

CORE LABORATORIES, INC.
OKLAHOMA CITY, OKLAHOMA

FULL DIAMETER
CORE ANALYSIS RESULTS

15-187-20138
10/08/73.
6-28-EPN
PAGE 1

AMOCO PRODUCTION COMPANY
PIPER GAS UNIT NO. 2
PANOMA FIELD
STANTON COUNTY, KANSAS

FORMATION: COUNCIL GROVE
DRLG. FLUID: WATER BASE MUD
ELEVATION: 3205' K.B.
LOCATION: 1250' FSL - 2450' FWL

DATE: 9-27-73
FILE NO: 3402-7900
ENGR: BOYLE

SEC 6-T28S-R39W

SAMPLE NO.	DEPTH INTERVAL FEET	PERMEABILITY - MD.		POROSITY PER CENT	FLUID SATS.		GRAIN DEN.	DESCRIPTION
		MAX.	90		OIL	WATER		
1	2547.00-48.00	*	<0.1	11.3			2.70	SLT SHY S/LMY
2	2548.00-49.00	*	<0.1	10.9			2.70	SLT SHY S/LMY
3	2549.00-50.00	*	.1	13.4			2.79	DOL SHY
4	2550.00-51.00	3.6	3.6	17.2			2.77	LM DOL ANH VF
5	2551.00-52.00	.4	.4	13.9			2.76	LM DOL SLTY S/ANH
6	2552.00-53.00	.8	.8	13.3			2.75	LM ANH
7	2553.00-54.00	.9	.8	12.2			2.75	LM ANH
8	2554.00-55.00	.6	.6	12.7			2.73	LM S/ANH
9	2555.00-56.00	<0.1	<0.1	4.9			2.74	LM S/ANH
10	2556.00-57.00	5.7	1.0	8.0			2.77	LM SHY +
11	2557.00-58.00	*	1.5	8.4			2.78	DOL SHY
12	2558.00-59.00	*	<0.1	7.5			2.78	DOL SHY
13	2559.00-60.00	*	<0.1	7.8			2.69	DOL V/SHY
14	2560.00-61.00	<0.1	<0.1	2.6			2.69	LM S/SHY
15	2561.00-62.00	<0.1	<0.1	1.7			2.69	LM
16	2562.00-63.00	<0.1	<0.1	3.6			2.70	LM SHY
17	2563.00-64.00	2685	.2	4.4			2.69	LM SHY VF
18	2564.00-65.00	<0.1	<0.1	7.8			2.72	LM S/ANH VF
19	2565.00-66.00	1.9	.2	7.7			2.71	LM S/ANH VF
20	2566.00-67.00	<0.1	<0.1	3.4			2.65	LM
21	2567.00-68.00	<0.1	<0.1	2.3			2.68	LM
22	2568.00-69.00	3.0	1.5	5.1			2.70	LM SHY +
23	2569.00-70.00	<0.1	<0.1	4.0			2.65	LM SHY +
24	2570.00-71.00	.3	<0.1	3.0			2.67	LM S/SHY +
25	2571.00-72.00	1.5	.3	5.8			2.71	LM SHY +
26	2572.00-73.00	.1	<0.1	7.5			2.66	LM SHY
27	2573.00-74.00	.2	<0.1	9.4			2.68	LM V/SHY
28	2574.00-75.00	<0.1	<0.1	6.5			2.67	LM SHY
29	2575.00-76.00	.1	.1	2.7			2.66	LM SHY
30	2576.00-77.00	.5	.3	3.4			2.70	LM SHY +

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SAMPLE NO.	DEPTH INTERVAL FEET	PERMEABILITY - MD.		POROSITY PER CENT	FLUID SATS.		GRAIN DEN.	DESCRIPTION
		MAX.	90		OIL	WATER		
31	2577.00-78.00	.4	.3	2.7			2.71	LM SHY +
32	2578.00-79.00	*	<0.1	2.8			2.70	LM SHY
33	2579.00-80.00	.3	<0.1	3.5			2.70	LM SHY +
34	2580.00-81.00	.1	<0.1	5.3			2.69	LM SHY
35	2581.00-82.00	<0.1	<0.1	3.2			2.68	LM SHY
36	2582.00-83.00	<0.1	<0.1	4.8			2.68	SLT SHY LMY +
37	2583.00-84.00	.3	.3	3.7			2.72	SLT SHY LMY
38	2584.00-85.00	.1	.1	5.7			2.75	SLT SHY LMY ANH +
39	2585.00-86.00	.1	<0.1	7.8			2.72	SLT SHY S/LMY ANH +
40	2586.00-87.00	<0.1	<0.1	8.9			2.68	SLT SHY S/ANH +
41	2587.00-88.00	.1	<0.1	7.7			2.70	SLT SHY LMY +
42	2588.00-89.00	.1	<0.1	4.5			2.66	SLT SHY LMY
43	2589.00-90.00	6.5	1.0	6.9			2.69	LM SHY +
44	2590.00-91.00	<0.1	<0.1	6.8			2.68	LM SHY
45	2591.00-92.00	<0.1	<0.1	9.5			2.73	LM SHY ANH
46	2592.00-93.00	.2	.1	8.0			2.69	SD S/LMY SLTY
47	2593.00-94.00	<0.1	<0.1	7.8			2.68	SD S/LMY SLTY
48	2594.00-95.00	<0.1	<0.1	7.0			2.65	SD S/LMY SLTY
49	2595.00-96.00	<0.1	<0.1	6.8			2.64	SD LMY SLTY
50	2596.00-97.00	<0.1	<0.1	4.9			2.64	SLT S/SHY LMY
51	2597.00-98.00	193	154	10.5			2.76	SLT S/LMY SHY ANH +
52	2598.00-99.00	2.9	.6	4.1			2.65	SLT S/SHY LMY
53	2599.00- 0.	61	31	4.7			2.65	SLT SHY LMY +
54	2600.00- 1.00	*	<0.1	12.3			2.72	SLT SHY S/LMY +
55	2601.00- 2.00	324	288	11.3			2.72	SLT SHY S/LMY +
56	2602.00- 3.00	79	54	9.4			2.71	SLT SH S/LMY S/ANH
57	2603.00- 4.00	<0.1	<0.1	10.0			2.71	SLT SHY S/LMY S/ANH
58	2604.00- 5.00	.2	.2	8.5			2.70	SLT S/SHY LMY
59	2605.00- 6.00	.6	.6	10.4			2.67	SLT S/SHY LMY
	2606.00-07.00		LOST CORE					
60	2607.00- 8.00	.3	.3	11.2			2.69	SLT SHY LMY

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SAMPLE NO.	DEPTH INTERVAL FEET	PERMEABILITY - MD.		POROSITY PER CENT	FLUID SATS.		GRAIN DEN.	DESCRIPTION
		MAX.	90		OIL	WATER		
61	2608.00- 9.00	.2	.1	9.6			2.67	SLT SHY LMY
62	2609.00-10.00	.2	.1	8.8			2.66	SLT SHY LMY
63	2610.00-11.00	.4	.4	8.7			2.67	SLT SHY LMY
64	2611.00-12.00	<0.1	<0.1	7.1			2.67	SLT SHY LMY
65	2612.00-13.00	1.0	1.0	7.4			2.67	SLT SHY LMY +
66	2613.00-14.00	<0.1	<0.1	6.9			2.65	SLT SHY LMY
67	2614.00-15.00	<0.1	<0.1	7.4			2.64	SLT SHY LMY
68	2615.00-16.00	<0.1	<0.1	5.9			2.65	SLT SHY LMY
69	2616.00-17.00	<0.1	<0.1	5.8			2.64	SLT SHY LMY
70	2617.00-18.00	<0.1	<0.1	5.9			2.64	SLT SHY LMY
71	2618.00-19.00	<0.1	<0.1	4.4			2.66	SLT SHY LMY
72	2619.00-20.00	<0.1	<0.1	4.5			2.68	SLT SHY LMY
73	2620.00-21.00	3.2	2.2	3.7			2.71	LM SHY +
74	2621.00-22.00	<0.1	<0.1	2.0			2.75	LM
75	2622.00-23.00	<0.1	<0.1	2.1			2.72	LM S/SHY
76	2623.00-24.00	*	<0.1	4.1			2.71	LM S/SHY
77	2624.00-25.00	<0.1	<0.1	3.4			2.72	LM SHY
78	2625.00-26.00	<0.1	<0.1	1.5			2.71	LM
79	2626.00-27.00	.5	.5	5.9			2.72	LM SHY +
80	2627.00-28.00	.2	<0.1	8.1			2.72	SLT SHY LMY +
81	2628.00-29.00	<0.1	<0.1	7.2			2.70	SLT SHY LMY +
82	2629.00-30.00	<0.1	<0.1	4.7			2.69	SLT SHY LMY +
83	2630.00-31.00	<0.1	<0.1	4.3			2.69	SLT SHY LMY +
84	2631.00-32.00	<0.1	<0.1	6.8			2.72	SLT SHY LMY +
85	2632.00-33.00	*	<0.1	15.3			2.76	SLT SHY LMY +
	2633.00-34.00		SHALE					
86	2634.00-35.00	<0.1	<0.1	11.5			2.74	SLT SHY LMY +
87	2635.00-36.00	<0.1	<0.1	8.3			2.73	SLT SHY LMY +
88	2636.00-37.00	<0.1	<0.1	10.1			2.74	SLT SHY LMY +
89	2637.00-38.00	.5	<0.1	4.0			2.69	SLT SHY LMY

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		MAX.	90		OIL	WATER		
90	2638.00-39.00	<0.1	<0.1	4.4			2.68	SLT SHY LMY
91	2639.00-40.00	<0.1	<0.1	4.6			2.68	SLT SHY LMY
92	2640.00-41.00	<0.1	<0.1	6.5			2.69	SLT SHY LMY +
93	2641.00-42.00	<0.1	<0.1	7.9			2.74	SLT SHY LMY +
94	2642.00-43.00	.2	.2	9.1			2.78	SLT SHY LMY ANH +
95	2643.00-44.00	.8	<0.1	1.4			2.73	LM
96	2644.00-45.00	1.7	<0.1	2.8			2.77	LM ANH
97	2645.00-46.00	<0.1	<0.1	4.0			2.71	LM SHY
98	2646.00-47.00	<0.1	<0.1	4.0			2.73	LM S/ANH
99	2647.00-48.00	<0.1	<0.1	2.8			2.79	LM ANH
100	2648.00-49.00	*	<0.1	2.3			2.75	LM S/SHY S/ANH VF
101	2649.00-50.00	.7	<0.1	7.0			2.65	SLT SHY LMY +
102	2650.00-51.00	.2	.1	11.2			2.71	SLT SHY +
103	2651.00-52.00	.6	.6	6.3			2.68	SLT SHY LMY
104	2652.00-53.00	<0.1	<0.1	4.6			2.66	SLT SHY LMY
105	2653.00-54.00	2.1	.5	5.3			2.66	SLT SHY LMY
106	2654.00-55.00	.1	<0.1	5.0			2.66	SLT SHY LMY +
107	2655.00-56.00	.1	<0.1	5.0			2.65	SLT SHY LMY
108	2656.00-57.00	<0.1	<0.1	5.7			2.66	SD SLTY LMY
109	2657.00-58.00	<0.1	<0.1	5.5			2.68	SD SLTY LMY
110	2658.00-59.00	<0.1	<0.1	5.6			2.66	SD SLTY LMY
111	2659.00-60.00	<0.1	<0.1	6.6			2.64	SD S/LMY SLTY
112	2660.00-61.00	<0.1	<0.1	9.9			2.65	SD SLTY LMY
113	2661.00-62.00	.1	<0.1	12.8			2.73	SD S/DOL SLTY
114	2662.00-63.00	<0.1	<0.1	11.9			2.70	SD S/DOL SLTY
115	2663.00-64.00	<0.1	<0.1	10.6			2.69	SD S/DOL SLTY
116	2664.00-65.00	<0.1	<0.1	7.0			2.65	SD S/DOL SLTY
117	2665.00-66.00	115	99	13.0			2.75	SLT S/DOL SHY +
118	2666.00-67.00	26	7.4	10.0			2.73	SLT SHY LMY +
119	2667.00-68.00	28	25	8.8			2.73	SLT SHY LMY +
120	2668.00-69.00	<0.1	<0.1	9.9			2.80	DOL S/SHY LMY
121	2669.00-70.00	*	<0.1	9.2			2.79	DOL S/SHY LMY

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		MAX.	90		OIL	WATER		
122	2670.00-71.00	<0.1	<0.1	12.6			2.74	LM S/SHY SLTY DOL
123	2671.00-72.00	.8	.8	16.8			2.72	SD SLTY DOL
124	2672.00-73.00	.6	.4	15.5			2.73	SD SLTY DOL
125	2673.00-74.00	3.1	1.1	7.5			2.69	SD S/DOL SLTY
126	2674.00-75.00	1.2	1.0	15.1			2.69	SD S/DOL SLTY
127	2675.00-76.00	<0.1	<0.1	13.2			2.71	SLT LMY
128	2676.00-77.00	24	15	9.3			2.68	SLT SHY LMY +
129	2677.00-78.00	33	18	11.9			2.71	SLT S/LMY S/ANH SH
130	2678.00-79.00	.2	.1	12.9			2.67	SD S/LMY SLTY
131	2679.00-80.00	<0.1	<0.1	9.6			2.63	SD S/LMY SLTY
132	2680.00-81.00	.4	.4	13.0			2.71	SD LMY SLTY
133	2681.00-82.00	.6	.5	14.7			2.70	SD LMY SLTY
134	2682.00-83.00	.5	.5	13.1			2.70	SD LMY SLTY
135	2683.00-84.00	.3	.3	10.7			2.67	SD LMY SLTY
136	2684.00-85.00	<0.1	<0.1	9.2			2.66	SD LMY SLTY
137	2685.00-86.00	<0.1	<0.1	5.7			2.64	SD LMY SLTY
138	2686.00-87.00	<0.1	<0.1	8.5			2.66	SLT SHY LMY +
139	2687.00-88.00	<0.1	<0.1	12.3			2.74	SLT SHY LMY +
140	2688.00-89.00	.1	<0.1	8.2			2.76	LM SHY +
141	2689.00-90.00	.2	.2	4.2			2.75	LM S/DOL S/SHY +
142	2690.00-91.00	<0.1	<0.1	14.4			2.77	SLT DOL SHY +
143	2691.00-92.00	<0.1	<0.1	10.8			2.72	SLT S/DOL SHY
144	2692.00-93.00	<0.1	<0.1	10.5			2.70	SLT SHY LMY +
145	2693.00-94.00	<0.1	<0.1	11.5			2.73	SLT SHY LMY +
146	2694.00-95.00	*	<0.1	8.1			2.67	SLT SHY LMY
147	2695.00-96.00	*	<0.1	10.7			2.66	SLT SHY LMY
148	2696.00-97.00	*	<0.1	10.7			2.66	SLT SHY LMY
149	2697.00-98.00	*	<0.1	9.6			2.68	SLT SHY LMY
150	2698.00-99.00	<0.1	<0.1	12.1			2.70	SLT SHY LMY +
151	2699.00- 0.	2.3	2.3	5.1			2.76	LM S/SHY
152	2700.00- 1.00	.1	<0.1	2.5			2.72	LM S/VGY
153	2701.00- 2.00	<0.1	<0.1	2.6			2.72	LM S/VGY

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		MAX.	90		OIL	WATER		
154	2702.00- 3.00	.2	.1	6.8			2.73	LM S/VGY STY
155	2703.00- 4.00	.4	.3	6.5			2.74	LM S/SHY S/VGY STY
156	2704.00- 5.00	1.3	1.0	13.9			2.71	LM S/VGY STY
157	2705.00- 6.00	3.1	.8	16.6			2.73	LM VF
158	2706.00- 7.00	9.4	1.9	7.1			2.74	LM S/ANH VF
159	2707.00- 8.00	24	1.9	7.8			2.74	LM S/ANH VF
160	2708.00- 9.00	.9	.9	6.4			2.73	LM S/ANH
161	2709.00-10.00	.1	<0.1	0.5			2.77	LM ANH
162	2710.00-11.00	<0.1	<0.1	0.0			2.76	LM ANH
163	2711.00-12.00	.1	<0.1	4.4			2.72	LM S/ANH
164	2712.00-13.00	*	<0.1	8.1			2.73	LM STY
165	2713.00-14.00	2.0	.7	4.0			2.72	LM S/SHY
166	2714.00-15.00	*	<0.1	9.9			2.75	SLT SHY LMY
167	2715.00-16.00	*	<0.1	9.2			2.74	SLT SHY LMY
168	2716.00-17.00	*	<0.1	9.0			2.74	SLT SHY LMY
169	2717.00-18.00	*	<0.1	8.3			2.75	SLT SHY LMY
170	2718.00-19.00	*	<0.1	9.6			2.74	SLT SHY LMY
171	2719.00-20.00	*	<0.1	8.9			2.74	SLT SHY LMY
172	2720.00-21.00	*	<0.1	10.5			2.73	SLT SHY LMY
173	2721.00-22.00	*	<0.1	9.7			2.74	SLT SHY LMY
174	2722.00-23.00	*	<0.1	10.1			2.74	SLT SHY LMY
175	2723.00-24.00	*	<0.1	11.6			2.75	SLT SHY LMY
176	2724.00-25.00	*	<0.1	8.1			2.73	SLT SHY LMY
177	2725.00-26.00	29	12	9.4			2.71	SLT SHY LMY +
178	2726.00-27.00	17	17	7.6			2.69	SLT SHY LMY +
179	2727.00-28.00	191	125	6.7			2.67	SLT SHY LMY +
180	2728.00-29.00	193	183	8.3			2.72	SLT SHY LMY +
181	2729.00-30.00	.2	<0.1	4.5			2.68	SLT SHY LMY +
182	2730.00-31.00	1.6	1.6	4.8			2.67	SLT SHY LMY +
183	2731.00-32.00	6.7	4.5	4.4			2.65	SLT SHY LMY +
184	2732.00-33.00	25	25	5.7			2.67	SLT SHY LMY +
185	2733.00-34.00	7.1	3.8	5.5			2.65	SLT SHY LMY +

Flu

Calc

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SAMPLE NO.	DEPTH INTERVAL FEET	PERMEABILITY - MD.		POROSITY PER CENT	FLUID SATS.		GRAIN DEN.	DESCRIPTION
		MAX.	90		OIL	WATER		
186	2734.00-35.00	26	18	8.6			2.71	SLT SHY LMY +
187	2735.00-36.00	22	19	7.8			2.70	SLT SHY LMY +
188	2736.00-37.00	<0.1	<0.1	5.2			2.68	SLT SHY LMY +
189	2737.00-38.00	1.1	<0.1	8.4			2.63	SLT SHY LMY +
190	2738.00-39.00	125	120	6.5			2.70	LM SHY +
191	2739.00-40.00	48	44	5.6			2.72	LM SHY
192	2740.00-41.00	<0.1	<0.1	5.5			2.82	LM DOL ANH
193	2741.00-42.00	4.0	1.8	11.3			2.79	LM DOL ANH
194	2742.00-43.00	.1	<0.1	9.5			2.74	LM
195	2743.00-44.00	<0.1	<0.1	10.9			2.75	LM S/DOL
196	2744.00-45.00	.5	.5	13.0			2.75	LM S/DOL
197	2745.00-46.00	.5	.4	10.9			2.73	LM S/ANH
198	2746.00-47.00	.1	<0.1	6.8			2.71	LM
199	2747.00-48.00	<0.1	<0.1	8.4			2.77	LM DOL SHY +
200	2748.00-49.00	<0.1	<0.1	4.4			2.71	LM SHY +
201	2749.00-50.00	18	6.4	4.2			2.71	LM SHY +
202	2750.00-51.00	11	2.3	3.6			2.70	LM S/SHY
203	2751.00-52.00	<0.1	<0.1	3.0			2.70	LM STY
204	2752.00-53.00	.4	.2	3.8			2.70	LM
205	2753.00-54.00	.3	<0.1	2.5			2.69	LM S/SHY
206	2754.00-55.00	1.6	.1	3.4			2.70	LM SHY +
207	2755.00-56.00	.1	<0.1	2.8			2.70	LM S/SHY +
208	2756.00-57.00	<0.1	<0.1	2.4			2.65	LM S/SHY +
209	2757.00-58.00	.2	<0.1	3.3			2.68	LM SHY +
210	2758.00-59.00	.2	<0.1	3.5			2.69	LM SHY +
211	2759.00-60.00	41	3.8	4.3			2.72	LM SHY +
212	2760.00-61.00	5.1	2.8	3.7			2.70	LM SHY
213	2761.00-62.00	<0.1	<0.1	2.6			2.70	LM S/SHY
214	2762.00-63.00	<0.1	<0.1	2.1			2.70	LM
215	2763.00-64.00	32	9.6	4.2			2.72	LM SHY +
216	2764.00-65.00	<0.1	<0.1	2.9			2.70	LM S/SHY
217	2765.00-66.00	<0.1	<0.1	4.8			2.70	LM S/SHY +

G.S. 1k

G.S. 1k

AMOCO PRODUCTION COMPANY
PIPER GAS UNIT NO. 2

FORMATION: COUNCIL GROVE
FIELD: PANOMA FIELD

DATE: 9-27-73
FILE NO. 3402-7900

SAMPLE NO.	DEPTH INTERVAL FEET	PERMEABILITY - MD.		POROSITY PER CENT	FLUID SATS.		GRAIN DEN.	DESCRIPTION
		MAX.	90		OIL	WATER		
218	2766.00-67.00	280	242	10.4			2.64	SLT SHY S/LMY
219	2767.00-68.00	*	<0.1	14.1			2.72	SLT SHY S/LMY
220	2768.00-69.00	*	<0.1	7.8			2.70	SLT SHY LMY
221	2769.00-70.00	*	<0.1	9.1			2.65	LM S/SHY
222	2770.00-71.00	3.7	.8	2.9			2.74	LM S/DOL
223	2771.00-72.00	<0.1	<0.1	4.3			2.76	LM S/DOL
224	2772.00-73.00	<0.1	<0.1	6.2			2.77	LM S/DOL S/VGY
225	2773.00-74.00	11	.2	13.0			2.76	LM S/DOL VF
226	2774.00-75.00	.9	<0.1	9.8			2.65	SLT SHY S/LMY +
227	2775.00-76.00	6.0	.2	8.9			2.68	SLT SHY +
228	2776.00-77.00	37	.7	9.9			2.70	SLT SHY +
229	2777.00-78.00	149	114	8.9			2.74	SLT SHY S/LMY +
230	2778.00-79.00	115	77	7.7			2.72	SLT SHY LMY S/ANH +
231	2779.00-80.00	35	33	7.1			2.70	SLT SHY LMY S/ANH +
232	2780.00-81.00	71	51	8.1			2.72	SLT SHY LMY S/ANH +
233	2781.00-82.00	19	14	6.1			2.66	SLT SHY LMY +
234	2782.00-83.00	*	<0.1	8.4			2.71	SLT SHY LMY
235	2783.00-84.00	<0.1	<0.1	8.2			2.67	SLT LMY
236	2784.00-85.00	<0.1	<0.1	8.6			2.69	SLT LMY
237	2785.00-86.00	<0.1	<0.1	8.2			2.66	SLT LMY
238	2786.00-87.00	<0.1	<0.1	8.8			2.65	SLT S/LMY
239	2787.00-88.00	<0.1	<0.1	6.8			2.64	SLT S/LMY
240	2788.00-89.00	*	.2	11.9			2.67	SLT SHY LMY
241	2789.00-90.00	*	<0.1	14.4			2.73	SLT SHY S/LMY
242	2790.00-91.00	.1	<0.1	12.4			2.71	SLT SHY LMY
243	2791.00-92.00	19	14	8.1			2.69	SLT SHY LMY +
244	2792.00-93.00	221	189	10.9			2.71	SLT SHY LMY +
245	2793.00-94.00	*	<0.1	11.4			2.68	SLT SHY S/LMY
246	2794.00-95.00	<0.1	<0.1	7.5			2.69	LM SHY
247	2795.00-96.00	.2	.2	8.8			2.76	LM S/DOL +
248	2796.00-97.00	<0.1	<0.1	2.1			2.72	LM VF
249	2797.00-98.00	8.3	<0.1	4.0			2.74	LM S/SHY VF

6.5 ft

6.5 ft

4.5 ft

4.5 ft

AMOCO PRODUCTION COMPANY
PIPER GAS UNIT NO. 2

FORMATION: COUNCIL GROVE
FIELD: PANOMA FIELD

DATE: 9-27-73
FILE NO. 3402-7900

SAMPLE NO.	DEPTH INTERVAL FEET	PERMEABILITY - MD.		POROSITY PER CENT	FLUID SATS.		GRAIN DEN.	DESCRIPTION
		MAX.	90		OIL	WATER		
250	2798.00-99.00	.4	.2	3.3			2.72	LM S/SHY VF STY
251	2799.00- 0.	<0.1	<0.1	4.2			2.74	LM S/SHY
252	2800.00- 1.00	<0.1	<0.1	4.8			2.74	LM
253	2801.00- 2.00	<0.1	<0.1	3.8			2.72	LM
254	2802.00- 3.00	<0.1	<0.1	3.3			2.73	LM STY
255	2803.00- 4.00	<0.1	<0.1	4.1			2.72	LM STY
256	2804.00- 5.00	<0.1	<0.1	4.7			2.73	LM
257	2805.00- 6.00	5.4	<0.1	6.8			2.75	LM S/DOL VF
258	2806.00- 7.00	3.3	1.6	7.4			2.77	LM S/DOL VF
259	2807.00- 8.00	18	<0.1	6.4			2.76	LM S/DOL VF
260	2808.00- 9.00	<0.1	<0.1	5.0			2.72	LM S/SHY STY
261	2809.00-10.00	.2	<0.1	10.4			2.70	LM V/CHT F
262	2810.00-11.00	<0.1	<0.1	9.4			2.72	LM CHT F
263	2811.00-12.00	<0.1	<0.1	10.5			2.71	LM CHT F

H. W.

CORE LABORATORIES, INC.



Petroleum Reservoir Engineering

COMPANY AMOCO PRODUCTION COMPANY FIELD PANOMA FILE 3402-7900
 WELL PIPER GAS UNIT "A" NO. 2 COUNTY STANTON DATE 10-5-73
 LOCATION SEC. 6-288-39W STATE KANSAS ELEV. _____

CORE-GAMMA CORRELATION

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VERTICAL SCALE: 5" = 100'

CORE-GAMMA SURFACE LOG

(PATENT APPLIED FOR)

GAMMA RAY
RADIATION INCREASE →

COREGRAPH

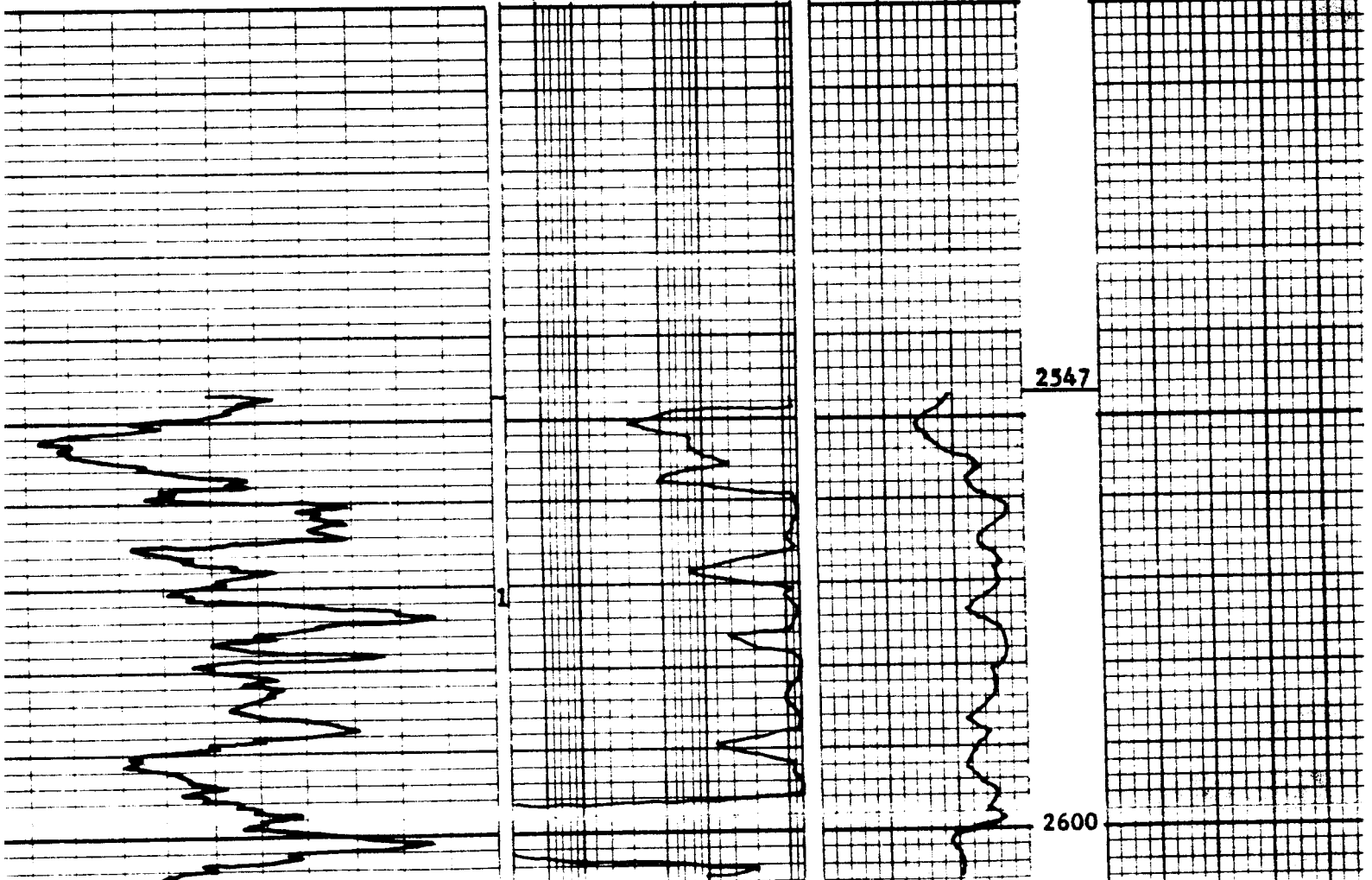
Binomial Average Data Plot

TOTAL WATER _____
 PERCENT TOTAL WATER
 80 60 40 20 0

PERMEABILITY _____
 MILLIDARCYs
 100 50 10 5 1

POROSITY _____
 PERCENT
 20 10

OIL SATURATION -----
 PERCENT PORE SPACE
 0 20 40 60 80



CORE-GAMMA SURFACE LOG

(PATENT APPLIED FOR)

GAMMA RAY

RADIATION INCREASE →

COREGRAPH

Binomial Average Data Plot

TOTAL WATER

PERCENT TOTAL WATER

80 60 40 20

PERMEABILITY

MILLIDARCY

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