

PICTURED CLIFFS SAND vs. FRUITLAND COAL COMPARISONS ~~shn 3-98~~ 23-Mar

	WELL NAME	DATE OF	LOCATION	T & R	FORMATION	FRACTURE	ETHANE	BTU	PROPANE	CO2	N2
		SAMPLE				Y/N		SORT			
						STIMULATED	MOL %	CONTENT	Mol %	MOL %	MOL %
1	Chaco 5	5/26/77	SE 1	26N - 13W	PC	NO *	7.66	1181	3.43	0.005	1.454
2	Chaco 2R	7/8/81	SW 7	26N - 12W	PC	NO	5.96	1163.2	2.607	0.451	1.77
3	Chaco 4	11/5/97	NW 7	26N - 12W	PC	YES	6.66	1153	2.81	1.28	0.32
4	Chaco 1	12/11/80	NW 18	26N - 12W	PC	NO	5.69	1131.9	2.26	0.561	0.48
5	Chaco1	7/8/81	NW 18	26N - 12W	PC	NO	5.56	1130.2	2.237	0.64	0.94
6	Chaco 2R	10/4/96	SW 7	26N - 12W	PC	YES	5.773	1125.9	1.7	0.42	0.42
7	Frew Federal 12	6/2/82	SE 30	26N - 12W	PC	NO	6.69	1123	1.98	1.09	0.23
8	Frew Federal 6	11/10/82	NW 19	26N - 12W	PC	NO	5.58	1117	2.13	0.662	0.942
9	Frew Federal 8	11/17/83	SE 19	26N - 12W	PC	NO	5.58	1117	2.07	0.62	3.24
10	Chaco 1 (+2 cpd)	4/8/96	NW 18	26N - 12W	PC	YES	5.04	1116	2.01	0.69	0.95
11	Dome Navajo 12-26-13 #1	2/11/98	SW 12	26N - 13W	PC		5.24	1113.7	1.891	0.822	0.226
12	Chaco 2R	3/20/97	SW 7	26N - 12W	PC	YES	5.475	1113.6	1.656	0.744	0.439
13	Designated Hitter 2	8/21/78	SW 27	26N - 12W	PC	NO	5.46	1111	2.01	1.02	0.45
14	Frew Federal 1	5/22/80	SE 20	26N - 12W	PC	NO	5.54	1111	2	0.74	0.43
15	CHACO 2R	11/10/97	NE 1	26N - 13W	PC	YES	5.224	1110.4	1.42	0.776	0.416
16	Frew Federal 2	5.27/80	SW 20	26N - 12W	PC	NO	5.55	1110	1.99	0.72	0.85
17	Fusselman Federal 1	3/24/78	SW 17	26N - 12W	PC	NO	5.28	1110	1.85	0.35	0.79
18	Chaco 2R	2/3/98	SW 7	26N - 12W	PC	YES	5.085	1103.8	1.307	0.849	0.445
19	Chaco 2R	2/11/98	SW 7	26N - 12W	PC	YES	5.804	1099.4	1.076	0.824	0.287
20	Fusselman Federal 1	3/22/94	SW 17	26N - 12W	COAL	YES	4.19	1092	1.65	0.639	1.698
21	Gallegos Fed. 26-12-30 #1	3/96	NE 30	26N - 12W	COAL	YES	4.94	1091	1.57	1.4	0.28
22	Chaco 4	3/4/96	NW 7	26N - 12W	PC	YES	5.59	1089	1.43	0.75	0.18
23	CHACO 2R	10/25/97	NE 1	26N - 13W	PC	YES	6.391	1085.6	0.698	0.762	0.174
24	Hard Deal 3	2/11/98	SE 18	26N - 12W	PC		4.202	1081.3	1.379	1.087	0.415
25	Fusselman Federal 2R	5/13/83	NW 17	26N - 12W	PC	NO	5.27	1081	1.27	0.687	0.315
26	Chaco 1J	4/11/97	SW 1	26N - 13W	PC	NO	4.7	1078	0.83	0.72	0.58
27	Designated Hitter 2	3/7/96	SW 27	26N - 12W	PC	YES	3.85	1077	1.56	1.14	0.84
28	Frew Federal 12	10/14/83	SE 30	26N - 12W	PC	NO	6.1	1072	1.01	2.1	0.28
29	Chaco 1J	3/20/97	SW 1	26N - 13W	PC	NO	4.852	1070.75	1.178	0.918	0.737
30	Cowsaround 27-7	2/15/96	NE 27	26N - 12W	COAL	YES	1.76	1064	0.62	1.42	2.3
31	Frew Federal 3	11/17/83	NE 29	26N - 12W	PC	NO	3.38	1061	1.26	0.42	0.87
32	Cowsaround 18-1	11/11/97	NE 16	26N - 12W	COAL	YES	3.35	1061	1.02	1.42	0.44
33	Frew Federal 12	12/2/81	SE 30	26N - 12W	PC	NO	5.49	1056	0.25	2.41	0.19
34	Designated Hitter 2	10/3/84	SW 27	26N - 12W	PC	NO	2.29	1055	0.47	2.24	0.14
35	Designated Hitter 2	8/15/89	SW 27	26N - 12W	PC	NO	4.2	1051	0.46	1.11	0.82
36	Designated Hitter 2	12/4/81	SW 27	26N - 12W	PC	NO	2.5	1051	0.46	2.3	0.17
37	Frew Federal 12	6/15/81	SE 30	26N - 12W	PC	NO	5.81	1050	0.27	2.27	0.29
38	Designated Hitter 2	6/2/89	SW 27	26N - 12W	PC	NO	4.19	1048	0.4	1.26	0.96
39	Gallegos Fed. 26-12-19-1	11/9/97	NE 19	26N - 12W	COAL	YES	3.08	1046	0.82	1.73	0.33
40	Ram 1	7/8/95	NE 8	26N - 12W	PC	NO	2.83	1045	0.74	0.77	3.57
41	Frew Federal 12	12/2/80	SE 30	26N - 12W	PC	NO	5.24	1040	0.3	2.11	0.18
42	Designated Hitter 2	11/5/90	SW 27	26N - 12W	PC	NO	3.04	1039	0.36	2.31	0.55
43	Designated Hitter 2	8/17/95	SW 27	26N - 12W	PC	YES	3.25	1038	0.84	2.45	0.64
44	Gallegos Fed. 26-13-14-1	3/23/95	SW 14	26N - 13W	COAL	YES	3.83	1036	0.31	1.5	0.52
45	Gallegos Fed. 26-12-19-1	1/19/95	NE 19	26N - 12W	COAL	YES	2.39	1035	0.49	1.35	0.39
46	Chaco 2J	10/4/96	NE 1	26N - 13W	PC	NO *	3.512	1034.2	0.25	0.79	2.39
47	Designated Hitter 2	4/14/86	SW 27	26N - 12W	PC	NO	2.62	1033	0.66	2.25	0.18
48	Gallegos Fed. 26-13-24-2	9/30/94	SW 24	26N - 13W	COAL	YES	2.4	1033	0.49	1.17	0.58
49	Gallegos Fed. 26-12-19-1	1/8/96	NE 19	26N - 12W	COAL	YES	2.32	1033	0.54	1.4	0.28
50	Fusselman Federal 1	1/19/95	SW 17	26N - 12W	COAL	YES	2.36	1033	0.21	0.701	1.112
51	Frew Federal 12	4/1/79	SE 30	26N - 12W	PC	NO		1032			
52	Susco 3	3/12/96	SW 9	26N - 12W	COAL	YES	3.83	1030	0.65	0.87	0.3
53	Gallegos Fed. 26-13-14-1	9/30/94	SW 14	26N - 13W	COAL	YES	2.34	1030	0.49	1.5	0.59
54	Designated Hitter 2	11/30/79	SW 27	26N - 12W	PC	NO	2.32	1029	0.55	1.86	0.17
55	Frew Federal 12	8/29/96	SE 30	26N - 12W	PC	YES	5.809	1027.9	0.073	0.689	0.959
56	Gallegos Fed. 26-12-30 #2	3/96	SW 30	26N - 12W	COAL	YES	3.9	1027	0.67	1.35	1.42
57	Gallegos Fed. 26-13-14-1	10/8/97	SW 14	26N - 13W	COAL	YES	1.9	1027	0.5	1.11	0.9
58	Designated Hitter 2	5/29/80	SW 27	26N - 12W	PC	NO	2.1	1027	0.38	2.03	0.11
59	Ram 2	7/21/95	NE 8	26N - 12W	COAL	YES	2.11	1027	0.27	0.7	0.61
60	Gallegos Fed. 26-12-6-2	2/23/95	SW 6	26N - 12W	COAL	YES	1.82	1026	0.39	0.76	2.48
61	Frew Federal 3	9/30/94	NE 29	26N - 12W	COAL	YES	2.26	1025	0.51	0.422	0.356
62	Hard deal 2J	2/11/98	NE 18	26N - 12W	PC & COAL	YES	2.511	1025	0.11	0.939	0.322
63	Chaco 1	3/20/97	NW 18	26N - 12W	PC	YES	2.45	1024.51	0.138	0.866	0.23
64	Gallegos Fed. 26-13-24-2	3/23/95	SW 24	26N - 13W	COAL	YES	1.92	1024	0.21	0.87	0.47
65	CHACO 1	11/10/97	NW 18	26N - 12W	PC	YES	2.318	1023.1	0.055	0.918	0.182
66	Gallegos Fed. 26-13-24-2	4/12/96	SW 24	26N - 13W	COAL	YES	1.71	1023	0.11	0.95	0.48
67	Irish 1J	2/11/98	SE 12	26N - 13W	PC/FRT?		1.319	1022.8	0.144	0.04	0.504
68	Leslie 1	2/11/98	NE 7	26N - 12W	PC	YES	2.234	1022.8	0.063	0.855	0.284
69	Cowsaround 27-7	8/26/93	NE 27	26N - 12W	COAL	YES	2.5	1022	0.76	1.57	1.44
70	Gallegos Fed. 26-12-31-1	3/10/96	NE 31	26N - 12W	COAL	YES	3.76	1022	0.55	2.58	0.98
71	Gallegos Fed. 26-13-12-1	11/7/97	NE 12	26N - 13W	COAL	YES	1.37	1022	0.35	0.87	0.68
72	Fusselman Federal 1	7/25/95	SW 17	26N - 12W	COAL	YES	2.16	1022	0.19	0.71	1.02
73	Cowsaround 27-7	8/23/94	NE 27	26N - 12W	COAL	YES	2.18	1021	0.41	1.17	0.59
74	Gallegos Fed. 26-12-31-1	1/9/98	NE 31	26N - 12W	COAL	YES	4.277	1020.2	0.511	3.387	0.229
75	Chaco 1	2/3/98	NW 18	26N - 12W	PC	YES	2.387	1020.2	0.062	0.956	0.511
76	Cowsaround 21-1	11/16/95	NE 21	26N - 12W	COAL	YES	1.82	1020	0.38	1.42	1.04
77	Designated Hitter 2	4/11/85	SW 27	26N - 12W	PC	NO	2.14	1020	0.34	2.31	0.22
78	Gallegos Fed. 26-13-25-1	3/8/96	NE 25	26N - 13W	COAL	YES	2.59	1020	0.24	2.11	0.28
79	Chaco 1	2/11/98	NW 18	26N - 12W	PC	YES	2.336	1019.4	0.041	0.946	0.516
80	Designated Hitter 2	10/5/83	SW 27	26N - 12W	PC	NO	2.06	1019	0.33	2.18	0.16
81	Frew Federal 12	4/21/97	SE 30	26N - 12W	PC	YES	3.1	1019	0.3	1.95	1
82	LESLIE 1	10/25/97	NE 7	26N - 12W	PC	YES	2.059	1018.9	0.007	0.828	0.315
83	State 1 s	10/21/97	NE 2	26N - 13W	PC&COAL	YES (2)	5.4	1018	1.94	0.81	9.01
84	Designated H										

99	Chaco 4	2/3/98	NW 7	26N - 12W	PC	YES	1.521	1013.5	0.036	0.989	0.445
100	CHACO 5	10/25/97	SE 1	26N - 13W	PC	YES	1.299	1013.4	0.06	0.778	0.577
101	Chaco 4	2/11/98	NW 7	26N - 12W	PC	YES	1.55	1013.3	0.021	0.928	0.432
102	Gallegos Fed. 26-13-1-2	2/22/95	SW 1	26N - 13W	COAL	YES	1.17	1013	0.19	0.53	1.22
103	Gallegos Fed. 26-12-7 #1	2/11/98	SW 7	26N - 12W	COAL	YES	1.458	1012.7	0	1.026	0.31
104	Chaco 2J	3/20/97	NE 1	26N - 13W	PC	NO *	1.307	1012.42	0.138	0.659	0.836
105	Gallegos Fed. 26-13-1-2	2/20/96	SW 1	26N - 13W	COAL	YES	1.07	1012	0.14	0.6	1.08
106	Gallegos Fed. 26-13-14-1	3/8/96	SW 14	26N - 13W	COAL	YES	1.61	1012	0.02	1.06	0.45
107	Gallegos Fed. 26-12-7-1	1/8/98	SW 7	26N - 13W	COAL	YES	1.418	1011.9	0	1.011	0.317
108	Chaco 1J	10/4/96	SW 1	26N - 13W	PC	NO	0.458	1011.7	0.1	1.46	1.07
109	Chaco 5	2/11/98	SE 1	26N - 13W	PC	YES	1.252	1011.6	0.004	0.811	0.457
110	Chaco 5	3/20/97	SE 1	26N - 13W	PC	YES	1.304	1011.5	0.086	0.73	0.7
111	Leslie 1	9/16/96	NE 7	26N - 12W	PC	YES	1.79	1010.8	0.011	1.21	1.44
112	CHACO 4	10/25/97	NW 7	26N - 12W	PC	YES	1.399	1010.5	0.023	0.897	0.695
113	Designated Hitter 2	1/8/86	SW 27	26N - 12W	PC	NO	1.79	1010	0.25	2.4	0.16
114	Gallegos Fed. 26-13-1-2	8/30/94	SW 1	26N - 13W	COAL	YES	1.38	1010	0.2	0.62	1.63
115	Chaco 5	9/27/96	SE 1	26N - 13W	PC	YES	1.149	1009.7	0.065	0.84	3.41
116	Chaco Ltd. 3J	2/11/98	NW 12	26N - 13W	PC		0.474	1008.2	0.106	0.068	1.165
117	Chaco 4	3/20/97	NW 7	26N - 12W	PC	YES	1.369	1008.1	0.024	0.85	0.748
118	STACEY 1	11/10/97	SE 6	26N - 12W	PC	YES	1.437	1008.1	0.012	0.744	1.04
119	Designated Hitter 2	10/8/86	SW 27	26N - 12W	PC	NO	2.07	1008	0.19	2.32	0.22
120	Susco 3	10/22/93	SW 9	26N - 12W	COAL	YES	1.554	1008	0.096	1.54	0.39
121	Gallegos Fed. 26-13-25-1	1/9/98	NE 25	26N - 13W	COAL	YES	2.482	1007.4	0.023	2.507	0.152
122	Designated Hitter 2	5/29/88	SW 27	26N - 12W	PC	NO	1.61	1007	0.2	2.06	0.4
123	Gallegos Fed. 26-13-12 #1	10/3/94	NE 12	26N - 13W	COAL	YES	1.05	1007	0.07	0.91	2.55
124	90 Dome Navajo 12-26-13	2/11/98	SW 12	26N - 13W	COAL	YES	0.862	1007	0.003	0.864	0.533
125	Gallegos Fed. 26-12-6 #2	2/11/98	SW 6	26N - 12W	COAL	YES	1.139	1006.7	0	0.87	0.862
126	Cowsaround 16-11	10/3/94	SW 16	26N - 12W	COAL	YES	1.47	1006	0.36	1.907	1.629
127	Cowsaround 21-1	2/8/96	NE 21	26N - 12W	COAL	YES	1.31	1006	0.14	0.98	0.64
128	Gallegos Fed. 26-13-12 #1	2/11/98	NE 12	26N - 12W	COAL	YES	0.784	1006	0	0.845	0.593
129	Chaco 1J	3/9/98	SW 1	26N - 13W	PC	NO	0.701	1005.9	0.184	0.013	1.847
130	Gallegos Fed. 26-13-1 #1	2/11/98	NE 1	26N - 13W	COAL	YES	1.012	1005.9	0	0.745	0.676
131	Cowsaround 16-11	8/16/95	SW 16	26N - 12W	COAL	YES	1.38	1005	0.26	1.88	0.35
132	Gallegos Fed. 26-13-1 #2	2/11/98	SW 1	26N - 13W	COAL	YES	0.556	1004.7	0.024	0.628	0.807
133	Cowsaround 16-1	1/11/95	NE 16	26N - 12W	COAL	YES	1.5	1003	0.42	2.58	0.98
134	Cowsaround 16-1	11/16/95	NE 16	26N - 12W	COAL	YES	1.33	1003	0.42	2.46	0.98
135	Stacey 1	9/26/96	SE 7	26N - 12W	PC	YES	1.397	1002.2	0.024	1.53	0.9
136	Chaco 5	6/4/95	SE 1	26N - 13W	PC	YES	0	1002	0.04	0.74	0.38
137	Cowsaround 2-7	10/24/95	NE 2	26N - 12W	COAL	YES	0	1001	0.08	0.81	0.94
138	Stacey 2	2/11/98	NE 6	26N - 12W	COAL	YES	0.809	999.6	0	0.716	1.341
139	Cowsaround 27-7	5/20/93	NE 27	26N - 12W	COAL	YES	1.221	994	0.039	1.48	0.35
140	Cowsaround 21-1	3/20/97	NE 21	26N - 12W	COAL	YES	0.529	993.56	0	0.853	1.457
141	Cowsaround 16-1	10/17/97	NE 16	26N - 12W	COAL	YES	0.63	992	0.08	0.76	2.36
142	Cowsaround 27-7	3/20/97	NE 27	26N - 12W	COAL	YES	1.214	991.94	0.01	1.69	1.346
143	Cowsaround 16-11	3/20/97	SW 16	26N - 12W	COAL	YES	0.81	989.41	0	0.881	2.059
144	Sullivan 9	2/8/96	SW 15	26N - 12W	COAL	YES	0.67	988	0.08	1.95	0.51
145	Gallegos Fed. 26-13-1-2	6/22/93	SW 1	26N - 13W	COAL	NO	0.43	986.9	0.003	0.263	3.11
146	Cowsaround 16-1	8/4/94	NE 16	26N - 12W	COAL	YES	0.96	985	0.17	2.47	1.31
147	Sullivan 9	3/20/97	SW 15	26N - 12W	COAL	YES	0.422	983.25	0	0.65	2.635
148	Cowsaround 16-1	3/20/97	NE 16	26N - 12W	COAL	YES	0.412	978.7	0	0.691	3.003
149	Dome Federal 17-4		NE 17	27N - 13W	COAL	YES	0.215	975.9	0.003	2.877	0.563
150	Gallegos Fed. 26-12-7 #1	10/10/98	SW 7	26N - 12W	COAL	YES					
151	Tenneco Fed. 1	2/21/80	SW 8	26N - 12W	PC	YES					

WAW GAS ANALYSE

WELL NAME	STACEY #2	GF 26-13-1 #2	GF 26-13-1 #1	GF 26-13-12 #1	GF 26-12-6 #2	DN 12-26-13 #90	CHACO LTD #3J	CHACO #5	GF 26-12-7	CHACO #4
FORMATION	COAL	COAL	COAL	COAL	COAL	COAL	PC	PC	COAL	PC
BTU	999.6	1004.7	1005.9	1006	1006.7	1007	1008.2	1011.6	1012.7	1013.3
CO2	0.716	0.628	0.745	0.845	0.87	0.864	0.068	0.811	1.026	0.928
METHANE	97.134	97.972	97.361	97.772	97.099	97.733	98.137	97.466	97.188	97.05
ETHANE	0.809	0.556	1.012	0.784	1.139	0.862	0.474	1.252	1.458	1.55
PROPANE	0	0.024	0	0	0	0.003	0.106	0.004	0	0.021
ISO BUTANE	0	0.011	0	0	0	0	0.4	0.001	0	0.005
BUTANE	0	0	0	0	0	0	0.004	0.001	0	0.005
ISO PENTANE	0	0	0	0	0	0	0.003	0	0	0.002
PENTANE	0	0	0	0	0	0	0	0	0	0
HEXANE	0	0.002	0.006	0.006	0.03	0.005	0.003	0.008	0.018	0.007

WELL NAME	STACEY #1	CHACO #1	LNDSLE FD #1	LESLIE #1	HRD DEAL #2J	IRISH #1J	HRD DEAL #3	CHACO #2R	DN 12-26-13 #1
FORMATION	PC	PC	FRM/FTSND/PC	PC	COAL/PC	PC	PC	PC	PC
BTU	1013.8	1019.4	1020.1	1022.8	1025	1022.8	1081.3	1099.5	1113.7
CO2	0.811	0.946	0.954	0.855	0.939	0.04	1.087	0.824	0.822
METHANE	96.874	96.121	96.518	96.429	96.033	97.927	91.893	90.883	90.401
ETHANE	1.742	2.336	2.225	2.324	2.511	1.319	4.202	5.804	5.24
PROPANE	0.003	0.041	0.018	0.063	0.11	0.144	1.379	1.076	1.891
ISO BUTANE	0.001	0.009	0.004	0.016	0.031	0.051	0.342	0.224	0.366
BUTANE	0	0.008	0.004	0.011	0.011	0.006	0.251	0.254	0.426
ISO PENTANE	0	0.004	0.002	0.007	0.014	0.004	0.175	0.128	0.18
PENTANE	0	0	0	0.002	0.002	0	0.046	0.079	0.108
HEXANE	0.001	0.021	0.013	0.009	0.027	0.005	0.21	0.441	0.34