

TABLE 1
ACCUTEST ANALYTICAL RESULTS
12999 County Road 30, Permit #220643
Platteville, Colorado
Sample ID: Hoffman 220643

Analyte, Units	11/17/2014 Result	5/8/2015 Result	9/16/2015 Result	11/4/2015 Result	3/3/2016 Result	5/10/2016 Result
Alkalinity, Bicarbonate, mg/L	163	158	166	165	154	154
Alkalinity, Carbonate, mg/L	15.3	15.6	15.6	28.5	23.0	23.6
Alkalinity, Total, mg/L	178	174	182	193	177	177
Bacteria, Iron Reducing, CFU/mL	74,500	74,500	74,500	9,000	9,000	74,500
Bacteria, Slime Forming, CFU/mL	66,500	ND	6,500	500	ND	ND
Bacteria, Sulfate Reducing, CFU/mL	359,000	200	200	200	ND	ND
Barium, mg/L	0.0261	0.0217	0.0228	0.0227	0.0239	0.0245
Benzene, ug/L	ND	ND	ND	ND	ND	ND
Boron, mg/L	ND	ND	ND	ND	ND	ND
Bromide, mg/L	0.22	0.19	0.16	0.18	0.19	0.20
Calcium, mg/L	7.30	5.68	4.46	5.23	5.34	5.51
Chloride, mg/L	21.7	20.6	17.6	19.1	19.3	19.9
Diesel Range Organics, mg/L	ND	ND	ND	ND	ND	ND
Ethane, mg/L	0.489	0.408	0.443	0.563	0.518	0.493
Ethylbenzene, ug/L	ND	ND	ND	ND	ND	ND
Fluoride, mg/L	0.65	0.64	0.57	0.60	0.58	0.57
Gasoline Range Organics, mg/L	ND	ND	ND	0.0585	ND	ND
Iron, mg/L	0.0145	ND	ND	ND	ND	ND
Magnesium, mg/L	1.16	0.900	0.735	0.820	0.888	0.939
Manganese, mg/L	0.0188	0.0239	0.0143	0.0161	0.0169	0.019
Methane, mg/L	2.61	1.95	2.20	2.93	2.85	2.77
Nitrogen, Nitrate, mg/L	ND	ND	ND	ND	ND	ND
Nitrogen, Nitrite, mg/L	ND	ND	ND	ND	ND	ND
pH, Standard Units	8.79	8.84	8.94	8.81	9.01	8.88
Phosphorus, Total, mg/L	0.032	0.069	0.011	0.044	0.051	0.040
Propane, mg/L	0.0844	0.119	0.140	0.155	0.147	0.132
Potassium, mg/L	ND	ND	ND	ND	1.16	ND
Selenium, mg/L	ND	ND	ND	ND	0.00084	ND
Sodium, mg/L	202	175	176	173	186	183
Specific Conductivity, µmhos/cm	844	672	690	779	711	734
Strontium, mg/L	0.167	0.123	0.106	0.121	0.129	0.135
Sulfate, mg/L	271	222	165	203	195	223
Toluene, ug/L	ND	ND	ND	ND	ND	ND
Total Dissolved Solids, mg/L	640	556	491	524	533	555
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
12999 County Road 30, Permit #220643
Platteville, Colorado
Sample ID: Hoffman 220643

Analyte, Units	11/17/2014 Result	5/8/2015 Result	9/16/2015 Result	11/4/2015 Result	3/3/2016 Result	5/10/2016 Result
dD of water, ‰ relative to VSMOW	-107.4	-105.2	-105.1	-103.9	-105.7	-104.7
d18O of water, ‰ relative to VSMOW	-13.96	-13.55	-13.74	-13.60	-13.89	-13.89
Tritium content of water, ‰	na	na	na	na	na	na
d13C of DIC, ‰ relative to VPDB	-11.7	-11.3	-11.0	-11.1	-11.2	-11.4
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
12999 County Road 30, Permit #220643
Platteville, Colorado
Sample ID: Hoffman 220643

Analyte, Units	11/17/2014 Result	5/8/2015 Result	9/16/2015 Result	11/4/2015 Result	3/3/2016 Result	5/10/2016 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 %	1.33	1.28 (0.57 mg/L)	1.27 (0.64 mg/L)	1.24 (0.62 mg/L)	1.27 (0.65 mg/L)	1.27 (0.63 mg/L)
Oxygen, mol %	1.26	0.38	2.02	1.62	1.18	1.73
Nitrogen, mol %	68.69	64.90 (17 mg/L)	66.24 (20 mg/L)	65.29 (19 mg/L)	64.79 (21 mg/L)	65.33 (20 mg/L)
Carbon Dioxide, mol %	0.14	0.15	0.12	0.13	0.16	0.17
Methane, mol %	26.10 (5.1 mg/L)	30.28 (5.4 mg/L)	27.40 (5.6 mg/L)	28.78 (5.8 mg/L)	29.52 (6.1 mg/L)	28.52 (5.7 mg/L)
Ethane, mol %	2.20 (0.88 mg/L)	2.49 (0.92 mg/L)	2.39 (1.0 mg/L)	2.43 (1.0 mg/L)	2.56 (1.1 mg/L)	2.49 (1.0 mg/L)
Ethylene, mol %	nd	nd	nd	nd	nd	nd
Propane, mol %	0.229 (0.13 mg/L)	0.416 (0.21 mg/L)	0.444 (0.26 mg/L)	0.409 (0.23 mg/L)	0.424 (0.25 mg/L)	0.396 (0.22 mg/L)
Propylene, mol %	nd	nd	nd	nd	nd	nd
Iso-butane, mol %	0.0219	0.0446	0.0515	0.0470	0.0467	0.0436
N-butane, mol %	0.0210	0.0451	0.0472	0.0417	0.0424	0.0403
Iso-pentane, mol %	0.0047	0.0088	0.0092	0.0082	0.0081	0.0083
N-pentane, mol %	0.0017	0.0034	0.0035	0.0029	0.0029	0.0032
Hexanes + , mol %	0.0009	0.0015	0.0012	0.0008	0.0005	0.0014

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