

TABLE 1
ACCUTEST ANALYTICAL RESULTS
13017 County Road 30, Permit #68535
Platteville, Colorado
Sample ID: Barclay 68535

Analyte, Units	1/5/2016 Result	3/2/2016 Result	5/10/2016 Result	7/5/2016 Result	8/23/2016 Result	12/13/2016 Result
Alkalinity, Bicarbonate, mg/L	422	427	433	440	432	458
Alkalinity, Carbonate, mg/L	15.9	18.4	17.4	14.9	16.0	ND
Alkalinity, Total, mg/L	437	456	450	454	448	458
Bacteria, Iron Reducing, CFU/mL	ND	9,000	ND	74,500	74,500	74,500
Bacteria, Slime Forming, CFU/mL	ND	ND	500	12,500	500	700
Bacteria, Sulfate Reducing, CFU/mL	700	200	200	1,200	700	ND
Barium, mg/L	0.0390	0.0374	0.0344	0.0341	0.0353	0.0391
Benzene, ug/L	ND	ND	ND	ND	ND	ND
Boron, mg/L	0.164	0.176	0.162	0.172	0.183	0.191
Bromide, mg/L	0.59	0.55	0.54	0.52	0.54	0.60
Calcium, mg/L	2.49	2.42	2.35	2.43	2.29	2.30
Chloride, mg/L	55.5	55.3	64.8	57.9	56.6	57.1
Diesel Range Organics, mg/L	ND	ND	ND	ND	ND	ND
Ethane, mg/L	0.341	0.231	0.240	0.234	ND	0.0058
Ethylbenzene, ug/L	ND	ND	ND	ND	ND	ND
Fluoride, mg/L	1.9	1.7	1.3	1.8	1.9	1.9
Gasoline Range Organics, mg/L	ND	0.0817	0.0686	ND	ND	ND
Iron, mg/L	0.0439	0.0565	0.0694	0.0582	0.0660	0.0538
Magnesium, mg/L	0.468	0.487	0.467	0.466	0.460	0.445
Manganese, mg/L	0.0088	0.0095	0.0094	0.0085	0.0079	0.0091
Methane, mg/L	8.44	7.69	5.28	4.61	4.31	5.41
Nitrogen, Nitrate, mg/L	ND	ND	ND	ND	ND	ND
Nitrogen, Nitrite, mg/L	ND	0.044	ND	ND	ND	ND
pH, Standard Units	8.61	8.61	8.59	8.58	8.54	8.57
Phosphorus, Total, mg/L	ND	0.054	0.043	ND	0.028	0.043
Propane, mg/L	0.151	0.0307	0.115	0.109	ND	ND
Potassium, mg/L	ND	1.56	1.12	1.25	1.22	1.44
Selenium, mg/L	ND	0.0040	ND	ND	ND	ND
Sodium, mg/L	221	252	239	238	239	242
Specific Conductivity, µmhos/cm	906	917	826	922	860	941
Strontium, mg/L	0.0697	0.0763	0.0733	0.0726	0.0704	0.0777
Sulfate, mg/L	ND	ND	ND	ND	ND	ND
Toluene, ug/L	ND	ND	4.5	ND	ND	0.56
Total Dissolved Solids, mg/L	615	600	620	592	606	610
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
13017 County Road 30, Permit #68535
Platteville, Colorado
Sample ID: Barclay 68535

Analyte, Units	1/5/2016 Result	3/2/2016 Result	5/10/2016 Result	7/5/2016 Result	8/23/2016 Result	12/13/2016 Result
dD of water, ‰ relative to VSMOW	-107.3	-107.1	-106.4	-106.7	-107.3	-107.4
d18O of water, ‰ relative to VSMOW	-14.19	-13.96	-14.12	-14.24	-14.01	-14.10
Tritium content of water, ‰	na	na	na	na	na	na
d13C of DIC, ‰ relative to VPDB	-11.0	-10.9	-11.0	-10.8	-10.7	-10.8
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
13017 County Road 30, Permit #68535
Platteville, Colorado
Sample ID: Barclay 68535

Analyte, Units	1/5/2016 Result	3/2/2016 Result	5/10/2016 Result	7/5/2016 Result	8/23/2016 Result	12/13/2016 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 %	0.734 (0.63 mg/L)	0.717 (0.64 mg/L)	0.728 (0.59 mg/L)	0.744 (0.66 mg/L)	0.759 (0.66 mg/L)	0.733 (0.66 mg/L)
Oxygen, mol %	0.88	1.00	1.07	1.550	2.77	0.98
Nitrogen, mol %	42.40 (22 mg/L)	41.06 (23 mg/L)	41.10 (21 mg/L)	43.33 (23 mg/L)	42.99 (23 mg/L)	42.55 (23 mg/L)
Carbon Dioxide, mol %	0.46	0.53	0.55	0.37	0.40	0.41
Methane, mol %	54.27 (19 mg/L)	55.14 (20 mg/L)	55.01 (18 mg/L)	52.63 (19 mg/L)	51.81 (18 mg/L)	53.82 (20 mg/L)
Ethane, mol %	0.875 (0.61 mg/L)	1.09 (0.79 mg/L)	1.07 (0.71 mg/L)	0.947 (0.70 mg/L)	0.892 (0.64 mg/L)	1.06 (0.79 mg/L)
Ethylene, mol %	nd	nd	nd	nd	nd	nd
Propane, mol %	0.256 (0.25 mg/L)	0.318 (0.32 mg/L)	0.313 (0.29 mg/L)	0.293 (0.30 mg/L)	0.263 (0.26 mg/L)	0.314 (0.32 mg/L)
Propylene, mol %	nd	nd	nd	nd	nd	nd
Iso-butane, mol %	0.0511	0.0588	0.0605	0.0528	0.0453	0.0553
N-butane, mol %	0.0506	0.0612	0.0651	0.0579	0.0491	0.0586
Iso-pentane, mol %	0.0137	0.0150	0.0181	0.0151	0.0118	0.0142
N-pentane, mol %	0.0062	0.0069	0.0095	0.0080	0.0060	0.0067
Hexanes + , mol %	0.0016	0.0018	0.0043	0.0033	0.0023	0.0021

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