October 12, 2015

DRAFT

(b) (6) [redacted]
Location Code: GKMTW393
(b) (6), (b) (9) [redacted]
Durango CO 81301

Re: Groundwater Well Sampling Results

Dear (b) (6) [redacted]:

Thank you for participating in the private drinking water well sampling conducted by the U.S. Environmental Protection Agency (EPA) in coordination with the Colorado Department of Public Health and Environment (CDPHE) and the San Juan Basin Health Department (SJBHD).

This letter provides the results for the water samples collected from your private water well. The water sample(s) were submitted to, and analyzed by, a private certified laboratory for the metals that could have been present in water from the Gold King Mine release.

The test results for your well water were compared to the National Drinking Water Standards, otherwise known as the Maximum Contaminant Levels (MCLs). The results of the analysis are provided in the enclosed table. Though these standards are intended for the evaluation of public water systems and therefore, do not apply to private domestic water wells such as yours, we have included the enclosed table so that you may compare the results with the Drinking Water Standards. **The metals described were present in your groundwater sample(s), above the EPA's Primary Drinking Water MCLs prior to filtration.**

Your post filtration results at your RO spigot after filter change indicate your drinking water DOES NOT EXCEED EPA's Primary Drinking Water MCLs and is suitable for consumption. We therefore recommend you follow the manufacturer's recommendations for maintaining your filtration system in order to preserve the safety of your drinking water.

Arsenic

The concentration of arsenic in your well water was above the MCL of 10 µg/L. Arsenic is an odorless, tasteless element that enters groundwater drinking sources through erosion of natural deposits or from human-made sources. Some people who drink water containing arsenic well in excess of the MCL for many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. Additional information on arsenic in drinking water is available on the EPA website at this location: http://water.epa.gov/drink/contaminants/basicinformation/arsenic.cfm

EPA has also established National Secondary Drinking Water Regulations that set non-mandatory water quality standards for 15 contaminants. EPA does not enforce these "secondary maximum contaminant levels". They are established only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color and odor. These contaminants are not considered to present a risk to human health at the secondary maximum contaminant level. **The following metals were present in your groundwater sample, above the EPA's Secondary Drinking Water MCLs prior to filtration. These metals were not present in your groundwater samples, above the EPA's Secondary MCLs, following filtration.**

Iron

The concentration of iron in your well water was above the secondary MCL which is 300 µg/L. Iron is an essential element for human nutrition however, high iron can cause constipation and other gastrointestinal effects. In addition, high iron may stain household fixtures and impart a metallic taste and red color to the water.

The Colorado Department of Public Health and Environment recommends using the Water Quality Interpretation Tool created by Colorado State University in collaboration with the Colorado Water Institute to get more information regarding the metals examined in your well. The Water Quality Interpretation Tool is available online at https://erams.com/wqtool/.

If you have any health related questions regarding these test results, please contact Flannery O'Neil with the San Juan Basin Health Department (SJBHD) at (970) 247-5702. If you would like to discuss your sample results with an EPA representative, please contact Dr. Deborah McKean at (303) 579-4371.

Sincerely,

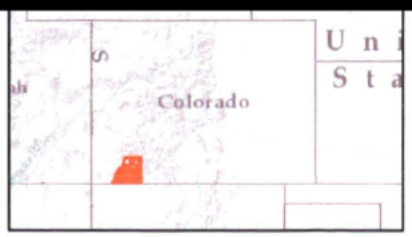
US Environmental Protection Agency, Region 8

CC:
Colorado Department of Public Health and Environment
San Juan Basin Health Department
San Juan County Public Health

Water Sample ID: GKMTW393

(b) (6), (b) (9)

[redacted]



0 50 100 200

Well Location

Parcel Boundary

N

1:1,200

1 inch = 100 feet

Map Created: 8/31/2015

(b) (6), (b) (9)

[redacted]

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(b) (6), (b) (9)

Analyte		Station ID Sample ID Sample Date Sample time Latitude Longitude				GKMTW393 GKMTW393_100215 10/2/2015 15:15 (b) (6), (b) (9) [redacted]
Metals, Total		CAS NO	Units	Colorado Water Standard	EPA MCL	Sub Location RO spigot post Lab Result
Aluminum	A,B	7429-90-5	ug/L	5000	200	24 U
Antimony		7440-36-0	ug/L	6	6	0.4 U
Arsenic		7440-38-2	ug/L	10	10	1.1
Barium		7440-39-3	ug/L	2000	2000	2.2
Beryllium		7440-41-7	ug/L	4	4	0.15 U
Cadmium		7440-43-9	ug/L	5	5	0.5 UB
Calcium		7440-70-2	ug/L			1700
Chromium		7440-47-3	ug/L	100	100	1 U
Cobalt	A	7440-48-4	ug/L	50		0.12 U
Copper	A	7440-50-8	ug/L	200	1300	28
Iron	A,B	7439-89-6	ug/L	5000	300	17 U
Lead	A	7439-92-1	ug/L	100	15	0.3 UB
Magnesium		7439-95-4	ug/L			400 J
Manganese	A,B	7439-96-5	ug/L	200	50	1.8 J
Mercury		7439-97-6	ug/L	2	2	0.08 U
Molybdenum		7439-98-7	ug/L			0.45 U
Nickel	A	7440-02-0	ug/L	200		0.83 J
Potassium		7440-09-7	ug/L			1500 J+
Selenium		7782-49-2	ug/L	50	50	0.58 U
Silver	B	7440-22-4	ug/L		100	0.1 U
Sodium		7440-23-5	ug/L			45000
Thallium		7440-28-0	ug/L	2	2	0.1 U
Vanadium	A	7440-62-2	ug/L	100		0.3 U
Zinc	A,B	7440-66-6	ug/L	2000	5000	34

A- CDPHE Agricultural Standards (Jan. 2013)
B- EPA Secondary MCL (May 2009)
U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
J- = The result is an estimated quantity, but the result may be biased low.
UJ = The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise
UJB = The analyte was detected in the sample below the reporting limit and in either the associated laboratory blank or field blank; the analyte result was reported as non-detected at the RL due to blank contamination. 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
UB = The analyte was detected in the sample below the Reporting Limit (RL) and in either the associated laboratory blank or field blank; the analyte result was reported as non-detected at the RL due to blank contamination.
J+ = The result is an estimated quantity, but the result may be biased high.
R = Reported value is "rejected." The sample results are rejected due to serious deficiencies in meeting QC criteria. The data are unusable. The analyte may or may not be present in the sample.
F1 = MS and/or MSD Recovery is outside acceptance limits.
HF = Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
* = The result exceeds maximum contaminant level
ug/L - Parts per billion (micrograms per liter)

Highlighted Yellow: indicates result exceeded Screening Value

Analyte		Station ID Sample ID Sample Date Sample time Latitude Longitude				GKMTW393B GKMTW393_090815B 9/8/2015 11:35 (b) (6), (b) (9) [redacted]
Metals, Total		CAS NO	Units	Colorado Water Standard	EPA MCL	Sub Location RO faucet Lab Result
Aluminum	A,B	7429-90-5	ug/L	5000	200	24 U
Antimony		7440-36-0	ug/L	6	6	0.4 U
Arsenic		7440-38-2	ug/L	10	10	15
Barium		7440-39-3	ug/L	2000	2000	13
Beryllium		7440-41-7	ug/L	4	4	0.15 U
Cadmium		7440-43-9	ug/L	5	5	0.14 J
Calcium		7440-70-2	ug/L			96000
Chromium		7440-47-3	ug/L	100	100	1 U
Cobalt	A	7440-48-4	ug/L	50		0.14 J
Copper	A	7440-50-8	ug/L	200	1300	30
Iron	A,B	7439-89-6	ug/L	5000	300	17 U
Lead	A	7439-92-1	ug/L	100	15	0.06 U
Magnesium		7439-95-4	ug/L			27000
Manganese	A,B	7439-96-5	ug/L	200	50	2 J
Mercury		7439-97-6	ug/L	2	2	0.08 U
Molybdenum		7439-98-7	ug/L			1.7
Nickel	A	7440-02-0	ug/L	200		0.92 J
Potassium		7440-09-7	ug/L			26000 J+
Selenium		7782-49-2	ug/L	50	50	6.6 U
Silver	B	7440-22-4	ug/L		100	0.1 U
Sodium		7440-23-5	ug/L			420000
Thallium		7440-28-0	ug/L	2	2	0.14 J
Vanadium	A	7440-62-2	ug/L	100		1.3
Zinc	A,B	7440-66-6	ug/L	2000	5000	18 J

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* = The result exceeds maximum contaminant level
ug/L - Parts per billion (micrograms per liter)

Highlighted Yellow: indicates result exceeded Screening Value

Analyte		Station ID Sample ID Sample Date Sample time Latitude Longitude				GKMTW393 GKMTW393_082315 8/23/2015 11:20 (b) (6), (b) (9) [redacted]
Metals, Total		CAS NO	Units	Colorado Water Standard	EPA MCL	Sub Location Hose bib post pressure t Lab Result
Aluminum	A,B	7429-90-5	ug/L	5000	200	24 U
Antimony		7440-36-0	ug/L	6	6	0.4 U
Arsenic		7440-38-2	ug/L	10	10	73
Barium		7440-39-3	ug/L	2000	2000	22
Beryllium		7440-41-7	ug/L	4	4	0.15 UJ
Cadmium		7440-43-9	ug/L	5	5	0.092 J
Calcium		7440-70-2	ug/L			130000
Chromium		7440-47-3	ug/L	100	100	1.4 J
Cobalt	A	7440-48-4	ug/L	50		0.55
Copper	A	7440-50-8	ug/L	200	1300	22
Iron	A,B	7439-89-6	ug/L	5000	300	6300
Lead	A	7439-92-1	ug/L	100	15	2.5
Magnesium		7439-95-4	ug/L			25000
Manganese	A,B	7439-96-5	ug/L	200	50	8.4
Mercury		7439-97-6	ug/L	2	2	0.08 UJ
Molybdenum		7439-98-7	ug/L			2.2
Nickel	A	7440-02-0	ug/L	200		6.1
Potassium		7440-09-7	ug/L			20000
Selenium		7782-49-2	ug/L	50	50	1.2 J
Silver	B	7440-22-4	ug/L		100	0.29 J
Sodium		7440-23-5	ug/L			370000
Thallium		7440-28-0	ug/L	2	2	0.13 J
Vanadium	A	7440-62-2	ug/L	100		3.3
Zinc	A,B	7440-66-6	ug/L	2000	5000	9.2 J

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