ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

January 08, 2016

Report to:
Mark Steen
Colorado Milling Company , LLC
PO Box 1523
Longmont, CO 80502

cc: Gordon E. Sweeney

Bill to:
Mark Steen
Colorado Milling Company , LLC
PO Box 1523
Longmont, CO 80502

Project ID:
ACZ Project ID: L28384

Mark Steen:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on January 04, 2016. This project has been assigned to ACZ's project number, L28384. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L28384. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

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

All samples and sub-samples associated with this project will be disposed of after February 07, 2016. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Colorado Milling Company, LLC
Project ID:
Sample ID: 0151229-MW1

ACZ Sample ID: ***L28384-01***
Date Sampled: *12/29/15 10:35*
Date Received: *01/04/16*
Sample Matrix: *Ground Water*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic, dissolved	M200.8 ICP-MS	1	0.0005	B		mg/L	0.0002	0.001	01/07/16 10:42	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.0001	B		mg/L	0.0001	0.0005	01/07/16 10:42	mfm
Manganese, dissolved	M200.7 ICP	1	0.271			mg/L	0.005	0.03	01/07/16 11:27	aeb
Zinc, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	01/07/16 11:27	aeb

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Lab Filtration (0.45um filter)	SOPWC050	1							01/08/16 11:05	emk
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A	1							01/05/16 15:00	gss
Residue, Filterable (TDS) @180C	SM2540C	1	1710			mg/L	10	20	01/05/16 16:22	emk
Sulfate	D516-02/-07 - Turbidimetric	50	698			mg/L	50	250	01/06/16 16:57	krh

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Colorado Milling Company, LLC
Project ID:
Sample ID: 0151229-MW5

ACZ Sample ID: ***L28384-02***
Date Sampled: *12/29/15 13:40*
Date Received: *01/04/16*
Sample Matrix: *Ground Water*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic, dissolved	M200.8 ICP-MS	1	0.0048			mg/L	0.0002	0.001	01/07/16 10:51	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.0002	B		mg/L	0.0001	0.0005	01/07/16 10:51	mfm
Manganese, dissolved	M200.7 ICP	1	0.035			mg/L	0.005	0.03	01/07/16 11:30	aeb
Zinc, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	01/07/16 11:30	aeb

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Lab Filtration (0.45um filter)	SOPWC050	1							01/06/16 11:23	emk
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A	1							01/05/16 15:00	gss
Residue, Filterable (TDS) @180C	SM2540C	1	824			mg/L	10	20	01/05/16 16:25	emk
Sulfate	D516-02/-07 - Turbidimetric	10	313			mg/L	10	50	01/06/16 16:45	krh

ACZ Laboratories, Inc.
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Inorganic Analytical Results

Colorado Milling Company, LLC
Project ID:
Sample ID: 0151229-CG

ACZ Sample ID: ***L28384-03***
Date Sampled: *12/29/15 14:25*
Date Received: *01/04/16*
Sample Matrix: *Surface Water*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0002	0.001	01/07/16 10:54	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.0014			mg/L	0.0001	0.0005	01/07/16 10:54	mfm
Manganese, dissolved	M200.7 ICP	1	0.021	B		mg/L	0.005	0.03	01/07/16 11:34	aeb
Zinc, dissolved	M200.7 ICP	1	0.33			mg/L	0.01	0.05	01/07/16 11:34	aeb

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Lab Filtration (0.45um filter)	SOPWC050	1							01/06/16 11:27	emk
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A	1							01/05/16 15:00	gss
Residue, Filterable (TDS) @180C	SM2540C	1	422			mg/L	10	20	01/05/16 16:30	emk
Sulfate	D516-02/-07 - Turbidimetric	10	219			mg/L	10	50	01/06/16 16:45	krh

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

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

QC Sample Type Explanations

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

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

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

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click: http://www.acz.com/public/extquallist.pdf

Colorado Milling Company, LLC

ACZ Project ID: ***L28384***

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG396765													
WG396765ICV	ICV	01/07/16 10:24	MS151201-3	.05		.05179	mg/L	104	90	110			
WG396765ICB	ICB	01/07/16 10:27				U	mg/L		-0.0006	0.0006			
WG396765LFB	LFB	01/07/16 10:30	MS151223-2	.0501		.05203	mg/L	104	85	115			
L28384-01AS	AS	01/07/16 10:46	MS151223-2	.0501	.0005	.05875	mg/L	116	70	130			
L28384-01ASD	ASD	01/07/16 10:48	MS151223-2	.0501	.0005	.05683	mg/L	112	70	130	3	20	

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG396765													
WG396765ICV	ICV	01/07/16 10:24	MS151201-3	.05		.05241	mg/L	105	90	110			
WG396765ICB	ICB	01/07/16 10:27				U	mg/L		-0.0003	0.0003			
WG396765LFB	LFB	01/07/16 10:30	MS151223-2	.05005		.05091	mg/L	102	85	115			
L28384-01AS	AS	01/07/16 10:46	MS151223-2	.05005	.0001	.05007	mg/L	100	70	130			
L28384-01ASD	ASD	01/07/16 10:48	MS151223-2	.05005	.0001	.04949	mg/L	99	70	130	1	20	

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG396770													
WG396770ICV	ICV	01/07/16 10:31	II160105-3	2		1.938	mg/L	97	95	105			
WG396770ICB	ICB	01/07/16 10:37				U	mg/L		-0.015	0.015			
WG396770LFB	LFB	01/07/16 10:49	II151221-2	.499		.4856	mg/L	97	85	115			
L28383-01AS	AS	01/07/16 11:05	II151221-2	.499	U	.4883	mg/L	98	85	115			
L28383-01ASD	ASD	01/07/16 11:08	II151221-2	.499	U	.4898	mg/L	98	85	115	0	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG396691													
WG396691PBW	PBW	01/05/16 16:03				U	mg/L		-20	20			
WG396691LCSW	LCSW	01/05/16 16:04	PCN49653	260		264	mg/L	102	80	120			
L28384-02DUP	DUP	01/05/16 16:27			824	828	mg/L				0	10	
L28399-05DUP	DUP	01/05/16 16:55			364	358	mg/L				2	10	

Sulfate D516-02/-07 - Turbidimetric

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG396733													
WG396733ICB	ICB	01/06/16 11:14				U	mg/L		-3	3			
WG396733ICV	ICV	01/06/16 11:14	WI151230-1	20		19.7	mg/L	99	90	110			
WG396733LFB1	LFB	01/06/16 16:29	WI150904-1	10.01		9.5	mg/L	95	90	110			
L28379-01DUP	DUP	01/06/16 16:29			16.4	16.1	mg/L				2	20	
L28379-02AS	AS	01/06/16 16:29	WI150904-1	10.01	U	11	mg/L	110	90	110			
WG396733LFB2	LFB	01/06/16 17:22	WI150904-1	10.01		9.6	mg/L	96	90	110			

Colorado Milling Company, LLC

ACZ Project ID: ***L28384***

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG396770													
WG396770ICV	ICV	01/07/16 10:31	II160105-3	2		1.905	mg/L	95	95	105			
WG396770ICB	ICB	01/07/16 10:37				U	mg/L		-0.03	0.03			
WG396770LFB	LFB	01/07/16 10:49	II151221-2	.4995		.486	mg/L	97	85	115			
L28383-01AS	AS	01/07/16 11:05	II151221-2	.4995	.04	.526	mg/L	97	85	115			
L28383-01ASD	ASD	01/07/16 11:08	II151221-2	.4995	.04	.52	mg/L	96	85	115	1	20	

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Inorganic Extended Qualifier Report

Colorado Milling Company, LLC ACZ Project ID: ***L28384***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION

No extended qualifiers associated with this analysis

Certification Qualifiers

Colorado Milling Company, LLC ACZ Project ID: ***L28384***

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Colorado Milling Company, LLC

ACZ Project ID: L28384
Date Received: 01/04/2016 10:15
Received By: ddp
Date Printed: 1/4/2016

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?			X
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	X		

A change was made in the Report To Address, Hold Time, Compliance Monitoring, Remarks, Upper Right Hand Margin section prior to ACZ custody.

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]			X
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
4348	0.5	<=6.0	15	Yes

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

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

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Colorado Milling Company, LLC

ACZ Project ID:	L28384
Date Received:	01/04/2016 10:15
Received By:	ddp
Date Printed:	1/4/2016

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ Laboratories, Inc. L28384

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

CHAIN of CUSTODY

Report to:

Name: MARK STEEN	Address: 9145 SUNSHINE CANYON DR BOULDER, CO 80302
Company: COLO MILLING CO, LLC	
E-mail: goldtontine@gmail.com	Telephone: 303-440-0633

Copy of Report to:

Name: GORDON SWEENEY	E-mail: gordonesweeney@gmail.com
Company: CMC	Telephone: 303-440-0633

Invoice to:

Name: MARK STEEN	Address: P.O. BOX 1523 LONGMONT, CO 80502
Company: COLO MILLING CO LLC	
E-mail: goldtontine@gmail.com	Telephone: 303-651-2985

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

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

Are samples for SDWA Compliance Monitoring? Yes [ ] No [X]

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: LEWIS PERKINS **Sampler's Site Information** **State** CO **Zip code** 80302 **Time Zone** MT

***Sampler's Signature:** Lewis Perkins

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #:

PO#:

Reporting state for compliance testing: COLORADO

Check box if samples include NRC licensed material? [ ]

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

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	As, Cd	Mn, Zn	TDS SULFATE					
0151229-MW1	12/29/15 10:35	GW	3	X	X	X					
0151229-MW5	" 13:40	GW	3	X	X	X					
0151229-CG	" 14:25	SW	3	X	X	X					

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

REMARKS

All samples are RAW, filter as needed.
Analyze for dissolved metals.

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

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Lewis Perkins	12/30/15 1:20 PM	U.P.S 3795 FRONTIER AVE BOULDER CO 80301	12/30/2015 1:20 PM

L28384 Chain of Custody