

**FOCUSED FEASIBILITY STUDY (FFS)
ADDENDUM
2015 ARSENIC RESULTS**

**EAGLE MINE SITE
MINTURN, COLORADO**

June 3, 2015



**730 17th Street, Suite 925
Denver, Colorado 80202**

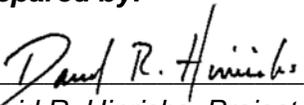
**FOCUSED FEASIBILITY STUDY (FFS)
ADDENDUM
2015 ARSENIC RESULTS**

**EAGLE MINE SITE
MINTURN, COLORADO**

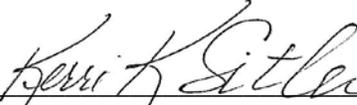
Prepared for:
CBS Operations Inc.

June 3, 2015

Prepared by:



David R. Hinrichs, Project Manager



Kerri K. Sitler, Project Quality Assurance Officer

 **NewFields**
Perspective. Vision. Solutions.
730 17th Street, Suite 925
Denver, Colorado 80202

Table of Contents

1	INTRODUCTION	1
1.1	Site Location and Mine History.....	1
1.2	Sampling Objectives	3
2	SAMPLING FOR ARSENIC	3
2.1	Groundwater	7
2.2	Surface Water	8
3	REFERENCES	9

List of Tables

Table 1	Sample Locations and Collection Dates	3
Table 2	Water Quality Monitoring Program Analytical Methods and Target Detection Limits	6
Table 3	BTS-1 Water Levels	7
Table 4	Mill Level Pumping Record for Winter/Spring 2015.....	7
Table 5	Total Arsenic in Groundwater Samples.....	8
Table 6	Total Arsenic in Surface Water Samples	9

List of Figures

Figure 1	Eagle Mine Site	2
Figure 2	Groundwater Monitoring Locations.....	4
Figure 3	Surface Water Monitoring Locations and Eagle River Basin Segments	5

List of Appendices

- A Well Measurements and Field Parameters
- B Data Quality Assessment Memorandum and Laboratory Data Reports

Focused Feasibility Study Addendum 2015 Arsenic Results

Eagle Mine Site, Minturn, Colorado

The Focused Feasibility Study (FFS) (NewFields 2013) evaluated alternatives that are designed to achieve Water Quality Standards (WQS) in the Eagle River as it passes through the Site. Data presented in this 2015 Arsenic Results report will be used in a FFS Addendum to determine if the alternatives identified in the FFS will capture and treat arsenic in a manner similar to the treatment of cadmium, copper and zinc. The collection of arsenic data was guided by the FFS Addendum Arsenic Sampling Plan (Plan) prepared by NewFields on behalf of CBS Operations Inc. (NewFields 2015).

Section 1.1 of this Work Plan provides site physical setting information. Sampling objectives are described in Section 1.2. Section 2 describes the sample locations and presents the arsenic results. Section 3 presents a list of references cited in this report.

1 INTRODUCTION

1.1 Site Location and Mine History

The Site is located in Eagle County, Colorado between Minturn and Red Cliff and is bordered by the White River National Forest to the south and west. The Eagle River and two of its principal tributaries, Cross Creek and Rock Creek, flow through the Site (Figure 1). The Site includes the underground mill and mine workings of the Eagle Mine along with associated waste rock piles and tailings.

Mining began in this area in 1879 and 1880 with the establishment of the Belden, Black Iron, and Little Chief mines near Gilman, and the Horn Silver and Wyoming Valley mine near Red Cliff. In 1906 the Eagle Mining & Milling Company erected the Iron Mask Mill, a 150-ton per day mill at Belden, the railroad siding below Gilman. By 1916, the Empire Zinc Company of Colorado (a subsidiary of The New Jersey Zinc Co.) completed the consolidation of the principal mines and mine claims in the Gilman and Belden area into what is known as the Eagle Mine.

A pipeline carried tailings from Empire Zinc Company's 650-ton per day underground mill at Belden to a 20-acre pond that is now called the Old Tailings Pile or OTP. The tailings disposal system and mill were in operation by 1929. In the 1940s, The New Jersey Zinc Co. extended the tailings pipeline across Rex Flats to the New Tailings Pond now called the CTP. Large-scale lead and zinc mining in Colorado ended in 1977 when the Eagle Mine closed.

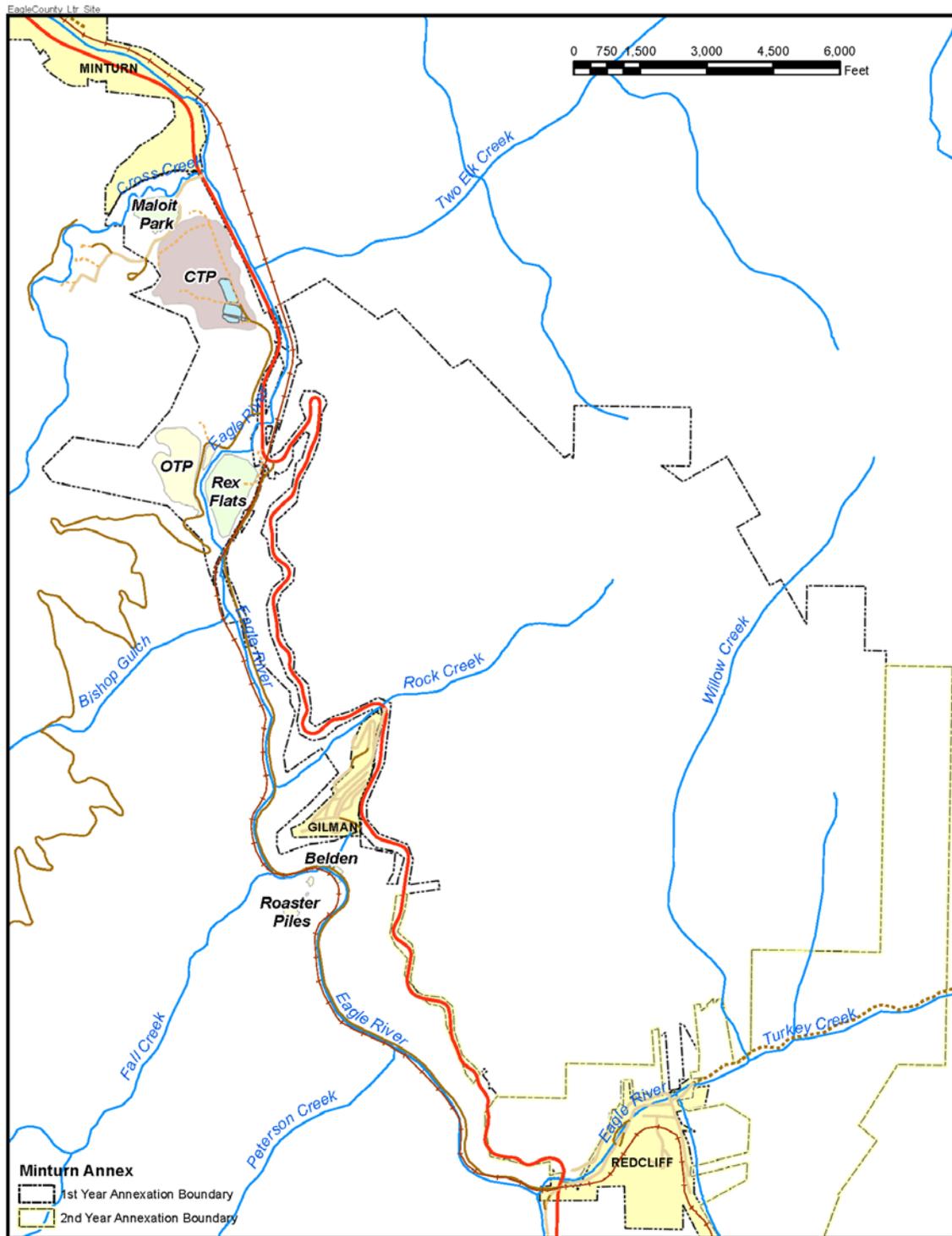


Figure 1 Eagle Mine Site

Gilman and the tailings ponds are owned by Battle Mountain Resort (BMR). Belden and the pipeline route is owned by the Union Pacific Railroad, BMR, or held by private individuals in patented mining claims.

1.2 Sampling Objectives

The FFS (NewFields 2013) evaluated alternatives that are designed to achieve WQS in the Eagle River as it passes through the Site. The data presented in this 2015 Arsenic Results report will be used in a FFS Addendum to estimate whether the alternatives identified in the FFS will capture/remove arsenic in a manner similar to the removal of cadmium, copper, and zinc. The data collected will be used to perform load calculations for each source, in the manner that load estimates were made for zinc in Section 4 of the FFS. The load calculations will be compared to surface water data collected under the plan for Surface Water and Groundwater Monitoring for 2015 (NewFields 2014) to predict if the collection of the source by FFS alternatives will result in a reduction in arsenic concentration in the Eagle River and its tributaries to meet a risk-based performance standard for arsenic.

2 SAMPLING FOR ARSENIC

Groundwater and surface water samples were collected by NewFields in Belden, Rock Creek, and the OTP. A summary of the sample locations and sample collection dates is presented in Table 1. The location of the Rock Creek and Belden wells is shown on Figure 2. Figure 3 presents the location of the surface water sampling locations in the Eagle River and its tributaries.

Table 1 Sample Locations and Collection Dates

Sample Site	Location	Sample Collection Dates
Groundwater		
BTS-1 in Belden	Well in Copper Tipple Extraction Trench	March 7, March 19, and April 7, 2015
BW-9R in Belden	Well near Copper Tipple Building	March 7, March 19, and April 7, 2015
EDS-3, Rock Creek	Well at the base of Rock Creek	March 7, March 19, and April 7, 2015
Mill Level in Belden	Underground mine workings	January 15 and March 26, 2015
Surface Water		
Lower Rock Creek	T-10, Rock Creek discharge to Eagle River	March 13, March 19, March 27, April 13 and April 27, 2015
Upper Rock Creek	T-10A, culvert discharge under Highway 24	March 27, March 19, March 27, April 13 and April 27, 2015
OTP Ditch Seep	At Tigwon Road culvert	March 19 and March 27, 2015

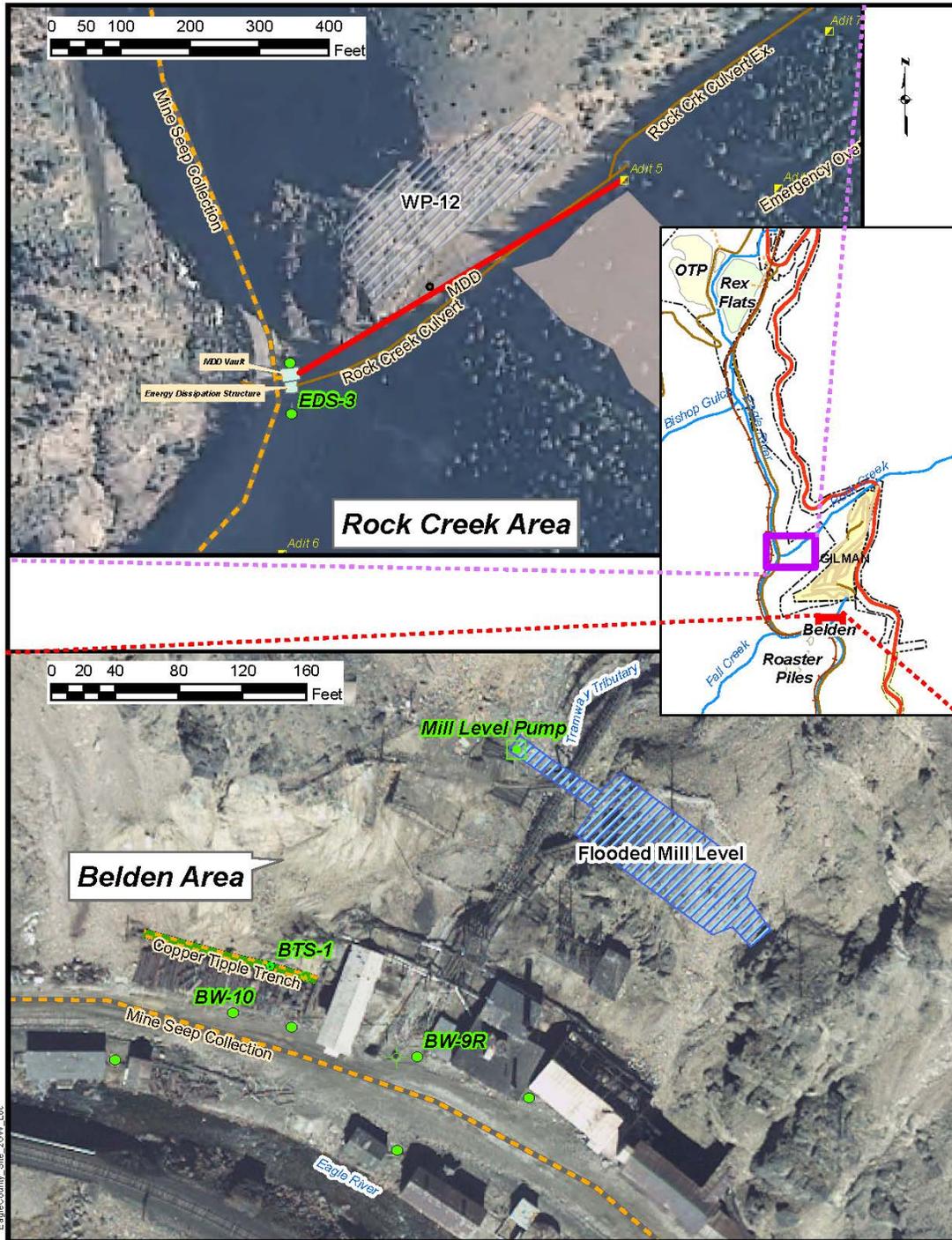


Figure 2 Groundwater Monitoring Locations

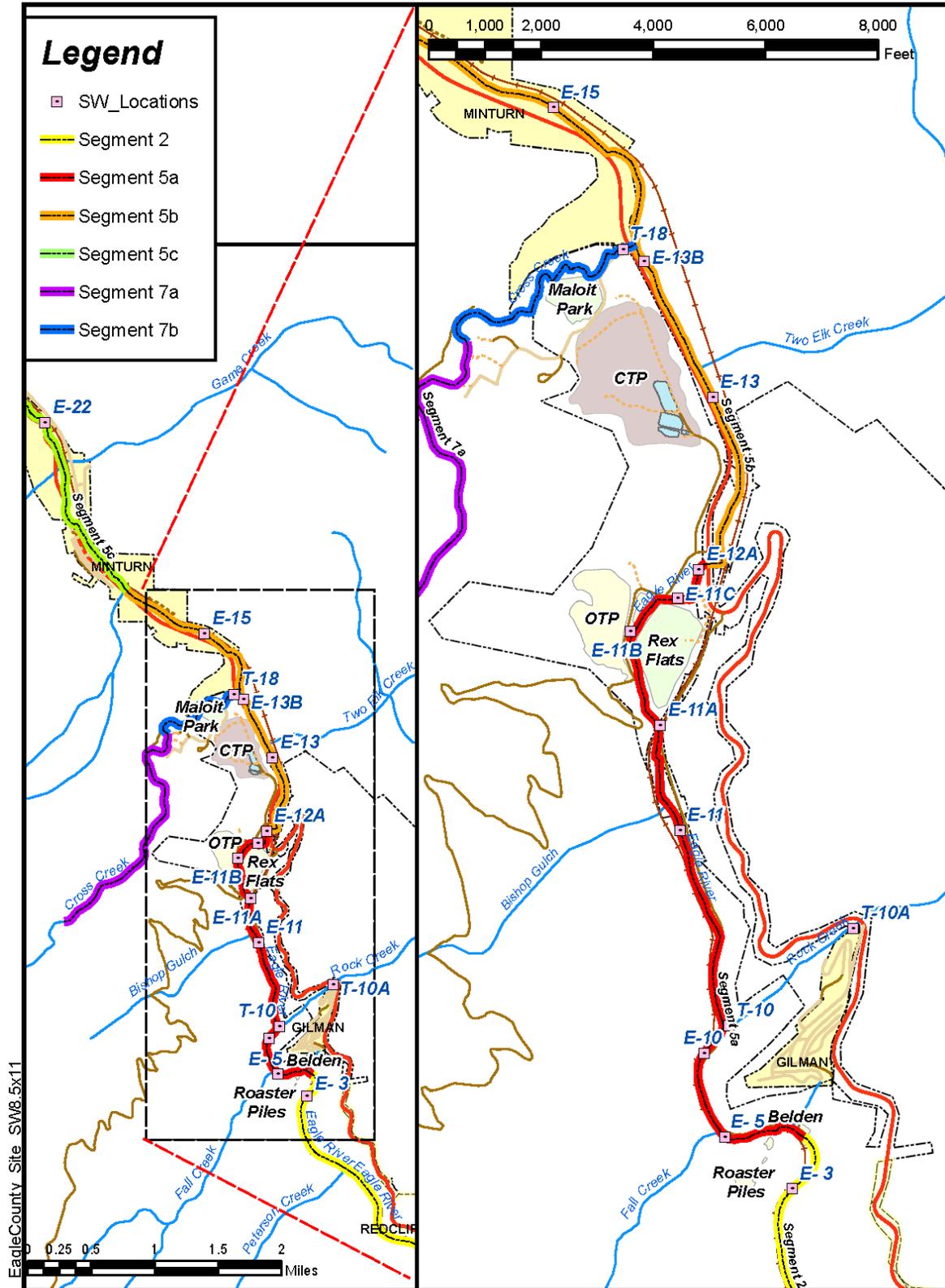


Figure 3 Surface Water Monitoring Locations and Eagle River Basin Segments

The collection of water samples followed the procedures described in the Plan and its attached standard operating procedures (SOPs). One field duplicate was collected during each sampling event. The sample was submitted blind to the laboratory. As specified in the field documentation procedures, the sampling field notes recorded the duplicate and its primary location. An assessment of field sampling procedures using the duplicate is presented in the Data Quality Assessment Memorandum provided in Appendix B.

To minimize the possibility of contamination and false positives, all bailers and sample collection bottles were dedicated in accordance with the SOPs in the Plan. Therefore, in accordance with the Plan, equipment rinsate samples were not collected.

All samples were analyzed for the list of parameters shown in Table 2. Field measurements consisted of temperature, specific conductance, and pH and were collected using the procedures specified in the Plan. Each measured conductance value was recorded and subsequently compensated to a temperature of 25°C. After the samples were processed in the field, they were transported to the laboratory for analysis following chain-of-custody procedures as described in the Plan. Field parameters are given in Appendix A. The analytical methods and target detection limits for water sample analysis are provided in Table 2.

**Table 2 Water Quality Monitoring Program
Analytical Methods and Target Detection Limits**

Parameter	Method ⁽¹⁾	Target Detection Limit (mg/L)
Temperature	Field instrument	0.5 deg. C
Specific Conductance	Field instrument	5 µmhos/cm or uS/cm
pH	Field instrument	0.1 SU
Arsenic, total (unfiltered)	200.8 ⁽¹⁾	0.0002 mg/L

⁽¹⁾ Methods for Chemical Analysis of Water and Wastes and Method 200.8 (EPA 1983, 1994).

AccuTest Laboratories, Mountain States analyzed the samples for this project. AccuTest and its predecessor Evergreen Analytical Laboratories have been the contract laboratory for the Eagle Mine project since 2001. As arsenic concentrations in surface water were found to be near the target detection limit, the laboratory provided estimated concentrations between the laboratory practical quantitation limit (PQL), which was the target detection limit, and the laboratory's established method detection limit (MDL). Concentrations beneath the PQL are estimated. The arsenic results were validated in accordance with the procedures and protocols outlined in the QAPP, part of the Plan. Validation results are reported in the Data Quality Assessment Memorandum provided in Appendix B. All results met project objectives.

2.1 Groundwater

Three wells were sampled. A fourth well in Belden, BW-10 was not sampled as quarterly data were available for 2014, as discussed in the Plan.

Prior to sampling, the water level in each well was measured with a Solinst electric water level meter then bailed with dedicated bailers until at least three borehole volumes had been removed from the 4-inch diameter well casing (0.65 gallons/foot). The extracted water was collected and treated at the treatment plant. Water levels, bailed volumes and well column depths are presented in Appendix A.

As indicated in the Plan, well sampling was timed to match the rising limb, peak and falling limb of the spring groundwater pulse in Belden. As in past years, this pulse was observed in the water levels of the Copper Tipple Extraction Trench well BTS-1. The Spring 2015 pulse was defined by the water levels in Table 3 indicated as the depth to water from a fixed measuring point on the top of the BTS-1 casing.

Table 3 BTS-1 Water Levels

Date of measurement	Depth to water in feet	Condition
March 6	14.3	Rising limb
March 7	14.4	Rising limb
March 13	13.4	Rising limb
March 19	11.1	Peak
March 25	11.9	Peak
April 7	13.8	Falling limb
April 29	15.0	Falling limb

The mine water that accumulates on the floor of the old underground mill, termed Mill Level, is periodically pumped out to maintain a low pool at the Mill Level. The general location of the portion of the Mill Level that collects water is shown on Figure 2. The pumping record for the winter/spring of 2015 is presented in Table 4:

Table 4 Mill Level Pumping Record for Winter/Spring 2015

Pumping date	Gallons removed	Sample ID and Date
January 12 -15, 2015	41,600	Mill-1 January 15, 2015
March 24 – 25, 2015	12,900	Mill-2 March 25, 2015
April 7 – 8, 2015	15,000	None
April 29 – May 1, 2015	24,000	None

Pre-preserved sample bottles supplied by the laboratory were filled directly from the bailer. Arsenic concentrations in these groundwater samples are presented in Table 5.

Table 5 Total Arsenic in Groundwater Samples

Sample Date	BTS-1	BW-9R	EDS-3	Mill Level
1/15/2015	NS	NS	NS	0.0012
3/7/2015	0.183	0.0026	0.0032	NS
3/26/2015	NS	NS	NS	0.0016
3/19/2015	0.0326	0.0022	0.0015	NS
4/7/2015	0.0183	0.0027	0.0013	NS

Notes:

All units in mg/L, Method EPA 200.8 Neat, reported at method detection limit (MDL) and estimated below practical quantification limit (PQL), if applicable. Detection limit was 0.000044 mg/L (Lab MDL), the PQL is 0.0002 mg/L.
NS – not sampled

2.2 Surface Water

Rock Creek was sampled at the T-10 station at the Rock Creek confluence with the Eagle River and at sampling station T-10A located near the culvert beneath Highway 24 at Gilman (see Figure 3). T-10A was originally to be located on the downstream side of the Highway 24 culvert but was buried under several feet of snow. Under the guidance of the Plan, the station was moved to the upstream side of the Highway. A third surface water sample was collected at the OTP where the south perimeter ditch crosses the Tigwon road. The OTP South Ditch was sampled opportunistically when flow was present.

In-stream measurements of water temperature, specific conductance, and pH were made in flowing water near the center of the channel, when safely accessible. Grab samples were collected using clean 1-gallon plastic bottles dedicated to each sample location. Field measurements are presented in Appendix A.

Sample collection coincided with the existing March-April bi-monthly surface water sampling program for the Site pursuant to the annual Site monitoring program (NewFields 2014). Total (unfiltered) arsenic concentrations for the surface water samples collected in accordance with the Plan as well as the Site's March-April bi-monthly sampling program are presented in Table 6.

Table 6 Total Arsenic in Surface Water Samples

Sample Date	E- 3	E-10	E-12A	E-15	E-22	T-10A	T-10	T-18	OTP South Ditch
3/13/15	0.0002	0.00025	0.00031	0.00025	0.00031	NS	0.0014	<i>0.00014 J</i>	NS
3/19/15	NS	NS	NS	NS	NS	0.00034	0.0022	NS	0.0017
3/27/15	<i>0.00016 J</i>	0.00021	0.00023	0.00025	0.00026	0.00020	0.0014	<i>0.00014 J</i>	0.0103
4/13/15	0.00031	0.00026	0.00031	0.00032	0.00029	0.00022	0.001	<i>0.00016 J</i>	NA
4/27/15	0.00021	0.00020	0.00032	0.00021	0.00030	0.00021	0.0011	0.00020	NA

Notes:

All units in mg/L, Method EPA 200.8 Neat, reported at method detection limit (MDL) and estimated below practical quantification limit (PQL).

Detection limit was 0.000044 mg/L (Lab MDL), the PQL is 0.0002 mg/L. Values italicized and marked with J are estimated as they are below the PQL.

NS – not sampled

NA – no flow available, not sampled

3 REFERENCES

Environmental Protection Agency (EPA) 1983. Methods for Chemical Analysis of Water and Wastes. 600/4-79-020

EPA 1994. EPA Method 200.8, “Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma-Mass Spectrometry,” from “Methods for Determination of Metals in Environmental Samples—Supplement I,” EPA-600/R-94-111, May 1994.

NewFields 2013. Focused Feasibility Study, Eagle Mine Site. July 26, 2013.

NewFields 2014. Surface Water and Groundwater Monitoring in 2015, Eagle River Mine Site. December 19, 2014.

NewFields 2015. Focused Feasibility Study (FFS) Addendum, Arsenic Sampling Plan, Eagle River Mine Site, Minturn, Colorado. March 13, 2015.

APPENDIX A
FIELD PARAMETERS AND WELL MEASUREMENTS

Table A-1 Well Measurements

3/7/2015			
	BTS-1	BW-9R	EDS-3
Well depth in feet (WD)	18.4	40	26.5 ¹
Water level in feet (WL)	14.4	17.8	11.9 ²
Water column height in feet (WC)	4	22.2	14.6
Casing volume in gallons (CV)	2.4	13.3	8.76
3 x CV	7.2	39.9	26.3
Bailed or pumped volume in gallons	7.5	40	45

3/19/2015			
	BTS-1	BW-9R	EDS-3
Well depth in feet (WD)	18.4	40	26.5 ¹
Water level in feet (WL)	11.12	15.2	11.9 ²
Water column height in feet (WC)	7.2	24.5	14.6
Casing volume in gallons (CV)	4.3	14.6	8.76
3 x CV	12.9	44	26.3
Bailed or pumped volume in gallons	13	45	120

4/7/2015			
	BTS-1	BW-9R	EDS-3
Well depth in feet (WD)	18.4	40	26.5 ¹
Water level in feet (WL)	13.8	16.45	11.9 ²
Water column height in feet (WC)	4.6	23.55	14.6
Casing volume in gallons (CV)	2.76	14.1	8.76
3 x CV	8.3	42.4	26.3
Bailed or pumped volume in gallons	8.5	44	120

WD and WL depth measurements use top of casing as the datum.

WC = WD-WL.

CV = 0.65 gallons/foot x WC.

- 1 A submersible pump prevents sounding this well and WD was taken from the well log.
- 2 A submersible pump prevents sounding this well; used water level of 11.9 feet taken 4/3/2014.

Table A-2 Field Parameters

Location	Sample Date	Field pH (SU)	Field Temperature deg C	Field Specific Conductance @25C umhos/cm
<i>Groundwater</i>				
BTS-1	3/7/2015	2.93	5.5	5824 J
	3/19/2015	2.6	5.5	4051
	4/7/2015	2.8	5	3846
BW- 9R	3/7/2015	7	7	4486 J
	3/19/2015	6.8	6.5	3007
	4/7/2015	6.9	9	3770
EDS-3	3/7/2015	6.83	5	1832 J
	3/19/2015	6.5	8	1477
	4/7/2015	6.35	6.6	1375
MILL-2	3/26/2015	6.13	1	2757
<i>Surface Water</i>				
OTP-South Ditch	3/19/2015	7.8	2	293
	3/27/2015	5.03	5	1129
T-10	3/13/2015	7.9	3.7	435 J
	3/19/2015	NA	6	477
	3/27/2015	7.9	5	548
	4/13/2015	7.61	9	345
	4/27/2015	8.05	6	396
T-10A	3/20/2015	8.2	3	180
	3/27/2015	8.39	3	198
	4/13/2015	8.15	4	166
	4/27/2015	8.15	4.5	169

Notes:

NA - not analyzed
J - estimated

Table A-3 Flow Measurements

Location	Sample Date	Flow (gpm)
OTP-South Ditch	3/19/2015	Snow covered NM
	3/27/2015	No Flow
T-10	3/13/2015	245
	3/19/2015	560
	3/27/2015	425
	4/13/2015	320
	4/27/2015	320
T-10A	3/20/2015	NM
	3/27/2015	NM
	4/13/2015	NM
	4/27/2015	NM

Notes:

NM – not measured

APPENDIX B
DATA QUALITY ASSESSMENT MEMORANDUM
AND LABORATORY DATA REPORTS



EAGLE MINE SITE

DATA QUALITY ASSESSMENT MEMORANDUM

TO: EAGLE MINE SITE FILES
FROM: KERRI SITLER *KKS*
SUBJECT: FFS ADDENDUM, ARSENIC SAMPLING
 SW&GW WATER QUALITY SAMPLING
 COLLECTED JANUARY - APRIL 2015

DATE: MAY 18, 2015

LABORATORY DATA PACKAGES:

This memorandum summarizes the review of analytical data for 51 water samples listed on Table 1. The samples were collected January 15, 2015 to April 27, 2015 as part of the Focused Feasibility Study (FFS) Addendum, Arsenic Sampling and/or the 2015 Annual Surface Water and Groundwater Monitoring program conducted at the Eagle Mine Site. Samples were collected by NewFields personnel and submitted to Accutest Laboratories Mountain State of Wheat Ridge, Colorado. All samples were analyzed for total arsenic by EPA 200.8. Some of the samples were also collected as part of the 2015 Annual Surface Water and Groundwater monitoring program and analyzed for cadmium, copper, and zinc by EPA 200.8; surface water samples were filtered and reported as dissolved metals whereas, groundwater samples were unfiltered and reported as total metals.

Table 1 List of Samples by Laboratory Package

Laboratory Package ID	Sampling Dates	Samples	Analytical Suite
D66782	1/15/15	MILL-1	Total Arsenic, Cadmium, Copper, and Zinc (Calcium was also reported)
D69165	3/7/15	EDS-3, BTS-1, BW-9R, BW-9D [dup of BW-9R]	Total Arsenic
D68761	3/13/15	E-3, E-10, E-12A, E-15, E-22, T-10, T-18	Total Arsenic Dissolved Cadmium, Calcium, Copper, Magnesium, and Zinc
D69157	3/19/15-3/26/15	EDS-3, EDS-4 [dup of EDS-3], BTS-1, BW-9R, OTP Ditch Seep, T-10, T-10A	Total Arsenic
D69157R ⁽¹⁾		MILL-2	Total Arsenic, Cadmium ⁽¹⁾ , Copper ⁽¹⁾ , and Zinc ⁽¹⁾
D69158	3/27/15	E-3, E-10, E-12A, E-15, E-22, T-10, T-18	Total Arsenic Dissolved Cadmium, Calcium, Copper, Magnesium, and Zinc
		T-10A, OTP-South Ditch	Total Arsenic
D69607	4/7/15	EDS-3, BTS-1, BTS-2 [dup of BTS-1], BW-9R	Total Arsenic



Laboratory Package ID	Sampling Dates	Samples	Analytical Suite
D69701	4/13/15	E-3, E-10, E-12A, E-15, E-22, T-10, T-18	Total Arsenic Dissolved Cadmium, Calcium, Copper, Magnesium, and Zinc
		T-10A, T-10B [dup of T-10A]	Total Arsenic
D70092	4/27/15	E-3, E-10, E-12A, E-15, E-22, T-10, T-18	Total Arsenic Dissolved Cadmium, Calcium, Copper, Magnesium, and Zinc
		T-10A, T-10B [dup of T-10A]	Total Arsenic
TOTAL ⁽⁴⁾	1/15/15 – 4/27/15	51 samples (including 5 duplicates)	51 Arsenic ⁹

All sample names listed in brackets “[]” are the primary sample for the duplicate.

(1) Sample was originally sent to the laboratory as part of the FFS Addendum, Arsenic Sampling. It was later identified after the laboratory reported the sample that MILL-2 should have also been analyzed for Cadmium, Copper, and Zinc.

The data were reviewed in accordance with the Quality Assurance Project Plan (QAPP), Focused Feasibility Study (FFS) Addendum, Arsenic Sampling Plan (NewFields, March 13, 2015). The QAPP and the Sampling Plans Standard Operating Procedures (SOPs) are based on the principles given in the USEPA National Functional Guidelines for Inorganic Data Review (EPA 2010). The qualifiers used to identify data that did not meet the criteria set forth in the previously referenced documents are listed in Table 2.

TABLE 2 DATA QUALIFIER DEFINITIONS

Qualifier	Definition
U	The analyte was analyzed for but was not detected above the reported sample quantitation limit
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample (concentrations reported between the PQL and the MDL are an example).
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

In each of the sections that follow, a list of the data review parameters is given at the beginning of each section. The sample is referred to by its sample ID (the sampling location and date combination) and may be also identified by the laboratory ID. A leading check mark (✓) indicates an area of review which all data were acceptable. A preceding X signifies an area where issues were raised during the course of the validation review and should be considered when evaluating any impact on data quality and usability.

METALS (METHOD 200.8)

- ✓ Data Completeness
- ✓ Sample Handling
- ✓ Blanks
- ✓ Analytical Duplicate data



- ✓ Matrix Spike / Matrix Spike Duplicate (MS/MDS)
- ✓ Laboratory Control Sample (LCS)
- ✓ Field Duplicates
- ✗ Other issues

No data were qualified beyond flagged by the laboratory.

DATA COMPLETENESS

The analyses were performed as requested on the chain of custody. The samples were run neat and reported down to the method detection limit (MDL) to ensure the lowest possible detected concentration could be reported. Concentrations between the lab's established practical quantitation limit (PQL), which was the listed target detection limit in the QAPP, and its established MDL were flagged by the laboratory as estimated concentrations.

Five (5) of the total arsenic results (E- 3_032715, T-10B_042715, T-18_031315, T-18_032715, T-18_041315) were reported below the PQL. Two of the dissolved cadmium results (E- 3_042715 and E-10_041315) and two of the dissolved copper results (T-18_031315 and T-18_042715) were reported below the PQL. All nine of these were flagged by the laboratory as estimated. Four of the dissolved cadmium results (T-18_031315, T-18_032715, T-18_041315, and T-18_042715) were not detected even at the MDL.

SAMPLE HANDLING

All samples were analyzed within the method stated holding time of 180 days.

Due to a bottle mix up from the laboratory, two filtered samples collected on 3/13/15 (E-22_031315 and T-10_031315) were not preserved in the field but were preserved in the laboratory upon receipt. Therefore, no action was taken. The sampling team was concerned that the lack of preservation would make the dissolved metals unusable and marked the chain-of-custody for total analysis of the required dissolved metals. Upon review of the method and understanding that no action would be required if the laboratory preserved the samples upon receipt, the total analysis of cadmium, copper, and zinc was cancelled.

The sample MILL-1_011515 (D66782-1) was analyzed for calcium (Ca) instead of cadmium (Cd) due to poor penmanship on the chain-of-custody. The laboratory was notified upon sample result reporting and the cadmium was reported. Calcium was also reported but was not assessed in this quality assurance report as it was not a target compound for this sample. The laboratory was alerted to notify NewFields if calcium is ever requested without magnesium, and visa versa, as there is likely an error on the chain-of-custody if present.

BLANKS

No target metal was not detected in any blank above the laboratories PQL and was not detected above the reported MDL with the exception of calcium and magnesium. These two metals were detected in all samples above the PQL, and therefore no action was taken.

ANALYTICAL DUPLICATE DATA

All laboratory duplicates met a control limit of 25% for the RPD between duplicates results that were greater than five times the target detection limit. A control limit of plus or minus two times the target detection limit was used for results less than five times the target detection limit.



MATRIX SPIKE / MATRIX SPIKE DUPLICATE (MS/MDS)

MS/MSD analyses are conducted to assess analytical accuracy. Control limits for MS recovery will be 75 to 125 percent. The MS/MSD RPD values were within the laboratory-established control limits.

MS/MSD analyses were performed both non-project and project samples. Non-project samples could not be used to evaluate project-related matrix effect. However for project samples; no project related matrix effect was observed. Non-project samples were used only when less than five samples per batch were sent to the lab.

LABORATORY CONTROL SAMPLE (LCS)

All laboratory control samples were within control limits for LCS recovery.

FIELD DUPLICATES

A total of 51 samples were collected and analyzed for total arsenic during the quarter; 5 samples were duplicated for an overall duplication of 10%. Duplicate pairs include:

Lab Package	Duplicate ID	Primary sample	RPD
D69165	BW-9D	BW-9R	0 %
D69157	EDS-4	EDS-3	18 %
D69607	BTS-2	BTS-1	3 %
D69701	T-10B	T-10A	9 %
D70092	T-10B	T-10A	47 % (1)

1. Concentrations were 0.13 J and 0.21 ug/L, respectively. The MDL of 0.044 ug/L is used as the target detection limit; therefore, the two samples need to be within 0.088 ug/L of each other. As the difference between the two samples was 0.08 ug/L, the duplicates meet the criterion.

Field duplicates samples were collected approximately with every sampling event or every 20th sample, if more than 20 samples were collected, to obtain an overall duplication rate of 5%. The acceptance criterion for field duplication samples is a RPD of no more than 20% where duplicates results that were greater than five times the target detection limit. A control limit of plus or minus two times the target detection limit was used for results less than five times the target detection limit. This criterion was met for all samples.

OTHER ISSUES

As noted in Table 1, NewFields requested Accutest to report total cadmium, copper, and zinc after the total arsenic was reported for sample D69157-8 (MILL_2_032615). The sample was originally sent to the laboratory as part of the FFS Addendum, Arsenic Sampling and therefore was marked on the chain-of-custody for total arsenic analysis. It was later identified after the laboratory reported the sample that MILL-2 should have also been analyzed for the total metals of cadmium, copper, and zinc in accordance with the annual monitoring memorandum for surface water and groundwater monitoring in 2015 (NewFields December 19, 2014). Accutest indicated that they could report the cadmium and copper from the original arsenic analysis (ICAP-MS) but not zinc as it was not within the linear range. The laboratory re-prepped the sample for the zinc analysis and reported it under D69157R. As the MS/MSD and other batch QC samples were not reported for cadmium and copper, the cadmium and copper results were marked as estimated.

Technical Report for

Newfields, Inc.

Belden- Mill Sample

560.0078.000

Accutest Job Number: D66782

Sampling Date: 01/15/15

Report to:

Newfields, Inc.
730 17th Street, Suite 925
Denver, CO 80202
ksitler@newfields.com

ATTN: Kerri Sitler

Total number of pages in report: 15



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read "Scott Heideman".

Scott Heideman
Laboratory Director

Client Service contact: Janel Mulholland 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Summary of Hits	5
Section 4: Sample Results	6
4.1: D66782-1: EAGLE-MILL LEVEL	7
Section 5: Misc. Forms	8
5.1: Chain of Custody	9
Section 6: Metals Analysis - QC Data Summaries	11
6.1: Prep QC MP15041: As,Cd,Ca,Cu,Zn	12



Sample Summary

Newfields, Inc.

Job No: D66782

Belden- Mill Sample
Project No: 560.0078.000

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
D66782-1	01/15/15	11:00 DRH	01/20/15	AQ	Ground Water	EAGLE-MILL LEVEL



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Newfields, Inc.

Job No D66782

Site: Belden- Mill Sample

Report Date 5/15/2015 3:43:17 PM

On 01/20/2015, 1 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 4.9 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D66782 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method EPA 200.8

Matrix: AQ

Batch ID: MP15041

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D66783-1FAMS, D66783-1FAMSD were used as the QC samples for the metals analysis.
- The matrix spike (MS) recovery(s) of Calcium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

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

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D66782
Account: Newfields, Inc.
Project: Belden- Mill Sample
Collected: 01/15/15



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

D66782-1 **EAGLE-MILL LEVEL**

Arsenic		1.2	0.20	0.044	ug/l	EPA 200.8
Cadmium		618	0.10	0.042	ug/l	EPA 200.8
Calcium		423000	4000	120	ug/l	EPA 200.8
Copper		932	2.0	0.13	ug/l	EPA 200.8
Zinc		377000	500	48	ug/l	EPA 200.8



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: EAGLE-MILL LEVEL Lab Sample ID: D66782-1 Matrix: AQ - Ground Water Project: Belden- Mill Sample	Date Sampled: 01/15/15 Date Received: 01/20/15 Percent Solids: n/a
--	---

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.2	0.20	0.044	ug/l	1	01/22/15	01/27/15 JB	EPA 200.8 ¹	EPA 200.8 ⁴
Cadmium	618	0.10	0.042	ug/l	1	01/22/15	01/27/15 JB	EPA 200.8 ¹	EPA 200.8 ⁴
Calcium	423000	4000	120	ug/l	10	01/22/15	01/28/15 NT	EPA 200.8 ²	EPA 200.8 ⁴
Copper	932	2.0	0.13	ug/l	1	01/22/15	01/27/15 JB	EPA 200.8 ¹	EPA 200.8 ⁴
Zinc	377000	500	48	ug/l	50	01/22/15	01/30/15 NT	EPA 200.8 ³	EPA 200.8 ⁴

- (1) Instrument QC Batch: MA5706
- (2) Instrument QC Batch: MA5715
- (3) Instrument QC Batch: MA5727
- (4) Prep QC Batch: MP15041

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.1
4

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Mountain States
4036 Youngfield Street Wheat Ridge, Co 80033
TEL 303 425 6021 877 737 4521
FAX 303 425 6021

FED-EX Tracking #
Accutest Quote #
Bottle Order Control #
Accutest Job # **D66782**

Client / Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)								Matrix Codes												
Company Name Nepofields		Project Name Belden - Mill Sample				<table border="1"> <tr> <td>Total Ca</td><td>200.8</td><td>Total Cu</td><td>200.8</td><td>Total Zn</td><td>200.8</td><td>Total AS</td><td>200.8</td><td colspan="4"></td> </tr> </table>								Total Ca	200.8	Total Cu	200.8	Total Zn	200.8	Total AS	200.8					DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank
Total Ca	200.8	Total Cu	200.8	Total Zn	200.8									Total AS	200.8											
Street Address 730 17th St. Ste. 925		Street 20 Eagle mine wTP																								
City, State, Zip Denver CO 80202		City Minturn CO 81645				Billing Information (If different from Report to)								LAB USE ONLY												
Project Contact Kerr Sittler ksittler@nepofields.com		Project# 566 0078 000 ?				Company Name																				
Phone # 303-308-0940		Client PO#				Street Address																				
Sampler(s) Name(s) Dave Hinrichs		Project Manager				City, State, Zip																				
Phone #		Attention:				PO#																				
Field ID / Point of Collection Eagle - Mill Level		MEQ/HD/Vial #		Collection		Matrix		# of bottles		Number of preserved bottles																
				Date 1-15-15		Time 1100		PR# GW		1		X														

Turnaround Time (Business days)		Approved By (Accutest PM) / Date:		Data Deliverable Information		Comments / Special Instructions	
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> Std. 5 Business Days (By Contract only) <input type="checkbox"/> 5 Day R/SH <input type="checkbox"/> 3 Day EMERGENJ <input type="checkbox"/> 2 Day EMERGENJ <input type="checkbox"/> 1 Day EMERGENJ				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> Commercial "B" + Narrative <input type="checkbox"/> FULLLT1 (Level 3-4)	<input type="checkbox"/> State Forms <input checked="" type="checkbox"/> EDD Format <input checked="" type="checkbox"/> PDF	rcc filled out as per email from (1-16-15) (1-16-15) K. Sittler's D. Hinrichs All Metals run via 200.8 for lowest P/L	

Emergency & Rush TJA data available VIA LabLink

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	1-15-15	[Signature]	2	1-19-15	2
3		3	4		4
5		5			

Custody Seal # Intact Not Intact Preserved when applicable On Ice Cooler Temp: **4.9**

5.1
5

D66782: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D66782 **Client:** NEWFIELDS **Project:** BELDEN
Date / Time Received: 1/20/2015 10:25:00 AM **Delivery Method:** _____ **Airbill #'s:** UPS
Cooler Temps (Initial/Adjusted): #1: (4.9/4.9):

Cooler Security		<u>Y or N</u>			<u>Y or N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Cooler Temperature		<u>Y or N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	<u>Bar Therm;</u>	
3. Cooler media:	<u>Ice (Bag)</u>	
4. No. Coolers:	<u>1</u>	

Quality Control Preservation	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Sample Integrity - Documentation		<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	

Sample Integrity - Condition		<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
3. Condition of sample:	<u>Intact</u>			

Sample Integrity - Instructions	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.1
5

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D66782
Account: NEWFCOD - Newfields, Inc.
Project: Belden- Mill Sample

QC Batch ID: MP15041
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 01/22/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.1	2		
Antimony	0.40	.0022	.011		
Arsenic	0.20	.017	.044	0.0090	<0.20
Barium	2.0	.016	.079		
Beryllium	0.20	.016	.069		
Boron	40	.49	2.1		
Cadmium	0.10	.036	.042	0.015	<0.10
Calcium	400	5.6	12	7.0	<400
Chromium	2.0	.053	.053		
Cobalt	0.20	.0049	.015		
Copper	2.0	.06	.13	0.46	<2.0
Iron	10	3.5	4.6		
Lead	0.50	.0079	.008		
Magnesium	100	1.3	1.3		
Manganese	1.0	.12	.13		
Molybdenum	1.0	.049	.029		
Nickel	2.0	.0088	.027		
Phosphorus	60	2.6	4.3		
Potassium	200	2.9	2.9		
Selenium	0.40	.06	.21		
Silver	0.10	.0019	.008		
Sodium	500	4.9	4.9		
Strontium	20	.01	.015		
Thallium	0.20	.0024	.005		
Tin	10	.063	1.3		
Titanium	2.0	.059	.092		
Uranium	0.20	.0017	.002		
Vanadium	1.0	.037	.2		
Zinc	10	.21	.96	0.81	<10

Associated samples MP15041: D66782-1

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D66782
 Account: NEWFCOD - Newfields, Inc.
 Project: Belden- Mill Sample

QC Batch ID: MP15041
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 01/22/15

Metal	D66783-1FA Original MS		SpikeLot ICPAL2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	1.1	226	200	112.5	70-130
Barium	anr				
Beryllium					
Boron					
Cadmium	0.22	97.4	100	97.2	70-130
Calcium	473000	482000	5000	180.0(a)	70-130
Chromium					
Cobalt					
Copper	0.49	93.0	100	92.5	70-130
Iron					
Lead	anr				
Magnesium					
Manganese	anr				
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium	anr				
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	69.7	152	100	82.3	70-130

Associated samples MP15041: D66782-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D66782
 Account: NEWFCOD - Newfields, Inc.
 Project: Belden- Mill Sample

QC Batch ID: MP15041
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 01/22/15

Metal	D66783-1FA		SpikeLot		MSD RPD	QC Limit
	Original	MSD	ICPAL2	% Rec		
Aluminum						
Antimony						
Arsenic	1.1	228	200	113.5	0.9	20
Barium	anr					
Beryllium						
Boron						
Cadmium	0.22	97.3	100	97.1	0.1	20
Calcium	473000	481000	5000	160.0(a)	0.2	20
Chromium						
Cobalt						
Copper	0.49	92.8	100	92.3	0.2	20
Iron						
Lead	anr					
Magnesium						
Manganese	anr					
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium	anr					
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	69.7	150	100	80.3	1.3	20

Associated samples MP15041: D66782-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D66782
 Account: NEWFCOD - Newfields, Inc.
 Project: Belden- Mill Sample

QC Batch ID: MP15041
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 01/22/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	218	200	109.0	85-115
Barium	anr			
Beryllium				
Boron				
Cadmium	108	100	108.0	85-115
Calcium	5250	5000	105.0	85-115
Chromium				
Cobalt				
Copper	103	100	103.0	85-115
Iron				
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium	anr			
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	107	100	107.0	85-115

Associated samples MP15041: D66782-1

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

6.1.3
6

Technical Report for

Newfields, Inc.

Eagle Mine, Minturn, CO

Accutest Job Number: D69165

Sampling Date: 03/07/15

Report to:

Newfields, Inc.
730 17th Street, Suite 925
Denver, CO 80202
ksitler@newfields.com

ATTN: Kerri Sitler

Total number of pages in report: **17**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



Scott Heideman
Laboratory Director

Client Service contact: Janel Mulholland 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Summary of Hits	5
Section 4: Sample Results	6
4.1: D69165-1: EDS-3	7
4.2: D69165-2: BTS-1	8
4.3: D69165-3: BW-9R	9
4.4: D69165-4: BW-9D	10
Section 5: Misc. Forms	11
5.1: Chain of Custody	12
Section 6: Metals Analysis - QC Data Summaries	13
6.1: Prep QC MP15694: As	14

1

2

3

4

5

6



Sample Summary

Newfields, Inc.

Job No: D69165

Eagle Mine, Minturn, CO

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D69165-1	03/07/15	11:00 DRH	03/28/15	AQ	Ground Water	EDS-3
D69165-2	03/07/15	12:05 DRH	03/28/15	AQ	Ground Water	BTS-1
D69165-3	03/07/15	13:00 DRH	03/28/15	AQ	Ground Water	BW-9R
D69165-4	03/07/15	13:05 DRH	03/28/15	AQ	Ground Water	BW-9D



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Newfields, Inc.

Job No D69165

Site: Eagle Mine, Minturn, CO

Report Date 5/15/2015 3:41:38 PM

On 03/28/2015, 4 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 13.4 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D69165 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method EPA 200.8

Matrix: AQ

Batch ID: MP15694

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D69135-1FAMS, D69135-1FAMSD were used as the QC samples for the metals analysis.

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

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D69165
Account: Newfields, Inc.
Project: Eagle Mine, Minturn, CO
Collected: 03/07/15



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D69165-1	EDS-3					
Arsenic		3.2	0.20	0.044	ug/l	EPA 200.8
D69165-2	BTS-1					
Arsenic		183	0.20	0.044	ug/l	EPA 200.8
D69165-3	BW-9R					
Arsenic		2.6	0.20	0.044	ug/l	EPA 200.8
D69165-4	BW-9D					
Arsenic		2.6	0.20	0.044	ug/l	EPA 200.8



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: EDS-3	Date Sampled: 03/07/15
Lab Sample ID: D69165-1	Date Received: 03/28/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.2	0.20	0.044	ug/l	1	04/15/15	04/15/15 JB	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6008

(2) Prep QC Batch: MP15694

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.1
 4

Report of Analysis

Client Sample ID: BTS-1	Date Sampled: 03/07/15
Lab Sample ID: D69165-2	Date Received: 03/28/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.2
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	183	0.20	0.044	ug/l	1	04/15/15	04/15/15 JB	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6008

(2) Prep QC Batch: MP15694

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: BW-9R	Date Sampled: 03/07/15
Lab Sample ID: D69165-3	Date Received: 03/28/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.3
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.6	0.20	0.044	ug/l	1	04/15/15	04/15/15 JB	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6008

(2) Prep QC Batch: MP15694

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: BW-9D Lab Sample ID: D69165-4 Matrix: AQ - Ground Water Project: Eagle Mine, Minturn, CO	Date Sampled: 03/07/15 Date Received: 03/28/15 Percent Solids: n/a
---	---

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.6	0.20	0.044	ug/l	1	04/15/15	04/15/15 JB	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6008

(2) Prep QC Batch: MP15694

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.4
4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D69165
Account: NEWFCOD - Newfields, Inc.
Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15694
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 04/15/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.1	2		
Antimony	0.40	.0022	.011		
Arsenic	0.20	.017	.044	-0.019	<0.20
Barium	2.0	.016	.079		
Beryllium	0.20	.016	.069		
Boron	40	.49	2.1		
Cadmium	0.10	.036	.042		
Calcium	400	5.6	12		
Chromium	2.0	.053	.053		
Cobalt	0.20	.0049	.015		
Copper	2.0	.06	.13		
Iron	10	3.5	4.6		
Lead	0.50	.0079	.008		
Magnesium	100	1.3	1.3		
Manganese	1.0	.12	.13		
Molybdenum	1.0	.049	.029		
Nickel	2.0	.0088	.027		
Phosphorus	60	2.6	4.3		
Potassium	200	2.9	2.9		
Selenium	0.40	.06	.21		
Silver	0.10	.0019	.008		
Sodium	500	4.9	4.9		
Strontium	20	.01	.015		
Thallium	0.20	.0024	.005		
Tin	10	.063	1.3		
Titanium	2.0	.059	.092		
Uranium	0.20	.0017	.002		
Vanadium	1.0	.037	.2		
Zinc	10	.21	.96		

Associated samples MP15694: D69165-1, D69165-2, D69165-3, D69165-4

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69165
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15694
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/15/15

Metal	D69135-1FA Original MS	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	1.4	233	200	115.8 70-130
Barium	anr			
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium	anr			
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium	anr			
Vanadium				
Zinc				

Associated samples MP15694: D69165-1, D69165-2, D69165-3, D69165-4

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

6.1.2
6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69165
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15694
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/15/15

Metal	D69135-1FA Original MSD	Spikelot ICPALL2	% Rec	MSD RPD	QC Limit	
Aluminum						
Antimony						
Arsenic	1.4	258	200	128.3	10.2	20
Barium	anr					
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium	anr					
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium	anr					
Vanadium						
Zinc						

Associated samples MP15694: D69165-1, D69165-2, D69165-3, D69165-4

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

6.1.2
 6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D69165
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15694
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/15/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	225	200	112.5	85-115
Barium	anr			
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium	anr			
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium	anr			
Vanadium				
Zinc				

Associated samples MP15694: D69165-1, D69165-2, D69165-3, D69165-4

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

6.1.3
 6

Technical Report for

Newfields, Inc.

Eagle Mine, Minturn, CO

Accutest Job Number: D68761

Sampling Date: 03/13/15

Report to:

Newfields, Inc.
730 17th Street, Suite 925
Denver, CO 80202
ksitler@newfields.com

ATTN: Kerri Sitler

Total number of pages in report: **34**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



Scott Heideman
Laboratory Director

Client Service contact: Janel Mulholland 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	5
Section 3: Summary of Hits	6
Section 4: Sample Results	8
4.1: D68761-1: E-3	9
4.2: D68761-1F: E-3	10
4.3: D68761-2: E-10	11
4.4: D68761-2F: E-10	12
4.5: D68761-3: T-10	13
4.6: D68761-3F: T-10	14
4.7: D68761-4: E-22	15
4.8: D68761-4F: E-22	16
4.9: D68761-5: E-15	17
4.10: D68761-5F: E-15	18
4.11: D68761-6: T-18	19
4.12: D68761-6F: T-18	20
4.13: D68761-7: E-12A	21
4.14: D68761-7F: E-12A	22
Section 5: Misc. Forms	23
5.1: Chain of Custody	24
Section 6: Metals Analysis - QC Data Summaries	26
6.1: Prep QC MP15519: Cd,Ca,Cu,Mg,Zn	27
6.2: Prep QC MP15754: As	31

1

2

3

4

5

6



Sample Summary

Newfields, Inc.

Job No: D68761

Eagle Mine, Minturn, CO

Sample Number	Collected		Matrix Code	Received	Type	Client Sample ID
	Date	Time By				
D68761-1	03/13/15	12:10 DRH	AQ	03/18/15	Surface Water	E-3
D68761-1F	03/13/15	12:10 DRH	AQ	03/18/15	Surface H2O Filtered	E-3
D68761-2	03/13/15	12:37 DRH	AQ	03/18/15	Surface Water	E-10
D68761-2F	03/13/15	12:37 DRH	AQ	03/18/15	Surface H2O Filtered	E-10
D68761-3	03/13/15	12:50 DRH	AQ	03/18/15	Surface Water	T-10
D68761-3F	03/13/15	12:50 DRH	AQ	03/18/15	Surface H2O Filtered	T-10
D68761-4	03/13/15	13:33 DRH	AQ	03/18/15	Surface Water	E-22
D68761-4F	03/13/15	13:33 DRH	AQ	03/18/15	Surface H2O Filtered	E-22
D68761-5	03/13/15	13:50 DRH	AQ	03/18/15	Surface Water	E-15
D68761-5F	03/13/15	13:50 DRH	AQ	03/18/15	Surface H2O Filtered	E-15
D68761-6	03/13/15	13:58 DRH	AQ	03/18/15	Surface Water	T-18
D68761-6F	03/13/15	13:58 DRH	AQ	03/18/15	Surface H2O Filtered	T-18
D68761-7	03/13/15	14:10 DRH	AQ	03/18/15	Surface Water	E-12A



Sample Summary (continued)

Newfields, Inc.

Job No: D68761

Eagle Mine, Minturn, CO

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D68761-7F	03/13/15	14:10	DRH	03/18/15	AQ Surface H2O Filtered	E-12A



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Newfields, Inc.

Job No D68761

Site: Eagle Mine, Minturn, CO

Report Date 5/15/2015 4:28:09 PM

On 03/18/2015, 7 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 10.8 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D68761 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method EPA 200.8

Matrix: AQ **Batch ID:** MP15519

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D68761-1FMS, D68761-1FMSD were used as the QC samples for the metals analysis.
- D68761-3,-4; Dissolved samples were acidified in the lab

Matrix: AQ **Batch ID:** MP15754

- All samples were digested and analyzed within the recommended method holding time.
- D68761-3,-4 client called and cancelled Total Cd,Cu and Zn,
- All method blanks for this batch meet method specific criteria.
- Sample(s) D69978-1FAMS, D69978-1FMSD were used as the QC samples for the metals analysis.

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

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D68761
Account: Newfields, Inc.
Project: Eagle Mine, Minturn, CO
Collected: 03/13/15



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D68761-1	E-3					
Arsenic		0.20	0.20	0.044	ug/l	EPA 200.8
D68761-1F	E-3					
Cadmium		0.14	0.10	0.042	ug/l	EPA 200.8
Calcium		21500	400	12	ug/l	EPA 200.8
Copper		3.2	2.0	0.13	ug/l	EPA 200.8
Magnesium		7840	100	1.3	ug/l	EPA 200.8
Zinc		28.8	10	0.96	ug/l	EPA 200.8
D68761-2	E-10					
Arsenic		0.25	0.20	0.044	ug/l	EPA 200.8
D68761-2F	E-10					
Cadmium		0.34	0.10	0.042	ug/l	EPA 200.8
Calcium		19500	400	12	ug/l	EPA 200.8
Copper		3.5	2.0	0.13	ug/l	EPA 200.8
Magnesium		7590	100	1.3	ug/l	EPA 200.8
Zinc		128	10	0.96	ug/l	EPA 200.8
D68761-3	T-10					
Arsenic		1.4	0.20	0.044	ug/l	EPA 200.8
D68761-3F	T-10					
Cadmium		2.7	0.10	0.042	ug/l	EPA 200.8
Calcium		39100	400	12	ug/l	EPA 200.8
Copper		8.2	2.0	0.13	ug/l	EPA 200.8
Magnesium		29000	100	1.3	ug/l	EPA 200.8
Zinc		1480	10	0.96	ug/l	EPA 200.8
D68761-4	E-22					
Arsenic		0.31	0.20	0.044	ug/l	EPA 200.8
D68761-4F	E-22					
Cadmium		0.19	0.10	0.042	ug/l	EPA 200.8
Calcium		23000	400	12	ug/l	EPA 200.8
Copper		2.0	2.0	0.13	ug/l	EPA 200.8

Summary of Hits

Job Number: D68761
Account: Newfields, Inc.
Project: Eagle Mine, Minturn, CO
Collected: 03/13/15



Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
		Magnesium	9530	100	1.3	ug/l EPA 200.8
		Zinc	113	10	0.96	ug/l EPA 200.8
D68761-5	E-15					
		Arsenic	0.25	0.20	0.044	ug/l EPA 200.8
D68761-5F	E-15					
		Cadmium	0.22	0.10	0.042	ug/l EPA 200.8
		Calcium	21000	400	12	ug/l EPA 200.8
		Copper	2.4	2.0	0.13	ug/l EPA 200.8
		Magnesium	8740	100	1.3	ug/l EPA 200.8
		Zinc	111	10	0.96	ug/l EPA 200.8
D68761-6	T-18					
		Arsenic	0.14 J	0.20	0.044	ug/l EPA 200.8
D68761-6F	T-18					
		Calcium	9880	400	12	ug/l EPA 200.8
		Copper	1.4 J	2.0	0.13	ug/l EPA 200.8
		Magnesium	3740	100	1.3	ug/l EPA 200.8
		Zinc	61.4	10	0.96	ug/l EPA 200.8
D68761-7	E-12A					
		Arsenic	0.31	0.20	0.044	ug/l EPA 200.8
D68761-7F	E-12A					
		Cadmium	0.31	0.10	0.042	ug/l EPA 200.8
		Calcium	20400	400	12	ug/l EPA 200.8
		Copper	2.8	2.0	0.13	ug/l EPA 200.8
		Magnesium	8370	100	1.3	ug/l EPA 200.8
		Zinc	153	10	0.96	ug/l EPA 200.8



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: E-3	Date Sampled: 03/13/15
Lab Sample ID: D68761-1	Date Received: 03/18/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.20	0.20	0.044	ug/l	1	04/23/15	04/24/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6050

(2) Prep QC Batch: MP15754

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.1
 4

Report of Analysis

Client Sample ID: E-3 Lab Sample ID: D68761-1F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 03/13/15 Date Received: 03/18/15 Percent Solids: n/a
--	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.14	0.10	0.042	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	21500	400	12	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	3.2	2.0	0.13	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	7840	100	1.3	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	28.8	10	0.96	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5935

(2) Prep QC Batch: MP15519

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.2
4

Report of Analysis

Client Sample ID: E-10	Date Sampled: 03/13/15
Lab Sample ID: D68761-2	Date Received: 03/18/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.3
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.25	0.20	0.044	ug/l	1	04/23/15	04/27/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6052

(2) Prep QC Batch: MP15754

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: E-10 Lab Sample ID: D68761-2F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 03/13/15 Date Received: 03/18/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.34	0.10	0.042	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	19500	400	12	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	3.5	2.0	0.13	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	7590	100	1.3	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	128	10	0.96	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5935

(2) Prep QC Batch: MP15519

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.4
4

Report of Analysis

Client Sample ID: T-10	Date Sampled: 03/13/15
Lab Sample ID: D68761-3	Date Received: 03/18/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.5
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.4	0.20	0.044	ug/l	1	04/23/15	04/27/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6052

(2) Prep QC Batch: MP15754

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: T-10 Lab Sample ID: D68761-3F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 03/13/15 Date Received: 03/18/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	2.7	0.10	0.042	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	39100	400	12	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	8.2	2.0	0.13	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	29000	100	1.3	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	1480	10	0.96	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5935

(2) Prep QC Batch: MP15519

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.6
4

Report of Analysis

Client Sample ID: E-22	Date Sampled: 03/13/15
Lab Sample ID: D68761-4	Date Received: 03/18/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.31	0.20	0.044	ug/l	1	04/23/15	04/27/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6052

(2) Prep QC Batch: MP15754

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

4.7
4

Report of Analysis

Client Sample ID: E-22	Date Sampled: 03/13/15
Lab Sample ID: D68761-4F	Date Received: 03/18/15
Matrix: AQ - Surface H2O Filtered	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.19	0.10	0.042	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	23000	400	12	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	2.0	2.0	0.13	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	9530	100	1.3	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	113	10	0.96	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5935

(2) Prep QC Batch: MP15519

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.8
 4

Report of Analysis

Client Sample ID: E-15	Date Sampled: 03/13/15
Lab Sample ID: D68761-5	Date Received: 03/18/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.9
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.25	0.20	0.044	ug/l	1	04/23/15	04/27/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6052

(2) Prep QC Batch: MP15754

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: E-15 Lab Sample ID: D68761-5F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 03/13/15 Date Received: 03/18/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.22	0.10	0.042	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	21000	400	12	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	2.4	2.0	0.13	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	8740	100	1.3	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	111	10	0.96	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5935

(2) Prep QC Batch: MP15519

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.10
4

Report of Analysis

Client Sample ID: T-18	Date Sampled: 03/13/15
Lab Sample ID: D68761-6	Date Received: 03/18/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.11
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.14 J	0.20	0.044	ug/l	1	04/23/15	04/27/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6052

(2) Prep QC Batch: MP15754

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: T-18	Date Sampled: 03/13/15
Lab Sample ID: D68761-6F	Date Received: 03/18/15
Matrix: AQ - Surface H2O Filtered	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.12
4

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.042 U	0.10	0.042	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	9880	400	12	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	1.4 J	2.0	0.13	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	3740	100	1.3	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	61.4	10	0.96	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5935

(2) Prep QC Batch: MP15519

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: E-12A	Date Sampled: 03/13/15
Lab Sample ID: D68761-7	Date Received: 03/18/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.13
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.31	0.20	0.044	ug/l	1	04/23/15	04/27/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6052

(2) Prep QC Batch: MP15754

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: E-12A Lab Sample ID: D68761-7F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 03/13/15 Date Received: 03/18/15 Percent Solids: n/a
--	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.31	0.10	0.042	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	20400	400	12	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	2.8	2.0	0.13	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	8370	100	1.3	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	153	10	0.96	ug/l	1	03/24/15	03/26/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5935

(2) Prep QC Batch: MP15519

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.14
4

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Mountain States
4036 Youngfield Street Wheat Ridge, Co 80033
TEL 303-425-6021 877-737-4521
FAX 303-425-6021

FED-EX Tracking # _____
Boiler Order Control # _____
Accutest Quote # _____
Accutest Job # **D68761**

Client / Reporting Information		Project Information										Requested Analysis (see TEST CODE sheet)										Matrix Codes										
Company Name New Fields		Project Name EAGLE																														
Street Address		Billing Information (If different from Report to)																														
City State Zip		Company Name																														
Project Contact K. Sittler		Street Address																														
Phone # Fax #		City State Zip																														
Sampler(s) Name(s) DPH		Project Manager																														
Phone #		Abandon:																														
Project PO#		PO#																														
Field ID / Point of Collection		MEOH/DI Vial #		Collection		Matrix		# of bottles		Number of preserved bottles																						
				Date		Time		Sampled by		Matrix		# of bottles		INCI		NGRHT		HMSD		HSDA		NONE		DI Water		MEOH		ENCORE		Sulfameth		
E-3				3/13/15		1210		duh		SW		2		2		2		2		1		1		1		1		1				
E-10						1237								2																		
T-10						1250																										
E-22						1333								1		1																
E-15						1350								2																		
T-18						1358								2																		
E-12A						1410								2																		

200.8
 Diss Cu Cd Zn Co Ni
 Total As
 Total Cd, Cu, Zn
 200.8

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

LAB USE ONLY

Turnaround Time (Business Days)		Approved By (Accutest PM) / Date:		Data Deliverable Information				Comments / Special Instructions			
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> Std. 5 Business Days (By Contract only) <input type="checkbox"/> 5 Day RI SH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY		_____ _____ _____		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> State Forms <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "B" - Narrative <input type="checkbox"/> PDP <input type="checkbox"/> FULLT1 (Level 3+4)				Acidity T-10 and E-22 diss. metals upon receipt. A Field F. Hendry			
Emergency & Rush TIA data available VIA Lablink				Commercial "A" = Results Only Commercial "B" = Results + OC Summary							

Sample Custody must be documented below each time samples change possession, including courier delivery.							
Relinquished by Sampler:	Date Time:	Received By:	Date Time:	Relinquished By:	Date Time:	Received By:	Date Time:
1 P. Himmich	3/16/15 0900	1 Jambor	3/18/15 1040				
Relinquished by Sampler:	Date Time:	Received By:	Date Time:	Relinquished By:	Date Time:	Received By:	Date Time:
3		3		4		4	
Relinquished by:	Date Time:	Received By:	Date Time:	Custody Seal #	Intact	Preserved where applicable	On Ice
5		5		FX	<input checked="" type="checkbox"/>	B	TSO RBIVE 10.8

5.1 5

Accutest Job Number: D68761 **Client:** NEW FIELDS **Project:** EAGLE
Date / Time Received: 3/18/2015 10:40:00 AM **Delivery Method:** _____ **Airbill #'s:** FX
Cooler Temps (Initial/Adjusted): #1: (10.8/10.8):

Cooler Security		<u>Y or N</u>			<u>Y or N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Cooler Temperature		<u>Y or N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	<u>IR Gun;</u>	
3. Cooler media:	<u>Ice (Bag)</u>	
4. No. Coolers:	<u>1</u>	

Quality Control Preservation	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Sample Integrity - Documentation		<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	

Sample Integrity - Condition		<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
3. Condition of sample:	<u>Intact</u>			

Sample Integrity - Instructions	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.1
5

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D68761
Account: NEWFCOD - Newfields, Inc.
Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15519
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 03/24/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.1	2		
Antimony	0.40	.0022	.011		
Arsenic	0.20	.017	.044		
Barium	2.0	.016	.079		
Beryllium	0.20	.016	.069		
Boron	40	.49	2.1		
Cadmium	0.10	.036	.042	-0.027	<0.10
Calcium	400	5.6	12	17.9	<400
Chromium	2.0	.053	.053		
Cobalt	0.20	.0049	.015		
Copper	2.0	.06	.13	0.041	<2.0
Iron	10	3.5	4.6		
Lead	0.50	.0079	.008		
Magnesium	100	1.3	1.3	8.3	<100
Manganese	1.0	.12	.13		
Molybdenum	1.0	.049	.029		
Nickel	2.0	.0088	.027		
Phosphorus	60	2.6	4.3		
Potassium	200	2.9	2.9		
Selenium	0.40	.06	.21		
Silver	0.10	.0019	.008		
Sodium	500	4.9	4.9		
Strontium	20	.01	.015		
Thallium	0.20	.0024	.005		
Tin	10	.063	1.3		
Titanium	2.0	.059	.092		
Uranium	0.20	.0017	.002		
Vanadium	1.0	.037	.2		
Zinc	10	.21	.96	0.70	<10

Associated samples MP15519: D68761-1F, D68761-2F, D68761-3F, D68761-4F, D68761-5F, D68761-6F, D68761-7F

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D68761
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15519
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 03/24/15

Metal	D68761-1F Original MS		SpikeLot ICPAL2 % Rec		QC Limits
Aluminum					
Antimony					
Arsenic	anr				
Barium					
Beryllium					
Boron					
Cadmium	0.14	101	100	100.9	70-130
Calcium	21500	26600	5000	102.0	70-130
Chromium	anr				
Cobalt					
Copper	3.2	103	100	99.8	70-130
Iron	anr				
Lead	anr				
Magnesium	7840	13100	5000	105.2	70-130
Manganese	anr				
Molybdenum	anr				
Nickel	anr				
Phosphorus					
Potassium					
Selenium	anr				
Silver	anr				
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	28.8	121	100	92.2	70-130

Associated samples MP15519: D68761-1F, D68761-2F, D68761-3F, D68761-4F, D68761-5F, D68761-6F, D68761-7F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D68761
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15519
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 03/24/15

Metal	D68761-1F Original MSD		SpikeLot ICPAL2 % Rec		MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	anr					
Barium						
Beryllium						
Boron						
Cadmium	0.14	102	100	101.9	1.0	20
Calcium	21500	27000	5000	110.0	1.5	20
Chromium	anr					
Cobalt						
Copper	3.2	103	100	99.8	0.0	20
Iron	anr					
Lead	anr					
Magnesium	7840	13200	5000	107.2	0.8	20
Manganese	anr					
Molybdenum	anr					
Nickel	anr					
Phosphorus						
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	28.8	121	100	92.2	0.0	20

Associated samples MP15519: D68761-1F, D68761-2F, D68761-3F, D68761-4F, D68761-5F, D68761-6F, D68761-7F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D68761
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15519
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 03/24/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium				
Beryllium				
Boron				
Cadmium	102	100	102.0	85-115
Calcium	5110	5000	102.2	85-115
Chromium	anr			
Cobalt				
Copper	105	100	105.0	85-115
Iron	anr			
Lead	anr			
Magnesium	5370	5000	107.4	85-115
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	100	100	100.0	85-115

Associated samples MP15519: D68761-1F, D68761-2F, D68761-3F, D68761-4F, D68761-5F, D68761-6F, D68761-7F

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D68761
Account: NEWFCOD - Newfields, Inc.
Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15754
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 04/23/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.1	2		
Antimony	0.40	.0022	.011		
Arsenic	0.20	.017	.044	-0.012	<0.20
Barium	2.0	.016	.079		
Beryllium	0.20	.016	.069		
Boron	40	.49	2.1		
Cadmium	0.10	.036	.042		
Calcium	400	5.6	12		
Chromium	2.0	.053	.053		
Cobalt	0.20	.0049	.015		
Copper	2.0	.06	.13		
Iron	10	3.5	4.6		
Lead	0.50	.0079	.008		
Magnesium	100	1.3	1.3		
Manganese	1.0	.12	.13		
Molybdenum	1.0	.049	.029		
Nickel	2.0	.0088	.027		
Phosphorus	60	2.6	4.3		
Potassium	200	2.9	2.9		
Selenium	0.40	.06	.21		
Silver	0.10	.0019	.008		
Sodium	500	4.9	4.9		
Strontium	20	.01	.015		
Thallium	0.20	.0024	.005		
Tin	10	.063	1.3		
Titanium	2.0	.059	.092		
Uranium	0.20	.0017	.002		
Vanadium	1.0	.037	.2		
Zinc	10	.21	.96		

Associated samples MP15754: D68761-1, D68761-2, D68761-3, D68761-4, D68761-5, D68761-6, D68761-7

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

6.2.1
6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D68761
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15754
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/23/15

Metal	D69978-1FA Original MS	Spikelot ICPALL2	% Rec	QC Limits	
Aluminum					
Antimony					
Arsenic	0.82	206	200	102.6	70-130
Barium	anr				
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Magnesium					
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium	anr				
Silver	anr				
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP15754: D68761-1, D68761-2, D68761-3, D68761-4, D68761-5, D68761-6, D68761-7

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D68761
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15754
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/23/15

Metal	D69978-1FA Original MSD	Spikelot ICPALL2	% Rec	MSD RPD	QC Limit	
Aluminum						
Antimony						
Arsenic	0.82	194	200	96.6	6.0	20
Barium	anr					
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP15754: D68761-1, D68761-2, D68761-3, D68761-4, D68761-5, D68761-6, D68761-7

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D68761
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15754
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/23/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	203	200	101.5	85-115
Barium	anr			
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP15754: D68761-1, D68761-2, D68761-3, D68761-4, D68761-5, D68761-6, D68761-7

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

6.2.3

6



05/15/15

Technical Report for

Newfields, Inc.

Eagle Mine, Minturn, CO

Accutest Job Number: D69157

Sampling Dates: 03/19/15 - 03/26/15

Report to:

Newfields, Inc.
730 17th Street, Suite 925
Denver, CO 80202
ksitler@newfields.com

ATTN: Kerri Sitler

Total number of pages in report: **25**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Scott Heideman
Laboratory Director

Client Service contact: Janel Mulholland 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Summary of Hits	5
Section 4: Sample Results	6
4.1: D69157-1: EDS-3	7
4.2: D69157-2: EDS-4	8
4.3: D69157-3: BTS-1	9
4.4: D69157-4: BW.9R	10
4.5: D69157-5: OTP DITCH SEEP	11
4.6: D69157-6: T-10	12
4.7: D69157-7: T-10A	13
4.8: D69157-8: MILL-2	14
Section 5: Misc. Forms	15
5.1: Chain of Custody	16
Section 6: Metals Analysis - QC Data Summaries	17
6.1: Prep QC MP15564: As,Cd,Cu	18
6.2: Prep QC MP15689: As	22

1

2

3

4

5

6



Sample Summary

Newfields, Inc.

Job No: D69157

Eagle Mine, Minturn, CO

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
D69157-1	03/19/15	13:50 DH	03/27/15	AQ	Ground Water	EDS-3
D69157-2	03/19/15	14:00 DH	03/27/15	AQ	Ground Water	EDS-4
D69157-3	03/19/15	14:20 DH	03/27/15	AQ	Ground Water	BTS-1
D69157-4	03/19/15	15:00 DH	03/27/15	AQ	Ground Water	BW.9R
D69157-5	03/19/15	16:10 DH	03/27/15	AQ	Ground Water	OTP DITCH SEEP
D69157-6	03/19/15	15:30 DH	03/27/15	AQ	Ground Water	T-10
D69157-7	03/20/15	10:30 DH	03/27/15	AQ	Ground Water	T-10A
D69157-8	03/26/15	11:00 DH	03/27/15	AQ	Ground Water	MILL-2



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Newfields, Inc.

Job No D69157

Site: Eagle Mine, Minturn, CO

Report Date 5/15/2015 3:50:25 PM

On 03/27/2015, 8 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 5.2 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D69157 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method EPA 200.8

Matrix: AQ **Batch ID:** MP15564

- All samples were digested and analyzed within the recommended method holding time.
- D69157-8 Client called and requested for Cd, and Cu be added to sample
- All method blanks for this batch meet method specific criteria.
- Sample(s) D69157-1MS, D69157-1MSD were used as the QC samples for the metals analysis.

Matrix: AQ **Batch ID:** MP15689

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D69157-2MS, D69157-2MSD were used as the QC samples for the metals analysis.

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

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D69157
Account: Newfields, Inc.
Project: Eagle Mine, Minturn, CO
Collected: 03/19/15 thru 03/26/15



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D69157-1	EDS-3					
Arsenic		1.5	0.20	0.044	ug/l	EPA 200.8
D69157-2	EDS-4					
Arsenic		1.8	0.20	0.044	ug/l	EPA 200.8
D69157-3	BTS-1					
Arsenic		32.6	0.20	0.044	ug/l	EPA 200.8
D69157-4	BW.9R					
Arsenic		2.2	0.20	0.044	ug/l	EPA 200.8
D69157-5	OTP DITCH SEEP					
Arsenic		1.7	0.20	0.044	ug/l	EPA 200.8
D69157-6	T-10					
Arsenic		2.2	0.20	0.044	ug/l	EPA 200.8
D69157-7	T-10A					
Arsenic		0.34	0.20	0.044	ug/l	EPA 200.8
D69157-8	MILL-2					
Arsenic		1.6	0.20	0.044	ug/l	EPA 200.8
Cadmium		545	0.10	0.042	ug/l	EPA 200.8
Copper		623	2.0	0.13	ug/l	EPA 200.8



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: EDS-3	Date Sampled: 03/19/15
Lab Sample ID: D69157-1	Date Received: 03/27/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.5	0.20	0.044	ug/l	1	03/30/15	04/10/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5990

(2) Prep QC Batch: MP15564

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.1
 4

Report of Analysis

Client Sample ID: EDS-4 Lab Sample ID: D69157-2 Matrix: AQ - Ground Water Project: Eagle Mine, Minturn, CO	Date Sampled: 03/19/15 Date Received: 03/27/15 Percent Solids: n/a
---	---

4.2
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.8	0.20	0.044	ug/l	1	04/14/15	04/15/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6007

(2) Prep QC Batch: MP15689

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: BTS-1	Date Sampled: 03/19/15
Lab Sample ID: D69157-3	Date Received: 03/27/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.3
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	32.6	0.20	0.044	ug/l	1	04/14/15	04/15/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6007

(2) Prep QC Batch: MP15689

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: BW.9R	Date Sampled: 03/19/15
Lab Sample ID: D69157-4	Date Received: 03/27/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.4
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.2	0.20	0.044	ug/l	1	04/14/15	04/15/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6007

(2) Prep QC Batch: MP15689

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: OTP DITCH SEEP	Date Sampled: 03/19/15
Lab Sample ID: D69157-5	Date Received: 03/27/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.5
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.7	0.20	0.044	ug/l	1	04/14/15	04/15/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6007

(2) Prep QC Batch: MP15689

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: T-10	Date Sampled: 03/19/15
Lab Sample ID: D69157-6	Date Received: 03/27/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.6
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.2	0.20	0.044	ug/l	1	04/14/15	04/15/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6007

(2) Prep QC Batch: MP15689

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: T-10A	Date Sampled: 03/20/15
Lab Sample ID: D69157-7	Date Received: 03/27/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.34	0.20	0.044	ug/l	1	04/14/15	04/15/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6007

(2) Prep QC Batch: MP15689

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.7
 4

Report of Analysis

Client Sample ID: MILL-2 Lab Sample ID: D69157-8 Matrix: AQ - Ground Water Project: Eagle Mine, Minturn, CO	Date Sampled: 03/26/15 Date Received: 03/27/15 Percent Solids: n/a
--	---

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.6	0.20	0.044	ug/l	1	04/14/15	04/15/15 NT	EPA 200.8 ²	EPA 200.8 ⁴
Cadmium	545	0.10	0.042	ug/l	1	03/30/15	04/08/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Copper	623	2.0	0.13	ug/l	1	03/30/15	04/08/15 NT	EPA 200.8 ¹	EPA 200.8 ³

- (1) Instrument QC Batch: MA5981
- (2) Instrument QC Batch: MA6007
- (3) Prep QC Batch: MP15564
- (4) Prep QC Batch: MP15689

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.8
4

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Missouri States
4036 Youngfield Street, Wheat Ridge, Co 80033
TEL: 303-425-6021 877-737-4521
FAX: 303-425-6021

FBI-EX Tracking #	Batch Order Control #
Accutest Quote #	Accutest Job # D69157
Requested Analysis (see TEST CODE sheet)	
Matrix Codes	
DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
LAB USE ONLY	

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)										Matrix Codes					
Company Name: NewFields		Project Name: Eagle																	
Street Address:		Street:																	
City State Zip:		City:																	
Project Contact: K. Sittler E-mail:		Project#:																	
Phone #:		Client PO#:																	
Fax #:		City State Zip:																	
Sampler(s) Name(s): D. Hummel Phone #:		Project Manager:																	
Attention:		PO#:																	
Accutest Sample #	Field ID / Point of Collection	MECH/DI Viol #	Collection		Sampled By	Matrix	# of bottles	Number of preserved Bottles										LAB USE ONLY	
			Date	Time				HCl	NaOH	HNO3	H2SO4	HNO2	Di Water	ME/PH	EM/ONE	Equation			
	EDS-3		3/19/15	1350	dm	GW	1		X									X	01
	EDS-4			1400		GW	1		X									X	02
	BTS-1			1420		GW	1		X									X	03
	BW. 9R			1500		GW	1		X									X	04
	OTP DITCH seep			1610		SW	1		X									X	05
	T-10			1530		SW	1		X									X	06
	T-10A		3/20/15	1030	dm	SW	1		X									X	07
	MILL-2		3/26/15	1100	"	GW	1		X									X	08

Turnaround Time (Business days) <input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> Std. 5 Business Days (By Contract only) <input type="checkbox"/> 5 Day <i>R/SH</i> <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY	Approved By (Accutest PM): / Date: _____ _____ _____	<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> State Forms <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "B" w/Narrative <input type="checkbox"/> PDF <input type="checkbox"/> FULLT1 (Level 3+4)	Comments / Special Instructions _____ _____ _____
--	---	--	--

Emergency 8 Push TIA data available VIA Lablink						Sample Custody must be documented below each time samples change possession, including courier delivery.					
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:						
1 Dave Hummel	3/20/15 1000	1 [Signature]	1 [Signature]	17:20	2						
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:						
3		3	4		4						
Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact	Preserved where applicable						
5		5	11	<input checked="" type="checkbox"/>	<input type="checkbox"/>						

D69157: Chain of Custody

Page 1 of 1

5.1
5

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D69157
Account: NEWFCOD - Newfields, Inc.
Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15564
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 03/30/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.1	2		
Antimony	0.40	.0022	.011		
Arsenic	0.20	.017	.044	0.011	<0.20
Barium	2.0	.016	.079		
Beryllium	0.20	.016	.069		
Boron	40	.49	2.1		
Cadmium	0.10	.036	.042	0.0050	<0.10
Calcium	400	5.6	12		
Chromium	2.0	.053	.053		
Cobalt	0.20	.0049	.015		
Copper	2.0	.06	.13	0.14	<2.0
Iron	10	3.5	4.6		
Lead	0.50	.0079	.008		
Magnesium	100	1.3	1.3		
Manganese	1.0	.12	.13		
Molybdenum	1.0	.049	.029		
Nickel	2.0	.0088	.027		
Phosphorus	60	2.6	4.3		
Potassium	200	2.9	2.9		
Selenium	0.40	.06	.21		
Silver	0.10	.0019	.008		
Sodium	500	4.9	4.9		
Strontium	20	.01	.015		
Thallium	0.20	.0024	.005		
Tin	10	.063	1.3		
Titanium	2.0	.059	.092		
Uranium	0.20	.0017	.002		
Vanadium	1.0	.037	.2		
Zinc	10	.21	.96		

Associated samples MP15564: D69157-1, D69157-8

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69157
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15564
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 03/30/15

Metal	D69157-1 Original MS	Spikelot ICPALL2	% Rec	QC Limits	
Aluminum					
Antimony					
Arsenic	1.5	193	200	95.8	70-130
Barium					
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium	anr				
Cobalt					
Copper					
Iron					
Lead	anr				
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	anr				
Phosphorus					
Potassium					
Selenium	anr				
Silver	anr				
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	anr				

Associated samples MP15564: D69157-1, D69157-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69157
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15564
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 03/30/15

Metal	D69157-1 Original	MSD	SpikeLot ICPALL2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	1.5	189	200	93.8	7.7	20
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium	anr					
Cobalt						
Copper						
Iron						
Lead	anr					
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	anr					
Phosphorus						
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	anr					

Associated samples MP15564: D69157-1, D69157-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D69157
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15564
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 03/30/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	195	200	97.5	85-115
Barium				
Beryllium				
Boron				
Cadmium	106	100	106.0	85-115
Calcium				
Chromium	anr			
Cobalt				
Copper	103	100	103.0	85-115
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	anr			

Associated samples MP15564: D69157-1, D69157-8

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

6.1.3
 6

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D69157
Account: NEWFCOD - Newfields, Inc.
Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15689
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 04/14/15

Metal	RL	IDL	MDL	MB	
				raw	final
Arsenic	0.20	.017	.044	-0.0010	<0.20

Associated samples MP15689: D69157-2, D69157-3, D69157-4, D69157-5, D69157-6, D69157-7, D69157-8

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

6.2.1
6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69157
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15689
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/14/15

Metal	D69157-2 Original MS	Spikelot ICPALL2	QC % Rec	QC Limits
-------	-------------------------	---------------------	-------------	--------------

Arsenic 1.8 217 200 107.6 70-130

Associated samples MP15689: D69157-2, D69157-3, D69157-4, D69157-5, D69157-6, D69157-7, D69157-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

6.2.2

6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69157
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15689
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/14/15

Metal	D69157-2 Original	MSD	SpikeLot ICPALL2	% Rec	MSD RPD	QC Limit
Arsenic	1.8	217	200	107.6	0.0	20

Associated samples MP15689: D69157-2, D69157-3, D69157-4, D69157-5, D69157-6, D69157-7, D69157-8

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

6.2.2

6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D69157
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15689
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/14/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Arsenic	210	200	105.0	85-115

Associated samples MP15689: D69157-2, D69157-3, D69157-4, D69157-5, D69157-6, D69157-7, D69157-8

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

6.2.3

6

Technical Report for

Newfields, Inc.

Eagle Mine, Minturn, CO

Accutest Job Number: D69157R

Sampling Date: 03/26/15

Report to:

Newfields, Inc.
730 17th Street, Suite 925
Denver, CO 80202
ksitler@newfields.com

ATTN: Kerri Sitler

Total number of pages in report: **14**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



Scott Heideman
Laboratory Director

Client Service contact: Janel Mulholland 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Summary of Hits	5
Section 4: Sample Results	6
4.1: D69157-8R: MILL-2	7
Section 5: Misc. Forms	8
5.1: Chain of Custody	9
Section 6: Metals Analysis - QC Data Summaries	10
6.1: Prep QC MP15906: Zn	11

1

2

3

4

5

6



Sample Summary

Newfields, Inc.

Job No: D69157R

Eagle Mine, Minturn, CO

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D69157-8R	03/26/15	11:00 DH	03/27/15	AQ	Ground Water	MILL-2



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Newfields, Inc.

Job No D69157R

Site: Eagle Mine, Minturn, CO

Report Date 5/15/2015 3:51:29 PM

On 03/27/2015, 1 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 5.2 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D69157R was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method EPA 200.8

Matrix: AQ	Batch ID: MP15906
-------------------	--------------------------

- All samples were digested and analyzed within the recommended method holding time.
- D69157R-8 Client called and requested Zn be added to the sample
- All method blanks for this batch meet method specific criteria.
- Sample(s) D70621-1FMS, D70621-1FMSD were used as the QC samples for the metals analysis.

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

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D69157R
Account: Newfields, Inc.
Project: Eagle Mine, Minturn, CO
Collected: 03/26/15



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

D69157-8R MILL-2

Zinc		314000	500	48	ug/l	EPA 200.8
------	--	--------	-----	----	------	-----------



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: MILL-2	Date Sampled: 03/26/15
Lab Sample ID: D69157-8R	Date Received: 03/27/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Zinc	314000	500	48	ug/l	50	05/13/15	05/14/15 JB	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6123

(2) Prep QC Batch: MP15906

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.1
 4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Missouri States
4036 Youngfield Street, Wheat Ridge, Co 80033
TEL: 303-425-6021 877-737-4521
FAX: 303-425-6021

FBI-EX Tracking #	State Order Control #
Accutest Quote #	Accutest Job # D69157
Requested Analysis (see TEST CODE sheet)	
Matrix Codes	
DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
LAB USE ONLY	

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)										Matrix Codes					
Company Name: NewFields		Project Name: Eagle																	
Street Address:		Street:																	
City State Zip:		City:																	
Project Contact: K. Sittler E-mail:		Project#:																	
Phone #:		Client PO#:																	
Fax #:		City State Zip:																	
Sampler(s) Name(s): D. Hummel Phone #:		Project Manager:																	
Attention:		PO#:																	
Accutest Sample #	Field ID / Point of Collection	MECH/DI Viol #	Collection		Sampled By	Matrix	# of bottles	Number of preserved Bottles										LAB USE ONLY	
			Date	Time				HCl	NaOH	HNO3	H2SO4	HNO2	Di Water	ME/PH	EM/ONE	Equation			
	EDS-3		3/19/15	1350	dm	GW	1		X									X	01
	EDS-4			1400	1	GW	1		X									X	02
	BTS-1			1420	1	GW	1		X									X	03
	BW. 9R			1500	1	GW	1		X									X	04
	OTP DITCH seep			1610	1	SW	1		X									X	05
	T-10			1530	1	SW	1		X									X	06
	T-10A		3/20/15	1030	dm	SW	1		X									X	07
	MILL-2		3/26/15	1100	1	GW	1		X									X	08

Turnaround Time (Business days) <input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> Std. 5 Business Days (By Contract only) <input type="checkbox"/> 5 Day <i>R/SH</i> <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY	Approved By (Accutest PM): / Date: _____ _____ _____	<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> State Forms <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "B" w/Narrative <input type="checkbox"/> PDF <input type="checkbox"/> FULLT1 (Level 3+4)	Comments / Special Instructions _____ _____ _____
--	---	--	--

Sample Custody must be documented below each time samples change possession, including courier delivery.					
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Dave Hummel	3/20/15 1000	1 [Signature]	1 [Signature]	17:20	2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal #	<input checked="" type="checkbox"/> Intact Preserved where applicable <input type="checkbox"/> Not Intact	On Ice <input checked="" type="checkbox"/>
5		5	HA		Cooler Temp: 3.2

D69157R: Chain of Custody

Page 1 of 1

5.1
5

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D69157R
Account: NEWFCOD - Newfields, Inc.
Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15906
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 05/13/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.1	2		
Antimony	0.40	.0022	.011		
Arsenic	0.20	.017	.044		
Barium	2.0	.016	.079		
Beryllium	0.20	.016	.069		
Boron	40	.49	2.1		
Cadmium	0.10	.036	.042		
Calcium	400	5.6	12		
Chromium	2.0	.053	.053		
Cobalt	0.20	.0049	.015		
Copper	2.0	.06	.13		
Iron	10	3.5	4.6		
Lead	0.50	.0079	.008		
Magnesium	100	1.3	1.3		
Manganese	1.0	.12	.13		
Molybdenum	1.0	.049	.029		
Nickel	2.0	.0088	.027		
Phosphorus	60	2.6	4.3		
Potassium	200	2.9	2.9		
Selenium	0.40	.06	.21		
Silver	0.10	.0019	.008		
Sodium	500	4.9	4.9		
Strontium	20	.01	.015		
Thallium	0.20	.0024	.005		
Tin	10	.063	1.3		
Titanium	2.0	.059	.092		
Vanadium	1.0	.037	.2		
Zinc	10	.21	.96	0.89	<10

Associated samples MP15906: D69157-8R

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69157R
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15906
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 05/13/15

Metal	D70621-1F Original MS	Spikelot ICPALL2	% Rec	QC Limits
Aluminum	anr			
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Copper	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	11.2	89.6	100	78.4 70-130

Associated samples MP15906: D69157-8R

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

6.1.2
 6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69157R
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15906
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 05/13/15

Metal	D70621-1F Original MSD	Spikelot ICPALL2	% Rec	MSD RPD	QC Limit
Aluminum	anr				
Antimony					
Arsenic	anr				
Barium	anr				
Beryllium					
Boron					
Cadmium	anr				
Calcium	anr				
Chromium	anr				
Copper	anr				
Lead	anr				
Magnesium	anr				
Manganese	anr				
Molybdenum	anr				
Nickel	anr				
Phosphorus					
Potassium	anr				
Selenium	anr				
Silver	anr				
Sodium	anr				
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc	11.2	89.1	100	77.9	0.6 20

Associated samples MP15906: D69157-8R

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

6.1.2
 6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D69157R
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15906
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 05/13/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum	anr			
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	108	100	108.0	85-115

Associated samples MP15906: D69157-8R

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

Technical Report for

Newfields, Inc.

Eagle Mine, Minturn, CO

Accutest Job Number: D69158

Sampling Date: 03/27/15

Report to:

Newfields, Inc.
730 17th Street, Suite 925
Denver, CO 80202
ksitler@newfields.com

ATTN: Kerri Sitler

Total number of pages in report: **35**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



Scott Heideman
Laboratory Director

Client Service contact: Janel Mulholland 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	5
Section 3: Summary of Hits	6
Section 4: Sample Results	8
4.1: D69158-1: E-22	9
4.2: D69158-1F: E-22	10
4.3: D69158-2: E-15	11
4.4: D69158-2F: E-15	12
4.5: D69158-3: T-18	13
4.6: D69158-3F: T-18	14
4.7: D69158-4: E-10	15
4.8: D69158-4F: E-10	16
4.9: D69158-5: T-10	17
4.10: D69158-5F: T-10	18
4.11: D69158-6: E-3	19
4.12: D69158-6F: E-3	20
4.13: D69158-7: E-12A	21
4.14: D69158-7F: E-12A	22
4.15: D69158-8: T-10A	23
4.16: D69158-9: OTP	24
Section 5: Misc. Forms	25
5.1: Chain of Custody	26
Section 6: Metals Analysis - QC Data Summaries	27
6.1: Prep QC MP15565: As	28
6.2: Prep QC MP15566: Cd,Ca,Cu,Mg,Zn	32

1

2

3

4

5

6



Sample Summary

Newfields, Inc.

Job No: D69158

Eagle Mine, Minturn, CO

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
D69158-1	03/27/15	11:30 SPH	03/27/15	AQ	Surface Water	E-22
D69158-1F	03/27/15	11:30 SPH	03/27/15	AQ	Surface H2O Filtered	E-22
D69158-2	03/27/15	11:40 SPH	03/27/15	AQ	Surface Water	E-15
D69158-2F	03/27/15	11:40 SPH	03/27/15	AQ	Surface H2O Filtered	E-15
D69158-3	03/27/15	11:50 SPH	03/27/15	AQ	Surface Water	T-18
D69158-3F	03/27/15	11:50 SPH	03/27/15	AQ	Surface H2O Filtered	T-18
D69158-4	03/27/15	13:40 SPH	03/27/15	AQ	Surface Water	E-10
D69158-4F	03/27/15	13:40 SPH	03/27/15	AQ	Surface H2O Filtered	E-10
D69158-5	03/27/15	13:30 SPH	03/27/15	AQ	Surface Water	T-10
D69158-5F	03/27/15	13:30 SPH	03/27/15	AQ	Surface H2O Filtered	T-10
D69158-6	03/27/15	13:50 SPH	03/27/15	AQ	Surface Water	E-3
D69158-6F	03/27/15	13:50 SPH	03/27/15	AQ	Surface H2O Filtered	E-3
D69158-7	03/27/15	12:00 SPH	03/27/15	AQ	Surface Water	E-12A



Sample Summary (continued)

Newfields, Inc.

Job No: D69158

Eagle Mine, Minturn, CO

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D69158-7F	03/27/15	12:00	SPH	03/27/15	AQ Surface H2O Filtered	E-12A
D69158-8	03/27/15	13:10	SPH	03/27/15	AQ Surface Water	T-10A
D69158-9	03/27/15	14:00	SPH	03/27/15	AQ Surface Water	OTP



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Newfields, Inc.

Job No D69158

Site: Eagle Mine, Minturn, CO

Report Date 4/8/2015 2:30:06 PM

On 03/27/2015, 9 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 5.7 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D69158 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method EPA 200.8

Matrix: AQ **Batch ID:** MP15565

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D69158-1MS, D69158-1MSD were used as the QC samples for the metals analysis.

Matrix: AQ **Batch ID:** MP15566

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D69158-1FMS, D69158-1FMSD were used as the QC samples for the metals analysis.

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

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D69158
Account: Newfields, Inc.
Project: Eagle Mine, Minturn, CO
Collected: 03/27/15



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D69158-1	E-22					
Arsenic		0.26	0.20	0.044	ug/l	EPA 200.8
D69158-1F	E-22					
Cadmium		0.32	0.10	0.042	ug/l	EPA 200.8
Calcium		19300	400	12	ug/l	EPA 200.8
Copper		4.8	2.0	0.13	ug/l	EPA 200.8
Magnesium		7830	100	1.3	ug/l	EPA 200.8
Zinc		156	10	0.96	ug/l	EPA 200.8
D69158-2	E-15					
Arsenic		0.25	0.20	0.044	ug/l	EPA 200.8
D69158-2F	E-15					
Cadmium		0.33	0.10	0.042	ug/l	EPA 200.8
Calcium		18300	400	12	ug/l	EPA 200.8
Copper		5.1	2.0	0.13	ug/l	EPA 200.8
Magnesium		7730	100	1.3	ug/l	EPA 200.8
Zinc		166	10	0.96	ug/l	EPA 200.8
D69158-3	T-18					
Arsenic		0.14 J	0.20	0.044	ug/l	EPA 200.8
D69158-3F	T-18					
Calcium		7210	400	12	ug/l	EPA 200.8
Copper		3.3	2.0	0.13	ug/l	EPA 200.8
Magnesium		2100	100	1.3	ug/l	EPA 200.8
Zinc		23.5	10	0.96	ug/l	EPA 200.8
D69158-4	E-10					
Arsenic		0.21	0.20	0.044	ug/l	EPA 200.8
D69158-4F	E-10					
Cadmium		0.45	0.10	0.042	ug/l	EPA 200.8
Calcium		14700	400	12	ug/l	EPA 200.8
Copper		6.7	2.0	0.13	ug/l	EPA 200.8
Magnesium		5730	100	1.3	ug/l	EPA 200.8

Summary of Hits

Job Number: D69158
Account: Newfields, Inc.
Project: Eagle Mine, Minturn, CO
Collected: 03/27/15



Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
		Zinc	180	10	0.96	ug/l EPA 200.8
D69158-5	T-10					
		Arsenic	1.4	0.20	0.044	ug/l EPA 200.8
D69158-5F	T-10					
		Cadmium	6.7	0.10	0.042	ug/l EPA 200.8
		Calcium	41700	400	12	ug/l EPA 200.8
		Copper	28.9	2.0	0.13	ug/l EPA 200.8
		Magnesium	33500	100	1.3	ug/l EPA 200.8
		Zinc	2760	10	0.96	ug/l EPA 200.8
D69158-6	E-3					
		Arsenic	0.16 J	0.20	0.044	ug/l EPA 200.8
D69158-6F	E-3					
		Cadmium	0.30	0.10	0.042	ug/l EPA 200.8
		Calcium	14600	400	12	ug/l EPA 200.8
		Copper	7.1	2.0	0.13	ug/l EPA 200.8
		Magnesium	5590	100	1.3	ug/l EPA 200.8
		Zinc	97.6	10	0.96	ug/l EPA 200.8
D69158-7	E-12A					
		Arsenic	0.23	0.20	0.044	ug/l EPA 200.8
D69158-7F	E-12A					
		Cadmium	0.52	0.10	0.042	ug/l EPA 200.8
		Calcium	16400	400	12	ug/l EPA 200.8
		Copper	6.2	2.0	0.13	ug/l EPA 200.8
		Magnesium	6500	100	1.3	ug/l EPA 200.8
		Zinc	225	10	0.96	ug/l EPA 200.8
D69158-8	T-10A					
		Arsenic	0.20	0.20	0.044	ug/l EPA 200.8
D69158-9	OTP					
		Arsenic	10.3	0.20	0.044	ug/l EPA 200.8



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: E-22	Date Sampled: 03/27/15
Lab Sample ID: D69158-1	Date Received: 03/27/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.26	0.20	0.044	ug/l	1	03/30/15	04/01/15 JB	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5957

(2) Prep QC Batch: MP15565

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.1
 4

Report of Analysis

Client Sample ID: E-22 Lab Sample ID: D69158-1F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 03/27/15 Date Received: 03/27/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.32	0.10	0.042	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Calcium	19300	400	12	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Copper	4.8	2.0	0.13	ug/l	1	03/30/15	04/07/15 NT	EPA 200.8 ²	EPA 200.8 ³
Magnesium	7830	100	1.3	ug/l	1	03/30/15	04/07/15 NT	EPA 200.8 ²	EPA 200.8 ³
Zinc	156	10	0.96	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³

- (1) Instrument QC Batch: MA5965
- (2) Instrument QC Batch: MA5975
- (3) Prep QC Batch: MP15566

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.2
4

Report of Analysis

Client Sample ID: E-15	Date Sampled: 03/27/15
Lab Sample ID: D69158-2	Date Received: 03/27/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.25	0.20	0.044	ug/l	1	03/30/15	04/01/15 JB	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5957

(2) Prep QC Batch: MP15565

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.3
 4

Report of Analysis

Client Sample ID: E-15 Lab Sample ID: D69158-2F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 03/27/15 Date Received: 03/27/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.33	0.10	0.042	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Calcium	18300	400	12	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Copper	5.1	2.0	0.13	ug/l	1	03/30/15	04/07/15 NT	EPA 200.8 ²	EPA 200.8 ³
Magnesium	7730	100	1.3	ug/l	1	03/30/15	04/07/15 NT	EPA 200.8 ²	EPA 200.8 ³
Zinc	166	10	0.96	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³

- (1) Instrument QC Batch: MA5965
- (2) Instrument QC Batch: MA5975
- (3) Prep QC Batch: MP15566

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.4
4

Report of Analysis

Client Sample ID: T-18 Lab Sample ID: D69158-3 Matrix: AQ - Surface Water Project: Eagle Mine, Minturn, CO	Date Sampled: 03/27/15 Date Received: 03/27/15 Percent Solids: n/a
---	---

4.5
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.14 J	0.20	0.044	ug/l	1	03/30/15	04/02/15 JB	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5960

(2) Prep QC Batch: MP15565

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: T-18 Lab Sample ID: D69158-3F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 03/27/15 Date Received: 03/27/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.042 U	0.10	0.042	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Calcium	7210	400	12	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Copper	3.3	2.0	0.13	ug/l	1	03/30/15	04/07/15 NT	EPA 200.8 ²	EPA 200.8 ³
Magnesium	2100	100	1.3	ug/l	1	03/30/15	04/07/15 NT	EPA 200.8 ²	EPA 200.8 ³
Zinc	23.5	10	0.96	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³

- (1) Instrument QC Batch: MA5965
- (2) Instrument QC Batch: MA5975
- (3) Prep QC Batch: MP15566

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.6
4

Report of Analysis

Client Sample ID: E-10	Date Sampled: 03/27/15
Lab Sample ID: D69158-4	Date Received: 03/27/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.21	0.20	0.044	ug/l	1	03/30/15	04/01/15 JB	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5957

(2) Prep QC Batch: MP15565

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.7
 4

Report of Analysis

Client Sample ID: E-10 Lab Sample ID: D69158-4F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 03/27/15 Date Received: 03/27/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.45	0.10	0.042	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Calcium	14700	400	12	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Copper	6.7	2.0	0.13	ug/l	1	03/30/15	04/07/15 NT	EPA 200.8 ²	EPA 200.8 ³
Magnesium	5730	100	1.3	ug/l	1	03/30/15	04/07/15 NT	EPA 200.8 ²	EPA 200.8 ³
Zinc	180	10	0.96	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³

- (1) Instrument QC Batch: MA5965
- (2) Instrument QC Batch: MA5975
- (3) Prep QC Batch: MP15566

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.8
4

Report of Analysis

Client Sample ID: T-10 Lab Sample ID: D69158-5 Matrix: AQ - Surface Water Project: Eagle Mine, Minturn, CO	Date Sampled: 03/27/15 Date Received: 03/27/15 Percent Solids: n/a
---	---

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.4	0.20	0.044	ug/l	1	03/30/15	04/01/15 JB	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5957

(2) Prep QC Batch: MP15565

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.9
4

Report of Analysis

Client Sample ID: T-10 Lab Sample ID: D69158-5F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 03/27/15 Date Received: 03/27/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	6.7	0.10	0.042	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Calcium	41700	400	12	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Copper	28.9	2.0	0.13	ug/l	1	03/30/15	04/07/15 NT	EPA 200.8 ²	EPA 200.8 ³
Magnesium	33500	100	1.3	ug/l	1	03/30/15	04/07/15 NT	EPA 200.8 ²	EPA 200.8 ³
Zinc	2760	10	0.96	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³

- (1) Instrument QC Batch: MA5965
- (2) Instrument QC Batch: MA5975
- (3) Prep QC Batch: MP15566

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.10
4

Report of Analysis

Client Sample ID: E-3	Date Sampled: 03/27/15
Lab Sample ID: D69158-6	Date Received: 03/27/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.11
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.16 J	0.20	0.044	ug/l	1	03/30/15	04/01/15 JB	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5957

(2) Prep QC Batch: MP15565

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: E-3 Lab Sample ID: D69158-6F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 03/27/15 Date Received: 03/27/15 Percent Solids: n/a
--	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.30	0.10	0.042	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Calcium	14600	400	12	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Copper	7.1	2.0	0.13	ug/l	1	03/30/15	04/07/15 NT	EPA 200.8 ²	EPA 200.8 ³
Magnesium	5590	100	1.3	ug/l	1	03/30/15	04/07/15 NT	EPA 200.8 ²	EPA 200.8 ³
Zinc	97.6	10	0.96	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³

- (1) Instrument QC Batch: MA5965
- (2) Instrument QC Batch: MA5975
- (3) Prep QC Batch: MP15566

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.12
4

Report of Analysis

Client Sample ID: E-12A	Date Sampled: 03/27/15
Lab Sample ID: D69158-7	Date Received: 03/27/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.23	0.20	0.044	ug/l	1	03/30/15	04/01/15 JB	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5957

(2) Prep QC Batch: MP15565

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: E-12A Lab Sample ID: D69158-7F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 03/27/15 Date Received: 03/27/15 Percent Solids: n/a
--	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.52	0.10	0.042	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Calcium	16400	400	12	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³
Copper	6.2	2.0	0.13	ug/l	1	03/30/15	04/07/15 NT	EPA 200.8 ²	EPA 200.8 ³
Magnesium	6500	100	1.3	ug/l	1	03/30/15	04/07/15 NT	EPA 200.8 ²	EPA 200.8 ³
Zinc	225	10	0.96	ug/l	1	03/30/15	04/03/15 NT	EPA 200.8 ¹	EPA 200.8 ³

- (1) Instrument QC Batch: MA5965
- (2) Instrument QC Batch: MA5975
- (3) Prep QC Batch: MP15566

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.14
4

Report of Analysis

Client Sample ID: T-10A	Date Sampled: 03/27/15
Lab Sample ID: D69158-8	Date Received: 03/27/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.15
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.20	0.20	0.044	ug/l	1	03/30/15	04/02/15 JB	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5957

(2) Prep QC Batch: MP15565

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: OTP Lab Sample ID: D69158-9 Matrix: AQ - Surface Water Project: Eagle Mine, Minturn, CO	Date Sampled: 03/27/15 Date Received: 03/27/15 Percent Solids: n/a
--	---

4.16
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	10.3	0.20	0.044	ug/l	1	03/30/15	04/02/15 JB	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA5957

(2) Prep QC Batch: MP15565

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D69158
Account: NEWFCOD - Newfields, Inc.
Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15565
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 03/30/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.1	2		
Antimony	0.40	.0022	.011		
Arsenic	0.20	.017	.044	-0.034	<0.20
Barium	2.0	.016	.079		
Beryllium	0.20	.016	.069		
Boron	40	.49	2.1		
Cadmium	0.10	.036	.042		
Calcium	400	5.6	12		
Chromium	2.0	.053	.053		
Cobalt	0.20	.0049	.015		
Copper	2.0	.06	.13		
Iron	10	3.5	4.6		
Lead	0.50	.0079	.008		
Magnesium	100	1.3	1.3		
Manganese	1.0	.12	.13		
Molybdenum	1.0	.049	.029		
Nickel	2.0	.0088	.027		
Phosphorus	60	2.6	4.3		
Potassium	200	2.9	2.9		
Selenium	0.40	.06	.21		
Silver	0.10	.0019	.008		
Sodium	500	4.9	4.9		
Strontium	20	.01	.015		
Thallium	0.20	.0024	.005		
Tin	10	.063	1.3		
Titanium	2.0	.059	.092		
Uranium	0.20	.0017	.002		
Vanadium	1.0	.037	.2		
Zinc	10	.21	.96		

Associated samples MP15565: D69158-1, D69158-2, D69158-3, D69158-4, D69158-5, D69158-6, D69158-7, D69158-8, D69158-9

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69158
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15565
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 03/30/15

Metal	D69158-1 Original MS		SpikeLot ICPALL2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	0.26	212	200	105.9	70-130
Barium	anr				
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Magnesium					
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium	anr				
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP15565: D69158-1, D69158-2, D69158-3, D69158-4, D69158-5, D69158-6, D69158-7, D69158-8, D69158-9

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69158
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15565
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 03/30/15

Metal	D69158-1 Original MSD		SpikeLot ICPAL2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.26	213	200	106.4	0.5	20
Barium	anr					
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium	anr					
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP15565: D69158-1, D69158-2, D69158-3, D69158-4, D69158-5, D69158-6, D69158-7, D69158-8, D69158-9

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D69158
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15565
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 03/30/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	208	200	104.0	85-115
Barium	anr			
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium	anr			
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP15565: D69158-1, D69158-2, D69158-3, D69158-4, D69158-5, D69158-6, D69158-7, D69158-8, D69158-9

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D69158
Account: NEWFCOD - Newfields, Inc.
Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15566
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 03/30/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.1	2		
Antimony	0.40	.0022	.011		
Arsenic	0.20	.017	.044		
Barium	2.0	.016	.079		
Beryllium	0.20	.016	.069		
Boron	40	.49	2.1		
Cadmium	0.10	.036	.042	-0.077	<0.10
Calcium	400	5.6	12	2.5	<400
Chromium	2.0	.053	.053		
Cobalt	0.20	.0049	.015		
Copper	2.0	.06	.13	0.097	<2.0
Iron	10	3.5	4.6		
Lead	0.50	.0079	.008		
Magnesium	100	1.3	1.3	10.6	<100
Manganese	1.0	.12	.13		
Molybdenum	1.0	.049	.029		
Nickel	2.0	.0088	.027		
Phosphorus	60	2.6	4.3		
Potassium	200	2.9	2.9		
Selenium	0.40	.06	.21		
Silver	0.10	.0019	.008		
Sodium	500	4.9	4.9		
Strontium	20	.01	.015		
Thallium	0.20	.0024	.005		
Tin	10	.063	1.3		
Titanium	2.0	.059	.092		
Uranium	0.20	.0017	.002		
Vanadium	1.0	.037	.2		
Zinc	10	.21	.96	0.56	<10

Associated samples MP15566: D69158-1F, D69158-2F, D69158-3F, D69158-4F, D69158-5F, D69158-6F, D69158-7F

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69158
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15566
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 03/30/15

Metal	D69158-1F Original MS		SpikeLot ICPALL2		QC Limits
			%	Rec	
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium	0.32	107	100	106.7	70-130
Calcium	19300	24600	5000	106.0	70-130
Chromium					
Cobalt					
Copper	4.8	102	100	97.2	70-130
Iron					
Lead					
Magnesium	7830	13000	5000	103.4	70-130
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	156	242	100	86.0	70-130

Associated samples MP15566: D69158-1F, D69158-2F, D69158-3F, D69158-4F, D69158-5F, D69158-6F, D69158-7F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69158
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15566
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 03/30/15

Metal	D69158-1F Original MSD		SpikeLot ICPAL2 % Rec		MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium	0.32	105	100	104.7	1.9	20
Calcium	19300	24200	5000	98.0	1.6	20
Chromium						
Cobalt						
Copper	4.8	101	100	96.2	1.0	20
Iron						
Lead						
Magnesium	7830	12800	5000	99.4	1.6	20
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	156	239	100	83.0	1.2	20

Associated samples MP15566: D69158-1F, D69158-2F, D69158-3F, D69158-4F, D69158-5F, D69158-6F, D69158-7F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D69158
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15566
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 03/30/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium	108	100	108.0	85-115
Calcium	5130	5000	102.6	85-115
Chromium				
Cobalt				
Copper	101	100	101.0	85-115
Iron				
Lead				
Magnesium	5250	5000	105.0	85-115
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	98.0	100	98.0	85-115

Associated samples MP15566: D69158-1F, D69158-2F, D69158-3F, D69158-4F, D69158-5F, D69158-6F, D69158-7F

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



05/15/15

Technical Report for

Newfields, Inc.

Eagle Mine, Minturn, CO

Accutest Job Number: D69607

Sampling Date: 04/07/15

Report to:

Newfields, Inc.
730 17th Street, Suite 925
Denver, CO 80202
ksitler@newfields.com

ATTN: Kerri Sitler

Total number of pages in report: **18**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Scott Heideman
Laboratory Director

Client Service contact: Janel Mulholland 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Summary of Hits	5
Section 4: Sample Results	6
4.1: D69607-1: BW-9R	7
4.2: D69607-2: BTS-1	8
4.3: D69607-3: BTS-2	9
4.4: D69607-4: EDS-3	10
Section 5: Misc. Forms	11
5.1: Chain of Custody	12
Section 6: Metals Analysis - QC Data Summaries	14
6.1: Prep QC MP15684: As	15

1

2

3

4

5

6



Sample Summary

Newfields, Inc.

Job No: D69607

Eagle Mine, Minturn, CO

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D69607-1	04/07/15	16:00 DRH	04/10/15	AQ	Ground Water	BW-9R
D69607-2	04/07/15	16:30 DRH	04/10/15	AQ	Ground Water	BTS-1
D69607-3	04/07/15	16:35 DRH	04/10/15	AQ	Ground Water	BTS-2
D69607-4	04/07/15	17:00 DRH	04/10/15	AQ	Ground Water	EDS-3



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Newfields, Inc.

Job No D69607

Site: Eagle Mine, Minturn, CO

Report Date 5/15/2015 3:39:44 PM

On 04/10/2015, 4 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 5.1 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D69607 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method EPA 200.8

Matrix: AQ

Batch ID: MP15684

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D69606-1FAMS, D69606-1FAMSD were used as the QC samples for the metals analysis.

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

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D69607
Account: Newfields, Inc.
Project: Eagle Mine, Minturn, CO
Collected: 04/07/15



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D69607-1	BW-9R					
Arsenic		2.7	0.20	0.044	ug/l	EPA 200.8
D69607-2	BTS-1					
Arsenic		18.3	0.20	0.044	ug/l	EPA 200.8
D69607-3	BTS-2					
Arsenic		17.7	0.20	0.044	ug/l	EPA 200.8
D69607-4	EDS-3					
Arsenic		1.3	0.20	0.044	ug/l	EPA 200.8

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: BW-9R	Date Sampled: 04/07/15
Lab Sample ID: D69607-1	Date Received: 04/10/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.1
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.7	0.20	0.044	ug/l	1	04/15/15	04/24/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6051

(2) Prep QC Batch: MP15684

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: BTS-1 Lab Sample ID: D69607-2 Matrix: AQ - Ground Water Project: Eagle Mine, Minturn, CO	Date Sampled: 04/07/15 Date Received: 04/10/15 Percent Solids: n/a
---	---

4.2
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	18.3	0.20	0.044	ug/l	1	04/15/15	04/27/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6052

(2) Prep QC Batch: MP15684

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: BTS-2 Lab Sample ID: D69607-3 Matrix: AQ - Ground Water Project: Eagle Mine, Minturn, CO	Date Sampled: 04/07/15 Date Received: 04/10/15 Percent Solids: n/a
---	---

4.3
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	17.7	0.20	0.044	ug/l	1	04/15/15	04/27/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6052

(2) Prep QC Batch: MP15684

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: EDS-3	Date Sampled: 04/07/15
Lab Sample ID: D69607-4	Date Received: 04/10/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.3	0.20	0.044	ug/l	1	04/15/15	04/24/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6051

(2) Prep QC Batch: MP15684

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.4
 4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Job Number: D69607 **Client:** NEWFIELDS **Project:** EAGLE
Date / Time Received: 4/10/2015 10:00:00 AM **Delivery Method:** _____ **Airbill #'s:** ups
Cooler Temps (Initial/Adjusted): #1: (5.1/5.1):

Cooler Security		<u>Y or N</u>			<u>Y or N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Cooler Temperature		<u>Y or N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	<u>IR Gun;</u>	
3. Cooler media:	<u>Ice (Bag)</u>	
4. No. Coolers:	<u>1</u>	

Quality Control Preservation	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Sample Integrity - Documentation		<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	

Sample Integrity - Condition		<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
3. Condition of sample:	<u>Intact</u>			

Sample Integrity - Instructions	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.1
5

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D69607
Account: NEWFCOD - Newfields, Inc.
Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15684
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 04/15/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.1	2		
Antimony	0.40	.0022	.011		
Arsenic	0.20	.017	.044	-0.0080	<0.20
Barium	2.0	.016	.079		
Beryllium	0.20	.016	.069		
Boron	40	.49	2.1		
Cadmium	0.10	.036	.042		
Calcium	400	5.6	12		
Chromium	2.0	.053	.053		
Cobalt	0.20	.0049	.015		
Copper	2.0	.06	.13		
Iron	10	3.5	4.6		
Lead	0.50	.0079	.008		
Magnesium	100	1.3	1.3		
Manganese	1.0	.12	.13		
Molybdenum	1.0	.049	.029		
Nickel	2.0	.0088	.027		
Phosphorus	60	2.6	4.3		
Potassium	200	2.9	2.9		
Selenium	0.40	.06	.21		
Silver	0.10	.0019	.008		
Sodium	500	4.9	4.9		
Strontium	20	.01	.015		
Thallium	0.20	.0024	.005		
Tin	10	.063	1.3		
Titanium	2.0	.059	.092		
Uranium	0.20	.0017	.002		
Vanadium	1.0	.037	.2		

Associated samples MP15684: D69607-1, D69607-2, D69607-3, D69607-4

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

6.1.1
6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69607
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15684
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/15/15

Metal	D69606-1FA Original MS	Spikelot ICPALL2	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	2.3	220	200	108.9 70-130
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin	anr			
Titanium				
Uranium				
Vanadium				

Associated samples MP15684: D69607-1, D69607-2, D69607-3, D69607-4

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

6.1.2
6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69607
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15684
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/15/15

Metal	D69606-1FA Original MSD	Spikelot ICPALL2	% Rec	MSD RPD	QC Limit	
Aluminum	anr					
Antimony	anr					
Arsenic	2.3	236	200	116.9	7.0	20
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	anr					
Magnesium						
Manganese	anr					
Molybdenum	anr					
Nickel	anr					
Phosphorus						
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin	anr					
Titanium						
Uranium						
Vanadium						

Associated samples MP15684: D69607-1, D69607-2, D69607-3, D69607-4

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D69607
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15684
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/15/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	218	200	109.0	85-115
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin	anr			
Titanium				
Uranium				
Vanadium				

Associated samples MP15684: D69607-1, D69607-2, D69607-3, D69607-4

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

6.1.3
6



05/15/15

Technical Report for

Newfields, Inc.

Eagle Mine, Minturn, CO

Accutest Job Number: D69701

Sampling Date: 04/13/15

Report to:

Newfields, Inc.
730 17th Street, Suite 925
Denver, CO 80202
ksitler@newfields.com

ATTN: Kerri Sitler

Total number of pages in report: **36**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Scott Heideman
Laboratory Director

Client Service contact: Janel Mulholland 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	5
Section 3: Summary of Hits	6
Section 4: Sample Results	8
4.1: D69701-1A: E-3	9
4.2: D69701-1F: E-3	10
4.3: D69701-2A: T-10	11
4.4: D69701-2F: T-10	12
4.5: D69701-3A: E-10	13
4.6: D69701-3F: E-10	14
4.7: D69701-4A: E-12A	15
4.8: D69701-4F: E-12A	16
4.9: D69701-5A: T-18	17
4.10: D69701-5F: T-18	18
4.11: D69701-6A: E-15	19
4.12: D69701-6F: E-15	20
4.13: D69701-7A: E-22	21
4.14: D69701-7F: E-22	22
4.15: D69701-8A: T-10A	23
4.16: D69701-9A: T-10B	24
Section 5: Misc. Forms	25
5.1: Chain of Custody	26
Section 6: Metals Analysis - QC Data Summaries	28
6.1: Prep QC MP15696: As,Cd,Ca,Cu,Mg,Zn	29
6.2: Prep QC MP15697: As,Cd,Ca,Cu,Mg,Zn	33

1

2

3

4

5

6



Sample Summary

Newfields, Inc.

Job No: D69701

Eagle Mine, Minturn, CO

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
D69701-1A	04/13/15	13:10 SH	04/13/15	AQ	Surface Water	E-3
D69701-1F	04/13/15	13:10 SH	04/13/15	AQ	Surface H2O Filtered	E-3
D69701-2A	04/13/15	13:45 SH	04/13/15	AQ	Surface Water	T-10
D69701-2F	04/13/15	13:45 SH	04/13/15	AQ	Surface H2O Filtered	T-10
D69701-3A	04/13/15	13:30 SH	04/13/15	AQ	Surface Water	E-10
D69701-3F	04/13/15	13:30 SH	04/13/15	AQ	Surface H2O Filtered	E-10
D69701-4A	04/13/15	12:30 SH	04/13/15	AQ	Surface Water	E-12A
D69701-4F	04/13/15	12:30 SH	04/13/15	AQ	Surface H2O Filtered	E-12A
D69701-5A	04/13/15	11:50 SH	04/13/15	AQ	Surface Water	T-18
D69701-5F	04/13/15	11:50 SH	04/13/15	AQ	Surface H2O Filtered	T-18
D69701-6A	04/13/15	11:30 SH	04/13/15	AQ	Surface Water	E-15
D69701-6F	04/13/15	11:30 SH	04/13/15	AQ	Surface H2O Filtered	E-15
D69701-7A	04/13/15	11:10 SH	04/13/15	AQ	Surface Water	E-22



Sample Summary (continued)

Newfields, Inc.

Job No: D69701

Eagle Mine, Minturn, CO

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D69701-7F	04/13/15	11:10 SH	04/13/15	AQ	Surface H2O Filtered	E-22
D69701-8A	04/13/15	12:10 SH	04/13/15	AQ	Surface Water	T-10A
D69701-9A	04/13/15	12:15 SH	04/13/15	AQ	Surface Water	T-10B



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Newfields, Inc.

Job No D69701

Site: Eagle Mine, Minturn, CO

Report Date 5/15/2015 3:36:28 PM

On 04/13/2015, 9 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 13.9 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D69701 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method EPA 200.8

Matrix: AQ **Batch ID:** MP15696

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D69701-5FMS, D69701-5FMSD were used as the QC samples for the metals analysis.

Matrix: AQ **Batch ID:** MP15697

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D69701-6FMS, D69701-6FMSD were used as the QC samples for the metals analysis.

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

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D69701
Account: Newfields, Inc.
Project: Eagle Mine, Minturn, CO
Collected: 04/13/15



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D69701-1A	E-3					
Arsenic		0.31	0.20	0.044	ug/l	EPA 200.8
D69701-1F	E-3					
Calcium		14600	400	12	ug/l	EPA 200.8
Copper		6.2	2.0	0.13	ug/l	EPA 200.8
Magnesium		5740	100	1.3	ug/l	EPA 200.8
Zinc		34.7	10	0.96	ug/l	EPA 200.8
D69701-2A	T-10					
Arsenic		1.0	0.20	0.044	ug/l	EPA 200.8
D69701-2F	T-10					
Cadmium		3.0	0.10	0.042	ug/l	EPA 200.8
Calcium		29300	400	12	ug/l	EPA 200.8
Copper		21.8	2.0	0.13	ug/l	EPA 200.8
Magnesium		23200	100	1.3	ug/l	EPA 200.8
Zinc		1300	10	0.96	ug/l	EPA 200.8
D69701-3A	E-10					
Arsenic		0.26	0.20	0.044	ug/l	EPA 200.8
D69701-3F	E-10					
Cadmium		0.092 J	0.10	0.042	ug/l	EPA 200.8
Calcium		14000	400	12	ug/l	EPA 200.8
Copper		5.1	2.0	0.13	ug/l	EPA 200.8
Magnesium		5490	100	1.3	ug/l	EPA 200.8
Zinc		62.8	10	0.96	ug/l	EPA 200.8
D69701-4A	E-12A					
Arsenic		0.31	0.20	0.044	ug/l	EPA 200.8
D69701-4F	E-12A					
Cadmium		0.12	0.10	0.042	ug/l	EPA 200.8
Calcium		13900	400	12	ug/l	EPA 200.8
Copper		5.0	2.0	0.13	ug/l	EPA 200.8
Magnesium		5510	100	1.3	ug/l	EPA 200.8

Summary of Hits

Job Number: D69701
Account: Newfields, Inc.
Project: Eagle Mine, Minturn, CO
Collected: 04/13/15



Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
		Zinc	87.5	10	0.96	ug/l EPA 200.8
D69701-5A	T-18					
		Arsenic	0.16 J	0.20	0.044	ug/l EPA 200.8
D69701-5F	T-18					
		Calcium	5790	400	12	ug/l EPA 200.8
		Copper	2.1	2.0	0.13	ug/l EPA 200.8
		Magnesium	1620	100	1.3	ug/l EPA 200.8
		Zinc	22.3	10	0.96	ug/l EPA 200.8
D69701-6A	E-15					
		Arsenic	0.32	0.20	0.044	ug/l EPA 200.8
D69701-6F	E-15					
		Cadmium	0.17	0.10	0.042	ug/l EPA 200.8
		Calcium	17300	400	12	ug/l EPA 200.8
		Copper	3.9	2.0	0.13	ug/l EPA 200.8
		Magnesium	6710	100	1.3	ug/l EPA 200.8
		Zinc	67.9	10	0.96	ug/l EPA 200.8
D69701-7A	E-22					
		Arsenic	0.29	0.20	0.044	ug/l EPA 200.8
D69701-7F	E-22					
		Cadmium	0.17	0.10	0.042	ug/l EPA 200.8
		Calcium	18300	400	12	ug/l EPA 200.8
		Copper	3.8	2.0	0.13	ug/l EPA 200.8
		Magnesium	6920	100	1.3	ug/l EPA 200.8
		Zinc	68.3	10	0.96	ug/l EPA 200.8
D69701-8A	T-10A					
		Arsenic	0.22	0.20	0.044	ug/l EPA 200.8
D69701-9A	T-10B					
		Arsenic	0.24	0.20	0.044	ug/l EPA 200.8



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: E-3 Lab Sample ID: D69701-1A Matrix: AQ - Surface Water Project: Eagle Mine, Minturn, CO	Date Sampled: 04/13/15 Date Received: 04/13/15 Percent Solids: n/a
---	---

Total Recoverable Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.31	0.20	0.044	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6056

(2) Prep QC Batch: MP15696

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.1
4

Report of Analysis

Client Sample ID: E-3 Lab Sample ID: D69701-1F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 04/13/15 Date Received: 04/13/15 Percent Solids: n/a
--	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.042 U	0.10	0.042	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	14600	400	12	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	6.2	2.0	0.13	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	5740	100	1.3	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	34.7	10	0.96	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6056

(2) Prep QC Batch: MP15696

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.2
4

Report of Analysis

Client Sample ID: T-10	Date Sampled: 04/13/15
Lab Sample ID: D69701-2A	Date Received: 04/13/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.3
4

Total Recoverable Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.0	0.20	0.044	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6056

(2) Prep QC Batch: MP15696

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: T-10 Lab Sample ID: D69701-2F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 04/13/15 Date Received: 04/13/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	3.0	0.10	0.042	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	29300	400	12	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	21.8	2.0	0.13	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	23200	100	1.3	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	1300	10	0.96	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6056

(2) Prep QC Batch: MP15696

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.4
4

Report of Analysis

Client Sample ID: E-10	Date Sampled: 04/13/15
Lab Sample ID: D69701-3A	Date Received: 04/13/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.5
4

Total Recoverable Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.26	0.20	0.044	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6056

(2) Prep QC Batch: MP15696

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: E-10 Lab Sample ID: D69701-3F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 04/13/15 Date Received: 04/13/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.092 J	0.10	0.042	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	14000	400	12	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	5.1	2.0	0.13	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	5490	100	1.3	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	62.8	10	0.96	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6056

(2) Prep QC Batch: MP15696

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.6
4

Report of Analysis

Client Sample ID: E-12A	Date Sampled: 04/13/15
Lab Sample ID: D69701-4A	Date Received: 04/13/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Recoverable Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.31	0.20	0.044	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6056

(2) Prep QC Batch: MP15696

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.7
 4

Report of Analysis

Client Sample ID: E-12A Lab Sample ID: D69701-4F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 04/13/15 Date Received: 04/13/15 Percent Solids: n/a
--	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.12	0.10	0.042	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	13900	400	12	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	5.0	2.0	0.13	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	5510	100	1.3	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	87.5	10	0.96	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6056

(2) Prep QC Batch: MP15696

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.8
4

Report of Analysis

Client Sample ID: T-18 Lab Sample ID: D69701-5A Matrix: AQ - Surface Water Project: Eagle Mine, Minturn, CO	Date Sampled: 04/13/15 Date Received: 04/13/15 Percent Solids: n/a
--	---

4.9
4

Total Recoverable Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.16 J	0.20	0.044	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6056

(2) Prep QC Batch: MP15696

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: T-18		Date Sampled: 04/13/15
Lab Sample ID: D69701-5F		Date Received: 04/13/15
Matrix: AQ - Surface H2O Filtered		Percent Solids: n/a
Project: Eagle Mine, Minturn, CO		

4.10
4

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.042 U	0.10	0.042	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	5790	400	12	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	2.1	2.0	0.13	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	1620	100	1.3	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	22.3	10	0.96	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6056

(2) Prep QC Batch: MP15696

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: E-15 Lab Sample ID: D69701-6A Matrix: AQ - Surface Water Project: Eagle Mine, Minturn, CO	Date Sampled: 04/13/15 Date Received: 04/13/15 Percent Solids: n/a
--	---

4.11
4

Total Recoverable Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.32	0.20	0.044	ug/l	1	04/15/15	04/29/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6063

(2) Prep QC Batch: MP15697

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: E-15 Lab Sample ID: D69701-6F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 04/13/15 Date Received: 04/13/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.17	0.10	0.042	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	17300	400	12	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	3.9	2.0	0.13	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	6710	100	1.3	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	67.9	10	0.96	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6060

(2) Prep QC Batch: MP15697

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.12
4

Report of Analysis

Client Sample ID: E-22	Date Sampled: 04/13/15
Lab Sample ID: D69701-7A	Date Received: 04/13/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.13
4

Total Recoverable Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.29	0.20	0.044	ug/l	1	04/15/15	04/29/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6063

(2) Prep QC Batch: MP15697

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: E-22 Lab Sample ID: D69701-7F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 04/13/15 Date Received: 04/13/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.17	0.10	0.042	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	18300	400	12	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	3.8	2.0	0.13	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	6920	100	1.3	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	68.3	10	0.96	ug/l	1	04/15/15	04/28/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6060

(2) Prep QC Batch: MP15697

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.14
4

Report of Analysis

Client Sample ID: T-10A Lab Sample ID: D69701-8A Matrix: AQ - Surface Water Project: Eagle Mine, Minturn, CO	Date Sampled: 04/13/15 Date Received: 04/13/15 Percent Solids: n/a
---	---

4.15
4

Total Recoverable Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.22	0.20	0.044	ug/l	1	04/15/15	04/29/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6063

(2) Prep QC Batch: MP15697

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: T-10B Lab Sample ID: D69701-9A Matrix: AQ - Surface Water Project: Eagle Mine, Minturn, CO	Date Sampled: 04/13/15 Date Received: 04/13/15 Percent Solids: n/a
---	---

4.16
4

Total Recoverable Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.24	0.20	0.044	ug/l	1	04/15/15	04/29/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6063

(2) Prep QC Batch: MP15697

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Job Number: D69701 **Client:** NEWFIELDS **Project:** EAGLE
Date / Time Received: 4/13/2015 4:51:00 PM **Delivery Method:** _____ **Airbill #'s:** hd
Cooler Temps (Initial/Adjusted): #1: (13.9/13.9):

Cooler Security

	<u>Y or N</u>			<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smp Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Cooler Temperature

	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	<u>IR Gun;</u>	
3. Cooler media:	<u>Ice (Bag)</u>	
4. No. Coolers:	<u>1</u>	

Quality Control Preservation

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Sample Integrity - Documentation

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Sample Integrity - Condition

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	<u>Intact</u>		

Sample Integrity - Instructions

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.1
5

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D69701
Account: NEWFCOD - Newfields, Inc.
Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15696
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 04/15/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.1	2		
Antimony	0.40	.0022	.011		
Arsenic	0.20	.017	.044	0.024	<0.20
Barium	2.0	.016	.079		
Beryllium	0.20	.016	.069		
Boron	40	.49	2.1		
Cadmium	0.10	.036	.042	-0.070	<0.10
Calcium	400	5.6	12	20.1	<400
Chromium	2.0	.053	.053		
Cobalt	0.20	.0049	.015		
Copper	2.0	.06	.13	0.049	<2.0
Iron	10	3.5	4.6		
Lead	0.50	.0079	.008		
Magnesium	100	1.3	1.3	8.0	<100
Manganese	1.0	.12	.13		
Molybdenum	1.0	.049	.029		
Nickel	2.0	.0088	.027		
Phosphorus	60	2.6	4.3		
Potassium	200	2.9	2.9		
Selenium	0.40	.06	.21		
Silver	0.10	.0019	.008		
Sodium	500	4.9	4.9		
Strontium	20	.01	.015		
Thallium	0.20	.0024	.005		
Tin	10	.063	1.3		
Titanium	2.0	.059	.092		
Uranium	0.20	.0017	.002		
Vanadium	1.0	.037	.2		
Zinc	10	.21	.96	0.41	<10

Associated samples MP15696: D69701-1A, D69701-1F, D69701-2A, D69701-2F, D69701-3A, D69701-3F, D69701-4A, D69701-4F, D69701-5A, D69701-5F

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69701
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15696
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/15/15

Metal	D69701-5F Original MS		SpikeLot ICPAL2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	0.16	207	200	103.4	70-130
Barium					
Beryllium					
Boron					
Cadmium	0.0	94.2	100	94.2	70-130
Calcium	5790	10700	5000	98.2	70-130
Chromium					
Cobalt					
Copper	2.1	105	100	102.9	70-130
Iron					
Lead					
Magnesium	1620	6660	5000	100.8	70-130
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	22.3	114	100	91.7	70-130

Associated samples MP15696: D69701-1A, D69701-1F, D69701-2A, D69701-2F, D69701-3A, D69701-3F, D69701-4A, D69701-4F, D69701-5A, D69701-5F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69701
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15696
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/15/15

Metal	D69701-5F Original MSD		SpikeLot ICPAL2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.16	205	200	102.4	7.6	20
Barium						
Beryllium						
Boron						
Cadmium	0.0	94.3	100	94.3	0.1	20
Calcium	5790	10700	5000	98.2	0.0	20
Chromium						
Cobalt						
Copper	2.1	106	100	103.9	0.9	20
Iron						
Lead						
Magnesium	1620	6740	5000	102.4	1.2	20
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	22.3	115	100	92.7	0.9	20

Associated samples MP15696: D69701-1A, D69701-1F, D69701-2A, D69701-2F, D69701-3A, D69701-3F, D69701-4A, D69701-4F, D69701-5A, D69701-5F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D69701
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15696
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/15/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	215	200	107.5	85-115
Barium				
Beryllium				
Boron				
Cadmium	97.4	100	97.4	85-115
Calcium	5140	5000	102.8	85-115
Chromium				
Cobalt				
Copper	105	100	105.0	85-115
Iron				
Lead				
Magnesium	5200	5000	104.0	85-115
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	99.1	100	99.1	85-115

Associated samples MP15696: D69701-1A, D69701-1F, D69701-2A, D69701-2F, D69701-3A, D69701-3F, D69701-4A, D69701-4F, D69701-5A, D69701-5F

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D69701
Account: NEWFCOD - Newfields, Inc.
Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15697
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 04/15/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.1	2		
Antimony	0.40	.0022	.011		
Arsenic	0.20	.017	.044	-0.0010	<0.20
Barium	2.0	.016	.079		
Beryllium	0.20	.016	.069		
Boron	40	.49	2.1		
Cadmium	0.10	.036	.042	-0.015	<0.10
Calcium	400	5.6	12	20.0	<400
Chromium	2.0	.053	.053		
Cobalt	0.20	.0049	.015		
Copper	2.0	.06	.13	0.092	<2.0
Iron	10	3.5	4.6		
Lead	0.50	.0079	.008		
Magnesium	100	1.3	1.3	10.8	<100
Manganese	1.0	.12	.13		
Molybdenum	1.0	.049	.029		
Nickel	2.0	.0088	.027		
Phosphorus	60	2.6	4.3		
Potassium	200	2.9	2.9		
Selenium	0.40	.06	.21		
Silver	0.10	.0019	.008		
Sodium	500	4.9	4.9		
Strontium	20	.01	.015		
Thallium	0.20	.0024	.005		
Tin	10	.063	1.3		
Titanium	2.0	.059	.092		
Uranium	0.20	.0017	.002		
Vanadium	1.0	.037	.2		
Zinc	10	.21	.96	0.66	<10

Associated samples MP15697: D69701-6A, D69701-6F, D69701-7A, D69701-7F, D69701-8A, D69701-9A

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69701
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15697
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/15/15

Metal	D69701-6F Original MS		SpikeLot ICPAL2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	0.20	203	200	101.4	70-130
Barium					
Beryllium					
Boron					
Cadmium	0.17	107	100	106.8	70-130
Calcium	17300	22400	5000	102.0	70-130
Chromium					
Cobalt					
Copper	3.9	106	100	102.1	70-130
Iron					
Lead					
Magnesium	6710	11400	5000	93.8	70-130
Manganese	anr				
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	67.9	157	100	89.1	70-130

Associated samples MP15697: D69701-6A, D69701-6F, D69701-7A, D69701-7F, D69701-8A, D69701-9A

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D69701
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15697
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/15/15

Metal	D69701-6F Original MSD		SpikeLot ICPALL2 % Rec		MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.20	208	200	103.9	2.4	20
Barium						
Beryllium						
Boron						
Cadmium	0.17	107	100	106.8	0.0	20
Calcium	17300	22400	5000	102.0	0.0	20
Chromium						
Cobalt						
Copper	3.9	105	100	101.1	0.9	20
Iron						
Lead						
Magnesium	6710	11500	5000	95.8	0.9	20
Manganese	anr					
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	67.9	159	100	91.1	1.3	20

Associated samples MP15697: D69701-6A, D69701-6F, D69701-7A, D69701-7F, D69701-8A, D69701-9A

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D69701
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15697
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/15/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	206	200	103.0	85-115
Barium				
Beryllium				
Boron				
Cadmium	110	100	110.0	85-115
Calcium	5300	5000	106.0	85-115
Chromium				
Cobalt				
Copper	105	100	105.0	85-115
Iron				
Lead				
Magnesium	5110	5000	102.2	85-115
Manganese	anr			
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	99.5	100	99.5	85-115

Associated samples MP15697: D69701-6A, D69701-6F, D69701-7A, D69701-7F, D69701-8A, D69701-9A

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

Technical Report for

Newfields, Inc.

Eagle Mine, Minturn, CO

Accutest Job Number: D70092

Sampling Date: 04/27/15

Report to:

Newfields, Inc.
730 17th Street, Suite 925
Denver, CO 80202
ksitler@newfields.com

ATTN: Kerri Sitler

Total number of pages in report: **37**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



Scott Heideman
Laboratory Director

Client Service contact: Janel Mulholland 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	5
Section 3: Summary of Hits	6
Section 4: Sample Results	9
4.1: D70092-1: E-22	10
4.2: D70092-1F: E-22	11
4.3: D70092-2: E-15	12
4.4: D70092-2F: E-15	13
4.5: D70092-3: T-18	14
4.6: D70092-3F: T-18	15
4.7: D70092-4: T10A	16
4.8: D70092-5: T-10B	17
4.9: D70092-6: E-12A	18
4.10: D70092-6F: E-12A	19
4.11: D70092-7: E-3	20
4.12: D70092-7F: E-3	21
4.13: D70092-8: E-10	22
4.14: D70092-8F: E-10	23
4.15: D70092-9: T-10	24
4.16: D70092-9F: T-10	25
Section 5: Misc. Forms	26
5.1: Chain of Custody	27
Section 6: Metals Analysis - QC Data Summaries	29
6.1: Prep QC MP15798: As	30
6.2: Prep QC MP15799: Cd,Ca,Cu,Mg,Zn	34

1

2

3

4

5

6



Sample Summary

Newfields, Inc.

Job No: D70092

Eagle Mine, Minturn, CO

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
D70092-1	04/27/15	11:20 SH	04/27/15	AQ	Surface Water	E-22
D70092-1F	04/27/15	11:20 SH	04/27/15	AQ	Surface H2O Filtered	E-22
D70092-2	04/27/15	11:40 SH	04/27/15	AQ	Surface Water	E-15
D70092-2F	04/27/15	11:40 SH	04/27/15	AQ	Surface H2O Filtered	E-15
D70092-3	04/27/15	11:50 SH	04/27/15	AQ	Surface Water	T-18
D70092-3F	04/27/15	11:50 SH	04/27/15	AQ	Surface H2O Filtered	T-18
D70092-4	04/27/15	12:05 SH	04/27/15	AQ	Surface Water	T10A
D70092-5	04/27/15	12:00 SH	04/27/15	AQ	Surface Water	T-10B
D70092-6	04/27/15	12:30 SH	04/27/15	AQ	Surface Water	E-12A
D70092-6F	04/27/15	12:30 SH	04/27/15	AQ	Surface H2O Filtered	E-12A
D70092-7	04/27/15	13:00 SH	04/27/15	AQ	Surface Water	E-3
D70092-7F	04/27/15	13:00 SH	04/27/15	AQ	Surface H2O Filtered	E-3
D70092-8	04/27/15	13:20 SH	04/27/15	AQ	Surface Water	E-10



Sample Summary (continued)

Newfields, Inc.

Job No: D70092

Eagle Mine, Minturn, CO

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D70092-8F	04/27/15	13:20 SH	04/27/15	AQ	Surface H2O Filtered	E-10
D70092-9	04/27/15	13:30 SH	04/27/15	AQ	Surface Water	T-10
D70092-9F	04/27/15	13:30 SH	04/27/15	AQ	Surface H2O Filtered	T-10



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Newfields, Inc.

Job No D70092

Site: Eagle Mine, Minturn, CO

Report Date 5/15/2015 3:33:45 PM

On 04/27/2015, 9 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 4.2 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D70092 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method EPA 200.8

Matrix: AQ **Batch ID:** MP15798

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D70092-1MS, D70092-1MSD were used as the QC samples for the metals analysis.

Matrix: AQ **Batch ID:** MP15799

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D70092-1FMS, D70092-1FMSD were used as the QC samples for the metals analysis.

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

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D70092
Account: Newfields, Inc.
Project: Eagle Mine, Minturn, CO
Collected: 04/27/15



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D70092-1	E-22					
Arsenic		0.30	0.20	0.044	ug/l	EPA 200.8
D70092-1F	E-22					
Cadmium		0.19	0.10	0.042	ug/l	EPA 200.8
Calcium		17900	400	12	ug/l	EPA 200.8
Copper		4.1	2.0	0.13	ug/l	EPA 200.8
Magnesium		6720	100	1.3	ug/l	EPA 200.8
Zinc		65.6	10	0.96	ug/l	EPA 200.8
D70092-2	E-15					
Arsenic		0.21	0.20	0.044	ug/l	EPA 200.8
D70092-2F	E-15					
Cadmium		0.30	0.10	0.042	ug/l	EPA 200.8
Calcium		17600	400	12	ug/l	EPA 200.8
Copper		4.4	2.0	0.13	ug/l	EPA 200.8
Magnesium		6850	100	1.3	ug/l	EPA 200.8
Zinc		111	10	0.96	ug/l	EPA 200.8
D70092-3	T-18					
Arsenic		0.20	0.20	0.044	ug/l	EPA 200.8
D70092-3F	T-18					
Calcium		5810	400	12	ug/l	EPA 200.8
Copper		1.9 J	2.0	0.13	ug/l	EPA 200.8
Magnesium		1690	100	1.3	ug/l	EPA 200.8
Zinc		20.8	10	0.96	ug/l	EPA 200.8
D70092-4	T10A					
Arsenic		0.21	0.20	0.044	ug/l	EPA 200.8
D70092-5	T-10B					
Arsenic		0.13 J	0.20	0.044	ug/l	EPA 200.8

Summary of Hits

Job Number: D70092
Account: Newfields, Inc.
Project: Eagle Mine, Minturn, CO
Collected: 04/27/15



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D70092-6	E-12A					
Arsenic		0.32	0.20	0.044	ug/l	EPA 200.8
D70092-6F	E-12A					
Cadmium		0.42	0.10	0.042	ug/l	EPA 200.8
Calcium		15800	400	12	ug/l	EPA 200.8
Copper		6.1	2.0	0.13	ug/l	EPA 200.8
Magnesium		5940	100	1.3	ug/l	EPA 200.8
Zinc		128	10	0.96	ug/l	EPA 200.8
D70092-7	E-3					
Arsenic		0.21	0.20	0.044	ug/l	EPA 200.8
D70092-7F	E-3					
Cadmium		0.063 J	0.10	0.042	ug/l	EPA 200.8
Calcium		15400	400	12	ug/l	EPA 200.8
Copper		6.8	2.0	0.13	ug/l	EPA 200.8
Magnesium		5760	100	1.3	ug/l	EPA 200.8
Zinc		26.9	10	0.96	ug/l	EPA 200.8
D70092-8	E-10					
Arsenic		0.20	0.20	0.044	ug/l	EPA 200.8
D70092-8F	E-10					
Cadmium		0.21	0.10	0.042	ug/l	EPA 200.8
Calcium		14800	400	12	ug/l	EPA 200.8
Copper		5.8	2.0	0.13	ug/l	EPA 200.8
Magnesium		5550	100	1.3	ug/l	EPA 200.8
Zinc		74.0	10	0.96	ug/l	EPA 200.8
D70092-9	T-10					
Arsenic		1.1	0.20	0.044	ug/l	EPA 200.8
D70092-9F	T-10					
Cadmium		3.2	0.10	0.042	ug/l	EPA 200.8
Calcium		33000	400	12	ug/l	EPA 200.8
Copper		19.6	2.0	0.13	ug/l	EPA 200.8

Summary of Hits

Job Number: D70092
Account: Newfields, Inc.
Project: Eagle Mine, Minturn, CO
Collected: 04/27/15



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
		26400	100	1.3	ug/l	EPA 200.8
		1310	10	0.96	ug/l	EPA 200.8



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: E-22	Date Sampled: 04/27/15
Lab Sample ID: D70092-1	Date Received: 04/27/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.30	0.20	0.044	ug/l	1	04/29/15	05/04/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6081

(2) Prep QC Batch: MP15798

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.1
 4

Report of Analysis

Client Sample ID: E-22 Lab Sample ID: D70092-1F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 04/27/15 Date Received: 04/27/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.19	0.10	0.042	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	17900	400	12	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	4.1	2.0	0.13	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	6720	100	1.3	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	65.6	10	0.96	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6084

(2) Prep QC Batch: MP15799

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.2
4

Report of Analysis

Client Sample ID: E-15	Date Sampled: 04/27/15
Lab Sample ID: D70092-2	Date Received: 04/27/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.3
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.21	0.20	0.044	ug/l	1	04/29/15	05/04/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6081

(2) Prep QC Batch: MP15798

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: E-15 Lab Sample ID: D70092-2F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 04/27/15 Date Received: 04/27/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.30	0.10	0.042	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	17600	400	12	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	4.4	2.0	0.13	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	6850	100	1.3	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	111	10	0.96	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6084

(2) Prep QC Batch: MP15799

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.4
4

Report of Analysis

Client Sample ID: T-18	Date Sampled: 04/27/15
Lab Sample ID: D70092-3	Date Received: 04/27/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.20	0.20	0.044	ug/l	1	04/29/15	05/04/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6081

(2) Prep QC Batch: MP15798

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: T-18 Lab Sample ID: D70092-3F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 04/27/15 Date Received: 04/27/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.042 U	0.10	0.042	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	5810	400	12	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	1.9 J	2.0	0.13	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	1690	100	1.3	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	20.8	10	0.96	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6084

(2) Prep QC Batch: MP15799

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.6
4

Report of Analysis

Client Sample ID: T10A	Date Sampled: 04/27/15
Lab Sample ID: D70092-4	Date Received: 04/27/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.21	0.20	0.044	ug/l	1	04/29/15	05/04/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6081

(2) Prep QC Batch: MP15798

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.7
 4

Report of Analysis

Client Sample ID: T-10B Lab Sample ID: D70092-5 Matrix: AQ - Surface Water Project: Eagle Mine, Minturn, CO	Date Sampled: 04/27/15 Date Received: 04/27/15 Percent Solids: n/a
--	---

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.13 J	0.20	0.044	ug/l	1	04/29/15	05/04/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6081

(2) Prep QC Batch: MP15798

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.8
4

Report of Analysis

Client Sample ID: E-12A Lab Sample ID: D70092-6 Matrix: AQ - Surface Water Project: Eagle Mine, Minturn, CO	Date Sampled: 04/27/15 Date Received: 04/27/15 Percent Solids: n/a
--	---

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.32	0.20	0.044	ug/l	1	04/29/15	05/04/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6081

(2) Prep QC Batch: MP15798

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.9
4

Report of Analysis

Client Sample ID: E-12A Lab Sample ID: D70092-6F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 04/27/15 Date Received: 04/27/15 Percent Solids: n/a
--	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.42	0.10	0.042	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	15800	400	12	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	6.1	2.0	0.13	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	5940	100	1.3	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	128	10	0.96	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6084

(2) Prep QC Batch: MP15799

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.10
4

Report of Analysis

Client Sample ID: E-3	Date Sampled: 04/27/15
Lab Sample ID: D70092-7	Date Received: 04/27/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.11

4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.21	0.20	0.044	ug/l	1	04/29/15	05/04/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6081

(2) Prep QC Batch: MP15798

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: E-3 Lab Sample ID: D70092-7F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 04/27/15 Date Received: 04/27/15 Percent Solids: n/a
--	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.063 J	0.10	0.042	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	15400	400	12	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	6.8	2.0	0.13	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	5760	100	1.3	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	26.9	10	0.96	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6084

(2) Prep QC Batch: MP15799

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.12
4

Report of Analysis

Client Sample ID: E-10	Date Sampled: 04/27/15
Lab Sample ID: D70092-8	Date Received: 04/27/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.13
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.20	0.20	0.044	ug/l	1	04/29/15	05/04/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6081

(2) Prep QC Batch: MP15798

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: E-10 Lab Sample ID: D70092-8F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 04/27/15 Date Received: 04/27/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	0.21	0.10	0.042	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	14800	400	12	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	5.8	2.0	0.13	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	5550	100	1.3	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	74.0	10	0.96	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6084

(2) Prep QC Batch: MP15799

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.14
4

Report of Analysis

Client Sample ID: T-10	Date Sampled: 04/27/15
Lab Sample ID: D70092-9	Date Received: 04/27/15
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Eagle Mine, Minturn, CO	

4.15
4

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.1	0.20	0.044	ug/l	1	04/29/15	05/04/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6081

(2) Prep QC Batch: MP15798

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: T-10 Lab Sample ID: D70092-9F Matrix: AQ - Surface H2O Filtered Project: Eagle Mine, Minturn, CO	Date Sampled: 04/27/15 Date Received: 04/27/15 Percent Solids: n/a
---	---

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	3.2	0.10	0.042	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Calcium	33000	400	12	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Copper	19.6	2.0	0.13	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	26400	100	1.3	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²
Zinc	1310	10	0.96	ug/l	1	04/29/15	05/06/15 NT	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA6084

(2) Prep QC Batch: MP15799

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.16
4

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Mountain States
4036 Youngfield Street Wheat Ridge, Co 80033
TEL 303-425-6021 877-737-4521
FAX 303-425-6021

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # D70092

Client / Reporting Information			Project Information										Requested Analysis (see TEST CODE sheet)										Matrix Codes											
Company Name Newfields			Project Name Eagle										2008 Diss. Metals Cu, Cd, Co, Zn, Ni, Pb Total As. 200.8 near +										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB- Equipment Blank RB- Rinse Blank TB-Trip Blank											
Street Address			Billing Information (If different from Report to)																															
City State Zip			Company Name																															
Project Contact K. Sittler			Street Address																															
Phone # Fax #			City State Zip																															
Sampler(s) Name(s) Phone # S. Hinrichs 3-941-1419			Project Manager Attention: PO#																															
MEOH/DI Viol #			Collection																					Number of preserved Bottles										LAB USE ONLY
Field ID / Point of Collection			Date Time																					Matrix # of bottles										
1 E-22			4/27/15 1120																					SH SW 2										01
2 E-15			1140										2										02											
3 T-18			1150										2										03											
4 T-10 A			1205										1										04											
5 T-10 b			1200										1										05											
6 E-12 A			1230										2										06											
7 E-3			1300										2										07											
8 E-10			1320										2										08											
9 T-10			1330										2										09											

Turnaround Time (Business days) <input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> Std. 5 Business Days (By Contract only) <input type="checkbox"/> 5 Day SH <input type="checkbox"/> 3 Day EMERGENC <input type="checkbox"/> 2 Day EMERGENC <input type="checkbox"/> 1 Day EMERGENC		Approved By (Accutest PM): / Date: _____		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> State Forms <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "B" +Narrative <input type="checkbox"/> PDF <input type="checkbox"/> FULLTI (Level 3+4)		Comments / Special Instructions	
Emergency & Rush T/A date available VIA Lablink		Commercial "A" = Results Only Commercial "B" = Results + QC Summary					

Sample Custody must be documented below each time samples change possession, including courier delivery.							
Relinquished by: <i>[Signature]</i> Date Time: 4/27/15 1745		Received By: <i>[Signature]</i> 1		Relinquished by: 2		Received By: 2	
Relinquished by: 3		Received By: 3		Relinquished by: 4		Received By: 4	
Relinquished by: 5		Received By: 5		Custody Seal # <i>410</i> <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Preserved where applicable <input type="checkbox"/> On Ice <input checked="" type="checkbox"/> Cooler Temp: <i>4.3</i>	

5.1
5

Accutest Job Number: D70092 **Client:** NEWFIELDS **Project:** EAGLE
Date / Time Received: 4/27/2015 5:45:00 PM **Delivery Method:** _____ **Airbill #'s:** HD
Cooler Temps (Initial/Adjusted): #1: (4.2/4.2):

Cooler Security

	<u>Y or N</u>			<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smp Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Cooler Temperature

	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	<u>Bar Therm;</u>	
3. Cooler media:	<u>Ice (Bag)</u>	
4. No. Coolers:	<u>1</u>	

Quality Control Preservation

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Comments

Sample Integrity - Documentation

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Sample Integrity - Condition

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	<u>Intact</u>		

Sample Integrity - Instructions

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.1
5

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D70092
Account: NEWFCOD - Newfields, Inc.
Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15798
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 04/29/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.1	2		
Antimony	0.40	.0022	.011		
Arsenic	0.20	.017	.044	-0.0070	<0.20
Barium	2.0	.016	.079		
Beryllium	0.20	.016	.069		
Boron	40	.49	2.1		
Cadmium	0.10	.036	.042		
Calcium	400	5.6	12		
Chromium	2.0	.053	.053		
Cobalt	0.20	.0049	.015		
Copper	2.0	.06	.13		
Iron	10	3.5	4.6		
Lead	0.50	.0079	.008		
Magnesium	100	1.3	1.3		
Manganese	1.0	.12	.13		
Molybdenum	1.0	.049	.029		
Nickel	2.0	.0088	.027		
Phosphorus	60	2.6	4.3		
Potassium	200	2.9	2.9		
Selenium	0.40	.06	.21		
Silver	0.10	.0019	.008		
Sodium	500	4.9	4.9		
Strontium	20	.01	.015		
Thallium	0.20	.0024	.005		
Tin	10	.063	1.3		
Titanium	2.0	.059	.092		
Uranium	0.20	.0017	.002		
Vanadium	1.0	.037	.2		
Zinc	10	.21	.96		

Associated samples MP15798: D70092-1, D70092-2, D70092-3, D70092-4, D70092-5, D70092-6, D70092-7, D70092-8, D70092-9

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D70092
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15798
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/29/15

Metal	D70092-1 Original MS		SpikeLot ICPALL2	% Rec	QC Limits
Aluminum	anr				
Antimony					
Arsenic	0.30	201	200	100.4	70-130
Barium					
Beryllium					
Boron	anr				
Cadmium	anr				
Calcium					
Chromium	anr				
Cobalt	anr				
Copper	anr				
Iron	anr				
Lead	anr				
Magnesium					
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium	anr				
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium	anr				
Zinc	anr				

Associated samples MP15798: D70092-1, D70092-2, D70092-3, D70092-4, D70092-5, D70092-6, D70092-7, D70092-8, D70092-9

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D70092
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15798
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/29/15

Metal	D70092-1 Original	MSD	SpikeLot ICPAL2	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony						
Arsenic	0.30	206	200	102.9	2.5	20
Barium						
Beryllium						
Boron	anr					
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	anr					
Magnesium						
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium	anr					
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium	anr					
Zinc	anr					

Associated samples MP15798: D70092-1, D70092-2, D70092-3, D70092-4, D70092-5, D70092-6, D70092-7, D70092-8, D70092-9

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D70092
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15798
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/29/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum	anr			
Antimony				
Arsenic	206	200	103.0	85-115
Barium				
Beryllium				
Boron	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium	anr			
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium	anr			
Zinc	anr			

Associated samples MP15798: D70092-1, D70092-2, D70092-3, D70092-4, D70092-5, D70092-6, D70092-7, D70092-8, D70092-9

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D70092
Account: NEWFCOD - Newfields, Inc.
Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15799
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 04/29/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.1	2		
Antimony	0.40	.0022	.011		
Arsenic	0.20	.017	.044		
Barium	2.0	.016	.079		
Beryllium	0.20	.016	.069		
Boron	40	.49	2.1		
Cadmium	0.10	.036	.042	-0.057	<0.10
Calcium	400	5.6	12	1.8	<400
Chromium	2.0	.053	.053		
Cobalt	0.20	.0049	.015		
Copper	2.0	.06	.13	-0.011	<2.0
Iron	10	3.5	4.6		
Lead	0.50	.0079	.008		
Magnesium	100	1.3	1.3	8.8	<100
Manganese	1.0	.12	.13		
Molybdenum	1.0	.049	.029		
Nickel	2.0	.0088	.027		
Phosphorus	60	2.6	4.3		
Potassium	200	2.9	2.9		
Selenium	0.40	.06	.21		
Silver	0.10	.0019	.008		
Sodium	500	4.9	4.9		
Strontium	20	.01	.015		
Thallium	0.20	.0024	.005		
Tin	10	.063	1.3		
Titanium	2.0	.059	.092		
Uranium	0.20	.0017	.002		
Vanadium	1.0	.037	.2		
Zinc	10	.21	.96	0.27	<10

Associated samples MP15799: D70092-1F, D70092-2F, D70092-3F, D70092-6F, D70092-7F, D70092-8F, D70092-9F

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D70092
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15799
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/29/15

Metal	D70092-1F Original MS		SpikeLot ICPAL2 % Rec		QC Limits
Aluminum	anr				
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium	0.19	101	100	100.8	70-130
Calcium	17900	22400	5000	90.0	70-130
Chromium					
Cobalt					
Copper	4.1	99.2	100	95.1	70-130
Iron	anr				
Lead	anr				
Magnesium	6720	11600	5000	97.6	70-130
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	65.6	154	100	88.4	70-130

Associated samples MP15799: D70092-1F, D70092-2F, D70092-3F, D70092-6F, D70092-7F, D70092-8F, D70092-9F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D70092
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15799
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/29/15

Metal	D70092-1F Original MSD		SpikeLot ICPAL2 % Rec		MSD RPD	QC Limit
Aluminum	anr					
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium	0.19	101	100	100.8	0.0	20
Calcium	17900	23000	5000	102.0	2.6	20
Chromium						
Cobalt						
Copper	4.1	101	100	96.9	1.8	20
Iron	anr					
Lead	anr					
Magnesium	6720	11800	5000	101.6	1.7	20
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	65.6	158	100	92.4	2.6	20

Associated samples MP15799: D70092-1F, D70092-2F, D70092-3F, D70092-6F, D70092-7F, D70092-8F, D70092-9F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D70092
 Account: NEWFCOD - Newfields, Inc.
 Project: Eagle Mine, Minturn,CO

QC Batch ID: MP15799
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 04/29/15

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum	anr			
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium	103	100	103.0	85-115
Calcium	5240	5000	104.8	85-115
Chromium				
Cobalt				
Copper	99.3	100	99.3	85-115
Iron	anr			
Lead	anr			
Magnesium	5180	5000	103.6	85-115
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	99.8	100	99.8	85-115

Associated samples MP15799: D70092-1F, D70092-2F, D70092-3F, D70092-6F, D70092-7F, D70092-8F, D70092-9F

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