Pioneer Natural Resources Stuart 3-34R Well
Grant County, Kansas

Key
TBFA = To broken for analysis

Key
SO = Shoal
SF = Shoal Flank
TF = Tidal Flat
PS = Paleosol/Coastal Plain
SL = Shelf/Lagoon

CORE DATA

Sample No.	DEPTH	Core Por. (%BV)	Core Perm (md)	Gr.Density (g/cc)	Facies	Shoal Package	ROP	LITHOLOGY	FORMATION/MEMBER	LOG D-N PHI
1	2755	4.5	0.71	2.71	SO1	1	5	Ls sl slty tr fos tr por		4.5
2	2756	8.1	0.03	2.72	SO1	1	5	Ls sl-mod slty tr fos tr-sct por		5.2
3	2757	11.7	0.65	2.69	SO1	1	5	Ls mod slty tr sdy tr-sct por		7.4
4	2758	9.0	0.1	2.69	TF		4	Ls mod slty tr sdy tr-sct por		9.5
5	2759	10.1	0.01	2.70	TF		4	Ls mod slty sl-tr sdy sct por		11.2
6	2760	11.1	0.06	2.68	TF		4	Ls sl-mod slty sl sdy sct por		11.8
7	2761	9.1	0.02	2.68	TF		5	Ls sl-mod slty sl sdy tr-sct por		11.2
8	2762	9.5	0.01	2.68	TF		4	Ls sl-mod slty sl sdy tr-sct por		10.9
9	2763	10.9	0.52	2.69	TF		5	Ls sl-mod slty sl sdy sct por		16.3
	2764	NO ANALYSIS			PS		4	No sample selected for analysis		26.9
	2765	NO ANALYSIS			PS		5	No sample selected for analysis		26.1
11	2766	9.1	TBFA	2.72	PS		5	Rdbd brn-rdbrn mod slty sl calc frac tr por		22.9
12	2767	7.0	TBFA	2.81	PS		9	Rdbd brn-rdbrn slty anhy incl calc frac tr por		18.4
13	2768	16.0	TBFA	2.79	PS		8	Rdbd brn-rdbrn slty anhy incl calc frac tr por		17.7
14	2769	9.0	TBFA	2.73	PS		7	Rdbd rdbrn-gygn mod slty mod calc frac tr por		11.6
15	2770	10.1	<0.01	2.79	PS		6	Rdbd brn-rdbrn slty anhy incl calc tr por		10.7
16	2771	8.9	<0.01	2.73	PS		6	Rdbd rdbrn-brn mod slty mod calc tr por		9.8
17	2772	8.8	9.02	2.72	PS		12	Rdbd rdbrn-brn mod slty mod calc frac tr por		12.1
18	2773	8.7	TBFA	2.74	PS		9	Rdbd rdbrn-brn mod slty mod calc frac tr por		12.0
19	2774	8.1	<0.01	2.72	PS		8	Rdbd rdbrn-brn mod slty tr calc tr por		10.4
20	2775	3.5	TBFA	2.91	PS		10	Rdbd rdbrn anhy incl sl calc frac tr por		19.5
21	2776	8.9	TBFA	2.74	PS		13	Rdbd brn-rdbrn mod slty sl sdy frac tr por		19.7
22	2777	13.6	TBFA	2.75	PS		15	Rdbd brn-rdbrn mod slty sl sdy frac sct por		15.6
23	2778	13.0	TBFA	2.73	PS		11	Rdbd brn-rdbrn mod slty sl sdy frac sct por		14.8
24	2779	7.6	<0.01	2.73	PS		15	Rdbd brn-rdbrn mod slty sl sdy tr por		12.2
25	2780	16.2	TBFA	2.74	PS		13	Sh gy-gygn mod slty frac		15.4
26	2781	6.2	0.01	2.78	TF		4	Ls tr-sl slty sl dol tr por	WREFORD	9.5
27	2782	7.9	0.02	2.69	TF		3	Ls tr-sl slty tr fos tr por	(Three Mile Member)	7.7
28	2783	8.9	0.03	2.69	TF		3	Ls tr-sl slty tr fos tr por		8.5
29	2784	8.0	0.01	2.71	TF		3	Ls tr-sl slty tr fos tr por		8.6
30	2785	7.2	0.01	2.71	SO2	2	4	Ls tr-sl slty tr fos tr por		7.6
31	2786	5.4	<0.01	2.71	SO2	2	3	Ls tr-sl slty tr fos tr por		6.8
32	2787	10.8	0.56	2.71	SO2	2	2	Ls tr-sl slty sl fos sct por		8.5
33	2788	14.2	2.24	2.72	SO2	2	2	Ls tr-sl slty sl fos sct por		10.9
34	2789	16.0	3.77	2.71	SO2	2	3	Ls tr-sl slty sl fos sct por		12.4
35	2790	14.1	1.01	2.71	SO2	2	4	Ls tr-sl slty sl fos sct por		12.6
36	2791	23.6	1.95	2.65	SO2	2	2	Ls sl slty slty lam tr fos sct por		13.4
37	2792	8.5	<0.01	2.73	SL		3	Ls tr-sl slty sl fos sct anhy tr por		14.0
38	2793	9.0	0.02	2.72	SL		3	Ls sl slty sl fos tr lam tr-sct por		13.7
39	2794	12.1	0.09	2.72	SL		2	Ls sl slty sl fos slty lam sct por		14.6
40	2795	16.1	0.4	2.70	SL		3	Ls sl slty sl fos slty lam sct por		16.2
41	2796	21.9	0.4	2.67	SL		2	Ls sl slty sl fos slty lam sct por		15.2
42	2797	8.6	<0.01	2.76	SL		4	Ls mod-sl slty tr fos tr lam tr por		11.6
43	2798	8.8	0.02	2.72	SL		3	Ls mod-sl slty tr fos tr lam tr por		9.8
44	2799	10.4	0.23	2.71	SL		3	Ls sl-mod slty sl fos tr lam sct por		8.9
45	2800	8.4	0.04	2.72	SL		3	Ls mod-sl slty tr fos tr lam tr por		8.7
46	2801	17.6	0.84	2.68	SL		3	Ls sl-mod slty sl fos tr lam sct por		10.2
47	2802	14.4	0.94	2.71	SO3	3	3	Ls sl-mod slty sl fos tr lam sct por		11.5
48	2803	14.2	4.16	2.72	SO3	3	3	Ls sl-mod slty sl fos tr lam sct por		12.1
49	2804	15.2	1.16	2.72	SO3	3	3	Ls sl-mod slty sl fos tr lam sct por		12.7
50	2805	3.5	0.06	2.81	SO3	3	3	Ls sl slty anhy incl sl fos tr por		13.2
51	2806	12.9	0.41	2.71	SO3	3	3	Ls sl slty sl fos sct por		12.2
52	2807	11.2	0.19	2.71	SO3	3	3	Ls sl slty sl fos sct por		10.3
53	2808	8.9	TBFA	2.70	PS		10	Sh gy-dkgy mod slty frac tr cal	COUNCIL GROVE	12.4
54	2809	9.0	TBFA	2.72	PS		15	Sh gy-dkgy mod slty frac tr cal	SPEISER SHALE	13.2
55	2810	8.2	<0.01	2.74	PS		21	Sltst brn sl-tr sdy tr calc tr por	(As)	12.3
56	2811	7.7	<0.01	2.72	PS		20	Sltst brn sl-tr sdy tr calc tr por		12.7
57	2812	10.9	TBFA	2.71	PS		13	Sltst brn sl-tr sdy tr calc frac tr por		12.8
58	2813	7.0	2.41	2.72	PS		3	Sltst brn sl-tr sdy tr calc frac tr por		10.7
59	2814	8.5	<0.01	2.69	PS		4	Rdbd rdbrn-brn sl slty sl-mod sdy sl calc tr por		9.1
60	2815	8.3	0.01	2.69	PS		4	Rdbd rdbrn-brn sl slty sl-mod sdy sl calc tr por		9.9
61	2816	9.6	0.01	2.70	PS		3	Rdbd rdbrn-brn sl slty sl-mod sdy sl calc tr por		11.1
62	2817	9.1	<0.01	2.72	PS		6	Rdbd rdbrn-brn sl slty sl-mod sdy sl calc tr por		12.7
63	2818	6.2	0.25	2.71	PS		4	Rdbrn brn-rdbrn sl slty/sdy tr anhy sl calc tr por		14.7
64	2819	5.7	<0.01	2.69	PS		3	Rdbrn brn-rdbrn sl slty/sdy tr anhy sl calc tr por		11.1
65	2820	5.9	<0.01	2.70	PS		3	Rdbrn brn-rdbrn sl slty/sdy tr anhy sl calc tr por		7.5
66	2821	6.8	0.02	2.70	PS		3	Rdbrn brn-rdbrn sl slty/sdy tr anhy sl calc tr por		6.6
67	2822	6.6	<0.01	2.69	PS		4	Rdbrn brn-rdbrn sl slty/sdy tr anhy sl calc tr por		6.8
68	2823	9.2	12.95	2.71	PS		5	Rdbrn brn-rdbrn sl slty/sdy tr anhy sl calc tr por		8.3
69	2824	9.1	TBFA	2.73	PS		15	Sh gy-gygn sl slty frac tr calc		11.0
70	2825	11.0	TBFA	2.72	PS		12	Sh gy-gygn sl slty frac tr calc		12.3
71	2826	14.5	0.09	2.81	PS		14	Dol tr slty tr fos slty lam sct por		13.3
72	2827	10.3	<0.01	2.75	PS		15	Sltst dkgy-gy sl calc tr-sl sdy sct por		19.4
73	2828	10.2	TBFA	2.77	PS		10	Ls sl-mod slty anhy incl sltst in	FUNSTON	19.1
74	2829	13.1	0.02	2.79	SO4	4	7	Ls sl-mod slty anhy incl sct poi	(A)	19.2
75	2830	15.6	0.29	2.82	SO4	4	4	Ls sl slty sl anhy sl dol sct por		16.9
76	2831	6.1	<0.01	2.71	SO4	4	4	Ls tr slty tr fos tr por		7.6
77	2832	6.0	0.01	2.74	SO4	4	8	Ls tr slty tr anhy tr fos tr por		5.6
78	2833	6.1	0.01	2.76	SF		9	Ls tr slty sct anhy sl fos tr por		5.1
79	2834	8.0	<0.01	2.77	SF		7	Ls tr slty sct anhy sl fos tr por		5.8
80	2835	10.6	0.01	2.75	SL		8	Ls sl slty sl anhy sl fos sct por		10.0
81	2836	9.4	TBFA	2.72	SL		9	Sltst gybrn slty lam sh ptg sl sdy frac tr por		12.2
82	2837	7.6	<0.01	2.74	SL		6	Sh blk-gyblk abnt fos sct Ls incl mod calc		12.1
83	2838	11.5	10.18	2.74	SL		12	Sh blk-gyblk abnt fos sct Ls incl mod calc		12.3
84	2839	5.4	<0.01	2.71	SL		4	Ls mod slty tr fos slty lam tr por		9.9
85	2840	5.6	TBFA	2.60	SL		5	Ss gy-ltgy vfgr slty lam frac sl calc tr por		6.9
86	2841	9.8	<0.01	2.75	SL		6	Sltst gy sl-mod sdy sl calc tr por		8.5
87	2842	5.7	<0.01	2.71	SL		7	Ls mod slty tr fos slty lam tr por		11.2
88	2843	4.6	<0.01	2.77	SO5	5	3	Ls sl slty sct anhy tr fos tr por		8.9
89	2844	15.5	2.51	2.71	SO5	5	3	Ls tr slty sct fos sct por		7.3
90	2845	16.4	3.27	2.70	SO5	5	4	Ls tr slty sct fos sct por		7.8
91	2846	18.3	2.1	2.71	SF	5	4	Ls tr slty sct fos sct por		11.1

92	2847	18.6	2.77	2.70	SF	5	3	Ls tr slty sct fos sct por		15.5
93	2848	16.5	0.95	2.71	SF	5	3	Ls tr slty sct fos sct por		16.5
94	2849	17.1	1.16	2.72	SF	5	2	Ls tr slty sct fos sct por		16.3
95	2850	13.7	0.98	2.75	SF	5	3	Ls tr slty sl fos sl anhy sct por		15.1
96	2851	6.5	<0.01	2.75	SF	5	2	Ls tr slty tr fos sl anhy tr por		12.7
97	2852	10.2	0.06	2.69	SL		3	Ls sl-mod slty tr fos sct por		10.0
98	2853	6.7	<0.01	2.71	SL		3	Ls sl-mod slty tr fos tr por		9.0
99	2854	6.3	0.01	2.70	SL		3	Ls sl-mod slty tr fos tr por		7.3
100	2855	6.4	<0.01	2.69	SL		6	Ls sl-mod slty tr fos tr por		6.5
101	2856	8.9	0.05	2.77	SL		9	Ls mod-v slty sl anhy slty lam tr por		7.5
102	2857	7.4	TBFA	2.74	SL		7	Sh blk abnt Ls incl frac sct anhy		8.9
103	2858	8.0	0.01	2.71	SL		5	Ls mod-v slty tr anhy slty lam tr por		10.0
104	2859	6.4	0.03	2.75	SL		7	Ls mod-v slty tr anhy slty lam tr por		10.3
105	2860	8.3	<0.01	2.72	SL		12	Ls mod-v slty tr anhy slty lam tr por		10.6
106	2861	1.9	<0.01	2.71	TF		7	Ls sl slty tr fos tr por		8.7
107	2862	1.1	<0.01	2.71	TF		7	Ls sl slty tr fos tr por		4.8
108	2863	1.4	<0.01	2.71	TF		9	Ls sl slty tr fos tr por		2.8
109	2864	4.0	<0.01	2.71	TF		16	Ls sl slty tr fos tr por		2.7
110	2865	6.1	<0.01	2.74	TF		22	Ls sl slty tr fos tr por		3.4
111	2866	5.2	<0.01	2.75	TF		12	Ls sl slty tr fos tr por		4.6
112	2867	5.7	<0.01	2.72	TF		8	Ls sl slty tr fos tr por		5.3
113	2868	11.1	TBFA	2.75	PS		4	Sltst gy tr dol tr sdy grdg to sh	BLUE RAPIDS SHALE	7.2
114	2869	8.2	TBFA	2.76	PS		15	Sltst gy tr dol tr sdy grdg to sh	(B1s)	10.2
115	2870	9.8	<0.01	2.79	PS		6	Rdbd rdbrn mod slty sl sdy sl anhy sct por		11.4
116	2871	10.2	0.02	2.75	PS		18	Ls mod-v slty sct fos grdg to sh sct por		10.8
117	2872	11.7	TBFA	2.72	PS		10	Rdbd brn-rdbrn sl slty tr calc frac sct por		12.6
118	2873	14.0	0.05	2.80	PS		13	Rdbd slty tr sdy sl dol sct por		13.3
119	2874	5.8	0.49	2.86	PS		13	Rdbd slty tr sdy sl dol sct anhy tr por		9.2
120	2875	6.9	TBFA	2.86	PS		11	Rdbd slty tr sdy sl dol sct anhy frac tr por		7.8
121	2876	5.0	TBFA	2.82	PS		7	Rdbd slty tr sdy sl dol sl anhy frac tr por		8.8
122	2877	9.0	0.01	2.73	PS		8	Rdbd brn-rdbrn mod slty tr sdy sl calc tr por		9.1
123	2878	7.6	<0.01	2.74	PS		8	Rdbd brn-rdbrn mod slty tr sdy sl calc tr por		9.2
124	2879	10.4	0.01	2.76	PS		23	Rdbd brn-rdbrn mod slty tr sdy sl calc sct por		10.1
125	2880	12.8	TBFA	2.73	PS		17	Rdbd brn-rdbrn mod slty tr sdy frac sct por		13.9
126	2881	8.9	<0.01	2.75	PS		27	Rdbd brn-rdbrn mod slty tr sdy sl calc tr por		16.8
	2882	NO ANALYSIS			PS		10	No sample selected for analysis		19.8
127	2883	6.4	1.58	2.78	TF		6	Ls sl slty tr dol tr-sl anhy frac tr	CROUSE	19.4
128	2884	5.8	<0.01	2.78	TF		5	Ls sl slty tr dol sl-tr anhy tr por	(B1)	7.0
129	2885	7.8	<0.01	2.75	TF		5	Ls sl slty tr dol sl-tr anhy tr por		5.4
130	2886	4.0	<0.01	2.75	SO6	6	5	Ls sl slty tr dol sl-tr anhy tr por		4.5
131	2887	2.2	0.02	2.87	SO6	6	3	Ls sl slty tr dol anhy incl tr por		3.2
132	2888	13.8	0.79	2.71	SO6	6	4	Ls tr slty sct fos sct por		7.0
133	2889	11.3	0.25	2.74	SO6	6	4	Ls tr slty sct fos sct por		11.1
134	2890	12.4	0.17	2.80	SO6	6	5	Dol sl slty tr fos sl calc sct por		11.2
135	2891	10.6	0.01	2.80	SO6	6	5	Dol sl-mod slty tr fos sl calc sct por		11.4
136	2892	4.8	<0.01	2.75	SF	6	4	Ls sl slty sl dol tr fos tr por		9.7
137	2893	6.2	0.02	2.71	SF	6	4	Ls sl slty tr fos tr por		7.4
138	2894	4.9	<0.01	2.71	SF	6	5	Ls sl slty tr fos tr por		5.2
139	2895	5.0	0.14	2.71	SO6	6	4	Ls sl slty tr fos tr por		4.7
140	2896	8.9	0.06	2.71	SO6	6	4	Ls sl slty tr fos tr-sct por		6.8
141	2897	9.1	0.08	2.71	SO6	6	4	Ls sl slty tr fos tr-sct por		7.6
142	2898	4.1	<0.01	2.72	SO6	6	7	Ls sl slty tr fos tr por		5.8
143	2899	12.8	TBFA	2.69	PS		10	Sltst gy sl sdy non calc frac sc	EASLY CREEK SHALE	9.6
144	2900	9.0	8.13	2.68	PS		18	Sltst gy sl sdy sl calc frac sct p	(B2s)	14.8
	2901	NO ANALYSIS			PS		19	No sample selected for analysis		22.3
145	2902	11.0	TBFA	2.71	PS		10	Rdbd rdbrn gygn mod slty tr anhy frac sct por		24.8
146	2903	6.2	0.05	2.70	PS		13	Rdbd rdbrn mod slty tr sdy tr por		21.3
147	2904	8.5	TBFA	2.70	PS		20	Rdbd rdbrn mod slty tr sdy frac tr por		15.6
148	2905	11.9	TBFA	2.69	PS		13	Rdbd rdbrn mod slty sl sdy frac sct por		19.5
149	2906	13.1	TBFA	2.67	PS		13	Rdbd rdbrn mod slty sl-mod sdy frac sct por		18.8
150	2907	9.6	0.07	2.81	PS		3	Dol sl slty tr rdbd tr-sct por	MIDDLEBURG	20.1
151	2908	10.4	0.48	2.73	TF	7	5	Ls sl slty sl fos sct por	(B2)	21.5
152	2909	15.6	1.21	2.71	SO7	7	5	Ls sl slty sl fos sct por		12.6
153	2910	14.2	8.82	2.71	SO7	7	4	Ls sl slty sl fos sct por		10.6
154	2911	5.6	0.01	2.71	SO7	7	4	Ls sl slty tr fos tr por		7.9
155	2912	11.1	0.22	2.71	SO7	7	4	Ls sl slty sl fos sct por		6.4
156	2913	9.9	0.28	2.76	SO7	7	4	Ls sl slty sl fos sl anhy sct por		7.4
157	2914	10.4	0.56	2.82	TF	7	4	Ls sl slty sl fos sct anhy incl sct por		7.5
158	2915	6.9	0.44	2.79	TF	7	4	Ls sl slty sl fos sct anhy tr por		6.9
159	2916	16.3	0.56	2.71	TF	7	5	Ls sl slty sl fos sct por		10.8
160	2917	16.3	1.08	2.70	SO7	7	5	Ls tr-sl slty sct fos sct por		14.7
161	2918	10.0	0.21	2.68	SO7	7	7	Ls tr-sl slty sl fos sct por		12.1
162	2919	4.2	0.01	2.71	SF		7	Ls sl slty tr fos slty lam tr por		7.3
163	2920	2.2	<0.01	2.72	SF		8	Ls sl slty tr fos tr por		4.7
164	2921	6.1	0.01	2.71	SF		16	Ls mod slty sl fos slty lam tr por		6.3
165	2922	7.0	0.01	2.71	PS		24	Rdbd rdbrn-brn slty tr sdy sl-m	HOOSER SHALE	9.5
166	2923	7.6	0.01	2.70	PS		13	Rdbd rdbrn-brn slty tr sdy sl-m	(B3s)	16.6
167	2924	13.2	TBFA	2.70	PS		10	Rdbd rdbrn-brn slty tr sdy tr calc frac sct por		21.4
168	2925	6.7	0.01	2.69	PS		15	Rdbd rdbrn-brn slty sl sdy sl-mod calc tr por		13.2
169	2926	7.1	<0.01	2.70	PS		8	Rdbd rdbrn-brn slty tr sdy sl-mod calc tr por		13.7
170	2927	7.8	<0.01	2.70	PS		8	Rdbd rdbrn-brn slty tr sdy sl-mod calc tr por		12.5
171	2928	6.9	0.01	2.71	PS		13	Rdbd rdbrn-brn slty tr sdy sl-mod calc tr por		8.8
172	2929	11.6	0.02	2.72	PS		17	Rdbd rdbrn-brn slty tr sdy sl calc sct por		11.3
173	2930	12.7	0.08	2.74	PS		10	Rdbd rdbrn-brn slty tr sdy sl calc sct por		15.3
174	2931	10.8	TBFA	2.72	PS		4	Rdbd rdbrn-brn slty tr sdy tr calc frac sct por		16.5
175	2932	4.5	TBFA	2.71	PS		4	Rdbd rdbrn-brn slty tr sdy tr calc frac tr por		11.3
176	2933	10.5	1.16	2.73	SO8	8	6	Ls tr-sl slty sl fos sct por	EISS	11.0
177	2934	13.8	2.39	2.71	SO8	8	5	Ls tr-sl slty sl fos sct por	(B3)	10.6
178	2935	11.4	0.16	2.72	SO8	8	4	Ls tr-sl slty sl fos sct por		9.2
179	2936	9.5	0.08	2.75	SO8	8	4	Ls tr-sl slty sl fos sl anhy sct por		9.1
180	2937	9.1	0.06	2.75	SO8	8	6	Ls tr-sl slty sl fos sl anhy sct por		11.4
181	2938	7.1	0.04	2.67	PS		8	Rdbd rdbrn mod slty sl-mod sc	STEARNES SHALE	10.8
182	2939	7.4	0.02	2.69	PS		5	Rdbd rdbrn mod slty sl-mod sc	(B4s)	10.3
183	2940	8.1	1.73	2.69	PS		5	Rdbd rdbrn mod slty sl-mod sdy mod calc tr por		11.4
184	2941	11.1	TBFA	2.70	PS		5	Sh rdbrn slty tr sdy tr calc frac		11.1
185	2942	6.6	0.02	2.68	PS		7	Rdbd rdbrn mod slty sl-mod sdy mod calc tr por		8.7
186	2943	7.3	0.01	2.70	PS		8	Rdbd rdbrn mod slty sl-mod sdy mod calc tr por		9.0
187	2944	7.2	0.01	2.70	PS		6	Rdbd rdbrn mod slty sl-mod sdy mod calc tr por		13.8
188	2945	9.7	0.01	2.71	PS		3	Rdbd rdbrn mod slty mod sdy mod calc sct por		24.3
189	2946	6.9	TBFA	2.71	PS		3	Ls mod slty-slty tr anhy frac tr por		19.6
190	2947	5.1	<0.01	2.72	SO9	9	3	Ls tr-sl slty tr fos tr por	MORRILL	8.0
191	2948	7.3	0.22	2.73	SO9	9	4	Ls tr-sl slty tr fos tr por	(B4)	6.5

192	2949	10.2	1.29	2.71	SO9	9	4	Ls tr-sl slty tr fos sct por		7.8
193	2950	11.1	0.28	2.70	SO9	9	3	Ls tr-sl slty tr fos sct por		5.6
194	2951	3.9	<0.01	2.73	SO9	9	6	Ls tr-sl slty tr fos tr por		4.1
195	2952	3.7	<0.01	2.72	SO9	9	6	Ls tr-sl slty tr fos tr por		14.1
196	2953	3.0	<0.01	2.73	SO9	9	5	Ls tr-sl slty tr fos tr por	FLORENA SHALE	-487.3
197	2954	8.3	TBFA	2.71	PS		3	Rdbd rdbrn-brn slty mod calc fi	(B5s)	23.3
198	2955	4.8	TBFA	2.71	PS		3	Ls mod slty tr fos frac tr por	COTTONWOOD	12.2
199	2956	19.7	26.9	2.70	SO10	10	4	Ls tr slty sct fos sct por	(B5)	14.1
200	2957	22.4	162.58	2.71	SO10	10	3	Ls tr slty sct fos sct por		19.8
201	2958	21.9	122.39	2.71	SO10	10	4	Ls tr slty sct fos sct por		19.8
202	2959	18.3	10.37	2.77	SO10	10	3	Ls tr slty sct fos sl anhy sct por		16.7
203	2960	11.4	3.5	2.81	SF	10	3	Ls tr slty sl fos anhy incl sct por		12.9
204	2961	19.0	68.43	2.81	SF	10	3	Ls tr slty sct fos anhy incl sct por		13.4
205	2962	17.4	9.56	2.78	SF	10	4	Ls tr slty sct fos sl anhy sct por		15.6
206	2963	2.9	0.15	2.84	SF	10	4	Ls tr slty tr fos sct anhy incl tr por		13.0
207	2964	8.4	1.6	2.81	SO10	10	5	Ls tr slty tr fos sct anhy incl tr por		8.5
208	2965	4.0	TBFA	2.90	SO10	10	3	Anhy xln sct Ls incl frac tr por		5.8
209	2966	4.6	0.65	2.78	SO10	10	4	Ls tr slty tr fos sct anhy incl tr por		3.6
210	2967	14.6	34.73	2.71	SO10	10	4	Ls tr slty sct fos sct por		7.2
211	2968	18.3	142.2	2.71	SO10	10	3	Ls tr slty sct fos sct por		14.2
212	2969	9.0	5.98	2.71	SO10	10	3	Ls tr slty sl fos tr-sct por		16.0
213	2970	12.7	0.64	2.78	SO10	10	3	Ls tr slty tr-sl fos sl dol sct por		13.0
214	2971	14.5	1.49	2.72	SO10	10	3	Ls tr slty sct fos sct por		10.5
215	2972	5.2	0.01	2.74	SO10	10	5	Ls tr slty sl fos tr por		8.3
216	2973	4.3	<0.01	2.72	SF		6	Ls tr slty sl fos tr por		4.9
217	2974	4.9	<0.01	2.75	SF		14	Ls sl slty tr fos tr anhy tr por		3.8
218	2975	12.1	0.04	2.76	PS		13	Sltst gy sl-mod sdy tr calc sct p	ESKRIDGE SHALE	7.0
	2976	NO ANALYSIS			PS		16	No sample selected for analys	(Cs)	20.1
	2977	NO ANALYSIS			PS		14	No sample selected for analysis		23.0
	2978	NO ANALYSIS			PS		13	No sample selected for analysis		21.1
	2979	NO ANALYSIS			PS		10	No sample selected for analysis		20.6
	2980	NO ANALYSIS			PS		9	No sample selected for analysis		20.1
219	2981	11.2	TBFA	2.72	PS		7	Rdbd rdbrn-gybrn slty tr calc frac sct por		19.0
220	2982	8.9	TBFA	2.75	PS		12	Rdbd rdbrn-gybrn slty tr calc sl anhy frac tr por		16.7
221	2983	6.9	<0.01	2.73	PS		15	Rdbd rdbrn-gybrn slty tr calc tr por		14.6
222	2984	12.6	TBFA	2.73	PS		12	Rdbd rdbrn-gybrn slty tr calc frac sct por		14.9
223	2985	10.7	<0.01	2.76	PS		14	Rdbd rdbrn-gybrn slty tr calc sl anhy sct por		16.8
224	2986	13.8	<0.01	2.80	PS		17	Rdbd rdbrn-gybrn slty tr calc sl anhy sct por		15.0
225	2987	7.9	<0.01	2.75	PS		13	Rdbd rdbrn-gybrn slty tr calc sl anhy tr por		13.4
226	2988	6.9	0.01	2.76	PS		10	Rdbd rdbrn-gybrn slty tr calc sl anhy tr por		13.9
	2989	NO ANALYSIS			PS		20	No sample selected for analysis		15.2
227	2990	9.1	TBFA	2.72	PS		6	Rdbd rdbrn-gybrn slty tr calc frac tr por		14.8
228	2991	8.9	TBFA	2.70	PS		7	Rdbd rdbrn-gybrn slty tr calc frac tr por		14.9
	2992	NO ANALYSIS			PS		8	No sample selected for analysis		13.5
	2993	NO ANALYSIS			PS		6	No sample selected for analysis		13.0
	2994	NO ANALYSIS			PS		5	No sample selected for analys	NEVA	13.3
231	2995	13.5	1.18	2.77	SO11	11	5	Ls tr-sl slty sl fos sct anhy sct p	(C)	19.9
232	2996	10.2	0.98	2.72	SO11	11	3	Ls tr-sl slty sl fos sct por		28.3
233	2997	12.2	2.65	2.76	SO11	11	3	Ls tr-sl slty sl fos sct anhy sct por		20.4
234	2998	12.8	1.42	2.72	SO11	11	3	Ls tr-sl slty sl fos sct por		9.8
235	2999	8.6	0.07	2.73	SO11	11	3	Ls sl slty tr fos tr por		8.9
236	3000	9.8	0.34	2.72	SO11	11	4	Ls sl slty tr fos sct por		10.1
237	3001	13.6	0.7	2.72	SO11	11	2	Ls sl slty tr fos sct por		10.1
238	3002	13.5	0.65	2.71	SO11	11	3	Ls sl slty tr fos sct por		10.2
239	3003	12.8	0.33	2.73	SO11	11	3	Ls sl slty tr fos sct por		11.8
240	3004	9.2	0.44	2.70	SO11	11	2	Ls sl slty tr fos sct-tr por		12.2
241	3005	7.6	0.01	2.76	SO11	11	3	Ls sl slty tr fos tr anhy tr por		11.9
242	3006	6.4	0.11	2.72	SL		3	Ls sl slty tr fos tr por		11.4
243	3007	9.2	0.02	2.73	SL		2	Ls sl slty tr fos tr por		9.2
244	3008	10.0	0.03	2.72	SL		2	Ls sl slty tr fos sct por		6.9
245	3009	9.8	0.02	2.69	SL		3	Ls sl slty tr fos sct por		7.5
246	3010	8.8	0.01	2.70	SL		3	Ls sl slty tr fos tr-sct por		8.3
247	3011	8.2	0.01	2.72	SL		2	Ls sl slty tr fos tr-sct por		9.3
248	3012	7.5	0.01	2.71	SL		3	Ls sl slty tr fos tr por		9.7
249	3013	6.2	0.01	2.71	SL		3	Ls sl slty tr fos tr por		9.5
250	3014	7.9	<0.01	2.68	SL		3	Ls sl slty tr fos tr por		8.9
251	3015	6.1	<0.01	2.69	SL		3	Ls sl slty tr fos tr por		8.7
252	3016	6.2	<0.01	2.70	SL		4	Ls sl slty tr fos tr por		7.8
253	3017	6.2	<0.01	2.70	SL		4	Ls sl slty tr fos tr por		7.7
254	3018	6.4	<0.01	2.69	SL		4	Ls sl slty tr fos tr por		7.4
255	3019	4.0	<0.01	2.68	SL		4	Ls sl slty tr fos tr por		7.5
256	3020	6.9	<0.01	2.75	SL		3	Ls sl slty tr fos tr anhy tr por		7.3
257	3021	5.6	<0.01	2.70	SL		3	Ls sl slty tr fos tr por		7.0
258	3022	4.4	<0.01	2.69	SL		4	Ls sl slty tr fos tr por		6.9
259	3023	6.4	0.09	2.70	SL		3	Ls mod slty tr fos tr por		7.4
260	3024	4.8	<0.01	2.70	SL		4	Ls mod slty tr fos tr por		7.2
261	3025	5.9	TBFA	2.69	SL		5	Ls mod slty tr fos frac tr por		6.7
262	3026	6.5	<0.01	2.71	SL		3	Ls mod slty-slty grdg to Sltst tr por		6.4
263	3027	8.4	<0.01	2.70	SL		4	Ls mod slty-slty grdg to Sltst tr por		7.0
264	3028	6.5	<0.01	2.69	SL		2	Ls mod slty-slty grdg to Sltst tr por		7.8
265	3029	8.1	<0.01	2.69	SL		3	Sltst gy-dkgy mod-v calc grdg to arg Ls		8.1
266	3030	8.2	<0.01	2.68	SL		3	Sltst gy-dkgy mod-v calc grdg to arg Ls		9.2
267	3031	8.8	<0.01	2.68	SL		3	Sltst gy-dkgy mod-v calc grdg to arg Ls		10.5
268	3032	7.8	<0.01	2.68	SL		2	Sltst gy-dkgy mod-v calc grdg to arg Ls		11.4
269	3033	7.9	<0.01	2.69	SL		2	Sltst gy-dkgy mod-v calc grdg to arg Ls		10.5
270	3034	8.6	<0.01	2.68	SL		3	Sltst gy-dkgy mod-v calc grdg to arg Ls		10.6
271	3035	8.5	<0.01	2.68	SL		2	Sltst gy-dkgy mod-v calc grdg to arg Ls		11.2
272	3036	8.4	<0.01	2.68	SL		3	Sltst gy-dkgy mod-v calc grdg to arg Ls		12.0
273	3037	9.7	<0.01	2.66	SL		2	Sh gy-dkgy sl slty mod calc		12.1
274	3038	8.1	<0.01	2.68	SL		2	Sltst gy-dkgy mod-v calc grdg to arg Ls		12.6
275	3039	8.8	<0.01	2.68	SL		5	Sltst gy-dkgy mod-v calc grdg to arg Ls		13.6
276	3040	9.7	<0.01	2.66	SL		5	Sh gy-dkgy sl slty mod calc		13.8
277	3041	10.2	0.06	2.66	SL		5	Sh gy-dkgy sl slty mod calc		14.1
278	3042	10.0	TBFA	2.67	SL		5	Sh gy-dkgy sl slty mod calc frac		14.6
279	3043	10.6	TBFA	2.66	SL		5	Sh gy-dkgy sl slty mod calc frac		15.7
280	3044	10.3	TBFA	2.65	SL		5	Sh gy-dkgy sl slty mod calc frac		15.4

Key

TBFA = To broken for

Key

SO = Shoal
SF = Shoal Flank
TF = Tidal Flat
PS = Paleosol/Coastal Plain
SL = Shelf/Lagoon

TABLE 1
PIONEER NATURAL RESOURCES
ROUTINE CORE ANALYSIS
Stuart 3-34R Well
Grant County, Kansas

ample No.	Depth (ft)	Porosity (%BV)	Permeability (md)	Grain Density (g/cc)	% FLUIDS Water	Oil	ROP	OIL FLOR	Facies	Shoal Package	
74	2829	13.1	0.02	2.79	71.3	0.0	7	0	SO4	4	3MILE
75	2830	15.6	0.29	2.82	62.1	0.0	4	0	SO4	4	3MILE
76	2831	6.1	0.01	2.71	62.9	0.0	4	0	SO4	4	3MILE
77	2832	6.	0.01	2.74	67.0	0.0	8	0	SO4	4	3MILE
88	2843	4.6	0.01	2.77	53.8	0.0	3	0	SO5	5	3MILE
89	2844	15.5	2.51	2.71	51.8	0.0	3	0	SO5	5	3MILE
90	2845	16.4	3.27	2.70	60.7	0.0	4	0	SO5	5	3MILE
91	2846	18.3	2.10	2.71	66.6	0.0	4	0	SF	5	3MILE
92	2847	18.6	2.77	2.70	61.7	0.0	3	0	SF	5	3MILE
93	2848	16.5	0.95	2.71	65.6	0.0	3	0	SF	5	3MILE
94	2849	17.1	1.16	2.72	62.9	0.0	2	0	SF	5	3MILE
95	2850	13.7	0.98	2.75	57.2	0.0	3	0	SF	5	3MILE
96	2851	6.5	0.01	2.75	55.6	0.0	2	0	SF	5	3MILE
130	2886	4.	0.01	2.75	61.4	0.0	5	0	SO6	6	FUNSTON
131	2887	2.2	0.02	2.87	52.0	0.0	3	0	SO6	6	FUNSTON
132	2888	13.8	0.79	2.71	60.5	0.0	4	0	SO6	6	FUNSTON
133	2889	11.3	0.25	2.74	63.3	0.0	4	0	SO6	6	FUNSTON
134	2890	12.4	0.17	2.80	53.0	0.0	5	0	SO6	6	FUNSTON
135	2891	10.6	0.01	2.80	82.5	0.0	5	0	SO6	6	FUNSTON
136	2892	4.8	0.01	2.75	85.5	0.0	4	0	SF	6	FUNSTON
137	2893	6.2	0.02	2.71	61.5	0.0	4	0	SF	6	FUNSTON
138	2894	4.9	0.01	2.71	63.5	0.0	5	0	SF	6	FUNSTON
139	2895	5.	0.14	2.71	62.0	0.0	4	0	SO6	6	FUNSTON
140	2896	8.9	0.06	2.71	64.7	0.0	4	0	SO6	6	FUNSTON
141	2897	9.1	0.08	2.71	66.5	0.0	4	0	SO6	6	FUNSTON
142	2898	4.1	0.01	2.72	62.9	0.0	7	0	SO6	6	FUNSTON
151	2908	10.4	0.48	2.73	47.3	0.0	5	0	TF	7	CRAUSE
152	2909	15.6	1.21	2.71	50.9	0.0	5	0	SO7	7	CRAUSE
153	2910	14.2	8.82	2.71	43.4	0.0	4	0	SO7	7	CRAUSE
154	2911	5.6	0.01	2.71	55.0	0.0	4	0	SO7	7	CRAUSE
155	2912	11.1	0.22	2.71	54.9	0.0	4	0	SO7	7	CRAUSE
156	2913	9.9	0.28	2.76	57.3	0.0	4	0	SO7	7	CRAUSE
157	2914	10.4	0.56	2.82	58.0	0.0	4	0	TF	7	CRAUSE
158	2915	6.9	0.44	2.79	62.8	0.0	4	0	TF	7	CRAUSE
159	2916	16.3	0.56	2.71	72.1	0.0	5	0	TF	7	CRAUSE
160	2917	16.3	1.08	2.70	69.1	0.0	5	0	SO7	7	CRAUSE
161	2918	10.	0.21	2.68	60.7	0.0	7	0	SO7	7	CRAUSE
176	2933	10.5	1.16	2.73	47.7	0.0	6	0	SO8	8	CRAUSE
177	2934	13.8	2.39	2.71	43.6	0.0	5	0	SO8	8	CRAUSE

TBFA = Too Broken For Analysis.
No Analysis = No analysis was done at this depth.

TABLE 1 (CONTINUED)
ROUTINE CORE ANALYSIS
Pioneer Natural Resources USA, Inc. Newby 2-28R Well
Stevens County, Kansas

Zone	Sample	Depth Range (ft)		Porosity (% BV)	Perm to gas (md)	Perm Net Pay K>0.01	Saturation(% PV) Water	Oil	Grain Density (g/cc)	ROP	FACIES	
3MILE		2833										
3MILE	49	2858	2859	1.34	0.01	None	96.14	0	2.64	3	1	
3MILE	52	2861	2862	6.33	0.03	0.03	84.79	0	2.71	2	1	
FUNSTON	94	2905	2906	13.99	3.79	3.79	47.69	0	2.71	7	1	
FUNSTON	95	2906	2907	7.19	0.17	0.17	60	0	2.8	5	1	
FUNSTON	96	2907	2908	9.17	0.07	0.07	68.6	0	2.79	10	1	
FUNSTON	97	2908	2909	4.87	0.15	0.15	54.49	0	2.82	11	1	
FUNSTON	98	2909	2910	8.55	0.44	0.44	46.03	0	2.78	6	1	
FUNSTON	99	2910	2911	11.38	1.83	1.83	40.28	0	2.75	4	1	
FUNSTON	100	2911	2912	17.56	0.93	0.93	59.06	0	2.8	6	1	
FUNSTON	101	2912	2913	8.76	0.01	None	77.77	0	2.79	6	1	
FUNSTON	102	2913	2914	7.43	0.03	0.03	72.49	0	2.75	10	1	
FUNSTON	103	2914	2915	13.83	0.57	0.57	47.42	0	2.75	8	1	
FUNSTON	104	2915	2916	13.6	0.9	0.9	44.79	0	2.75	10	1	
FUNSTON	105	2916	2917	2.74	0.01	None	69.13	0	2.72	9	1	
FUNSTON	106	2917	2918	8	0.06	0.06	55.24	0	2.71	10	1	
FUNSTON	107	2918	2919	3.98	0.03	0.03	88.2	0	2.75	3	1	
FUNSTON	108	2919	2920	12.54	4.24	4.24	46.6	0	2.71	4	1	
FUNSTON	109	2920	2921	14.47	0.91	0.91	51.08	0	2.71	4	1	
FUNSTON	110	2921	2922	14.8	1.37	1.37	49.27	0	2.71	6	1	
FUNSTON	111	2922	2923	6.31	0.02	0.02	52.35	0	2.71	2	1	
CRAUSE	117	2929	2930	3.43	0.07	0.07	80.36	0	2.71	6	1	
CRAUSE	118	2930	2931	6.77	0.04	0.04	47.13	0	2.72	11	1	
CRAUSE	119	2931	2932	16.82	7.97	7.97	37.89	0	2.71	5	1	
CRAUSE	120	2932	2933	8.9	45.9	45.86	96.86	0	2.52	5	1	
CRAUSE	121	2933	2934	7.08	15.3	15.31	51.49	0	2.74	5	1	
CRAUSE	122	2934	2935	9.8	10.9	10.87	49.16	0	2.77	3	1	
CRAUSE	123	2935	2936	3.07	0.02	0.02	54.37	0	2.74	3	1	
CRAUSE	124	2936	2937	16.34	3.78	3.78	56	0	2.71	4	1	

TABLE 1
PIONEER NATURAL RESOURCES
ROUTINE CORE ANALYSIS
Stuart 3-34R Well
Grant County, Kansas

ample No.	Depth (ft)	Porosity (%BV)	Permeability (md)	Grain Density (g/cc)	% FLUIDS Water	Oil	ROP	OIL FLOR	Facies	Shoal Package	
178	2935	11.4	0.16	2.72	53.6	0.0	4	0	SO8	8	CRAUSE
179	2936	9.5	0.08	2.75	43.1	0.0	4	0	SO8	8	CRAUSE
180	2937	9.1	0.06	2.75	47.9	0.0	6	0	SO8	8	CRAUSE
190	2947	5.1	0.01	2.72	24.7	0.0	3	0	SO9	9	BADER
191	2948	7.3	0.22	2.73	22.7	0.0	4	0	SO9	9	BADER
192	2949	10.2	1.29	2.71	23.6	0.0	4	0	SO9	9	BADER
193	2950	11.1	0.28	2.70	25.4	0.0	3	0	SO9	9	BADER
194	2951	3.9	0.01	2.73	30.6	0.0	6	0	SO9	9	BADER
195	2952	3.7	0.01	2.72	54.3	0.0	6	0	SO9	9	BADER
196	2953	3.	0.01	2.73	72.5	0.0	5	0	SO9	9	BADER
199	2956	19.7	26.90	2.70	34.8	0.0	4	0	SO10	10	BADER
200	2957	22.4	162.58	2.71	42.8	0.0	3	0	SO10	10	BADER
201	2958	21.9	122.39	2.71	46.6	0.0	4	0	SO10	10	BADER
202	2959	18.3	10.37	2.77	44.0	0.0	3	0	SO10	10	BADER
203	2960	11.4	3.50	2.81	32.3	0.0	3	0	SF	10	BADER
204	2961	19.	68.43	2.81	36.5	0.0	3	0	SF	10	BADER
205	2962	17.4	9.56	2.78	27.0	0.0	4	0	SF	10	BADER
206	2963	2.9	0.15	2.84	48.3	0.0	4	0	SF	10	BADER
207	2964	8.4	1.60	2.81	32.3	0.0	5	0	SO10	10	BADER
208	2965	4.	TBFA	2.90	57.6	0.0	3	0	SO10	10	BADER
209	2966	4.6	0.65	2.78	46.9	0.0	4	0	SO10	10	BADER
210	2967	14.6	34.73	2.71	35.9	0.0	4	0	SO10	10	BADER
211	2968	18.3	142.20	2.71	43.1	0.0	3	0	SO10	10	BADER
212	2969	9.	5.98	2.71	38.5	0.0	3	0	SO10	10	BADER
213	2970	12.7	0.64	2.78	34.4	0.0	3	0	SO10	10	BADER
214	2971	14.5	1.49	2.72	32.3	0.0	3	0	SO10	10	BADER
215	2972	5.2	0.01	2.74	41.8	0.0	5	0	SO10	10	BADER
231	2995	13.5	1.18	2.77	24.2	0.0	5	0	SO11	11	BEATY
232	2996	10.2	0.98	2.72	24.1	0.0	3	0	SO11	11	BEATY
233	2997	12.2	2.65	2.76	34.9	0.0	3	0	SO11	11	BEATY
234	2998	12.8	1.42	2.72	36.4	0.0	3	0	SO11	11	BEATY
235	2999	8.6	0.07	2.73	31.1	0.0	3	0	SO11	11	BEATY
236	3000	9.8	0.34	2.72	24.1	0.0	4	0	SO11	11	BEATY
237	3001	13.6	0.70	2.72	32.1	0.0	2	0	SO11	11	BEATY
238	3002	13.5	0.65	2.71	37.9	0.0	3	0	SO11	11	BEATY
239	3003	12.8	0.33	2.73	35.6	0.0	3	0	SO11	11	BEATY
240	3004	9.2	0.44	2.70	23.3	0.0	2	0	SO11	11	BEATY
241	3005	7.6	0.01	2.76	53.7	0.0	3	0	SO11	11	BEATY
Min:		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!			

TBFA = Too Broken For Analysis.
No Analysis = No analysis was done at this depth.

TABLE 1 (CONTINUED)
ROUTINE CORE ANALYSIS
Pioneer Natural Resources USA, Inc. Newby 2-28R Well
Stevens County, Kansas

Zone	Sample	Depth Range (ft)		Porosity (% BV)	Perm to gas (md)	Perm Net Pay K>0.01	Saturation(% PV) Water	Oil	Grain Density (g/cc)	ROP	FACIES	
CRAUSE	125	2937	2938	18.71	4.3	4.3	60.47	0	2.7	3	1	
CRAUSE	126	2938	2939	15.88	1.5	1.5	66.64	0	2.71	3	1	
CRAUSE	127	2939	2940	9.34	0.08	0.08	55.59	0	2.72	5	1	
CRAUSE	142	2954	2955	9.94	0.41	0.41	52.64	0	2.71	4	1	
CRAUSE	143	2955	2956	5.77	0.07	0.07	58.53	0	2.76	4	1	
CRAUSE	144	2956	2957	7	0.03	0.03	72.62	0	2.72	3	1	
CRAUSE	156	2968	2969	2.15	0.01	None	91.77	0	2.78	8	1	
BADER	157	2969	2970	10.01	1.85	1.85	45.26	0	2.71	7	1	
BADER	158	2970	2971	8.17	0.39	0.39	54.19	0	2.8	6	1	
BADER	159	2971	2972	7.13	0.1	0.1	69.47	0	2.77	5	1	
BADER	160	2972	2973	10.42	0.29	0.29	59.74	0	2.8	4	1	
BADER	161	2973	2974	7.35	0.02	0.02	70.52	0	2.78	3	1	
BADER	164	2982	2983	0.87	0.01	None	79.71	0	2.7	7	1	
BADER	165	2983	2984	2.17	0.03	0.03	85.74	0	2.73	8	1	
BADER	166	2984	2985	2.32	0.04	0.04	87.4	0	2.71	8	1	
BADER	167	2985	2986	2.21		None	93.15	0	2.71	5	1	
BADER	168	2986	2987	2.13	0.14	0.14	86.13	0	2.71	5	1	
BADER	169	2987	2988	3.37	0.41	0.41	88.48	0	2.72	10	1	
BADER	170	2988	2989	9.78		None	60.57	0	2.71	9	1	
BADER	171	2989	2990	8.51	1.83	1.83	58.69	0	2.71	11	1	
BADER	172	2990	2991	12.1	11.5	11.54	55.13	0	2.71	5	1	
BADER	173	2991	2992	14.34	119	118.62	66.05	0	2.71	5	1	
BADER	174	2992	2993	20.6	1141	1141.06	64.42	0	2.71	5	1	
BADER	175	2993	2994	12.78	97.1	97.09	62.78	0	2.75	9	1	
BADER	176	2994	2995	13.42	154	154.43	56.13	0	2.71	8	1	
BADER	177	2995	2996	9.73	9.44	9.44	50.19	0	2.71	3	1	
BADER	178	2996	2997	15.41	154	154.04	61.22	0	2.71	3	1	
BADER	179	2997	2998	15.28	191	191.45	63.72	0	2.71	3	1	
BADER	180	2998	2999	13.81	17.8	17.83	68.74	0	2.7	2	1	
BEATY	185	3023	3024	1.47	0.01	None	76.23	0	2.71	2	1	
BEATY	186	3024	3025	5.1	0.01	None	67.21	0	2.71	3	1	
BEATY	187	3025	3026	7.08	0.03	0.03	64.1	0	2.72	4	1	
BEATY	188	3026	3027	5.43	0.01	None	64.89	0	2.72	6	1	
BEATY	208	3046	3047	4.89	0.01	None	90.34	0	2.72	4	1	
BEATY	209	3047	3048	2.67	0.01	None	63.71	0	2.7	5	1	
BEATY	210	3048	3049	1.53	0.01	None	80.92	0	2.66	2	1	
BEATY	217	3055	3056	2.81	0.01	None	41.63	0	2.75	3	1	
BEATY	218	3056	3057	3.73	0.01	None	60.23	0	2.7	3	1	
BEATY	219	3057	3058	3.28	0.01	None	58.39	0	2.71	3	1	

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TABLE 1
PIONEER NATURAL RESOURCES
ROUTINE CORE ANALYSIS
Stuart 3-34R Well
Grant County, Kansas

ample No.	Depth (ft)	Porosity (%BV)	Permeability (md)	Grain Density (g/cc)	% FLUIDS Water	% FLUIDS Oil	OIL ROP	OIL FLOR	Facies	Shoal Package
	Max:	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		
	Avg:	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		

Key
SO = Shoal
SF = Shoal Flank
TF = Tidal Flat
PS = Paleosol
SL = Shelf/Lagoon

TBFA = Too Broken For Analysis.
No Analysis = No analysis was done at this depth.

TABLE 1 (CONTINUED)
ROUTINE CORE ANALYSIS
Pioneer Natural Resources USA, Inc. Newby 2-28R Well
Stevens County, Kansas

Zone	Sample	Depth Range (ft)	Porosity (% BV)	Perm to gas (md)	Perm Net Pay K>0.01	Saturation(% PV) Water	Saturation(% PV) Oil	Grain Density (g/cc)	ROP	FACIES
		Minimum:	0.87	<0.01		37.89	0	2.52		1
		Maximum:	20.6	1141		98.66	0	2.84		22
		Average:	7.76	10.4		80.37	0	2.71		5

[1] Sample is too broken for analysis.

Facies Codes
1 - Shoal
2 - Siliciclastic-Dominated Shelf
3 - Carbonate-Dominated Shelf
4 - Tidal Flat
5 - Paleosol to Coastal Plain

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Pioneer Natural Resources Stuart 3-34R Well
Grant County, Kansas

Dunham

	LOG DATA			CORE DATA				
DEPTH	NPHI	DPHI	D-N PHI	Core Por. (%BV)	Core Perm (md)	LITHOLOGY		Facies
2755	5.3	3.7	4.5	4.5	0.71	Ls sl slty tr fos tr por	3.5	SO1
2756	5.2	5.2	5.2	8.1	0.03	Ls sl-mod slty tr fos tr-sct por	3.5	SO1
2757	6.9	8.0	7.4	9.4	0.08	Ls mod slty tr sdy tr-sct por	8.	SO1
2758	8.8	10.2	9.5	9.0	0.1	Ls mod slty tr sdy tr-sct por	8.	TF
2759	11.6	10.8	11.2	10.1	0.01	Ls mod slty sl-tr sdy sct por	8.	TF
2760	12.7	10.9	11.8	11.1	0.06	Ls sl-mod slty sl sdy sct por	8.	TF
2761	11.0	11.3	11.2	9.1	0.02	Ls sl-mod slty sl sdy tr-sct por	8.	TF
2762	10.7	11.0	10.9	9.5	0.01	Ls sl-mod slty sl sdy tr-sct por	8.	TF
2763	17.0	15.6	16.3	10.9	0.52	Ls sl-mod slty sl sdy sct por	8.	TF
2764	26.8	26.9	26.9	NO ANALYSIS		No sample selected for analysis	8.	PS
2765	27.3	24.9	26.1	NO ANALYSIS		No sample selected for analysis	8.	PS
2766	24.5	21.3	22.9	9.1	TBFA	Rdbd brn-rdbrn mod slty sl calc frac	8.	PS
2767	22.2	14.7	18.4	7.0	TBFA	Rdbd brn-rdbrn slty anhy incl calc fr	8.	PS
2768	20.6	14.7	17.7	16.0	TBFA	Rdbd brn-rdbrn slty anhy incl calc fr	8.	PS
2769	16.6	6.7	11.6	9.0	TBFA	Rdbd rdbrn-gygn mod slty mod calc	8.	PS
2770	15.2	6.1	10.7	10.1	<0.01	Rdbd brn-rdbrn slty anhy incl calc tr	8.	PS
2771	12.4	7.1	9.8	8.9	<0.01	Rdbd rdbrn-brn mod slty mod calc t	8.	PS
2772	15.2	9.1	12.1	8.8	9.02	Rdbd rdbrn-brn mod slty mod calc fi	8.	PS
2773	15.1	8.9	12.0	8.7	TBFA	Rdbd rdbrn-brn mod slty mod calc fi	8.	PS
2774	12.9	7.9	10.4	8.1	<0.01	Rdbd rdbrn-brn mod slty tr calc tr po	8.	PS
2775	20.0	18.9	19.5	3.5	TBFA	Rdbd rdbrn anhy incl sl calc frac tr p	8.	PS
2776	21.2	18.2	19.7	8.9	TBFA	Rdbd brn-rdbrn mod slty sl sdy frac	8.	PS
2777	19.1	12.0	15.6	13.6	TBFA	Rdbd brn-rdbrn mod slty sl sdy frac	8.	PS
2778	18.3	11.2	14.8	13.0	TBFA	Rdbd brn-rdbrn mod slty sl sdy frac	8.	PS
2779	16.3	8.1	12.2	7.6	<0.01	Rdbd brn-rdbrn mod slty sl sdy tr po	8.	PS
2780	19.0	11.7	15.4	16.2	TBFA	Sh gy-gygn mod slty frac	8.	PS
2781	11.0	8.0	9.5	6.2	0.01	Ls tr-sl slty sl dol tr por	0.	TF
27 2782	7.2	8.1	7.7	7.9	0.02	Ls tr-sl slty tr fos tr por	1.5	TF
2783	7.7	9.4	8.5	8.9	0.03	Ls tr-sl slty tr fos tr por	1.5	TF
2784	7.7	9.5	8.6	8.0	0.01	Ls tr-sl slty tr fos tr por	2.5	TF
2785	6.9	8.3	7.6	7.2	0.01	Ls tr-sl slty tr fos tr por	3.	SO2
2786	6.0	7.6	6.8	5.4	<0.01	Ls tr-sl slty tr fos tr por	4.	SO2
2787	6.3	10.6	8.5	10.8	0.56	Ls tr-sl slty sl fos sct por	4.	SO2
2788	7.1	14.7	10.9	14.2	2.24	Ls tr-sl slty sl fos sct por	4.	SO2
2789	8.8	16.0	12.4	16.0	3.77	Ls tr-sl slty sl fos sct por	4.	SO2
2790	10.4	14.9	12.6	14.1	1.01	Ls tr-sl slty sl fos sct por	4.	SO2
2791	12.7	14.0	13.4	23.6	1.95	Ls sl slty slty lam tr fos sct por	2.5	SO2
2792	13.9	14.1	14.0	8.5	<0.01	Ls tr-sl slty sl fos sct anhy tr por	2.5	SL
2793	13.2	14.1	13.7	9.0	0.02	Ls sl slty sl fos tr lam tr-sct por	2.5	SL
39 2794	14.3	15.0	14.6	12.1	0.09	Ls sl slty sl fos slty lam sct por	2.5	SL
2795	14.9	17.5	16.2	16.1	0.4	Ls sl slty sl fos slty lam sct por	3.	SL
41 2796	14.7	15.7	15.2	21.9	0.4	Ls sl slty sl fos slty lam sct por	2.5	SL
2797	12.2	11.0	11.6	8.6	<0.01	Ls mod-sl slty tr fos tr lam tr por	2.5	SL
2798	10.2	9.5	9.8	8.8	0.02	Ls mod-sl slty tr fos tr lam tr por	2.	SL
2799	8.8	8.9	8.9	10.4	0.23	Ls sl-mod slty sl fos tr lam sct por	2.	SL
2800	8.8	8.7	8.7	8.4	0.04	Ls mod-sl slty tr fos tr lam tr por	4.	SL
2801	10.2	10.1	10.2	17.6	0.84	Ls sl-mod slty sl fos tr lam sct por	1.5	SL
2802	10.8	12.1	11.5	14.4	0.94	Ls sl-mod slty sl fos tr lam sct por	3.5	SO3
2803	11.2	12.9	12.1	14.2	1.16	Ls sl-mod slty sl fos tr lam sct por	3.	SO3
2804	11.6	13.7	12.7	15.2	1.16	Ls sl-mod slty sl fos tr lam sct por	3.	SO3
2805	12.0	14.5	13.2	3.5	0.06	Ls sl slty anhy incl sl fos tr por	3.5	SO3
2806	11.1	13.2	12.2	12.9	0.41	Ls sl slty sl fos sct por	3.5	SO3
2807	10.9	9.7	10.3	11.2	0.19	Ls sl slty sl fos sct por	3.5	SO3
2808	16.1	8.7	12.4	8.9	TBFA	Sh gy-dkgy mod slty frac tr calc	8.	PS
2809	18.0	8.5	13.2	9.0	TBFA	Sh gy-dkgy mod slty frac tr calc	8.	PS
2810	15.8	8.8	12.3	8.2	<0.01	Sltst brn sl-tr sdy tr calc tr por	8.	PS
2811	15.8	9.6	12.7	7.7	<0.01	Sltst brn sl-tr sdy tr calc tr por	8.	PS
2812	16.5	9.1	12.8	10.9	TBFA	Sltst brn sl-tr sdy tr calc frac tr por	8.	PS
2813	13.9	7.6	10.7	7.0	2.41	Sltst brn sl-tr sdy tr calc frac tr por	8.	PS
2814	10.8	7.4	9.1	8.5	<0.01	Rdbd rdbrn-brn sl slty sl-mod sdy sl	8.	PS
2815	11.3	8.6	9.9	8.3	0.01	Rdbd rdbrn-brn sl slty sl-mod sdy sl	8.	PS
2816	12.8	9.4	11.1	9.6	0.01	Rdbd rdbrn-brn sl slty sl-mod sdy sl	8.	PS
2817	14.8	10.6	12.7	9.1	<0.01	Rdbd rdbrn-brn sl slty sl-mod sdy sl	8.	PS
2818	18.3	11.1	14.7	6.2	0.25	Rdbrn brn-rdbrn sl slty/sdy tr anhy s	8.	PS
2819	12.4	9.8	11.1	5.7	<0.01	Rdbrn brn-rdbrn sl slty/sdy tr anhy s	8.	PS
2820	8.0	7.0	7.5	5.9	<0.01	Rdbrn brn-rdbrn sl slty/sdy tr anhy s	8.	PS
2821	7.0	6.2	6.6	6.8	0.02	Rdbrn brn-rdbrn sl slty/sdy tr anhy s	8.	PS
2822	7.4	6.2	6.8	6.6	<0.01	Rdbrn brn-rdbrn sl slty/sdy tr anhy s	8.	PS
2823	10.4	6.1	8.3	9.2	12.95	Rdbrn brn-rdbrn sl slty/sdy tr anhy s	8.	PS
2824	15.9	6.2	11.0	9.1	TBFA	Sh gy-gygn sl slty frac tr calc	7.	PS
2825	17.6	7.0	12.3	11.0	TBFA	Sh gy-gygn sl slty frac tr calc	7.	PS
2826	17.5	9.0	13.3	14.5	0.09	Dol tr slty tr fos slty lam sct por	1.	PS
2827	22.0	16.8	19.4	10.3	<0.01	Sltst dkgy-gy sl calc tr-sl sdy sct por	1.	PS
2828	22.1	16.1	19.1	10.2	TBFA	Ls sl-mod slty anhy incl sltst incl fra	1.	PS
2829	23.6	14.8	19.2	13.1	0.02	Ls sl-mod slty anhy incl sct por	1.	SO4
75 2830	21.7	12.2	16.9	15.6	0.29	Ls sl slty sl anhy sl dol sct por	3.	SO4
2831	8.8	6.5	7.6	6.1	<0.01	Ls tr slty tr fos tr por	3.	SO4
2832	6.4	4.7	5.6	6.0	0.01	Ls tr slty tr anhy tr fos tr por	3.	SO4
2833	5.8	4.3	5.1	6.1	0.01	Ls tr slty sct anhy sl fos tr por	3.	SF
2834	7.3	4.3	5.8	8.0	<0.01	Ls tr slty sct anhy sl fos tr por	3.5	SF
2835	13.7	6.4	10.0	10.6	0.01	Ls sl slty sl anhy sl fos sct por	3.5	SL
2836	16.8	7.6	12.2	9.4	TBFA	Sltst gybrn slty lam sh ptg sl sdy fra	2.5	SL
2837	16.5	7.6	12.1	7.6	<0.01	Sh blk-gyblk abnt fos sct Ls incl mo	3.	SL
2838	15.9	8.6	12.3	11.5	10.18	Sh blk-gyblk abnt fos sct Ls incl mo	2.	SL

2839	11.6	8.1	9.9	5.4	<0.01	Ls mod slty tr fos slty lam tr por	3.	SL
2840	7.0	6.8	6.9	5.6	TBFA	Ss gy-ltgy vfgr slty lam frac sl calc tr	3.5	SL
2841	10.6	6.5	8.5	9.8	<0.01	Sltst gy sl-mod sdy sl calc tr por	3.5	SL
2842	15.1	7.2	11.2	5.7	<0.01	Ls mod slty tr fos slty lam tr por	4.	SL
2843	10.0	7.8	8.9	4.6	<0.01	Ls sl slty sct anhy tr fos tr por	5.	SO5
2844	7.3	7.2	7.3	15.5	2.51	Ls tr slty sct fos sct por	4.5	SO5
2845	6.7	8.9	7.8	16.4	3.27	Ls tr slty sct fos sct por	3.5	SO5
2846	9.9	12.4	11.1	18.3	2.1	Ls tr slty sct fos sct por	3.	SF
2847	15.1	15.9	15.5	18.6	2.77	Ls tr slty sct fos sct por	2.5	SF
2848	15.6	17.5	16.5	16.5	0.95	Ls tr slty sct fos sct por	2.5	SF
2849	15.1	17.4	16.3	17.1	1.16	Ls tr slty sct fos sct por	3.	SF
2850	14.6	15.6	15.1	13.7	0.98	Ls tr slty sl fos sl anhy sct por	3.	SF
2851	12.1	13.4	12.7	6.5	<0.01	Ls tr slty tr fos sl anhy tr por	2.	SF
2852	9.9	10.2	10.0	10.2	0.06	Ls sl-mod slty tr fos sct por	2.	SL
2853	8.8	9.2	9.0	6.7	<0.01	Ls sl-mod slty tr fos tr por	2.	SL
2854	8.1	6.6	7.3	6.3	0.01	Ls sl-mod slty tr fos tr por	2.	SL
2855	7.9	5.2	6.5	6.4	<0.01	Ls sl-mod slty tr fos tr por	2.	SL
2856	8.9	6.1	7.5	8.9	0.05	Ls mod-v slty sl anhy slty lam tr por	2.	SL
2857	12.1	5.7	8.9	7.4	TBFA	Sh blk abnt Ls incl frac sct anhy	1.	SL
2858	13.0	6.9	10.0	8.0	0.01	Ls mod-v slty tr anhy slty lam tr por	1.	SL
2859	12.3	8.4	10.3	6.4	0.03	Ls mod-v slty tr anhy slty lam tr por	1.5	SL
2860	12.9	8.3	10.6	8.3	<0.01	Ls mod-v slty tr anhy slty lam tr por	1.5	SL
2861	10.1	7.2	8.7	1.9	<0.01	Ls sl slty tr fos tr por	3.	TF
2862	5.3	4.3	4.8	1.1	<0.01	Ls sl slty tr fos tr por	3.	TF
2863	2.8	2.8	2.8	1.4	<0.01	Ls sl slty tr fos tr por	3.	TF
2864	2.7	2.8	2.7	4.0	<0.01	Ls sl slty tr fos tr por	4.	TF
2865	3.1	3.6	3.4	6.1	<0.01	Ls sl slty tr fos tr por	2.	TF
2866	4.9	4.2	4.6	5.2	<0.01	Ls sl slty tr fos tr por	2.	TF
2867	6.4	4.2	5.3	5.7	<0.01	Ls sl slty tr fos tr por	2.	TF
2868	8.6	5.8	7.2	11.1	TBFA	Sltst gy tr dol tr sdy grdg to sh	1.	PS
2869	13.0	7.4	10.2	8.2	TBFA	Sltst gy tr dol tr sdy grdg to sh	8.	PS
2870	16.0	6.8	11.4	9.8	<0.01	Rdbd rdbrn mod slty sl sdy sl anhy s	8.	PS
2871	15.0	6.5	10.8	10.2	0.02	Ls mod-v slty sct fos grdg to sh sct	8.	PS
2872	16.4	8.8	12.6	11.7	TBFA	Rdbd brn-rdbrn sl slty tr calc frac sc	8.	PS
2873	18.0	8.6	13.3	14.0	0.05	Rdbd slty tr sdy sl dol sct por	8.	PS
2874	14.1	4.3	9.2	5.8	0.49	Rdbd slty tr sdy sl dol sct anhy tr po	8.	PS
2875	12.6	2.9	7.8	6.9	TBFA	Rdbd slty tr sdy sl dol sct anhy frac	8.	PS
2876	12.9	4.7	8.8	5.0	TBFA	Rdbd slty tr sdy sl dol sl anhy frac tr	8.	PS
2877	11.9	6.4	9.1	9.0	0.01	Rdbd brn-rdbrn mod slty tr sdy sl ca	8.	PS
2878	11.1	7.4	9.2	7.6	<0.01	Rdbd brn-rdbrn mod slty tr sdy sl ca	8.	PS
2879	12.4	7.9	10.1	10.4	0.01	Rdbd brn-rdbrn mod slty tr sdy sl ca	8.	PS
2880	16.3	11.5	13.9	12.8	TBFA	Rdbd brn-rdbrn mod slty tr sdy frac	8.	PS
2881	20.1	13.4	16.8	8.9	<0.01	Rdbd brn-rdbrn mod slty tr sdy sl ca	8.	PS
2882	23.3	16.4	19.8	NO ANALYSIS		No sample selected for analysis	8.	PS
2883	22.8	16.1	19.4	6.4	1.58	Ls sl slty tr dol tr-sl anhy frac tr por	1.5	TF
2884	10.8	3.3	7.0	5.8	<0.01	Ls sl slty tr dol sl-tr anhy tr por	2.	TF
2885	7.6	3.3	5.4	7.8	<0.01	Ls sl slty tr dol sl-tr anhy tr por	2.	TF
2886	5.7	3.3	4.5	4.0	<0.01	Ls sl slty tr dol sl-tr anhy tr por	4.5	SO6
2887	4.5	2.0	3.2	2.2	0.02	Ls sl slty tr dol anhy incl tr por	4.5	SO6
2888	7.2	6.8	7.0	13.8	0.79	Ls tr slty sct fos sct por	4.	SO6
2889	11.2	11.1	11.1	11.3	0.25	Ls tr slty sct fos sct por	3.	SO6
2890	12.7	9.8	11.2	12.4	0.17	Dol sl slty tr fos sl calc sct por	2.	SO6
2891	15.9	7.0	11.4	10.6	0.01	Dol sl-mod slty tr fos sl calc sct por	1.5	SO6
2892	13.0	6.3	9.7	4.8	<0.01	Ls sl slty sl dol tr fos tr por	1.5	SF
2893	7.9	6.9	7.4	6.2	0.02	Ls sl slty tr fos tr por	2.5	SF
2894	5.3	5.1	5.2	4.9	<0.01	Ls sl slty tr fos tr por	3.5	SF
2895	5.1	4.3	4.7	5.0	0.14	Ls sl slty tr fos tr por	3.5	SO6
2896	7.0	6.5	6.8	8.9	0.06	Ls sl slty tr fos tr-sct por	3.5	SO6
2897	6.8	8.3	7.6	9.1	0.08	Ls sl slty tr fos tr-sct por	3.5	SO6
2898	5.7	6.0	5.8	4.1	<0.01	Ls sl slty tr fos tr por	4.	SO6
2899	9.8	9.3	9.6	12.8	TBFA	Sltst gy sl sdy non calc frac sct por	8.	PS
2900	16.4	13.1	14.8	9.0	8.13	Sltst gy sl sdy sl calc frac sct por	8.	PS
2901	23.9	20.7	22.3	NO ANALYSIS		No sample selected for analysis	8.	PS
2902	28.8	20.7	24.8	11.0	TBFA	Rdbd rdbrn gygn mod slty tr anhy fr	8.	PS
2903	24.1	18.6	21.3	6.2	0.05	Rdbd rdbrn mod slty tr sdy tr por	8.	PS
2904	18.5	12.7	15.6	8.5	TBFA	Rdbd rdbrn mod slty tr sdy frac tr po	8.	PS
2905	19.5	19.4	19.5	11.9	TBFA	Rdbd rdbrn mod slty sl sdy frac sct	8.	PS
2906	20.9	16.6	18.8	13.1	TBFA	Rdbd rdbrn mod slty sl-mod sdy frac	8.	PS
2907	21.3	18.9	20.1	9.6	0.07	Dol sl slty tr rdbd tr-sct por	8.	PS
2908	22.0	21.0	21.5	10.4	0.48	Ls sl slty sl fos sct por	4.	TF
2909	12.4	12.8	12.6	15.6	1.21	Ls sl slty sl fos sct por	3.5	SO7
2910	10.3	10.8	10.6	14.2	8.82	Ls sl slty sl fos sct por	4.5	SO7
2911	7.2	8.6	7.9	5.6	0.01	Ls sl slty tr fos tr por	4.5	SO7
2912	6.4	6.4	6.4	11.1	0.22	Ls sl slty sl fos sct por	4.5	SO7
2913	7.4	7.3	7.4	9.9	0.28	Ls sl slty sl fos sl anhy sct por	4.	SO7
2914	8.4	6.5	7.5	10.4	0.56	Ls sl slty sl fos sct anhy incl sct por	4.	TF
2915	8.5	5.3	6.9	6.9	0.44	Ls sl slty sl fos sct anhy tr por	3.5	TF
2916	10.4	11.3	10.8	16.3	0.56	Ls sl slty sl fos sct por	3.	TF
2917	13.5	15.9	14.7	16.3	1.08	Ls tr-sl slty sct fos sct por	2.5	SO7
2918	10.7	13.5	12.1	10.0	0.21	Ls tr-sl slty sl fos sct por	3.	SO7
2919	7.1	7.5	7.3	4.2	0.01	Ls sl slty tr fos slty lam tr por	1.	SF
2920	5.5	3.9	4.7	2.2	<0.01	Ls sl slty tr fos tr por	1.	SF
2921	6.7	5.9	6.3	6.1	0.01	Ls mod slty sl fos slty lam tr por	8.	SF
2922	10.9	8.0	9.5	7.0	0.01	Rdbd rdbrn-brn slty tr sdy sl-mod ca	8.	PS
2923	17.8	15.4	16.6	7.6	0.01	Rdbd rdbrn-brn slty tr sdy sl-mod ca	8.	PS
2924	24.2	18.6	21.4	13.2	TBFA	Rdbd rdbrn-brn slty tr sdy tr calc fra	8.	PS
2925	14.7	11.6	13.2	6.7	0.01	Rdbd rdbrn-brn slty sl sdy sl-mod ca	8.	PS
2926	15.1	12.2	13.7	7.1	<0.01	Rdbd rdbrn-brn slty tr sdy sl-mod ca	8.	PS
2927	14.1	10.9	12.5	7.8	<0.01	Rdbd rdbrn-brn slty tr sdy sl-mod ca	8.	PS

2928	10.2	7.5	8.8	6.9	0.01	Rdbd rdbrn-brn slty tr sdy sl-mod ca	8.	PS
2929	12.5	10.1	11.3	11.6	0.02	Rdbd rdbrn-brn slty tr sdy sl calc sc	8.	PS
2930	17.5	13.0	15.3	12.7	0.08	Rdbd rdbrn-brn slty tr sdy sl calc sc	8.	PS
2931	19.3	13.8	16.5	10.8	TBFA	Rdbd rdbrn-brn slty tr sdy tr calc fra	8.	PS
2932	13.8	8.8	11.3	4.5	TBFA	Rdbd rdbrn-brn slty tr sdy tr calc fra	4.5	PS
2933	10.7	11.3	11.0	10.5	1.16	Ls tr-sl slty sl fos sct por	3.5	SO8
2934	10.3	10.9	10.6	13.8	2.39	Ls tr-sl slty sl fos sct por	3.5	SO8
178 2935	9.6	8.7	9.2	11.4	0.16	Ls tr-sl slty sl fos sct por	3.	SO8
2936	10.6	7.7	9.1	9.5	0.08	Ls tr-sl slty sl fos sl anhy sct por	3.5	SO8
2937	12.7	10.2	11.4	9.1	0.06	Ls tr-sl slty sl fos sl anhy sct por	4.	SO8
2938	11.9	9.8	10.8	7.1	0.04	Rdbd rdbrn mod slty sl-mod sdy mo	8.	PS
2939	12.3	8.2	10.3	7.4	0.02	Rdbd rdbrn mod slty sl-mod sdy mo	8.	PS
2940	14.3	8.5	11.4	8.1	1.73	Rdbd rdbrn mod slty sl-mod sdy mo	8.	PS
2941	13.1	9.1	11.1	11.1	TBFA	Sh rdbrn slty tr sdy tr calc frac	8.	PS
2942	9.3	8.1	8.7	6.6	0.02	Rdbd rdbrn mod slty sl-mod sdy mo	8.	PS
2943	9.8	8.2	9.0	7.3	0.01	Rdbd rdbrn mod slty sl-mod sdy mo	8.	PS
2944	13.2	14.3	13.8	7.2	0.01	Rdbd rdbrn mod slty sl-mod sdy mo	8.	PS
2945	24.7	24.0	24.3	9.7	0.01	Rdbd rdbrn mod slty mod sdy mod c	8.	PS
2946	16.9	22.3	19.6	6.9	TBFA	Ls mod slty-slty tr anhy frac tr por	8.	PS
2947	6.8	9.2	8.0	5.1	<0.01	Ls tr-sl slty tr fos tr por	4.	SO9
2948	5.9	7.1	6.5	7.3	0.22	Ls tr-sl slty tr fos tr por	4.5	SO9
192 2949	7.4	8.1	7.8	10.2	1.29	Ls tr-sl slty tr fos sct por	4.	SO9
2950	5.2	5.9	5.6	11.1	0.28	Ls tr-sl slty tr fos sct por	4.	SO9
2951	4.0	4.1	4.1	3.9	<0.01	Ls tr-sl slty tr fos tr por	4.	SO9
2952	9.3	18.9	14.1	3.7	<0.01	Ls tr-sl slty tr fos tr por	4.	SO9
2953	24.4	-999.0	-487.3	3.0	<0.01	Ls tr-sl slty tr fos tr por	4.	SO9
2954	23.6	23.0	23.3	8.3	TBFA	Rdbd rdbrn-brn slty mod calc frac tr	1.	PS
2955	13.6	10.8	12.2	4.8	TBFA	Ls mod slty tr fos frac tr por	2.	PS
2956	15.0	13.2	14.1	19.7	26.9	Ls tr slty sct fos sct por	4.	SO10
2957	18.5	21.1	19.8	22.4	162.58	Ls tr slty sct fos sct por	4.	SO10
201 2958	18.3	21.2	19.8	21.9	122.39	Ls tr slty sct fos sct por	4.	SO10
2959	16.1	17.3	16.7	18.3	10.37	Ls tr slty sct fos sl anhy sct por	3.	SO10
2960	14.1	11.6	12.9	11.4	3.5	Ls tr slty sl fos anhy incl sct por	3.	SF
2961	16.4	10.5	13.4	19.0	68.43	Ls tr slty sct fos anhy incl sct por	3.	SF
2962	19.7	11.6	15.6	17.4	9.56	Ls tr slty sct fos sl anhy sct por	2.5	SF
2963	14.9	11.1	13.0	2.9	0.15	Ls tr slty tr fos sct anhy incl tr por	2.5	SF
207 2964	9.8	7.1	8.5	8.4	1.6	Ls tr slty tr fos sct anhy incl tr por	2.5	SO10
2965	6.9	4.7	5.8	4.0	TBFA	Anhy xln sct Ls incl frac tr por	3.	SO10
2966	4.8	2.5	3.6	4.6	0.65	Ls tr slty tr fos sct anhy incl tr por	3.	SO10
2967	7.2	7.2	7.2	14.6	34.73	Ls tr slty sct fos sct por	4.5	SO10
2968	14.0	14.5	14.2	18.3	142.2	Ls tr slty sct fos sct por	4.	SO10
2969	15.0	17.0	16.0	9.0	5.98	Ls tr slty sl fos tr-sct por	3.5	SO10
2970	12.2	13.8	13.0	12.7	0.64	Ls tr slty tr-sl fos sl dol sct por	3.5	SO10
2971	10.5	10.4	10.5	14.5	1.49	Ls tr slty sct fos sct por	3.	SO10
2972	8.2	8.3	8.3	5.2	0.01	Ls tr slty sl fos tr por	3.	SO10
2973	5.7	4.1	4.9	4.3	<0.01	Ls tr slty sl fos tr por	3.	SF
2974	5.1	2.5	3.8	4.9	<0.01	Ls sl slty tr fos tr anhy tr por	2.5	SF
2975	8.8	5.2	7.0	12.1	0.04	Sltst gy sl-mod sdy tr calc sct por	8.	PS
2976	22.3	17.9	20.1	NO ANALYSIS		No sample selected for analysis	8.	PS
2977	28.7	17.2	23.0	NO ANALYSIS		No sample selected for analysis	8.	PS
2978	28.5	13.8	21.1	NO ANALYSIS		No sample selected for analysis	8.	PS
2979	28.9	12.4	20.6	NO ANALYSIS		No sample selected for analysis	8.	PS
2980	27.5	12.7	20.1	NO ANALYSIS		No sample selected for analysis	8.	PS
2981	26.3	11.6	19.0	11.2	TBFA	Rdbd rdbrn-gybrn slty tr calc frac sc	8.	PS
2982	24.1	9.4	16.7	8.9	TBFA	Rdbd rdbrn-gybrn slty tr calc sl anhy	8.	PS
2983	20.5	8.7	14.6	6.9	<0.01	Rdbd rdbrn-gybrn slty tr calc tr por	8.	PS
2984	20.9	8.9	14.9	12.6	TBFA	Rdbd rdbrn-gybrn slty tr calc frac sc	8.	PS
2985	23.8	9.8	16.8	10.7	<0.01	Rdbd rdbrn-gybrn slty tr calc sl anhy	8.	PS
2986	21.2	8.7	15.0	13.8	<0.01	Rdbd rdbrn-gybrn slty tr calc sl anhy	8.	PS
2987	19.0	7.8	13.4	7.9	<0.01	Rdbd rdbrn-gybrn slty tr calc sl anhy	8.	PS
2988	19.1	8.7	13.9	6.9	0.01	Rdbd rdbrn-gybrn slty tr calc sl anhy	8.	PS
2989	20.8	9.6	15.2	NO ANALYSIS		No sample selected for analysis	8.	PS
2990	21.6	7.9	14.8	9.1	TBFA	Rdbd rdbrn-gybrn slty tr calc frac tr	8.	PS
2991	21.4	8.4	14.9	8.9	TBFA	Rdbd rdbrn-gybrn slty tr calc frac tr	8.	PS
2992	19.4	7.6	13.5	NO ANALYSIS		No sample selected for analysis	8.	PS
2993	18.1	7.9	13.0	NO ANALYSIS		No sample selected for analysis	8.	PS
2994	18.2	8.3	13.3	NO ANALYSIS		No sample selected for analysis	3.5	PS
2995	21.7	18.0	19.9	13.5	1.18	Ls tr-sl slty sl fos sct anhy sct por	3.	SO11
2996	30.9	25.8	28.3	10.2	0.98	Ls tr-sl slty sl fos sct por	4.5	SO11
2997	21.3	19.4	20.4	12.2	2.65	Ls tr-sl slty sl fos sct anhy sct por	4.	SO11
2998	12.9	6.7	9.8	12.8	1.42	Ls tr-sl slty sl fos sct por	1.	SO11
2999	9.9	7.9	8.9	8.6	0.07	Ls sl slty tr fos tr por	2.	SO11
3000	10.1	10.0	10.1	9.8	0.34	Ls sl slty tr fos sct por	3.	SO11
3001	10.7	9.6	10.1	13.6	0.7	Ls sl slty tr fos sct por	3.	SO11
3002	11.3	9.1	10.2	13.5	0.65	Ls sl slty tr fos sct por	3.	SO11
3003	11.9	11.8	11.8	12.8	0.33	Ls sl slty tr fos sct por	3.	SO11
3004	12.2	12.2	12.2	9.2	0.44	Ls sl slty tr fos sct-tr por	4.	SO11
3005	11.9	12.0	11.9	7.6	0.01	Ls sl slty tr fos tr anhy tr por	4.	SO11
3006	11.1	11.6	11.4	6.4	0.11	Ls sl slty tr fos tr por	1.	SL
3007	9.2	9.2	9.2	9.2	0.02	Ls sl slty tr fos tr por	1.5	SL
3008	8.0	5.8	6.9	10.0	0.03	Ls sl slty tr fos sct por	2.5	SL
3009	9.4	5.5	7.5	9.8	0.02	Ls sl slty tr fos sct por	1.5	SL
3010	10.1	6.6	8.3	8.8	0.01	Ls sl slty tr fos tr-sct por	2.5	SL
3011	10.8	7.8	9.3	8.2	0.01	Ls sl slty tr fos tr-sct por	2.	SL
3012	10.4	9.1	9.7	7.5	0.01	Ls sl slty tr fos tr por	1.5	SL
3013	9.6	9.3	9.5	6.2	0.01	Ls sl slty tr fos tr por	1.5	SL
3014	9.3	8.5	8.9	7.9	<0.01	Ls sl slty tr fos tr por	1.5	SL
3015	9.5	7.9	8.7	6.1	<0.01	Ls sl slty tr fos tr por	1.5	SL
3016	8.9	6.6	7.8	6.2	<0.01	Ls sl slty tr fos tr por	1.5	SL

3017	8.5	6.8	7.7	6.2	<0.01	Ls sl slty tr fos tr por	1.5	SL
3018	8.5	6.3	7.4	6.4	<0.01	Ls sl slty tr fos tr por	1.5	SL
3019	8.3	6.7	7.5	4.0	<0.01	Ls sl slty tr fos tr por	1.5	SL
3020	8.1	6.4	7.3	6.9	<0.01	Ls sl slty tr fos tr anhy tr por	1.5	SL
3021	8.1	5.9	7.0	5.6	<0.01	Ls sl slty tr fos tr por	1.5	SL
3022	8.5	5.4	6.9	4.4	<0.01	Ls sl slty tr fos tr por	1.5	SL
3023	8.7	6.1	7.4	6.4	0.09	Ls mod slty tr fos tr por	1.	SL
3024	8.4	6.0	7.2	4.8	<0.01	Ls mod slty tr fos tr por	1.5	SL
3025	7.7	5.6	6.7	5.9	TBFA	Ls mod slty tr fos frac tr por	1.5	SL
3026	7.2	5.6	6.4	6.5	<0.01	Ls mod slty-slty grdg to Sltst tr por	1.5	SL
3027	6.8	7.1	7.0	8.4	<0.01	Ls mod slty-slty grdg to Sltst tr por	1.	SL
3028	7.8	7.8	7.8	6.5	<0.01	Ls mod slty-slty grdg to Sltst tr por	1.	SL
3029	8.0	8.1	8.1	8.1	<0.01	Sltst gy-dkgy mod-v calc grdg to arg	1.	SL
3030	9.3	9.0	9.2	8.2	<0.01	Sltst gy-dkgy mod-v calc grdg to arg	1.	SL
3031	11.3	9.7	10.5	8.8	<0.01	Sltst gy-dkgy mod-v calc grdg to arg	1.	SL
3032	12.7	10.1	11.4	7.8	<0.01	Sltst gy-dkgy mod-v calc grdg to arg	1.	SL
3033	11.9	9.2	10.5	7.9	<0.01	Sltst gy-dkgy mod-v calc grdg to arg	1.	SL
3034	11.7	9.6	10.6	8.6	<0.01	Sltst gy-dkgy mod-v calc grdg to arg	1.	SL
3035	12.4	9.9	11.2	8.5	<0.01	Sltst gy-dkgy mod-v calc grdg to arg	1.	SL
3036	12.7	11.3	12.0	8.4	<0.01	Sltst gy-dkgy mod-v calc grdg to arg	1.	SL
3037	13.1	11.1	12.1	9.7	<0.01	Sh gy-dkgy sl slty mod calc	1.	SL
3038	13.3	11.9	12.6	8.1	<0.01	Sltst gy-dkgy mod-v calc grdg to arg	1.	SL
3039	14.4	12.7	13.6	8.8	<0.01	Sltst gy-dkgy mod-v calc grdg to arg	1.	SL
3040	15.1	12.4	13.8	9.7	<0.01	Sh gy-dkgy sl slty mod calc	1.	SL
3041	16.2	11.9	14.1	10.2	0.06	Sh gy-dkgy sl slty mod calc	1.	SL
3042	17.3	11.8	14.6	10.0	TBFA	Sh gy-dkgy sl slty mod calc frac	0.	SL
3043	19.0	12.4	15.7	10.6	TBFA	Sh gy-dkgy sl slty mod calc frac	0.	SL
3044	18.2	12.5	15.4	10.3	TBFA	Sh gy-dkgy sl slty mod calc frac	0.	SL

Key
TBFA = To broken for analysis

Key
SO = Shoal
SF = Shoal
TF = Tidal F
PS = Paleos
SL = Shelf/L

Clastic

Rock Type	Type/Grn Sz	Clay Content	Bedding	Pore Type	Cem/Pore Fill	Water Depth	Fauna	Color
1	2	3	4	5	6	7	8	9

Carb.

Sampl: Plugs	Sampl: Thin Sect.	Rock Type	Dunham	Clay Content	Grain Size	Pore Type	2nd Pore	Water Depth	Fauna	Color

Operator: Pioneer Natural Resources
Well: # 3-34R Stuart
Location: 34-29S-34W
County: Morton
API: 15-067-21445
Elevation: 2884 KB
Spud Date: 1/98

Cored Interval: 2755-3045
Core Described: MICD
KGS Corebarn Loc.:
Core Depth Correction:
Date: 10/25/02 - 11/04/02
Description by: MICD
Page: 1/7

Features	Core Depth	Comments	Depo Envir	Strat Interval
	2780			
		From session w/ L. Watney 11/5/02		
		1. "Algal" looking fabric is Phyloid Algal White there is no trace of PA left. Some may be burrowed		
	85	2. Encrustations are not necessarily on firmground. Could have been on algal blades that are no longer present	Need Thin Section	
		3. "Loose" encrustns lost their host substrate (PA?)		
	90	4. Calcite nodules result of calcite precip due to "seeping" of calcite rich fluids through groundwater system		
		5. Green = Reducing environment around rooted areas due to oxidation of carbon material ↳ not sufficient O2 for iron		
	95	6. Green/Gray silt at top of Lovesite sequence could signal a change in environment related to more temperate climate moving out of ice age?		
	2800			
	05			
		burrowed		Council Grove
		burrowed		A1 s
	10	Overall: V. little Bdng.		
PA		Non Self		
	15			
	20			

Clastic

Rock Type	Type/Grn Sz	Clay Content	-	Bedding	Pore Type	Cem/Pore Fill	-	Water Depth	Fauna	Color
1	2	3	-	4	5	6	-	7	8	9

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Carb.

Sampl: Plugs	Sampl: Thin Sect.	Rock Type	Dunham	Clay Content	-	Grain Size	Pore Type	2nd Pore	-	Water Depth	Fauna	Color
		1	2	3	-	4	5	6	-	7	8	9

Features	Core Depth	Comments	Depo Envir	Strat Interval
	2820			
		Vertical burrows	TF?	A/S
		Faint Hz lam		
		Hz burrows		
			Cp	
	25			L1
		strom		
		Stromatolitic or Algal mud bl/ Crudely SH Tepees	TF	
		CO_3 mud stone w/ burrows, calcisiltite Cast network Root tubes etc.	Lacka	
		OV root molds	Cp	
	30	dolo Fem mdst-wkst pell. (fecal or root molds) insitu breccia (weathering)		F
Frac			Shoal	U
		pell-ctd grn-Ost. pkst Whispy lam. (Microbial?)		N
				S
		Sctrd Algy displacive Shell wkst (echinoid, brach frags		T
		Echy brach.	Lagoon	O
	35	Ripple laminated Vf sstone Subst.		N
		Rippled Abdt crinoid.		
		Abdt. Lge whole Brachs		
	40	blk chrt Mixed skel wkst Echin. Crin. brach bryz		
		Rippled calcareous siltstone		
		Possible tidal lam. Scrd FG		
		STORM - Bioclast cg skel grns		Exposed?
Frac filled w/ insol		PA Baffle, encr Brown on algal blades, Sheltery filled w/ encr. Foram wkst	Shoaly	BRECCIA - Looks like PA community collapsed
		Intraclasts vaguely filled w/ Algy cement PA Blade mats " "		
	45	skel pkst, mostly nondescript rud Some ost. & brachiopod brachs		
Breccia				
Breccia		Skel Wkst, bryz, Scrd brachs, burrow mottled (?) throughout	Lagoon	like algal baffled? mud
		Whispy clay lam. throughout (Scrd) Anastomozing Microstyl.		
		wh. encr. foram 49-51 (Frac)		
		△ nodules scrd. throughout		
	50			
		Burrowed or P. Algal skel. wkst		
		PA Blades cracked		
		Silty Wkst, wvy lam, clast nodules		
		Grapestone Algy nodules		
	55			
		Crinoidal calc. siltst - wavy bedded Abu brachs, bryz		
		Like Algy mat clusters V. small hz burrows		
	2860			

rippled up mud clasts

2 sets 2857-62

PA Shelty mud

PA grnstn

Clastic

Rock Type	Type/Grn Sz	Clay Content		Bedding	Pore Type	Cem/Pore Fill		Water Depth	Fauna	Color
1	2	3	-	4	5	6	-	7	8	9

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Carb.

Sampl: Plugs	Sampl: Thin Sect.	Rock Type	Dunham	Clay Content		Grain Size	Pore Type	2nd Pore		Water Depth	Fauna	Color

Features | Core Depth | Comments | Depo Envir | Strat Interval

2860
- ↓, abrupt contact (Scour? Exposure?)
- collapse breccia, Calcite lam; ciram frac
- P algal? Skel wkst
- Sfd echin., encr. foram, brz
- Fib Mdst. wispy laminae (microstyl) assoc. w/ larger styl.

Algal wkst (not PA) note surf. are coated w/ encr. 2863.5

Lagoonal

- Cg plast common grains; CM CO_3 mud (fibroclasts CPA-shelter pore)
- Scoured surface (Storm)

65

- Sli silty ost. mdst w/ poss. few vugs at top burrowed? 66-67

TF

- Silty dol. mdst w/ few. vugs
- Algal lam.

B_{1S}

70

- Sdvd cem Anhy mdst

Cp

75

- Anhy filled Root structures?

80

- Pol. Fen mdst
- Algal lam; weathering breccia at surface
- Few vugs, filled w/ Anhy
- + Cm anhy mud
- Mini styl.

B_1 C R O U S E

TF

85

Shoal

- Cg oncolite & Ctd grain plast-grnst
- Ige ovoids replaced by Anhy
- oncolitic, pellet, mixed skel plast (ost, fenestrates)

Lagoon

- Polymictic ost wkst

90

Rippled

- Silty dol.
- clay/lam. assoc. w/ main. styl.
- Few cris (silicified)
- Fus → Vs micro styl. cutting undercut of fus
- PA mdst – extensive encr forams – encrustation to 3cm (PA blue zone)
- w/ scattered bryz & ost
- extensive Anhy repl. w/ red chert repl. Anhy
- Mixed skel – algal wkst plast – chromed Aladi Textularia, abt. encr forams (Bac)
- Rugose Coral
- Red chert after Anhy
- Mixed skel – Ctd grn plast
- Mostly rnd but some wkstn & broken

C_{DS}

Shoal

95

- Sol. by mini styl.
- Cg Ctd grn & osagid grain plast-grnst

- Root Retected calcite mudstone
- Burrows filled w/ CO_3 mud & pelvids (TS)

Cp

B_{2S}

2900

Clastic

Rock Type	Type/Grn Sz	Clay Content	Bedding	Pore Type	Cem/Pore Fill	Water Depth	Fauna	Color
1	2	3	4	5	6	7	8	9

Carb.

Sampl: Plugs	Sampl: Thin Sect.	Rock Type	Dunham	Clay Content	Grain Size	Pore Type	2nd Pore	Water Depth	Fauna	Color

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Core Depth	Features	Comments	Depo Envir	Strat Interval
2900		4A (post TS)		
		More abdt. CM caliche nod. (V. little to no Anhydrite)		
05		Roots w/ Anhy-fill		
		Caliche Breccia 1.TF-Mdst; Rooted? Sheet cracks (linked w/ rooted) coastal calcrete crust w. ? dolomitic LS poss. peloid?	TF	B_2
10		Cg ctd grnst & oncoid pkst-grnst		M
		← Large Burrows ?		i
		Cg skel & ctd grn pkst more div, incl. fracs, & recrystallized brgz.	Shoal	d
		PA Baffle stone mixed w/ encr algae boundstone. Shelter voids filled w/ Anhy lgb of trapped mud. Collapsed to form breccia w/ grainy matrix filling parts	PAB Mound	a l c b u i l d g
15		F-mg pell-skel pkst-grnst	Shoal	
		mod skel wkst-pkst Abdt Fenestrate Slt silty wkst Lmg Brach, echinoid frags	CDSu	
20		Abdt-fus.		
		LAb - CM caliche & other Lithoclasts	Beach	
		scattered calcite caliche nodules (1 cm)		B_3 S
25		(V. little Anhydrite)		
30		Rubble - caliche clasts & LS lithoclasts		
		Cg oncolitic & peloidal pkst-grnst	Shoal	B_3 E
		M-cg oncolite - pellet pkst-grnst ← solution w/ clay lag & grains (Oncolite)		
35		Sol. voids mostly filled w/ clay (Not Anhy)		I
		Abundant fenestrae wkst w/ scattered gastr. Yellow weathering color ↑ at base of Tge lithoclasts		S
		green beds (dust) NO caliche or Anhy		B_4 S
40				

All Larger pores filled w/ Anhydrite

Reducing environment due to oxidization of carbon material related to roots

Clastic

Rock Type	Type/Grn Sz	Clay Content	Bedding	Pore Type	Cem/Pore Fill	Water Depth	Fauna	Color
1	2	3	4	5	6	7	8	9

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Carb.

Sampl: Plugs	Sampl: Thin Sect.	Rock Type	Dunham	Clay Content	Grain Size	Pore Type	2nd Pore	Water Depth	Fauna	Color	Features	Core Depth	Comments	Depo Envir	Strat Interval
		1	1	4	9	1	4	0	0	1		2940			B4s
		1	1	4	9	1	4	0	0	1					
		1	1	4	9	1	4	0	0	1					
		1	2	4	9	1	4	0	0	1			greenish Rooted?		
		1	2	4	9	1	4	0	0	1		45			
		1	1	4	9	1	4	0	0	1					
		1	1	4	9	1	4	0	0	1					
		1	1	4	9	1	4	0	0	1					
		5	2	0	1	1	2	3	2	3			Rooted Mdst-Wkst r-v. odd .5mm rnd grains scttrd in mud matrix	TF	B4
		5	2	0	1	1	2	3	2	3					
		5	6	0	5	1	3	4	2	3			Ctd grn grns	Shoal	Murrill
		5	6	0	5	1	3	4	2	3					
	48	5	4	0	5	1	3	4	4	4					
		5	4	0	6	1	3	4	5	4		50	Abdt. Ramose Bryz.		
		5	3	0	3	1	3	5	6	4				CDSu	
		5	3	0	3	1	0	5	6	4					
		5	4	0	3	1	0	5	6	6			Abdt. Algal ctd grns		
		5	4	0	3	1	0	5	6	6					
		3	6	3	3	1	4	3	2	1			Shaley 1ith - ctd.sm plast w/ red silt wispy lam		
		3	6	3	3	1	4	3	2	1			Lag		
		5	4	1	5	1	0	3	2	3			Red shale intraclast ctd grns, calcilutite		LL
		1	1	4	9	1	4	0	0	1					
		1	1	4	9	1	4	0	0	1				Cp	B5s
		1	1	4	9	1	4	0	0	1		55			
		1	1	4	9	1	4	0	0	1			Green-gy shale w/ abdt. calcilutite mud.		
		5	4	0	6	4	2	4	3	4			Pizolite "type"		B5
		5	4	0	4	3	2	4	3	4					
		5	4	0	4	3	2	4	3	4			Pell - Ost plast w/ good moldic & intergran	SHBAL	
		5	4	0	4	4	2	4	3	4			Pell - Onc - plast		
		5	4	0	4	4	2	4	3	4					
	50	5	4	0	4	4	2	4	3	4					
		5	4	0	6	4	3	4	3	4			Onc - pizolite, pell plast		
		8	8	0	2	2	4	5	4	3					
		8	8	0	2	2	4	5	4	3			Dol. algal wkst encr. forams	Lagoon	
		8	8	0	2	2	3	5	4	3		60	Bounding algal fabric is somewhat preserved		
		8	8	0	2	4	2	5	4	3			Fenestrate Schrod molds & small unsc (Encr. Algal Boundstone)	TF	
		8	8	0	2	4	2	5	4	3					
		8	8	0	2	2	4	5	4	4					
		8	8	0	2	4	2	5	4	4			spony	Lagoon	
		8	8	0	2	2	1	5	4	4			Abundant displacive & Anhy repl.		
		8	8	0	2	2	1	5	4	4					
	52	5	3	0	4	1	5	6	4	3			PA, Encr Algal Baffle - Boundstone		
		5	3	0	4	1	5	6	4	3					
		5	2	0	2	1	2	6	4	3		65	Large Alg molds filled w/ Anhy	RDSu	
		5	3	0	5	1	2	6	4	3			Abdt. Anhy Molds Anhy replacem		
		5	3	0	5	1	3	6	4	3			Alternating PA Baffle & Encr. Algal Boundstone		
		5	2	0	2	1	3	6	4	3					
		5	3	0	4	4	2	5	4	3			Sparse Cr. fossil molds preserved		
		5	3	0	4	4	2	5	4	3			Abdt. Encr. Forams		
		5	3	0	4	4	2	5	4	3					
		5	3	0	4	2	4	5	4	3			PA Baffle stone / FP v. Alga - Boundstone, Churned Gs, Alg Blades are broken & intermixed w/ Baffle bound lumps w/ grainier matrix. Good Moldic ϕ		
		7	2	0	2	2	1	6	3	4		70			
		7	2	0	2	2	1	6	3	4			Dol. LS, Ost pell wkst w/ scttr. "Tree" encr. forams		
		7	2	0	2	2	1	6	3	4					
		5	2	0	2	1	0	6	3	4					
		5	2	0	2	1	0	6	3	4					
		3	2	2	4	1	4	7	7	7			Abdt. crinoids	CDSc	
		4	3	1	6	1	0	6	7	6			Abdt Fus. algae, brachs		
		4	3	1	6	1	0	6	7	6			Many ctd w/ encr. forams	CDSu	
		5	3	0	5	1	0	6	4	6			Fewer Fus, brachs, ~ same Ostracodes		
		5	3	1	5	1	0	4	4	6					
		5	3	1	5	1	0	3	3	6		75	Oscgrdstgrn (ϕ 2cm)	Trans Shoal	
		1	1	5	9	1	4	0	0	5					C5
		1	1	5	9	1	4	0	0	5					
		1	1	5	9	1	4	0	0	5					
								0	0	1					
		1	1	5	9	1	4	0	0	1		80			

Anhy dest. by

Clastic

Rock Type	Type/Grn Sz	Clay Content	Bedding	Pore Type	Cem/Pore Fill	Water Depth	Fauna	Color
1	2	3	4	5	6	7	8	9

Carb.

Sampl: Plugs	Sampl: Thin Sect.	Rock Type	Dunham	Clay Content	Grain Size	Pore Type	2nd Pore	Water Depth	Fauna	Color

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Features	Core Depth	Comments	Depo Envir	Strat Interval
	2980			
		modest caliche near middle		
	85	Scattered Anhy filled vert fracs or roots		
		overall a lot less silty and more clay rich than silts above		
	90			
		Anhy @ base		
	95	green clay filled sol. voids (Pell wkst) Oncoid-ctd grn-pell pkst-grns	shoal	C
		Exposure Surface!		
		green clay filled sol. voids, dol-pell-ost-wkst	lagoon	N
		Oncoid-skel-pell pkst	shoal	e
		Brache, Fusulinids, Foram's		V
		silty : v. silty Mdst skel wkst	SDSL	a
	3000	skel-oncoid pkst pell	shoal	
		Anastamozing Styl. Lith Fusulinids, green		
		pell ost wkst-pkst	lagoon	
		mixed skel-ost wkst-pkst	cosa	
	05			
		silty wkst : mdst wkst	CDSU	
		Large crinoids dominate bryz : brachs (Pen) Some v. abd. Fen. Some Ramose Wavy laminated, some burrowing		
	10	smaller crinoids		
		v. silty mdst wkst : Calc. Siltst	CDSL	
	15	v. sparse Fauna		
	20			

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Features	Core Depth	Comments	Depo Envir	Strat Interval
3 1 4 - 1 1 4 - 7 8 7	3020	Vr. Sparse Fauna		
	25	V. Sparse Fauna		
3 1 4 - 1 1 4 - 7 8 7				
2 1 5 - 8 1 4 - 8 8 9		small crinoids, fenestrate bryozoa, brachiopod (?)	SDS L	
		Fairly fz laminated Brittle		
	30			
2 1 5 - 8 1 4 - 8 8 9				
2 1 5 - 8 1 4 - 8 9 9				
	35			
	40	Almost no macro fauna		
2 1 5 - 8 1 4 - 8 9 9	45			