



**AMERICAN
WEST
ANALYTICAL
LABORATORIES**

463 West 3600 South
Salt Lake City, Utah
84115

March 13, 2008

Les Pennington
Wasatch Environmental
2410 West California Avenue
Salt Lake City, UT 84104

TEL: (801) 972-8400

FAX: (801) 972-8459

RE: Gunnison Remediation / 1241-026A

Lab Set ID: L82664

Dear Les Pennington:

American West Analytical Labs received 6 samples on 2/29/2008 for the analyses presented in the following report.

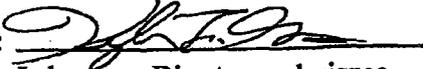
All analyses were performed in accordance to National Environmental Laboratory Accreditation Program (NELAP) protocols unless noted otherwise. If you have any questions or concerns regarding this report please feel free to call.

Thank you.

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687
mail: awal@awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Approved by: 
Laboratory Director or designee

Report Date: 3/13/2008 Page 1 of 12



INORGANIC ANALYSIS REPORT

Client: Wasatch Environmental
Project ID: Gunnison Remediation / 1241-026A

Contact: Les Pennington

**AMERICAN
WEST
ANALYTICAL
LABORATORIES**

Lab Sample ID: L82664-01D
Field Sample ID: MW-9
Collected: 2/28/2008 9:30:00 AM
Received: 2/29/2008

DISSOLVED METALS

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Results
Manganese	mg/L	3/3/2008 6:59:00 PM	6010B	0.0050	0.37

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer



INORGANIC ANALYSIS REPORT

Client: Wasatch Environmental
Project ID: Gunnison Remediation / 1241-026A

Contact: Les Pennington

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Lab Sample ID: L82664-02D
Field Sample ID: MW-12
Collected: 2/28/2008 11:20:00 AM
Received: 2/29/2008

DISSOLVED METALS

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Results
Manganese	mg/L	3/3/2008 7:15:08 PM	6010B	0.0050	2.2

463 West 3600 South
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Sample required additional preservative upon receipt.

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Laboratory Director

Jose Rocha
QA Officer

Report Date: 3/13/2008 Page 3 of 12



INORGANIC ANALYSIS REPORT

Client: Wasatch Environmental
Project ID: Gunnison Remediation / 1241-026A

Contact: Les Pennington

AMERICAN
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ANALYTICAL
LABORATORIES

Lab Sample ID: L82664-03D
Field Sample ID: MW-1
Collected: 2/28/2008 1:00:00 PM
Received: 2/29/2008

DISSOLVED METALS

463 West 3600 South
Salt Lake City, Utah
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Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Results
Manganese	mg/L	3/3/2008 7:19:00 PM	6010B	0.0050	1.2

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INORGANIC ANALYSIS REPORT

Client: Wasatch Environmental
Project ID: Gunnison Remediation / 1241-026A

Contact: Les Pennington

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Lab Sample ID: L82664-04D
Field Sample ID: MW-7
Collected: 2/28/2008 3:15:00 PM
Received: 2/29/2008

DISSOLVED METALS

463 West 3600 South
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Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Results
Manganese	mg/L	3/3/2008 7:23:00 PM	6010B	0.0050	0.13

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Jose Rocha
QA Officer

Report Date: 3/13/2008 Page 5 of 12

All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.



INORGANIC ANALYSIS REPORT

Client: Wasatch Environmental
Project ID: Gunnison Remediation / 1241-026A

Contact: Les Pennington

AMERICAN
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LABORATORIES

Lab Sample ID: L82664-05D
Field Sample ID: MW-5
Collected: 2/28/2008 4:45:00 PM
Received: 2/29/2008

DISSOLVED METALS

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Results
Manganese	mg/L	3/3/2008 7:35:00 PM	6010B	0.0050	L6

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Laboratory Director

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QA Officer

Report Date: 3/13/2008 Page 6 of 12



INORGANIC ANALYSIS REPORT

Client: Wasatch Environmental
Project ID: Gunnison Remediation / 1241-026A

Contact: Les Pennington

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Lab Sample ID: L82664-01
Field Sample ID: MW-9
Collected: 2/28/2008 9:30:00 AM
Received: 2/29/2008

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result
Alkalinity,(As CaCO3)	mg/L	3/3/2008 7:00:00 AM	2320B	20	470
Carbon Dioxide	mg/L	3/7/2008	4500CO2D	0.10	8.7
Chloride	mg/L	2/29/2008 11:27:47 PM	300.0	10	360
Iron, Ferrous	mg/L	3/3/2008 7:00:00 PM	3500FE	0.10	< 0.10 H
Nitrate (as N)	mg/L	2/29/2008 4:32:00 PM	353.2	0.10	15
Sulfate	mg/L	2/29/2008 11:27:47 PM	300.0	75	340
Sulfide	mg/L	3/3/2008 6:20:08 AM	4500(S2-)B	5.0	< 5.0
Total Organic Carbon	mg/L	3/4/2008 9:08:00 AM	5310B	1.0	4.0

H - Sample was received outside of holding time.

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INORGANIC ANALYSIS REPORT

Client: Wasatch Environmental
Project ID: Gunnison Remediation / I241-026A

Contact: Les Pennington

AMERICAN
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LABORATORIES

Lab Sample ID: L82664-02
Field Sample ID: MW-12
Collected: 2/28/2008 11:20:00 AM
Received: 2/29/2008

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Salt Lake City, Utah
84115

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Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result
Alkalinity,(As CaCO3)	mg/L	3/3/2008 7:00:00 AM	2320B	20	540
Carbon Dioxide	mg/L	3/7/2008	4500CO2D	0.10	30
Chloride	mg/L	3/3/2008 10:12:26 PM	300.0	10	300
Iron, Ferrous	mg/L	3/3/2008 7:00:00 PM	3500FE	0.10	< 0.10 H
Nitrate (as N)	mg/L	2/29/2008 4:32:00 PM	353.2	0.10	16
Sulfate	mg/L	3/1/2008 1:00:49 AM	300.0	15	340
Sulfide	mg/L	3/3/2008 6:20:00 AM	4500(S2-)B	5.0	< 5.0 *
Total Organic Carbon	mg/L	3/4/2008 9:08:00 AM	5310B	1.0	3.2

* Sample required additional preservative upon receipt.

H - Sample was received outside of holding time.

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer



INORGANIC ANALYSIS REPORT

Client: Wasatch Environmental
Project ID: Gunnison Remediation / 1241-026A

Contact: Les Pennington

AMERICAN
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ANALYTICAL
LABORATORIES

Lab Sample ID: L82664-03
Field Sample ID: MW-1
Collected: 2/28/2008 1:00:00 PM
Received: 2/29/2008

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Salt Lake City, Utah
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Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result
Alkalinity,(As CaCO3)	mg/L	3/3/2008 7:00:00 AM	2320B	20	630
Carbon Dioxide	mg/L	3/7/2008	4500CO2D	0.10	29
Chloride	mg/L	3/3/2008 10:35:41 PM	300.0	10	320
Iron, Ferrous	mg/L	3/3/2008 7:00:00 PM	3500FE	0.10	< 0.10 H
Nitrate (as N)	mg/L	2/29/2008 4:32:00 PM	353.2	0.010	0.054
Sulfate	mg/L	3/1/2008 1:24:06 AM	300.0	15	360
Sulfide	mg/L	3/3/2008 6:20:00 AM	4500(S2-)B	5.0	< 5.0
Total Organic Carbon	mg/L	3/4/2008 9:08:00 AM	5310B	1.0	4.2

H - Sample was received outside of holding time.

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer



INORGANIC ANALYSIS REPORT

Client: Wasatch Environmental
Project ID: Gunnison Remediation / 1241-026A

Contact: Les Pennington

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Lab Sample ID: L82664-04
Field Sample ID: MW-7
Collected: 2/28/2008 3:15:00 PM
Received: 2/29/2008

	Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result
463 West 3600 South Salt Lake City, Utah 84115 (801) 263-8686 Toll Free (888) 263-8686 Fax (801) 263-8687 -mail: awal@awal-labs.com	Alkalinity,(As CaCO3)	mg/L	3/3/2008 7:00:00 AM	2320B	40	630
	Carbon Dioxide	mg/L	3/7/2008	4500CO2D	0.10	28
	Chloride	mg/L	3/3/2008 10:58:55 PM	300.0	10	340
	Iron, Ferrous	mg/L	3/3/2008 7:00:00 PM	3500FE	0.10	< 0.10 H
	Nitrate (as N)	mg/L	2/29/2008 4:32:00 PM	353.2	0.10	3.6
	Sulfate	mg/L	3/1/2008 1:47:22 AM	300.0	15	360
	Sulfide	mg/L	3/3/2008 6:20:00 AM	4500(S2-)B	5.0	< 5.0
	Total Organic Carbon	mg/L	3/4/2008 9:08:00 AM	5310B	1.0	6.8

H - Sample was received outside of holding time.

Kyle F. Gross
Laboratory Director

Jose Rocla
QA Officer



INORGANIC ANALYSIS REPORT

Client: Wasatch Environmental
Project ID: Gunnison Remediation / 1241-026A

Contact: Les Pennington

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Lab Sample ID: L82664-05
Field Sample ID: MW-5
Collected: 2/28/2008 4:45:00 PM
Received: 2/29/2008

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Salt Lake City, Utah
84115

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result
Alkalinity,(As CaCO3)	mg/L	3/3/2008 7:00:00 AM	2320B	40	610
Carbon Dioxide	mg/L	3/7/2008	4500CO2D	0.10	IS
Chloride	mg/L	3/1/2008 11:22:10 PM	300.0	10	390
Iron, Ferrous	mg/L	3/3/2008 7:00:00 PM	3500FE	0.10	< 0.10 IH
Nitrate (as N)	mg/L	2/29/2003 4:32:00 PM	353.2	0.010	< 0.010
Sulfate	mg/L	3/1/2003 2:10:39 AM	300.0	15	340
Sulfide	mg/L	3/3/2008 6:20:00 AM	4500(S2-)B	5.0	< 5.0
Total Organic Carbon	mg/L	3/4/2008 9:08:00 AM	5310B	1.0	5.0

H - Sample was received outside of holding time.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer



INORGANIC ANALYSIS REPORT

Client: Wasatch Environmental
Project ID: Gunnison Remediation / 1241-026A

Contact: Les Pennington

AMERICAN
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ANALYTICAL
LABORATORIES

Lab Sample ID: L82664-06
Field Sample ID: WS-1
Collected: 2/28/2008 7:15:00 PM
Received: 2/29/2008

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Salt Lake City, Utah
84115

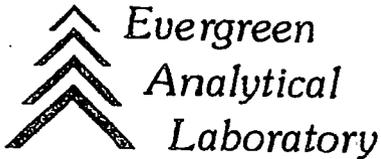
Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result
Alkalinity,(As CaCO ₃)	mg/L	3/3/2008 7:00:00 AM	2320B	40	720
Carbon Dioxide	mg/L	3/7/2008	4500CO2D	0.10	11
Chloride	mg/L	3/1/2003 2:33:55 AM	300.0	5.0	240
Iron, Ferrous	mg/L	3/3/2008 7:00:00 PM	3500FE	0.10	< 0.10 H
Nitrate (as N)	mg/L	2/29/2008 4:32:00 PM	353.2	0.010	0.025
Sulfate	mg/L	3/1/2008 2:33:55 AM	300.0	38	100
Sulfide	mg/L	3/3/2008 6:20:00 AM	4500(S2-)B	5.0	< 5.0
Total Organic Carbon	mg/L	3/4/2008 9:08:00 AM	5310B	1.0	27

H - Sample was received outside of holding time.

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

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March 18, 2008

Elona Hayward
American West Analytical Laboratories
463 West 3600 South
Salt Lake City, UT 84115

Lab Work Order: 08-1450
Client Project ID: Gunnison Rem/1241-026A

Dear Elona Hayward:

Enclosed are the analytical results for the samples shown in the Laboratory Work Order Summary. The invoice is included with this report or has been mailed to another party as indicated on the chain of custody.

The enclosed data for testing performed at Evergreen Analytical Laboratory (EAL) have been reviewed for quality assurance. A case narrative is included to describe any anomalies associated with the samples or data.

EAL will dispose of all samples one month from the date of this letter. If you want samples returned, please advise us by mail or fax as soon as possible.

A copy of this project report and supporting data will be retained for a period of five years unless we are otherwise advised by you. A document retrieval charge will apply.

Thank you for using the services of Evergreen Analytical. If you have any questions concerning the analytical data, please contact me. Please direct other questions to Client Services.

Sincerely,


Carl Smits / Kaprie Hollman
Technical Director of Chemical Analysis

WORK ORDER Summary**Evergreen Analytical, Inc.****08-1450**

Rpt To: Elona Hayward

American West Analytical Laboratories

463 West 3600 South

Salt Lake City, UT 84115

(801) 263-8686

Fax To: Elona Hayward

EX: (801) 263-8687

Email To: elona@awal-labs.com

Email To: rcbekah@awal-labs.com

3/18/2008 5:56:01 PM

Client Project ID: Gunnison Rem/1241-026A PO 82664

QC Level: Level 1

Comments

Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Test Code	Test Name	Hold	MS	Date Due	Hold Time
08-1450-01A	MW-9	Water	2/29/08 0000	3/06/08	MEEP_W*	RSK175M: MEE	<input type="checkbox"/>	<input type="checkbox"/>	3/20/08	3/14/08
08-1450-02A	MW-12	Water	2/29/08 0000	3/06/08	MEEP_W*	RSK175M: MEE	<input type="checkbox"/>	<input type="checkbox"/>	3/20/08	3/14/08
08-1450-03A	MW-1	Water	2/29/08 0000	3/06/08	MEEP_W*	RSK175M: MEE	<input type="checkbox"/>	<input type="checkbox"/>	3/20/08	3/14/08
08-1450-04A	MW-7	Water	2/29/08 0000	3/06/08	MEEP_W*	RSK175M: MEE	<input type="checkbox"/>	<input type="checkbox"/>	3/20/08	3/14/08
08-1450-05A	MW-5	Water	2/29/08 0000	3/06/08	MEEP_W*	RSK175M: MEE	<input type="checkbox"/>	<input type="checkbox"/>	3/20/08	3/14/08
08-1450-06A	WS-1	Water	2/29/08 0000	3/06/08	MEEP_W*	RSK175M: MEE	<input type="checkbox"/>	<input type="checkbox"/>	3/20/08	3/14/08

Definitions: * - Test Code has a Select List

American West Analytical Laboratories

Chain of Custody

Lab Sample Set # _____

Client: American West Analytical Laboratories
 Address: 463 W. 3600 S.
 Salt Lake City, UT 84115

Contact: Elona Hayward
 Phone: (801) 263-8686
 Fax: (801) 263-8687

Project Name: **Gunnison Remediation / 1241-026A**
 PO#: **82664**

Email: elona@awal-labs.com
rebekah@awal-labs.com

QC Level:
 Turn Around Time
Standard

Sample ID:	Date Sampled	Time	# of Containers	Sample Matrix	Methane	Ethene	Ethane	Comments
1 MW-9	2-29			aq	X	X	X	01
2 MW-12					X	X	X	02
3 MW-1					X	X	X	03
4 MW-7					X	X	X	04
5 MW-5					X	X	X	05
6 WB-1					X	X	X	06
7								
8								
9								
10								
11								
12								
13								
14								
15								

WO# 1241-026A OF# 1-4
 C/S (O) 1/1/08 C/S (I) 1/15/08
 Seals Present Y Intact Y
 Pres Y Hd Sp Y Loc Y
 Temp (C) 3.0 Container 3.0 By HW

4 Received Broken/Leaking (Improperly Sealed)
 Y

5 Properly Preserved
 N

6 Received Within Holding Times
 N

COC Tape Was:
 1 Present on Outer Package
 N NA
 2 Unbroken on Outer Package
 N NA
 3 Present on Sample
 Y N NA
 4 Unbroken on Sample
 Y N NA

Discrepancies Between Sample Labels and COC Record?
 Y

Special Instructions: Include project name and PO# on final report and invoice. Email results to both Elona and Rebekah.

Relinquished by: Signature <i>Elona Hayward</i>	Date: 2-4-08	Received by: Signature <i>U.P.S.</i>	Date:
Print Name: Elona Hayward	Time: 1045	Print Name:	Time:
Relinquished by: Signature <i>Rebekah Winkler</i>	Date:	Received by: Signature <i>Rebekah Winkler</i>	Date: 2/6/08
Print Name:	Time:	Print Name:	Time: 1045

Evergreen Analytical, Inc.

Date: 18-Mar-08

Client Project ID: Gunnison Remediation/1241-026A

Lab Order: 08-1450

CASE NARRATIVE

SAMPLE RECEIVING

Custody seals were present and intact.

The temperature of the sample(s) upon arrival was 3.0 °C.

Sample(s) were received in good condition, in the proper container, and within holding times.

VOC sample(s) were marked as preserved on the bottle labels.

VOC sample(s) were received with no headspace present. JD

QUALITY ASSURANCE (QA)

Analyses performed on samples in this work order by EAL meet the requirements of the EAL Quality Assurance Program unless otherwise explained. Analyses of RCRA samples meet the requirements of NELAC and Utah Rule R444-14 unless otherwise explained. CMS

CLIENT SERVICES

There are no anomalies to report. JB

GAS CHROMATOGRAPHY

Method MEEP_W: There are no anomalies to report. MS

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID: MW-9	Lab Work Order: 08-1450
Client Project ID: Gunnison Remediation/1241-026A	Lab Sample ID: 08-1450-01A
Date Collected: 2/29/08	Sample Matrix: Water
Date Received: 3/6/08	Lab File ID: GAS0312036
Date Prepared: 3/12/08	Method Blank: GB031208
Date Analyzed: 3/12/08	Prep Factor: 1.000
Percent Moisture: NA	Dilution Factor: 1.00

Method: RSKSOP175M RSKSOP-175M HEADSPACE

Prep Method: RSKSOP175M

Analytes	CAS Number	Result	Units: mg/L LQL
Ethane	74-84-0	U	0.0016
Ethene	74-85-1	U	0.0024
Methane	74-82-8	0.0051	0.00080

Analyst

Approved

Qualifiers: See the case narrative for a discussion

- B - Analyte detected in the Method Blank, value not subtracted from result
- E - Extrapolated value, Value exceeds calibration range
- H - Prep or Analytical holding time exceeded
- S - Spike Recovery outside acceptance limits
- X - See case narrative
- * - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

Qualifiers: U - Analyte not detected at or above the reporting limit
J - Estimated value below the LQL

Definitions: NA - Not Applicable
LQL - Lower Quantitation Limit
MDL - Method Detection Limit
Surr - Surrogate Standard

Print Date: 3/13/03

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID: MW-12	Lab Work Order: 08-1450
Client Project ID: Gunnison Remediation/1241-026A	Lab Sample ID: 08-1450-02A
Date Collected: 2/29/08	Sample Matrix: Water
Date Received: 3/6/08	Lab File ID: GAS0312037
Date Prepared: 3/12/08	Method Blank: GB031208
Date Analyzed: 3/12/08	Prep Factor: 1.000
Percent Moisture: NA	Dilution Factor: 1.00

Method: RSKSOP175M		RSKSOP-175M HEADSPACE	
Prep Method: RSKSOP175M			Units: mg/L
Analytes	CAS Number	Result	LQL
Ethane	74-84-0	U	0.0016
Ethene	74-85-1	U	0.0024
Methane	74-82-8	0.0056	0.00080



Analyst



Approved

Qualifiers: See the case narrative for a discussion
 B - Analyte detected in the Method Blank, value not subtracted from result
 E - Extrapolated value. Value exceeds calibration range
 H - Prep or Analytical holding time exceeded
 S - Spike Recovery outside acceptance limits
 X - See case narrative
 * - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

Qualifiers: U - Analyte not detected at or above the reporting limit
 J - Estimated value below the LQL
Definitions: NA - Not Applicable
 LQL - Lower Quantitation Limit
 MDL - Method Detection Limit
 Surr - Surrogate Standard

Print Date: 3/13/08

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862

(303) 425-6021

Client Sample ID: MW-1
 Client Project ID: Gunnison Remediation/1241-026A
 Date Collected: 2/29/08
 Date Received: 3/6/08
 Date Prepared: 3/12/08
 Date Analyzed: 3/12/08
 Percent Moisture NA

Lab Work Order 08-1450
 Lab Sample ID: 08-1450-03A
 Sample Matrix: Water
 Lab File ID: GAS0312024
 Method Blank: GB031208
 Prep Factor: 1.000
 Dilution Factor: 1.00

Method: RSKSOP175M

RSKSOP-175M HEADSPACE

Prep Method: RSKSOP175M

Analytes	CAS Number	Result	Units: mg/L LQL
Ethane	74-84-0	U	0.0016
Ethene	74-85-1	U	0.0024
Methane	74-82-8	0.00090	0.00080


 Analyst


 Approved

Qualifiers: See the case narrative for a discussion

- B - Analyte detected in the Method Blank, value not subtracted from result
- E - Extrapolated value. Value exceeds calibration range
- H - Prep or Analytical holding time exceeded
- S - Spike Recovery outside acceptance limits
- X - See case narrative
- * - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

Qualifiers: U - Analyte not detected at or above the reporting limit

J - Estimated value below the LQL

- Definitions: NA - Not Applicable
- LQL - Lower Quantitation Limit
- MDL - Method Detection Limit
- Surr - Surrogate Standard

Print Date: 3/13/08

007

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID: MW-7
Client Project ID: Gunnison Remediation/1241-026A
Date Collected: 2/29/08
Date Received: 3/6/08
Date Prepared: 3/12/08
Date Analyzed: 3/12/08
Percent Moisture NA

Lab Work Order 08-1450
Lab Sample ID: 08-1450-04A
Sample Matrix: Water
Lab File ID: GAS0312025
Method Blank: GB031208
Prep Factor: 1.000
Dilution Factor: 1.00

Method: RSKSOP175M

RSKSOP-175M HEADSPACE

Prep Method: RSKSOP175M

Analytes	CAS Number	Result	Units: mg/L LQL
Ethane	74-84-0	U	0.0016
Ethene	74-85-1	U	0.0024
Methane	74-82-8	U	0.00080

Analyst

Approved

Qualifiers: See the case narrative for a discussion

- B - Analyte detected in the Method Blank, value not subtracted from result
- E - Extrapolated value. Value exceeds calibration range
- H - Prep or Analytical holding time exceeded
- S - Spike Recovery outside acceptance limits
- X - See case narrative
- * - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

Qualifiers: U - Analyte not detected at or above the reporting limit
J - Estimated value below the LQL

Definitions: NA - Not Applicable
LQL - Lower Quantitation Limit
MDL - Method Detection Limit
Surr - Surrogate Standard

Print Date: 3/13/08

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID: MW-5	Lab Work Order: 08-1450
Client Project ID: Gunnison Remediation/1241-026A	Lab Sample ID: 08-1450-05A
Date Collected: 2/29/08	Sample Matrix: Water
Date Received: 3/6/08	Lab File ID: GAS0312029
Date Prepared: 3/12/08	Method Blank: GB031208
Date Analyzed: 3/12/08	Prep Factor: 1.000
Percent Moisture: NA	Dilution Factor: 1.00

Method: RSKSOP175M		RSKSOP-175M HEADSPACE	
Prep Method: RSKSOP175M			Units: mg/L
Analytes	CAS Number	Result	LQL
Ethane	74-84-0	U	0.0016
Ethene	74-85-1	U	0.0024
Methane	74-82-8	0.0012	0.00080



Analyst



Approved

Qualifiers: See file case narrative for a discussion
 B - Analyte detected in the Method Blank, value not subtracted from result
 E - Extrapolated value. Value exceeds calibration range
 H - Prep or Analytical holding time exceeded
 S - Spike Recovery outside acceptance limits
 X - See case narrative
 * - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL

Qualifiers: U - Analyte not detected at or above the reporting limit
 J - Estimated value below the LQL
Definitions: NA - Not Applicable
 LQL - Lower Quantitation Limit
 MDL - Method Detection Limit
 Surr - Surrogate Standard

Print Date: 3/13/08

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID: WS-1	Lab Work Order: 08-1450
Client Project ID: Gunnison Remediation/1241-026A	Lab Sample ID: 08-1450-06A
Date Collected: 2/29/08	Sample Matrix: Water
Date Received: 3/6/08	Lab File ID: GAS0312038
Date Prepared: 3/12/08	Method Blank: GB031208
Date Analyzed: 3/12/08	Prep Factor: 1.000
Percent Moisture: NA	Dilution Factor: 1.00

Method: RSKSOP175M		RSKSOP-175M HEADSPACE	
Prep Method: RSKSOP175M			Units: mg/L
Analytes	CAS Number	Result	LQL
Ethane	74-84-0	U	0.0016
Ethene	74-85-1	U	0.0024
Methane	74-82-8	0.0052	0.00080



Analyst



Approved

Qualifiers: See the case narrative for a discussion
 B - Analyte detected in the Method Blank, value not subtracted from result
 E - Extrapolated value. Value exceeds calibration range
 H - Prep or Analytical holding times exceeded
 S - Spike Recovery outside acceptance limits
 X - See case narrative
 * - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

Qualifiers: U - Analyte not detected at or above the reporting limit
 J - Estimated value below the LQL
Definitions: NA - Not Applicable
 LQL - Lower Quantitation Limit
 MDL - Method Detection Limit
 Surt - Surrogate Standard

QUALITY ASSURANCE REPORTS

METHOD BLANKS (MB, MEB)

LABORATORY CONTROL SPIKES (LCS)

MATRIX SPIKES (MS/MSD)*

DUPLICATES (DUP)*

*Only included if requested or if performed on this client's samples.

Work Order: 08-1450

Client Project ID: Gunnison Remediation/1241-026A

ANALYTICAL QC SUMMARY REPORT

BatchID: GAS031208

Sample ID: GB03120a	SampType: MBLK	TestCode: MEEP_W	Run ID: FID4_080312A	Prep Date: 3/12/08	Units: mg/L						
Batch ID: GAS03120a	TestNo: RSKSOP175	FileID: GAS031200S	Analysis Date: 3/12/08	SeqNo: 665424							
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethane	U	0.0016									
Ethene	U	0.0024									
Methane	U	0.00080									

Sample ID: LCS031208	SampType: LCS	TestCode: MEEP_W	Run ID: FID4_080312A	Prep Date: 3/12/08	Units: mg/L						
Batch ID: GAS03120S	TestNo: RSKSOP17S	FileID: GAS0312006	Analysis Date: 3/12/08	SeqNo: 66S425							
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethane	1.084	0.016	0.9548	0	114	70	130	0	0		
Ethene	1.212	0.024	0.8913	0	136	70	140	0	0		
Methane	0.5711	0.0080	0.5094	0	112	70	130	0	0		

Sample ID: LCSD031208	SampType: LCSD	TestCode: MEEP_W	Run ID: FID4_080312A	Prep Date: 3/12/08	Units: mg/L						
Batch ID: GAS031208	TestNo: RSKSOP175	FileID: GAS0312007	Analysis Date: 3/12/08	SeqNo: 665426							
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethane	1.097	0.016	0.9548	0	115	70	130	1.084	1.14	30	
Ethene	1.218	0.024	0.8913	0	137	70	140	1.212	0.493	30	
Methane	0.5712	0.0080	0.5094	0	112	70	130	0.5711	0.00367	30	

Sample ID: 08-1450-04AMS	SampType: MS	TestCode: MEEP_W	Run ID: FID4_080312A	Prep Date: 3/12/08	Units: mg/L						
Client ID: MW-7	Batch ID: GAS031208	TestNo: RSKSOP175	FileID: GAS0312035	Analysis Date: 3/12/08	SeqNo: 665413						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethane	0.82	0.016	0.9548	0	85.9	70	130	0	0		
Ethene	0.9117	0.024	0.8913	0	102	70	140	0	0		
Methane	0.4337	0.0080	0.5094	0	85.1	70	130	0	0		

Qualifiers:
 U - Not detected at or above the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside acceptance limits
 R - Extrapolated value, value exceeds calibration range.

R - RPD outside acceptance limits
 B - Analyte detected in the associated Method Blank
 H - Prep or analytical holding time exceeded
 X - See case narrative

Work Order: 08-1450

Client Project ID: Gunnison Remediation/1241-026A

ANALYTICAL QC SUMMARY REPORT

BatchID: GAS031208

Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethane	0.8253	0.016	0.9548	0	86.4	70	130	0.82	0.646	30	
Ethene	0.9204	0.024	0.8913	0	103	70	140	0.9117	0.953	30	
Methane	0.437	0.0080	0.5094	0	85.8	70	130	0.4337	0.753	30	

Qualifiers:

U - Not detected at or above the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside acceptance limits
 E - Extrapolated value, value exceeds calibration range.

R - RPD outside acceptance limits
 B - Analyte detected in the associated Method Blank
 H - Prep or analytical holding time exceeded
 X - See case narrative

WORK ORDER Summary

03-Mar-08

Client ID: WAS580

QC Level: QC 1

Work Order L82664

Project: Gunnison Remediation / 1241-026A

Location:

Contact: Les Pennington

Comments: PA Rush; QC Level: QC 1 / Footnote report, sample #2 metals @ 5, sulfide one @ 9 the other @ 7 (174) - Samples for Methane sent to Evergreen.

Sample ID	Client Sample ID	Collection Date	Date Received	Date Due	Matrix	Test Code	Storage	
L82664-03A	MW-1	2/28/2008 1:00:00 PM	2/29/2008	3/11/2008	Aqueous	FERROUS-W	feb 29 wc	1
				3/11/2008		NO3-W	feb 29 wc	1
L82664-03B				3/11/2008		S2-W-4500S2-B	feb 29 s2	2
L82664-03C				3/11/2008		TOC-W-SM5310B	feb 29 toe	3
L82664-03O				3/11/2008	Aqueous-Dissolved	3005A-Diss	feb 29 metals	1
				3/11/2008		ICP-W-DIS	feb 29 metals	1
L82664-03E				3/11/2008	Aqueous	SHIPPR	Evergreen	3
				3/11/2008		SUB-METHANE	Evergreen	3
L82664-03F							hold - feb 29	1
L82664-04A	MW-7	2/28/2008 3:15:00 PM		3/11/2008		2320B-ALK-W	feb 29 wc	1
				3/11/2008		300.0-W	feb 29 wc	1
				3/11/2008		CO2	feb 29 wo	1
				3/11/2008		FERROUS-W	feb 29 wc	1
				3/11/2008		NO3-W	feb 29 wc	1
L82664-04B				3/11/2008		S2-W-4500S2-B	feb 29 s2	2
L82664-04C				3/11/2008		TOC-W-SM5310B	feb 29 toe	3
L82664-04D				3/11/2008	Aqueous-Dissolved	3005A-Diss	feb 29 metals	1
				3/11/2008		ICP-W-DIS	feb 29 metals	1
L82664-04E				3/11/2008	Aqueous	SHIPPR	Evergreen	3
				3/11/2008		SUB-METHANE	Evergreen	3
L82664-04F							hold - feb 29	1
L82664-05A	MW-5	2/28/2008 4:45:00 PM		3/11/2008		2320B-ALK-W	feb 29 wc	1
				3/11/2008		300.0-W	feb 29 wc	1
				3/11/2008		CO2	feb 29 wc	1
				3/11/2008		FERROUS-W	feb 29 wc	1
				3/11/2008		NO3-W	feb 29 wc	1
L82664-05B				3/11/2008		S2-W-4500S2-B	feb 29 s2	2
L82664-05C				3/11/2008		TOC-W-SM5310B	feb 29 toe	3

WORK ORDER Summary

03-Mar-08

Work Order L82664

Client ID: WAS580

QC Level: QC 1

Project: Gunnison Remediation / 1241-026A

Location:

Contact: Les Pennington

Comments: PA Rush; QC Level: QC 1 / Footnote report, sample #2 metals @ 5, sulfide one @ 9 the other @ 7 (174) - Samples for Methane sent to Evergreen.

Sample ID	Client Sample ID	Collection Date	Date Received	Date Due	Matrix	Test Code	Storage	
L82664-05D	MW-5	2/28/2008 4:45:00 PM	2/29/2008	3/11/2008	Aqueous-Dissolved	3005A-Diss	feb 29 metals	1
				3/11/2008		ICP-W-DIS	feb 29 metals	1
L82664-05E				3/11/2008	Aqueous	SHIPPR	Evergreen	3
				3/11/2008		SUB-METHANE	Evergreen	3
L82664-05F							hold - feb 29	1
L82664-06A	WS-1	2/28/2008 7:15:00 PM		3/11/2008		S2-W-4500S2-B	feb 29 s2	2
L82664-06B				3/11/2008		TOC-W-SM5310B	feb 29 too	3
L82664-06C				3/11/2008		SHIPPR	Evergreen	3
				3/11/2008		SUB-METHANE	Evergreen	3
L82664-06D				3/11/2008		2320B-ALK-W	feb 29 wc	1
				3/11/2008		300.0-W	feb 29 wc	1
				3/11/2008		CO2	feb 29 wc	1
				3/11/2008		FERROUS-W	feb 29 wc	1
				3/11/2008		NO3-W	feb 29 wc	1

Monitored Natural Attenuation/Biodegradation Parameters

Parameter	Method	Sample Collection	Preservation	Price	Note
Dissolved Oxygen	Troll				
Oxidation-Reduction Potential	Troll				
pH	Troll				
Temperature	Troll				
Nitrate ✓	353.2	1 Liter Plastic	None	\$13	48 hour holding time
Sulfate ✓	300			\$13	
Sulfide ✓	300			\$13	
Chloride ✓	300			\$13	
Total Organic Carbon ✓	5310B	3 x 40 ml VOA	Phosphoric acid	\$23	
Methane; ethane, ethene	8015	1 x 40 ml VOA	HCL	\$100	
Soluble ferrous iron ✓	6010B	500 ml Plastic	Nitric Acid	\$9	
Soluble manganese ✓	6010B			\$9	
Alkalinity ✓	2320B				
Carbon Dioxide ✓	SM4500CO2D	250 ml Plastic	None	\$19	
Soil fraction of organic carbon	160.4	1 x 4 oz glass	None	\$20	Soil sample, Total Volatile Solids
Bug plate count	9215C	?	?	\$150	

Don't do
for petalium
re lemmas

Sample Set: 82 COC 4

Preservation Check Sheet

Sample Set Extension and pH

Bottle Type	Preservative	All OK	Except 2	Except												
Ammonia	pH < 2 H ₂ SO ₄															
COD	pH < 2 H ₂ SO ₄															
Cyanide	pH > 12 NaOH															
Metals	pH < 2 HNO ₃		5													
NO ₂ & NO ₃	pH < 2 H ₂ SO ₄															
Nutrients	pH < 2 H ₂ SO ₄															
O & G	pH < 2 HCL															
Phenols	pH < 2 H ₂ SO ₄															
Sulfide	pH > 9 NaOH, Zn Acetate		7/5													
TKN	pH < 2 H ₂ SO ₄															
TOC	pH < 2 H ₃ PO ₄															
TOX	pH < 2 H ₂ SO ₄															
TPO ₄	pH < 2 H ₂ SO ₄															
TPH	pH < 2 HCL															

- Procedure:
- 1) Pour a small amount of sample in the sample lid
 - 2) Pour sample from Lid gently over wide range pH paper
 - 3) Do Not dip the pH paper in the sample bottle or lid
 - 4) If sample is not preserved properly list its extension and receiving pH in the appropriate column above
 - 5) Flag COC, notify client if requested
 - 6) Place client conversation on COC
 - 7) Samples may be adjusted

Frequency: All samples requiring preservation



**AMERICAN
WEST
ANALYTICAL
LABORATORIES**

Les Pennington
Wasatch Environmental
2410 West California Avenue
Salt Lake City, UT 84104-

TEL: (801) 972-8400

FAX: (801) 972-8459

463 West 3600 South
Salt Lake City, Utah
84115

RE: Gunnison Remediation / 1241-026A

Lab Set ID: 0904072

Dear Les Pennington:

American West Analytical Laboratories received 6 sample(s) on 4/3/2009 for the analyses presented in the following report.

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687
mail: awal@awal-labs.com

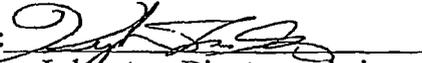
All analyses were performed in accordance to The NELAC Institute protocols unless noted otherwise. American West Analytical Laboratories is certified by The NELAC Institute in the following states: Utah, Colorado, Idaho, and Texas. Certification document is available upon request. If you have any questions or concerns regarding this report please feel free to call.

Kyle F. Gross
Laboratory Director

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit.

Jose Rocha
QA Officer

Thank You

Approved by: 
Laboratory Director or designee

Report Date: 4/14/2009 Page 1 of 13



INORGANIC ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Wasatch Environmental
Project: Gunnison Remediation / 1241-026A
Lab Sample ID: 0904072-001
Client Sample ID: MW-1
Collection Date: 4/3/2009 10:25:00 AM
Received Date: 4/3/2009

Contact: Les Pennington

DISSOLVED METALS

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Manganese	mg/L	4/8/2009 7:13:19 PM	E200.8	0.0012	0.0027	

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Email: awal@awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Report Date: 4/14/2009 Page 2 of 13

All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.



INORGANIC ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Wasatch Environmental
Project: Gunnison Remediation / 1241-026A
Lab Sample ID: 0904072-002
Client Sample ID: MW-5
Collection Date: 4/3/2009 10:45:00 AM
Received Date: 4/3/2009

Contact: Les Pennington

DISSOLVED METALS

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qnai
Manganese	mg/L	4/8/2009 7:18:18 PM	E200.8	0.0012	0.88	

463 West 3600 South
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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Report Date: 4/14/2009 Page 3 of 13

All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAP protocols. Pertinent sampling information is located on the attached COC. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.



INORGANIC ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Wasatch Environmental
Project: Gunnison Remediation / 1241-026A
Lab Sample ID: 0904072-003
Client Sample ID: MW-6
Collection Date: 4/3/2009 9:10:00 AM
Received Date: 4/3/2009

Contact: Les Pennington

DISSOLVED METALS

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Manganese	mg/L	4/8/2009 7:23:16 PM	E200.8	0.0012	< 0.0012	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Report Date: 4/14/2009 Page 4 of 13

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INORGANIC ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Wasatch Environmental
Project: Gunnison Remediation / 1241-026A
Lab Sample ID: 0904072-004
Client Sample ID: MW-7
Collection Date: 4/3/2009 9:20:00 AM
Received Date: 4/3/2009

Contact: Les Pennington

DISSOLVED METALS

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Manganese	mg/L	4/8/2009 7:28:15 PM	E200.8	0.0012	< 0.0012	

463 West 3600 South
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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Report Date: 4/14/2009 Page 5 of 13

All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAP protocols. Pertinent sampling information is located on the attached COC. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.



INORGANIC ANALYTICAL REPORT

**AMERICAN
WEST
ANALYTICAL
LABORATORIES**

Client: Wasatch Environmental
Project: Gunnison Remediation / 1241-026A
Lab Sample ID: 0904072-005
Client Sample ID: MW-9
Collection Date: 4/3/2009 9:00:00 AM
Received Date: 4/3/2009

Contact: Les Pennington

463 West 3600 South
Salt Lake City, Utah
84115

DISSOLVED METALS

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Manganese	mg/L	4/8/2009 7:33:13 PM	E200.8	0.0012	<0.0012	

(801) 263-8686

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Email: awal@awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Report Date: 4/14/2009 Page 6 of 13

All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only in contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.



INORGANIC ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Wasatch Environmental
Project: Gunnison Remediation / 1241-026A
Lab Sample ID: 0904072-006
Client Sample ID: MW-12
Collection Date: 4/3/2009 10:10:00 AM
Received Date: 4/3/2009

Contact: Les Pennington

DISSOLVED METALS

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Manganese	mg/L	4/8/2009 7:38:12 PM	E200.8	0.0012	< 0.0012	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Report Date: 4/14/2009 Page 7 of 13

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INORGANIC ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Wasatch Environmental
Project: Gunnison Remediation / 1241-026A
Lab Sample ID: 0904072-001
Client Sample ID: MW-1
Collection Date: 4/3/2009 10:25:00 AM
Received Date: 4/3/2009

Contact: Les Pennington

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Alkalinity (as CaCO3)	mg/L	4/6/2009 8:15:00 AM	A2320B	40	520	
Carbon dioxide	mg/L	4/14/2009	A4500-CO2-D	0.10	33	
Iron, Ferrous	mg/L	4/3/2009 8:40:00 PM	HACH 8146	0.10	< 0.10	
Nitrate (as N)	mg/L	4/3/2009 4:50:22 PM	E353.2	0.10	5.1	
Sulfate	mg/L	4/13/2009 3:51:47 PM	E300.0	75	320	

* - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.

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E-mail: awal@awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

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AMERICAN
WEST
ANALYTICAL
LABORATORIES

INORGANIC ANALYTICAL REPORT

Client: Wasatch Environmental
Project: Gunnison Remediation / 1241-026A
Lab Sample ID: 0904072-002
Client Sample ID: MW-5
Collection Date: 4/3/2009 10:45:00 AM
Received Date: 4/3/2009

Contact: Les Pennington

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Alkalinity (as CaCO ₃)	mg/L	4/6/2009 8:15:00 AM	A2320B	40	540	
Carbon dioxide	mg/L	4/14/2009	A4500-CO2-D	0.10	61	
Iron, Ferrous	mg/L	4/3/2009 8:40:00 PM	HACH 8146	0.10	< 0.10	
Nitrate (as N)	mg/L	4/3/2009 4:35:47 PM	E353.2	0.010	0.35	
Sulfate	mg/L	4/13/2009 4:39:22 PM	E300.0	75	370	

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Report Date: 4/14/2009 Page 9 of 13

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INORGANIC ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Wasatch Environmental
Project: Gunnison Remediation / 1241-026A
Lab Sample ID: 0904072-003
Client Sample ID: MW-6
Collection Date: 4/3/2009 9:10:00 AM
Received Date: 4/3/2009

Contact: Les Pennington

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Alkalinity (as CaCO ₃)	mg/L	4/6/2009 8:15:00 AM	A2320B	40	490	
Carbon dioxide	mg/L	4/14/2009	A4500-CO2-D	0.10	32	
Iron, Ferrous	mg/L	4/3/2009 8:40:00 PM	HACH 8146	0.10	<0.10	
Nitrate (as N)	mg/L	4/3/2009 4:54:27 PM	E353.2	0.10	4.4	
Sulfate	mg/L	4/13/2009 9:39:22 PM	E300.0	75	310	

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Report Date: 4/14/2009 Page 10 of 13

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INORGANIC ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Wasatch Environmental
Project: Gunnison Remediation / 1241-026A
Lab Sample ID: 0904072-004
Client Sample ID: MW-7
Collection Date: 4/3/2009 9:20:00 AM
Received Date: 4/3/2009

Contact: Les Pemington

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Alkalinity (as CaCO ₃)	mg/L	4/6/2009 8:15:00 AM	A2320B	40	520	
Carbon dioxide	mg/L	4/14/2009	A4500-CO2-D	0.10	36	
Iron, Ferrous	mg/L	4/3/2009 8:40:00 PM	HACH 8146	0.10	< 0.10	
Nitrate (as N)	mg/L	4/3/2009 4:55:49 PM	B353.2	0.10	3.6	
Sulfate	mg/L	4/13/2009 10:02:41 PM	E300.0	75	320	

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Report Date: 4/14/2009 Page 11 of 13

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INORGANIC ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Wasatch Environmental
Project: Gunnison Remediation / 1241-026A
Lab Sample ID: 0904072-005
Client Sample ID: MW-9
Collection Date: 4/3/2009 9:00:00 AM
Received Date: 4/3/2009

Contact: Les Pennington

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Alkalinity (as CaCO ₃)	mg/L	4/6/2009 8:15:00 AM	A2320B	40	450	
Carbon dioxide	mg/L	4/14/2009	A4500-CO2-D	0.10	18	
Iron, Ferrous	mg/L	4/3/2009 8:40:00 PM	HACH 8146	0.10	<0.10	
Nitrate (as N)	mg/L	4/3/2009 4:57:11 PM	E353.2	1.0	13	
Sulfate	mg/L	4/13/2009 10:25:58 PM	E300.0	75	290	

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Report Date: 4/14/2009 Page 12 of 13

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INORGANIC ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Wasatch Environmental
Project: Gunnison Remediation / 1241-026A
Lab Sample ID: 0904072-006
Client Sample ID: MW-12
Collection Date: 4/3/2009 10:10:00 AM
Received Date: 4/3/2009

Contact: Les Pennington

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Alkalinity (as CaCO ₃)	mg/L	4/6/2009 8:15:00 AM	A2320B	40	450	
Carbon dioxide	mg/L	4/14/2009	A4500-CO2-D	0.10	34	
Iron, Ferrous	mg/L	4/3/2009 8:40:00 PM	HACH 8146	0.10	< 0.10	
Nitrate (as N)	mg/L	4/3/2009 4:58:33 PM	E353.2	1.0	8.7	
Sulfate	mg/L	4/13/2009 10:49:16 PM	E300.0	75	230	

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American West Analytical Laboratories

WORK ORDER Summary

06-Apr-09

Work Order: 0904072

WO Type: Standard

Client ID: WAS580

Contact: Les Pennington

Project: Gunnison Remediation / 1241-026A

QC Level: LEVEL I

Reviewed by Elona Hayward on 4/3/2009

Comments: PA Client. Methane sent to Evergreen Lab.

H/KSP

DB

Sample ID	Client Sample ID	Date Collected	Date Received	Date Due	Matrix	Test Code	Hid	MS	SEL	Sub	Storage
0904072-001A	MW-1	4/3/2009 10:25:00 AM	4/3/2009	4/14/2009	Aqueous	300.0-W	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		ALK-W-2320B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		CO2-4500CO2D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - wo
				4/14/2009		NO3-W-353.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		PH-4500H+B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
0904072-001B				4/14/2009	Aqueous-Dissolved	200.8-DIS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - dis metals
				4/14/2009		200.8-DIS-PR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - dis metals
0904072-001C				4/14/2009	Aqueous	FE2-W-HACH814	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - ferrous
0904072-001D				4/14/2009		OUTSIDE LAB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Evergreen
0904072-001E							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - hold
0904072-002A	MW-5	4/3/2009 10:45:00 AM		4/14/2009		300.0-W	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		ALK-W-2320B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wo
				4/14/2009		CO2-4500CO2D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - wo
				4/14/2009		NO3-W-353.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - wo
				4/14/2009		PH-4500H+B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
0904072-002B				4/14/2009	Aqueous-Dissolved	200.S-DIS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - dis metals
				4/14/2009		200.8-DIS-PR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - dis metals
0904072-002C				4/14/2009	Aqueous	FE2-W-HACH814	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - ferrous
0904072-002D				4/14/2009		OUTSIDE LAB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Evergreen
0904072-002E							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 2 - hold
0904072-003A	MW-6	4/3/2009 9:10:00 AM		4/14/2009		300.0-W	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		ALK-W-2320B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		CO2-4500CO2D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - wo
				4/14/2009		NO3-W-353.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		PH-4500H+B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc

WORK ORDER Summary

06-Apr-09

Client ID: WAS580
 Contact: Les Pennington
 Project: Gunnison Remediation / 1241-026A
 Comments: PA Client. Methane sent to Evergreen Lab.

Work Order: 0904072
 WO Type: Standard

QC Level: LEVEL I

Reviewed by Elona Hayward on 4/3/2009

Sample ID	Client Sample ID	Date Collected	Date Received	Date Due	Matrix	Test Code	Hid	MS	SEL	Sub	Storage
0904072-003B	MW-6	4/3/2009 9:10:00 AM	4/3/2009	4/14/2009	Aqueous-Dissolved	200.8-DIS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - dis metals
				4/14/2009		200.8-DIS-PR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - dis metals
0904072-003C				4/14/2009	Aqueous	FE2-W-HACH814	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - ferrous
0904072-003D				4/14/2009		OUTSIDE LAB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Evergreen
0904072-003E							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - hold
0904072-004A	MW-7	4/3/2009 9:20:00 AM		4/14/2009		300.0-W	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wo
				4/14/2009		ALK-W-2320B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		CO2-4500CO2D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		NO3-W-353.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		PH-4500H+B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
0904072-004B				4/14/2009	Aqueous-Dissolved	200.8-DIS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - dis metals
				4/14/2009		200.8-DIS-PR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - dis metals
0904072-004C				4/14/2009	Aqueous	FE2-W-HACH814	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - ferrous
0904072-004O				4/14/2009		OUTSIDE LAB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Evergreen
0904072-004E							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - hold
0904072-005A	MW-9	4/3/2009 9:00:00 AM		4/14/2009		300.0-W	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		ALK-W-2320B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		CO2-4500CO2D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		NO3-W-353.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		PH-4500H+B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
0904072-005B				4/14/2009	Aqueous-Dissolved	200.8-DIS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - dis metals
				4/14/2009		200.8-DIS-PR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - dis metals
0904072-005C				4/14/2009	Aqueous	FE2-W-HACH814	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - ferrous
0904072-005D				4/14/2009		OUTSIDE LAB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Evergreen
0904072-005E							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - hold
0904072-006A	MW-12	4/3/2009 10:10:00 AM		4/14/2009		300.0-W	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc

WORK ORDER Summary

06-Apr-09

Client ID: WAS580
 Contact: Les Pennington
 Project: Gunnison Remediation / 1241-026A
 Comments: PA Client. Methane sent to Evergreen Lab.

Work Order: 0904072
 WO Type: Standard

QC Level: LEVEL I

Reviewed by Elona Hayward on 4/3/2009

Sample ID	Client Sample ID	Date Collected	Date Received	Date Due	Matrix	Test Code	Hid	MS	SEL	Sub	Storage
0904072-006A	MW-12	4/3/2009 10:10:00 AM	4/3/2009	4/14/2009	Aqueous	ALK-W-2320B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wo
				4/14/2009		CO2-4500CO2D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		NO3-W-353.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
				4/14/2009		PH-4500H+B	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - wc
0904072-006B				4/14/2009	Aqueous-Dissolved	200.8-DIS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	apr 3 - dis metals
				4/14/2009		200.8-DIS-PR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - dis metals
0904072-006C				4/14/2009	Aqueous	FE2-W-HACH814	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - ferrous
0904072-006D				4/14/2009		OUTSIDE LAB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Evergreen
0904072-006E							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	apr 3 - hold

Monitored Natural Attenuation/Biodegradation Parameters for Petroleum Products					
Parameter	Method	Sample Collection	Preservation	Price	Note
Dissolved Oxygen	Troll				
Oxidation-Reduction Potential	Troll				
pH	Troll				
Temperature	Troll				
Nitrate	300			\$13	48 hour holding time
Sulfate	300			\$13	28 day holding time
Alkalinity	310.1	1 Liter Plastic	None	\$19	28 day holding time
Methane	8015	3 x 40 ml VOA	None	\$100	14 day holding time
Soluble ferrous iron	SM3500(FeD)			\$9	Same day holding time
Soluble manganese	200.78*	500 ml Plastic	None	\$9	Same day holding time
Carbon dioxide	SM4500(CO2D)	250 ml Plastic	None	\$19	Same day holding time
Soil fraction of organic carbon	160.4	1 x 4 oz glass	None	\$20	Soil sample, Total Volatile Solids

*per Kyle, client informed 9/24/09

Updated 3/30/09

Preservation Check Sheet

Sample Set Extension and pH

Bottle Type	Preservative	All OK	Except														
Ammonia	pH <2 H ₂ SO ₄																
COD	pH <2 H ₂ SO ₄																
Cyanide	pH >12 NaOH																
Metals	pH <2 HNO ₃	✓															
NO ₂ & NO ₃	pH <2 H ₂ SO ₄																
Nutrients	pH <2 H ₂ SO ₄																
O & G	pH <2 HCL																
Phenols	pH <2 H ₂ SO ₄																
Sulfide	pH > 9NaOH, Zn Acetate																
TKN	pH <2 H ₂ SO ₄																
TOC	pH <2 H ₃ PO ₄																
TOX	pH <2 H ₂ SO ₄																
T PO ₄	pH <2 H ₂ SO ₄																
TPH	pH <2 HCL																

Procedure:

- 1) Pour a small amount of sample in the sample lid
- 2) Pour sample from Lid gently over wide range pH paper
- 3) Do Not dip the pH paper in the sample bottle or lid
- 4) If sample is not preserved properly list its extension and receiving pH in the appropriate column above
- 5) Flag COC, notify client if requested
- 6) Place client conversation on COC
- 7) Samples may be adjusted

Frequency:

All samples requiring preservation

Micropurge Log

Well MW-5

Date 9/26/08

Site Gunnison Rem. Sampler TJS

DTW (ft-TOC) 12.24

Depth of pump tubing beneath static water level (ft) 6 ft

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
11:02:00	0.40	180	60.81	2350	6.39
11:02:30	0.39	178	60.80	2350	6.41
11:03:00	0.38	175	60.77	2350	6.42
11:03:30	0.38	174	60.78	2349	6.44
11:04:00	0.38	172	60.77	2347	6.45
11:04:30	0.37	171	60.77	2347	6.46
11:05:00	0.37	170	60.77	2347	6.47
11:05:30	0.37	169	60.78	2367	6.67

Total volume purged (gallons) 2.0

Well MW-1

Date 9/26/08

Site Gunnison Rem. Sampler TJS

DTW (ft-TOC) 10.96

Depth of pump tubing beneath static water level (ft) 5

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
13:17:00	1.11	98	56.93	2050	7.01
13:17:30	1.17	98	56.93	2050	7.01
13:18:00	1.23	98	56.93	2050	7.01
13:18:30	1.27	98	56.93	2050	7.01
13:19:00	1.16	97	56.91	2051	7.01
13:19:30	1.11	97	56.90	2049	7.01
13:20:00	1.03	97	56.90	2047	7.01
13:20:30	1.03	97	56.89	2048	7.02
13:21:00	1.06	97	56.87	2047	7.02
13:21:30	1.08	97	56.89	2047	7.02
13:22:00	1.07	97	56.89	2047	7.02
13:22:30	1.04	97	56.88	2047	7.02

Total volume purged (gallons) 2.0

Stabilization parameters: pH 0.1, Cond. 3-5%, Temp. 10%

Micropurge Log

Well MW-7

Date 9-26-08

Site Garrison Res. Sampler TJS

DTW (ft-TOC) 10.62

Depth of pump tubing beneath static water level (ft) 5 ft

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
1:41:00	1.20	103	60.25	2181	6.99
1:41:30	1.11	103	60.21	2179	6.99
1:42:00	1.07	103	60.18	2180	6.99
1:42:30	1.04	103	60.16	2179	6.99
1:43:00	1.02	103	60.16	2179	6.99
1:43:30	0.98	103	60.13	2176	6.99
1:44:00	0.96	103	60.12	2176	6.99
1:44:30	0.94	103	60.12	2176	6.99
1:45:00	0.92	103	60.10	2174	6.99
1:45:30	0.90	103	60.10	2172	6.99
1:46:00	0.89	103	60.09	2172	6.99
1:46:30	0.89	103	60.10	2170	6.99

Total volume purged (gallons) 2.0

Well MW-6

Date 9-26-08

Site Garrison R. Sampler TJS

DTW (ft-TOC) 10.64

Depth of pump tubing beneath static water level (ft) 5 ft

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
14:15:00	1.65	74	59.38	2141	7.18
14:15:30	1.66	74	59.38	2141	7.18
14:16:00	2.37	74	59.38	2140	7.17
14:16:30	1.96	74	59.38	2139	7.17
14:17:00	1.77	74	59.37	2139	7.17
14:17:30	1.55	75	59.37	2139	7.17
14:18:00	1.59	75	59.36	2138	7.17
14:18:30	1.48	75	59.37	2139	7.17
14:19:00	1.55	75	59.36	2138	7.17
14:19:30	1.64	75	59.36	2138	7.17
14:20:00	1.56	75	59.36	2138	7.17
14:20:30	1.54	75	59.36	2138	7.17

Total volume purged (gallons) 2.0

Stabilization parameters: pH 0.1, Cond: 3-5%, Temp. 10%

Micropurge Log

Well mw-9

Date 3-4-09

Site 1241-026A
Gunnison

Sampler TJS

DTW (ft-TOC) _____

Depth of pump tubing beneath static water level (ft) _____

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
	10.6				
	10.5				
	10.4				
	10.4	120	10.5	0.27	7.67

Total volume purged (gallons) 8

Well mw-14

Date 3-4-09

Site 1241-026A
Gunnison

Sampler TJS

DTW (ft-TOC) _____

Depth of pump tubing beneath static water level (ft) _____

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
	5.7				
	5.6				
	5.5				
	5.4				
	5.3				
	5.3	71	11.9	0.25	7.39

Total volume purged (gallons) 8

Stabilization parameters: pH 0.1, Cond. 3-5%, Temp. 10%

Micropurge Log

Well mw-17

Date 3-4-09

Site 1241-026A
Gunnison

Sampler TJS

DTW (ft-TOC) _____

Depth of pump tubing beneath static water level (ft) _____

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
	1.3				
	1.2				
	1.1				
	↓				
	1.1	-27	10.2	0.28	7.25

1.8

Total volume purged (gallons) 8

Well MW-19

Date 3-4-09

Site 1241-026A
Gunnison

Sampler TJS

DTW (ft-TOC) _____

Depth of pump tubing beneath static water level (ft) _____

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
	6.7				
	6.6				
	6.5				
	6.4				
	6.3				
	↓				
	6.3	144	12.0	0.21	7.71

1.4

Total volume purged (gallons) 8

Stabilization parameters: pH 0.1, Cond. 3-5%, Temp. 10%

Micropurge Log

Well MW-20

Date 3-4-09

Site 1241-026A
Gunnison

Sampler TJS

DTW (ft-TOC) _____

Depth of pump tubing beneath static water level (ft) _____

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
	0.9				
	0.6				
	↓				
	0.6	73	13.2	0.30	7.20

TDS

1.9

Total volume purged (gallons) 8

Well MW-21

Date 3-4-09

Site 1241-026A
Gunnison

Sampler TJS

DTW (ft-TOC) _____

Depth of pump tubing beneath static water level (ft) _____

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
	6.2				
	6.1				
	6.0				
	5.9				
	5.8				
	↓				
	5.8	93	12.0	0.30	7.37

1.9

Total volume purged (gallons) 8

Stabilization parameters: pH 0.1, Cond. 3-5%, Temp. 10%

Micropurge Log

Well MW-22

Date 3-4-09

Site 1241-026A
Gunnison

Sampler TJS

DTW (ft-TOC) _____

Depth of pump tubing beneath static water level (ft) _____

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
	1.4		12.5		
	1.1		12.6		
	1.0		↓		
	0.9				
	0.8				
	0.7				
	0.6				
	↓		↓		
	0.6	105	12.6	0.27	7.43

TDS

1.7

Total volume purged (gallons) 8

Well MW-23

Date 3-4-09

Site 1241-026A
Gunnison

Sampler TJS

DTW (ft-TOC) _____

Depth of pump tubing beneath static water level (ft) _____

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH	
	1.0	-48	12.4		7.30	
	0.8		12.5		7.29	
	0.7		↓		7.26	
	0.6				7.24	
	↓		↓		↓	
	0.6	-56	12.5	0.27	7.24	

TDS

1.7

Total volume purged (gallons) 8

Stabilization parameters: pH 0.1, Cond. 3-5%, Temp. 10%

Micropurge Log

Well mw-24

Date 3-4-09

Site ^{1241-026A}
Gunnison

Sampler TJS

DTW (ft-TOC) _____

Depth of pump tubing beneath static water level (ft) _____

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
	3.6				
	3.5				
	3.5	104	13.1	0.28	7.26

TDS

1.8

Total volume purged (gallons) 8

Well mw-25

Date 3-4-09

Site ^{1241-026A}
Gunnison

Sampler TJS

DTW (ft-TOC) _____

Depth of pump tubing beneath static water level (ft) _____

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
	1.0				
	0.9				
	0.8				
	0.8	-76	14.3	0.26	7.23

TDS

1.7

Total volume purged (gallons) 8

Stabilization parameters: pH 0.1, Cond. 3-5%, Temp. 10%

Micropurge Log

Weil MW-28

Date 3-4-09

Site 1241-026A
Gunnison

Sampler TJS

DTW (ft-TOC) _____

Depth of pump tubing beneath static water level (ft) _____

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
	7.0				
	5.6	-17	13.7	0.26	7.40

TDS

1.7

Total volume purged (gallons) 8

Weil MW-29

Date 3-4-09

Site 1241-026A
Gunnison

Sampler TJS

OTW (ft-TOC) _____

Depth of pump tubing beneath static water level (ft) _____

Time	DO mg/L	ORP mv	Temp (C degrees)	Conductivity	pH
	2.4	-107	13.8		7.26
	2.3	-111	13.9		
	1.3	-112			
	1.2				
	1.1				
	0.9				
	0.9	-112	13.9	0.26	7.23

TDS

1.7

Total volume purged (gallons) 8

Stabilization parameters: pH 0.1, Cond. 3-5%, Temp. 10%

