

AREA GEOL
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CORE ANALYSIS REPORT

FOR

GULF ENERGY & MINERALS COMPANY, - U. S.
STINCHCOMB NO. 1-2-20 WELL
KEARNY COUNTY, KANSAS
C-SW/4 Sec 20-24S-36W

WH. KID = 1006078036

Lease KID = 1001108364

CORE LABORATORIES, INC.

JANUARY 19, 1977

GULF ENERGY & MINERALS CO.-U.S.
P.O. BOX 12116
OKLAHOMA CITY, OKLAHOMA 73112

ATTN: MR. HAYDEN O. ARNOLD

SUBJECT: CORE ANALYSIS DATA
STINCHCOMB 1-2-20 WELL
KEARNY COUNTY, KANSAS
CLI FILE 3402-8853

GENTLEMEN:

CORES TAKEN IN THE SUBJECT WELL IN THE COUNCIL GROVE FORMATION WERE RECEIVED AT THE OKLAHOMA CITY LABORATORY FOR SPECIAL ANALYTICAL TESTING DESCRIBED ON THE PROCEDURE PAGE.

THE ACCOMPANYING COREGRAPH PRESENTS THE SURFACE CORE GAMMA LOG AND BINOMIALLY AVERAGED CORE ANALYSIS DATA IN GRAPHICAL FORM TO AID CORRELATION WITH DOWNHOLE ELECTRICAL SURVEYS.

TABULAR PRESENTATION OF THE MEASURED PHYSICAL PROPERTIES MAY BE FOUND ON PAGES ONE THROUGH SIX OF THIS REPORT.

DATA AVERAGES REFLECTING ZONE CHANGES ARE PRESENTED ON PAGE SEVEN.

IT IS A PLEASURE TO HAVE THIS OPPORTUNITY OF SERVING YOU.

VERY TRULY YOURS,

CORE LABORATORIES, INC.

Dale E. Boyle (VP)
DALE E. BOYLE
DISTRICT MANAGER

6 CC-ADDRESSEE

CORE LABORATORIES, INC.

GULF ENERGY & MINERALS CO.-U.S
STINCHCOMB NO. 1-2-20 WELL
FILE NO: 3402-8853

PROCEDURE PAGE

HANDLING AND ANALYTICAL PROCEDURES

DIAMOND CORING EQUIPMENT AND WATER BASE MUD WERE USED TO OBTAIN 4.0 INCH DIAMETER CORES BETWEEN 2680 TO 2858 FEET.

THE CORES WERE PRESERVED AT THE WELL SITE IN PLASTIC BAGS BY CLI PERSONNEL.

THE CORES WERE TRANSPORTED TO OKLAHOMA CITY BY CLI PERSONNEL.

A CORE GAMMA LOG WAS RECORDED FOR DOWNHOLE E-LOG CORRELATION.

CORE ANALYSIS WAS MADE IN THE INTERVALS REQUESTED ON RIGHT CYLINDER FULL DIAMETER SAMPLES.

FLUID REMOVAL WAS ACCOMPLISHED USING VACUUM RETORTS.

POROSITY WAS DETERMINED BY DENSITY BALANCE METHOD.

AIR PERMEABILITY IN TWO HORIZONTAL DIRECTIONS-MEASURED WITHOUT KLINKENBERG CORRECTION.

SELECTED SAMPLES WERE DELIVERED TO GULF ENERGY & MINERALS CO.-U.S. IN OKLAHOMA CITY.

TEMPORARY STORAGE OF CORES IN OKLAHOMA CITY LABORATORY AWAITING ADDITIONAL INSTRUCTIONS.

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

GULF ENERGY & MINERALS CO.-US
STINCHCOMB NO. 1-2-20 WELL
PANOMA EXTENSION FIELD
KEARNY COUNTY, KANSAS

DATE: 1/5/77
FORMATION: COUNCIL GROVE
DRLG. FLUID: WATER BASE MUD
LOCATION: C SW SEC. 20-24S-36W

FILE NO: 3402-8853
ENGINEER: PUGH
ELEVATION: 3120'K.B.

* INDICATES PLUG PERM

SMP. NO.	DEPTH	PERM. TO AIR MD. MAXIMUM 90 DEG	POROSITY PER CENT	FLUID SATS. OIL WTR.	GR. DEN.	DESCRIPTION
WHOLE CORE ANALYSIS						
#+	1 2680.0-81.0	33.0	31.0	13.3	0.0 90.2	2.76 SLT,SHY
	2 2681.0-82.0	<0.1	<0.1	7.1	0.0 83.0	2.73 LM,SL/ANHY
	3 2682.0-83.0	<0.1	<0.1	7.9	0.0 88.1	2.73 LM,SL/ANHY
	4 2683.0-84.0	<0.1	<0.1	9.1	0.0 79.5	2.76 LM,ANHY
+	5 2684.0-85.0	0.1	<0.1	8.9	0.0 63.4	2.79 LM,ANHY,FISS
	6 2685.0-86.0	<0.1	<0.1	11.7	0.0 62.7	2.78 LM,ANHY,SL/SHY
+	7 2686.0-87.0	0.7	<0.1	8.7	0.0 69.1	2.73 LM,SL/ANHY,SHY
+	8 2687.0-88.0	0.1	<0.1	9.0	0.0 57.7	2.72 LM,SL/ANHY,SHY
	9 2688.0-89.0	<0.1	<0.1	9.9	0.0 53.0	2.71 LM,SL/ANHY
	10 2689.0-90.0	0.1	<0.1	8.5	0.0 47.0	2.73 LM,SL/ANHY
	11 2690.0-91.0	<0.1	<0.1	9.7	0.0 53.3	2.73 LM,SL/ANHY
	12 2691.0-92.0	<0.1	<0.1	8.9	0.0 57.6	2.71 LM,SL/SHY
	13 2692.0-93.0	<0.1	<0.1	9.0	0.0 70.3	2.77 LM,ANHY
	14 2693.0-94.0	<0.1	<0.1	7.7	0.0 69.0	2.76 LM,ANHY
	15 2694.0-95.0	<0.1	<0.1	8.0	0.0 68.5	2.72 LM,SL/ANHY
	16 2695.0-96.0	<0.1	<0.1	6.9	0.0 72.5	2.74 LM,SL/ANHY
	17 2696.0-97.0	<0.1	<0.1	7.8	0.0 63.1	2.72 LM,SL/ANHY,SHY
	18 2697.0-98.0	144.0	<0.1	9.2	0.0 58.4	2.70 LM,V/F
	19 2698.0-99.0	<0.1	<0.1	7.5	0.0 65.4	2.72 LM,ANHY,SHY
	20 2699.0-00.0	<0.1	<0.1	7.0	0.0 70.6	2.71 LM,SLTY,ANHY,SHY
+	21 2700.0-01.0	21.0	19.0	6.2	0.0 78.5	2.70 SLT,SL/LMY,ANHY,SHY
#+	22 2701.0-02.0	37.0	34.0	7.9	0.0 80.6	2.72 SLT,LMY,ANHY,SHY
#+	23 2702.0-03.0	52.0	41.0	7.6	0.0 86.2	2.74 SLT,LMY,ANHY,SHY
#+	24 2703.0-04.0	48.0	46.0	8.7	0.0 89.6	2.76 SLT,LMY,ANHY,SHY
#+	25 2704.0-05.0	74.0	66.0	9.8	0.0 83.6	2.78 SLT,LMY,ANHY,SHY
#+	26 2705.0-06.0	218.0	208.0	10.4	0.0 82.8	2.75 SLT,DOL,ANHY,SHY

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CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

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GULF ENERGY & MINERALS CO.-US
STINCHCOMB NO. 1-2-20 WELL

DATE: 1/5/77
FORMATION: COUNCIL GROVE

FILE NO: 3402-8853
ENGINEER: PUGH

SMP. NO.	DEPTH	PERM. TO AIR MD. MAXIMUM 90 DEG	POROSITY PER CENT	FLUID SATS. OIL WTR.	GR. DEN.	DESCRIPTION
#+ 27	2706.0-07.0	77.0 55.0	9.9	0.0 87.1	2.78	SLT,DOL,ANHY,SHY
#+ 28	2707.0-08.0	21.0 0.5	6.9	0.0 89.1	2.71	SLT,SL/DOL,SHY
#+ 29	2708.0-09.0	49.0 48.0	8.3	0.0 89.6	2.71	SLT,SL/DOL,SHY
	2709.0-10.0					SLT,SL/DOL,SHY
#+ 30	2710.0-11.0	13.0 7.1	6.6	0.0 86.7	2.74	SLT,LMY,ANHY,SHY
#+ 31	2711.0-12.0	4.6 0.8	7.0	0.0 89.6	2.68	SLT,LMY,SHY
32	2712.0-13.0	0.2 0.2	14.9	0.0 86.0	2.70	SLT,LMY,SDY,ANHY
33	2713.0-14.0	0.3 0.2	17.0	0.0 75.4	2.71	SD,SLT,ANHY,SHY
+ 34	2714.0-15.0	6.3 3.8	18.4	0.0 72.2	2.72	SD,SLT,ANHY,SHY,V/F
+ 35	2715.0-16.0	28.0 13.0	19.2	0.0 74.5	2.71	SD,SLT,ANHY,SHY,V/F
+ 36	2716.0-17.0	44.0 22.0	18.3	0.0 79.9	2.72	SD,SLT,ANHY,SHY,V/F
37	2717.0-18.0	0.6 0.4	17.1	0.0 80.8	2.72	SD,SLT,ANHY,SHY,V/F
+ 38	2718.0-19.0	1.5 0.4	16.4	0.0 83.9	2.72	SD,SLT,ANHY,SHY
#+ 39	2719.0-20.0	28.0 27.0	12.2	0.0 86.2	2.72	SLT,SDY,ANHY,SHY
#+ 40	2720.0-21.0	95.0 65.0	11.8	0.0 88.7	2.72	SLT,ANHY,SHY
#+ 41	2721.0-22.0	15.0 2.0	13.8	0.0 80.9	2.75	SLT,ANHY,SHY
42	2722.0-23.0	0.1 <0.1	11.7	0.0 79.6	2.73	SLT,SDY,ANHY,SHY
43	2723.0-24.0	0.1 <0.1	11.3	0.0 76.9	2.72	SD,SLTY,ANHY,SHY
#+ 44	2724.0-25.0	50.0 12.0	12.7	0.0 86.2	2.72	SLT,ANHY,V/SHY
#+ 45	2725.0-26.0	106.0 66.0	10.5	0.0 83.6	2.72	SLT,LMY,ANHY,V/SHY
+ 46	2726.0-27.0	64.0 29.0	11.4	0.0 87.0	2.73	SLT,LMY,ANHY,V/SHY
47	2727.0-28.0	<0.1 <0.1	6.3	0.0 85.3	2.73	LM,SLTY,SL/ANHY
48	2728.0-29.0	0.2 0.1	8.7	0.0 86.8	2.73	LM,SL/ANHY,V/F
49	2729.0-30.0	265.0 <0.1	7.2	0.0 81.1	2.72	LM,STY,SL/ANHY,V/F
+ 50	2730.0-31.0	0.2 0.2	3.6	0.0 78.5	2.75	LM,ANHY,SHY
+ 51	2731.0-32.0	3.6 3.1	5.0	0.0 89.1	2.73	LM,ANHY,V/SHY
+ 52	2732.0-33.0	4.7 2.6	9.7	0.0 88.6	2.77	LM,ANHY,V/SHY
+ 53	2733.0-34.0	4.1 0.8	4.2	0.0 85.6	2.70	LM,V/SHY
54	2734.0-35.0	<0.1 <0.1	3.4	0.0 77.4	2.70	LM,SHY
+ 55	2735.0-36.0	4.5 2.7	3.7	0.0 83.7	2.70	LM,V/SHY
+ 56	2736.0-37.0	15.0 13.0	8.0	0.0 88.3	2.75	LM,ANHY,V/SHY
+ 57	2737.0-38.0	6.2 0.3	6.8	0.0 82.5	2.71	LM,V/SHY

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

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GULF ENERGY & MINERALS CO.-US
STINCHCOMB NO. 1-2-20 WELL

DATE: 1/5/77
FORMATION: COUNCIL GROVE

FILE NO: 3402-8853
ENGINEER: PUGH

SMP. NO.	DEPTH	PERM. TO AIR MD. MAXIMUM 90 DEG	POROSITY PER CENT	FLUID SATS. OIL WTR.	GR. DEN.	DESCRIPTION
58	2738.0-39.0	0.2 0.1	9.8	0.0 54.8	2.72	LM,OOL
59	2739.0-40.0	0.1 <0.1	9.3	0.0 47.9	2.71	LM,OOL
60	2740.0-41.0	0.1 <0.1	6.3	0.0 59.6	2.70	LM,OOL,SL/ANHY
61	2741.0-42.0	0.1 <0.1	8.2	0.0 66.2	2.71	LM,OOL
+ 62	2742.0-43.0	1.4 1.3	4.7	0.0 87.9	2.71	LM,SL/ANHY,SHY
63	2743.0-44.0	<0.1 <0.1	5.2	0.0 87.3	2.70	LM,SL/SHY
+ 64	2744.0-45.0	12.0 0.5	4.7	0.0 90.7	2.71	LM,SL/ANHY,V/SHY
+ 65	2745.0-46.0	7.8 0.2	4.7	0.0 86.0	2.71	LM,SL/ANHY,V/SHY
+ 66	2746.0-47.0	22.0 17.0	10.7	0.0 91.5	2.71	LM,SL/ANHY,V/SHY
+ 67	2747.0-48.0	10.0 10.0	11.0	0.0 88.9	2.73	LM,SL/ANHY,V/SHY
+ 68	2748.0-49.0	28.0 9.5	6.0	0.0 89.3	2.71	LM,SL/ANHY,V/SHY
+ 69	2749.0-50.0	26.0 22.0	11.8	0.0 81.7	2.73	LM,SL/ANHY,V/SHY
+ 70	2750.0-51.0	17.0 0.7	5.2	0.0 86.9	2.70	SLT,LMY,ANHY,SHY
+ 71	2751.0-52.0	52.0 24.0	6.5	0.0 86.6	2.72	SLT,LMY,ANHY,SHY
+ 72	2752.0-53.0	11.0 <0.1	2.8	0.0 80.8	2.70	SLT,LMY,ANHY,SHY
+ 73	2753.0-54.0	0.9 0.1	4.1	0.0 84.5	2.71	SLT,LMY,ANHY,SHY
+ 74	2754.0-55.0	16.0 11.0	8.5	0.0 90.4	2.72	SH,LMY,SLTY
#+ 75	2755.0-56.0	* 4.7	9.2	0.0 86.0	2.73	SLT,LMY,ANHY,SHY
#+ 76	2756.0-57.0	* 4.8	9.4	0.0 85.8	2.74	SLT,LMY,ANHY,SHY
#+ 77	2757.0-58.0	80.0 53.0	10.4	0.0 89.4	2.74	SLT,LMY,ANHY,SHY
+ 78	2758.0-59.0	26.0 18.0	10.1	0.0 89.8	2.77	SLT,LMY,ANHY,SHY,V/F
#+ 79	2759.0-60.0	35.0 24.0	8.9	0.0 90.7	2.81	SLT,LMY,ANHY,SHY
#+ 80	2760.0-61.0	13.0 11.0	8.2	0.0 90.3	2.82	SLT,DOL,ANHY,SHY
#+ 81	2761.0-62.0	19.0 10.0	10.0	0.0 88.3	2.81	SLT,DOL,ANHY,SHY
#+ 82	2762.0-63.0	12.0 5.4	7.5	0.0 86.8	2.79	SLT,DOL,ANHY,SHY
#+ 83	2763.0-64.0	33.0 32.0	9.0	0.0 89.3	2.72	SLT,DOL,ANHY,SHY
84	2764.0-65.0	0.2 0.1	11.7	0.0 83.6	2.69	SD,LMY,SLTY
85	2765.0-66.0	0.2 0.1	12.2	0.0 83.1	2.69	SD,LMY,SLTY
86	2766.0-67.0	0.1 0.1	12.7	0.0 84.3	2.69	SD,LMY,SLTY
87	2767.0-68.0	0.1 0.1	12.7	0.0 84.8	2.69	SD,LMY,SLTY
+ 88	2768.0-69.0	0.4 0.1	11.6	0.0 83.5	2.69	SD,LMY,SLTY,SL/SHY
#+ 89	2769.0-70.0	41.0 18.0	9.9	0.0 89.5	2.71	SLT,SDY,LMY,ANHY

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CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

GULF ENERGY & MINERALS CO.--US
STINCHCOMB NO. 1-2-20 WELL

DATE: 1/5/77
FORMATION: COUNCIL GROVE

FILE NO: 3402-8853
ENGINEER: PUGH

SMP. NO.	DEPTH	PERM. TO AIR MD. MAXIMUM 90 DEG	POROSITY PER CENT	FLUID SATS. OIL WTR.	GR. DEN.	DESCRIPTION
# 90	2770.0-71.0	108.0	92.0	11.9	0.0 87.9	2.74 SLT, LMY, ANHY, SHY
# + 91	2771.0-72.0	51.0	44.0	8.9	0.0 87.2	2.72 SLT, LMY, ANHY, SHY
# + 92	2772.0-73.0	58.0	51.0	10.3	0.0 81.0	2.73 SLT, LMY, ANHY, SHY
# + 93	2773.0-74.0	50.0	44.0	14.0	0.0 87.7	2.74 SLT, LMY, ANHY, SHY
94	2774.0-75.0	<0.1	<0.1	6.8	0.0 87.0	2.74 LM, SL/ANHY
95	2775.0-76.0	<0.1	<0.1	4.8	0.0 85.4	2.79 LM, ANHY
96	2776.0-77.0	<0.1	<0.1	4.1	0.0 80.9	2.76 LM, ANHY
97	2777.0-78.0	<0.1	<0.1	6.1	0.0 82.3	2.72 LM, SL/ANHY
98	2778.0-79.0	<0.1	<0.1	4.1	0.0 84.8	2.77 LM, ANHY
99	2779.0-80.0	<0.1	<0.1	4.4	0.0 85.1	2.71 LM, SLTY, ANHY, SHY
100	2780.0-81.0	<0.1	<0.1	6.6	0.0 89.2	2.69 SD, LMY, SLTY
101	2781.0-82.0	<0.1	<0.1	4.4	0.0 83.5	2.71 SD, V/LMY, ANHY, SLTY
102	2782.0-83.0	<0.1	<0.1	6.1	0.0 88.0	2.70 SD, V/LMY, ANHY, SLTY
103	2783.0-84.0	0.1	0.1	7.7	0.0 88.2	2.71 SD, V/LMY, ANHY, SLTY
104	2784.0-85.0	0.2	0.1	6.9	0.0 88.3	2.70 SLT, V/LMY, ANHY
+ 105	2785.0-86.0	0.7	0.6	6.7	0.0 87.9	2.69 SLT, V/LMY, ANHY
# + 106	2786.0-87.0	1.1	0.2	7.0	0.0 87.1	2.72 SLT, V/LMY, ANHY, SHY
# + 107	2787.0-88.0	83.0	60.0	11.2	0.0 84.6	2.76 SLT, LMY, ANHY, SHY
	2788.0-89.0					SH, LMY
# + 108	2789.0-90.0	51.0	45.0	14.3	0.0 77.5	2.74 SLT, LMY, ANHY, SHY
+ 109	2790.0-91.0	44.0	43.0	9.0	0.0 88.3	2.72 SLT, LMY, ANHY, SHY
# + 110	2791.0-92.0	46.0	33.0	8.7	0.0 85.0	2.73 SLT, LMY, ANHY, SHY
+ 111	2792.0-93.0	26.0	19.0	10.0	0.0 84.0	2.76 SLT, LMY, ANHY, SHY
+ 112	2793.0-94.0	42.0	41.0	13.0	0.0 84.4	2.76 SLT, LMY, ANHY, SHY
113	2794.0-95.0	0.1	0.1	13.8	0.0 86.3	2.70 SLT, LMY, ANHY, SHY
+ 114	2795.0-96.0	3.2	2.3	5.9	0.0 90.7	2.72 SLT, LMY, ANHY, SHY
+ 115	2796.0-97.0	46.0	36.0	12.9	0.0 94.5	2.78 SLT, LMY, ANHY, SHY
+ 116	2797.0-98.0	31.0	22.0	15.9	0.0 88.6	2.79 SLT, LMY, ANHY, SHY
+ 117	2798.0-99.0	28.0	14.0	15.8	0.0 89.1	2.80 LM, ANHY
118	2799.0-00.0	<0.1	<0.1	2.3	0.0 56.4	2.71 LM, SL/ANHY
119	2800.0-01.0	<0.1	<0.1	4.9	0.0 57.6	2.77 LM, ANHY
120	2801.0-02.0	<0.1	<0.1	6.8	0.0 55.7	2.72 LM, SL/ANHY

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

GULF ENERGY & MINERALS CO.-US
STINCHCOMB NO. 1-2-20 WELL

DATE: 1/5/77
FORMATION: COUNCIL GROVE

FILE NO: 3402-8853
ENGINEER: PUGH

SMP. NO.	DEPTH	PERM. TO AIR MD. MAXIMUM 90 DEG	POROSITY PER CENT	FLUID SATS. OIL WTR.	GR. DEN.	DESCRIPTION
121	2802.0-03.0	<0.1	<0.1	4.1	0.0 59.5	2.71 LM,SL/ANHY,SHY
#+122	2803.0-04.0	41.0	0.1	4.7	0.0 67.1	2.70 SLT,LMY,ANHY,SHY
#+123	2804.0-05.0	0.6	0.5	7.4	0.0 76.6	2.72 SLT,LMY,ANHY,SHY
#+124	2805.0-06.0	21.0	15.0	9.1	0.0 78.9	2.72 SLT,LMY,ANHY,SDY
125	2806.0-07.0	<0.1	<0.1	10.8	0.0 75.2	2.71 SLT,LMY,ANHY,SDY
126	2807.0-08.0	<0.1	<0.1	9.0	0.0 80.0	2.73 SD,LMY,SLTY,ANHY
127	2808.0-09.0	<0.1	<0.1	14.3	0.0 71.9	2.73 SD,LMY,SLTY,ANHY
+ 128	2809.0-10.0	11.0	9.9	11.1	0.0 80.2	2.71 SD,LMY,SLTY,ANHY
#+129	2810.0-11.0	*	0.9	13.7	0.0 79.9	2.72 SLT,LMY,ANHY,SHY
#+130	2811.0-12.0	113.0	103.0	14.5	0.0 81.7	2.75 SLT,LMY,ANHY,SHY
#+131	2812.0-13.0	95.0	89.0	14.8	0.0 78.2	2.70 SLT,LMY,ANHY,SHY
#+132	2813.0-14.0	6.1	5.3	15.0	0.0 81.7	2.72 SLT,LMY,ANHY,SHY
#+133	2814.0-15.0	11.0	10.0	16.2	0.0 76.7	2.72 SLT,LMY,ANHY,SHY
#+134	2815.0-16.0	40.0	36.0	14.0	0.0 85.0	2.71 SD,LMY,ANHY,SLTY
#+135	2816.0-17.0	*	0.8	11.2	0.0 82.4	2.77 SD,LMY,ANHY,SLTY
#+136	2817.0-18.0	*	0.8	11.7	0.0 80.0	2.76 SLT,LMY,ANHY,SHY
137	2818.0-19.0	0.1	0.1	6.7	0.0 72.3	2.69 SD,LMY,SLTY
138	2819.0-20.0	0.1	0.1	6.2	0.0 77.8	2.69 SD,LMY,SLTY
#+139	2820.0-21.0	173.0	164.0	10.7	0.0 86.3	2.71 SD,LMY,ANHY,SHY
#+140	2821.0-22.0	155.0	135.0	11.6	0.0 82.2	2.72 SD,LMY,ANHY,SHY
#+141	2822.0-23.0	158.0	128.0	13.0	0.0 84.4	2.75 SD,LMY,ANHY,SHY
142	2823.0-24.0	<0.1	<0.1	2.6	0.0 60.1	2.70 LM,SLTY,SHY
143	2824.0-25.0	<0.1	<0.1	3.1	0.0 83.5	2.70 LM,SLTY,SHY
144	2825.0-26.0	<0.1	<0.1	5.7	0.0 54.0	2.70 LM,SLTY,SHY
145	2826.0-27.0	<0.1	<0.1	6.2	0.0 68.9	2.70 SD,LMY,ANHY,SHY
146	2827.0-28.0	<0.1	<0.1	8.6	0.0 74.1	2.70 SD,LMY,ANHY,SHY
147	2828.0-29.0	0.2	<0.1	14.4	0.0 75.7	2.70 SD,LMY,ANHY
+ 148	2829.0-30.0	11.0	1.3	14.4	0.0 80.6	2.70 SD,LMY,ANHY,SHY
149	2830.0-31.0	<0.1	<0.1	12.3	0.0 76.7	2.70 SD,LMY,ANHY
150	2831.0-32.0	<0.1	<0.1	9.8	0.0 80.3	2.70 SD,LMY,ANHY
#+151	2832.0-33.0	26.0	25.0	12.1	0.0 82.9	2.73 SD,LMY,ANHY,SHY
152	2833.0-34.0	0.3	0.1	14.2	0.0 76.6	2.70 SD,LMY,SHY

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

GULF ENERGY & MINERALS CO.-US
STINCHCOMB NO. 1-2-20 WELL

DATE: 1/5/77
FORMATION: COUNCIL GROVE

FILE NO: 3402-8853
ENGINEER: PUGH

SMP. NO.	DEPTH	PERM. TO AIR MD. MAXIMUM 90 DEG	POROSITY PER CENT	FLUID SATS. OIL WTR.	GR. DEN.	DESCRIPTION
153	2834.0-35.0	0.4	0.4	18.5	0.0 74.6	2.70 SD, LMY, SHY
154	2835.0-36.0	0.5	0.4	15.6	0.0 76.9	2.70 SD, LMY, SLTY
155	2836.0-37.0	1.1	1.1	17.2	0.0 73.8	2.70 SD, LMY, SLTY
156	2837.0-38.0	0.2	0.1	14.1	0.0 78.2	2.70 SD, LMY, SLTY
157	2838.0-39.0	<0.1	<0.1	13.6	0.0 70.8	2.71 SD, LMY, ANHY, SLTY
+ 158	2839.0-40.0	6.3	0.1	9.1	0.0 81.7	2.70 SD, LMY, ANHY, SHY
	2840.0-42.0					SH, LMY
159	2842.0-43.0	0.9	0.4	9.0	0.0 78.1	2.76 LM, SHY, ANHY, STY
160	2843.0-44.0	<0.1	<0.1	7.9	0.0 74.4	2.72 LM, SL/ANHY
161	2844.0-45.0	<0.1	<0.1	4.6	0.0 65.0	2.77 LM, ANHY
162	2845.0-46.0	<0.1	<0.1	3.5	0.0 72.8	2.74 LM, SL/ANHY
+ 163	2846.0-47.0	56.0	49.0	15.8	0.0 81.2	2.74 SLT, ANHY, V/SHY
+ 164	2847.0-48.0	56.0	52.0	14.6	0.0 81.6	2.74 SLT, ANHY, V/SHY
+ 165	2848.0-49.0	154.0	138.0	17.0	0.0 80.5	2.81 SLT, ANHY, V/SHY
	2849.0-50.0					SH, LMY
+ 166	2850.0-51.0	140.0	132.0	15.6	0.0 83.4	2.80 SLT, LMY, ANHY, SHY
+ 167	2851.0-52.0	118.0	109.0	13.4	0.0 80.8	2.78 SLT, LMY, ANHY, SHY
+ 168	2852.0-53.0	*	0.7	12.3	0.0 78.1	2.79 SLT, LMY, ANHY, SHY
169	2853.0-54.0	*	0.1	13.5	0.0 74.6	2.84 DOL, LMY, ANHY, SHY
170	2854.0-55.0	*	24.0	20.1	0.0 69.9	2.83 DOL, LMY, ANHY, SHY
171	2855.0-56.0	*	3.5	12.6	0.0 89.4	2.79 DOL, LMY, SL/SHY
172	2856.0-57.0	*	0.4	14.8	0.0 79.2	2.74 LM, SL/DOL
173	2857.0-58.0	*	4.5	15.7	0.0 67.4	2.74 LM, SL/DOL

+ DENOTES HORIZONTAL CRACKS

DENOTES CHAOTIC FISSURES

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

CORE SUMMARYCOMPANY GULF ENERGY & MINERALS COMPANY -U. S.WELL STINCHCOMB NO. 1-2-20PAGE 7 OF 7 FILE 3402-8853

DEPTH	PERMEABILITY			POROSITY	SATURATION		GRAIN DENSITY
	MAXIMUM	90 DEGREES	VERTICAL		OIL	WATER	
2681-2700	7.6	<0.1		8.6	0.0	65.9	2.73
2700-2712	56	48		8.1	0.0	85.8	2.73
2712-2719	12	5.7		17.3	0.0	79.0	2.71
2719-2727	45	25		11.9	0.0	83.6	2.73
2727-2738	28	2.1		6.1	0.0	84.3	2.73
2738-2742	0.1	<0.1		8.4	0.0	57.1	2.71
2742-2746	5.3	0.5		4.8	0.0	88.0	2.71
2746-2750	22	15		9.9	0.0	87.9	2.72
2750-2754	20	6.2		4.7	0.0	84.7	2.71
2754-2764	29	17		9.1	0.0	88.7	2.77
2764-2769	0.2	0.1		12.2	0.0	83.9	2.69
2769-2774	62	50		11.0	0.0	86.7	2.73
2774-2780	<0.1	<0.1		5.1	0.0	84.3	2.75
2780-2787	0.3	0.1		6.5	0.0	87.5	2.70
2787-2799	40	31		12.5	0.0	86.2	2.75
2799-2803	<0.1	<0.1		4.5	0.0	57.3	2.73
2803-2808	13	3.1		8.2	0.0	75.6	2.72
2808-2818	39	26		13.7	0.0	79.8	2.73
2818-2820	0.1	0.1		6.5	0.0	75.1	2.69
2820-2823	162	142		11.8	0.0	84.3	2.73
2823-2826	<0.1	<0.1		3.8	0.0	65.9	2.70
2827-2840	3.5	2.2		13.4	0.0	77.1	2.70
2842-2846	0.2	0.1		6.3	0.0	72.7	2.75
2846-2853	105	80		14.8	0.0	80.9	2.78
2853-2856	*	9.2		15.4	0.0	78.0	2.82
2856-2858	*	2.5		15.3	0.0	73.3	2.74

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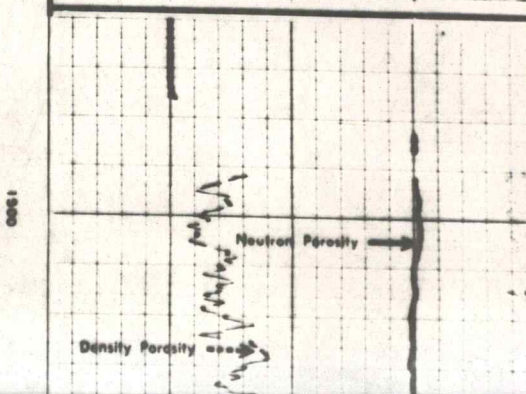
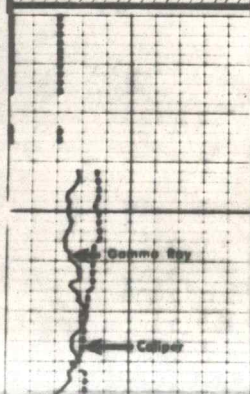
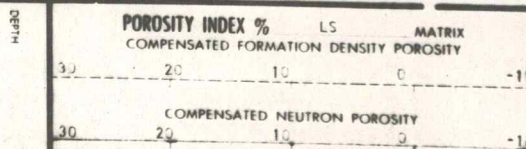
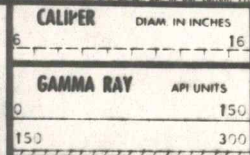
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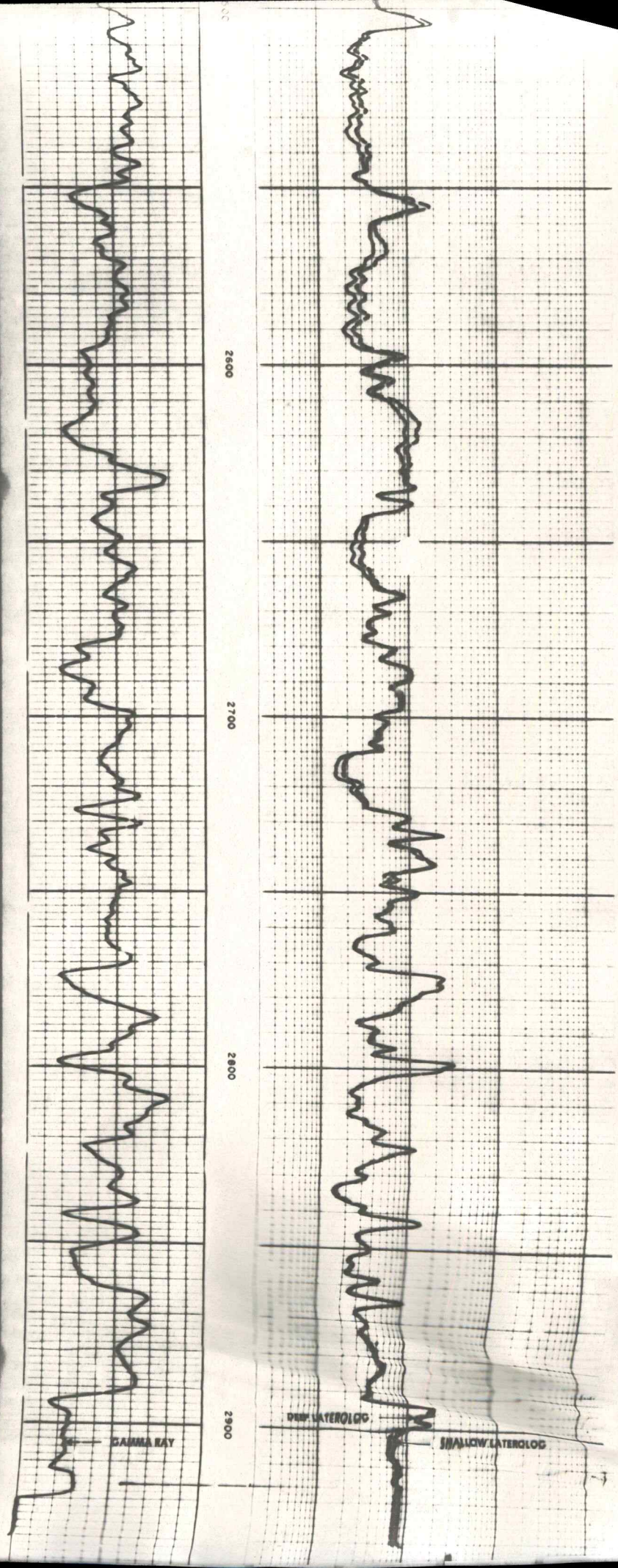
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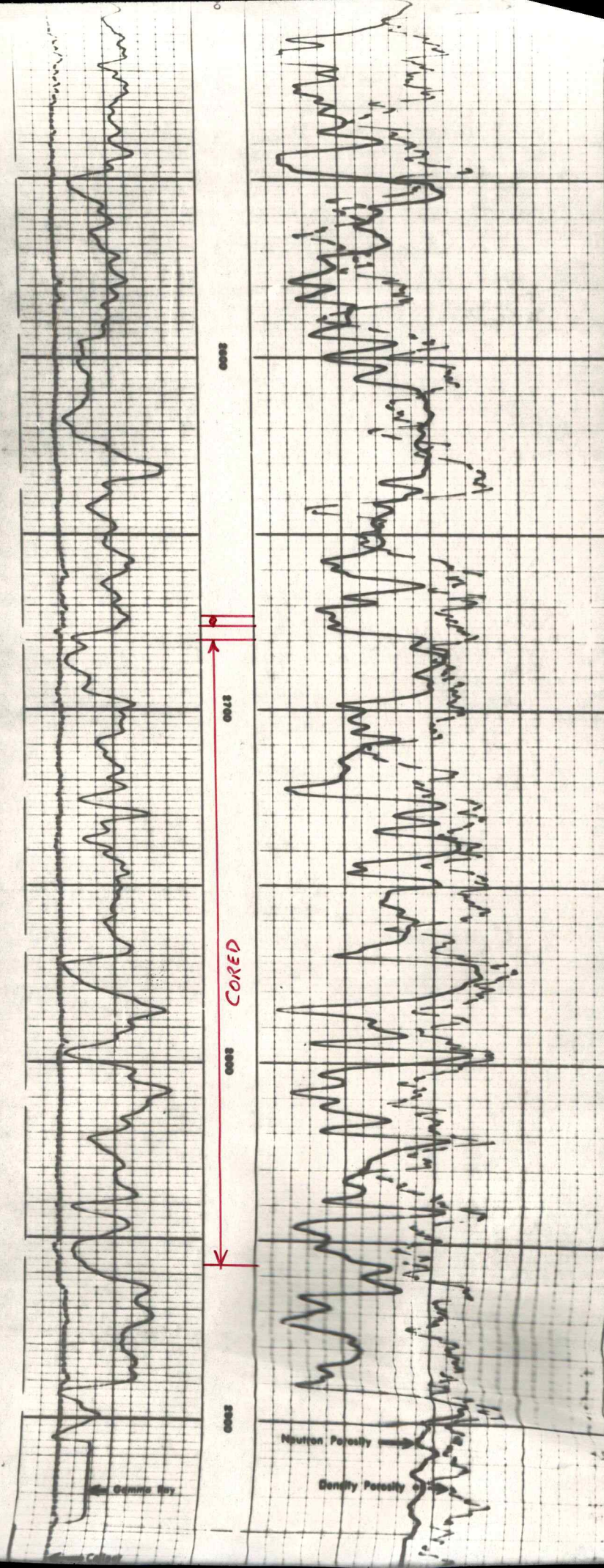
COMPANY						GULF ENERGY & MINERALS					
COUNTY						PANAMA					
WELL						ST INCHCOMB NO. 1-2-20					
FIELD						PANOMA					
COUNTRY						KENYA					
STATE						KANJIAS					
C SW											
DLL											
Perforation Datum:						GROUND LEVEL					
Log Measured From:						KB					
Drilling Measured from KB:						10 ft. Above Perm. Datum					
Date						12-82-76					
Rm No.						ONE					
Depth Driller						2930					
Depth Logger						2930					
Bore Log Interval						2929					
Top Log Interval						1500					
Coring Driller						8 5/8" 745					
Coring Logger						733					
Bit Size						7 7/8					
Type Fluid in Hole						SGM					
Dens. Visc.						9.8 49					
pH Fluid Loss						6.5 8.9 ml					
Source of Sample						CIRCULATED					
Rm. @ Meas Temp						-11 70 F					
Rinf. @ Meas Temp						-09 65 F					
Source Rmt. Rate M						-					
Rmt. BHT						-07 92 F					
Circulation Stopped						2200					
Logger on Bottom						2:00					
Max Rec. Temp						92					
Temp Location						7806 DUMAS					
Recorded By						DELAY					
Witnessed By Mr.						LINDSAY					

FOLD HERE

RUN NO.		ONE		Type Log		Depth						
Service Order No.		36351										
Fluid Level		FULL										
Salinity, PPM CL		100,000										
Served, F.P. M.		30										
EQUIPMENT DATA												
Dens. Panel		1115										
Dens. Cart		733										
Dens. Skid		336										
Dens. Sonde		251										
Dens. Source		2499										
Dens. Calibrator		1018										
Neph. Panel		673										
Neph. Cart		363										
Neph. Source		477										
Neph. Calibrator		346										
GR Cart		323										
Memorizer Panel		20										
Tape Recorder (TR)		2847										
Depth Encoder (DRE)		1989										
Pressure Wheel (CPW)												
Centralizers		Type										
Enter Spring		No.										
Standoffs		S. O.										
Inches or None		Inches										
CALIBRATION DATA												
GR		BKG. CPS		126								
		Source CPS		364								
		Sens. Cal		150								
		T.C. Cal		2								
LOG	Short Spacing, Before Log		2800									
	Long Spacing, Before Log		1280									
	Short Spacing, After Log		2800									
	Long Spacing, After Log		1280									
	Pr. Before Log		404									
	Pr. After Log		632									
NO.	Pr. Before Log		404									
	Pr. After Log		632									
LOGGING DATA												
DEPTH		CNP		FDC		GR						
Top	Bottom	Porosity Scale	Matrix	Auto Corr. or Hole Size Setting	Porosity Scale	Grain Density	Liquid Density	Hole Fluid	Sens. Logged	I.C.	Zero Dr. Left	Scale Per 100 Dr.
1500	2929	30/-10	LS	AUTO	30/-10	2.71	1.0	L1Q	150	2	0	150
All interpretations are opinions based on information from electrical or other measurements and are subject to change or question due to necessary uncertainties of any logs generated, and we shall not accept any type of payment or other obligation for liability or responsibility for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 8 of our General Terms and Conditions on test and in our current Price Schedule.												









COMPANY GULF ENERGY & MINERALS COMPANY - U.S. FIELD PANOMA EXTENSION FILE 3402-8853
WELL STINCHCOMB NO. 1-2-20 COUNTY KEARNY DATE 1/20/77
LOCATION C SW SEC. 20-24S-36W STATE KANSAS ELEV. 3120' KB

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
MILLIDARCY
100.0 10.0 1.0 0.1

POROSITY
PERCENT
30 20 10

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

