

TABLE 1
ACCUTEST ANALYTICAL RESULTS
13159 County Road 39, Permit #78801-F-R
Platteville, Colorado
Sample ID: NGL 78801-F-R

Analyte, Units	7/24/2017 Result	11/15/2017 Result	2/7/2018 Result	5/7/2018 Result	8/13/2018 Result	11/7/2018 Result
Alkalinity, Bicarbonate, mg/L	494	549	511	475	480	488
Alkalinity, Carbonate, mg/L	6.2	ND	ND	12.6	8.4	15.5
Alkalinity, Total, mg/L	501	549	512	487	488	503
Bacteria, Iron Reducing, CFU/mL	74,500	74,500	74,500	74,500	35,000	9,000
Bacteria, Slime Forming, CFU/mL	ND	ND	6,500	350,000	2,500	ND
Bacteria, Sulfate Reducing, CFU/mL	1,200	5,000	18,000	5,000	6,000	6,000
Barium, mg/L	0.0443	0.0435	0.0287	0.0602	0.0342	0.0515
Benzene, ug/L	ND	ND	ND	ND	ND	ND
Boron, mg/L	0.214	0.173	0.204	0.213	0.219	0.218
Bromide, mg/L	0.90	2.2	0.94	0.90	0.94	0.91
Calcium, mg/L	19.7	103	24.7	18.4	20.5	16.8
Chloride, mg/L	153	628	178	161	163	159
Diesel Range Organics, mg/L	ND	ND	ND	ND	ND	ND
Ethane, mg/L	0.262	0.0973	0.101	0.230	0.128	0.229
Ethylbenzene, ug/L	ND	ND	ND	ND	ND	ND
Fluoride, mg/L	1.6	0.78	1.7	1.9	1.8	1.8
Gasoline Range Organics, mg/L	ND	ND	ND	ND	ND	ND
Iron, mg/L	ND	0.0204	0.0615	ND	0.0394	ND
Magnesium, mg/L	5.99	35.6	7.27	5.66	6.18	5.27
Manganese, mg/L	0.0131	0.0620	0.0127	0.0117	0.0119	0.0118
Methane, mg/L	7.00	3.04	5.29	5.11	5.91	7.50
Nitrogen, Nitrate, mg/L	ND	ND	ND	ND	ND	ND
Nitrogen, Nitrite, mg/L	ND	ND	0.022	ND	ND	ND
pH, Standard Units	8.34	7.96	8.30	8.48	8.42	8.51
Phosphorus, Total, mg/L	0.047	ND	0.036	0.040	0.041	0.043
Propane, mg/L	0.167	0.0484	0.0666	0.128	0.0566	0.0703
Potassium, mg/L	3.07	9.44	3.73	3.13	2.98	3.06
Selenium, mg/L	ND	0.0011	ND	ND	ND	ND
Sodium, mg/L	424	961	394	397	361	378
Specific Conductivity, μ mhos/cm	1,500	4,990	1,900	1,570	1,680	1,670
Strontium, mg/L	0.516	2.72	0.588	0.482	0.517	0.468
Sulfate, mg/L	169	1,230	228	174	197	162
Toluene, ug/L	ND	ND	ND	0.69	ND	ND
Total Dissolved Solids, mg/L	1,070	3,040	1,180	1,070	1,090	1,020
Xylene, Total, ug/L	ND	ND	ND	ND	ND	ND

Notes:

ND (RL) = Non-detect (reporting limit)

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

TABLE 2
ISOTECH SIW RESULTS
13159 County Road 39, Permit #78801-F-R
Platteville, Colorado
Sample ID: NGL 78801-F-R

Analyte, Units	7/24/2017 Result	11/15/2017 Result	2/7/2018 Result	5/7/2018 Result	8/13/2018 Result	11/7/2018 Result
dD of water, ‰ relative to VSMOW	-104.8	-104.5	-104.6	-104.7	-105.2	-105.0
d18O of water, ‰ relative to VSMOW	-13.69	-13.37	-13.68	-13.70	-13.75	-13.70
Tritium content of water, ‰	na	na	na	na	na	na
d13C of DIC, ‰ relative to VPDB	-14.7	-15.4	-15.0	-14.6	-15.9	-14.5
14C content of DIC, ‰	na	na	na	na	na	na
d15N of nitrate, ‰	na	na	na	na	na	na
d18O of nitrate, ‰	na	na	na	na	na	na
d34S of sulfate, ‰	na	na	na	na	na	na
d18O of sulfate, ‰	na	na	na	na	na	na

Notes:

Isotopic analysis conducted at Isotech Laboratories Inc.

na = not analyzed

TABLE 3
ISOTECH NG4 RESULTS
13159 County Road 39, Permit #78801-F-R
Platteville, Colorado
Sample ID: NGL 78801-F-R

Analyte, Units	7/24/2017 Result	11/15/2017 Result	2/7/2018 Result	5/7/2018 Result	8/13/2018 Result	11/7/2018 Result
Carbon Monoxide, mol %	nd	nd	nd	nd	nd	nd
Helium, mol %	na	na	na	na	na	na
Hydrogen, mol %	nd	nd	nd	nd	nd	nd
Argon, mol %	0.520 (0.37 mg/L)	0.993 (0.51 mg/L)	0.636 (0.42 mg/L)	0.540 (0.38 mg/L)	0.713 (0.55 mg/L)	0.700 (0.46 mg/L)
Oxygen, mol %	1.11	18.96	3.81	2.07	4.92	4.61
Nitrogen, mol %	27.87 (12 mg/L)	55.21 (17 mg/L)	32.60 (13 mg/L)	27.72 (12 mg/L)	36.34 (17 mg/L)	32.85 (13 mg/L)
Carbon Dioxide, mol %	1.78	8.22	2.44	1.91	2.05	1.73
Methane, mol %	66.89 (19 mg/L)	16.27 (3.3 mg/L)	59.65 (16 mg/L)	65.89 (19 mg/L)	55.23 (17 mg/L)	59.22 (16 mg/L)
Ethane, mol %	1.15 (0.67 mg/L)	0.235 (0.098 mg/L)	0.518 (0.28 mg/L)	1.24 (0.72 mg/L)	0.539 (0.34 mg/L)	0.703 (0.38 mg/L)
Ethylene, mol %	nd	nd	nd	nd	nd	nd
Propane, mol %	0.493 (0.39 mg/L)	0.0767 (0.044 mg/L)	0.233 (0.18 mg/L)	0.466 (0.37 mg/L)	0.149 (0.13 mg/L)	0.136 (0.10 mg/L)
Propylene, mol %	nd	nd	nd	nd	nd	nd
Iso-butane, mol %	0.0764	0.0173	0.0473	0.0629	0.0243	0.0215
N-butane, mol %	0.0823	0.0159	0.0466	0.0784	0.0237	0.0186
Iso-pentane, mol %	0.0147	0.0032	0.0089	0.0132	0.0057	0.0051
N-pentane, mol %	0.0070	0.0018	0.0055	0.0074	0.0025	0.0018
Hexanes + , mol %	0.0017	0.0009	0.0018	0.0016	0.0013	0.0011

Notes:

Isotopic analysis conducted at Isotech Laboratories, Inc.

^a Chemical compositions

are normalized to 100%

nd = not detected

na = not analyzed