



02/10/10

Technical Report for

KRW Consulting, Inc.

1001-02

Accutest Job Number: D10402

Sampling Date: 01/14/10

Report to:

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Total number of pages in report: 118



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.

Client Service contact: 303-425-6021

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

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Test results relate only to samples analyzed.

Gary K. Ward
Laboratory Director

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Sample Summary

KRW Consulting, Inc.

Job No: D10402

1001-02

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D10402-1	01/14/10	09:40	01/15/10	SO	Soil	296-7B1A
D10402-1A	01/14/10	09:40	01/15/10	SO	Soil	296-7B1A
D10402-2	01/14/10	11:20	01/15/10	SO	Soil	296-7B1B
D10402-2A	01/14/10	11:20	01/15/10	SO	Soil	296-7B1B
D10402-3	01/14/10	11:50	01/15/10	SO	Soil	296-7FWP
D10402-3A	01/14/10	11:50	01/15/10	SO	Soil	296-7FWP
D10402-4	01/14/10	12:40	01/15/10	SO	Soil	296-7-RP
D10402-4A	01/14/10	12:40	01/15/10	SO	Soil	296-7-RP
D10402-5	01/14/10	13:57	01/15/10	SO	Soil	296-7-CP
D10402-5A	01/14/10	13:57	01/15/10	SO	Soil	296-7-CP
D10402-6	01/14/10	12:15	01/15/10	SO	Soil	296-7B2A
D10402-6A	01/14/10	12:15	01/15/10	SO	Soil	296-7B2A
D10402-7	01/14/10	12:50	01/15/10	SO	Soil	296-7B2B

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



Sample Summary
(continued)

KRW Consulting, Inc.
1001-02

Job No: D10402

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D10402-7A	01/14/10	12:50	01/15/10	SO	Soil	296-7B2B
D10402-8	01/14/10	14:30	01/15/10	SO	Soil	296-7B3A
D10402-8A	01/14/10	14:30	01/15/10	SO	Soil	296-7B3A
D10402-9	01/14/10	14:40	01/15/10	SO	Soil	296-7B3B
D10402-9A	01/14/10	14:40	01/15/10	SO	Soil	296-7B3B
D10402-10	01/14/10	15:20	01/15/10	SO	Soil	296-7SP
D10402-10A	01/14/10	15:20	01/15/10	SO	Soil	296-7SP

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: KRW Consulting, Inc.

Job No D10402

Site: 1001-02

Report Dat 2/10/2010 9:38:13 AM

On 01/15/2010, ten (10) samples were received at Accutest Mountain States Laboratories at a temperature of 5.7°C. The samples were intact and properly preserved, unless noted below. An Accutest Job Number of D10402 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 Section.

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

Matrix SO

Batch ID: OP1314

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Samples D10286-2MS, D10286-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample D10402-3 has surrogates outside control limits. Probable cause due to matrix interference.
- OP1314-MSD: One internal standard recovery is below the QC limits.

Volatiles by GC By Method SW846 8015B

Matrix SO

Batch ID: GGB154

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Samples D10402-3MSD, D10402-3MS, and D10402-3MSD were used as the QC samples indicated.
- The matrix spike and matrix spike duplicate (MS/MSD) recoveries of TPH-GRO (C6-C10) are outside control limits. The laboratory control spike (LCS) recovery is within QC limits, proving the analysis is in control.
- Samples D10402-3MS, D10402-3MSD, and D10402-4 have surrogates outside control limits. Outside control limits due to matrix interference.

Matrix SO

Batch ID: GGB157

- The data for SW846 8015B meets quality control requirements.
- Samples D10402-3MS, D10402-3MSD, D10402-4 have surrogates outside control limits. Outside control limits due to matrix interference. The samples were analyzed in duplicate to confirm surrogate recoveries.
- D10402-4: Confirmation run.

Volatiles by GC By Method SW846 8021B

Matrix SO

Batch ID: GTB154

- All samples were analyzed within the recommended method holding time.
- Samples D10402-3MS and D10402-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- The matrix spike and matrix spike duplicate (MS/MSD) recoveries of Benzene, Ethylbenzene, m,p-Xylene, o-Xylene, and Toluene are outside control limits. The laboratory control spike (LCS) recoveries of these analytes are within QC limits, proving the analysis is in control.
- The RPD for the MS and MSD recoveries of Benzene, Ethylbenzene, m,p-Xylene, o-Xylene, and Toluene are outside control limits for sample D10402-3MSD. Probable cause due to sample homogeneity.
- Samples D10402-3MS, D10402-3MSD, and D10402-4 have surrogates outside control limits. Outside control limits due to matrix interference.

Matrix SO

Batch ID: GTB157

- The data for SW846 8021B meets quality control requirements.
- Samples D10402-3MS, D10402-3MSD, D10402-4 have surrogates outside control limits. Outside control limits due to matrix interference. The samples were analyzed in duplicate to confirm surrogate recoveries.
- D10402-4: Confirmation run.

Extractables by GC By Method SW846-8015B

Matrix SO

Batch ID: OP1321

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Samples D10403-4MS and D10403-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010B

Matrix AQ

Batch ID: MP1159

- 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.

Matrix SO

Batch ID: MP1168

- 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.
- Samples D10522-3MS, D10522-3MSD, and D10522-3SDL were used as the QC samples for metals.
- The matrix spike (MS) recovery of Barium is outside control limits. The spike amount is low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- The RPD for the MS and MSD recoveries of Barium are outside control limits due to the MS recovery.
- The serial dilution RPDs for Boron, Copper, Lead, and Selenium are outside control limits for sample MP1168-SD1. The percent difference is acceptable due to low initial sample concentration (< 50 times IDL).

Metals By Method SW846 6020

Matrix SO

Batch ID: MP1111

- 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.
- Samples D10400-1DUP, D10400-1MS, D10400-1MSD, and D10400-1SDL were used as the QC samples for metals.

Matrix SO

Batch ID: MP1169

- 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.
- Samples D10522-3MS, D10522-3SDL, D10522-3MSD, and D10522-3DUP were used as the QC samples for metals.
- The duplicate RPD for Arsenic is outside control limits for sample MP1169-D1. The high RPD is due to possible sample nonhomogeneity.

Metals By Method SW846 7471A

Matrix SO

Batch ID: MP1151

- 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.
- Samples D10402-3MSD and D10402-3MS were used as the QC samples for the metals analysis.
- The matrix spike (MS) recovery of Mercury is outside control limits. The spike amount is low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- The RPD for the MS and MSD recoveries of Mercury is outside control limits for sample MP1151-S2. The high RPD is due to possible sample nonhomogeneity.

Wet Chemistry By Method ASTM E1498-76M

Matrix SO

Batch ID: M:GN30926

- The data for ASTM E1498-76M meets quality control requirements.
- The following samples were run outside of holding time for method ASTM E1498-76M: D10402-10, D10402-3, D10402-4, D10402-5
- Redox Potential Vs H2: Analysis performed at Accutest Laboratories, Marlborough, MA.

Wet Chemistry By Method LADNR29B

Matrix SO

Batch ID: R1029

- The data for LADNR29B meets quality control requirements.
- Sodium Adsorption Ratio: Calculated as: $(\text{Na meq/L}) / \sqrt{[(\text{Ca meq/L}) + (\text{Mg meq/L})/2]}$

Wet Chemistry By Method SM19 2540B M

Matrix SO

Batch ID: GN2900

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

Wet Chemistry By Method SW846 3060/7196A M

Matrix SO

Batch ID: R1058

- Trivalent Chromium, : Calculated as: $(\text{Chromium}) - (\text{Hexavalent Chromium})$

Wet Chemistry By Method SW846 3060A/7196A**Matrix** SO**Batch ID:** M:GP11206

- The data for SW846 3060A/7196A meets quality control requirements.
- Hexavalent Chromium: Analysis performed at Accutest Laboratories, Marlborough, MA.

Wet Chemistry By Method SW846 9045C**Matrix** SO**Batch ID:** GN2907

- The following samples were run outside of holding time for method SW846 9045C: D10402-1, D10402-10, D10402-2, D10402-3, D10402-4, D10402-5, D10402-7, D10402-8, D10402-9, D10402-6

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

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 Laboratories 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 Laboratories indicated via signature on the report cover

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Accutest Mountain States

Job No D10402

Site: KRWCCOL: KRW, Lakewood, CO

Report Date 1/26/2010 3:50:21 PM

4 Samples were collected on 01/14/2010 and were received at Accutest on 01/15/2010 properly preserved, at 2.7 Deg. C and intact. These Samples received an Accutest job number of D10402. 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.

Wet Chemistry By Method ASTM E1498-76M

Matrix SO

Batch ID: GN30926

- Sample(s) D10403-2CDUP were used as the QC samples for Redox Potential Vs H2.

Wet Chemistry By Method SW846 3060A/7196A

Matrix SO

Batch ID: GP11206

- 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) D10404-2BDUP, D10404-2BMS 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(D10402).



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	296-7B1A	Date Sampled:	01/14/10
Lab Sample ID:	D10402-1	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	82.4
Project:	1001-02		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.8	0.39	mg/kg	1	01/28/10	01/29/10 SES	SW846 6020 ¹	SW846 3050B ²

(1) Instrument QC Batch: MA361
(2) Prep QC Batch: MP1169

RL = Reporting Limit

Report of Analysis

Client Sample ID: 296-7B1A
Lab Sample ID: D10402-1
Matrix: SO - Soil
Project: 1001-02

Date Sampled: 01/14/10
Date Received: 01/15/10
Percent Solids: 82.4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	82.4		%	1	01/18/10	SWT	SM19 2540B M
Specific Conductivity	281	1.0	umhos/cm	1	01/22/10	JD	DEPT.OF AG, BOOK N9
pH	8.99		su	1	01/18/10 08:45	CJ	SW846 9045C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B1A	Date Sampled:	01/14/10
Lab Sample ID:	D10402-1A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	82.4
Project:	1001-02		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	26.0	2.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²
Magnesium	5.25	1.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²
Sodium	19.7	2.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA355
(2) Prep QC Batch: MP1159

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B1A	Date Sampled:	01/14/10
Lab Sample ID:	D10402-1A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	82.4
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.921		ratio	1	01/27/10 23:06	JM	LADNR29B

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B1B	Date Sampled:	01/14/10
Lab Sample ID:	D10402-2	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	90.3
Project:	1001-02		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.0	0.36	mg/kg	1	01/28/10	01/29/10 SES	SW846 6020 ¹	SW846 3050B ²

(1) Instrument QC Batch: MA361
(2) Prep QC Batch: MP1169

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B1B	Date Sampled:	01/14/10
Lab Sample ID:	D10402-2	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	90.3
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	90.3		%	1	01/18/10	SWT	SM19 2540B M
Specific Conductivity	626	1.0	umhos/cm	1	01/22/10	JD	DEPT.OF AG, BOOK N9
pH	8.40		su	1	01/18/10 08:45	CJ	SW846 9045C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B1B	Date Sampled:	01/14/10
Lab Sample ID:	D10402-2A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	90.3
Project:	1001-02		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	61.6	2.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²
Magnesium	13.0	1.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²
Sodium	26.3	2.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²

- (1) Instrument QC Batch: MA355
(2) Prep QC Batch: MP1159

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B1B	Date Sampled:	01/14/10
Lab Sample ID:	D10402-2A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	90.3
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.794		ratio	1	01/27/10 23:13	JM	LADNR29B

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7FWP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-3	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	86.8
Method:	SW846 8270C SW846 3540C		
Project:	1001-02		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G05293.D	10	01/20/10	TMB	01/18/10	OP1314	E1G160
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	25.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	11000	8400	ug/kg	
208-96-8	Acenaphthylene	ND	11000	9600	ug/kg	
120-12-7	Anthracene	ND	11000	7200	ug/kg	
56-55-3	Benzo(a)anthracene	ND	11000	8400	ug/kg	
50-32-8	Benzo(a)pyrene	ND	11000	7200	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	12000	11000	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	11000	7200	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	13000	12000	ug/kg	
218-01-9	Chrysene	ND	13000	12000	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	12000	8600	ug/kg	
206-44-0	Fluoranthene	ND	20000	11000	ug/kg	
86-73-7	Fluorene	ND	12000	9600	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	11000	7800	ug/kg	
90-12-0	1-Methylnaphthalene	28400	13000	11000	ug/kg	
91-57-6	2-Methylnaphthalene	138000	11000	8100	ug/kg	
91-20-3	Naphthalene	174000	20000	9600	ug/kg	
85-01-8	Phenanthrene	38800	20000	11000	ug/kg	
129-00-0	Pyrene	ND	12000	11000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	103%		33-130%
321-60-8	2-Fluorobiphenyl	110%		37-130%
1718-51-0	Terphenyl-d14	166% ^a		48-130%

(a) Outside control limits due to dilution.

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:	296-7FWP						
Lab Sample ID:	D10402-3				Date Sampled:	01/14/10	
Matrix:	SO - Soil				Date Received:	01/15/10	
Method:	SW846 8015B				Percent Solids:	86.8	
Project:	1001-02						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB3047.D	1	01/18/10	SD	n/a	n/a	GGB154
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	2.82	1.2	1.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	13% ^a		60-140%		

(a) Outside control limits due to matrix interference. MS/MSD surrogate recovery confirms low sample surrogate.

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:	296-7FWP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-3	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	86.8
Method:	SW846 8021B		
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TB3047.D	1	01/18/10	SD	n/a	n/a	GTB154
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.8	ug/kg	
108-88-3	Toluene	ND	12	ug/kg	
100-41-4	Ethylbenzene	ND	12	ug/kg	
	m,p-Xylene	41.7	12	ug/kg	
95-47-6	o-Xylene	ND	12	ug/kg	

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

(a) Outside control limits due to matrix interference. MS/MSD surrogate recovery confirm low sample surrogate recovery.

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:	296-7FWP						
Lab Sample ID:	D10402-3				Date Sampled:	01/14/10	
Matrix:	SO - Soil				Date Received:	01/15/10	
Method:	SW846-8015B	SW846 3550B			Percent Solids:	86.8	
Project:	1001-02						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FC1547.D	20	01/20/10	LAC	01/20/10	OP1321	GFC91
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	8.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	92200	1200	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
98-06-6	t-Butylbenzene	74%		39-130%	

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: 296-7FWP

Lab Sample ID: D10402-3

Matrix: SO - Soil

Project: 1001-02

Date Sampled: 01/14/10

Date Received: 01/15/10

Percent Solids: 86.8

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.5	0.34	mg/kg	1	01/20/10	01/26/10 SES	SW846 6020 ¹	SW846 3050B ⁶
Barium	6670	18	mg/kg	20	01/28/10	02/03/10 JM	SW846 6010B ⁵	SW846 3050B ⁸
Boron	28.3	4.5	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Cadmium	< 0.91	0.91	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Chromium	50.2	0.91	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Copper	63.9	4.5	mg/kg	10	01/28/10	02/02/10 JM	SW846 6010B ⁴	SW846 3050B ⁸
Lead	19.7	4.5	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Mercury	71.6	9.4	mg/kg	100	01/26/10	01/27/10 CM	SW846 7471A ²	SW846 7471A ⁷
Nickel	16.0	2.7	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Selenium	< 4.5	4.5	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Silver	< 2.7	2.7	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Zinc	148	2.7	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸

(1) Instrument QC Batch: MA350

(2) Instrument QC Batch: MA354

(3) Instrument QC Batch: MA362

(4) Instrument QC Batch: MA370

(5) Instrument QC Batch: MA373

(6) Prep QC Batch: MP1111

(7) Prep QC Batch: MP1151

(8) Prep QC Batch: MP1168

RL = Reporting Limit

Report of Analysis

Client Sample ID: 296-7FWP**Lab Sample ID:** D10402-3**Matrix:** SO - Soil**Project:** 1001-02**Date Sampled:** 01/14/10**Date Received:** 01/15/10**Percent Solids:** 86.8**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 2.3	2.3	mg/kg	1	01/20/10 17:40	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	49.5	3.2	mg/kg	1	01/30/10 03:17	JM	SW846 3060/7196A M
Redox Potential Vs H2 ^a	125		mv	1	01/19/10	AMA	ASTM E1498-76M
Solids, Percent	86.8		%	1	01/18/10	SWT	SM19 2540B M
Specific Conductivity	5360	1.0	umhos/cm	1	01/22/10	JD	DEPT.OF AG, BOOK N9
pH	9.07		su	1	01/18/10 08:45	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:	296-7FWP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-3A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	86.8
Project:	1001-02		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	40.0	2.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²
Magnesium	3.09	1.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²
Sodium	740	2.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA355
(2) Prep QC Batch: MP1159

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7FWP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-3A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	86.8
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	30.3		ratio	1	01/27/10 23:21	JM	LADNR29B

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7-RP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-4	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	59.6
Method:	SW846 8270C SW846 3540C		
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G05295.D	10	01/20/10	TMB	01/18/10	OP1314	E1G160
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	7.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4300	3400	ug/kg	
208-96-8	Acenaphthylene	ND	4300	3900	ug/kg	
120-12-7	Anthracene	ND	4300	2900	ug/kg	
56-55-3	Benzo(a)anthracene	ND	4300	3400	ug/kg	
50-32-8	Benzo(a)pyrene	ND	4300	2900	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	4700	4300	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	4300	2900	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	5500	4700	ug/kg	
218-01-9	Chrysene	ND	5500	4700	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	4700	3500	ug/kg	
206-44-0	Fluoranthene	ND	8200	4300	ug/kg	
86-73-7	Fluorene	ND	4700	3900	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4300	3200	ug/kg	
90-12-0	1-Methylnaphthalene	ND	5500	4300	ug/kg	
91-57-6	2-Methylnaphthalene	ND	4300	3300	ug/kg	
91-20-3	Naphthalene	ND	8200	3900	ug/kg	
85-01-8	Phenanthrene	13900	8200	4300	ug/kg	
129-00-0	Pyrene	ND	4700	4300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	92%		33-130%
321-60-8	2-Fluorobiphenyl	94%		37-130%
1718-51-0	Terphenyl-d14	104%		48-130%

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:	296-7-RP		
Lab Sample ID:	D10402-4	Date Sampled:	01/14/10
Matrix:	SO - Soil	Date Received:	01/15/10
Method:	SW846 8015B	Percent Solids:	59.6
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB3050.D	1	01/18/10	SD	n/a	n/a	GGB154
Run #2 ^a	GB3094.D	1	01/21/10	SD	n/a	n/a	GGB157

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

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	1.7	1.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	31% ^c	30% ^b	60-140%

(a) Confirmation run.

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

(c) Outside control limits due to matrix interference.

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:	296-7-RP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-4	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	59.6
Method:	SW846 8021B		
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TB3050.D	1	01/18/10	SD	n/a	n/a	GTB154
Run #2 ^a	TB3094.D	1	01/21/10	SD	n/a	n/a	GTB157

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

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	8.4	ug/kg	
108-88-3	Toluene	ND	17	ug/kg	
100-41-4	Ethylbenzene	ND	17	ug/kg	
	m,p-Xylene	ND	17	ug/kg	
95-47-6	o-Xylene	ND	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	6% ^c	4% ^b	60-140%

(a) Confirmation run.

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

(c) Outside control limits due to matrix interference.

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:	296-7-RP						
Lab Sample ID:	D10402-4				Date Sampled:	01/14/10	
Matrix:	SO - Soil				Date Received:	01/15/10	
Method:	SW846-8015B	SW846 3550B			Percent Solids:	59.6	
Project:	1001-02						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FC1548.D	20	01/20/10	LAC	01/20/10	OP1321	GFC91
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	172000	2200	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
98-06-6	t-Butylbenzene	69%		39-130%	

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: 296-7-RP
Lab Sample ID: D10402-4
Matrix: SO - Soil
Project: 1001-02

Date Sampled: 01/14/10
Date Received: 01/15/10
Percent Solids: 59.6

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	3.6	0.55	mg/kg	1	01/20/10	01/27/10 SES	SW846 6020 ¹	SW846 3050B ⁶
Barium	14200	120	mg/kg	100	01/28/10	02/08/10 JM	SW846 6010B ⁵	SW846 3050B ⁸
Boron	24.2	6.1	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Cadmium	< 1.2	1.2	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Chromium	30.5	1.2	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Copper	34.3	6.1	mg/kg	10	01/28/10	02/02/10 JM	SW846 6010B ⁴	SW846 3050B ⁸
Lead	12.0	6.1	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Mercury	1.8	0.37	mg/kg	10	01/26/10	01/27/10 CM	SW846 7471A ²	SW846 7471A ⁷
Nickel	12.5	3.7	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Selenium	< 6.1	6.1	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Silver	< 3.7	3.7	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Zinc	43.7	3.7	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸

- (1) Instrument QC Batch: MA353
(2) Instrument QC Batch: MA354
(3) Instrument QC Batch: MA362
(4) Instrument QC Batch: MA370
(5) Instrument QC Batch: MA380
(6) Prep QC Batch: MP1111
(7) Prep QC Batch: MP1151
(8) Prep QC Batch: MP1168

RL = Reporting Limit

Report of Analysis

Client Sample ID: 296-7-RP
Lab Sample ID: D10402-4
Matrix: SO - Soil
Project: 1001-02

Date Sampled: 01/14/10
Date Received: 01/15/10
Percent Solids: 59.6

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 2.1	2.1	mg/kg	1	01/20/10 17:40	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	29.7	3.3	mg/kg	1	01/30/10 03:24	JM	SW846 3060/7196A M
Redox Potential Vs H2 ^a	261		mv	1	01/19/10	AMA	ASTM E1498-76M
Solids, Percent	59.6		%	1	01/18/10	SWT	SM19 2540B M
Specific Conductivity	2300	1.0	umhos/cm	1	01/22/10	JD	DEPT.OF AG, BOOK N9
pH	9.23		su	1	01/18/10 08:45	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:	296-7-RP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-4A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	59.6
Project:	1001-02		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	18.6	2.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²
Magnesium	2.08	1.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²
Sodium	443	2.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA355
(2) Prep QC Batch: MP1159

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7-RP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-4A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	59.6
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	26.0		ratio	1	01/27/10 23:28	JM	LADNR29B

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7-CP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-5	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	87.4
Method:	SW846 8270C SW846 3540C		
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G05294.D	10	01/20/10	TMB	01/18/10	OP1314	E1G160
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	840	660	ug/kg	
208-96-8	Acenaphthylene	ND	840	760	ug/kg	
120-12-7	Anthracene	ND	840	570	ug/kg	
56-55-3	Benzo(a)anthracene	ND	840	660	ug/kg	
50-32-8	Benzo(a)pyrene	ND	840	570	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	920	840	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	840	570	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	1100	920	ug/kg	
218-01-9	Chrysene	ND	1100	920	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	920	690	ug/kg	
206-44-0	Fluoranthene	ND	1600	840	ug/kg	
86-73-7	Fluorene	ND	920	760	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	840	620	ug/kg	
90-12-0	1-Methylnaphthalene	ND	1100	840	ug/kg	
91-57-6	2-Methylnaphthalene	843	840	640	ug/kg	
91-20-3	Naphthalene	ND	1600	760	ug/kg	
85-01-8	Phenanthrene	ND	1600	840	ug/kg	
129-00-0	Pyrene	ND	920	840	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%		33-130%
321-60-8	2-Fluorobiphenyl	92%		37-130%
1718-51-0	Terphenyl-d14	121%		48-130%

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:	296-7-CP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-5	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	87.4
Method:	SW846 8015B		
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB3051.D	1	01/18/10	SD	n/a	n/a	GGB154
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	1.1	1.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	89%		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:	296-7-CP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-5	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	87.4
Method:	SW846 8021B		
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TB3051.D	1	01/18/10	SD	n/a	n/a	GTB154
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.7	ug/kg	
108-88-3	Toluene	ND	11	ug/kg	
100-41-4	Ethylbenzene	ND	11	ug/kg	
	m,p-Xylene	ND	11	ug/kg	
95-47-6	o-Xylene	ND	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	88%		60-140%

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:	296-7-CP		
Lab Sample ID:	D10402-5	Date Sampled:	01/14/10
Matrix:	SO - Soil	Date Received:	01/15/10
Method:	SW846-8015B SW846 3550B	Percent Solids:	87.4
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FC1549.D	10	01/20/10	LAC	01/20/10	OP1321	GFC91
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	946	150	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
98-06-6	t-Butylbenzene	49%		39-130%	

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: 296-7-CP

Lab Sample ID: D10402-5

Matrix: SO - Soil

Project: 1001-02

Date Sampled: 01/14/10

Date Received: 01/15/10

Percent Solids: 87.4

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	15.1	0.37	mg/kg	1	01/20/10	01/27/10 SES	SW846 6020 ¹	SW846 3050B ⁶
Barium	3640	18	mg/kg	20	01/28/10	02/03/10 JM	SW846 6010B ⁵	SW846 3050B ⁸
Boron	11.6	4.4	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Cadmium	< 0.89	0.89	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Chromium	11.0	0.89	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Copper	29.2	4.4	mg/kg	10	01/28/10	02/02/10 JM	SW846 6010B ⁴	SW846 3050B ⁸
Lead	16.4	4.4	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Mercury	< 0.097	0.097	mg/kg	1	01/26/10	01/27/10 CM	SW846 7471A ²	SW846 7471A ⁷
Nickel	12.5	2.7	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Selenium	< 4.4	4.4	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Silver	< 2.7	2.7	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Zinc	52.4	2.7	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸

(1) Instrument QC Batch: MA353

(2) Instrument QC Batch: MA354

(3) Instrument QC Batch: MA362

(4) Instrument QC Batch: MA370

(5) Instrument QC Batch: MA373

(6) Prep QC Batch: MP1111

(7) Prep QC Batch: MP1151

(8) Prep QC Batch: MP1168

RL = Reporting Limit

Report of Analysis

Client Sample ID: 296-7-CP**Lab Sample ID:** D10402-5**Matrix:** SO - Soil**Project:** 1001-02**Date Sampled:** 01/14/10**Date Received:** 01/15/10**Percent Solids:** 87.4**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 2.2	2.2	mg/kg	1	01/20/10 17:40	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	10.5	3.1	mg/kg	1	01/30/10 03:31	JM	SW846 3060/7196A M
Redox Potential Vs H2 ^a	331		mv	1	01/19/10	AMA	ASTM E1498-76M
Solids, Percent	87.4		%	1	01/18/10	SWT	SM19 2540B M
Specific Conductivity	7180	1.0	umhos/cm	1	01/22/10	JD	DEPT.OF AG, BOOK N9
pH	8.39		su	1	01/18/10 08:45	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:	296-7-CP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-5A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	87.4
Project:	1001-02		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	190	2.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²
Magnesium	48.2	1.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²
Sodium	1400	2.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA355
(2) Prep QC Batch: MP1159

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7-CP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-5A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	87.4
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	23.5		ratio	1	01/27/10 23:35	JM	LADNR29B

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B2A		
Lab Sample ID:	D10402-6	Date Sampled:	01/14/10
Matrix:	SO - Soil	Date Received:	01/15/10
		Percent Solids:	85.3
Project:	1001-02		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	6.5	0.37	mg/kg	1	01/28/10	01/29/10 SES	SW846 6020 ¹	SW846 3050B ²

(1) Instrument QC Batch: MA361
(2) Prep QC Batch: MP1169

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B2A	Date Sampled:	01/14/10
Lab Sample ID:	D10402-6	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	85.3
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	85.3		%	1	01/18/10	SWT	SM19 2540B M
Specific Conductivity	495	1.0	umhos/cm	1	01/22/10	JD	DEPT.OF AG, BOOK N9
pH	7.79		su	1	01/18/10 08:45	CJ	SW846 9045C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B2A	Date Sampled:	01/14/10
Lab Sample ID:	D10402-6A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	85.3
Project:	1001-02		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	41.9	2.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²
Magnesium	9.79	1.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²
Sodium	30.9	2.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA355
(2) Prep QC Batch: MP1159

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B2A	Date Sampled:	01/14/10
Lab Sample ID:	D10402-6A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	85.3
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	1.12		ratio	1	01/27/10 23:46	JM	LADNR29B

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B2B	Date Sampled:	01/14/10
Lab Sample ID:	D10402-7	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	86.4
Project:	1001-02		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	16.0	0.38	mg/kg	1	01/28/10	01/31/10 SES	SW846 6020 ¹	SW846 3050B ²

(1) Instrument QC Batch: MA364
(2) Prep QC Batch: MP1169

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B2B	Date Sampled:	01/14/10
Lab Sample ID:	D10402-7	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	86.4
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	86.4		%	1	01/18/10	SWT	SM19 2540B M
Specific Conductivity	1440	1.0	umhos/cm	1	01/22/10	JD	DEPT.OF AG, BOOK N9
pH	9.40		su	1	01/18/10 08:45	CJ	SW846 9045C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B2B	Date Sampled:	01/14/10
Lab Sample ID:	D10402-7A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	86.4
Project:	1001-02		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	50.7	2.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²
Magnesium	17.5	1.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²
Sodium	222	2.0	mg/l	1	01/26/10	01/27/10 JM	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA355
(2) Prep QC Batch: MP1159

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B2B	Date Sampled:	01/14/10
Lab Sample ID:	D10402-7A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	86.4
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	6.85		ratio	1	01/27/10 23:53	JM	LADNR29B

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B3A	Date Sampled:	01/14/10
Lab Sample ID:	D10402-8	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	86.5
Project:	1001-02		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	6.2	0.36	mg/kg	1	01/28/10	01/29/10 SES	SW846 6020 ¹	SW846 3050B ²

(1) Instrument QC Batch: MA361
(2) Prep QC Batch: MP1169

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B3A	Date Sampled:	01/14/10
Lab Sample ID:	D10402-8	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	86.5
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	86.5		%	1	01/18/10	SWT	SM19 2540B M
Specific Conductivity	230	1.0	umhos/cm	1	01/22/10	JD	DEPT.OF AG, BOOK N9
pH	8.93		su	1	01/18/10 08:45	CJ	SW846 9045C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B3A	Date Sampled:	01/14/10
Lab Sample ID:	D10402-8A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	86.5
Project:	1001-02		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	27.6	2.0	mg/l	1	01/26/10	01/28/10 JM	SW846 6010B ¹	SW846 3010A ²
Magnesium	6.55	1.0	mg/l	1	01/26/10	01/28/10 JM	SW846 6010B ¹	SW846 3010A ²
Sodium	5.47	2.0	mg/l	1	01/26/10	01/28/10 JM	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA355
(2) Prep QC Batch: MP1159

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B3A	Date Sampled:	01/14/10
Lab Sample ID:	D10402-8A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	86.5
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.243		ratio	1	01/28/10 00:01	JM	LADNR29B

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B3B	Date Sampled:	01/14/10
Lab Sample ID:	D10402-9	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	85.2
Project:	1001-02		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.3	0.36	mg/kg	1	01/28/10	01/29/10 SES	SW846 6020 ¹	SW846 3050B ²

(1) Instrument QC Batch: MA361
(2) Prep QC Batch: MP1169

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B3B	Date Sampled:	01/14/10
Lab Sample ID:	D10402-9	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	85.2
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	85.2		%	1	01/18/10	SWT	SM19 2540B M
Specific Conductivity	503	1.0	umhos/cm	1	01/22/10	JD	DEPT.OF AG, BOOK N9
pH	9.22		su	1	01/18/10 08:45	CJ	SW846 9045C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B3B	Date Sampled:	01/14/10
Lab Sample ID:	D10402-9A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	85.2
Project:	1001-02		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	21.9	2.0	mg/l	1	01/26/10	01/28/10 JM	SW846 6010B ¹	SW846 3010A ³
Magnesium	8.55	1.0	mg/l	1	01/26/10	01/28/10 JM	SW846 6010B ²	SW846 3010A ³
Sodium	41.5	2.0	mg/l	1	01/26/10	01/28/10 JM	SW846 6010B ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA355
- (2) Instrument QC Batch: MA359
- (3) Prep QC Batch: MP1159

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7B3B	Date Sampled:	01/14/10
Lab Sample ID:	D10402-9A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	85.2
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	1.90		ratio	1	01/28/10 20:36	JM	LADNR29B

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7SP						
Lab Sample ID:	D10402-10				Date Sampled:	01/14/10	
Matrix:	SO - Soil				Date Received:	01/15/10	
Method:	SW846 8270C SW846 3540C				Percent Solids:	80.9	
Project:	1001-02						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G05288.D	10	01/20/10	TMB	01/18/10	OP1314	E1G160
Run #2							

	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	450	360	ug/kg	
208-96-8	Acenaphthylene	ND	450	410	ug/kg	
120-12-7	Anthracene	ND	450	310	ug/kg	
56-55-3	Benzo(a)anthracene	ND	450	360	ug/kg	
50-32-8	Benzo(a)pyrene	ND	450	310	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	490	450	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	450	310	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	580	490	ug/kg	
218-01-9	Chrysene	ND	580	490	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	490	370	ug/kg	
206-44-0	Fluoranthene	ND	870	450	ug/kg	
86-73-7	Fluorene	ND	490	410	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	450	330	ug/kg	
90-12-0	1-Methylnaphthalene	622	580	450	ug/kg	
91-57-6	2-Methylnaphthalene	1110	450	350	ug/kg	
91-20-3	Naphthalene	571	870	410	ug/kg	J
85-01-8	Phenanthrene	ND	870	450	ug/kg	
129-00-0	Pyrene	ND	490	450	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		33-130%
321-60-8	2-Fluorobiphenyl	83%		37-130%
1718-51-0	Terphenyl-d14	113%		48-130%

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:	296-7SP						
Lab Sample ID:	D10402-10					Date Sampled:	01/14/10
Matrix:	SO - Soil					Date Received:	01/15/10
Method:	SW846 8015B					Percent Solids:	80.9
Project:	1001-02						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB3052.D	1	01/18/10	SD	n/a	n/a	GGB154
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	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

Client Sample ID:	296-7SP						
Lab Sample ID:	D10402-10				Date Sampled:	01/14/10	
Matrix:	SO - Soil				Date Received:	01/15/10	
Method:	SW846 8021B				Percent Solids:	80.9	
Project:	1001-02						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TB3052.D	1	01/18/10	SD	n/a	n/a	GTB154
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	6.2	ug/kg	
108-88-3	Toluene	ND	12	ug/kg	
100-41-4	Ethylbenzene	ND	12	ug/kg	
	m,p-Xylene	ND	12	ug/kg	
95-47-6	o-Xylene	ND	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	101%		60-140%

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:	296-7SP						
Lab Sample ID:	D10402-10				Date Sampled:	01/14/10	
Matrix:	SO - Soil				Date Received:	01/15/10	
Method:	SW846-8015B	SW846 3550B			Percent Solids:	80.9	
Project:	1001-02						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FC1550.D	20	01/20/10	LAC	01/20/10	OP1321	GFC91
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)	491	330	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
98-06-6	t-Butylbenzene	54%		39-130%	

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: 296-7SP
Lab Sample ID: D10402-10
Matrix: SO - Soil
Project: 1001-02

Date Sampled: 01/14/10
Date Received: 01/15/10
Percent Solids: 80.9

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	7.5	0.36	mg/kg	1	01/20/10	01/27/10 SES	SW846 6020 ¹	SW846 3050B ⁶
Barium	4820	19	mg/kg	20	01/28/10	02/03/10 JM	SW846 6010B ⁵	SW846 3050B ⁸
Boron	5.2	4.8	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Cadmium	< 0.97	0.97	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Chromium	14.7	0.97	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Copper	13.5	4.8	mg/kg	10	01/28/10	02/02/10 JM	SW846 6010B ⁴	SW846 3050B ⁸
Lead	15.4	4.8	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Mercury	< 0.098	0.098	mg/kg	1	01/26/10	01/27/10 CM	SW846 7471A ²	SW846 7471A ⁷
Nickel	10.5	2.9	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Selenium	< 4.8	4.8	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Silver	< 2.9	2.9	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸
Zinc	36.3	2.9	mg/kg	1	01/28/10	01/30/10 JM	SW846 6010B ³	SW846 3050B ⁸

- (1) Instrument QC Batch: MA353
(2) Instrument QC Batch: MA354
(3) Instrument QC Batch: MA362
(4) Instrument QC Batch: MA370
(5) Instrument QC Batch: MA373
(6) Prep QC Batch: MP1111
(7) Prep QC Batch: MP1151
(8) Prep QC Batch: MP1168

RL = Reporting Limit

Report of Analysis

Client Sample ID: 296-7SP
Lab Sample ID: D10402-10
Matrix: SO - Soil
Project: 1001-02

Date Sampled: 01/14/10
Date Received: 01/15/10
Percent Solids: 80.9

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 2.4	2.4	mg/kg	1	01/20/10 17:40	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	13.9	3.4	mg/kg	1	01/30/10 03:38	JM	SW846 3060/7196A M
Redox Potential Vs H2 ^a	323		mv	1	01/19/10	AMA	ASTM E1498-76M
Solids, Percent	80.9		%	1	01/18/10	SWT	SM19 2540B M
Specific Conductivity	2970	1.0	umhos/cm	1	01/22/10	JD	DEPT.OF AG, BOOK N9
pH	9.24		su	1	01/18/10 08:45	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:	296-7SP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-10A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	80.9
Project:	1001-02		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	153	2.0	mg/l	1	01/26/10	01/28/10 JM	SW846 6010B ¹	SW846 3010A ³
Magnesium	18.4	1.0	mg/l	1	01/26/10	01/28/10 JM	SW846 6010B ²	SW846 3010A ³
Sodium	450	2.0	mg/l	1	01/26/10	01/28/10 JM	SW846 6010B ¹	SW846 3010A ³

- (1) Instrument QC Batch: MA355
- (2) Instrument QC Batch: MA359
- (3) Prep QC Batch: MP1159

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7SP	Date Sampled:	01/14/10
Lab Sample ID:	D10402-10A	Date Received:	01/15/10
Matrix:	SO - Soil	Percent Solids:	80.9
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	9.14		ratio	1	01/28/10 20:59	JM	LADNR29B

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY RECORD / ANALYTICAL SERVICES AGREEMENT **

10402

CLIENT INFORMATION

Accutest Mountain States

Page ____ of ____

Mail Original Report to: KRW Consulting, Inc.Attn: Joe Hess & Greg KneilAddress: 8000 W 14th Ave, #200City: Lakewood State: CO Zip: 80214

Tel #: _____ Fax #: _____

E-mail: info@accutest.com

4036 Youngfield St.
Wheat Ridge, Colorado 80033
(303) 425-6021
FAX (303) 425-6854
(877) 737-4521
E-mail: info@accutest.com

Report Results by: _____ (Date)*

Standard 2 working weeks ☐UST Analyses per Fee Schedule ☐* Rush: ☐ less than 24 hrs, 150% ☐ 1 - 2 work days, 100%☐ 3 - 5 work days, 50% ☐ 6 - 9 work days, 25%

*Subject to surcharge & exceptions noted in fee schedule.

REPORT ALSO BY ☐ FAX ☐ PDF ☐ EDD FAXED CONFIRMATION OF SAMPLE RECEIPT REQUIRED? ☐ YESREPORT CHROMATOGRAMS ☐ YESMail Invoice to: Joe Hess / KRW

Attn: _____

Address: _____

City: _____ State: _____ Zip: _____

Tel #: _____ Fax #: _____

Project ID# 1001-02

P.O. _____ Quote _____

Sampler: _____

NOTE: Identify Known Hazards Below

SAMPLE IDENTIFICATION	DATE SAMPLED	TIME
-----------------------	--------------	------

296-7B1A	01/14/10	8:40
296-7B1B	"	11:20
296-7FWP	"	11:50
296-7-RP	"	12:40
296-7-CP	"	13:57
296-7B2A	"	12:15
296-7B2B	"	12:50
296-7B3A	"	14:30
296-7B3B	"	14:40
296-7SP	"	15:20

No. of Containers	1) Drinking Water or 2) Discharge Water or 3) Ground Water (circle one)	Soil / Solid / Air / Gas	Oil / Sludge / Wipe	ANALYSES (check analysis)																For Laboratory Use Only	
				SAR, ES, PH	arsenic total	Cr 6	Metals	8021 Vol. organic	8270 semi-vol. org												
2				✓	✓															W.O. #	D10402
2				✓	✓															B.O.F. #	330159
5				✓	✓	✓	✓	✓	✓											C/S (O)	296-7B1B PH
5				✓	✓	✓	✓	✓	✓											C/S (I)	1307 & 648 HD
5				✓	✓	✓	✓	✓	✓											Temp.	55.7 / Ice ✓
5				✓	✓	✓	✓	✓	✓											Seals Present	Y / N / NA
2				✓	✓															Samples Pres.	Y / N / NA
2				✓	✓															Headspace	Y / N / NA
2				✓	✓															By	1/15/10
5				✓	✓	✓	✓	✓	✓												

Does this analysis involve property transfer? ☐ Yes or ☐ No

Instructions: The following samples for Total, 910-1 parameters: 296-7FWP 296-7RP 296-7CP, using SP 41 v. 11.0

** Important Note: See reverse side hereof for terms and conditions.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
<i>[Signature]</i>	1/15/10 535pm	<i>[Signature]</i>	1/15/10 535pm				

D10402: Chain of Custody

Page 1 of 2

Patty McClellan

From: Gregory Knell [GKnell@krwconsulting.com]
Sent: Tuesday, January 19, 2010 10:28 AM
To: Patty McClellan
Subject: Samples submitted Friday, Jan 15

Hi Patty,
Three coolers of samples from 2 different projects were submitted last Friday. For sample numbers starting with "296-7" can you PLEASE add the project number 1001-02 on the chain of custody. For the chain of custody regarding sample numbers starting with "297-15" please add the project number 1001-05. This will greatly aid us in invoicing the client, as the sampler (that's me) did not have project numbers in the field last week.
Thank you,
Greg Knell



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

Page 1 of 1

Job Number: D10402
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1314-MB	1G05272.D	1	01/19/10	TMB	01/18/10	OP1314	E1G160

The QC reported here applies to the following samples:

Method: SW846 8270C

D10402-3, D10402-4, D10402-5, D10402-10

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	37	29	ug/kg	
208-96-8	Acenaphthylene	ND	37	33	ug/kg	
120-12-7	Anthracene	ND	37	25	ug/kg	
56-55-3	Benzo(a)anthracene	ND	37	29	ug/kg	
50-32-8	Benzo(a)pyrene	ND	37	25	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	40	37	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	37	25	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	47	40	ug/kg	
218-01-9	Chrysene	ND	47	40	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	40	30	ug/kg	
206-44-0	Fluoranthene	ND	70	37	ug/kg	
86-73-7	Fluorene	ND	40	33	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	37	27	ug/kg	
90-12-0	1-Methylnaphthalene	ND	47	37	ug/kg	
91-57-6	2-Methylnaphthalene	ND	37	28	ug/kg	
91-20-3	Naphthalene	ND	70	33	ug/kg	
85-01-8	Phenanthrene	ND	70	37	ug/kg	
129-00-0	Pyrene	ND	40	37	ug/kg	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	64% 26-130%
4165-62-2	Phenol-d5	67% 47-130%
118-79-6	2,4,6-Tribromophenol	84% 50-130%
4165-60-0	Nitrobenzene-d5	57% 33-130%
321-60-8	2-Fluorobiphenyl	58% 37-130%
1718-51-0	Terphenyl-d14	84% 48-130%

Blank Spike Summary

Page 1 of 1

Job Number: D10402
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1314-BS	1G05273.D	1	01/19/10	TMB	01/18/10	OP1314	E1G160

The QC reported here applies to the following samples:

Method: SW846 8270C

D10402-3, D10402-4, D10402-5, D10402-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	3330	3000	90	54-130
208-96-8	Acenaphthylene	3330	3100	93	53-130
120-12-7	Anthracene	3330	3040	91	54-130
56-55-3	Benzo(a)anthracene	3330	3020	91	52-130
50-32-8	Benzo(a)pyrene	3330	2980	89	56-130
205-99-2	Benzo(b)fluoranthene	3330	3100	93	58-130
191-24-2	Benzo(g,h,i)perylene	3330	2670	80	46-130
207-08-9	Benzo(k)fluoranthene	3330	2990	90	53-130
218-01-9	Chrysene	3330	2970	89	51-130
53-70-3	Dibenzo(a,h)anthracene	3330	2800	84	48-130
206-44-0	Fluoranthene	3330	2590	78	50-130
86-73-7	Fluorene	3330	2950	89	59-130
193-39-5	Indeno(1,2,3-cd)pyrene	3330	2910	87	48-134
90-12-0	1-Methylnaphthalene	3330	2460	74	43-130
91-57-6	2-Methylnaphthalene	3330	2810	84	40-130
91-20-3	Naphthalene	3330	2570	77	37-130
85-01-8	Phenanthrene	3330	2910	87	57-130
129-00-0	Pyrene	3330	3300	99	54-130

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	56%	26-130%
4165-62-2	Phenol-d5	65%	47-130%
118-79-6	2,4,6-Tribromophenol	89%	50-130%
4165-60-0	Nitrobenzene-d5	65%	33-130%
321-60-8	2-Fluorobiphenyl	74%	37-130%
1718-51-0	Terphenyl-d14	85%	48-130%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D10402
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1314-MS	1G05276.D	1	01/19/10	TMB	01/18/10	OP1314	E1G160
OP1314-MSD ^a	1G05277.D	1	01/19/10	TMB	01/18/10	OP1314	E1G160
D10286-2	1G05275.D	1	01/19/10	TMB	01/18/10	OP1314	E1G160

The QC reported here applies to the following samples:

Method: SW846 8270C

D10402-3, D10402-4, D10402-5, D10402-10

CAS No.	Compound	D10286-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		3560	3380	95	3340	94	1	54-130/30
208-96-8	Acenaphthylene	ND		3560	3570	100	3480	98	3	53-130/30
120-12-7	Anthracene	ND		3560	3450	97	3340	94	3	54-130/30
56-55-3	Benzo(a)anthracene	ND		3560	3630	102	3460	97	5	52-130/30
50-32-8	Benzo(a)pyrene	ND		3560	3450	97	3350	94	3	56-130/30
205-99-2	Benzo(b)fluoranthene	ND		3560	3700	104	3760	106	2	58-130/30
191-24-2	Benzo(g,h,i)perylene	ND		3560	3440	97	3260	92	5	46-130/30
207-08-9	Benzo(k)fluoranthene	ND		3560	3520	99	3070	86	14	53-130/30
218-01-9	Chrysene	ND		3560	3500	98	3290	92	6	51-130/30
53-70-3	Dibenzo(a,h)anthracene	ND		3560	3560	100	3320	93	7	48-130/30
206-44-0	Fluoranthene	ND		3560	2770	78	2950	83	6	50-130/30
86-73-7	Fluorene	ND		3560	3380	95	3520	99	4	59-130/30
193-39-5	Indeno(1,2,3-cd)pyrene	ND		3560	3620	102	3470	98	4	48-134/30
90-12-0	1-Methylnaphthalene	ND		3560	2900	82	3130	88	8	43-140/30
91-57-6	2-Methylnaphthalene	ND		3560	3360	94	3500	98	4	40-140/30
91-20-3	Naphthalene	ND		3560	3140	88	3210	90	2	37-140/30
85-01-8	Phenanthrene	ND		3560	3380	95	3220	91	5	57-130/30
129-00-0	Pyrene	ND		3560	3960	111	3730	105	6	54-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D10286-2	Limits
367-12-4	2-Fluorophenol	64%	63%	69%	26-130%
4165-62-2	Phenol-d5	72%	73%	84%	47-130%
118-79-6	2,4,6-Tribromophenol	91%	99%	87%	50-130%
4165-60-0	Nitrobenzene-d5	76%	78%	75%	33-130%
321-60-8	2-Fluorobiphenyl	80%	74%	78%	37-130%
1718-51-0	Terphenyl-d14	97%	93%	93%	48-130%

(a) One ISTD recovery is below the QC limits.



GC Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Page 1 of 1

Job Number: D10402
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB154-MB	GB3045.D	1	01/18/10	SD	n/a	n/a	GGB154

The QC reported here applies to the following samples:

Method: SW846 8015B

D10402-3, D10402-4, D10402-5, D10402-10

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	114% 60-140%

Method Blank Summary

Page 1 of 1

Job Number: D10402
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GTB154-MB	TB3045.D	1	01/18/10	SD	n/a	n/a	GTB154

The QC reported here applies to the following samples:

Method: SW846 8021B

D10402-3, D10402-4, D10402-5, D10402-10

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

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	113% 60-140%

Blank Spike Summary

Job Number: D10402
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB154-BS	GB3046.D	1	01/18/10	SD	n/a	n/a	GGB154

The QC reported here applies to the following samples: Method: SW846 8015B

D10402-3, D10402-4, D10402-5, D10402-10

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	11	11.1	101	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	125%	60-140%

Blank Spike Summary

Page 1 of 1

Job Number: D10402

Account: KRWCCOL KRW Consulting, Inc.

Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GTB154-BS	TB3046.D	1	01/18/10	SD	n/a	n/a	GTB154

The QC reported here applies to the following samples:

Method: SW846 8021B

D10402-3, D10402-4, D10402-5, D10402-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	136	130	96	70-130
100-41-4	Ethylbenzene	228	213	93	70-130
108-88-3	Toluene	1060	1010	95	70-130
95-47-6	o-Xylene	330	326	99	70-130
	m,p-Xylene	750	734	98	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	119%	60-140%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D10402
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D10402-3MS	GB3048.D	1	01/18/10	SD	n/a	n/a	GGB154
D10402-3MSD	GB3049.D	1	01/18/10	SD	n/a	n/a	GGB154
D10402-3	GB3047.D	1	01/18/10	SD	n/a	n/a	GGB154

The QC reported here applies to the following samples:

Method: SW846 8015B

D10402-3, D10402-4, D10402-5, D10402-10

CAS No.	Compound	D10402-3 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	2.82		12.7	3.98	9* a	4.52	13* a	13	62-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D10402-3	Limits
120-82-1	1,2,4-Trichlorobenzene	11% * a	11% * a	13% * b	60-140%

(a) Outside control limits due to matrix interference.

(b) Outside control limits due to matrix interference. MS/MSD surrogate recovery confirms low sample surrogate.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D10402
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D10402-3MS	TB3048.D	1	01/18/10	SD	n/a	n/a	GTB154
D10402-3MSD	TB3049.D	1	01/18/10	SD	n/a	n/a	GTB154
D10402-3	TB3047.D	1	01/18/10	SD	n/a	n/a	GTB154

The QC reported here applies to the following samples:

Method: SW846 8021B

D10402-3, D10402-4, D10402-5, D10402-10

CAS No.	Compound	D10402-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		157	43.1	28* a	62.0	40* a	36* a	70-130/30
100-41-4	Ethylbenzene	ND		263	20.1	8* a	38.9	15* a	64* a	62-130/30
108-88-3	Toluene	ND		1220	161	13* a	283	23* a	55* a	70-130/30
95-47-6	o-Xylene	ND		380	33.2	9* a	57.3	15* a	53* a	65-135/30
	m,p-Xylene	41.7		864	95.3	6* a	151	13* a	45* a	60-140/30

CAS No.	Surrogate Recoveries	MS	MSD	D10402-3	Limits
120-82-1	1,2,4-Trichlorobenzene	-4% * a	-4% * a	-1% * b	60-140%

(a) Outside control limits due to matrix interference.

(b) Outside control limits due to matrix interference. MS/MSD surrogate recovery confirm low sample surrogate recovery.



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

Page 1 of 1

Job Number: D10402
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1321-MB	FC1532.D	1	01/20/10	LAC	01/20/10	OP1321	GFC91

The QC reported here applies to the following samples:

Method: SW846-8015B

D10402-3, D10402-4, D10402-5, D10402-10

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

CAS No.	Surrogate Recoveries	Limits
98-06-6	t-Butylbenzene	48% 39-130%

Blank Spike Summary

Job Number: D10402
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1321-BS	FC1533.D	1	01/20/10	LAC	01/20/10	OP1321	GFC91

The QC reported here applies to the following samples: Method: SW846-8015B

D10402-3, D10402-4, D10402-5, D10402-10

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	592	89	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
98-06-6	t-Butylbenzene	70%	39-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D10402
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1321-MS	FC1537.D	1	01/20/10	LAC	01/20/10	OP1321	GFC91
OP1321-MSD	FC1538.D	1	01/20/10	LAC	01/20/10	OP1321	GFC91
D10403-4	FC1536.D	1	01/20/10	LAC	01/20/10	OP1321	GFC91

The QC reported here applies to the following samples: Method: SW846-8015B

D10402-3, D10402-4, D10402-5, D10402-10

CAS No.	Compound	D10403-4 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	1570		764	2190	81	2190	81	0	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D10403-4	Limits
98-06-6	t-Butylbenzene	114%	98%	91%	39-130%



Metals Analysis

QC Data Summaries

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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: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1111
Matrix Type: SOLID

Methods: SW846 6020
Units: mg/kg

Prep Date: 01/20/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	25	.24	.89		
Antimony	0.20	.001	.045		
Arsenic	0.40	.058	.26	-0.096	<0.40
Barium	1.0	.0063	.17		
Beryllium	0.10	.0042	.014		
Boron	20	.61	2		
Cadmium	0.050	.012	.048		
Calcium	200	2.6	6.1		
Chromium	1.0	.063	.23		
Cobalt	0.10	.00085	.088		
Copper	1.0	.0045	.14		
Iron	20	2.1	6.1		
Lead	0.25	.0013	.18		
Magnesium	50	.096	1.3		
Manganese	0.50	.0026	.089		
Molybdenum	0.50	.0068	.2		
Nickel	1.0	.0037	.074		
Phosphorus	30	4.2	5.6		
Potassium	100	4.3	9.1		
Selenium	0.20	.072	.14		
Silver	0.050	.0013	.029		
Sodium	250	.25	1.8		
Strontium	10	.0061	.047		
Thallium	0.10	.0007	.071		
Tin	5.0	.0025	.17		
Titanium	1.0	.03	.071		
Uranium	0.25	.0005	.12		
Vanadium	2.0	.042	.99		
Zinc	5.0	.017	.53		

Associated samples MP1111: D10402-3, D10402-4, D10402-5, D10402-10

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1111
Matrix Type: SOLID

Methods: SW846 6020
Units: mg/kg

Prep Date:

01/20/10

01/20/10

	D10400-1			QC	D10400-1		Spikelot			QC
Metal	Original	DUP	RPD	Limits	Original	MS	MPICPR1	% Rec	Limits	
Aluminum										
Antimony										
Arsenic	21.1	25.3	18.1	0-20	21.1	431	398	103.1	60-119	
Barium										
Beryllium										
Boron										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Phosphorus										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Uranium										
Vanadium										
Zinc										

Associated samples MP1111: D10402-3, D10402-4, D10402-5, D10402-10

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1111
Matrix Type: SOLID

Methods: SW846 6020
Units: mg/kg

Prep Date: 01/20/10

Metal	D10400-1 Original	MSD	Spikelot MPICPR1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	21.1	433	398	103.6	0.5	20
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP1111: D10402-3, D10402-4, D10402-5, D10402-10

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

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

Prep Date: 01/20/10

Metal	LCS Result	Spikelot MPLCD064	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	154	158	97.5	82-118
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: D10402
 Account: KRWCCOL - KRW Consulting, Inc.
 Project: 1001-02

QC Batch ID: MP1111
 Matrix Type: SOLID

Methods: SW846 6020
 Units: ug/l

Prep Date: 01/20/10

Metal	D10400-1		%DIF	QC Limits
	Original	SDL 1:5		
Aluminum				
Antimony				
Arsenic	27.2	26.4	2.8	0-10
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP1111: D10402-3, D10402-4, D10402-5, D10402-10

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

8.1.4
8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1151
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 01/26/10 01/26/10

Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Mercury	0.091	.00095	.0011	0.00063	<0.10	-0.00063	<0.091

Associated samples MP1151: D10402-3, D10402-4, D10402-5, D10402-10

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D10402
 Account: KRWCCOL - KRW Consulting, Inc.
 Project: 1001-02

QC Batch ID: MP1151
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 01/26/10

Metal	D10402-3 Original MS	Spikelot HGWSR1	% Rec	QC Limits
-------	-------------------------	--------------------	-------	--------------

Mercury 71.6 46.1 0.419 -6086.8a 85-115

Associated samples MP1151: D10402-3, D10402-4, D10402-5, D10402-10

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

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

8.2.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D10402
 Account: KRWCCOL - KRW Consulting, Inc.
 Project: 1001-02

QC Batch ID: MP1151
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 01/26/10

Metal	D10402-3 Original MSD	Spikelot HGWSR1	% Rec	MSD RPD	QC Limit
-------	--------------------------	--------------------	-------	------------	-------------

Mercury 71.6 59.0 0.427 -2952.9a 24.5 (b) 20

Associated samples MP1151: D10402-3, D10402-4, D10402-5, D10402-10

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

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

(b) High RPD due to possible sample nonhomogeneity.

8.2.2

8

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

Methods: SW846 7471A
Units: mg/kg

Metal	LCS Result	Spikelot HGLCD064 % Rec	QC Limits
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Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1159
Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
Units: ug/l

Prep Date: 01/26/10

Metal	RL	IDL	MDL	MB raw	final
Antimony	150	68	65		
Arsenic	130	35	33		
Barium	50	1	12		
Beryllium	50	17	22		
Boron	250	17	93		
Cadmium	50	3.7	6		
Calcium	2000	9	46	13.5	<2000
Chromium	50	3	8		
Cobalt	25	3	1.5		
Copper	25	9	14		
Iron	350	28	50		
Lead	250	17	16		
Lithium	10		8		
Magnesium	1000	3.1	62	-22	<1000
Manganese	25	.5	3.5		
Molybdenum	50	7.5	6		
Nickel	150	4.1	3		
Phosphorus	500	230	270		
Potassium	5000	57	2700		
Selenium	250	25	36		
Silver	150	1.5	1.5		
Sodium	2000	17	110	105	<2000
Strontium	25		17		
Thallium	50	7	11		
Tin	250	13	22		
Titanium	50	.65	3.5		
Uranium	250	22	20		
Vanadium	50	3.4	1.5		
Zinc	150	2.6	8.5		

Associated samples MP1159: D10402-1A, D10402-2A, D10402-3A, D10402-4A, D10402-5A, D10402-6A, D10402-7A, D10402-8A, D10402-9A, D10402-10A

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D10402
 Account: KRWCCOL - KRW Consulting, Inc.
 Project: 1001-02

QC Batch ID: MP1159
 Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
 Units: ug/l

Prep Date: 01/26/10

01/26/10

Metal	BSP Result	Spikelot MPICPR1	% Rec	QC Limits	BSD Result	Spikelot MPICPR1	% Rec	BSD RPD	QC Limit
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium	48800	50000	97.6	80-120	49200	50000	98.4	0.8	
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Lithium									
Magnesium	45900	50000	91.8	80-120	46500	50000	93.0	1.3	
Manganese									
Molybdenum									
Nickel									
Phosphorus									
Potassium									
Selenium									
Silver									
Sodium	46400	50000	92.8	80-120	46600	50000	93.2	0.4	
Strontium									
Thallium									
Tin									
Titanium									
Uranium									
Vanadium									
Zinc									

Associated samples MP1159: D10402-1A, D10402-2A, D10402-3A, D10402-4A, D10402-5A, D10402-6A, D10402-7A, D10402-8A, D10402-9A, D10402-10A

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1168
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 01/28/10

Metal	RL	IDL	MDL	MB raw	final
Antimony	3.0	1.4	.5		
Arsenic	2.5	.7	.72		
Barium	1.0	.02	.05	0.59	<1.0
Beryllium	1.0	.33	.21		
Boron	5.0	.33	.91	0.40	<5.0
Cadmium	1.0	.073	.12	0.030	<1.0
Calcium	40	.18	2.7		
Chromium	1.0	.06	.18	0.070	<1.0
Cobalt	0.50	.059	.058		
Copper	0.50	.18	.38	0.29	<0.50
Iron	7.0	.55	.91		
Lead	5.0	.33	.24	-0.93	<5.0
Lithium	0.20		.09		
Magnesium	20	.061	.93		
Manganese	0.50	.01	.028		
Molybdenum	1.0	.15	.16		
Nickel	3.0	.081	.075	0.010	<3.0
Phosphorus	10	4.7	3.5		
Potassium	200	1.1	130		
Selenium	5.0	.5	.54	-0.15	<5.0
Silicon	5.0	.96	.68		
Silver	3.0	.03	.068	-0.14	<3.0
Sodium	40	.34	6.3		
Strontium	5.0		.02		
Thallium	1.0	.14	.21		
Tin	5.0	.26	.56		
Titanium	1.0	.013	.041		
Uranium	5.0	.43	.53		
Vanadium	1.0	.067	.034		
Zinc	3.0	.051	.49	2.0	<15

Associated samples MP1168: D10402-3, D10402-4, D10402-5, D10402-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1168
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 01/28/10

Metal	D10522-3 Original MS		Spikelot MPICPR1	% Rec	QC Limits
Antimony					
Arsenic	anr				
Barium	4990	7740	477	576.6(a)	75-125
Beryllium					
Boron	4.6	170	191	87.2	75-125
Cadmium	0.0	16.8	19.1	88.1	75-125
Calcium					
Chromium	7.6	180	191	90.4	75-125
Cobalt					
Copper	12.4	178	191	86.6	75-125
Iron					
Lead	12.1	195	191	95.9	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	10	179	191	88.6	75-125
Phosphorus	anr				
Potassium	anr				
Selenium	1.4	180	191	93.6	75-125
Silicon					
Silver	0.0	16.3	19.1	85.4	75-125
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	36.4	221	191	96.8	75-125

Associated samples MP1168: D10402-3, D10402-4, D10402-5, D10402-10

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1168
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

8.4.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1168
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 01/28/10

Metal	D10522-3 Original	MSD	Spikelot MPICPR1	% Rec	MSD RPD	QC Limit
Antimony						
Arsenic	anr					
Barium	4990	4830	432	-37.0(a)	46.3	20
Beryllium						
Boron	4.6	143	173	80.6	17.3	20
Cadmium	0.0	14.9	17.3	86.2	12.0	20
Calcium						
Chromium	7.6	156	173	85.8	14.3	20
Cobalt						
Copper	12.4	152	173	80.5	15.8	20
Iron						
Lead	12.1	168	173	90.1	14.9	20
Lithium						
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	10	156	173	84.4	13.7	20
Phosphorus	anr					
Potassium	anr					
Selenium	1.4	151	173	86.5	17.5	20
Silicon						
Silver	0.0	14.4	17.3	83.3	12.4	20
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	36.4	197	173	92.9	11.5	20

Associated samples MP1168: D10402-3, D10402-4, D10402-5, D10402-10

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1168
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

8.4.2

8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D10402

Account: KRWCCOL - KRW Consulting, Inc.

Project: 1001-02

QC Batch ID: MP1168

Methods: SW846 6010B

Matrix Type: SOLID

Units: mg/kg

Prep Date:

01/28/10

Metal	LCS Result	Spikelot MPLCD064	% Rec	QC Limits
Antimony				
Arsenic	anr			
Barium	303	348	87.1	81-119
Beryllium				
Boron	121	136	89.0	73-126
Cadmium	163	187	87.2	82-118
Calcium				
Chromium	77.3	89.5	86.4	79-121
Cobalt				
Copper	115	129	89.1	84-117
Iron				
Lead	158	172	91.9	79-120
Lithium				
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	87.5	99	88.4	81-119
Phosphorus				
Potassium	anr			
Selenium	138	148	93.2	78-121
Silicon				
Silver	61.5	66	93.2	66-134
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	349	394	88.6	80-119

Associated samples MP1168: D10402-3, D10402-4, D10402-5, D10402-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1168
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 01/28/10

Metal	D10522-3 Original	SDL 1:5	%DIF	QC Limits
Antimony				
Arsenic	anr			
Barium	100000000051100		0.0	0-10
Beryllium				
Boron	46.6	59.5	27.7 (a)	0-10
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	78.2	87.5	8.9	0-10
Cobalt				
Copper	127	0.00	100.0(a)	0-10
Iron				
Lead	124	91.0	26.4 (a)	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	102	123	5.4	0-10
Phosphorus	anr			
Potassium	anr			
Selenium	14.8	25.5	72.3 (a)	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	372	525	8.2	0-10

Associated samples MP1168: D10402-3, D10402-4, D10402-5, D10402-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1169
Matrix Type: SOLID

Methods: SW846 6020
Units: mg/kg

Prep Date: 01/28/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	25	.24	.89		
Arsenic	0.40	.058	.26	0.16	<0.40
Calcium	200	2.6	6.1		
Copper	1.0	.0045	.14		
Iron	20	2.1	6.1		
Lead	0.25	.0013	.18		
Magnesium	50	.096	1.3		
Potassium	100	4.3	9.1		
Sodium	250	.25	1.8		
Uranium	0.25	.0005	.12		

Associated samples MP1169: D10402-1, D10402-2, D10402-6, D10402-7, D10402-8, D10402-9

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

8.5.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1169
Matrix Type: SOLID

Methods: SW846 6020
Units: mg/kg

Prep Date: 01/28/10 01/28/10

Metal	D10522-3 Original DUP		RPD	QC Limits	D10522-3 Original MS		Spikelot MPICPR1	% Rec	QC Limits
Aluminum									
Arsenic	5.3	7.7	36.9*(a)	0-20	5.3	191	191	97.3	60-119
Calcium									
Copper									
Iron									
Lead									
Magnesium									
Potassium									
Sodium									
Uranium									

Associated samples MP1169: D10402-1, D10402-2, D10402-6, D10402-7, D10402-8, D10402-9

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

(a) High RPD due to possible sample nonhomogeneity.

8.5.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D10402
 Account: KRWCCOL - KRW Consulting, Inc.
 Project: 1001-02

QC Batch ID: MP1169
 Matrix Type: SOLID

Methods: SW846 6020
 Units: mg/kg

Prep Date: 01/28/10

Metal	D10522-3 Original	MSD	Spikelot MPICPR1	% Rec	MSD RPD	QC Limit
Aluminum						
Arsenic	5.3	170	173	95.2	11.6	20
Calcium						
Copper						
Iron						
Lead						
Magnesium						
Potassium						
Sodium						
Uranium						

Associated samples MP1169: D10402-1, D10402-2, D10402-6, D10402-7, D10402-8, D10402-9

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

8.5.2
8

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

Methods: SW846 6020
Units: mg/kg

Metal	LCS Result	Spikelot MPLCD064	% Rec	QC Limits
Aluminum				
Arsenic	159	158	100.6	82-118
Calcium				
Copper				
Iron				
Lead				
Magnesium				
Potassium				
Sodium				
Uranium				

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1169
Matrix Type: SOLID

Methods: SW846 6020
Units: ug/l

Prep Date: 01/28/10

Metal	D10522-3 Original SDL 1:5		%DIF	QC Limits
Aluminum				
Arsenic	10.8	10.5	2.7	0-10
Calcium				
Copper				
Iron				
Lead				
Magnesium				
Potassium				
Sodium				
Uranium				

Associated samples MP1169: D10402-1, D10402-2, D10402-6, D10402-7, D10402-8, D10402-9

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

8.5.4

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: D10402
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Specific Conductivity	GP1355/GN2982			umhos/cm	9985	10000	100.4	90-110%
pH	GN2907			su	8.00	7.99	99.9	99.3-100.7%

Associated Samples:

Batch GN2907: D10402-1, D10402-10, D10402-2, D10402-3, D10402-4, D10402-5, D10402-6, D10402-7, D10402-8, D10402-9

Batch GP1355: D10402-1, D10402-10, D10402-2, D10402-3, D10402-4, D10402-5, D10402-6, D10402-7, D10402-8, D10402-9

(*) 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



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D10402

Client: AMS

Immediate Client Services Action Required: No

Date / Time Received: 1/19/2010 10:00:00 AM

No. Coolers: 1

Client Service Action Required at Login: No

Project: N/A

Airbill #'s: N/A

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 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"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | Infrared gun | |
| 3. Cooler media: | Ice (bag) | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 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 properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 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"/> |

Sample Integrity - Condition

Y or N

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

Sample Integrity - Instructions

Y or N N/A

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

Accutest Laboratories
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495 Technology Center West, Bldg One
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D10402: Chain of Custody

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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: D10402
Account: ALMS - Accutest Mountain States
Project: KRWCCOL: KRW, Lakewood, CO

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chromium, Hexavalent	GP11206/GN30930	2.0	0.0	mg/kg	40	40.7	101.8	80-120%
Chromium, Hexavalent	GP11206/GN30930			mg/kg	696	683	98.1	80-120%
Chromium, Hexavalent	GP11206/GN30930			mg/kg	120	105	87.5	80-120%

Associated Samples:
Batch GP11206: D10402-10, D10402-3, D10402-4, D10402-5
(*) Outside of QC limits

11.1
11

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D10402
Account: ALMS - Accutest Mountain States
Project: KRWCCOL: KRW, Lakewood, CO

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chromium, Hexavalent	GP11206/GN30930	D10404-2B	mg/kg	0.40	0.34	16.2	0-20%
Redox Potential Vs H2	GN30926	D10403-2C	mv	195	193	1.0	0-20%

Associated Samples:
Batch GN30926: D10402-10, D10402-3, D10402-4, D10402-5
Batch GP11206: D10402-10, D10402-3, D10402-4, D10402-5
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D10402
Account: ALMS - Accutest Mountain States
Project: KRWCCOL: KRW, Lakewood, CO

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GP11206/GN30930	D10404-2B	mg/kg	0.40	46.8	47.8	101.3	75-125%
Chromium, Hexavalent	GP11206/GN30930	D10404-2B	mg/kg	0.40	966	999	103.4	75-125%

Associated Samples:
Batch GP11206: D10402-10, D10402-3, D10402-4, D10402-5
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits



IT'S ALL IN THE CHEMISTRY

03/08/10

Technical Report for

KRW Consulting, Inc.

1001-02

Accutest Job Number: D11205

Sampling Date: 02/17/10

Report to:

KRW Consulting, Inc.
8000 West 14th Avenue Suite 200
Lakewood, CO 80214
gknell@krwconsulting.com; jhess@krwconsulting.com
ATTN: Joe Hess

Total number of pages in report: **84**



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.

Client Service contact: 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.

Gary K. Ward
Laboratory Director

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Sample Summary

KRW Consulting, Inc.
1001-02

Job No: D11205

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D11205-1	02/17/10	14:12	02/22/10	SO	Soil	296-7CS-1
D11205-1A	02/17/10	14:12	02/22/10	SO	Soil	296-7CS-1
D11205-2	02/17/10	14:30	02/22/10	SO	Soil	296-7CS-2
D11205-2A	02/17/10	14:30	02/22/10	SO	Soil	296-7CS-2
D11205-3	02/17/10	14:20	02/22/10	SO	Soil	296-7CS-3
D11205-3A	02/17/10	14:20	02/22/10	SO	Soil	296-7CS-3

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: KRW Consulting, Inc.

Job No D11205

Site: 1001-02

Report Dat 3/8/2010 3:27:22 PM

On 02/22/2010, three (3) samples were received at Accutest Mountain States Laboratories at a temperature of 4.0°C. The samples were intact and properly preserved, unless noted below. An Accutest Job Number of D11205 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 Section.

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

Matrix SO

Batch ID: OP1468

- All samples were extracted 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.
- Samples D11203-1MS and D11203-1MSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8015B

Matrix SO

Batch ID: GGA296

- All samples were analyzed within the recommended method holding time.
- Samples D11203-1MS and D11203-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- The matrix spike duplicate (MSD) recovery of TPH-GRO (C6-C10) is outside control limits. The laboratory control spike (LCS) recovery of TPH-GRO (C6-C10) is within QC limits, proving the analysis is in control.

Volatiles by GC By Method SW846 8021B

Matrix SO

Batch ID: GTA296

- All samples were analyzed within the recommended method holding time.
- Samples D11203-1MS and D11203-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846-8015

Matrix SO

Batch ID: OP1459

- All samples were extracted 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.

Metals By Method SW846 6010B

Matrix AQ

Batch ID: MP1378

- 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.
- Samples D11204-1ADUP and D11204-1AMS were used as the QC samples for the metals analysis.
- The matrix spike (MS) recovery of Calcium and Sodium are outside control limits. The spike amounts are low relative to the sample amounts. Refer to lab control or spike blank for recovery information.

Matrix SO

Batch ID: MP1394

- 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.
- Samples D11203-2MS, D11203-2MSD, and D11203-2SDL were used as the QC samples for the metals analysis.
- The matrix spike and matrix spiked duplicate (MS/MSD) recoveries of Nickel and Zinc and the MSD recovery of Chromium are outside control limits. The laboratory control spike (LCS) recoveries of Chromium, Nickel, and Zinc are within QC limits, proving the analysis is in control.
- The matrix spike (MS) recovery of Barium is outside control limits. The spike amount is low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- The RPD for the MS and MSD recoveries of Barium are outside control limits for sample MP1394-S2 due to the MS recovery.
- The serial dilution RPDs for Lead, Selenium, Boron, Nickel, and Zinc are outside control limits for sample MP1394-SD1. The percent differences are acceptable due to low initial sample concentration (< 50 times IDL).

Metals By Method SW846 6020

Matrix SO

Batch ID: MP1393

- 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.
- Samples D11203-2MS, D11203-2MSD, and D11203-2SDL were used as the QC samples for the metals analysis.

Metals By Method SW846 7471A

Matrix SO

Batch ID: MP1389

- 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.
- Samples D11195-1MS, and D11195-1MSD were used as the QC samples for the Mercury analysis.

Wet Chemistry By Method ASTM E1498-76M

Matrix SO

Batch ID: M:GN31188

- The data for ASTM E1498-76M meets quality control requirements.
- The following samples were run outside of holding time for method ASTM E1498-76M: D11205-1, D11205-2, D11205-3
- Redox Potential Vs H2: Analysis performed at Accutest Laboratories, Marlborough, MA.

Wet Chemistry By Method LADNR29B

Matrix SO

Batch ID: MP1378

- Sodium Adsorption Ratio: Calculated as: $(\text{Na meq/L}) / \sqrt{[(\text{Ca meq/L}) + (\text{Mg meq/L})/2]}$

Wet Chemistry By Method SM19 2540B M**Matrix** SO**Batch ID:** GN3333

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

Wet Chemistry By Method SW846 3060/7196A M**Matrix** SO**Batch ID:** R1438

- 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:GP11347

- Hexavalent Chromium: Analysis performed at Accutest Laboratories, Marlborough, MA.

Wet Chemistry By Method SW846 9045C**Matrix** SO**Batch ID:** GN3335

- The following samples were run outside of holding time for method SW846 9045C: D11205-1, D11205-2, D11205-3

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

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 Laboratories 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 Laboratories indicated via signature on the report cover

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Accutest Mountain States**Job No** D11205**Site:** KRWCCOL: 1001-02**Report Date** 3/8/2010 10:00:30 AM

3 Sample(s) were collected on 02/17/2010 and were received at Accutest on 02/22/2010 properly preserved, at 1.3 Deg. C and intact. These Samples received an Accutest job number of D11205. 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.

Wet Chemistry By Method ASTM E1498-76M

Matrix SO**Batch ID:** GN31188

- Sample(s) D11203-2DUP were used as the QC samples for Redox Potential Vs H2.

Wet Chemistry By Method SW846 3060A/7196A

Matrix SO**Batch ID:** GP11347

- 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) D11393-1DUP, D11393-1MS 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(D11205).



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	296-7CS-1		
Lab Sample ID:	D11205-1	Date Sampled:	02/17/10
Matrix:	SO - Soil	Date Received:	02/22/10
Method:	SW846 8270C SW846 3540C	Percent Solids:	91.0
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G05932.D	5	03/03/10	TMB	02/25/10	OP1468	E1G180
Run #2							

	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	200	160	ug/kg	
208-96-8	Acenaphthylene	ND	200	180	ug/kg	
120-12-7	Anthracene	ND	200	140	ug/kg	
56-55-3	Benzo(a)anthracene	ND	200	160	ug/kg	
50-32-8	Benzo(a)pyrene	ND	200	140	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	220	200	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	200	140	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	260	220	ug/kg	
218-01-9	Chrysene	ND	260	220	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	220	160	ug/kg	
206-44-0	Fluoranthene	ND	380	200	ug/kg	
86-73-7	Fluorene	ND	220	180	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	200	150	ug/kg	
90-12-0	1-Methylnaphthalene	206	260	200	ug/kg	J
91-57-6	2-Methylnaphthalene	508	200	150	ug/kg	
91-20-3	Naphthalene	212	380	180	ug/kg	J
85-01-8	Phenanthrene	ND	380	200	ug/kg	
129-00-0	Pyrene	ND	220	200	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	73%		33-130%
321-60-8	2-Fluorobiphenyl	76%		37-130%
1718-51-0	Terphenyl-d14	100%		48-130%

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:	296-7CS-1						
Lab Sample ID:	D11205-1					Date Sampled:	02/17/10
Matrix:	SO - Soil					Date Received:	02/22/10
Method:	SW846 8015B					Percent Solids:	91.0
Project:	1001-02						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA5357.D	1	03/03/10	SD	n/a	n/a	GGA296
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	1.1	1.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	76%		60-140%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	296-7CS-1		
Lab Sample ID:	D11205-1	Date Sampled:	02/17/10
Matrix:	SO - Soil	Date Received:	02/22/10
Method:	SW846 8021B	Percent Solids:	91.0
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TA5357.D	1	03/03/10	SD	n/a	n/a	GTA296
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.5	ug/kg	
108-88-3	Toluene	ND	11	ug/kg	
100-41-4	Ethylbenzene	ND	11	ug/kg	
	m,p-Xylene	ND	11	ug/kg	
95-47-6	o-Xylene	ND	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	78%		60-140%

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:	296-7CS-1		
Lab Sample ID:	D11205-1	Date Sampled:	02/17/10
Matrix:	SO - Soil	Date Received:	02/22/10
Method:	SW846-8015B SW846 3550B	Percent Solids:	91.0
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FI1237.D	1	02/24/10	CP	02/23/10	OP1459	GF192
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)	202	15	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
98-06-6	t-Butylbenzene	63%		39-130%	

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: 296-7CS-1

Lab Sample ID: D11205-1

Matrix: SO - Soil

Project: 1001-02

Date Sampled: 02/17/10

Date Received: 02/22/10

Percent Solids: 91.0

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	6.1	0.35	mg/kg	5	03/04/10	03/05/10 SES	SW846 6020 ³	SW846 3050B ⁵
Barium	6140	4.4	mg/kg	5	03/04/10	03/06/10 JM	SW846 6010B ²	SW846 3050B ⁶
Boron	9.5	4.4	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Cadmium	< 0.87	0.87	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Chromium	21.2	0.87	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Copper	17.5	1.7	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Lead	18.9	4.4	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Mercury	< 0.11	0.11	mg/kg	1	03/03/10	03/04/10 NC	SW846 7471A ¹	SW846 7471A ⁴
Nickel	13.5	2.6	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Selenium	< 4.4	4.4	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Silver	< 2.6	2.6	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Zinc	39.9	2.6	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶

(1) Instrument QC Batch: MA457

(2) Instrument QC Batch: MA459

(3) Instrument QC Batch: MA460

(4) Prep QC Batch: MP1389

(5) Prep QC Batch: MP1393

(6) Prep QC Batch: MP1394

RL = Reporting Limit

Report of Analysis

Client Sample ID: 296-7CS-1**Lab Sample ID:** D11205-1**Matrix:** SO - Soil**Project:** 1001-02**Date Sampled:** 02/17/10**Date Received:** 02/22/10**Percent Solids:** 91.0

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 2.1	2.1	mg/kg	1	03/05/10 17:15	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	21.2	3.0	mg/kg	1	03/05/10 17:15	AMA	SW846 3060/7196A M
Redox Potential Vs H2 ^a	215		mv	1	02/25/10	AMA	ASTM E1498-76M
Solids, Percent	91		%	1	02/22/10	SWT	SM19 2540B M
Specific Conductivity	7990	1.0	umhos/cm	1	03/02/10	CJ	DEPT.OF AG, BOOK N9
pH	9.15		su	1	02/22/10 13:00	JK	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:	296-7CS-1	Date Sampled:	02/17/10
Lab Sample ID:	D11205-1A	Date Received:	02/22/10
Matrix:	SO - Soil	Percent Solids:	91.0
Project:	1001-02		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	482	2.0	mg/l	1	03/01/10	03/01/10 JM	SW846 6010B ¹	EPA 200.7 ²
Magnesium	75.0	1.0	mg/l	1	03/01/10	03/01/10 JM	SW846 6010B ¹	EPA 200.7 ²
Sodium	1530	2.0	mg/l	1	03/01/10	03/01/10 JM	SW846 6010B ¹	EPA 200.7 ²

(1) Instrument QC Batch: MA442
(2) Prep QC Batch: MP1378

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7CS-1	Date Sampled:	02/17/10
Lab Sample ID:	D11205-1A	Date Received:	02/22/10
Matrix:	SO - Soil	Percent Solids:	91.0
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	17.1		ratio	1	03/01/10 14:18	JM	LADNR29B

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7CS-2		
Lab Sample ID:	D11205-2	Date Sampled:	02/17/10
Matrix:	SO - Soil	Date Received:	02/22/10
Method:	SW846 8270C SW846 3540C	Percent Solids:	90.0
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G05941.D	10	03/03/10	TMB	02/25/10	OP1468	E1G181
Run #2							

	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	410	320	ug/kg	
208-96-8	Acenaphthylene	ND	410	370	ug/kg	
120-12-7	Anthracene	ND	410	280	ug/kg	
56-55-3	Benzo(a)anthracene	ND	410	320	ug/kg	
50-32-8	Benzo(a)pyrene	ND	410	280	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	440	410	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	410	280	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	520	440	ug/kg	
218-01-9	Chrysene	ND	520	440	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	440	330	ug/kg	
206-44-0	Fluoranthene	ND	780	410	ug/kg	
86-73-7	Fluorene	ND	440	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	410	300	ug/kg	
90-12-0	1-Methylnaphthalene	ND	520	410	ug/kg	
91-57-6	2-Methylnaphthalene	343	410	310	ug/kg	J
91-20-3	Naphthalene	ND	780	370	ug/kg	
85-01-8	Phenanthrene	ND	780	410	ug/kg	
129-00-0	Pyrene	ND	440	410	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	80%		33-130%
321-60-8	2-Fluorobiphenyl	84%		37-130%
1718-51-0	Terphenyl-d14	83%		48-130%

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:	296-7CS-2						
Lab Sample ID:	D11205-2				Date Sampled:	02/17/10	
Matrix:	SO - Soil				Date Received:	02/22/10	
Method:	SW846 8015B				Percent Solids:	90.0	
Project:	1001-02						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA5370.D	1	03/03/10	SD	n/a	n/a	GGA296
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	1.1	1.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	75%		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:	296-7CS-2		
Lab Sample ID:	D11205-2	Date Sampled:	02/17/10
Matrix:	SO - Soil	Date Received:	02/22/10
Method:	SW846 8021B	Percent Solids:	90.0
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TA5370.D	1	03/03/10	SD	n/a	n/a	GTA296
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.1	ug/kg	
108-88-3	Toluene	ND	2.2	ug/kg	
100-41-4	Ethylbenzene	ND	2.2	ug/kg	
	m,p-Xylene	ND	2.2	ug/kg	
95-47-6	o-Xylene	ND	2.2	ug/kg	

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

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:	296-7CS-2		
Lab Sample ID:	D11205-2	Date Sampled:	02/17/10
Matrix:	SO - Soil	Date Received:	02/22/10
Method:	SW846-8015B SW846 3550B	Percent Solids:	90.0
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FI1238.D	1	02/24/10	CP	02/23/10	OP1459	GF192
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)	141	15	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
98-06-6	t-Butylbenzene	53%		39-130%	

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: 296-7CS-2

Lab Sample ID: D11205-2

Matrix: SO - Soil

Project: 1001-02

Date Sampled: 02/17/10

Date Received: 02/22/10

Percent Solids: 90.0

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	6.3	0.34	mg/kg	5	03/04/10	03/05/10 SES	SW846 6020 ³	SW846 3050B ⁵
Barium	5070	4.2	mg/kg	5	03/04/10	03/06/10 JM	SW846 6010B ²	SW846 3050B ⁶
Boron	8.6	4.2	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Cadmium	< 0.84	0.84	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Chromium	21.6	0.84	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Copper	15.9	1.7	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Lead	18.1	4.2	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Mercury	< 0.11	0.11	mg/kg	1	03/03/10	03/04/10 NC	SW846 7471A ¹	SW846 7471A ⁴
Nickel	13.8	2.5	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Selenium	< 4.2	4.2	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Silver	< 2.5	2.5	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Zinc	41.6	2.5	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶

(1) Instrument QC Batch: MA457

(2) Instrument QC Batch: MA459

(3) Instrument QC Batch: MA460

(4) Prep QC Batch: MP1389

(5) Prep QC Batch: MP1393

(6) Prep QC Batch: MP1394

RL = Reporting Limit

Report of Analysis

Client Sample ID: 296-7CS-2**Lab Sample ID:** D11205-2**Matrix:** SO - Soil**Project:** 1001-02**Date Sampled:** 02/17/10**Date Received:** 02/22/10**Percent Solids:** 90.0

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 2.2	2.2	mg/kg	1	03/05/10 17:15	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	21.6	3.0	mg/kg	1	03/05/10 17:15	AMA	SW846 3060/7196A M
Redox Potential Vs H2 ^a	226		mv	1	02/25/10	AMA	ASTM E1498-76M
Solids, Percent	90		%	1	02/22/10	SWT	SM19 2540B M
Specific Conductivity	6010	1.0	umhos/cm	1	03/02/10	CJ	DEPT.OF AG, BOOK N9
pH	9.13		su	1	02/22/10 13:00	JK	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:	296-7CS-2		
Lab Sample ID:	D11205-2A	Date Sampled:	02/17/10
Matrix:	SO - Soil	Date Received:	02/22/10
		Percent Solids:	90.0
Project:	1001-02		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	488	2.0	mg/l	1	03/01/10	03/01/10 JM	SW846 6010B ¹	EPA 200.7 ²
Magnesium	63.2	1.0	mg/l	1	03/01/10	03/01/10 JM	SW846 6010B ¹	EPA 200.7 ²
Sodium	994	2.0	mg/l	1	03/01/10	03/01/10 JM	SW846 6010B ¹	EPA 200.7 ²

(1) Instrument QC Batch: MA442
(2) Prep QC Batch: MP1378

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7CS-2		
Lab Sample ID:	D11205-2A	Date Sampled:	02/17/10
Matrix:	SO - Soil	Date Received:	02/22/10
		Percent Solids:	90.0
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	11.2		ratio	1	03/01/10 14:28	JM	LADNR29B

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID: 296-7CS-3

Lab Sample ID: D11205-3

Date Sampled: 02/17/10

Matrix: SO - Soil

Date Received: 02/22/10

Method: SW846 8270C SW846 3540C

Percent Solids: 88.4

Project: 1001-02

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G05921.D	1	03/02/10	TMB	02/25/10	OP1468	E1G180
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	41	33	ug/kg	
208-96-8	Acenaphthylene	ND	41	38	ug/kg	
120-12-7	Anthracene	ND	41	28	ug/kg	
56-55-3	Benzo(a)anthracene	ND	41	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	41	28	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	45	41	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	41	28	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	53	45	ug/kg	
218-01-9	Chrysene	ND	53	45	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	45	34	ug/kg	
206-44-0	Fluoranthene	ND	79	41	ug/kg	
86-73-7	Fluorene	ND	45	38	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	41	31	ug/kg	
90-12-0	1-Methylnaphthalene	ND	53	41	ug/kg	
91-57-6	2-Methylnaphthalene	ND	41	32	ug/kg	
91-20-3	Naphthalene	ND	79	38	ug/kg	
85-01-8	Phenanthrene	ND	79	41	ug/kg	
129-00-0	Pyrene	ND	45	41	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		33-130%
321-60-8	2-Fluorobiphenyl	74%		37-130%
1718-51-0	Terphenyl-d14	92%		48-130%

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:	296-7CS-3						
Lab Sample ID:	D11205-3				Date Sampled:	02/17/10	
Matrix:	SO - Soil				Date Received:	02/22/10	
Method:	SW846 8015B				Percent Solids:	88.4	
Project:	1001-02						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA5359.D	1	03/03/10	SD	n/a	n/a	GGA296
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	1.1	1.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	92%		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:	296-7CS-3		
Lab Sample ID:	D11205-3	Date Sampled:	02/17/10
Matrix:	SO - Soil	Date Received:	02/22/10
Method:	SW846 8021B	Percent Solids:	88.4
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TA5359.D	1	03/03/10	SD	n/a	n/a	GTA296
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.7	ug/kg	
108-88-3	Toluene	ND	11	ug/kg	
100-41-4	Ethylbenzene	ND	11	ug/kg	
	m,p-Xylene	ND	11	ug/kg	
95-47-6	o-Xylene	ND	11	ug/kg	

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

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:	296-7CS-3		
Lab Sample ID:	D11205-3	Date Sampled:	02/17/10
Matrix:	SO - Soil	Date Received:	02/22/10
Method:	SW846-8015B SW846 3550B	Percent Solids:	88.4
Project:	1001-02		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FI1251.D	1	02/24/10	CP	02/23/10	OP1459	GF193
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	15	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
98-06-6	t-Butylbenzene	51%		39-130%	

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: 296-7CS-3

Lab Sample ID: D11205-3

Matrix: SO - Soil

Project: 1001-02

Date Sampled: 02/17/10

Date Received: 02/22/10

Percent Solids: 88.4

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.1	0.35	mg/kg	5	03/04/10	03/05/10 SES	SW846 6020 ³	SW846 3050B ⁵
Barium	3990	4.4	mg/kg	5	03/04/10	03/06/10 JM	SW846 6010B ²	SW846 3050B ⁶
Boron	5.3	4.4	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Cadmium	< 0.87	0.87	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Chromium	24.6	0.87	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Copper	10.9	1.8	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Lead	13.5	4.4	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Mercury	< 0.11	0.11	mg/kg	1	03/03/10	03/04/10 NC	SW846 7471A ¹	SW846 7471A ⁴
Nickel	13.8	2.6	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Selenium	< 4.4	4.4	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Silver	< 2.6	2.6	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶
Zinc	39.5	2.6	mg/kg	1	03/04/10	03/05/10 JM	SW846 6010B ²	SW846 3050B ⁶

(1) Instrument QC Batch: MA457

(2) Instrument QC Batch: MA459

(3) Instrument QC Batch: MA460

(4) Prep QC Batch: MP1389

(5) Prep QC Batch: MP1393

(6) Prep QC Batch: MP1394

RL = Reporting Limit

Report of Analysis

Client Sample ID: 296-7CS-3**Lab Sample ID:** D11205-3**Matrix:** SO - Soil**Project:** 1001-02**Date Sampled:** 02/17/10**Date Received:** 02/22/10**Percent Solids:** 88.4**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 2.2	2.2	mg/kg	1	03/05/10 17:15	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	24.6	3.1	mg/kg	1	03/05/10 17:15	AMA	SW846 3060/7196A M
Redox Potential Vs H2 ^a	222		mv	1	02/25/10	AMA	ASTM E1498-76M
Solids, Percent	88.4		%	1	02/22/10	SWT	SM19 2540B M
Specific Conductivity	1070	1.0	umhos/cm	1	03/02/10	CJ	DEPT.OF AG, BOOK N9
pH	9.76		su	1	02/22/10 13:00	JK	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:	296-7CS-3		
Lab Sample ID:	D11205-3A	Date Sampled:	02/17/10
Matrix:	SO - Soil	Date Received:	02/22/10
		Percent Solids:	88.4
Project:	1001-02		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	49.7	2.0	mg/l	1	03/01/10	03/01/10 JM	SW846 6010B ¹	EPA 200.7 ²
Magnesium	13.5	1.0	mg/l	1	03/01/10	03/01/10 JM	SW846 6010B ¹	EPA 200.7 ²
Sodium	165	2.0	mg/l	1	03/01/10	03/01/10 JM	SW846 6010B ¹	EPA 200.7 ²

(1) Instrument QC Batch: MA442
(2) Prep QC Batch: MP1378

RL = Reporting Limit

Report of Analysis

Client Sample ID:	296-7CS-3	Date Sampled:	02/17/10
Lab Sample ID:	D11205-3A	Date Received:	02/22/10
Matrix:	SO - Soil	Percent Solids:	88.4
Project:	1001-02		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	5.35		ratio	1	03/01/10 14:50	JM	LADNR29B

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY RECORD / ANALYTICAL SERVICES AGREEMENT **

D11205
Page 1 of 1

CLIENT INFORMATION

Mail Original Report to: KRW Consulting Inc.

Evergreen Analytical, An Accutest Company

Attn: Joe Hess
Address: 8030 W. 19th Ave. Ste # 200
City: Lakewood State: CO Zip: 80214
Phone: 303-239-9011 Fax: 303-239-0745 E-mail: Joe.Hess@KRWConsulting.com



4036 Youngfield St.
Wheat Ridge, Colorado 80033
(303) 425-6021
FAX (303) 425-6854
(877) 737-4521
www.evergreenanalytical.com

Report Results by: _____ (Date) _____
Standard 2 working weeks ☒
UST Analyses per Fee Schedule ☐
* Rush: ☐ less than 24 hrs, 150% ☐ 1 - 2 work days, 100%
☐ 3 - 5 work days, 50% ☐ 6 - 9 work days, 25%
*Subject to surcharge & exceptions noted in fee schedule.

REPORT ALSO BY ☒ FAX ☐ PDF ☐ EDD

REPORT CHROMATOGRAMS ☐ NO

Mail Invoice to: Same as above

Attn: _____
Address: _____
City: _____ State: _____ Zip: _____
Tel #: _____ Fax #: _____
Project ID#: 1001-02
P.O. _____ Quote _____
Sampler: _____

NOTE: Identify Known Hazards Below

CONFIRMATION OF SAMPLE RECEIPT REQUIRED? ☐ YES

SAMPLE IDENTIFICATION	DATE SAMPLED	TIME	No. of Containers	MATRIX		ANALYSES (check analysis)															For Laboratory Use Only	
				1) Drinking Water or 2) Discharge Water or 3) Ground Water (circle one)	Oil / Solid / Air / Gas	Oil / Sludge / Wipe	TCLP VOA BNA/Pest/Herb/Metals (circle)	Volatile Organics 8260/624 (circle)	Semi-volatile Organics BNA, PAH, PNA 8270/625 (circle)	Chlorinated Pesticides 8081/608 (circle)	Organophosphorous Pesticides 8270	PCBs/8082/608/screen (circle)	Herbicides 8151	BTEX 8021/602/8260/MTEE (circle)	TPPH 8015mod. / 8260 (circle)	TEPH 8015mod. (Diesel)	Total Metals - DW / NPDES / SW846 (circle & list metals below)	Dissolved Metals - DW / SW846 (circle & list metals below)	Oil & Grease 1664 / 9071 (circle)	TPPH 4181	Anions 300.0 (circle below)	W.O. #
296-705-1	2/17/10	1412	5	<input checked="" type="checkbox"/>																		D11205
296-705-2	2/17/10	1430	5																			N/A
296-705-3	2/17/10	1420	5																			1632 / HD
																						Temp: 4.0 / Ice
																						Seals Present Y / N / NA
																						Samples Pres. Y / N / NA
																						Headspace Y / N / NA
																						By: B
Sample Fraction																						LOL - W2 FG

Instructions: E-mail also to: G. Kneff @ KRW Consulting - Owner Table 910 Table 910 as second

** Important Note: See reverse side for Terms and Conditions.

Anions: Bromide, Chloride, Nitrate, Nitrite, O-Phosphate, Sulfate (Circle)

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
<u>George Kneff</u>	<u>2/17/2010</u> <u>12:39</u>	<u>[Signature]</u>	<u>2/17/10</u> <u>12:40</u>	<u>[Signature]</u>	<u>2/22/10</u> <u>1:00</u>	<u>[Signature]</u>	<u>2/22/10</u> <u>1:00</u>

D11205: Chain of Custody

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GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Page 1 of 1

Job Number: D11205
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1468-MB	1G05914.D	1	03/02/10	TMB	02/25/10	OP1468	E1G180

The QC reported here applies to the following samples:

Method: SW846 8270C

D11205-1, D11205-2, D11205-3

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	37	29	ug/kg	
208-96-8	Acenaphthylene	ND	37	33	ug/kg	
120-12-7	Anthracene	ND	37	25	ug/kg	
56-55-3	Benzo(a)anthracene	ND	37	29	ug/kg	
50-32-8	Benzo(a)pyrene	ND	37	25	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	40	37	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	37	25	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	47	40	ug/kg	
218-01-9	Chrysene	ND	47	40	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	40	30	ug/kg	
206-44-0	Fluoranthene	ND	70	37	ug/kg	
86-73-7	Fluorene	ND	40	33	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	37	27	ug/kg	
90-12-0	1-Methylnaphthalene	ND	47	37	ug/kg	
91-57-6	2-Methylnaphthalene	ND	37	28	ug/kg	
91-20-3	Naphthalene	ND	70	33	ug/kg	
85-01-8	Phenanthrene	ND	70	37	ug/kg	
129-00-0	Pyrene	ND	40	37	ug/kg	

CAS No.	Surrogate Recoveries	Limits
4165-60-0	Nitrobenzene-d5	57% 33-130%
321-60-8	2-Fluorobiphenyl	55% 37-130%
1718-51-0	Terphenyl-d14	67% 48-130%

Blank Spike Summary

Page 1 of 1

Job Number: D11205
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1468-BS	1G05915.D	1	03/02/10	TMB	02/25/10	OP1468	E1G180

The QC reported here applies to the following samples:

Method: SW846 8270C

D11205-1, D11205-2, D11205-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1670	1190	71	54-130
208-96-8	Acenaphthylene	1670	1240	74	53-130
120-12-7	Anthracene	1670	1290	77	54-130
56-55-3	Benzo(a)anthracene	1670	1310	79	52-130
50-32-8	Benzo(a)pyrene	1670	1320	79	56-130
205-99-2	Benzo(b)fluoranthene	1670	1350	81	58-130
191-24-2	Benzo(g,h,i)perylene	1670	1000	60	46-130
207-08-9	Benzo(k)fluoranthene	1670	1250	75	53-130
218-01-9	Chrysene	1670	1280	77	51-130
53-70-3	Dibenzo(a,h)anthracene	1670	1090	65	48-130
206-44-0	Fluoranthene	1670	1150	69	50-130
86-73-7	Fluorene	1670	1240	74	59-130
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1070	64	48-134
90-12-0	1-Methylnaphthalene	1670	1100	66	43-130
91-57-6	2-Methylnaphthalene	1670	1250	75	40-130
91-20-3	Naphthalene	1670	1080	65	37-130
85-01-8	Phenanthrene	1670	1250	75	57-130
129-00-0	Pyrene	1670	1360	82	54-130

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	66%	33-130%
321-60-8	2-Fluorobiphenyl	65%	37-130%
1718-51-0	Terphenyl-d14	81%	48-130%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D11205
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1468-MS	1G05917.D	1	03/02/10	TMB	02/25/10	OP1468	E1G180
OP1468-MSD	1G05918.D	1	03/02/10	TMB	02/25/10	OP1468	E1G180
D11203-1	1G05916.D	1	03/02/10	TMB	02/25/10	OP1468	E1G180

The QC reported here applies to the following samples:

Method: SW846 8270C

D11205-1, D11205-2, D11205-3

CAS No.	Compound	D11203-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		1860	1430	77	1290	69	10	54-130/30
208-96-8	Acenaphthylene	ND		1860	1450	78	1350	72	7	53-130/30
120-12-7	Anthracene	ND		1860	1470	79	1360	73	8	54-130/30
56-55-3	Benzo(a)anthracene	ND		1860	1510	81	1340	72	12	52-130/30
50-32-8	Benzo(a)pyrene	ND		1860	1480	79	1400	75	6	56-130/30
205-99-2	Benzo(b)fluoranthene	ND		1860	1540	83	1450	78	6	58-130/30
191-24-2	Benzo(g,h,i)perylene	ND		1860	1480	79	1240	67	18	46-130/30
207-08-9	Benzo(k)fluoranthene	ND		1860	1470	79	1350	72	9	53-130/30
218-01-9	Chrysene	ND		1860	1460	78	1310	70	11	51-130/30
53-70-3	Dibenzo(a,h)anthracene	ND		1860	1480	79	1290	69	14	48-130/30
206-44-0	Fluoranthene	ND		1860	1240	67	1110	60	11	50-130/30
86-73-7	Fluorene	ND		1860	1410	76	1250	67	12	59-130/30
193-39-5	Indeno(1,2,3-cd)pyrene	ND		1860	1500	81	1280	69	16	48-134/30
90-12-0	1-Methylnaphthalene	ND		1860	1310	70	1160	62	12	43-140/30
91-57-6	2-Methylnaphthalene	57.2		1860	1510	78	1350	69	11	40-140/30
91-20-3	Naphthalene	ND		1860	1290	69	1160	62	11	37-140/30
85-01-8	Phenanthrene	ND		1860	1450	78	1330	71	9	57-130/30
129-00-0	Pyrene	ND		1860	1760	95	1680	90	5	54-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D11203-1	Limits
4165-60-0	Nitrobenzene-d5	65%	60%	65%	33-130%
321-60-8	2-Fluorobiphenyl	72%	66%	67%	37-130%
1718-51-0	Terphenyl-d14	94%	88%	80%	48-130%



GC Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Page 1 of 1

Job Number: D11205
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA296-MB	GA5346.D	1	03/02/10	SD	n/a	n/a	GGA296

The QC reported here applies to the following samples:

Method: SW846 8015B

D11205-1, D11205-2, D11205-3

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	81% 60-140%

Method Blank Summary

Page 1 of 1

Job Number: D11205
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GTA296-MB	TA5346.D	1	03/02/10	SD	n/a	n/a	GTA296

The QC reported here applies to the following samples:

Method: SW846 8021B

D11205-1, D11205-2, D11205-3

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

Blank Spike Summary

Job Number: D11205
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA296-BS	GA5347.D	1	03/02/10	SD	n/a	n/a	GGA296

The QC reported here applies to the following samples: Method: SW846 8015B

D11205-1, D11205-2, D11205-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	11	9.34	85	70-130

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

Blank Spike Summary

Page 1 of 1

Job Number: D11205
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GTA296-BS	TA5347.D	1	03/02/10	SD	n/a	n/a	GTA296

The QC reported here applies to the following samples:

Method: SW846 8021B

D11205-1, D11205-2, D11205-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	136	134	99	70-130
100-41-4	Ethylbenzene	228	216	95	70-130
108-88-3	Toluene	1060	940	89	70-130
95-47-6	o-Xylene	330	321	97	70-130
	m,p-Xylene	750	690	92	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	107%	60-140%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D11205
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D11203-1MS	GA5349.D	1	03/03/10	SD	n/a	n/a	GGA296
D11203-1MSD	GA5350.D	1	03/03/10	SD	n/a	n/a	GGA296
D11203-1 ^a	GA5348.D	1	03/03/10	SD	n/a	n/a	GGA296

The QC reported here applies to the following samples:

Method: SW846 8015B

D11205-1, D11205-2, D11205-3

CAS No.	Compound	D11203-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		12.3	7.99	65	7.51	61* b	6	62-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D11203-1	Limits
120-82-1	1,2,4-Trichlorobenzene	69%	95%	50%* c	60-140%

(a) Confirmation run.

(b) Outside control limits due to matrix interference.

(c) Outside control limits due to matrix interference. Sample for QC purposes only.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D11205
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D11203-1MS	TA5349.D	1	03/03/10	SD	n/a	n/a	GTA296
D11203-1MSD	TA5350.D	1	03/03/10	SD	n/a	n/a	GTA296
D11203-1 ^a	TA5348.D	1	03/03/10	SD	n/a	n/a	GTA296

The QC reported here applies to the following samples:

Method: SW846 8021B

D11205-1, D11205-2, D11205-3

CAS No.	Compound	D11203-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		152	135	89	137	90	1	70-130/30
100-41-4	Ethylbenzene	ND		255	192	75	188	74	2	62-130/30
108-88-3	Toluene	ND		1180	898	76	902	76	0	70-130/30
95-47-6	o-Xylene	ND		368	284	77	280	76	1	65-135/30
	m,p-Xylene	ND		838	618	74	605	72	2	60-140/30

CAS No.	Surrogate Recoveries	MS	MSD	D11203-1	Limits
120-82-1	1,2,4-Trichlorobenzene	67%	99%	53% * b	60-140%

(a) Confirmation run.

(b) Outside control limits due to matrix interference. Sample used for QC purposes only.



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: D11205
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1459-MB	FI1218.D	1	02/23/10	CP	02/23/10	OP1459	GFI92

The QC reported here applies to the following samples: Method: SW846-8015

D11205-1, D11205-2, D11205-3

CAS No.	Compound	Result	RL	Units	Q
	Diesel Fuel (No. 2)	ND	13	mg/kg	

CAS No.	Surrogate Recoveries	Limits
98-06-6	t-Butylbenzene	56% 39-130%

7.1.1
7

Blank Spike Summary

Job Number: D11205
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1459-BS	FI1219.D	1	02/23/10	CP	02/23/10	OP1459	GFI92

The QC reported here applies to the following samples: Method: SW846-8015

D11205-1, D11205-2, D11205-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	Diesel Fuel (No. 2)	667	616	92	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
98-06-6	t-Butylbenzene	72%	39-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D11205
Account: KRWCCOL KRW Consulting, Inc.
Project: 1001-02

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1459-MS	FI1221.D	1	02/23/10	CP	02/23/10	OP1459	GFI92
OP1459-MSD	FI1222.D	1	02/23/10	CP	02/23/10	OP1459	GFI92
D11210-1	FI1220.D	1	02/23/10	CP	02/23/10	OP1459	GFI92

The QC reported here applies to the following samples: Method: SW846-8015

D11205-1, D11205-2, D11205-3

CAS No.	Compound	D11210-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	Diesel Fuel (No. 2)	ND		730	797	92	693	78	14	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D11210-1	Limits
98-06-6	t-Butylbenzene	64%	65%	85%	39-130%



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: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1378
Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
Units: ug/l

Prep Date: 03/01/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	500	160	250		
Antimony	150	68	65		
Arsenic	130	35	33		
Barium	50	1	12		
Beryllium	50	17	22		
Boron	250	17	93		
Cadmium	50	3.7	6		
Calcium	2000	9	46	13.5	<2000
Chromium	50	3	8		
Cobalt	25	3	1.5		
Copper	25	9	14		
Iron	350	28	50		
Lead	250	17	16		
Lithium	10		8		
Magnesium	1000	3.1	62	56.5	<1000
Manganese	25	.5	3.5		
Molybdenum	50	7.5	6		
Nickel	150	4.1	3		
Phosphorus	500	230	270		
Potassium	5000	57	2700		
Selenium	250	25	36		
Silicon	250	48	100		
Silver	150	1.5	1.5		
Sodium	2000	17	110	-400	<2000
Strontium	25		17		
Thallium	50	7	11		
Tin	250	13	22		
Titanium	50	.65	3.5		
Uranium	250	22	20		
Vanadium	50	3.4	1.5		
Zinc	150	2.6	8.5		

Associated samples MP1378: D11205-1A, D11205-2A, D11205-3A

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1378
Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
Units: ug/l

Prep Date:

Metal

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D11205
 Account: KRWCCOL - KRW Consulting, Inc.
 Project: 1001-02

QC Batch ID: MP1378
 Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
 Units: ug/l

Prep Date: 03/01/10 03/01/10

Metal	D11204-1A Original	DUP	RPD	QC Limits	D11204-1A Original	MS	Spikelot MPICPR1	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium	632000	587000	7.4	0-20	632000	660000	50000	56.0 (a)	75-125
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Lithium									
Magnesium	54000	49000	9.7	0-20	54000	99400	50000	90.8	75-125
Manganese									
Molybdenum									
Nickel									
Phosphorus									
Potassium									
Selenium									
Silicon									
Silver									
Sodium	854000	771000	10.2	0-20	854000	843000	50000	-22.0(a)	75-125
Strontium									
Thallium									
Tin									
Titanium									
Uranium									
Vanadium									
Zinc									

Associated samples MP1378: D11205-1A, D11205-2A, D11205-3A

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1378
Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
Units: ug/l

Prep Date:

Metal

- (N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

8.1.2

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SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1378
Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
Units: ug/l

Prep Date:

Metal

(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1389
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 03/03/10

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.10	.0011	.0012	-0.0023	<0.10

Associated samples MP1389: D11205-1, D11205-2, D11205-3

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D11205
 Account: KRWCCOL - KRW Consulting, Inc.
 Project: 1001-02

QC Batch ID: MP1389
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 03/03/10

Metal	D11195-1 Original MS	Spikelot HGWSR1	% Rec	QC Limits
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Mercury	0.015	0.48	0.449	103.5	85-115
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Associated samples MP1389: D11205-1, D11205-2, D11205-3

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: D11205
 Account: KRWCCOL - KRW Consulting, Inc.
 Project: 1001-02

QC Batch ID: MP1389
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 03/03/10

Metal	D11195-1 Original MSD		Spikelot HGWSR1	% Rec	MSD RPD	QC Limit
Mercury	0.015	0.46	0.441	101.0	4.3	20

Associated samples MP1389: D11205-1, D11205-2, D11205-3

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

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

Methods: SW846 7471A
Units: mg/kg

Metal	LCS Result	Spikelot HGLCD064 % Rec	QC Limits
Mercury	6.6	7.34	89.9 72-128

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1393
Matrix Type: SOLID

Methods: SW846 6020
Units: mg/kg

Prep Date: 03/04/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	25	.24	.89		
Arsenic	0.40	.058	.26	-0.12	<0.40
Calcium	200	2.6	6.1		
Copper	1.0	.0045	.14		
Iron	20	2.1	6.1		
Lead	0.25	.0013	.18		
Magnesium	50	.096	1.3		
Potassium	100	4.3	9.1		
Sodium	250	.25	1.8		
Uranium	0.25	.0005	.12		

Associated samples MP1393: D11205-1, D11205-2, D11205-3

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D11205
 Account: KRWCCOL - KRW Consulting, Inc.
 Project: 1001-02

QC Batch ID: MP1393
 Matrix Type: SOLID

Methods: SW846 6020
 Units: mg/kg

Prep Date: 03/04/10

Metal	D11203-2 Original MS		Spikelot MPICPR1	% Rec	QC Limits
Aluminum					
Arsenic	7.7	150	162	87.8	60-119
Calcium					
Copper					
Iron					
Lead					
Magnesium					
Potassium					
Sodium					
Uranium					

Associated samples MP1393: D11205-1, D11205-2, D11205-3

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

8.3.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D11205
 Account: KRWCCOL - KRW Consulting, Inc.
 Project: 1001-02

QC Batch ID: MP1393
 Matrix Type: SOLID

Methods: SW846 6020
 Units: mg/kg

Prep Date: 03/04/10

Metal	D11203-2 Original	MSD	Spikelot MPICPR1	% Rec	MSD RPD	QC Limit
Aluminum						
Arsenic	7.7	156	168	88.0	3.9	20
Calcium						
Copper						
Iron						
Lead						
Magnesium						
Potassium						
Sodium						
Uranium						

Associated samples MP1393: D11205-1, D11205-2, D11205-3

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

8.3.2
8

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

Methods: SW846 6020
Units: mg/kg

Metal	BSP Result	Spikelot MPICPR1	% Rec	QC Limits
Aluminum				
Arsenic	188	200	94.0	80-120
Calcium				
Copper				
Iron				
Lead				
Magnesium				
Potassium				
Sodium				
Uranium				

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: D11205
 Account: KRWCCOL - KRW Consulting, Inc.
 Project: 1001-02

QC Batch ID: MP1393
 Matrix Type: SOLID

Methods: SW846 6020
 Units: ug/l

Prep Date: 03/04/10

Metal	D11203-2 Original SDL 5:25 %DIF			QC Limits
Aluminum				
Arsenic	92.3	91.9	0.5	0-10
Calcium				
Copper				
Iron				
Lead				
Magnesium				
Potassium				
Sodium				
Uranium				

Associated samples MP1393: D11205-1, D11205-2, D11205-3

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

8.3.4

8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1394
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 03/04/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	3.3	2		
Antimony	3.0	1.4	.5		
Arsenic	2.5	.7	.72		
Barium	1.0	.02	.05	0.30	<1.0
Beryllium	1.0	.33	.21		
Boron	5.0	.33	.91	0.68	<5.0
Cadmium	1.0	.073	.12	0.050	<1.0
Calcium	40	.18	2.7		
Chromium	1.0	.06	.18	0.080	<1.0
Cobalt	0.50	.059	.058		
Copper	2.0	.18	.38	1.3	<2.0
Iron	7.0	.55	.91		
Lead	5.0	.33	.24	0.090	<5.0
Lithium	0.20		.09		
Magnesium	20	.061	.93		
Manganese	0.50	.01	.028		
Molybdenum	1.0	.15	.16		
Nickel	3.0	.081	.075	0.060	<3.0
Phosphorus	10	4.7	3.5		
Potassium	200	1.1	130		
Selenium	5.0	.5	.54	-0.37	<5.0
Silicon	5.0	.96	.68		
Silver	3.0	.03	.068	-0.020	<3.0
Sodium	40	.34	6.3		
Strontium	5.0		.02		
Thallium	1.0	.14	.21		
Tin	5.0	.26	.56		
Titanium	1.0	.013	.041		
Uranium	5.0	.43	.53		
Vanadium	1.0	.067	.034		
Zinc	3.0	.051	.49	0.20	<3.0

Associated samples MP1394: D11205-1, D11205-2, D11205-3

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1394
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

(anr) Analyte not requested

8.4.1

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1394
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 03/04/10

Metal	D11203-2 Original MS		Spikelot MPICPR1	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	anr				
Barium	6180	8580	405	592.4(a)	75-125
Beryllium					
Boron	15.5	160	162	89.2	75-125
Cadmium	0.0	13.2	16.2	81.5	75-125
Calcium					
Chromium	11.3	136	162	77.0	75-125
Cobalt					
Copper	11.2	162	162	93.1	75-125
Iron					
Lead	20.3	174	162	94.8	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	8.4	120	162	68.9N(b)	75-125
Phosphorus	anr				
Potassium	anr				
Selenium	3.0	133	162	80.2	75-125
Silicon					
Silver	0.0	13.2	16.2	81.5	75-125
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	25.7	131	162	65.0N(b)	75-125

Associated samples MP1394: D11205-1, D11205-2, D11205-3

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1394
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 amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

8.4.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1394
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 03/04/10

Metal	D11203-2 Original	MSD	Spikelot MPICPR1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	anr					
Barium	6180	6970	421	187.6(a)	20.7 (b)	20
Beryllium						
Boron	15.5	156	168	83.4	2.5	20
Cadmium	0.0	13.5	16.8	80.2	2.2	20
Calcium						
Chromium	11.3	135	168	73.4N(c)	0.7	20
Cobalt						
Copper	11.2	158	168	87.2	2.5	20
Iron						
Lead	20.3	163	168	84.7	6.5	20
Lithium						
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	8.4	119	168	65.7N(c)	0.8	20
Phosphorus	anr					
Potassium	anr					
Selenium	3.0	131	168	76.0	1.5	20
Silicon						
Silver	0.0	13.1	16.8	77.8	0.8	20
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	25.7	134	168	64.3N(c)	2.3	20

Associated samples MP1394: D11205-1, D11205-2, D11205-3

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1394
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 amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- (b) High RPD due to possible sample nonhomogeneity.
- (c) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

8.4.2

8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1394
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 03/04/10

Metal	BSP Result	Spikelot MPICPR1	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	453	500	90.6	80-120
Beryllium				
Boron	186	200	93.0	80-120
Cadmium	17.8	20	89.0	80-120
Calcium				
Chromium	188	200	94.0	80-120
Cobalt				
Copper	190	200	95.0	80-120
Iron				
Lead	185	200	92.5	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	182	200	91.0	80-120
Phosphorus	anr			
Potassium	anr			
Selenium	168	200	84.0	80-120
Silicon				
Silver	17.0	20	85.0	80-120
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	173	200	86.5	80-120

Associated samples MP1394: D11205-1, D11205-2, D11205-3

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

8.4.3
8

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

Methods: SW846 6010B
Units: mg/kg

Metal

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1394
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 03/04/10

Metal	D11203-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	74000	70400	4.9	0-10
Beryllium				
Boron	186	219	17.8*(a)	0-10
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	135	146	8.1	0-10
Cobalt				
Copper	135	123	8.6	0-10
Iron				
Lead	243	183	24.9 (b)	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	101	116	14.2*(a)	0-10
Phosphorus	anr			
Potassium	anr			
Selenium	36.1	44.5	23.3 (b)	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	308	355	15.3*(a)	0-10

Associated samples MP1394: D11205-1, D11205-2, D11205-3

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

QC Batch ID: MP1394
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

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

8.4.4

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: D11205
Account: KRWCCOL - KRW Consulting, Inc.
Project: 1001-02

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Specific Conductivity	GP1549/GN3436			umhos/cm	9985	10000	100.3	90-110%
pH	GN3335			su	8.00	7.98	99.8	99.3-100.7%

Associated Samples:
Batch GN3335: D11205-1, D11205-2, D11205-3
Batch GP1549: D11205-1, D11205-2, D11205-3
(*) 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



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D11205

Client: AMS

Immediate Client Services Action Required: No

Date / Time Received: 2/25/2010 8:00:00 AM

No. Coolers: 1

Client Service Action Required at Login: No

Project: N/A

Airbill #'s: N/A

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 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"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | Infrared gun | |
| 3. Cooler media: | Ice (bag) | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 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 properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 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"/> |

Sample Integrity - Condition

Y or N

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

Sample Integrity - Instructions

Y or N N/A

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

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www.accutest.com

D11205: Chain of Custody

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10.1
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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: D11205
Account: ALMS - Accutest Mountain States
Project: KRWCCOL: 1001-02

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chromium, Hexavalent	GP11347/GN31255	2.0	0.0	mg/kg	40	42.7	106.8	80-120%
Chromium, Hexavalent	GP11347/GN31255			mg/kg	805	793	98.5	80-120%
Chromium, Hexavalent	GP11347/GN31255			mg/kg	164	136	82.9	80-120%

Associated Samples:
Batch GP11347: D11205-1, D11205-2, D11205-3
(*) Outside of QC limits

11.1
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DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D11205
Account: ALMS - Accutest Mountain States
Project: KRWCCOL: 1001-02

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chromium, Hexavalent	GP11347/GN31255	D11393-1	mg/kg	0.0	0.0	0.0	0-20%
Redox Potential Vs H2	GN31188	D11203-2	mv	294	293	0.3	0-20%

Associated Samples:
Batch GN31188: D11205-1, D11205-2, D11205-3
Batch GP11347: D11205-1, D11205-2, D11205-3
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D11205
Account: ALMS - Accutest Mountain States
Project: KRWCCOL: 1001-02

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GP11347/GN31255	D11393-1	mg/kg	0.0	52.4	50.1	95.6	75-125%
Chromium, Hexavalent	GP11347/GN31255	D11393-1	mg/kg	0.0	1210	1300	107.0	75-125%

Associated Samples:

Batch GP11347: D11205-1, D11205-2, D11205-3

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits