

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

Analyte, Units	2/7/2018 Result	4/12/2018 Result	6/6/2018 Result	8/6/2018 Result	10/16/2018 Result	12/5/2018 Result
Alkalinity, Bicarbonate, mg/L	391	392	416	392	409	392
Alkalinity, Carbonate, mg/L	8.7	19.6	10.8	16.0	10.8	11.6
Alkalinity, Total, mg/L	400	411	427	408	420	404
Bacteria, Iron Reducing, CFU/mL	74,500	74,500	74,500	35,000	35,000	35,000
Bacteria, Slime Forming, CFU/mL	350,000	350,000	350,000	13,000	67,000	13,000
Bacteria, Sulfate Reducing, CFU/mL	359,000	700,000	18,000	27,000	6,000	500,000
Barium, mg/L	0.0677	0.0573	0.0692	0.0679	0.0691	0.0723
Benzene, ug/L	3.0	1.9	0.75	ND	1.5	4.1
Boron, mg/L	0.102	0.118	0.123	0.110	0.106	0.0972
Bromide, mg/L	0.46	0.54	0.42	0.51	0.48	0.46
Calcium, mg/L	3.94	3.62	3.52	2.90	3.53	3.82
Chloride, mg/L	49.6	51.8	52.1	49.1	48.2	48.6
Diesel Range Organics, mg/L	ND	ND	ND	ND	ND	ND
Ethane, mg/L	0.854	1.46	0.924	0.484	0.577	1.18
Ethylbenzene, ug/L	ND	ND	ND	ND	ND	ND
Fluoride, mg/L	1.7	1.8	1.8	1.8	1.8	1.6
Gasoline Range Organics, mg/L	0.159	0.242	0.121	0.0904	0.0586	0.112
Iron, mg/L	0.0172	ND	ND	0.0255	0.0275	0.0425
Magnesium, mg/L	0.738	0.705	0.739	0.592	0.712	0.851
Manganese, mg/L	0.0109	0.0093	0.0083	0.0070	0.0094	0.0195
Methane, mg/L	6.52	8.10	6.08	4.92	7.23	7.02
Nitrogen, Nitrate, mg/L	ND	ND	ND	ND	ND	ND
Nitrogen, Nitrite, mg/L	0.035	ND	ND	ND	ND	ND
pH, Standard Units	8.53	8.67	8.41	8.53	8.56	8.53
Phosphorus, Total, mg/L	0.010	0.028	0.027	0.026	0.029	0.022
Propane, mg/L	0.460	0.828	0.454	0.103	0.299	0.668
Potassium, mg/L	1.89	1.52	2.05	1.28	1.29	1.59
Selenium, mg/L	ND	ND	ND	ND	ND	ND
Sodium, mg/L	201	223	231	196	202	201
Specific Conductivity, μ mhos/cm	826	813	839	783	885	877
Strontium, mg/L	0.115	0.114	0.112	0.0951	0.114	0.138
Sulfate, mg/L	1.2	1.1	0.58	ND	ND	1.8
Toluene, ug/L	ND	0.72	ND	ND	ND	0.56
Total Dissolved Solids, mg/L	534	563	567	560	548	510
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	2/7/2018 Result	4/12/2018 Result	6/6/2018 Result	8/6/2018 Result	10/16/2018 Result	12/5/2018 Result
dD of water, ‰ relative to VSMOW	-109.0	-109.1	-107.8	-107.8	-107.7	-109.6
d18O of water, ‰ relative to VSMOW	-14.33	-14.27	-14.18	-14.20	-14.17	-14.36
Tritium content of water, ‰	na	na	na	na	na	na
d13C of DIC, ‰ relative to VPDB	-12.5	-13.1	-12.6	-12.0	-12.0	-12.5
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
12735 County Road 34, Permit #15631
Platteville, Colorado
Sample ID: 7_3N_66W_Henrickson

Analyte, Units	2/7/2018 Result	4/12/2018 Result	6/6/2018 Result	8/6/2018 Result	10/16/2018 Result	12/5/2018 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 %	0.756 (0.56 mg/L)	0.524 (0.45 mg/L)	0.609 (0.47 mg/L)	0.728 (0.57 mg/L)	0.887 (0.67 mg/L)	0.798 (0.63 mg/L)
Oxygen, mol %	1.78	1.34	2.33	3.84	1.91	1.09
Nitrogen, mol %	42.69 (19 mg/L)	28.35 (15 mg/L)	33.66 (16 mg/L)	37.14 (18 mg/L)	48.27 (22 mg/L)	40.77 (20 mg/L)
Carbon Dioxide, mol %	0.65	0.61	0.70	0.67	0.68	0.75
Methane, mol %	49.37 (15 mg/L)	61.03 (21 mg/L)	56.18 (18 mg/L)	52.60 (17 mg/L)	45.82 (14 mg/L)	51.36 (16 mg/L)
Ethane, mol %	3.17 (1.9 mg/L)	5.24 (3.7 mg/L)	4.21 (2.7 mg/L)	3.19 (2.0 mg/L)	1.64 (1.0 mg/L)	3.47 (2.2 mg/L)
Ethylene, mol %	nd	nd	nd	nd	nd	nd
Propane, mol %	1.22 (1.0 mg/L)	2.22 (2.1 mg/L)	1.78 (1.6 mg/L)	1.38 (1.2 mg/L)	0.612 (0.53 mg/L)	1.35 (1.2 mg/L)
Propylene, mol %	nd	nd	nd	nd	nd	nd
Iso-butane, mol %	0.110	0.212	0.161	0.139	0.056	0.127
N-butane, mol %	0.196	0.372	0.286	0.240	0.0965	0.216
Iso-pentane, mol %	0.0302	0.0541	0.0410	0.0382	0.0143	0.0343
N-pentane, mol %	0.0202	0.0356	0.0280	0.0264	0.0095	0.0213
Hexanes + , mol %	0.0100	0.0125	0.0102	0.0125	0.0048	0.0108

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