P.M. Note: delivery times for all services may be later in some areas. Check service guide or visit our website for details.</small> <input checked="" type="checkbox"/> SUNRISE - BY 10:30 AM* <input type="checkbox"/> SUNRISE GOLD - BY 8:00 AM* <input type="checkbox"/> HEAVYWEIGHT** <input type="checkbox"/> Saturday Delivery - Extra Charge (see Service Guide for details) <input type="checkbox"/> HOLD FOR PICKUP <small>This shipment requires a delivery signature</small> <input checked="" type="checkbox"/> Declared Value \$ (maximum \$25,000) <input type="checkbox"/> C.O.D. Amount \$, Limit \$10,000 (enter C.O.D. tag to message)	<b>Billing Information</b> <small>If none is selected, shipper will be invoiced.</small> <input type="checkbox"/> Bill Shipper's Account <input checked="" type="checkbox"/> Bill Other Acct #	<b>Weight</b> <input type="checkbox"/> 8 oz. Letter or Weight lbs. (Subject to verification) Dim weight charge if greater than actual weight: L in. X W in. X H in. +225 =
Driver # Pick-up Time Shipper's Signature	Secured Payment (Money Order or Certified Check) <input type="checkbox"/> Unsecured Payment (Company Check or Personal Check) <input type="checkbox"/>	Driver's Initials Shipper's Name

Driver's Initials: E D A B A  
 Shipper's Name:



# Associated Laboratories

806 N. Batavia - Orange, CA 92868  
Tel (714)771-6900 Fax (714)538-1209  
www.associatedlabs.com  
Info@associatedlabs.com



Client: Advanced Technology Labs  
Address: 3151-3153 W. Post Road  
Las Vegas, NV 89118  
Attn: Marlon Cartin

Lab Request: 311310  
Report Date: 10/05/2012  
Date Received: 09/29/2012  
Client ID: 12257

Comments: P.O. #N008590

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

<u>Sample #</u>	<u>Client Sample ID</u>
311310-001	N008590-001D/Soil IDW-MW
311310-002	N008590-002D/Soil IDW-SB

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Behare, Ph.D.  
Lab Director

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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TESTING & CONSULTING  
Chemical  
Microbiological  
Environmental

<b>Matrix:</b> Solid	<b>Client:</b> Advanced Technology Labs	<b>Collector:</b> Client
<b>Sampled:</b> 09/27/2012 11:45	<b>Site:</b>	<b>Notes:</b>
<b>Sample #:</b> <u>311310-001</u>	<b>Client Sample #:</b> N008590-001D/Soil IDW-MW	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 1030 <i>NELAC</i>	Prep Method: Method		QCBatchID:				
Ignitability	Pass	1		mm/sec	10/01/12	hanhkhong	

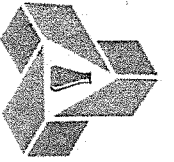
<b>Matrix:</b> Solid	<b>Client:</b> Advanced Technology Labs	<b>Collector:</b> Client
<b>Sampled:</b> 09/27/2012 12:00	<b>Site:</b>	<b>Notes:</b>
<b>Sample #:</b> <u>311310-002</u>	<b>Client Sample #:</b> N008590-002D/Soil IDW-SB	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 1030 <i>NELAC</i>	Prep Method: Method		QCBatchID:				
Ignitability	Pass	1		mm/sec	10/01/12	hanhkhong	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit      DF = Dilution Factor





**Advanced Technology Laboratories**

3151-3153 W Post Rd., Las Vegas, NV 89118  
www.atglobal.com  
TEL: 7023072659 FAX: 7023072691

**CHAIN-OF-CUSTODY RECORD**

311210

QC Level: RTNE

**Subcontractor:**

Associated Laboratories  
806 N. Batavia  
Orange, CA 92868

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

Field Sampler: Jeff Ockerman

28-Sep-12

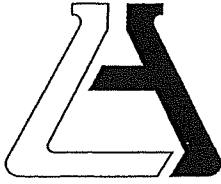
Sample ID	Matrix	Date Collected	Bottle Type	EPA 1030	Requested Tests
N008590-001D	/ Soil IDW - MW	9/27/2012 11:45:00 AM	4OZG	1	
N008590-002D	/ Soil IDW - SB	9/27/2012 12:00:00 PM	4OZG	1	

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

Please use PO#: N008590

Please fax results by: Normal TAT

Relinquished by:		Date/Time	9/28/12 9:30
Relinquished by:		Date/Time	
Received by:		Date/Time	9/28/12 10:13
Received by:		Date/Time	



**ASSOCIATED LABORATORIES**

806 North Batavia – Orange, California 92868 – 714-771-6900

FAX 714-538-1209

**SAMPLE ACCEPTANCE CHECKLIST**

**Section 1**  
 Client: ATL Project: \_\_\_\_\_  
 Date Received: 9-29-12 Sampler's Name: Yes No  
 Sample(s) received in cooler: Yes No (Skip Section 2)  
 Shipping Information: \_\_\_\_\_

**Section 2**  
 Was the cooler packed with: \_\_\_\_\_ Ice X Ice Packs \_\_\_\_\_ Bubble Wrap \_\_\_\_\_ Styrofoam  
 \_\_\_\_\_ Paper \_\_\_\_\_ None \_\_\_\_\_ Other \_\_\_\_\_  
 Cooler or box temperature: 20c  
 (Acceptance range is 0 to 6 Deg. C.)

Section 3	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Is it properly completed? (IDs, sampling date and time, signature, test)	<input checked="" type="checkbox"/>		
Were custody seals present?			<input checked="" type="checkbox"/>
If Yes – were they intact?			<input checked="" type="checkbox"/>
Were all samples sealed in plastic bags?	<input checked="" type="checkbox"/>		
Did all samples arrive intact? If no, indicate below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were correct containers used for the tests required?	<input checked="" type="checkbox"/>		
Was a sufficient amount of sample sent for tests indicated?	<input checked="" type="checkbox"/>		
Was there headspace in VOA vials?			<input checked="" type="checkbox"/>
Were the containers labeled with correct preservatives?			<input checked="" type="checkbox"/>
Was total residual chlorine measured (Fish Bioassay samples only)? *			<input checked="" type="checkbox"/>

\*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**  
 Explanations/Comments  
 \_\_\_\_\_  
 \_\_\_\_\_

**Section 5**  
 Was Project Manager notified of discrepancies: Y / N N/A

Completed By: Phong L Date: 9-29-12