

**APPENDIX D**

**PRESCO 2004 BASELINE WATER QUALITY DATA**

December 21, 2004

Report to:  
James Hix  
Cordilleran Compliance Services  
5550 Marshall Street  
Arvada, CO 80002

Bill to:  
James Hix  
Cordilleran Compliance Services  
5550 Marshall Street  
Arvada, CO

Project ID: EO4243  
ACZ Project ID: L48763

James Hix:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on November 12, 2004. This project has been assigned to ACZ's project number, L48763. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L48763. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after January 21, 2005. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years. Please notify your Project Manager if you have other needs.

If you have any questions, please contact your Project Manager or Customer Service Representative.

21/Dec/04

Tony Antalek, Project Manager, has reviewed and approved this report in its entirety.



Cordilleran Compliance Services

December 20, 2004

Project ID: EO4243

ACZ Project ID: L48763

#### Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 13 ground water samples from Cordilleran Compliance Services on November 12, 2004. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L48763. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

#### Holding Times

All analyses except those qualified with an ACZ 'H' flag were performed within EPA recommended holding times. Samples received for Nitrate / Nitrite analysis were either received past method holding time or too close to method holding time expiration.

#### Sample Analysis

These samples were analyzed for inorganic and organic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The extended qualifier reports may contain footnotes qualifying specific elements due to QC failures. In addition the following has been noted with this specific project:

1. The Sulfide Reactivity analyses were qualified with the ACZ 'N1' flag as the recovery on the laboratory fortified blank was low, which is typical for this method.

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: JLS-W1

ACZ Sample ID: **L48763-01**  
Date Sampled: 11/09/04 10:08  
Date Received: 11/12/04  
Sample Matrix: Ground Water

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	31.5			mg/L	0.2	1	12/08/04 20:38	wfg
Iron, total	M200.7 ICP	0.04	B		mg/L	0.01	0.05	12/10/04 15:36	wfg
Magnesium, total	M200.7 ICP	32.5			mg/L	0.2	1	12/08/04 20:38	wfg
Manganese, total	M200.7 ICP		U		mg/L	0.005	0.03	12/08/04 20:38	wfg
Potassium, total	M200.7 ICP	1.5			mg/L	0.3	1	12/08/04 20:38	wfg
Selenium, total	M200.7 ICP		U		mg/L	0.04	0.2	12/08/04 20:38	wfg
Sodium, total	M200.7 ICP	84.1			mg/L	0.3	1	12/08/04 20:38	wfg

#### Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/07/04 13:12	ak

#### Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		328			mg/L	2	10	11/18/04 0:00	nlm
Carbonate as CaCO3			U		mg/L	2	10	11/18/04 0:00	nlm
Hydroxide as CaCO3			U		mg/L	2	10	11/18/04 0:00	nlm
Total Alkalinity		328			mg/L	2	10	11/18/04 0:00	nlm
Hardness as CaCO3 (total)	SM2340B - Calculation	212			mg/L	1	7	12/20/04 11:06	calc
Lab Filtration	SM 3030 B							11/12/04 14:27	nlm
Lab Filtration & Acidification	SM 3030 B							11/19/04 12:06	ak
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2	1.15			mg/L	0.02	0.1	12/20/04 11:06	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1.15	H	*	mg/L	0.02	0.1	11/12/04 20:16	jjr
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction		UH	*	mg/L	0.01	0.05	11/12/04 20:16	jjr
Nitrogen, ammonia	M350.1 - Automated Phenate		U	*	mg/L	0.05	0.5	11/30/04 12:29	ccp
Phosphate	Calculation based on Ortho Phosphorus	0.06	B		mg/L	0.03	0.15	12/20/04 11:06	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	0.02	BH	*	mg/L	0.01	0.05	11/12/04 21:39	jjr
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	400			mg/L	10	20	11/16/04 16:36	jah
Sodium Absorption Ratio in Water	USGS - 11738-78		U			0.03	0.15	12/20/04 11:06	calc
Sulfate	M375.3 - Gravimetric	40	B		mg/L	10	50	12/07/04 11:30	ktd
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030		UH	*	mg/Kg	0.3	3	12/18/04 14:08	jah

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: USGC-BC1

ACZ Sample ID: **L48763-02**  
Date Sampled: 11/09/04 11:39  
Date Received: 11/12/04  
Sample Matrix: Ground Water

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	24.7			mg/L	0.2	1	12/08/04 20:42	wfg
Iron, total	M200.7 ICP	0.11			mg/L	0.01	0.05	12/10/04 15:41	wfg
Magnesium, total	M200.7 ICP	7.4			mg/L	0.2	1	12/08/04 20:42	wfg
Manganese, total	M200.7 ICP	0.005	B		mg/L	0.005	0.03	12/08/04 20:42	wfg
Potassium, total	M200.7 ICP	1.4			mg/L	0.3	1	12/08/04 20:42	wfg
Selenium, total	M200.7 ICP		U		mg/L	0.04	0.2	12/08/04 20:42	wfg
Sodium, total	M200.7 ICP	9.8			mg/L	0.3	1	12/08/04 20:42	wfg

#### Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/07/04 13:14	ak

#### Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		94			mg/L	2	10	11/18/04 0:00	nlm
Carbonate as CaCO3			U		mg/L	2	10	11/18/04 0:00	nlm
Hydroxide as CaCO3			U		mg/L	2	10	11/18/04 0:00	nlm
Total Alkalinity		94			mg/L	2	10	11/18/04 0:00	nlm
Hardness as CaCO3 (total)	SM2340B - Calculation	92			mg/L	1	7	12/20/04 11:07	calc
Lab Filtration	SM 3030 B							11/12/04 14:29	nlm
Lab Filtration & Acidification	SM 3030 B							11/19/04 12:12	ak
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2	0.03	B		mg/L	0.02	0.1	12/20/04 11:07	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	0.03	BH	*	mg/L	0.02	0.1	11/12/04 20:19	jjr
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction		UH	*	mg/L	0.01	0.05	11/12/04 20:19	jjr
Nitrogen, ammonia	M350.1 - Automated Phenate		U	*	mg/L	0.05	0.5	11/30/04 12:30	ccp
Phosphate	Calculation based on Ortho Phosphorus	0.06	B		mg/L	0.03	0.15	12/20/04 11:07	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	0.02	BH	*	mg/L	0.01	0.05	11/12/04 21:40	jjr
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	90			mg/L	10	20	11/16/04 16:39	jah
Sodium Absorption Ratio in Water	USGS - I1738-78		U			0.03	0.15	12/20/04 11:07	calc
Sulfate	M375.3 - Gravimetric	10	B		mg/L	10	50	12/07/04 11:30	ktd
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030		UH	*	mg/Kg	0.3	3	12/18/04 14:17	jah

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: CW-W2

ACZ Sample ID: **L48763-03**  
Date Sampled: 11/09/04 13:06  
Date Received: 11/12/04  
Sample Matrix: Ground Water

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	61.8			mg/L	0.2	1	12/08/04 20:54	wfg
Iron, total	M200.7 ICP	0.02	B		mg/L	0.01	0.05	12/10/04 15:53	wfg
Magnesium, total	M200.7 ICP	27.9			mg/L	0.2	1	12/08/04 20:54	wfg
Manganese, total	M200.7 ICP		U		mg/L	0.005	0.03	12/08/04 20:54	wfg
Potassium, total	M200.7 ICP	0.7	B		mg/L	0.3	1	12/08/04 20:54	wfg
Selenium, total	M200.7 ICP		U		mg/L	0.04	0.2	12/08/04 20:54	wfg
Sodium, total	M200.7 ICP	50.0			mg/L	0.3	1	12/08/04 20:54	wfg

#### Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/07/04 13:16	ak

#### Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		285			mg/L	2	10	11/18/04 0:00	nfm
Carbonate as CaCO3			U		mg/L	2	10	11/18/04 0:00	nfm
Hydroxide as CaCO3			U		mg/L	2	10	11/18/04 0:00	nfm
Total Alkalinity		285			mg/L	2	10	11/18/04 0:00	nfm
Hardness as CaCO3 (total)	SM2340B - Calculation	269			mg/L	1	7	12/20/04 11:07	calc
Lab Filtration	SM 3030 B							11/12/04 14:31	nfm
Lab Filtration & Acidification	SM 3030 B							11/19/04 12:18	ak
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2	0.66			mg/L	0.02	0.1	12/20/04 11:07	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	0.66	H	*	mg/L	0.02	0.1	11/12/04 20:22	jjr
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction		UH	*	mg/L	0.01	0.05	11/12/04 20:22	jjr
Nitrogen, ammonia	M350.1 - Automated Phenate		U	*	mg/L	0.05	0.5	11/30/04 12:31	ccp
Phosphate	Calculation based on Ortho Phosphorus	0.06	B		mg/L	0.03	0.15	12/20/04 11:07	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	0.02	BH	*	mg/L	0.01	0.05	11/12/04 21:40	jjr
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	380			mg/L	10	20	11/16/04 16:41	jah
Sodium Absorption Ratio in Water	USGS - I1738-78		U			0.03	0.15	12/20/04 11:07	calc
Sulfate	M375.3 - Gravimetric	60			mg/L	10	50	12/07/04 11:30	ktd
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030		UH	*	mg/Kg	0.3	3	12/18/04 14:27	jah

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: HC-S2

ACZ Sample ID: **L48763-04**  
Date Sampled: 11/09/04 13:50  
Date Received: 11/12/04  
Sample Matrix: Ground Water

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	36.9			mg/L	0.2	1	12/08/04 20:58	wfg
Iron, total	M200.7 ICP	0.13			mg/L	0.01	0.05	12/10/04 15:57	wfg
Magnesium, total	M200.7 ICP	9.5			mg/L	0.2	1	12/08/04 20:58	wfg
Manganese, total	M200.7 ICP		U		mg/L	0.005	0.03	12/08/04 20:58	wfg
Potassium, total	M200.7 ICP	1.2			mg/L	0.3	1	12/08/04 20:58	wfg
Selenium, total	M200.7 ICP		U		mg/L	0.04	0.2	12/08/04 20:58	wfg
Sodium, total	M200.7 ICP	18.4			mg/L	0.3	1	12/08/04 20:58	wfg

#### Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/07/04 13:19	ak

#### Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		142			mg/L	2	10	11/18/04 0:00	n/m
Carbonate as CaCO3			U		mg/L	2	10	11/18/04 0:00	n/m
Hydroxide as CaCO3			U		mg/L	2	10	11/18/04 0:00	n/m
Total Alkalinity		142			mg/L	2	10	11/18/04 0:00	n/m
Hardness as CaCO3 (total)	SM2340B - Calculation	131			mg/L	1	7	12/20/04 11:07	calc
Lab Filtration	SM 3030 B							11/12/04 14:33	n/m
Lab Filtration & Acidification	SM 3030 B							11/19/04 12:25	ak
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2	0.14			mg/L	0.02	0.1	12/20/04 11:07	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	0.14	H	*	mg/L	0.02	0.1	11/12/04 20:23	jjr
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction		UH	*	mg/L	0.01	0.05	11/12/04 20:23	jjr
Nitrogen, ammonia	M350.1 - Automated Phenate		U	*	mg/L	0.05	0.5	11/30/04 12:32	ccp
Phosphate	Calculation based on Ortho Phosphorus	0.12	B		mg/L	0.03	0.15	12/20/04 11:07	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	0.04	BH	*	mg/L	0.01	0.05	11/12/04 21:41	jjr
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	190			mg/L	10	20	11/16/04 16:44	jah
Sodium Absorption Ratio in Water	USGS - 11738-78		U			0.03	0.15	12/20/04 11:07	calc
Sulfate	M375.3 - Gravimetric	20	B		mg/L	10	50	12/07/04 11:30	ktd
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030		UH	*	mg/Kg	0.3	3	12/18/04 14:36	jah

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: LJS-W3

ACZ Sample ID: **L48763-05**  
Date Sampled: 11/09/04 15:13  
Date Received: 11/12/04  
Sample Matrix: Ground Water

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	30.7			mg/L	0.2	1	12/08/04 21:02	wfg
Iron, total	M200.7 ICP	0.06			mg/L	0.01	0.05	12/10/04 16:01	wfg
Magnesium, total	M200.7 ICP	49.3			mg/L	0.2	1	12/08/04 21:02	wfg
Manganese, total	M200.7 ICP		U		mg/L	0.005	0.03	12/08/04 21:02	wfg
Potassium, total	M200.7 ICP	8.0			mg/L	0.3	1	12/08/04 21:02	wfg
Selenium, total	M200.7 ICP		U		mg/L	0.04	0.2	12/08/04 21:02	wfg
Sodium, total	M200.7 ICP	42.8			mg/L	0.3	1	12/08/04 21:02	wfg

#### Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/07/04 13:21	ak

#### Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		306			mg/L	2	10	11/18/04 0:00	n/m
Carbonate as CaCO3			U		mg/L	2	10	11/18/04 0:00	n/m
Hydroxide as CaCO3			U		mg/L	2	10	11/18/04 0:00	n/m
Total Alkalinity		306			mg/L	2	10	11/18/04 0:00	n/m
Hardness as CaCO3 (total)	SM2340B - Calculation	279			mg/L	1	7	12/20/04 11:07	calc
Lab Filtration	SM 3030 B							11/12/04 14:35	n/m
Lab Filtration & Acidification	SM 3030 B							11/19/04 12:31	ak
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2	0.72			mg/L	0.02	0.1	12/20/04 11:07	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	0.72	H	*	mg/L	0.02	0.1	11/12/04 20:24	jjr
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction		UH	*	mg/L	0.01	0.05	11/12/04 20:24	jjr
Nitrogen, ammonia	M350.1 - Automated Phenate		U	*	mg/L	0.05	0.5	11/30/04 12:33	ccp
Phosphate	Calculation based on Ortho Phosphorus	0.12	B		mg/L	0.03	0.15	12/20/04 11:07	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	0.04	BH	*	mg/L	0.01	0.05	11/12/04 21:43	jjr
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	360			mg/L	10	20	11/16/04 16:47	jah
Sodium Absorption Ratio in Water	USGS - I1738-78		U			0.03	0.15	12/20/04 11:07	calc
Sulfate	M375.3 - Gravimetric	30	B		mg/L	10	50	12/07/04 11:30	ktd
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030		UH	*	mg/Kg	0.3	3	12/18/04 14:46	jah

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: GUS-SP1

ACZ Sample ID: **L48763-06**  
Date Sampled: 11/10/04 08:15  
Date Received: 11/12/04  
Sample Matrix: Ground Water

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	32.8			mg/L	0.2	1	12/08/04 21:06	wfg
Iron, total	M200.7 ICP		U		mg/L	0.01	0.05	12/10/04 16:05	wfg
Magnesium, total	M200.7 ICP	30.1			mg/L	0.2	1	12/08/04 21:06	wfg
Manganese, total	M200.7 ICP		U		mg/L	0.005	0.03	12/08/04 21:06	wfg
Potassium, total	M200.7 ICP	2.1			mg/L	0.3	1	12/08/04 21:06	wfg
Selenium, total	M200.7 ICP		U		mg/L	0.04	0.2	12/08/04 21:06	wfg
Sodium, total	M200.7 ICP	44.1			mg/L	0.3	1	12/08/04 21:06	wfg

#### Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/07/04 13:24	ak

#### Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		246			mg/L	2	10	11/18/04 0:00	nfm
Carbonate as CaCO3			U		mg/L	2	10	11/18/04 0:00	nfm
Hydroxide as CaCO3			U		mg/L	2	10	11/18/04 0:00	nfm
Total Alkalinity		246			mg/L	2	10	11/18/04 0:00	nfm
Hardness as CaCO3 (total)	SM2340B - Calculation	206			mg/L	1	7	12/20/04 11:07	calc
Lab Filtration	SM 3030 B							11/12/04 14:37	nfm
Lab Filtration & Acidification	SM 3030 B							11/19/04 12:37	ak
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2	1.15			mg/L	0.02	0.1	12/20/04 11:07	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1.15	H	*	mg/L	0.02	0.1	11/12/04 20:25	jjr
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction		UH	*	mg/L	0.01	0.05	11/12/04 20:25	jjr
Nitrogen, ammonia	M350.1 - Automated Phenate		U	*	mg/L	0.05	0.5	11/30/04 12:34	ccp
Phosphate	Calculation based on Ortho Phosphorus	0.06	B		mg/L	0.03	0.15	12/20/04 11:07	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	0.02	BH	*	mg/L	0.01	0.05	11/12/04 21:45	jjr
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	310			mg/L	10	20	11/17/04 18:23	ktd
Sodium Absorption Ratio in Water	USGS - I1738-78		U			0.03	0.15	12/20/04 11:07	calc
Sulfate	M375.3 - Gravimetric	20	B		mg/L	10	50	12/07/04 11:30	ktd
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030		UH	*	mg/Kg	0.3	3	12/18/04 14:55	jah

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: RS-W4

ACZ Sample ID: **L48763-07**  
Date Sampled: 11/10/04 10:50  
Date Received: 11/12/04  
Sample Matrix: Ground Water

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	31.2			mg/L	0.2	1	12/08/04 21:10	wfg
Iron, total	M200.7 ICP	0.06			mg/L	0.01	0.05	12/10/04 16:09	wfg
Magnesium, total	M200.7 ICP	12.9			mg/L	0.2	1	12/08/04 21:10	wfg
Manganese, total	M200.7 ICP	0.007	B		mg/L	0.005	0.03	12/08/04 21:10	wfg
Potassium, total	M200.7 ICP	4.0			mg/L	0.3	1	12/08/04 21:10	wfg
Selenium, total	M200.7 ICP		U		mg/L	0.04	0.2	12/08/04 21:10	wfg
Sodium, total	M200.7 ICP	14.0			mg/L	0.3	1	12/08/04 21:10	wfg

#### Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/07/04 13:26	ak

#### Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		152			mg/L	2	10	11/18/04 0:00	nfm
Carbonate as CaCO3			U		mg/L	2	10	11/18/04 0:00	nfm
Hydroxide as CaCO3			U		mg/L	2	10	11/18/04 0:00	nfm
Total Alkalinity		152			mg/L	2	10	11/18/04 0:00	nfm
Hardness as CaCO3 (total)	SM2340B - Calculation	131			mg/L	1	7	12/20/04 11:08	calc
Lab Filtration	SM 3030 B							11/12/04 14:40	nfm
Lab Filtration & Acidification	SM 3030 B							11/19/04 12:44	ak
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2	0.02	B		mg/L	0.02	0.1	12/20/04 11:08	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	0.02	BH	*	mg/L	0.02	0.1	11/12/04 20:26	jjr
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction		UH	*	mg/L	0.01	0.05	11/12/04 20:26	jjr
Nitrogen, ammonia	M350.1 - Automated Phenate	0.05	B	*	mg/L	0.05	0.5	11/30/04 12:37	ccp
Phosphate	Calculation based on Ortho Phosphorus	0.24			mg/L	0.03	0.15	12/20/04 11:08	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	0.08	H	*	mg/L	0.01	0.05	11/12/04 21:59	jjr
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	180			mg/L	10	20	11/17/04 18:24	ktd
Sodium Absorption Ratio in Water	USGS - I1738-78		U			0.03	0.15	12/20/04 11:08	calc
Sulfate	M375.3 - Gravimetric		U		mg/L	10	50	12/07/04 11:30	ktd
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030		UH	*	mg/Kg	0.3	3	12/18/04 15:24	jah

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: EG-SP2

ACZ Sample ID: **L48763-08**  
Date Sampled: 11/10/04 13:36  
Date Received: 11/12/04  
Sample Matrix: Ground Water

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	63.7			mg/L	0.2	1	12/08/04 21:14	wfg
Iron, total	M200.7 ICP	0.02	B		mg/L	0.01	0.05	12/10/04 16:13	wfg
Magnesium, total	M200.7 ICP	28.8			mg/L	0.2	1	12/08/04 21:14	wfg
Manganese, total	M200.7 ICP		U		mg/L	0.005	0.03	12/08/04 21:14	wfg
Potassium, total	M200.7 ICP	0.5	B		mg/L	0.3	1	12/08/04 21:14	wfg
Selenium, total	M200.7 ICP		U		mg/L	0.04	0.2	12/08/04 21:14	wfg
Sodium, total	M200.7 ICP	56.6			mg/L	0.3	1	12/08/04 21:14	wfg

#### Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/07/04 13:28	ak

#### Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		307			mg/L	2	10	11/18/04 0:00	n/m
Carbonate as CaCO3			U		mg/L	2	10	11/18/04 0:00	n/m
Hydroxide as CaCO3			U		mg/L	2	10	11/18/04 0:00	n/m
Total Alkalinity		307			mg/L	2	10	11/18/04 0:00	n/m
Hardness as CaCO3 (total)	SM2340B - Calculation	278			mg/L	1	7	12/20/04 11:08	calc
Lab Filtration	SM 3030 B							11/12/04 14:42	n/m
Lab Filtration & Acidification	SM 3030 B							11/19/04 12:50	ak
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2	0.15			mg/L	0.02	0.1	12/20/04 11:08	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	0.15	H	*	mg/L	0.02	0.1	11/12/04 20:27	jjr
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction		UH	*	mg/L	0.01	0.05	11/12/04 20:27	jjr
Nitrogen, ammonia	M350.1 - Automated Phenate		U	*	mg/L	0.05	0.5	11/30/04 12:38	ccp
Phosphate	Calculation based on Ortho Phosphorus	0.03	B		mg/L	0.03	0.15	12/20/04 11:08	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	0.01	BH	*	mg/L	0.01	0.05	11/12/04 21:48	jjr
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	430			mg/L	10	20	11/17/04 18:26	ktd
Sodium Absorption Ratio in Water	USGS - I1738-78		U			0.03	0.15	12/20/04 11:08	calc
Sulfate	M375.3 - Gravimetric	70			mg/L	10	50	12/07/04 11:30	ktd
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030		UH	*	mg/Kg	0.3	3	12/18/04 15:34	jah

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: WK-SP3

ACZ Sample ID: **L48763-09**  
Date Sampled: 11/10/04 14:35  
Date Received: 11/12/04  
Sample Matrix: Ground Water

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	58.1			mg/L	0.2	1	12/08/04 21:19	wfg
Iron, total	M200.7 ICP	0.65		*	mg/L	0.01	0.05	12/10/04 0:57	wfg
Magnesium, total	M200.7 ICP	29.0			mg/L	0.2	1	12/08/04 21:19	wfg
Manganese, total	M200.7 ICP		U		mg/L	0.005	0.03	12/08/04 21:19	wfg
Potassium, total	M200.7 ICP	0.6	B		mg/L	0.3	1	12/08/04 21:19	wfg
Selenium, total	M200.7 ICP		U		mg/L	0.04	0.2	12/08/04 21:19	wfg
Sodium, total	M200.7 ICP	47.3			mg/L	0.3	1	12/08/04 21:19	wfg

#### Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/07/04 13:31	ak

#### Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		287			mg/L	2	10	11/18/04 0:00	nfm
Carbonate as CaCO3			U		mg/L	2	10	11/18/04 0:00	nfm
Hydroxide as CaCO3			U		mg/L	2	10	11/18/04 0:00	nfm
Total Alkalinity		287			mg/L	2	10	11/18/04 0:00	nfm
Hardness as CaCO3 (total)	SM2340B - Calculation	264			mg/L	1	7	12/20/04 11:08	calc
Lab Filtration	SM 3030 B							11/12/04 14:44	nfm
Lab Filtration & Acidification	SM 3030 B							11/19/04 12:56	ak
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2	0.25			mg/L	0.02	0.1	12/20/04 11:08	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	0.25	H	*	mg/L	0.02	0.1	11/12/04 20:30	jjr
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction		UH	*	mg/L	0.01	0.05	11/12/04 20:30	jjr
Nitrogen, ammonia	M350.1 - Automated Phenate		U	*	mg/L	0.05	0.5	11/30/04 12:39	ccp
Phosphate	Calculation based on Ortho Phosphorus		U		mg/L	0.03	0.15	12/20/04 11:08	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid		UH	*	mg/L	0.01	0.05	11/12/04 21:49	jjr
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	390			mg/L	10	20	11/17/04 18:27	ktd
Sodium Absorption Ratio in Water	USGS - I1738-78		U			0.03	0.15	12/20/04 11:08	calc
Sulfate	M375.3 - Gravimetric	60			mg/L	10	50	12/07/04 11:30	ktd
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030		UH	*	mg/Kg	0.3	3	12/18/04 15:43	jah

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: LH96-SP4

ACZ Sample ID: **L48763-10**  
Date Sampled: 11/10/04 15:45  
Date Received: 11/12/04  
Sample Matrix: Ground Water

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	70.9			mg/L	0.2	1	12/08/04 21:23	wfg
Iron, total	M200.7 ICP	0.02	B		mg/L	0.01	0.05	12/10/04 16:18	wfg
Magnesium, total	M200.7 ICP	49.5			mg/L	0.2	1	12/08/04 21:23	wfg
Manganese, total	M200.7 ICP		U		mg/L	0.005	0.03	12/08/04 21:23	wfg
Potassium, total	M200.7 ICP	0.9	B		mg/L	0.3	1	12/08/04 21:23	wfg
Selenium, total	M200.7 ICP		U		mg/L	0.04	0.2	12/08/04 21:23	wfg
Sodium, total	M200.7 ICP	57.4			mg/L	0.3	1	12/08/04 21:23	wfg

#### Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/07/04 13:33	ak

#### Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		355			mg/L	2	10	11/18/04 0:00	nfm
Carbonate as CaCO3			U		mg/L	2	10	11/18/04 0:00	nfm
Hydroxide as CaCO3			U		mg/L	2	10	11/18/04 0:00	nfm
Total Alkalinity		355			mg/L	2	10	11/18/04 0:00	nfm
Hardness as CaCO3 (total)	SM2340B - Calculation	381			mg/L	1	7	12/20/04 11:08	calc
Lab Filtration	SM 3030 B							11/12/04 14:46	nfm
Lab Filtration & Acidification	SM 3030 B							11/19/04 13:03	ak
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2	0.38			mg/L	0.02	0.1	12/20/04 11:08	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	0.38	H	*	mg/L	0.02	0.1	11/12/04 20:31	jjr
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction		UH	*	mg/L	0.01	0.05	11/12/04 20:31	jjr
Nitrogen, ammonia	M350.1 - Automated Phenate		U		mg/L	0.05	0.5	11/30/04 12:40	ccp
Phosphate	Calculation based on Ortho Phosphorus		U		mg/L	0.03	0.15	12/20/04 11:08	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid		UH	*	mg/L	0.01	0.05	11/12/04 21:50	jjr
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	520			mg/L	10	20	11/17/04 18:28	ktd
Sodium Absorption Ratio in Water	USGS - I1738-78		U			0.03	0.15	12/20/04 11:08	calc
Sulfate	M375.3 - Gravimetric	120			mg/L	10	50	12/07/04 11:30	ktd
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030		UH	*	mg/Kg	0.3	3	12/18/04 15:53	jah

### Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

### QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LFB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

### QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

### ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
U	Analyte was analyzed for but not detected at the indicated MDL
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
W	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
X	Quality control sample is out of control.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

### Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(5)	EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
(6)	Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

### Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.

Cordilleran Compliance Services

ACZ Project ID: **L48763**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L48763-01	WG181459	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
	WG182161	Nitrogen, ammonia	M350.1 - Automated Phenate	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG181461	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	H3	Sample was received and analyzed past holding time.
	WG183010	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	C4	Confirmatory analysis was past holding time.
Section 7.3 SW-846 (3rd Ed) & M9030			N1	See Case Narrative.	
L48763-02	WG181459	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
	WG182161	Nitrogen, ammonia	M350.1 - Automated Phenate	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG181461	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	H3	Sample was received and analyzed past holding time.
	WG183010	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	C4	Confirmatory analysis was past holding time.
Section 7.3 SW-846 (3rd Ed) & M9030			N1	See Case Narrative.	
L48763-03	WG181459	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
	WG182161	Nitrogen, ammonia	M350.1 - Automated Phenate	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG181461	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	H3	Sample was received and analyzed past holding time.
	WG183010	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	C4	Confirmatory analysis was past holding time.
Section 7.3 SW-846 (3rd Ed) & M9030			N1	See Case Narrative.	
L48763-04	WG181459	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
	WG182161	Nitrogen, ammonia	M350.1 - Automated Phenate	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG181461	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	H3	Sample was received and analyzed past holding time.
	WG183010	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	C4	Confirmatory analysis was past holding time.
Section 7.3 SW-846 (3rd Ed) & M9030			N1	See Case Narrative.	
L48763-05	WG181459	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
	WG182161	Nitrogen, ammonia	M350.1 - Automated Phenate	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG181461	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	H3	Sample was received and analyzed past holding time.
	WG183010	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	C4	Confirmatory analysis was past holding time.
Section 7.3 SW-846 (3rd Ed) & M9030			N1	See Case Narrative.	

Cordilleran Compliance Services

ACZ Project ID: **L48763**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L48763-06	WG181459	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H1	Sample analysis performed past holding time. See Case Narrative.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H1	Sample analysis performed past holding time. See Case Narrative.
	WG182161	Nitrogen, ammonia	M350.1 - Automated Phenate	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG181461	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	H3	Sample was received and analyzed past holding time.
	WG183010	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	C4	Confirmatory analysis was past holding time.
Section 7.3 SW-846 (3rd Ed) & M9030			N1	See Case Narrative.	
L48763-07	WG181459	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H1	Sample analysis performed past holding time. See Case Narrative.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H1	Sample analysis performed past holding time. See Case Narrative.
	WG182161	Nitrogen, ammonia	M350.1 - Automated Phenate	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG181461	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	H3	Sample was received and analyzed past holding time.
	WG183010	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	C4	Confirmatory analysis was past holding time.
Section 7.3 SW-846 (3rd Ed) & M9030			N1	See Case Narrative.	
L48763-08	WG181459	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H1	Sample analysis performed past holding time. See Case Narrative.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H1	Sample analysis performed past holding time. See Case Narrative.
	WG182161	Nitrogen, ammonia	M350.1 - Automated Phenate	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG181461	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	H3	Sample was received and analyzed past holding time.
	WG183010	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	C4	Confirmatory analysis was past holding time.
Section 7.3 SW-846 (3rd Ed) & M9030			N1	See Case Narrative.	
L48763-09	WG182628	Iron, total	M200.7 ICP	B7	Target analyte detected in method blank at or above method reporting limit. Sample value was > 10X the concentration in the method blank.
	WG181459	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H1	Sample analysis performed past holding time. See Case Narrative.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H1	Sample analysis performed past holding time. See Case Narrative.
	WG182161	Nitrogen, ammonia	M350.1 - Automated Phenate	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG181461	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	H3	Sample was received and analyzed past holding time.
WG183010	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	C4	Confirmatory analysis was past holding time.	
		Section 7.3 SW-846 (3rd Ed) & M9030	N1	See Case Narrative.	
L48763-10	WG181459	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H1	Sample analysis performed past holding time. See Case Narrative.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H1	Sample analysis performed past holding time. See Case Narrative.
	WG181461	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	H3	Sample was received and analyzed past holding time.
	WG183010	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	C4	Confirmatory analysis was past holding time.
Section 7.3 SW-846 (3rd Ed) & M9030			N1	See Case Narrative.	

### Cordilleran Compliance Services

Project ID: EO4243  
 Sample ID: JLS-W1  
 Locator:

ACZ Sample ID: **L48763-01**  
 Date Sampled: 11/09/04 10:08  
 Date Received: 11/12/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: *km*  
 Extract Date: 11/18/04 13:21  
 Analysis Date: 11/18/04 13:21  
 Dilution Factor: 1

#### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2	0.3	J	*	ug/L	0.2	0.5
Ethylbenzene	000100-41-4	0.4	J	*	ug/L	0.2	1
m p Xylene	01330 20 7	0.9	J	*	ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U	*	ug/L	0.2	1
o Xylene	00095-47- 6	0.4	J	*	ug/L	0.2	1
Toluene	000108-88-3	0.5	J	*	ug/L	0.2	1

#### Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	95.3		%	83	117

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: JLS-W1  
Locator:

ACZ Sample ID: **L48763-01**  
Date Sampled: 11/09/04 10:08  
Date Received: 11/12/04  
Sample Matrix: Ground Water

### Methane

Analysis Method: **GC/FID**  
Extract Method: **Method**

Analyst: *jj*  
Extract Date: 11/23/04 15:08  
Analysis Date: 11/23/04 15:08  
Dilution Factor: 1

### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U		mg/L	0.002	0.002

**Cordilleran Compliance Services**

Project ID: EO4243  
 Sample ID: USGC-BC1  
 Locator:

ACZ Sample ID: **L48763-02**  
 Date Sampled: 11/09/04 11:39  
 Date Received: 11/12/04  
 Sample Matrix: Ground Water

**BTEX with MTBE**

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: km  
 Extract Date: 11/18/04 15:28  
 Analysis Date: 11/18/04 15:28  
 Dilution Factor: 1

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	*	ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U	*	ug/L	0.2	1
m p Xylene	01330 20 7		U	*	ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U	*	ug/L	0.2	1
o Xylene	00095-47- 6		U	*	ug/L	0.2	1
Toluene	000108-88-3		U	*	ug/L	0.2	1

**Surrogate Recoveries**

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	98.7		%	83	117

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: USGC-BC1  
Locator:

ACZ Sample ID: **L48763-02**  
Date Sampled: 11/09/04 11:39  
Date Received: 11/12/04  
Sample Matrix: Ground Water

### Methane

Analysis Method: **GC/FID**  
Extract Method: **Method**

Analyst: *jj*  
Extract Date: 11/23/04 15:13  
Analysis Date: 11/23/04 15:13  
Dilution Factor: 1

#### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U		mg/L	0.002	0.002

### Cordilleran Compliance Services

Project ID: EO4243  
 Sample ID: CW-W2  
 Locator:

ACZ Sample ID: **L48763-03**  
 Date Sampled: 11/09/04 13:06  
 Date Received: 11/12/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: *km*  
 Extract Date: 11/18/04 16:11  
 Analysis Date: 11/18/04 16:11  
 Dilution Factor: 1

#### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U		ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U		ug/L	0.2	1
m p Xylene	01330 20 7		U		ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U		ug/L	0.2	1
o Xylene	00095-47- 6		U		ug/L	0.2	1
Toluene	000108-88-3		U		ug/L	0.2	1

#### Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	98.7		%	83	117

**Cordilleran Compliance Services**

Project ID: EO4243

Sample ID: CW-W2

Locator:

ACZ Sample ID: **L48763-03**

Date Sampled: 11/09/04 13:06

Date Received: 11/12/04

Sample Matrix: Ground Water

**Methane**Analysis Method: **GC/FID**Extract Method: **Method**Analyst: *jj*

Extract Date: 11/23/04 15:15

Analysis Date: 11/23/04 15:15

Dilution Factor: 1

## Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U		mg/L	0.002	0.002

### Cordilleran Compliance Services

Project ID: EO4243  
 Sample ID: HC-S2  
 Locator:

ACZ Sample ID: **L48763-04**  
 Date Sampled: 11/09/04 13:50  
 Date Received: 11/12/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: *km*  
 Extract Date: 11/18/04 16:53  
 Analysis Date: 11/18/04 16:53  
 Dilution Factor: 1

#### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U		ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U		ug/L	0.2	1
m p Xylene	01330 20 7		U		ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U		ug/L	0.2	1
o Xylene	00095-47- 6		U		ug/L	0.2	1
Toluene	000108-88-3		U		ug/L	0.2	1

#### Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	97		%	83	117

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: HC-S2  
Locator:

ACZ Sample ID: **L48763-04**  
Date Sampled: 11/09/04 13:50  
Date Received: 11/12/04  
Sample Matrix: Ground Water

### Methane

Analysis Method: **GC/FID**  
Extract Method: **Method**

Analyst: *jj*  
Extract Date: 11/23/04 15:18  
Analysis Date: 11/23/04 15:18  
Dilution Factor: 1

### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U		mg/L	0.002	0.002

### Cordilleran Compliance Services

Project ID: EO4243  
 Sample ID: LJS-W3  
 Locator:

ACZ Sample ID: **L48763-05**  
 Date Sampled: 11/09/04 15:13  
 Date Received: 11/12/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: *km*  
 Extract Date: 11/18/04 17:36  
 Analysis Date: 11/18/04 17:36  
 Dilution Factor: 1

#### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	*	ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U	*	ug/L	0.2	1
m p Xylene	01330 20 7		U	*	ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U	*	ug/L	0.2	1
o Xylene	00095-47-6		U	*	ug/L	0.2	1
Toluene	000108-88-3		U	*	ug/L	0.2	1

#### Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LGL	UCL
Bromofluorobenzene	000460-00-4	100.5		%	83	117

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: LJS-W3  
Locator:

ACZ Sample ID: **L48763-05**  
Date Sampled: 11/09/04 15:13  
Date Received: 11/12/04  
Sample Matrix: Ground Water

### Methane

Analysis Method: **GC/FID**  
Extract Method: **Method**

Analyst: *jj*  
Extract Date: 11/23/04 15:21  
Analysis Date: 11/23/04 15:21  
Dilution Factor: 1

### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U		mg/L	0.002	0.002

**Cordilleran Compliance Services**

Project ID: EO4243  
 Sample ID: GUS-SP1  
 Locator:

ACZ Sample ID: **L48763-06**  
 Date Sampled: 11/10/04 8:15  
 Date Received: 11/12/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: *km*  
 Extract Date: 11/18/04 19:01  
 Analysis Date: 11/18/04 19:01  
 Dilution Factor: 1

Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	*	ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U	*	ug/L	0.2	1
m p Xylene	01330 20 7		U	*	ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U	*	ug/L	0.2	1
o Xylene	00095-47- 6		U	*	ug/L	0.2	1
Toluene	000108-88-3	0.3	J	*	ug/L	0.2	1

Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	100.1		%	83	117

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: GUS-SP1  
Locator:

ACZ Sample ID: **L48763-06**  
Date Sampled: 11/10/04 8:15  
Date Received: 11/12/04  
Sample Matrix: Ground Water

### Methane

Analysis Method: **GC/FID**  
Extract Method: **Method**

Analyst: *jj*  
Extract Date: 11/23/04 15:23  
Analysis Date: 11/23/04 15:23  
Dilution Factor: 1

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U		mg/L	0.002	0.002

### Cordilleran Compliance Services

Project ID: EO4243  
 Sample ID: RS-W4  
 Locator:

ACZ Sample ID: **L48763-07**  
 Date Sampled: 11/10/04 10:50  
 Date Received: 11/12/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: km  
 Extract Date: 11/18/04 19:44  
 Analysis Date: 11/18/04 19:44  
 Dilution Factor: 1

#### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	*	ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U	*	ug/L	0.2	1
m p Xylene	01330 20 7		U	*	ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U	*	ug/L	0.2	1
o Xylene	00095-47-6		U	*	ug/L	0.2	1
Toluene	000108-88-3		U	*	ug/L	0.2	1

#### Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	96.6		%	83	117

**Cordilleran Compliance Services**

Project ID: EO4243

Sample ID: RS-W4

Locator:

ACZ Sample ID: **L48763-07**

Date Sampled: 11/10/04 10:50

Date Received: 11/12/04

Sample Matrix: Ground Water

**Methane**Analysis Method: **GC/FID**Extract Method: **Method**Analyst: *jj*

Extract Date: 11/23/04 15:26

Analysis Date: 11/23/04 15:26

Dilution Factor: 1

## Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U		mg/L	0.002	0.002

**Cordilleran Compliance Services**

Project ID: EO4243  
 Sample ID: EG-SP2  
 Locator:

ACZ Sample ID: **L48763-08**  
 Date Sampled: 11/10/04 13:36  
 Date Received: 11/12/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: *km*  
 Extract Date: 11/18/04 20:26  
 Analysis Date: 11/18/04 20:26  
 Dilution Factor: 1

**Compound**

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	*	ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U	*	ug/L	0.2	1
m p Xylene	01330 20 7		U	*	ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U	*	ug/L	0.2	1
o Xylene	00095-47-6		U	*	ug/L	0.2	1
Toluene	000108-88-3		U	*	ug/L	0.2	1

**Surrogate Recoveries**

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	100		%	83	117

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: EG-SP2  
Locator:

ACZ Sample ID: **L48763-08**  
Date Sampled: 11/10/04 13:36  
Date Received: 11/12/04  
Sample Matrix: Ground Water

### Methane

Analysis Method: **GC/FID**  
Extract Method: **Method**

Analyst: *jj*  
Extract Date: 11/23/04 15:28  
Analysis Date: 11/23/04 15:28  
Dilution Factor: 1

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U		mg/L	0.002	0.002

### Cordilleran Compliance Services

Project ID: EO4243  
 Sample ID: WK-SP3  
 Locator:

ACZ Sample ID: **L48763-09**  
 Date Sampled: 11/10/04 14:35  
 Date Received: 11/12/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: *km*  
 Extract Date: 11/18/04 21:10  
 Analysis Date: 11/18/04 21:10  
 Dilution Factor: 1

#### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U		ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U		ug/L	0.2	1
m p Xylene	01330 20 7		U		ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U		ug/L	0.2	1
o Xylene	00095-47- 6		U		ug/L	0.2	1
Toluene	000108-88-3		U		ug/L	0.2	1

#### Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	99.5		%	83	117

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: WK-SP3  
Locator:

ACZ Sample ID: **L48763-09**  
Date Sampled: 11/10/04 14:35  
Date Received: 11/12/04  
Sample Matrix: Ground Water

### Methane

Analysis Method: **GC/FID**  
Extract Method: **Method**

Analyst: *jj*  
Extract Date: 11/23/04 15:31  
Analysis Date: 11/23/04 15:31  
Dilution Factor: 1

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U		mg/L	0.002	0.002

### Cordilleran Compliance Services

Project ID: EO4243  
 Sample ID: LH96-SP4  
 Locator:

ACZ Sample ID: **L48763-10**  
 Date Sampled: 11/10/04 15:45  
 Date Received: 11/12/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: km  
 Extract Date: 11/18/04 21:52  
 Analysis Date: 11/18/04 21:52  
 Dilution Factor: 1

#### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	*	ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U	*	ug/L	0.2	1
m p Xylene	01330 20 7		U	*	ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U	*	ug/L	0.2	1
o Xylene	00095-47- 6		U	*	ug/L	0.2	1
Toluene	000108-88-3		U	*	ug/L	0.2	1

#### Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	97.4		%	83	117

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: LH96-SP4  
Locator:

ACZ Sample ID: **L48763-10**  
Date Sampled: 11/10/04 15:45  
Date Received: 11/12/04  
Sample Matrix: Ground Water

### Methane

Analysis Method: **GC/FID**  
Extract Method: **Method**

Analyst: *jj*  
Extract Date: 11/23/04 15:33  
Analysis Date: 11/23/04 15:33  
Dilution Factor: 1

### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U		mg/L	0.002	0.002

**Cordilleran Compliance Services**

Project ID: EO4243  
 Sample ID: JHD-SP5  
 Locator:

ACZ Sample ID: **L48763-11**  
 Date Sampled: 11/10/04 16:01  
 Date Received: 11/12/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: km  
 Extract Date: 11/18/04 22:35  
 Analysis Date: 11/18/04 22:35  
 Dilution Factor: 1

Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	*	ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U	*	ug/L	0.2	1
m p Xylene	01330 20 7		U	*	ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U	*	ug/L	0.2	1
o Xylene	00095-47- 6		U	*	ug/L	0.2	1
Toluene	000108-88-3		U	*	ug/L	0.2	1

Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	98.5		%	83	117

**Cordilleran Compliance Services**

Project ID: EO4243  
 Sample ID: TB102704-01  
 Locator:

ACZ Sample ID: **L48763-12**  
 Date Sampled: 11/09/04 0:00  
 Date Received: 11/12/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: km  
 Extract Date: 11/18/04 23:17  
 Analysis Date: 11/18/04 23:17  
 Dilution Factor: 1

Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	*	ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U	*	ug/L	0.2	1
m p Xylene	01330 20 7		U	*	ug/L	0.4	2
Methyl Teri Butyl Ether	001634-04-4		U	*	ug/L	0.2	1
o Xylene	00095-47- 6		U	*	ug/L	0.2	1
Toluene	000108-88-3		U	*	ug/L	0.2	1

Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	102.6		%	83	117

**Cordilleran Compliance Services**

Project ID: EO4243  
 Sample ID: TB102704-02  
 Locator:

ACZ Sample ID: **L48763-13**  
 Date Sampled: 11/09/04 10:08  
 Date Received: 11/12/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: *km*  
 Extract Date: 11/19/04 0:00  
 Analysis Date: 11/19/04 0:00  
 Dilution Factor: 1

Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U		ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U		ug/L	0.2	1
m p Xylene	01330 20 7		U		ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U		ug/L	0.2	1
o Xylene	00095-47- 6		U		ug/L	0.2	1
Toluene	000108-88-3		U		ug/L	0.2	1

Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	98.7		%	83	117

### Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>LCL</i>	Lower Control Limit
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>UCL</i>	Upper Control Limit
<i>Sample</i>	Value of the Sample of interest

### QC Sample Types

<i>SURR</i>	Surrogate	<i>LFM</i>	Laboratory Fortified Matrix
<i>INTS</i>	Internal Standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>MS/MSD</i>	Matrix Spike/Matrix Spike Duplicate
<i>LCSW</i>	Laboratory Control Sample - Water	<i>PBS</i>	Prep Blank - Soil
<i>LFB</i>	Laboratory Fortified Blank	<i>PBW</i>	Prep Blank - Water

### QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.

### ACZ Qualifiers (Qual)

B	Analyte detected in daily blank
H	Analysis exceeded method hold time.
J	Analyte concentration detected at a value between MDL and PQL
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
U	Analyte was analyzed for but not detected at the indicated MDL
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
W	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
X	Quality control sample is out of control.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.
P	Analyte concentration differs from second detector by more than 40%.
E	Analyte concentration is estimated due to result exceeding calibration range.
M	Analyte concentration is estimated due to matrix interferences.

### Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/4-90/020. Methods for the Determination of Organic Compounds in Drinking Water (I), July 1990.
- (3) EPA 600/R-92/129. Methods for the Determination of Organic Compounds in Drinking Water (II), July 1990.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December, 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

### Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Organic analyses are reported on an "as received" basis.

Cordilleran Compliance Services

ACZ Project ID: **L48763**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L48763-01	WG181631	Benzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Ethylbenzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		m p Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Methyl Tert Butyl Ether	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		o Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Toluene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
L48763-02	WG181631	Benzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Ethylbenzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		m p Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Methyl Tert Butyl Ether	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		o Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Toluene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
L48763-05	WG181631	Benzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Ethylbenzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		m p Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Methyl Tert Butyl Ether	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		o Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Toluene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
L48763-06	WG181631	Benzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Ethylbenzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		m p Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Methyl Tert Butyl Ether	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		o Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Toluene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
L48763-07	WG181631	Benzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Ethylbenzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		m p Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Methyl Tert Butyl Ether	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		o Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Toluene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
L48763-08	WG181631	Benzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Ethylbenzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		m p Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Methyl Tert Butyl Ether	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		o Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Toluene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
L48763-10	WG181631	Benzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Ethylbenzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		m p Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Methyl Tert Butyl Ether	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		o Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Toluene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.

Cordilleran Compliance Services

ACZ Project ID: **L48763**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L48763-11	WG181631	Benzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Ethylbenzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		m p Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Methyl Tert Butyl Ether	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		o Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Toluene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
L48763-12	WG181631	Benzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Ethylbenzene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		m p Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Methyl Tert Butyl Ether	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		o Xylene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Toluene	M8021B GC/PID	Q3	Sample received with improper chemical preservation.

**Cordilleran Compliance Services**  
 EO4243

ACZ Project ID: L48763  
 Date Received: 11/12/2004  
 Received By:

**Receipt Verification**

- 1) Does this project require special handling procedures such as CLP protocol?
- 2) Are the custody seals on the cooler intact?
- 3) Are the custody seals on the sample containers intact?
- 4) Is there a Chain of Custody or other directive shipping papers present?
- 5) Is the Chain of Custody complete?
- 6) Is the Chain of Custody in agreement with the samples received?
- 7) Is there enough sample for all requested analyses?
- 8) Are all samples within holding times for requested analyses?
- 9) Were all sample containers received intact?
- 10) Are the temperature blanks present?
- 11) Are the trip blanks (VOA and/or Cyanide) present?
- 12) Are samples requiring no headspace, headspace free?
- 13) Do the samples that require a Foreign Soils Permit have one?

YES	NO	NA	
		X	
X			
		X	
X			
X			
X			
X			
	X		
X			
			X
X			
X			
			X

**Exceptions: If you answered no to any of the above questions, please describe**

samples-01 through -06 ; nitrate/nitrite p-ortho-d out of ht

**Contact (For any discrepancies, the client must be contacted)**

The client was not contacted. see coc

**Shipping Containers**

Cooler Id	Temp (°C)	Rad (µR/hr)
acz	4.5	14
acz	1.2	15
acz	1.0	13
acz	0.4	15

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

**Notes**

**Cordilleran Compliance Services**  
 EO4243

ACZ Project ID: L48763  
 Date Received: 11/12/2004  
 Received By:

**Sample Container Preservation**

SAMPLE	CLIENT ID	R < 2	G < 2	Y < 2	YG < 2	B < 2	BG < 2	O < 2	T > 12	P > 12	N/A	RAD
L48763-01	JLS-W1	Y		Y					Y			
L48763-02	USGC-BC1	Y		Y					Y			
L48763-03	CW-W2	Y		Y					Y			
L48763-04	HC-S2	Y		Y					Y			
L48763-05	LJS-W3	Y		Y					Y			
L48763-06	GUS-SP1	Y		Y					Y			
L48763-07	RS-W4	Y		Y					Y			
L48763-08	EG-SP2	Y		Y					Y			
L48763-09	WK-SP3	Y		Y					Y			
L48763-10	LH96-SP4	Y		Y					Y			
L48763-11	JHD-SP5	Y		Y					Y			
L48763-12	TB102704-01										0	
L48763-13	TB102704-02										0	

**Sample Container Preservation Legend**

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BG	Filtered/Sulfuric	BLUE GLASS	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

L48763

## CHAIN of CUSTODY

### Report to:

Name: James Hix  
 Company: Cordilleran Compliance  
 E-mail: james.hix@cordcomp.com

Address: 5550 Marshall Street  
Arvada, CO  
 Telephone: 303 237-2092

### Copy of Report to:

Name:  
 Company:

E-mail:  
 Telephone:

### Invoice to:

Name: James Hix  
 Company: Cordilleran Compliance

Email:  
 Telephone: Fax 303.237.2659

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES  NO   
 If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

### PROJECT INFORMATION

ANALYSES REQUESTED (attach list or use quote number)

Quote #: B012016  
 Project/PO #: E04243  
 Reporting state for compliance testing: CO  
 Are any samples NRC licensable material?

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	BTEX (B0218)	METHANE	MAJOR ANIONS	ALKALINITY	H <sub>2</sub> S	AMMONIA	TDS	TOTAL METALS	TRITIUM Gamma Spec
JLS-W1	11/09/04 1009	GW	13	✓	✓	✓	✓	✓	✓	✓	✓	✓
USGC-BC1	11/09/04 1139	SW	13	✓	✓	✓	✓	✓	✓	✓	✓	✓
CW-W2	11/09/04 1306	GW	13	✓	✓	✓	✓	✓	✓	✓	✓	✓
HC-S2	11/09/04 1350	SW	13	✓	✓	✓	✓	✓	✓	✓	✓	✓
LJS-W3	11/09/04 15R3	GW	13	✓	✓	✓	✓	✓	✓	✓	✓	✓
BUS-SP1	11/10/04 0815	GW	13	✓	✓	✓	✓	✓	✓	✓	✓	✓
RS-W4	11/10/04 1050	GW	13	✓	✓	✓	✓	✓	✓	✓	✓	✓
EG-SP2	11/10/04 1336	GW	13	✓	✓	✓	✓	✓	✓	✓	✓	✓
WK-SP3	11/10/04 1435	GW	13	✓	✓	✓	✓	✓	✓	✓	✓	✓
LH96-SP4	11/10/04 1545	GW	13	✓	✓	✓	✓	✓	✓	✓	✓	✓

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

### REMARKS

JHD-SP5 11/10/04 1601 GW 3 ✓ ✓  
 \* BTEX, MTBE, TRITIUM ONLY

Please refer to ACZ's terms & conditions located on the reverse side of this COC

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
<u>James W. Hix</u>	<u>11/10/04 1713</u>	<u>Ken Peiris</u>	<u>11/10/04 1713</u>
<u>Ken Peiris</u>	<u>11/11/04 1700</u>	<u>[Signature]</u>	<u>11-12-04 1000</u>

SAMPLED BY:	INTERNAL USE ONLY

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: JLS-W1

ACZ Sample ID: **L48763-01**  
Date Sampled: 11/09/04 10:08  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/09/04</b>	<b>dhc</b>
Actinium - 228		<		7.59	pCi/L		
Americium - 241		<		4.68	pCi/L		
Antimony - 122		<		2.76	pCi/L		
Antimony - 124		<		2.06	pCi/L		
Antimony - 125		<		3.83	pCi/L		
Antimony - 126		<		2.37	pCi/L		
Argon - 41		<		3.01	pCi/L		
Arsenic - 76		<		3.81	pCi/L		
Barium - 139		<		2.93	pCi/L		
Barium - 140		<		9.64	pCi/L		
Beryllium - 7		<		13.30	pCi/L		
Bismuth - 207		<		2.04	pCi/L		
Bismuth - 212		<		16.8	pCi/L		
Bismuth - 214		<		5.12	pCi/L		
Bromine - 82		<		0.94	pCi/L		
Cadmium - 109		<		38.20	pCi/L		
Cerium - 139		<		0.69	pCi/L		
Cerium - 141		<		1.54	pCi/L		
Cerium - 143		<		2.70	pCi/L		
Cerium - 144		<		6.74	pCi/L		
Cesium - 134		<		1.91	pCi/L		
Cesium - 136		<		1.75	pCi/L		
Cesium - 137		<		2.15	pCi/L		
Cesium - 138		<		2.09	pCi/L		
Chlorine - 38		<		5.00	pCi/L		
Chromium - 51		<		9.74	pCi/L		
Cobalt - 56		<		2.14	pCi/L		
Cobalt - 57		<		0.78	pCi/L		
Cobalt - 58		<		1.61	pCi/L		
Cobalt - 60		<		2.30	pCi/L		
Copper - 64				*	pCi/L		
Europium - 152		<		10.10	pCi/L		
Europium - 154		<		1.36	pCi/L		
Europium - 155		<		2.16	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: JLS-W1

ACZ Sample ID: **L48763-01**  
Date Sampled: 11/09/04 10:08  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/09/04</b>	<b>dhc</b>
Gadolinium - 153		<		3.94	pCi/L		
Gold - 196		<		1.32	pCi/L		
Gold - 198		<		0.86	pCi/L		
Hafnium - 181		<		1.45	pCi/L		
Iron - 59		<		3.55	pCi/L		
Krypton - 85		<		0.80	pCi/L		
Krypton - 87		<		1.82	pCi/L		
Krypton - 88		<		3.63	pCi/L		
Krypton - 89		<		4.88	pCi/L		
Lanthanum - 140		<		1.13	pCi/L		
Lead - 210		<		74	pCi/L		
Lead - 212		<		4	pCi/L		
Lead - 214		<		1.26	pCi/L		
Lutetium - 177		<		8.58	pCi/L		
Manganese - 54		<		1.24	pCi/L		
Manganese - 56		<		1.99	pCi/L		
Mercury - 203		<		1.62	pCi/L		
Molybdenum - 99		<		0.68	pCi/L		
Neodymium - 147		<		2.00	pCi/L		
Neptunium - 237		<		5.39	pCi/L		
Neptunium - 239		<		2.44	pCi/L		
Niobium - 94		<		2.14	pCi/L		
Niobium - 95		<		1.50	pCi/L		
Plutonium - 239		<		*	pCi/L		
Potassium - 40		<		65.30	pCi/L		
Potassium - 42		<		10.00	pCi/L		
Praseodymium - 144		<		146.00	pCi/L		
Protactinium - 234		<		2.53	pCi/L		
Radium - 224		<		21.5	pCi/L		
Rhodium - 106m		<		2.00	pCi/L		
Rubidium - 86		<		12.00	pCi/L		
Rubidium - 89		<		0.71	pCi/L		
Ruthenium - 103		<		1.08	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: JLS-W1

ACZ Sample ID: **L48763-01**  
Date Sampled: 11/09/04 10:08  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/09/04</b>	<b>dhc</b>
Scandium - 46		<		2.84	pCi/L		
Selenium - 75		<		1.84	pCi/L		
Silver - 108		<		92.00	pCi/L		
Silver - 110		<		1.01	pCi/L		
Sodium - 22		6.15	2.83		pCi/L		
Sodium - 24		<		1.71	pCi/L		
Strontium - 91		<		2.70	pCi/L		
Tantalum - 182		<		2.70	pCi/L		
Technetium - 99m		<		0.72	pCi/L		
Tellurium - 131		<		0.91	pCi/L		
Tellurium - 132		<		1.10	pCi/L		
Terbium - 160		<		4.48	pCi/L		
Thallium - 208		<		3.62	pCi/L		
Thorium - 227		<		7.13	pCi/L		
Tin - 113		<		0.66	pCi/L		
Tungsten - 187		<		3.11	pCi/L		
Uranium - 235		<		2.74	pCi/L		
Uranium - 237		<		2.17	pCi/L		
Xenon - 135		<		1.13	pCi/L		
Xenon - 138		<		3.80	pCi/L		
Ytterbium - 175		<		24.00	pCi/L		
Yttrium - 88		<		1.23	pCi/L		
Yttrium - 91m		<		1.82	pCi/L		
Zinc - 65		<		5.44	pCi/L		
Zirconium - 95		<		0.99	pCi/L		

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: USGC-BC1

ACZ Sample ID: **L48763-02**  
Date Sampled: 11/09/04 11:39  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/09/04</b>	<b>dhc</b>
Actinium - 228		<		7.7	pCi/L		
Americium - 241		<		3.33	pCi/L		
Antimony - 122		<		1.76	pCi/L		
Antimony - 124		<		1.94	pCi/L		
Antimony - 125		<		5.03	pCi/L		
Antimony - 126		<		2.37	pCi/L		
Argon - 41		<		3.10	pCi/L		
Arsenic - 76		<		2.39	pCi/L		
Barium - 139		<		5.01	pCi/L		
Barium - 140		<		9.98	pCi/L		
Beryllium - 7		<		10.60	pCi/L		
Bismuth - 207		<		1.4	pCi/L		
Bismuth - 212		<		15.4	pCi/L		
Bismuth - 214		<		5.33	pCi/L		
Bromine - 82		<		0.47	pCi/L		
Cadmium - 109		<		55.10	pCi/L		
Cerium - 139		<		1.18	pCi/L		
Cerium - 141		<		1.38	pCi/L		
Cerium - 143		<		1.99	pCi/L		
Cerium - 144		<		5.88	pCi/L		
Cesium - 134		<		2.11	pCi/L		
Cesium - 136		<		1.43	pCi/L		
Cesium - 137		<		1.64	pCi/L		
Cesium - 138		<		0.74	pCi/L		
Chlorine - 38		<		2.75	pCi/L		
Chromium - 51		<		12.00	pCi/L		
Cobalt - 56		<		1.77	pCi/L		
Cobalt - 57		<		0.86	pCi/L		
Cobalt - 58		<		1.39	pCi/L		
Cobalt - 60		<		0.53	pCi/L		
Copper - 64				*	pCi/L		
Europium - 152		<		9.81	pCi/L		
Europium - 154		<		1.51	pCi/L		
Europium - 155		<		1.83	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: USGC-BC1

ACZ Sample ID: **L48763-02**

Date Sampled: 11/09/04 11:39  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/09/04</b>	<b>dhc</b>
Gadolinium - 153		<		4.44	pCi/L		
Gold - 196		<		0.50	pCi/L		
Gold - 198		<		1.49	pCi/L		
Hafnium - 181		<		1.37	pCi/L		
Iron - 59		<		3.91	pCi/L		
Krypton - 85		<		0.80	pCi/L		
Krypton - 87		<		2.55	pCi/L		
Krypton - 88		<		3.93	pCi/L		
Krypton - 89		<		5.41	pCi/L		
Lanthanum - 140		<		0.92	pCi/L		
Lead - 210		256	142.9		pCi/L		
Lead - 212		<		2.21	pCi/L		
Lead - 214		<		2.52	pCi/L		
Lutetium - 177		<		6.81	pCi/L		
Manganese - 54		<		1.50	pCi/L		
Manganese - 56		<		1.79	pCi/L		
Mercury - 203		<		1.26	pCi/L		
Molybdenum - 99		<		0.35	pCi/L		
Neodymium - 147		<		2.53	pCi/L		
Neptunium - 237		<		4.56	pCi/L		
Neptunium - 239		<		2.61	pCi/L		
Niobium - 94		<		1.89	pCi/L		
Niobium - 95		<		1.57	pCi/L		
Plutonium - 239				*	pCi/L		
Potassium - 40		<		65.00	pCi/L		
Potassium - 42		<		17.30	pCi/L		
Praseodymium - 144		<		142.00	pCi/L		
Protactinium - 234		<		2.38	pCi/L		
Radium - 224		<		25.9	pCi/L		
Rhodium - 106m		<		3.08	pCi/L		
Rubidium - 86		<		15.00	pCi/L		
Rubidium - 89		<		0.71	pCi/L		
Ruthenium - 103		<		1.73	pCi/L		

\* - No in-range peaks



# Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## RadioChemistry Analytical Results

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: USGC-BC1

ACZ Sample ID: **L48763-02**  
Date Sampled: 11/09/04 11:39  
Date Received: 11/12/04  
Sample Matrix: Ground Water

### Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					12/09/04	dhc
Scandium - 46		<		2.81	pCi/L		
Selenium - 75		<		1.56	pCi/L		
Silver - 108		<		71.40	pCi/L		
Silver - 110		<		1.27	pCi/L		
Sodium - 22		<		2.37	pCi/L		
Sodium - 24		<		1.87	pCi/L		
Strontium - 91		<		2.55	pCi/L		
Tantalum - 182		<		2.22	pCi/L		
Technetium - 99m		<		0.35	pCi/L		
Tellurium - 131		<		1.02	pCi/L		
Tellurium - 132		<		1.03	pCi/L		
Terbium - 160		<		5.35	pCi/L		
Thallium - 208		<		3.23	pCi/L		
Thorium - 227		<		4.82	pCi/L		
Tin - 113		<		2.04	pCi/L		
Tungsten - 187		<		1.70	pCi/L		
Uranium - 235		<		2.35	pCi/L		
Uranium - 237		<		2.08	pCi/L		
Xenon - 135		<		1.33	pCi/L		
Xenon - 138		<		3.39	pCi/L		
Ytterbium - 175		<		17.50	pCi/L		
Yttrium - 88		<		2.00	pCi/L		
Yttrium - 91m		<		1.54	pCi/L		
Zinc - 65		<		4.83	pCi/L		
Zirconium - 95		<		0.81	pCi/L		

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: CW-W2

ACZ Sample ID: **L48763-03**  
Date Sampled: 11/09/04 13:06  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/10/04</b>	<b>dhc</b>
Actinium - 228		<		9.68	pCi/L		
Americium - 241		<		4.11	pCi/L		
Antimony - 122		<		2.48	pCi/L		
Antimony - 124		<		1.96	pCi/L		
Antimony - 125		<		4.36	pCi/L		
Antimony - 126		<		2.35	pCi/L		
Argon - 41		<		2.73	pCi/L		
Arsenic - 76		<		3.77	pCi/L		
Barium - 139		<		3.19	pCi/L		
Barium - 140		<		10	pCi/L		
Beryllium - 7		<		9.79	pCi/L		
Bismuth - 207		<		1.33	pCi/L		
Bismuth - 212		<		13.1	pCi/L		
Bismuth - 214		<		4.96	pCi/L		
Bromine - 82		<		0.445	pCi/L		
Cadmium - 109		<		48.1	pCi/L		
Cerium - 139		<		0.751	pCi/L		
Cerium - 141		<		1.26	pCi/L		
Cerium - 143		<		2.23	pCi/L		
Cerium - 144		<		6.77	pCi/L		
Cesium - 134		<		1.8	pCi/L		
Cesium - 136		<		0.674	pCi/L		
Cesium - 137		<		1.94	pCi/L		
Cesium - 138		<		0.739	pCi/L		
Chlorine - 38		<		5	pCi/L		
Chromium - 51		<		8.22	pCi/L		
Cobalt - 56		<		1.81	pCi/L		
Cobalt - 57		<		0.765	pCi/L		
Cobalt - 58		<		1.34	pCi/L		
Cobalt - 60		<		0.527	pCi/L		
Copper - 64		<		*	pCi/L		
Europium - 152		<		9.36	pCi/L		
Europium - 154		<		1.78	pCi/L		
Europium - 155		<		1.73	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: CW-W2

ACZ Sample ID: **L48763-03**  
Date Sampled: 11/09/04 13:06  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/10/04</b>	<b>dhc</b>
Gadolinium - 153		<		4.5	pCi/L		
Gold - 196		<		1.44	pCi/L		
Gold - 198		<		1.01	pCi/L		
Hafnium - 181		<		1.72	pCi/L		
Iron - 59		<		2.82	pCi/L		
Krypton - 85		<		1.07	pCi/L		
Krypton - 87		<		2.13	pCi/L		
Krypton - 88		<		3.98	pCi/L		
Krypton - 89		<		3.76	pCi/L		
Lanthanum - 140		<		1	pCi/L		
Lead - 210		<		67	pCi/L		
Lead - 212		<		3.41	pCi/L		
Lead - 214		<		2.06	pCi/L		
Lutetium - 177		<		3.5	pCi/L		
Manganese - 54		<		1.89	pCi/L		
Manganese - 56		<		1.92	pCi/L		
Mercury - 203		<		1.27	pCi/L		
Molybdenum - 99		<		0.456	pCi/L		
Neodymium - 147		<		2.53	pCi/L		
Neptunium - 237		<		4.33	pCi/L		
Neptunium - 239		<		2.57	pCi/L		
Niobium - 94		<		2.02	pCi/L		
Niobium - 95		<		1.32	pCi/L		
Plutonium - 239				*	pCi/L		
Potassium - 40		<		45.4	pCi/L		
Potassium - 42		<		9.99	pCi/L		
Praseodymium - 144		<		150	pCi/L		
Protactinium - 234		<		2.34	pCi/L		
Radium - 224		<		21.7	pCi/L		
Rhodium - 106m		<		3.2	pCi/L		
Rubidium - 86		<		13.1	pCi/L		
Rubidium - 89		<		1	pCi/L		
Ruthenium - 103		<		1.42	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: CW-W2

ACZ Sample ID: **L48763-03**  
Date Sampled: 11/09/04 13:06  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/10/04</b>	<b>dhc</b>
Scandium - 46		<		2.16	pCi/L		
Selenium - 75		<		0.892	pCi/L		
Silver - 108		<		63.8	pCi/L		
Silver - 110		<		2.1	pCi/L		
Sodium - 22		<		1.13	pCi/L		
Sodium - 24		<		1.08	pCi/L		
Strontium - 91		<		2.86	pCi/L		
Tantalum - 182		<		2.37	pCi/L		
Technetium - 99m		<		0.543	pCi/L		
Tellurium - 131		<		1.1	pCi/L		
Tellurium - 132		<		1.09	pCi/L		
Terbium - 160		<		5.61	pCi/L		
Thallium - 208		<		3.33	pCi/L		
Thorium - 227		<		5.22	pCi/L		
Tin - 113		<		1.17	pCi/L		
Tungsten - 187		<		2.6	pCi/L		
Uranium - 235		<		2.67	pCi/L		
Uranium - 237		<		4.01	pCi/L		
Xenon - 135		<		1.02	pCi/L		
Xenon - 138		<		3.45	pCi/L		
Ytterbium - 175		<		25.2	pCi/L		
Yttrium - 88		<		1.42	pCi/L		
Yttrium - 91m		<		1.83	pCi/L		
Zinc - 65		<		4.67	pCi/L		
Zirconium - 95		<		2.14	pCi/L		

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: HC-S2

ACZ Sample ID: **L48763-04**  
Date Sampled: 11/09/04 13:50  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/10/04</b>	<b>dhc</b>
Actinium - 228		<		7.7	pCi/L		
Americium - 241		<		5.19	pCi/L		
Antimony - 122		<		2.55	pCi/L		
Antimony - 124		<		1.98	pCi/L		
Antimony - 125		<		4.54	pCi/L		
Antimony - 126		<		2.16	pCi/L		
Argon - 41		<		1.86	pCi/L		
Arsenic - 76		<		3.2	pCi/L		
Barium - 139		<		4.76	pCi/L		
Barium - 140		<		7.11	pCi/L		
Beryllium - 7		<		10.6	pCi/L		
Bismuth - 207		<		0.765	pCi/L		
Bismuth - 212		<		12.8	pCi/L		
Bismuth - 214		<		4.84	pCi/L		
Bromine - 82		<		1.48	pCi/L		
Cadmium - 109		<		55.8	pCi/L		
Cerium - 139		<		1.12	pCi/L		
Cerium - 141		<		1.79	pCi/L		
Cerium - 143		<		1.39	pCi/L		
Cerium - 144		<		6.61	pCi/L		
Cesium - 134		<		2	pCi/L		
Cesium - 136		<		1.99	pCi/L		
Cesium - 137		<		1.5	pCi/L		
Cesium - 138		<		0.739	pCi/L		
Chlorine - 38		<		5.5	pCi/L		
Chromium - 51		<		7.68	pCi/L		
Cobalt - 56		<		1.45	pCi/L		
Cobalt - 57		<		0.822	pCi/L		
Cobalt - 58		<		1.11	pCi/L		
Cobalt - 60		<		1.05	pCi/L		
Copper - 64		<		*	pCi/L		
Europium - 152		<		9.21	pCi/L		
Europium - 154		<		1.29	pCi/L		
Europium - 155		<		2.15	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: HC-S2

ACZ Sample ID: **L48763-04**  
Date Sampled: 11/09/04 13:50  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/10/04</b>	<b>dhc</b>
Gadolinium - 153		<		4.29	pCi/L		
Gold - 196		<		1.39	pCi/L		
Gold - 198		<		1.1	pCi/L		
Hafnium - 181		<		1.43	pCi/L		
Iron - 59		<		3.41	pCi/L		
Krypton - 85		<		1.07	pCi/L		
Krypton - 87		<		2.92	pCi/L		
Krypton - 88		<		3.8	pCi/L		
Krypton - 89		<		3.8	pCi/L		
Lanthanum - 140		<		1	pCi/L		
Lead - 210		<		68.5	pCi/L		
Lead - 212		<		3.45	pCi/L		
Lead - 214		<		5	pCi/L		
Lutetium - 177		<		10.8	pCi/L		
Manganese - 54		<		1.54	pCi/L		
Manganese - 56		<		0.86	pCi/L		
Mercury - 203		<		1.53	pCi/L		
Molybdenum - 99		<		0.453	pCi/L		
Neodymium - 147		<		1.28	pCi/L		
Neptunium - 237		<		4.93	pCi/L		
Neptunium - 239		<		2.16	pCi/L		
Niobium - 94		<		2.81	pCi/L		
Niobium - 95		<		0.979	pCi/L		
Plutonium - 239		<		*	pCi/L		
Potassium - 40		<		43.8	pCi/L		
Potassium - 42		<		14.1	pCi/L		
Praseodymium - 144		<		152	pCi/L		
Protactinium - 234		<		2.47	pCi/L		
Radium - 224		<		27.7	pCi/L		
Rhodium - 106m		<		3.18	pCi/L		
Rubidium - 86		<		7	pCi/L		
Rubidium - 89		<		2.23	pCi/L		
Ruthenium - 103		<		1.83	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: HC-S2

ACZ Sample ID: **L48763-04**  
Date Sampled: 11/09/04 13:50  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/10/04</b>	<b>dhc</b>
Scandium - 46		<		2.88	pCi/L		
Selenium - 75		<		1.56	pCi/L		
Silver - 108		<		87.4	pCi/L		
Silver - 110		<		0.505	pCi/L		
Sodium - 22		<		1.6	pCi/L		
Sodium - 24		<		1.41	pCi/L		
Strontium - 91		<		2.99	pCi/L		
Tantalum - 182		<		2.75	pCi/L		
Technetium - 99m		<		0.361	pCi/L		
Tellurium - 131		<		1.13	pCi/L		
Tellurium - 132		<		0.603	pCi/L		
Terbium - 160		<		5.48	pCi/L		
Thallium - 208		<		3.81	pCi/L		
Thorium - 227		<		5.28	pCi/L		
Tin - 113		<		2.29	pCi/L		
Tungsten - 187		<		6.05	pCi/L		
Uranium - 235		<		2.44	pCi/L		
Uranium - 237		<		4.71	pCi/L		
Xenon - 135		<		1.02	pCi/L		
Xenon - 138		<		3.53	pCi/L		
Ytterbium - 175		<		22.4	pCi/L		
Yttrium - 88		<		1.23	pCi/L		
Yttrium - 91m		<		1.64	pCi/L		
Zinc - 65		<		4.14	pCi/L		
Zirconium - 95		<		3	pCi/L		

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: LJS-W3

ACZ Sample ID: **L48763-05**  
Date Sampled: 11/09/04 15:13  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/10/04</b>	<b>dhc</b>
Actinium - 228		<		9.57	pCi/L		
Americium - 241		<		4.34	pCi/L		
Antimony - 122		<		2.46	pCi/L		
Antimony - 124		<		2.11	pCi/L		
Antimony - 125		<		4.75	pCi/L		
Antimony - 126		<		3.05	pCi/L		
Argon - 41		<		3	pCi/L		
Arsenic - 76		<		3.5	pCi/L		
Barium - 139		<		3.45	pCi/L		
Barium - 140		<		1.63	pCi/L		
Beryllium - 7		<		13.4	pCi/L		
Bismuth - 207		<		1.35	pCi/L		
Bismuth - 212		<		13.1	pCi/L		
Bismuth - 214		<		5.15	pCi/L		
Bromine - 82		<		1.25	pCi/L		
Cadmium - 109		<		54.5	pCi/L		
Cerium - 139		<		0.812	pCi/L		
Cerium - 141		<		1.23	pCi/L		
Cerium - 143		<		2.94	pCi/L		
Cerium - 144		<		5.91	pCi/L		
Cesium - 134		<		2.14	pCi/L		
Cesium - 136		<		1.69	pCi/L		
Cesium - 137		<		2.22	pCi/L		
Cesium - 138		<		0.739	pCi/L		
Chlorine - 38		<		2.75	pCi/L		
Chromium - 51		<		7.95	pCi/L		
Cobalt - 56		<		2	pCi/L		
Cobalt - 57		<		0.811	pCi/L		
Cobalt - 58		<		1.16	pCi/L		
Cobalt - 60		<		0.527	pCi/L		
Copper - 64		<		*	pCi/L		
Europium - 152		<		10.2	pCi/L		
Europium - 154		<		1.61	pCi/L		
Europium - 155		<		2.21	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: LJS-W3

ACZ Sample ID: **L48763-05**  
Date Sampled: 11/09/04 15:13  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/10/04</b>	<b>dhc</b>
Gadolinium - 153		<		4.47	pCi/L		
Gold - 196		<		0.531	pCi/L		
Gold - 198		<		1.45	pCi/L		
Hafnium - 181		<		1.89	pCi/L		
Iron - 59		<		3.03	pCi/L		
Krypton - 85		<		0.962	pCi/L		
Krypton - 87		<		2.45	pCi/L		
Krypton - 88		<		3.66	pCi/L		
Krypton - 89		<		3.87	pCi/L		
Lanthanum - 140		<		1.13	pCi/L		
Lead - 210		376	201		pCi/L		
Lead - 212		17.7	10.7		pCi/L		
Lead - 214		18.6	10.2		pCi/L		
Lutetium - 177		<		7.22	pCi/L		
Manganese - 54		<		1.72	pCi/L		
Manganese - 56		<		2.14	pCi/L		
Mercury - 203		<		1.53	pCi/L		
Molybdenum - 99		<		0.391	pCi/L		
Neodymium - 147		<		1.82	pCi/L		
Neptunium - 237		<		5.51	pCi/L		
Neptunium - 239		<		2.77	pCi/L		
Niobium - 94		<		2.47	pCi/L		
Niobium - 95		<		1.47	pCi/L		
Plutonium - 239		<		*	pCi/L		
Potassium - 40		<		57.1	pCi/L		
Potassium - 42		<		12.9	pCi/L		
Praseodymium - 144		<		87.3	pCi/L		
Protactinium - 234		<		2.42	pCi/L		
Radium - 224		<		26.2	pCi/L		
Rhodium - 106m		<		3.13	pCi/L		
Rubidium - 86		<		15	pCi/L		
Rubidium - 89		<		2	pCi/L		
Ruthenium - 103		<		0.606	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: LJS-W3

ACZ Sample ID: **L48763-05**  
Date Sampled: 11/09/04 15:13  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/10/04</b>	<b>dhc</b>
Scandium - 46		<		2.95	pCi/L		
Selenium - 75		<		1.62	pCi/L		
Silver - 108		<		112	pCi/L		
Silver - 110		<		1.2	pCi/L		
Sodium - 22		<		1.01	pCi/L		
Sodium - 24		<		1.43	pCi/L		
Strontium - 91		<		2.73	pCi/L		
Tantalum - 182		<		2.69	pCi/L		
Technetium - 99m		<		0.398	pCi/L		
Tellurium - 131		<		1.04	pCi/L		
Tellurium - 132		<		1.11	pCi/L		
Terbium - 160		<		5.35	pCi/L		
Thallium - 208		<		3	pCi/L		
Thorium - 227		<		10.2	pCi/L		
Tin - 113		<		0.708	pCi/L		
Tungsten - 187		<		2.2	pCi/L		
Uranium - 235		<		2.52	pCi/L		
Uranium - 237		<		2.02	pCi/L		
Xenon - 135		<		0.398	pCi/L		
Xenon - 138		<		2.81	pCi/L		
Ytterbium - 175		<		23.2	pCi/L		
Yttrium - 88		<		0.711	pCi/L		
Yttrium - 91m		<		1.75	pCi/L		
Zinc - 65		<		5.65	pCi/L		
Zirconium - 95		<		1.15	pCi/L		



# Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## RadioChemistry Analytical Results

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: GUS-SP1

ACZ Sample ID: **L48763-06**  
Date Sampled: 11/10/04 08:15  
Date Received: 11/12/04  
Sample Matrix: Ground Water

### Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
Gamma	ESM - 4202					12/11/04	dhc
Actinium - 228		<		9.68	pCi/L		
Americium - 241		<		4.1	pCi/L		
Antimony - 122		<		1.76	pCi/L		
Antimony - 124		<		2.44	pCi/L		
Antimony - 125		<		3.78	pCi/L		
Antimony - 126		<		2.35	pCi/L		
Argon - 41		<		2.53	pCi/L		
Arsenic - 76		<		4.2	pCi/L		
Barium - 139		<		4.22	pCi/L		
Barium - 140		<		2.31	pCi/L		
Beryllium - 7		<		14.7	pCi/L		
Bismuth - 207		<		1.33	pCi/L		
Bismuth - 212		<		13.6	pCi/L		
Bismuth - 214		<		5.06	pCi/L		
Bromine - 82		<		0.944	pCi/L		
Cadmium - 109		<		46.8	pCi/L		
Cerium - 139		<		0.943	pCi/L		
Cerium - 141		<		1.6	pCi/L		
Cerium - 143		<		2.41	pCi/L		
Cerium - 144		<		5.41	pCi/L		
Cesium - 134		<		2.31	pCi/L		
Cesium - 136		<		2.13	pCi/L		
Cesium - 137		<		1.67	pCi/L		
Cesium - 138		<		0.739	pCi/L		
Chlorine - 38		<		1.94	pCi/L		
Chromium - 51		<		5.03	pCi/L		
Cobalt - 56		<		1.35	pCi/L		
Cobalt - 57		<		0.831	pCi/L		
Cobalt - 58		<		1.39	pCi/L		
Cobalt - 60		<		1.49	pCi/L		
Copper - 64		<		*	pCi/L		
Europium - 152		<		8.83	pCi/L		
Europium - 154		<		1.47	pCi/L		
Europium - 155		<		2.36	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: GUS-SP1

ACZ Sample ID: **L48763-06**  
Date Sampled: 11/10/04 08:15  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/11/04</b>	<b>dhc</b>
Gadolinium - 153		<		4.55	pCi/L		
Gold - 196		<		0.965	pCi/L		
Gold - 198		<		1.05	pCi/L		
Hafnium - 181		<		1.49	pCi/L		
Iron - 59		<		4.14	pCi/L		
Krypton - 85		<		0.882	pCi/L		
Krypton - 87		<		2.75	pCi/L		
Krypton - 88		<		4.04	pCi/L		
Krypton - 89		<		3.42	pCi/L		
Lanthanum - 140		<		1.5	pCi/L		
Lead - 210		<		47.5	pCi/L		
Lead - 212		16.6	8.6		pCi/L		
Lead - 214		<		3.95	pCi/L		
Lutetium - 177		<		8.85	pCi/L		
Manganese - 54		<		1.09	pCi/L		
Manganese - 56		<		1.36	pCi/L		
Mercury - 203		<		1.51	pCi/L		
Molybdenum - 99		<		0.559	pCi/L		
Neodymium - 147		<		2.69	pCi/L		
Neptunium - 237		<		5.9	pCi/L		
Neptunium - 239		<		2.37	pCi/L		
Niobium - 94		<		2.02	pCi/L		
Niobium - 95		<		1.32	pCi/L		
Plutonium - 239				*	pCi/L		
Potassium - 40		<		50.8	pCi/L		
Potassium - 42		<		16.3	pCi/L		
Praseodymium - 144		<		162	pCi/L		
Protactinium - 234		<		2.52	pCi/L		
Radium - 224		<		16.9	pCi/L		
Rhodium - 106m		<		2.23	pCi/L		
Rubidium - 86		<		14	pCi/L		
Rubidium - 89		<		2.23	pCi/L		
Ruthenium - 103		<		1.46	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: GUS-SP1

ACZ Sample ID: **L48763-06**  
Date Sampled: 11/10/04 08:15  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/11/04</b>	<b>dhc</b>
Scandium - 46		<		2.16	pCi/L		
Selenium - 75		<		0.738	pCi/L		
Silver - 108		<		108	pCi/L		
Silver - 110		<		1.24	pCi/L		
Sodium - 22		<		1.34	pCi/L		
Sodium - 24		<		0.935	pCi/L		
Strontium - 91		<		2.76	pCi/L		
Tantalum - 182		<		3.29	pCi/L		
Technetium - 99m		<		0.376	pCi/L		
Tellurium - 131		<		1.16	pCi/L		
Tellurium - 132		<		1.01	pCi/L		
Terbium - 160		<		6	pCi/L		
Thallium - 208		<		3.93	pCi/L		
Thorium - 227		<		10.2	pCi/L		
Tin - 113		<		1.76	pCi/L		
Tungsten - 187		<		2.78	pCi/L		
Uranium - 235		<		2.59	pCi/L		
Uranium - 237		<		2.53	pCi/L		
Xenon - 135		<		0.436	pCi/L		
Xenon - 138		<		3.2	pCi/L		
Ytterbium - 175		<		15.8	pCi/L		
Yttrium - 88		<		2.36	pCi/L		
Yttrium - 91m		<		1.96	pCi/L		
Zinc - 65		<		5.44	pCi/L		
Zirconium - 95		<		3.8	pCi/L		



# Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## RadioChemistry Analytical Results

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: RS-W4

ACZ Sample ID: **L48763-07**  
Date Sampled: 11/10/04 10:50  
Date Received: 11/12/04  
Sample Matrix: Ground Water

### Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
Gamma	ESM - 4202					12/12/04	dhc
Actinium - 228		<		8.01	pCi/L		
Americium - 241		<		2.41	pCi/L		
Antimony - 122		<		2.41	pCi/L		
Antimony - 124		<		2.05	pCi/L		
Antimony - 125		<		5.03	pCi/L		
Antimony - 126		<		2.45	pCi/L		
Argon - 41		<		2.31	pCi/L		
Arsenic - 76		<		2.97	pCi/L		
Barium - 139		<		3.06	pCi/L		
Barium - 140		<		6.31	pCi/L		
Beryllium - 7		<		15.5	pCi/L		
Bismuth - 207		<		1.66	pCi/L		
Bismuth - 212		<		13	pCi/L		
Bismuth - 214		16.4	9.6		pCi/L		
Bromine - 82		<		0.629	pCi/L		
Cadmium - 109		<		42.2	pCi/L		
Cerium - 139		<		0.611	pCi/L		
Cerium - 141		<		1.26	pCi/L		
Cerium - 143		<		2.94	pCi/L		
Cerium - 144		<		7.39	pCi/L		
Cesium - 134		<		2	pCi/L		
Cesium - 136		<		1.62	pCi/L		
Cesium - 137		<		2.1	pCi/L		
Cesium - 138		<		1.5	pCi/L		
Chlorine - 38		<		1.94	pCi/L		
Chromium - 51		<		10.6	pCi/L		
Cobalt - 56		<		2.67	pCi/L		
Cobalt - 57		<		0.822	pCi/L		
Cobalt - 58		<		1.58	pCi/L		
Cobalt - 60		<		1.58	pCi/L		
Copper - 64		<		*	pCi/L		
Europium - 152		<		9.57	pCi/L		
Europium - 154		<		1.75	pCi/L		
Europium - 155		<		1.79	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: RS-W4

ACZ Sample ID: **L48763-07**  
Date Sampled: 11/10/04 10:50  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/12/04</b>	<b>dhc</b>
Gadolinium - 153		<		4.42	pCi/L		
Gold - 196		<		1.16	pCi/L		
Gold - 198		<		1.54	pCi/L		
Hafnium - 181		<		1.98	pCi/L		
Iron - 59		<		3.8	pCi/L		
Krypton - 85		<		1.01	pCi/L		
Krypton - 87		<		3.09	pCi/L		
Krypton - 88		<		4.2	pCi/L		
Krypton - 89		<		4.96	pCi/L		
Lanthanum - 140		<		0.651	pCi/L		
Lead - 210		344	198		pCi/L		
Lead - 212		<		3.05	pCi/L		
Lead - 214		22	11.4		pCi/L		
Lutetium - 177		<		8.49	pCi/L		
Manganese - 54		<		1.33	pCi/L		
Manganese - 56		<		2.61	pCi/L		
Mercury - 203		<		1.47	pCi/L		
Molybdenum - 99		<		0.558	pCi/L		
Neodymium - 147		<		2.15	pCi/L		
Neptunium - 237		<		4.46	pCi/L		
Neptunium - 239		<		2.37	pCi/L		
Niobium - 94		<		2.34	pCi/L		
Niobium - 95		<		0.785	pCi/L		
Plutonium - 239				*	pCi/L		
Potassium - 40		<		45.4	pCi/L		
Potassium - 42		<		15.3	pCi/L		
Praseodymium - 144		<		174	pCi/L		
Protactinium - 234		<		2.52	pCi/L		
Radium - 224		<		27.1	pCi/L		
Rhodium - 106m		<		3.48	pCi/L		
Rubidium - 86		<		8.57	pCi/L		
Rubidium - 89		<		3.24	pCi/L		
Ruthenium - 103		<		1.66	pCi/L		

\* - No in-range peaks



# Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## RadioChemistry Analytical Results

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: RS-W4

ACZ Sample ID: **L48763-07**  
Date Sampled: 11/10/04 10:50  
Date Received: 11/12/04  
Sample Matrix: Ground Water

### Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/12/04</b>	<b>dhc</b>
Scandium - 46		<		2.46	pCi/L		
Selenium - 75		<		1.21	pCi/L		
Silver - 108		<		81.4	pCi/L		
Silver - 110		<		0.921	pCi/L		
Sodium - 22		<		1.43	pCi/L		
Sodium - 24		<		0.935	pCi/L		
Strontium - 91		<		2.94	pCi/L		
Tantalum - 182		<		2.47	pCi/L		
Technetium - 99m		<		0.69	pCi/L		
Tellurium - 131		<		0.921	pCi/L		
Tellurium - 132		<		1.26	pCi/L		
Terbium - 160		<		6.1	pCi/L		
Thallium - 208		<		3.45	pCi/L		
Thorium - 227		<		7.72	pCi/L		
Tin - 113		<		1.91	pCi/L		
Tungsten - 187		<		6.66	pCi/L		
Uranium - 235		<		2.61	pCi/L		
Uranium - 237		<		2.21	pCi/L		
Xenon - 135		<		0.836	pCi/L		
Xenon - 138		<		3.69	pCi/L		
Ytterbium - 175		<		15.1	pCi/L		
Yttrium - 88		<		0.711	pCi/L		
Yttrium - 91m		<		1.69	pCi/L		
Zinc - 65		<		4.83	pCi/L		
Zirconium - 95		<		1.28	pCi/L		

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: EG-SP2

ACZ Sample ID: **L48763-08**  
Date Sampled: 11/10/04 13:36  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/12/04</b>	<b>dhc</b>
Actinium - 228		<		9.77	pCi/L		
Americium - 241		<		3.28	pCi/L		
Antimony - 122		<		1.62	pCi/L		
Antimony - 124		<		1.75	pCi/L		
Antimony - 125		<		3.33	pCi/L		
Antimony - 126		<		2.26	pCi/L		
Argon - 41		<		2.48	pCi/L		
Arsenic - 76		<		2.69	pCi/L		
Barium - 139		<		3.4	pCi/L		
Barium - 140		<		2.58	pCi/L		
Beryllium - 7		<		15	pCi/L		
Bismuth - 207		<		0.89	pCi/L		
Bismuth - 212		<		15.8	pCi/L		
Bismuth - 214		<		5.03	pCi/L		
Bromine - 82		<		1.32	pCi/L		
Cadmium - 109		<		92.1	pCi/L		
Cerium - 139		<		0.824	pCi/L		
Cerium - 141		<		1.68	pCi/L		
Cerium - 143		<		2.31	pCi/L		
Cerium - 144		<		6.06	pCi/L		
Cesium - 134		<		1.81	pCi/L		
Cesium - 136		<		1.94	pCi/L		
Cesium - 137		<		2.25	pCi/L		
Cesium - 138		<		0.739	pCi/L		
Chlorine - 38		<		1.94	pCi/L		
Chromium - 51		<		3.84	pCi/L		
Cobalt - 56		<		1.35	pCi/L		
Cobalt - 57		<		0.787	pCi/L		
Cobalt - 58		<		0.336	pCi/L		
Cobalt - 60		<		0.527	pCi/L		
Copper - 64		<		*	pCi/L		
Europium - 152		<		9.97	pCi/L		
Europium - 154		<		1.27	pCi/L		
Europium - 155		<		2.52	pCi/L		

\* - No in-range peaks



# Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## RadioChemistry Analytical Results

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: EG-SP2

ACZ Sample ID: **L48763-08**  
Date Sampled: 11/10/04 13:36  
Date Received: 11/12/04  
Sample Matrix: Ground Water

### Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/12/04</b>	<b>dhc</b>
Gadolinium - 153		<		4.74	pCi/L		
Gold - 196		<		1.34	pCi/L		
Gold - 198		<		0.903	pCi/L		
Hafnium - 181		<		1.3	pCi/L		
Iron - 59		<		3.88	pCi/L		
Krypton - 85		<		0.969	pCi/L		
Krypton - 87		<		2.53	pCi/L		
Krypton - 88		<		3.76	pCi/L		
Krypton - 89		<		5.13	pCi/L		
Lanthanum - 140		<		0.651	pCi/L		
Lead - 210		360	189		pCi/L		
Lead - 212		<		3.27	pCi/L		
Lead - 214		<		2.62	pCi/L		
Lutetium - 177		<		8.63	pCi/L		
Manganese - 54		<		2.25	pCi/L		
Manganese - 56		<		0.497	pCi/L		
Mercury - 203		<		1.36	pCi/L		
Molybdenum - 99		<		0.505	pCi/L		
Neodymium - 147		<		2.01	pCi/L		
Neptunium - 237		<		6.18	pCi/L		
Neptunium - 239		<		2.3	pCi/L		
Niobium - 94		<		2.17	pCi/L		
Niobium - 95		<		1.67	pCi/L		
Plutonium - 239				*	pCi/L		
Potassium - 40		<		57.9	pCi/L		
Potassium - 42		<		12.5	pCi/L		
Praseodymium - 144		<		166	pCi/L		
Protactinium - 234		<		2.41	pCi/L		
Radium - 224		<		22.1	pCi/L		
Rhodium - 106m		<		2.85	pCi/L		
Rubidium - 86		<		4.95	pCi/L		
Rubidium - 89		<		2	pCi/L		
Ruthenium - 103		<		1.68	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: EG-SP2

ACZ Sample ID: **L48763-08**  
Date Sampled: 11/10/04 13:36  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/12/04</b>	<b>dhc</b>
Scandium - 46		<		2.29	pCi/L		
Selenium - 75		<		2.14	pCi/L		
Silver - 108		<		79.8	pCi/L		
Silver - 110		<		1.17	pCi/L		
Sodium - 22		<		2.09	pCi/L		
Sodium - 24		<		0.54	pCi/L		
Strontium - 91		<		2.81	pCi/L		
Tantalum - 182		<		2.51	pCi/L		
Technetium - 99m		<		0.928	pCi/L		
Tellurium - 131		<		1.11	pCi/L		
Tellurium - 132		<		1.14	pCi/L		
Terbium - 160		<		5.08	pCi/L		
Thallium - 208		<		3.98	pCi/L		
Thorium - 227		<		7.84	pCi/L		
Tin - 113		<		2.41	pCi/L		
Tungsten - 187		<		4.5	pCi/L		
Uranium - 235		<		2.27	pCi/L		
Uranium - 237		<		2.08	pCi/L		
Xenon - 135		<		1.05	pCi/L		
Xenon - 138		<		3.29	pCi/L		
Ytterbium - 175		<		9.68	pCi/L		
Yttrium - 88		<		1.01	pCi/L		
Yttrium - 91m		<		1.62	pCi/L		
Zinc - 65		<		5.07	pCi/L		
Zirconium - 95		<		2	pCi/L		



# Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## RadioChemistry Analytical Results

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: WK-SP3

ACZ Sample ID: **L48763-09**  
Date Sampled: 11/10/04 14:35  
Date Received: 11/12/04  
Sample Matrix: Ground Water

### Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					12/13/04	dhc
Actinium - 228		<		9.6	pCi/L		
Americium - 241		<		4.75	pCi/L		
Antimony - 122		<		1.97	pCi/L		
Antimony - 124		<		1.94	pCi/L		
Antimony - 125		<		3.93	pCi/L		
Antimony - 126		<		2.33	pCi/L		
Argon - 41		<		2.88	pCi/L		
Arsenic - 76		<		3.58	pCi/L		
Barium - 139		<		4.07	pCi/L		
Barium - 140		<		3.71	pCi/L		
Beryllium - 7		<		11.5	pCi/L		
Bismuth - 207		<		1.85	pCi/L		
Bismuth - 212		<		12	pCi/L		
Bismuth - 214		<		5	pCi/L		
Bromine - 82		<		0.545	pCi/L		
Cadmium - 109		<		47	pCi/L		
Cerium - 139		<		0.958	pCi/L		
Cerium - 141		<		1.49	pCi/L		
Cerium - 143		<		2.52	pCi/L		
Cerium - 144		<		6.45	pCi/L		
Cesium - 134		<		1.5	pCi/L		
Cesium - 136		<		2.02	pCi/L		
Cesium - 137		<		2.48	pCi/L		
Cesium - 138		<		0.739	pCi/L		
Chlorine - 38		<		4.35	pCi/L		
Chromium - 51		<		11.7	pCi/L		
Cobalt - 56		<		2	pCi/L		
Cobalt - 57		<		0.799	pCi/L		
Cobalt - 58		<		1.1	pCi/L		
Cobalt - 60		<		0.527	pCi/L		
Copper - 64		<		*	pCi/L		
Europium - 152		<		9.12	pCi/L		
Europium - 154		<		1.44	pCi/L		
Europium - 155		<		2.4	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: WK-SP3

ACZ Sample ID: **L48763-09**  
Date Sampled: 11/10/04 14:35  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/13/04</b>	<b>dhc</b>
Gadolinium - 153		<		4.4	pCi/L		
Gold - 196		<		1.33	pCi/L		
Gold - 198		<		1.53	pCi/L		
Hafnium - 181		<		1.53	pCi/L		
Iron - 59		<		3.75	pCi/L		
Krypton - 85		<		0.871	pCi/L		
Krypton - 87		<		2.96	pCi/L		
Krypton - 88		<		4.14	pCi/L		
Krypton - 89		<		4.1	pCi/L		
Lanthanum - 140		<		0.651	pCi/L		
Lead - 210		<		75.3	pCi/L		
Lead - 212		<		1.27	pCi/L		
Lead - 214		<		4.62	pCi/L		
Lutetium - 177		<		7.59	pCi/L		
Manganese - 54		<		1.46	pCi/L		
Manganese - 56		<		2.02	pCi/L		
Mercury - 203		<		1.33	pCi/L		
Molybdenum - 99		<		0.721	pCi/L		
Neodymium - 147		<		1.86	pCi/L		
Neptunium - 237		<		6	pCi/L		
Neptunium - 239		<		2.45	pCi/L		
Niobium - 94		<		2.31	pCi/L		
Niobium - 95		<		1.63	pCi/L		
Plutonium - 239				*	pCi/L		
Potassium - 40		<		44.5	pCi/L		
Potassium - 42		<		14.8	pCi/L		
Praseodymium - 144		<		170	pCi/L		
Protactinium - 234		<		2.37	pCi/L		
Radium - 224		<		30.7	pCi/L		
Rhodium - 106m		<		2.08	pCi/L		
Rubidium - 86		<		7	pCi/L		
Rubidium - 89		<		1.22	pCi/L		
Ruthenium - 103		<		1.28	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: WK-SP3

ACZ Sample ID: **L48763-09**  
Date Sampled: 11/10/04 14:35  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/13/04</b>	<b>dhc</b>
Scandium - 46		<		3.18	pCi/L		
Selenium - 75		<		2	pCi/L		
Silver - 108		<		93	pCi/L		
Silver - 110		<		1.09	pCi/L		
Sodium - 22		<		0.506	pCi/L		
Sodium - 24		<		1.62	pCi/L		
Strontium - 91		<		2.67	pCi/L		
Tantalum - 182		<		2.59	pCi/L		
Technetium - 99m		<		0.934	pCi/L		
Tellurium - 131		<		0.865	pCi/L		
Tellurium - 132		<		1.05	pCi/L		
Terbium - 160		<		4.63	pCi/L		
Thallium - 208		<		3.81	pCi/L		
Thorium - 227		<		9.2	pCi/L		
Tin - 113		<		2.5	pCi/L		
Tungsten - 187		<		6.05	pCi/L		
Uranium - 235		<		2.14	pCi/L		
Uranium - 237		<		4.13	pCi/L		
Xenon - 135		<		0.617	pCi/L		
Xenon - 138		<		3.49	pCi/L		
Ytterbium - 175		<		25.6	pCi/L		
Yttrium - 88		<		0.711	pCi/L		
Yttrium - 91m		<		1.66	pCi/L		
Zinc - 65		<		5.37	pCi/L		
Zirconium - 95		<		1.28	pCi/L		

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: LH96-SP4

ACZ Sample ID: **L48763-10**  
Date Sampled: 11/10/04 15:45  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/13/04</b>	<b>dhc</b>
Actinium - 228		<		8.79	pCi/L		
Americium - 241		<		3.98	pCi/L		
Antimony - 122		<		1.47	pCi/L		
Antimony - 124		<		1.8	pCi/L		
Antimony - 125		<		3.72	pCi/L		
Antimony - 126		<		2.2	pCi/L		
Argon - 41		<		3	pCi/L		
Arsenic - 76		<		2.97	pCi/L		
Barium - 139		<		4.5	pCi/L		
Barium - 140		<		2.31	pCi/L		
Beryllium - 7		<		11.1	pCi/L		
Bismuth - 207		<		1.46	pCi/L		
Bismuth - 212		<		15	pCi/L		
Bismuth - 214		<		5.0	pCi/L		
Bromine - 82		<		0.385	pCi/L		
Cadmium - 109		<		38.7	pCi/L		
Cerium - 139		<		1.06	pCi/L		
Cerium - 141		<		1.63	pCi/L		
Cerium - 143		<		0.96	pCi/L		
Cerium - 144		<		5.6	pCi/L		
Cesium - 134		<		1.94	pCi/L		
Cesium - 136		<		1.58	pCi/L		
Cesium - 137		<		1.7	pCi/L		
Cesium - 138		<		1.96	pCi/L		
Chlorine - 38		<		1.94	pCi/L		
Chromium - 51		<		6.81	pCi/L		
Cobalt - 56		<		1.84	pCi/L		
Cobalt - 57		<		0.808	pCi/L		
Cobalt - 58		<		0.582	pCi/L		
Cobalt - 60		7.37	3.18		pCi/L		
Copper - 64				*	pCi/L		
Europium - 152		<		10	pCi/L		
Europium - 154		<		1.47	pCi/L		
Europium - 155		<		2.41	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: LH96-SP4

ACZ Sample ID: **L48763-10**  
Date Sampled: 11/10/04 15:45  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/13/04</b>	<b>dhc</b>
Gadolinium - 153		<		4.27	pCi/L		
Gold - 196		<		1.35	pCi/L		
Gold - 198		<		0.883	pCi/L		
Hafnium - 181		<		1.55	pCi/L		
Iron - 59		<		3.96	pCi/L		
Krypton - 85		<		1.06	pCi/L		
Krypton - 87		<		2.34	pCi/L		
Krypton - 88		<		3.71	pCi/L		
Krypton - 89		<		3.45	pCi/L		
Lanthanum - 140		<		1.46	pCi/L		
Lead - 210		360	189		pCi/L		
Lead - 212		<		2.18	pCi/L		
Lead - 214		<		2.4	pCi/L		
Lutetium - 177		<		9.27	pCi/L		
Manganese - 54		<		0.768	pCi/L		
Manganese - 56		<		1.86	pCi/L		
Mercury - 203		<		1.33	pCi/L		
Molybdenum - 99		<		0.663	pCi/L		
Neodymium - 147		<		1.62	pCi/L		
Neptunium - 237		<		6.02	pCi/L		
Neptunium - 239		<		2.4	pCi/L		
Niobium - 94		<		2.37	pCi/L		
Niobium - 95		<		0.555	pCi/L		
Plutonium - 239				*	pCi/L		
Potassium - 40		<		48.4	pCi/L		
Potassium - 42		<		14.9	pCi/L		
Praseodymium - 144		<		146	pCi/L		
Protactinium - 234		<		2.49	pCi/L		
Radium - 224		<		14.4	pCi/L		
Rhodium - 106m		<		3.43	pCi/L		
Rubidium - 86		<		7	pCi/L		
Rubidium - 89		<		1.5	pCi/L		
Ruthenium - 103		<		1.31	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: LH96-SP4

ACZ Sample ID: **L48763-10**  
Date Sampled: 11/10/04 15:45  
Date Received: 11/12/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/13/04</b>	<b>dhc</b>
Scandium - 46		<		2.5	pCi/L		
Selenium - 75		<		0.579	pCi/L		
Silver - 108		<		76.5	pCi/L		
Silver - 110		<		1.27	pCi/L		
Sodium - 22		<		1.34	pCi/L		
Sodium - 24		<		2.12	pCi/L		
Strontium - 91		<		2.97	pCi/L		
Tantalum - 182		<		2.27	pCi/L		
Technetium - 99m		<		0.737	pCi/L		
Tellurium - 131		<		1.18	pCi/L		
Tellurium - 132		<		0.794	pCi/L		
Terbium - 160		<		5.86	pCi/L		
Thallium - 208		<		3.44	pCi/L		
Thorium - 227		<		7.84	pCi/L		
Tin - 113		<		2.77	pCi/L		
Tungsten - 187		<		4.61	pCi/L		
Uranium - 235		<		2.6	pCi/L		
Uranium - 237		<		2.64	pCi/L		
Xenon - 135		<		1.18	pCi/L		
Xenon - 138		<		3.83	pCi/L		
Ytterbium - 175		<		18.1	pCi/L		
Yttrium - 88		<		1.23	pCi/L		
Yttrium - 91m		<		1.76	pCi/L		
Zinc - 65		<		5.07	pCi/L		
Zirconium - 95		<		1.28	pCi/L		



**Hazen Research, Inc.**

4601 Indiana Street  
Golden, CO 80403 USA  
Tel: (303) 279-4501  
Fax: (303) 278-1528

DATE December 9, 2004  
HRI PROJECT 002-JT7  
HRI SERIES NO. K314/04  
DATE REC'D 11/19/2004  
CUST. P.O.# None Rec'd

ACZ Laboratories, Inc.  
Tony Antalek  
2773 Downhill Drive  
Steamboat Springs, CO 80487

**REPORT OF ANALYSIS**

SAMPLE NO. K314/04-1

SAMPLE IDENTIFICATION: L48763-01 - sampled on 11/09/2004 @ 1008

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	44(+/-470)	470	SM 7500-3H B	11/22/2004 @ 1030	EDF

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
NY ELAP - 11417; PA DEP 68551; WI - 998376610

**CODES:**

- (T) = Total (D) = Dissolved
- (S) = Suspended (R) = Total Recoverable
- (PD) = Potentially Dissolved
- < = Less Than

By:   
Robert Rostad  
Laboratory Manager



**Hazen Research, Inc.**  
 4601 Indiana Street  
 Golden, CO 80403 USA  
 Tel: (303) 279-4501  
 Fax: (303) 278-1528

DATE December 9, 2004  
 HRI PROJECT 002-JT7  
 HRI SERIES NO. K314/04  
 DATE REC'D 11/19/2004  
 CUST. P.O.# None Rec'd

ACZ Laboratories, Inc.  
 Tony Antalek  
 2773 Downhill Drive  
 Steamboat Springs, CO 80487

**REPORT OF ANALYSIS**

SAMPLE NO. K314/04-2

SAMPLE IDENTIFICATION: L48763-02 - sampled on 11/09/2004 @ 1139

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	0(+460)	470	SM 7500-3H B	11/22/2004 @ 1145	EDF

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
 Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
 NY ELAP - 11417; PA DEP 68551; WI - 998376610

CODES:

(T) = Total (D) = Dissolved  
 (S) = Suspended (R) = Total Recoverable  
 (PD) = Potentially Dissolved  
 < = Less Than

By:   
 Robert Rostad  
 Laboratory Manager



**Hazen Research, Inc.**  
 4601 Indiana Street  
 Golden, CO 80403 USA  
 Tel: (303) 279-4501  
 Fax: (303) 278-1528

DATE December 9, 2004  
 HRI PROJECT 002-JT7  
 HRI SERIES NO. K314/04  
 DATE REC'D 11/19/2004  
 CUST. P.O.# None Rec'd

ACZ Laboratories, Inc.  
 Tony Antalek  
 2773 Downhill Drive  
 Steamboat Springs, CO 80487

**REPORT OF ANALYSIS**

SAMPLE NO. K314/04-3

SAMPLE IDENTIFICATION: L48763-03 - sampled on 11/09/2004 @ 1306

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	18(+/-470)	470	SM 7500-3H B	11/22/2004 @ 1250	EDF

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
 Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
 NY ELAP - 11417; PA DEP 68551; WI - 998376610

CODES:

(T) = Total (D) = Dissolved  
 (S) = Suspended (R) = Total Recoverable  
 (PD) = Potentially Dissolved  
 < = Less Than

By:   
 Robert Rostad  
 Laboratory Manager



**Hazen Research, Inc.**

4601 Indiana Street  
Golden, CO 80403 USA  
Tel: (303) 279-4501  
Fax: (303) 278-1528

DATE December 9, 2004  
HRI PROJECT 002-JT7  
HRI SERIES NO. K314/04  
DATE REC'D 11/19/2004  
CUST. P.O.# None Rec'd

ACZ Laboratories, Inc.  
Tony Antalek  
2773 Downhill Drive  
Steamboat Springs, CO 80487

**REPORT OF ANALYSIS**

SAMPLE NO. K314/04-4

SAMPLE IDENTIFICATION: L48763-04 - sampled on 11/09/2004 @ 1350

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	160(+/-470)	470	SM 7500-3H B	11/22/2004 @ 1350	EDF

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
NY ELAP - 11417; PA DEP 68551; WI - 998376610

**CODES:**

(T) = Total (D) = Dissolved  
(S) = Suspended (R) = Total Recoverable  
(PD) = Potentially Dissolved  
< = Less Than

By:   
Robert Rostad  
Laboratory Manager



**Hazen Research, Inc.**  
 4601 Indiana Street  
 Golden, CO 80403 USA  
 Tel: (303) 279-4501  
 Fax: (303) 278-1528

DATE December 9, 2004  
 HRI PROJECT 002-JT7  
 HRI SERIES NO. K314/04  
 DATE REC'D 11/19/2004  
 CUST. P.O.# None Rec'd

ACZ Laboratories, Inc.  
 Tony Antalek  
 2773 Downhill Drive  
 Steamboat Springs, CO 80487

**REPORT OF ANALYSIS**

SAMPLE NO. K314/04-5

SAMPLE IDENTIFICATION: L48763-05 - sampled on 11/09/2004 @ 1513

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	66(+470)	470	SM 7500-3H B	11/22/2004 @ 1455	EDF

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
 Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
 NY ELAP - 11417; PA DEP 68551; WI - 998376610

CODES:

(T) = Total (D) = Dissolved  
 (S) = Suspended (R) = Total Recoverable  
 (PD) = Potentially Dissolved  
 < = Less Than

By:   
 Robert Rostad  
 Laboratory Manager



**Hazen Research, Inc.**  
 4601 Indiana Street  
 Golden, CO 80403 USA  
 Tel: (303) 279-4501  
 Fax: (303) 278-1528

DATE December 9, 2004  
 HRI PROJECT 002-JT7  
 HRI SERIES NO. K314/04  
 DATE REC'D 11/19/2004  
 CUST. P.O.# None Rec'd

ACZ Laboratories, Inc.  
 Tony Antalek  
 2773 Downhill Drive  
 Steamboat Springs, CO 80487

**REPORT OF ANALYSIS**

SAMPLE NO. K314/04-6

SAMPLE IDENTIFICATION: L48763-06 - sampled on 11/10/2004 @ 0815

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	220(+470)	470	SM 7500-3H B	11/23/2004 @ 0620	EDF

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
 Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
 NY ELAP - 11417; PA DEP 68551; WI - 998376610

CODES:

(T) = Total (D) = Dissolved  
 (S) = Suspended (R) = Total Recoverable  
 (PD) = Potentially Dissolved  
 < = Less Than

By:   
 Robert Rostad  
 Laboratory Manager



**Hazen Research, Inc.**

4601 Indiana Street  
Golden, CO 80403 USA  
Tel: (303) 279-4501  
Fax: (303) 278-1528

DATE December 9, 2004  
HRI PROJECT 002-JT7  
HRI SERIES NO. K314/04  
DATE REC'D 11/19/2004  
CUST. P.O.# None Rec'd

ACZ Laboratories, Inc.  
Tony Antalek  
2773 Downhill Drive  
Steamboat Springs, CO 80487

**REPORT OF ANALYSIS**

SAMPLE NO. K314/04-7

SAMPLE IDENTIFICATION: L48763-07 - sampled on 11/10/2004 @ 1050

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	0(+460)	470	SM 7500-3H B	11/23/2004 @ 0730	EDF

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
NY ELAP - 11417; PA DEP 68551; WI - 998376610

CODES:

- (T) = Total (D) = Dissolved
- (S) = Suspended (R) = Total Recoverable
- (PD) = Potentially Dissolved
- < = Less Than

By:   
Robert Rostad  
Laboratory Manager



**Hazen Research, Inc.**

4601 Indiana Street  
Golden, CO 80403 USA  
Tel: (303) 279-4501  
Fax: (303) 278-1528

DATE December 9, 2004  
HRI PROJECT 002-JT7  
HRI SERIES NO. K314/04  
DATE REC'D 11/19/2004  
CUST. P.O.# None Rec'd

ACZ Laboratories, Inc.  
Tony Antalek  
2773 Downhill Drive  
Steamboat Springs, CO 80487

**REPORT OF ANALYSIS**

SAMPLE NO. K314/04-8

SAMPLE IDENTIFICATION: L48763-08 - sampled on 11/10/2004 @ 1336

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	260(+470)	470	SM 7500-3H B	11/23/2004 @ 0900	EDF

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
NY ELAP - 11417; PA DEP 68551; WI - 998376610

**CODES:**

(T) = Total (D) = Dissolved  
(S) = Suspended (R) = Total Recoverable  
(PD) = Potentially Dissolved  
< = Less Than

By:   
Robert Rostad  
Laboratory Manager



**Hazen Research, Inc.**  
 4601 Indiana Street  
 Golden, CO 80403 USA  
 Tel: (303) 279-4501  
 Fax: (303) 278-1528

DATE December 9, 2004  
 HRI PROJECT 002-JT7  
 HRI SERIES NO. K314/04  
 DATE REC'D 11/19/2004  
 CUST. P.O.# None Rec'd

ACZ Laboratories, Inc.  
 Tony Antalek  
 2773 Downhill Drive  
 Steamboat Springs, CO 80487

**REPORT OF ANALYSIS**

SAMPLE NO. K314/04-9

SAMPLE IDENTIFICATION: L48763-09 - sampled on 11/10/2004 @ 1435

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	0(+/-470)	470	SM 7500-3H B	11/23/2004 @ 1015	EDF

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
 Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
 NY ELAP - 11417; PA DEP 68551; WI - 998376610

CODES:

(T) = Total (D) = Dissolved  
 (S) = Suspended (R) = Total Recoverable  
 (PD) = Potentially Dissolved  
 < = Less Than

By:   
 Robert Rostad  
 Laboratory Manager



**Hazen Research, Inc.**

4601 Indiana Street  
Golden, CO 80403 USA  
Tel: (303) 279-4501  
Fax: (303) 278-1528

DATE December 9, 2004  
HRI PROJECT 002-JT7  
HRI SERIES NO. K314/04  
DATE REC'D 11/19/2004  
CUST. P.O.# None Rec'd

ACZ Laboratories, Inc.  
Tony Antalek  
2773 Downhill Drive  
Steamboat Springs, CO 80487

**REPORT OF ANALYSIS**

SAMPLE NO. K314/04-10

SAMPLE IDENTIFICATION: L48763-10 - sampled on 11/10/2004 @ 1545

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	0(+/-470)	470	SM 7500-3H B	11/23/2004 @ 1130	EDF

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
NY ELAP - 11417; PA DEP 68551; WI - 998376610

CODES:

(T) = Total (D) = Dissolved  
(S) = Suspended (R) = Total Recoverable  
(PD) = Potentially Dissolved  
< = Less Than

By:   
Robert Rostad  
Laboratory Manager

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## CHAIN of CUSTODY

**Report to:**

Name: TONY ANTALEK	Address: 2773 DOWNHILL DR
Company: ACZ LABS, INC.	STEAMBOAT SPGS, CO 80487
E-mail: tantalek@acz.com	Telephone: (970) 879-6590

**Copy of Report to:**

Name: N/A	E-mail:
Company:	Telephone:

**Invoice to:**

Name: YVONNE BAKER	Address: 2773 DOWNHILL DR
Company: ACZ LAS, INC.	STEAMBOAT SPGS, CO 80487
E-mail: yb@acz.com	Telephone: (970) 870-6590

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES  NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

**PROJECT INFORMATION** ANALYSES REQUESTED (attach list or use quote number)

Quote #:	# of Containers																		
Project/PO #:																			
Shipping Co.:																			
Tracking #:																			
Reporting state for compliance testing:																			
Are any samples NRC licensable material?																			

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	H3															
L48763-01	11/9/2004 10:08	GW	1	✓															
L48763-02	11/9/2004 11:39	SW	1	✓															
L48763-03	11/9/2004 13:06	GW	1	✓															
L48763-04	11/9/2004 13:50	SW	1	✓															
L48763-05	11/9/2004 15:13	GW	1	✓															
L48763-06	11/10/2004 08:15	GW	1	✓															
L48763-07	11/10/2004 10:50	GW	1	✓															
L48763-08	11/10/2004 13:36	GW	1	✓															
L48763-09	11/10/2004 14:35	GW	1	✓															
L48763-10	11/10/2004 15:45	GW	1	✓															

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

**REMARKS**

SUBCONTRACTED - Hazen Research, 4601 Indiana Street, Golden, CO 80403  
 Attn: John Jarvis (303) 279-4502 ext 218

WG 182 508

50  
55  
82

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME	Page
T. ANTALEK	11/18/2004 1600	Diana Lupton	11-19-04	1000

James Hix  
Cordilleran Compliance Services  
5550 Marshall Street  
Arvada, CO 80002

January 20, 2005

Project ID: EO4243  
ACZ Project ID: L49014

Basil Bear:

Enclosed are revised analytical reports for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on December 04, 2004 and reported on December 30, 2004. Refer to the case narrative for explanation of the changes. This project was assigned to ACZ's project number, L49014. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L49014. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

This report should be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after January 30, 2005. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years. Please notify your Project Manager if you have other needs.

If you have any questions, please contact your Project Manager or Customer Service Representative.

20/Jan/05

Tony Antalek, Project Manager, has reviewed and approved this report in its entirety.



Cordilleran Compliance Services

January 20, 2005

Project ID: EO4243

ACZ Project ID: L49014

**Sample Receipt**

ACZ Laboratories, Inc. (ACZ) received 4 ground water samples from Cordilleran Compliance Services on December 4, 2004. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L49014. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

**Holding Times**

All analyses except those qualified with the ACZ 'H1' flag were performed within EPA recommended holding times. The Dissolved Ortho Phosphorus samples were received too close to method holding time to be processed prior to hold time expiration.

**Sample Analysis**

These samples were analyzed for inorganic and organic parameters. The individual methods are referenced on both the ACZ invoice and the analytical reports. The extended qualifier reports may contain footnotes qualifying specific elements due to QC failures. In addition the following has been noted with this specific project:

1. The Sulfide Reactivity analysis experienced low quality control sample recovery which is typical for this method.
2. The Tritium analysis was subcontracted to Hazen Research and is reported as an attachment to this report.
3. This is a revised report due to the editing of the filtration work group date. This will not affect any other previously reported data.

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: CK-W5

ACZ Sample ID: **L49014-01**  
Date Sampled: 12/02/04 11:50  
Date Received: 12/04/04  
Sample Matrix: Ground Water

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	47.6			mg/L	0.2	1	12/28/04 16:07	wfg
Iron, total	M200.7 ICP	0.04	B		mg/L	0.01	0.05	12/28/04 16:07	wfg
Magnesium, total	M200.7 ICP	43.0			mg/L	0.2	1	12/28/04 16:07	wfg
Manganese, total	M200.7 ICP			U	mg/L	0.005	0.03	12/28/04 16:07	wfg
Potassium, total	M200.7 ICP	2.2			mg/L	0.3	1	12/28/04 16:07	wfg
Selenium, total	M200.7 ICP			U	mg/L	0.04	0.2	12/28/04 16:07	wfg
Sodium, total	M200.7 ICP	74.9			mg/L	0.3	1	12/28/04 16:07	wfg

#### Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/27/04 19:12	ak

#### Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		396			mg/L	2	10	12/10/04 0:00	eds/nlm
Carbonate as CaCO3				U	mg/L	2	10	12/10/04 0:00	eds/nlm
Hydroxide as CaCO3				U	mg/L	2	10	12/10/04 0:00	eds/nlm
Total Alkalinity		396			mg/L	2	10	12/10/04 0:00	eds/nlm
Hardness as CaCO3 (total)	SM2340B - Calculation	296			mg/L	1	7	01/20/05 0:00	calc
Lab Filtration	SM 3030 B							12/04/04 17:56	mb
Lab Filtration & Acidification	SM 3030 B							12/10/04 14:26	ak
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.64			mg/L	0.02	0.1	12/23/04 20:25	pjb
Nitrogen, ammonia	M350.1 - Automated Phenate			U	mg/L	0.05	0.5	12/16/04 22:04	erf
Phosphate	Calculation based on Ortho Phosphorus	0.09	B		mg/L	0.03	0.15	01/20/05 0:00	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	0.03	BH	*	mg/L	0.01	0.05	12/04/04 15:34	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	460	H	*	mg/L	10	20	12/21/04 10:16	ktd
Sodium Absorption Ratio in Water	USGS - I1738-78			U		0.03	0.15	01/20/05 0:00	calc
Sulfate	M375.3 - Gravimetric	50			mg/L	10	50	12/22/04 9:31	bf
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030			U	mg/Kg	0.3	3	12/09/04 15:54	ktd

**Cordilleran Compliance Services**

Project ID: EO4243  
 Sample ID: TJ-W6

ACZ Sample ID: **L49014-02**  
 Date Sampled: 12/02/04 12:40  
 Date Received: 12/04/04  
 Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	54.4			mg/L	0.2	1	12/28/04 16:10	wfg
Iron, total	M200.7 ICP	0.12			mg/L	0.01	0.05	12/28/04 16:10	wfg
Magnesium, total	M200.7 ICP	13.0			mg/L	0.2	1	12/28/04 16:10	wfg
Manganese, total	M200.7 ICP		U		mg/L	0.005	0.03	12/28/04 16:10	wfg
Potassium, total	M200.7 ICP	1.2			mg/L	0.3	1	12/28/04 16:10	wfg
Selenium, total	M200.7 ICP		U		mg/L	0.04	0.2	12/28/04 16:10	wfg
Sodium, total	M200.7 ICP	9.8			mg/L	0.3	1	12/28/04 16:10	wfg

Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/27/04 19:13	ak

Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		194			mg/L	2	10	12/10/04 0:00	eds/nlm
Carbonate as CaCO3			U		mg/L	2	10	12/10/04 0:00	eds/nlm
Hydroxide as CaCO3			U		mg/L	2	10	12/10/04 0:00	eds/nlm
Total Alkalinity		194			mg/L	2	10	12/10/04 0:00	eds/nlm
Hardness as CaCO3 (total)	SM2340B - Calculation	189			mg/L	1	7	01/20/05 0:00	calc
Lab Filtration	SM 3030 B							12/04/04 18:00	mb
Lab Filtration & Acidification	SM 3030 B							12/10/04 14:33	ak
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.27			mg/L	0.02	0.1	12/23/04 20:27	pjb
Nitrogen, ammonia	M350.1 - Automated Phenate		U		mg/L	0.05	0.5	12/16/04 22:06	erf
Phosphate	Calculation based on Ortho Phosphorus	0.12	B		mg/L	0.03	0.15	01/20/05 0:00	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	0.04	BH	*	mg/L	0.01	0.05	12/04/04 15:36	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	230	H	*	mg/L	10	20	12/21/04 10:18	ktd
Sodium Absorption Ratio in Water	USGS - 11738-78		U			0.03	0.15	01/20/05 0:00	calc
Sulfate	M375.3 - Gravimetric	10	B		mg/L	10	50	12/22/04 10:02	bf
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030		U	*	mg/Kg	0.3	3	12/09/04 15:58	ktd

### Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

### QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

### QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

### ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
U	Analyte was analyzed for but not detected at the indicated MDL.
V	High blank data accepted because sample concentration is 10 times higher than blank concentration.
W	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
X	Quality control sample is out of control.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

### Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(5)	EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
(6)	Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

### Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.

Cordilleran Compliance Services

ACZ Project ID: **L49014**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L49014-01	WG182374	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	H1	Sample analysis performed past holding time. See Case Narrative.
	WG183084	Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	HC	Initial analysis within holding time. Reanalysis was past holding time which was required due to a QC failure during the initial analysis.
	WG182599	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	N1	See Case Narrative.
L49014-02	WG182374	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	H1	Sample analysis performed past holding time. See Case Narrative.
	WG183084	Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	HC	Initial analysis within holding time. Reanalysis was past holding time which was required due to a QC failure during the initial analysis.
	WG182599	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	N1	See Case Narrative.

### Cordilleran Compliance Services

Project ID: EO4243  
 Sample ID: CK-W5  
 Locator:

ACZ Sample ID: **L49014-01**  
 Date Sampled: 12/02/04 11:50  
 Date Received: 12/04/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: km  
 Extract Date: 12/07/04 15:01  
 Analysis Date: 12/07/04 15:01  
 Dilution Factor: 1

#### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	*	ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U	*	ug/L	0.2	1
m p Xylene	01330 20 7		U	*	ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U	*	ug/L	0.2	1
o Xylene	00095-47- 6		U	*	ug/L	0.2	1
Toluene	000108-88-3		U	*	ug/L	0.2	1

#### Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	100.8	*	%	83	117

### Cordilleran Compliance Services

Project ID: EO4243

Sample ID: CK-W5

Locator:

ACZ Sample ID: **L49014-01**

Date Sampled: 12/02/04 11:50

Date Received: 12/04/04

Sample Matrix: Ground Water

### Methane

Analysis Method: **GC/FID**

Extract Method: **Method**

Analyst: *jj*

Extract Date: 12/15/04 14:19

Analysis Date: 12/15/04 14:19

Dilution Factor: 1

### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U	*	mg/L	0.002	0.002

**Cordilleran Compliance Services**

Project ID: EO4243  
 Sample ID: TJ-W6  
 Locator:

ACZ Sample ID: **L49014-02**  
 Date Sampled: 12/02/04 12:40  
 Date Received: 12/04/04  
 Sample Matrix: Ground Water

**BTEX with MTBE**

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: km  
 Extract Date: 12/07/04 17:12  
 Analysis Date: 12/07/04 17:12  
 Dilution Factor: 1

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	*	ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U	*	ug/L	0.2	1
m p Xylene	01330 20 7		U	*	ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U	*	ug/L	0.2	1
o Xylene	00095-47-6		U	*	ug/L	0.2	1
Toluene	000108-88-3		U	*	ug/L	0.2	1

**Surrogate Recoveries**

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	100.9	*	%	83	117

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: TJ-W6  
Locator:

ACZ Sample ID: **L49014-02**  
Date Sampled: 12/02/04 12:40  
Date Received: 12/04/04  
Sample Matrix: Ground Water

### Methane

Analysis Method: **GC/FID**  
Extract Method: **Method**

Analyst: *jj*  
Extract Date: 12/15/04 14:26  
Analysis Date: 12/15/04 14:26  
Dilution Factor: 1

### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U	*	mg/L	0.002	0.002

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: TB112204-02  
Locator:

ACZ Sample ID: **L49014-03**  
Date Sampled: 12/02/04 0:00  
Date Received: 12/04/04  
Sample Matrix: Ground Water

### Methane

Analysis Method: **GC/FID**  
Extract Method: **Method**

Analyst: *jj*  
Extract Date: 12/15/04 14:28  
Analysis Date: 12/15/04 14:28  
Dilution Factor: 1

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U	*	mg/L	0.002	0.002

### Cordilleran Compliance Services

Project ID: EO4243  
 Sample ID: TB112204-03  
 Locator:

ACZ Sample ID: **L49014-04**  
 Date Sampled: 12/02/04 0:00  
 Date Received: 12/04/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: km  
 Extract Date: 12/07/04 18:40  
 Analysis Date: 12/07/04 18:40  
 Dilution Factor: 1

#### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U		ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U		ug/L	0.2	1
m p Xylene	01330 20 7		U		ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U		ug/L	0.2	1
o Xylene	00095-47-6		U		ug/L	0.2	1
Toluene	000108-88-3		U		ug/L	0.2	1

#### Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LGL	UCL
Bromofluorobenzene	000460-00-4	98.6		%	83	117

### Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>LCL</i>	Lower Control Limit
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>UCL</i>	Upper Control Limit
<i>Sample</i>	Value of the Sample of interest

### QC Sample Types

<i>SURR</i>	Surrogate	<i>LFM</i>	Laboratory Fortified Matrix
<i>INTS</i>	Internal Standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>MSIMSD</i>	Matrix Spike/Matrix Spike Duplicate
<i>LCSW</i>	Laboratory Control Sample - Water	<i>PBS</i>	Prep Blank - Soil
<i>LFB</i>	Laboratory Fortified Blank	<i>PBW</i>	Prep Blank - Water

### QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.

### ACZ Qualifiers (Qual)

B	Analyte detected in daily blank
H	Analysis exceeded method hold time.
J	Analyte concentration detected at a value between MDL and PQL
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
U	Analyte was analyzed for but not detected at the indicated MDL
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
W	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
X	Quality control sample is out of control.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.
P	Analyte concentration differs from second detector by more than 40%.
E	Analyte concentration is estimated due to result exceeding calibration range.
M	Analyte concentration is estimated due to matrix interferences.

### Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/4-90/020. Methods for the Determination of Organic Compounds in Drinking Water (I), July 1990.
- (3) EPA 600/R-92/129. Methods for the Determination of Organic Compounds in Drinking Water (II), July 1990.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December, 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

### Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Organic analyses are reported on an "as received" basis.

Cordilleran Compliance Services

ACZ Project ID: **L49014**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L49014-01	WG182853	*All Compounds*	GC/FID	B3	Target analyte detected in calibration blank at or above the method reporting limit.
	WG182521		M8021B GC/PID	Q3	Sample received with improper chemical preservation.
L49014-02	WG182853	*All Compounds*	GC/FID	B3	Target analyte detected in calibration blank at or above the method reporting limit.
	WG182521		M8021B GC/PID	Q3	Sample received with improper chemical preservation.
L49014-03	WG182853	*All Compounds*	GC/FID	B3	Target analyte detected in calibration blank at or above the method reporting limit.

### Cordilleran Compliance Services

Project ID: EO4243

Sample ID: CK-W5

Locator:

ACZ Sample ID: **L49014-01**

Date Sampled: 12/02/04 11:50

Date Received: 12/04/04

Sample Matrix:

### Radiochemistry

Parameter	EPA Method	Result	Error(+/-)	LLD	XQ	Units	Date	Analyst
Tritium in water		see case narrative						n/a

Prep:

**Note: See Attachments for Tritium and Gamma results.**

### Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: TJ-W6  
Locator:

ACZ Sample ID: **L49014-02**  
Date Sampled: 12/02/04 12:40  
Date Received: 12/04/04  
Sample Matrix:

### Radiochemistry

Parameter	EPA Method	Result	Error(+/-)	LLD	XQ	Units	Date	Analyst
Tritium in water		see case narrative						n/a

Prep:

**Note: See Attachments for Tritium and Gamma results.**

### Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Error(+/-)</i>	Calculated sample specific uncertainty
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>LCL</i>	Lower Control Limit, in % (except for LCSS, mg/Kg)
<i>LLD</i>	Calculated sample specific Lower Limit of Detection
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RER</i>	Relative Error Ratio, calculation used for Dup. QC taking into account the error factor.
<i>UCL</i>	Upper Control Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

### QC Sample Types

<i>DUP</i>	Sample Duplicate	<i>MS/MSD</i>	Matrix Spike/Matrix Spike Duplicate
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBS</i>	Prep Blank - Soil
<i>LCSW</i>	Laboratory Control Sample - Water	<i>PBW</i>	Prep Blank - Water

### QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Matrix Spikes	Determines sample matrix interferences, if any.

### ACZ Qualifiers (Qual)

H	Analysis exceeded method hold time.
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Replicate Error Ratio (RER) accepted because sample concentrations are less than 10x the MDL.
U	No nuclides detected above the Lower Limit of Detection (LLD)
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
X	QC is out of control. See Case Narrative.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

### Method Prefix Reference

M	EPA methodology, including those under SDWA, CWA, and RCRA
SM	Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.
D	ASTM
RP	DOE
ESM	DOE/ESM

### Comments

- (1) Solid matrices are reported on a dry weight basis.
- (2) Preparation method: "Method" indicates preparation defined in analytical method.
- (3) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.

**Cordilleran Compliance Services**  
 EO4243

ACZ Project ID: L49014  
 Date Received: 12/4/2004  
 Received By:

**Receipt Verification**

- 1) Does this project require special handling procedures such as CLP protocol?
- 2) Are the custody seals on the cooler intact?
- 3) Are the custody seals on the sample containers intact?
- 4) Is there a Chain of Custody or other directive shipping papers present?
- 5) Is the Chain of Custody complete?
- 6) Is the Chain of Custody in agreement with the samples received?
- 7) Is there enough sample for all requested analyses?
- 8) Are all samples within holding times for requested analyses?
- 9) Were all sample containers received intact?
- 10) Are the temperature blanks present?
- 11) Are the trip blanks (VOA and/or Cyanide) present?
- 12) Are samples requiring no headspace, headspace free?
- 13) Do the samples that require a Foreign Soils Permit have one?

YES	NO	NA	
		X	
		X	
		X	
X			
X			
X			
X			
	X		
X			
			X
			X
	X		
			X

**Exceptions: If you answered no to any of the above questions, please describe**

Samples were recieved with <2 hours before hold time for P-ORTHO-D and PO4-D were up.

**Contact (For any discrepancies, the client must be contacted)**

The client was not contacted. Headspace in sample #1. Analyses were ran anyway as per CCOC.

**Shipping Containers**

Cooler Id	Temp (°C)	Rad (µR/hr)
acz	2.2	15

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

**Notes**

**Cordilleran Compliance Services**  
 EO4243

ACZ Project ID: L49014  
 Date Received: 12/4/2004  
 Received By:

**Sample Container Preservation**

SAMPLE	CLIENT ID	R < 2	G < 2	Y < 2	YG < 2	B < 2	BG < 2	O < 2	T > 12	P > 12	N/A	RAD
L49014-01	CK-W5	Y		Y					Y			
L49014-02	TJ-W6	Y		Y					Y			
L49014-03	TB112204-02										Ö	
L49014-04	TB112204-03										Ö	

**Sample Container Preservation Legend**

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BG	Filtered/Sulfuric	BLUE GLASS	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr





**Hazen Research, Inc.**

4601 Indiana Street  
Golden, CO 80403 USA  
Tel: (303) 279-4501  
Fax: (303) 278-1528

DATE December 23, 2004  
HRI PROJECT 002-KA4  
HRI SERIES NO. L184/04  
DATE REC'D 12/10/2004  
CUST. P.O.# 12733

ACZ Laboratories, Inc.  
Tony Antalek  
2773 Downhill Drive  
Steamboat Springs, CO 80487

**REPORT OF ANALYSIS**

SAMPLE NO. L184/04-1

SAMPLE IDENTIFICATION: L49014-01 - sampled on 12/02/2004 @ 1150

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	240(+460)	460	SM 7500-3H B	12/16/2004 @ 1610	MRA

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
NY ELAP - 11417; PA DEP 68551; WI - 998376610

**CODES:**

(T) = Total (D) = Dissolved  
(S) = Suspended (R) = Total Recoverable  
(PD) = Potentially Dissolved  
< = Less Than

By:   
Robert Rostad  
Laboratory Manager



**Hazen Research, Inc.**  
 4601 Indiana Street  
 Golden, CO 80403 USA  
 Tel: (303) 279-4501  
 Fax: (303) 278-1528

DATE December 23, 2004  
 HRI PROJECT 002-KA4  
 HRI SERIES NO. L184/04  
 DATE REC'D 12/10/2004  
 CUST. P.O.# 12733

ACZ Laboratories, Inc.  
 Tony Antalek  
 2773 Downhill Drive  
 Steamboat Springs, CO 80487

**REPORT OF ANALYSIS**

SAMPLE NO. L184/04-2

SAMPLE IDENTIFICATION: L49014-02 - sampled on 12/02/2004 @ 1240

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	140(+460)	460	SM 7500-3H B	12/17/2004 @ 0900	MRA

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
 Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
 NY ELAP - 11417; PA DEP 68551; WI - 998376610

**CODES:**

(T) = Total (D) = Dissolved  
 (S) = Suspended (R) = Total Recoverable  
 (PD) = Potentially Dissolved  
 < = Less Than

By:   
 Robert Rostad  
 Laboratory Manager

WG182556  
L49014 - SUB

<b>ACZ Laboratories, Inc.</b>				<b>CHAIN of CUSTODY</b>			
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493							
<b>Report to:</b>							
Name: TONY ANTALEK				Address: 2773 DOWNHILL DR			
Company: ACZ LABS, INC.				STEAMBOAT SPGS, CO 80487			
E-mail: tantalek@acz.com				Telephone: (970) 879-6590			
<b>Copy of Report to:</b>							
Name: N/A				E-mail:			
Company:				Telephone:			
<b>Invoice to:</b>							
Name: YVONNE BAKER				Address: 2773 DOWNHILL DR			
Company: ACZ LAS, INC.				STEAMBOAT SPGS, CO 80487			
E-mail: yb@acz.com				Telephone: (970) 870-6590			
If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses?							YES <input checked="" type="checkbox"/>
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.							NO <input type="checkbox"/>
<b>PROJECT INFORMATION</b>				<b>ANALYSES REQUESTED (attach list or use quote number)</b>			
Quote #:				# of Containers	H3		
Project/PO #: 12733							
Shipping Co.:							
Tracking #:							
Reporting state for compliance testing:							
Are any samples NRC licensable material?							
<b>SAMPLE IDENTIFICATION</b>		<b>DATE:TIME</b>	<b>Matrix</b>				
L49014-01	12/2/2004 11:50	GW	1	✓			
L49014-02	12/2/2004 12:40	GW	1	✓			
Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)							
<b>REMARKS</b>							
SUBCONTRACTED - Hazen Research, 4601 Indiana Street, Golden, CO 80403 Attn: John Jarvis (303) 279-4502 ext 218							
<b>RELINQUISHED BY:</b>		<b>DATE:TIME</b>	<b>RECEIVED BY:</b>		<b>DATE:TIME</b>	<b>Page</b>	
T. ANTALEK <i>[Signature]</i>		12/09/2004 1600	Name [Signature]		12-10-04 1600	1 of	



Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: CK-W5

ACZ Sample ID: L49014-01  
Date Sampled: 12/02/04 11:50  
Date Received: 12/04/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (%)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/14/04</b>	<b>dhc</b>
Actinium - 228		<		9.68	pCi/L		
Americium - 241		<		3.96	pCi/L		
Antimony - 122		<		2.46	pCi/L		
Antimony - 124		<		2.01	pCi/L		
Antimony - 125		<		4.31	pCi/L		
Antimony - 126		<		2.14	pCi/L		
Argon - 41		<		1.71	pCi/L		
Arsenic - 76		<		3.33	pCi/L		
Barium - 139		<		4.44	pCi/L		
Barium - 140		<		8.07	pCi/L		
Beryllium - 7		<		14.40	pCi/L		
Bismuth - 207		<		1.96	pCi/L		
Bismuth - 212		<		11.2	pCi/L		
Bismuth - 214		24.4	10.9		pCi/L		
Bromine - 82		<		1.72	pCi/L		
Cadmium - 109		<		76.50	pCi/L		
Cerium - 139		<		0.95	pCi/L		
Cerium - 141		<		1.86	pCi/L		
Cerium - 143		<		2.50	pCi/L		
Cerium - 144		<		7.63	pCi/L		
Cesium - 134		<		1.99	pCi/L		
Cesium - 136		<		1.58	pCi/L		
Cesium - 137		<		2.02	pCi/L		
Cesium - 138		<		0.74	pCi/L		
Chlorine - 38		<		1.94	pCi/L		
Chromium - 51		<		6.33	pCi/L		
Cobalt - 56		<		1.91	pCi/L		
Cobalt - 57		<		0.86	pCi/L		
Cobalt - 58		<		1.00	pCi/L		
Cobalt - 60		<		0.75	pCi/L		
Copper - 64				*	pCi/L		
Europium - 152		<		9.47	pCi/L		
Europium - 154		<		1.91	pCi/L		
Europium - 155		<		2.67	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: CK-W5

ACZ Sample ID: **L49014-01**

Date Sampled: 12/02/04 11:50  
Date Received: 12/04/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/14/04</b>	<b>dhc</b>
Gadolinium - 153		<		4.69	pCi/L		
Gold - 196		<		1.25	pCi/L		
Gold - 198		<		1.67	pCi/L		
Hafnium - 181		<		1.34	pCi/L		
Iron - 59		<		2.92	pCi/L		
Krypton - 85m		<		1.15	pCi/L		
Krypton - 87		<		1.26	pCi/L		
Krypton - 88		<		3.97	pCi/L		
Krypton - 89		<		4.08	pCi/L		
Lanthanum - 140		<		1.00	pCi/L		
Lead - 210		405	212		pCi/L		
Lead - 212		<		3.39	pCi/L		
Lead - 214		<		5.14	pCi/L		
Lutetium - 177		<		6.90	pCi/L		
Manganese - 54		<		1.94	pCi/L		
Manganese - 56		<		1.92	pCi/L		
Mercury - 203		<		1.68	pCi/L		
Molybdenum - 99		<		0.74	pCi/L		
Neodymium - 147		<		1.94	pCi/L		
Neptunium - 237		<		6.67	pCi/L		
Neptunium - 239		<		2.41	pCi/L		
Niobium - 94		<		2.52	pCi/L		
Niobium - 95		<		1.20	pCi/L		
Plutonium - 239				*	pCi/L		
Potassium - 40		<		65.30	pCi/L		
Potassium - 42		<		18.80	pCi/L		
Praseodymium - 144		<		142.00	pCi/L		
Protactinium - 234		<		2.55	pCi/L		
Radium - 224		<		26.3	pCi/L		
Rhodium - 106m		<		3.35	pCi/L		
Rubidium - 86		<		8.57	pCi/L		
Rubidium - 89		<		2.12	pCi/L		
Ruthenium - 103		<		1.74	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: CK-W5

ACZ Sample ID: **L49014-01**  
Date Sampled: 12/02/04 11:50  
Date Received: 12/04/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/14/04</b>	<b>dhc</b>
Scandium - 46		<		3.36	pCi/L		
Selenium - 75		<		1.25	pCi/L		
Silver - 108		<		69.60	pCi/L		
Silver - 110		<		1.60	pCi/L		
Sodium - 22		<		0.51	pCi/L		
Sodium - 24		<		2.16	pCi/L		
Strontium - 91		<		2.53	pCi/L		
Tantalum - 182		<		2.84	pCi/L		
Technetium - 99m		<		0.83	pCi/L		
Tellurium - 131		<		1.24	pCi/L		
Tellurium - 132		<		1.16	pCi/L		
Terbium - 160		<		7.38	pCi/L		
Thallium - 208		<		2.79	pCi/L		
Thorium - 227		<		7.78	pCi/L		
Tin - 113		<		1.89	pCi/L		
Tungsten - 187		<		3.00	pCi/L		
Uranium - 235		<		2.61	pCi/L		
Uranium - 237		<		2.18	pCi/L		
Xenon - 135		<		1.28	pCi/L		
Xenon - 138		<		4.10	pCi/L		
Ytterbium - 175		<		20.00	pCi/L		
Yttrium - 88		<		1.74	pCi/L		
Yttrium - 91m		<		1.69	pCi/L		
Zinc - 65		<		5.29	pCi/L		
Zirconium - 95		<		1.40	pCi/L		



Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: TJ-W6

ACZ Sample ID: L49014-02

Date Sampled: 12/02/04 11:40  
Date Received: 12/04/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
Gamma	ESM - 4202					12/14/04	dhc
Actinium - 228		<		8.76	pCi/L		
Americium - 241		<		4.64	pCi/L		
Antimony - 122		<		1.62	pCi/L		
Antimony - 124		<		1.94	pCi/L		
Antimony - 125		<		3.93	pCi/L		
Antimony - 126		<		2.14	pCi/L		
Argon - 41		<		2	pCi/L		
Arsenic - 76		<		2.99	pCi/L		
Barium - 139		<		3.72	pCi/L		
Barium - 140		<		8	pCi/L		
Beryllium - 7		<		8.48	pCi/L		
Bismuth - 207		<		1.75	pCi/L		
Bismuth - 212		<		1.23	pCi/L		
Bismuth - 214		<		5	pCi/L		
Bromine - 82		<		0.385	pCi/L		
Cadmium - 109		<		21.4	pCi/L		
Cerium - 139		<		1.03	pCi/L		
Cerium - 141		<		1.73	pCi/L		
Cerium - 143		<		2.59	pCi/L		
Cerium - 144		<		5.85	pCi/L		
Cesium - 134		<		2.06	pCi/L		
Cesium - 136		<		1.62	pCi/L		
Cesium - 137		<		1.67	pCi/L		
Cesium - 138		<		1.81	pCi/L		
Chlorine - 38		<		1.94	pCi/L		
Chromium - 51		<		11.8	pCi/L		
Cobalt - 56		<		1.56	pCi/L		
Cobalt - 57		<		8.42	pCi/L		
Cobalt - 58		<		1	pCi/L		
Cobalt - 60		<		1.75	pCi/L		
Copper - 64		<		*	pCi/L		
Europium - 152		<		9.84	pCi/L		
Europium - 154		<		1.6	pCi/L		
Europium - 155		<		2.05	pCi/L		

\* - No in-range peaks

**Cordilleran Compliance Services**

Project ID: EO4243  
Sample ID: TJ-W6

ACZ Sample ID: **L49014-02**  
Date Sampled: 12/02/04 11:40  
Date Received: 12/04/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/14/04</b>	<b>dhc</b>
Gadolinium - 153		<		4.58	pCi/L		
Gold - 196		<		1.18	pCi/L		
Gold - 198		<		0.922	pCi/L		
Hafnium - 181		<		1.87	pCi/L		
Iron - 59		<		2.5	pCi/L		
Krypton - 85m		<		1.01	pCi/L		
Krypton - 87		<		2.42	pCi/L		
Krypton - 88		<		3.68	pCi/L		
Krypton - 89		<		5.68	pCi/L		
Lanthanum - 140		<		1.46	pCi/L		
Lead - 210		<		64.7	pCi/L		
Lead - 212		<		3.16	pCi/L		
Lead - 214		<		4.95	pCi/L		
Lutetium - 177		<		11	pCi/L		
Manganese - 54		<		0.841	pCi/L		
Manganese - 56		<		1.57	pCi/L		
Mercury - 203		<		1.58	pCi/L		
Molybdenum - 99		<		0.468	pCi/L		
Neodymium - 147		<		1.89	pCi/L		
Neptunium - 237		<		5.12	pCi/L		
Neptunium - 239		<		2.57	pCi/L		
Niobium - 94		<		2.02	pCi/L		
Niobium - 95		<		1.63	pCi/L		
Plutonium - 239		<		*	pCi/L		
Potassium - 40		<		46.4	pCi/L		
Potassium - 42		<		1.56	pCi/L		
Praseodymium - 144		<		146	pCi/L		
Protactinium - 234		<		2.48	pCi/L		
Radium - 224		<		30.1	pCi/L		
Rhodium - 106m		<		3.5	pCi/L		
Rubidium - 86		<		7	pCi/L		
Rubidium - 89		<		1.22	pCi/L		
Ruthenium - 103		<		1.82	pCi/L		

\* - No in-range peaks



Cordilleran Compliance Services

Project ID: EO4243  
Sample ID: TJ-W6

ACZ Sample ID: L49014-02  
Date Sampled: 12/02/04 11:40  
Date Received: 12/04/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (%)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/14/04</b>	<b>dhc</b>
Scandium - 46		<		2.5	pCi/L		
Selenium - 75		<		1.14	pCi/L		
Silver - 108		<		95.7	pCi/L		
Silver - 110		<		2.16	pCi/L		
Sodium - 22		<		1.89	pCi/L		
Sodium - 24		<		2.16	pCi/L		
Strontium - 91		<		2.86	pCi/L		
Tantalum - 182		<		2.57	pCi/L		
Technetium - 99m		<		0.841	pCi/L		
Tellurium - 131		<		1.26	pCi/L		
Tellurium - 132		<		0.976	pCi/L		
Terbium - 160		<		7.66	pCi/L		
Thallium - 208		<		3.02	pCi/L		
Thorium - 227		<		5.22	pCi/L		
Tin - 113		<		1.39	pCi/L		
Tungsten - 187		<		5.1	pCi/L		
Uranium - 235		<		2.56	pCi/L		
Uranium - 237		<		3.56	pCi/L		
Xenon - 135		<		0.951	pCi/L		
Xenon - 138		<		1.44	pCi/L		
Ytterbium - 175		<		7.81	pCi/L		
Yttrium - 88		<		1.59	pCi/L		
Yttrium - 91m		<		1.83	pCi/L		
Zinc - 65		<		5.14	pCi/L		
Zirconium - 95		<		1.62	pCi/L		

January 25, 2005

Report to:  
James Hix  
Cordilleran Compliance Services  
5550 Marshall Street  
Arvada, CO 80002

Bill to:  
James Hix  
Cordilleran Compliance Services  
5550 Marshall Street  
Arvada, CO

Project ID: PRESCO-BTLMNT-MESA  
ACZ Project ID: L49164

James Hix:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on December 16, 2004. This project has been assigned to ACZ's project number, L49164. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L49164. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after February 25, 2005. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years. Please notify your Project Manager if you have other needs.

If you have any questions, please contact your Project Manager or Customer Service Representative.

25/Jan/05

Tony Antalek, Project Manager, has reviewed and approved this report in its entirety.



Cordilleran Compliance Services

January 25, 2005

Project ID: PRESCO-BTLMNT-MESA

ACZ Project ID: L49164

**Sample Receipt**

ACZ Laboratories, Inc. (ACZ) received 3 ground water samples from Cordilleran Compliance Services on December 16, 2004. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L49164. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

**Holding Times**

All analyses were performed within EPA recommended holding times.

**Sample Analysis**

These samples were analyzed for inorganic and organic parameters. The individual methods are referenced on both the ACZ invoice and the analytical reports. The extended qualifier reports may contain footnotes qualifying specific elements due to QC failures. In addition the following has been noted with this specific project:

1. The Reactive Sulfide analyses were qualified with the ACZ 'N1' flag as recovery for the laboratory fortified blank sample was low. This was anticipated and is inherent in the method.

### Cordilleran Compliance Services

Project ID: PRESCO-BTLMNT-MESA  
 Sample ID: PW-W7

ACZ Sample ID: **L49164-01**  
 Date Sampled: 12/15/04 00:00  
 Date Received: 12/16/04  
 Sample Matrix: Ground Water

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	119			mg/L	0.2	1	01/04/05 10:20	mea
Iron, total	M200.7 ICP	39.00		*	mg/L	0.01	0.05	01/04/05 10:20	mea
Magnesium, total	M200.7 ICP	118			mg/L	0.2	1	01/04/05 10:20	mea
Manganese, total	M200.7 ICP	0.058			mg/L	0.005	0.03	01/04/05 10:20	mea
Potassium, total	M200.7 ICP	4.7			mg/L	0.3	1	01/04/05 10:20	mea
Selenium, total	M200.7 ICP			U	mg/L	0.04	0.2	01/04/05 10:20	mea
Sodium, total	M200.7 ICP	167			mg/L	0.3	1	01/04/05 10:20	mea

#### Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/30/04 13:34	ak

#### Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		333			mg/L	2	10	12/27/04 0:00	bf
Carbonate as CaCO3				U	mg/L	2	10	12/27/04 0:00	bf
Hydroxide as CaCO3				U	mg/L	2	10	12/27/04 0:00	bf
Total Alkalinity		333			mg/L	2	10	12/27/04 0:00	bf
Hardness as CaCO3 (total)	SM2340B - Calculation	782			mg/L	1	7	01/25/05 0:00	calc
Lab Filtration	SM 3030 B							12/17/04 15:35	eds
Lab Filtration & Acidification	SM 3030 B							12/27/04 15:00	ak
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.04	B	*	mg/L	0.02	0.1	01/04/05 18:00	pjb
Nitrogen, ammonia	M350.1 - Automated Phenate			U	mg/L	0.05	0.5	01/06/05 12:49	ccp
Phosphate	Calculation based on Ortho Phosphorus	0.06	B		mg/L	0.03	0.15	01/25/05 0:00	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	0.02	B	*	mg/L	0.01	0.05	12/16/04 23:39	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	1480			mg/L	10	20	12/21/04 17:07	ktd
Sodium Absorption Ratio in Water	USGS - I1738-78			U		0.03	0.15	01/25/05 0:00	calc
Sulfate	M375.3 - Gravimetric	770			mg/L	10	50	12/31/04 8:29	bf
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030			U	mg/Kg	0.3	3	12/18/04 16:12	jah

### Cordilleran Compliance Services

Project ID: PRESCO-BTLMNT-MESA  
 Sample ID: RW-W8

ACZ Sample ID: **L49164-02**  
 Date Sampled: 12/15/04 00:00  
 Date Received: 12/16/04  
 Sample Matrix: Ground Water

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	100			mg/L	0.2	1	01/04/05 10:30	mea
Iron, total	M200.7 ICP	18.70		*	mg/L	0.01	0.05	01/04/05 10:30	mea
Magnesium, total	M200.7 ICP	104			mg/L	0.2	1	01/04/05 10:30	mea
Manganese, total	M200.7 ICP	0.035			mg/L	0.005	0.03	01/04/05 10:30	mea
Potassium, total	M200.7 ICP	4.6			mg/L	0.3	1	01/04/05 10:30	mea
Selenium, total	M200.7 ICP			U	mg/L	0.04	0.2	01/04/05 10:30	mea
Sodium, total	M200.7 ICP	140			mg/L	0.3	1	01/04/05 10:30	mea

#### Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/30/04 13:42	ak

#### Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		338			mg/L	2	10	12/27/04 0:00	bf
Carbonate as CaCO3				U	mg/L	2	10	12/27/04 0:00	bf
Hydroxide as CaCO3				U	mg/L	2	10	12/27/04 0:00	bf
Total Alkalinity		338			mg/L	2	10	12/27/04 0:00	bf
Hardness as CaCO3 (total)	SM2340B - Calculation	677			mg/L	1	7	01/25/05 0:00	calc
Lab Filtration	SM 3030 B							12/17/04 15:38	eds
Lab Filtration & Acidification	SM 3030 B							12/27/04 15:06	ak
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.07	B	*	mg/L	0.02	0.1	01/04/05 16:34	pjb
Nitrogen, ammonia	M350.1 - Automated Phenate			U	mg/L	0.05	0.5	01/06/05 12:52	ccp
Phosphate	Calculation based on Ortho Phosphorus	0.03	B		mg/L	0.03	0.15	01/25/05 0:00	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	0.01	B	*	mg/L	0.01	0.05	12/16/04 23:41	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	1300			mg/L	10	20	12/21/04 17:10	ktd
Sodium Absorption Ratio in Water	USGS - I1738-78			U		0.03	0.15	01/25/05 0:00	calc
Sulfate	M375.3 - Gravimetric	630			mg/L	10	50	12/31/04 8:31	bf
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030			U	mg/Kg	0.3	3	12/18/04 16:21	jah

### Cordilleran Compliance Services

Project ID: PRESCO-BTLMNT-MESA  
 Sample ID: MC-S3

ACZ Sample ID: **L49164-03**  
 Date Sampled: 12/15/04 00:00  
 Date Received: 12/16/04  
 Sample Matrix: Ground Water

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, total	M200.7 ICP	68.7			mg/L	0.2	1	01/04/05 10:33	mea
Iron, total	M200.7 ICP	0.58		*	mg/L	0.01	0.05	01/04/05 10:33	mea
Magnesium, total	M200.7 ICP	53.0			mg/L	0.2	1	01/04/05 10:33	mea
Manganese, total	M200.7 ICP	0.015	B		mg/L	0.005	0.03	01/04/05 10:33	mea
Potassium, total	M200.7 ICP	3.1			mg/L	0.3	1	01/04/05 10:33	mea
Selenium, total	M200.7 ICP		U		mg/L	0.04	0.2	01/04/05 10:33	mea
Sodium, total	M200.7 ICP	98.8			mg/L	0.3	1	01/04/05 10:33	mea

#### Metals Prep

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M200.2 ICP							12/30/04 13:44	ak

#### Wet Chemistry

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration								
Bicarbonate as CaCO3		341			mg/L	2	10	12/27/04 0:00	bf
Carbonate as CaCO3		8	B		mg/L	2	10	12/27/04 0:00	bf
Hydroxide as CaCO3			U		mg/L	2	10	12/27/04 0:00	bf
Total Alkalinity		349			mg/L	2	10	12/27/04 0:00	bf
Hardness as CaCO3 (total)	SM2340B - Calculation	390			mg/L	1	7	01/25/05 0:00	calc
Lab Filtration	SM 3030 B							12/17/04 15:41	eds
Lab Filtration & Acidification	SM 3030 B							12/27/04 15:12	ak
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	2.93		*	mg/L	0.02	0.1	01/04/05 16:36	pjb
Nitrogen, ammonia	M350.1 - Automated Phenate		U		mg/L	0.05	0.5	01/06/05 12:54	ccp
Phosphate	Calculation based on Ortho Phosphorus		U		mg/L	0.03	0.15	01/25/05 0:00	calc
Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid		U	*	mg/L	0.01	0.05	12/16/04 23:42	pjb
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	680			mg/L	10	20	12/21/04 17:13	ktd
Sodium Absorption Ratio in Water	USGS - I1738-78		U			0.03	0.15	01/25/05 0:00	calc
Sulfate	M375.3 - Gravimetric	240			mg/L	10	50	12/31/04 8:33	bf
Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030		U	*	mg/Kg	0.3	3	12/18/04 16:31	jah

### Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

### QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

### QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

### ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
U	Analyte was analyzed for but not detected at the indicated MDL
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
W	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
X	Quality control sample is out of control.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

### Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(5)	EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
(6)	Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

### Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.

Cordilleran Compliance Services

ACZ Project ID: **L49164**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L49164-01	WG183505	Iron, total	M200.7 ICP	B7	Target analyte detected in method blank at or above method reporting limit. Sample value was > 10X the concentration in the method blank.
			M200.7 ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG183537	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG182961	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	RA	Relative Percent Difference (RPD) exceeded limit; sample concentrations are less than 10x the MDL.
	WG183010	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	N1	See Case Narrative.
L49164-02	WG183505	Iron, total	M200.7 ICP	B7	Target analyte detected in method blank at or above method reporting limit. Sample value was > 10X the concentration in the method blank.
			M200.7 ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG183537	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG182961	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	RA	Relative Percent Difference (RPD) exceeded limit; sample concentrations are less than 10x the MDL.
	WG183010	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	N1	See Case Narrative.
L49164-03	WG183505	Iron, total	M200.7 ICP	B7	Target analyte detected in method blank at or above method reporting limit. Sample value was > 10X the concentration in the method blank.
			M200.7 ICP	M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
	WG183537	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG182961	Phosphorus, ortho dissolved	M365.1 - Automated Ascorbic Acid	RA	Relative Percent Difference (RPD) exceeded limit; sample concentrations are less than 10x the MDL.
	WG183010	Sulfide, reactive	Section 7.3 SW-846 (3rd Ed) & M9030	N1	See Case Narrative.

### Cordilleran Compliance Services

Project ID: PRESCO-BTLMNT-MESA  
 Sample ID: PW-W7  
 Locator:

ACZ Sample ID: **L49164-01**  
 Date Sampled: 12/15/04 0:00  
 Date Received: 12/16/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: km  
 Extract Date: 12/22/04 18:46  
 Analysis Date: 12/22/04 18:46  
 Dilution Factor: 1

#### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U		ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U		ug/L	0.2	1
m p Xylene	01330 20 7		U		ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U		ug/L	0.2	1
o Xylene	00095-47-6		U		ug/L	0.2	1
Toluene	000108-88-3		U		ug/L	0.2	1

#### Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	102.4		%	83	117

### Cordilleran Compliance Services

Project ID: PRESCO-BTLMNT-MESA  
Sample ID: PW-W7  
Locator:

ACZ Sample ID: **L49164-01**  
Date Sampled: 12/15/04 0:00  
Date Received: 12/16/04  
Sample Matrix: Ground Water

### Methane

Analysis Method: **GC/FID**  
Extract Method: **Method**

Analyst: *jj*  
Extract Date: 12/20/04 14:19  
Analysis Date: 12/20/04 14:19  
Dilution Factor: 1

### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U		mg/L	0.002	0.002

**Cordilleran Compliance Services**

Project ID: PRESCO-BTLMNT-MESA  
Sample ID: RW-W8  
Locator:

ACZ Sample ID: **L49164-02**  
Date Sampled: 12/15/04 0:00  
Date Received: 12/16/04  
Sample Matrix: Ground Water

**BTEX with MTBE**

Analysis Method: **M8021B GC/PID**  
Extract Method: **Method**

Analyst: km  
Extract Date: 12/22/04 20:12  
Analysis Date: 12/22/04 20:12  
Dilution Factor: 1

## Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	*	ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U	*	ug/L	0.2	1
m p Xylene	01330 20 7	0.4	J	*	ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U	*	ug/L	0.2	1
o Xylene	00095-47-6	0.2	J	*	ug/L	0.2	1
Toluene	000108-88-3	0.3	J	*	ug/L	0.2	1

## Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	101.8	*	%	83	117

### Cordilleran Compliance Services

Project ID: PRESCO-BTLMNT-MESA  
Sample ID: RW-W8  
Locator:

ACZ Sample ID: **L49164-02**  
Date Sampled: 12/15/04 0:00  
Date Received: 12/16/04  
Sample Matrix: Ground Water

### Methane

Analysis Method: **GC/FID**  
Extract Method: **Method**

Analyst: *jj*  
Extract Date: 12/20/04 14:26  
Analysis Date: 12/20/04 14:26  
Dilution Factor: 1

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U		mg/L	0.002	0.002

### Cordilleran Compliance Services

Project ID: PRESCO-BTLMNT-MESA  
 Sample ID: MC-S3  
 Locator:

ACZ Sample ID: **L49164-03**  
 Date Sampled: 12/15/04 0:00  
 Date Received: 12/16/04  
 Sample Matrix: Ground Water

### BTEX with MTBE

Analysis Method: **M8021B GC/PID**  
 Extract Method: **Method**

Analyst: km  
 Extract Date: 12/22/04 20:56  
 Analysis Date: 12/22/04 20:56  
 Dilution Factor: 1

#### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	*	ug/L	0.2	0.5
Ethylbenzene	000100-41-4		U	*	ug/L	0.2	1
m p Xylene	01330 20 7		U	*	ug/L	0.4	2
Methyl Tert Butyl Ether	001634-04-4		U	*	ug/L	0.2	1
o Xylene	00095-47- 6		U	*	ug/L	0.2	1
Toluene	000108-88-3	0.3	J	*	ug/L	0.2	1

#### Surrogate Recoveries

Surrogate	CAS	% Recovery	XQ	Units	LGL	UCL
Bromofluorobenzene	000460-00-4	100.1	*	%	83	117

### Cordilleran Compliance Services

Project ID: PRESCO-BTLMNT-MESA  
Sample ID: MC-S3  
Locator:

ACZ Sample ID: **L49164-03**  
Date Sampled: 12/15/04 0:00  
Date Received: 12/16/04  
Sample Matrix: Ground Water

### Methane

Analysis Method: **GC/FID**  
Extract Method: **Method**

Analyst: *jj*  
Extract Date: 12/20/04 14:29  
Analysis Date: 12/20/04 14:29  
Dilution Factor: 1

### Compound

Compound	CAS	Result	QUAL	XQ	Units	MDL	PQL
Methane	000074-82-8		U		mg/L	0.002	0.002

### Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>LCL</i>	Lower Control Limit
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCNI/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>UCL</i>	Upper Control Limit
<i>Sample</i>	Value of the Sample of interest

### QC Sample Types

<i>SURR</i>	Surrogate	<i>LFM</i>	Laboratory Fortified Matrix
<i>INTS</i>	Internal Standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>MS/MSD</i>	Matrix Spike/Matrix Spike Duplicate
<i>LCSW</i>	Laboratory Control Sample - Water	<i>PBS</i>	Prep Blank - Soil
<i>LFB</i>	Laboratory Fortified Blank	<i>PBW</i>	Prep Blank - Water

### QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.

### ACZ Qualifiers (Qual)

B	Analyte detected in daily blank
H	Analysis exceeded method hold time.
J	Analyte concentration detected at a value between MDL and PQL
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
U	Analyte was analyzed for but not detected at the indicated MDL
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
W	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
X	Quality control sample is out of control.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.
P	Analyte concentration differs from second detector by more than 40%.
E	Analyte concentration is estimated due to result exceeding calibration range.
M	Analyte concentration is estimated due to matrix interferences.

### Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/4-90/020. Methods for the Determination of Organic Compounds in Drinking Water (I), July 1990.
- (3) EPA 600/R-92/129. Methods for the Determination of Organic Compounds in Drinking Water (II), July 1990.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December, 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

### Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Organic analyses are reported on an "as received" basis.

Cordilleran Compliance Services

ACZ Project ID: **L49164**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L49164-02	WG183140	*All Compounds*	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
L49164-03	WG183140	*All Compounds*	M8021B GC/PID	Q3	Sample received with improper chemical preservation.

**Cordilleran Compliance Services**  
 PRESCO-BTLMNT-MESA

ACZ Project ID: L49164  
 Date Received: 12/16/2004  
 Received By:

**Receipt Verification**

- 1) Does this project require special handling procedures such as CLP protocol?
- 2) Are the custody seals on the cooler intact?
- 3) Are the custody seals on the sample containers intact?
- 4) Is there a Chain of Custody or other directive shipping papers present?
- 5) Is the Chain of Custody complete?
- 6) Is the Chain of Custody in agreement with the samples received?
- 7) Is there enough sample for all requested analyses?
- 8) Are all samples within holding times for requested analyses?
- 9) Were all sample containers received intact?
- 10) Are the temperature blanks present?
- 11) Are the trip blanks (VOA and/or Cyanide) present?
- 12) Are samples requiring no headspace, headspace free?
- 13) Do the samples that require a Foreign Soils Permit have one?

YES	NO	NA
		X
		X
		X
X		
X		
X		
X		
X		
X		
	X	
X		
		X

**Exceptions: If you answered no to any of the above questions, please describe**

N/A

**Contact (For any discrepancies, the client must be contacted)**

N/A

**Shipping Containers**

Cooler Id	Temp (°C)	Rad (µR/hr)
ACZ	5.7	14
ACZ	5.7	14

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

**Notes**

**Cordilleran Compliance Services**  
 PRESCO-BTLMNT-MESA

ACZ Project ID: L49164  
 Date Received: 12/16/2004  
 Received By:

**Sample Container Preservation**

SAMPLE	CLIENT ID	R < 2	G < 2	Y < 2	YG < 2	B < 2	BG < 2	O < 2	T > 12	P > 12	N/A	RAD
L49164-01	PW-W7	Y		Y					Y			
L49164-02	RW-W8	Y		Y					Y			
L49164-03	MC-S3	Y		Y					Y			

**Sample Container Preservation Legend**

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BG	Filtered/Sulfuric	BLUE GLASS	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr



**Cordilleran Compliance Services**

Project ID: PRESCO-BTLMNT-MESA  
Sample ID: PW-W7

ACZ Sample ID: **L49164-01**  
Date Sampled: 12/15/04 00:00  
Date Received: 12/16/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/29/04</b>	<b>dhc</b>
Actinium - 228		<		7.26	pCi/L		
Americium - 241		<		3.30	pCi/L		
Antimony - 122		<		0.83	pCi/L		
Antimony - 124		<		2.17	pCi/L		
Antimony - 125		<		3.02	pCi/L		
Antimony - 126		<		2.31	pCi/L		
Argon - 41		<		3.00	pCi/L		
Arsenic - 76		<		3.37	pCi/L		
Barium - 139		<		2.68	pCi/L		
Barium - 140		<		2.58	pCi/L		
Beryllium - 7		<		16.00	pCi/L		
Bismuth - 207		<		1.85	pCi/L		
Bismuth - 212		<		19.70	pCi/L		
Bismuth - 214		<		6.09	pCi/L		
Bromine - 82		<		2.18	pCi/L		
Cadmium - 109		<		34.60	pCi/L		
Cerium - 139		<		0.42	pCi/L		
Cerium - 141		<		1.40	pCi/L		
Cerium - 143		<		2.06	pCi/L		
Cerium - 144		<		3.76	pCi/L		
Cesium - 134		<		2.24	pCi/L		
Cesium - 136		<		1.55	pCi/L		
Cesium - 137		<		2.56	pCi/L		
Cesium - 138		<		2.45	pCi/L		
Chlorine - 38		<		1.94	pCi/L		
Chromium - 51		<		14.50	pCi/L		
Cobalt - 56		<		0.85	pCi/L		
Cobalt - 57		<		0.72	pCi/L		
Cobalt - 58		<		1.50	pCi/L		
Cobalt - 60		<		1.50	pCi/L		
Europium - 152		<		6.77	pCi/L		
Europium - 154		<		1.53	pCi/L		
Europium - 155		<		2.08	pCi/L		

**Cordilleran Compliance Services**

Project ID: PRESCO-BTLMNT-MESA  
Sample ID: PW-W7

ACZ Sample ID: **L49164-01**  
Date Sampled: 12/15/04 00:00  
Date Received: 12/16/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/29/04</b>	<b>dhc</b>
Gadolinium - 153		<		3.51	pCi/L		
Gold - 196		<		1.08	pCi/L		
Gold - 198		<		1.66	pCi/L		
Hafnium - 181		<		1.64	pCi/L		
Iron - 59		<		2.82	pCi/L		
Krypton - 85		<		0.89	pCi/L		
Krypton - 87		<		2.87	pCi/L		
Krypton - 88		<		2.05	pCi/L		
Krypton - 89		<		5.55	pCi/L		
Lanthanum - 140		<		1.95	pCi/L		
Lead - 210		<		66.00	pCi/L		
Lead - 212		<		3.06	pCi/L		
Lead - 214		<		4.11	pCi/L		
Lutetium - 177		<		8.27	pCi/L		
Manganese - 54		<		1.50	pCi/L		
Manganese - 56		<		0.70	pCi/L		
Mercury - 203		<		1.10	pCi/L		
Molybdenum - 99		<		0.44	pCi/L		
Neodymium - 147		<		1.26	pCi/L		
Neptunium - 237		<		5.39	pCi/L		
Neptunium - 239		<		2.10	pCi/L		
Niobium - 94		<		1.64	pCi/L		
Niobium - 95		<		0.64	pCi/L		
Potassium - 40		<		62.00	pCi/L		
Potassium - 42		<		4.71	pCi/L		
Praseodymium - 144		<		112.00	pCi/L		
Protactinium - 234		<		1.80	pCi/L		
Radium - 224		<		32.40	pCi/L		
Rhodium - 106m		<		2.97	pCi/L		
Rubidium - 86		<		14.80	pCi/L		
Rubidium - 89		<		0.71	pCi/L		
Ruthenium - 103		<		0.70	pCi/L		



Cordilleran Compliance Services

Project ID: PRESCO-BTLMNT-MESA  
Sample ID: PW-W7

ACZ Sample ID: L49164-01

Date Sampled: 12/15/04 00:00  
Date Received: 12/16/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/29/04</b>	<b>dhc</b>
Scandium - 46		<		2.34	pCi/L		
Selenium - 75		<		1.42	pCi/L		
Silver - 108		<		84.40	pCi/L		
Silver - 110m		<		2.02	pCi/L		
Sodium - 22		<		0.51	pCi/L		
Sodium - 24		<		0.54	pCi/L		
Strontium - 91		<		2.76	pCi/L		
Tantalum - 182		<		2.03	pCi/L		
Technetium - 99m		<		0.82	pCi/L		
Tellurium - 131		<		1.20	pCi/L		
Tellurium - 132		<		1.10	pCi/L		
Terbium - 160		<		6.00	pCi/L		
Thallium - 208		<		3.54	pCi/L		
Thorium - 227		<		11.80	pCi/L		
Tin - 113		<		1.58	pCi/L		
Tungsten - 187		<		1.96	pCi/L		
Uranium - 235		<		2.84	pCi/L		
Uranium - 237		<		2.71	pCi/L		
Xenon - 135		<		0.55	pCi/L		
Xenon - 138		<		3.33	pCi/L		
Ytterbium - 175		<		7.40	pCi/L		
Yttrium - 88		<		0.71	pCi/L		
Yttrium - 91m		<		2.01	pCi/L		
Zinc - 65		<		1.76	pCi/L		
Zirconium - 95		<		1.98	pCi/L		

**Cordilleran Compliance Services**

Project ID: PRESCO-BTLMNT-MESA  
Sample ID: RW-W8

ACZ Sample ID: **L49164-02**  
Date Sampled: 12/15/04 00:00  
Date Received: 12/16/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/29/04</b>	<b>dhc</b>
Actinium - 228		<		8.98	pCi/L		
Americium - 241		<		3.07	pCi/L		
Antimony - 122		<		0.76	pCi/L		
Antimony - 124		<		2.22	pCi/L		
Antimony - 125		<		3.56	pCi/L		
Antimony - 126		<		2.60	pCi/L		
Argon - 41		<		3.00	pCi/L		
Arsenic - 76		<		4.43	pCi/L		
Barium - 139		<		3.38	pCi/L		
Barium - 140		<		3.46	pCi/L		
Beryllium - 7		<		13.10	pCi/L		
Bismuth - 207		<		1.64	pCi/L		
Bismuth - 212		<		18.10	pCi/L		
Bismuth - 214		<		5.44	pCi/L		
Bromine - 82		<		2.04	pCi/L		
Cadmium - 109		<		36.10	pCi/L		
Cerium - 139		<		0.64	pCi/L		
Cerium - 141		<		1.44	pCi/L		
Cerium - 143		<		3.11	pCi/L		
Cerium - 144		<		6.64	pCi/L		
Cesium - 134		<		2.24	pCi/L		
Cesium - 136		<		1.72	pCi/L		
Cesium - 137		<		2.52	pCi/L		
Cesium - 138		<		0.74	pCi/L		
Chlorine - 38		<		3.37	pCi/L		
Chromium - 51		<		6.66	pCi/L		
Cobalt - 56		<		0.60	pCi/L		
Cobalt - 57		<		0.83	pCi/L		
Cobalt - 58		<		0.48	pCi/L		
Cobalt - 60		<		0.75	pCi/L		
Europium - 152		<		7.67	pCi/L		
Europium - 154		<		1.54	pCi/L		
Europium - 155		<		2.27	pCi/L		



Cordilleran Compliance Services

Project ID: PRESCO-BTLMNT-MESA
Sample ID: RW-W8

ACZ Sample ID: L49164-02
Date Sampled: 12/15/04 00:00
Date Received: 12/16/04
Sample Matrix: Ground Water

Radiochemistry

Table with 8 columns: Parameter, EPA Method, Results, Error (±), LLD, Units, Date, Analyst. Row 1: Gamma, ESM - 4202, 12/29/04, dhc. Subsequent rows list various isotopes like Gadolinium, Gold, Hafnium, Iron, Krypton, Lanthanum, Lead, Lutetium, Manganese, Mercury, Molybdenum, Neodymium, Neptunium, Niobium, Potassium, Praseodymium, Protactinium, Radium, Rhodium, Rubidium, Ruthenium with their respective LLD values and units (pCi/L).



Cordilleran Compliance Services

Project ID: PRESCO-BTLMNT-MESA
Sample ID: RW-W8

ACZ Sample ID: L49164-02
Date Sampled: 12/15/04 00:00
Date Received: 12/16/04
Sample Matrix: Ground Water

Radiochemistry

Table with 8 columns: Parameter, EPA Method, Results, Error (±), LLD, Units, Date, Analyst. Row 1: Gamma, ESM - 4202, <, <, <, <, 12/29/04, dhc. Subsequent rows list isotopes like Scandium - 46, Selenium - 75, Silver - 108, etc., with their respective LLD values and units (pCi/L).

**Cordilleran Compliance Services**

Project ID: PRESCO-BTLMNT-MESA  
Sample ID: MC-S3

ACZ Sample ID: **L49164-03**  
Date Sampled: 12/15/04 00:00  
Date Received: 12/16/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/30/04</b>	<b>dhc</b>
Actinium - 228		<		14.40	pCi/L		
Americium - 241		<		3.71	pCi/L		
Antimony - 122		<		4.07	pCi/L		
Antimony - 124		<		4.00	pCi/L		
Antimony - 125		<		5.89	pCi/L		
Antimony - 126		<		3.86	pCi/L		
Argon - 41		<		3.54	pCi/L		
Arsenic - 76		<		5.11	pCi/L		
Barium - 139		<		4.09	pCi/L		
Barium - 140		<		11.20	pCi/L		
Beryllium - 7		<		17.80	pCi/L		
Bismuth - 207		<		1.76	pCi/L		
Bismuth - 212		<		25.90	pCi/L		
Bismuth - 214		<		23.22	pCi/L		
Bromine - 82		<		2.46	pCi/L		
Cadmium - 109		<		67.80	pCi/L		
Cerium - 139		<		0.96	pCi/L		
Cerium - 141		<		2.07	pCi/L		
Cerium - 143		<		4.51	pCi/L		
Cerium - 144		<		9.02	pCi/L		
Cesium - 134		<		3.28	pCi/L		
Cesium - 136		<		3.00	pCi/L		
Cesium - 137		<		3.95	pCi/L		
Cesium - 138		<		1.06	pCi/L		
Chlorine - 38		<		7.35	pCi/L		
Chromium - 51		<		6.88	pCi/L		
Cobalt - 56		<		2.77	pCi/L		
Cobalt - 57		<		1.17	pCi/L		
Cobalt - 58		<		2.00	pCi/L		
Cobalt - 60		<		1.06	pCi/L		
Europium - 152		<		12.30	pCi/L		
Europium - 154		<		2.04	pCi/L		
Europium - 155		<		3.47	pCi/L		

**Cordilleran Compliance Services**

Project ID: PRESCO-BTLMNT-MESA  
Sample ID: MC-S3

ACZ Sample ID: **L49164-03**

Date Sampled: 12/15/04 00:00  
Date Received: 12/16/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/30/04</b>	<b>dhc</b>
Gadolinium - 153		<		6.61	pCi/L		
Gold - 196		<		4.00	pCi/L		
Gold - 198		<		2.25	pCi/L		
Hafnium - 181		<		2.51	pCi/L		
Iron - 59		<		4.74	pCi/L		
Krypton - 85		<		1.30	pCi/L		
Krypton - 87		<		3.50	pCi/L		
Krypton - 88		<		2.16	pCi/L		
Krypton - 89		<		7.90	pCi/L		
Lanthanum - 140		<		0.93	pCi/L		
Lead - 210		<		52.20	pCi/L		
Lead - 212		<		4.78	pCi/L		
Lead - 214		<		9.00	pCi/L		
Lutetium - 177		<		9.11	pCi/L		
Manganese - 54		<		1.63	pCi/L		
Manganese - 56		<		1.12	pCi/L		
Mercury - 203		<		0.94	pCi/L		
Molybdenum - 99		<		0.94	pCi/L		
Neodymium - 147		<		1.37	pCi/L		
Neptunium - 237		<		8.38	pCi/L		
Neptunium - 239		<		2.62	pCi/L		
Niobium - 94		<		3.14	pCi/L		
Niobium - 95		<		3.07	pCi/L		
Potassium - 40		<		81.60	pCi/L		
Potassium - 42		<		4.76	pCi/L		
Praseodymium - 144		<		211.00	pCi/L		
Protactinium - 234		<		2.56	pCi/L		
Radium - 224		<		37.20	pCi/L		
Rhodium - 106m		<		4.84	pCi/L		
Rubidium - 86		<		24.50	pCi/L		
Rubidium - 89		<		1.01	pCi/L		
Ruthenium - 103		<		5.00	pCi/L		

**Cordilleran Compliance Services**

Project ID: PRESCO-BTLMNT-MESA  
Sample ID: MC-S3

ACZ Sample ID: **L49164-03**

Date Sampled: 12/15/04 00:00  
Date Received: 12/16/04  
Sample Matrix: Ground Water

Radiochemistry

Parameter	EPA Method	Results	Error (±)	LLD	Units	Date	Analyst
<b>Gamma</b>	<b>ESM - 4202</b>					<b>12/30/04</b>	<b>dhc</b>
Scandium - 46		<		1.93	pCi/L		
Selenium - 75		<		3.00	pCi/L		
Silver - 108		<		193.00	pCi/L		
Silver - 110m		<		2.39	pCi/L		
Sodium - 22		<		2.04	pCi/L		
Sodium - 24		<		1.34	pCi/L		
Strontium - 91		<		3.97	pCi/L		
Tantalum - 182		<		3.31	pCi/L		
Technetium - 99m		<		1.14	pCi/L		
Tellurium - 131		<		1.52	pCi/L		
Tellurium - 132		<		1.57	pCi/L		
Terbium - 160		<		8.88	pCi/L		
Thallium - 208		<		0.52	pCi/L		
Thorium - 227		<		7.55	pCi/L		
Tin - 113		<		2.02	pCi/L		
Tungsten - 187		<		5.00	pCi/L		
Uranium - 235		<		3.78	pCi/L		
Uranium - 237		<		5.85	pCi/L		
Xenon - 135		<		1.87	pCi/L		
Xenon - 138		<		5.05	pCi/L		
Ytterbium - 175		<		23.60	pCi/L		
Yttrium - 88		<		1.02	pCi/L		
Yttrium - 91m		<		2.87	pCi/L		
Zinc - 65		<		1.78	pCi/L		
Zirconium - 95		<		2.00	pCi/L		



**Hazen Research, Inc.**  
 4601 Indiana Street  
 Golden, CO 80403 USA  
 Tel: (303) 279-4501  
 Fax: (303) 278-1528

DATE January 24, 2005  
 HRI PROJECT 002-KE3  
 HRI SERIES NO L336/04  
 DATE REC'D. 12/22/2004  
 CUST. P.O.# 12760

ACZ Laboratories, Inc.  
 Tony Antalek  
 2773 Downhill Drive  
 Steamboat Springs, CO 80487

**REPORT OF ANALYSIS**

SAMPLE NO. L336/04-1


SAMPLE IDENTIFICATION: L49164-01 - sampled on 12/15/2004 @ 0000

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	580(+/-460)	440	SM 7500-3H B	1/18/2005 @ 1130	EDF

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
 Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
 NY ELAP - 11417; PA DEP 68551; WI - 998376610

CODES:

(T) = Total (D) = Dissolved  
 (S) = Suspended (R) = Total Recoverable  
 (PD) = Potentially Dissolved  
 < = Less Than

By:   
 Robert Rostad  
 Laboratory Manager



**Hazen Research, Inc.**  
 4601 Indiana Street  
 Golden, CO 80403 USA  
 Tel: (303) 279-4501  
 Fax: (303) 278-1528

DATE January 24, 2005  
 HRI PROJECT 002-KE3  
 HRI SERIES NO L336/04  
 DATE REC'D. 12/22/2004  
 CUST. P.O.# 12760

ACZ Laboratories, Inc.  
 Tony Antalek  
 2773 Downhill Drive  
 Steamboat Springs, CO 80487

**REPORT OF ANALYSIS**

SAMPLE NO. L336/04-2

SAMPLE IDENTIFICATION: L49164-02 - sampled on 12/15/2004 @ 0000

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	410(+450)	440	SM 7500-3H B	1/18/2005 @ 1230	EDF

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
 Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
 NY ELAP - 11417; PA DEP 68551; WI - 998376610

CODES:

(T) = Total (D) = Dissolved  
 (S) = Suspended (R) = Total Recoverable  
 (PD) = Potentially Dissolved  
 < = Less Than

By:   
 Robert Rostad  
 Laboratory Manager



**Hazen Research, Inc.**  
 4601 Indiana Street  
 Golden, CO 80403 USA  
 Tel: (303) 279-4501  
 Fax: (303) 278-1528

DATE January 24, 2005  
 HRI PROJECT 002-KE3  
 HRI SERIES NO L336/04  
 DATE REC'D. 12/22/2004  
 CUST. P.O.# 12760

ACZ Laboratories, Inc.  
 Tony Antalek  
 2773 Downhill Drive  
 Steamboat Springs, CO 80487

REPORT OF ANALYSIS

SAMPLE NO. L336/04-3

SAMPLE IDENTIFICATION: L49164-03 - sampled on 12/15/2004 @ 0000

PARAMETER	RESULT	DETECTION LIMIT	METHOD	ANALYSIS DATE	ANALYST
Tritium (H-3) (+-Precision*), pCi/l (T)	420(+450)	440	SM 7500-3H B	1/18/2005 @ 1325	EDF

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.  
 Certification ID's: CO/EPA - CO00008; CT - PH-0152; KY - 90076; KS - E-10265; NH - 232804-A;  
 NY ELAP - 11417; PA DEP 68551; WI - 998376610

CODES:

(T) = Total (D) = Dissolved  
 (S) = Suspended (R) = Total Recoverable  
 (PD) = Potentially Dissolved  
 < = Less Than

By:   
 Robert Rostad  
 Laboratory Manager



JOHN C. KEPHART & CO.  
GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from:

Cordilleran Compliance  
James Hix  
5550 Marshall St.  
Arvada, CO 80002  
(303)589-1572, FAX 237-2659

Customer No. FO#E04243 Laboratory No. 6911 Sample water

Date Received 11/10/04 Date Reported 11/30/04

Lab number:

6911

Sample ID:

Baseline Sampling JLS-W1, 11/9/04  
time 1008, samplers: Ken Kreie/James Hix  
Presco, Inc.

Iron Related Bacteria

present, approximately 500 CFU/ml

Sulfate Reducing Bacteria

present (detected)\*

Slime Forming Bacteria

present, approximately 66,500 CFU/ml

\*Test indicated Sulfate Reducing Bacteria present, but either in very low numbers or in consortial association with other microbial species.

Director: B. Bauer

JOHN C. KEPHART & CO.  
GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from: Cordilleran Compliance  
James Hix  
5550 Marshall St.  
Arvada, CO 80002  
(303) 589-1572, FAX 237-2659  
6912 water

PO#ED4243

Customer No. \_\_\_\_\_ Laboratory No. \_\_\_\_\_ Sample \_\_\_\_\_

Date Received 11/10/04 Date Reported 11/30/04

Lab number: 6912  
Sample ID: Baseline Sampling USGS-BC1  
11/9/04, time 1150,  
samplers: James Hix/Ken Kreie,  
Presco, Inc.

Iron Related Bacteria present, approximately 2,300 CFU/ml,

Sulfate Reducing Bacteria present, approximately 700,000 CFU/ml,  
combination of aerobic and anaerobic  
Sulfate Reducing Bacteria

Slime Forming Bacteria present, approximately 66,500 CFU/ml

Director: E. Bauer

JOHN C. KEPHART & CO.  
GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from:

Cordilleran Compliance  
James Hix  
5550 Marshall St.  
Arvada, CO 80002  
(303) 589-1572, FAX 237-2659  
6914

PO#ED4243

water

Customer No.

Laboratory No.

Sample

Date Received

11/10/04

Date Reported

11/30/04

Lab number:

6914

Sample ID:

Baseline Sampling CW-W2, 11/9/04  
time 1306, samplers: Ken Kreie/James Hix  
Presco, Inc.

Iron Related Bacteria

present, approximately 25 CFU/ml

Sulfate Reducing Bacteria

absent

Slime Forming Bacteria

present, approximately 12,500 CFU/ml

Director: B. Bauer

JOHN C. KEPHART & CO.  
GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from:

Cordilleran Compliance  
James Hix  
5550 Marshall St.  
Arvada, CO 80002  
(303)589-1572, FAX 237-2659  
6913

PO# E04243

water

Customer No. \_\_\_\_\_ Laboratory No. \_\_\_\_\_ Sample \_\_\_\_\_

Date Received 11/10/04 Date Reported 11/30/04

Lab number:

6913

Sample ID:

Baseline Sampling HC-S2, 11/9/04,  
time 13:50, samplers: James Hix/Ken Kreie,  
Presco, Inc.

Iron Related Bacteria

present, approximately 2,300 CFU/ml

Sulfate Reducing Bacteria

present, approximately 700,000 CFU/ml,  
combination of aerobic and anaerobic  
Sulfate Reducing Bacteria

Slime Forming Bacteria

present, approximately 66,500 CFU/ml

Director: B. Bauer

JOHN C. KEPHART & CO.  
GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from:

Cordilleran Compliance

James Hix

5550 Marshall St.

Arvada, CO 80002

(303) 589-1572, FAX 237-2659

6915

water

PD#ED4243

Customer No. \_\_\_\_\_

Laboratory No. \_\_\_\_\_

Sample \_\_\_\_\_

11/10/04

11/30/04

Date Received \_\_\_\_\_

Date Reported \_\_\_\_\_

Lab number:

6915

Sample ID:

Baseline Sampling WS-W3, 11/9/04

time 1513, samplers: James Hix/Ken Kreie

Iron Related Bacteria

present, approximately 2,300 CFU/ml

Sulfate Reducing Bacteria

absent

Slime Forming Bacteria

present, approximately 12,500 CFU/ml

Director: B. Bauer

JOHN C. KEPHART & CO.  
GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from: Cordilleran Compliance  
James Hix  
5550 Marshall St.  
Arvada, CO 80002  
FO#ED4243 (303)589-1572, FAX 237-2659  
6932 water

Customer No. \_\_\_\_\_ Laboratory No. \_\_\_\_\_ Sample \_\_\_\_\_

Date Received 11/11/04 Date Reported 11/30/04

Lab number: 6932  
Sample ID: Baseline Sampling BVS-SP1, 11/10/04  
time 0815, samplers: Ken Kreie/James Hix  
Presco, Inc.  
  
Iron Related Bacteria absent  
Sulfate Reducing Bacteria absent  
Slime Forming Bacteria absent

Director: B. Bauer

JOHN C. KEPHART & CO.  
GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from: Cordilleran Compliance  
James Hix  
5550 Marshall St.  
Arvada, CO 80002  
(303) 589-1572, FAX 237-2659  
6933 water

PO#EO4243

Customer No. \_\_\_\_\_ Laboratory No. \_\_\_\_\_ Sample \_\_\_\_\_

Date Received 11/10/04 Date Reported 11/30/04

Lab number: 6933  
Sample ID: Baseline Sampling RS-W4  
11/10/04, time 1050,  
samplers: James Hix/Ken Kreie,  
Presco, Inc.

Iron Related Bacteria present, approximately 9,000 CFU/ml  
Sulfate Reducing Bacteria present, approximately 200 CFU/ml,  
dense anaerobic  
Sulfate Reducing Bacteria consortium  
Slime Forming Bacteria present, approximately 66,500 CFU/ml

Director: E. Bauer

JOHN C. KEPHART & CO.

# GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from:

Cordilleran Compliance  
James Hix  
5550 Marshall St.  
Arvada, CO 80002  
(303) 589-1572, FAX 237-2659  
6934

PO# E04243

water

Customer No. \_\_\_\_\_

Laboratory No. \_\_\_\_\_

Sample \_\_\_\_\_

Date Received \_\_\_\_\_

11/11/04

Date Reported \_\_\_\_\_

11/30/04

Lab number:

6934

Sample ID:

Baseline Sampling EG-SP4, 11/10/04,  
time 13:36, samplers: James Hix/Ken Kreie,  
Presco, Inc.

Iron Related Bacteria

present, approximately 2,300 CFU/ml

Sulfate Reducing Bacteria

present, approximately 5,000 CFU/ml,  
combination of aerobic and anaerobic  
Sulfate Reducing Bacteria

Slime Forming Bacteria

present, approximately 66,500 CFU/ml

Director: E. Bauer

JOHN C. KEPHART & CO.  
GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from:

Cordilleran Compliance  
James Hix  
5550 Marshall St.  
Arvada, CO 80002  
(303) 589-1572, FAX 237-2659  
6935

PO#ED4243

water

Customer No. \_\_\_\_\_

Laboratory No. \_\_\_\_\_

Sample \_\_\_\_\_

11/11/04

11/30/04

Date Received \_\_\_\_\_

Date Reported \_\_\_\_\_

Lab number:

6935

Sample ID:

Baseline Sampling WK-SP3, 11/10/04  
time 1435, samplers: Ken Kreie/James Hix  
Presco, Inc.

Iron Related Bacteria

present, approximately 9,000 CFU/ml

Sulfate Reducing Bacteria

absent

Slime Forming Bacteria

present, approximately 12,500 CFU/ml

Director: B. Bauer

JOHN C. KEPHART & CO.  
GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from:

Cordilleran Compliance  
James Hix  
5550 Marshall St.  
Arvada, CO 80002  
(303) 589-1572, FAX 237-2659  
6936

PO#ED4243

water

Customer No. \_\_\_\_\_ Laboratory No. \_\_\_\_\_ Sample \_\_\_\_\_

Date Received 11/11/04 Date Reported 11/30/04

Lab number:

6936

Sample ID:

Baseline Sampling LH96-SP4, 11/10/04  
time 1545, samplers: James Hix/Ken Kreie

Iron Related Bacteria

present, approximately 2,300 CFU/ml

Sulfate Reducing Bacteria

present, approximately 1,200 CFU/ml,  
combination of aerobic and anaerobic  
Sulfate Reducing Bacteria

Slime Forming Bacteria

present, approximately 66,500 CFU/ml

Director: E. Bauer

JOHN C. KEPHART & CO.  
GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from:

Cordilleran Compliance  
James Hix  
5550 Marshall St.  
Arvada, CO 80002  
(303)589-1572, FAX 237-2659  
7207

PO#ED4243

water

Customer No. \_\_\_\_\_ Laboratory No. \_\_\_\_\_ Sample \_\_\_\_\_

Date Received 12/15/04 Date Reported 1/18/05

Lab number: 7207  
Sample ID: FW-W7 12/15/04 07:50 by Kreie

Iron Related Bacteria present, approximately 9,000 CFU/ml  
Sulfate Reducing Bacteria present, approximately 200 CFU/ml,  
dense anaerobic  
Sulfate Reducing Bacteria consortium  
Slime Forming Bacteria absent

Director: B. Bauer

JOHN C. KEPHART & CO.  
GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from: Cordilleran Compliance  
James Hix  
5550 Marshall St.  
Arvada, CO 80002  
(303) 589-1572, FAX 237-2659  
7206 water

FO#E04243

Customer No. \_\_\_\_\_ Laboratory No. \_\_\_\_\_ Sample \_\_\_\_\_

Date Received 12/15/04 Date Reported 1/18/05

Lab number: 7206  
Sample ID: RW-W8, 12/15/04 07:50 by Kreie

Iron Related Bacteria present, approximately 9,000 CFU/ml  
Sulfate Reducing Bacteria present, approximately 200 CFU/ml,  
dense anaerobic  
Sulfate Reducing Bacteria consortium  
Slime Forming Bacteria present, approximately 12,500 CFU/ml

Director: B. Bauer

JOHN C. KEPHART & CO.  
GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from: Cordilleran Compliance  
James Hix  
5550 Marshall St.  
Arvada, CO 80002  
(303) 589-1572, FAX 237-2659  
7208 water

PO#E04243

Customer No. \_\_\_\_\_ Laboratory No. \_\_\_\_\_ Sample \_\_\_\_\_

Date Received 12/15/04 Date Reported 1/18/05

Lab number: 7208  
Sample ID: MC-S3, 12/15/04 09:00 by Kreie

Iron Related Bacteria present, approximately 2,300 CFU/ml

Sulfate Reducing Bacteria present, approximately 700,000 CFU/ml,  
combination of aerobic and anaerobic  
Sulfate Reducing Bacteria

Slime Forming Bacteria present, approximately 350,000 CFU/ml

Director: H. Bauer

JOHN C. KEPHART & CO.  
GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from: Cordilleran Compliance  
James Hix  
5550 Marshall St.  
Arvada, CO 80002  
(303) 589-1572, FAX 237-2659  
7071 water

PO#ED4243

Customer No. \_\_\_\_\_ Laboratory No. \_\_\_\_\_ Sample \_\_\_\_\_

Date Received 12/3/04 Date Reported 12/14/04

Lab number: 7071  
Sample ID: CK-W5, 12/2/04 11:50 by Ken Kreie

Iron Related Bacteria present, approximately 2,300 CFU/ml  
Sulfate Reducing Bacteria absent  
Slime Forming Bacteria present, approximately 500 CFU/ml

Director: B. Bauer

JOHN C. KEPHART & CO.  
GRAND JUNCTION LABORATORIES

435 NORTH AVENUE ♦ PHONE: (970) 242-7618 ♦ FAX: (970) 243-7235 ♦ GRAND JUNCTION, COLORADO 81501

— ANALYTICAL REPORT —

Received from:

Cordilleran Compliance  
James Hix  
5550 Marshall St.  
Arvada, CO 80002  
(303) 589-1572, FAX 237-2659  
7072

PO#E04243

water

Customer No. \_\_\_\_\_ Laboratory No. \_\_\_\_\_ Sample \_\_\_\_\_

12/3/04

12/14/04

Date Received \_\_\_\_\_ Date Reported \_\_\_\_\_

Lab number:

7072

Sample ID:

TJ-W6 12/2/04 12:40 by Kreie

Iron Related Bacteria

present, approximately 9,000 CFU/ml,

Sulfate Reducing Bacteria

absent

Slime Forming Bacteria

present, approximately 66,500 CFU/ml

Director: B. Bauer