

**TABLE 4**  
**WATER WELL SAMPLE RESULTS**  
**Permit #58905-F (Well #3)**  
**Fort Lupton, Colorado**  
**Sample ID: Buffalo 58905-F, Sample Date: 3/4/2024**

Analyte	Result	Units	Regulatory Limit
Alkalinity, Bicarbonate	545	mg/L	n/a
Alkalinity, Carbonate	30.0	mg/L	n/a
Alkalinity, Total	575	mg/L	n/a
Bacteria, Iron Related	35,000	CFU/mL	n/a
Bacteria, Slime Forming	67,000	CFU/mL	n/a
Bacteria, Sulfate Reducing	6,000	CFU/mL	n/a
Barium	0.0711	mg/L	2
Benzene	ND	µg/L	5
Boron	0.377	mg/L	0.75
Bromide	0.78	mg/L	n/a
Calcium	1.81	mg/L	n/a
Chloride	80.8	mg/L	250
Diesel Range Organics	ND	mg/L	n/a
Ethane	0.0221	mg/L	n/a
Ethylbenzene	ND	µg/L	700
Fluoride	1.8	mg/L	2.0
Gasoline Range Organics	ND	mg/L	n/a
Iron	0.0689	mg/L	0.3
Magnesium	0.507	mg/L	n/a
Manganese	0.0046	mg/L	0.05
Methane	9.74	mg/L	n/a
Nitrogen, Nitrate	ND	mg/L	10
Nitrogen, Nitrite	ND	mg/L	1
pH	8.82	Standard Units	6.5-8.5
Phosphorus, Total	0.055	mg/L	n/a
Propane	ND	mg/L	n/a
Potassium	1.41	mg/L	n/a
Selenium	ND	mg/L	0.02
Sodium	295	mg/L	n/a
Specific Conductivity	1,230	µmhos/cm	n/a
Strontium	0.0803	mg/L	n/a
Sulfate	ND	mg/L	250
Toluene	ND	µg/L	1,000
Total Dissolved Solids	663	mg/L	500
Xylene, Total	ND	µg/L	10,000

Notes:

ND = Not detected above method reporting limit

Lab qualifiers (i.e. letters next to result) are defined in the lab report

n/a = regulatory limit not available for the analyte

**TABLE 5**  
**WATER WELL SAMPLE ISOTOPIC ANALYSIS RESULTS**  
**Permit #58905-F (Well #3)**  
**Fort Lupton, Colorado**  
**Sample ID: Buffalo 58905-F, Sample Date: 3/4/2024**

Analyte	Result	Units <sup>a</sup>	Regulatory Limit
$\delta$ D of water	-102.4	‰ relative to VSMOW	n/a
$\delta$ <sup>18</sup> O of water	-13.48	‰ relative to VSMOW	n/a
Tritium content of water	na	‰	n/a
$\delta$ <sup>13</sup> C of DIC	-8.3	‰ relative to VPDB	n/a
<sup>14</sup> C content of DIC	na	‰	n/a
$\delta$ <sup>15</sup> N of nitrate	na	‰	n/a
$\delta$ <sup>18</sup> O of nitrate	na	‰	n/a
$\delta$ <sup>34</sup> S of sulfate	na	‰	n/a
$\delta$ <sup>18</sup> O of sulfate	na	‰	n/a

Notes:

Isotopic analysis conducted at Isotech Laboratories Inc.

n/a = regulatory limit not available for the analyte

na = not analyzed

**TABLE 6**  
**WATER WELL SAMPLE ISOTOPIC ANALYSIS RESULTS**  
**Permit #58905-F (Well #3)**  
**Fort Lupton, Colorado**  
**Sample ID: Buffalo 58905-F, Sample Date: 3/4/2024**

Analyte	Result	Units <sup>a</sup>	Regulatory Limit
Carbon Monoxide	nd	mol %	n/a
Helium	na	mol %	n/a
Hydrogen	nd	mol %	n/a
Argon	0.699 (0.61 mg/L)	mol %	n/a
Oxygen	3.86	mol %	n/a
Nitrogen	35.12 (19 mg/L)	mol %	n/a
Carbon Dioxide	0.61	mol %	n/a
Methane	59.63 (21 mg/L)	mol %	n/a
Ethane	0.0797 (0.056 mg/L)	mol %	n/a
Ethylene	nd	mol %	n/a
Propane	0.0011 (0.0011 mg/L)	mol %	n/a
Propylene	nd	mol %	n/a
Iso-butane	nd	mol %	n/a
N-butane	nd	mol %	n/a
Iso-pentane	nd	mol %	n/a
N-pentane	nd	mol %	n/a
Hexanes +	nd	mol %	n/a

Notes:

Isotopic analysis conducted at Isotech Laboratories, Inc.

<sup>a</sup> Chemical compositions are normalized to 100% (Mol. % is approximately equal to Vol. %). Additional information provided in attached lab report n/a = regulatory limit not available for the analyte

nd = Not detected above method reporting limit

na = Not analyzed

n/a = regulatory limit not available for the analyte