April 14, 2022

Craig Dossey
El Paso County - Planning and Community Development Department
2880 International Circle, Suite 110
Colorado Springs, CO 80910

Dear Mr. Dossey:

RE: 5-Lot Development for Collin Brones at 6665 Walker Road
El Paso County Parcel #5100000421
Finding of Sufficient Water Quality According to Section 8.4.7.B.10)(a) of the Amended El Paso County Land Development Code (LDC-19-007)

FINDING OF SUFFICIENT WATER QUALITY

Mr. Paul Smith and Mr. Collin Brones own approximately 40 acres on the above-described property, located at 6665 Walker Road, Colorado Springs, CO, 80908 (EPC Receipt No.: 5100000421). The Brones' wish to subdivide the 40 acres into five (5) lots through the El Paso County Land Development and Planning process. As part of the subdivision process the Brones' have prepared a Water Resources report tosupport sufficient water quantity over a 300-year evaluation period. The waterresources report supported sufficient quantity but no sufficient quality according toSection 8.4.7.B.10)(a) of the Amended El Paso County Land Development Code. TheBrones' subsequently reached out to JDS-Hydro, a Division of RESPEC to completewater quality sufficiency sampling and analysis according to the aforementioned sectionof the Code, and provide an engineering opinion of the analysis.

Section 8.4.7.B.10)(a) in the Amended El Paso County Land Development Code (EPC-LDC) requires that the applicant obtain analyses results for twenty-one (21) Volatile Organic Chemical (VOC) Contaminants, twenty-nine (29) Synthetic Organic Chemical Contaminants (SOC), fourteen (14) Inorganic Chemicals, ten (10) Secondary Maximum Contaminants, indicators of bacteriological pahotgens (i.e. E.coli), inorganic anions, and two (2) radionuclides. According to Case No. 21CW3119, which was included in the Water Resources Report, the proposed five (5) lot subdivision will be supplied with water from the underlying not-nontributary Dawson formation, which is considered a confined Denver Basin Aquifer. Therefore, according to paragraph two (2) from

5540 Tech Center Drive
Suite 100
Colorado Springs, CO 80919
719.227.0072

respec.com

RESPEC

JDS-HYDRO CONSULTANTS, INC.

Section 8.4.7.B.10)(a) VOC's and SOC's are not required as part of the stipulated chemical analysis.

On March 16, 2022. Representatives with JDS-Hydro sampled the existing Dawson Well located on the existing property at 6665 Walker Road. The representative Dawson Well was permitted under Permit No. 130940 to a James M. Brown, and subsequently underwent a change of ownership to Paul Smith and Collin Brones on June 1, 2021. Well samples were taken on the 16th and overnighted to Colorado Analytical Laboratories to meet specified holding times for certain constituents. Results from all chemical analyses were received by JDS-Hydro via email on April 12, 2022. Results were tabulated and compared vs. primary and secondary Maximum Contaminant Limits as established by the Colorado Department of Health and Environment's (CDPHE) latest drinking water standards. From the evaluation, none of the constituents were found to exceed any established primary or secondary drinking water standards. Please see tabulated results and associated analytical results from Colorado Analytical Laboratories in the enclosure.

After reviewing the analytical results JDS-Hydro does not find any cause for concern in utilizing the underlying Dawson Aquifer for public consumption or irrigation uses within the proposed subdivision. JDS-Hydro also does not see any reason to recommend any additional treatment within the proposed residences to bring the source water into compliance with established Colorado Drinking Water Standards.

Should the El Paso County Planning and Development Department have any additional comments, questions, or concerns please do not hesitate to contact Douglas E. Schwenke, P.E. with JDS-Hydro a Division of RESPEC at 719-227-0072 Ext. 102 or at dschwenke@jdshydro.com.

Sincerely,

Douglas E. Schwenke
Principal Engineer

DES
Enclosure: DWR Permit No. 130940
Tabulated Water Quality Sufficiency Results from March 16, 2022 Sample Trip to 6665 Walker Road
Analytical Results from Colorado Analytical, Task No.: 220316024 - Total Coliform and E.coli
Analytical Results from Colorado Analytical, Task No.: 220316024 - Langoliers and Chemical Constituents
Analytical Report from Haxen, Task No.: 220316024 - Radiologicals

cc: Project Central File: W0273.21001.001 – Category: External Letter

Form No. GWS-11 08/2016	COLORADO DIVISION OF WATER RESOURCES DEPARTMENT OF NATURAL RESOURCES 1313 Sherman St., Ste 821, Denver, CO 80203 Main: 303.866.3581 dwrpermitsonline@state.co.us	For Office Use Only RECEIVED 5/27/2021 WATER RESOURCES STATE ENGINEER COLO

CHANGE IN OWNER NAME/MAILING ADDRESS

PRIOR TO COMPLETING THIS FORM, SEE INSTRUCTIONS ON REVERSE SIDE INCOMPLETE, POOR QUALITY, OR ILLEGIBLE FORMS CANNOT BE PROCESSED AND WILL BE RETURNED

Name, address and phone number of person claiming ownership of the well permit:

Name(s): **PAUL A. SMITH AND COLLIN G. BRONES**

Mailing Address: **6665 WALKER RD.**

City, St, Zip: **Colorado Springs, CO 80908**

Phone: **(719) 660-3351** Email: **drmorgul@yahoo.com**

Well Permit Number: **130940** Receipt Number: **0234566** Case Number(optional): **N/A**

WELL LOCATION: County: **El Paso** Well Name or # (optional): **N/A**

6665 WALKER ROAD, COLORADO SPRINGS, CO 80908
Street Address at Well Location

☐ Check if well address is same as owner's mailing address

NW-NE ¼ of the **SE-SW** ¼, Sec. **18** , Township **11** ☐ N. or ☒ S. Range **65** ☐ E. or ☒ W., **6TH** P.M.

Distance from Section Lines: **1980** Ft. From ☐ N. or ☒ S. Line, **1620** Ft. From ☒ E. or ☐ W. Line.

Subdivision Name (if applicable): **N/A** , Lot **N/A** , Block **N/A** , Filing/Unit **N/A**

NOTE: If changing/correcting the permitted location of a well, use Form No. GWS-42

I (we) claim and say that I am (we are) the owner(s) of the well permit described above, know the contents of the statements made herein, and state that they are true to my (our) knowledge. This filing is made pursuant to C.R.S. 37-90-143.

Signature(s) of the new owner	Please print the Signer's Name & title	Date
Paul Smith	Paul Smith	**May 27, 2021**

It is the responsibility of the new owner of this well permit to complete and sign this form. If an agent is signing or entering information, please see instructions.
Please allow 4 to 6 weeks for processing of this form. Thereafter, you can view or print the accepted document at:
http://www.dwr.state.co.us/WellPermitSearch

Signature of DWR staff indicates acceptance as a Change in Owner Name and/or Mailing Address.

For Staff Use Only

Tammy Poindexter
Staff Signature

6/1/2021
Date

WJR-26-77

THIS FORM MUST BE SUBMITTED WITHIN 60 DAYS OF COMPLETION OF THE WORK DESCRIBED HEREON. TYPE OR PRINT IN BLACK INK.

COLORADO DIVISION OF WATER RESOURCES

1313 Sherman Street - Room 818
Denver, Colorado 80203

WELL COMPLETION AND PRIOR ABANDONMENT REPORT

PERMIT NUMBER 130940

RECEIVED
JUL 22 1983
WATER RESOURCES
STATE ENGINEER
COLO.

WELL OWNER Jean M. Brown NW-NE ¼ of the SE-SW ¼ of Sec. 18,

ADDRESS 46349 Hwy. #6 & 24, Glenwood Sprgs. CO. 81601, T. 11 S. R. 65 W. 6th P.M.

DATE COMPLETED July 15, 1983

WELL LOG

From	To	Type and Color of Material	Water Loc.
0	1	Top Soil	
1	16	Sand & Grav. m/wBrown Clay	
16	35	Sand & Grav. m/wGray Clay	
35	42	Sand & Grav. m/wBrown Clay	
42	55	Brown Sandy Clay	
55	60	Sandstone	
60	140	Sand & Grav. m/wGray Clay	
140	155	Sand & Grav.	X
155	185	Brown Sandy Clay	
185	215	Sand & Grav.	X
215	220	Brown Sandy Clay	
220	270	Sand & Grav.	X
270	290	Sand & Grav. m/wGray Clay	

TOTAL DEPTH 290'

Use additional pages necessary to complete log.

HOLE DIAMETER

6¼ in. from 0 to 290 ft.

____ in. from ____ to ____ ft.

____ in. from ____ to ____ ft.

DRILLING METHOD Rotary

CASING RECORD: Plain Casing

Size 6" & kind Steel from 0 to 20 ft.

Size 4" & kind PVC from 6 to 210 ft.

Size 4" & kind PVC from 270 to 290 ft.

Perforated Casing

Size 4" & kind PVC from 210 to 270 ft.

Size ____ & kind ____ from ____ to ____ ft.

Size ____ & kind ____ from ____ to ____ ft.

GROUTING RECORD

Material Sand, Gravel, Cement

Intervals 0' - 19' Neat cement @ 180'

Placement Method Manual

GRAVEL PACK: Size 3/8" Pea

Interval 19' - 290'

TEST DATA

Date Tested July 15, 1983

Static Water Level Prior to Test 123 ft.

Type of Test Pump Blown by air

Length of Test 4 hours

Sustained Yield (Metered) 15+ G.P.M.

Final Pumping Water Level ____

El Paso County Land Development Code
Water Quality Requirements and Results
Dawson Confined Aquifer
For 6665 Walker Road
Sampled March 16, 2022

Compound	Units	MCL/SMCL	Result
Antimony	mg/l	0.006	0
Arsenic	mg/l	0.01	0
Barium	mg/l	2	0.113
Beryllium	mg/l	0.004	0
Cadmium	mg/l	0.005	0
Chromium	mg/l	0.1	0
Cyanide (Total)	mg/l	0	0
Fluoride	mg/l	4	0.26
Mercury	mg/l	0.002	0
Nitrate as N	mg/l	10	1.14
Nitrite as N	mg/l	1	0
Selenium	mg/l	0.05	0
Thallium	mg/l	0.002	0
Aluminum	mg/l	0.05	0
Chloride	mg/l	250	1.7
Langelier Index			-1
Iron	mg/l	0.3	0
Manganese	mg/l	0.05	0.0017
pH		6.5 - 8.5	7.58
Silver	mg/l	0.1	0
Sulfate	mg/l	250	4.3
TDS	mg/l	500	115
Zinc	mg/l	5	0.101
Gross Alpha/Beta	pCi/l	15	6.6
Combined Radium 226+228	pCi/l	5	3.9
Total Coliform	#/100 ml	Absent	Absent

Green = Result below MCL - Acceptable Water Quality

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 220316024

Report To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Bill To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Task No.: 220316024
Client PO:
Client Project: Brones Well

Date Received: 3/16/22
Date Reported: 4/12/22
Matrix: Water - Drinking

Lab Number	Customer Sample ID	Sample Date/Time	Test	Result	Method	Date Analyzed
220316024-01B	#1	3/15/22 2:50 PM	Total Coliform	**Absent**	SM 9223	3/17/22
			E-Coli	**Absent**	SM 9223	3/17/22

Abbreviations/ References:

Absent = Coliform Not Detected
Present = Coliform Detected - Chlorination Recommended
Date Analyzed = Date Test Completed
SM = "Standard Methods for the Examination of Water and Wastewater"; APHA; 19th Edition; 1995

DATA APPROVED FOR RELEASE BY

Drinking Water Chain of Custody

Colorado Analytical LABORATORIES, INC.

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	Project Information
Company Name: JDS- Hydro	Company Name:	PWSID: N/A
Contact Name: Doug Schwenke	Contact Name:	System Name:
Address: 5540 Tech Center Dr 100	Address:	Compliance Samples: Yes ☐ No ☐
City: CS State: CO Zip: 80919	City: State: Zip:	Send Results to CDPHE: Yes ☐ No ☐
Phone: 719-227-0072	Phone:	Task Number (Lab Use Only) CAL Task 220316024 JAK
Email: dschwenke@jdshydro.com	Email:	
Sample Collector: Stephanie Schwenke		
Sample Collector Phone: 719-321-5341	PO Number:	

Brones Well

Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	PHASE I, II, V Drinking Water Analyses (check requested analysis)																				Subcontract Analyses				
					Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index (Circle)	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Cyanide	Gross Alpha/Beta	Radium 226/228	Radon	Uranium	Chlorite
3/15/22	2:50pm	#1			X													X	X	X	X	X			X	X	X			
					(10)																									

Instructions: Please analyze all listed compounds on enclosed WORD Doc

Field pH: 7.14
Field temp: 13.2°C

C/S Info:

Delivered Via: FedEx C/S Charge ☒ K

Seals Present Yes ☐ No ☐ Headspace Yes ☐ No ☐

Temp. 2 °C /Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Stephanie Schwenke	3/15/22 4 p.m		3/16/22				

JAK

EPC Confined Aquifer Sampling Requirements

Field Measurements
pH
Temp

Radionuclides
Radium 226 and Radium 228
Gross alpha/Beta

Inorganics
Antimony
Arsenic
Barium
Beryllium
Cadmium
Chromium
Cyanide (Total)
Fluoride
Mercury
Nitrate
Nitrite
Selenium
Thallium

Secondary MCLs
Aluminum
Chloride
Corrosivity
Iron
Manganese
Silver
Sulfate
Zinc
TDS

Bacteriological:
Total Coliform

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 220316024

Report To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Bill To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Task No.: 220316024
Client PO:
Client Project: Brones Well

Date Received: 3/16/22
Date Reported: 4/12/22
Matrix: Water - Drinking

Customer Sample ID #1
Sample Date/Time: 3/15/22 2:50 PM
Lab Number: 220316024-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	**49.6 mg/L as CaCO3**	SM 2320-B	0.2 mg/L as CaCO3	3/16/22	-	TAB
Calcium as CaCO3	**32.0 mg/L**	EPA 200.7	0.1 mg/L	3/21/22	-	MAT
Carbonate	**ND**	SM 2320-B	0.2 mg/L as CaCO3	3/16/22	-	TAB
Hydroxide	**ND**	SM 2320-B	0.2 mg/L as CaCO3	3/16/22	-	TAB
Langelier Index	**-1.00 units**	SM 2330-B	units	3/23/22	-	SAN
pH	**7.58 units**	SM 4500-H-B	0.01 units	3/16/22	-	AKF
Temperature	**20 °C**	SM 4500-H-B	1 °C	3/16/22	-	AKF
Total Alkalinity	**49.6 mg/L as CaCO3**	SM 2320-B	4.0 mg/L as CaCO3	3/16/22	QC55659	TAB
Total Dissolved Solids	**115 mg/L**	SM 2540-C	5 mg/L	3/21/22	QC55702	DEK

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Colorado Analytical LABORATORIES, INC.

Analytical QC Summary

TASK NO: 220316024

Report To: Doug Schwenke
Company: JDS Hydro Consultants

Receive Date: 3/16/22
Project Name: Brones Well

Test	QC Batch ID	QC Type	Result	Method
Total Alkalinity	QC55659	Blank	ND	SM 2320-B
Total Dissolved Solids	QC55702	Blank	ND	SM 2540-C

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Total Alkalinity	QC55659	Duplicate	0 - 20	-	0.8	SM 2320-B
		LCS	90 - 110	99.5	-	
Total Dissolved Solids	QC55702	Duplicate	0 - 20	-	4.3	SM 2540-C
		LCS	85 - 115	95.0	-	

All analyses were performed in accordance with approved methods under the latest revision to 40 CFR Part 136 unless otherwise identified. Based on my inquiry of the person or persons directly responsible for analyzing the wastewater samples and generating the report (s), the analyses, report, and information submitted are, to the best of my knowledge and belief, true, accurate, and complete.

DATA APPROVED FOR RELEASE BY

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Drinking Water Chain of Custody

Colorado Analytical LABORATORIES, INC.

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	Project Information
Company Name: JDS- Hydro	Company Name:	PWSID: N/A
Contact Name: Doug Schwenke	Contact Name:	System Name:
Address: 5540 Tech Center Dr 100	Address:	Compliance Samples: Yes ☐ No ☐
City: CS State: CO Zip: 80919	City: State: Zip:	Send Results to CDPHE: Yes ☐ No ☐
Phone: 719-227-0072	Phone:	Task Number (Lab Use Only): CAL Task 220316024 JAK
Email: dschwenke@jdshydro.com	Email:	
Sample Collector: Stephanie Schwenke		
Sample Collector Phone: 719-321-5341	PO Number:	

Brones Well

Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	PHASE I, II, V Drinking Water Analyses (check requested analysis)																				Subcontract Analyses				
					Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index (Circle)	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Cyanide	Gross Alpha/Beta	Radium 226/228	Radon	Uranium	Chlorite
3/15/22	2:50pm	#1			X													X	X	X	X	X			X	X	X			
					(10)																									

Instructions: Please analyze all listed compounds on enclosed WORD Doc

Field pH: 7.14
Field temp: 13.2°C

C/S Info:
Delivered Via: FedEx C/S Charge ☒ K

Seals Present Yes ☐ No ☐ Headspace Yes ☐ No ☐
Temp. 2 °C /Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Stephanie Schwenke	3/15/22 4 p.m		3/16/22				

JAK

EPC Confined Aquifer Sampling Requirements

Field Measurements
pH
Temp

Radionuclides
Radium 226 and Radium 228
Gross alpha/Beta

Inorganics
Antimony
Arsenic
Barium
Beryllium
Cadmium
Chromium
Cyanide (Total)
Fluoride
Mercury
Nitrate
Nitrite
Selenium
Thallium

Secondary MCLs
Aluminum
Chloride
Corrosivity
Iron
Manganese
Silver
Sulfate
Zinc
TDS

Bacteriological:
Total Coliform

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 220316024

Report To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Bill To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Task No.: 220316024
Client PO:
Client Project: Brones Well

Date Received: 3/16/22
Date Reported: 4/12/22
Matrix: Water - Drinking

Customer Sample ID #1
Sample Date/Time: 3/15/22 2:50 PM
Lab Number: 220316024-01

Test	Result	Method	RL	MCL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	**1.7 mg/L**	EPA 300.0	0.1 mg/L		3/16/22	QC55694	MLT
Fluoride	**0.26 mg/L**	EPA 300.0	0.10 mg/L	4	3/16/22	QC55691	MLT
Nitrate Nitrogen	**1.14 mg/L**	EPA 300.0	0.05 mg/L	10	3/16/22	QC55692	MLT
Nitrite Nitrogen	**ND**	EPA 300.0	0.03 mg/L	1	3/16/22	QC55693	MLT
Sulfate	**4.3 mg/L**	EPA 300.0	0.1 mg/L		3/16/22	QC55695	MLT
Cyanide-Total	**ND**	EPA 335.4	0.005 mg/L	0.02	3/18/22	QC55725	ECM
Total							
Iron	**ND**	EPA 200.7	0.005 mg/L	0.3	3/21/22	QC55732	MAT
Aluminum	**ND**	EPA 200.8	0.001 mg/L	0.05	3/21/22	QC55748	MBN
Antimony	**ND**	EPA 200.8	0.0012 mg/L	0.006	3/21/22	QC55748	MBN
Arsenic	**ND**	EPA 200.8	0.0006 mg/L	0.01	3/21/22	QC55748	MBN
Barium	**0.1130 mg/L**	EPA 200.8	0.0007 mg/L	2	3/21/22	QC55748	MBN
Beryllium	**ND**	EPA 200.8	0.0001 mg/L	0.004	3/21/22	QC55748	MBN
Cadmium	**ND**	EPA 200.8	0.0001 mg/L	0.005	3/21/22	QC55748	MBN
Chromium	**ND**	EPA 200.8	0.0015 mg/L	0.1	3/21/22	QC55748	MBN
Manganese	**0.0017 mg/L**	EPA 200.8	0.0008 mg/L	0.05	3/21/22	QC55748	MBN
Mercury	**ND**	EPA 200.8	0.0001 mg/L	0.002	3/21/22	QC55748	MBN
Selenium	**ND**	EPA 200.8	0.0008 mg/L	0.05	3/21/22	QC55748	MBN
Silver	**ND**	EPA 200.8	0.0005 mg/L	0.1	3/21/22	QC55748	MBN
Thallium	**ND**	EPA 200.8	0.0002 mg/L	0.002	3/21/22	QC55748	MBN
Zinc	**0.101 mg/L**	EPA 200.8	0.001 mg/L	5	3/21/22	QC55748	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Colorado Analytical LABORATORIES, INC.

Analytical QC Summary

TASK NO: 220316024

Report To: Doug Schwenke
Company: JDS Hydro Consultants

Receive Date: 3/16/22
Project Name: Brones Well

Test	QC Batch ID	QC Type	Result	Method
Chloride	QC55694	Blank	ND	EPA 300.0
Cyanide-Total	QC55725	Blank	ND	EPA 335.4
Fluoride	QC55691	Blank	ND	EPA 300.0
Aluminum	QC55748	Method Blank	ND	EPA 200.8
Antimony	QC55748	Method Blank	ND	EPA 200.8
Arsenic	QC55748	Method Blank	ND	EPA 200.8
Barium	QC55748	Method Blank	ND	EPA 200.8
Beryllium	QC55748	Method Blank	ND	EPA 200.8
Cadmium	QC55748	Method Blank	ND	EPA 200.8
Chromium	QC55748	Method Blank	ND	EPA 200.8
Manganese	QC55748	Method Blank	ND	EPA 200.8
Mercury	QC55748	Method Blank	ND	EPA 200.8
Selenium	QC55748	Method Blank	ND	EPA 200.8
Silver	QC55748	Method Blank	ND	EPA 200.8
Thallium	QC55748	Method Blank	ND	EPA 200.8
Zinc	QC55748	Method Blank	ND	EPA 200.8
Iron	QC55732	Method Blank	ND	EPA 200.7
Nitrate Nitrogen	QC55692	Blank	ND	EPA 300.0
Nitrite Nitrogen	QC55693	Blank	ND	EPA 300.0
Sulfate	QC55695	Blank	ND	EPA 300.0

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Chloride	QC55694	Duplicate	0 - 20	-	0.3	EPA 300.0
		LCS	90 - 110	102.0	-	
		MS	75 - 125	98.5	-	
Cyanide-Total	QC55725	Duplicate	0 - 20	-	0.0	EPA 335.4
		LCS	90 - 110	98.4	-	
		MS	75 - 125	93.0	-	
Fluoride	QC55691	Duplicate	0 - 20	-	5.4	EPA 300.0
		LCS	90 - 110	99.0	-	
		MS	75 - 125	100.5	-	
Aluminum	QC55748	LCS	90 - 110	103.6	-	EPA 200.8
		MS	70 - 130	107.4	-	
		MSD	0 - 10	-	2.1	
Antimony	QC55748	LCS	90 - 110	97.5	-	EPA 200.8
		MS	70 - 130	94.2	-	
		MSD	0 - 10	-	2.8	
Arsenic	QC55748	LCS	90 - 110	96.5	-	EPA 200.8
		MS	70 - 130	104.6	-	
		MSD	0 - 10	-	2.4	
Barium	QC55748	LCS	90 - 110	91.9	-	EPA 200.8

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
		MS	70 - 130	92.4	-	
		MSD	0 - 10	-	0.9	
Beryllium	QC55748	LCS	90 - 110	100.8	-	EPA 200.8
		MS	70 - 130	106.2	-	
		MSD	0 - 10	-	0.5	
Cadmium	QC55748	LCS	90 - 110	93.9	-	EPA 200.8
		MS	70 - 130	92.7	-	
		MSD	0 - 10	-	1.9	
Chromium	QC55748	LCS	90 - 110	102.1	-	EPA 200.8
		MS	70 - 130	115.5	-	
		MSD	0 - 10	-	2.2	
Manganese	QC55748	LCS	90 - 110	96.3	-	EPA 200.8
		MS	70 - 130	107.7	-	
		MSD	0 - 10	-	1.3	
Mercury	QC55748	LCS	90 - 110	99.3	-	EPA 200.8
		MS	70 - 130	90.5	-	
		MSD	0 - 10	-	4.4	
Selenium	QC55748	LCS	90 - 110	96.2	-	EPA 200.8
		MS	70 - 130	99.5	-	
		MSD	0 - 10	-	5.5	
Silver	QC55748	LCS	90 - 110	94.2	-	EPA 200.8
		MS	70 - 130	75.5	-	
		MSD	0 - 10	-	2.4	
Thallium	QC55748	LCS	90 - 110	100.7	-	EPA 200.8
		MS	70 - 130	97.3	-	
		MSD	0 - 10	-	1.6	
Zinc	QC55748	LCS	90 - 110	100.9	-	EPA 200.8
		MS	70 - 130	113.0	-	
		MSD	0 - 10	-	1.5	
Iron	QC55732	Duplicate	0 - 20	-	8.0	EPA 200.7
		LCS	90 - 110	99.8	-	
		MS	75 - 125	110.5	-	
Nitrate Nitrogen	QC55692	Duplicate	0 - 20	-	1.0	EPA 300.0
		LCS	90 - 110	99.5	-	
		MS	75 - 125	97.1	-	
Nitrite Nitrogen	QC55693	Duplicate	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	98.8	-	
		MS	75 - 125	95.1	-	
Sulfate	QC55695	Duplicate	0 - 20	-	0.9	EPA 300.0
		LCS	90 - 110	99.8	-	
		MS	75 - 125	101.8	-	

All analyses were performed in accordance with approved methods under the latest revision to 40 CFR Part 136 unless otherwise identified. Based on my inquiry of the person or persons directly responsible for analyzing the wastewater samples and generating the report (s), the analyses, report, and information submitted are, to the best of my knowledge and belief, true, accurate, and complete.

DATA APPROVED FOR RELEASE BY

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
mg/L = Milligrams Per Liter or PPM
ug/L = Micrograms Per Liter or PPB
mpn/100 mls = Most Probable Number Index/ 100 mls
Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Drinking Water Chain of Custody

Colorado Analytical LABORATORIES, INC.

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	Project Information
Company Name: JDS- Hydro	Company Name:	PWSID: N/A
Contact Name: Doug Schwenke	Contact Name:	System Name:
Address: 5540 Tech Center Dr 100	Address:	Compliance Samples: Yes ☐ No ☐
City: CS State: CO Zip: 80919	City: State: Zip:	Send Results to CDPHE: Yes ☐ No ☐
Phone: 719-227-0072	Phone:	Task Number (Lab Use Only) CAL Task 220316024 JAK
Email: dschwenke@jdshydro.com	Email:	
Sample Collector: Stephanie Schwenke		
Sample Collector Phone: 719-321-5341	PO Number:	

Brones Well

Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	PHASE I, II, V Drinking Water Analyses (check requested analysis)																					Subcontract Analyses				
					Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index (Circle)	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Cyanide	Gross Alpha/Beta	Radium 226/228	Radon	Uranium	Chlorite
3/15/22	2:50pm	#1			X													X	X	X	X	X			X	X	X			
					(10)																									

Instructions: Please analyze all listed compounds on enclosed WORD Doc

Field pH: 7.14
Field temp: 13.2°C

C/S Info:
Delivered Via: FedEx C/S Charge ☒ K

Seals Present Yes ☐ No ☐ Headspace Yes ☐ No ☐
Temp. 2 °C /Ice Y Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Stephanie Schwenke	3/15/22 4 p.m		3/16/22				

JAK

EPC Confined Aquifer Sampling Requirements

Field Measurements
pH
Temp

Radionuclides
Radium 226 and Radium 228
Gross alpha/Beta

Inorganics
Antimony
Arsenic
Barium
Beryllium
Cadmium
Chromium
Cyanide (Total)
Fluoride
Mercury
Nitrate
Nitrite
Selenium
Thallium

Secondary MCLs
Aluminum
Chloride
Corrosivity
Iron
Manganese
Silver
Sulfate
Zinc
TDS

Bacteriological:
Total Coliform

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

Lab Control ID: 22M01464
Received: Mar 17, 2022
Reported: Apr 12, 2022
Purchase Order No.
None Received

Customer ID: 20040H
Account ID: Z01034

Stuart Nielson
Colorado Analytical Laboratories, Inc.
10411 Heinz Way
Commerce City, CO 80640

ANALYTICAL REPORT

By: Roxanne Sullivan
Roxanne Sullivan
Analytical Laboratories Director

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

Lab Control ID: 22M01464
Received: Mar 17, 2022
Reported: Apr 12, 2022
Purchase Order No.
None Received

Customer ID: 20040H
Account ID: Z01034

ANALYTICAL REPORT

Stuart Nielson
Colorado Analytical Laboratories, Inc.

Lab Sample ID	22M01464-001							
Customer Sample ID	**220316024-01D** - Brones Well - #1 sampled on 03/15/22 @ 1450							
Parameter	**Units**	**Code**	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	**pCi/L**	**T**	2.9	1.7	0.1	SM 7110 B	3/23/22 @ 0849	RG
Gross Beta	**pCi/L**	**T**	3.7	2.4	3.1	SM 7110 B	3/23/22 @ 0849	RG
Radium-226	**pCi/L**	**T**	NR	-	-	SM 7500-Ra B	-	-
Radium-228	**pCi/L**	**T**	NR	-	-	EPA Ra-05	-	-

Certification ID's: CO/EPA CO00008

*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.

Codes: (T) = Total (D) = Dissolved (S) = Suspended (R) = Total Residual (AR) = As Received < = Less Than

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

Lab Control ID: 22M01464
Received: Mar 17, 2022
Reported: Apr 12, 2022
Purchase Order No.
None Received

Customer ID: 20040H
Account ID: Z01034

ANALYTICAL REPORT

Stuart Nielson
Colorado Analytical Laboratories, Inc.

Lab Sample ID	22M01464-002							
Customer Sample ID	**220316024-01E** - Brones Well - #1 sampled on 03/15/22 @ 1450							
Parameter	**Units**	**Code**	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	**pCi/L**	**T**	NR	-	-	SM 7110 B	-	-
Gross Beta	**pCi/L**	**T**	NR	-	-	SM 7110 B	-	-
Radium-226	**pCi/L**	**T**	1.2	0.3	0.1	SM 7500-Ra B	3/31/22 @ 1407	KT
Radium-228	**pCi/L**	**T**	2.7	0.8	0.2	EPA Ra-05	3/29/22 @ 1120	JR

Certification ID's: CO/EPA CO00008

*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.

Codes: (T) = Total (D) = Dissolved (S) = Suspended (R) = Total Residual (AR) = As Received < = Less Than

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY Date: 03/23/2022

Batch QC Summary Form

Analyte: Gross Alpha

Control Standard/LFB: ID: C-11 pCi/mL: 57.4 (use 1 diluted)

Spike Solution: ID: C-11 pCi/mL: 57.4 (use 1 mL)

Spike Recovery Calculation: Sample: Tap*

$$\text{Calculation: } \frac{(46.3)\ (1.000) - (0.0)\ (0.200)}{57.4} \times 100 = 81\%$$

Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 30 %	x		
Spike Recovery	70 - 130 %	x		
Blank	< or = 3 x Uncertainty	x		
Duplicate 1	95% confidence interval overlap	x		
Duplicate 2 *	95% confidence interval overlap			x

* Required for batch size greater than 10 samples.

Conclusions:

x Batch QC Passes**
_____ Batch QC Fails
_____ Batch QC Passes, with exceptions**:

Reruns Required: _____

Narrative:

**All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluted in this report.

Batch Listing by Lab Control Number:

22M01421	
22M01441	
22M01464	
22M01473	
22M01477	
22M01485	
22M01434	

Evaluator: 

03/31/2022
Date

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY Date: 03/23/2022

Batch QC Summary Form

Analyte: Gross Beta

Control Standard/LFB: ID: C-11 pCi/mL: 44 (use 1 diluted)

Spike Solution: ID: C-11 pCi/mL: 44 (use 1 mL)

Spike Recovery Calculation: Sample: Tap*

$$\text{Calculation: } \frac{(37.7)\ (1.000) - (0.5)\ (0.200)}{44} \times 100 = 85\%$$

Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 20 %	x		
Spike Recovery	80 - 120 %	x		
Blank	< or = 3 x Uncertainty	x		
Duplicate 1	95% confidence interval overlap	x		
Duplicate 2 *	95% confidence interval overlap			x

* Required for batch size greater than 10 samples.

Conclusions:

x Batch QC Passes**
_____ Batch QC Fails
_____ Batch QC Passes, with exceptions**:

Reruns Required: _____

Narrative:

**All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluted in this report.

Batch Listing by Lab Control Number:

22M01421	
22M01441	
22M01464	
22M01473	
22M01477	
22M01485	
22M01434	

Evaluator: 

03/31/2022
Date

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY Date: 03/30/2022

Batch QC Summary Form

Analyte: Radium-226

Control Standard/LFB: ID: C1-002 pCi/mL: 23 (use 2 diluted)

Spike Solution: ID: C1-002 pCi/mL: 23 (use 2 mL)

Spike Recovery Calculation: Sample: 22M01477-02c

$$\text{Calculation: } \frac{(36.9)\ (1.000) - (0.1)\ (1.000)}{46} \times 100 = 80\%$$

Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 20 %	x		
Spike Recovery	80 - 120 %	x		
Blank	< or = 3 x Uncertainty	x		
Duplicate 1	95% confidence interval overlap	x		
Duplicate 2 *	95% confidence interval overlap	x		

* Required for batch size greater than 10 samples.

Conclusions:

x Batch QC Passes**
_____ Batch QC Fails
_____ Batch QC Passes, with exceptions**:

Reruns Required: _____

Narrative:

**All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluted in this report.

Batch Listing by Lab Control Number:

22M01428	22M01505
22M01432	22M01512
22M01447	22M01513
22M01464	22M01515
22M01465	22M01530
22M01472	22M01440
22M01477	22M01552
22M01500	
22M01501	
22M01504	

Evaluator: 

04/06/2022
Date

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY Date: 03/28/2022

Batch QC Summary Form

Analyte: Radium-228

Control Standard/LFB: ID: C6-002 pCi/mL: 12.9 (use 5 diluted)

Spike Solution: ID: C6-002 pCi/mL: 12.9 (use 5 mL)

Spike Recovery Calculation: Sample: 22M01465-1b

$$\text{Calculation: } \frac{(63.4)\ (1.000) - (2.3)\ (0.800)}{64.5} \times 100 = 95\%$$

Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 20 %	x		
Spike Recovery	80 - 120 %	x		
Blank	< or = 3 x Uncertainty	x		
Duplicate 1	95% confidence interval overlap	x		
Duplicate 2 *	95% confidence interval overlap			x

* Required for batch size greater than 10 samples.

Conclusions:

x Batch QC Passes**
_____ Batch QC Fails
_____ Batch QC Passes, with exceptions**:

Reruns Required: _____

Narrative:

**All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluted in this report.

Batch Listing by Lab Control Number:

22M01378	
22M01428	
22M01440	
22M01464	
22M01465	
22M01477	
22M01500	

Evaluator: 

04/04/2022
Date

Colorado Analytical LABORATORIES, INC.

22M01464

Ship To: Hazen Research
Preserved: Y / (N)
HNO3 Lot #: N/A
Date Preserved: N/A

Report To Information	Bill To Information (If different from report to)	Project Name
Company Name: Colorado Analytical Laboratory Report To: Stuart Nielson E-Mail: stuartnielson@coloradolab.com		Brones Well
Address: 10411 Heinz Way Commerce City, CO 80640 Phone: 303-659-2313	Address: CAL TASK 220316024 JAK	Compliance Samples: Yes ☐ No ☑ Submit Data to CDPHE: Yes ☐ No ☑

Tests Requested

Sample Date/Time		Sample ID	Matrix	Radium 226 (Sub)	Gross Alpha/Beta (Sub)	Radium 228 (Sub)	Container Type
3/15/22	2:50 PM	220316024-01D - #1	Water - Drinking		X		1l Cylinder - Unpreserved
3/15/22	2:50 PM	220316024-01E - #1	Water - Drinking	X		X	4 - 1L Cylinder - None

Comment: FedEx: 5645 7801 0026
pres: (A03) 3/17/22 1303 AS
pH✓: 3/21/22 1303 RL

Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:	Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:
Adams	3/17/22 1000		3/17/22 1241				

Page 1 of 1