

TABLE 1
ACCUTEST ANALYTICAL RESULTS
12735 County Road 34, Permit #15631
Platteville, Colorado
Sample ID: 7_3N_66W_Henrickson

Analyte, Units	1/19/2017 Result	3/6/2017 Result	5/9/2017 Result	7/6/2017 Result	9/12/2017 Result	12/14/2017 Result
Alkalinity, Bicarbonate, mg/L	388	395	423	449	415	394
Alkalinity, Carbonate, mg/L	ND	9.5	9.7	16.4	16.9	17.1
Alkalinity, Total, mg/L	388	405	432	465	432	411
Bacteria, Iron Reducing, CFU/mL	74,500	74,500	74,500	74,500	74,500	74,500
Bacteria, Slime Forming, CFU/mL	66,500	66,500	66,500	12,500	350,000	66,500
Bacteria, Sulfate Reducing, CFU/mL	1,200	18,000	5,000	ND	1,200	18,000
Barium, mg/L	0.0598	0.0571	0.0679	0.0664	0.0635	0.0717
Benzene, ug/L	3.7	2.0	1.0	ND	1.4	3.3
Boron, mg/L	0.107	0.111	0.112	0.104	0.117	0.115
Bromide, mg/L	0.49	0.49	0.51	0.52	0.52	0.47
Calcium, mg/L	3.64	3.78	3.15	3.16	3.16	3.94
Chloride, mg/L	59.6	54.2	49.8	51.8	49.4	49.4
Diesel Range Organics, mg/L	ND	ND	ND	ND	ND	ND
Ethane, mg/L	1.46	2.44	1.37	3.67	2.36	0.981
Ethylbenzene, ug/L	ND	ND	ND	ND	ND	ND
Fluoride, mg/L	1.7	1.8	1.8	1.9	1.8	1.7
Gasoline Range Organics, mg/L	0.403	0.406	0.277	0.826	0.569	0.173
Iron, mg/L	0.0303	0.0112	ND	ND	ND	ND
Magnesium, mg/L	0.767	0.811	0.674	0.641	0.649	0.811
Manganese, mg/L	0.0070	0.0089	0.0060	0.0076	0.0082	0.0116
Methane, mg/L	8.51	12.2	3.49	11.7	9.87	4.94
Nitrogen, Nitrate, mg/L	ND	ND	ND	ND	ND	ND
Nitrogen, Nitrite, mg/L	ND	ND	ND	0.0086	ND	0.69
pH, Standard Units	8.35	8.42	8.42	8.53	8.60	8.59
Phosphorus, Total, mg/L	0.019	ND	0.016	0.020	ND	0.024
Propane, mg/L	0.934	1.89	0.899	2.09	1.70	0.546
Potassium, mg/L	1.33	0.200	1.38	1.28	1.43	1.44
Selenium, mg/L	ND	ND	ND	ND	ND	ND
Sodium, mg/L	210	209	221	212	222	202
Specific Conductivity, μ mhos/cm	865	923	904	813	904	875
Strontium, mg/L	0.111	0.116	0.102	0.103	0.106	0.118
Sulfate, mg/L	0.84	ND	ND	ND	0.56	ND
Toluene, ug/L	1.9	0.98	ND	ND	0.61	0.86
Total Dissolved Solids, mg/L	554	566	568	552	566	547
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
12735 County Road 34, Permit #15631
Platteville, Colorado
Sample ID: 7_3N_66W_Henrickson

Analyte, Units	1/19/2017 Result	3/6/2017 Result	5/9/2017 Result	7/6/2017 Result	9/12/2017 Result	12/14/2017 Result
dD of water, ‰ relative to VSMOW	-108.1	-108.6	-108.4	-108.2	-108.0	-109.0
d18O of water, ‰ relative to VSMOW	-14.24	-14.28	-14.23	-14.20	-14.22	-14.27
Tritium content of water, ‰	na	na	na	na	na	na
d13C of DIC, ‰ relative to VPDB	-12.4	-12.0	-11.9	-12.2	-12.4	-12.3
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
12735 County Road 34, Permit #15631
Platteville, Colorado
Sample ID: 7_3N_66W_Henrickson

Analyte, Units	1/19/2017 Result	3/6/2017 Result	5/9/2017 Result	7/6/2017 Result	9/12/2017 Result	12/14/2017 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 %	0.497 (0.41 mg/L)	0.346 (0.34 mg/L)	0.623 (0.51 mg/L)	0.129 (0.17 mg/L)	0.261 (0.26 mg/L)	0.678 (0.47 mg/L)
Oxygen, mol %	0.79	0.92	0.76	0.44	0.95	2.60
Nitrogen, mol %	27.50 (14 mg/L)	18.22 (11 mg/L)	35.62 (18 mg/L)	7.24 (5.8 mg/L)	15.32 (9.4 mg/L)	37.19 (15 mg/L)
Carbon Dioxide, mol %	0.67	0.55	0.50	0.34	0.48	0.58
Methane, mol %	60.89 (20 mg/L)	68.53 (27 mg/L)	56.09 (19 mg/L)	76.55 (40 mg/L)	70.23 (28 mg/L)	52.08 (14 mg/L)
Ethane, mol %	6.14 (4.2 mg/L)	7.12 (5.7 mg/L)	3.99 (2.7 mg/L)	9.78 (10 mg/L)	8.05 (6.6 mg/L)	4.40 (2.5 mg/L)
Ethylene, mol %	nd	nd	nd	nd	nd	nd
Propane, mol %	2.66 (2.5 mg/L)	3.26 (3.6 mg/L)	1.80 (1.7 mg/L)	4.16 (6.1 mg/L)	3.52 (4.0 mg/L)	1.84 (1.4 mg/L)
Propylene, mol %	nd	nd	nd	nd	nd	nd
Iso-butane, mol %	0.258	0.327	0.184	0.388	0.343	0.181
N-butane, mol %	0.461	0.577	0.331	0.758	0.653	0.336
Iso-pentane, mol %	0.0693	0.0814	0.0515	0.108	0.0991	0.0578
N-pentane, mol %	0.0459	0.0539	0.0371	0.0787	0.0706	0.0397
Hexanes + , mol %	0.0180	0.0156	0.0128	0.0299	0.0232	0.0154

Notes:

Isotopic analysis conducted at Isotech Laboratories, Inc.

^a Chemical compositions are normalized to 100% (Mol. % is approximately equal to Vol. %). Additional information provided in attached lab report.

nd = not detected

na = not analyzed