Mountain States ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

02/18/10

Technical Report for

KRW Consulting, Inc.

1001-06

FRV 297-32A

Accutest Job Number: D10554

Sampling Date: 01/21/10

Report to:

gknell@krwconsulting.com

ATTN: Distribution1

Total number of pages in report: **61**

ACCREDITED IN ACCORDANCE WITH nelac

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.

Gary K. Ward
Laboratory Director

Client Service contact: 303-425-6021

ACCUTEST LABORATORIES 50 YEARS 1956-2006

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

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Sample Summary

KRW Consulting, Inc.

Job No: D10554

1001-06
Project No: FRV 297-32A

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
D10554-1	01/21/10	11:00	DK	01/25/10	SO	Soil	297-32 B1A
D10554-1A	01/21/10	11:00	DK	01/25/10	SO	Soil	297-32 B1A
D10554-2	01/21/10	11:50	DK	01/25/10	SO	Soil	297-32 B1B
D10554-2A	01/21/10	11:50	DK	01/25/10	SO	Soil	297-32 B1B
D10554-3	01/21/10	12:35	DK	01/25/10	SO	Soil	297-32 B2A
D10554-3A	01/21/10	12:35	DK	01/25/10	SO	Soil	297-32 B2A
D10554-4	01/21/10	13:00	DK	01/25/10	SO	Soil	297-32 B2B
D10554-4A	01/21/10	13:00	DK	01/25/10	SO	Soil	297-32 B2B
D10554-5	01/21/10	13:40	DK	01/25/10	SO	Soil	297-32 B3A
D10554-5A	01/21/10	13:40	DK	01/25/10	SO	Soil	297-32 B3A
D10554-6	01/21/10	14:00	DK	01/25/10	SO	Soil	297-32 B3B
D10554-6A	01/21/10	14:00	DK	01/25/10	SO	Soil	297-32 B3B
D10554-7	01/21/10	13:05	DK	01/25/10	SO	Soil	297-32 FWP

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

Sample Summary
(continued)

KRW Consulting, Inc.

Job No: D10554

1001-06
Project No: FRV 297-32A

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
D10554-7A	01/21/10	13:05	DK	01/25/10	SO	Soil	297-32 FWP
D10554-8	01/21/10	14:20	DK	01/25/10	SO	Soil	297-32 RP
D10554-8A	01/21/10	14:20	DK	01/25/10	SO	Soil	297-32 RP
D10554-9	01/21/10	15:05	DK	01/25/10	SO	Soil	297-32 CT
D10554-9A	01/21/10	15:05	DK	01/25/10	SO	Soil	297-32 CT

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	KRW Consulting, Inc.	**Job No**	D10554
Site:	1001-06	**Report Dat**	2/18/2010 12:54:35 PM

On 01/25/2010, 9 Samples were received at Accutest Laboratories at a temperature of 2.6°C. The samples were intact and properly preserved, unless noted below. An Accutest Job Number of D10554 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:** OP1350

- 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 D10555-8AMS and D10555-8AMSD were used as the QC samples indicated.
- D10554-7 through D10554-9: Sample was analyzed at a dilution due to matrix
- D10554-7 and D10554-8 for Terphenyl-d14: Outside control limits due to dilution.

Volatiles by GC By Method SW846 8015B

Matrix SO **Batch ID:** GGA250

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Samples D10522-4MS and D10522-4MSD were used as the QC samples indicated.
- D10554-7 and D10554-8 for 1,2,4 Trichlorobenzene: Outside control limits due to matrix interference.

Matrix SO **Batch ID:** GGB165

- The data for SW846 8015B meets quality control requirements.
- D10554-7 and D10554-8: Confirmation run.
- D10554-7 and D10554-8 for 1,2,4 Trichlorobenzene: Outside control limits due to matrix interference. Confirmed by reanalysis.

Volatiles by GC By Method SW846 8021B

Matrix SO **Batch ID:** GTA250

- All samples were analyzed within the recommended method holding time.
- Samples D10522-4MS and D10522-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- D10554-7 and D10554-8 for 1,2,4-Trichlorobenzene: Outside control limits due to matrix interference.

Matrix SO **Batch ID:** GTB165

- D10554-7 and D10554-8: Confirmation run.
- D10554-7 and D10554- 8 for 1,2,4-Trichlorobenzene: Outside control limits due to matrix interference. Confirmed by reanalysis.

Extractables by GC By Method SW846-8015B

Matrix	SO	Batch ID:	OP1345

- 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 D10555-8AMS and D10555-8AMSD were used as the QC samples indicated.
- D10554-7 and D10554-8 for t-Butylbenzene: Surrogate dluted out

Metals By Method SW846 6010B

Matrix	AQ	Batch ID:	MP1183

- 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:	MP1194

- 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 D10554-7MS, D10554-7MSD, and D10554-7SDL were used as the QC samples for metals.
- The matrix spike recovery for Silver is outside control limits. The spike recovery indicates possible matrix interference.
- The matrix spike duplicate recoveries for Chromium, and Silver are outside control limits. Probable cause due to matrix interference.
- The Serial Dilution RPDs for Boron and Chromium are outside control limits for sample MP1194-SD1. Probable cause due to sample homogeneity.
- MP1194-SD1 for Boron, Chromium: Serial dilution indicates possible matrix interference.

Matrix	SO	Batch ID:	MP1308

- 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 D10554-7MSD, D10554-7SDL, D10554-7MS, and D10554-7MSD were used as the QC samples for metals.
- The matrix spike recovery for Zinc is outside control limits. The spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- The matrix spike duplicate recoveries for Nickel and Zinc are outside control limits. Probable cause due to matrix interference.
- The matrix spike recovery for 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 serial dilution RPDs for Selenium, Lead, Nickel, and Zinc are outside control limits for sample MP1308-SD1. The percent difference is acceptable due to low initial sample concentration (< 50 times IDL).
- MP1308-SD1 for Lead, Nickel, and Zinc: Serial dilution indicates possible matrix interference.
- MP1308-MB1 for Copper: All sample results >10x method blank concentration.

Metals By Method SW846 6020

Matrix SO **Batch ID:** MP1195

- 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 D10554-7MS, D10554-7MSD, D10554-7DUP, and D10554-7SDL were used as the QC samples for metals.

Matrix SO **Batch ID:** MP1209

- 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 D10555-7ADUP, D10555-7AMS, D10555-7AMSD, and D10555-7ASDL were used as the QC samples for metals.

Metals By Method SW846 7471A

Matrix SO **Batch ID:** MP1196

- 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 D10496-7AMS and D10496-7AMSD were used as the QC samples for metals.
- The matrix spike duplicate recovery for Mercury is outside control limits. Probable cause due to matrix interference.

Wet Chemistry By Method ASTM E1498-76M

Matrix SO **Batch ID:** M:GN30962

- The data for ASTM E1498-76M meets quality control requirements.
- The following samples were run outside of holding time for method ASTM E1498-76M: D10554-7, D10554-8, D10554-9
- D10554-7 through D10554-9 for Redox Potential Vs H2: Analysis performed at Accutest Laboratories, Marlborough, MA.

Wet Chemistry By Method LADNR29B

Matrix SO **Batch ID:** R1167

- The data for LADNR29B meets quality control requirements.
- D10554-1A through D10554-9A for Sodium Adsorption Ratio: Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+(Mg meq/L)/2]

Wet Chemistry By Method SW846 3060/7196A M

Matrix SO **Batch ID:** R1119

- The data for SW846 3060/7196A M meets quality control requirements.
- D10554-7 through D10554-9 for Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent)

Wet Chemistry By Method SW846 3060A/7196A

Matrix SO **Batch ID:** M:GP11222

- D10554-7 through D10554-9 for Chromium, Hexavalent: Analysis performed at Accutest Laboratories, Marlborough, MA.

Wet Chemistry By Method SW846 9045C

Matrix SO **Batch ID:** GN3003

- The following samples were run outside of holding time for method SW846 9045C: D10554-1, D10554-2, D10554-3, D10554-4, D10554-5, D10554-6, D10554-7, D10554-8, D10554-9

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**	D10554
Site:	KRWCCOL: 1001-06	**Report Date**	1/29/2010 10:13:53 AM

3 Sample(s) were collected on 01/21/2010 and were received at Accutest on 01/25/2010 properly preserved, at 3.2 Deg. C and intact. These Samples received an Accutest job number of D10554. 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:** GN30962

- Sample(s) D10555-7ADUP were used as the QC samples for Redox Potential Vs H2.

Wet Chemistry By Method SW846 3060A/7196A

Matrix SO **Batch ID:** GP11222

- 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) M88649-1RDUP, M88649-1RMS 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(D10554).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	297-32 B1A		
Lab Sample ID:	D10554-1	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	84.6
Project:	1001-06		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.7	0.36	mg/kg	1	02/05/10	02/09/10	SES	SW846 6020 [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA386
(2) Prep QC Batch: MP1209

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B1A		
Lab Sample ID:	D10554-1	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	84.6
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	84.6		%	1	01/25/10	SWT	SM19 2540B M
pH	9.77		su	1	01/25/10 13:05	JD	SW846 9045C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B1A		
Lab Sample ID:	D10554-1A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	84.6
Project:	1001-06		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	72.0	2.0	mg/l	1	01/29/10	02/03/10	JM	SW846 6010B [1]	SW846 3005A [3]
Magnesium	77.6	1.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]
Sodium	1660	2.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]

(1) Instrument QC Batch: MA370
(2) Instrument QC Batch: MA380
(3) Prep QC Batch: MP1183

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B1A		
Lab Sample ID:	D10554-1A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	84.6
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio [a]	32.3		ratio	1	02/08/10 15:42	JM	LADNR29B
Specific Conductivity	7700	1.0	umhos/cm	1	01/27/10	JK	DEPT.OF AG, BOOK N9

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B1B		
Lab Sample ID:	D10554-2	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	89.8
Project:	1001-06		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	7.1	0.32	mg/kg	1	02/05/10	02/09/10	SES	SW846 6020 [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA386
(2) Prep QC Batch: MP1209

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B1B		
Lab Sample ID:	D10554-2	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	89.8
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	89.8		%	1	01/25/10	SWT	SM19 2540B M
pH	9.63		su	1	01/25/10 13:05	JD	SW846 9045C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B1B		
Lab Sample ID:	D10554-2A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	89.8
Project:	1001-06		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	49.9	2.0	mg/l	1	01/29/10	02/03/10	JM	SW846 6010B [1]	SW846 3005A [3]
Magnesium	36.2	1.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]
Sodium	403	2.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]

(1) Instrument QC Batch: MA370
(2) Instrument QC Batch: MA380
(3) Prep QC Batch: MP1183

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B1B		
Lab Sample ID:	D10554-2A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	89.8
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio [a]	10.6		ratio	1	02/08/10 15:51	JM	LADNR29B
Specific Conductivity	2550	1.0	umhos/cm	1	01/27/10	JK	DEPT.OF AG, BOOK N9

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B2A		
Lab Sample ID:	D10554-3	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	90.7
Project:	1001-06		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	3.7	0.33	mg/kg	1	02/05/10	02/09/10	SES	SW846 6020 [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA386
(2) Prep QC Batch: MP1209

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B2A		
Lab Sample ID:	D10554-3	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	90.7
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	90.7		%	1	01/25/10	SWT	SM19 2540B M
pH	9.10		su	1	01/25/10 13:05	JD	SW846 9045C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B2A		
Lab Sample ID:	D10554-3A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	90.7
Project:	1001-06		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	35.7	2.0	mg/l	1	01/29/10	02/03/10	JM	SW846 6010B [1]	SW846 3005A [3]
Magnesium	8.86	1.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]
Sodium	22.9	2.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]

(1) Instrument QC Batch: MA370
(2) Instrument QC Batch: MA380
(3) Prep QC Batch: MP1183

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B2A		
Lab Sample ID:	D10554-3A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	90.7
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio [a]	0.889		ratio	1	02/08/10 15:58	JM	LADNR29B
Specific Conductivity	356	1.0	umhos/cm	1	01/27/10	JK	DEPT.OF AG, BOOK N9

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B2B		
Lab Sample ID:	D10554-4	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	85.2
Project:	1001-06		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	3.5	0.37	mg/kg	1	02/05/10	02/09/10	SES	SW846 6020 [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA386
(2) Prep QC Batch: MP1209

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B2B		
Lab Sample ID:	D10554-4	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	85.2
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	85.2		%	1	01/25/10	SWT	SM19 2540B M
pH	9.26		su	1	01/25/10 13:05	JD	SW846 9045C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B2B		
Lab Sample ID:	D10554-4A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	85.2
Project:	1001-06		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	255	2.0	mg/l	1	01/29/10	02/03/10	JM	SW846 6010B [1]	SW846 3005A [3]
Magnesium	153	1.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]
Sodium	973	2.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]

(1) Instrument QC Batch: MA370
(2) Instrument QC Batch: MA380
(3) Prep QC Batch: MP1183

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B2B		
Lab Sample ID:	D10554-4A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	85.2
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio [a]	11.9		ratio	1	02/08/10 16:04	JM	LADNR29B
Specific Conductivity	6630	1.0	umhos/cm	1	01/27/10	JK	DEPT.OF AG, BOOK N9

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B3A		
Lab Sample ID:	D10554-5	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	84.2
Project:	1001-06		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	20.7	0.35	mg/kg	1	02/05/10	02/09/10	SES	SW846 6020 [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA386
(2) Prep QC Batch: MP1209

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B3A		
Lab Sample ID:	D10554-5	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	84.2
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	84.2		%	1	01/25/10	SWT	SM19 2540B M
pH	9.20		su	1	01/25/10 13:05	JD	SW846 9045C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B3A		
Lab Sample ID:	D10554-5A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	84.2
Project:	1001-06		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	55.8	2.0	mg/l	1	01/29/10	02/03/10	JM	SW846 6010B [1]	SW846 3005A [3]
Magnesium	4.57	1.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]
Sodium	51.2	2.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]

(1) Instrument QC Batch: MA370
(2) Instrument QC Batch: MA380
(3) Prep QC Batch: MP1183

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B3A		
Lab Sample ID:	D10554-5A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	84.2
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio [a]	1.77		ratio	1	02/08/10 16:10	JM	LADNR29B
Specific Conductivity	545	1.0	umhos/cm	1	01/27/10	JK	DEPT.OF AG, BOOK N9

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B3B		
Lab Sample ID:	D10554-6	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	85.6
Project:	1001-06		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	7.6	0.37	mg/kg	1	02/05/10	02/09/10	SES	SW846 6020 [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA386
(2) Prep QC Batch: MP1209

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B3B		
Lab Sample ID:	D10554-6	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	85.6
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	85.6		%	1	01/25/10	SWT	SM19 2540B M
pH	9.37		su	1	01/25/10 13:05	JD	SW846 9045C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B3B		
Lab Sample ID:	D10554-6A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	85.6
Project:	1001-06		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	63.2	2.0	mg/l	1	01/29/10	02/03/10	JM	SW846 6010B [1]	SW846 3005A [3]
Magnesium	42.3	1.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]
Sodium	287	2.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]

(1) Instrument QC Batch: MA370
(2) Instrument QC Batch: MA380
(3) Prep QC Batch: MP1183

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 B3B		
Lab Sample ID:	D10554-6A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	85.6
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio [a]	6.85		ratio	1	02/08/10 16:16	JM	LADNR29B
Specific Conductivity	1940	1.0	umhos/cm	1	01/27/10	JK	DEPT.OF AG, BOOK N9

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 FWP		
Lab Sample ID:	D10554-7	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
Method:	SW846 8270C SW846 3540C	**Percent Solids:**	76.0
Project:	1001-06		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1G05657.D	10	02/09/10	TMB	01/28/10	OP1350	E1G169
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	14.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	6800	5300	ug/kg	
208-96-8	Acenaphthylene	ND	6800	6100	ug/kg	
120-12-7	Anthracene	ND	6800	4600	ug/kg	
56-55-3	Benzo(a)anthracene	ND	6800	5300	ug/kg	
50-32-8	Benzo(a)pyrene	ND	6800	4600	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	7400	6800	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	6800	4600	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	8600	7400	ug/kg	
218-01-9	Chrysene	ND	8600	7400	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	7400	5500	ug/kg	
206-44-0	Fluoranthene	ND	13000	6800	ug/kg	
86-73-7	Fluorene	ND	7400	6100	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	6800	5000	ug/kg	
90-12-0	1-Methylnaphthalene	ND	8600	6800	ug/kg	
91-57-6	2-Methylnaphthalene	ND	6800	5200	ug/kg	
91-20-3	Naphthalene	ND	13000	6100	ug/kg	
85-01-8	Phenanthrene	ND	13000	6800	ug/kg	
129-00-0	Pyrene	ND	7400	6800	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		33-130%
321-60-8	2-Fluorobiphenyl	112%		37-130%
1718-51-0	Terphenyl-d14	195% [b]		48-130%

(a) Sample was analyzed at a dilution due to matrix
(b) 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:	297-32 FWP		
Lab Sample ID:	D10554-7	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
Method:	SW846 8015B	**Percent Solids:**	76.0
Project:	1001-06		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA4605.D	1	01/27/10	SD	n/a	n/a	GGA250
Run #2 [a]	GB3207.D	1	02/02/10	SD	n/a	n/a	GGB165

	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	1.3	1.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	57% [c]	38% [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:	297-32 FWP		
Lab Sample ID:	D10554-7	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
Method:	SW846 8021B	**Percent Solids:**	76.0
Project:	1001-06		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TA4605.D	1	01/27/10	SD	n/a	n/a	GTA250
Run #2 [a]	TB3207.D	1	02/02/10	SD	n/a	n/a	GTB165

	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	6.6	ug/kg	
108-88-3	Toluene	ND	13	ug/kg	
100-41-4	Ethylbenzene	ND	13	ug/kg	
	m,p-Xylene	ND	13	ug/kg	
95-47-6	o-Xylene	ND	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	30% [c]	17% [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:	297-32 FWP		
Lab Sample ID:	D10554-7	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
Method:	SW846-8015B SW846 3550B	**Percent Solids:**	76.0
Project:	1001-06		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FC1669.D	50	01/29/10	CP	01/27/10	OP1345	GFC97
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)	164000	4400	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-06-6	t-Butylbenzene	0% [a]		39-130%

(a) Surrogate diluted out

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:	297-32 FWP		
Lab Sample ID:	D10554-7	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	76.0
Project:	1001-06		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	3.9	0.39	mg/kg	1	02/02/10	02/04/10	SES	SW846 6020 [3]	SW846 3050B [7]
Barium	11400	19	mg/kg	20	02/09/10	02/17/10	JM	SW846 6010B [5]	SW846 3050B [9]
Boron	56.7	4.8	mg/kg	1	02/02/10	02/04/10	JM	SW846 6010B [2]	SW846 3050B [6]
Cadmium	< 0.97	0.97	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Chromium	22.3	0.97	mg/kg	1	02/02/10	02/04/10	JM	SW846 6010B [2]	SW846 3050B [6]
Copper	24.4	1.9	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Lead	19.6	4.8	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Mercury	0.92	0.12	mg/kg	1	02/02/10	02/03/10	CM	SW846 7471A [1]	SW846 7471A [8]
Nickel	9.4	2.9	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Selenium	< 4.8	4.8	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Silver	< 2.9	2.9	mg/kg	1	02/02/10	02/04/10	JM	SW846 6010B [2]	SW846 3050B [6]
Zinc	60.9	2.9	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]

(1) Instrument QC Batch: MA374
(2) Instrument QC Batch: MA376
(3) Instrument QC Batch: MA378
(4) Instrument QC Batch: MA411
(5) Instrument QC Batch: MA412
(6) Prep QC Batch: MP1194
(7) Prep QC Batch: MP1195
(8) Prep QC Batch: MP1196
(9) Prep QC Batch: MP1308

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 FWP		
Lab Sample ID:	D10554-7	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	76.0
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent [a]	< 2.5	2.5	mg/kg	1	01/27/10 18:00	AMA	SW846 3060A/7196A
Chromium, Trivalent [b]	20.1	3.5	mg/kg	1	02/04/10 12:08	JM	SW846 3060/7196A M
Redox Potential Vs H2 [a]	352		mv	1	01/26/10	AMA	ASTM E1498-76M
Solids, Percent	76		%	1	01/25/10	SWT	SM19 2540B M
pH	8.96		su	1	01/25/10 13:05	JD	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:	297-32 FWP		
Lab Sample ID:	D10554-7A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	76.0
Project:	1001-06		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	44.0	2.0	mg/l	1	01/29/10	02/03/10	JM	SW846 6010B [1]	SW846 3005A [3]
Magnesium	4.04	1.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]
Sodium	113	2.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]

(1) Instrument QC Batch: MA370
(2) Instrument QC Batch: MA380
(3) Prep QC Batch: MP1183

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 FWP		
Lab Sample ID:	D10554-7A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	76.0
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio [a]	4.37		ratio	1	02/08/10 16:22	JM	LADNR29B
Specific Conductivity	700	1.0	umhos/cm	1	01/27/10	JK	DEPT.OF AG, BOOK N9

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 RP		
Lab Sample ID:	D10554-8	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
Method:	SW846 8270C SW846 3540C	**Percent Solids:**	73.8
Project:	1001-06		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1G05658.D	10	02/09/10	TMB	01/28/10	OP1350	E1G169
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	14.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	7000	5500	ug/kg	
208-96-8	Acenaphthylene	ND	7000	6300	ug/kg	
120-12-7	Anthracene	ND	7000	4700	ug/kg	
56-55-3	Benzo(a)anthracene	ND	7000	5500	ug/kg	
50-32-8	Benzo(a)pyrene	ND	7000	4700	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	7600	7000	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	7000	4700	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	8900	7600	ug/kg	
218-01-9	Chrysene	ND	8900	7600	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	7600	5700	ug/kg	
206-44-0	Fluoranthene	ND	13000	7000	ug/kg	
86-73-7	Fluorene	ND	7600	6300	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	7000	5100	ug/kg	
90-12-0	1-Methylnaphthalene	ND	8900	7000	ug/kg	
91-57-6	2-Methylnaphthalene	ND	7000	5300	ug/kg	
91-20-3	Naphthalene	ND	13000	6300	ug/kg	
85-01-8	Phenanthrene	29500	13000	7000	ug/kg	
129-00-0	Pyrene	ND	7600	7000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	102%		33-130%
321-60-8	2-Fluorobiphenyl	90%		37-130%
1718-51-0	Terphenyl-d14	178% [b]		48-130%

(a) Sample was analyzed at a dilution due to matrix.
(b) 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:	297-32 RP		
Lab Sample ID:	D10554-8	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
Method:	SW846 8015B	**Percent Solids:**	73.8
Project:	1001-06		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA4606.D	1	01/27/10	SD	n/a	n/a	GGA250
Run #2 [a]	GB3208.D	1	02/02/10	SD	n/a	n/a	GGB165

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

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	2.67	1.4	1.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	34% [c]	44% [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:	297-32 RP		
Lab Sample ID:	D10554-8	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
Method:	SW846 8021B	**Percent Solids:**	73.8
Project:	1001-06		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TA4606.D	1	01/27/10	SD	n/a	n/a	GTA250
Run #2 [a]	TB3208.D	1	02/02/10	SD	n/a	n/a	GTB165

	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	6.8	ug/kg	
108-88-3	Toluene	ND	14	ug/kg	
100-41-4	Ethylbenzene	ND	14	ug/kg	
	m,p-Xylene	18.9	14	ug/kg	
95-47-6	o-Xylene	ND	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	42% [c]	21% [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:	297-32 RP		
Lab Sample ID:	D10554-8	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
Method:	SW846-8015B SW846 3550B	**Percent Solids:**	73.8
Project:	1001-06		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FC1671.D	50	01/29/10	CP	01/27/10	OP1345	GFC97
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	209000	4500	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-06-6	t-Butylbenzene	0% [a]		39-130%

(a) Surrogate dluted out

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:	297-32 RP		
Lab Sample ID:	D10554-8	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	73.8
Project:	1001-06		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	10.9	0.41	mg/kg	1	02/02/10	02/04/10	SES	SW846 6020 [3]	SW846 3050B [7]
Barium	10400	21	mg/kg	20	02/09/10	02/17/10	JM	SW846 6010B [5]	SW846 3050B [9]
Boron	52.3	5.2	mg/kg	1	02/02/10	02/04/10	JM	SW846 6010B [2]	SW846 3050B [6]
Cadmium	< 1.0	1.0	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Chromium	67.5	1.0	mg/kg	1	02/02/10	02/04/10	JM	SW846 6010B [2]	SW846 3050B [6]
Copper	108	2.1	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Lead	25.2	5.2	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Mercury	2.4	1.1	mg/kg	10	02/02/10	02/04/10	CM	SW846 7471A [1]	SW846 7471A [8]
Nickel	23.3	3.1	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Selenium	< 5.2	5.2	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Silver	< 3.1	3.1	mg/kg	1	02/02/10	02/04/10	JM	SW846 6010B [2]	SW846 3050B [6]
Zinc	146	3.1	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]

(1) Instrument QC Batch: MA375
(2) Instrument QC Batch: MA376
(3) Instrument QC Batch: MA378
(4) Instrument QC Batch: MA411
(5) Instrument QC Batch: MA412
(6) Prep QC Batch: MP1194
(7) Prep QC Batch: MP1195
(8) Prep QC Batch: MP1196
(9) Prep QC Batch: MP1308

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 RP		
Lab Sample ID:	D10554-8	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	73.8
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent [a]	3.0	2.6	mg/kg	1	01/27/10 18:00	AMA	SW846 3060A/7196A
Chromium, Trivalent [b]	64.5	3.6	mg/kg	1	02/04/10 12:58	JM	SW846 3060/7196A M
Redox Potential Vs H2 [a]	298		mv	1	01/26/10	AMA	ASTM E1498-76M
Solids, Percent	73.8		%	1	01/25/10	SWT	SM19 2540B M
pH	7.75		su	1	01/25/10 13:05	JD	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:	297-32 RP		
Lab Sample ID:	D10554-8A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	73.8
Project:	1001-06		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	38.8	2.0	mg/l	1	01/29/10	02/03/10	JM	SW846 6010B [1]	SW846 3005A [3]
Magnesium	1.26	1.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]
Sodium	176	2.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]

(1) Instrument QC Batch: MA370
(2) Instrument QC Batch: MA380
(3) Prep QC Batch: MP1183

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 RP		
Lab Sample ID:	D10554-8A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	73.8
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio [a]	7.57		ratio	1	02/08/10 16:28	JM	LADNR29B
Specific Conductivity	1050	1.0	umhos/cm	1	01/27/10	JK	DEPT.OF AG, BOOK N9

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 CT		
Lab Sample ID:	D10554-9	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
Method:	SW846 8270C SW846 3540C	**Percent Solids:**	78.5
Project:	1001-06		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1G05659.D	10	02/09/10	TMB	01/28/10	OP1350	E1G169
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	6.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	2800	2200	ug/kg	
208-96-8	Acenaphthylene	ND	2800	2500	ug/kg	
120-12-7	Anthracene	ND	2800	1900	ug/kg	
56-55-3	Benzo(a)anthracene	ND	2800	2200	ug/kg	
50-32-8	Benzo(a)pyrene	ND	2800	1900	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	3100	2800	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	2800	1900	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	3600	3100	ug/kg	
218-01-9	Chrysene	ND	3600	3100	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	3100	2300	ug/kg	
206-44-0	Fluoranthene	ND	5400	2800	ug/kg	
86-73-7	Fluorene	ND	3100	2500	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2800	2100	ug/kg	
90-12-0	1-Methylnaphthalene	ND	3600	2800	ug/kg	
91-57-6	2-Methylnaphthalene	ND	2800	2100	ug/kg	
91-20-3	Naphthalene	ND	5400	2500	ug/kg	
85-01-8	Phenanthrene	ND	5400	2800	ug/kg	
129-00-0	Pyrene	ND	3100	2800	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	97%		33-130%
321-60-8	2-Fluorobiphenyl	86%		37-130%
1718-51-0	Terphenyl-d14	97%		48-130%

(a) Sample was analyzed at a dilution due to matrix.

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:	297-32 CT		
Lab Sample ID:	D10554-9	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
Method:	SW846 8015B	**Percent Solids:**	78.5
Project:	1001-06		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA4607.D	1	01/27/10	SD	n/a	n/a	GGA250
Run #2							

	Initial Weight
Run #1	1.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	1.3	1.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	63%		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:	297-32 CT		
Lab Sample ID:	D10554-9	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
Method:	SW846 8021B	**Percent Solids:**	78.5
Project:	1001-06		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TA4607.D	1	01/27/10	SD	n/a	n/a	GTA250
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	6.4	ug/kg	
108-88-3	Toluene	ND	13	ug/kg	
100-41-4	Ethylbenzene	ND	13	ug/kg	
	m,p-Xylene	ND	13	ug/kg	
95-47-6	o-Xylene	ND	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	66%		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:	297-32 CT		
Lab Sample ID:	D10554-9	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
Method:	SW846-8015B SW846 3550B	**Percent Solids:**	78.5
Project:	1001-06		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FC1673.D	20	01/29/10	CP	01/27/10	OP1345	GFC97
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)	861	340	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-06-6	t-Butylbenzene	67%		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: 297-32 CT
Lab Sample ID: D10554-9
Matrix: SO - Soil
Project: 1001-06

Date Sampled: 01/21/10
Date Received: 01/25/10
Percent Solids: 78.5

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	20.3	0.38	mg/kg	1	02/02/10	02/04/10	SES	SW846 6020 [3]	SW846 3050B [7]
Barium	3470	19	mg/kg	20	02/09/10	02/17/10	JM	SW846 6010B [5]	SW846 3050B [9]
Boron	9.6	4.7	mg/kg	1	02/02/10	02/04/10	JM	SW846 6010B [2]	SW846 3050B [6]
Cadmium	< 0.94	0.94	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Chromium	21.8	0.94	mg/kg	1	02/02/10	02/04/10	JM	SW846 6010B [2]	SW846 3050B [6]
Copper	39.8	1.9	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Lead	23.6	4.7	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Mercury	< 0.10	0.10	mg/kg	1	02/02/10	02/03/10	CM	SW846 7471A [1]	SW846 7471A [8]
Nickel	16.2	2.8	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Selenium	< 4.7	4.7	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]
Silver	< 2.8	2.8	mg/kg	1	02/02/10	02/04/10	JM	SW846 6010B [2]	SW846 3050B [6]
Zinc	52.3	2.8	mg/kg	1	02/09/10	02/16/10	JM	SW846 6010B [4]	SW846 3050B [9]

(1) Instrument QC Batch: MA374
(2) Instrument QC Batch: MA376
(3) Instrument QC Batch: MA378
(4) Instrument QC Batch: MA411
(5) Instrument QC Batch: MA412
(6) Prep QC Batch: MP1194
(7) Prep QC Batch: MP1195
(8) Prep QC Batch: MP1196
(9) Prep QC Batch: MP1308

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 CT		
Lab Sample ID:	D10554-9	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	78.5
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent [a]	< 2.4	2.4	mg/kg	1	01/27/10 18:00	AMA	SW846 3060A/7196A
Chromium, Trivalent [b]	20.8	3.3	mg/kg	1	02/04/10 13:06	JM	SW846 3060/7196A M
Redox Potential Vs H2 [a]	355		mv	1	01/26/10	AMA	ASTM E1498-76M
Solids, Percent	78.5		%	1	01/25/10	SWT	SM19 2540B M
pH	8.27		su	1	01/25/10 13:05	JD	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:	297-32 CT		
Lab Sample ID:	D10554-9A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	78.5
Project:	1001-06		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	420	2.0	mg/l	1	01/29/10	02/03/10	JM	SW846 6010B [1]	SW846 3005A [3]
Magnesium	158	1.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]
Sodium	808	2.0	mg/l	1	01/29/10	02/08/10	JM	SW846 6010B [2]	SW846 3005A [3]

(1) Instrument QC Batch: MA370
(2) Instrument QC Batch: MA380
(3) Prep QC Batch: MP1183

RL = Reporting Limit

Report of Analysis

Client Sample ID:	297-32 CT		
Lab Sample ID:	D10554-9A	**Date Sampled:**	01/21/10
Matrix:	SO - Soil	**Date Received:**	01/25/10
		Percent Solids:	78.5
Project:	1001-06		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio [a]	8.53		ratio	1	02/08/10 16:34	JM	LADNR29B
Specific Conductivity	5600	1.0	umhos/cm	1	01/27/10	JK	DEPT.OF AG, BOOK N9

(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 (Accutest Labs of New England, Inc.)

CHAIN OF CUSTODY

ACCUTEST Laboratories

4036 Youngfield Street, Wheat Ridge, Colorado 80033
TEL. 303-425-6021; 877-737-4521 FAX: 303-425-6854
www.accutest.com

PAGE ___ OF ___

FED-EX Tracking # | Bottle Order Control #
Accutest Quote # | Accutest Job # D10554

Client / Reporting Information

Company Name: KRW Consulting Inc.
Street Address: 8000 W. 14th Ave Ste 200
City / State / Zip: Lakewood, Co. 80124
Project Contact / E-mail: 303 239 9011 / 303 239-0745
Phone # / Fax #: Joe Hess / JHess@krwconsulting.com
Sampler(s) Name(s) / Phone #: Mike Raynos / Dwayne K

Project Information

Project Name: FRU 297-32
Street: SAME AS
City / State: ___
Project #: 1001-06
Client Purchase Order #: ___
Project Manager: Joe Hess

Billing Information (If different from Report to)

Company Name: ___
Street Address: ___
City / State / Zip: ___
Attention: ___

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	SAR, EC, PH	Cr 6	Metals	Volatile Organics	Semi-Vol Organics	Arsenic	LAB USE ONLY
1	297-32 B1A		12/10	1100	MR		2									✓					✓	01
2	297-32 B1B		12/10	1150	MR		2									✓					✓	02
3	297-32 B2A		12/10	1235	MR		2									✓					✓	03
4	297-32 B2B		12/10	1300	MR		2									✓					✓	04
5	297-32 B3A		12/10	1340	MR		2									✓					✓	05
6	297-32 B3B		12/10	1400	MR		2									✓					✓	06
7	297-32 FWP		12/10	1305	DK		5									✓	✓	✓	✓	✓		07
8	297-32 RP		12/10	1420	DK		5									✓	✓	✓	✓	✓		08
9	297-32 CT		12/10	1505	DK		5									✓	✓	✓	✓	✓		09

Turnaround Time (Business days)

- ☐ Std. 10 Business Days
- ☐ UST Analysis 3-5 Days
- ☐ 6 - 9 Day *RUSH*
- ☐ 3 - 5 Day *RUSH*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Level 1 = Results Only
Level 2 = Results + QC Summary + Case Narrative
Level 3 = Results + QC Summary + Partial Raw data
Level 4 = Full Deliverable

- ☐ PDF
- ☐ EDD Format ___
- ☐ Other ___

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Mike Raynos	1-23-10 1630	Chris Sarno	Chris Sarno	1-25-10 9:00A	
2						
3						
4						
5						

Custody Seal # ___ ☐ Intact ☑ Not intact
Preserved where applicable ☐
On Ice ☑
Cooler Temp. 2.6

4.1 4

D10554: Chain of Custody
Page 1 of 1

CHAIN OF CUSTODY

ACCUTEST

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

Accutest Job #:	D10554
Accutest Quote #:	
AMS P.O. #:	
Project No.:	FRV 297-32A

Client Information	Subcontract Laboratory Information
Name: Accutest Mountain States (AMS)	Name: Accutest - New England
Address: 4036 Youngfield St.	Address: 495 Technology Center West, BLDG O
City: Wheat Ridge, State: CO Zip: 80033	City: Marlborough State: MA Zip: 01752
Send Report to: Carl Smits Any questions contact: Andrea Engelbrecht	Contact: Sample Management
Phone/Fax #: (303) 425-6021; (303)425-6854	Phone: (508) 481-6200

Field ID / Point of Collection	Collection Date	Collection Time		Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2So4	None	Hexavalent Chromium	EH				Comments
D10554 -7	1/21/10	1:05 PM		Soil	1						X	X				
-8	1/21/10	2:20 PM		Soil	1						X	X				
-9	1/21/10	3:05 PM		Soil	1						X	X				
-																
-																
-																
-																
-																
-																
-																

Turnaround Information

- [X] 10 Business Day Standard — Approved By:
- [ ] Other _____ (Days)

10 Day Turnaround Hardcopy, RUSH is FAX Data unless previously approved.

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] Reduced Tier 1
- [ ] Full Tier 1
- [ ] Other (Specify)
- [ ] PDF
- [ ] Compact Disk Deliverable
- [ ] Electronic Delivery:
- [ ] State Forms

Comments / Remarks

Please use Colorado regulations and RLs.

13C

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date & Time:	Received By:	Date & Time:
1	[signature]	1/25/10	1 UPS	1
2	UPS	1/29/10 10:30	2 [signature]	2 1/29/10 10:30
3			3	3

For Subcontract Laborartory Use Only

Seal #: Headspace: Yes ☐ No ☐ NA ☐

Preserved where applicable: ☐

Temperature °C _____ On Ice ☐ 3.0°

D10554: Chain of Custody
Page 1 of 1
Accutest Labs of New England, Inc.