

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

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AMOCO PRODUCTION COMPANY
 G. ARNOLD UNIT NO. 1 WELL
 WILDCAT
 STANTON COUNTY, KANSAS

DATE: 5/11/77
 FORMATION: COUNCIL GROVE
 DRLG. FLUID: WATER BASE MUD
 LOCATION: 1980' FEL & 1980' FSL SEC. 5-29S-40W

FILE NO: 3402-8967
 ENGINEER: PUGH
 ELEVATION: 3303' KB

* INDICATES PLUG PERM

SMP. NO.	DEPTH	PERM. TO AIR MD. MAXIMUM	90 DEG	POROSITY PERCENT	FLUID SATS. OIL WTR.	GR. DEN.	DESCRIPTION
WHOLE CORE ANALYSIS							
#+	1	2581.0-82.0	4.1	2.9	11.8	0.0 88.6	2.73 SLT, LMY, SHY, ANHY
+	2	2582.0-83.0	6.1	1.6	12.1	0.0 88.7	2.77 SLT, LMY, SHY, ANHY
#+	3	2583.0-84.0	116.0	106.0	12.8	0.0 86.0	2.74 SLT, LMY, SHY, ANHY
#+	4	2584.0-85.0	235.0	184.0	11.6	0.0 87.3	2.73 SLT, LMY, SHY, ANHY
+	5	2585.0-86.0	72.0	21.0	9.7	0.0 84.2	2.72 SLT, LMY, SHY, SL/ANHY
#+	6	2586.0-87.0	301.0	236.0	12.5	0.0 82.9	2.73 SLT, LMY, SHY, SL/ANHY
#+	7	2587.0-88.0	157.0	114.0	10.2	0.0 84.6	2.73 SLT, LMY, SHY, SL/ANHY
#+	8	2588.0-89.0	73.0	45.0	8.0	0.0 83.8	2.73 SLT, LMY, SHY, SL/ANHY
+	9	2589.0-90.0	3.9	2.0	5.2	0.0 60.0	2.75 LM, SHY, ANHY
	10	2590.0-91.0	<0.1	<0.1	1.9	0.0 58.5	2.77 LM, V/ANHY
	11	2591.0-92.0	<0.1	<0.1	3.2	0.0 76.7	2.72 LM, SL/SHY
	12	2592.0-93.0	<0.1	<0.1	4.3	0.0 78.6	2.70 LM, SL/SHY
+	13	2593.0-94.0	55.0	34.0	6.8	0.0 80.4	2.74 LM, SHY, SL/ANHY
+	14	2594.0-95.0	52.0	35.0	5.5	0.0 76.7	2.72 LM, V/SHY, SL/ANHY
#+	15	2595.0-96.0	25.0	22.0	6.5	0.0 81.8	2.72 SLT, V/LMY, SHY
#+	16	2596.0-97.0	28.0	18.0	7.0	0.0 82.1	2.72 SLT, V/LMY, SHY
#+	17	2597.0-98.0	80.0	63.0	10.7	0.0 85.2	2.72 SLT, V/LMY, SHY
#+	18	2598.0-99.0	122.0	96.0	9.5	0.0 83.8	2.71 SLT, V/LMY, SHY
#+	19	2599.0-00.0	208.0	193.0	10.8	0.0 82.8	2.71 SLT, V/LMY, SHY
#+	20	2600.0-01.0	25.0	13.0	6.2	0.0 83.6	2.70 SLT, LMY, SHY
#+	21	2601.0-02.0	12.0	8.5	9.3	0.0 80.4	2.69 SLT, LMY, SL/SDY, SHY
#+	22	2602.0-03.0	103.0	81.0	10.2	0.0 80.7	2.73 SLT, V/LMY, SHY
#+	23	2603.0-04.0	104.0	96.0	11.3	0.0 80.9	2.74 SLT, LMY, SHY, SL ANHY
#+	24	2604.0-05.0	73.0	58.0	9.6	0.0 87.2	2.74 SLT, LMY, SDY, SHY, ANHY
		2605.0-06.0					SH, SL/SLTY
+	25	2606.0-07.0	67.0	51.0	14.0	0.0 75.1	2.71 SLT, LM INCL, SHY

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ENGINEER: PUGH

SMP. NO.	DEPTH	PERM. TO AIR MD. MAXIMUM 90 DEG	POROSITY PERCENT	FLUID SATS. OIL WTR.	GR. DEN.	DESCRIPTION
+ 26	2607.0-08.0	25.0	23.0	10.1	0.0 73.5	2.72 SLT, LM INCL, SHY, ANHY
27	2608.0-09.0	0.1	0.1	8.0	0.0 74.0	2.77 SD, SLTY, V/ANHY
#+ 28	2609.0-10.0	41.0	37.0	6.6	0.0 80.4	2.75 SD, SLTY, SHY, ANHY
#+ 29	2610.0-11.0	40.0	35.0	11.0	0.0 70.5	2.74 SD, SLTY, SHY, ANHY
	2611.0-12.0					SH, SL/LMY
30	2612.0-13.0	<0.1	<0.1	1.2	0.0 47.0	2.78 LM, ANHY, VF
31	2613.0-14.0	<0.1	<0.1	1.1	0.0 50.4	2.82 LM, V/ANHY
32	2614.0-15.0	<0.1	<0.1	2.3	0.0 68.2	2.77 LM, V/ANHY, SL/SHY
33	2615.0-16.0	<0.1	<0.1	3.6	0.0 72.9	2.73 LM, ANHY, SHY
#+ 34	2616.0-17.0	123.0	106.0	9.9	0.0 79.9	2.74 SLT, LMY, SL/ANHY
#+ 35	2617.0-18.0	112.0	92.0	10.3	0.0 79.4	2.70 SLT, LMY, SHY, SL/ANHY
#+ 36	2618.0-19.0	26.0	11.0	7.9	0.0 70.3	2.70 SD, LMY, SLTY, SHY, ANHY
#+ 37	2619.0-20.0	37.0	26.0	9.3	0.0 67.4	2.68 SD, LMY, SLTY, SHY
#+ 38	2620.0-21.0	41.0	30.0	12.5	0.0 67.9	2.70 SD, LMY, SLTY, SHY, ANHY
#+ 39	2621.0-22.0	50.0	26.0	10.9	0.0 68.1	2.71 SLT, LMY, SDY, SHY, ANHY
#+ 40	2622.0-23.0	13.0	5.2	6.5	0.0 81.3	2.70 SLT, LMY, SHY, SL/ANHY
#+ 41	2623.0-24.0	20.0	12.0	5.7	0.0 82.1	2.71 SLT, LMY, SDY, SHY, ANHY
#+ 42	2624.0-25.0	41.0	17.0	7.5	0.0 86.7	2.72 SLT, LMY, SDY, SHY, ANHY
#+ 43	2625.0-26.0	39.0	32.0	8.0	0.0 80.9	2.72 SLT, LMY, SDY, SHY, ANHY
#+ 44	2626.0-27.0	103.0	102.0	12.1	0.0 67.7	2.71 SLT, LMY, SDY, SHY, ANHY
#+ 45	2627.0-28.0	64.0	52.0	9.0	0.0 71.0	2.72 SLT, LMY, SDY, SHY, ANHY
+ 46	2628.0-29.0	4.6	3.5	10.4	0.0 87.5	2.71 SD, LMY, SLTY, SL/ANHY
47	2629.0-30.0	1.0	0.8	17.6	0.0 88.4	2.75 SD, SLTY, ANHY
48	2630.0-31.0	0.1	0.1	11.4	0.0 86.0	2.73 SD, LMY, SLTY, ANHY
+ 49	2631.0-32.0	10.0	2.8	10.7	0.0 72.1	2.69 SD, LMY, SLTY, SHY
#+ 50	2632.0-33.0	140.0	124.0	13.8	0.0 71.4	2.71 SD, LMY, SLTY, SHY, ANHY
51	2633.0-34.0	0.3	0.1	16.7	0.0 63.2	2.67 SLT, LMY, SHY
52	2634.0-35.0	<0.1	<0.1	3.6	0.0 71.8	2.70 LM, SL/SLTY
53	2635.0-36.0	<0.1	<0.1	11.2	0.0 61.0	2.72 LM, SLTY, SL/ANHY

2636.0-38.0 TOO BROKEN FOR ANALYSIS

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54	2638.0-39.0	<0.1	<0.1	7.2	0.0 88.2	2.70 SD,LM INCL,SLTY,SHY
+ 55	2639.0-40.0	33.0	7.4	10.0	0.0 87.7	2.68 SD,LM INCL,SLTY,SHY
#+ 56	2640.0-41.0	161.0	131.0	10.7	0.0 82.3	2.73 SLT,LMY,SDY,SHY,ANHY
#+ 57	2641.0-42.0	309.0	287.0	14.1	0.0 84.4	2.75 SLT,LMY,SDY,SHY,ANHY
+ 58	2642.0-43.0	49.0	45.0	9.2	0.0 83.8	2.72 SLT,LMY,SDY,SHY,ANHY
+ 59	2643.0-44.0	73.0	33.0	17.6	0.0 76.6	2.71 SD,LMY,SLTY,SHY,ANHY
60	2644.0-45.0	0.6	0.6	17.5	0.0 80.7	2.71 SD,LMY,SLTY,ANHY
61	2645.0-46.0	0.6	0.5	16.3	0.0 79.0	2.72 SD,LMY,SLTY,ANHY
62	2646.0-47.0	0.5	0.5	15.7	0.0 85.9	2.71 SD,LMY,SLTY,ANHY
63	2647.0-48.0	0.2	0.2	14.7	0.0 76.5	2.72 SD,LMY,SLTY,ANHY
64	2648.0-49.0	<0.1	<0.1	13.2	0.0 77.5	2.70 SD,LMY,SLTY,SL/ANHY
65	2649.0-50.0	<0.1	<0.1	12.8	0.0 79.1	2.69 SD,LMY,SLTY
#+ 66	2650.0-51.0	74.0	46.0	13.2	0.0 79.6	2.70 SLT,LMY,SDY,ANHY
#+ 67	2651.0-52.0	208.0	203.0	18.1	0.0 63.8	2.69 SLT,LMY,SHY
#+ 68	2652.0-53.0	200.0	150.0	17.3	0.0 66.0	2.71 SLT,LMY,SHY,ANHY
69	2653.0-54.0	36.0	<0.1	2.8	0.0 66.4	2.71 LM,STY,VF
70	2654.0-55.0	11.0	0.1	2.7	0.0 65.5	2.77 LM,ANHY,VF
71	2655.0-56.0	0.5	0.2	19.8	0.0 65.4	2.70 SLT,SHY,ANHY
+ 72	2656.0-57.0	192.0	51.0	17.9	0.0 70.3	2.73 SLT,SHY,ANHY
+ 73	2657.0-58.0	115.0	96.0	19.0	0.0 67.3	2.74 SLT,LMY,SHY,ANHY
+ 74	2658.0-59.0	291.0	199.0	18.1	0.0 64.0	2.70 SLT,LMY,SHY,ANHY
#+ 75	2659.0-60.0	*	1.1	17.9	0.0 67.9	2.68 SLT,LMY,SHY
#+ 76	2660.0-61.0	279.0	183.0	16.4	0.0 62.0	2.74 SLT,LMY,SHY,ANHY
#+ 77	2661.0-62.0	233.0	188.0	17.3	0.0 63.8	2.73 SLT,LMY,SHY,ANHY
	2662.0-64.0					SH,ANHY
78	2664.0-65.0	0.2	0.2	11.0	0.0 61.7	2.73 LM,SHY,VF
79	2665.0-66.0	0.2	0.2	10.7	0.0 71.1	2.75 LM,SHY,ANHY,VF
80	2666.0-67.0	0.1	<0.1	4.3	0.0 73.9	2.73 LM,SHY,ANHY
81	2667.0-68.0	0.1	0.1	8.4	0.0 70.7	2.74 LM,ANHY,VF
82	2668.0-69.0	0.1	0.1	8.3	0.0 69.2	2.74 LM,ANHY
83	2669.0-70.0	0.2	0.1	9.0	0.0 74.8	2.76 LM,STY,ANHY,VF
84	2670.0-71.0	7.9	<0.1	7.7	0.0 72.8	2.76 LM,STY,ANHY,VF

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+ 85	2671.0-71.5	76.0 10.0	3.7	0.0 81.9	2.73	LM, SHY, VF
+ 86	2671.5-72.0	41.0 23.0	5.3	0.0 78.1	2.75	LM, SHY, ANHY, VF
87	2672.0-73.0	0.1 <0.1	5.2	0.0 69.4	2.74	LM, STY, ANHY
88	2673.0-74.0	18.0 <0.1	6.3	0.0 77.6	2.77	LM, SHY, ANHY, VF
#+ 89	2674.0-75.0	* 0.1	17.2	0.0 63.2	2.70	SLT, LMY, V, SHY
#+ 90	2675.0-76.0	* 0.2	20.0	0.0 64.2	2.68	SLT, LMY, SHY
	2676.0-77.0	TOO BROKEN FOR ANALYSIS				
#+ 91	2677.0-78.0	* 0.3	21.6	0.0 60.0	2.67	SLT, LMY, SHY
	2678.0-79.0	TOO BROKEN FOR ANALYSIS				
#+ 92	2679.0-80.0	* 0.1	18.9	0.0 60.5	2.67	SLT, LMY, SHY
#+ 93	2680.0-81.0	* 0.1	18.0	0.0 62.7	2.72	SLT, LMY, SHY
#+ 94	2681.0-82.0	* 0.1	17.5	0.0 66.1	2.69	SLT, LMY, SHY
#+ 95	2682.0-83.0	* 0.2	19.8	0.0 60.2	2.70	SLT, LMY, SHY
	2683.0-85.0	TOO BROKEN FOR ANALYSIS				
#+ 96	2685.0-86.0	84.0 75.0	12.7	0.0 68.3	2.66	SLT, LMY, ANHY
#+ 97	2686.0-87.0	67.0 58.0	12.9	0.0 68.1	2.70	SLT, LMY, SDY, ANHY
+ 98	2687.0-88.0	104.0 75.0	13.5	0.0 67.8	2.69	SLT, LMY, SDY, ANHY
+ 99	2688.0-89.0	219.0 75.0	13.5	0.0 67.8	2.71	SLT, LMY, SDY, ANHY
#+100	2689.0-90.0	71.0 44.0	12.7	0.0 68.7	2.71	SLT, LMY, SDY, SHY, ANHY
#+101	2690.0-91.0	121.0 65.0	14.3	0.0 61.9	2.73	SLT, LMY, SDY, SHY, ANHY
#+102	2691.0-92.0	* 0.1	13.9	0.0 62.2	2.73	SLT, LMY, SHY
#+103	2692.0-93.0	269.0 192.0	11.4	0.0 78.1	2.72	SLT, LMY, SDY, SHY, ANHY

DENOTES CHAOTIC FISSURES

+ DENOTES HORIZONTAL CRACKS

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

CORE SUMMARY

Company AMOCO PRODUCTION COMPANY
 Well G, ARNOLD UNIT NO. 1
 Page 5 of 5 File 3402-8967

DEPTH FEET	HORIZONTAL PERMEABILITY, Md.		POROSITY PER CENT	SATURATION		GRAIN DENSITY
	MAXIMUM	90 DEGREES		OIL	WATER	
#+2581-2589	121	89	11.1	0.0	85.8	2.74
+2589-2595	19	12	4.5	0.0	71.8	2.73
#+2595-2605	78	65	9.1	0.0	82.9	2.72
+2606-2608	46	37	12.1	0.0	74.3	2.72
#+2608-2611	27	24	8.5	0.0	75.0	2.75
2612-2616	<0.1	<0.1	2.1	0.0	59.6	2.78
#+2616-2618	118	99	10.1	0.0	79.7	2.72
#+2618-2621	35	22	9.9	0.0	68.5	2.69
#+2621-2628	47	35	8.5	0.0	76.8	2.71
#+2628-2633	31	26	12.8	0.0	81.1	2.72
2633-2634	0.3	0.1	16.7	0.0	63.2	2.67
2634-2635	<0.1	<0.1	3.6	0.0	71.8	2.70
2635-2636	<0.1	<0.1	11.2	0.0	61.0	2.72
+2638-2640	17	3.7	8.6	0.0	88.0	2.69
#+2640-2643	173	154	11.3	0.0	83.5	2.73
+2643-2650	11	5.0	15.4	0.0	79.3	2.71
#+2650-2653	161	133	16.2	0.0	69.8	2.70
2653-2655	24	0.1	2.8	0.0	66.0	2.74
#+2655-2662	185	103	18.1	0.0	65.8	2.72
2664-2666	0.2	0.2	10.9	0.0	66.4	2.74
2666-2667	0.1	<0.1	4.3	0.0	73.9	2.73
2667-2671	2.1	0.1	8.4	0.0	71.9	2.75
+2671-2674	34	8.3	5.1	0.0	76.8	2.75
#+2674-2676	*	0.2	18.6	0.0	63.7	2.69
#+2677-2683	*	0.2	19.2	0.0	61.9	2.69
#+2685-2693	134	73	13.1	0.0	67.9	2.71

15-187-20228



CORE LABORATORIES, INC. Petroleum Reservoir Engineering

COMPANY AMOCO PRODUCTION COMPANY FIELD WILDCAT FILE 3402-8967
WELL G. ARNOLD UNIT NO. 1 COUNTY STANTON DATE 6/10/77
LOCATION 1980' FSL & 1980' FSL STATE KANSAS ELEV. 3303' KB
SEC. 5-29S-40W

CORE-GAMMA CORRELATION

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VERTICAL SCALE: 5" = 100'

TOTAL WATER 0000
PERCENT PORE SPACE
80 60 40 20 0

GAMMA RAY RADIATION INCREASE → PERMEABILITY MILLIDARCYs POROSITY PERCENT OIL SATURATION XXXX PERCENT PORE SPACE

100.0 10.0 1.0 0.1 30 20 10 0 0 20 40 60 80

