# **SUMMA WATER SERVICES**

### Contract Water & Wastewater Operations Well & Water Testing Assistance

February 4, 2025

Silverado Ranch, Inc. c/o Stan Searle, Owner/Developer 18911 Cherry Springs Ranch Drive Monument, CO 80132

### RE: <u>Water Supply Standards – Finding of Sufficient Quality</u> EPC PCD File No. SF246, Silverado Ranch Filing No. 2

Dear Mr. Searle:

Summa Water Services has completed a water quality investigation for Silverado Ranch, per your request and in compliance with current requirements of the El Paso County (EPC) Land Development Code (LDC), Section 8.4.7.(10). This report summarizes the groundwater sampling and analysis in support of a finding of sufficient water quality for the proposed Silverado Ranch Filing No. 2 Subdivision. The quality of the water supply for the proposed subdivision must meet or exceed the drinking water contaminant limits established in the *Colorado Primary Drinking Water Regulations*. These regulations serve to assure the safety of public drinking water supplies by enforcing standards established by the federal Safe Drinking Water Act (i.e., Public Law 93-523), as amended. The following report will demonstrate that the proposed subdivision's water supply is safe to drink.

### Site Location & Subdivision Water Source

Silverado Ranch is a 318-acre development located south of Drennan Road, west of Ellicott Highway, and east of Peyton Highway. Filing No. 1 was approved in October 2018 for 10 single-family residential lots (2.5-acre minimum size) and 3 larger open space parcels. The proposed Filing No. 2 will create 15 single-family lots.

The Silverado Ranch development utilizes the Laramie-Fox Hills aquifer as the primary water source for individual wells. This aquifer is the deepest in the Denver Basin and widely used for public water systems. The Laramie-Fox Hills is both a bedrock groundwater source and a confined aquifer. Therefore, the required chemical analysis from the contaminants list in the EPC LDC does not include the Volatile Organic and Synthetic Organic Chemical Contaminants.

### Sample Location & Collection Techniques

For this water quality investigation, representative water samples were obtained from an existing well located at 20005 Silverado Hill View, which is within ½ mile of the proposed Filing No. 2. The existing well (Permit No. 80462-F) was drilled into the Laramie-Fox Hills aquifer at a depth of 352 feet, with perforated casing starting at 183 feet. The samples collected from this well are considered to be representative of the Laramie-Fox Hills source water.

Field work was carried out by Ellen Ellson, a Certified Water Professional and masters' level analytical chemist with over 25 years' experience operating public water systems, collecting and analyzing water quality samples, and testing and treating domestic wells. Neither Summa Water Services nor Ms. Ellson

are associated with Silverado Ranch except for this contracted project. Samples were collected on Monday, December 30, 2024, with lab supplied bottles, stored and transported to multiple Colorado certified laboratories within the standard holding times. A chain of custody is included with each laboratory's report (attached).

### **Chemical Analysis & Results**

Water samples were collected and stored on ice for transporting to various laboratories, including EPC Public Health Laboratory, Colorado Analytical, SGS North America (Wheat Ridge location), and Hazen Research. All Inorganic Chemicals, Secondary Maximum Contaminants, Radionuclide, and Bacteriological analyses were performed, as required by the LDC Section 8.4.7.(10)(a). All laboratories utilized in this investigation are Colorado certified to perform the analyses requested on their Chain of Custody form.

Please note that corrosivity of water is not the measure of one specific parameter, but rather an attempt to assess the potential for water to be corrosive and possibly leach trace metals from the aquifer, well pump, piping, fixtures, and the internal components of appliances. Colorado Analytical conducted the additional analyses and calculated the water's Langelier Index, a common standard of evaluating the tendency of water to be corrosive (negative index) or to form scale (positive index). A Langelier Index of zero is considered "balanced" water and not likely to cause corrosion or scale formation. A Langelier Index of - 0.5 to +0.5 is interpreted as "non-corrosive" and probably not requiring treatment. The water sample collected from Silverado Ranch has a Langelier Index of -0.52 units, so very mild corrosion might be expected over time. Exposure to leached heavy metals in drinking water can be minimized by flushing the tap with cold water prior to consumption, always using cold water for drinking or cooking, and/or adding an in-home water treatment device such as an NSF Standard 53 certified water filter to remove heavy metals like lead, copper, cadmium and mercury.

Analytical results from all laboratories are tabulated on the following page and the all laboratory reports are attached. Where a laboratory report indicates an analyte was not detected at the reporting limit (i.e., Colorado Analytical's "ND"), the result is reported as "less than the reporting limit or minimum level" (e.g., "<0.05"). In all cases, the reporting limit is below the MCL and/or SMCL. Where there is no applicable MCL or SMCL, a "---" is listed.

### Contaminant Levels Meet Drinking Water Requirements

Per the LDC, the maximum permissible contaminant levels in the source water supply shall meet the requirements of the *Colorado Primary Drinking Water Regulations*, as clarified by the EPC Public Health. As shown in the tabulated results, the water samples collected for Silverado Ranch meet or exceed the *Colorado Primary Drinking Water Regulations'* Maximum Contaminant Limits (MCLs) for all Inorganic Chemicals, Radionuclides, and Bacteriological Contaminants.

Among the Secondary Maximum Contaminants, there are two analytes (Iron and Manganese) that appear to be present at "objectionable" levels simply because they do not meet the respective Secondary Maximum Contaminant Levels (SMCLs). According to the *Colorado Primary Drinking Water Regulations*, Secondary Maximum Contaminants mainly affect the aesthetic qualities of drinking water and might have health implications at significantly higher concentrations. Both Iron and Manganese are essential nutrients. Iron levels above the SMCL can cause rusty colored water, sedimentation, metallic taste, and reddish or orange staining. Manganese levels exceeding the SMCL of 0.05 mg/L can cause drinking water to taste better, in addition to dark colored staining of plumbing and laundry. Adverse health effects can be observed for both underexposure and overexposure for Manganese. However, the World Health Organization recommends water manganese levels less than 0.4 mg/L to avoid potential health

Silverado Ranch - Wate	er Quality	y Results	- 12/3	30/24 Samples
Inorganic C	Chemical C	ontaminant	Levels	
<u>Analyte</u>	<u>Results</u>	MCL	<u>Units</u>	Laboratory
Anitmony	< 0.0012	0.006	mg/L	Colorado Analytical
Arsenic	<0.0006	0.01	mg/L	Colorado Analytical
Barium	0.0492	2.0	mg/L	Colorado Analytical
Beryllium	<0.0001	0.004	mg/L	Colorado Analytical
Cadmium	<0.0001	0.005	mg/L	Colorado Analytical
Chromium	<0.0015	0.1	mg/L	Colorado Analytical
Cyanide (Total*)	0.0056	0.02	mg/L	SGS North America
Fluoride	0.45	4.0	mg/L	Colorado Analytical
Mercury	<0.0001	0.002	mg/L	Colorado Analytical
Nitrate (as Nitrogen)	<0.05	10	mg/L	Colorado Analytical
Nitrite (as Nitrogen)	< 0.03	1.0	mg/L	Colorado Analytical
Total Nitrate and Nitrite (as Nitrogen)	< 0.03	10.0	mg/L	Colorado Analytical
Selenium	<0.008	0.1	mg/L	Colorado Analytical
Thallium	<0.0002	0.0	mg/L	Colorado Analytical
*If total cyanide is 0.2 mg/L or greater,	then further a	nalysis for free	e cyanide	e is required.
Secondary I	Maximum C	Contaminan	t Level	S
Analyte	Results	<u>SMCL</u>	<u>Units</u>	Laboratory
Aluminum	0.002	0.05 to 0.2	mg/L	Colorado Analytical
Chloride	2.4	250	mg/L	Colorado Analytical
Corrosivity (Langelier Index)	-0.52		units	Colorado Analytical
Iron	0.367	0.3	mg/L	Colorado Analytical
Manganese	0.0764	0.05	mg/L	Colorado Analytical
pH	7.18	6.5-8.5		Colorado Analytical
Silver	<0.0005	0.1	mg/L	Colorado Analytical
Sulfate	56.9	250	mg/L	Colorado Analytical
Total dissolved solids (TDS)	269	500	mg/L	Colorado Analytical
Zinc	0.012	5.0	mg/L	Colorado Analytical
Radionu	clides Con	taminant Le	evels	
Analyte	<u>Results</u>	<u>MCL</u>	<u>Units</u>	Laboratory
Gross Alph	<2.1	15	pCi/L	Hazen Research
Gross Beta	2.7		pCi/L	Hazen Research
Combined Radium-226+228	1.0 ±0.6	5	pCi/L	Hazen Research
Bacteriological	Contamina	ant Presenc	e/Abse	ense
<u>Analyte</u>	<u>Results</u>			Laboratory
Total Coliform (Qualitative)	Absent			EPC Public Health
Abbreviations:				
MCL = Maximum Contaminant Level			mg/L =	milligrams per liter
SMCL = Secondary Maximum Contam	inant Level			picocuries per liter

complications. Manganese levels at Silverado Ranch's water source are substantially below this figure. SMCLs are not enforceable for public water systems, but rather they are used primarily for guidance in determining realistic goals for drinking water quality. Despite the two SMCL exceedances, the Laramie-Fox Hills water supply at Silverado Ranch appears to meet the standards specified in the *Colorado Primary Drinking Water Regulations* and no treatment facilities are necessary.

#### Future Water Quality & Analysis Expiration

Under foreseeable and likely future conditions, the quality of the proposed water supply should continue to meet or exceed the water quality standards as set forth in the *Colorado Primary Drinking Water* Regulations. Unless otherwise conditioned by EPC Public Health, further analysis of the water quality should not be necessary, since the Laramie-Fox Hills water source is a confined aquifer.

### **Compliance Not to Diminish Other State and Federal Standards**

Nothing in this report is intended to modify, displace, supersede or diminish compliance with other Colorado and/or federal water quality requirements.

In summary, the water quality investigation completed for Silverado Ranch Filing No. 2 demonstrates that the designated water source, the Laramie-Fox Hills aquifer, meets the standards specified in the *Colorado Primary Drinking Water Regulations*, per the EPC Public Health and LDC Section 8.4.7.(10). The water supply is safe for consumption and no treatment facilities are necessary. Please let me know if you have any questions or concerns with the sample results and/or narrative presented herein. I am always happy to assist with any additional testing, should you need it. Thank you for your business.

Very truly yours,

len Ellson

Ellen Ellson, Owner Summa Water Services 9548 Waterbury Drive, Falcon, CO 80831 719.352.5257 mobile *ellson.ellen@gmail.com* 

enclosures



### **Analytical Results**

TASK NO: 241230047

Report To: Ellen Ellson Company: Summa Water Services 9548 Waterbury Dr Falcon CO 80831 Bill To: Ellen Ellson Company: Ellen Ellson 9548 Waterbury Drive Falcon CO 80831

Task No.: 241230047 Client PO: Client Project: 20005 Silverado Hill Loop

Date Received: 12/30/24 Date Reported: 1/7/25 Matrix: Water - Drinking

Customer Sample ID	20005 Silverado Hill Loop						
Sample Date/Time:	12/30/24	10:15 AM					
Lab Number:	241230047-0	1					

Test	Result	Method	RL	MCL	Date Analyzed	QC Batch ID	Analyzed By
Nitrate/ Nitrite Nitrogen	ND mg/L	Calculation	0.05 mg/L		1/2/25	-	AMJ
Chloride	2.4 mg/L	EPA 300.0	0.1 mg/L	250	12/31/24	QC78599	NRP
Fluoride	0.45 mg/L	EPA 300.0	0.10 mg/L	4	12/31/24	QC78603	NRP
Nitrate Nitrogen	ND mg/L	EPA 300.0	0.05 mg/L	10	12/31/24	QC78600	NRP
Nitrite Nitrogen	ND mg/L	EPA 300.0	0.03 mg/L	1	12/31/24	QC78601	NRP
Sulfate	56.9 mg/L	EPA 300.0	0.1 mg/L	250	12/31/24	QC78602	NRP

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) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable



### **Analytical Results**

TASK NO: 241230047

Report To: Ellen Ellson Company: Summa Water Services 9548 Waterbury Dr Falcon CO 80831 Bill To: Ellen Ellson Company: Ellen Ellson 9548 Waterbury Drive Falcon CO 80831

Task No.: 241230047 Client PO: Client Project: 20005 Silverado Hill Loop

### Date Received: 12/30/24 Date Reported: 1/7/25 Matrix: Water - Drinking

### Customer Sample ID 20005 Silverado Hill Loop Sample Date/Time: 12/30/24 10:15 AM

Lab	Number:	241230047-02

Lab Number: 2	41230047-02						
Test	Result	Method	RL	MCL	Date Analyzed	QC Batch ID	Analyzed By
<u>Total</u>							
Iron	0.367 mg/L	EPA 200.7	0.005 mg/L	0.3	1/2/25	QC78610	MBN
<u>Total</u>							
Aluminum	0.002 mg/L	EPA 200.8	0.001 mg/L	0.05	1/2/25	QC78585	MBN
Antimony	ND mg/L	EPA 200.8	0.0012 mg/L	0.006	1/2/25	QC78585	MBN
Arsenic	ND mg/L	EPA 200.8	0.0006 mg/L	0.01	1/2/25	QC78585	MBN
Barium	0.0492 mg/L	EPA 200.8	0.0007 mg/L	2	1/2/25	QC78585	MBN
Beryllium	ND mg/L	EPA 200.8	0.0001 mg/L	0.004	1/2/25	QC78585	MBN
Cadmium	ND mg/L	EPA 200.8	0.0001 mg/L	0.005	1/2/25	QC78585	MBN
Chromium	ND mg/L	EPA 200.8	0.0015 mg/L	0.1	1/2/25	QC78585	MBN
Manganese	0.0764 mg/L	EPA 200.8	0.0008 mg/L	0.05	1/2/25	QC78585	MBN
Mercury	ND mg/L	EPA 200.8	0.0001 mg/L	0.002	1/2/25	QC78585	MBN
Selenium	ND mg/L	EPA 200.8	0.0008 mg/L	0.05	1/2/25	QC78585	MBN
Silver	ND mg/L	EPA 200.8	0.0005 mg/L	0.1	1/2/25	QC78585	MBN
Thallium	ND mg/L	EPA 200.8	0.0002 mg/L	0.002	1/2/25	QC78585	MBN
Zinc	0.012 mg/L	EPA 200.8	0.001 mg/L	5	1/2/25	QC78585	MBN

Abbreviations/ References:

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Company: Summa Water Services

Report To: Ellen Ellson

### Analytical QC Summary

#### TASK NO: 241230047

Receive Date: 12/30/24 Project Name: 20005 Silverado Hill Loop

Test	QC Batch II	D QC Type	Result		Method	Prep Date
Chloride	QC78599	Blank	ND		EPA 300.0	12/31/24
Fluoride	QC78603	Blank	ND		EPA 300.0	12/31/24
Aluminum	QC78585	Method Blank	ND		EPA 200.8	12/30/24
Antimony	QC78585	Method Blank	ND		EPA 200.8	12/30/24
Arsenic	QC78585	Method Blank	ND		EPA 200.8	12/30/24
Barium	QC78585	Method Blank	ND		EPA 200.8	12/30/24
Beryllium	QC78585	Method Blank	ND		EPA 200.8	12/30/24
Cadmium	QC78585	Method Blank	ND		EPA 200.8	12/30/24
Chromium	QC78585	Method Blank	ND		EPA 200.8	12/30/24
Manganese	QC78585	Method Blank	ND		EPA 200.8	12/30/24
Mercury	QC78585	Method Blank	ND		EPA 200.8	12/30/24
Selenium	QC78585	Method Blank	ND		EPA 200.8	12/30/24
Silver	QC78585	Method Blank	ND		EPA 200.8	12/30/24
Thallium	QC78585	Method Blank	ND		EPA 200.8	12/30/24
Zinc	QC78585	Method Blank	ND		EPA 200.8	12/30/24
ron	QC78610	Method Blank	ND		EPA 200.7	1/2/25
Nitrate Nitrogen	QC78600	Blank	ND		EPA 300.0	12/31/24
Nitrite Nitrogen	QC78601	Blank	ND		EPA 300.0	12/31/24
Sulfate	QC78602	Blank	ND		EPA 300.0	12/31/24
Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Chloride	QC78599	Duplicate -241230083-03	0 - 20	-	0.1	EPA 300.0
		LCS	90 - 110	104.7	-	
			00 110	10111		
		MS -241230083-03	75 - 125	99.8	-	
Fluoride	QC78603	MS -241230083-03 Duplicate -241230085-01			- 1.4	EPA 300.0
Fluoride	QC78603		75 - 125	99.8	- 1.4 -	EPA 300.0
Fluoride	QC78603	Duplicate -241230085-01	75 - 125 0 - 20	99.8	- 1.4 - -	EPA 300.0
	QC78603 QC78585	Duplicate -241230085-01 LCS	75 - 125 0 - 20 90 - 110	99.8 - 99.4	-	EPA 300.0 EPA 200.8
		Duplicate -241230085-01 LCS MS -241230085-01	75 - 125 0 - 20 90 - 110 75 - 125	99.8 - 99.4 95.8	-	
		Duplicate -241230085-01 LCS MS -241230085-01 LCS	75 - 125 0 - 20 90 - 110 75 - 125 90 - 110	99.8 - 99.4 95.8 100.2		
Aluminum	QC78585	Duplicate -241230085-01 LCS MS -241230085-01 LCS MS -241230007-09	75 - 125 0 - 20 90 - 110 75 - 125 90 - 110 70 - 130	99.8 - 99.4 95.8 100.2 102.6		
Aluminum	QC78585	Duplicate -241230085-01 LCS MS -241230085-01 LCS MS -241230007-09 MSD -241230007-09	75 - 125 0 - 20 90 - 110 75 - 125 90 - 110 70 - 130 0 - 10	99.8 - 99.4 95.8 100.2 102.6 -		EPA 200.8
Aluminum	QC78585	Duplicate -241230085-01 LCS MS -241230085-01 LCS MS -241230007-09 MSD -241230007-09 LCS	75 - 125 0 - 20 90 - 110 75 - 125 90 - 110 70 - 130 0 - 10 90 - 110	99.8 - 99.4 95.8 100.2 102.6 - 102.0	- - - 0.1 -	EPA 200.8
Aluminum Antimony	QC78585 QC78585	Duplicate -241230085-01 LCS MS -241230085-01 LCS MS -241230007-09 MSD -241230007-09 LCS MS -241230007-09	75 - 125 0 - 20 90 - 110 75 - 125 90 - 110 70 - 130 0 - 10 90 - 110 70 - 130	99.8 - 99.4 95.8 100.2 102.6 - 102.0	- - - 0.1 - -	EPA 200.8
Aluminum Antimony	QC78585 QC78585	Duplicate -241230085-01 LCS MS -241230085-01 LCS MS -241230007-09 MSD -241230007-09 LCS MS -241230007-09 MSD -241230007-09	75 - 125         0 - 20         90 - 110         75 - 125         90 - 110         70 - 130         0 - 10         90 - 110         70 - 130         0 - 10         90 - 110         70 - 130         0 - 10	99.8 - 99.4 95.8 100.2 102.6 - 102.0 104.7 -	- - - 0.1 - 0.5	EPA 200.8 EPA 200.8
Aluminum Antimony	QC78585 QC78585	Duplicate -241230085-01 LCS MS -241230085-01 LCS MS -241230007-09 MSD -241230007-09 LCS MS -241230007-09 MSD -241230007-09 LCS	75 - 125         0 - 20         90 - 110         75 - 125         90 - 110         70 - 130         0 - 10         90 - 110         70 - 130         90 - 110         90 - 110         90 - 110         90 - 110         90 - 110         90 - 110	99.8 - 99.4 95.8 100.2 102.6 - 102.0 104.7 - 101.0	- - - 0.1 - 0.5	EPA 200.8 EPA 200.8
Aluminum Antimony	QC78585 QC78585	Duplicate -241230085-01 LCS MS -241230085-01 LCS MS -241230007-09 MSD -241230007-09 LCS MS -241230007-09 MSD -241230007-09 LCS MS -241230007-09	75 - 125         0 - 20         90 - 110         75 - 125         90 - 110         70 - 130         0 - 10         90 - 110         70 - 130         0 - 10         90 - 110         70 - 130         0 - 10         90 - 110         70 - 130         0 - 10         90 - 110         70 - 130         0 - 10	99.8 - 99.4 95.8 100.2 102.6 - 102.0 104.7 - 101.0 113.3	- - - 0.1 - - 0.5 - - - -	EPA 200.8 EPA 200.8
Aluminum Antimony Arsenic	QC78585 QC78585 QC78585	Duplicate -241230085-01 LCS MS -241230085-01 LCS MS -241230007-09 MSD -241230007-09 LCS MS -241230007-09 LCS MS -241230007-09 MSD -241230007-09 MSD -241230007-09	75 - 125         0 - 20         90 - 110         75 - 125         90 - 110         70 - 130         0 - 10         90 - 110         70 - 130         0 - 10         90 - 110         70 - 130         0 - 10         90 - 110         70 - 130         0 - 10         90 - 110         70 - 130         0 - 10	99.8 - 99.4 95.8 100.2 102.6 - 102.0 104.7 - 101.0 113.3 -	- - 0.1 - 0.5 - 5.6	EPA 200.8 EPA 200.8 EPA 200.8
Aluminum Antimony Arsenic	QC78585 QC78585 QC78585	Duplicate -241230085-01 LCS MS -241230085-01 LCS MS -241230007-09 MSD -241230007-09 LCS MS -241230007-09 MSD -241230007-09 LCS MS -241230007-09 MSD -241230007-09	75 - 125         0 - 20         90 - 110         75 - 125         90 - 110         70 - 130         0 - 10         90 - 110         70 - 130         0 - 10         90 - 110         70 - 130         0 - 10         90 - 110         90 - 110         90 - 110         90 - 110         90 - 110         90 - 110         90 - 110	99.8 - 99.4 95.8 100.2 102.6 - 102.0 104.7 - 101.0 113.3 - 97.7	- - 0.1 - 0.5 - 5.6 -	EPA 200.8 EPA 200.8 EPA 200.8
Aluminum Antimony Arsenic Barium	QC78585 QC78585 QC78585 QC78585	Duplicate -241230085-01 LCS MS -241230085-01 LCS MS -241230007-09 MSD -241230007-09 LCS MS -241230007-09 LCS MS -241230007-09 MSD -241230007-09 LCS MS -241230007-09 MSD -241230007-09	$\begin{array}{c} 75 - 125 \\ 0 - 20 \\ 90 - 110 \\ 75 - 125 \\ 90 - 110 \\ 70 - 130 \\ 0 - 10 \\ 90 - 110 \\ 70 - 130 \\ 0 - 10 \\ 90 - 110 \\ 70 - 130 \\ 0 - 10 \\ 90 - 110 \\ 70 - 130 \\ 0 - 10 \\ 90 - 110 \\ 70 - 130 \\ 0 - 10 \\ 90 - 110 \\ 70 - 130 \\ 0 - 10 \\ \end{array}$	99.8 - 99.4 95.8 100.2 102.6 - 102.0 104.7 - 101.0 113.3 - 97.7 96.7 -	- - 0.1 - 0.5 - - 5.6 - -	EPA 200.8 EPA 200.8 EPA 200.8 EPA 200.8
Aluminum Antimony Arsenic	QC78585 QC78585 QC78585	Duplicate -241230085-01 LCS MS -241230085-01 LCS MS -241230007-09 MSD -241230007-09 LCS MS -241230007-09 LCS MS -241230007-09 MSD -241230007-09 LCS MS -241230007-09	$\begin{array}{c} 75 - 125 \\ 0 - 20 \\ 90 - 110 \\ 75 - 125 \\ 90 - 110 \\ 70 - 130 \\ 0 - 10 \\ 90 - 110 \\ 70 - 130 \\ 0 - 10 \\ 90 - 110 \\ 70 - 130 \\ 0 - 10 \\ 90 - 110 \\ 70 - 130 \\ 0 - 10 \\ 90 - 110 \\ 70 - 130 \\ 0 - 110 \\ 70 - 130 \\ 0 - 130 \\ \end{array}$	99.8 - 99.4 95.8 100.2 102.6 - 102.0 104.7 - 101.0 113.3 - 97.7 96.7	- - 0.1 - - 0.5 - - 5.6 - - 0.1	EPA 200.8 EPA 200.8 EPA 200.8

Abbreviations/ References:

RL = Reporting Limit = Minimum Level

mg/L = Milligrams Per Liter or PPM

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Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
 (s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

est	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
	L.	MSD -241230007-09	0 - 10	-	3.0	
Cadmium	QC78585	LCS	90 - 110	99.5	-	EPA 200.8
		MS -241230007-09	70 - 130	99.9	-	
		MSD -241230007-09	0 - 10	-	1.3	
Chromium	QC78585	LCS	90 - 110	100.2	-	EPA 200.8
		MS -241230007-09	70 - 130	100.4	-	
		MSD -241230007-09	0 - 10	-	0.6	
Manganese	QC78585	LCS	90 - 110	101.5	-	EPA 200.8
		MS -241230007-09	70 - 130	103.7	-	
		MSD -241230007-09	0 - 10	-	1.9	
Mercury	QC78585	LCS	90 - 110	101.4	-	EPA 200.8
		MS -241230007-09	70 - 130	101.7	-	
		MSD -241230007-09	0 - 10	-	3.1	
Selenium	QC78585	LCS	90 - 110	102.7	-	EPA 200.8
		MS -241230007-09	70 - 130	104.6	-	
		MSD -241230007-09	0 - 10	-	5.2	
Silver	QC78585	LCS	90 - 110	95.4	-	EPA 200.8
		MS -241230007-09	70 - 130	84.6	-	
		MSD -241230007-09	0 - 10	-	8.2	
Thallium	QC78585	LCS	90 - 110	90.1	-	EPA 200.8
		MS -241230007-09	70 - 130	98.4	-	
		MSD -241230007-09	0 - 10	-	4.0	
Zinc	QC78585	LCS	90 - 110	97.8	-	EPA 200.8
		MS -241230007-09	70 - 130	87.7	-	
		MSD -241230007-09	0 - 10	-	4.2	
Iron	QC78610	Duplicate -241230011-10	0 - 20	-	1.4	EPA 200.7
		LCS	90 - 110	104.3	-	
		MS -241230020-01A	75 - 125	108.3	-	
Nitrate Nitrogen	QC78600	Duplicate -241230083-03	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	102.3	-	
		MS -241230083-03	75 - 125	96.4	-	
Nitrite Nitrogen	QC78601	Duplicate -241230083-03	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	99.7	-	
		MS -241230083-03	75 - 125	98.2	-	
Sulfate	QC78602	Duplicate -241230083-03	0 - 20	-	0.3	EPA 300.0
		LCS	90 - 110	102.3	-	
		MS -241230083-03	75 - 125	105.3	-	

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 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) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

Colorado Anolytical LABORATORIES, INC.	<u>Commerce City Lab</u> 10411 Heinz Way Commerce City CO 80640	Lakewood Service Center 610 Garrison Street, Unit E Lakewood CO 80215	Phone: 303-659-2313 www.coloradolab.com		ride sanics crock (Circle) c, UV 254 (Circle) c, UV	Alk/L SUVA Gros Gros Radi					Scals Present Yes 🗆 No 🖵 Headspace Yes 🕞 No 🗖	Received By: Date/Time: Received By: Date/Time:	XX 1.202
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Custody Protect Information	PWSID: NO	amples: to CDPHE:	Task Number (Lab Use Only) CAL Task 241230047	CJF V Drinking Wotor Angless (chack reade		57725 57675 17875 17875 17185						Delivered Viar (A I/V) Relinquished By:	0
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Drinking Water Chain Bill To Information (If different from report to)	Company Name: SAM	ess: State:		lber:	f Containers bal Chlorine .) amples Only	o .oV S A\q Vam) S A\q	<u>8</u> 6.6	20	HUCALA .		11 See.	Received By:	
	SUNC	WW DT. Address: ate: (10 Zip: X0B) City:	nuil.c	PO Number:	Ruttle Labels Sury " Silverado Parich. Logged per COC. (F 12/30/34	Client Sample ID / Sample Pt ID	2000551 Norado		MNdrd (	MURRAWKA. (+	to Ellen's Mastercano		NIO 12 InCOL
Report To Information	Company Name Summa WATEN Contact Name: EMEN FUSIN	OSUS: WOTER DWW CITY: FILL COM STATE: (10)	Phone: 719-352-525 Emailel 15M. Ellen C.	Sample Collector Phone:	Ruttle Labels s panch. Logged	Date Time C	- <u>Grun</u> Kalash		<u> </u>	MC MC 1	Bill to EUL	Relinquished By	1/manan

M	Gmail
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## CAL Task

241230047

### **RE: developer water testing**

1 message

CJF

Jaime Adams <jaimeadams@coloradolab.com> To: Ellen Ellson <ellson.ellen@gmail.com>

Mon, Dec 23, 2024 at 10:42 AM

You would need:

5 – 1 liter unpresevered

1 – 500 ml. unpreserved

1 – 500 ml. Nitric preserved

1 – 500 ml. Green Cyanide

1-250 ml. unpreserved

1 Bac-Tusur

ild ne

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Yes -- what do lead for the tests that you CAN run? Thanks. =e=

nprr

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Are you just needing to know what containers you need? We don't typically ship out containers to be sent to other labs, but I can tell you what containers you will need.

llen Ellsor nday, F

From: Ellen Ellson <ellson.ellen@gmail.com> Sent: Monday, December 23, 2024 10:29 AM To: Jaime Adams <jaimeadams@coloradolab.com> Subject: Re: developer water testing

I have a built of bottles here -- I think I have everything I need, but you could give me a list to double-check? I don't necessarily need a quote, as he'll pay what he needs to pay ... all in the course of developing a subdivision, ya know? =e=

### you just

you just

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Do you need me to have a project manager generate a quote for you? All the bottles will ship together so I cannot guarantee they will go out today.

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Yes, Sorta figured that was the schedule. I figure I can do the bacT test locally, too, even if it requires a repeat trip to the site. The more important thing is whether or not you can do the Cyanide and Silver testing. I'd need a "green" bottle and ??? for those? Could that be shipped to me yet today, if you can do those tests? I see that SGS is drinking water certified for at least the Cyanide, so I'll contact them, too, if need be (although I'd rather work with you guys!). Thanks! =e= On.Mon, Dec 23, 2024 at 10:22 AM Jaime Adams <jaimeadams@coloradolab.com> wrote: Hi Ettent- I can have a project manager put together a quote for you, but as far as sampling this week, we an only accept sub-contract samples on Thursday morning, or first thing the morning of 12/30. We cannot accept bacteriological samples 12/24 or 12/31. Shipping might be iffy since we cannot take bacteriological samples tomorrow. I am checking on the Cyanide inquiry. 94 - 650 M 157 CAL Task From: Ellen Ellson <ellson.ellen@gmail.com> Sent: Monday, December 23, 2024 9:47 AM 241230047 To: Jaime Adams <jaimeadams@coloradolab.com> Subject: developer water testing CJF ··········· Jaime, a developer in the C/S area contacted me last Friday. Apparently, El Paso County requires water testing during the development and approval process and they require a list of specific analyses, depending on the water source. Here's the list that also includes the apparent MCL next to each test: S. 13. Inorganic Chemicals and MCL (mg/L): Antimony 0.006 2. Arsenic 0.01 3. Barium 2.0 4. Beryllium 0.004 5. Cadmium 0.005 6 Chromium 0.1 or greater then further analysis for free cyanide is required. throtal cyanite is 0.2 mg/ Eluoride 4.o 9. Mercury. 0.002 10. Nitrate 10.0 (as Nitrogen) 11. Nitrite 1.0 (as Nitrogen) 2. Total Nitrate and Nitrite 10.0 (as Nitrogen) 13. Selenium 0.05 14. Thallium 0.002 Secondary Maximum Contaminants: Alupainum 0.05 to 0.2 mg/L 2. Chjøride 250 mg/l Langler Index 8. Corrosivity Non-corrosive 4. Iron 0.3 mg/L Manganese 0.05 mg/L 6 pH 6.5-8.5 Page 7 of 8 Ville P

7: Silver 0.1 mg/L
8: Sulfate 250 mg/L
9: Total dissolved solids (TDS) 500 mg/L
10: Zinc 5.0 mg/L

Radionuclides:

Gross Alpha Bera-Water 226 and radium-2281 5pCi/L valdiyim Bacteriological

Collection Techniques. Samples shall be collected by qualified personnel using standard collection and preservation methods and shall be analyzed within the limits of standard holding times. A chain of custody shall be maintained and documented from sampling to a laboratory analysis. Samples shall be analyzed by a Colorado certified testing laboratory.

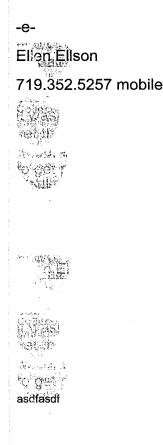
CAL Task

241230047

CJF

#### 

Could you possibly send me a quote for the tests that you can do? I don't see you guys listed as being certified for Cyanide in drinking water. I'm also unsure about the Silver test. I will likely bring the radionuclide samples to Hazen Research myself, since time is of the essence. I do not have any "green" bottles on hand for the Cyanide testing, so that would need to be shipped to me ASAP and/or I could pick the bottle up when I'm there and then ship it back. I'd told the guy I thought I had all of the bottles and would sample and transport them to you today, but I didn't notice the "odd" tests that were listed -- I believe I have all the other "regular" test bottles on hand. In any case, this developer is in the late stages of planning approval and is anxious to get the results, as I wasn't something he'd known about until just recently. I'd love to be able to collect the samples yet this week, but getting a bottle sent to me quickly could be iffy -- I don't want to drive to the lab twice, either. ;-) I realize that the Radium test will have the longest wait for results, but he's hoping to get preliminary approval with all of the rest, so the sooner I can do this, the better. Please advise. Thanks!





Report To: Ellen Ellson Company: Summa Water Services 9548 Waterbury Dr Falcon CO 80831

### **Analytical Results**

TASK NO: 241230047

Bill To: Ellen Ellson Company: Ellen Ellson 9548 Waterbury Drive Falcon CO 80831

Task No.: 241230047 Client PO: Client Project: 20005 Silverado Hill Loop

Date Received: 12/30/24 Date Reported: 1/7/25 Matrix: Water - Drinking

Customer Sample ID 20005 Silverado Hill Loop Sample Date/Time: 12/30/24 Lab Number: 241230047-01

10:15 AM

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	153.9 mg/L as CaCO3	SM 2320-B	0.2 mg/L as CaCO3	12/31/24	-	KJP
Calcium as CaCO3	89.9 mg/L	EPA 200.7	0.1 mg/L	1/2/25	-	MBN
Carbonate	ND mg/L as CaCO3	SM 2320-B	0.2 mg/L as CaCO3	12/31/24	-	KJP
Hydroxide	ND mg/L as CaCO3	SM 2320-B	0.2 mg/L as CaCO3	12/31/24	-	KJP
Langelier Index	-0.52 units	SM 2330-B	units	1/2/25	-	DPL
рН	7.18 units	SM 4500-H-B	0.01 units	12/30/24	-	JJA
Temperature	20 °C	SM 4500-H-B	1 °C	12/30/24	-	JJA
Total Alkalinity	153.9 mg/L as CaCO3	SM 2320-B	4.0 mg/L as CaCO3	12/31/24	QC78581	KJP
Total Dissolved Solids	269 mg/L	SM 2540-C	5 mg/L	12/31/24	QC78563	ISG

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.



## Analytical QC Summary

### TASK NO: 241230047

Report To: Ellen Ellson Company: Summa Water Services Receive Date: 12/30/24 Project Name: 20005 Silverado Hill Loop

Test	QC Batch ID	QC Type	Result		Method	Prep Date
Total Alkalinity	QC78581	Blank	ND		SM 2320-B	12/31/24
Total Dissolved Solids	QC78563	Blank	ND		SM 2540-C	12/30/24
Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Total Alkalinity	QC78581 E	Duplicate -241226047-01	0 - 20	-	19.5	SM 2320-B
	L	.CS	90 - 110	99.4	-	
	L	.CS-2	90 - 110	106.5	-	
Total Dissolved Solids	QC78563 E	Duplicate -241227047-02	0 - 10	-	6.3	SM 2540-C
	L	.CS	85 - 115	105.2	-	

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 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.

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Anolytical LABORATORIES, INC.	<u>Commerce City Lab</u> 10411 Heinz Way Commerce City CO 80640	Lakewood Service Center 610 Garrison Street, Unit E Lakewood CO 80215	Phone: 303-659-2313 www.coloradolab.com	-07	pride ganics C, DOC (Circle) A, UV 254 (Circle)	oulfl Naire Mik/i Naire Mik/i Naire Mik/i						Scals Present Yes I No Headspace Yes No I	Received By: Dayle Fress, restLine L	1 7 × 1 × 1 × 1 × 1 × 1 × 1 × 1 × 1 × 1
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Report To Information	Company Name: SUMMA WITHEN Contact Name: EMEN FUSIN	OSUS: WATER DWW City: MICON State: 10	Phone: 719-352-525 Email (15M. Cll Ch Cg Sample Collector: PM CM	Sample Collector Phone:	Ruttle Labels ? Painch. Loggeo	Date Time C	SIM 4202/21	~ mp		\$C	1-250 MLU	Instructions: Bill to EUL	Relinquished By	HMY WWWW

M	Gmail
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## CAL Task

241230047

### **RE: developer water testing**

1 message

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CAL Task

241230047

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### Wheat Ridge, CO

The results set forth herein are provided by SGS North America Inc.

### **Technical Report for**

### Summa Water Services

Summa Water Services

**Project: Silverado Ranch** 

SGS Job Number: DA69663



Sampling Date: 12/30/24

Report to:

Summa Water Services 9548 Waterbury Drive Falcon, CO 80831 ellson.ellen@gmail.com

**ATTN: Ellen Ellson** 

### Total number of pages in report: 9



Eric Hoffman

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 unless noted in the narrative, comments or footnotes.

Client Service contact: Parna Payandeh 303-425-6021 Certifications: CO (CO00049), ND (R-027), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY (8TMS-L) HI (CO00049), NJ (CO011), NV (CO00049), AK (CO00049), CA (3076), and NC (08701)

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

SGS North America Inc. • 4036 Youngfield St. • Wheat Ridge, CO 80033-3862 • tel: 303-425-6021 •

Please share your ideas about how we can serve you better at: EHS.US.CustomerCare@sgs.com



DA69663

01/15/25

Automated Report

e-Hardcopy 2.0

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## **Table of Contents**

Section 1: Sample Summary	3
Section 2: Summary of Hits	4
Section 3: Sample Results	
3.1: DA69663-1: 20005 SILVERADO HILL LOOPS	6
Section 4: Misc. Forms	7
4.1: Chain of Custody	8

### Sample Summary

Summa Water Services

Job No: DA69663 Silverado Ranch

Summa Water Services Project No: Project: Silverado Ranch

Sample	Collected			Matrix	Client
Number	Date	Time By	Received	Code Type	Sample ID
DA69663-1	12/30/24	10:20 E	12/30/24	AQ Ground Water	20005 SILVERADO HILL LOOPS

### Summary of Hits

Job Number:	DA69663
Account:	Summa Water Services
Project:	Summa Water Services
Collected:	12/30/24

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
DA69663-1	20005 SILVERAD	OO HILL LOOP	S			
Cyanide, Total		0.0056	0.0050		mg/l	EPA 335.4/SW 9012B

Page 1 of 1

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Wheat Ridge, CO

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Sample Results

Report of Analysis





SGS North America Inc.

			Repor	t of Ar	nalysis			Page 1 of 1
Client Sample ID:	20005 SI	LVERADO H	HILL LOOP	5				
Lab Sample ID:	DA69663	8-1				Date Sampled	: 12	/30/24
Matrix:	AQ - Gro	ound Water				Date Received	: 12	/30/24
						Percent Solids	: n/a	a
Project:	Summa V	Vater Service	8					
General Chemistry	,							
Analyte		Result	RL	Units	DF	Analyzed	By	Method
Cyanide, Total		0.0056	0.0050	mg/l	1	01/13/25 18:18	TH	EPA 335.4/SW 9012B

3.1 3





Wheat Ridge, CO

**Section 4** 

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

• Chain of Custody



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Current Regular COC 23MAY23.xis; FORM: EHSA-QAC-0027-01-FORM-Wheat Ridge - COC; RV 9/2/21

DA69663: Chain of Custody Page 1 of 2



4.1 **4** 

### SGS Sample Receipt Summary

Job Number: da69663			Client:	SUMMA W	ATER SERVIC	ES	Project: SIVERADO RA	NCH		
Date / Time Received:	12/30/202	24 1:45:0	0 PM	Delivery M	ethod:	hd	Airbill #'s:			
Cooler Temps (Raw Mea Cooler Temps (Cor	,									
Cooler Informatio		<u>Y o</u>	<u>r N</u>			<u>Sampl</u>	e Information	Y	or N	N/A
<ol> <li>Custody Seals Present:</li> <li>Custody Seals Intact:</li> <li>Temp criteria achieved:</li> <li>Cooler temp verification:</li> <li>Cooler media:</li> </ol> Trip Blank Information <ol> <li>Trip Blank present / cool</li> <li>Trip Blank listed on COO</li> </ol> 3. Type of TB Received	ler:	✓ ✓ ✓ □ □ □		VA I I I I		2. Sam 3. Suff 4. Con 5. Sam 6. Date 7. VOC 8. Bott 9. Com 10. Voc 11. %	ple labels present on bottles: iples presented properly iient volume/containers recv'd for analys dition of sample: iple recv'd within HT ps/Times/IDs on COC match sample label cs have headspace les received for unspecified tests ippositing instructions clear a Soil Kits/Jars received past 48hrs? Solids Jar Received? sidual Chlorine Present?	Intact		8
Misc Information Number of Encores: 29 Test Strip Lot #s: Residual Chlorine Test 9 Comments	pH 0-3:		5 Gram	_	pH 10-12:		Number of Lab Filtered Metals Other: (Specify)			
SM001 Rev. Date 05/04/17 Ted	chnician:	JEREMY	)	Date:	12/30/2024 5:2	7:54 PM	Reviewer: D	ate:		

DA69663: Chain of Custody Page 2 of 2



4.1 **4** 



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

Lab Control ID: 24H03643 Received: Dec 30, 2024 Reported: Jan 31, 2025 Purchase Order No. None Received

Customer ID: 01893Z Account ID: Z00000

Ellen Ellson 9548 Waterbury Drive Falcon, CO 80831

# ANALYTICAL REPORT

Report may only be copied in its entirety. Results reported herein relate only to discrete samples submitted by the client. Hazen Research, Inc. does not warrant that the results are representative of anything other than the samples that were received in the laboratory Reviewed and approved by:

Vive

Roxanne Sullivan Analytical Laboratories Director



Lab Control ID: 24H03643 Received: Dec 30, 2024 Reported: Jan 31, 2025 Purchase Order No. None Received

Customer ID: 01893Z Account ID: Z00000

### ANALYTICAL REPORT

### Ellen Ellson

La Custom		-	24H03643-001 20005 Silver	ado Hill I o	on			
oustonn			20003 011701	sampled or	•	@ 1010		
				Precision*	Detection		Analysis	
Parameter	Units	Code	Result	+/-	Limit	Method	Date / Time	Analyst
<b>Gross Alpha</b>	pCi/L	Т	<2.1	2.4	2.1	SM 7110 B	01/23/25 @ 0852	JR
Gross Beta	pCi/L	Т	2.7	2.4	1.8	SM 7110 B	01/23/25 @ 0852	JR
Radium-226	pCi/L	Т	0.4	0.2	0.1	SM 7500-Ra B	01/14/25 @ 1451	KT
Radium-228	pCi/L	Т	0.6	0.6	0.2	EPA pg.19	01/23/25 @ 1543	KR

### 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) = Replicate Sample (AR) = As Received < = Less Than

Date: 01/23/2025

### **Batch QC Summary Form**

Analyte: Gross Alpha					
Control Standard/LFB:	ID:	C11-006	pCi/mL:	57.4	(use 1 diluted)
Spike Solution:	ID:	C11-006	pCi/mL:	57.4	(use 1 mL)
Spike Recovery Calculation:		Sample: T	ар		

Calculation:	(269.8)	(0.200)	-	(0.5)	(0.200)	 x 100 =	93.8%
			57.4				

### Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 30 %	Х		
Spike Recovery	70 - 130 %	Х		
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:

24H03606	24H03638
24H03609	24H03642
24H03610	24H03643
24H03611	25H01001
24H03613	25H01002
24H03614	25H01009
24H03620	
24H03622	
24H03624	
24H03637	

Evaluator:

01/27/2025

Date

Date: 01/23/2025

### **Batch QC Summary Form**

Analyte: Gross Beta							
Control Standard/LFB:	ID:	C11-006	pCi/mL:	44	(use 1 diluted)		
Spike Solution:	ID:	C11-006	pCi/mL:	44	(use 1 mL)		
Spike Recovery Calculation:		Sample:	Тар				
Calculation: (1	90.6)	(0.200)	-	(0.95)	(0.200)	x 100 =	86.2%

44

### Batch QC Evaluation:

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

\* 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:

24H03606	24H03638
24H03609	24H03642
24H03610	24H03643
24H03611	25H01001
24H03613	25H01002
24H03614	25H01009
24H03620	
24H03622	
24H03624	
24H03637	

Evaluator:

01/27/2025

Date

Date: 01/22/2025

### **Batch QC Summary Form**

Analyte: Radium-228							
Control Standard/LFB:	ID:	C6-009	pCi/mL:	14.2	(use 5 diluted)		
Spike Solution:	ID:	C6-009	pCi/mL:	14.2	(use 5 mL)		
Spike Recovery Calculation:		Sample: 2	4H03643-1	lb			
Calculation: (6	9.9)	(1.000)	- 71	(0.6)	(1.000)	x 100 =	97.6%

### 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	Х		
Duplicate 2 *	95% confidence interval overlap			x

\* Required for batch size greater than 10 samples.

### Conclusions:

Batch QC Passes\*\* х 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:

25H01048 25H01050 24H03604 24H03619 24H03620 24H03622 24H03624 24H03643	<u>Evaluator:</u> Afaly (mini-
	 01/31/2025

Date: 01/14/2025

### **Batch QC Summary Form**

Analyte: Radium-226					
Control Standard/LFB:	ID:	C73-008	pCi/mL:	10.55	(use 2 diluted)
Spike Solution:	ID:	C73-008	pCi/mL:	10.55	(use 2 mL)
Spike Recovery Calculation:		Sample: 24	4H03643-0	1a	

Calculation:	(19.3)	(1.000)	-	(0.4)	(1.000)	x 100 =	90%
_			21.1				

### 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:

24H03642	
24H03643	
25H01014	
25H01025	
25H01026	
25H01057	
25H01032	

<u>Evaluator:</u> Afalingtine=

01/24/2025

Date



HAZEN

24H **03643** 

### CHAIN OF CUSTODY RECORD, P. 1

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GOL	DEN,	со	80403	5
	4601	4601 INDI	4601 INDIANA	HAZEN RESEARCH, 4601 INDIANA STRE GOLDEN, CO 80403

Phone - (303) 279 4501 Fax - (303) 278 1528

Customer Information							Billing Information (If different)											
Client Name: Summa Water Services						Billing Name: (Same)												
Contact: Ellen Ellson					Billing Contact:													
Address: 4 174114 9548 Waterbury Drive					Billing Address:													
Falcon, CO 80831							<u> </u>											
	A LE MARTE	/																
Phone:	<u>1990)</u> Mai	719.352.525	7				PO #											
email:	-0268	ellson.ellen@		com		- 49	e-mail:											
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(2	and another to be	G=Glass O=Other								-					01			
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Client Preservation Information Client Preserved Sample: Y N Acid Lot ID: <u>4</u> /7 Preservation check: (216hrs) Date/Time: <u>12/31</u> 1125 Initials: TA									AL.									
Pres	erved Date	/Time:	_ Initials:		liation					JN. (≥		Julo/ I						
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Chain of Custody Record.xls Hazen R					Research, Inc Updated 12/3/2024													



	ty Public Health L		METHOD:SI EPA ID# C 0907 - (719) 57	000025		Date 12/30/2024 Date 12/30/2024	Time 1115 Time 1302	Rc'd 728 Tested 728			
PWSID				□ Raw □ Finished □ LT2	Î	Date 12/31/2024	Time 0722	Comp 744			
Sample Point ID: RTOR	Sample Point ID: RTOR					Lab Sample # 21997					
Sample Taken Date: 12/30/2			·			Coli	lert Results P	er 100ml			
Address where sample was	taken: 2000 Silverad	do Hill Loop Colorado Sp	orings CO 809	928		(1 - 20)					
Sample site location: Hydra	ant	Collector Name: Elle	llen Chlorine: mg/L			Absence: Absence of coliform bacteria					
	,	Recreational				Presence: P non-complia standards.	resence of col nce with drinki	iform bacteria & ing water			
Results to: Ellen Ellson			Phone: (719)	352-5257		MPN/100 ml:					
Mailing address: 9548 Wate	erbury Drive					Absence: E.	Coli: Escheric	hia coli bacteria			
City/State/Zip: Falcon, CO 8	80831					□ Presence:E.	Coli: Escheric	chia coli hacteria			

Comments:

MPN/100 ml: