



Technical Report for

HRL Compliance Solutions

PDC Parachute Creek #5 Job#10-351

Accutest Job Number: D12968

Sampling Dates: 04/28/10 - 05/03/10

Report to:

HRL Compliance Solutions
744 Horizon Court #140
Grand Junction, CO 81506
hlucero@hrlcomp.com

ATTN: Herman Lucero

Total number of pages in report: **88**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Jesse L. Smith
Laboratory Director

Client Service contact: Shea Greiner 303-425-6021

Certifications: CO, ID, NE, NM, ND (R-027) (PW) UT (NELAP CO00049)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.



Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Sample Results	8
3.1: D12968-1: SE CORNER EXC BTM	9
3.2: D12968-2: SE CORNER WALL	15
3.3: D12968-3: EXCAVATION FOOT PRINT	21
3.4: D12968-4: SIDEWALL NORTH/SOUTH	27
3.5: D12968-5: SIDEWALL WEST	33
3.6: D12968-6: BACKGROUND	39
Section 4: Misc. Forms	40
4.1: Chain of Custody	41
Section 5: GC/MS Semi-volatiles - QC Data Summaries	42
5.1: Method Blank Summary	43
5.2: Blank Spike Summary	44
5.3: Matrix Spike/Matrix Spike Duplicate Summary	45
Section 6: GC Volatiles - QC Data Summaries	46
6.1: Method Blank Summary	47
6.2: Blank Spike Summary	49
6.3: Matrix Spike/Matrix Spike Duplicate Summary	51
Section 7: GC Semi-volatiles - QC Data Summaries	53
7.1: Method Blank Summary	54
7.2: Blank Spike Summary	56
7.3: Matrix Spike/Matrix Spike Duplicate Summary	58
Section 8: Metals Analysis - QC Data Summaries	60
8.1: Prep QC MP1824: Ba,Cd,Cr,Cu,Pb,Ni,Se,Ag,Zn	61
8.2: Prep QC MP1825: As	71
Section 9: General Chemistry - QC Data Summaries	76
9.1: Method Blank and Spike Results Summary	77
Section 10: Misc. Forms (Accutest Labs of New England, Inc.)	78
10.1: Chain of Custody	79
Section 11: Metals Analysis - QC Data (Accutest Labs of New England, Inc.)	81
11.1: Prep QC MP15228: Hg	82
Section 12: General Chemistry - QC Data (Accutest Labs of New England, Inc.)	85
12.1: Method Blank and Spike Results Summary	86
12.2: Duplicate Results Summary	87
12.3: Matrix Spike Results Summary	88



Sample Summary

HRL Compliance Solutions

Job No: D12968

PDC Parachute Creek #5 Job#10-351

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
D12968-1	04/28/10	15:10 MEM	05/04/10	SO	Soil	SE CORNER EXC BTM
D12968-2	04/28/10	15:20 MEM	05/04/10	SO	Soil	SE CORNER WALL
D12968-3	05/03/10	13:35 MEM	05/04/10	SO	Soil	EXCAVATION FOOT PRINT
D12968-4	05/03/10	13:50 MEM	05/04/10	SO	Soil	SIDEWALL NORTH/SOUTH
D12968-5	05/03/10	14:05 MEM	05/04/10	SO	Soil	SIDEWALL WEST
D12968-6	05/03/10	14:00 MEM	05/04/10	SO	Soil	BACKGROUND

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: HRL Compliance Solutions

Job No D12968

Site: PDC Parachute Creek #5 Job#10-351

Report Dat 5/12/2010 4:22:12 PM

On 05/04/2010, six (6) samples were received at Accutest Mountain States at a temperature of 3°C. The samples were intact and properly preserved, unless noted below. An Accutest Mountain States Job Number of D12968 was assigned to the project. The laboratory sample IDs, client sample IDs, and dates of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix SO	Batch ID: OP1807
------------------	-------------------------

- All samples were extracted and analyzed within the recommended method holding time.
- Samples D12967-1MS and D12967-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- The RPD for matrix spike duplicate (MSD) of Indeno(1,2,3-cd)pyrene is outside control limits for sample OP1807-MSD. The high RPD is due to possible sample nonhomogeneity.

Volatiles by GC By Method SW846 8015B

Matrix SO	Batch ID: GGB233
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Samples D12967-1MS and D12967-1MSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8021B

Matrix SO	Batch ID: GTB233
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- Samples D12967-1MS and D12967-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846-8015B

Matrix SO	Batch ID: OP1805
------------------	-------------------------

- All samples were extracted and analyzed within the recommended method holding time.
- Samples D12968-3MS and D12968-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix SO	Batch ID: OP1827
------------------	-------------------------

- All samples were extracted and analyzed within the recommended method holding time.
- Samples D12968-5MS and D12968-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010B

Matrix SO	Batch ID: MP1824
------------------	-------------------------

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Samples D12967-1MS, D12967-1MSD, and D12967-1SDL were used as the QC samples for metals analysis.
- The matrix spike and matrix spike duplicate (MS/MSD) recoveries of Nickel, Zinc and matrix spike duplicate (MSD) of Barium are outside control limits. The spike recovery indicates possible matrix interference and/or sample nonhomogeneity. The blank spike (BS) recoveries of these analytes are within the QC limits.
- The serial dilution RPDs of Cadmium, Selenium, Chromium, Nickel, and Zinc are outside control limits for sample MP1824-SD1. The percent differences are acceptable due to low initial sample concentration (< 50 times IDL).

Metals By Method SW846 6020

Matrix SO	Batch ID: MP1825
------------------	-------------------------

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Samples D12967-1SDL, D12967-1MS, and D12967-1MSD were used as the QC samples for metals analysis.

Metals By Method SW846 7471A

Matrix SO	Batch ID: M:MP15228
------------------	----------------------------

- The data for SW846 7471A meets quality control requirements.
- D12968-1 through D12968-5 for Mercury: Analysis performed at Accutest Laboratories, Marlborough, MA.

Wet Chemistry By Method ASTM E1498-76M

Matrix SO	Batch ID: M:GN31777
------------------	----------------------------

- The data for ASTM E1498-76M meets quality control requirements.
- The following samples were run outside of holding time for method ASTM E1498-76M: D12968-1 through D12968-5.
- D12968-1 through D12968-5 for Redox Potential Vs H2: Analysis performed at Accutest Laboratories, Marlborough, MA.

Wet Chemistry By Method SM19 2540B M

Matrix SO	Batch ID: GN4210
------------------	-------------------------

- The data for SM19 2540B M meets quality control requirements.

Wet Chemistry By Method SW846 3060/7196A M

Matrix SO	Batch ID: R2214
------------------	------------------------

- The data for SW846 3060/7196A M meets quality control requirements.
- Trivalent Chromium: Calculated as: (Chromium) - (Hexavalent Chromium)

Wet Chemistry By Method SW846 3060A/7196A

Matrix SO	Batch ID: M:GP11589
------------------	----------------------------

- D12968-1 through D12968-5 for Hexavalent Chromium: Analysis performed at Accutest Laboratories, Marlborough, MA.

Wet Chemistry By Method SW846 9045C

Matrix SO	Batch ID: GN4203
------------------	-------------------------

- The following samples were run outside of holding time for method SW846 9045C: D12968-1 and D12968-2

Accutest Mountain States certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest Mountain States's Quality System precision, accuracy and complete

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Mountain States is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Mountain States indicated via signature on the report cov

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Accutest Mountain States

Job No D12968

Site: HRLCCOGJ: PDC Parachute Creek #5 Job#10-351

Report Date 5/12/2010 5:50:32 PM

5 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on between 04/28/2010 and 05/03/2010 and were received at Accutest on 05/04/2010 properly preserved, at 1.8 Deg. C and intact. These Samples received an Accutest job number of D12968. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals By Method SW846 7471A

Matrix SO	Batch ID: MP15228
------------------	--------------------------

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D13175-1DUP, D13175-1MS were used as the QC samples for metals.

Wet Chemistry By Method ASTM E1498-76M

Matrix SO	Batch ID: GN31777
------------------	--------------------------

- Sample(s) D12967-1DUP were used as the QC samples for Redox Potential Vs H2.

Wet Chemistry By Method SW846 3060A/7196A

Matrix SO	Batch ID: GP11589
------------------	--------------------------

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D12967-2DUP, D12967-2MS were used as the QC samples for Chromium, Hexavalent.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(D12968).



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SE CORNER EXC BTM		
Lab Sample ID:	D12968-1	Date Sampled:	04/28/10
Matrix:	SO - Soil	Date Received:	05/04/10
Method:	SW846 8270C BY SIM SW846 3540C	Percent Solids:	84.8
Project:	PDC Parachute Creek #5 Job#10-351		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G00759.D	2	05/07/10	TMB	05/05/10	OP1807	E3G12
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	16	15	ug/kg	
208-96-8	Acenaphthylene	ND	78	16	ug/kg	
120-12-7	Anthracene	ND	16	10	ug/kg	
56-55-3	Benzo(a)anthracene	ND	16	15	ug/kg	
50-32-8	Benzo(a)pyrene	ND	16	9.9	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	16	11	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	16	9.8	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	16	9.9	ug/kg	
218-01-9	Chrysene	ND	16	7.8	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	16	12	ug/kg	
206-44-0	Fluoranthene	ND	16	9.7	ug/kg	
86-73-7	Fluorene	ND	16	15	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	16	10	ug/kg	
90-12-0	1-Methylnaphthalene	ND	16	14	ug/kg	
91-57-6	2-Methylnaphthalene	ND	78	24	ug/kg	
91-20-3	Naphthalene	18.0	78	17	ug/kg	J
85-01-8	Phenanthrene	ND	16	12	ug/kg	
129-00-0	Pyrene	ND	16	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		10-193%
321-60-8	2-Fluorobiphenyl	60%		20-138%
1718-51-0	Terphenyl-d14	58%		17-174%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: SE CORNER EXC BTM	Date Sampled: 04/28/10
Lab Sample ID: D12968-1	Date Received: 05/04/10
Matrix: SO - Soil	Percent Solids: 84.8
Method: SW846 8015B	
Project: PDC Parachute Creek #5 Job#10-351	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB4325.D	1	05/09/10	DG	n/a	n/a	GGB233
Run #2							

Run #	Initial Weight
Run #1	1.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	1.2	1.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	102%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: SE CORNER EXC BTM	
Lab Sample ID: D12968-1	Date Sampled: 04/28/10
Matrix: SO - Soil	Date Received: 05/04/10
Method: SW846 8021B	Percent Solids: 84.8
Project: PDC Parachute Creek #5 Job#10-351	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TB4325.D	1	05/09/10	DG	n/a	n/a	GTB233
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.9	5.9	ug/kg	
108-88-3	Toluene	ND	12	12	ug/kg	
100-41-4	Ethylbenzene	ND	12	12	ug/kg	
	m,p-Xylene	ND	12	12	ug/kg	
95-47-6	o-Xylene	ND	12	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	99%		60-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: SE CORNER EXC BTM	
Lab Sample ID: D12968-1	Date Sampled: 04/28/10
Matrix: SO - Soil	Date Received: 05/04/10
Method: SW846-8015B SW846 3550B	Percent Solids: 84.8
Project: PDC Parachute Creek #5 Job#10-351	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD1187.D	1	05/06/10	LAC	05/05/10	OP1805	GFD87
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	16.8	16	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	100%		63-130%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SE CORNER EXC BTM	Date Sampled: 04/28/10
Lab Sample ID: D12968-1	Date Received: 05/04/10
Matrix: SO - Soil	Percent Solids: 84.8
Project: PDC Parachute Creek #5 Job#10-351	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	8.5	0.39	mg/kg	5	05/07/10	05/10/10 SES	SW846 6020 ³	SW846 3050B ⁶
Barium	172	0.97	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Cadmium	< 0.97	0.97	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium	9.1	0.97	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	16.2	0.48	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Lead	10.8	4.8	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury ^a	< 0.031	0.031	mg/kg	1	05/12/10	05/12/10 AMA	SW846 7471A ¹	SW846 7471A ⁴
Nickel	15.2	2.9	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium	< 4.8	4.8	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Silver	< 2.9	2.9	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	59.7	2.9	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵

- (1) Instrument QC Batch: M:MA11758
- (2) Instrument QC Batch: MA648
- (3) Instrument QC Batch: MA656
- (4) Prep QC Batch: M:MP15228
- (5) Prep QC Batch: MP1824
- (6) Prep QC Batch: MP1825

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

RL = Reporting Limit

Report of Analysis

Client Sample ID: SE CORNER EXC BTM	
Lab Sample ID: D12968-1	Date Sampled: 04/28/10
Matrix: SO - Soil	Date Received: 05/04/10
	Percent Solids: 84.8
Project: PDC Parachute Creek #5 Job#10-351	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 2.3	2.3	mg/kg	1	05/10/10 15:45	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	9.1	3.3	mg/kg	1	05/10/10 15:45	AMA	SW846 3060/7196A M
Redox Potential Vs H2 ^a	352		mv	1	05/05/10	AMA	ASTM E1498-76M
Solids, Percent	84.8		%	1	05/04/10	SWT	SM19 2540B M
pH	8.48		su	1	05/04/10 10:05	CJ	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID: SE CORNER WALL	
Lab Sample ID: D12968-2	Date Sampled: 04/28/10
Matrix: SO - Soil	Date Received: 05/04/10
Method: SW846 8270C BY SIM SW846 3540C	Percent Solids: 84.3
Project: PDC Parachute Creek #5 Job#10-351	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G00760.D	2	05/07/10	TMB	05/05/10	OP1807	E3G12
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	16	15	ug/kg	
208-96-8	Acenaphthylene	ND	79	16	ug/kg	
120-12-7	Anthracene	ND	16	10	ug/kg	
56-55-3	Benzo(a)anthracene	ND	16	15	ug/kg	
50-32-8	Benzo(a)pyrene	ND	16	10	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	16	11	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	16	9.9	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	16	10	ug/kg	
218-01-9	Chrysene	ND	16	7.9	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	16	12	ug/kg	
206-44-0	Fluoranthene	ND	16	9.7	ug/kg	
86-73-7	Fluorene	ND	16	15	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	16	10	ug/kg	
90-12-0	1-Methylnaphthalene	ND	16	14	ug/kg	
91-57-6	2-Methylnaphthalene	ND	79	24	ug/kg	
91-20-3	Naphthalene	ND	79	17	ug/kg	
85-01-8	Phenanthrene	ND	16	13	ug/kg	
129-00-0	Pyrene	ND	16	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		10-193%
321-60-8	2-Fluorobiphenyl	72%		20-138%
1718-51-0	Terphenyl-d14	69%		17-174%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

32
3

Client Sample ID: SE CORNER WALL	
Lab Sample ID: D12968-2	Date Sampled: 04/28/10
Matrix: SO - Soil	Date Received: 05/04/10
Method: SW846 8015B	Percent Solids: 84.3
Project: PDC Parachute Creek #5 Job#10-351	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB4326.D	1	05/09/10	DG	n/a	n/a	GGB233
Run #2							

Run #	Initial Weight
Run #1	1.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	1.2	1.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	102%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

32
3

Client Sample ID: SE CORNER WALL	
Lab Sample ID: D12968-2	Date Sampled: 04/28/10
Matrix: SO - Soil	Date Received: 05/04/10
Method: SW846 8021B	Percent Solids: 84.3
Project: PDC Parachute Creek #5 Job#10-351	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TB4326.D	1	05/09/10	DG	n/a	n/a	GTB233
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.9	5.9	ug/kg	
108-88-3	Toluene	ND	12	12	ug/kg	
100-41-4	Ethylbenzene	ND	12	12	ug/kg	
	m,p-Xylene	ND	12	12	ug/kg	
95-47-6	o-Xylene	ND	12	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	97%		60-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

32
3

Client Sample ID: SE CORNER WALL	
Lab Sample ID: D12968-2	Date Sampled: 04/28/10
Matrix: SO - Soil	Date Received: 05/04/10
Method: SW846-8015B SW846 3550B	Percent Solids: 84.3
Project: PDC Parachute Creek #5 Job#10-351	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD1188.D	1	05/06/10	LAC	05/05/10	OP1805	GFD87
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	ND	16	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	107%		63-130%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

32
3

Client Sample ID: SE CORNER WALL	Date Sampled: 04/28/10
Lab Sample ID: D12968-2	Date Received: 05/04/10
Matrix: SO - Soil	Percent Solids: 84.3
Project: PDC Parachute Creek #5 Job#10-351	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	9.2	0.36	mg/kg	5	05/07/10	05/10/10 SES	SW846 6020 ³	SW846 3050B ⁶
Barium	171	0.90	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Cadmium	< 0.90	0.90	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium	8.2	0.90	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	16.3	0.45	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Lead	10.3	4.5	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury ^a	< 0.033	0.033	mg/kg	1	05/12/10	05/12/10 AMA	SW846 7471A ¹	SW846 7471A ⁴
Nickel	14.6	2.7	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium	< 4.5	4.5	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Silver	< 2.7	2.7	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	56.5	2.7	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵

- (1) Instrument QC Batch: M:MA11758
- (2) Instrument QC Batch: MA648
- (3) Instrument QC Batch: MA656
- (4) Prep QC Batch: M:MP15228
- (5) Prep QC Batch: MP1824
- (6) Prep QC Batch: MP1825

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

RL = Reporting Limit

Report of Analysis

Client Sample ID: SE CORNER WALL	Date Sampled: 04/28/10
Lab Sample ID: D12968-2	Date Received: 05/04/10
Matrix: SO - Soil	Percent Solids: 84.3
Project: PDC Parachute Creek #5 Job#10-351	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 2.3	2.3	mg/kg	1	05/10/10 15:45	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	7.8	3.2	mg/kg	1	05/10/10 15:45	AMA	SW846 3060/7196A M
Redox Potential Vs H2 ^a	338		mv	1	05/05/10	AMA	ASTM E1498-76M
Solids, Percent	84.3		%	1	05/04/10	SWT	SM19 2540B M
pH	8.46		su	1	05/04/10 10:05	CJ	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EXCAVATION FOOT PRINT		
Lab Sample ID:	D12968-3	Date Sampled:	05/03/10
Matrix:	SO - Soil	Date Received:	05/04/10
Method:	SW846 8270C BY SIM SW846 3540C	Percent Solids:	86.1
Project:	PDC Parachute Creek #5 Job#10-351		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G00761.D	2	05/07/10	TMB	05/05/10	OP1807	E3G12
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	15	14	ug/kg	
208-96-8	Acenaphthylene	ND	77	16	ug/kg	
120-12-7	Anthracene	ND	15	10	ug/kg	
56-55-3	Benzo(a)anthracene	ND	15	15	ug/kg	
50-32-8	Benzo(a)pyrene	ND	15	9.7	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	15	11	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	15	9.7	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	15	9.7	ug/kg	
218-01-9	Chrysene	ND	15	7.7	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	15	11	ug/kg	
206-44-0	Fluoranthene	ND	15	9.5	ug/kg	
86-73-7	Fluorene	ND	15	15	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	15	10	ug/kg	
90-12-0	1-Methylnaphthalene	39.6	15	14	ug/kg	
91-57-6	2-Methylnaphthalene	129	77	24	ug/kg	
91-20-3	Naphthalene	58.6	77	17	ug/kg	J
85-01-8	Phenanthrene	ND	15	12	ug/kg	
129-00-0	Pyrene	ND	15	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		10-193%
321-60-8	2-Fluorobiphenyl	65%		20-138%
1718-51-0	Terphenyl-d14	67%		17-174%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: EXCAVATION FOOT PRINT	
Lab Sample ID: D12968-3	Date Sampled: 05/03/10
Matrix: SO - Soil	Date Received: 05/04/10
Method: SW846 8015B	Percent Solids: 86.1
Project: PDC Parachute Creek #5 Job#10-351	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB4327.D	1	05/09/10	DG	n/a	n/a	GGB233
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	1.2	1.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	98%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EXCAVATION FOOT PRINT		
Lab Sample ID:	D12968-3	Date Sampled:	05/03/10
Matrix:	SO - Soil	Date Received:	05/04/10
Method:	SW846 8021B	Percent Solids:	86.1
Project:	PDC Parachute Creek #5 Job#10-351		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TB4327.D	1	05/09/10	DG	n/a	n/a	GTB233
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.8	5.8	ug/kg	
108-88-3	Toluene	ND	12	12	ug/kg	
100-41-4	Ethylbenzene	ND	12	12	ug/kg	
	m,p-Xylene	24.9	12	12	ug/kg	
95-47-6	o-Xylene	ND	12	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	91%		60-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: EXCAVATION FOOT PRINT	
Lab Sample ID: D12968-3	Date Sampled: 05/03/10
Matrix: SO - Soil	Date Received: 05/04/10
Method: SW846-8015B SW846 3550B	Percent Solids: 86.1
Project: PDC Parachute Creek #5 Job#10-351	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD1179.D	1	05/06/10	LAC	05/05/10	OP1805	GFD87
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	27.0	15	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	104%		63-130%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: EXCAVATION FOOT PRINT	Date Sampled: 05/03/10
Lab Sample ID: D12968-3	Date Received: 05/04/10
Matrix: SO - Soil	Percent Solids: 86.1
Project: PDC Parachute Creek #5 Job#10-351	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	8.4	0.43	mg/kg	5	05/07/10	05/10/10 SES	SW846 6020 ³	SW846 3050B ⁶
Barium	149	1.1	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Cadmium	< 1.1	1.1	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium	7.0	1.1	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	13.3	0.54	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Lead	9.0	5.4	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury ^a	< 0.034	0.034	mg/kg	1	05/12/10	05/12/10 AMA	SW846 7471A ¹	SW846 7471A ⁴
Nickel	12.6	3.2	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium	< 5.4	5.4	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Silver	< 3.2	3.2	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	49.9	3.2	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵

(1) Instrument QC Batch: M:MA11758

(2) Instrument QC Batch: MA648

(3) Instrument QC Batch: MA656

(4) Prep QC Batch: M:MP15228

(5) Prep QC Batch: MP1824

(6) Prep QC Batch: MP1825

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

RL = Reporting Limit

Report of Analysis

Client Sample ID: EXCAVATION FOOT PRINT	Date Sampled: 05/03/10
Lab Sample ID: D12968-3	Date Received: 05/04/10
Matrix: SO - Soil	Percent Solids: 86.1
Project: PDC Parachute Creek #5 Job#10-351	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 2.3	2.3	mg/kg	1	05/10/10 15:45	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	7.0	3.4	mg/kg	1	05/10/10 15:45	AMA	SW846 3060/7196A M
Redox Potential Vs H2 ^a	351		mv	1	05/05/10	AMA	ASTM E1498-76M
Solids, Percent	86.1		%	1	05/04/10	SWT	SM19 2540B M
pH	8.42		su	1	05/04/10 10:05	CJ	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SIDEWALL NORTH/SOUTH		
Lab Sample ID:	D12968-4	Date Sampled:	05/03/10
Matrix:	SO - Soil	Date Received:	05/04/10
Method:	SW846 8270C BY SIM SW846 3540C	Percent Solids:	83.5
Project:	PDC Parachute Creek #5 Job#10-351		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G00762.D	2	05/07/10	TMB	05/05/10	OP1807	E3G12
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	16	15	ug/kg	
208-96-8	Acenaphthylene	ND	80	16	ug/kg	
120-12-7	Anthracene	ND	16	10	ug/kg	
56-55-3	Benzo(a)anthracene	ND	16	16	ug/kg	
50-32-8	Benzo(a)pyrene	ND	16	10	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	16	12	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	16	10	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	16	10	ug/kg	
218-01-9	Chrysene	ND	16	8.0	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	16	12	ug/kg	
206-44-0	Fluoranthene	ND	16	9.8	ug/kg	
86-73-7	Fluorene	ND	16	16	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	16	10	ug/kg	
90-12-0	1-Methylnaphthalene	ND	16	14	ug/kg	
91-57-6	2-Methylnaphthalene	ND	80	24	ug/kg	
91-20-3	Naphthalene	ND	80	18	ug/kg	
85-01-8	Phenanthrene	ND	16	13	ug/kg	
129-00-0	Pyrene	ND	16	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		10-193%
321-60-8	2-Fluorobiphenyl	61%		20-138%
1718-51-0	Terphenyl-d14	63%		17-174%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.4
3

Client Sample ID:	SIDEWALL NORTH/SOUTH		
Lab Sample ID:	D12968-4	Date Sampled:	05/03/10
Matrix:	SO - Soil	Date Received:	05/04/10
Method:	SW846 8015B	Percent Solids:	83.5
Project:	PDC Parachute Creek #5 Job#10-351		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB4328.D	1	05/10/10	DG	n/a	n/a	GGB233
Run #2							

Run #	Initial Weight
Run #1	1.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	1.2	1.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	96%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.4
3

Client Sample ID: SIDEWALL NORTH/SOUTH	
Lab Sample ID: D12968-4	Date Sampled: 05/03/10
Matrix: SO - Soil	Date Received: 05/04/10
Method: SW846 8021B	Percent Solids: 83.5
Project: PDC Parachute Creek #5 Job#10-351	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TB4328.D	1	05/10/10	DG	n/a	n/a	GTB233
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	6.0	6.0	ug/kg	
108-88-3	Toluene	ND	12	12	ug/kg	
100-41-4	Ethylbenzene	ND	12	12	ug/kg	
	m,p-Xylene	ND	12	12	ug/kg	
95-47-6	o-Xylene	ND	12	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	93%		60-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.4
3

Client Sample ID: SIDEWALL NORTH/SOUTH	
Lab Sample ID: D12968-4	Date Sampled: 05/03/10
Matrix: SO - Soil	Date Received: 05/04/10
Method: SW846-8015B SW846 3550B	Percent Solids: 83.5
Project: PDC Parachute Creek #5 Job#10-351	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD1189.D	1	05/06/10	LAC	05/05/10	OP1805	GFD87
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	ND	16	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	86%		63-130%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

34
3

Client Sample ID: SIDEWALL NORTH/SOUTH	Date Sampled: 05/03/10
Lab Sample ID: D12968-4	Date Received: 05/04/10
Matrix: SO - Soil	Percent Solids: 83.5
Project: PDC Parachute Creek #5 Job#10-351	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	9.4	0.37	mg/kg	5	05/07/10	05/10/10 SES	SW846 6020 ³	SW846 3050B ⁶
Barium	204	0.94	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Cadmium	< 0.94	0.94	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium	8.7	0.94	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	15.0	0.47	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Lead	11.0	4.7	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury ^a	< 0.035	0.035	mg/kg	1	05/12/10	05/12/10 AMA	SW846 7471A ¹	SW846 7471A ⁴
Nickel	14.8	2.8	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium	< 4.7	4.7	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Silver	< 2.8	2.8	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	59.3	2.8	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵

- (1) Instrument QC Batch: M:MA11758
- (2) Instrument QC Batch: MA648
- (3) Instrument QC Batch: MA656
- (4) Prep QC Batch: M:MP15228
- (5) Prep QC Batch: MP1824
- (6) Prep QC Batch: MP1825

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

RL = Reporting Limit

Report of Analysis

3.4
3

Client Sample ID: SIDEWALL NORTH/SOUTH	Date Sampled: 05/03/10
Lab Sample ID: D12968-4	Date Received: 05/04/10
Matrix: SO - Soil	Percent Solids: 83.5
Project: PDC Parachute Creek #5 Job#10-351	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 2.4	2.4	mg/kg	1	05/10/10 15:45	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	7.6	3.3	mg/kg	1	05/10/10 15:45	AMA	SW846 3060/7196A M
Redox Potential Vs H2 ^a	336		mv	1	05/05/10	AMA	ASTM E1498-76M
Solids, Percent	83.5		%	1	05/04/10	SWT	SM19 2540B M
pH	8.44		su	1	05/04/10 10:05	CJ	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID: SIDEWALL WEST	
Lab Sample ID: D12968-5	Date Sampled: 05/03/10
Matrix: SO - Soil	Date Received: 05/04/10
Method: SW846 8270C BY SIM SW846 3540C	Percent Solids: 84.2
Project: PDC Parachute Creek #5 Job#10-351	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G00763.D	2	05/07/10	TMB	05/05/10	OP1807	E3G12
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	16	15	ug/kg	
208-96-8	Acenaphthylene	ND	79	16	ug/kg	
120-12-7	Anthracene	ND	16	10	ug/kg	
56-55-3	Benzo(a)anthracene	ND	16	15	ug/kg	
50-32-8	Benzo(a)pyrene	ND	16	9.9	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	16	11	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	16	9.9	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	16	9.9	ug/kg	
218-01-9	Chrysene	ND	16	7.9	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	16	12	ug/kg	
206-44-0	Fluoranthene	ND	16	9.7	ug/kg	
86-73-7	Fluorene	ND	16	15	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	16	10	ug/kg	
90-12-0	1-Methylnaphthalene	ND	16	14	ug/kg	
91-57-6	2-Methylnaphthalene	ND	79	24	ug/kg	
91-20-3	Naphthalene	ND	79	17	ug/kg	
85-01-8	Phenanthrene	ND	16	13	ug/kg	
129-00-0	Pyrene	ND	16	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		10-193%
321-60-8	2-Fluorobiphenyl	65%		20-138%
1718-51-0	Terphenyl-d14	64%		17-174%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.5
3

Client Sample ID: SIDEWALL WEST	
Lab Sample ID: D12968-5	Date Sampled: 05/03/10
Matrix: SO - Soil	Date Received: 05/04/10
Method: SW846 8015B	Percent Solids: 84.2
Project: PDC Parachute Creek #5 Job#10-351	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB4331.D	1	05/10/10	DG	n/a	n/a	GGB233
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	1.2	1.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	99%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SIDEWALL WEST	
Lab Sample ID: D12968-5	Date Sampled: 05/03/10
Matrix: SO - Soil	Date Received: 05/04/10
Method: SW846 8021B	Percent Solids: 84.2
Project: PDC Parachute Creek #5 Job#10-351	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TB4331.D	1	05/10/10	DG	n/a	n/a	GTB233
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.9	5.9	ug/kg	
108-88-3	Toluene	ND	12	12	ug/kg	
100-41-4	Ethylbenzene	ND	12	12	ug/kg	
	m,p-Xylene	ND	12	12	ug/kg	
95-47-6	o-Xylene	ND	12	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	95%		60-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.5
3

Client Sample ID: SIDEWALL WEST	
Lab Sample ID: D12968-5	Date Sampled: 05/03/10
Matrix: SO - Soil	Date Received: 05/04/10
Method: SW846-8015B SW846 3550B	Percent Solids: 84.2
Project: PDC Parachute Creek #5 Job#10-351	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD1259.D	1	05/10/10	CP	05/08/10	OP1827	GFD89
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	ND	16	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	112%		63-130%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

35
3

Client Sample ID: SIDEWALL WEST	Date Sampled: 05/03/10
Lab Sample ID: D12968-5	Date Received: 05/04/10
Matrix: SO - Soil	Percent Solids: 84.2
Project: PDC Parachute Creek #5 Job#10-351	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	8.1	0.40	mg/kg	5	05/07/10	05/10/10 SES	SW846 6020 ³	SW846 3050B ⁶
Barium	194	1.0	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Cadmium	< 1.0	1.0	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium	9.3	1.0	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	16.7	0.50	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Lead	10.9	5.0	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury ^a	< 0.037	0.037	mg/kg	1	05/12/10	05/12/10 AMA	SW846 7471A ¹	SW846 7471A ⁴
Nickel	16.6	3.0	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium	< 5.0	5.0	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Silver	< 3.0	3.0	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	63.1	3.0	mg/kg	1	05/07/10	05/07/10 JM	SW846 6010B ²	SW846 3050B ⁵

- (1) Instrument QC Batch: M:MA11758
- (2) Instrument QC Batch: MA648
- (3) Instrument QC Batch: MA656
- (4) Prep QC Batch: M:MP15228
- (5) Prep QC Batch: MP1824
- (6) Prep QC Batch: MP1825

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

RL = Reporting Limit

Report of Analysis

Client Sample ID: SIDEWALL WEST	
Lab Sample ID: D12968-5	Date Sampled: 05/03/10
Matrix: SO - Soil	Date Received: 05/04/10
	Percent Solids: 84.2
Project: PDC Parachute Creek #5 Job#10-351	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 2.3	2.3	mg/kg	1	05/10/10 15:45	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	9.3	3.3	mg/kg	1	05/10/10 15:45	AMA	SW846 3060/7196A M
Redox Potential Vs H2 ^a	380		mv	1	05/05/10	AMA	ASTM E1498-76M
Solids, Percent	84.2		%	1	05/04/10	SWT	SM19 2540B M
pH	7.97		su	1	05/04/10 10:05	CJ	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID: BACKGROUND	
Lab Sample ID: D12968-6	Date Sampled: 05/03/10
Matrix: SO - Soil	Date Received: 05/04/10
	Percent Solids: 88.0
Project: PDC Parachute Creek #5 Job#10-351	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	7.2	0.35	mg/kg	5	05/07/10	05/10/10 SES	SW846 6020 ¹	SW846 3050B ²

(1) Instrument QC Batch: MA656

(2) Prep QC Batch: MP1825

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



GC/MS Semi-volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1807-MB	3G00744.D	1	05/06/10	TMB	05/05/10	OP1807	E3G12

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	6.7	6.2	ug/kg	
208-96-8	Acenaphthylene	ND	33	6.9	ug/kg	
120-12-7	Anthracene	ND	6.7	4.3	ug/kg	
56-55-3	Benzo(a)anthracene	ND	6.7	6.5	ug/kg	
50-32-8	Benzo(a)pyrene	ND	6.7	4.2	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	6.7	4.8	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	6.7	4.2	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	6.7	4.2	ug/kg	
218-01-9	Chrysene	ND	6.7	3.3	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	6.7	4.9	ug/kg	
206-44-0	Fluoranthene	ND	6.7	4.1	ug/kg	
86-73-7	Fluorene	ND	6.7	6.5	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	6.7	4.4	ug/kg	
90-12-0	1-Methylnaphthalene	ND	6.7	5.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	33	10	ug/kg	
91-20-3	Naphthalene	ND	33	7.4	ug/kg	
85-01-8	Phenanthrene	ND	6.7	5.3	ug/kg	
129-00-0	Pyrene	ND	6.7	4.5	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
4165-60-0	Nitrobenzene-d5	88%	10-193%
321-60-8	2-Fluorobiphenyl	80%	20-138%
1718-51-0	Terphenyl-d14	98%	17-174%

Blank Spike Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1807-BS	3G00745.D	1	05/06/10	TMB	05/05/10	OP1807	E3G12

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	83.3	63.9	77	40-136
208-96-8	Acenaphthylene	83.3	63.4	76	42-139
120-12-7	Anthracene	83.3	66.6	80	40-141
56-55-3	Benzo(a)anthracene	83.3	69.3	83	38-143
50-32-8	Benzo(a)pyrene	83.3	69.7	84	39-145
205-99-2	Benzo(b)fluoranthene	83.3	70.0	84	38-151
191-24-2	Benzo(g,h,i)perylene	83.3	65.4	78	35-136
207-08-9	Benzo(k)fluoranthene	83.3	70.7	85	38-147
218-01-9	Chrysene	83.3	67.5	81	39-137
53-70-3	Dibenzo(a,h)anthracene	83.3	65.6	79	35-139
206-44-0	Fluoranthene	83.3	67.2	81	34-132
86-73-7	Fluorene	83.3	64.5	77	41-136
193-39-5	Indeno(1,2,3-cd)pyrene	83.3	65.5	79	31-144
90-12-0	1-Methylnaphthalene	83.3	63.3	76	36-130
91-57-6	2-Methylnaphthalene	83.3	63.1	76	40-131
91-20-3	Naphthalene	83.3	64.3	77	36-130
85-01-8	Phenanthrene	83.3	63.8	77	40-135
129-00-0	Pyrene	83.3	69.1	83	29-157

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	85%	10-193%
321-60-8	2-Fluorobiphenyl	76%	20-138%
1718-51-0	Terphenyl-d14	81%	17-174%

5.2.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1807-MS	3G00757.D	2	05/07/10	TMB	05/05/10	OP1807	E3G12
OP1807-MSD	3G00758.D	2	05/07/10	TMB	05/05/10	OP1807	E3G12
D12967-1	3G00747.D	2	05/06/10	TMB	05/05/10	OP1807	E3G12

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

CAS No.	Compound	D12967-1 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND	99.9	70.4	71	66.5	67	6	20-151/30	
208-96-8	Acenaphthylene	ND	99.9	73.6	74	70.3	71	5	23-156/30	
120-12-7	Anthracene	ND	99.9	72.1	72	68.6	69	5	25-149/30	
56-55-3	Benzo(a)anthracene	ND	99.9	93.0	93	86.0	86	8	22-157/30	
50-32-8	Benzo(a)pyrene	ND	99.9	89.9	90	81.8	82	9	23-153/30	
205-99-2	Benzo(b)fluoranthene	ND	99.9	90.7	91	85.2	85	6	22-161/30	
191-24-2	Benzo(g,h,i)perylene	ND	99.9	71.4	72	64.2	64	11	20-158/30	
207-08-9	Benzo(k)fluoranthene	ND	99.9	73.8	74	64.8	65	13	17-161/30	
218-01-9	Chrysene	ND	99.9	73.1	73	67.5	68	8	16-159/30	
53-70-3	Dibenzo(a,h)anthracene	ND	99.9	70.9	71	66.2	66	7	21-154/30	
206-44-0	Fluoranthene	ND	99.9	85.5	86	79.7	80	7	16-140/30	
86-73-7	Fluorene	ND	99.9	71.8	72	68.8	69	4	15-153/30	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	99.9	74.8	75	42.1	42	56* a	21-159/30	
90-12-0	1-Methylnaphthalene	ND	99.9	72.9	73	68.6	69	6	10-148/30	
91-57-6	2-Methylnaphthalene	ND	99.9	72.0	72	67.8	68	6	10-181/30	
91-20-3	Naphthalene	ND	99.9	71.0	71	67.2	67	5	10-176/30	
85-01-8	Phenanthrene	ND	99.9	67.8	68	62.2	62	9	22-152/30	
129-00-0	Pyrene	ND	99.9	75.4	76	70.4	71	7	10-200/30	

CAS No.	Surrogate Recoveries	MS	MSD	D12967-1	Limits
4165-60-0	Nitrobenzene-d5	76%	76%	57%	10-193%
321-60-8	2-Fluorobiphenyl	72%	68%	53%	20-138%
1718-51-0	Terphenyl-d14	71%	66%	53%	17-174%

(a) High RPD due to possible sample nonhomogeneity.

5.3.1
 5



GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB233-MB	GB4315.D	1	05/09/10	DG	n/a	n/a	GGB233

The QC reported here applies to the following samples:

Method: SW846 8015B

D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	1.0	1.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	105% 60-140%

Method Blank Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GTB233-MB	TB4315.D	1	05/09/10	DG	n/a	n/a	GTB233

The QC reported here applies to the following samples:

Method: SW846 8021B

D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	5.0	ug/kg	
100-41-4	Ethylbenzene	ND	10	10	ug/kg	
108-88-3	Toluene	ND	10	10	ug/kg	
95-47-6	o-Xylene	ND	10	10	ug/kg	
	m,p-Xylene	ND	10	10	ug/kg	

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	103% 60-140%

Blank Spike Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB233-BS	GB4316.D	1	05/09/10	DG	n/a	n/a	GGB233

The QC reported here applies to the following samples:

Method: SW846 8015B

D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	11	10.1	92	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	120%	60-140%

6.2.1
6

Blank Spike Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GTB233-BS	TB4316.D	1	05/09/10	DG	n/a	n/a	GTB233

The QC reported here applies to the following samples:

Method: SW846 8021B

D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	136	123	90	70-130
100-41-4	Ethylbenzene	228	214	94	70-130
108-88-3	Toluene	1060	961	91	70-130
95-47-6	o-Xylene	330	324	98	70-130
	m,p-Xylene	750	713	95	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	111%	60-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D12967-1MS	GB4318.D	1	05/09/10	DG	n/a	n/a	GGB233
D12967-1MSD	GB4319.D	1	05/09/10	DG	n/a	n/a	GGB233
D12967-1	GB4317.D	1	05/09/10	DG	n/a	n/a	GGB233

The QC reported here applies to the following samples:

Method: SW846 8015B

D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

CAS No.	Compound	D12967-1 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	13.2	10.3	78	10.0	76	3	62-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D12967-1	Limits
120-82-1	1,2,4-Trichlorobenzene	117%	107%	105%	60-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D12967-1MS	TB4318.D	1	05/09/10	DG	n/a	n/a	GTB233
D12967-1MSD	TB4319.D	1	05/09/10	DG	n/a	n/a	GTB233
D12967-1	TB4317.D	1	05/09/10	DG	n/a	n/a	GTB233

The QC reported here applies to the following samples:

Method: SW846 8021B

D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

CAS No.	Compound	D12967-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	163	137	84	137	84	0	70-130/30
100-41-4	Ethylbenzene	ND	273	223	82	217	79	3	62-130/30
108-88-3	Toluene	ND	1270	1040	82	1020	80	2	70-130/30
95-47-6	o-Xylene	ND	395	336	85	325	82	3	65-135/30
	m,p-Xylene	ND	899	740	82	716	80	3	60-140/30

CAS No.	Surrogate Recoveries	MS	MSD	D12967-1	Limits
120-82-1	1,2,4-Trichlorobenzene	106%	98%	103%	60-140%



GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1805-MB	FD1177.D	1	05/06/10	LAC	05/05/10	OP1805	GFD87

The QC reported here applies to the following samples:

Method: SW846-8015B

D12968-1, D12968-2, D12968-3, D12968-4

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	ND	13	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	112% 63-130%

7.1.1
7

Method Blank Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1827-MB	FD1254.D	1	05/10/10	CP	05/08/10	OP1827	GFD89

The QC reported here applies to the following samples:

Method: SW846-8015B

D12968-5

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	ND	13	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	92% 63-130%

Blank Spike Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1805-BS	FD1178.D	1	05/06/10	LAC	05/05/10	OP1805	GFD87

The QC reported here applies to the following samples:

Method: SW846-8015B

D12968-1, D12968-2, D12968-3, D12968-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	694	104	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	112%	63-130%

7.2.1

7

Blank Spike Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1827-BS	FD1258.D	1	05/10/10	CP	05/08/10	OP1827	GFD89

The QC reported here applies to the following samples:

Method: SW846-8015B

D12968-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	731	110	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	116%	63-130%

7.2.2

7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1805-MS	FD1180.D	1	05/06/10	LAC	05/05/10	OP1805	GFD87
OP1805-MSD	FD1181.D	1	05/06/10	LAC	05/05/10	OP1805	GFD87
D12968-3	FD1179.D	1	05/06/10	LAC	05/05/10	OP1805	GFD87

The QC reported here applies to the following samples:

Method: SW846-8015B

D12968-1, D12968-2, D12968-3, D12968-4

CAS No.	Compound	D12968-3 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	27.0	774	712	89	758	95	6	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D12968-3	Limits
84-15-1	o-Terphenyl	98%	105%	104%	63-130%

7.3.1

7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D12968
Account: HRLCCOGJ HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1827-MS	FD1260.D	1	05/10/10	CP	05/08/10	OP1827	GFD89
OP1827-MSD	FD1261.D	1	05/10/10	CP	05/08/10	OP1827	GFD89
D12968-5	FD1259.D	1	05/10/10	CP	05/08/10	OP1827	GFD89

The QC reported here applies to the following samples:

Method: SW846-8015B

D12968-5

CAS No.	Compound	D12968-5 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	ND	790	823	104	785	99	5	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D12968-5	Limits
84-15-1	o-Terphenyl	107%	102%	112%	63-130%



Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D12968
Account: HRLCCOGJ - HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1824
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 05/07/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	5.0	.35	.98		
Antimony	1.5	.085	.25		
Arsenic	1.3	.14	.36		
Barium	0.50	.007	.025	0.010	<0.50
Beryllium	0.50	.07	.11		
Boron	2.5	.18	.46		
Cadmium	0.50	.011	.06	0.020	<0.50
Calcium	20	.85	1.3		
Chromium	0.50	.014	.09	0.045	<0.50
Cobalt	0.25	.024	.029		
Copper	0.25	.08	.19	0.12	<0.25
Iron	3.5	.39	.46		
Lead	2.5	.065	.12	-0.16	<2.5
Lithium	0.10	.038	.045		
Magnesium	10	.29	.47		
Manganese	0.25	.011	.014		
Molybdenum	0.50	.021	.08		
Nickel	1.5	.019	.038	0.020	<1.5
Phosphorus	5.0	.75	1.8		
Potassium	100	19	64		
Selenium	2.5	.14	.27	-0.0050	<2.5
Silicon	2.5	.6	.34		
Silver	1.5	.049	.034	0.0	<1.5
Sodium	20	12	3.1		
Strontium	2.5	.0046	.01		
Thallium	0.50	.16	.11		
Tin	2.5	.7	.28		
Titanium	0.50	.0049	.021		
Uranium	2.5	.11	.27		
Vanadium	0.50	.014	.017		
Zinc	1.5	.038	.25	0.25	<1.5

Associated samples MP1824: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D12968
Account: HRLCCOGJ - HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1824
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

(anr) Analyte not requested

8.1.1

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D12968
 Account: HRLCCOGJ - HRL Compliance Solutions
 Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1824
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 05/07/10

Metal	D12967-1 Original MS		Spike/lot MPICPALL % Rec		QC Limits
Aluminum					
Antimony					
Arsenic					
Barium	260	427	207	80.8	75-125
Beryllium					
Boron					
Cadmium	0.54	43.3	51.7	82.7	75-125
Calcium					
Chromium	8.7	51.1	51.7	82.0	75-125
Cobalt					
Copper	18.2	65.7	51.7	91.9	75-125
Iron					
Lead	9.2	92.3	103	80.4	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel	17.0	54.1	51.7	71.8N(a)	75-125
Phosphorus					
Potassium					
Selenium	2.3	83.1	103	78.2	75-125
Silicon					
Silver	0.0	18.2	20.7	88.0	75-125
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	60.6	93.2	51.7	63.1N(a)	75-125

Associated samples MP1824: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

8.12
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D12968
Account: HRLCCOGJ - HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1824
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D12968
 Account: HRLCCOGJ - HRL Compliance Solutions
 Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1824
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 05/07/10

Metal	D12967-1 Original MSD		SpikeLot MPICPAL % Rec	MSD RPD	QC Limit	
Aluminum						
Antimony						
Arsenic						
Barium	260	409	207	72.1N(a)	4.3	20
Beryllium						
Boron						
Cadmium	0.54	43.4	51.7	82.9	0.2	20
Calcium						
Chromium	8.7	51.8	51.7	83.4	1.4	20
Cobalt						
Copper	18.2	66.3	51.7	93.1	0.9	20
Iron						
Lead	9.2	92.5	103	80.6	0.2	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	17.0	54.5	51.7	72.6N(a)	0.7	20
Phosphorus						
Potassium						
Selenium	2.3	83.2	103	78.3	0.1	20
Silicon						
Silver	0.0	18.4	20.7	89.0	1.1	20
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	60.6	97.1	51.7	70.6N(a)	4.1	20

Associated samples MP1824: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

8.12
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D12968
Account: HRLCCOGJ - HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1824
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D12968
 Account: HRLCCOGJ - HRL Compliance Solutions
 Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1824
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 05/07/10

Metal	BSP Result	Spikelot MPICPALL	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium	189	200	94.5	80-120
Beryllium				
Boron				
Cadmium	45.9	50	91.8	80-120
Calcium				
Chromium	48.6	50	97.2	80-120
Cobalt				
Copper	49.0	50	98.0	80-120
Iron				
Lead	94.7	100	94.7	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	47.0	50	94.0	80-120
Phosphorus				
Potassium				
Selenium	85.7	100	85.7	80-120
Silicon				
Silver	19.3	20	96.5	80-120
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	46.0	50	92.0	80-120

Associated samples MP1824: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

8.1.3
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D12968
Account: HRLCCOGJ - HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1824
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

(anr) Analyte not requested

8.1.3

8

SERIAL DILUTION RESULTS SUMMARY

Login Number: D12968
 Account: HRLCCOGJ - HRL Compliance Solutions
 Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1824
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: ug/l

Prep Date: 05/07/10

Metal	D12967-1 Original SDL 1:5		%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium	2520	2760	9.6	0-10
Beryllium				
Boron				
Cadmium	5.20	4.50	13.5 (a)	0-10
Calcium				
Chromium	83.9	95.0	13.2*(b)	0-10
Cobalt				
Copper	177	176	0.6	0-10
Iron				
Lead	89.3	82.5	7.6	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	164	193	17.2*(b)	0-10
Phosphorus				
Potassium				
Selenium	21.8	29.5	35.3 (a)	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	586	725	23.7*(b)	0-10

Associated samples MP1824: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

8.1.4
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: D12968
Account: HRLCCOGJ - HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1824
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

- (anr) Analyte not requested
- (a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- (b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D12968
Account: HRLCCOGJ - HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1825
Matrix Type: SOLID

Methods: SW846 6020
Units: mg/kg

Prep Date: 05/07/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	25	.14	.89		
Antimony	0.20	.001	.045		
Arsenic	0.40	.049	.26	0.13	<0.40
Barium	1.0	.0035	.17		
Beryllium	0.10	.0075	.014		
Boron	20	.97	2		
Cadmium	0.050	.023	.048		
Calcium	200	1.8	6.1		
Chromium	1.0	.021	.23		
Cobalt	0.10	.0033	.088		
Copper	1.0	.011	.14		
Iron	20	.81	6.1		
Lead	0.25	.0012	.18		
Magnesium	50	.067	1.3		
Manganese	0.50	.007	.089		
Molybdenum	0.50	.0044	.2		
Nickel	1.0	.0029	.074		
Phosphorus	30	1.8	5.6		
Potassium	100	2	9.1		
Selenium	0.20	.075	.14		
Silver	0.050	.0008	.029		
Sodium	250	.8	1.8		
Strontium	10	.004	.047		
Thallium	0.10	.015	.071		
Tin	5.0	.006	.17		
Titanium	1.0	.035	.071		
Uranium	0.25	.00038	.12		
Vanadium	2.0	.052	.99		
Zinc	5.0	.039	.53		

Associated samples MP1825: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5, D12968-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.2.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D12968
 Account: HRLCCOGJ - HRL Compliance Solutions
 Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1825
 Matrix Type: SOLID

Methods: SW846 6020
 Units: mg/kg

Prep Date: 05/07/10

Metal	D12967-1 Original MS		SpikeLot MPICPALL % Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	10.7	112	103	98.0 60-119
Barium	anr			
Beryllium	anr			
Boron	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese				
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	anr			

Associated samples MP1825: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5, D12968-6

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.2.2
 8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D12968
 Account: HRLCCOGJ - HRL Compliance Solutions
 Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1825
 Matrix Type: SOLID

Methods: SW846 6020
 Units: mg/kg

Prep Date: 05/07/10

Metal	D12967-1 Original MSD		SpikeLot MPICPALL % Rec	MSD RPD	QC Limit	
Aluminum						
Antimony	anr					
Arsenic	10.7	107	103	93.2	4.6	20
Barium	anr					
Beryllium	anr					
Boron	anr					
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper	anr					
Iron	anr					
Lead	anr					
Magnesium	anr					
Manganese						
Molybdenum	anr					
Nickel	anr					
Phosphorus						
Potassium						
Selenium	anr					
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	anr					

Associated samples MP1825: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5, D12968-6

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.2.2
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D12968
 Account: HRLCCOGJ - HRL Compliance Solutions
 Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1825
 Matrix Type: SOLID

Methods: SW846 6020
 Units: mg/kg

Prep Date: 05/07/10 05/07/10

Metal	BSP Result	Spikelot MPICPALL	% Rec	QC Limits	BSP Result	Spikelot MPICPALL	% Rec	QC Limits
Aluminum								
Antimony	anr							
Arsenic	101	100	101.0	80-120	101	100	101.0	80-120
Barium	anr							
Beryllium	anr							
Boron	anr							
Cadmium	anr							
Calcium								
Chromium	anr							
Cobalt								
Copper	anr							
Iron	anr							
Lead	anr							
Magnesium	anr							
Manganese								
Molybdenum	anr							
Nickel	anr							
Phosphorus								
Potassium								
Selenium	anr							
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Uranium								
Vanadium								
Zinc	anr							

Associated samples MP1825: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5, D12968-6

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.2.3
 8

SERIAL DILUTION RESULTS SUMMARY

Login Number: D12968
 Account: HRLCCOGJ - HRL Compliance Solutions
 Project: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP1825
 Matrix Type: SOLID

Methods: SW846 6020
 Units: ug/l

Prep Date: 05/07/10

Metal	D12967-1	QC
	Original	Limits

Metal	Original	SDL	5:25 %DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	103	110	6.6	0-10
Barium	anr			
Beryllium	anr			
Boron	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese				
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	anr			

Associated samples MP1825: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5, D12968-6

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.2.4
 8



General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D12968
Account: HRLCCOGJ - HRL Compliance Solutions
Project: PDC Parachute Creek #5 Job#10-351

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
pH	GN4203			su	8.00	7.96	99.5	99.3-100.7%

Associated Samples:

Batch GN4203: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

(*) Outside of QC limits



Misc. Forms

Custody Documents and Other Forms

(Accutest Labs of New England, Inc.)

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

4036 Youngfield St., Wheat Ridge, CO 80033
 303-425-6021 FAX: 303-425-6854

Accutest Job #: D12968
 Accutest Quote #:
 AMS P.O. #:
 Project No.:

Client Information			Subcontract Laboratory Information							Analytical Information						
Name Accutest Mountain States (AMS)			Name Accutest - New England							X C R A	E H				Comments	
Address 4036 Youngfield St.			Address 495 Technology Center West, BLDG O													
City Wheat Ridge,	State CO	Zip 80033	City Marlborough	State MA	Zip 01752											
Send Report to: Tiffany Pham			Contact: Sample Management													
Any questions contact: Amanda Kissell			Phone: (508) 481-6200													
Phone/Fax #: (303) 425-6021; (303)425-6854			Phone: (508) 481-6200													
Field ID / Point of Collection		Collection		Matrix	# of bottles	Preservation					X C R A	E H				Comments
	Date	Time					HCl	NaOH	HNO3	H2SO4						
D12968 -1	4/28/10	3:10 PM		Soil	1						X	X				
-2	4/28/10	3:20 PM		Soil	1						X	X				
-3	5/3/10	1:35 PM		Soil	1						X	X				
-4	5/3/10	1:50 PM		Soil	1						X	X				
-5	5/3/10	2:05 PM		Soil	1						X	X				
Turnaround Information			Data Deliverable Information							Comments / Remarks						
<input checked="" type="checkbox"/> 3 - 5 Business Day Rush <input type="checkbox"/> Other _____ (Days)			Approved By: _____			<input type="checkbox"/> Commercial "A" <input type="checkbox"/> Commercial "B" <input checked="" type="checkbox"/> Commercial "BN" <input type="checkbox"/> Reduced Tier 1 <input type="checkbox"/> Full Tier 1		<input type="checkbox"/> PDF <input type="checkbox"/> Compact Disk Deliverable <input type="checkbox"/> Electronic Delivery: _____ <input type="checkbox"/> State Forms <input type="checkbox"/> Other (Specify) _____		Please use Colorado regulations and RLs. <i>101</i>						
10 Day Turnaround Hardcopy, RUSH is FAX Data unless previously approved.																
Sample Custody must be documented below each time samples change possession, including courier delivery.												For Subcontract Laboratory Use Only				
Relinquished by:	Date & Time:	Received By:	Date & Time:	Seal #:	Headspace: Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>											
1 <i>[Signature]</i>	5/4/10 16:00	1 <i>[Signature]</i>	1													
Relinquished by:	Date & Time:	Received By:	Date & Time:	Preserved where applicable:												
2 <i>[Signature]</i>	5/5/10 10:15	2 <i>[Signature]</i>	2 5/5/10 10:15	<input type="checkbox"/>												
Relinquished by:	Date & Time:	Received By:	Date & Time:	Temperature °C												
3		3	3	1.8°	<input checked="" type="checkbox"/> On Ice											

10.1 10

D12968: Chain of Custody
Page 1 of 2
Accutest Labs of New England, Inc.



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D12968

Client: AMS

Immediate Client Services Action Required: No

Date / Time Received: 5/5/2010 10:15:00 AM

No. Coolers: 1

Client Service Action Required at Login: No

Project: N/A

Airbill #'s: N/A

<u>Cooler Security</u>	<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Cooler temp verification:			Infrared gun
3. Cooler media:			Ice (bag)

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	
3. Samples preserved property:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:			Intact

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume rec'd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Empty box for comments.

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www.accutest.com

10.1
10



Metals Analysis

QC Data Summaries

(Accutest Labs of New England, Inc.)

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D12968
Account: ALMS - Accutest Mountain States
Project: HRLCCOGJ: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP15228
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 05/12/10

Metal	RL	IDL	MDL	MB raw	final
-------	----	-----	-----	-----------	-------

Mercury 0.033 .0058 .014 0.0010 <0.033

Associated samples MP15228: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

11.11
11

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D12968
 Account: ALMS - Accutest Mountain States
 Project: HRLCCOGJ: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP15228
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 05/12/10 05/12/10

Metal	D13175-1 Original MS		Spike/lot HGRWS1 % Rec		QC Limits	D13175-1 Original DUP		RPD	QC Limits
Mercury	0.090	0.78	0.665	103.8	75-125	0.090	0.094	4.3	0-20

Associated samples MP15228: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

11.12
11

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D12968
 Account: ALMS - Accutest Mountain States
 Project: HRLCCOGJ: PDC Parachute Creek #5 Job#10-351

QC Batch ID: MP15228
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 05/12/10 05/12/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	LCS Result	Spikelot HGLCSD68	% Rec	QC Limits
Mercury	0.49	0.5	98.0	80-120	8.7	14.1	61.7	27-110

Associated samples MP15228: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

11.1.3
11



General Chemistry

QC Data Summaries

(Accutest Labs of New England, Inc.)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D12968
Account: ALMS - Accutest Mountain States
Project: HRLCCOGJ: PDC Parachute Creek #5 Job#10-351

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chromium, Hexavalent	GP11589/GN31808	2.0	0.0	mg/kg	40	42.4	106.0	80-120%
Chromium, Hexavalent	GP11589/GN31808			mg/kg	1100	1150	104.5	80-120%

Associated Samples:

Batch GP11589: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

(*) Outside of QC limits

12.1
12

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D12968
Account: ALMS - Accutest Mountain States
Project: HRLCCOGJ: PDC Parachute Creek #5 Job#10-351

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chromium, Hexavalent	GP11589/GN31808	D12967-2	mg/kg	0.0	0.0	0.0	0-20%
Redox Potential Vs H2	GN31777	D12967-1	mv	304	301	1.0	0-20%

Associated Samples:

Batch GN31777: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

Batch GP11589: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

(*) Outside of QC limits

12.2
12

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D12968
Account: ALMS - Accutest Mountain States
Project: HRLCCOGJ: PDC Parachute Creek #5 Job#10-351

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GP11589/GN31808	D12967-2	mg/kg	0.0	48.6	44.1	90.7	75-125%
Chromium, Hexavalent	GP11589/GN31808	D12967-2	mg/kg	0.0	1100	1190	108.2	75-125%

Associated Samples:

Batch GP11589: D12968-1, D12968-2, D12968-3, D12968-4, D12968-5

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

12.3
12