

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

15-187-2023
1
FILE NO: 3402-8974
ENGINEER: PUGH
ELEVATION:

AMOCO PRODUCTION COMPANY
L.R. & C.E. CROSS NO. 1 WELL
WILDCAT
STANTON COUNTY, KANSAS

DATE: 5/18/77
FORMATION: COUNCIL GROVE
DRLG. FLUID: WATER BASE MUD
LOCATION: C NW SEC. 36-27S-41W

Duplicate

* INDICATES PLUG PERM

SMP. NO.	DEPTH	PERM. TO AIR MD.		POROSITY PERCENT	FLUID SATS.		GR. DEN.	DESCRIPTION	
		MAXIMUM	90 DEG		OIL	WTR.			
WHOLE CORE ANALYSIS									
	1	2431.0-32.0	0.1	0.1	15.1	0.0	88.2	2.72	SD, SLTY, LMY
	2	2432.0-33.0	<0.1	<0.1	13.6	0.0	89.6	2.71	SD, SLTY, LMY
#	3	2433.0-34.0	724.0	500.0	14.0	0.0	92.3	2.72	SLT, SHY, LMY
#	4	2434.0-35.0	51.0	38.0	7.5	0.0	87.6	2.74	SLT, SHY, LMY
#	5	2435.0-36.0	79.0	67.0	7.8	0.0	84.3	2.75	SLT, SHY, LMY
#	6	2436.0-37.0	405.0	405.0	14.0	0.0	72.6	2.75	SLT, SHY, LMY
#	7	2437.0-38.0	308.0	308.0	11.3	0.0	72.9	2.73	SLT, SHY, LMY
#	8	2438.0-39.0	391.0	294.0	9.7	0.0	66.0	2.68	SLT, SHY, LMY
#	9	2439.0-40.0	16.0	7.5	10.2	0.0	58.8	2.70	SLT, SHY, LMY
#	10	2440.0-41.0	170.0	155.0	12.2	0.0	64.9	2.72	SLT, SHY, LMY
#	11	2441.0-42.0	11.0	10.0	6.1	0.0	85.0	2.71	SLT, SHY, LMY
	12	2442.0-43.0	<0.1	<0.1	8.5	0.0	87.4	2.69	SD, SLTY, SHY, LMY
	13	2443.0-44.0	<0.1	<0.1	12.3	0.0	89.7	2.72	SD, SLTY, LMY
	14	2444.0-45.0	<0.1	<0.1	11.1	0.0	86.5	2.71	SD, SLTY, LMY
#	15	2445.0-46.0							SH
#	15	2446.0-47.0	154.0	150.0	12.6	0.0	65.5	2.71	SLT, SHY, LMY
#	16	2447.0-48.0	43.0	42.0	7.5	0.0	82.4	2.72	SLT, SHY, LMY
#	17	2448.0-49.0	45.0	44.0	8.0	0.0	86.3	2.72	SLT, SHY, LMY
#	18	2449.0-50.0	287.0	277.0	11.1	0.0	87.8	2.76	SLT, SHY, LMY
#	19	2450.0-51.0	162.0	158.0	10.7	0.0	67.8	2.71	SLT, SHY, LMY
#	20	2451.0-52.0	311.0	310.0	15.8	0.0	76.6	2.73	SLT, SHY, LMY
#	21	2452.0-53.0	291.0	246.0	14.7	0.0	69.0	2.75	SLT, SHY, LMY
#	22	2453.0-54.0	34.0	33.0	8.6	0.0	85.3	2.72	SLT, SHY, LMY
#	23	2454.0-55.0	317.0	290.0	16.2	0.0	76.8	2.71	SLT, SHY, LMY
#	24	2455.0-56.0	54.0	53.0	13.6	0.0	75.8	2.71	SLT, SHY, LMY
#	25	2456.0-57.0	<0.1	<0.1	6.1	0.0	77.5	2.73	SD, SLTY, LMY

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Petroleum Reservoir Engineering
DALLAS, TEXAS

AMOCO PRODUCTION COMPANY
L.R. & C.E. CROSS NO. 1 WELL

DATE: 5/18/77
FORMATION: COUNCIL GROVE

FILE NO: 3402-8974
ENGINEER: PUGH

SMP. NO.	DEPTH	PERM. TO AIR MD. MAXIMUM	90 DEG	POROSITY PERCENT	FLUID OIL	SATS. WTR.	GR. DEN.	DESCRIPTION
26	2457.0-58.0	0.1	0.1	10.0	0.0	74.9	2.75	SD, SLTY, LMY
27	2458.0-59.0	0.2	0.2	13.1	0.0	88.8	2.74	SD, SLTY, LMY
# 28	2459.0-60.0	165.0	96.0	16.4	0.0	74.1	2.71	SLT, SHY
# 29	2460.0-61.0	120.0	18.0	13.0	0.0	87.2	2.75	SLT, SHY, SL/LMY
30	2461.0-62.0	2.6	2.6	16.9	0.0	87.2	2.73	SD, SLTY, LMY
31	2462.0-63.0	0.8	0.8	11.2	0.0	84.5	2.75	SD, SLTY, LMY
32	2463.0-64.0	1.2	1.2	10.9	0.0	86.9	2.74	SD, SLTY, LMY
33	2464.0-65.0	3.1	3.1	16.0	0.0	86.5	2.73	SD, SLTY, LMY
34	2465.0-66.0	3.1	3.1	15.3	0.0	84.9	2.71	SD, SLTY, LMY
35	2466.0-67.0	3.5	3.5	13.2	0.0	85.0	2.72	SD, SLTY, LMY
	2467.0-68.0							SH
+ 36	2468.0-69.0	2.8	2.8	7.5	0.0	85.9	2.73	SD, SLTY, LMY, SHY
+ 37	2469.0-70.0	0.4	0.4	6.4	0.0	88.0	2.74	SD, SLTY, LMY, SHY
+ 38	2470.0-71.0	0.4	0.4	6.8	0.0	84.0	2.74	SD, SLTY, LMY, SHY
+ 39	2471.0-72.0	0.5	0.5	6.5	0.0	84.2	2.74	SD, SLTY, LMY, SHY
+ 40	2472.0-73.0	0.8	0.4	4.8	0.0	80.0	2.71	SD, SLTY, LMY, SHY
# 41	2473.0-74.0	133.0	123.0	10.5	0.0	86.8	2.76	SLT, SHY, LMY
# 42	2474.0-75.0	139.0	111.0	9.7	0.0	88.5	2.74	SLT, SHY, LMY
# 43	2475.0-76.0	223.0	179.0	10.3	0.0	86.6	2.75	SLT, SHY, LMY
# 44	2476.0-77.0	294.0	144.0	12.8	0.0	78.8	2.73	SLT, SHY, LMY
# 45	2477.0-78.0	1.2	0.4	12.6	0.0	88.2	2.71	SLT, SL/SHY, LMY
46	2478.0-79.0	0.4	0.4	16.5	0.0	91.0	2.71	SD, SLTY, LMY
47	2479.0-80.0	1.0	1.0	18.3	0.0	90.9	2.70	SD, SLTY, LMY
48	2480.0-81.0	2.8	2.8	20.2	0.0	93.2	2.70	SD, SLTY, LMY
49	2481.0-82.0	2.4	2.4	20.4	0.0	93.4	2.71	SD, SLTY, LMY
50	2482.0-83.0	2.8	2.8	20.4	0.0	94.8	2.70	SD, SLTY, LMY
51	2483.0-84.0	3.5	3.5	18.7	0.0	91.3	2.74	SD, SLTY, LMY
52	2484.0-85.0	4.0	4.0	20.7	0.0	91.8	2.72	SD, SLTY, LMY
53	2485.0-86.0	*	6.3	21.7	0.0	95.5	2.71	SD, SLTY, LMY
54	2486.0-87.0	2.4	2.4	19.0	0.0	91.2	2.71	SD, SLTY, LMY
55	2487.0-88.0	2.0	2.0	18.9	0.0	92.4	2.70	SD, SLTY, LMY
56	2488.0-89.0	1.3	1.3	17.7	0.0	89.2	2.71	SD, SLTY, LMY

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		MAXIMUM	90 DEG		OIL	WTR.		
57	2489.0-90.0	0.7	0.7	16.1	0.0	91.4	2.72	SD, SLTY, LMY
# 58	2490.0-91.0	359.0	270.0	14.8	0.0	77.6	2.69	SLT, SHY, LMY, ANHY
# 59	2491.0-92.0	271.0	134.0	10.9	0.0	91.4	2.71	SLT, SHY, LMY, ANHY
60	2492.0-93.0	0.1	<0.1	11.0	0.0	89.5	2.71	SD, SLTY, SHY, LMY
61	2493.0-94.0	0.1	0.1	12.5	0.0	90.5	2.71	SD, SLTY, SHY, LMY
62	2494.0-95.0	0.1	0.1	13.4	0.0	91.9	2.70	SD, SLTY, SHY, LMY
63	2495.0-96.0	<0.1	<0.1	9.9	0.0	81.3	2.66	SD, SLTY, SHY, LMY
# 64	2496.0-97.0	61.0	60.0	10.5	0.0	85.9	2.69	SD, SLTY, SHY, LMY
# 65	2497.0-98.0	302.0	291.0	14.6	0.0	89.1	2.76	SLT, SHY, ANHY
# 66	2498.0-99.0	53.0	52.0	8.3	0.0	85.0	2.74	SLT, SHY, LMY
# 67	2499.0-00.0	312.0	234.0	12.2	0.0	86.7	2.72	SLT, SHY, LMY, ANHY
# 68	2500.0-01.0	266.0	245.0	13.9	0.0	86.7	2.79	SLT, SHY, DOL
+ 69	2501.0-02.0	274.0	251.0	18.7	0.0	90.8	2.83	DOL, SHY
70	2502.0-03.0	0.5	0.5	9.1	0.0	85.0	2.74	LM, SDY, SL/DOL
71	2503.0-04.0	6.4	0.2	9.3	0.0	86.1	2.70	LM, SDY, VF
72	2504.0-05.0	<0.1	<0.1	2.6	0.0	77.1	2.69	LM, SL/SHY
73	2505.0-06.0	<0.1	<0.1	2.1	0.0	67.9	2.72	LM, SL/SHY
+ 74	2506.0-07.0	0.8	0.8	4.2	0.0	79.6	2.72	LM, SHY
	2507.0-08.0							SH
75	2508.0-09.0	<0.1	<0.1	7.6	0.0	79.0	2.73	LM, SDY, SL/SHY
76	2509.0-10.0	<0.1	<0.1	12.2	0.0	84.4	2.79	DOL, LMY, SL/ANHY
77	2510.0-11.0	<0.1	<0.1	10.4	0.0	84.7	2.80	DOL, LMY, SL/ANHY
+ 78	2511.0-12.0	53.0	52.0	8.0	0.0	91.9	2.70	LM, SDY
79	2512.0-13.0	0.1	0.1	6.4	0.0	74.0	2.67	LM, SDY, SHY, CHTY
# 80	2513.0-14.0	11.0	10.0	5.5	0.0	79.3	2.71	LM, SHY
+ 81	2514.0-15.0	0.1	<0.1	3.9	0.0	78.5	2.69	LM, SHY
+ 82	2515.0-16.0	1.2	1.2	6.1	0.0	73.0	2.68	LM, SL/SHY
# 83	2516.0-17.0	0.2	0.2	4.2	0.0	82.8	2.71	LM, SHY
# 84	2517.0-18.0	6.8	6.2	6.1	0.0	86.9	2.74	LM, SHY
	2518.0-19.0							SH
# 85	2519.0-20.0	5.0	4.0	5.1	0.0	84.2	2.72	LM, SHY
+ 86	2520.0-21.0	3.9	1.5	5.6	0.0	80.8	2.67	LM, SL/SHY, CHTY

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Petroleum Reservoir Engineering
DALLAS, TEXAS

AMOCO PRODUCTION COMPANY
L.R. & C.E. CROSS NO. 1 WELL

DATE: 5/18/77
FORMATION: COUNCIL GROVE

FILE NO: 3402-8974
ENGINEER: PUGH

SMP. NO.	DEPTH	PERM. TO AIR MD.		POROSITY PERCENT	FLUID SATS.		GR. DEN.	DESCRIPTION
		MAXIMUM	90 DEG		OIL	WTR.		
+ 87	2521.0-22.0	0.4	0.4	5.6	0.0	82.3	2.74	LM, SL, SHY, SL, ANHY
+ 88	2522.0-23.0	0.4	0.4	5.4	0.0	81.0	2.68	LM, SL, SHY, SL, ANHY
# 89	2523.0-24.0	7.6	3.1	4.5	0.0	81.0	2.73	LM, SHY
	2524.0-29.0							SH
# 90	2529.0-30.0	139.0	127.0	11.4	0.0	56.1	2.69	SLT, SHY, LMY
# 91	2530.0-31.0	79.0	41.0	8.3	0.0	87.4	2.72	SLT, SHY, LMY
# 92	2531.0-32.0	85.0	79.0	9.1	0.0	89.0	2.84	SLT, SHY, LMY, ANHY
# 93	2532.0-33.0	204.0	168.0	8.4	0.0	71.4	2.75	SLT, SHY, LMY, ANHY
# 94	2533.0-34.0	251.0	206.0	9.1	0.0	79.0	2.75	SLT, SHY, LMY, ANHY
# 95	2534.0-35.0	71.0	49.0	4.5	0.0	82.9	2.74	SLT, SHY, LMY, ANHY
# 96	2535.0-36.0	15.0	2.9	5.6	0.0	83.7	2.77	SLT, SHY, LMY, ANHY
# 97	2536.0-37.0	133.0	129.0	8.5	0.0	84.2	2.71	SLT, SHY, LMY
# 98	2537.0-38.0	137.0	136.0	7.3	0.0	77.8	2.70	SLT, SHY, LMY
# 99	2538.0-39.0	0.4	0.3	7.3	0.0	80.5	2.73	SLT, SHY, LMY
100	2539.0-40.0	<0.1	<0.1	8.6	0.0	82.9	2.72	SD, SLTY, LMY, ANHY
101	2540.0-41.0	<0.1	<0.1	14.8	0.0	82.8	2.71	SD, SLTY, LMY
102	2541.0-42.0	0.5	0.4	15.4	0.0	90.0	2.71	SD, SLTY, LMY
103	2542.0-43.0	0.7	0.7	16.5	0.0	87.0	2.70	SD, SLTY, LMY
104	2543.0-44.0	0.7	0.7	17.3	0.0	84.6	2.74	SD, SLTY, LMY
105	2544.0-45.0	0.7	0.6	15.0	0.0	86.1	2.75	SD, SLTY, LMY
106	2545.0-46.0	0.7	0.7	14.4	0.0	85.5	2.75	SD, SLTY, LMY
107	2546.0-47.0	1.2	1.2	17.1	0.0	83.2	2.72	SD, SLTY, LMY
108	2547.0-48.0	1.6	1.5	18.0	0.0	83.5	2.73	SD, SLTY, LMY
109	2548.0-49.0	4.3	3.9	19.8	0.0	82.9	2.71	SD, SLTY, LMY
110	2549.0-50.0	1.2	1.2	18.1	0.0	90.5	2.70	SD, SLTY, LMY
111	2550.0-51.0	0.5	0.5	17.1	0.0	89.0	2.71	SD, SLTY, LMY
# 112	2551.0-52.0	264.0	191.0	13.0	0.0	86.9	2.69	SLT, SHY, LMY
# 113	2552.0-53.0	25.0	19.0	11.1	0.0	81.3	2.68	SLT, SHY, LMY
+ 114	2553.0-54.0	82.0	0.4	12.2	0.0	88.0	2.69	SD, SLTY, SHY, LMY
# 115	2554.0-55.0	349.0	342.0	14.4	0.0	97.7	2.76	SLT, SHY, LMY
# 116	2555.0-56.0	*	<0.1	17.4	0.0	74.6	2.69	SLT, SHY, LMY
+ 117	2556.0-57.0	238.0	3.3	13.5	0.0	90.6	2.79	SLT, SHY, ANHY

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CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

CORE SUMMARY

Company AMOCO PRODUCTION COMPANY
 Well LR & GE CROSS NO. 1
 Page 5 of 5 File 3402-8974

DEPTH FEET	HORIZONTAL PERMEABILITY, Md.		POROSITY PER CENT	SATURATION		GRAIN DENSITY
	MAXIMUM	90 DEGREES		OIL	WATER	
2431-2433	0.1	0.1	14.4	0.0	88.9	2.72
#2433-2442	239	198	10.3	0.0	76.0	2.72
2442-2445	<0.1	<0.1	10.6	0.0	87.9	2.71
#2446-2456	170	160	11.9	0.0	77.3	2.72
2456-2457	<0.1	<0.1	6.1	0.0	77.5	2.73
2457-2459	0.2	0.2	11.6	0.0	81.9	2.74
#2459-2461	143	57	14.7	0.0	80.7	2.73
2461-2467	2.4	2.4	13.9	0.0	85.8	2.73
+2468-2473	1.0	0.9	6.4	0.0	84.4	2.73
#2473-2478	158	112	11.2	0.0	85.8	2.74
2478-2490	2.5	2.5	19.1	0.0	92.2	2.71
#2490-2492	315	202	12.9	0.0	84.5	2.70
2492-2496	0.1	0.1	11.7	0.0	88.3	2.70
#2496-2501	199	176	11.9	0.0	86.7	2.74
+2501-2502	274	251	18.7	0.0	90.8	2.83
2502-2504	3.5	0.4	9.2	0.0	85.6	2.72
+2504-2507	0.3	0.3	3.0	0.0	74.9	2.71
2508-2509	<0.1	<0.1	7.6	0.0	79.0	2.73
2509-2511	<0.1	<0.1	11.3	0.0	84.6	2.80
#+2511-2524	7.5	6.6	5.5	0.0	81.3	2.70
#2529-2539	111	94	8.0	0.0	79.2	2.74
2539-2551	1.0	1.0	16.0	0.0	85.7	2.72
#+2551-2557	192	93	13.6	0.0	86.5	2.72



15-187-20231

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

COMPANY AMOCO PRODUCTION COMPANY FIELD WILDCAT FILE 3402-8974
 WELL L.R. & C.R. CROSS NO. 1 COUNTY STANTON DATE 6/10/77
 LOCATION C NW SEC. 36-278-41N STATE KANSAS ELEV. _____

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
MILLIDARCS

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

