American West
ANALYTICAL LABORATORIES

3440 South 700 West
Salt Lake City, UT 84119

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

web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

TABLE OF CONTENTS FOR QC III+ DATA PACKAGE

LABORATORY IDENTIFICATION NUMBER: 1511119

Assembled by: Melissa Connolly
Digitally signed by Melissa Connolly
DN: cn=Melissa Connolly, o=American West Analytical Laboratories, ou, email=melissa@awal-labs.com, c=US
Date: 2015.12.03 16:02:35 -07'00'

Reviewed by: Kyle F. Gross
Digitally signed by Kyle F. Gross
Date: 2015.12.04 07:39:24 -07'00'

3440 South 700 West
Salt Lake City, UT 84119

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

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Laboratory Director

Jose Rocha
QA Officer

SECTION 1.

- CASE NARRATIVE
- AWAL CHAIN-OF-CUSTODY
- CLIENT CHAIN-OF-CUSTODY

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Laboratory Director

Jose Rocha
QA Officer

Jim Harris
Utah Division of Water Quality
PO Box 144870
SLC, UT 84114
TEL: (801) 538-6329

RE: Gold King Mine Spill / 01255.1.016.03

Dear Jim Harris: Lab Set ID: 1511119

American West Analytical Laboratories received sample(s) on 11/6/2015 for the analyses presented in the following report.

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, Wyoming, and Missouri.

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

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

Thank You,

Approved by: Kyle F. Gross Digitally signed by Kyle F. Gross Date: 2015.12.04 07:39:39 -07'00'

Laboratory Director or designee

American West Analytical Laboratories

REVISED: 11-9-15

Samples 7, 8, and 9 taken off hold. -DB

D

WORK ORDER Summary

Work Order: **1511119**

Client: Utah Division of Water Quality — Due Date: 11/20/2015

Client ID: UTD200 — **Contact:** Jim Harris

Project: **Gold King Mine Spill / 01255.1.016.03** — **QC Level:** III+ MDL — WO Type: Standard

Comments: QC 3+ MDL. Include EDD. CC: Brad Martin W/Techlaw. Email to lenoras@utah.gov. 11-9-15 - Samples 7, 8 & 9 taken off hold.;

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1511119-001A	**GK01-ST-19**	10/31/2015 1200h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-002A	**GK01-ST-20**	11/1/2015 0000h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-003A	**GK01-ST-21**	11/1/2015 1200h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-004A	**GK01-ST-22**	11/2/2015 0000h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-005A	**GK01-ST-23**	11/2/2015 1200h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-006A	**GK02-ST-01**	10/22/2015 1200h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-007A	**GK02-ST-02**	10/23/2015 0000h	11/6/2015 1030h	**200.7-W**	Aqueous	☑	DF-Metals	1
				6 SEL Analytes: AL CA FE MG K NA				
				200.7-W-PR		☐	DF-Metals	
				200.8-W		☑	DF-Metals	
				17 SEL Analytes: SB AS BA BE CD CR CO CU PB MN MO NI SE AG TL V ZN				
				200.8-W-PR		☐	DF-Metals	
				HG-DW-245.1		☐	DF-Metals	
				HG-DW-PR		☐	DF-Metals	
1511119-008A	**GK02-ST-03**	10/23/2015 1200h	11/6/2015 1030h	**200.7-W**	Aqueous	☑	DF-Metals	1
				6 SEL Analytes: AL CA FE MG K NA				
				200.7-W-PR		☐	DF-Metals	
				200.8-W		☑	DF-Metals	
				17 SEL Analytes: SB AS BA BE CD CR CO CU PB MN MO NI SE AG TL V ZN				
				200.8-W-PR		☐	DF-Metals	
				HG-DW-245.1		☐	DF-Metals	
				HG-DW-PR		☐	DF-Metals	
1511119-009A	**GK02-ST-04**	10/24/2015 0000h	11/6/2015 1030h	**200.7-W**	Aqueous	☑	DF-Metals	1
				6 SEL Analytes: AL CA FE MG K NA				
				200.7-W-PR		☐	DF-Metals	
				200.8-W		☑	DF-Metals	
				17 SEL Analytes: SB AS BA BE CD CR CO CU PB MN MO NI SE AG TL V ZN				

Printed: 11/25/2015 FOR LABORATORY USE ONLY [fill out on page 1]: %M ☐ RT ☐ CN ☐ TAT ☐ QC ☐ HOK_ _ _ _ HOK_ _ _ _ HOK_ _ _ _ COC Emailed_ _ _ _ _ _ _

WORK ORDER Summary

Work Order: **1511119**

Client: Utah Division of Water Quality

Due Date: 11/20/2015

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1511119-009A	**GK02-ST-04**	10/24/2015 0000h	11/6/2015 1030h	**200.8-W-PR**	Aqueous	☐	DF-Metals	1
				HG-DW-245.1		☐	DF-Metals	
				HG-DW-PR		☐	DF-Metals	
1511119-010A	**GK02-ST-05**	10/24/2015 1200h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-011A	**GK02-ST-06**	10/25/2015 0000h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-012A	**GK02-ST-07**	10/25/2015 1200h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-013A	**GK02-ST-08**	10/26/2015 0000h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-014A	**GK02-ST-09**	10/26/2015 1200h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-015A	**GK02-ST-10**	10/27/2015 0000h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-016A	**GK02-ST-11**	10/27/2015 1200h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-017A	**GK02-ST-12**	10/28/2015 0000h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-018A	**GK02-ST-13**	10/28/2015 1200h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-019A	**GK02-ST-14**	10/29/2015 0000h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1
1511119-020A	**GK02-ST-15**	10/29/2015 1200h	11/6/2015 1030h		Aqueous	☐	DF-Hold	1

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CHAIN OF CUSTODY

1511119
AWAL Lab Sample Set #
Page 1 of 2

All analysis will be conducted using NELAP accredited methods and all data will be reported using AWAL's standard analyte lists and reporting limits (PQL) unless specifically requested otherwise on this Chain of Custody and/or attached documentation.

QC Level: 1 2 2+ 3 3+ (4)

Turn Around Time: 1 2 3 4 5 (Std)

Unless other arrangements have been made, signed reports will be emailed by **5:00 pm** on the day they are due.

Due Date:

Client: State of Utah/TechLaw, Inc.
Address: 195 N, 1950 West
SLC, UT 84119
Contact: Jim H (UT), Brad M (TL)
Phone #: 801-536-4360 Cell #: 630-693-5407
Email:
Project Name: Gold King Mine Spill
Project #: 01255.1.016.03
PO #:
Sampler Name: TechLaw

☒ Report down to the MDL
☒ Include EDD:
☐ Lab Filte for:
☐ Field Filtered For:

For Compliance With:
☐ NELAP
☐ RCRA
☐ CWA
☐ SDWA
☐ ELAP / A2LA
☐ NLLAP
☐ Non-Compliance
☐ Other:

	Sample ID:	Date Sampled	Time Sampled	# of Containers	Sample Matrix	TOTAL METALS	Known Hazards & Sample Comments
1	GK01-ST-19	10/31/15	1200	1	W	*	
2	GK01-ST-20	11/1/15	0000				
3	GK01-ST-21	11/1/15	1200				**Received broken Sample transferred to another container
4	GK01-ST-22	11/2/15	0000				
5	GK01-ST-23	11/2/15	1200				
6	GK02-ST-01	10/22/15	~~0000~~ 1200				
7	GK02-ST-02	10/23/15	0000				*
8	GK02-ST-03	10/23/15	1200				*
9	GK02-ST-04	10/24/15	0000				*
10	GK02-ST-05	10/24/15	1200				
11	GK02-ST-06	10/25/15	0000				
12	GK02-ST-07	10/25/15	1200				

Laboratory Use Only

Samples Were: Fed Ex
1 Shipped or hand-delivered
2 Ambient or Chilled
3 Temperature 3.2 °C
4 Received Broken/Leaking (Improperly Sealed) (Y) #3 Broken AB 11/9/15
5 Properly Preserved (Y) N Checked at bench
6 Received Within Holding Times (Y) N

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

Discrepancies Between Sample Labels and COC Record? Y (N)

Relinquished by: Signature / Print Name: Michael Anderson / MICHAEL ANDERSON	Date: 11/5/15 Time: 1205	Received by: Signature / Print Name:	Date: Time:
Relinquished by: Signature / Print Name:	Date: Time:	Received by: Signature / Print Name:	Date: Time:
Relinquished by: Signature / Print Name:	Date: Time:	Received by: Signature / Print Name:	Date: Time:
Relinquished by: Signature / Print Name:	Date: Time:	Received by: Signature / Print Name: Denise Brown / Denise Brown	Date: 11/5/15 Time: 1630

Special Instructions:

Hold for analysis

* 11/9/2015 Analyze for (200.7) Al, Ca, Fe, K, Mg, Na (200.8) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Mn, Ni, Ag Se, Tl, V, Zn (Hg: DW)

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CHAIN OF CUSTODY

1511119
AWAL Lab Sample Set #
Page 2 of 2

All analysis will be conducted using NELAP accredited methods and all data will be reported using AWAL's standard analyte lists and reporting limits (PQL) unless specifically requested otherwise on this Chain of Custody and/or attached documentation.

QC Level: 1 2 2+ 3 3+ (4)

Turn Around Time: 1 2 3 4 5 (Stnd)

Unless other arrangements have been made, signed reports will be emailed by **5:00 pm** on the day they are due.

Due Date:

Client: State of Utah/TechLaw, Inc.
Address: 195 N, 1950 West
SLC, UT 84119
Contact: Jim H (UT), Brad M (TL)
Phone #: 801-536-4360 Cell #: 630-693-5407
Email:
Project Name: Gold King Mine Spill
Project #: 01255.1.016.03
PO #:
Sampler Name: TechLaw

☒ Report down to the MDL
☒ Include EDD:
☐ Lab Filter for:
☐ Field Filtered For:

For Compliance With:
☐ NELAP
☐ RCRA
☐ CWA
☐ SDWA
☐ ELAP / A2LA
☐ NLLAP
☐ Non-Compliance
☐ Other:

	Sample ID:	Date Sampled	Time Sampled	# of Containers	Sample Matrix	TOTAL METALS	Known Hazards & Sample Comments
1	GKO2-ST-08	10/26/15	0000	1	W		
2	GKO2-ST-09	10/26/15	1200				
3	GKO2-ST-10	10/27/15	0000				
4	GKO2-ST-11	10/27/15	1200				
5	GKO2-ST-12	10/28/15	0000				
6	GKO2-ST-13	10/28/15	1200				
7	GKO2-ST-14	10/29/15	0000				
8	GKO2-ST-15	10/29/15	1200				
9							
10							
11							
12							

Laboratory Use Only

Samples Were: Fed Ex
(Shipped or hand delivered)
2 Ambient or (Chilled)
3 Temperature 3.2 °C
4 Received Broken/Leaking (Improperly Sealed) (Y) (N) #3 broken AEB 11/9/15
5 Properly Preserved (Y) N Checked at bench
6 Received Within Holding Times (Y) N

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

Discrepancies Between Sample Labels and COC Record? Y (N)

Relinquished by: Signature: Michael Anderson	Date: 11/5/15	Received by: Signature	Date:
Print Name: MICHAEL ANDERSON	Time: 1200	Print Name:	Time:
Relinquished by: Signature	Date:	Received by: Signature	Date:
Print Name:	Time:	Print Name:	Time:
Relinquished by: Signature	Date:	Received by: Signature	Date:
Print Name:	Time:	Print Name:	Time:
Relinquished by: Signature	Date:	Received by: Signature: Denise Brown	Date: 11/6/15
Print Name:	Time:	Print Name: Denise Brown	Time: 10:30

Special Instructions:

Hold for analysis

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Inorganic Case Narrative

Client: Utah Division of Water Quality
Contact: Jim Harris
Project: Gold King Mine Spill / 01255.1.016.03
Lab Set ID: 1511119

Sample Receipt Information:

Date of Receipt: 11/6/2015
Date of Collection: 10/22-11/2/2015
Date of Analyses Request: 11/9/2015
Sample Condition: Intact
C-O-C Discrepancies: None

Holding Time and Preservation Requirements: The analysis and preparation of all samples were performed within the method holding times.

Preparation and Analysis Requirements: The samples were analyzed following the methods stated on the analytical reports.

Analytical QC Requirements: All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Batch QC Requirements: MB, LCS, MS, MSD, RPD, PDS, SD:

Method Blanks (MBs): No target analytes were detected above the reporting limits, indicating that the procedure was free from contamination. Selenium on sample MB-40207 was observed between the MDL and reporting limit.

Laboratory Control Sample (LCSs): All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

Matrix Spike / Matrix Spike Duplicate (MS/MSD): All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, with the following exceptions:

Sample ID	Analyte	QC	Explanation
1511119-007A	Aluminum	MS/MSD	High analyte concentration
1511119-007A	Antimony	MS/MSD/RPD	Sample matrix interference and/or sample non-homogeneity
1511119-007A	Barium	MS/MSD	High analyte concentration
1511119-007A	Calcium	MS/MSD	High analyte concentration
1511119-007A	Iron	MS/MSD	High analyte concentration
1511119-007A	Magnesium	MSD	High analyte concentration
1511119-007A	Manganese	MS/MSD	High analyte concentration
1511119-007A	Molybdenum	MS/MSD/RPD	Sample matrix interference and/or sample non-homogeneity

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Post Digestion Spike (PDS): The PDS percent recoveries were within the control limits, with the following exceptions: the PDS percent recovery for Magnesium on sample 1511119-007APDS were outside of the control limits due to sample matrix interference.

Serial Dilution (SD): The serial dilution RPDs were within the control limits, with the following exceptions: The analyte concentrations for Silver and Molybdenum on sample 1511119-007A5X were too low for serial dilution evaluation. The RPD for Potassium on sample 1511119-007A5X was outside of the control limit due to sample matrix interference.

Corrective Action: None required.

SAMPLE SUMMARY

Client: Utah Division of Water Quality **Contact:** Jim Harris
Project: Gold King Mine Spill / 01255.1.016.03
Lab Set ID: 1511119
Date Received: 11/6/2015 1030h

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1511119-007A	GK02-ST-02	10/23/2015 000h	Aqueous	Mercury, Drinking Water
1511119-007A	GK02-ST-02	10/23/2015 000h	Aqueous	ICPMS Metals, Total
1511119-007A	GK02-ST-02	10/23/2015 000h	Aqueous	ICP Metals, Total
1511119-008A	GK02-ST-03	10/23/2015 1200h	Aqueous	Mercury, Drinking Water
1511119-008A	GK02-ST-03	10/23/2015 1200h	Aqueous	ICPMS Metals, Total
1511119-008A	GK02-ST-03	10/23/2015 1200h	Aqueous	ICP Metals, Total
1511119-009A	GK02-ST-04	10/24/2015 000h	Aqueous	Mercury, Drinking Water
1511119-009A	GK02-ST-04	10/24/2015 000h	Aqueous	ICPMS Metals, Total
1511119-009A	GK02-ST-04	10/24/2015 000h	Aqueous	ICP Metals, Total

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SECTION 2.

ANALYTICAL REPORTS

- The contract required detection limits (CRDL's) were met.
- There is an analytical report for each sample on the chain-of-custody.
- The results and dates on the analytical reports match the raw data.
- The information on the header of the analytical reports including the field ID's, the sample dates, and the received date match the chain-of-custody.

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Laboratory Director

Jose Rocha
QA Officer

INORGANIC ANALYTICAL REPORT

Client: Utah Division of Water Quality **Contact:** Jim Harris
Project: Gold King Mine Spill / 01255.1.016.03
Lab Sample ID: 1511119-007
Client Sample ID: GK02-ST-02
Collection Date: 10/23/2015 000h
Received Date: 11/6/2015 1030h

Analytical Results TOTAL METALS

Compound	CAS	Units	Date Prepared	Date Analyzed	Method Used	MDL	Reporting Limit	Analytical Result	Qual
Aluminum	7429-90-5	mg/L	11/11/2015 1040h	11/12/2015 1020h	E200.7	0.237	1.00	**45.7**	²
Antimony	7440-36-0	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.0000366	0.00200	0.00122	J¹@
Arsenic	7440-38-2	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.0000920	0.00200	**0.0163**	
Barium	7440-39-3	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.000538	0.00200	**1.26**	²
Beryllium	7440-41-7	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.0000288	0.00200	**0.00360**	
Cadmium	7440-43-9	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.000193	0.000500	**0.00198**	
Calcium	7440-70-2	mg/L	11/11/2015 1040h	11/12/2015 1020h	E200.7	0.401	10.0	**317**	²
Chromium	7440-47-3	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.00154	0.00200	**0.0319**	
Cobalt	7440-48-4	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.0000434	0.00400	**0.0282**	
Copper	7440-50-8	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.000692	0.00200	**0.0735**	
Iron	7439-89-6	mg/L	11/11/2015 1040h	11/12/2015 1144h	E200.7	0.767	1.00	**44.0**	²
Lead	7439-92-1	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.000264	0.00200	**0.0572**	
Magnesium	7439-95-4	mg/L	11/11/2015 1040h	11/12/2015 1020h	E200.7	0.294	10.0	**57.3**	² §
Manganese	7439-96-5	mg/L	11/11/2015 1040h	11/12/2015 1548h	E200.8	0.0153	0.0200	**1.92**	²
Mercury	7439-97-6	mg/L	11/11/2015 1500h	11/12/2015 1227h	E245.1	0.00000892	0.000150	**0.000267**	
Molybdenum	7439-98-7	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.000206	0.00200	0.00157	J¹$
Nickel	7440-02-0	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.000754	0.00200	**0.0574**	
Potassium	7440-09-7	mg/L	11/11/2015 1040h	11/12/2015 1047h	E200.7	0.247	1.00	**13.8**	¤
Selenium	7782-49-2	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.0000634	0.00200	**0.00255**	B
Silver	7440-22-4	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.0000244	0.00200	0.000490	J$
Sodium	7440-23-5	mg/L	11/11/2015 1040h	11/12/2015 1020h	E200.7	0.330	10.0	**50.6**	
Thallium	7440-28-0	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.0000242	0.00200	0.000746	J
Vanadium	7440-62-2	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.000438	0.00440	**0.0696**	
Zinc	7440-66-6	mg/L	11/11/2015 1040h	11/12/2015 1236h	E200.8	0.00476	0.00500	**0.213**	

$ - Sample concentration too low for serial dilution evaluation.
@ - High RPD due to suspected sample non-homogeneity or matrix interference.
¤ - Serial dilution RPD indicates matrix interference.
§ - Post digestion spike (PDS) recovery indicates matrix interference.
¹ - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.
² - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.
B - This analyte was also detected in the method blank below the PQL.
J - Estimated value between the MDL and the reporting limit (PQL).

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Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687
e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

INORGANIC ANALYTICAL REPORT

Client: Utah Division of Water Quality **Contact:** Jim Harris
Project: Gold King Mine Spill / 01255.1.016.03
Lab Sample ID: 1511119-008
Client Sample ID: GK02-ST-03
Collection Date: 10/23/2015 1200h
Received Date: 11/6/2015 1030h

Analytical Results TOTAL METALS

Compound	CAS	Units	Date Prepared	Date Analyzed	Method Used	MDL	Reporting Limit	Analytical Result	Qual
Aluminum	7429-90-5	mg/L	11/11/2015 1040h	11/12/2015 1031h	E200.7	0.237	1.00	**69.8**	
Antimony	7440-36-0	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.0000366	0.00200	0.000204	J
Arsenic	7440-38-2	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.0000920	0.00200	**0.0183**	
Barium	7440-39-3	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.000538	0.00200	**1.47**	
Beryllium	7440-41-7	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.0000288	0.00200	**0.00576**	
Cadmium	7440-43-9	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.000193	0.000500	**0.00200**	
Calcium	7440-70-2	mg/L	11/11/2015 1040h	11/12/2015 1031h	E200.7	0.401	10.0	**252**	
Chromium	7440-47-3	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.00154	0.00200	**0.0403**	
Cobalt	7440-48-4	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.0000434	0.00400	**0.0383**	
Copper	7440-50-8	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.000692	0.00200	**0.0988**	
Iron	7439-89-6	mg/L	11/11/2015 1040h	11/12/2015 1156h	E200.7	0.767	1.00	**62.8**	
Lead	7439-92-1	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.000264	0.00200	**0.0731**	
Magnesium	7439-95-4	mg/L	11/11/2015 1040h	11/12/2015 1031h	E200.7	0.294	10.0	**52.2**	
Manganese	7439-96-5	mg/L	11/11/2015 1040h	11/12/2015 1613h	E200.8	0.0153	0.0200	**2.52**	
Mercury	7439-97-6	mg/L	11/11/2015 1500h	11/12/2015 1232h	E245.1	0.00000892	0.000150	**0.000292**	
Molybdenum	7439-98-7	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.000206	0.00200	0.00108	J
Nickel	7440-02-0	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.000754	0.00200	**0.0613**	
Potassium	7440-09-7	mg/L	11/11/2015 1040h	11/12/2015 1058h	E200.7	0.247	1.00	**15.4**	
Selenium	7782-49-2	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.0000634	0.00200	**0.00239**	
Silver	7440-22-4	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.0000244	0.00200	0.000575	J
Sodium	7440-23-5	mg/L	11/11/2015 1040h	11/12/2015 1031h	E200.7	0.330	10.0	**50.7**	
Thallium	7440-28-0	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.0000242	0.00200	0.000953	J
Vanadium	7440-62-2	mg/L	11/11/2015 1040h	11/12/2015 1613h	E200.8	0.00438	0.0440	**0.0872**	
Zinc	7440-66-6	mg/L	11/11/2015 1040h	11/12/2015 1445h	E200.8	0.00476	0.00500	**0.241**	

J - Estimated value between the MDL and the reporting limit (PQL).

American West ANALYTICAL LABORATORIES

3440 South 700 West
Salt Lake City, UT 84119
Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687
e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

INORGANIC ANALYTICAL REPORT

Client: Utah Division of Water Quality **Contact:** Jim Harris
Project: Gold King Mine Spill / 01255.1.016.03
Lab Sample ID: 1511119-009
Client Sample ID: GK02-ST-04
Collection Date: 10/24/2015 000h
Received Date: 11/6/2015 1030h

Analytical Results TOTAL METALS

Compound	CAS	Units	Date Prepared	Date Analyzed	Method Used	MDL	Reporting Limit	Analytical Result	Qual
Aluminum	7429-90-5	mg/L	11/11/2015 1040h	11/12/2015 1033h	E200.7	0.237	1.00	**200**	
Antimony	7440-36-0	mg/L	11/11/2015 1040h	11/12/2015 1448h	E200.8	0.0000366	0.00200	0.000193	J
Arsenic	7440-38-2	mg/L	11/11/2015 1040h	11/12/2015 1448h	E200.8	0.0000920	0.00200	**0.0321**	
Barium	7440-39-3	mg/L	11/11/2015 1040h	11/12/2015 1616h	E200.8	0.00538	0.0200	**4.18**	
Beryllium	7440-41-7	mg/L	11/11/2015 1040h	11/12/2015 1616h	E200.8	0.000288	0.0200	**0.0204**	
Cadmium	7440-43-9	mg/L	11/11/2015 1040h	11/12/2015 1448h	E200.8	0.000193	0.000500	**0.00442**	
Calcium	7440-70-2	mg/L	11/11/2015 1040h	11/12/2015 1033h	E200.7	0.401	10.0	**349**	
Chromium	7440-47-3	mg/L	11/11/2015 1040h	11/12/2015 1448h	E200.8	0.00154	0.00200	**0.0953**	
Cobalt	7440-48-4	mg/L	11/11/2015 1040h	11/12/2015 1448h	E200.8	0.0000434	0.00400	**0.109**	
Copper	7440-50-8	mg/L	11/11/2015 1040h	11/12/2015 1448h	E200.8	0.000692	0.00200	**0.266**	
Iron	7439-89-6	mg/L	11/11/2015 1040h	11/12/2015 1213h	E200.7	0.767	1.00	**171**	
Lead	7439-92-1	mg/L	11/11/2015 1040h	11/12/2015 1448h	E200.8	0.000264	0.00200	**0.218**	
Magnesium	7439-95-4	mg/L	11/11/2015 1040h	11/12/2015 1033h	E200.7	0.294	10.0	**89.3**	
Manganese	7439-96-5	mg/L	11/11/2015 1040h	11/12/2015 1616h	E200.8	0.0153	0.0200	**6.63**	
Mercury	7439-97-6	mg/L	11/11/2015 1500h	11/12/2015 1234h	E245.1	0.00000892	0.000150	**0.000597**	
Molybdenum	7439-98-7	mg/L	11/11/2015 1040h	11/12/2015 1448h	E200.8	0.000206	0.00200	0.000904	J
Nickel	7440-02-0	mg/L	11/11/2015 1040h	11/12/2015 1448h	E200.8	0.000754	0.00200	**0.143**	
Potassium	7440-09-7	mg/L	11/11/2015 1040h	11/12/2015 1100h	E200.7	0.247	1.00	**32.3**	
Selenium	7782-49-2	mg/L	11/11/2015 1040h	11/12/2015 1448h	E200.8	0.0000634	0.00200	**0.00329**	
Silver	7440-22-4	mg/L	11/11/2015 1040h	11/12/2015 1448h	E200.8	0.0000244	0.00200	0.00168	J
Sodium	7440-23-5	mg/L	11/11/2015 1040h	11/12/2015 1033h	E200.7	0.330	10.0	**70.3**	
Thallium	7440-28-0	mg/L	11/11/2015 1040h	11/12/2015 1448h	E200.8	0.0000242	0.00200	**0.00233**	
Vanadium	7440-62-2	mg/L	11/11/2015 1040h	11/12/2015 1616h	E200.8	0.00438	0.0440	**0.162**	
Zinc	7440-66-6	mg/L	11/11/2015 1040h	11/12/2015 1448h	E200.8	0.00476	0.00500	**0.564**	

J - Estimated value between the MDL and the reporting limit (PQL).

3440 South 700 West
Salt Lake City, UT 84119

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

web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

SECTION 3.

- BATCH QC REPORTS
  - METHOD BLANK (MB) REPORTS
    - Raw data matches method blank reports.
    - Any results greater than the contract required detection limit are flagged.
  - LABORATORY CONTROL SAMPLE (LCS) REPORTS
    - Raw data matches LCS reports.
    - Any results outside the control limits are flagged.
  - MATRIX SPIKE / MATRIX SPIKE DUPLICATE (MS/MSD) REPORTS
    - Raw data matches MS/MSD reports.
    - Any results outside the control limits are flagged and qualified.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Utah Division of Water Quality
Lab Set ID: 1511119
Project: Gold King Mine Spill / 01255.1.016.03

Contact: Jim Harris
Dept: ME
QC Type: LCS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: LCS-40206	Date Analyzed:	11/12/2015 1018h											
Test Code: 200.7-W	Date Prepared:	11/11/2015 1040h											
Aluminum	0.970	mg/L	E200.7	0.0237	0.100	1.000	0	97.0	85 - 115				
Calcium	9.78	mg/L	E200.7	0.0401	1.00	10.00	0	97.8	85 - 115				
Magnesium	10.1	mg/L	E200.7	0.0294	1.00	10.00	0	101	85 - 115				
Potassium	9.78	mg/L	E200.7	0.247	1.00	10.00	0	97.8	85 - 115				
Sodium	9.71	mg/L	E200.7	0.0330	1.00	10.00	0	97.1	85 - 115				
Lab Sample ID: LCS-40206	Date Analyzed:	11/12/2015 1141h											
Test Code: 200.7-W	Date Prepared:	11/11/2015 1040h											
Iron	1.04	mg/L	E200.7	0.0767	0.100	1.000	0	104	85 - 115				
Lab Sample ID: LCS-40207	Date Analyzed:	11/12/2015 1233h											
Test Code: 200.8-W	Date Prepared:	11/11/2015 1040h											
Antimony	0.178	mg/L	E200.8	0.0000366	0.00200	0.2000	0	89.0	85 - 115				
Arsenic	0.213	mg/L	E200.8	0.0000920	0.00200	0.2000	0	106	85 - 115				
Barium	0.199	mg/L	E200.8	0.000538	0.00200	0.2000	0	99.7	85 - 115				
Beryllium	0.206	mg/L	E200.8	0.0000288	0.00200	0.2000	0	103	85 - 115				
Cadmium	0.201	mg/L	E200.8	0.000193	0.000500	0.2000	0	101	85 - 115				
Chromium	0.202	mg/L	E200.8	0.00154	0.00200	0.2000	0	101	85 - 115				
Cobalt	0.198	mg/L	E200.8	0.0000434	0.00400	0.2000	0	99.0	85 - 115				
Copper	0.202	mg/L	E200.8	0.000692	0.00200	0.2000	0	101	85 - 115				
Lead	0.196	mg/L	E200.8	0.000264	0.00200	0.2000	0	98.1	85 - 115				
Manganese	0.205	mg/L	E200.8	0.00153	0.00200	0.2000	0	102	85 - 115				
Molybdenum	0.199	mg/L	E200.8	0.000206	0.00200	0.2000	0	99.4	85 - 115				
Nickel	0.200	mg/L	E200.8	0.000754	0.00200	0.2000	0	99.8	85 - 115				
Selenium	0.206	mg/L	E200.8	0.0000634	0.00200	0.2000	0	103	85 - 115				
Silver	0.195	mg/L	E200.8	0.0000244	0.00200	0.2000	0	97.7	85 - 115				
Thallium	0.192	mg/L	E200.8	0.0000242	0.00200	0.2000	0	96.0	85 - 115				
Vanadium	0.202	mg/L	E200.8	0.000438	0.00440	0.2000	0	101	85 - 115				

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Kyle F. Gross
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QC SUMMARY REPORT

Client: Utah Division of Water Quality
Lab Set ID: 1511119
Project: Gold King Mine Spill / 01255.1.016.03

Contact: Jim Harris
Dept: ME
QC Type: LCS

Analyte		Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID:	**LCS-40207**	Date Analyzed:	11/12/2015 1233h											
Test Code:	200.8-W	Date Prepared:	11/11/2015 1040h											
Zinc		1.03	mg/L	E200.8	0.00476	0.00500	1.000	0	103	85 - 115				
Lab Sample ID:	**LCS-40220**	Date Analyzed:	11/12/2015 1142h											
Test Code:	HG-DW-245.1	Date Prepared:	11/11/2015 1500h											
Mercury		0.00338	mg/L	E245.1	0.00000892	0.000150	0.003330	0	102	85 - 115				

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Utah Division of Water Quality
Lab Set ID: 1511119
Project: Gold King Mine Spill / 01255.1.016.03

Contact: Jim Harris
Dept: ME
QC Type: MBLK

Analyte		Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID:	**MB-40206**	Date Analyzed:	11/12/2015 1015h											
Test Code:	200.7-W	Date Prepared:	11/11/2015 1040h											
Aluminum		< 0.100	mg/L	E200.7	0.0237	0.100								U
Calcium		< 1.00	mg/L	E200.7	0.0401	1.00								U
Magnesium		< 1.00	mg/L	E200.7	0.0294	1.00								U
Potassium		< 1.00	mg/L	E200.7	0.247	1.00								U
Sodium		< 1.00	mg/L	E200.7	0.0330	1.00								U
Lab Sample ID:	**MB-40206**	Date Analyzed:	11/12/2015 1139h											
Test Code:	200.7-W	Date Prepared:	11/11/2015 1040h											
Iron		< 0.100	mg/L	E200.7	0.0767	0.100								U
Lab Sample ID:	**MB-40207**	Date Analyzed:	11/12/2015 1230h											
Test Code:	200.8-W	Date Prepared:	11/11/2015 1040h											
Antimony		< 0.00200	mg/L	E200.8	0.0000366	0.00200								U
Arsenic		< 0.00200	mg/L	E200.8	0.0000920	0.00200								U
Barium		< 0.00200	mg/L	E200.8	0.000538	0.00200								U
Beryllium		< 0.00200	mg/L	E200.8	0.0000288	0.00200								U
Cadmium		< 0.000500	mg/L	E200.8	0.000193	0.000500								U
Chromium		< 0.00200	mg/L	E200.8	0.00154	0.00200								U
Cobalt		< 0.00400	mg/L	E200.8	0.0000434	0.00400								U
Copper		< 0.00200	mg/L	E200.8	0.000692	0.00200								U
Lead		< 0.00200	mg/L	E200.8	0.000264	0.00200								U
Manganese		< 0.00200	mg/L	E200.8	0.00153	0.00200								U
Molybdenum		< 0.00200	mg/L	E200.8	0.000206	0.00200								U
Nickel		< 0.00200	mg/L	E200.8	0.000754	0.00200								U
Selenium		0.0000656	mg/L	E200.8	0.0000634	0.00200								JB
Silver		< 0.00200	mg/L	E200.8	0.0000244	0.00200								U
Thallium		< 0.00200	mg/L	E200.8	0.0000242	0.00200								U
Vanadium		< 0.00440	mg/L	E200.8	0.000438	0.00440								U

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Utah Division of Water Quality
Lab Set ID: 1511119
Project: Gold King Mine Spill / 01255.1.016.03

Contact: Jim Harris
Dept: ME
QC Type: MBLK

Analyte		Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID:	**MB-40207**	Date Analyzed:	11/12/2015 1230h											
Test Code:	200.8-W	Date Prepared:	11/11/2015 1040h											
Zinc		< 0.00500	mg/L	E200.8	0.00476	0.00500								U
Lab Sample ID:	**MB-40220**	Date Analyzed:	11/12/2015 1140h											
Test Code:	HG-DW-245.1	Date Prepared:	11/11/2015 1500h											
Mercury		< 0.000150	mg/L	E245.1	0.00000892	0.000150								U

B - This analyte was also detected in the method blank below the PQL.
J - Estimated value between the MDL and the reporting limit (PQL).
U - This flag indicates the compound was analyzed for but not detected above the MDL.

3440 South 700 West
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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Utah Division of Water Quality
Lab Set ID: 1511119
Project: Gold King Mine Spill / 01255.1.016.03

Contact: Jim Harris
Dept: ME
QC Type: MS

Analyte		Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID:	**1511119-007AMS**	Date Analyzed:	11/12/2015 1027h											
Test Code:	200.7-W	Date Prepared:	11/11/2015 1040h											
Aluminum		54.0	mg/L	E200.7	0.237	1.00	1.000	45.7	829	70 - 130				2
Calcium		306	mg/L	E200.7	0.401	10.0	10.00	317	-110	70 - 130				2
Magnesium		64.9	mg/L	E200.7	0.294	10.0	10.00	57.3	76.9	70 - 130				
Sodium		59.2	mg/L	E200.7	0.330	10.0	10.00	50.6	86.2	70 - 130				
Lab Sample ID:	**1511119-007AMS**	Date Analyzed:	11/12/2015 1053h											
Test Code:	200.7-W	Date Prepared:	11/11/2015 1040h											
Potassium		23.7	mg/L	E200.7	0.247	1.00	10.00	13.8	98.9	70 - 130				
Lab Sample ID:	**1511119-007AMS**	Date Analyzed:	11/12/2015 1151h											
Test Code:	200.7-W	Date Prepared:	11/11/2015 1040h											
Iron		45.7	mg/L	E200.7	0.767	1.00	1.000	44	177	70 - 130				2
Lab Sample ID:	**1511119-007AMS**	Date Analyzed:	11/12/2015 1245h											
Test Code:	200.8-W	Date Prepared:	11/11/2015 1040h											
Antimony		0.0244	mg/L	E200.8	0.0000366	0.00200	0.2000	0.00122	11.6	75 - 125				1
Arsenic		0.186	mg/L	E200.8	0.0000920	0.00200	0.2000	0.0163	84.9	75 - 125				
Barium		1.31	mg/L	E200.8	0.000538	0.00200	0.2000	1.26	25.8	75 - 125				2
Beryllium		0.176	mg/L	E200.8	0.0000288	0.00200	0.2000	0.0036	86.0	75 - 125				
Cadmium		0.189	mg/L	E200.8	0.000193	0.000500	0.2000	0.00198	93.5	75 - 125				
Chromium		0.215	mg/L	E200.8	0.00154	0.00200	0.2000	0.0319	91.5	75 - 125				
Cobalt		0.205	mg/L	E200.8	0.0000434	0.00400	0.2000	0.0282	88.2	75 - 125				
Copper		0.246	mg/L	E200.8	0.000692	0.00200	0.2000	0.0735	86.3	75 - 125				
Lead		0.231	mg/L	E200.8	0.000264	0.00200	0.2000	0.0572	86.7	75 - 125				
Molybdenum		0.0900	mg/L	E200.8	0.000206	0.00200	0.2000	0.00157	44.2	75 - 125				1
Nickel		0.236	mg/L	E200.8	0.000754	0.00200	0.2000	0.0574	89.3	75 - 125				
Selenium		0.160	mg/L	E200.8	0.0000634	0.00200	0.2000	0.00255	78.9	75 - 125				
Silver		0.184	mg/L	E200.8	0.0000244	0.00200	0.2000	0.00049	91.6	75 - 125				
Thallium		0.166	mg/L	E200.8	0.0000242	0.00200	0.2000	0.000746	82.8	75 - 125				

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Utah Division of Water Quality
Lab Set ID: 1511119
Project: Gold King Mine Spill / 01255.1.016.03

Contact: Jim Harris
Dept: ME
QC Type: MS

Analyte		Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID:	**1511119-007AMS**	Date Analyzed:	11/12/2015 1245h											
Test Code:	200.8-W	Date Prepared:	11/11/2015 1040h											
Vanadium		0.240	mg/L	E200.8	0.000438	0.00440	0.2000	0.0696	85.2	75 - 125				
Zinc		1.11	mg/L	E200.8	0.00476	0.00500	1.000	0.213	89.9	75 - 125				
Lab Sample ID:	**1511119-007AMS**	Date Analyzed:	11/12/2015 1606h											
Test Code:	200.8-W	Date Prepared:	11/11/2015 1040h											
Manganese		2.06	mg/L	E200.8	0.0153	0.0200	0.2000	1.92	68.7	75 - 125				[2]
Lab Sample ID:	**1511116-002AMS**	Date Analyzed:	11/12/2015 1149h											
Test Code:	HG-DW-245.1	Date Prepared:	11/11/2015 1500h											
Mercury		0.00432	mg/L	E245.1	0.00000892	0.000150	0.003330	0.00072	108	80 - 120				
Lab Sample ID:	**1511117-003AMS**	Date Analyzed:	11/12/2015 1202h											
Test Code:	HG-DW-245.1	Date Prepared:	11/11/2015 1500h											
Mercury		0.00402	mg/L	E245.1	0.00000892	0.000150	0.003330	0.000642	101	80 - 120				
Lab Sample ID:	**1511118-002AMS**	Date Analyzed:	11/12/2015 1211h											
Test Code:	HG-DW-245.1	Date Prepared:	11/11/2015 1500h											
Mercury		0.00402	mg/L	E245.1	0.00000892	0.000150	0.003330	0.000387	109	80 - 120				
Lab Sample ID:	**1511119-007AMS**	Date Analyzed:	11/12/2015 1228h											
Test Code:	HG-DW-245.1	Date Prepared:	11/11/2015 1500h											
Mercury		0.00378	mg/L	E245.1	0.00000892	0.000150	0.003330	0.000267	105	80 - 120				

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

[2] - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.

3440 South 700 West
Salt Lake City, UT 84119
Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687
e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Utah Division of Water Quality
Lab Set ID: 1511119
Project: Gold King Mine Spill / 01255.1.016.03

Contact: Jim Harris
Dept: ME
QC Type: MSD

Analyte		Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID:	**1511119-007AMSD**	Date Analyzed:	11/12/2015 1029h											
Test Code:	200.7-W	Date Prepared:	11/11/2015 1040h											
Aluminum		46.2	mg/L	E200.7	0.237	1.00	1.000	45.7	53.5	70 - 130	54	15.5	20	²
Calcium		285	mg/L	E200.7	0.401	10.0	10.00	317	-316	70 - 130	306	6.94	20	²
Magnesium		60.4	mg/L	E200.7	0.294	10.0	10.00	57.3	31.8	70 - 130	64.9	7.19	20	²
Sodium		59.6	mg/L	E200.7	0.330	10.0	10.00	50.6	89.7	70 - 130	59.2	0.578	20	
Lab Sample ID:	**1511119-007AMSD**	Date Analyzed:	11/12/2015 1055h											
Test Code:	200.7-W	Date Prepared:	11/11/2015 1040h											
Potassium		22.9	mg/L	E200.7	0.247	1.00	10.00	13.8	91.1	70 - 130	23.7	3.37	20	
Lab Sample ID:	**1511119-007AMSD**	Date Analyzed:	11/12/2015 1154h											
Test Code:	200.7-W	Date Prepared:	11/11/2015 1040h											
Iron		42.3	mg/L	E200.7	0.767	1.00	1.000	44	-169	70 - 130	45.7	7.86	20	²
Lab Sample ID:	**1511119-007AMSD**	Date Analyzed:	11/12/2015 1248h											
Test Code:	200.8-W	Date Prepared:	11/11/2015 1040h											
Antimony		0.0368	mg/L	E200.8	0.0000366	0.00200	0.2000	0.00122	17.8	75 - 125	0.0244	40.6	20	¹@
Arsenic		0.195	mg/L	E200.8	0.0000920	0.00200	0.2000	0.0163	89.2	75 - 125	0.186	4.53	20	
Barium		1.19	mg/L	E200.8	0.000538	0.00200	0.2000	1.26	-36.2	75 - 125	1.31	9.93	20	²
Beryllium		0.188	mg/L	E200.8	0.0000288	0.00200	0.2000	0.0036	92.3	75 - 125	0.176	6.97	20	
Cadmium		0.201	mg/L	E200.8	0.000193	0.000500	0.2000	0.00198	99.4	75 - 125	0.189	6.03	20	
Chromium		0.226	mg/L	E200.8	0.00154	0.00200	0.2000	0.0319	97.3	75 - 125	0.215	5.19	20	
Cobalt		0.217	mg/L	E200.8	0.0000434	0.00400	0.2000	0.0282	94.6	75 - 125	0.205	6.11	20	
Copper		0.249	mg/L	E200.8	0.000692	0.00200	0.2000	0.0735	87.8	75 - 125	0.246	1.23	20	
Lead		0.240	mg/L	E200.8	0.000264	0.00200	0.2000	0.0572	91.6	75 - 125	0.231	4.16	20	
Molybdenum		0.112	mg/L	E200.8	0.000206	0.00200	0.2000	0.00157	55.4	75 - 125	0.09	22.0	20	¹@
Nickel		0.244	mg/L	E200.8	0.000754	0.00200	0.2000	0.0574	93.4	75 - 125	0.236	3.45	20	
Selenium		0.166	mg/L	E200.8	0.0000634	0.00200	0.2000	0.00255	81.8	75 - 125	0.16	3.56	20	
Silver		0.197	mg/L	E200.8	0.0000244	0.00200	0.2000	0.00049	98.3	75 - 125	0.184	7.01	20	
Thallium		0.179	mg/L	E200.8	0.0000242	0.00200	0.2000	0.000746	88.9	75 - 125	0.166	7.08	20	

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Analyte		Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID:	**1511119-007AMSD**	Date Analyzed:	11/12/2015 1248h											
Test Code:	200.8-W	Date Prepared:	11/11/2015 1040h											
Vanadium		0.247	mg/L	E200.8	0.000438	0.00440	0.2000	0.0696	88.6	75 - 125	0.24	2.80	20	
Zinc		1.15	mg/L	E200.8	0.00476	0.00500	1.000	0.213	93.6	75 - 125	1.11	3.28	20	
Lab Sample ID:	**1511119-007AMSD**	Date Analyzed:	11/12/2015 1610h											
Test Code:	200.8-W	Date Prepared:	11/11/2015 1040h											
Manganese		1.81	mg/L	E200.8	0.0153	0.0200	0.2000	1.92	-57.0	75 - 125	2.06	13.0	20	²
Lab Sample ID:	**1511116-002AMSD**	Date Analyzed:	11/12/2015 1151h											
Test Code:	HG-DW-245.1	Date Prepared:	11/11/2015 1500h											
Mercury		0.00417	mg/L	E245.1	0.00000892	0.000150	0.003330	0.00072	104	80 - 120	0.00432	3.34	20	
Lab Sample ID:	**1511117-003AMSD**	Date Analyzed:	11/12/2015 1204h											
Test Code:	HG-DW-245.1	Date Prepared:	11/11/2015 1500h											
Mercury		0.00392	mg/L	E245.1	0.00000892	0.000150	0.003330	0.000642	98.3	80 - 120	0.00402	2.56	20	
Lab Sample ID:	**1511118-002AMSD**	Date Analyzed:	11/12/2015 1212h											
Test Code:	HG-DW-245.1	Date Prepared:	11/11/2015 1500h											
Mercury		0.00382	mg/L	E245.1	0.00000892	0.000150	0.003330	0.000387	103	80 - 120	0.00402	5.23	20	
Lab Sample ID:	**1511119-007AMSD**	Date Analyzed:	11/12/2015 1230h											
Test Code:	HG-DW-245.1	Date Prepared:	11/11/2015 1500h											
Mercury		0.00368	mg/L	E245.1	0.00000892	0.000150	0.003330	0.000267	103	80 - 120	0.00378	2.46	20	

@ - High RPD due to suspected sample non-homogeneity or matrix interference.
¹ - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.
² - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.