Case No.
6653

Large Exhibits

TABLE 21 A

UNITIZATION PARAMETERS – WELLS, PRODUCTION AND GAS CAP VOLUMETRICS

TR. NO.	TRACT NAME / OPERATOR – LEASE	NUMBER OF WELLS 1/1/77				CUMULATIVE *		CURRENT PROD., YEAR 1976				ORIGINAL GAS CAP GAS IN PLACE								TR. NO.
		USEABLE		ACTIVE		OIL PROD. 1/1/77		OIL		GAS		GRAYBURG UPPER		GRAYBURG UNPR.		GRAYBURG TOTAL		S.A. ZONE Σ		UNIT TOTAL	
		NO.	%	NO.	%	BBLS	%	BBLS	%	MCF	%	MCF	%	MCF	%	MCF	%	MCF	%	MCF	%
1	[illegible]	2,450	.45980	2,470	.47406	54044	.00969	1929	.00137	1200	.00197			0	.00000	0	.00000	0	.00000	0	.00000	1
2	[illegible]	2,450	.45980	2,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	2
3	[illegible]	1,450	.45980	2,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	3
4	[illegible]	2,450	.45980	2,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	4
5	[illegible]	2,450	.45980	2,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	5
6	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	6
7	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	7
8	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	8
9	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	9
10	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	10
11	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	11
12	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	12
13	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	13
14	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	14
15	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	15
16	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	16
17	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	17
18	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	18
19	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	19
20	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	20
21	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	21
22	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	22
23	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	23
24	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	24
25	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	25
26	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	26
27	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	27
28	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	28
29	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	29
30	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	30
31	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	31
32	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	32
33	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	33
34	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	34
35	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	35
36	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	36
37	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	37
38	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	38
39	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	39
40	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	40
41	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	41
42	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	42
43	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	43
44	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	44
45	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	45
46	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	46
47	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	47
48	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	48
49	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	49
50	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	50
51	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	51
52	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	52
53	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	53
54	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	54
55	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	55
56	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	56
57	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	57
58	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	58
59	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	59
60	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	60
61	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	61
62	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	62
63	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	63
64	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	64
65	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	65
66	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	66
67	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	67
68	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	68
69	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	69
70	[illegible]	4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	70
		4,450	.45980	4,470	.47406	1527752	.27383	2158	.00154	12200	.00197	8348	.00062	0	.00000	0	.00000	8348	.00062	0	.00000	

* INCLUDES NO REASONABLE OF IN ADDITIONAL 3000 BARRELS OF OIL FOR "LOST" PRODUCTION FROM 3 WELLS (NOS. 301 & 303), WHICH WERE

PUT IN TEMPORARILY, BUT NEVER HOOKED UP FOR TECHNICAL REASONS.

U.S.B.C.F. MICROGRAPHICS

BEST AVAILABLE COPY

TABLE 21 B

UNITIZATION PARAMETERS – WELLS, PRODUCTION AND GAS CAP VOLUMETRICS

WORKING INTEREST OWNER	NO. OF WELLS 1/1/77		CUMULATIVE OIL PROD. 1/1/77	CURRENT PROD., YEAR 1976		ORIGINAL GAS CAP GAS IN PLACE						
	USEABLE	ACTIVE	OIL	OIL	GAS	GD UPPER	GD LOWER	GD TOTAL	S. A. ZONE	UNIT TOTAL		
	NO. %	NO. %	BBLS. %	BBLS. %	MCF %	MCF %	MCF %	MCF %	MCF %	MCF %		

TABLE 22 A

UNITIZATION PARAMETERS – ORIGINAL OIL IN PLACE

TR. NO.	TRACT NAME / OPERATOR – LEASE	PRODUCTIVE ACRES		BASAL GRAYBURG						SAN ANDRES										UNIT TOTALS		TR. NO.
				UPPER ZONE		LOWER ZONE		TOTALS		ZONE I		ZONE II		ZONE III $_U$		ZONE III $_L$		TOTALS				
		ACRES	%	STB	%	STB	%	STB	%	STB	%	STB	%	STB	%	STB	%	STB	%	STB	%	

TABLE 22 B

UNITIZATION PARAMETERS – ORIGINAL OIL IN PLACE

WIO NO.	WORKING INTEREST OWNER	PRODUCTIVE ACRES ACS.	PRODUCTIVE ACRES %	BASAL GRAYBURG UPPER ZONE STB	BASAL GRAYBURG UPPER ZONE %	BASAL GRAYBURG LOWER ZONE STB	BASAL GRAYBURG LOWER ZONE %	BASAL GRAYBURG TOTALS STB	BASAL GRAYBURG TOTALS %	SAN ANDRES ZONE I STB	SAN ANDRES ZONE I %	SAN ANDRES ZONE II STB	SAN ANDRES ZONE II %	SAN ANDRES ZONE III STB	SAN ANDRES ZONE III %	SAN ANDRES ZONE III L STB	SAN ANDRES ZONE III L %	SAN ANDRES TOTALS STB	SAN ANDRES TOTALS %	UNIT TOTALS STB	UNIT TOTALS %	WIO NO.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TABLE 23 A

PRIMARY OIL RESERVES AND ULTIMATE OIL RECOVERY

TR. NO.	TRACT NAME / OPERATOR – LEASE	PRIMARY OIL RESERVES GRAYBURG BBLS	GRAYBURG %	S.A. ZONE I BBLS	S.A. ZONE I %	S.A. ZONE II BBLS	S.A. ZONE II %	S.A. ZONE III BBLS	S.A. ZONE III %	S.A. TOTAL BBLS	S.A. TOTAL %	UNIT TOTAL BBLS	UNIT TOTAL %	ULTIMATE OIL REC.* BBLS	ULTIMATE OIL REC.* %	TR. NO.
1	GETTY - STATE A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1
2	AMERADA HESS-STATE WHD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2
3	GULF - LEA FO STATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3
4	TEXAS PACIFIC-STATE V ACI	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4
5	ESTES ENGR. - L STATE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5
6	CONTINENTAL - STATE B 13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6
7	SHELL - RICE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7
8	AMERADA HESS - B HARDIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8
9	GULF - DAN HARDIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9
10	MORANCO - STATE Y 17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10
11	CHEVRON - STATE 1 13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11
12	GETTY(SKELLY)-STATE A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12
13	ANTWEIL-MORRIS CONS-TOWNS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13
14	WISER - MORRIS A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14
15	WISER - MORRIS B	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15
16	GULF - W.D. GRIMES NCT C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16
17	C.H. SWEET - MCKINLEY B	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17
18	GETTY(SKELLY) - MCKINLEY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18
19	CHEVRON - H D MCKINLEY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19
20	C H SWEET - GRIMES	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20
21	BILL SWEET-BOWERS A FED.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21
22	BILL SWEET-BOWERS A FED.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22
23	ATLANTIC RICH-GRIMES	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23
24	SHELL - MCKINLEY A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24
25	GETTY - BOONE HARDIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25
26	CITIES SERVICE - HARDIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26
27	SHELL - MCKINLEY A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27
28	GULF-GRAHAM STATE NCT A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28
29–63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	29–63
		[illegible]	100.00000	[illegible]	100.00000	[illegible]	100.00000	[illegible]	100.00000	[illegible]	100.00000	[illegible]	100.00000	[illegible]	100.00000	

*INCLUDES AN ADJUSTMENT OF AN ADDITIONAL [illegible] BARRELS OF OIL FOR LOST PRODUCTION FROM 3 WELLS [illegible] WHICH WERE SHUT IN FOR SPECIAL BHP BUILD-UP SURVEYS REQUESTED BY THE TECHNICAL COMMITTEE

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TABLE 23 D

PRIMARY OIL RESERVES AND ULTIMATE OIL RECOVERY

MAP NO.	WORKING INTEREST OWNER	PRIMARY OIL RESERVES										ULTIMATE OIL RECOVERY *		MAP NO.
		GRAYBURG		S. A. ZONE I		S. A. ZONE II		S. A. ZONE III		S. A. TOTAL		UNIT TOTAL				
		BBLS.	%	BBLS.	%	BBLS.	%	BBLS.	%	BBLS.	%	BBLS.	%	BBLS.	%	
1	AMOCO PRODUCTION CO.	0	.000000	177419	.013179	0	.000000	847168	.062937	1024587	.076116	1024587	.076116	1024587	.076116	1
2	ARCO OIL & GAS CO.	1627	.000121	0	.000000	0	.000000	0	.000000	0	.000000	1627	.000121	1627	.000121	2
3	ARCO OIL & GAS CO., ET AL	3414	.000254	0	.000000	0	.000000	0	.000000	0	.000000	3414	.000254	3414	.000254	3
4	ARCO OIL & GAS CO., C. P.	3414	.000254	0	.000000	0	.000000	0	.000000	0	.000000	3414	.000254	3414	.000254	4
5	ARCO OIL & GAS CO., ET AL	3414	.000254	0	.000000	1459977	.108470	681379	.050619	2141356	.159089	2144770	.159343	2144770	.159343	5
6	ATLAS P. M.	47567	1.478967	0	.000000	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	6
7	CAL. EXPLORATION CO.	9421	.000700	0	.000000	0	.000000	0	.000000	0	.000000	9421	.000700	9421	.000700	7
8	CITIES SERVICE OIL CO.	0	.000000	1001422	.074387	1077619	.080057	1004854	.074644	3083895	.229088	3083895	.229088	3083895	.229088	8
9	CITIES SERVICE OIL CO., ET AL	0	.000000	167419	.012436	0	.000000	0	.000000	167419	.012436	167419	.012436	167419	.012436	9
10	CONOCO INC. ETAL	31749	1.013751	0	.000000	0	.000000	0	.000000	0	.000000	31749	.002358	31749	.002358	10
11	CONOCO INC. ETAL	0	.000000	2.147484	7.413793	1579415	8.000000	2144771	8.000000	3724186	27.413793	3724186	27.413793	3724186	27.413793	11
12	CYCLE, MARVIN M.	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	12
13	CYCLE, MARVIN M., ET AL	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	13
14	CYCLE, P. M.	0	.000000	1459977	.108470	2141356	.159089	1459977	.108470	5061310	.375929	5061310	.375929	5061310	.375929	14
15	DAVIDSON, PAUL ET UX	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	15
16	DAVIDSON, PAUL, ET UX	47567	1.478967	0	.000000	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	16
17	DAVIDSON, PAUL, ET UX	9421	.000700	0	.000000	0	.000000	0	.000000	0	.000000	9421	.000700	9421	.000700	17
18	DAVIDSON, PAUL, ET UX	18842	1.479667	0	.000000	0	.000000	0	.000000	0	.000000	18842	.001400	18842	.001400	18
19	DEVON ENERGY CORP.	0	.000000	1459977	.108470	2141356	.159089	1459977	.108470	5061310	.375929	5061310	.375929	5061310	.375929	19
20	DORSEY, C. LEROY	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	20
21	DORSEY, C. LEROY, ET UX	18842	1.479667	1459977	.108470	1504544	.111753	1459977	.108470	4424498	.328693	4424498	.328693	4424498	.328693	21
22	EAST TEXAS B MINERALS	17733	1.317311	1459977	.108470	1504544	.111753	1459977	.108470	4424498	.328693	4424498	.328693	4424498	.328693	22
23	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	23
24	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	24
25	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	25
26	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	26
27	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	27
28	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	28
29	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	29
30	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	30
31	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	31
32	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	32
33	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	33
34	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	34
35	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	35
36	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	36
37	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	37
38	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	38
39	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	39
40	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	40
41	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	41
42	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	42
43	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	43
44	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	44
45	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	45
46	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	46
47	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	47
48	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	48
49	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	49
50	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	50
51	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	51
52	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	52
53	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	53
54	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	54
55	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	55
56	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	56
57	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	57
58	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	58
59	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	59
60	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	60
61	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	61
62	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	62
63	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	63
64	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	64
65	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	65
66	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	66
67	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	67
68	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	68
69	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	69
70	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	70
71	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	71
72	EATELL, LEONTIA, ESTATE	0	.000000	47567	.003534	0	.000000	0	.000000	0	.000000	47567	.003534	47567	.003534	72

* INCLUDES AN ADJUSTMENT OF AN ADDITIONAL 1634 BARRELS OF OIL PER "LOST" PRODUCTION PRODUCTIVE WELLS
ON, INC & DEL WHICH HAVE NOT HAD FOR SPECIAL DAY ROLLS-UP WAIVER REQUESTED BY THE TECHNICAL COMMITTEE

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TABLE 24 A
UNITIZATION PARAMETERS – SECONDARY OIL RESERVES

TR NO.	TRACT NAME / OPERATOR – LEASE	GRAYBURG UPPER & LOWER BBLS.	GRAYBURG UPPER & LOWER %	SAN ANDRES ZONE II BBLS.	SAN ANDRES ZONE II %	SAN ANDRES ZONE III$_U$ BBLS.	SAN ANDRES ZONE III$_U$ %	SAN ANDRES ZONE III$_L$ BBLS.	SAN ANDRES ZONE III$_L$ %	SAN ANDRES TOTALS BBLS.	SAN ANDRES TOTALS %	UNIT TOTALS BBLS.	UNIT TOTALS %	TR NO.
1	GETTY - STATE B	77157	1.17617	0	.00000	0	.00000	0	.00000	0	.00000	77157	.13978	1
2	AMERADA HESS-STATE WHB	113816	1.73500	925	.00236	0	.00000	0	.00000	925	.00047	114741	.20496	2
3	GULF - LEA FO STATE	46155	.70358	0	.00000	0	.00000	0	.00000	0	.00000	46155	.08364	3
4	TEXAS PACIFIC-STATE V ACT.	157803	2.40552	3173	.01763	0	.00000	0	.00000	3173	.00152	160975	.29162	4
5	ESTES ENGR. - STATE	74776	1.13991	33997	.18881	358	.00197	0	.00000	34345	.01761	109123	.19769	5
6	CONTINENTAL - STATE A 13	232710	3.54737	247535	1.37477	226015	.92428	0	.00000	473550	.97358	706260	1.35192	6
7	SHELL - RICE	35633	.54375	384391	2.13479	881791	3.63539	0	.00000	1275116	2.64215	1310749	2.37455	7
8	AMERADA HESS - S HARDIN	26588	.40530	373758	2.06532	789466	3.25356	0	.00000	1161224	2.34627	1187812	2.11160	8
9	GULF - CAN HARDIN	174050	2.65319	285716	1.55953	249717	1.06451	0	.00000	540933	1.11101	714983	1.29435	9
10	MORANCO - STATE T 17	22355	.34081	179	.00099	0	.00000	0	.00000	179	.00037	22533	.04082	10
11	CHEVRON - STATE T 17	34803	.53053	5366	.02981	0	.00000	0	.00000	5366	.01103	40169	.07277	11
12	GETTY(SKELLY)-STATE	42855	.65328	14906	.07119	0	.00000	0	.00000	14906	.03393	59263	.10736	12
13	ANTWEIL-MORRIS CONE TOWNS	19480	.29695	0	.00000	0	.00000	0	.00000	0	.00000	19480	.03529	13
14	WISER -MORRIS B	16039	.15303	0	.00000	0	.00000	0	.00000	0	.00000	16039	.02812	14
15	WISER -MORRIS A	17299	.26370	0	.00000	0	.00000	0	.00000	0	.00000	17299	.03134	15
16	GULF - W.D.GRIMES ACT. C	65867	1.00320	9491	.05329	0	.00000	0	.00000	9491	.01913	75588	.13133	16
17	C M SWEET - MCKINLEY B	63480	.96769	6539	.03799	0	.00000	0	.00000	6539	.01755	72019	.13047	17
18	GETTY(SKELLY)- MCKINLEY	51236	.78103	57051	.31695	0	.00000	0	.00000	57051	.11721	108286	.19617	18
19	CHEVRON - W D MCKINLEY	56831	.86633	159928	.88899	0	.00000	0	.00000	159928	.32850	216759	.39268	19
20	C M SWEET - GRIMES	23948	.36506	0	.00000	0	.00000	0	.00000	0	.00000	23948	.04338	20
21	BILL SWEET-BOWERS A FED.	28017	.42709	19262	.10712	0	.00000	0	.00000	19232	.03964	47249	.08565	21
22	BILL SWEET-BOWERS B FED.	32223	.49121	18599	.10333	0	.00000	0	.00000	18599	.03825	50822	.09207	22
23	ATLANTIC RICH-GRIMES	35245	.53729	36704	.20392	0	.01000	0	.00000	36704	.07544	71951	.13035	23
24	SHELL - MCKINLEY B	147816	2.25330	358665	1.99259	6926	.02856	0	.00000	365599	.75163	513413	.93009	24
25	GETTY - BOONE HARDIN	138302	2.10826	356631	1.98461	265619	1.09498	0	.00000	618243	1.27104	756545	1.37055	25
26	CITIES SERVICE - HARDIN	15225	.23732	555145	3.08425	1049231	4.33013	0	.00000	1604376	3.29851	1620830	2.93593	26
27	SHELL - MCKINLEY A	155728	2.37395	1003267	5.57371	871821	3.57309	0	.00000	1875088	3.85503	2031406	3.68001	27
28	GULF-GRAHAM STATE ACT. A	15838	.24143	413411	3.45117	1019184	4.15772	0	.00000	1333895	3.35916	1639733	2.97055	28
29	SHELL - STATE D	36615	.55819	303493	1.68630	239733	1.19321	0	.00000	550904	1.11327	617020	1.11779	29
30	AMERADA HESS-STATE E	45584	1.38085	206701	1.13564	45565	.19144	0	.00000	304274	.62556	394856	.72527	30
31	TEXAS PACIFIC-STATE G	48593	1.21952	477403	2.24446	463465	1.81926	0	.00000	1121257	2.30522	1205850	2.18451	31
32	SAMEDAN - STATE C	283315	4.31883	385594	2.14320	49591	.40736	0	.00000	485137	.99740	768452	1.39212	32
33	C M SWEET - STATE F	227830	3.47307	112149	.62335	2339	.00959	0	.00000	114988	.23530	342314	.62015	33
34	SHELL - STATE F	126436	1.92697	5567	.03093	0	.00000	0	.00000	5567	.01144	131773	.23958	34
35	TEXAS PACIFIC-STATE Y ACT	187591	2.85982	0	.00000	0	.00000	0	.00000	0	.00000	187591	.33319	35
36	C&C OPER. - SHIPP A	17373	.26483	0	.00000	0	.00000	0	.00000	0	.00000	17373	.03147	36
37	JOHN S TATES-SHELL STATE	213610	3.25629	627	.00348	0	.00000	0	.00000	627	.00129	214237	.38811	37
38	MISSLE - STATE L	47079	.71767	0	.00000	0	.00000	0	.00000	0	.00000	47079	.08529	38
39	GETTY(SKELLY) - MORRIS E	95059	1.44904	0	.00000	0	.00000	0	.00000	0	.00000	95063	.17221	39
40	CONTINENTAL - STATE A 35	155476	2.38604	86289	.47947	205	.00084	0	.00000	86587	.18155	242748	.44019	40
41	SAMEDAN - STATE B	129094	1.96790	18369	.10202	0	.00000	0	.00000	18369	.03774	147468	.26713	41
42	TEXACO - WM. DD W C ST.	131335	2.00206	416298	2.31277	95626	.39381	0	.00000	511926	1.05227	643261	1.16615	42
43	EXXON - WM. STATE A	399978	6.09722	128760	.71528	13997	.05736	0	.00000	142757	.29350	542728	.98320	43
44	AMERICA - M D.MCKINLEY	34916	.53225	538216	2.99009	467649	1.87650	0	.00000	995866	2.04741	1033276	1.84231	44
45	GETTY - H D MCKINLEY	55769	.85013	675345	3.75203	833222	3.41485	205	.00328	1508772	3.10196	1564541	2.83435	45
46	MARATHON-STATE SEC. 30	183652	2.79951	524532	2.91185	386949	1.57266	0	.00000	911481	1.88010	1096123	1.98575	46
47	EXXON-BOWERS A-FEDERAL	31251	.48356	1286942	7.14968	1868938	7.57656	264554	1.49083	3310734	6.84829	3372982	6.10957	47
48	EXXON-BOWERS A FED COM	47257	.72023	128135	.71194	60021	.24599	0	.00000	188156	.38683	235903	.42645	48
49	AMERADA - STATE B	121340	1.84969	360246	2.00191	296393	1.21473	0	.00000	656737	1.35020	774097	1.40956	49
50	EXXON - W D GRIMES	40605	.61897	82352	.45856	9209	.03774	0	.00000	91561	.18824	132086	.23925	50
51	CONTINENTAL-STATE A 36	2374	.03472	446061	2.48196	846770	3.46350	330331	3.53015	1570162	3.22813	1572536	2.84880	51
52	GETTY - W D GRIMES	29692	.45662	199356	1.10974	349070	1.43553	59787	.67799	653412	1.34377	682256	1.23597	52
53	CHEVRON - STATE 1-36	0	.00000	313362	1.74079	735050	3.01161	346888	3.64310	1384281	2.84597	1384281	2.60776	53
54	ATLANTIC- W D GRIMES 30C	116870	1.78157	299750	1.65572	187197	.76720	0	.00000	485947	.99907	602837	1.09210	54
55	SAMEDAN - MOON A	46262	.70603	56015	.30443	34533	.14971	0	.00000	91599	.18821	137794	.24963	55
56	SAMEDAN - MOON B	31525	.48057	25833	.14377	1519	.00493	0	.00000	27452	.05695	58983	.10685	56
57	SHELL - GRIMES	11537	.12021	403965	2.24414	861285	4.07044	353863	4.54949	1585027	3.54935	1592614	3.07354	57
58	CONTINENTAL - W D GRIMES	49411	.75321	350832	1.95104	96244	2.03633	33317	.53392	881013	1.81127	930926	1.68555	58
59	SHELL - SAGER	73472	1.12031	76247	.42364	34776	.14252	0	.03500	110023	.22620	183495	.33242	59
60	MORANCO - HOBBS	3631	.05539	0	.00000	0	.00000	0	.00000	0	.00000	3631	.00658	60
61	SHELL - TURNER	31825	.48620	26556	.14763	2551	.01046	0	.00000	29107	.05984	60936	.11037	61
62	GETTY(SKELLY)-BW TURNER	22362	.34613	17625	.09792	22000	.09016	0	.00000	39625	.08147	61987	.11511	62
63	GETTY(SKELLY)-TURNER AT	22296	.33989	48295	.27446	85512	.35045	130	.00134	148921	.30220	171212	.31108	63
64	SAMEDAN - TURNER A	7467	.11446	925	.00514	0	.00000	0	.00000	925	.00987	8392	.01549	64
65	SAMEDAN - TURNER A BAT 2	8997	.13131	224	.00124	0	.00000	0	.00000	224	.00046	9171	.01661	65
66	SAMEDAN - TURNER A	57062	.86985	112266	.62370	40009	.16397	0	.00000	152275	.31307	209337	.37923	66
67	GULF - W D GRIMES ACT. B	3560	.05427	931965	5.17773	949319	3.89058	461234	4.84368	1877461	3.85991	1881021	3.40765	67
68	SHELL - STATE D	0	.00000	281441	1.56360	619070	2.53717	470936	7.48705	1371955	2.81960	1371955	2.48552	68
69	AMOCO - STATE G	0	.00000	271332	1.50745	830265	3.40216	422350	2.93268	1373331	2.82354	1374437	2.49011	69
70	CONTINENTAL - STATE A 33	0	.00000	834235	4.63466	2002092	8.22580	1569129	25.00847	4405598	9.05735	4405595	7.98097	70
71	AMERADA HESS - STATE A	0	.00000	240344	1.33527	684982	2.87228	203256	3.22104	1128454	2.32001	1128456	2.04430	71
72	SHELL - STATE A	0	.00000	289287	1.60712	757209	3.10330	368586	6.02038	1415049	2.90923	1415049	2.56349	72
73	GULF - W.D. GRIMES ACT A/3	5193	.07922	529405	2.94120	1103599	4.52317	280078	4.45818	1913819	3.93436	1919007	3.47696	73
74	GULF - GRIMES ACT A BAT 2	15219	.23200	551147	3.06193	1181362	4.84163	316317	5.04710	2058826	4.23278	2074045	3.75733	74
75	MARATHON - STATE SEC 35 36	0	.00000	423013	2.31037	1347494	6.05588	851118	13.49023	2343860	5.69428	2253860	4.10316	75
76	CITIES SERVICE - FOWLER	112110	1.70899	469484	2.60103	855940	3.50132	6787	.10818	1281559	2.63499	1393761	2.52499	76
77	GETTY(SKELLY)-FOWLER	139431	2.12518	178606	.99208	76433	.31327	0	.00000	252133	.51837	391612	.70944	77
78	SUN - CLARK FOWLER	174325	2.65735	63379	.35215	526	.00216	0	.00000	63105	.12974	239730	.43429	78
79	SHELL - BERRY	168481	2.56831	553660	3.01962	962631	3.93999	136	.00169	516027	1.88238	1084508	1.96469	79
80	MOBIL - HOBB BERRY	299825	4.57037	76293	.42388	197	.00081	0	.00000	76990	.15726	371295	.67265	80
81	AMERADA HESS - STATE E	328479	4.57910	5042	.02800	0	.00000	0	.00000	5042	.01036	333741	.60478	81
82	BYRON - J A HOLT STATE	65977	1.00599	0	.00000	0	.00000	0	.00000	0	.00000	65987	.11955	82
83	GULF - J.A. HOLT ACT. B	26264	.40033	0	.00000	0	.00000	0	.00000	0	.00000	26265	.04758	83
		6560000	100.00000	18000000	100.00000	24400000	100.00000	6290000	100.00000	48640000	100.00000	55200000	100.00000	

N.M.R.C.F. MICROGRAPHICS

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TABLE 24 B
UNITIZATION PARAMETERS – SECONDARY OIL RESERVES

WELL NO.	WORKING INTEREST OWNER	GRAYBURG UPPER & LOWER BBLS.	%	SAN ANDRES ZONE II BBLS.	%	SAN ANDRES ZONE III_U BBLS.	%	SAN ANDRES ZONE III_L BBLS.	%	TOTALS BBLS.	%	UNIT TOTALS BBLS.	%	WELL NO.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	29
30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30
31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	31
32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	32
33	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	33
34	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	34
35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	35
36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	36
37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	37
38	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38
39	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39
40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	40
41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	41
42	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	42
43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	43
44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	44
45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	45
46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	46
47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	47
48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	48
49	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	49
50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	50
51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	51
52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	52
53	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	53
54	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	54
55	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	55
56	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	56
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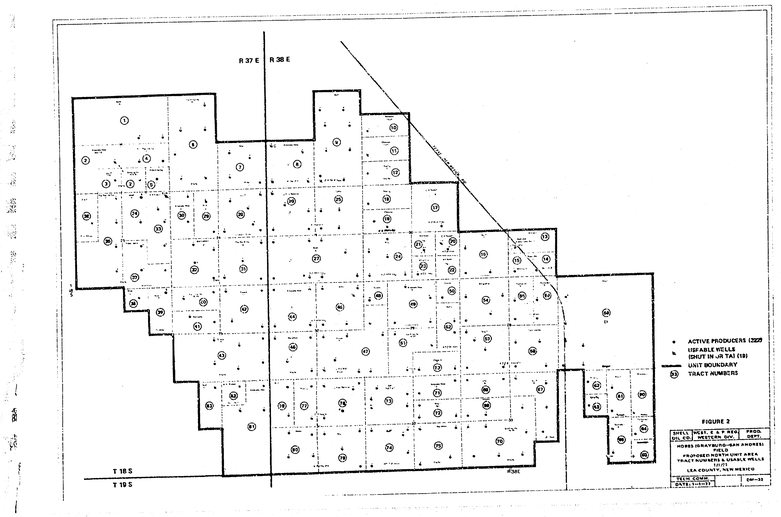
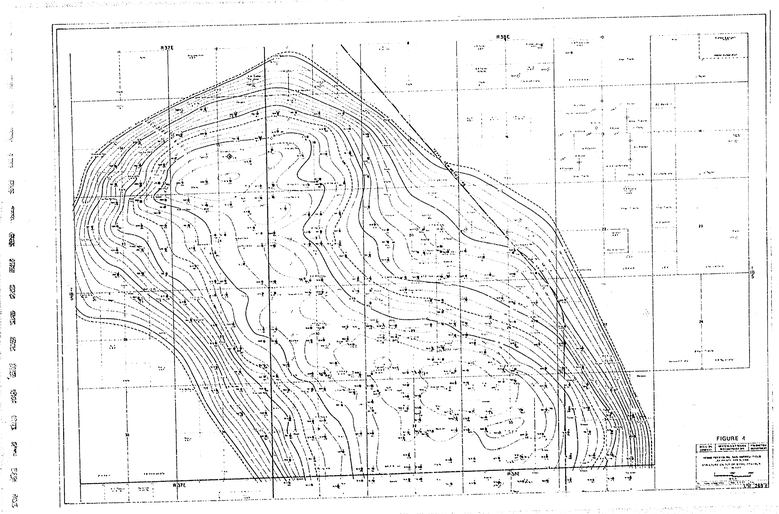


FIGURE 2

SHELL WESTERN E & P INC.	PROD. DEPT.
HOBBS (GRAYBURG-SAN ANDRES) FIELD	
PROPOSED NORTH UNIT AREA TRACT NUMBERS & USABLE WELLS	
LEA COUNTY, NEW MEXICO	
DRAWN BY:	DWG. NO.
APPROVED BY:	



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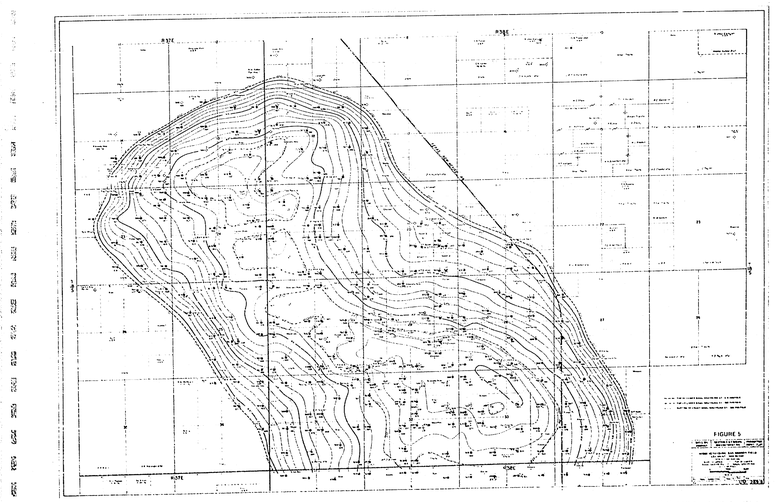

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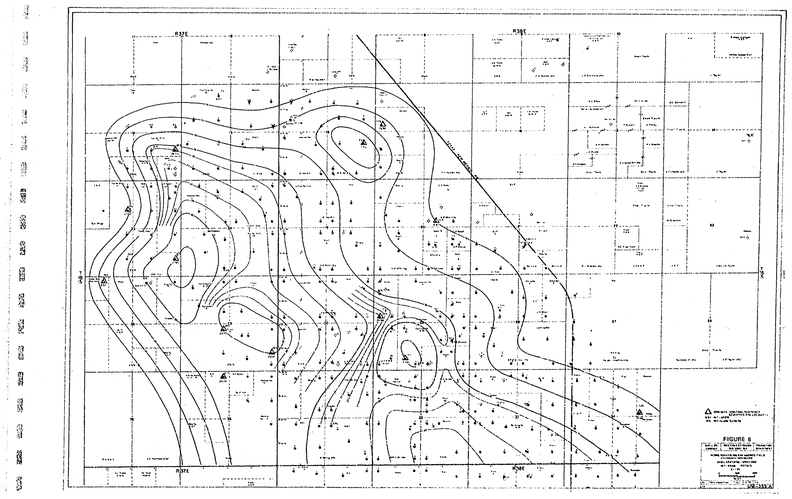

FIGURE 6

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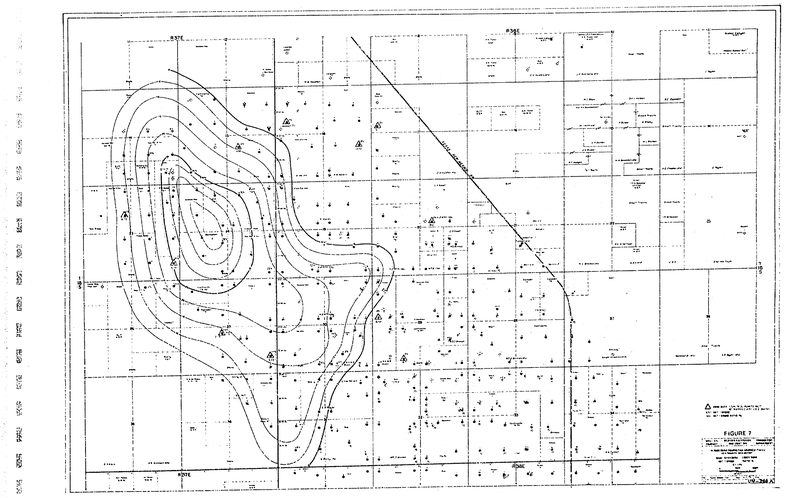

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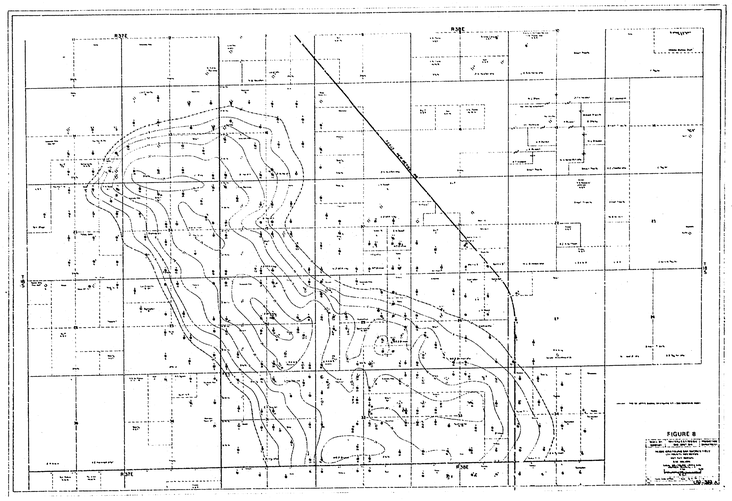

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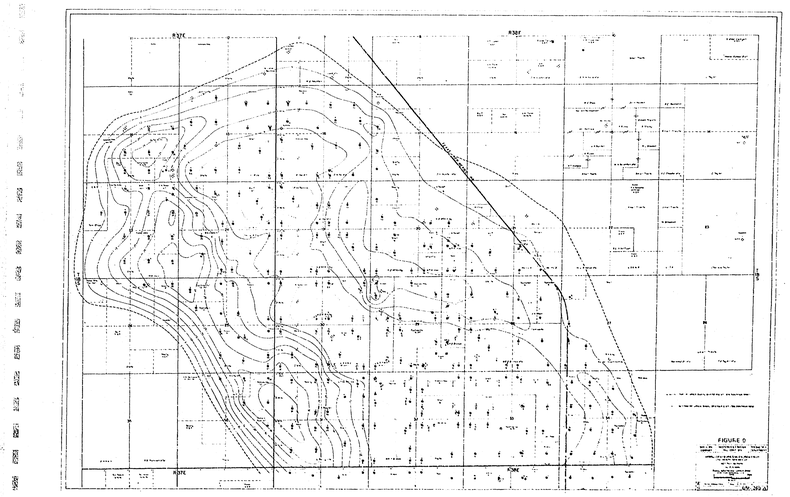

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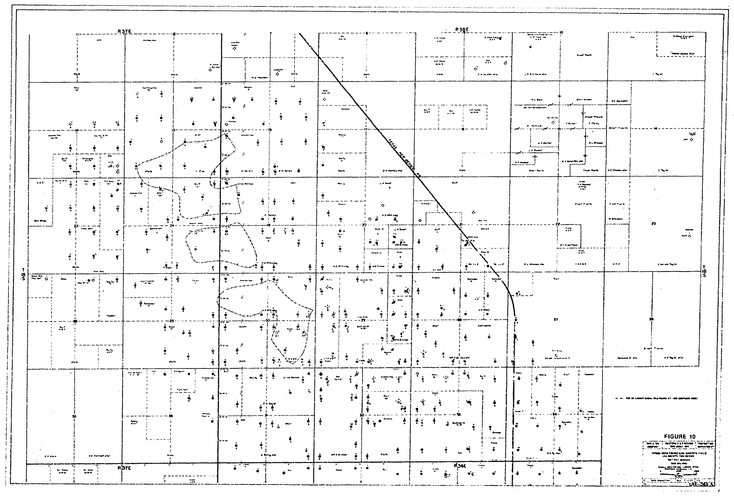

FIGURE 10

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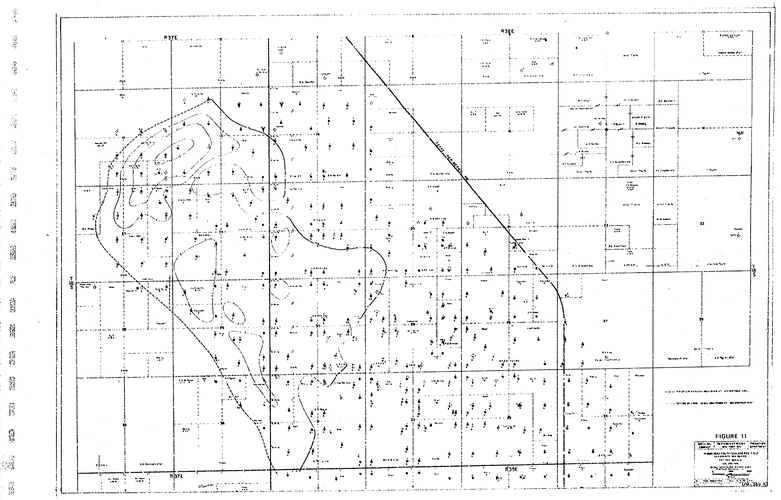

FIGURE 11

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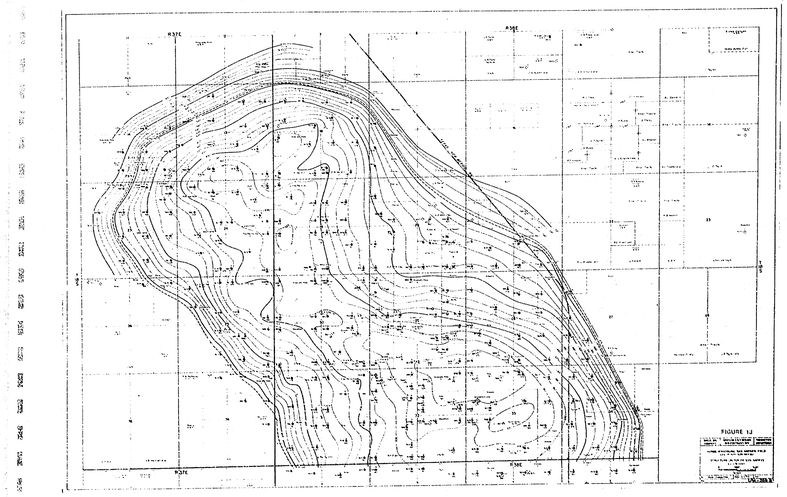

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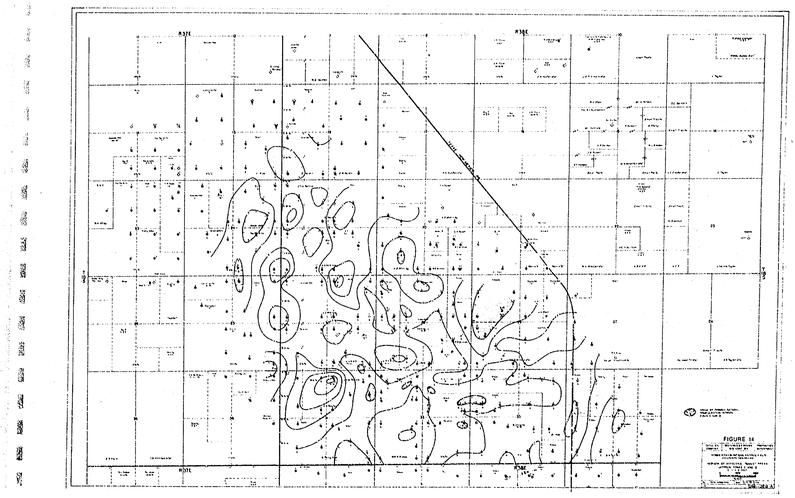

FIGURE 14

U.S.G.S. TOPOGRAPHICS

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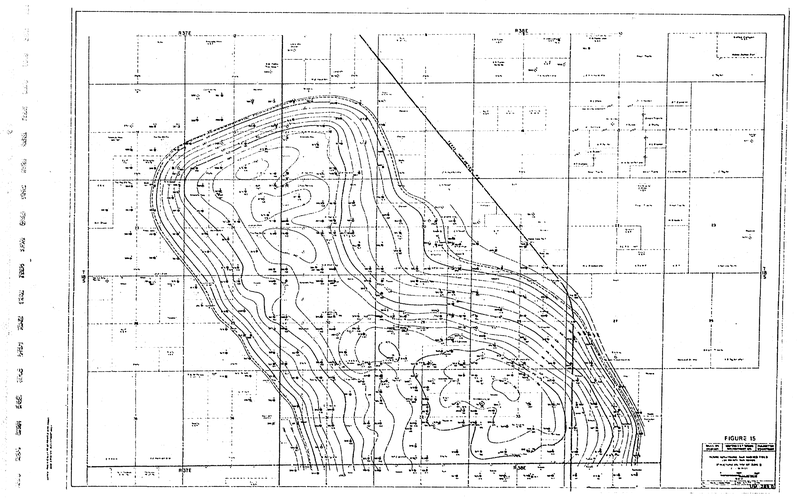

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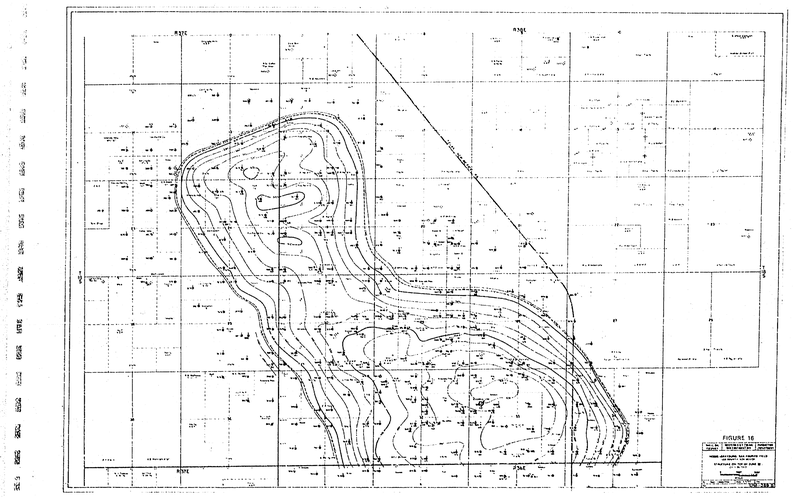

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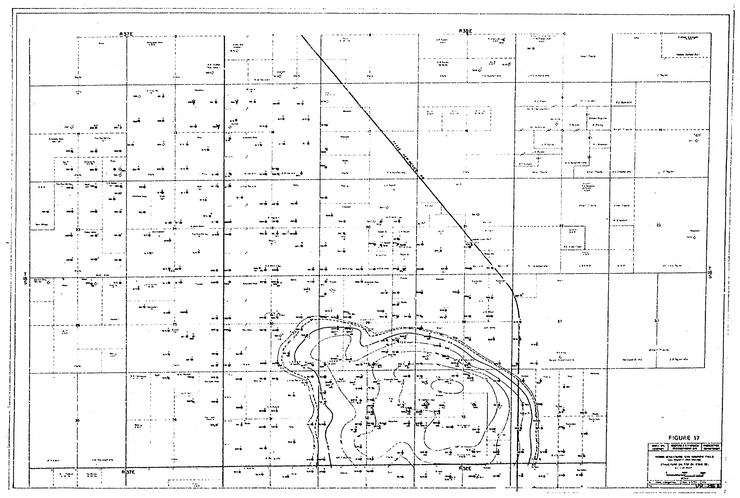

FIGURE 17

U.S.D.A.C.F. MICROGRAPHICS

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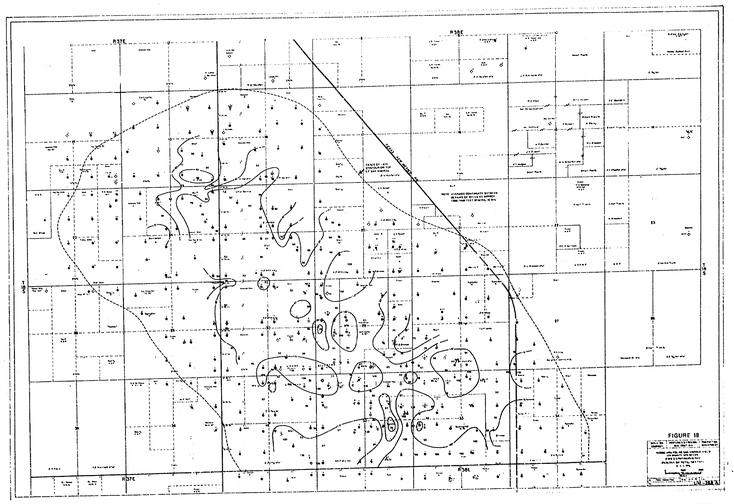
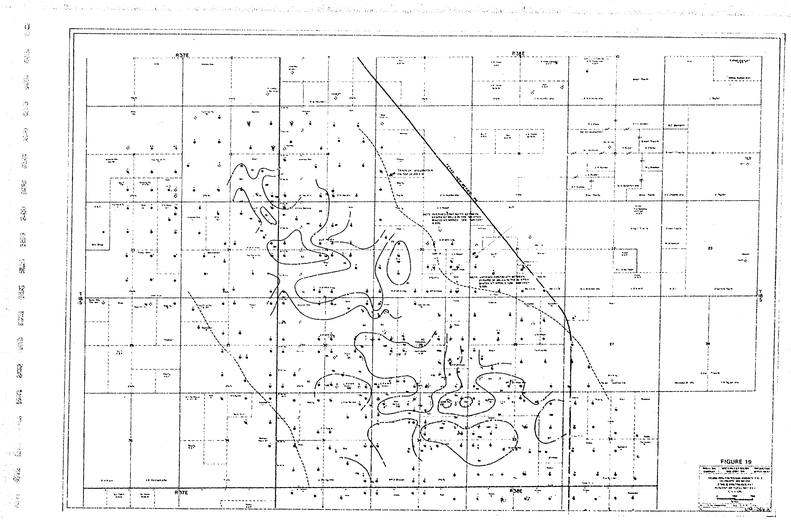


FIGURE 18



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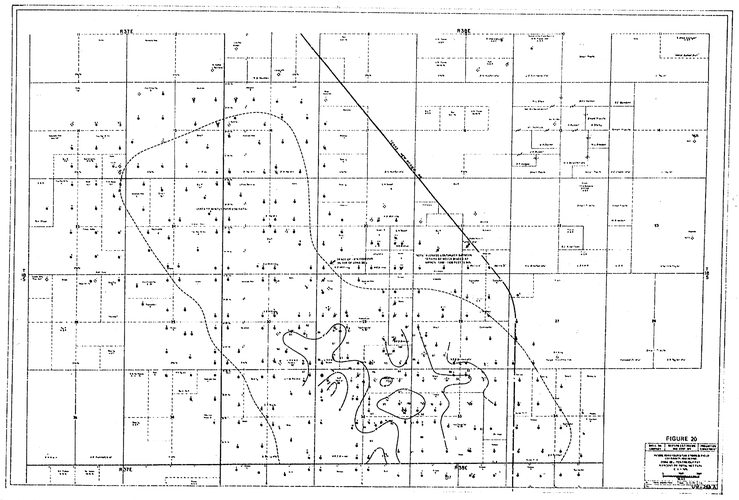

FIGURE 30

V.P.R.I.Y. MICROGRAPHICS

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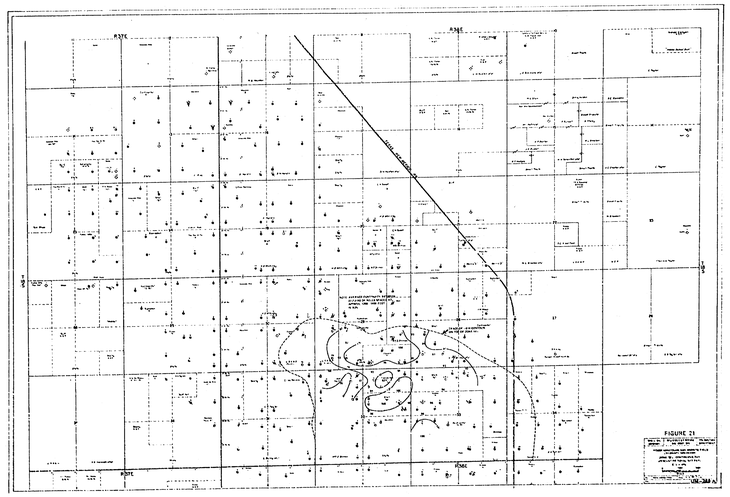

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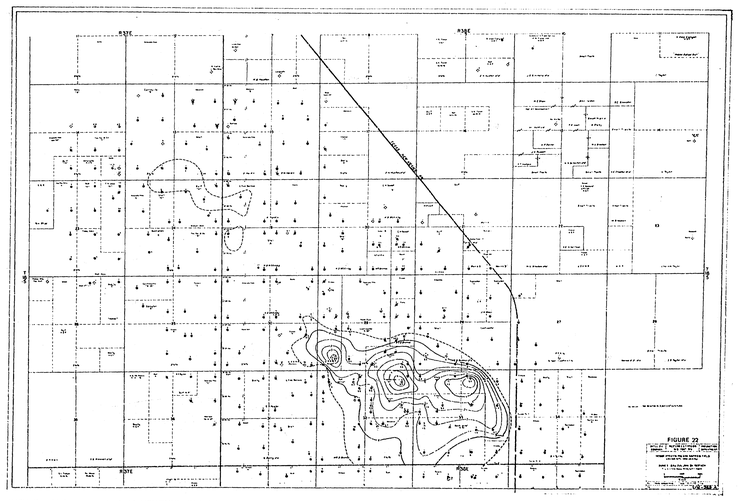
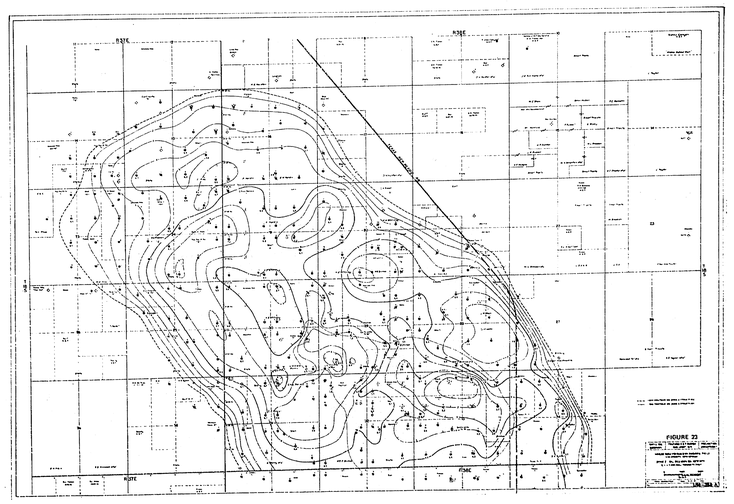


FIGURE 22


R30E
R31E
T20S
T21S
FIGURE 22

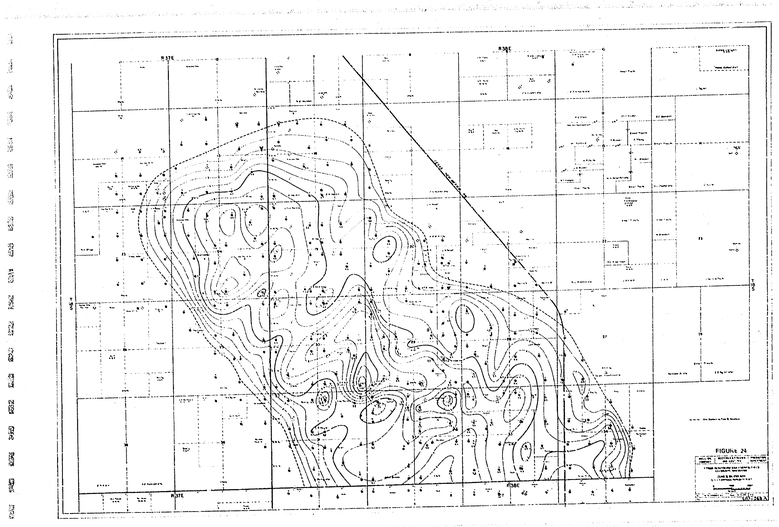


FIGURE 24

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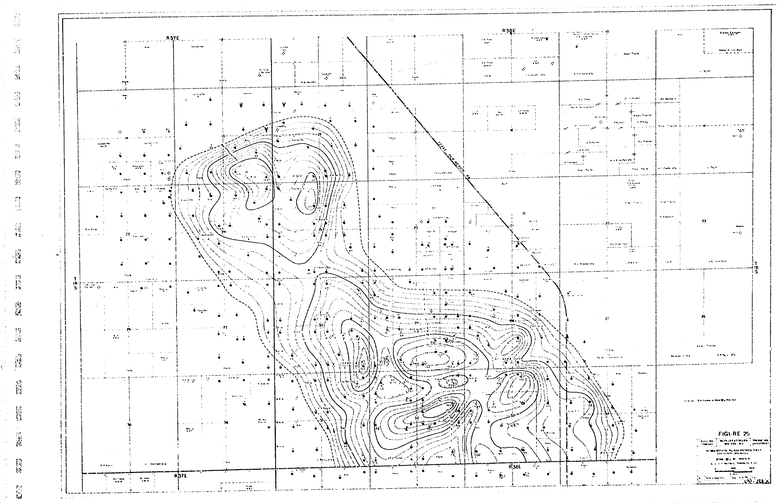

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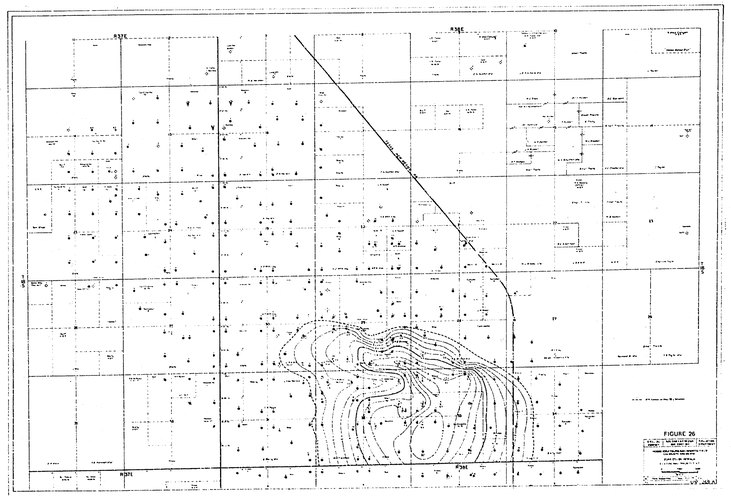

FIGURE 26

U.S.G.S. TOPOGRAPHICS

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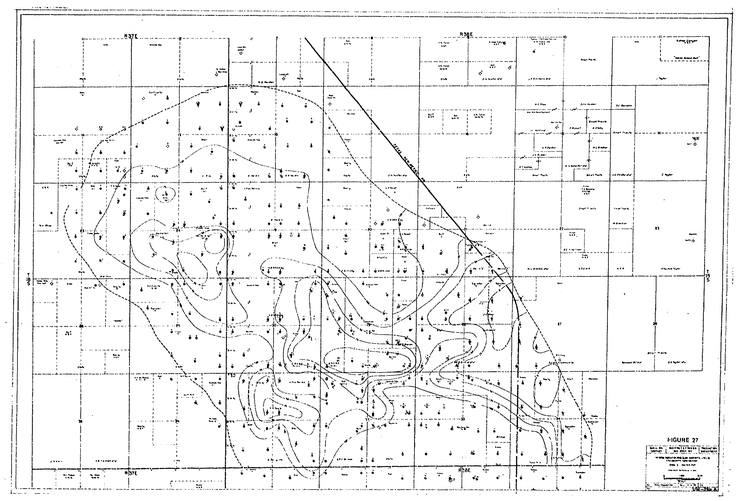

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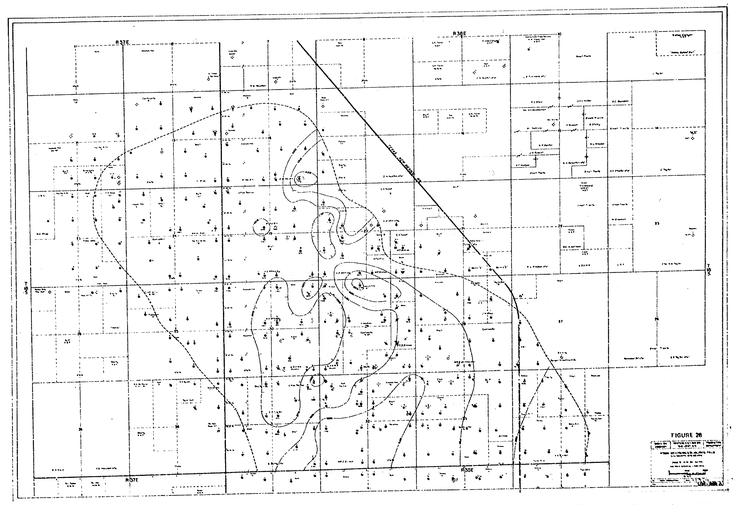

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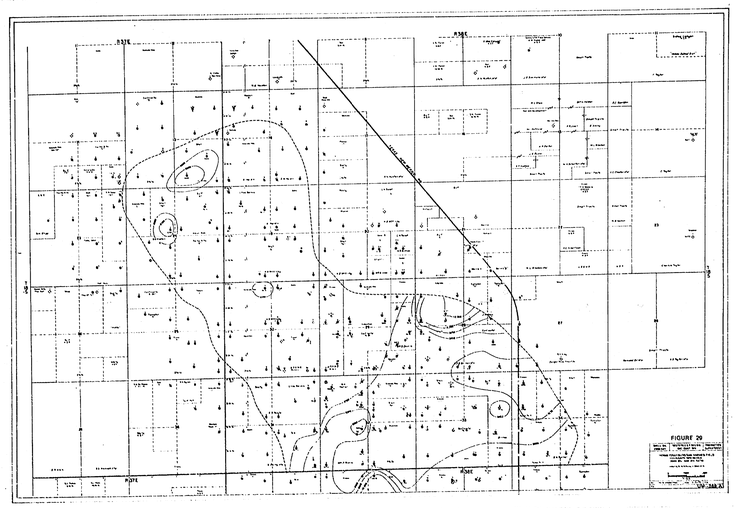

FIGURE 29

U.S.B.C.F. MICROGRAPHICS

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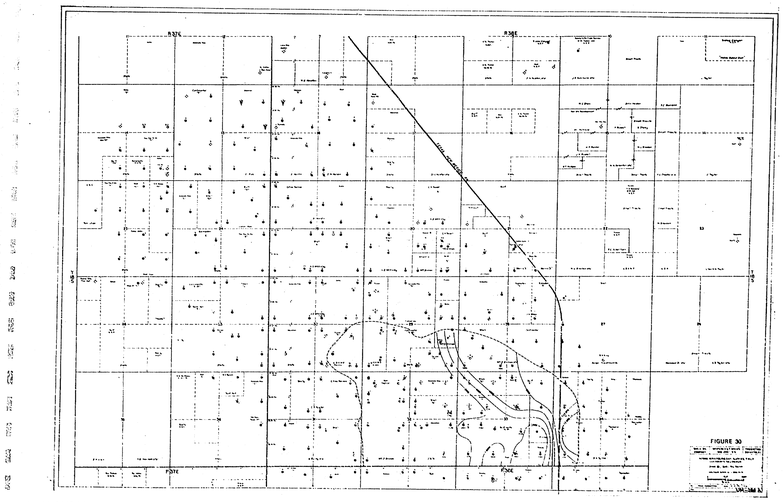

FIGURE 30

BEST AVAILABLE COPY

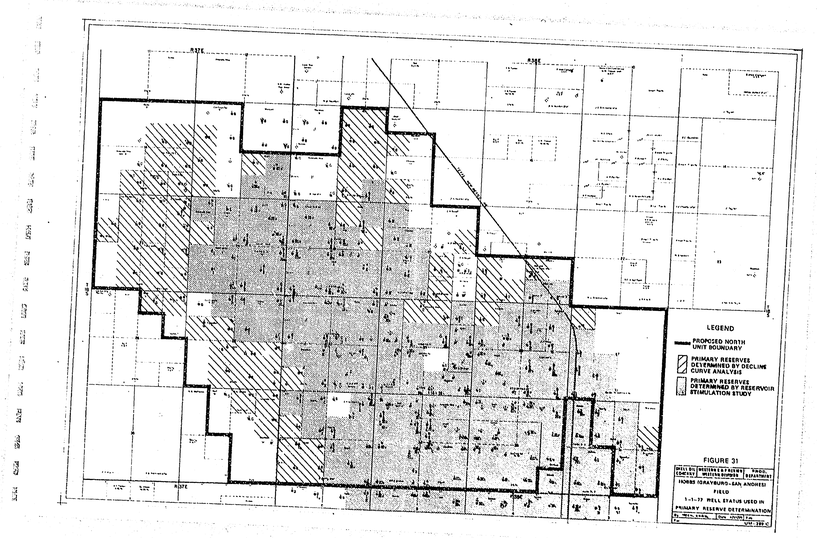

FIGURE 31

HOBBS (GRAYBURG-SAN ANDRES) FIELD

1-1-77 WELL STATUS USED IN PRIMARY RESERVE DETERMINATION

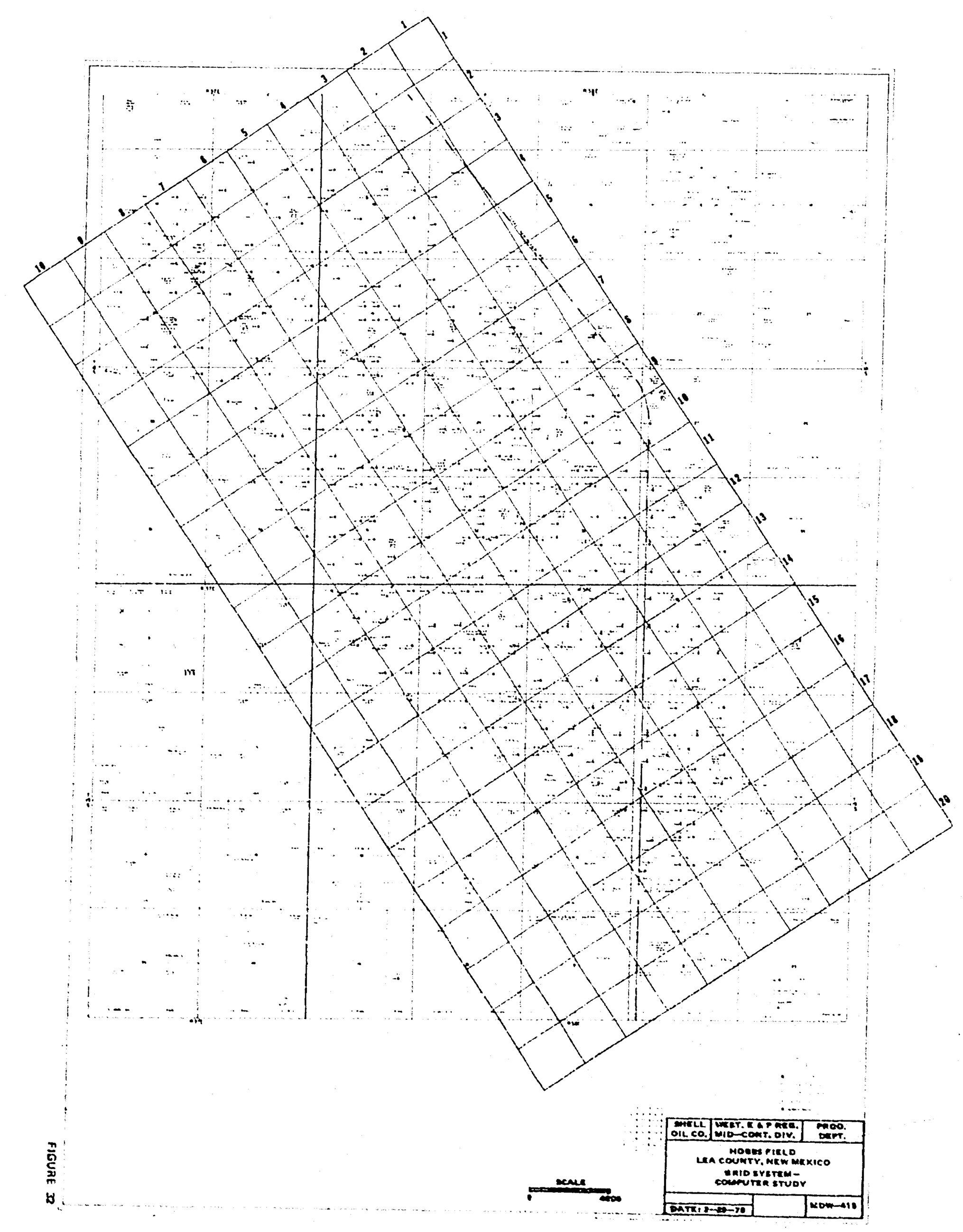

FIGURE 32

V.S.R.C.F. MICROGRAPHICS

BEST AVAILABLE COPY

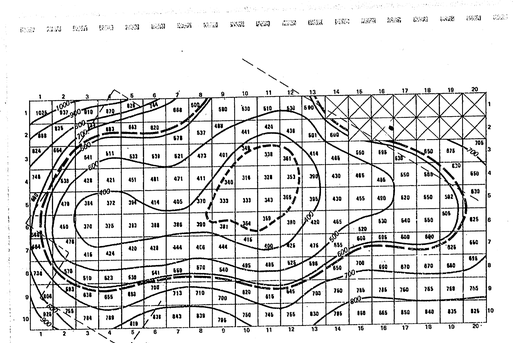

FIGURE 53

SIMULATION STUDY

U.S.B.C.F. MICROGRAPHICS

BEST AVAILABLE COPY

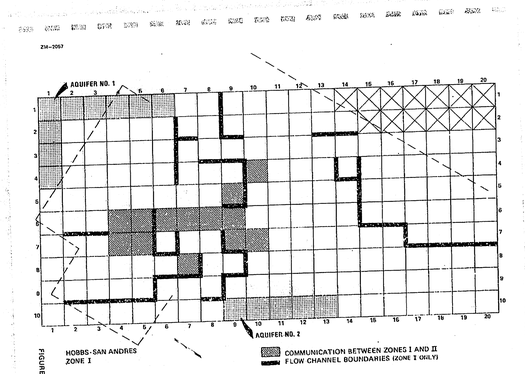

FIGURE 24

SIMULATION STUDY

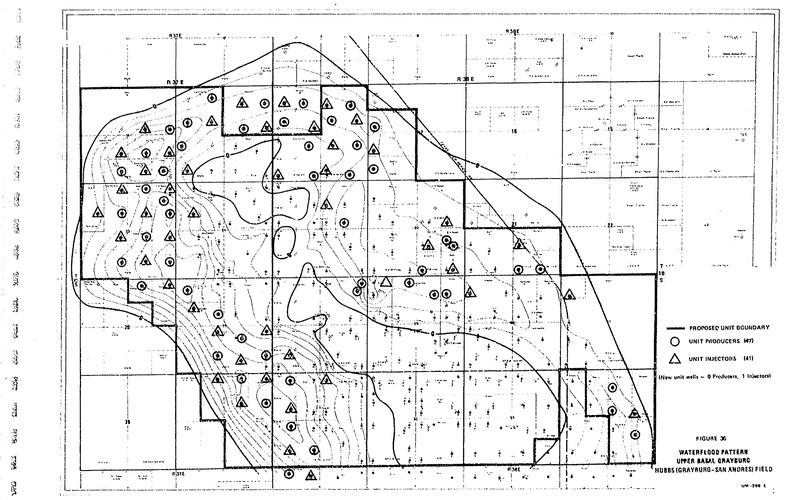

FIGURE 36
WATERFLOOD PATTERN
UPPER BASAL GRAYBURG
HOBBS (GRAYBURG-SAN ANDRES) FIELD

BEST AVAILABLE COPY

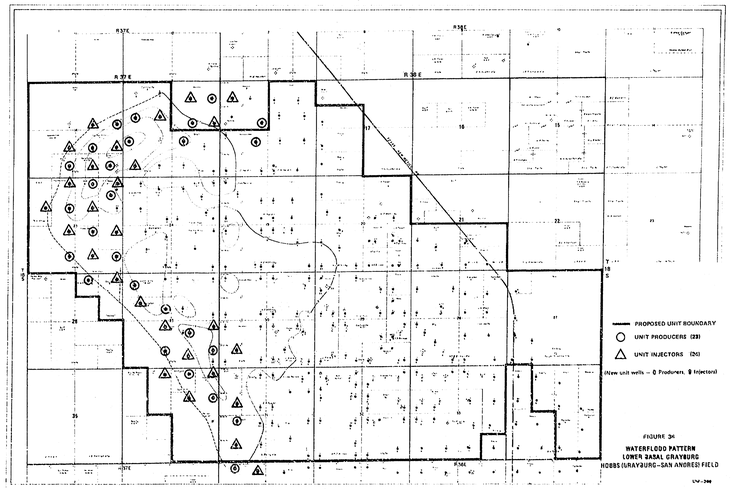

FIGURE 34
WATERFLOOD PATTERN
LOWER BASAL GRAYBURG
HOBBS (GRAYBURG-SAN ANDRES) FIELD

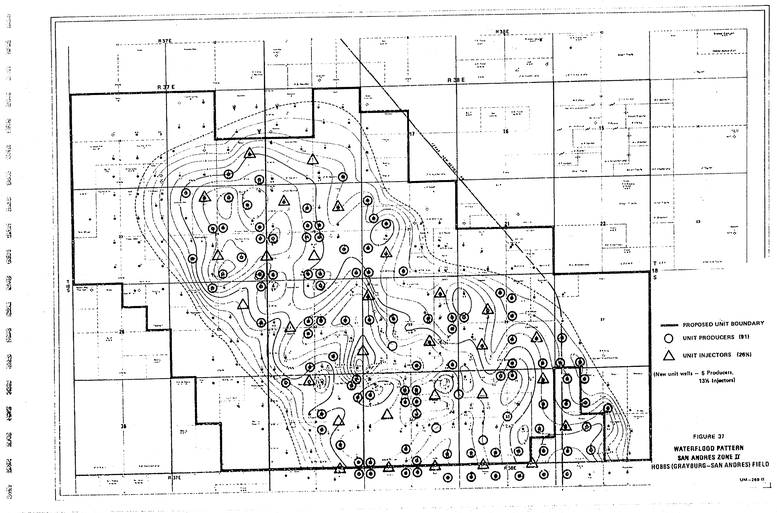

FIGURE 37
WATERFLOOD PATTERN
SAN ANDRES ZONE 2I
HOBBS (GRAYBURG-SAN ANDRES) FIELD

W.E.B.C.I.P. MICROGRAPHICS
BEST AVAILABLE COPY

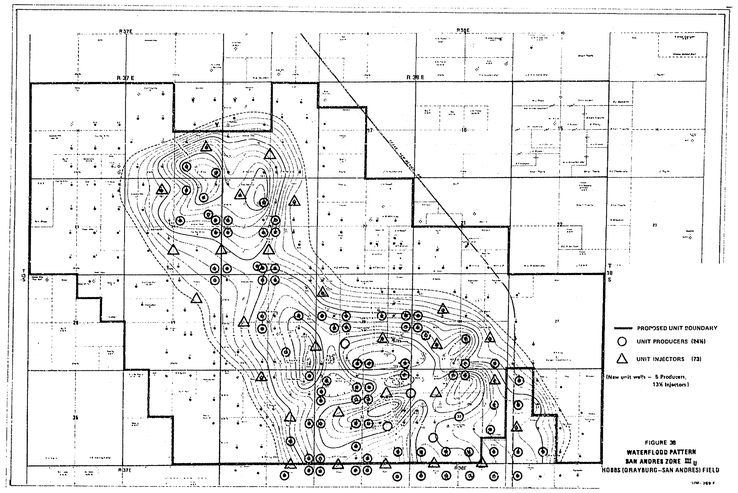

FIGURE 36
WATERFLOOD PATTERN
SAN ANDRES ZONE III
HOBBS (GRAYBURG-SAN ANDRES) FIELD

BEST AVAILABLE COPY

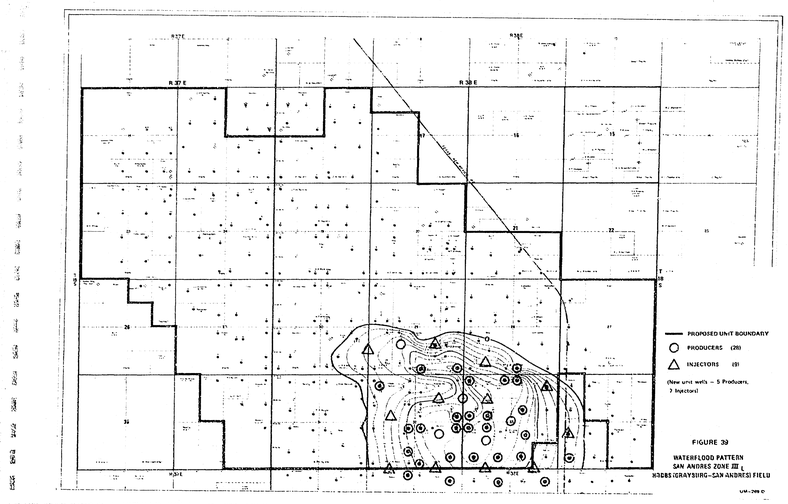

FIGURE 39

WATERFLOOD PATTERN
SAN ANDRES ZONE III
HOBBS (GRAYBURG-SAN ANDRES) FIELD

UM-249 C

U.S.G.S. TOPOGRAPHIC

BEST AVAILABLE COPY

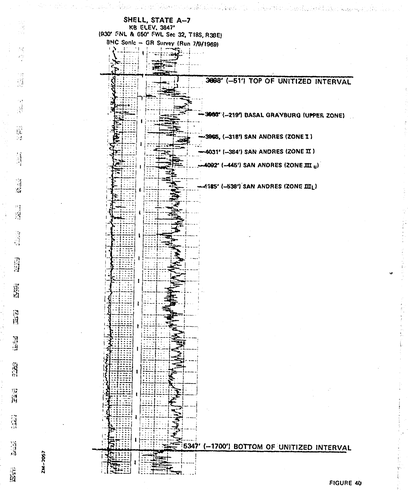

FIGURE 40

BEST AVAILABLE COPY

TABLE 21 B
UNITIZATION PARAMETERS – WELLS, PRODUCTION AND GAS CAP VOLUMETRICS

WIO NO.	WORKING INTEREST OWNER	NO. OF WELLS 1/1/77 USEABLE NO.	USEABLE %	ACTIVE NO.	ACTIVE %	CUMULATIVE OIL PROD. 1/1/77 BBLS.	%	CURRENT PROD., YEAR 1976 OIL BBLS.	%	GAS MCF	%	ORIGINAL GAS CAP GAS IN PLACE GB UPPER MCF	%	GB LOWER MCF	%	GB TOTAL MCF	%	S. A. ZONE I MCF	%	UNIT TOTAL MCF	%	WIO NO.
1	AMERADA HESS CORP.	20.00	8.29875	14.00	6.30631	15788495	9.45367	187029	6.82483	485590	6.42535	5036980	11.10914	30593	12.25355	5067573	11.11037	1225901	14.23996	6292474	11.60727	1
2	AMOCO PRODUCTION CO.	2.00	.82987	2.00	.90090	2327409	1.39370	84756	3.00538	60244	.79715	381137	.84264	0	.00000	381137	.83222	987631	11.47062	1368768	2.49700	2
3	ANDERSON ADA A	.12	.04979	.12	.05405	8807	.00527	431	.01572	3639	.04809	24581	.05419	0	.00000	24581	.05390	0	.00000	24581	.04534	3
4	ANDERSON EST., SAMUEL D.	.12	.04979	.12	.05405	8807	.00527	431	.01573	3639	.04809	24581	.05419	0	.00000	24581	.05390	0	.00000	24581	.04534	4
5	ANDERSON, W D AND SONS	.23	.09544	.23	.10360	17619	.01055	863	.03149	7269	.09618	49162	.10839	0	.00000	49162	.10781	0	.00000	49162	.09069	5
6	ARMSTRONG, J. M.	.23	.09544	.23	.10360	17619	.01055	863	.03149	7269	.09618	49162	.10839	0	.00000	49162	.10781	0	.00000	49162	.09069	6
7	ATLANTIC RICHFIELD CO.	5.00	2.07469	5.00	2.25225	4052701	2.42663	37230	1.35855	221262	2.92775	76102	.16779	0	.00000	76102	.16688	0	.00000	76102	.14038	7
8	BYRON [illegible]	.59	.24481	.59	.26577	119359	.07146	2275	.08302	4723	.06249	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	8
9	CNC OPERATING CO.	1.00	.41494	1.00	.45045	18532	.01110	799	.02916	92	.00096	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	9
10	CHEVRON OIL COMPANY	5.00	2.07469	4.00	1.80180	3634053	2.17594	67903	2.47782	47127	.62359	335940	.74069	0	.00000	335940	.73668	323409	3.75674	659349	1.21628	10
11	CITIES SERVICE OIL CO.	10.38	4.30705	8.28	3.72973	8063921	4.82843	94121	3.43454	80897	1.07043	3018275	6.65454	5482	2.23221	3023757	6.63072	0	.00000	3023757	5.57771	11
12	CONRAD, MARY DANIEL	.06	.02490	.06	.02703	35828	.02145	551	.02011	1133	.01499	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	12
13	CONTINENTAL OIL CO.	22.00	9.12863	20.00	9.00901	15913819	9.52970	256724	9.34290	652536	8.63430	5838840	12.87274	27919	11.97757	5866059	12.86392	1635761	19.00027	7503822	13.84178	13
14	CHILES, HERMAN R.	.09	.03735	.09	.04054	53742	.03218	826	.03014	1697	.02258	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	14
15	CUSACK, J. P.	.76	.31535	.76	.34234	431060	.25810	8986	.32791	28090	.37169	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	15
16	CUSACK, JR., J. P.	1.00	.41494	1.00	.45045	749823	.44900	19931	.72730	49057	.64912	16	.00004	0	.00000	16	.00003	0	.00000	16	.00003	16
17	CUSACK, MICHAEL F.	1.00	.41494	1.00	.45045	749823	.44900	19931	.72730	49057	.64912	16	.00004	0	.00000	16	.00003	0	.00000	16	.00003	17
18	DELHI [illegible]	1.19	.49378	1.19	.53604	68339	.05092	4178	.15246	48215	.63838	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	18
19	DUNLAVEY, J.H.	.05	.02075	.05	.02252	3370	.00202	79	.00288	129	.00171	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	19
20	ESTES, RUSSELL G.	.06	.02490	.06	.02703	4687	.00281	230	.00839	1938	.02565	13110	.02890	0	.00000	13110	.02876	0	.00000	13110	.02418	20
21	EXXON COMPANY - U.S.A.	15.75	6.53527	14.75	6.64414	14379585	8.60999	161905	5.90977	727217	9.62256	3850945	8.49027	23795	9.68471	3874190	8.49562	402759	4.67825	4276949	7.88937	21
22	FIRST ROSWELL COMPANY	.09	.03735	.09	.04054	6340	.00380	158	.00577	251	.00332	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	22
23	FORBES C. C.	.08	.03319	.08	.03604	66276	.03962	2119	.07719	2910	.03851	8863	.01954	0	.00000	8863	.01944	0	.00000	8863	.01635	23
24	FORBES, ISAAC	.07	.02905	.07	.03153	64936	.03858	2059	.07513	2833	.03749	8630	.01903	0	.00000	8630	.01892	0	.00000	8630	.01592	24
25	GETTY OIL COMPANY	21.25	8.81743	21.25	9.57207	16963996	10.15719	236623	8.63952	693187	9.17228	3112093	6.86129	22191	9.01554	3134234	6.87299	16175	.18788	3150409	5.81134	25
26	GULF ENERGY & MINERALS	31.06	[illegible]	31.06	13.99099	19249016	11.52223	285938	10.40053	1081305	14.30787	7353639	16.21212	63786	25.97294	7417420	16.26556	1208959	14.04267	8626379	15.91298	26
27	HEADLEY, KENNETH NOEL	.22	.09129	.22	.09910	117139	.07013	1365	.04981	7357	.09735	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	27
28	HURD, PETER	.06	.02490	.06	.02703	35828	.02145	551	.02011	1133	.01499	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	28
29	JUDSON, RUBY NANDE CO[illegible]	.01	.00415	.01	.00451	7166	.00429	110	.00401	227	.00300	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	29
30	KENNITZ, [illegible]	1.15	.47718	1.15	.51802	1001371	.59959	31995	1.16752	44028	.58258	134116	.29569	0	.00000	134116	.29410	0	.00000	134116	.24738	30
31	LAFLIN, GEORGE P.	.05	.02075	.05	.02252	3370	.00202	79	.00288	129	.00171	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	31
32	LOWE, M. RALPH	.25	.10373	.25	.11261	33881	.02029	1355	.04945	6357	.08412	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	32
33	MARATHON OIL COMPANY	8.00	3.31950	8.00	3.60360	8892553	5.32459	74953	2.91754	253567	3.35541	3271119	7.21199	0	.00000	3271119	7.17316	190222	2.21058	3461937	6.38600	33
34	MCCARTHY, KATHRYN L. C.	.01	.00415	.01	.00451	7166	.00429	110	.00401	227	.00300	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	34
35	MCPETERS, K. D.	.12	.04979	.12	.05405	11397	.00682	372	.01357	1383	.01830	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	35
36	MCPHERSON, MARGARET M.	.18	.07563	.18	.08108	35806	.02144	683	.02492	1417	.01875	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	36
37	MCPHERSON, ROBERT L.	.09	.03734	.09	.04054	17903	.01072	341	.01244	708	.00937	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	37
38	MOBIL OIL CORP.	4.00	1.65975	4.00	1.80180	1729829	1.03577	36179	1.32001	146134	1.93368	38917	.08581	0	.00000	38917	.08534	0	.00000	38917	.07179	38
39	MOMANCO	.32	.13278	.32	.14414	36507	.02306	1420	.05211	6217	.08226	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	39
40	MORAN, W. H.	.47	.19502	.47	.21171	45630	.02732	1389	.05433	5537	.07327	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	40
41	MORRIS, G. D.	.05	.02075	.05	.02252	43538	.02607	1391	.05076	1919	.02533	5831	.01286	0	.00000	5831	.01279	0	.00000	5831	.01076	41
42	MURDOCH, KATHLEEN J. COVERA	.01	.00415	.01	.00451	7166	.00429	110	.00401	227	.00300	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	42
43	NOBLE, RICHARD L.	.61	.25311	.61	.27478	529420	.31700	16715	.61774	23277	.30800	70906	.15633	0	.00000	70906	.15549	0	.00000	70906	.13080	43
44	PARRISH, H.C. ESTATE	.09	.03735	.09	.04054	12712	.00761	508	.01854	2385	.03156	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	44
45	PORTALES NATIONAL BANK	.07	.02905	.07	.03153	65307	.03910	2087	.07616	2871	.03799	8747	.01928	0	.00000	8747	.01918	0	.00000	8747	.01613	45
46	ROWING JOHN	.15	.06224	.15	.06757	130613	.07821	4173	.15228	5743	.07599	17493	.03857	0	.00000	17493	.03836	0	.00000	17493	.03227	46
47	ROSE, FRANCES J. CONRAD	.01	.00415	.01	.00451	7166	.00429	110	.00401	227	.00300	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	47
48	SAMEDAN OIL CORP.	8.47	3.51452	8.47	3.81532	5343952	3.19980	134889	4.92200	246960	3.26117	176939	.38990	0	.00000	176939	.38801	0	.00000	176939	.32596	48
49	SEA PROPERTIES, LTD.	.08	.03734	.08	.04054	71115	.04468	2031	.07411	4092	.05415	3503	.00772	0	.00000	3503	.00767	0	.00000	3503	.00646	49
50	SHELL OIL COMPANY	44.00	18.25726	42.00	18.91892	32997773	19.75823	699766	25.59221	1750281	23.15974	8207192	18.09493	60534	24.77795	8267726	18.13076	2217459	25.76154	10485185	19.34259	50
52	SPALDING, SMITH, ESTATE OF	.05	.02075	.05	.02252	43538	.02607	1391	.05076	1914	.02533	5831	.01286	0	.00000	5831	.01279	0	.00000	5831	.01076	52
53	SPEAR RUSSELL	.02	.00830	.02	.00901	1685	.00101	39	.00142	64	.00085	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	53
54	SULLIVAN, C.G.	.07	.02905	.07	.03153	65307	.03910	2087	.07616	2871	.03799	8747	.01928	0	.00000	8747	.01918	0	.00000	8747	.01613	54
55	SUN OIL CO. (DELAWARE)	2.00	.82987	2.00	.90090	901669	.53989	9502	.34675	63931	.84596	32952	.07265	0	.00000	32952	.07226	0	.00000	32952	.06078	55
56	SWEET, MILL C.	1.00	.41494	1.00	.45045	822581	.49254	1112	.04058	3110	.04115	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	56
57	S[illegible] OIL CO.	7.00	2.90456	5.00	2.25225	1033333	.61873	4755	.15433	137937	1.81851	239183	.52733	0	.00000	239183	.52450	0	.00000	239183	.44118	57
58	TATE, H.C., ESTATE	.15	.06224	.15	.06757	130613	.07821	4173	.15228	5743	.07599	17493	.03857	0	.00000	17493	.03836	0	.00000	17493	.03227	58
59	TEXACO, INC.	4.00	1.65975	4.00	1.80180	4474336	2.68027	92771	3.37257	206161	2.72839	1139791	2.51293	27	.01099	1139818	2.49950	0	.00000	1139818	2.10254	59
60	TEXAS PACIFIC OIL CO.	10.00	4.14938	10.00	4.50451	4721651	2.82718	135886	4.95346	191819	2.53809	1828923	4.03231	10365	4.07636	1839288	4.03339	0	.00000	1839288	3.39273	60
61	TREADAWAY, BETTYE CONRAD	.01	.00415	.01	.00451	7166	.00429	110	.00401	227	.00300	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	61
62	TWO STATES OIL CO.	.38	.15768	.38	.17117	190133	.11386	1415	.05693	16934	.22406	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	62
63	WALLACE, COLLEEN MCPHERSON	.09	.03734	.09	.04054	17903	.01072	341	.01244	708	.00937	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	63
64	WHITLEY, [illegible]	.05	.02075	.05	.02252	3370	.00202	79	.00288	129	.00171	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	64
65	WILLIAMS, HATTIE C.	.12	.04979	.12	.05405	97358	.05829	2407	.08783	2220	.02937	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	65
66	WILLIAMSON, [illegible]	.05	.02075	.05	.02252	3370	.00202	79	.00288	129	.00171	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	66
67	WISER OIL COMPANY, THE	2.00	.82987	2.00	.90090	550398	.32956	6448	.23989	31876	.41990	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	67
68	YATES, JOHN A.	3.00	1.24481	3.00	1.35135	433365	.25949	6824	.21251	30671	.39124	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	68
69	YEAGER & ARMSTRONG	.23	.09544	.23	.10360	17619	.01055	863	.03149	7269	.09610	49162	.10839	0	.00000	49162	.10781	0	.00000	49162	.09069	69
70	YEAGER JR., [illegible]	.05	.01660	.05	.01802	33312	.01994	359	.01310	237	.00314	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	70
71	YEAGER RUTH ANNE	.03	.01245	.03	.01351	17295	.01035	767	.02799	549	.00726	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	71
72	YEAGER RUTH/HELEN	.01	.00415	.01	.00451	5931	.00355	92	.00336	189	.00250	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	72
73	YEAGER RUTH PEELER	.04	.01660	.04	.01802	25023	.01498	385	.01405	791	.01047	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	73
		241.00	100.00000	222.00	100.00000	167003173	100.00000	2740529	100.00000	7557319	100.00000	45356825	100.00000	245596	100.00000	45602216	100.00000	8609185	100.00000	54211376	100.00000	

TABLE 22 A

UNITIZATION PARAMETERS – ORIGINAL OIL IN PLACE

TR.	TRACT NAME	PRODUCTIVE ACRES		BASAL GRAYBURG UPPER ZONE		BASAL GRAYBURG LOWER ZONE		BASAL GRAYBURG TOTALS		SAN ANDRES ZONE I		SAN ANDRES ZONE II		SAN ANDRES ZONE III U		SAN ANDRES ZONE III L		SAN ANDRES TOTALS		UNIT TOTALS		TR.
NO.	OPERATOR – LEASE	ACRES	%	STB	%	STB	%	STB	%	STB	%	STB	%	STB	%	STB	%	STB	%	STB	%	NO.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TABLE 22 B

UNITIZATION PARAMETERS – ORIGINAL OIL IN PLACE

WIO NO.	WORKING INTEREST OWNER	PRODUCTIVE ACRES ACS.	PRODUCTIVE ACRES %	BASAL GRAYBURG UPPER ZONE STB	UPPER ZONE %	LOWER ZONE STB	LOWER ZONE %	BASAL GRAYBURG TOTALS STB	TOTALS %
1	AMERADA HESS CORP.	791.55	10.17129	5749471	10.52773	[illegible]	7.38886	[illegible]	10.19277
2	AMOCO PRODUCTION CO.	.00	.00000	0	.00000	0	.00000	0	.00000
3	[illegible]	4.69	.06027	47262	.08654	34980	.27342	82242	.13358
4	[illegible]	4.69	.06027	47262	.08654	34980	.27342	82242	.13358
5	[illegible]	9.37	.12040	94524	.17307	69961	.54684	164485	.26717
6	[illegible]	9.37	.12040	94524	.17307	69961	.54684	164485	.26717
7	ATLANTIC RICHFIELD CO.	200.00	2.56997	1927813	[illegible]	0	.00000	1927813	2.31919
8	[illegible]	23.49	.30120	[illegible]	[illegible]	[illegible]	[illegible]	342702	.68912
9	[illegible]	75.20	.96631	141974	.27439	1170	.01741	143094	.26483
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	.00000	1588959	1.39484
11	CITIES SERVICE OIL CO.	261.80	3.36409	1313496	2.39792	19674	.22335	1333170	2.14592
12	[illegible]	1.60	.01212	10147	.01445	0	.00000	10147	.01498
13	CONTINENTAL OIL CO.	512.40	6.59148	3122568	5.67777	1327681	[illegible]	5476249	7.30197
14	[illegible]	3.35	.04819	15220	.02767	0	.00000	15220	.02472
15	[illegible]	75.22	.23150	58473	.10632	0	.00000	56973	.09498
16	[illegible]	[illegible]	[illegible]	182483	.33181	0	.00000	182483	.29480
17	[illegible]	[illegible]	.31399	182983	.33181	0	.00000	182983	.29650
18	[illegible]	23.98	[illegible]	185208	.33908	0	.00000	185208	.30732
19	[illegible]	2.90	.03726	9830	.01787	0	.00000	9830	.01597
20	[illegible]	2.50	.03212	25204	.04583	17659	.28396	32862	.07129
21	EXXON COMPANY U.S.A.	433.20	5.57292	4294568	7.79063	486452	7.55637	4781021	7.76563
22	[illegible]	5.60	.07952	19440	.03535	0	.00000	19440	.03193
23	[illegible]	3.05	.03918	40960	.07448	9560	.13951	50520	.08206
24	[illegible]	2.98	.03803	[illegible]	[illegible]	[illegible]	[illegible]	58171	.02970
25	GETTY OIL COMPANY	875.42	11.24900	6455367	11.71053	349135	5.59237	6804502	11.05230
26	[illegible]	774.20	10.23105	3398613	6.17720	125117	1.90537	3523730	5.72354
27	[illegible]	8.25	.11299	26997	.04909	0	.00000	26997	.04385
28	[illegible]	1.60	.01232	10147	.01845	0	.00000	10147	.01498
29	[illegible]	.50	.00643	2029	.00369	0	.00000	2029	.00330
30	[illegible]	46.00	.59108	[illegible]	[illegible]	[illegible]	[illegible]	748957	1.29166
31	[illegible]	2.90	.03726	9830	.01787	0	.00000	9830	.01597
32	[illegible]	6.27	.06172	8518	.01549	0	.00000	8518	.01383
33	MARATHON OIL COMPANY	153.20	1.96459	1445136	2.62769	278363	4.22468	1723599	5.79991
34	[illegible]	.50	.00643	2029	.00369	0	.00000	2029	.00330
35	[illegible]	5.39	.06962	16340	.02971	0	.00000	16340	.02459
36	[illegible]	3.03	.05033	[illegible]	[illegible]	[illegible]	[illegible]	106810	.17674
37	[illegible]	4.52	.05923	52476	.09542	2430	.02938	54906	.08857
38	MOBIL OIL CORP.	156.00	2.00457	2694672	4.90227	[illegible]	[illegible]	2745738	4.45997
39	[illegible]	10.25	.13175	27696	.05027	0	.00000	27696	.04490
40	[illegible]	21.37	.22382	65348	.11882	0	.00000	65348	.10617
41	[illegible]	2.00	.02570	26946	.04900	6289	.09572	33237	.05399
42	[illegible]	.50	.00643	2029	.00369	0	.00000	2029	.00330
43	[illegible]	24.32	.31251	327697	.59583	76476	1.17552	404140	.65646
44	[illegible]	1.98	.02559	3176	.00581	0	.00000	3176	.00517
45	[illegible]	3.00	.03855	40425	.07350	9434	.13959	49855	.08098
46	[illegible]	6.00	.07710	80853	.14700	18867	.28717	99710	.16196
47	[illegible]	.50	.00643	2029	.00369	0	.00000	2029	.00330
48	[illegible]	331.27	4.25677	2804694	5.09973	334135	5.08977	3138803	5.09825
49	[illegible]	3.60	.04626	27216	.04949	3276	.05744	30492	.05018
50	SHELL OIL COMPANY	1251.40	16.19338	6550322	11.91055	772990	11.82906	7323312	11.90132
52	[illegible]	3.00	.03855	29846	.05500	3393	.05633	33231	.05397
53	[illegible]	1.45	.01863	4915	.00894	0	.00000	4915	.00798
54	[illegible]	3.00	.03855	40421	.07350	9434	.13959	49865	.08098
55	SUN OIL CO.	24.00	.30840	1541966	2.80212	115581	1.77945	1657697	2.69295
56	[illegible]	80.21	1.02799	565367	1.02799	0	.00000	565367	.91828
57	[illegible]	370.00	4.11195	2607072	4.79095	351661	5.35253	2958733	4.80576
58	[illegible]	6.00	.07710	80853	.14700	17867	.28717	98210	.16181
59	[illegible]	160.00	2.05597	1065149	1.93679	167937	2.55843	1233596	2.00206
60	[illegible]	480.00	6.16792	3229102	5.87148	823727	12.53731	4053839	6.58396
61	[illegible]	.50	.00643	2029	.00369	0	.00000	2029	.00330
62	[illegible]	15.00	.19275	35331	.06424	0	.00000	35331	.05739
63	[illegible]	3.52	.04523	52476	.09542	2430	.02938	54906	.08837
64	[illegible]	2.90	.03726	9830	.01787	0	.00000	9830	.01597
65	[illegible]	9.69	.12227	31377	.05705	0	.00000	31377	.05096
66	[illegible]	2.90	.03726	9830	.01787	0	.00000	9830	.01597
67	[illegible]	80.00	1.02799	569307	1.03517	819	.01247	570174	.92603
68	[illegible]	134.00	1.54498	1846930	3.35291	1158022	[illegible]	3004762	3.16628
69	[illegible]	9.37	.12040	94524	.17187	69961	1.06484	164985	.26717
70	[illegible]	1.63	.02094	6609	.01202	0	.00000	6609	.01073
71	[illegible]	1.21	.01555	4912	.00893	0	.00000	4912	.00798
72	[illegible]	.42	.00540	1591	.00307	0	.00000	1591	.00275
73	[illegible]	1.75	.02249	7037	.01280	0	.00000	7037	.01151
		7782.29	100.00000	54996356	100.00000	6569934	100.00000	61566290	100.00000

WIO NO.	SAN ANDRES ZONE I STB	ZONE I %	ZONE II STB	ZONE II %	ZONE III STB	ZONE III %	ZONE III L STB	ZONE III L %	SAN ANDRES TOTALS STB	TOTALS %	UNIT TOTALS STB	UNIT TOTALS %
1	13237833	7.71332	13650524	9.11604	13654532	8.91475	1675728	4.21885	42470521	8.21351	48475490	8.42923
2	2559924	1.49064	2152524	1.50746	4012042	2.64610	3007001	7.61048	10226695	1.94006	10226695	1.76912
3	61099	.03560	33133	.02213	247	.00017	0	.00000	94479	.01830	176734	.03057
4	61099	.03560	33133	.02213	247	.00017	0	.00000	94479	.01830	176734	.03063
5	122189	.07120	66265	.04425	535	.00034	0	.00000	188989	.03659	353474	.06115
6	122189	.07120	66265	.04426	535	.00036	0	.00000	188989	.03659	353474	.06115
7	5269234	3.07025	2290655	1.53389	1192187	.79720	0	.00000	8752067	1.79132	10679880	1.84759
8	29683	.01934	0	.00000	0	.00000	0	.00000	29683	.00576	387386	.06702
9	0	.00000	0	.00000	0	.00000	0	.00000	0	.00000	143094	.02821
10	4029932	2.32724	3981342	2.65940	3412642	2.03181	2201331	5.54310	14840077	2.88134	16290874	2.72315
11	9579193	5.58153	8753211	5.95555	11892328	7.62083	41010	.10328	30217742	5.85672	31550912	5.45821
12	36667	.02136	0	.00000	0	.00000	0	.00000	36657	.00710	46804	.00810
13	18478692	10.88352	16598071	11.01104	23047359	15.83159	11571181	29.13103	69795272	13.51179	74280521	12.85029
14	54985	.03204	0	.00000	0	.00000	0	.00000	54985	.01065	70205	.01215
15	50255	.02928	2025	.00135	0	.00000	0	.00000	52280	.01012	110753	.01916
16	1029174	.59967	168234	.11236	60675	.03908	0	.00000	1258087	.24356	1440570	.24921
17	1029174	.59767	168234	.11235	60675	.03905	0	.00000	1258087	.24359	1440570	.24921
18	67612	.04054	0	.00000	0	.00000	0	.00000	69612	.01348	258820	.04478
19	2391	.00139	75	.00005	0	.00000	0	.00000	2461	.00048	12291	.00213
20	32585	.01899	17671	.01180	143	.00009	0	.00000	50398	.00976	99260	.01631
21	12817691	7.46868	13356250	8.91954	12287368	7.90722	1307461	3.21094	39770970	7.70331	44551991	7.70727
22	9783	.00229	150	.00009	0	.00000	0	.00000	4923	.00096	29843	.00926
23	68188	.03973	60952	.05070	12045	.00775	0	.00000	141180	.02733	191700	.03316
24	66395	.03869	57355	.03963	11728	.00756	0	.00000	137466	.02663	186667	.03229
25	16325733	9.51255	13779022	9.15515	11098159	7.15175	350939	.88303	41574683	8.03593	48303185	8.35630
26	22089895	12.87119	20150422	13.95697	28744773	18.49810	4490020	11.54821	77276618	14.96976	81499286	14.09911
27	72958	.04251	0	.00000	0	.00000	0	.00000	72958	.01413	99955	.01729
28	36657	.02136	0	.00000	0	.00000	0	.00000	36657	.00710	46804	.00810
29	7331	.00927	0	.00000	0	.00000	0	.00000	7331	.00142	9360	.00162
30	1031795	.60120	422232	.03578	182267	.11729	0	.00000	3136294	.61362	3885231	.50182
31	2391	.00139	75	.00005	0	.00000	0	.00000	2461	.00048	12291	.00213
32	279	.00016	0	.00000	0	.00005	0	.00000	279	.00005	8797	.00152
33	7599765	4.42830	7729172	5.27191	8756137	5.63359	5418187	13.64273	29474553	5.70481	31920652	5.51957
34	2331	.00927	0	.00000	0	.00000	0	.00000	2331	.00143	9360	.00162
35	3640	.00212	15	.00037	0	.00005	0	.00000	3795	.00073	20097	.00347
36	2406	.00931	0	.00000	0	.00005	0	.00000	3405	.00193	116215	.02010
37	3702	.00216	0	.00000	0	.00005	0	.00000	3702	.00072	58108	.01005
38	1763614	1.02755	635532	.42395	1257	.00081	0	.00000	2379957	.46456	5166235	.89376
39	5095	.00294	199	.00009	0	.00000	0	.00000	5195	.00105	32631	.00564
40	15552	.00905	317	.00028	0	.00000	0	.00000	16924	.00298	80359	.01390
41	99861	.02819	40092	.02675	7929	.00513	0	.00000	92683	.01794	171337	.02182
42	7331	.00927	0	.00000	0	.00000	0	.00000	7331	.00142	9360	.00162
43	545505	.31785	487540	.32561	94359	.06293	0	.00000	1179991	.21148	1533603	.26531
44	105	.00006	0	.00000	0	.00000	0	.00000	105	.00002	3301	.00057
45	67291	.03921	60145	.04017	11984	.00744	0	.00000	139322	.02697	189177	.03273
46	134582	.07842	120291	.08033	23773	.01530	0	.00000	278696	.05395	378356	.06545
47	7331	.00427	0	.00000	0	.00000	0	.00000	2331	.00145	9360	.00162
48	5165582	3.02208	2515905	1.58017	591288	.37807	0	.00000	8293295	1.60307	11932583	1.97407
49	88867	.05166	33352	.02251	8388	.00550	0	.00000	131214	.02457	182104	.02806
50	31298092	18.20737	29960129	19.99111	31345393	20.16950	7155512	18.01535	99628021	19.29103	106956133	18.50307
52	49861	.02413	50032	.03421	3923	.00610	0	.00000	13882	.02398	134117	.02183
53	1194	.00070	35	.00002	0	.00000	0	.00000	1231	.00206	6146	.00106
54	67291	.03921	60145	.04017	11984	.00744	0	.00000	139322	.02698	189177	.03273
55	1153876	.67233	520593	.39766	3352	.00216	0	.00000	1677623	.32486	3335920	.57703
56	2010873	1.17168	316130	.21096	0	.00000	0	.00000	2326003	.45036	2891363	.50020
57	3001601	1.74895	1023993	.67084	14895	.00958	0	.00000	4070489	.77594	4979222	1.20738
58	135583	.07882	120291	.08033	23723	.01530	0	.00000	374684	.05374	374356	.06545
59	4574075	2.72578	3463172	2.31277	608382	.39151	0	.00000	8775629	1.69409	9982225	1.72689
60	5532962	3.22361	5463366	3.78308	2825949	1.81874	0	.00000	14031283	2.71470	18085121	3.12874
61	7331	.00427	0	.00000	0	.00000	0	.00000	2331	.00142	9360	.00162
62	53920	.03142	0	.00000	0	.00000	0	.00000	53920	.01044	89261	.01544
63	3702	.00216	0	.00000	0	.00000	0	.00000	3702	.00072	58108	.01005
64	2391	.00139	70	.00005	0	.00000	0	.00000	2461	.00048	12291	.00213
65	72618	.04231	54719	.03659	14939	.00961	0	.00000	142276	.02754	173653	.03007
66	2391	.00139	70	.00005	0	.00000	0	.00000	2461	.00048	12291	.00213
67	367979	.21912	0	.00000	0	.00000	0	.00000	367974	.07115	937603	.16220
68	546310	.31775	6213	.00398	0	.00050	0	.00000	556623	.10458	3555225	.59205
69	122189	.07120	66265	.03425	535	.00034	0	.00000	188989	.03659	353474	.06115
70	23856	.01390	0	.00000	0	.00000	0	.00000	23856	.00462	30460	.00527
71	17797	.01034	0	.00000	0	.00000	0	.00000	17797	.00344	22659	.00392
72	6109	.00356	0	.00000	0	.00000	0	.00000	6109	.00118	7800	.00135
73	25601	.01992	0	.00000	0	.00000	0	.00000	25601	.00496	32698	.00566
	171621083	100.00009	149751518	100.00000	155394215	100.00000	39720050	100.00000	516476977	100.00000	578043267	100.00000

TABLE 23 A

PRIMARY OIL RESERVES AND ULTIMATE OIL RECOVERY

TR. NO.	TRACT NAME OPERATOR – LEASE	PRIMARY OIL RESERVES: GRAYBURG BBLS	GRAYBURG %	S.A. ZONE I BBLS	S.A. ZONE I %	S.A. ZONE II BBLS	S.A. ZONE II %	S.A. ZONE III BBLS	S.A. ZONE III %	S.A. TOTAL BBLS	S.A. TOTAL %	UNIT TOTAL BBLS	UNIT TOTAL %	ULTIMATE OIL REC.* BBLS	ULTIMATE OIL REC.* %	TR. NO.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	100.00000	[illegible]	100.00000	[illegible]	100.00000	[illegible]	100.00000	[illegible]	100.00000	[illegible]	100.00000	[illegible]	100.00000	

*INCLUDES AN ADJUSTMENT OF AN ADDITIONAL [illegible] BARRELS OF OIL FOR LOST PRODUCTION FROM 3 WELLS ([illegible]) WHICH WERE SHUT IN FOR SPECIAL BHP BUILD-UP SURVEYS REQUESTED BY THE TECHNICAL COMMITTEE

N.R.R.C.F. MICROGRAPHICS

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TABLE 33-B

PRIMARY OIL RESERVES AND ULTIMATE OIL RECOVERY

MAP NO.	WORKING INTEREST OWNER	PRIMARY OIL RESERVES												ULTIMATE OIL RECOVERY *		MAP NO.
		GRAYBURG		S.A. ZONE I		S.A. ZONE II		S.A. ZONE III		S.A. TOTAL		UNIT TOTAL				
		BBLS.	%	BBLS.	%	BBLS.	%	BBLS.	%	BBLS.	%	BBLS.	%	BBLS.	%	
1	AMERADA HESS CORP.	1756494	10.3744%	1222126	6.7917%	749761	4.2447%	549534	4.7433%	2899105	6.1455%	4755699	8.1488%	6654804	8.1488%	1
2	AMERADA HESS CORP. ET. AL.	1689	.0975%	0	.0000%	0	.0000%	0	.0000%	0	.0000%	1689	.0029%	2364	.0029%	2
3	AMERADA HESS CORP.	1689	.0975%	0	.0000%	0	.0000%	0	.0000%	0	.0000%	1689	.0029%	2364	.0029%	3
4	AMERADA HESS CORP., MARTHA W.	1689	.0975%	0	.0000%	0	.0000%	0	.0000%	0	.0000%	1689	.0029%	2364	.0029%	4
5	AMERADA HESS CORP., ET AL, Amoco	1689	.0975%	0	.0000%	0	.0000%	0	.0000%	0	.0000%	1689	.0029%	2364	.0029%	5
6	AMERADA...., J. H.	3016	.1741%	0	.0000%	0	.0000%	0	.0000%	0	.0000%	3016	.0052%	4222	.0052%	6
7	ATLANTIC RICHFIELD CO.	69540	4.0154%	45126	2.5076%	14997	.8489%	8127	.7016%	68270	1.4469%	137810	2.3624%	192934	2.3624%	7
8	BAKER, J. A.	3016	.1741%	0	.0000%	0	.0000%	0	.0000%	0	.0000%	3016	.0052%	4222	.0052%	8
9	BAY PETROLEUM CO.	7545	.4356%	0	.0000%	0	.0000%	0	.0000%	0	.0000%	7545	.0129%	10563	.0129%	9
10	BELCO DEVELOPMENT CO.	0	.0000%	1227972	6.8242%	1276619	7.2307%	1076744	9.2959%	3581335	7.5900%	3581335	6.1402%	5014669	6.1402%	10
11	BELCO DEVELOPMENT CO., ET AL	0	.0000%	1227972	6.8242%	1276619	7.2307%	1076744	9.2959%	3581335	7.5900%	3581335	6.1402%	5014669	6.1402%	11
12	BENNETT, HUNT TRUST,	21745	1.2556%	0	.0000%	0	.0000%	0	.0000%	0	.0000%	21745	.0373%	30443	.0373%	12
13	BENNETT, HUNTER W.,	0	.0000%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	10722	.0184%	15011	.0184%	13
14	BIRGE, HUNTER W.,	0	.0000%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	10722	.0184%	15011	.0184%	14
15	BIRGE, J. R.,	0	.0000%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	10722	.0184%	15011	.0184%	15
16	BIRGE, HUNTER W.,	0	.0000%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	10722	.0184%	15011	.0184%	16
17	BISHOP, RICHARD,	0	.0000%	41044	2.2810%	42647	2.4161%	36634	3.1624%	120325	2.5503%	120325	2.0631%	168455	2.0631%	17
18	BOLACK, LOUISE, ESTATE OF	3016	.1741%	0	.0000%	0	.0000%	0	.0000%	0	.0000%	3016	.0052%	4222	.0052%	18
19	BOLACK, WILLIAM,	0	.0000%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	10722	.0184%	15011	.0184%	19
20	BOLACK, WILLIAM, ESTATE	0	.0000%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	10722	.0184%	15011	.0184%	20
21	BOYDSTUN, MARVIN,	0	.0000%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	10722	.0184%	15011	.0184%	21
22	BRIDGES, FLOYD,	3016	.1741%	0	.0000%	0	.0000%	0	.0000%	0	.0000%	3016	.0052%	4222	.0052%	22
23	BRIDGES, FLOYD, ESTATE	0	.0000%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	10722	.0184%	15011	.0184%	23
24	BRIDGES, R. L., Estate	0	.0000%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	10722	.0184%	15011	.0184%	24
25	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	25
26	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	26
27	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	27
28	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	28
29	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	29
30	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	30
31	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	31
32	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	32
33	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	33
34	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	34
35	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	35
36	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	36
37	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	37
38	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	38
39	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	39
40	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	40
41	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	41
42	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	42
43	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	43
44	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	44
45	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	45
46	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	46
47	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	47
48	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	48
49	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	49
50	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	50
51	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	51
52	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	52
53	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	53
54	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	54
55	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	55
56	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	56
57	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	57
58	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	58
59	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	59
60	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	60
61	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	61
62	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	62
63	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	63
64	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	64
65	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	65
66	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	66
67	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	67
68	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	68
69	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	69
70	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	70
71	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	71
72	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	72
73	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	73
74	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	74
75	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	75
76	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	76
77	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	77
78	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	78
79	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	79
80	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	80
81	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	81
82	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	82
83	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	83
84	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	84
85	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	85
86	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	86
87	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	87
88	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	88
89	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	89
90	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	90
91	BRIDGES, R. L., Estate	3016	.1741%	10722	.0596%	0	.0000%	0	.0000%	0	.0000%	13738	.0236%	19233	.0236%	91
		17326216	100.0000%	17979544	100.0000%	11799544	100.0000%	7743984	100.0000%	29543072	100.0000%	58412832	100.0000%	81777965	100.0000%	

* INCLUDES AN ADJUSTMENT OF AN ADDITIONAL 100 BARRELS OF OIL PER "LOST" PRODUCTION FROM THOSE WELLS DRILLED AND PRODUCING WITH UNIT IN FOR SPECIAL SPP RULES. SPP REVIEWED PARAMETERS OF THIS TECHNICAL COMMITTEE

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TABLE 24 A
UNITIZATION PARAMETERS – SECONDARY OIL RESERVES

TR NO.	TRACT NAME / OPERATOR – LEASE	GRAYBURG UPPER & LOWER BBLS.	GRAYBURG UPPER & LOWER %	SAN ANDRES ZONE II BBLS.	ZONE II %	ZONE III_U BBLS.	ZONE III_U %	ZONE III_L BBLS.	ZONE III_L %	TOTALS BBLS.	TOTALS %	UNIT TOTALS BBLS.	UNIT TOTALS %	TR NO.
1	GETTY - STATE B	77157	1.17617	0	.00000	0	.00000	0	.00000	0	.00000	77157	.13970	1
2	AMERADA HESS-STATE NMB	113816	1.73500	975	.00236	0	.00000	0	.00000	975	.00087	114791	.20496	2
3	GULF - LEA FO STATE	46155	.70358	0	.00000	0	.00000	0	.00000	0	.00000	46155	.08241	3
4	TEXAS PACIF-STATE Y AC1	157402	2.40552	3173	.01543	0	.00000	0	.00000	3173	.00852	160575	.29182	4
5	ESTES ENGR. - STATE	74778	1.13991	33987	.18881	358	.00157	0	.00000	34345	.07061	109123	.19487	5
6	CONTINENTAL - STATE A 13	272710	4.15717	247535	1.37619	226015	.92629	0	.00000	473550	.97359	746260	1.35192	6
7	SHELL - RICE	25633	.39075	384391	2.13550	894795	3.66719	0	.00000	1285114	2.64210	1310749	2.37455	7
8	AMERADA HESS - B HARDIN	26588	.40530	371758	2.06532	769988	3.15335	0	.00000	1141224	2.34627	1167812	2.11560	8
9	GULF - DAN HARDIN	174050	2.65319	280714	1.55953	259717	1.06441	0	.00000	540433	1.11109	714483	1.29435	9
10	MORANCO - STATE T 17	22399	.34145	133	.00074	0	.00000	0	.00000	133	.00027	22532	.04082	10
11	CHEVRON - STATE 1 17	34803	.53053	5366	.02981	0	.00000	0	.00000	5366	.01103	40169	.07277	11
12	GETTY(SKELLY)-STATE	42859	.65334	16406	.09114	0	.00000	0	.00000	16406	.03373	59265	.10736	12
13	ANTWELL-MORRIS CONS TOWNS	19480	.29695	0	.00000	0	.00000	0	.00000	0	.00000	19480	.03529	13
14	WISER - MORRIS B	10039	.15303	0	.00000	0	.00000	0	.00000	0	.00000	10039	.01819	14
15	WISER - MORRIS A	17299	.26370	0	.00000	0	.00000	0	.00000	0	.00000	17299	.03134	15
16	GULF - W.D. GRIMES NCT C	84867	1.29370	9491	.05273	0	.00000	0	.00000	9491	.01951	94358	.17094	16
17	C M SWEET - MCKINLEY B	63480	.96769	8539	.04744	0	.00000	0	.00000	8539	.01755	72019	.13047	17
18	GETTY(SKELLY)- MCKINLEY	51236	.78103	57051	.31695	0	.00000	0	.00000	57051	.11729	108287	.19617	18
19	CHEVRON - H D MCKINLEY	56831	.86633	159928	.88849	0	.00000	0	.00000	159928	.32880	216759	.39268	19
20	C M SWEET - GRIMES	23998	.36582	0	.00000	0	.00000	0	.00000	0	.00000	23998	.04347	20
21	BILL SWEET-BOWERS A FED.	38017	.57953	19282	.10712	0	.00000	0	.00000	19282	.03964	57299	.10380	21
22	BILL SWEET-BOWERS B FED.	32223	.49121	18599	.10333	0	.00000	0	.00000	18599	.03824	50822	.09207	22
23	ATLANTIC RICH-SKIPPER	35295	.53803	36706	.20392	0	.00000	0	.00000	36706	.07546	72001	.13044	23
24	SHELL - MCKINLEY B	147816	2.25330	354665	1.97036	4929	.02020	0	.00000	359594	.73930	507410	.91922	24
25	GETTY - BOONE HARDIN	138302	2.10826	353829	1.96572	264619	1.08450	0	.00000	618448	1.27148	756750	1.37092	25
26	CITIES SERVICE - HARDIN	16229	.24739	555165	3.08425	1049231	4.30013	0	.00000	1604396	3.29851	1620625	2.93591	26
27	SHELL - MCKINLEY A	156718	2.38899	1003267	5.57371	871821	3.57304	0	.00000	1875088	3.85503	2031806	3.68081	27
28	GULF-HARDIN STATE NCT A	15838	.24143	618911	3.43839	1014984	4.15977	0	.00000	1633895	3.35916	1649733	2.98865	28
29	SHELL - STATE D	36619	.55822	303973	1.68874	275933	1.13087	0	.00000	579906	1.19225	616525	1.11689	29
30	AMERADA HESS-STATE E	90589	1.38093	208709	1.15949	95565	.39166	0	.00000	304274	.62556	394863	.71533	30
31	TEXAS PACIF.-STATE G	84593	1.28952	677603	3.76446	443654	1.81826	0	.00000	1121257	2.30522	1205850	2.18451	31
32	SAMEDAN - STATE C	283316	4.31884	394594	2.19219	97591	.39996	0	.00000	492185	1.01190	775501	1.40489	32
33	C M SWEET - STATE F	227830	3.47302	112149	.62305	2339	.00959	0	.00000	114488	.23538	342318	.62014	33
34	SHELL - STATE F	125906	1.91930	5567	.03093	0	.00000	0	.00000	5567	.01145	131473	.23818	34
35	TEXAS PACIF.-STATE Y AC2	189491	2.88858	0	.00000	0	.00000	0	.00000	0	.00000	189491	.34328	35
36	C&C OPERS. - SHIPP A	17373	.26483	0	.00000	0	.00000	0	.00000	0	.00000	17373	.03147	36
37	JOHN A YATES-SHELL STATE	213610	3.25625	427	.00237	0	.00000	0	.00000	427	.00088	214037	.38775	37
38	WISER - STATE L	47079	.71767	0	.00000	0	.00000	0	.00000	0	.00000	47079	.08529	38
39	GETTY(SKELLY) - MORRIS E	95058	1.44906	0	.00000	0	.00000	0	.00000	0	.00000	95058	.17221	39
40	CONTINENTAL - STATE A 35	151573	2.31056	88096	.48942	405	.00166	0	.00000	88501	.18195	240074	.43492	40
41	SAMEDAN - STATE B	129094	1.96790	18369	.10205	0	.00000	0	.00000	18369	.03776	147463	.26714	41
42	TEXACO - N.M. "O" NCT ST	131335	2.00206	416298	2.31277	95528	.39151	0	.00000	511826	1.05227	643161	1.16515	42
43	EXXON - N.M. STATE A	399978	6.09722	129250	.71806	13497	.05532	0	.00000	142747	.29348	542725	.98320	43
44	AMERADA - W.D. MCKINLEY	34916	.53225	538216	2.99009	457644	1.87559	0	.00000	995860	2.04741	1030776	1.86735	44
45	GETTY - W D MCKINLEY	55769	.85013	675365	3.75203	832222	3.41075	205	.00328	1507792	3.09990	1563561	2.83254	45
46	MARATHON-STATE SEC. 30	183692	2.80018	524532	2.91407	384449	1.57561	0	.00000	908981	1.86879	1092673	1.97948	46
47	EXXON-BOWERS A FEDERAL	31798	.48473	1286992	7.14996	1845938	7.56532	268359	4.30063	3401289	6.99278	3433087	6.21936	47
48	EXXON-BOWERS B FED COM	47257	.72038	128135	.71186	60021	.24599	0	.00000	188156	.38683	235413	.42647	48
49	AMERADA - STATE B	121390	1.85046	349344	1.94080	296393	1.21473	0	.00000	645737	1.32758	767127	1.38972	49
50	EXXON - W D GRIMES	40405	.61593	82252	.45696	9207	.03773	0	.00000	91459	.18803	131864	.23888	50
51	CONTINENTAL-STATE A 35	2375	.03620	461641	2.56467	844774	3.46219	330333	5.29380	1636748	3.36503	1639123	2.96942	51
52	GETTY - W D GRIMES	29692	.45262	199756	1.10976	349070	1.43062	59787	.95813	608613	1.25126	638305	1.15635	52
53	CHEVRON - STATE 1 29	0	.00000	313342	1.74079	735050	3.01250	345888	5.54308	1394280	2.86653	1394280	2.52587	53
54	ATLANTIC - W D GRIMES SOC	114990	1.75290	298750	1.65972	187197	.76720	0	.00000	485947	.99907	600937	1.08865	54
55	SAMEDAN - HOOD A	46250	.70503	55019	.30566	36530	.14971	0	.00000	91549	.18822	137799	.24964	55
56	SAMEDAN - HOOD B	31525	.48057	25929	.14405	1529	.00627	0	.00000	27458	.05645	58983	.10685	56
57	SHELL - GRIMES	13782	.21009	403948	2.24416	993289	4.07086	345865	5.54271	1743102	3.58368	1756884	3.18276	57
58	CONTINENTAL - W D GRIMES	49511	.75474	358532	1.99184	496844	2.03625	33317	.53392	888693	1.82709	938204	1.69965	58
59	SHELL - SAWLER	73472	1.12000	76247	.42359	34776	.14252	0	.00000	111023	.22825	184495	.33423	59
60	MORANCO - HOBBS	3631	.05535	0	.00000	0	.00000	0	.00000	0	.00000	3631	.00658	60
61	SHELL - TURNER	31829	.48520	24656	.13698	2551	.01045	0	.00000	27207	.05594	59036	.10695	61
62	GETTY(SKELLY)-SW TURNER	23347	.35590	17425	.09681	22000	.09016	0	.00000	39425	.08105	62772	.11372	62
63	GETTY(SKELLY)-TURNER B2	22296	.33988	49399	.27444	69512	.28488	110	.00176	119021	.24470	141317	.25601	63
64	SAMEDAN - TURNER A	7667	.11688	425	.00236	0	.00000	0	.00000	425	.00087	8092	.01466	64
65	SAMEDAN - TURNER A BAT 2	8937	.13624	224	.00124	0	.00000	0	.00000	224	.00046	9161	.01660	65
66	SAMEDAN - TURNER A	57042	.86954	112266	.62370	40009	.16397	0	.00000	152275	.31307	209317	.37920	66
67	GULF - W.D. GRIMES NCT B	3540	.05396	431905	2.39947	949319	3.89065	501734	8.04061	1882958	3.87121	1886498	3.41757	67
68	SHELL - STATE B	0	.00000	281449	1.56360	619070	2.53717	470926	7.54689	1371445	2.81958	1371445	2.48450	68
69	AMOCO - STATE E	0	.00000	271327	1.50737	830263	3.40272	472396	7.57045	1573986	3.23599	1573986	2.85142	69
70	CONTINENTAL - STATE A 33	0	.00000	634279	3.52377	2007092	8.22579	1364179	21.86184	4005550	8.23509	4005550	7.25643	70
71	AMERADA HESS - STATE A	0	.00000	240796	1.33776	609982	2.49992	263286	4.21933	1114064	2.29043	1114064	2.01823	71
72	SHELL - STATE A	0	.00000	184182	1.02323	767309	3.14471	368558	5.90638	1320049	2.71391	1320049	2.39140	72
73	GULF-W.D. GRIMES NCT A22	5393	.08221	539485	2.99714	1103655	4.52317	280078	4.48843	1923218	3.95398	1928611	3.49386	73
74	GULF-GRIMES NCT A LSE 2	15219	.23200	551147	3.06193	1191362	4.88263	316317	5.06918	2058826	4.23278	2074045	3.75733	74
75	MARATHON-STATE SEC 33 1A	0	.00000	423012	2.35007	949429	3.89110	841178	13.48042	2213619	4.55103	2213619	4.01018	75
76	CITIES SERVICE - FOWLER	112110	1.70899	469459	2.60810	805948	3.30307	6757	.10829	1282164	2.63603	1394274	2.52586	76
77	GETTY(SKELLY)-FOWLER	139477	2.12618	175676	.97598	76437	.31327	0	.00000	252113	.51832	391590	.70940	77
78	SUN - CLARA FOWLER	174625	2.66197	62579	.34766	526	.00216	0	.00000	63105	.12974	237730	.43067	78
79	SHELL - BERRY	168981	2.57593	452668	2.51482	462621	1.89599	738	.01183	916027	1.88328	1085008	1.96559	79
80	MOBIL - NORA BERRY	294805	4.49398	76293	.42385	193	.00079	0	.00000	76486	.15725	371291	.67263	80
81	AMERADA HESS - STATE C	324679	4.94938	5047	.02804	0	.00000	0	.00000	5047	.01038	329726	.59733	81
82	BYRON - J R HOLT STATE	65957	1.00544	0	.00000	0	.00000	0	.00000	0	.00000	65957	.11949	82
83	GULF - J.R. HOLT NCT B	26285	.40069	0	.00000	0	.00000	0	.00000	0	.00000	26285	.04762	83
		6560000	100.00000	18000000	100.00000	24400000	100.00000	6240000	100.00000	48640000	100.00000	55200000	100.00000	

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TABLE 24 B
UNITIZATION PARAMETERS - SECONDARY OIL RESERVES

WIO NO.	WORKING INTEREST OWNER	GRAYBURG UPPER & LOWER		SAN ANDRES						UNIT TOTALS		WIO NO.
		ZONE II		ZONE III$_U$		ZONE III$_L$		TOTALS				
		BBLS	%	BBLS	%	BBLS	%	BBLS	%	BBLS	%	
1	AMERADA HESS CORP.	4,979,474	10.417377	1,470,961	9.411,836	2,167,727	6.471,478	3,638,688	7.483,314	8,618,162	8.438,691	1
2	AMOCO PRODUCTION CO.	913	.001909	371,577	2.377,544	1,497,541	4.469,515	1,869,118	3.844,059	1,870,031	1.831,967	2
3	ARCO OIL & GAS CO.	4,963	.010383	4,963	.031,763	0	.000000	4,963	.010,209	9,926	.009,722	3
4	ATLANTIC, LTD., ET AL	1,626	.003,401	1,626	.010,406	0	.000000	1,626	.003,345	3,252	.003,185	4
5	ATLANTIC RICHFIELD CO.	1,626	.003,401	1,626	.010,406	0	.000000	1,626	.003,345	3,252	.003,185	5
6	ATLANTIC RICHFIELD CO.	157,136	3.287,615	109,963	1.412,679	167,197	1.717,202	0	.000000	277,160	1.570,615	6
7	BHP PETROLEUM CO.	1,626	.003,401	0	.000000	0	.000000	0	.000000	1,626	.001,593	7
8	BHP PETROLEUM CO.	1,626	.003,401	0	.000000	0	.000000	0	.000000	1,626	.001,593	8
9	CHEVRON OIL CO.	1,626	.003,401	1,626	.010,406	0	.000000	1,626	.003,345	3,252	.003,185	9
10	CITIES SERVICE OIL CO.	147,062	3.076,545	103,519	1.329,534	174,962	1.798,242	278,481	5.729,779	425,543	2.411,124	10
11	CONTINENTAL OIL CO.	17,774	3.718,744	109,963	1.412,679	241,894	1.485,354	1,817,826	37.403,258	1,969,683	11.159,242	11
12	CONTINENTAL OIL CO.	4,963	.010,383	0	.000,000	0	.000,000	0	.000,000	4,963	.028,123	12
13	CORDES, J. M.	4,963	.010,383	963	.006,178	0	.000,000	963	.019,817	5,926	.033,580	13
14	CORDES-PICKRELL, ET AL	3,926	.008,213	963	.006,178	0	.000,000	963	.019,817	4,889	.027,703	14
15	CORDES-PICKRELL, ET AL	20,963	.043,850	9,963	.063,930	0	.000,000	9,963	.204,960	30,926	.175,227	15
16	DELHI-TAYLOR OIL CORP.	4,963	.010,383	0	.000,000	0	.000,000	0	.000,000	4,963	.028,123	16
17	EXXON CORPORATION	1,626	.003,401	0	.000,000	0	.000,000	0	.000,000	1,626	.009,211	17
18	EXXON CORPORATION	487,926	10.208,465	1,470,963	9.411,836	2,167,727	6.471,478	3,638,688	7.483,314	6,297,577	35.677,966	18
19	FOREST OIL CORP.	7,926	.016,581	7,926	.050,744	0	.000,000	963	.019,817	8,889	.050,368	19
20	GETTY OIL COMPANY	1,126,111	23.559,210	2,470,926	15.811,815	14,126,267	42.147,774	2,470,926	50.820,744	3,597,037	20.377,211	20
21	GETTY OIL COMPANY	1,126,111	23.559,210	2,470,926	15.811,815	14,126,267	42.147,774	2,470,926	50.820,744	3,597,037	20.377,211	21
22	HAMILTON, LOUETTA MAE	963	.020,148	963	.006,163	0	.000,000	963	.019,817	1,926	.010,911	22
23	HANLEY	0	.000,000	0	.000,000	0	.000,000	0	.000,000	0	.000,000	23
24	HARRISON, HOWARD F.	963	.020,148	0	.000,000	0	.000,000	0	.000,000	963	.005,455	24
25	HARRISON, HOWARD F.	1,926	.040,296	1,926	.012,326	0	.000,000	0	.000,000	2,889	.016,366	25
26	HARRISON OIL COMPANY	963	.020,148	0	.000,000	0	.000,000	0	.000,000	963	.005,455	26
27	HARRISON OIL COMPANY	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	27
28	HEARN, J.	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	28
29	HEARN, R. M.	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	29
30	HENDRIX, ALVIN E.	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	30
31	HENRY, WILLIAM J.	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	31
32	HENRY, WILLIAM J.	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	32
33	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	33
34	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	34
35	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	35
36	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	36
37	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	37
38	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	38
39	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	39
40	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	40
41	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	41
42	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	42
43	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	43
44	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	44
45	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	45
46	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	46
47	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	47
48	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	48
49	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	49
50	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	50
51	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	51
52	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	52
53	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	53
54	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	54
55	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	55
56	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	56
57	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	57
58	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	58
59	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	59
60	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	60
61	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	61
62	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	62
63	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	63
64	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	64
65	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	65
66	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	66
67	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	67
68	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	68
69	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	69
70	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	70
71	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	71
72	HERRELL, ELLA	963	.020,148	963	.006,163	0	.000,000	0	.000,000	1,926	.010,911	72
		47,774,963	100.000,000	47,774,963	100.000,000	33,126,267	100.000,000	19,178,926	100.000,000	176,855,119	100.000,000	

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TABLE 21 A

UNITIZATION PARAMETERS - WELLS, PRODUCTION AND GAS CAP VOLUMETRICS

TR NO.	TRACT NAME / OPERATOR - LEASE	NUMBER OF WELLS 1/1/77 USEABLE NO.	%	ACTIVE NO.	%	CUMULATIVE * OIL PROD. 1/1/77 MBLS	%	CURRENT PROD., YEAR 1976 OIL BBLS	%	GAS MCF	%	ORIGINAL GAS CAP GAS IN PLACE GRAYBURG UPPER MCF	%	GRAYBURG LWR. MCF	%	GRAYBURG TOTAL MCF	%	S.A. ZONE I MCF	%	UNIT TOTAL MCF	%	TR NO.
1	SKYES + DUKE W	1	1.41%	1	1.41%	6,000	0.04%	1,000	0.01%	1,000	0.01%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1
2	AMERADA,HESS&AMOCO,TAR	2	2.82%	2	2.82%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	4,000	0.01%	0	0.00%	4,000	0.01%	0	0.00%	4,000	0.01%	2
3	GULF + SUN RA B/ATOK	4	5.63%	4	5.63%	600,000	3.98%	1,000	0.01%	1,000	0.01%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	3
4	MOBIL,ATLAN,+ARCO,+ARCO	5	7.04%	5	7.04%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	4
5	MOBIL,ATLAN,+ARCO,+ARCO	5	7.04%	5	7.04%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	5
6	CONTINENTAL,+ STATE A-13	6	8.45%	6	8.45%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	6
7	AMERADA,HESS,+ MOBIL,+	7	9.86%	7	9.86%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	7
8	GULF + SUN SAUTA	8	11.27%	8	11.27%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	8
9	MOBIL,ATLAN,+ARCO,+ARCO	9	12.68%	9	12.68%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	9
10	AMERADA,HESS,+ MOBIL,+	10	14.08%	10	14.08%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	10
11	GULF + SUN SAUTA	11	15.49%	11	15.49%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	11
12	MOBIL,ATLAN,+ARCO,+ARCO	12	16.90%	12	16.90%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	12
13	AMERADA,HESS,+ MOBIL,+	13	18.31%	13	18.31%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	13
14	GULF + SUN SAUTA	14	19.72%	14	19.72%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	14
15	MOBIL,ATLAN,+ARCO,+ARCO	15	21.13%	15	21.13%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	15
16	AMERADA,HESS,+ MOBIL,+	16	22.54%	16	22.54%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	16
17	GULF + SUN SAUTA	17	23.95%	17	23.95%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	17
18	MOBIL,ATLAN,+ARCO,+ARCO	18	25.36%	18	25.36%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	18
19	AMERADA,HESS,+ MOBIL,+	19	26.77%	19	26.77%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	19
20	GULF + SUN SAUTA	20	28.18%	20	28.18%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	20
21	MOBIL,ATLAN,+ARCO,+ARCO	21	29.59%	21	29.59%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	21
22	AMERADA,HESS,+ MOBIL,+	22	31.00%	22	31.00%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	22
23	GULF + SUN SAUTA	23	32.41%	23	32.41%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	23
24	MOBIL,ATLAN,+ARCO,+ARCO	24	33.82%	24	33.82%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	24
25	AMERADA,HESS,+ MOBIL,+	25	35.23%	25	35.23%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	25
26	GULF + SUN SAUTA	26	36.64%	26	36.64%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	26
27	MOBIL,ATLAN,+ARCO,+ARCO	27	38.05%	27	38.05%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	27
28	AMERADA,HESS,+ MOBIL,+	28	39.46%	28	39.46%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	28
29	GULF + SUN SAUTA	29	40.87%	29	40.87%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	29
30	MOBIL,ATLAN,+ARCO,+ARCO	30	42.28%	30	42.28%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	30
31	AMERADA,HESS,+ MOBIL,+	31	43.69%	31	43.69%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	31
32	GULF + SUN SAUTA	32	45.10%	32	45.10%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	32
33	MOBIL,ATLAN,+ARCO,+ARCO	33	46.51%	33	46.51%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	33
34	AMERADA,HESS,+ MOBIL,+	34	47.92%	34	47.92%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	34
35	GULF + SUN SAUTA	35	49.33%	35	49.33%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	35
36	MOBIL,ATLAN,+ARCO,+ARCO	36	50.74%	36	50.74%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	36
37	AMERADA,HESS,+ MOBIL,+	37	52.15%	37	52.15%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	37
38	GULF + SUN SAUTA	38	53.56%	38	53.56%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	38
39	MOBIL,ATLAN,+ARCO,+ARCO	39	54.97%	39	54.97%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	39
40	AMERADA,HESS,+ MOBIL,+	40	56.38%	40	56.38%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	40
41	GULF + SUN SAUTA	41	57.79%	41	57.79%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	41
42	MOBIL,ATLAN,+ARCO,+ARCO	42	59.20%	42	59.20%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	42
43	AMERADA,HESS,+ MOBIL,+	43	60.61%	43	60.61%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	43
44	GULF + SUN SAUTA	44	62.02%	44	62.02%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	44
45	MOBIL,ATLAN,+ARCO,+ARCO	45	63.43%	45	63.43%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	45
46	AMERADA,HESS,+ MOBIL,+	46	64.84%	46	64.84%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	46
47	GULF + SUN SAUTA	47	66.25%	47	66.25%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	47
48	MOBIL,ATLAN,+ARCO,+ARCO	48	67.66%	48	67.66%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	48
49	AMERADA,HESS,+ MOBIL,+	49	69.07%	49	69.07%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	49
50	GULF + SUN SAUTA	50	70.48%	50	70.48%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	50
51	MOBIL,ATLAN,+ARCO,+ARCO	51	71.89%	51	71.89%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	51
52	AMERADA,HESS,+ MOBIL,+	52	73.30%	52	73.30%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	52
53	GULF + SUN SAUTA	53	74.71%	53	74.71%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	53
54	MOBIL,ATLAN,+ARCO,+ARCO	54	76.12%	54	76.12%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	54
55	AMERADA,HESS,+ MOBIL,+	55	77.53%	55	77.53%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	55
56	GULF + SUN SAUTA	56	78.94%	56	78.94%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	56
57	MOBIL,ATLAN,+ARCO,+ARCO	57	80.35%	57	80.35%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	57
58	AMERADA,HESS,+ MOBIL,+	58	81.76%	58	81.76%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	58
59	GULF + SUN SAUTA	59	83.17%	59	83.17%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	59
60	MOBIL,ATLAN,+ARCO,+ARCO	60	84.58%	60	84.58%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	60
61	AMERADA,HESS,+ MOBIL,+	61	85.99%	61	85.99%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	61
62	GULF + SUN SAUTA	62	87.40%	62	87.40%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	62
63	MOBIL,ATLAN,+ARCO,+ARCO	63	88.81%	63	88.81%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	63
64	AMERADA,HESS,+ MOBIL,+	64	90.22%	64	90.22%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	64
65	GULF + SUN SAUTA	65	91.63%	65	91.63%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	65
66	MOBIL,ATLAN,+ARCO,+ARCO	66	93.04%	66	93.04%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	66
67	AMERADA,HESS,+ MOBIL,+	67	94.45%	67	94.45%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	67
68	GULF + SUN SAUTA	68	95.86%	68	95.86%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	68
69	MOBIL,ATLAN,+ARCO,+ARCO	69	97.27%	69	97.27%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	69
70	AMERADA,HESS,+ MOBIL,+	70	98.68%	70	98.68%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	70
71	GULF + SUN SAUTA	71	100.09%	71	100.09%	1,000,000	6.64%	1,000	0.01%	1,000	0.01%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	0	0.00%	1,000,000	0.01%	71

*INCLUDES 5% ROYALTY OIL IN ADDITION, 100% SUPPLY OF OIL FOR TAX/OPERATION, PAID 3 YEARS 1974, 1975, 1976 WHICH WERE

AND 1% FOR SPECIAL 30% ROYALTY PAYMENTS TO THE TECHNICAL COMMITTEE

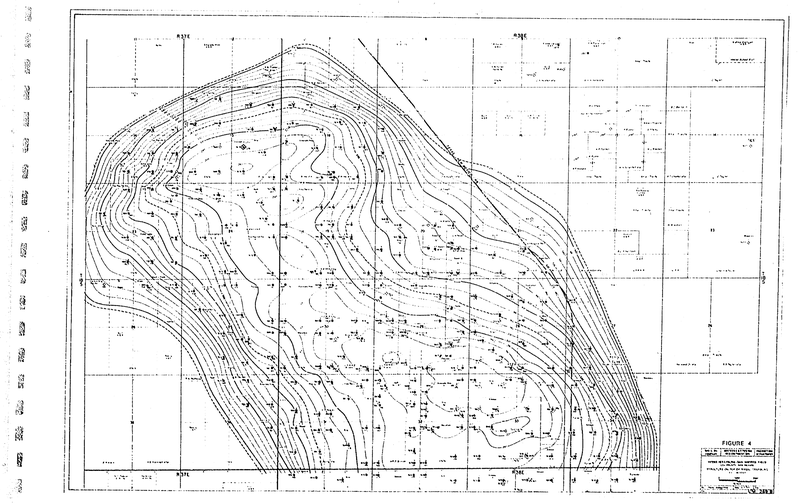

FIGURE 4

U.S.D.O.E. MICROGRAPHICS

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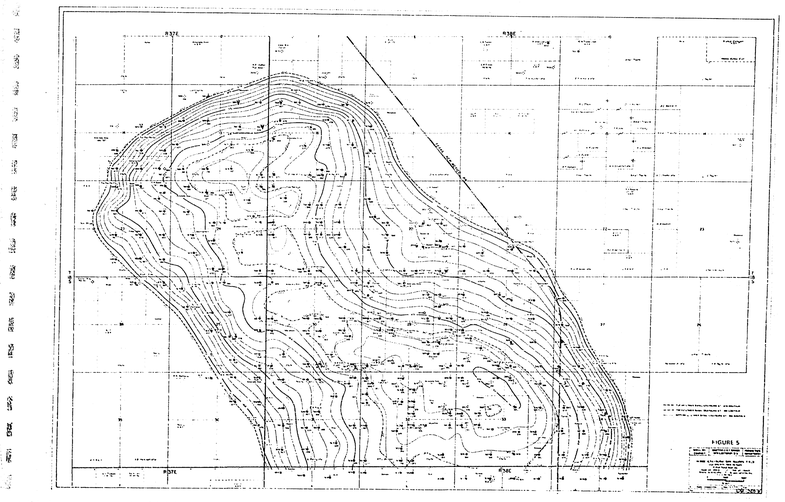

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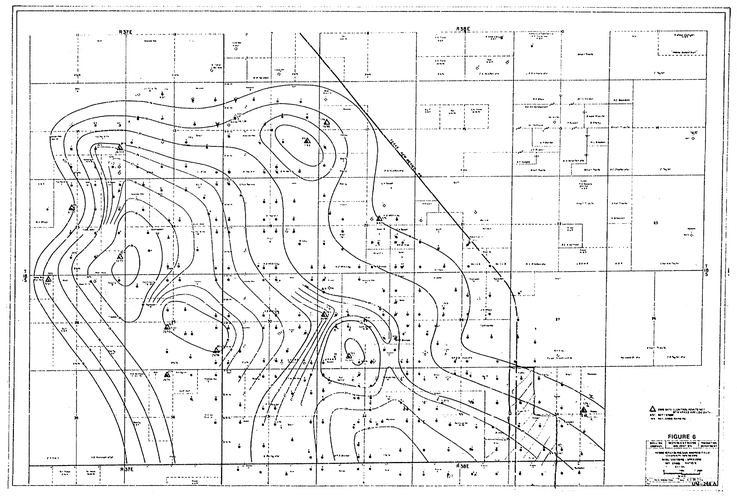

U.S.G.S. - REPOSITORY

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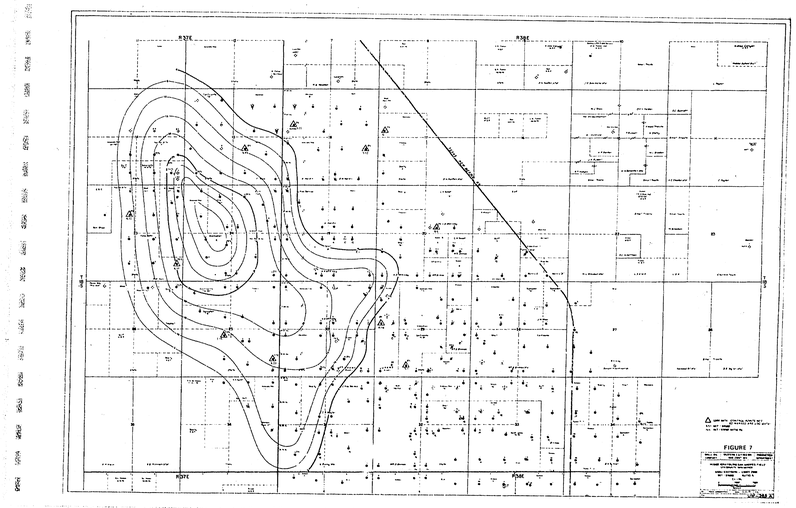

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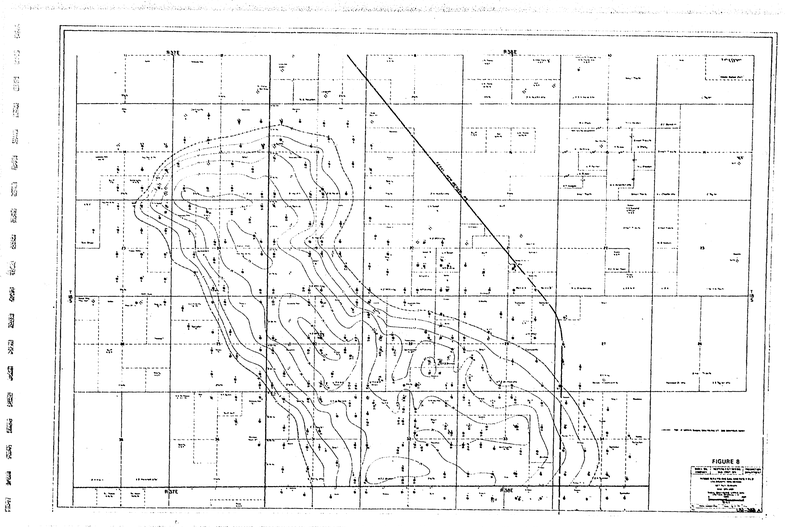

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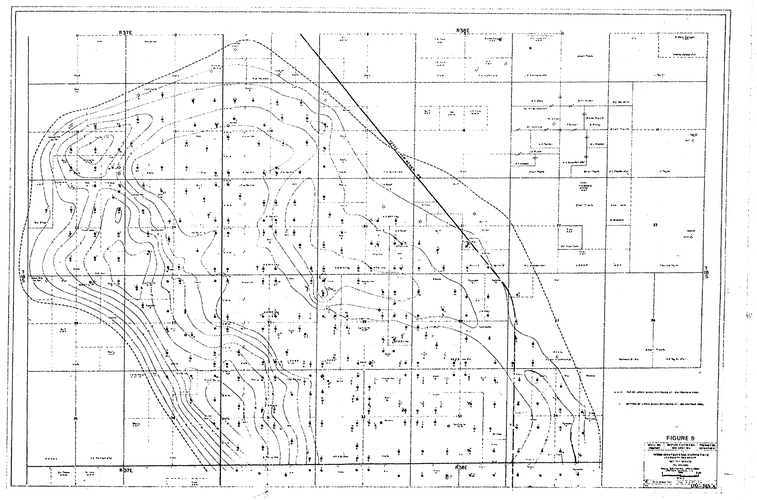

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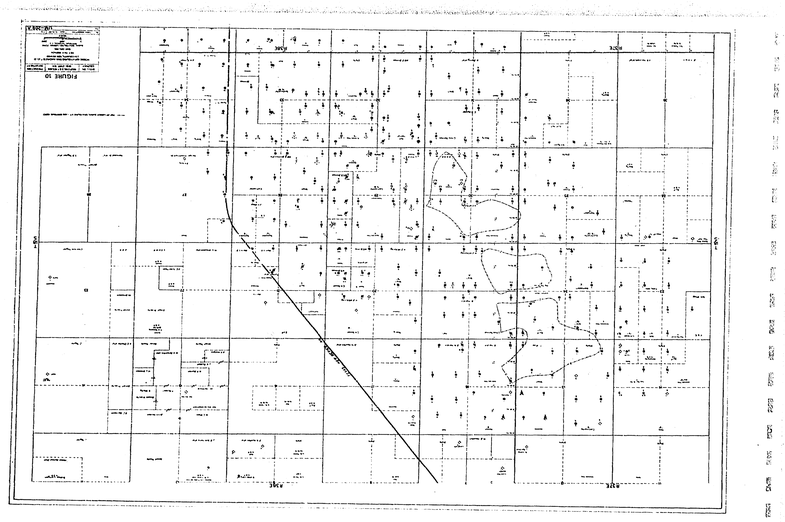

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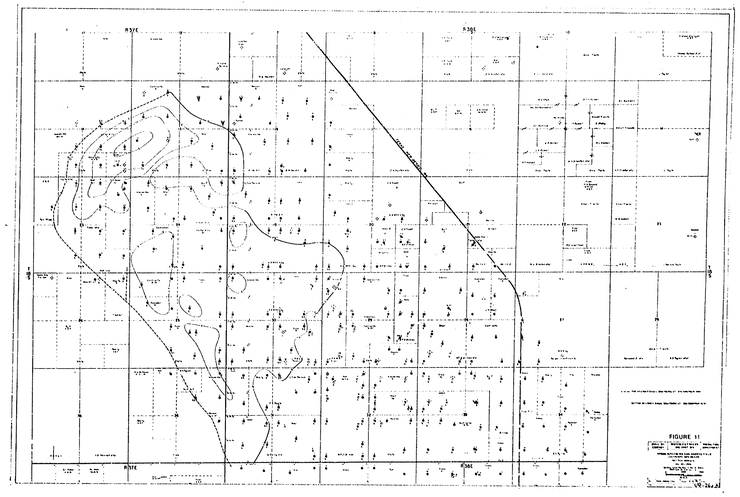
R31E
R32E
T9N
T8N
FIGURE 11

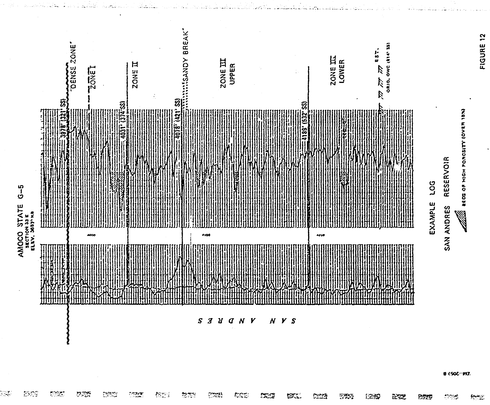

FIGURE 12

U.S.G.S. - RECONNAISSANCE
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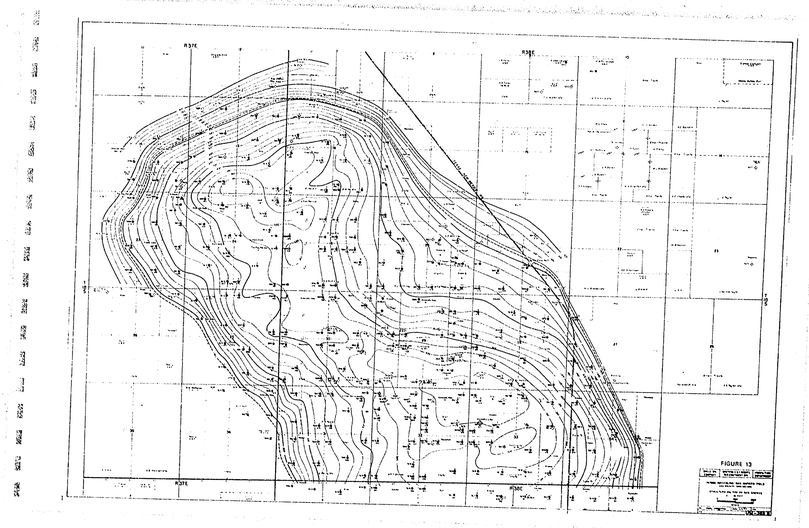

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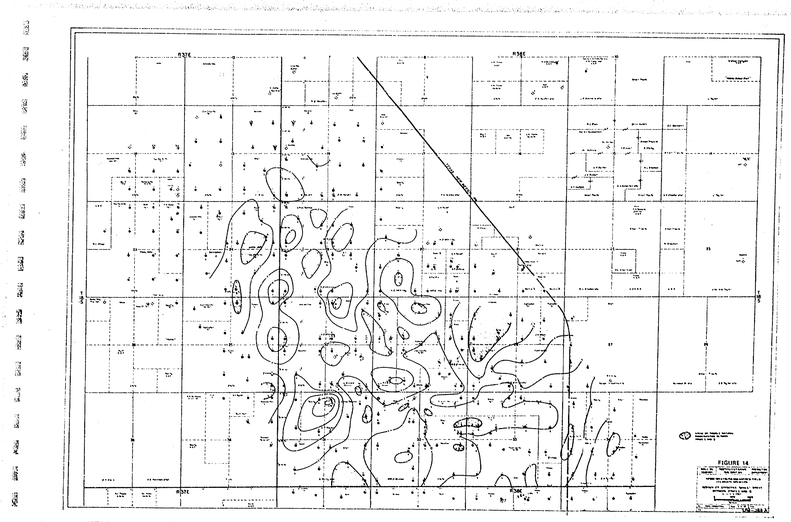
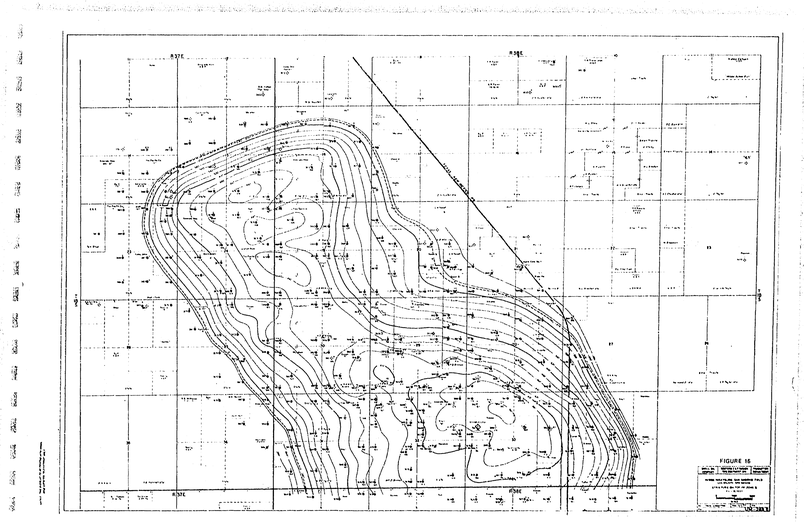
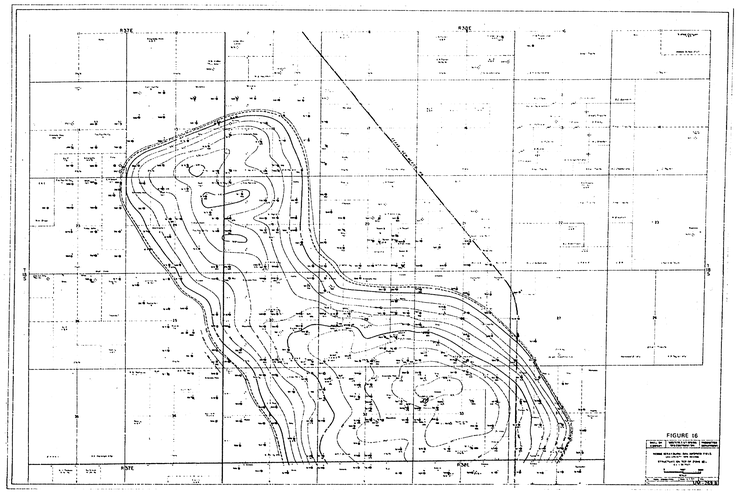


FIGURE 14


R.37E.
R.38E.
T.39N.
T.38N.
FIGURE 16



U.S.G.S. PHOTOGRAPHIC

BEST AVAILABLE COPY

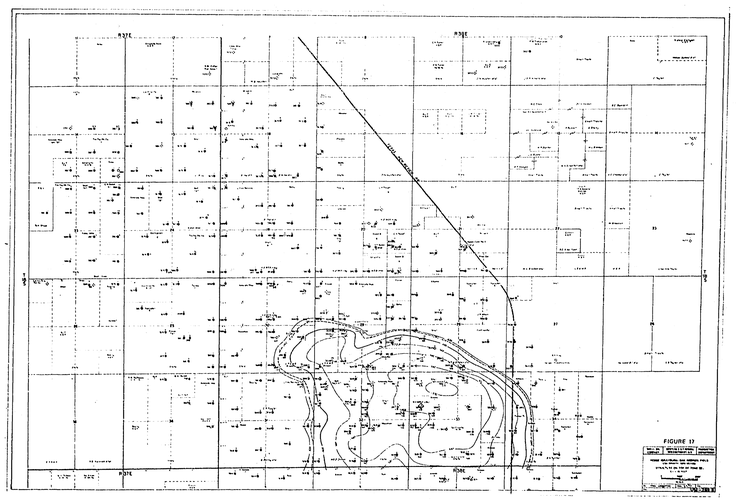


FIGURE 17

U.S.D.A.F. MICROGRAPHICS

BEST AVAILABLE COPY

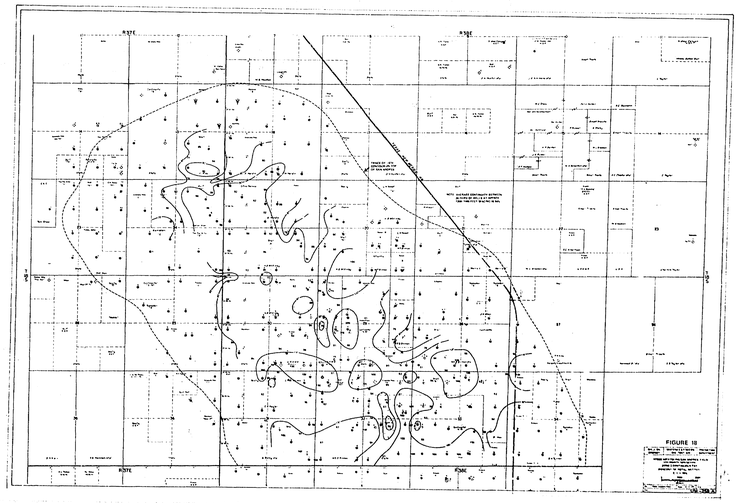


FIGURE 18

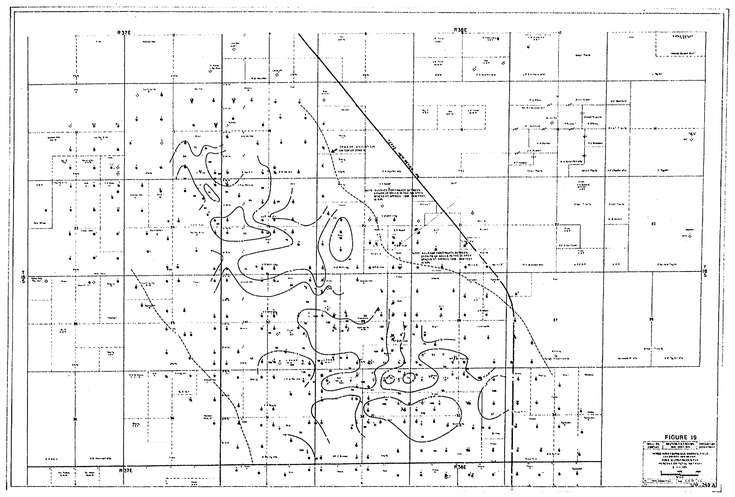


FIGURE 15

V.P.R.I.P. MICROGRAPHICS

BEST AVAILABLE COPY

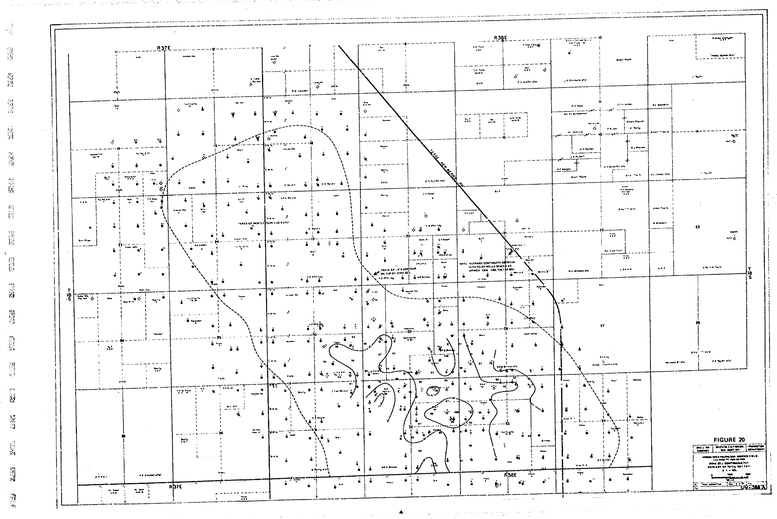


FIGURE 20

BEST AVAILABLE COPY

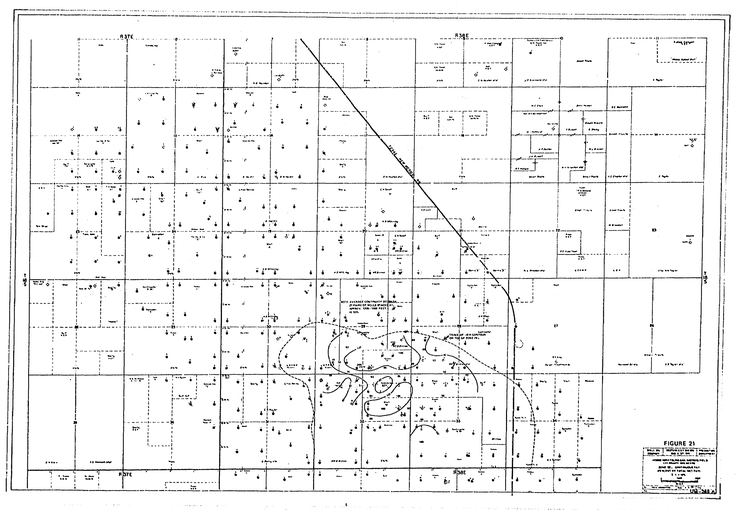


FIGURE 31

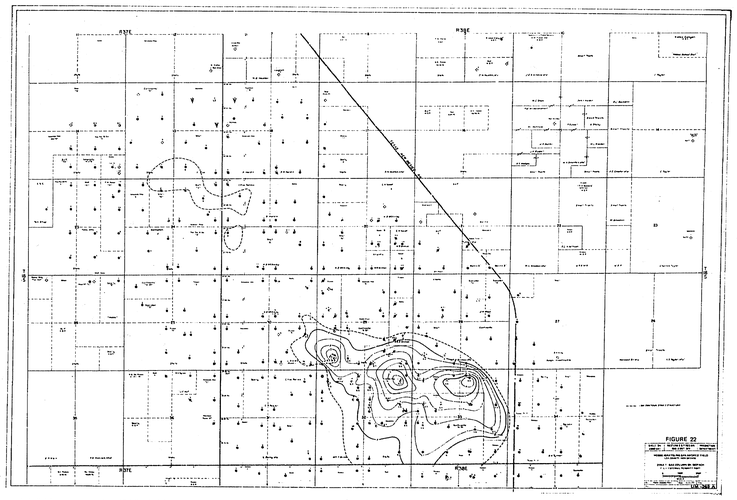
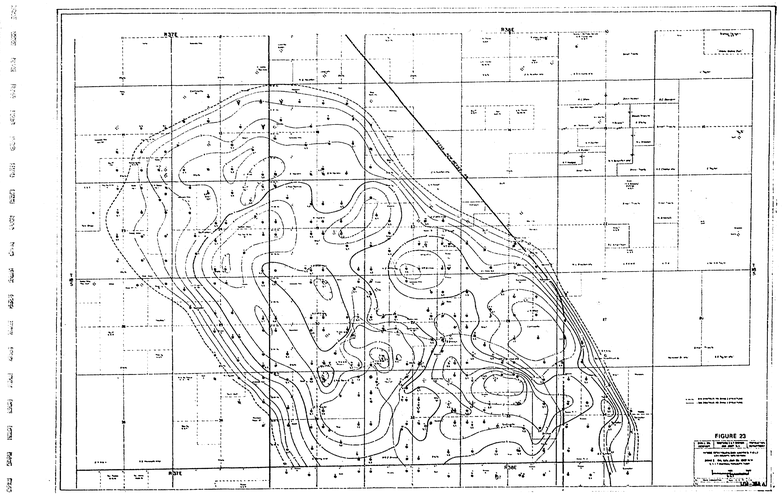


FIGURE 22

U.S.G.S. GEOGRAPHICS

BEST AVAILABLE COPY



U.S.A.C.E. TOPOGRAPHIC
BEST AVAILABLE COPY

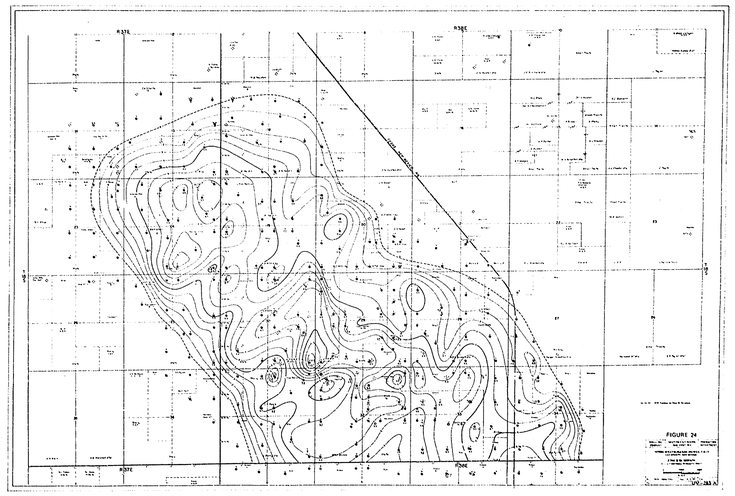
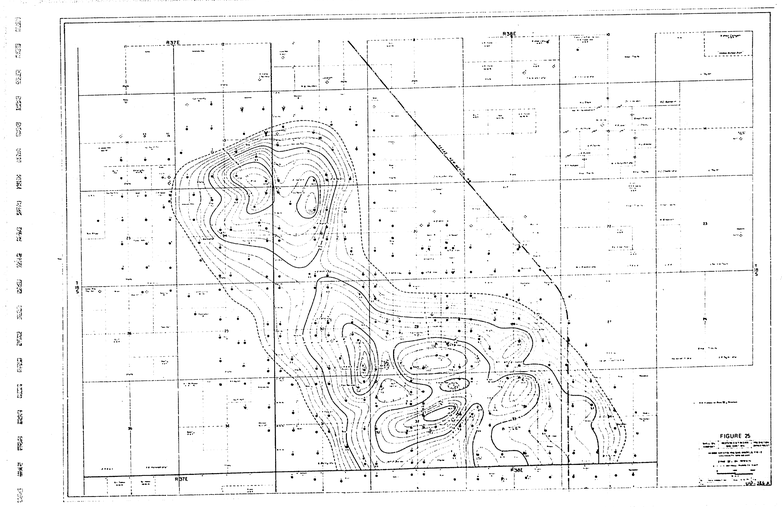


FIGURE 24



U.S.G.S. LIBRARY
RESTON, VIRGINIA
NOT AVAILABLE FOR LOAN

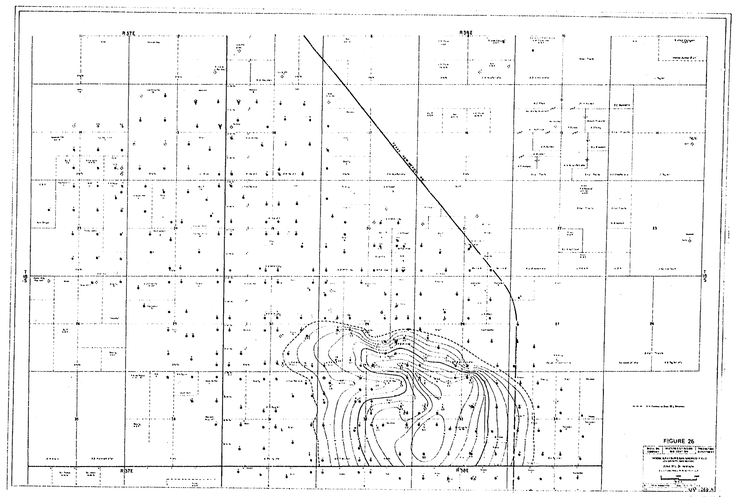


FIGURE 26

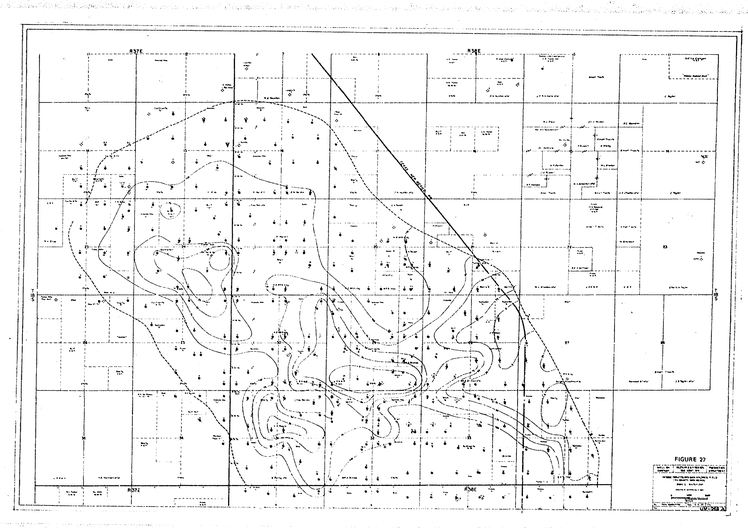


FIGURE 27

BEST AVAILABLE COPY

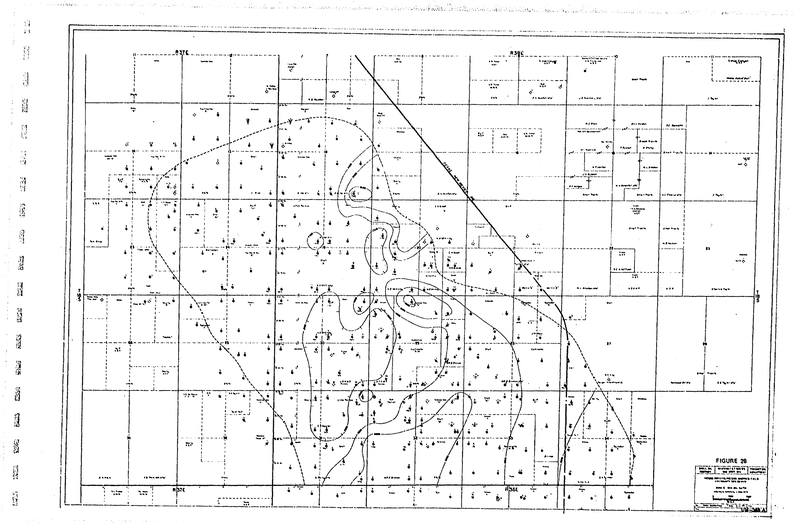


FIGURE 26

U.S.G.S. TOPOGRAPHICS

BEST AVAILABLE COPY

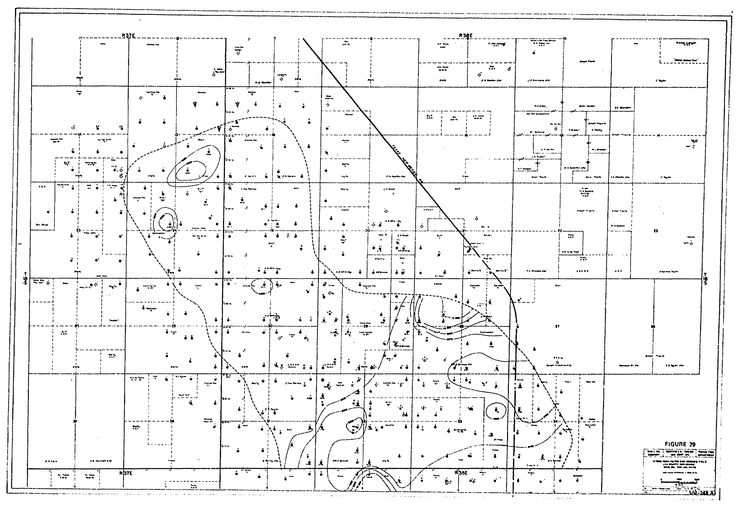


FIGURE 29

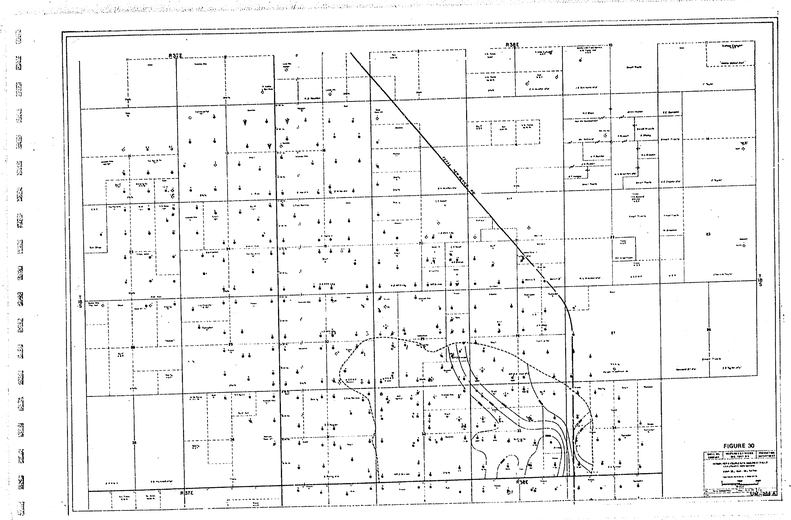


FIGURE 30

U.S.G.S. TOPOGRAPHICS

BEST AVAILABLE COPY

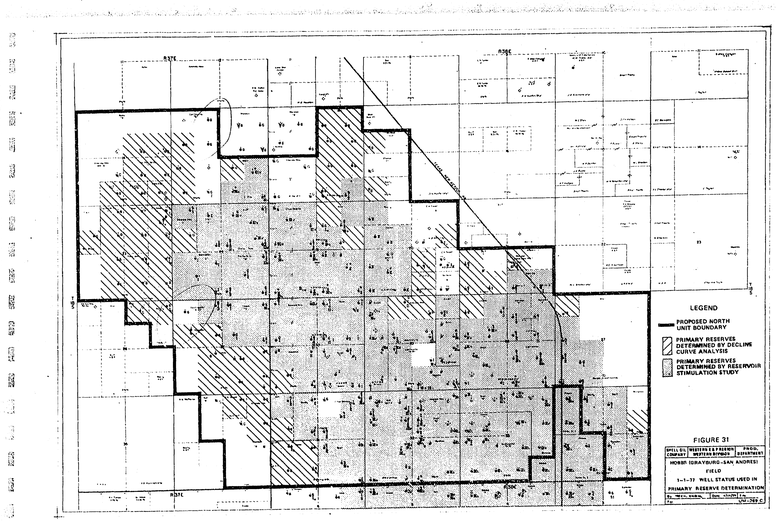


FIGURE 31

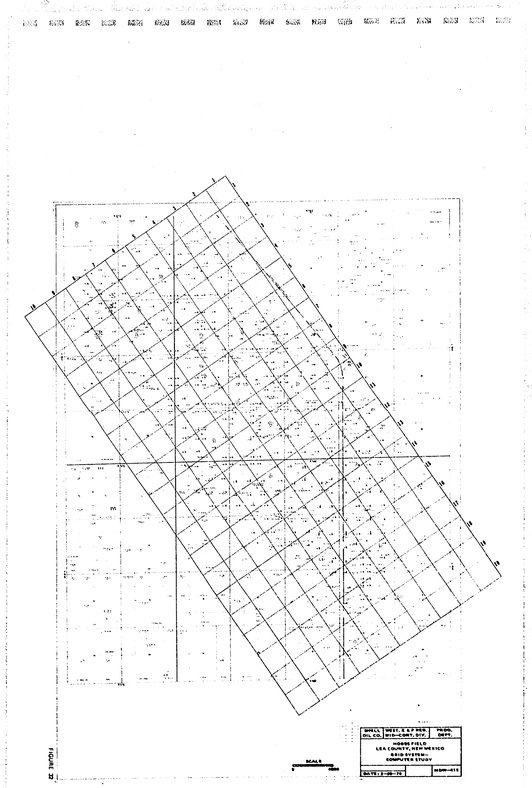
SHELL OIL COMPANY	WESTERN E & P REGION MIDLAND DISTRICT	HOBBS, EMPIRE

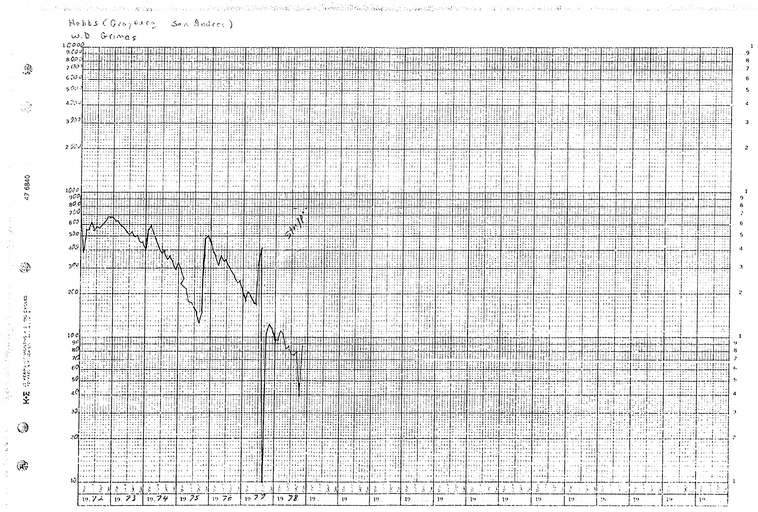
HOBBS (GRAYBURG-SAN ANDRES) FIELD

1-1-77 WELL STATUS USED IN PRIMARY RESERVE DETERMINATION

I.H.S.J. ECONOMICS

BEST AVAILABLE COPY


SHELL OIL CO.
WEST. K.S.T. REG. MID-CONT. DIV.
TIDAL DEPT.
MAGNETIC FIELD
LEA COUNTY, NEW MEXICO
BASE SYSTEM-
COMPUTER STUDY
DATE: 2-28-72
SCALE
1 INCH = 2 MILES


Hobbs (Grayburg San Andres)
W.D. Grimes
47 6840
MCF GAS/DAY - CUMULATIVE PRODUCTION
1972
1973
1974
1975
1976
1977
1978

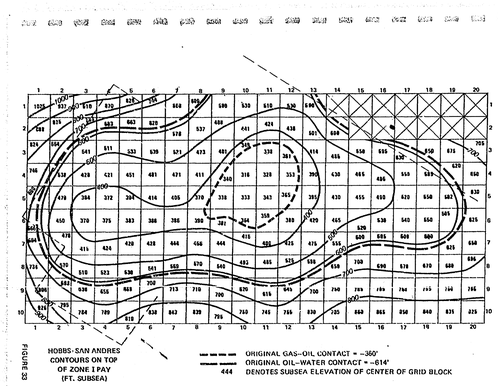


FIGURE 23

SIMULATION STUDY

U.S.D.I. GEOLOGICAL SURVEY
BEST AVAILABLE COPY

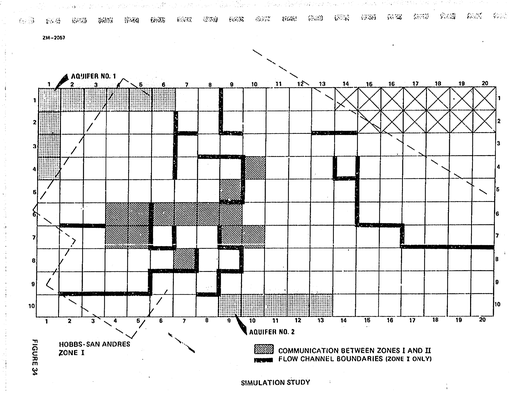


FIGURE 3A

SIMULATION STUDY

U.S.G.S. COPY
BEST AVAILABLE COPY

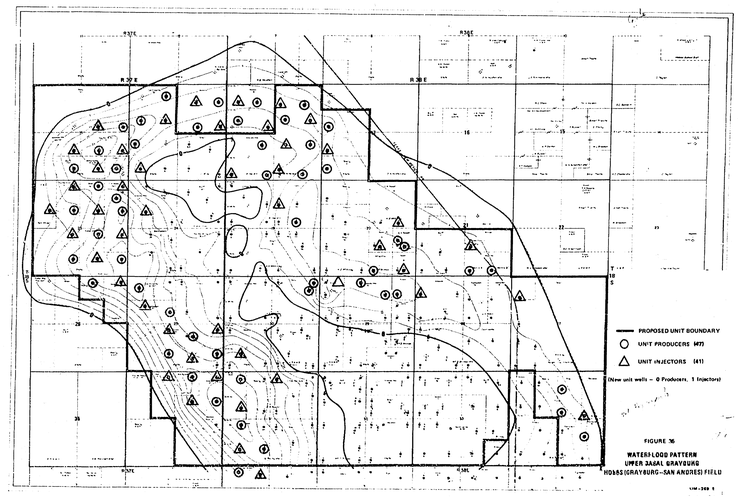


FIGURE 16
WATERFLOOD PATTERN
UPPER JAGAL GRAYBURG
HOBBS(GRAYBURG-SAN ANDRES) FIELD

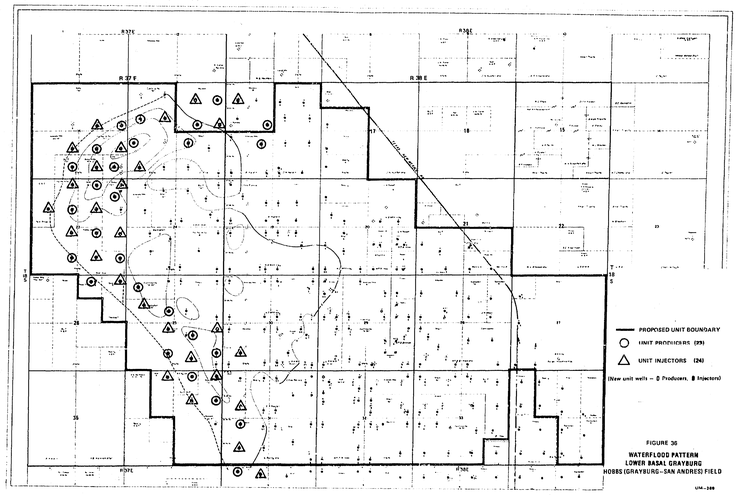


FIGURE 36
WATERFLOOD PATTERN
LOWER BASAL GRAYBURG
HOBBS (GRAYBURG-SAN ANDRES) FIELD

UM-289

BEST AVAILABLE COPY

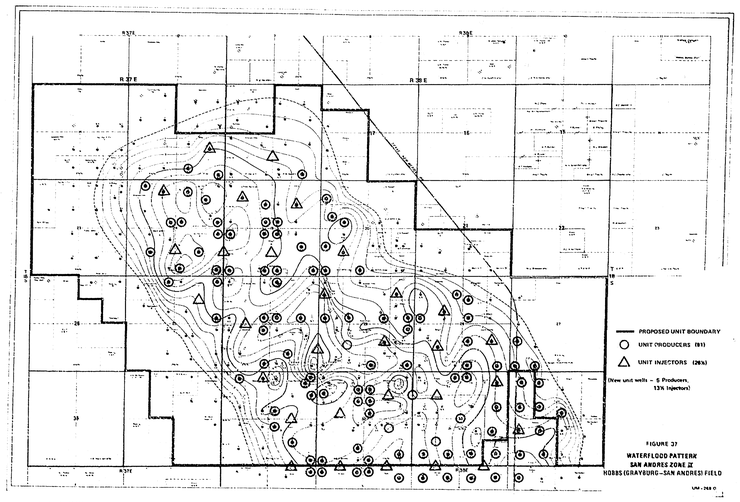


FIGURE 37
WATERFLOOD PATTERN
SAN ANDRES ZONE 2E
HOBBS (GRAYBURG–SAN ANDRES) FIELD

UM-248 O

U.S.D.I. GEOGRAPHICS
BEST AVAILABLE COPY

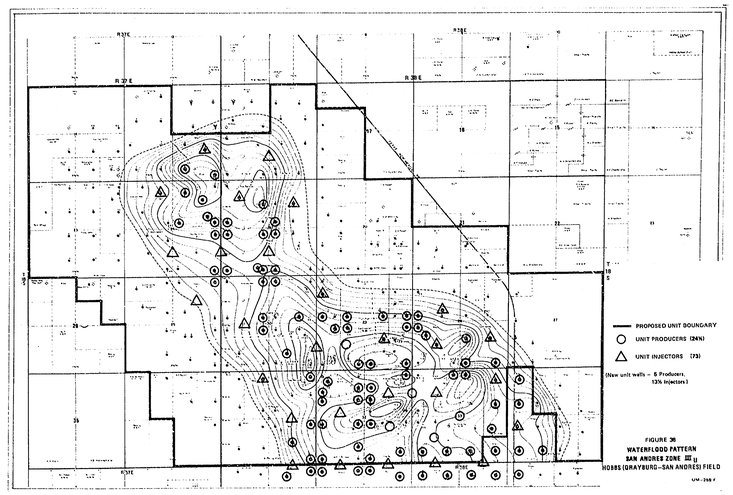


FIGURE 26
WATERFLOOD PATTERN
SAN ANDRES ZONE III
HOBBS (GRAYBURG–SAN ANDRES) FIELD

BEST AVAILABLE COPY

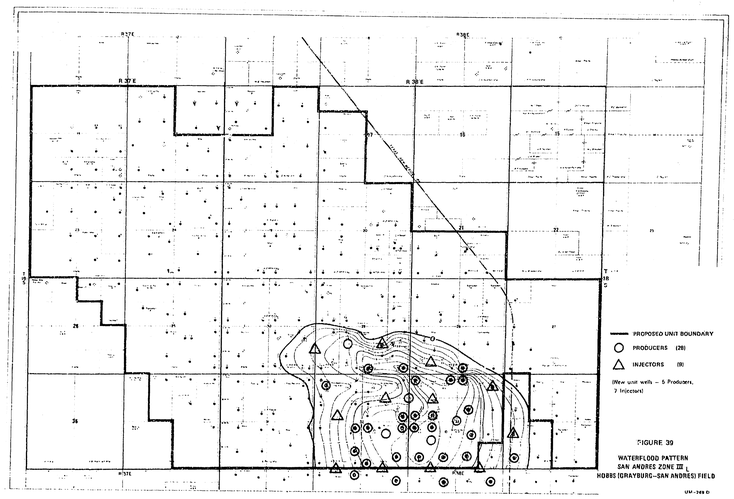
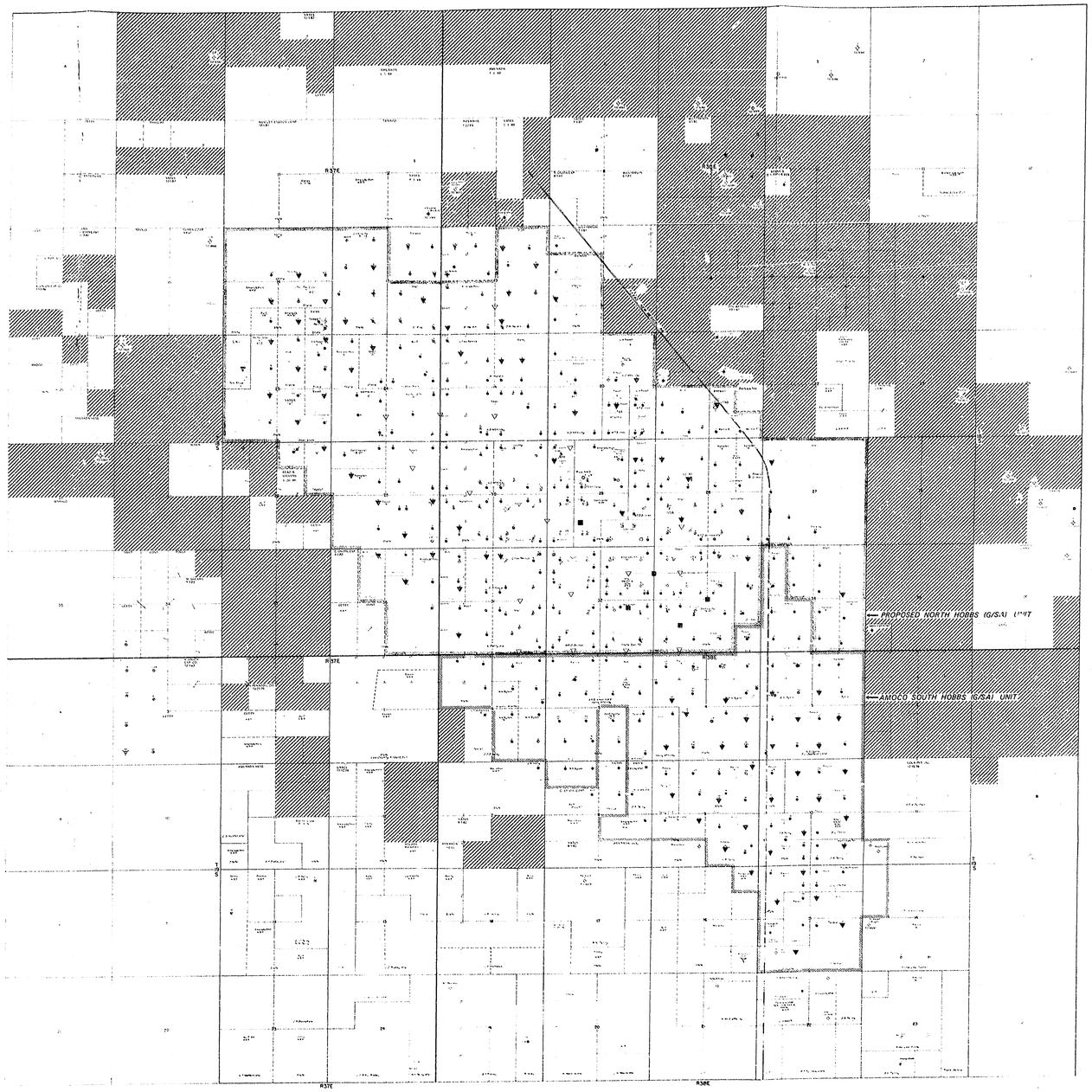


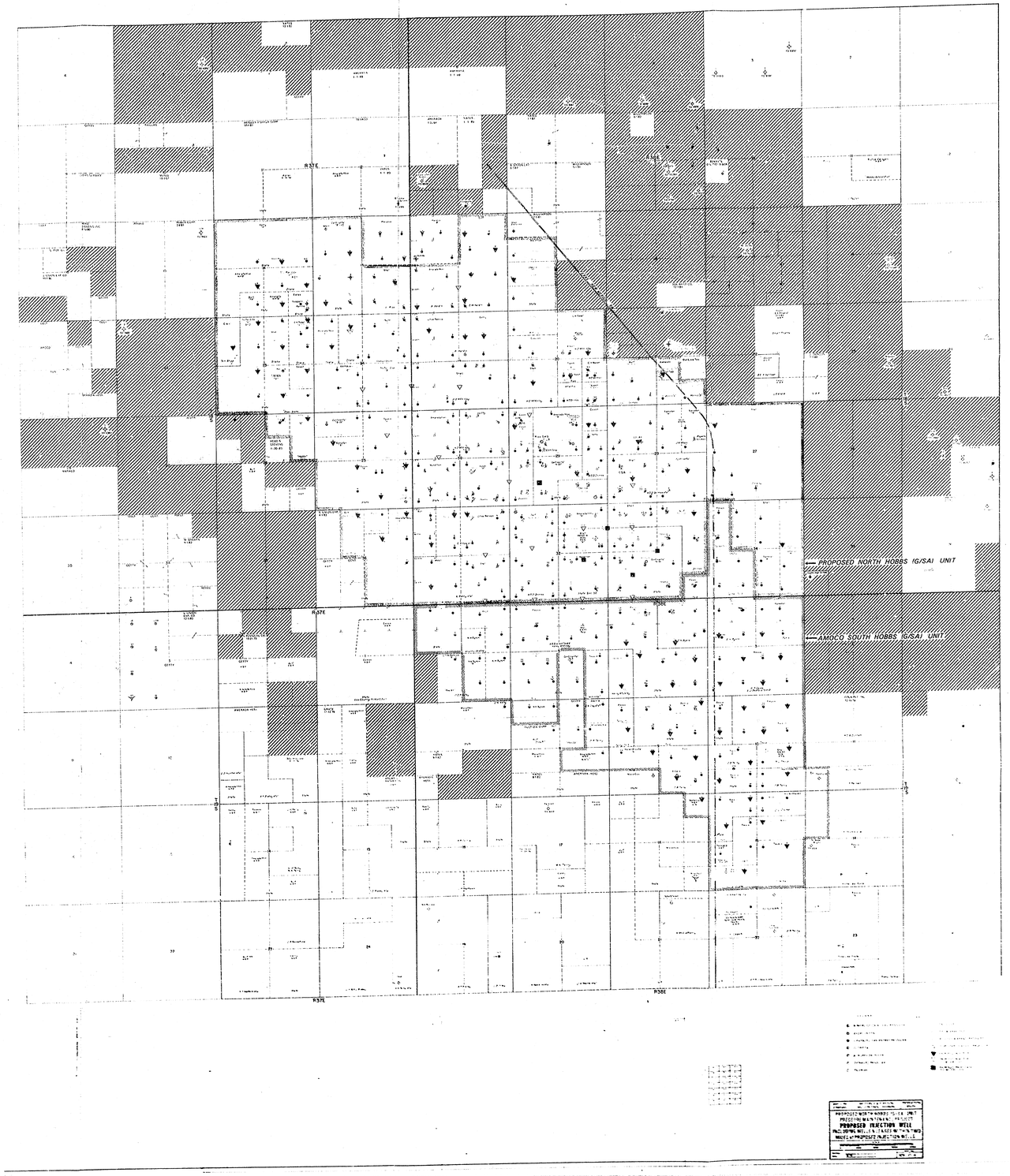
FIGURE 39

WATERFLOOD PATTERN
SAN ANDRES ZONE III
HOBBS (GRAYBURG–SAN ANDRES) FIELD

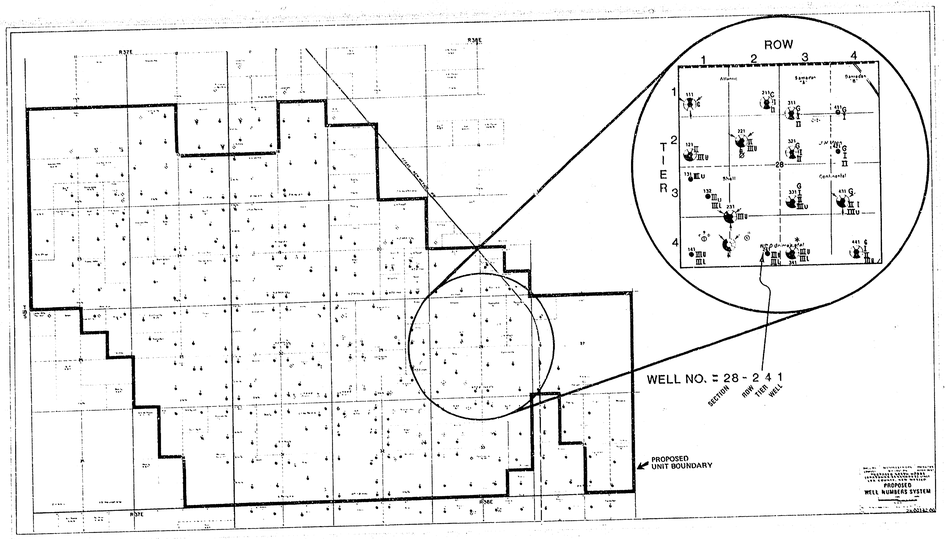


PROPOSED NORTH HOBBS (G/SA) UNIT
PRESSURE MAINTENANCE PROJECT
PROPOSED INJECTION WELL
INCLUDING WELLS & LEASES WITHIN TWO MILES of PROPOSED INJECTION WELLS

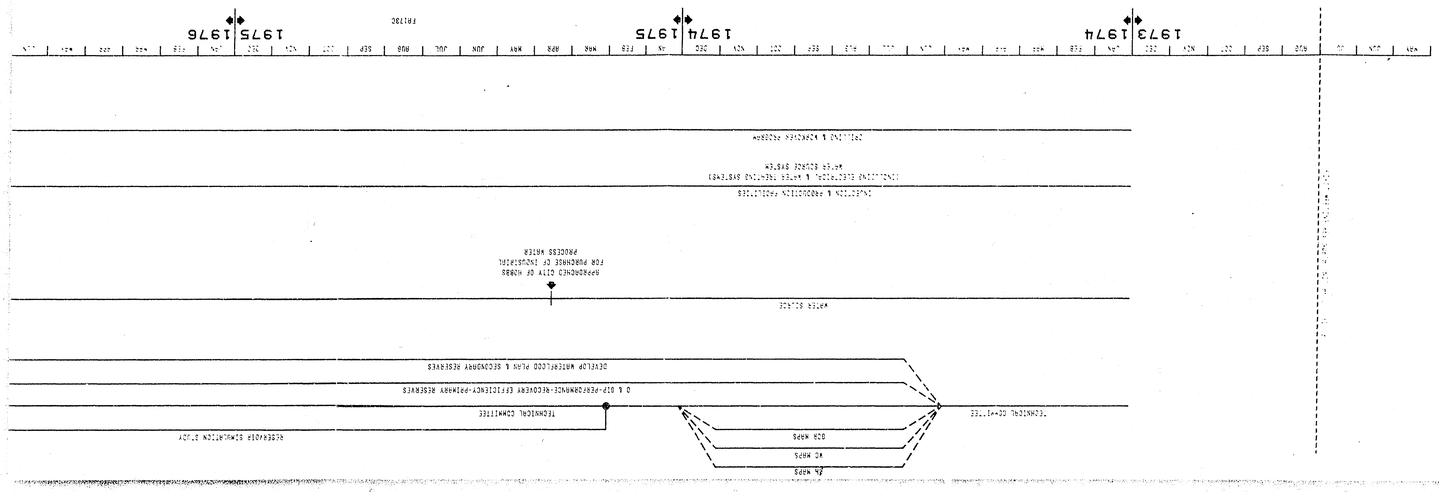
U.S.G.S. RECONNAISSANCE
BEST AVAILABLE COPY

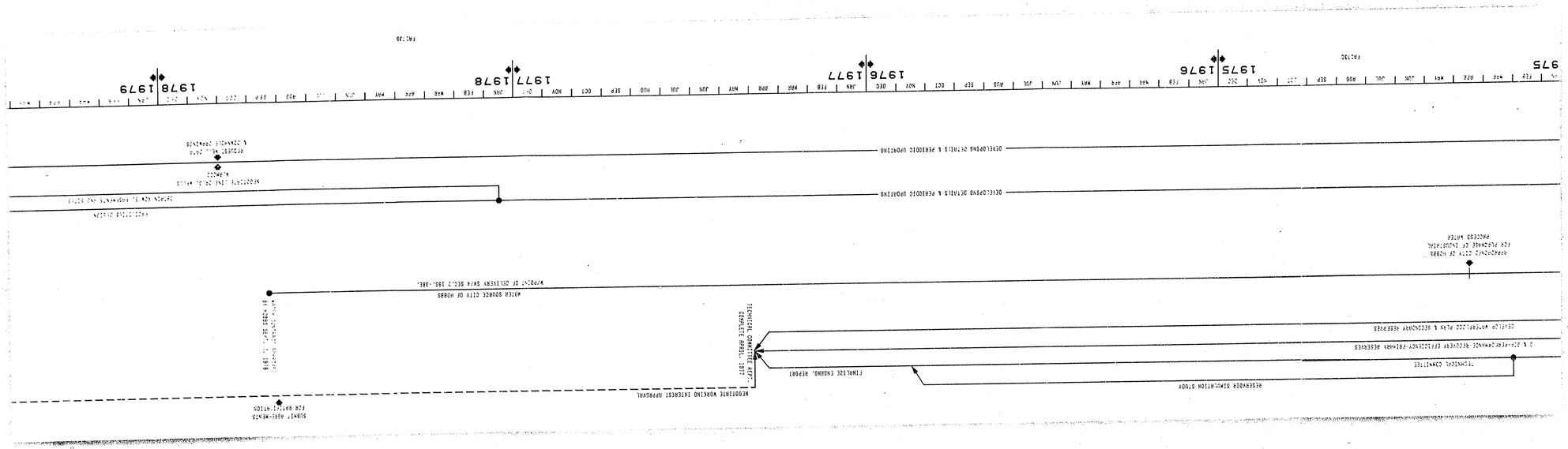


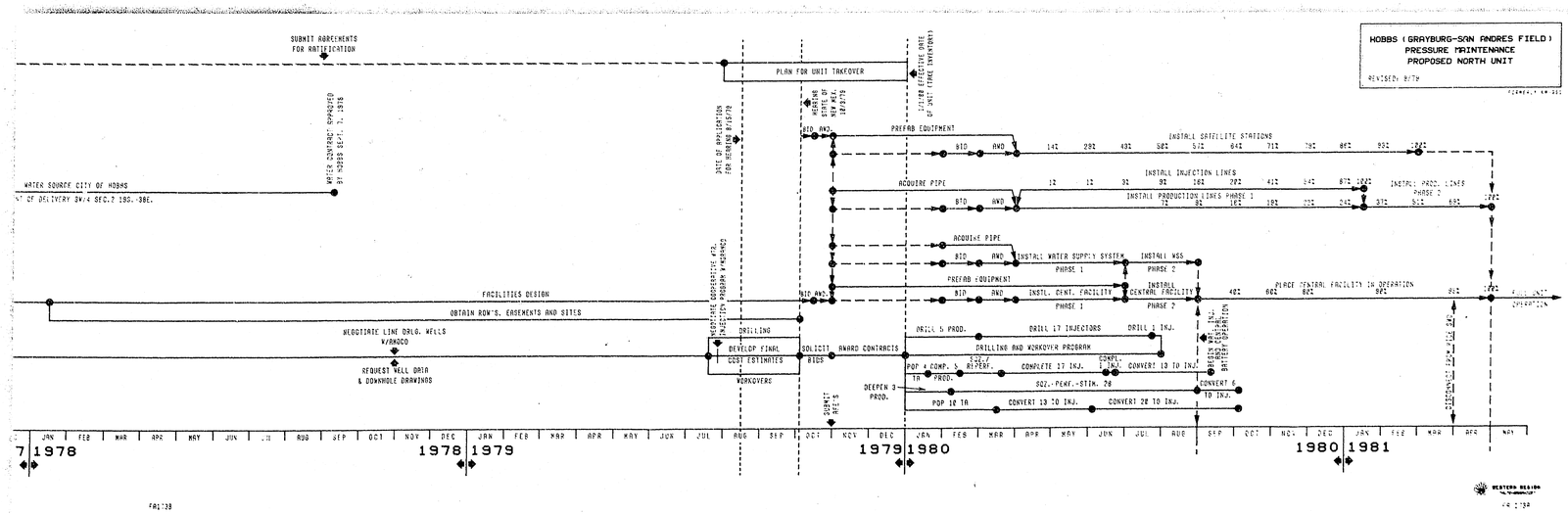
BEST AVAILABLE COPY



U.S.G.S. RECORDS
BEST AVAILABLE COPY


1973
1974
1974
1975
1975
1976
PROPOSED CITY OF HOBBS
FOR PUBLIC USE OF FACILITIES
PROCESS WATER
WATER RIGHTS
DEVELOP WATER/LOCO PLAN & SECONDARY RESERVES
D & DIP-PERFORMANCE-RECOVERY EFFICIENCY-PRIMARY RESERVES
TECHNICAL COMMITTEE
RESERVOIR STRATIFICATION STUDY
TECHNICAL CONTINUED
#3 WAPS
#2 WAPS
DIR WAPS


1975
1976
1977
1978
1979
DEVELOPING DETAILS & PERIODIC UPDATING
DEVELOPING DETAILS & PERIODIC UPDATING
TECHNICAL COMMITTEE
FINALIZE ENDING, REPORT
RESERVOIR SIMULATION STUDY
WATER SOURCE CITY OF HOBBS
WATER SOURCE CITY OF HOBBS
FOR PURCHASE OF INCREMENTAL
PRODUCED WATER
FOR APPLICATION



BEST AVAILABLE COPY

N. HOBBS TRACT NO. 47

ACTUAL (——)

FORECAST (——) PRODUCTION (BBLS DAY)

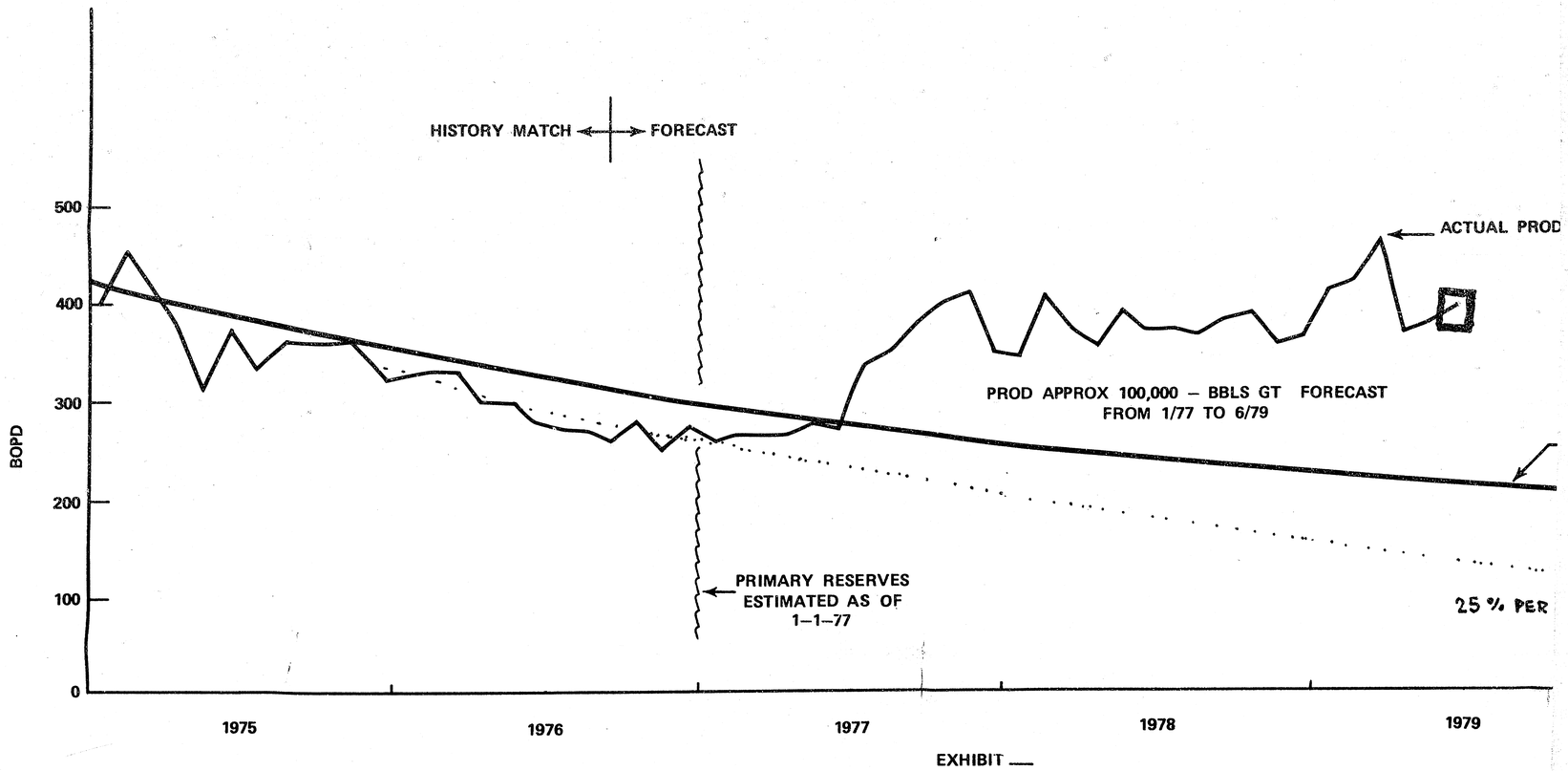


EXHIBIT ___

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Case No. 6453 Exhibit No. 35
Submitted by: Shell
Hearing Date 10/31/77

Shell

U.S.G.S. RECORDS
BEST AVAILABLE COPY

N. HOBBS TRACT NO. 47

ACTUAL (——)

FORECAST (——) PRODUCTION (BBLS DAY)

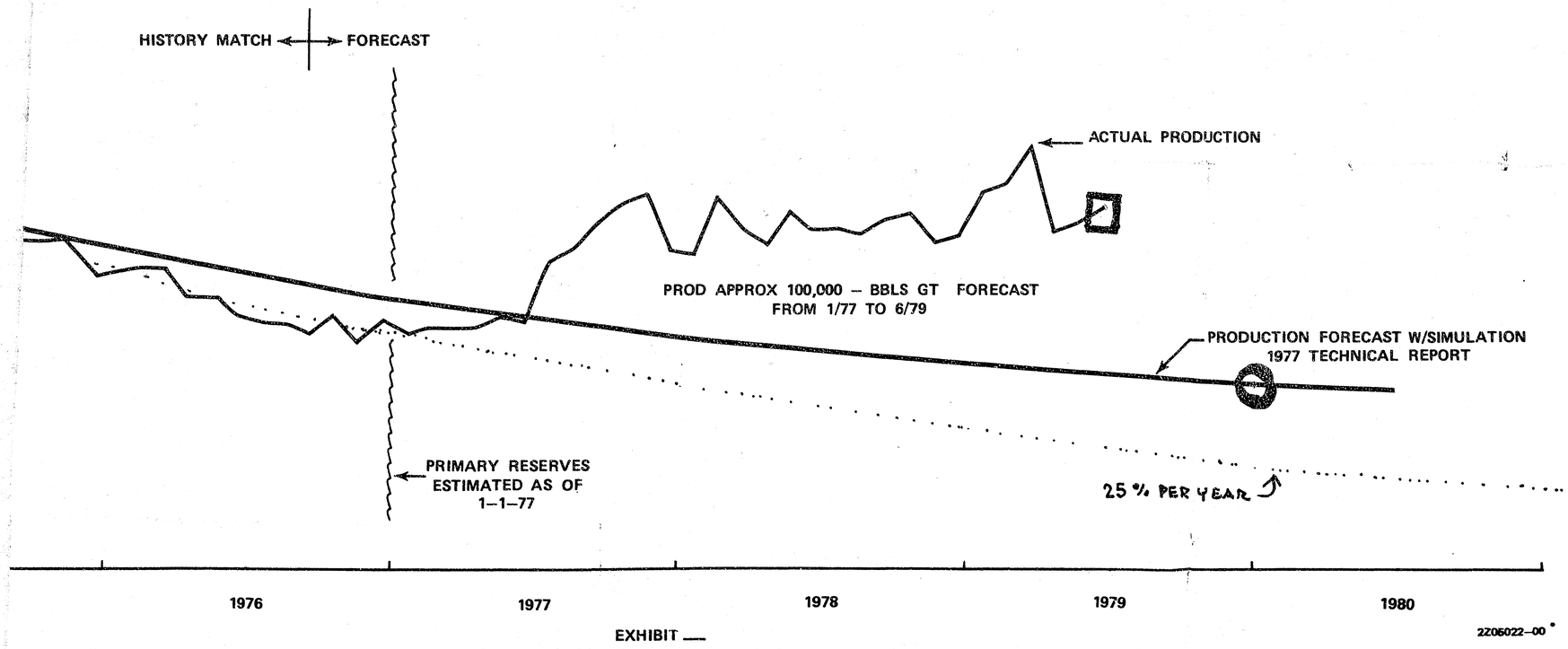


EXHIBIT —

2Z06022–00

Shell Exhibit 35

PLOT OF EXXONS TRACT NO. 47 PRIMARY RESE
AS PREDICTED BY
N. HOBBS RESERVOIR SIMULATOR

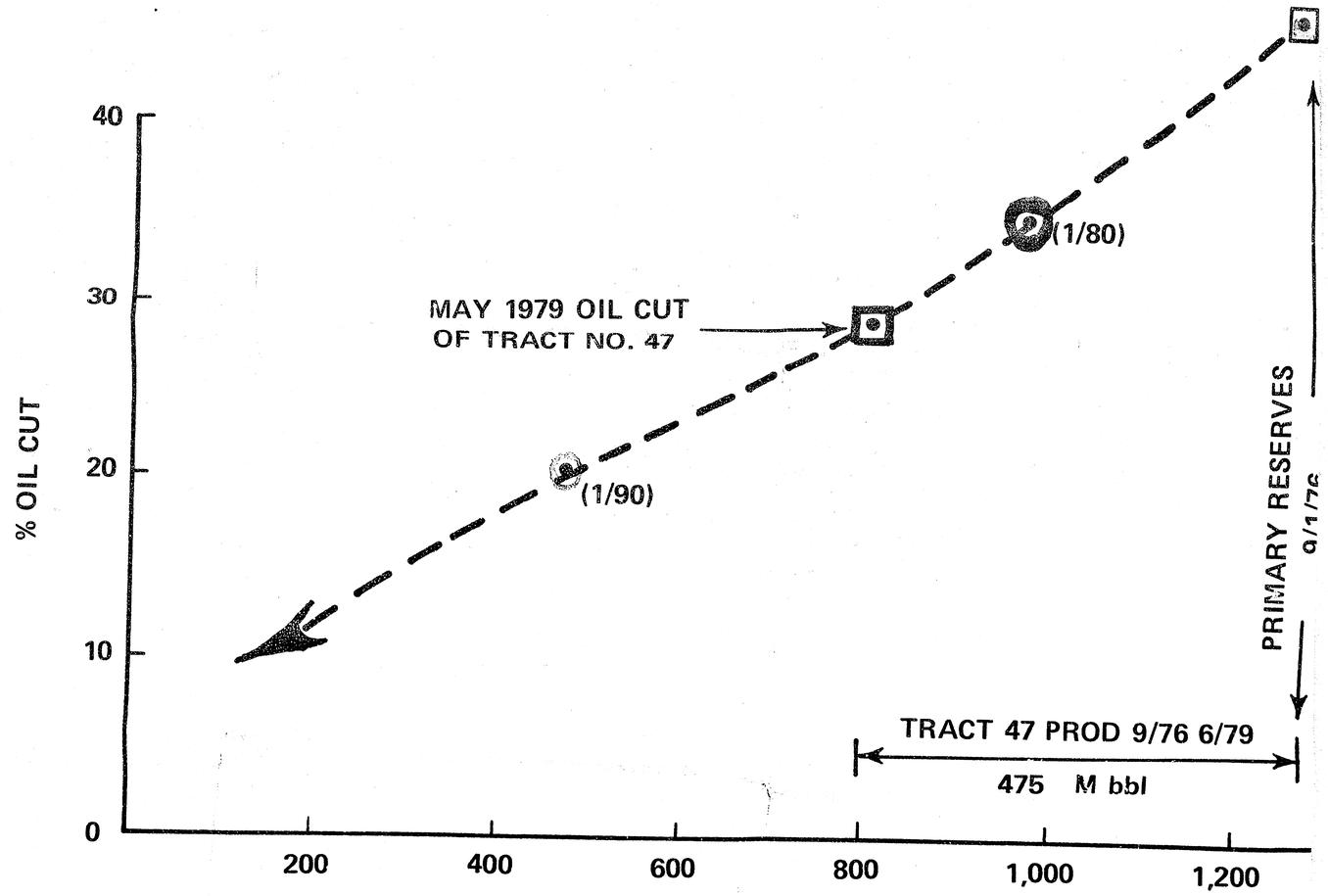


EXHIBIT ___

2Z05

Shell Ex

OIL CONSERVATION COMMISSION
CASE NO. 663 EXHIBIT NO. 36
SHELL
11/9/79

EXXONS TRACT NO. 47 PRIMARY RESERVES AS PREDICTED BY . HOBBS RESERVOIR SIMULATOR

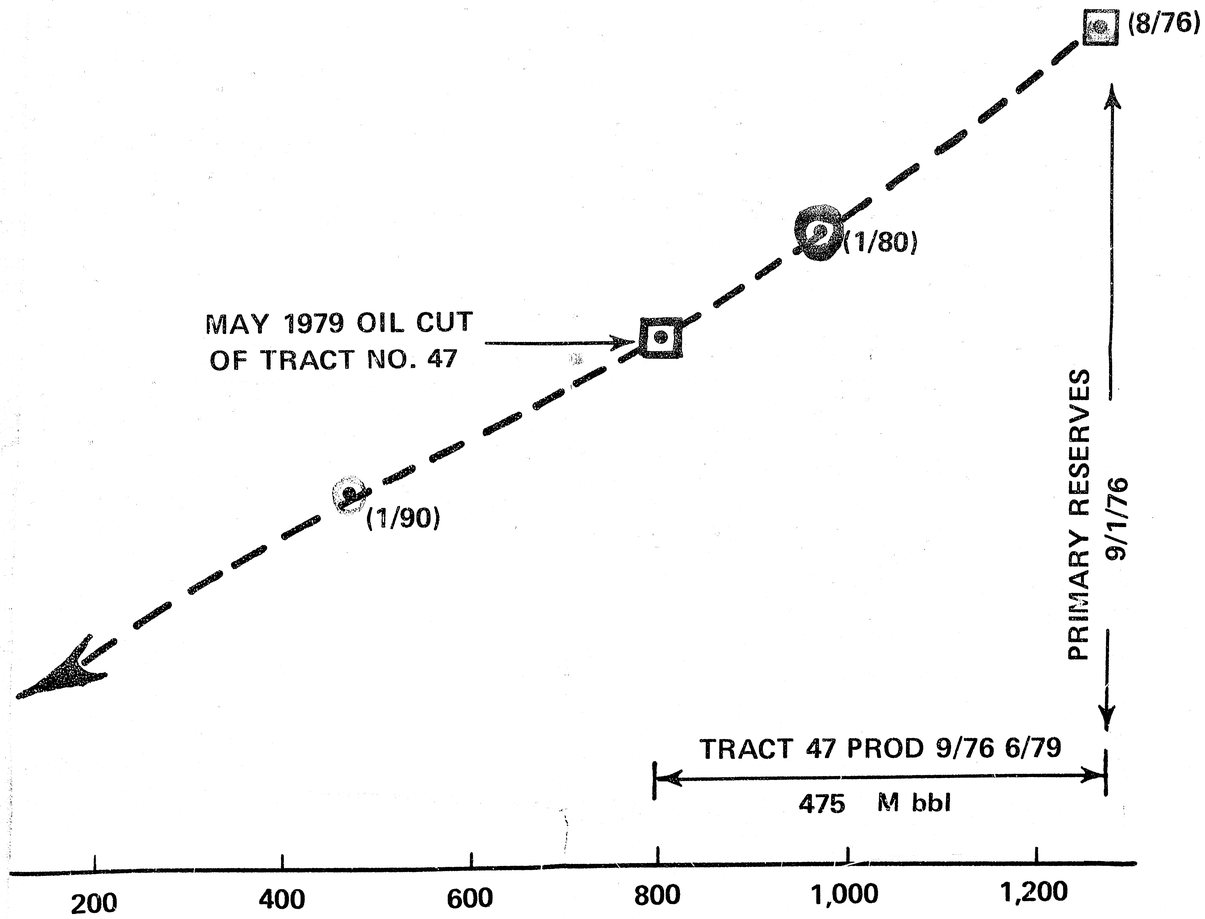


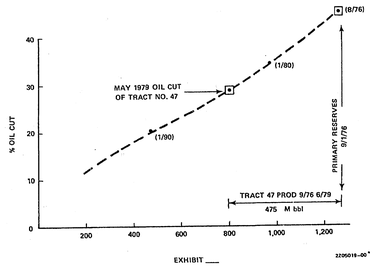
EXHIBIT —

2Z05019–00*

Shell Exhibit 36

Shell Exhibit 36 Case No. 6653 & 6652 10-3-77

PLOT OF EXXONS TRACT NO. 47 PRIMARY RESERVES
AS PREDICTED BY
N. HOBBS RESERVOIR SIMULATOR



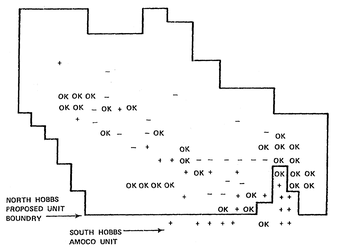
BEST AVAILABLE COPY

Shell Exhibit 37 Case No. 6653 10-3-79

HOBBS FIELD

COMPAIRSON WELLS PRODUCING MORE THAN 65 BOPD

MAY 1979 VS LAST YEAR SIMULATION HISTORY MATCH (1976.>)



\+ INDICATES WELL MAKING > 65 BOPD
MAY 1979 THAT WAS < 65 BOPD 1976. >

– INDICATES WELL MAKING > 65 BOPD 1976. >
IS MAKING < 65 BOPD MAY 1979

OK INDICATES WELL > 65 BOPD BOTH
MAY 1979 AND 1976.>

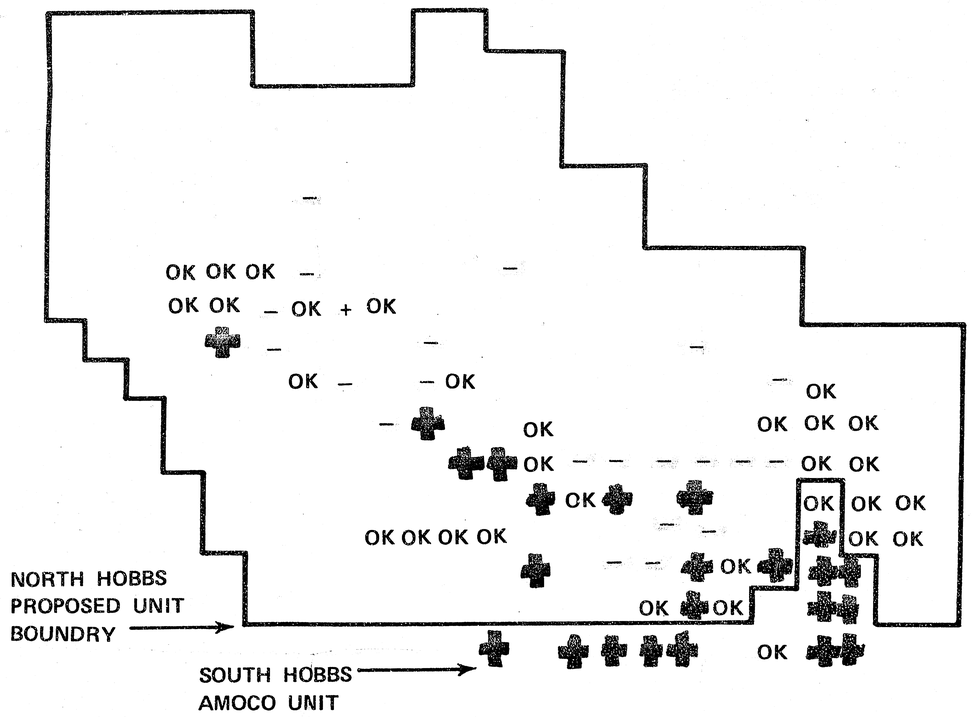
SHEET 1

A.R.A.M. MICROGRAPHICS
BEST AVAILABLE COPY

HOBBS FIELD

COMPARISON WELLS PRODUCING MORE THAN 65 BOPD

MAY 1979 VS LAST YEAR SIMULATION HISTORY MATCH (1976.)



✚ INDICATES WELL MAKING > 65 BOPD MAY 1979 THAT WAS < 65 BOPD 1976.

– INDICATES WELL MAKING > 65 BOPD 1976. IS MAKING < 65 BOPD MAY 1979

OK INDICATES WELL > 65 BOPD BOTH MAY 1979 AND 1976.

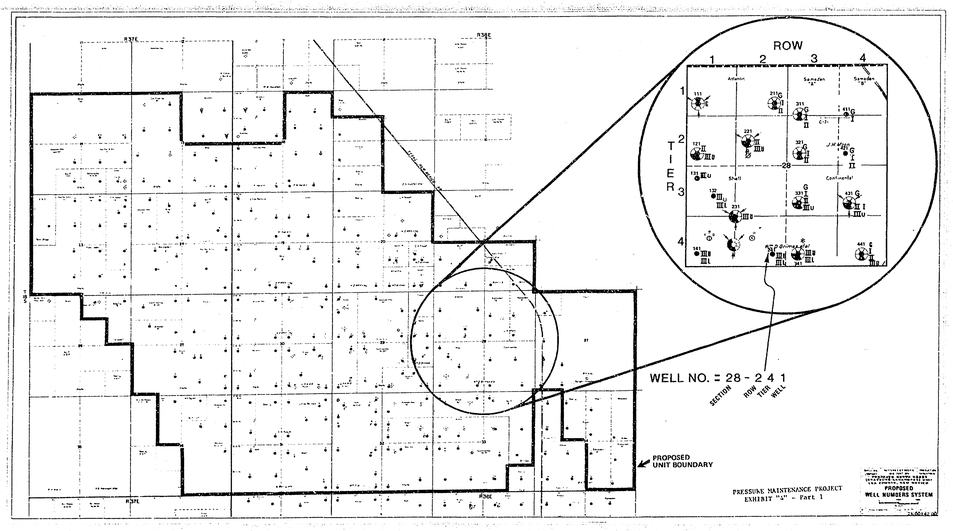
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Case No. 6653 Exhibit No. 37
Submitted by Shell
Hearing Date 11/1/79

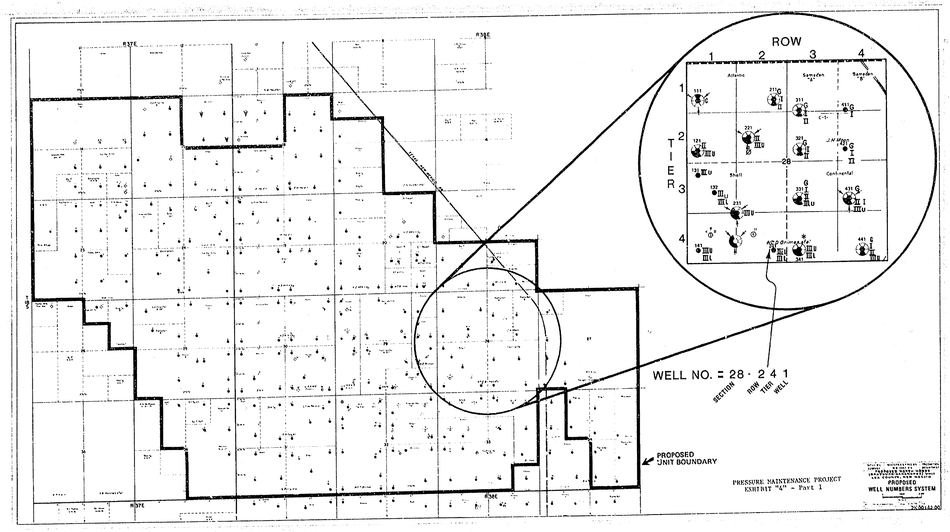
SHEET I

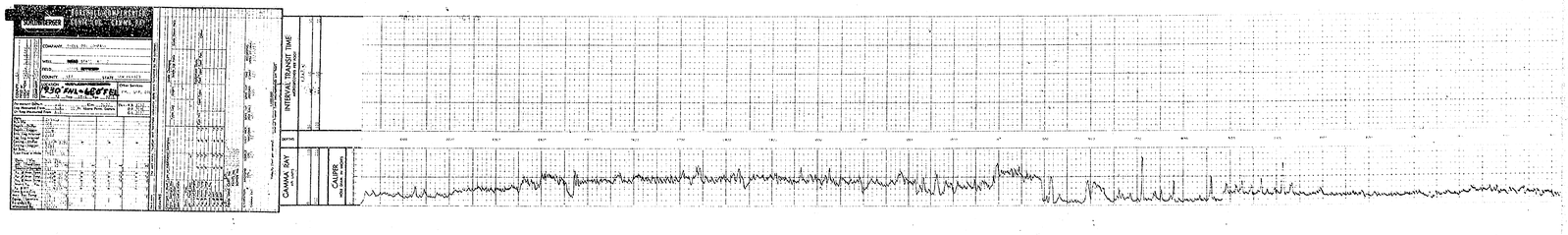
Shell Exhibit 37

Case No
6653

Large Exhibits


R37E
R38E
ROW
1
2
3
4
TIER
WELL NO. = 28 - 2 4 1
SECTION
ROW
TIER
WELL
PROPOSED
UNIT BOUNDARY
PRESSURE MAINTENANCE PROJECT
EXHIBIT "A" - Part 1
PROPOSED
WELL NUMBERS SYSTEM


R32E
R33E
ROW
1
2
3
4
T
I
E
R
3
28
WELL NO. = 28 · 2 4 1
SECTION
ROW
TIER
WELL
PROPOSED
UNIT BOUNDARY
PRESSURE MAINTENANCE PROJECT
EXHIBIT "A" - Part 1
PROPOSED
WELL NUMBERS SYSTEM



PRESSURE MAINTENANCE PROJECT
EXHIBIT "2"

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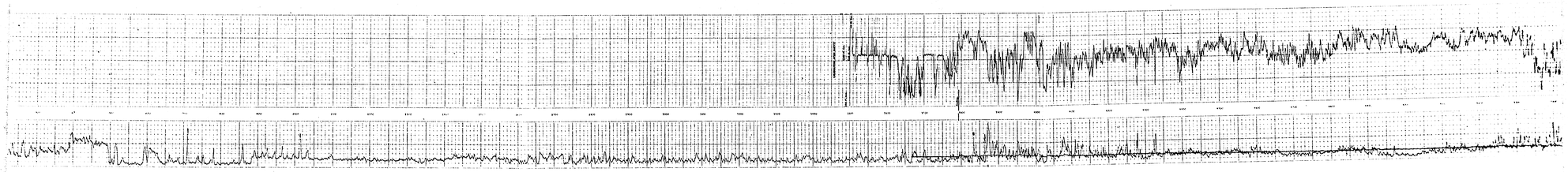

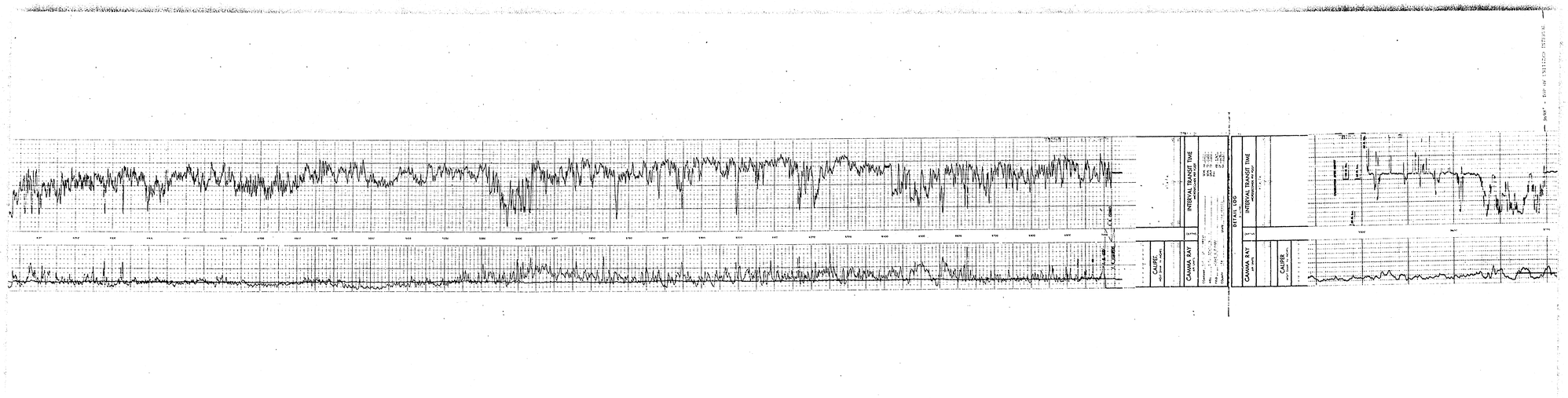

V.P.I.C.F. MICROGRAPHICS
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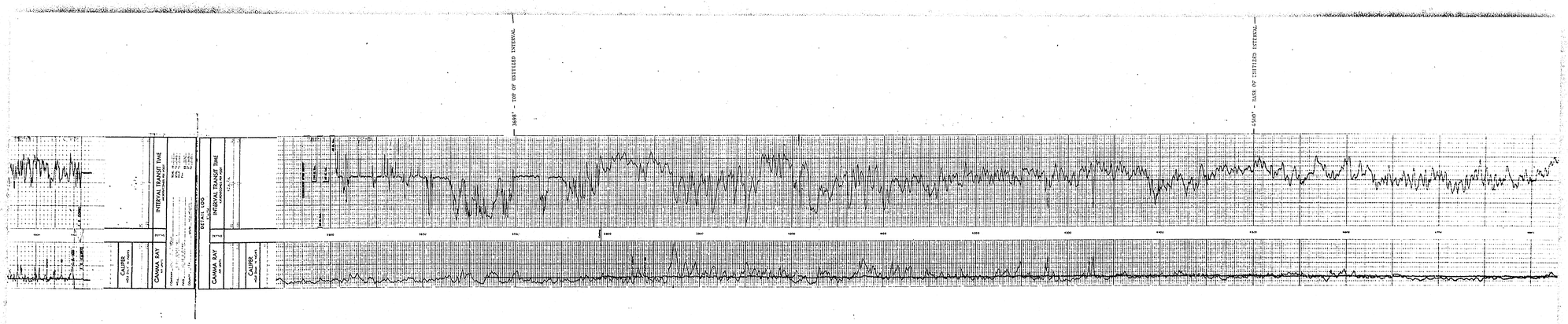

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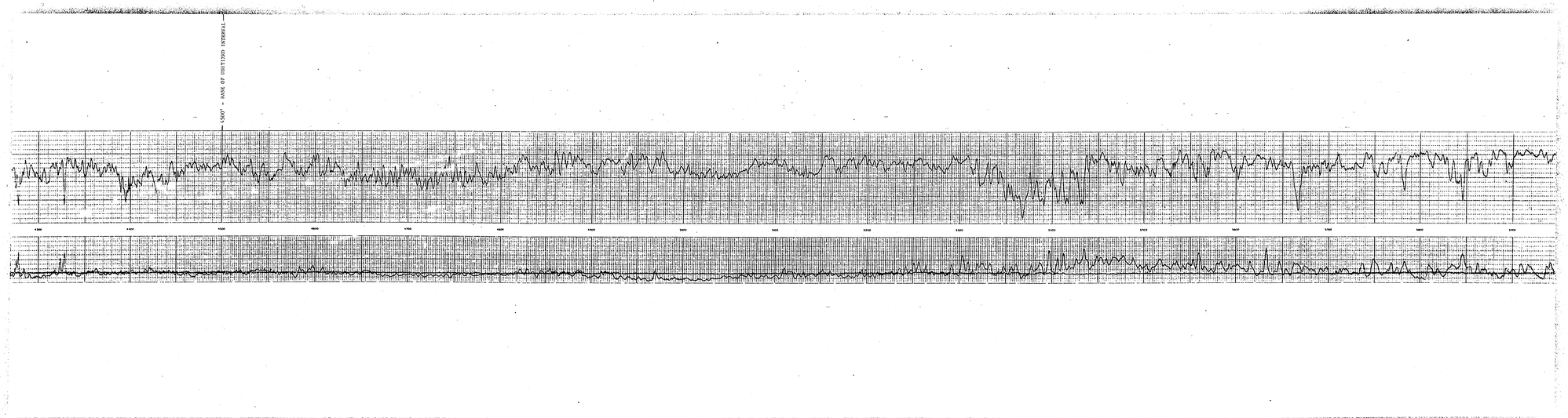

U.S.D.C.F. MICROGRAPHICS

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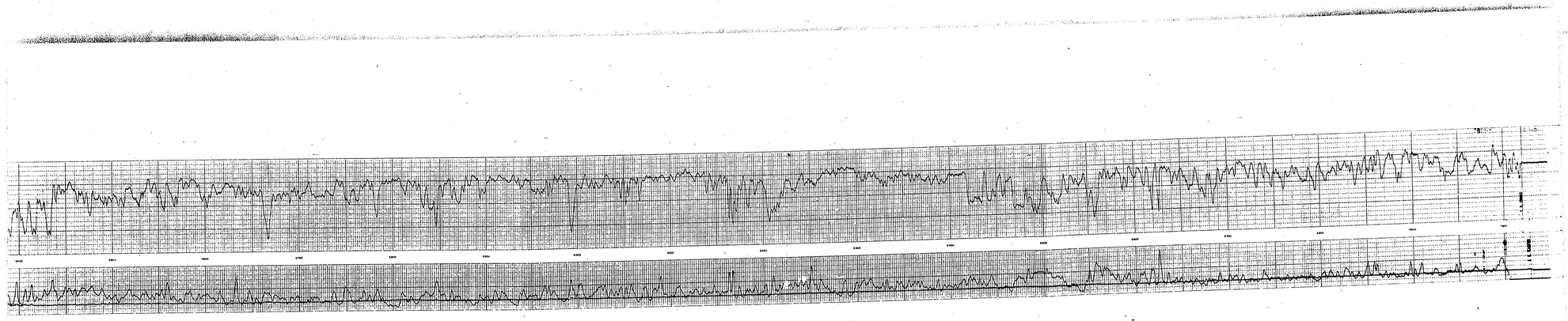

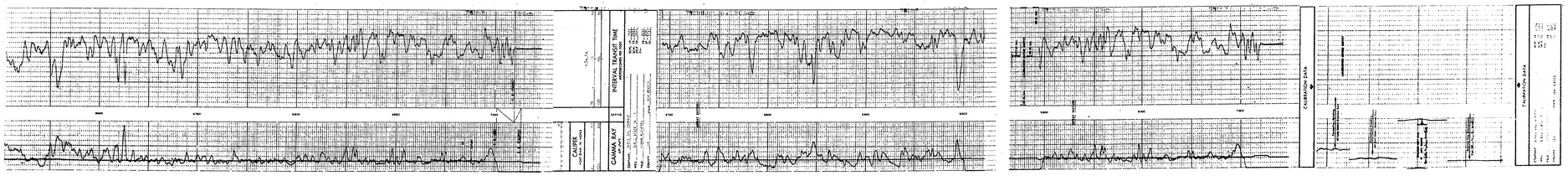

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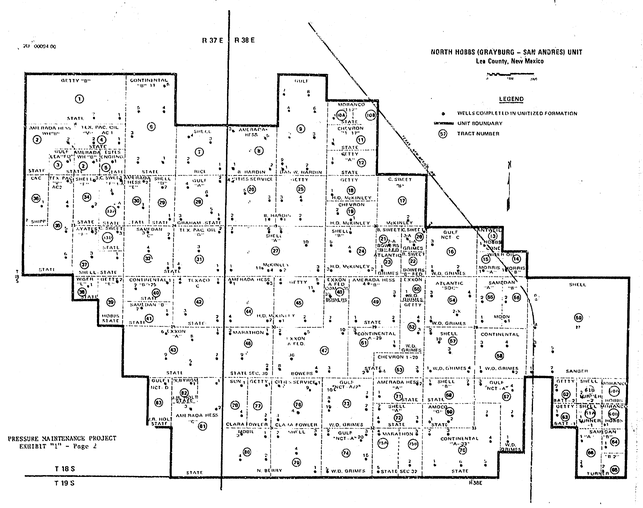

V.R.M.C.F. MICROGRAPHICS
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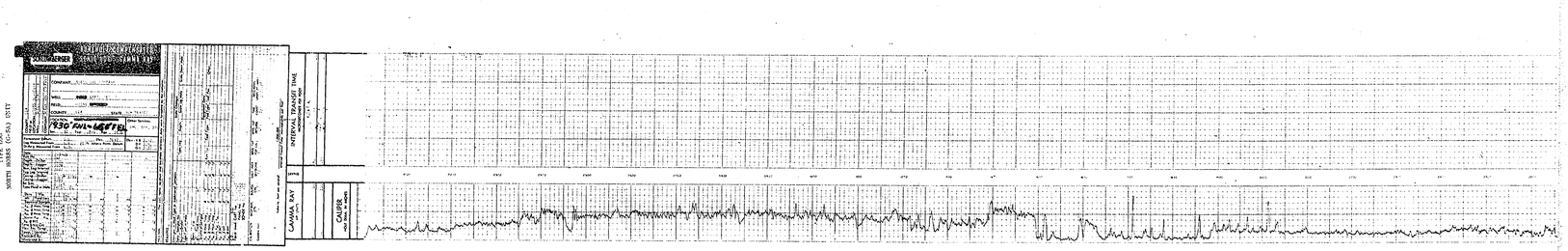
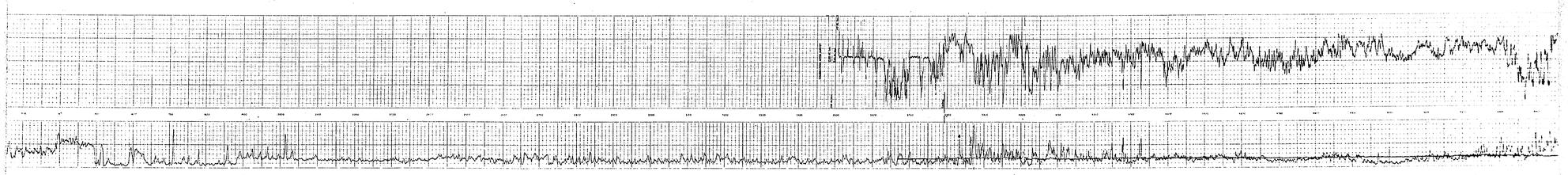


PRESSURE MAINTENANCE
EXHIBIT "2"



U.S.D.A. NEAL
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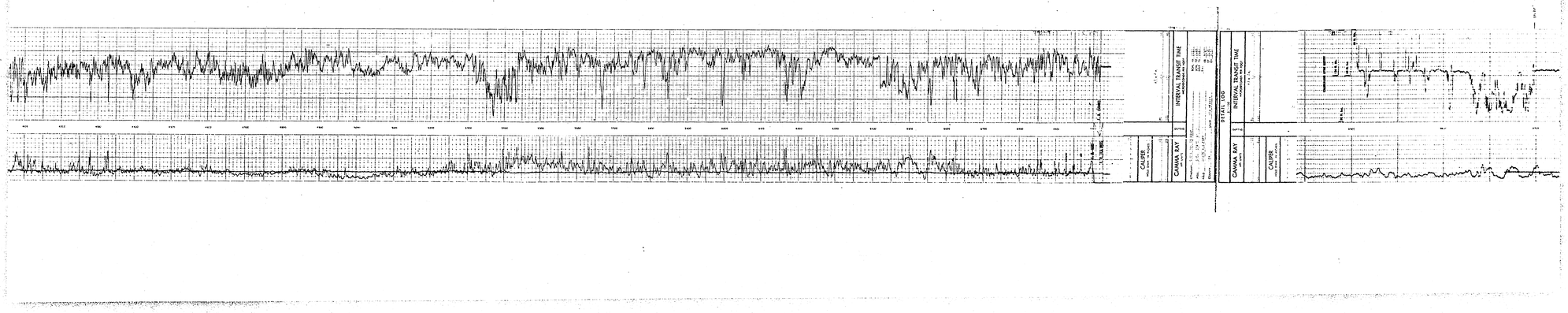
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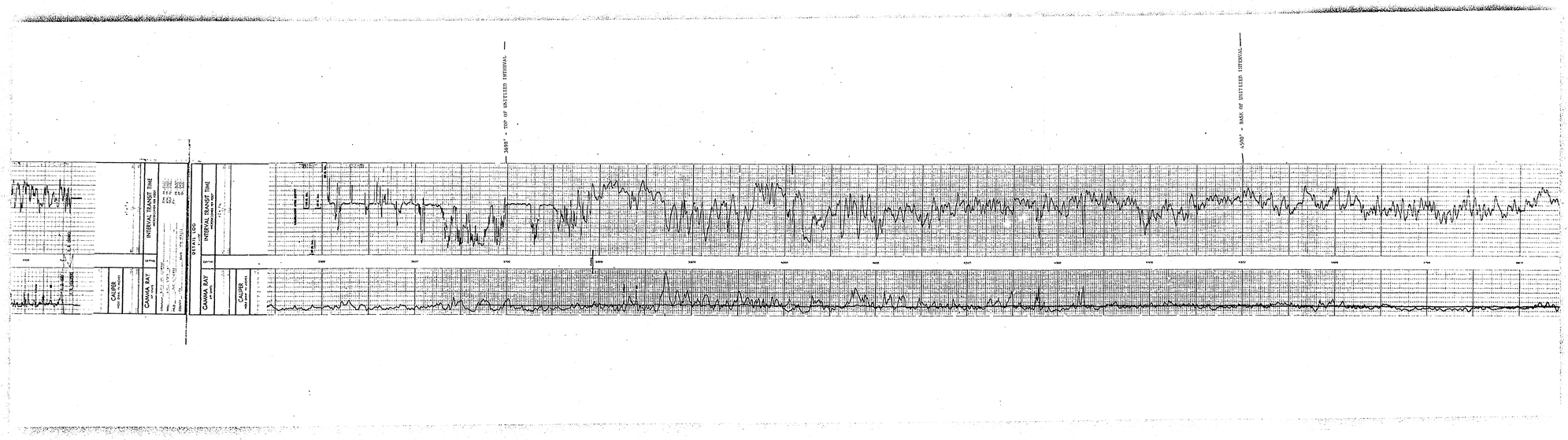
CALIPER
GAMMA RAY
INTERVAL TRANSIT TIME
CALIPER
GAMMA RAY



U.S.G.S. HYDROGRAPHICS
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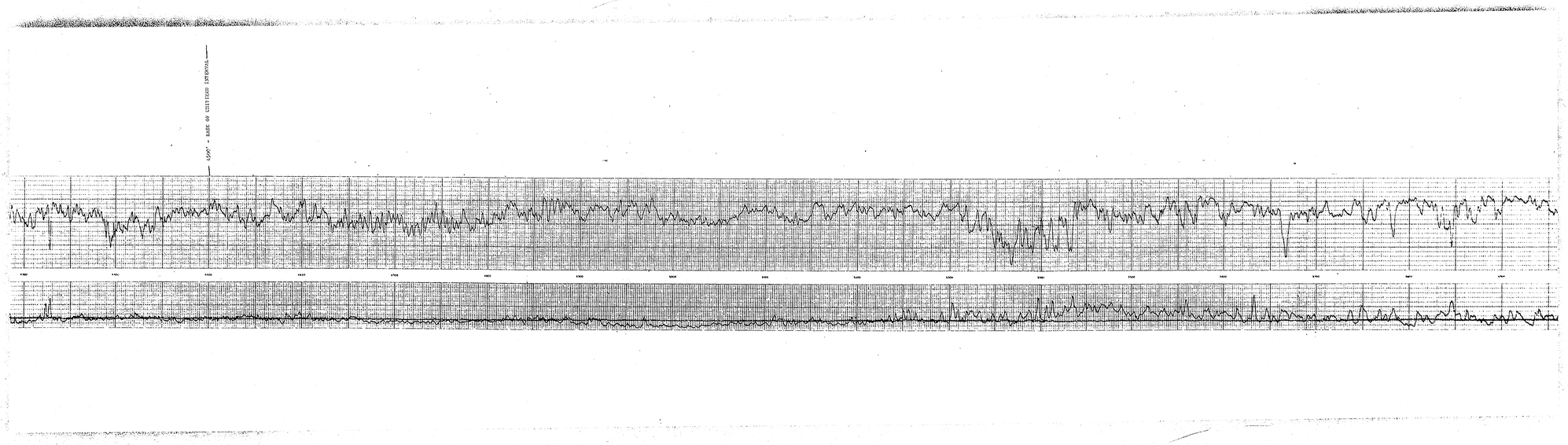
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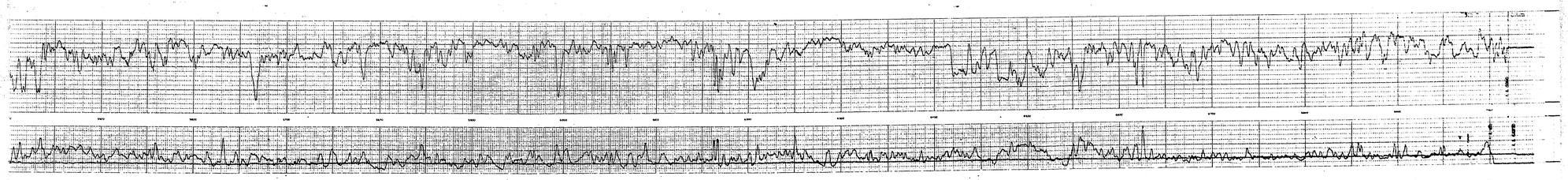

U.S.D.C.F. MICROGRAPHICS

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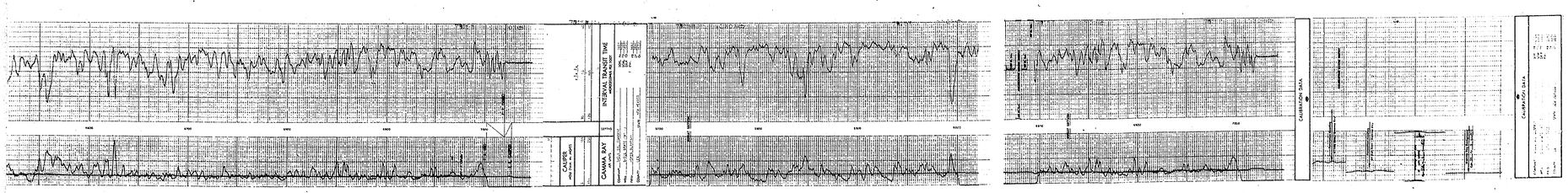

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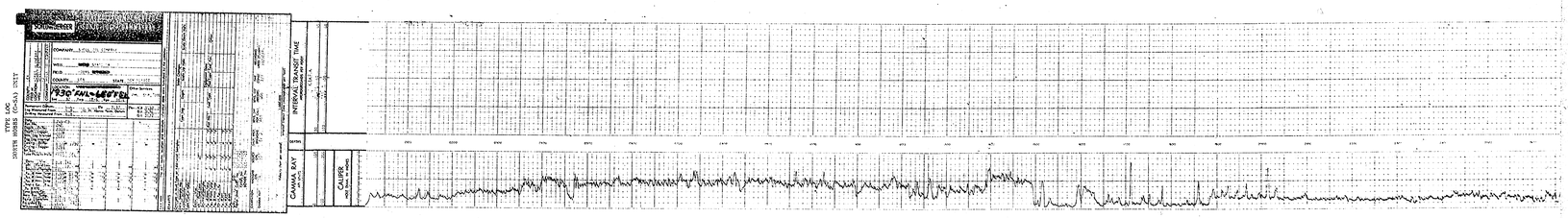

PRESSURE MAINTENANCE PROJECT
EXHIBIT "2"

W.P.M.C.F. MICROGRAPHICS
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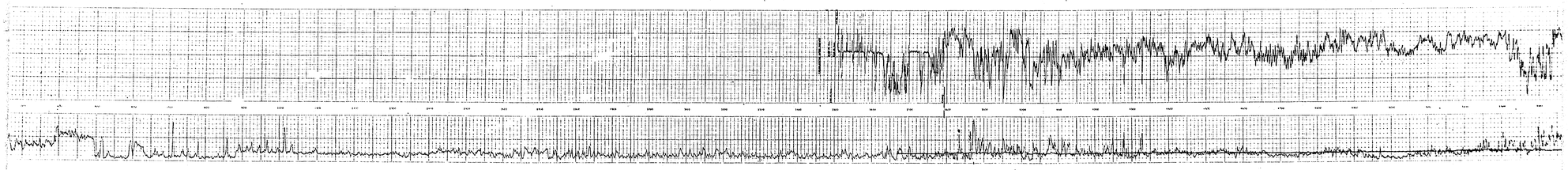

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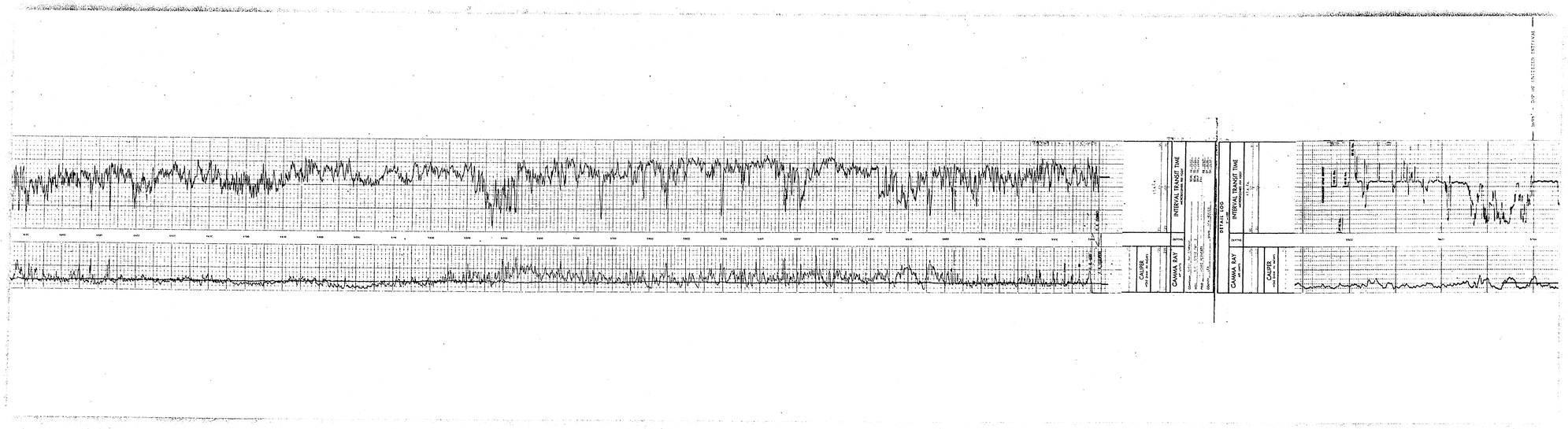

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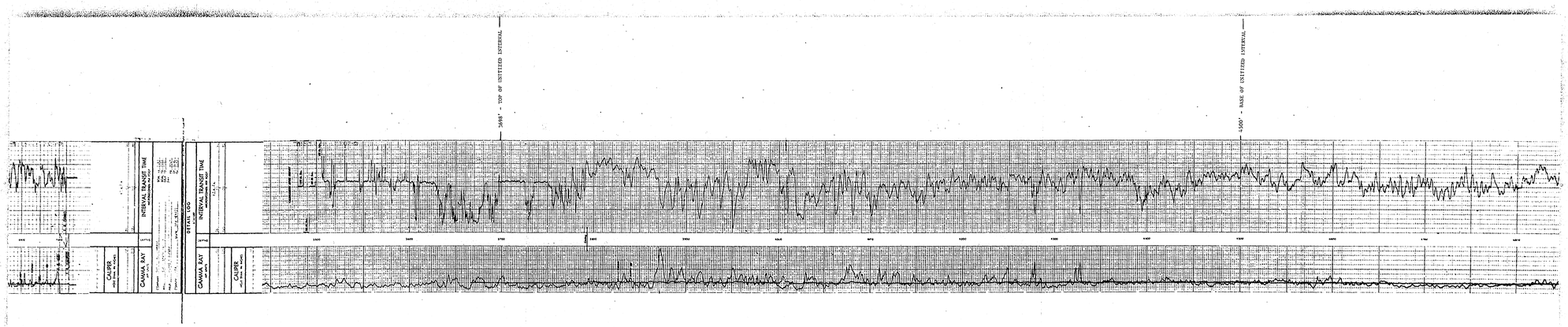

V.P.R.C.F. MICROGRAPHICS
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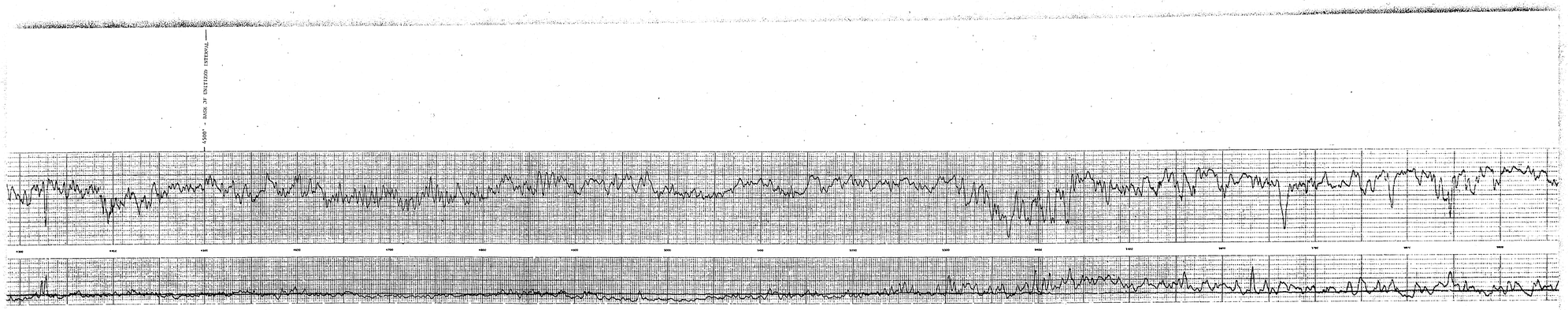

U.S.N.R.C.F. MICROGRAPHICS

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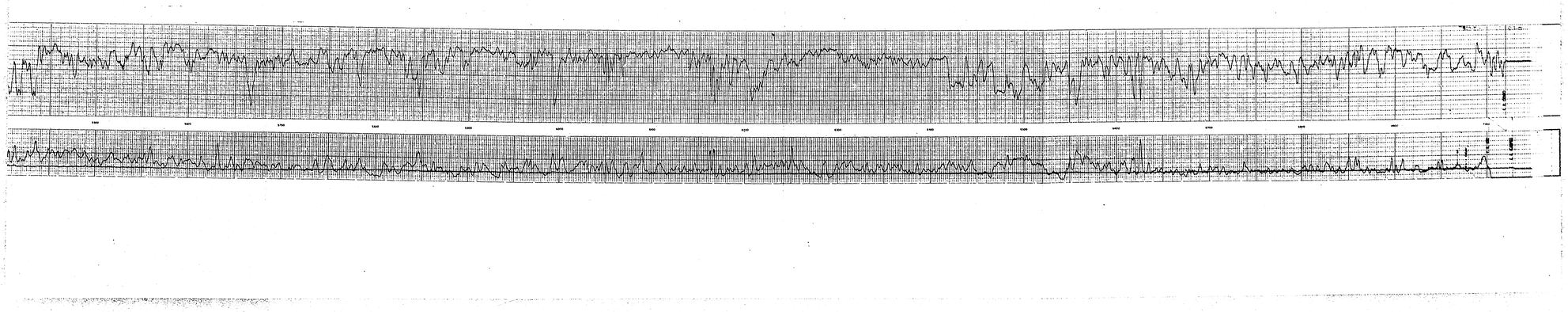

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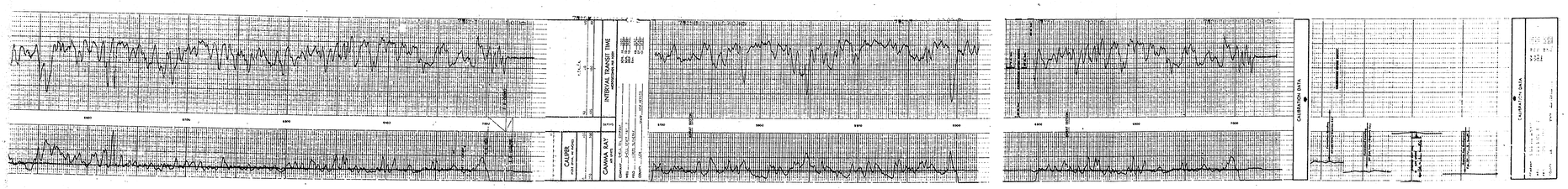

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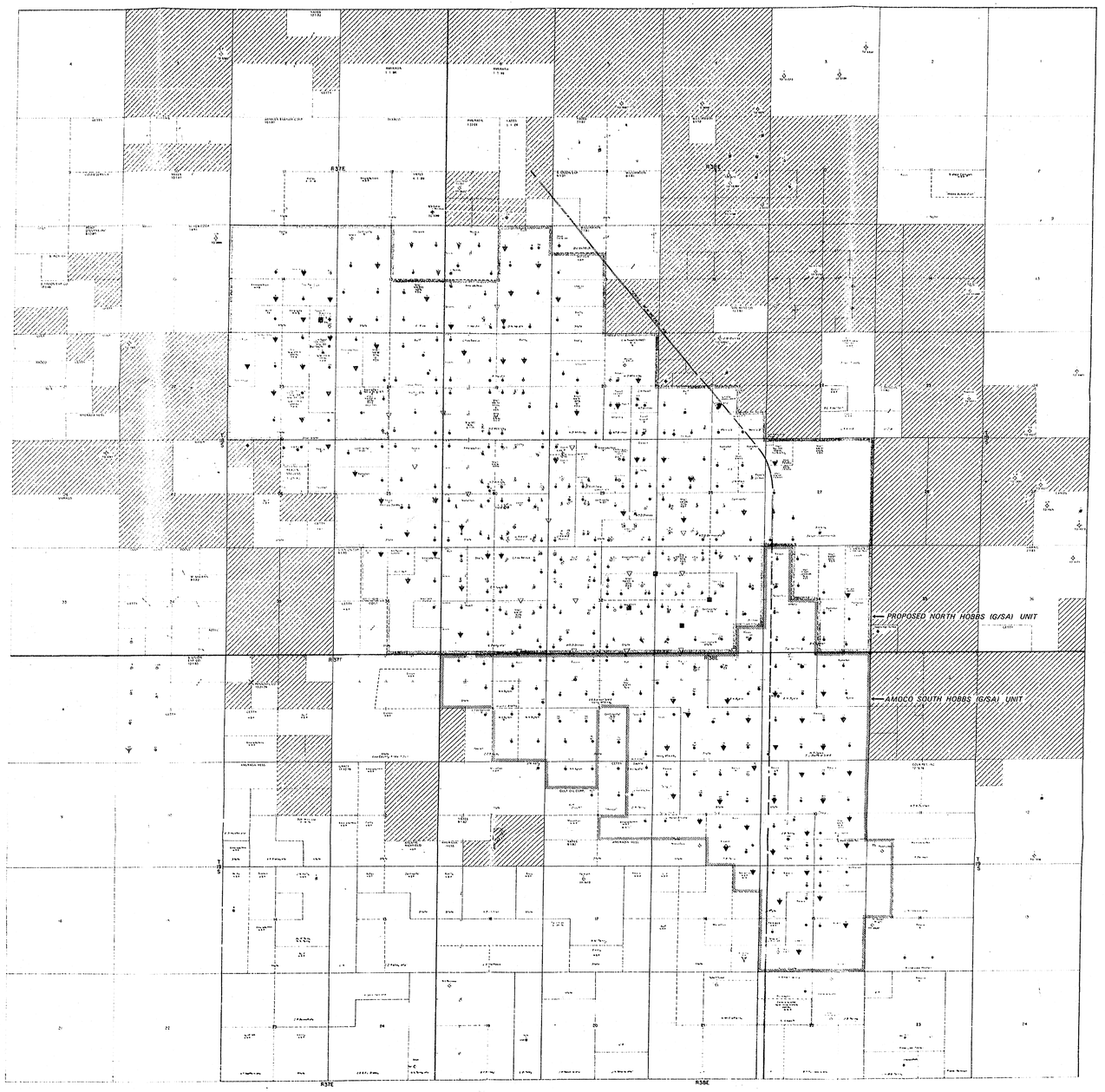

PROPOSED NORTH HOBBS (G-SA) UNIT
PRESSURE MAINTENANCE PROJECT
PRODUCER INJECTION WELL
PRODUCING WELLS & LEASES WITHIN TWO MILES of PROPOSED INJECTION WELLS

PRESSURE MAINTENANCE PROJECT
EXHIBIT "1"

U.S.G.S. RECONNAISSANCE
BEST AVAILABLE COPY

NORTH HOBBS (G/SA) UNIT
WELL NUMBERS
CROSS - REFERENCE
BY UNIT WELL #

T18S R37E

N. Hobbs (G/SA) Unit Sec. 13

Unit Well #		
13-121	=	Continental - "B" State #5
13-131	=	Continental - "B" State #7
13-141	=	Continental - "B" State #2
13-211	=	Continental - "B" State #6
13-221	=	Continental - "B" State #4
13-241	=	Continental - "B" State #1
13-331	=	Shell - Rice #4
13-341	=	Shell - Rice #2
13-431	=	Shell - Rice #3
13-441	=	Shell - Rice #1

N. Hobbs (G/SA) Unit Sec. 14

Unit Well #		
14-231	=	Amerada Hess - "WNB" State #2
14-241	=	Gulf - "FO" State #1
14-321	=	Getty - "B" State #2
14-331	=	Tex. Pac. - "V" State #2
14-341	=	Amerada Hess - "WNB" State #1
14-421	=	Getty - "B" State #1
14-431	=	Tex. Pac. - "V" State J1
14-441	=	Estes. Engr. - State #1

N. Hobbs (G/SA) Unit Sec. 23

Unit Well #		
23-121	=	C&C Shipp - State #1
23-211	=	Tex. Pac. - "V" State #3
23-221	=	Tex. Pac. - "V" State #4
23-231	=	Tex. Pac. - "V" State #5
23-241	=	Tex. Pac. - "V" State #6
23-311	=	Shell - "F" State #3
23-321	=	Shell - "F" State #2
23-331	=	Yates - Shell - State #2
23-341	=	Yates - Shell - State #3
23-411	=	C. H. Sweet - "F" State #1-A
23-412	=	C. H. Sweet - "F" State #4
23-421	=	C. H. Sweet - "F" State #2-A
23-431	=	C. H. Sweet - "F" State #3
23-441	=	Yates - Shell - State #1

PRESSURE MAINTENANCE PROJECT
EXHIBIT "A" - Part 2

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N. Hobbs (G/SA) Unit Sec. 24

Unit Well #		
24-131	=	Amerada Hess "E" State #2
24-121	=	Amerada Hess "E" State #1
24-131	=	Samedan "C" State #3
24-141	=	Samedan "C" State #4
24-211	=	Shell "D" State #2
24-221	=	Shell "D" State #1
24-231	=	Samedan "C" State #2
24-241	=	Samedan "C" State #1
24-311	=	Gulf Graham - State #4
24-321	=	Gulf Graham - State #3
24-331	=	Tex. Pac. "G" State #3
24-341	=	Tex. Pac. "G" State #4
24-411	=	Gulf Graham - State #6
24-412	=	Gulf Graham - State #2
24-421	=	Gulf Graham - State #5
24-422	=	Gulf Graham - State #1
24-431	=	Tex. Pac. "G" State #2
24-441	=	Tex. Pac. "G" State #1

N. Hobbs Unit (G/SA) Unit Sec. 25

Unit Well #25-		
25-111	=	Continental - "B-25" State #2
25-121	=	Samedan - "B" State #2
25-211	=	Continental - "B-25" State #1
25-221	=	Samedan - "B" State #1
25-231	=	Exxon - "A" State #6
25-241	=	Exxon - "A" State #9
25-311	=	Texaco - "C" State #4
25-321	=	Texaco - "C" State #3
25-331	=	Exxon - "A" State #8
25-341	=	Exxon - "A" State #5
25-411	=	Texaco - "C" State #1
25-421	=	Texaco - "C" State #2
25-431	=	Exxon - "A" State #1
25-441	=	Exxon - "A" State #7

N. Hobbs (G/SA) Unit Sec. 26

Unit Well #26-		
26-311	=	Wiser - "L" State #1
26-411	=	Skelly (Getty) "E" State #1

N. Hobbs (G/SA) Unit Sec. 36

Unit Well #36-		
36-211	=	Gulf - "D" State #1
36-311	=	Byron - Gulf Holt State #1
36-321	=	Amerada Hess - "C" State #3
36-411	=	Amerada Hess - "C" State #1
36-421	=	Amerada Hess - "C" State #2

V.S.R.C.F. MICROGRAPHICS

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718S384

N. Hobbs (G/SA) Unit Sec. 17

Unit
Well #17-121 = Moranco "717" State #1
17-131 = Chevron "17" State #1
17-141 = Skelly (Getty) - "A" State #1

N. Hobbs (G/SA) Unit Sec. 18

Unit
Well #18-131 = Amerada Hess - Hardin #3
18-141 = Amerada Hess - Hardin #1
18-231 = Amerada Hess - Hardin #5
18-241 = Amerada Hess - Hardin #2
18-311 = Gulf - Hardin #7
18-321 = Gulf - Hardin #4
18-331 = Gulf - Hardin #5
18-341 = Gulf - Hardin #9
18-342 = Gulf - Hardin #1
18-411 = Gulf - Hardin #8
18-421 = Gulf - Hardin #6
18-431 = Gulf - Hardin #3
18-441 = Gulf - Hardin #2

N. Hobbs (G/SA) Unit Sec. 19

Unit
Well #19-111 = Cities Service - Hardin #5
19-112 = Cities Service - Hardin #4
19-121 = Cities Service - Hardin #2
19-131 = Shell - "A" McKinley #7
19-141 = Shell - "A" McKinley #1
19-211 = Cities Service - Hardin #3
19-221 = Cities Service - Hardin #1
19-231 = Shell - "A" McKinley #6
19-241 = Shell - "A" McKinley #4
19-242 = Shell - "A" McKinley #11
19-311 = Getty - Hardin #3
19-321 = Getty - Hardin #1
19-331 = Shell - "A" McKinley #5
19-341 = Shell - "A" McKinley #2
19-411 = Getty - Hardin #4
19-421 = Getty - Hardin #2
19-431 = Shell - "A" McKinley #10
19-441 = Shell - "A" McKinley #3

N. Hobbs (G/SA) Unit Sec. 20

Unit
Well #20-111 = Skelly (Getty) - McKinley #1
#20-131 = Chevron - McKinley #2
#20-131 = Shell - "B" McKinley #5
#20-141 = Shell - "B" McKinley #3

U.S.D.O.E. RECORDS
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N. Hobbs (G/SA) Unit Sec. 20 (Continued)

Unit Well		
#20-221	=	Chevron - McKinley #1
20-231	=	Shell - "B" McKinley #1
20-232	=	Shell - "B" McKinley #4
20-241	=	Shell - "B" McKinley #2
20-331	=	Bill Sweet - "B" US #2-A
20-341	=	Atlantic - Grimes #1
20-421	=	C. H. Sweet - McKinley B #2
20-431	=	C. H. Sweet - Grimes #1-A
20-432	=	C. H. Sweet - Grimes #3-A

N. Hobbs (G/SA) Unit Sec. 21

Unit Well		
#21-131	=	Gulf - "C" Grimes #3
21-141	=	Gulf - "C" Grimes #1
21-241	=	Gulf - "C" Grimes #2
21-331	=	Antwil - Hobbs CT #1
21-341	=	Wiser - Morris "A" #1
21-441	=	Wiser - Morris "B" #1

N. Hobbs (G/SA) Unit Sec. 27

Unit Well		
#27-111	=	Shell - Sanger #5
27-121	=	Shell - Sanger #4
27-131	=	Shell - Sanger #3
27-141	=	Shell - Sanger #1
27-231	=	Sehll - Sanger #5
27-241	=	Shell - Sanger #2

N. Hobbs (G/SA) Unit Sec. 28

Unit Well		
#28-111	=	Atlantic - Grimes SOC #3
28-121	=	Atlantic - Grimes SOC #1
28-131	=	Shell - Grimes #2
28-132	=	Shell - Grimes #10
28-141	=	Shell - Grimes #1
28-211	=	Atlantic - Grimes SOC #4
28-221	=	Atlantic - Grimes SOC #2A
28-231	=	Shell - Grimes #3
28-241	=	Shell - Grimes #4
28-311	=	Samedan - "A" Moon #2
28-321	=	Samedan - "A" Moon #1
28-331	=	Continental - Grimes #3
28-341	=	Continental - Grimes #5
28-411	=	Samedan - "B" Moon #2
28-421	=	Samedan - "B" Moon #1
28-431	=	Continental - Grimes #4
28-442	=	Continental - Grimes #2

U.S.G.S. RECORDS
BEST AVAILABLE COPY

N. Hobbs (G/SA) Unit Sec. 29

Unit Well #		
29-111	=	Exxon - U.S.A.M.R. Bowers #35
29-121	=	Exxon - U.S.A.M.R. Bowers #7
29-131	=	Exxon - U.S.A.M.R. Bowers #10
29-141	=	Exxon - U.S.A.M.R. Bowers #3
29-211	=	Amerada Hess - "B" Hobbs State #4
29-221	=	Amerada Hess - "B" Hobbs State #1
29-231	=	Continental "A-29" State #3
29-241	=	Continental "A-29" State #2
29-311	=	Amerada Hess "B" Hobbs State #3
29-321	=	Amerada Hess "B" Hobbs State #2
29-331	=	Continental "A-29" State #1
29-341	=	Chevron "A" State #4
29-411	=	Exxon - Grimes #1
29-421	=	Getty - Grimes #4
29-431	=	Getty - Grimes #3
29-441	=	Chevron - "A" State #3

N. Hobbs (G/SA) Unit Sec. 30

Unit Well #		
30-111	=	Amerada Hess - McKinley #1
30-121	=	Amerada Hess - McKinley #4
30-131	=	Marathon - State #3
30-141	=	Marathon - State #9
30-211	=	Amerada Hess - McKinley #3
30-221	=	Amerada Hess - McKinley #2
30-231	=	Marathon - State #1
30-241	=	Marathon - State #2
30-311	=	Getty - McKinley #4
30-321	=	Getty - McKinley #1
30-331	=	Exxon "A" USA Bowers #2
30-341	=	Exxon "A" USA Bowers #36
30-342	=	Exxon "A" USA Bowers #8
30-411	=	Getty - McKinley #3
30-412	=	Getty - McKinley #11
30-421	=	Getty - McKinley #2
30-431	=	Exxon "A" USA Bowers #5
30-441	=	Exxon "A" USA Bowers #4

N. Hobbs (G/SA) Unit Sec. 31

Unit Well #		
31-111	=	Sun - Fowler #1
31-121	=	Sun - Fowler #4
31-131	=	Mobil - Berry #3
31-141	=	Mobil - Berry #4
31-211	=	Skelly (Getty) - Fowler #1
31-221	=	Skelly (Getty) - Fowler #2
31-231	=	Mobil - Berry #1
31-241	=	Mobil - Berry #2
31-311	=	Cities Service - Fowler #2

BEST AVAILABLE COPY

N. Hobbs (G/SA) Unit Sec. 31 (Cont'd)

Unit
Well #31-321 = Cities Service - Fowler #3
31-331 = Shell - Berry #2
31-341 = Shell - Berry #4
31-411 = Cities Service - Fowler #1
31-412 = Cities Service - Fowler #9
31-421 = Cities Service - Fowler #4
31-431 = Shell - Berry #3
31-441 = Shell - Berry #1

N. Hobbs (G/SA) Unit Sec. 32

Unit
Well #32-111 = Gulf - "NCT-A" Grimes #10
32-112 = Gulf - "NCT-A" Grimes #8
32-121 = Gulf - "NCT-A" Grimes #19
32-131 = Gulf - "NCT-A" Grimes #9
32-141 = Gulf - "NCT-A" Grimes #5
32-211 = Gulf - "NCT-A" Grimes #7
32-221 = Gulf - "NCT-A" Grimes #2
32-231 = Gulf - "NCT-A" Grimes #3
32-232 = Gulf - "NCT-A" Grimes #20
32-241 = Gulf - "NCT-A" Grimes #15
32-311 = Amerada Hess "A" State #1
32-321 = Shell - "A" State #2
32-322 = Shell - "A" State #4
32-331 = Marathon - State #4
32-341 = Marathon - State #5
32-411 = Amerada Hess - "A" State #2
32-421 = Shell - "A" State #3
32-431 = Marathon - State #3
32-443 = Marathon - State #2

N. Hobbs (G/SA) Unit Sec. 33

Unit
Well #33-111 = Shell - "A" State #1
33-121 = Amoco - "G" State #1
33-131 = Continental "A-33" State #2
33-141 = Continental "A-33" State #1
33-211 = Shell - "B" State #2
33-221 = Amoco - "G" State #2
33-231 = Continental - "A-33" State #3
33-241 = Continental - "A-33" State #6
33-311 = Gulf - "B" Grimes #3
33-321 = Continental - "A-33" State #7
33-331 = Continental - "A-33" State #4
33-341 = Continental - "A-33" State #5
33-411 = Gulf - "B" Grimes #4
33-421 = Gulf - "B" Grimes #2
33-431 = Gulf - "B" Grimes #1

N. Hobbs (G/SA) Unit Sec. 34

Unit
Well #34-211 = Skelly (Getty) - Turner #2
34-221 = Skelly (Getty) - Turner #1
34-311 = Shell - Turner #2
34-321 = Shell - Turner #1
34-331 = Samedan - "A" Turner #1
34-341 = Samedan - "A" Turner #2
34-421 = Maranco - Hobbs #1
34-431 = Samedan - "B" Turner #1
34-441 = Samedan - "B" Turner #2

U.S.D.C.F. RECONSTRUCTED
BEST AVAILABLE COPY

NORTH HOBBS (G/SA) UNIT
WELL NUMBERS
CROSS - REFERENCE
BY CURRENT OPERATOR/WELL #

Operator	Lease Name	Well #	Unit Letter	Sec.	Unit Well #
Amerada Hess	Hardin	1	M	= 18 -	18-141
Amerada Hess	Hardin	2	N	= 18 -	18-241
Amerada Hess	Hardin	3	L	= 18 -	18-131
Amerada Hess	Hardin	5	K	= 18 -	18-231
Amerada Hess	Hardin	1	D	= 30 -	30-111
Amerada Hess	McKinley	2	F	= 30 -	30-221
Amerada Hess	McKinley	3	C	= 30 -	30-211
Amerada Hess	McKinley	4	E	= 30 -	30-121
Amerada Hess	McKinley	1	B	= 32 -	32-311
Amerada Hess	State "A"	2	A	= 32 -	32-411
Amerada Hess	State "A"	1	F	= 29 -	29-221
Amerada Hess	State "B"	2	G	= 29 -	29-321
Amerada Hess	State "B"	3	B	= 29 -	29-311
Amerada Hess	State "B"	4	C	= 29 -	29-211
Amerada Hess	State "E"	1	A	= 36 -	36-441
Amerada Hess	State "C"	2	H	= 36 -	36-421
Amerada Hess	State "C"	3	G	= 36 -	36-321
Amerada Hess	State "C"	1	E	= 24 -	24-121
Amerada Hess	State "E"	2	D	= 24 -	24-111
Amerada Hess	State "E"	1	O	= 14 -	14-341
Amerada Hess	State "NHA"	1	X	= 14 -	14-231
Amerada Hess	State "NHB"	2	E	= 33 -	33-121
Amerada Hess	State "G"	1	E	= 33 -	33-221
Amoco	State "G"	2	F	= 33 -	21-331
Amoco	State "CT"	1	J	= 21 -	20-341
Amoco	Hobbs "CT"	1	O	= 20 -	28-121
Antweil	Grimes	1	E	= 28 -	28-221
Atlantic	Grimes "SOC"	2A	F	= 28 -	28-111
Atlantic	Grimes "SOC"	3	D	= 28 -	28-211
Atlantic	Grimes "SOC"	4	C	= 28 -	36-311
Atlantic	Gulf Holt-State	1	B	= 36 -	20-221
Byrom	McKinley	1	F	= 20 -	20-121
Chevron	McKinley	2	E	= 20 -	17-131
Chevron	State "17"	1	L	= 17 -	29-441
Chevron	State "29"	3	P	= 29 -	29-341
Chevron	State "29"	4	O	= 29 -	31-411
Chevron	Fowler	1	A	= 31 -	31-311
Cities Service	Fowler	2	B	= 31 -	31-121
Cities Service	Fowler	3	G	= 31 -	31-421
Cities Service	Fowler	4	H	= 31 -	31-412
Cities Service	Fowler	9	A	= 31 -	19-121
Cities Service	Fowler	1	F	= 19 -	19-121
Cities Service	Hardin	2	E	= 19 -	19-211
Cities Service	Hardin	3	C	= 19 -	
Cities Service	Hardin				

PRESSURE MAINTENANCE PROJECT
EXHIBIT "A" - Part 3

Operator	Lease Name	Well #	Unit Letter		Sec.		Unit Well #
Cities Service	Hardin	4	D	=	19	-	19-112
Cities Service	Hardin	5	D	=	19	-	19-111
Continental	Grimes	1	O	=	28	-	28-341
Continental	Grimes	2	P	=	28	-	28-441
Continental	Grimes	3	J	=	28	-	28-331
Continental	Grimes	4	I	=	28	-	28-431
Continental	State "A29"	1	J	=	29	-	29-331
Continental	State "A29"	2	N	=	29	-	29-241
Continental	State "A29"	3	K	=	29	-	29-231
Continental	State "A33"	1	M	=	33	-	33-141
Continental	State "A33"	2	L	=	33	-	33-131
Continental	State "A33"	3	K	=	33	-	33-231
Continental	State "A33"	4	J	=	33	-	33-331
Continental	State "A33"	5	O	=	33	-	33-341
Continental	State "A33"	6	N	=	33	-	33-241
Continental	State "A33"	7	G	=	33	-	33-321
Continental	State "B-13"	1	N	=	13	-	13-241
Continental	State "B-13"	2	M	=	13	-	13-141
Continental	State "B-13"	4	F	=	13	-	13-221
Continental	State "B-13"	5	E	=	13	-	13-121
Continental	State "B-13"	6	C	=	13	-	13-211
Continental	State "B-13"	7	L	=	13	-	13-131
Continental	State "B25"	1	C	=	25	-	25-211
Continental	State "B25"	2	B	=	25	-	25-111
Mobil	Berry	1	K	=	31	-	31-231
Mobil	Berry	2	N	=	31	-	31-241
Mobil	Berry	3	L	=	31	-	31-131
Mobil	Berry	4	M	=	31	-	31-141
Exxon	Bowers A Fed.	2	J	=	30	-	30-331
Exxon	Bowers A Fed.	3	M	=	29	-	29-141
Exxon	Bowers A Fed.	4	P	=	30	-	30-441
Exxon	Bowers A Fed.	5	I	=	30	-	30-431
Exxon	Bowers A Fed.	7	E	=	29	-	29-121
Exxon	Bowers A Fed.	8	O	=	30	-	30-342
Exxon	Bowers A Fed.	10	L	=	29	-	29-131
Exxon	Bowers A Fed.	36	O	=	30	-	30-341
Exxon	Bowers A Fed. Com.	35	D	=	29	-	29-111
Exxon	Grimes	1	A	=	29	-	29-411
Exxon	New Mexico State	1	I	=	25	-	25-431
Exxon	New Mexico State	5	O	=	25	-	25-341
Exxon	New Mexico State	6	K	=	25	-	25-231
Exxon	New Mexico State	7	P	=	25	-	25-441
Exxon	New Mexico State	8	J	=	25	-	25-331
Exxon	New Mexico State	9	N	=	25	-	25-241
Getty	Grimes	3	I	=	29	-	29-431
Getty	Grimes	4	H	=	29	-	29-421
Getty	Hardin	1	G	=	19	-	19-321
Getty	Hardin	2	H	=	19	-	19-421

W.P.A.C.F. MICROGRAPHICS

BEST AVAILABLE COPY

Operator	Lease Name	Well #	Unit Letter		Sec.		Unit Well #
Getty	Hardin	3	E	-	19	-	19-311
Getty	Hardin	4	A	-	19	-	19-411
Getty	McKinley	1	G	-	30	-	30-321
Getty	McKinley	2	H	-	30	-	30-421
Getty	Mckinley	4	B	-	30	-	30-211
Getty	McKinley	5	A	-	30	-	30-411
Getty	McKinley	11	A	-	30	-	30-412
Getty	State "B"	1	H	-	14	-	14-421
Getty	State "B"	2	G	-	14	-	14-321
Getty	Fowler	1	C	-	31	-	31-211
Getty	Fowler	2	F	-	31	-	31-221
Getty	Hobbs "B"	1	A	-	26	-	26-411
Getty	McKinley	1	D	-	20	-	20-111
Getty	State "A"	1	M	-	17	-	17-141
Getty	Turner	1	F	-	34	-	34-221
Getty	Turner	2	C	-	34	-	34-211
Gulf	Graham State "A"	1	H	-	24	-	24-422
Gulf	Graham State "A"	2	A	-	24	-	24-412
Gulf	Graham State "A"	3	G	-	24	-	24-321
Gulf	Graham State "A"	4	B	-	24	-	24-311
Gulf	Graham State "A"	5	H	-	24	-	24-421
Gulf	Graham State "A"	6	A	-	24	-	24-411
Gulf	Grimes "A"	2	F	-	32	-	32-221
Gulf	Grimes "A"	7	C	-	32	-	32-211
Gulf	Grimes "A"	8	E	-	32	-	32-112
Gulf	Grimes "A"	10	D	-	32	-	32-111
Gulf	Grimes "A"	19	E	-	32	-	32-121
Gulf	Grimes "A" No. 2	3	K	-	32	-	32-231
Gulf	Grimes "A" No. 2	5	M	-	32	-	32-141
Gulf	Grimes "A" No. 2	9	L	-	32	-	32-131
Gulf	Grimes "A" No. 2	15	N	-	32	-	32-241
Gulf	Grimes "A" No. 2	20	K	-	32	-	32-232
Gulf	Grimes "B"	1	I	-	33	-	33-431
Gulf	Grimes "B"	2	H	-	33	-	33-421
Gulf	Grimes "B"	3	B	-	33	-	33-311
Gulf	Grimes "B"	4	A	-	33	-	33-411
Gulf	Grimes "C"	1	M	-	21	-	21-141
Gulf	Grimes "C"	2	N	-	21	-	21-241
Gulf	Grimes "C"	3	L	-	21	-	21-131
Gulf	Hardin	1	O	-	18	-	18-342
Gulf	Hardin	2	P	-	18	-	18-441
Gulf	Hardin	3	I	-	18	-	18-431
Gulf	Hardin	4	G	-	18	-	18-321
Gulf	Hardin	5	J	-	18	-	18-331
Gulf	Hardin	6	H	-	18	-	18-421
Gulf	Hardin	7	B	-	18	-	18-311
Gulf	Hardin	8	A	-	18	-	18-411
Gulf	Hardin	9	O	-	18	-	18-341

U.S.G.S. RECORDS

BEST AVAILABLE COPY

Operator	Lease Name	Well #	Unit Letter	Sec.	Unit Well #
Gulf	Holt NCT - D	1	C	- 36 -	36-211
Gulf	Lea FO State	1	N	- 14 -	14-241
Marathon	State 30	1	K	- 30 -	30-231
Marathon	Staco 30	2	N	- 30 -	30-241
Marathon	State 30	3	L	- 30 -	30-131
Marathon	State 30	9	M	- 30 -	30-141
Marathon	State 32	2	F	- 32 -	32-441
Marathon	State 32	3	I	- 32 -	32-431
Marathon	State 32	4	J	- 32 -	32-331
Marathon	State 32	5	O	- 32 -	32-341
Moran	Hobbs	1	M	- 34 -	34-421
Moran	State "717"	1	K	- 17 -	17-121
C&C Shipp	"A"	1	E	- 23 -	23-121
Sun	Fowler	1	D	- 31 -	31-111
Sun	Fowler	4	E	- 31 -	31-121
Samedan	Moon "A"	1	G	- 28 -	28-321
Samedan	Moon "A"	2	B	- 28 -	28-311
Samedan	Moon "B"	1	H	- 28 -	28-421
Samedan	Moon "B"	2	A	- 28 -	28-411
Samedan	State "B"	1	F	- 25 -	25-221
Samedan	State "B"	2	E	- 25 -	25-121
Samedan	State "C"	1	N	- 24 -	24-241
Samedan	State "C"	2	K	- 24 -	24-231
Samedan	State "C"	3	L	- 24 -	24-131
Samedan	State "C"	4	M	- 24 -	24-141
Samedan	Turner "A"	1	J	- 34 -	34-331
Samedan	Turner "A"	2	O	- 34 -	34-341
Samedan	Turner "B"	1	I	- 34 -	34-431
Samedan	Turner "B"	2	P	- 34 -	34-441
Shell	Berry	1	P	- 31 -	31-441
Shell	Berry	2	J	- 31 -	31-331
Shell	Berry	3	I	- 31 -	31-431
Shell	Berry	4	O	- 31 -	31-341
Shell	Grimes	1	M	- 28 -	28-141
Shell	Grimes	2	L	- 28 -	28-131
Shell	Grimes	3	K	- 28 -	28-231
Shell	Grimes	4	N	- 28 -	23-241
Shell	Grimes	10	L	- 28 -	28-132
Shell	McKinley "A"	1	M	- 19 -	19-141
Shell	McKinley "A"	2	O	- 19 -	19-341
Shell	McKinley "A"	3	B	- 19 -	19-441
Shell	McKinley "A"	4	N	- 19 -	19-241
Shell	McKinley "A"	5	J	- 19 -	19-331
Shell	McKinley "A"	6	K	- 19 -	19-231
Shell	McKinley "A"	7	L	- 19 -	19-131
Shell	McKinley "A"	10	I	- 19 -	19-431
Shell	McKinley "A"	11	N	- 19 -	19-242
Shell	McKinley "B"	1	K	- 20 -	20-231

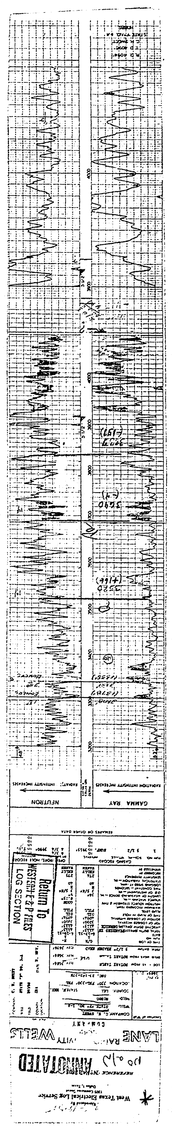
BEST AVAILABLE COPY

Operator	Lease Name	Well #	Unit Letter		Sec.		Unit Well #
Shell	McKinley "B"	2	N	=	20	-	20-241
Shell	McKinley "B"	3	M	=	20	-	20-141
Shell	McKinley "B"	4	K	=	20	-	20-232
Shell	McKinley "B"	5	L	=	20	-	20-131
Shell	Rice	1	P	=	13	-	13-441
Shell	Rice	2	O	=	13	-	13-341
Shell	Rice	3	I	=	13	-	13-431
Shell	Rice	4	J	=	13	-	13-331
Shell	Sanger	1	M	=	27	-	27-141
Shell	Sanger	2	N	=	27	-	27-241
Shell	Sanger	3	L	=	27	-	27-131
Shell	Sanger	4	E	=	27	-	27-121
Shell	Sanger	5	K	=	27	-	27-231
Shell	Sanger	6	D	=	27	-	27-111
Shell	State "A"	2	G	=	32	-	32-321
Shell	State "A"	3	H	=	32	-	32-421
Shell	State "A"	4	G	=	32	-	32-322
Shell	State "B"	1	D	=	33	-	33-111
Shell	State "B"	2	C	=	33	-	33-211
Shell	State "D"	1	F	=	24	-	24-221
Shell	State "D"	2	C	=	24	-	24-211
Shell	State "F"	2	G	=	23	-	23-321
Shell	State "F"	3	B	=	23	-	23-331
Shell	Turner	1	G	=	34	-	34-321
Shell	Turner	2	B	=	34	-	34-311
Bill Sweet	Bowers "B"	2A	J	=	20	-	20-331
C. N. Sweet	Grimes	1A	I	=	20	-	20-431
C. N. Sweet	Grimes	3A	I	=	20	-	20-432
C. N. Sweet	McKinley "B"	2	H	=	20	-	20-421
C. N. Sweet	State "F"	1A	A	=	23	-	23-411
C. N. Sweet	State "F"	2A	H	=	23	-	23-421
C. N. Sweet	State "F"	3	I	=	23	-	23-431
C. N. Sweet	State "F"	4	A	=	23	-	23-412
Texaco	New Mexico St. "C"	1	A	=	25	-	25-411
Texaco	New Mexico St. "C"	2	H	=	25	-	25-421
Texaco	New Mexico St. "C"	3	G	=	25	-	25-321
Texaco	New Mexico St. "C"	4	B	=	25	-	25-311
Tex. Pac.	State "C"	1	P	=	24	-	24-441
Tex. Pac.	State "C"	2	I	=	24	-	24-431
Tex. Pac.	State "C"	3	J	=	24	-	24-331
Tex. Pac.	State "C"	4	O	=	24	-	24-341
Tex. Pac.	State "V"	1	I	=	14	-	14-431
Tex. Pac.	State "V"	2	J	=	14	-	14-331
Tex. Pac.	State "V"	3	C	=	23	-	23-211
Tex. Pac.	State "V"	4	F	=	23	-	23-221
Tex. Pac.	State "V"	5	K	=	23	-	23-231
Tex. Pac.	State "V"	6	N	=	23	-	23-241
Wiser	Morris "A"	1	O	=	21	-	21-341

U.S.G.S. - GEOMAGNETICS

BEST AVAILABLE COPY

Operator	Lease Name	Well #	Unit Letter		Sec.		Unit Well #
Wiser	Morris "B"	1	P	=	21	-	21-441
Wiser	State "L"	1	B	=	26	-	26-311
Yates	Shell - State	1	P	=	23	-	23-441
Yates	Shell - State	2	J	=	23	-	23-331
Yates	Shell - State	3	O	=	23	-	23-341
Estes (Yeager)	State	1	P	=	14	-	14-441


Return To
RESERVOIR ENGINEERING
LOG SECTION
LANE
CANAL BAY
NEUTRON

20-18-38

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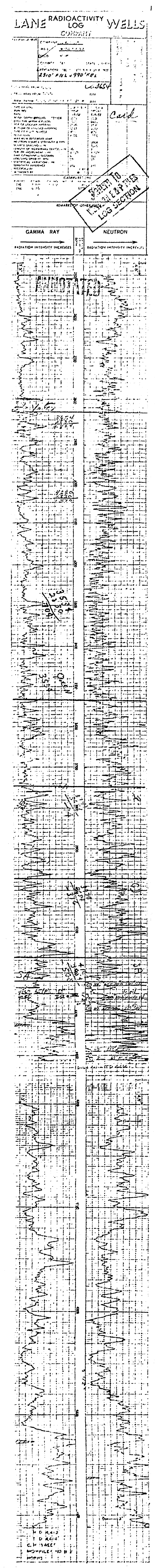
West Texas Electrical Log Service
DALLAS, TEXAS

REFERENCE No A 1370 -0



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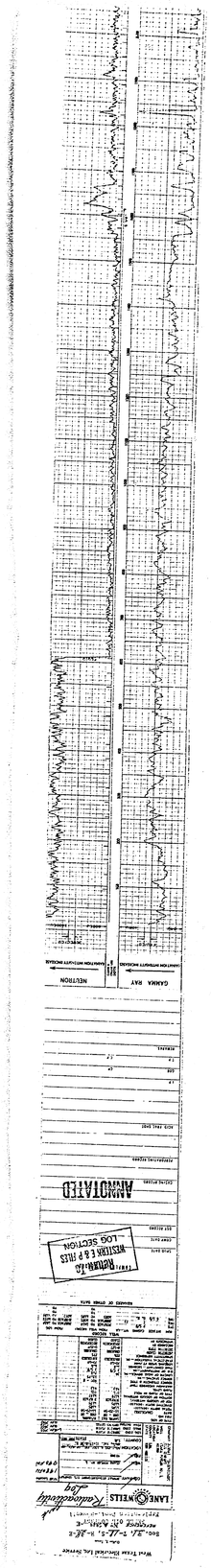
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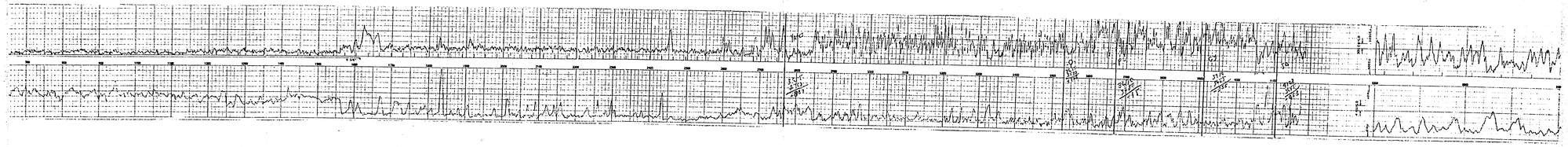

U.S.A.F.S. MICROGRAPHICS

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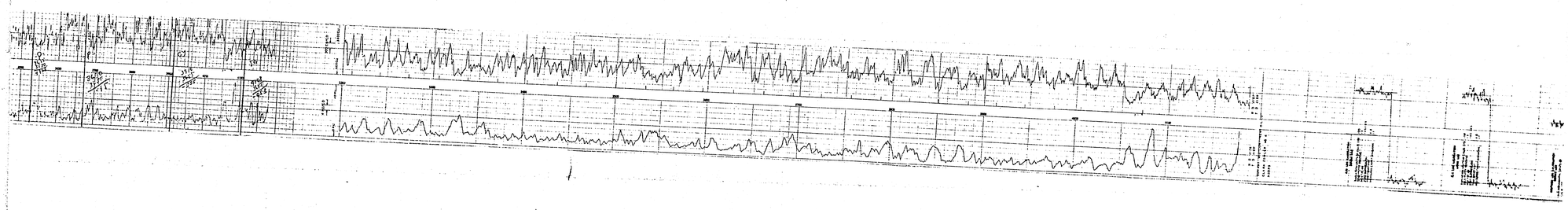

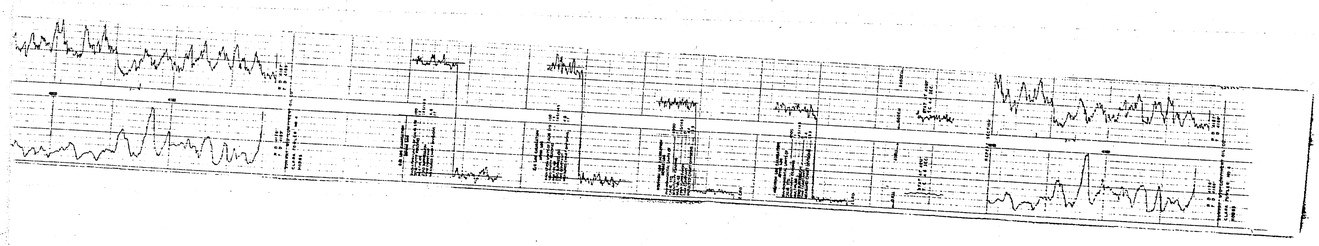

U.S.N.A.F. MICROGRAPHICS

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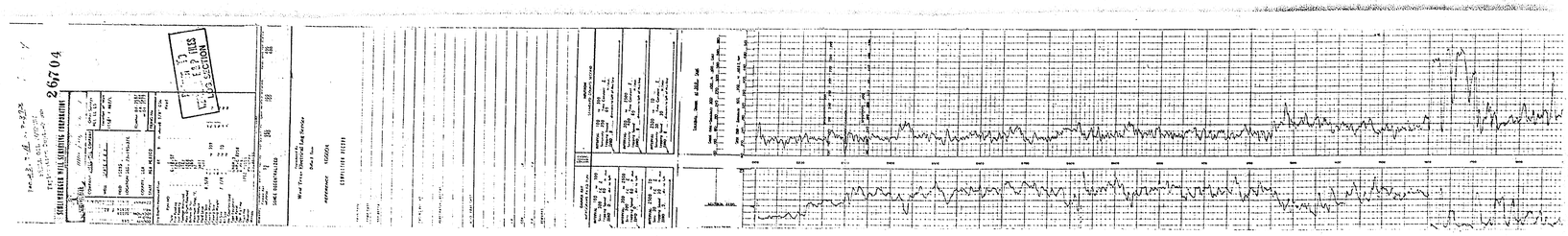
26704
WELL HISTORY FILES
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SCHLUMBERGER WELL SERVICES, INCORPORATED
Western Atlas International
Gearhart Owen
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Schlumberger Well Services
Baker Hughes
Halliburton Logging Services
Welex
Computalog
Computalog Wireline Services
Computalog Drilling Services
Computalog Gyro Services
Computalog Directional Services
Computalog Measurement Services
Computalog Production Services
Computalog Fluid Services
Computalog Scientific Drilling
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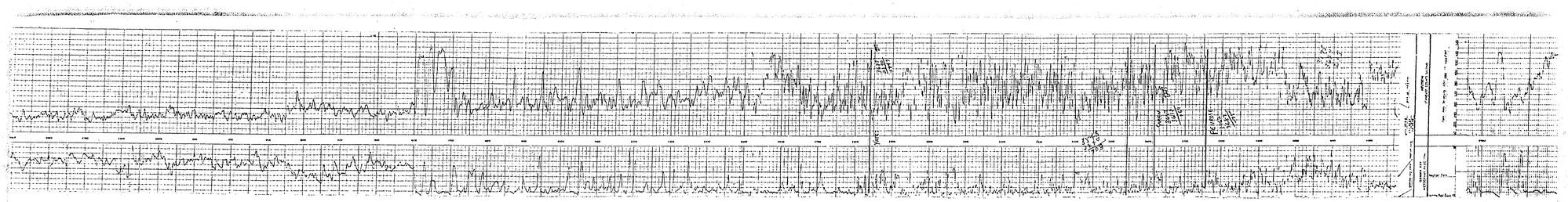

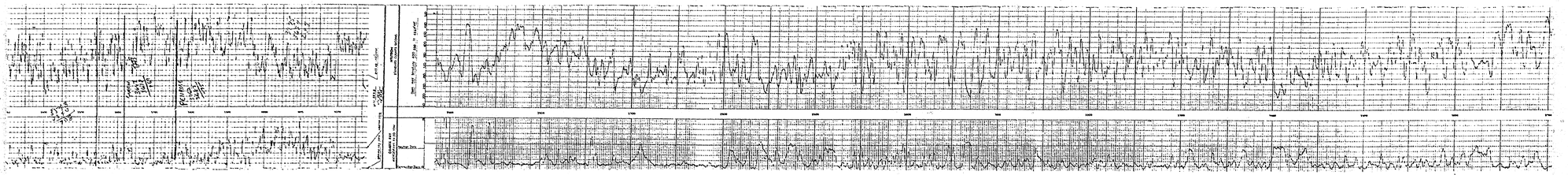

V.E.B.C.F. KEONOGRAPHICS

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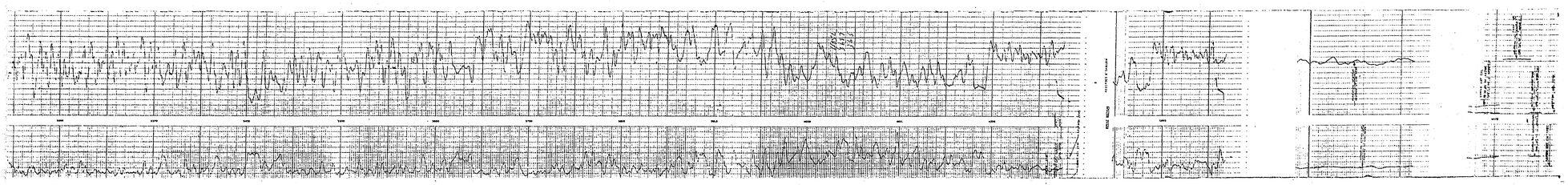
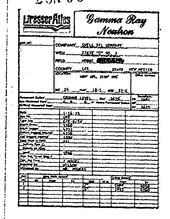


26,706

Dresser Atlas

Gamma Ray Neutron



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Electronic Log Service

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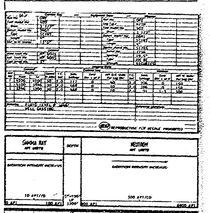

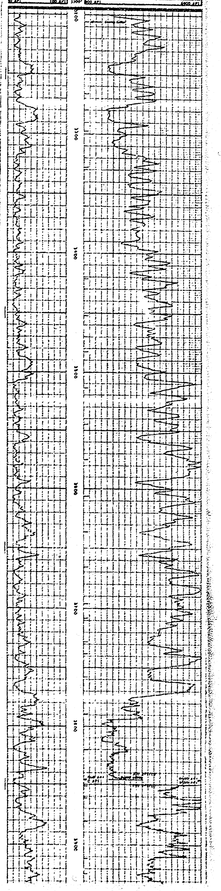

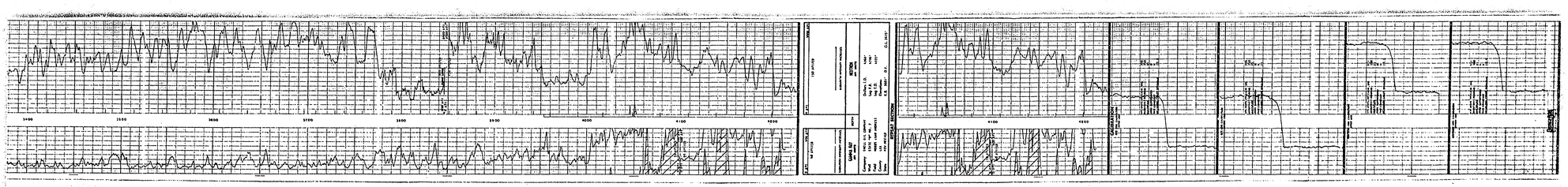

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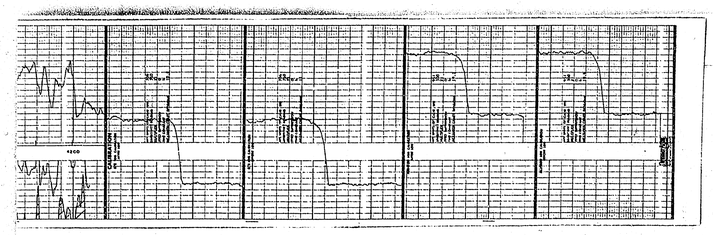

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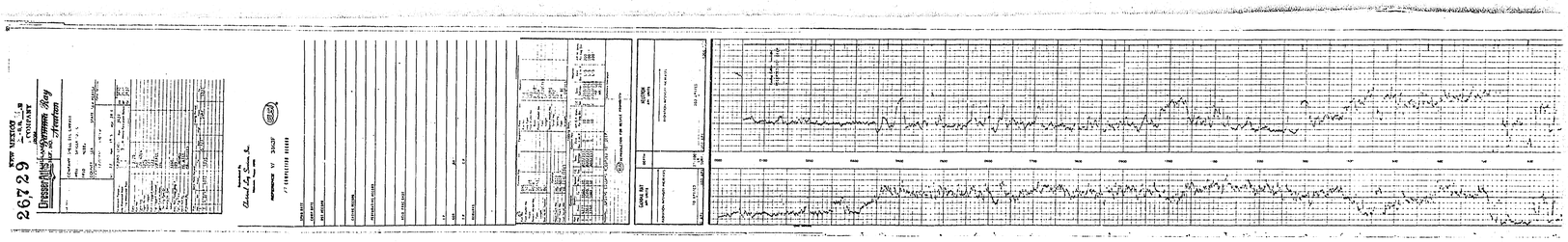

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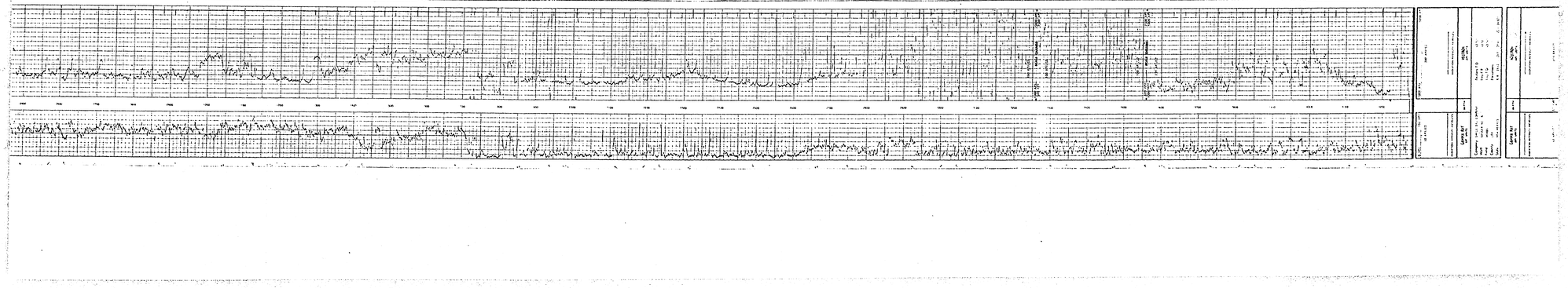

V.P.R.C.F. MICROGRAPHICS

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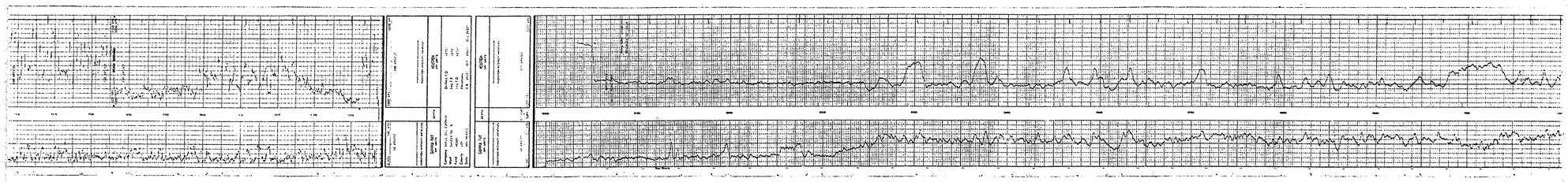

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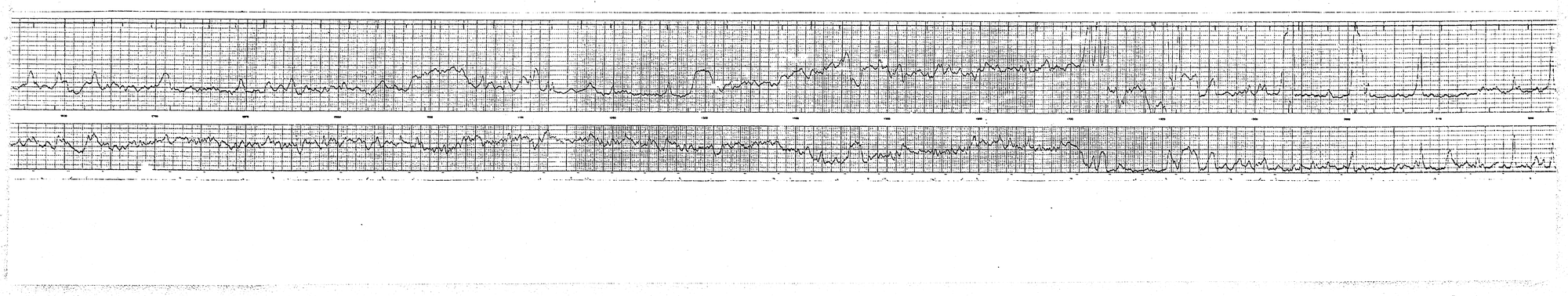

U.S.D.A.F.S. NEOMYCOLOGICS

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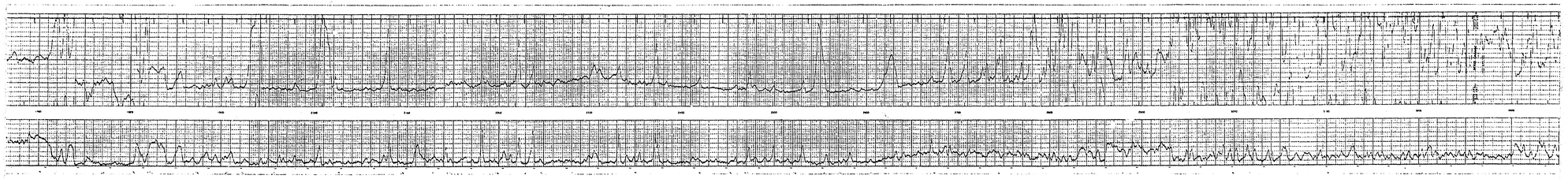

U.S.N.S. HOSPITAL
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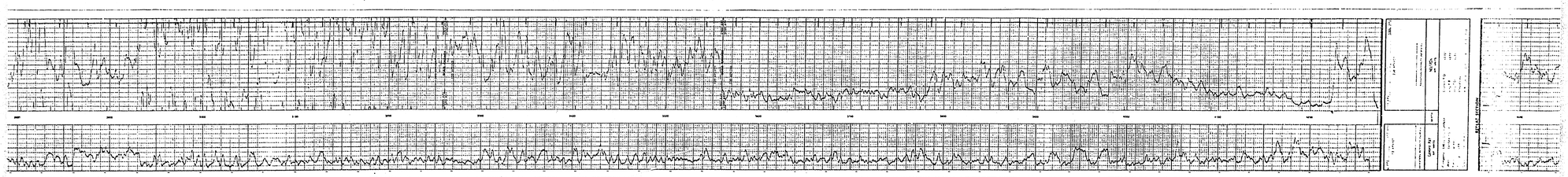

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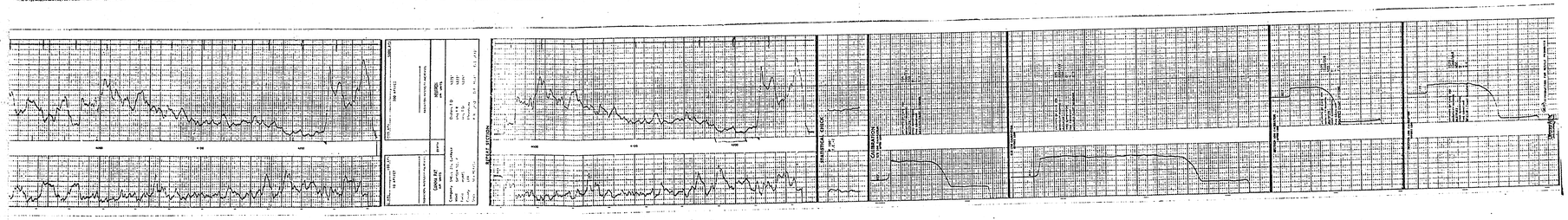

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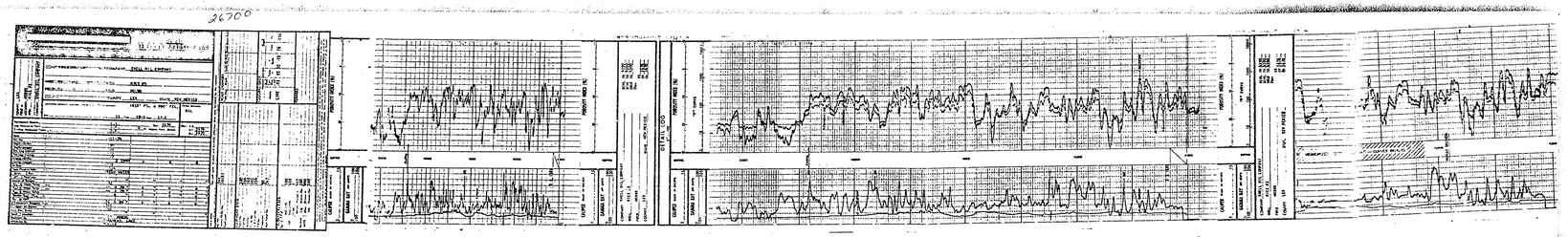

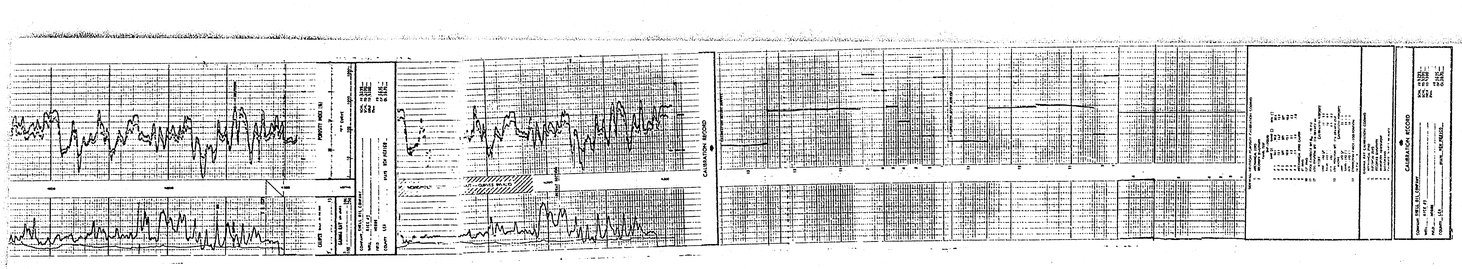

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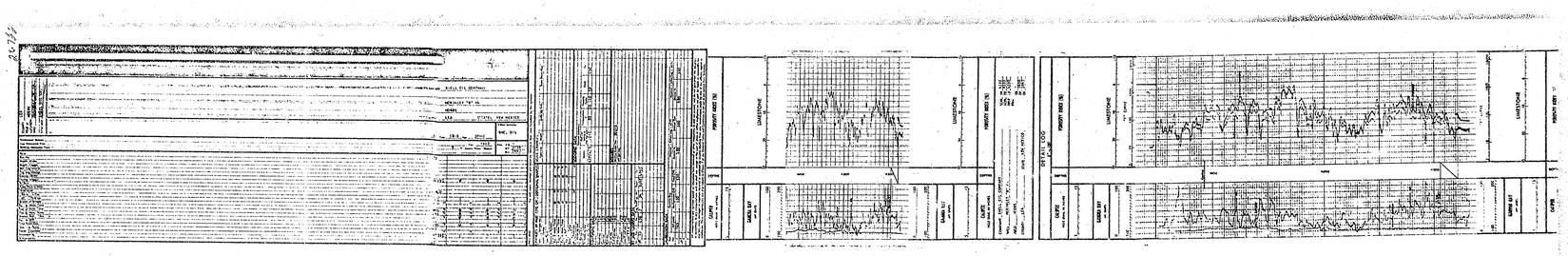

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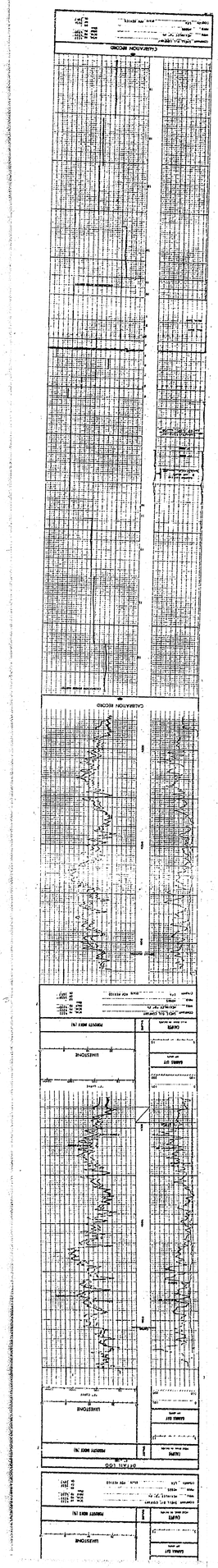

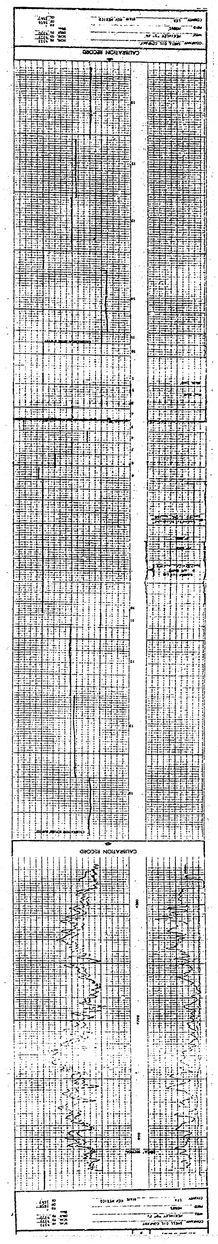
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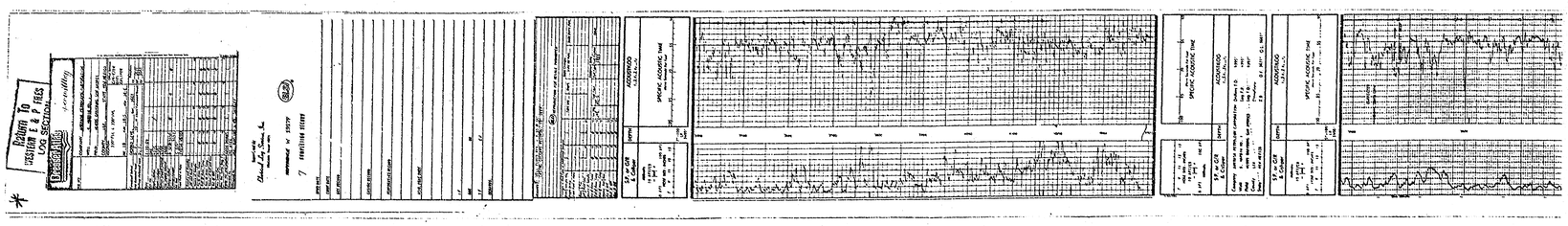

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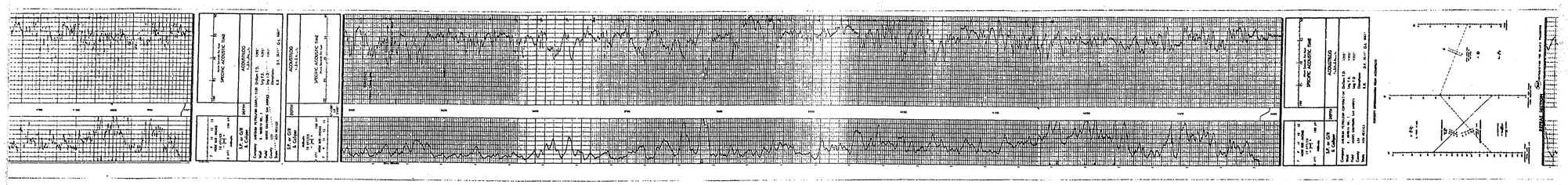

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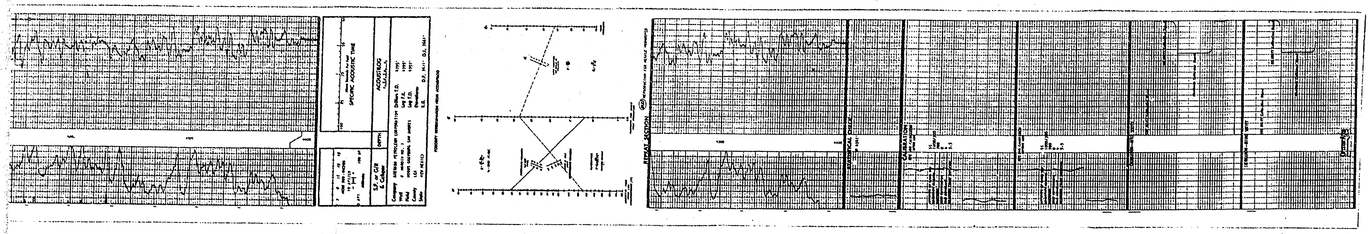

U.S.B.C.F. MICROGRAPHICS

BEST AVAILABLE COPY

Return to
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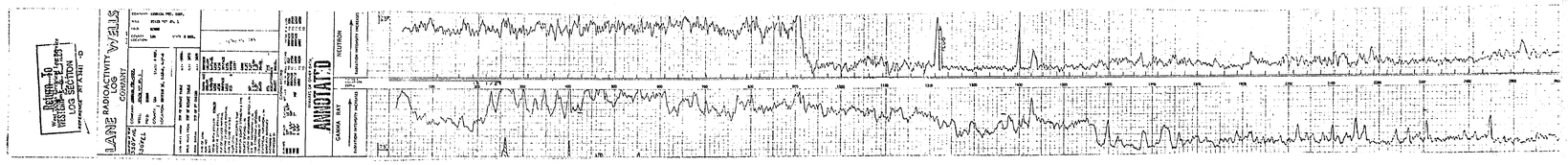
Denver, Colorado



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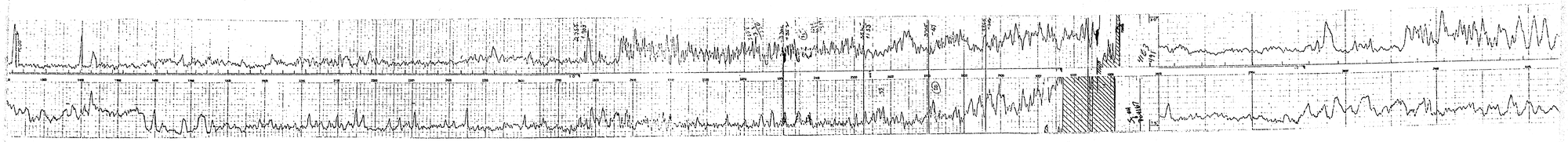

W.R.D.C.F. MICROGRAPHICS

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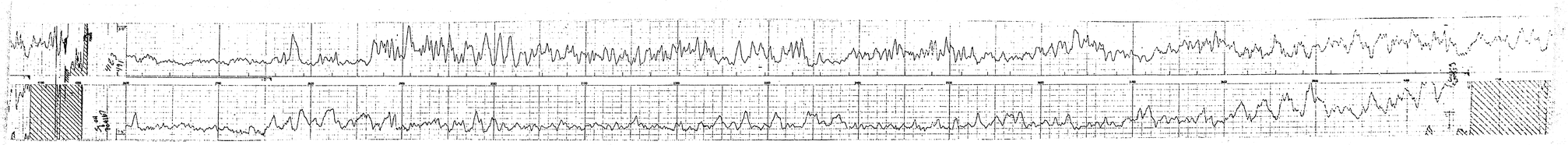

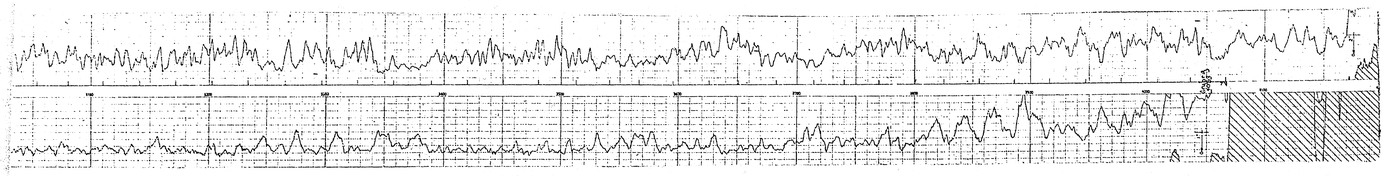

U.S.D.C.F. MICROGRAPHICS

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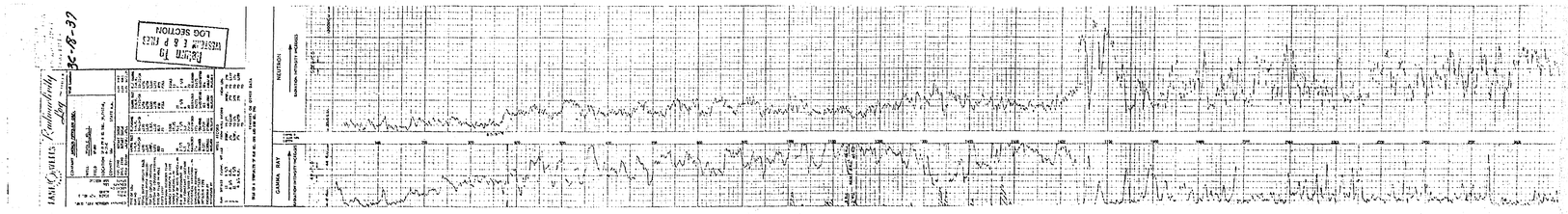

U.S.G.S. RECONNAISSANCE
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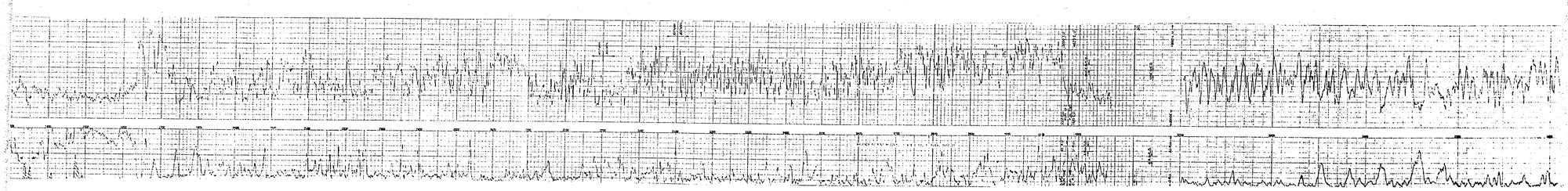

U.S.D.A. NATIONAL AGRICULTURAL LIBRARY
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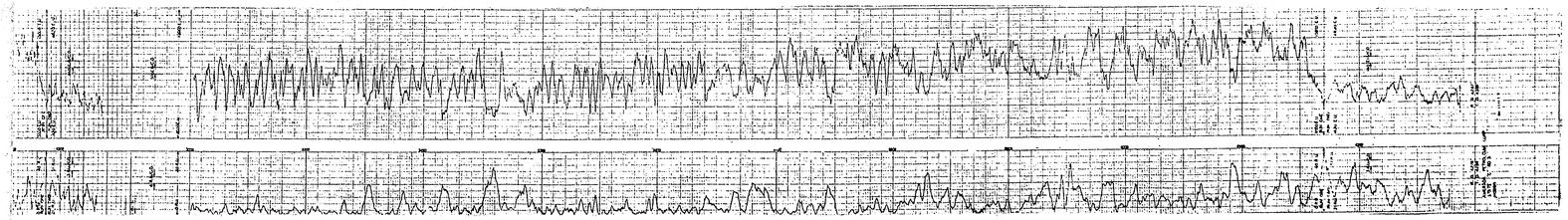

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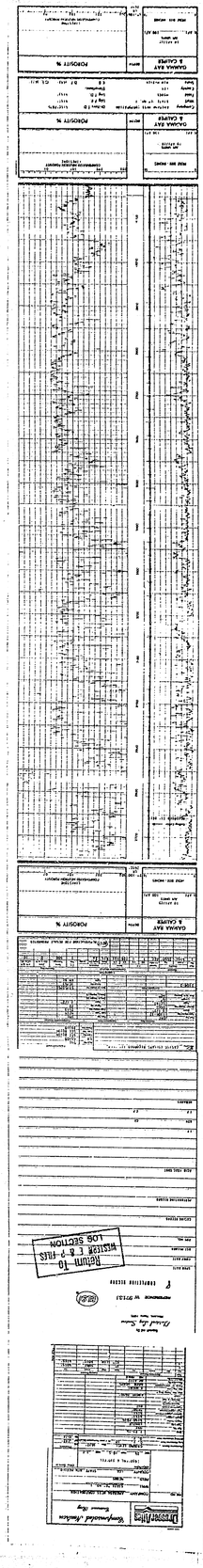

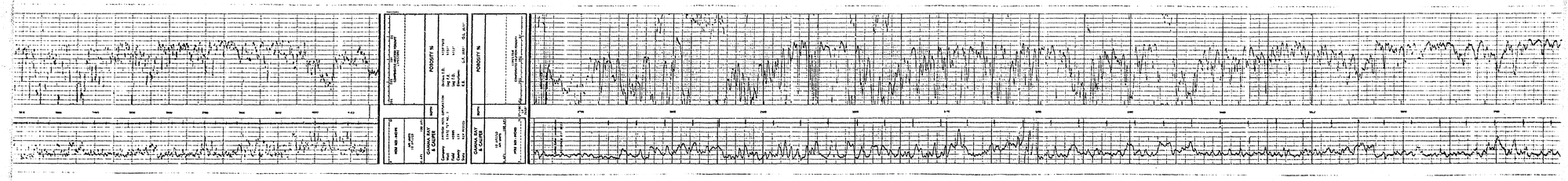

U.S.D.E.P. MICROGRAPHICS

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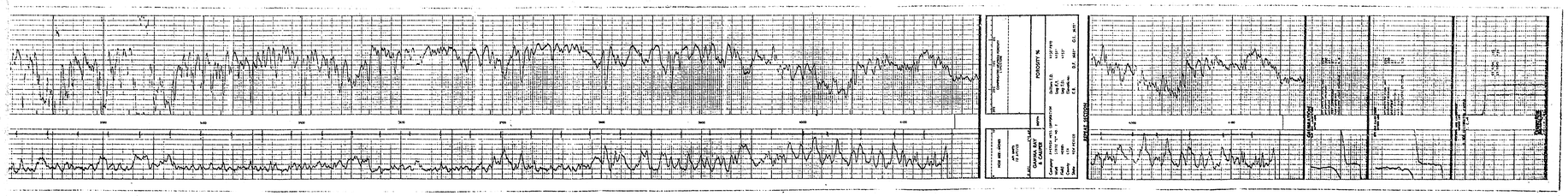

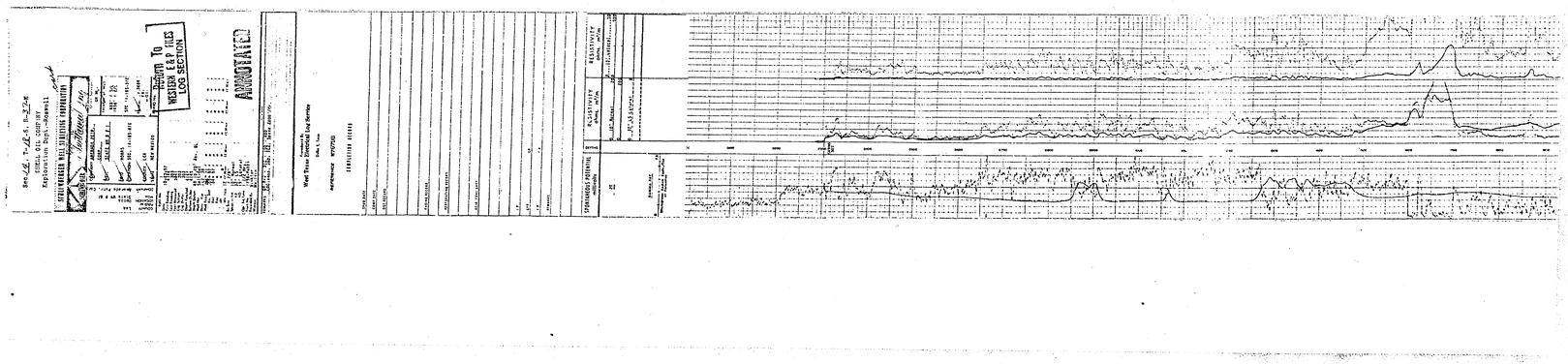

U.S.G.S. GEOGRAPHIC
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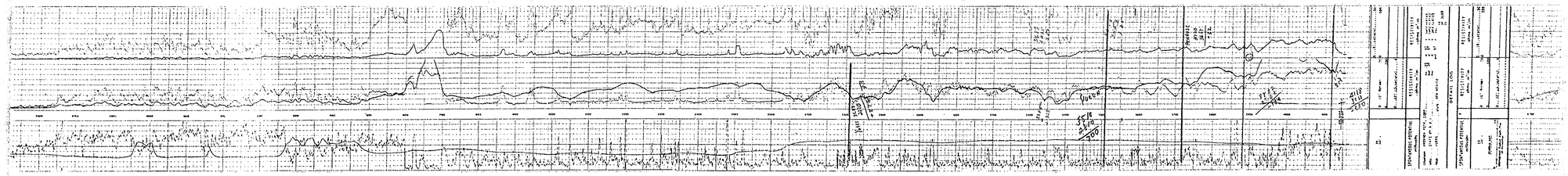

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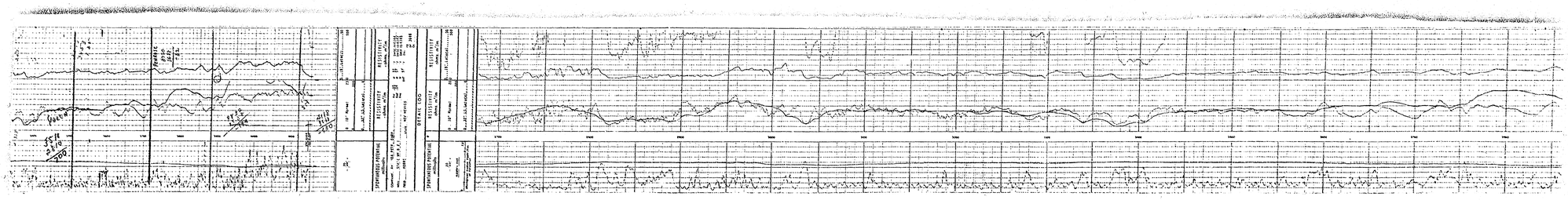

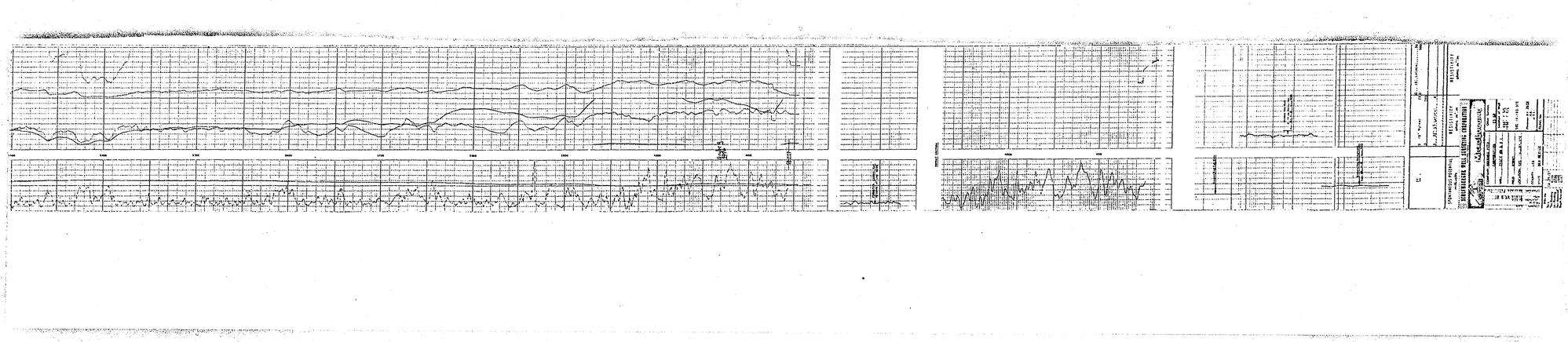

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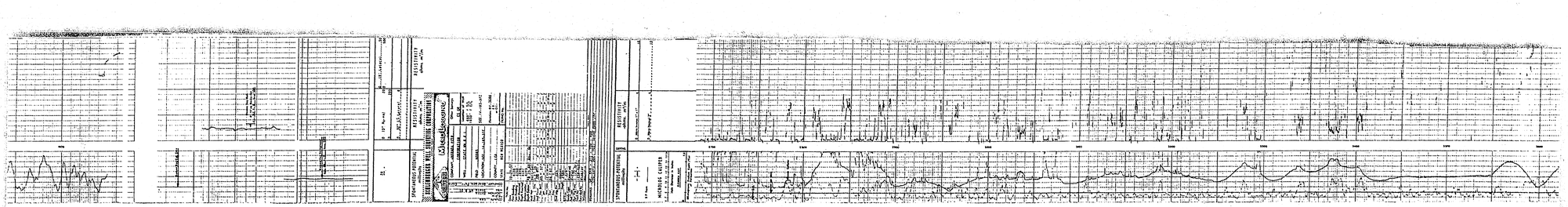

U.S.N.A.F. GEOSCIENCES

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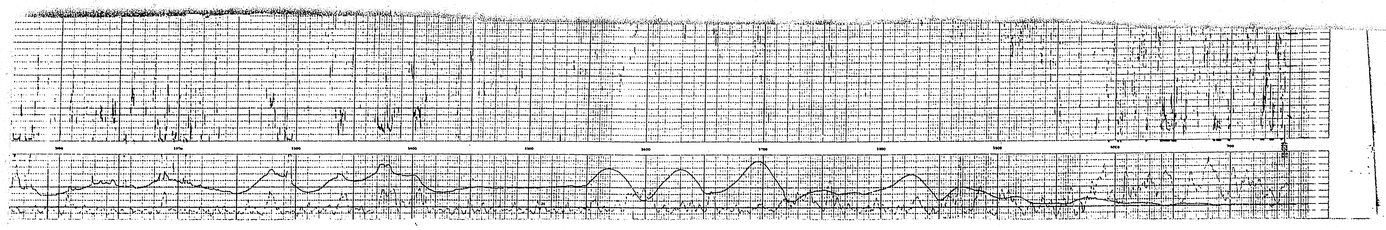

U.S.B.C.F. SEISMOGRAPHICS

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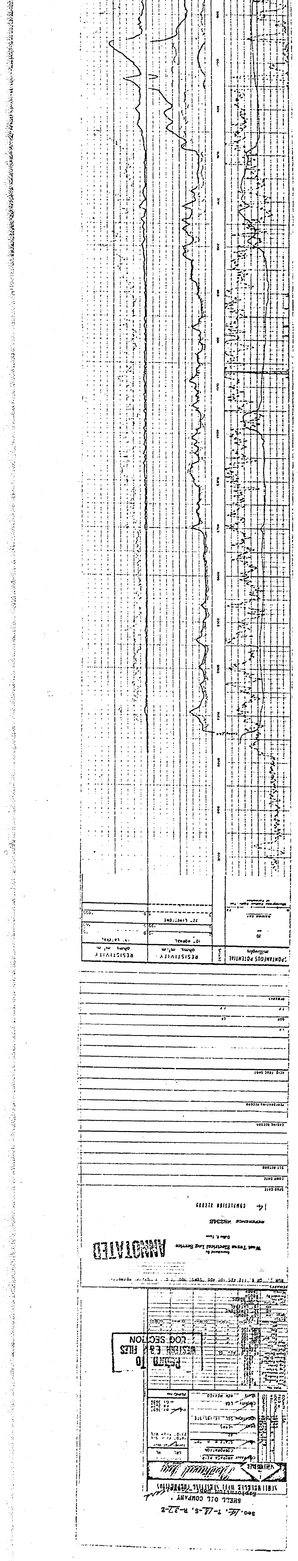
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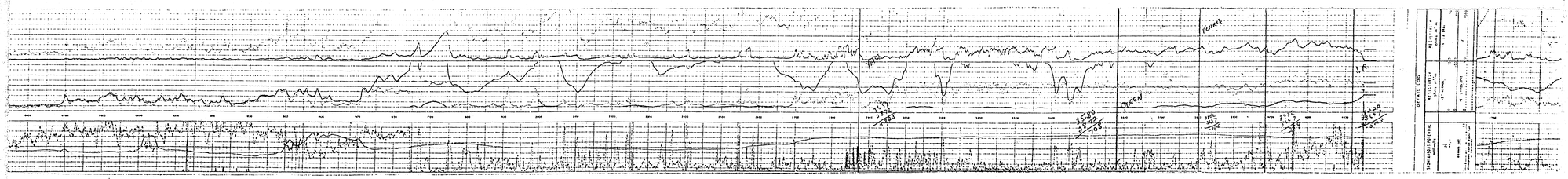
FILES
LOG SECTION



B.P.R.C.V. VICKSBURG, MISS.
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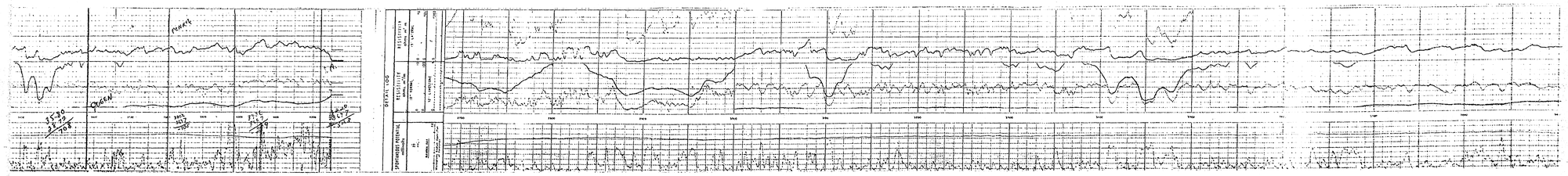

U.S.B.M.-P. WASHINGTON

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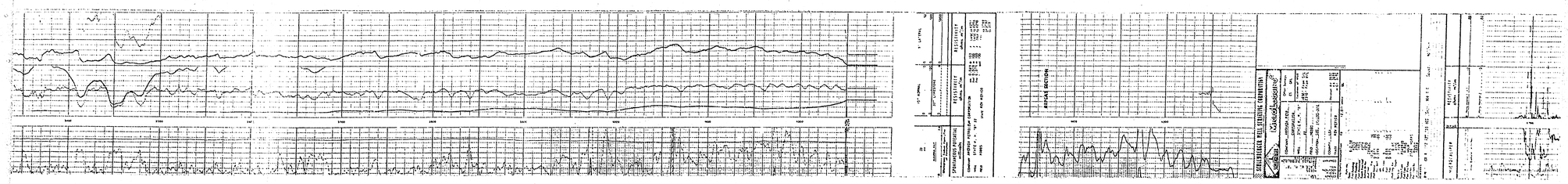

U.S.G.S. LIBRARIES

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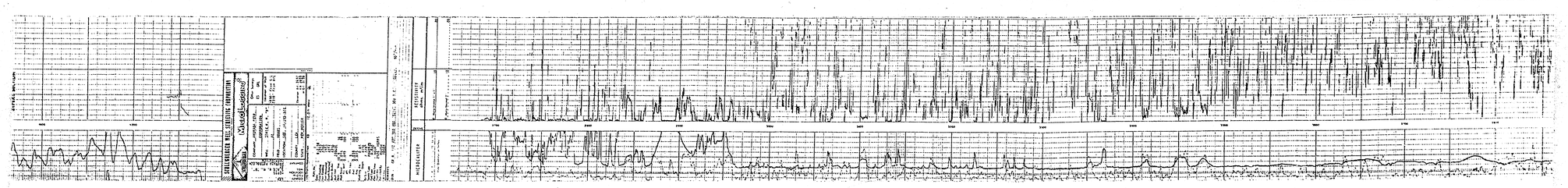

U.S.G.S. MICROGRAPHICS

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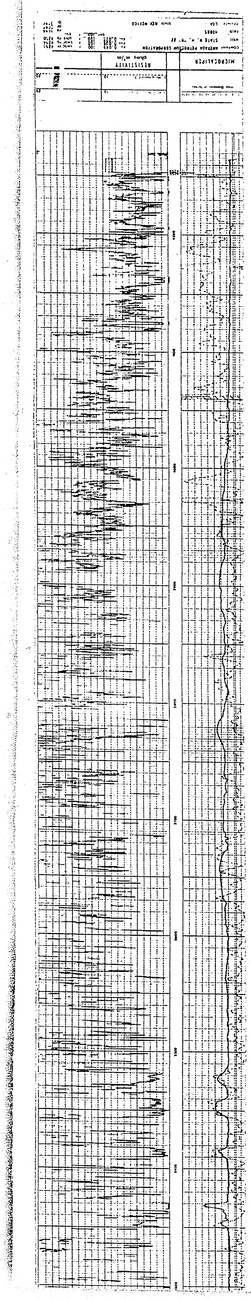

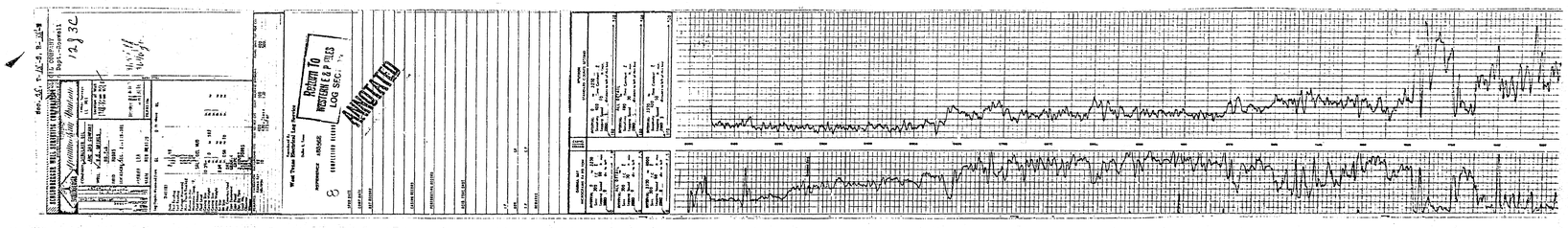

W.P.G.F. RECORDAPHICS
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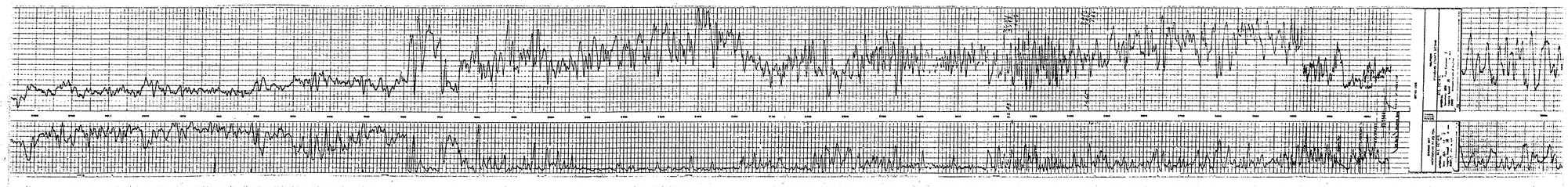

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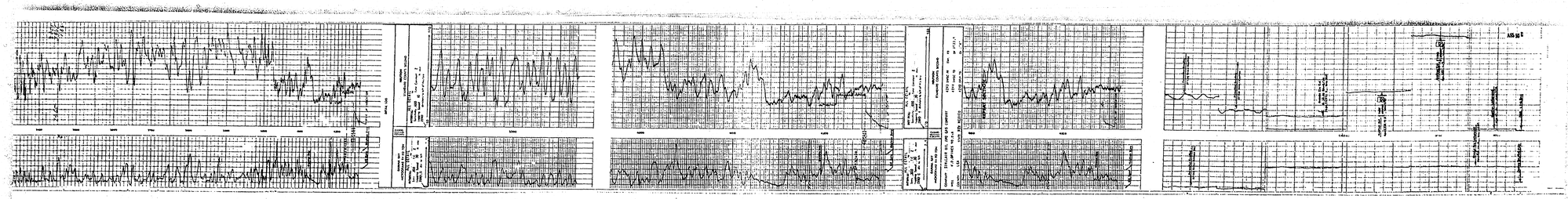

U.S.D.A.-C.I.T. MICROGRAPHICS

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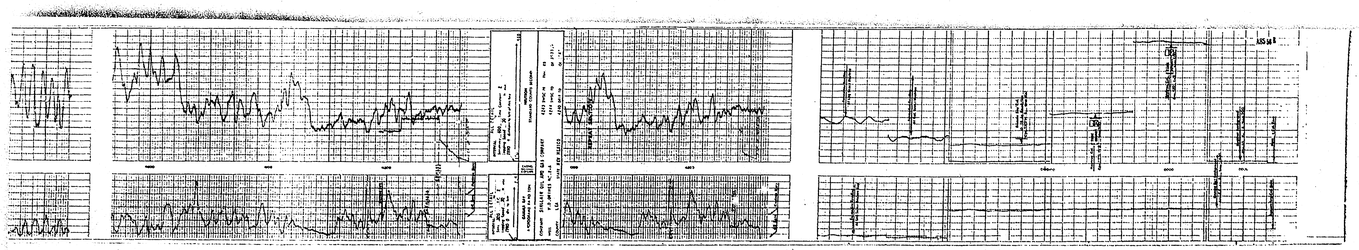

U.S.N.T. ECONOMICS

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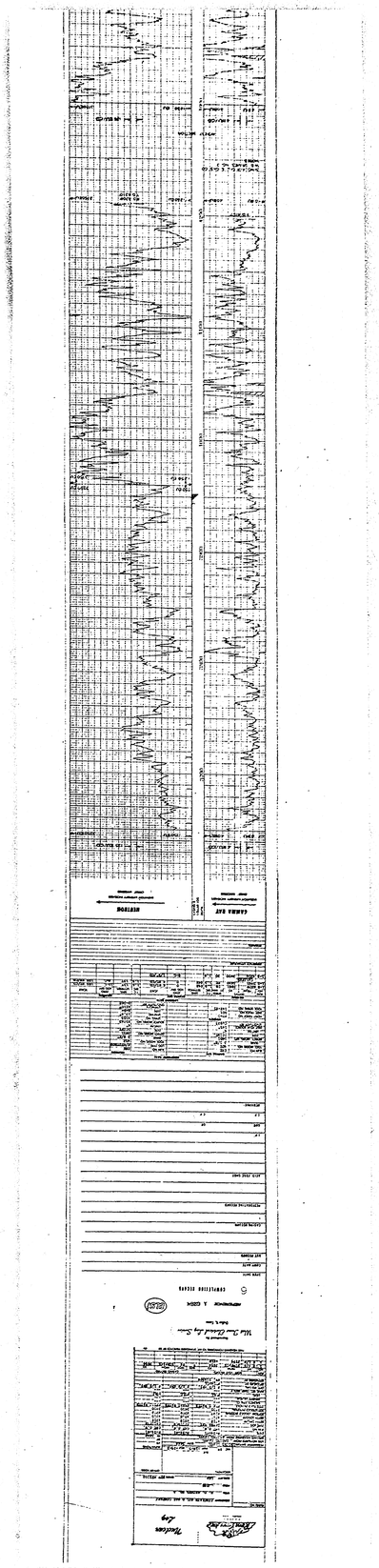

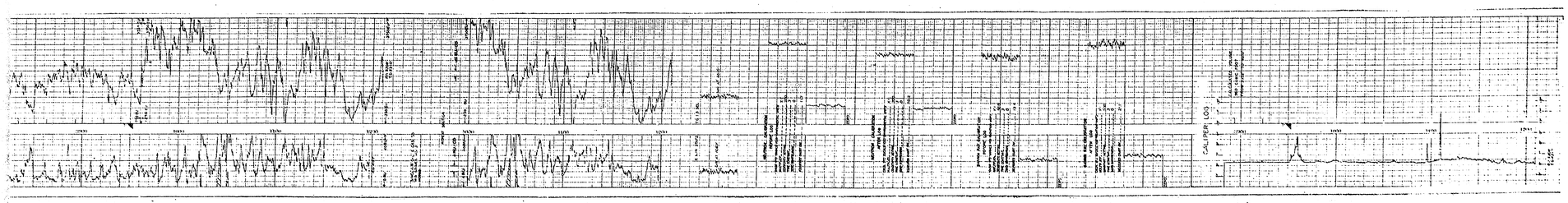
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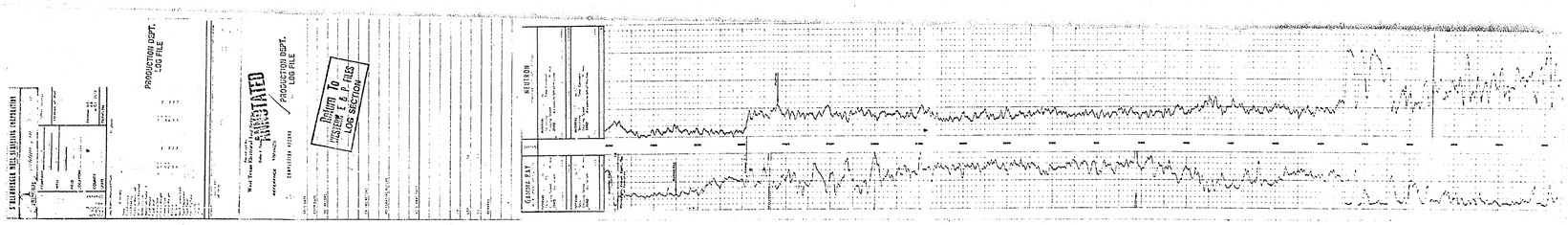
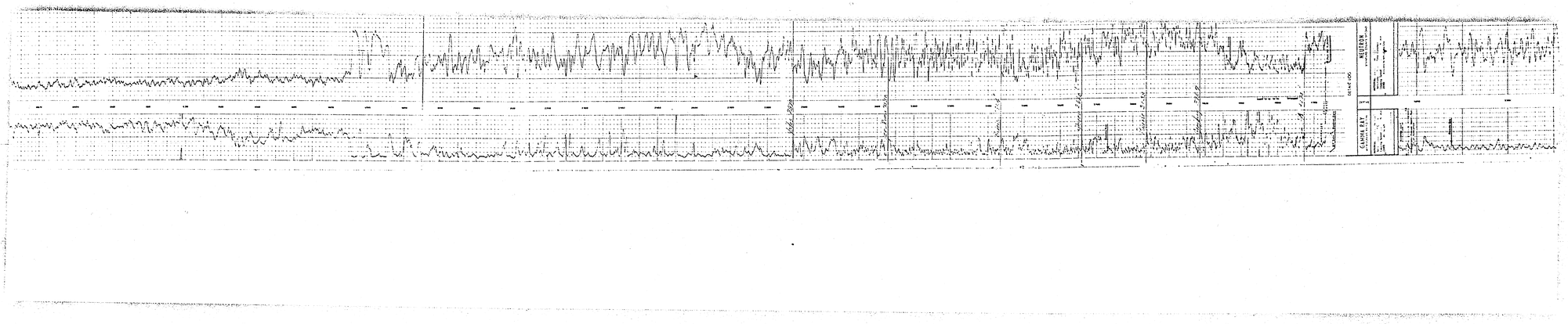

PRODUCTION DEPT.
LOG FILE
ANNOTATED
PRODUCTION DEPT.
LOG FILE
Datum D
Datum E & F
LOG SECTIONS
NEUTRON
GAMMA RAY

W.A.C.C.F. MICROGRAPHICS
BEST AVAILABLE COPY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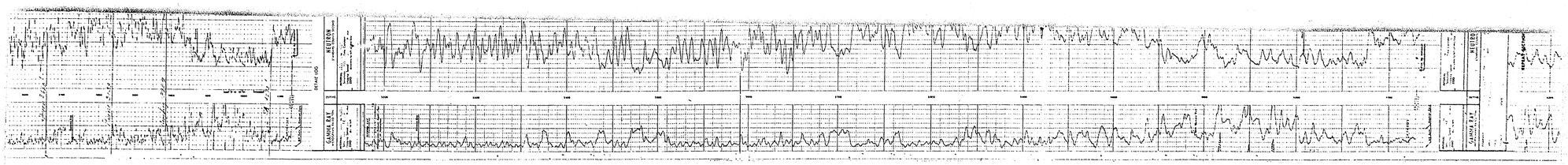

B.P.R.C.F. RECORDINGS
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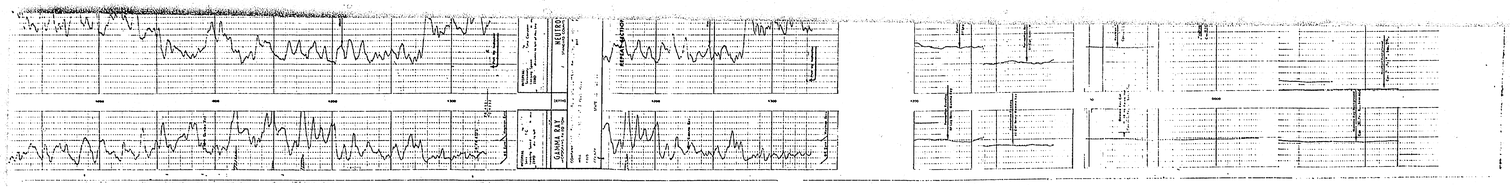

U.S.A.F. ACADEMY

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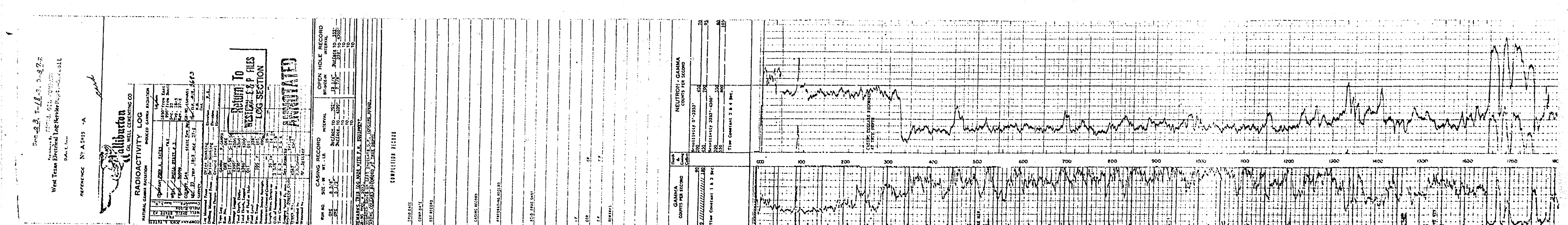

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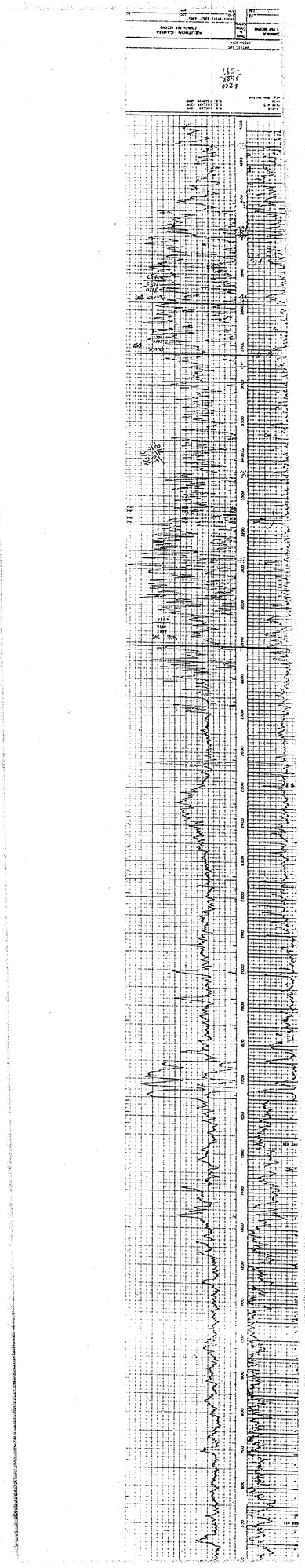

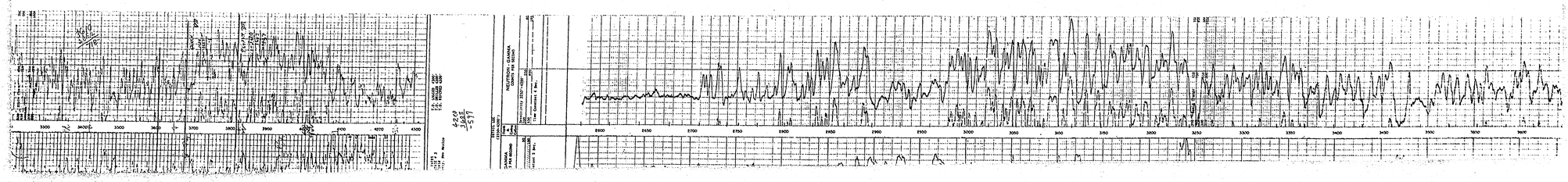

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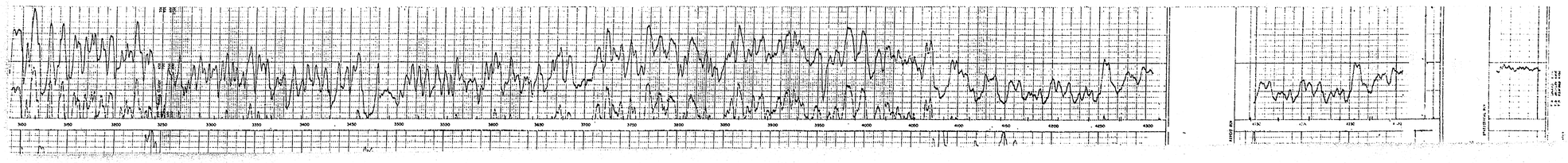

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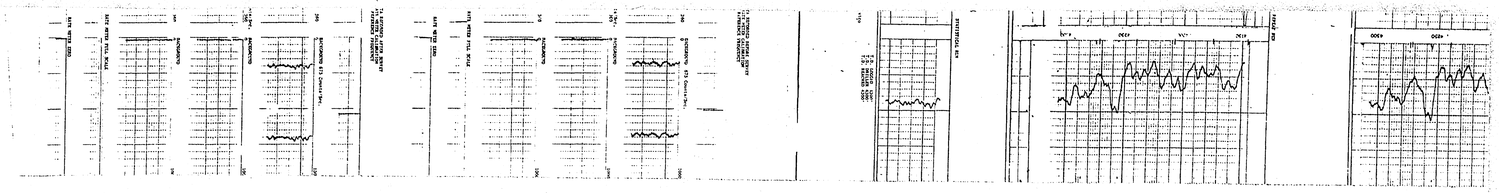
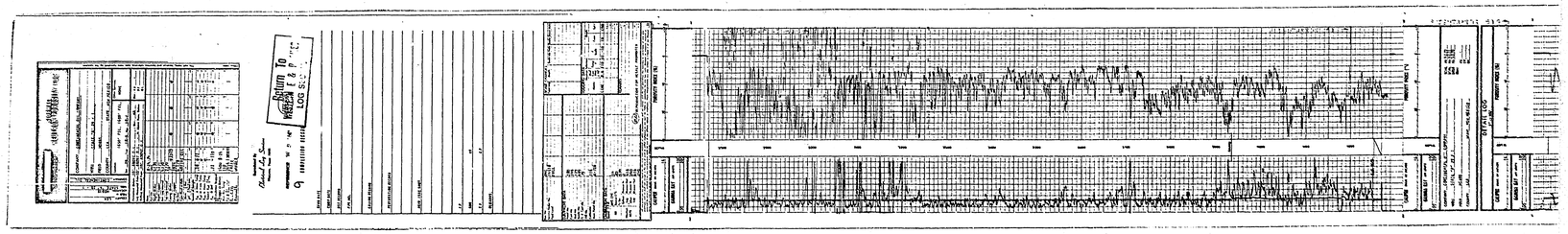
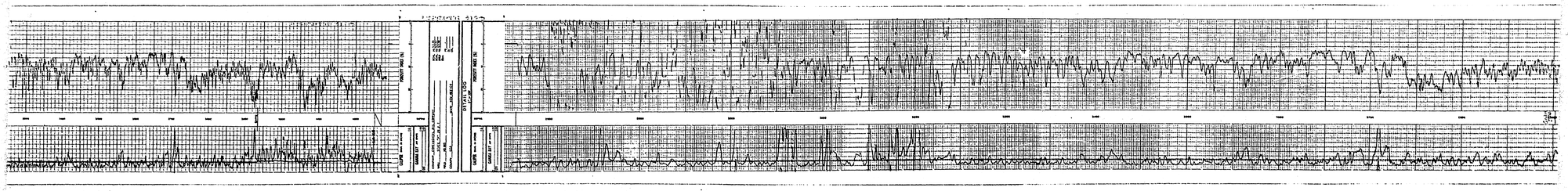




U.S.G.S.
NOT AVAILABLE FOR



U.S.N.R.S. RECOMMENDED

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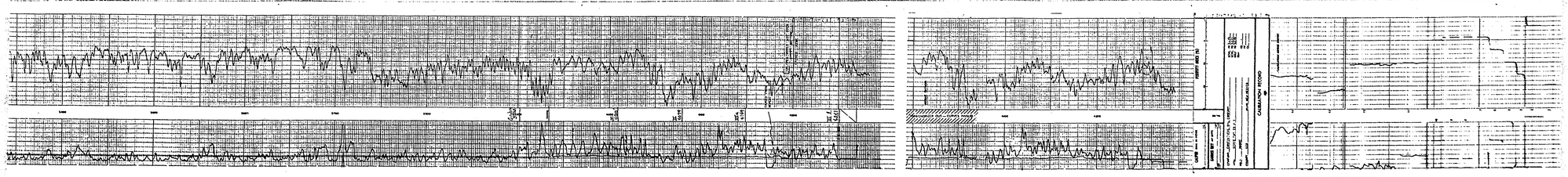

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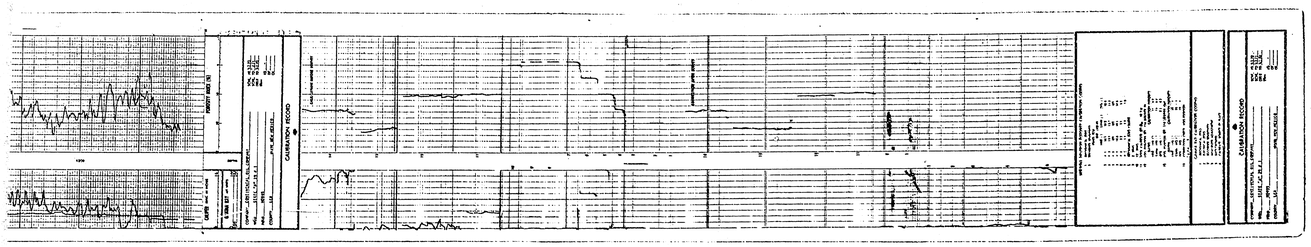
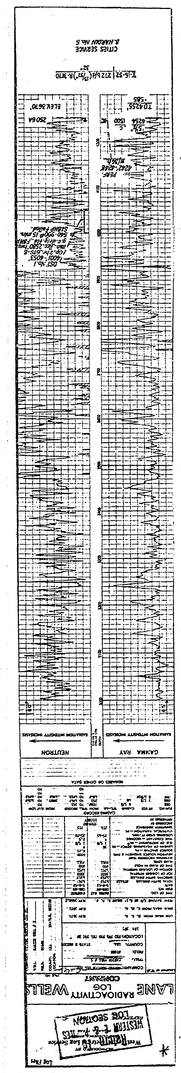
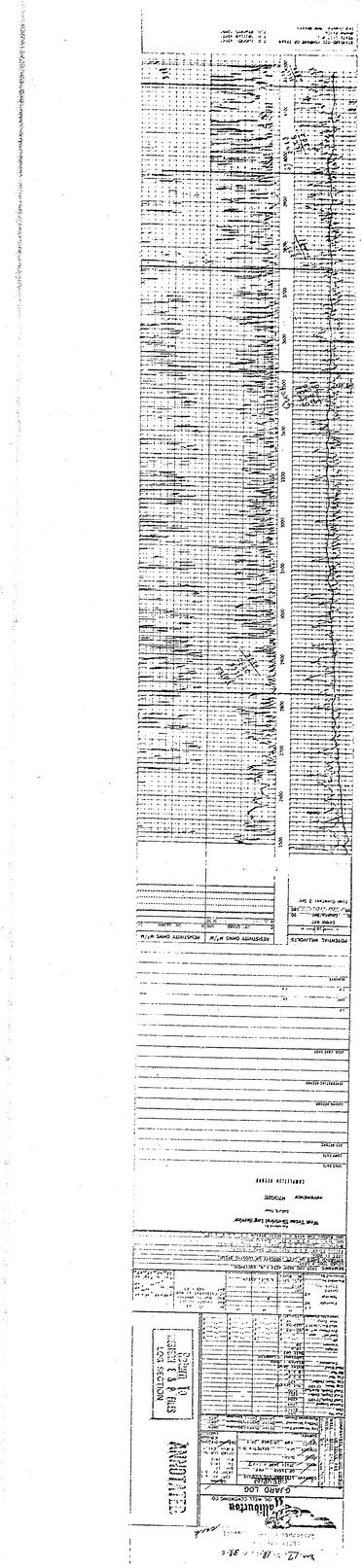
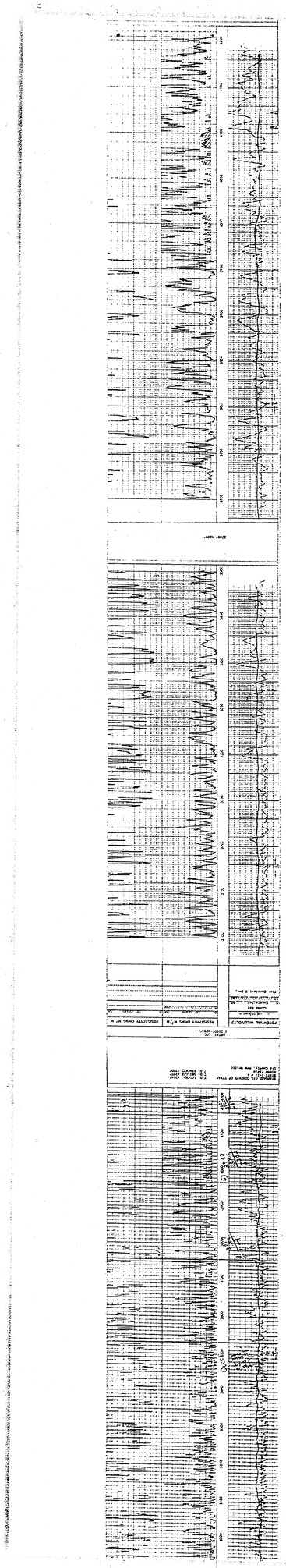



LANE RADIOACTIVITY WELL LOG
COMPANY
CITIES SERVICE
E. HARDIN No. 5
CANADA BAY
NEUTRON
GAMMA RAY
NEUTRON
RECEIVED
OCT 7 1963
HISTORICAL
CORE SECTION





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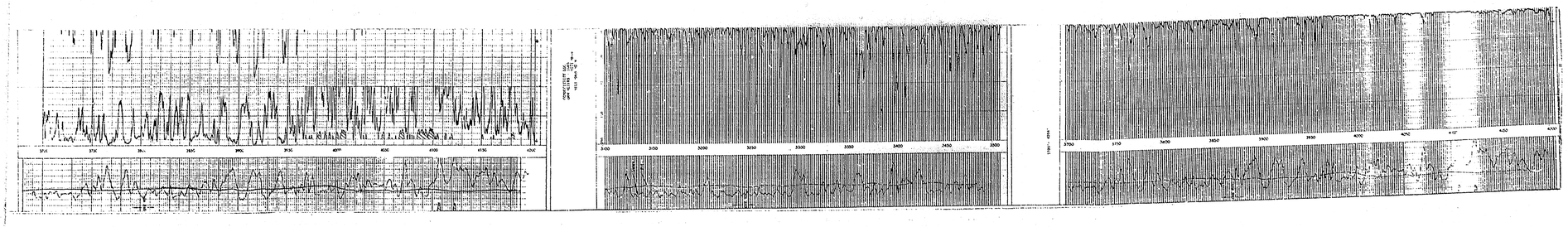
U.S.G.S. RECORDS



V.E.R.C.F. RICHMOND

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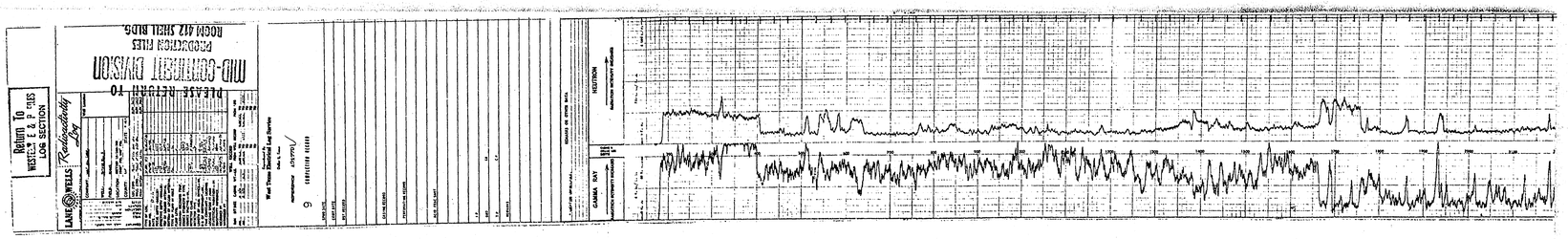

W.S.R.C.F. MICROGRAPHICS

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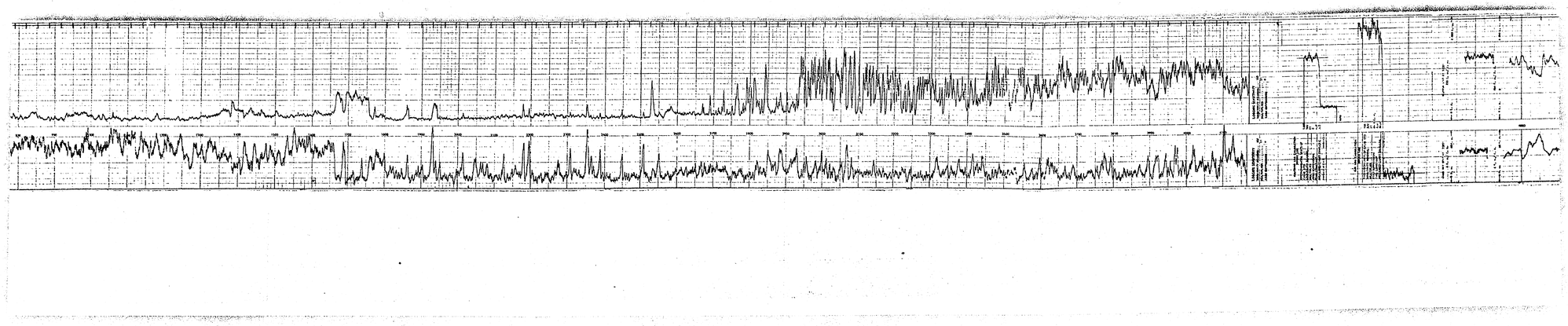

U.S.A.F. ACADEMY

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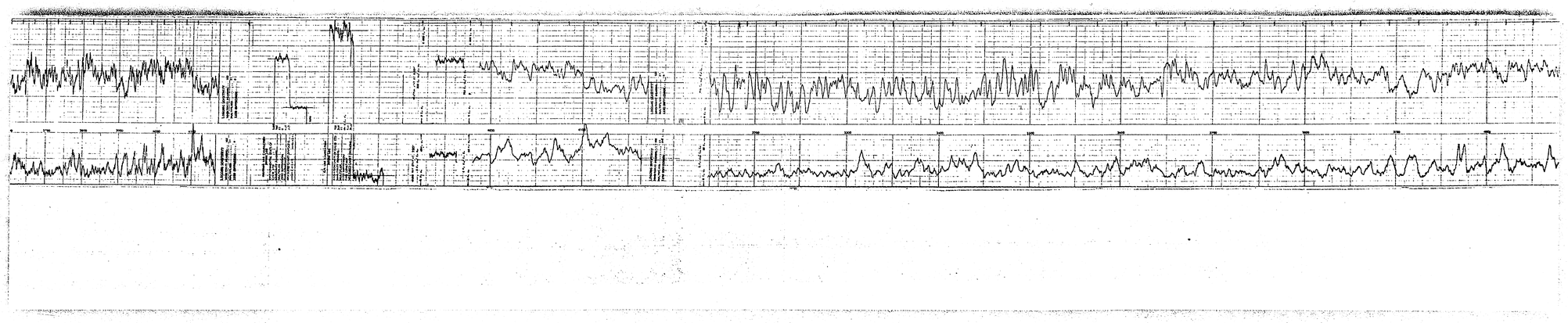

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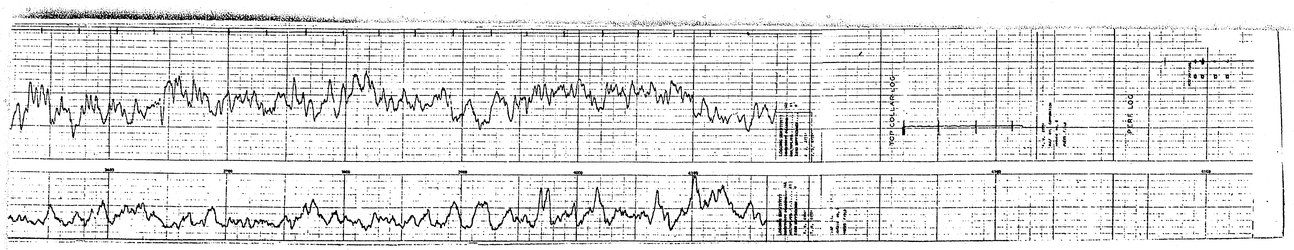

U.S.D.C.F. RECONNAISSANCE

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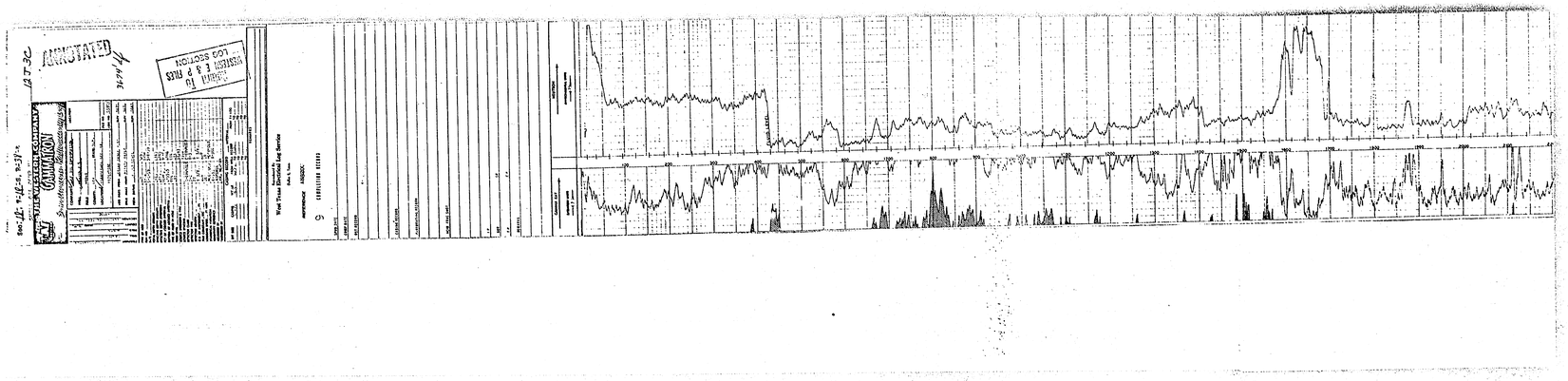

V.P.I.&S.U. MICROGRAPHICS
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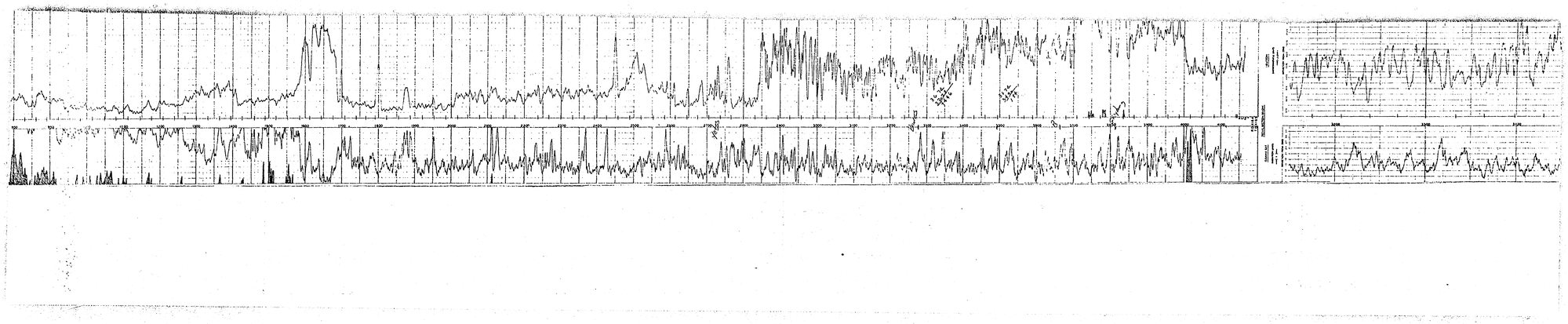

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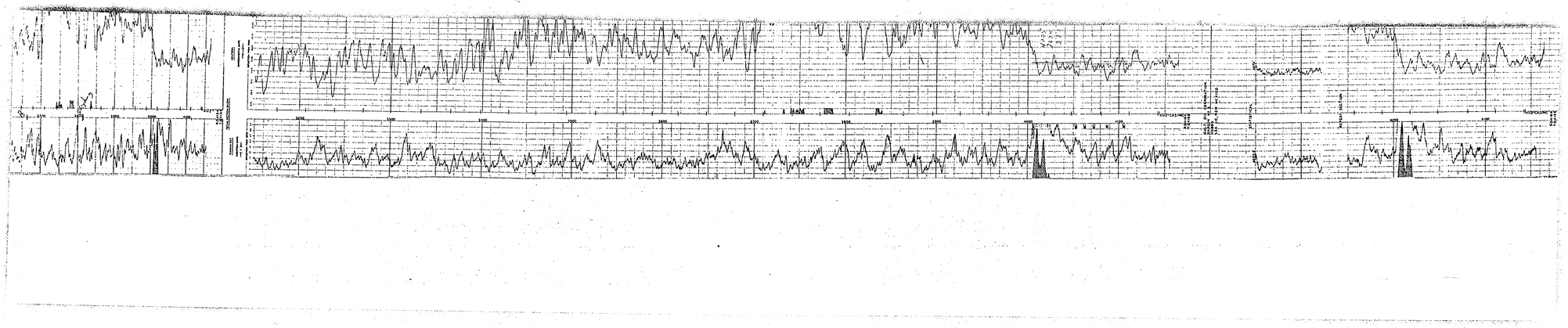

V.R.M.C.F. MICROGRAPHICS

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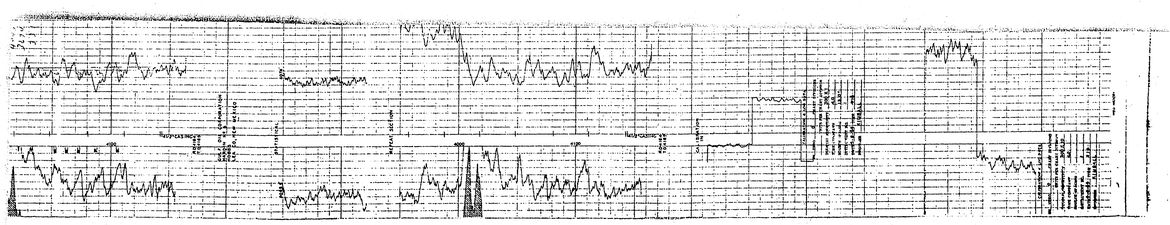
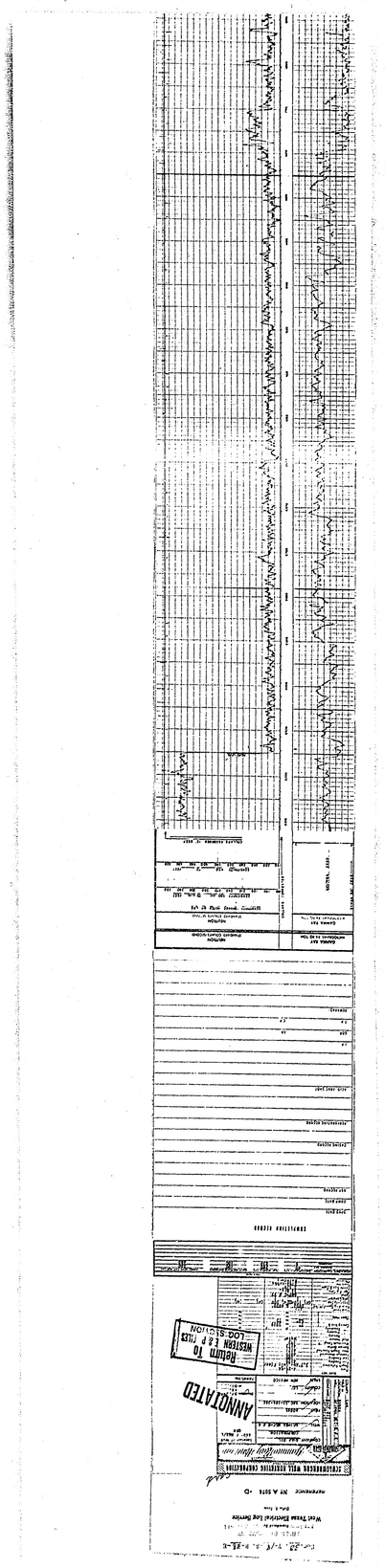
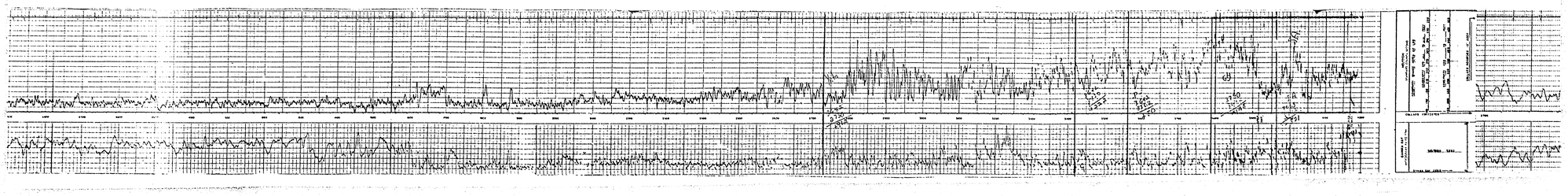



ANNOTATED
RETURN TO
WESTERN E&P FILES
LOG SECTION



V.R.C.F. MICROGRAPHICS

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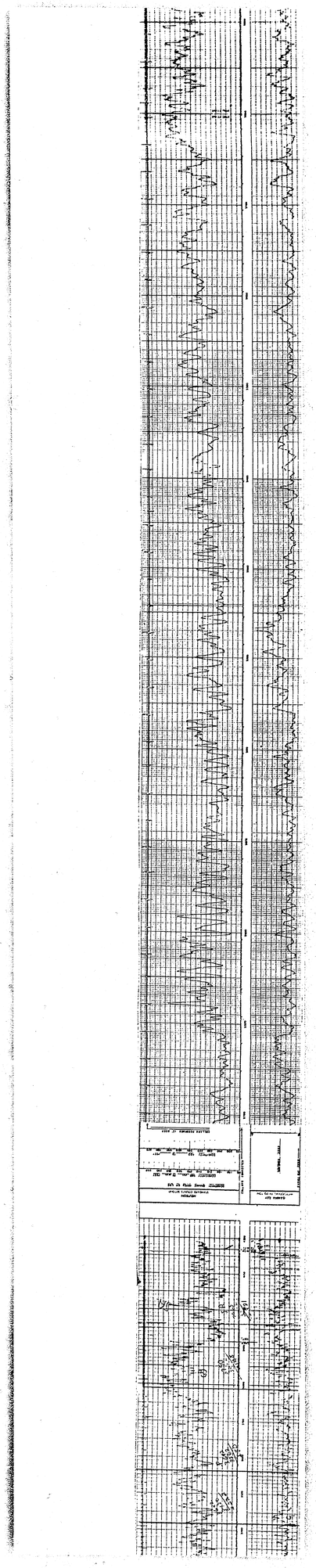

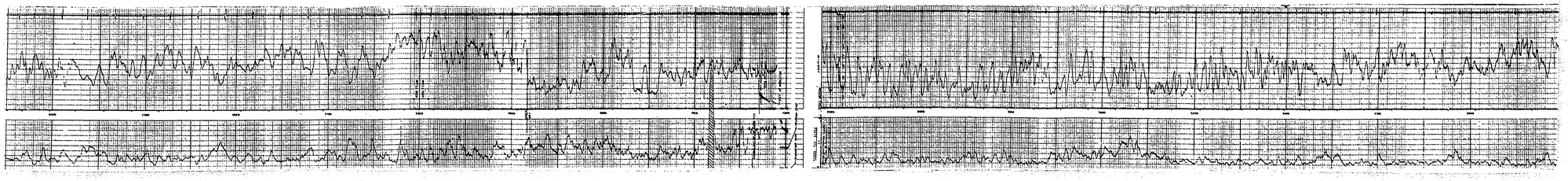

V.P.I.&.S.U. HISTORICAL PHOTOS

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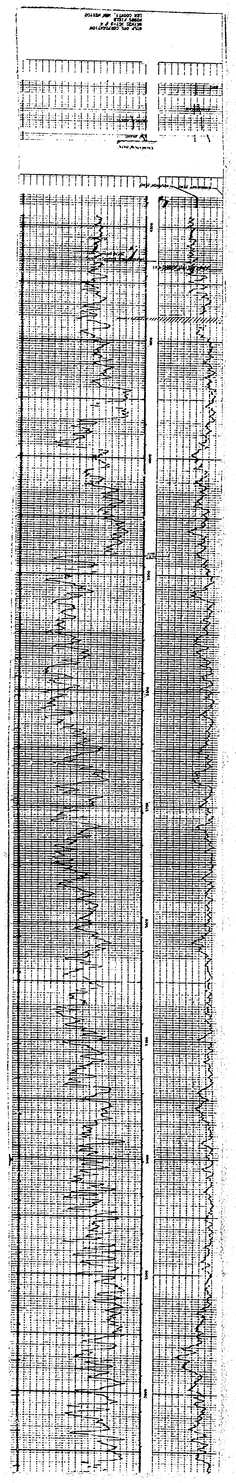

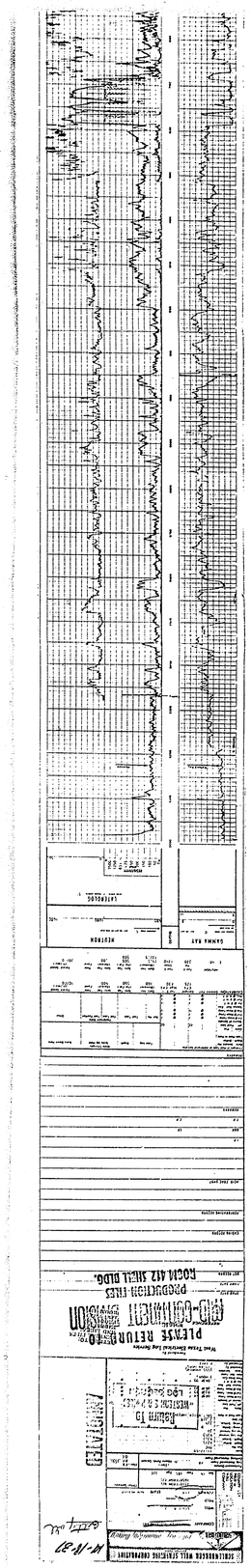

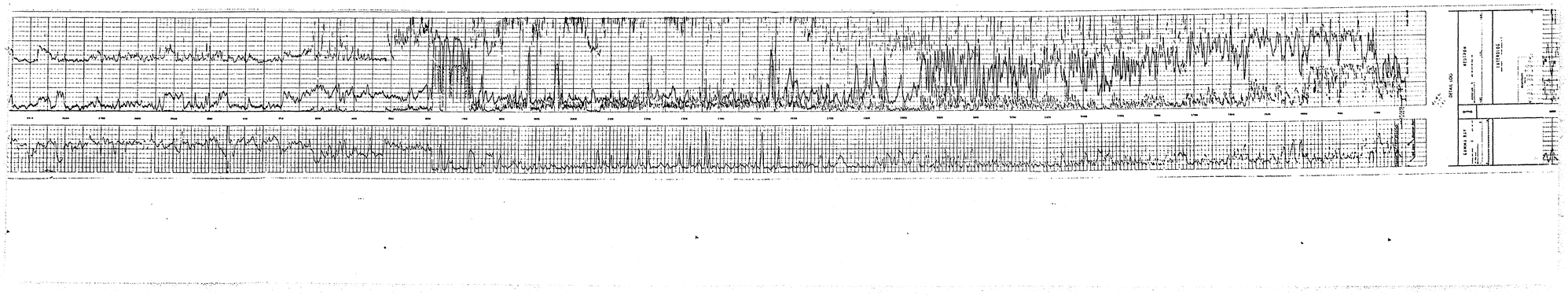

V.A.R.C.I. MICROGRAPHICS

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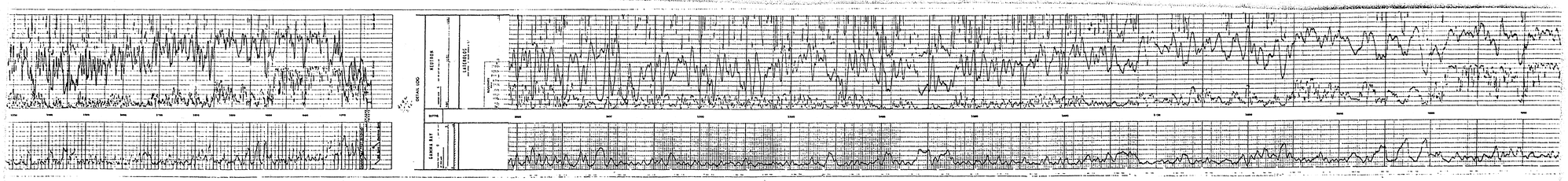

U.S.G.S. DOCUMENTS

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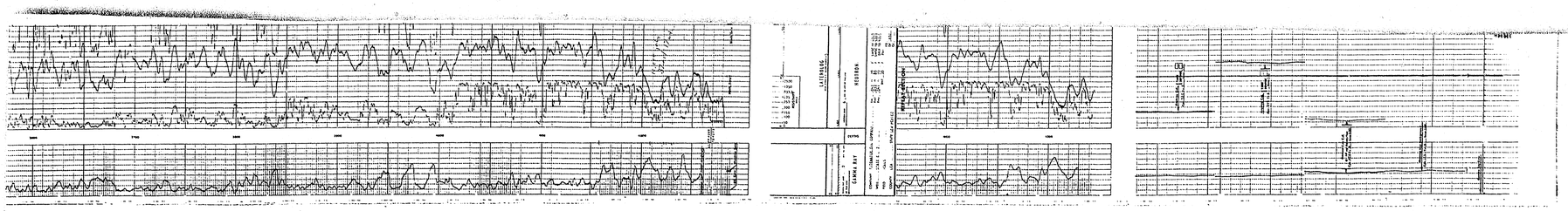

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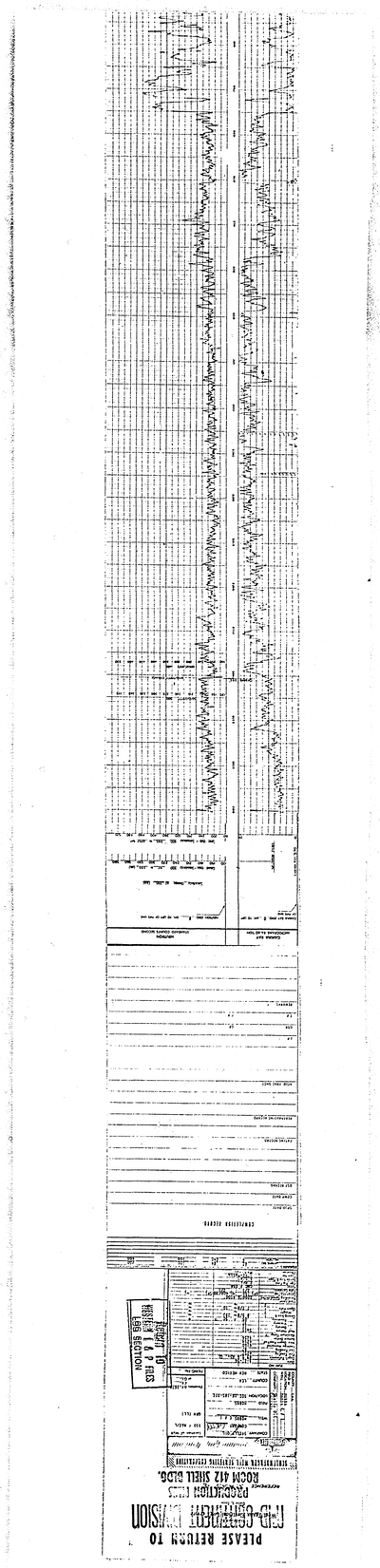
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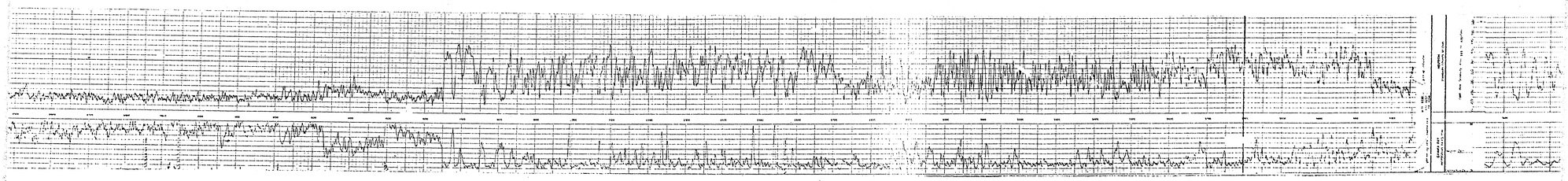
CMP-GEOTECH DIVISION
PASCATION LMOS
ROOM 412 SHELL BLDG.
PROPERTY OF GTS
GEOTECHNICAL SECTION



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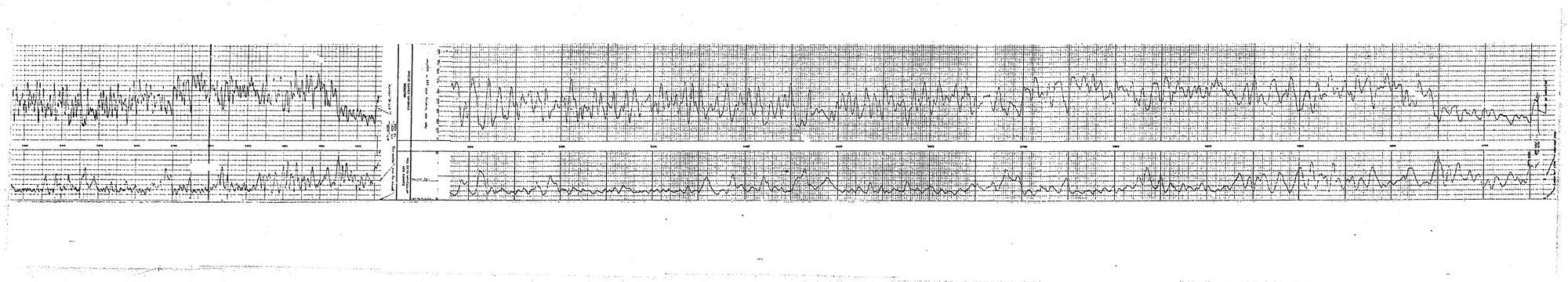

U.S.D.C.F. MICROGRAPHICS

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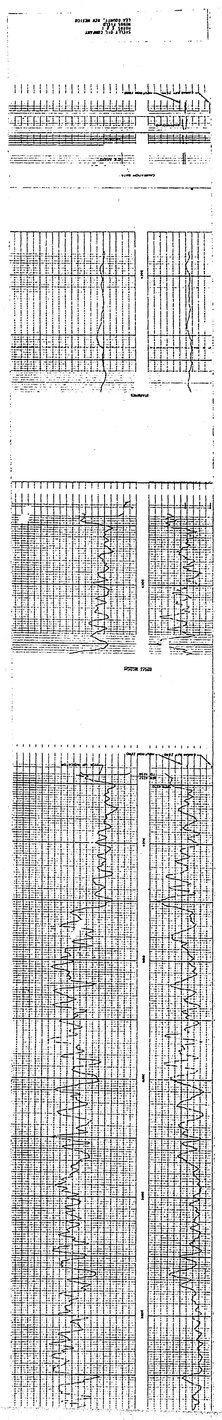

U.S.A.C.I. REPRODUCTIONS
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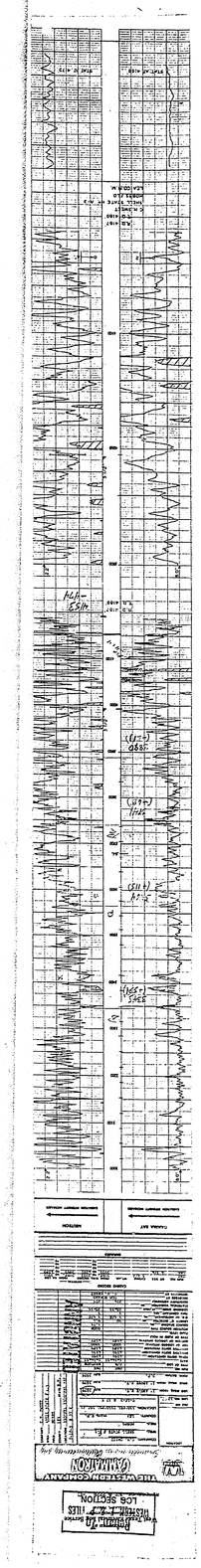

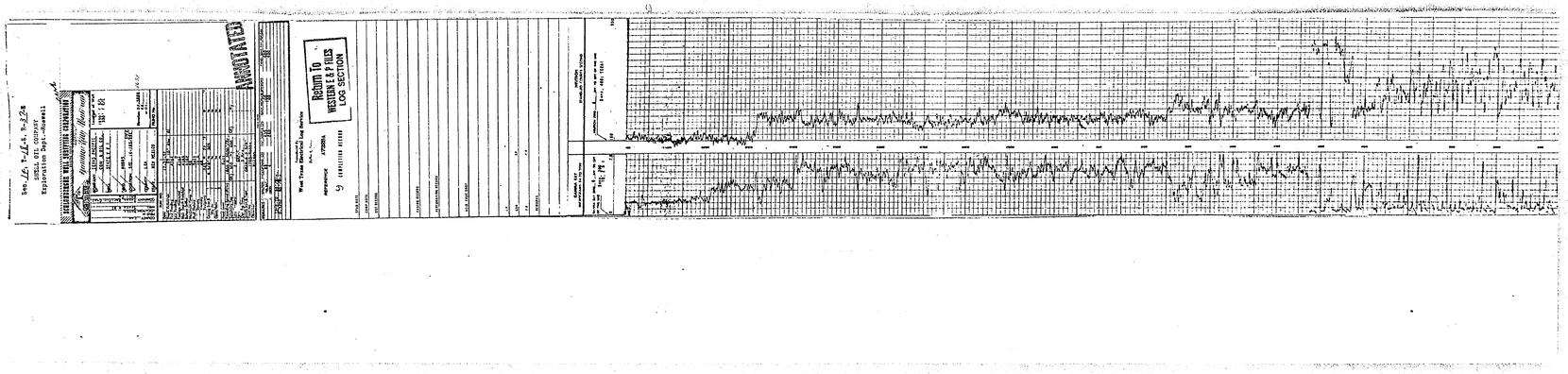

U.S.G.S. GEOMAGNETISM
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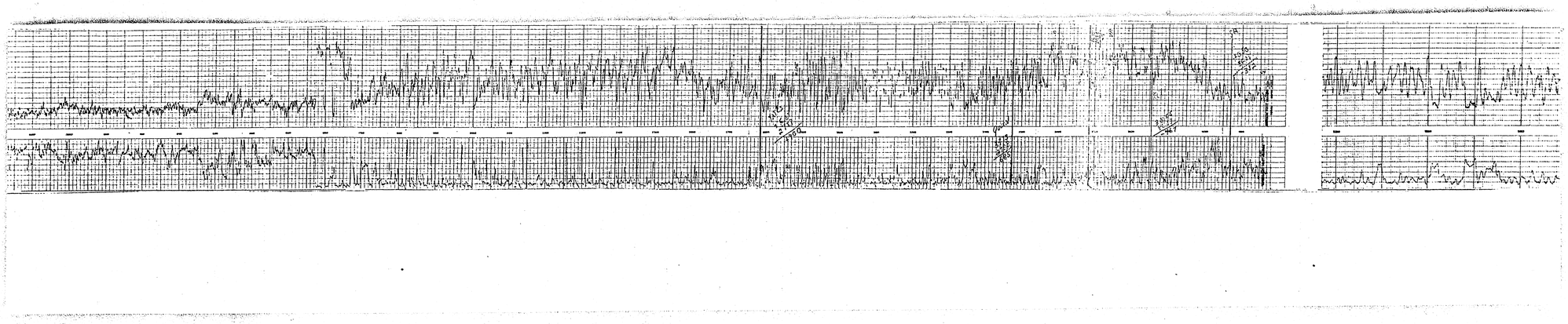

U.S.G.S. OBSERVATORY

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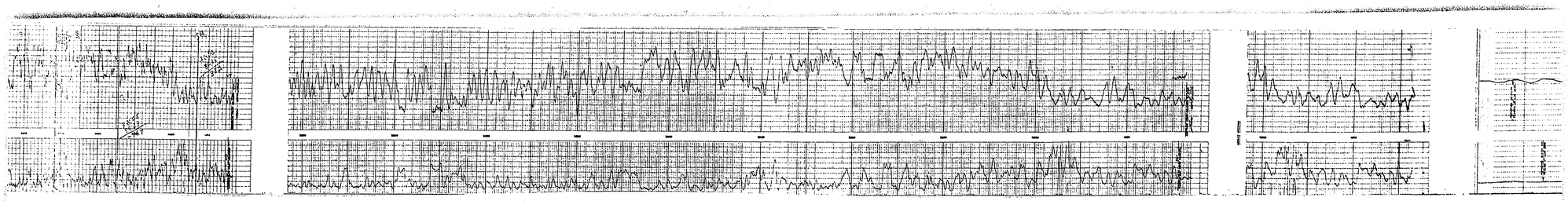

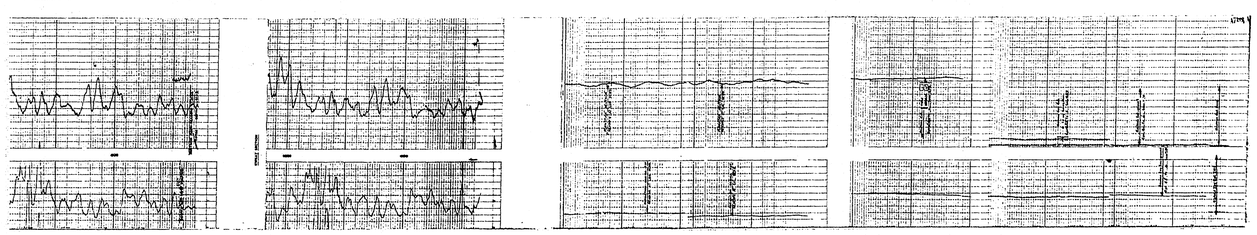

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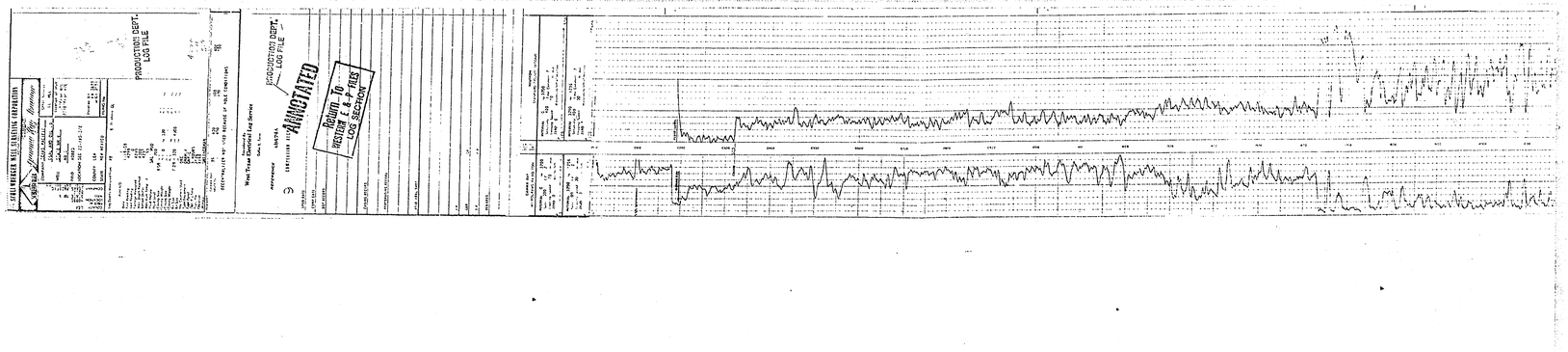
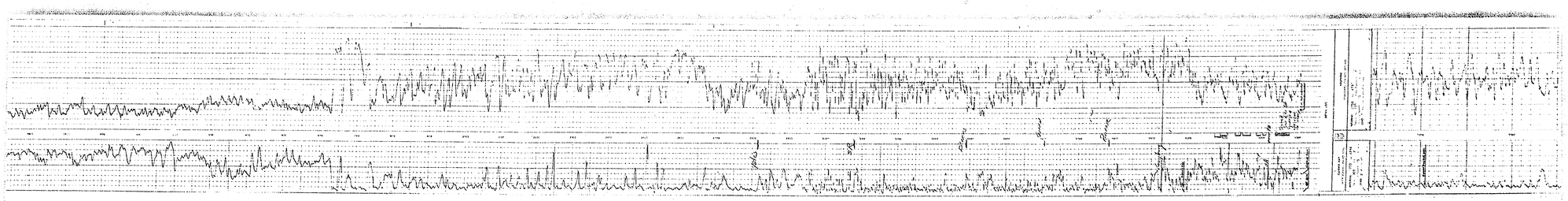
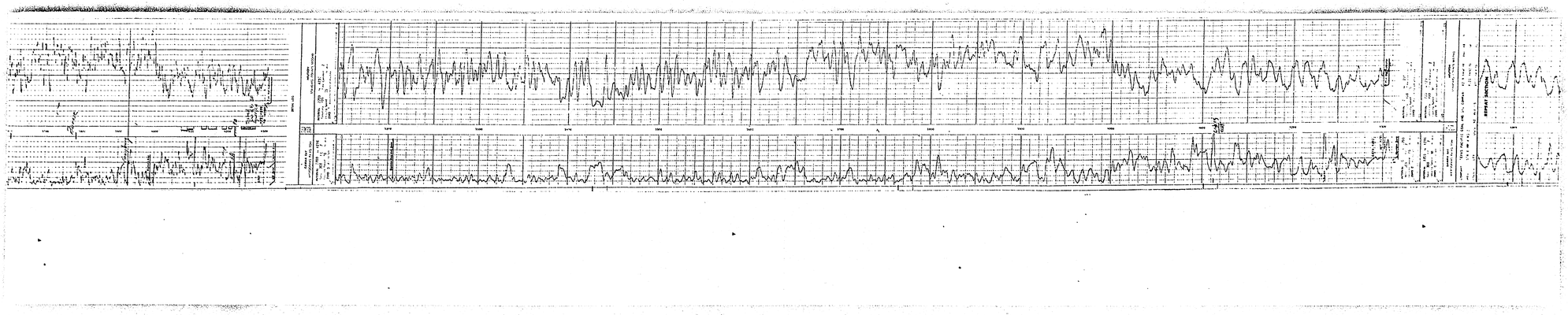

SCHLUMBERGER WELL SURVEYING CORPORATION
PRODUCTION DEPT.
LOG FILE
ANNOTATED
Route 10
Western U.S.
Log Section





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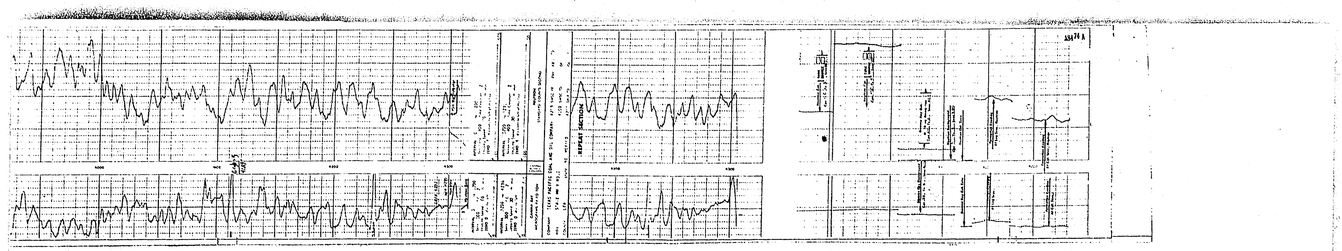

U.S.A.F. MICROGRAPHICS

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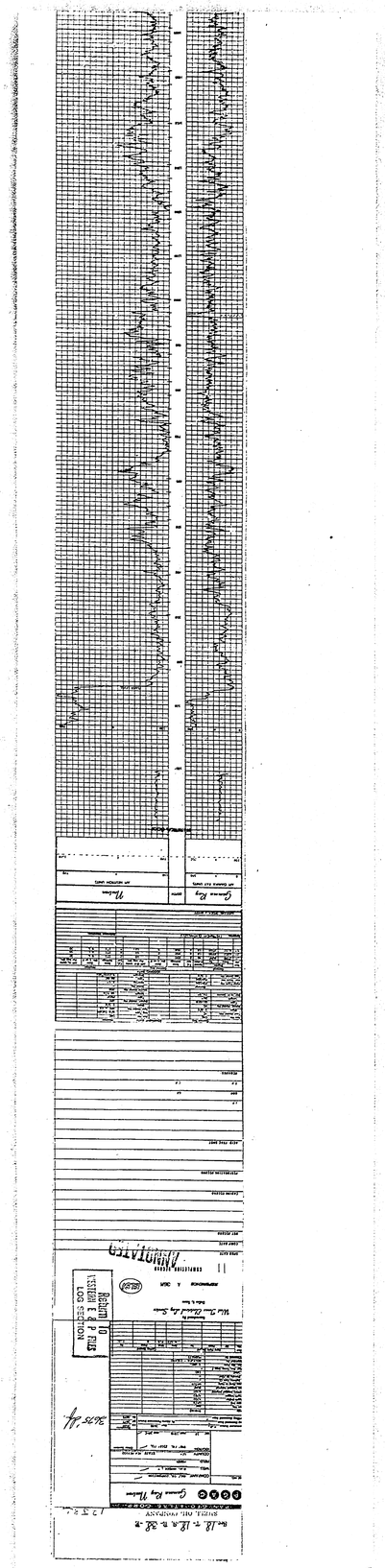

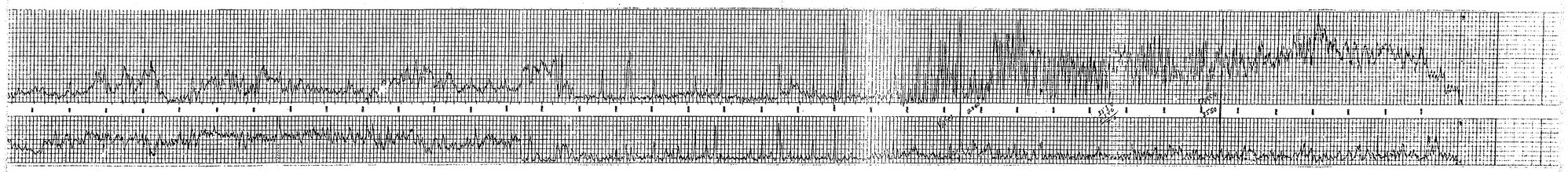

U.S.G.S. PHOTOGRAPHER

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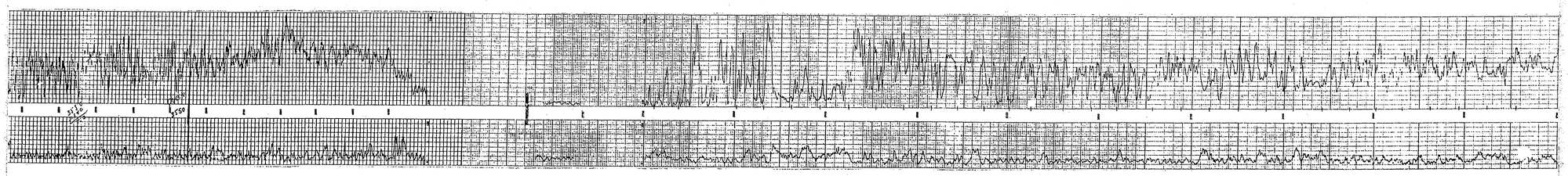

U.S.A.F.C.F. MICROGRAPHICS

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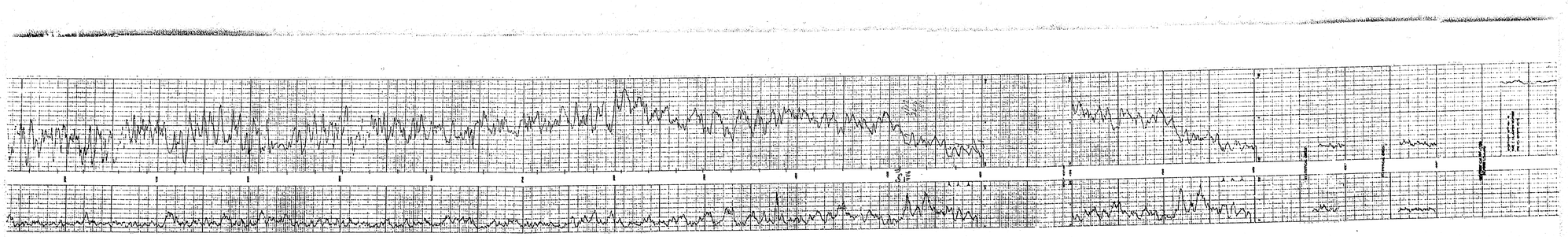

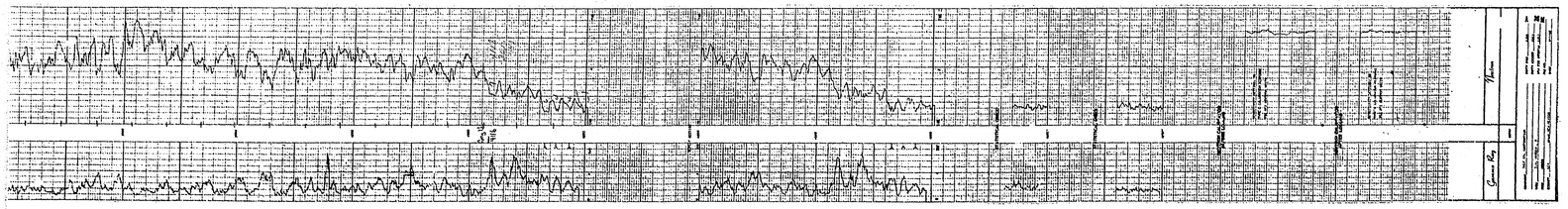

U.S.G.S. MICROGRAPHICS
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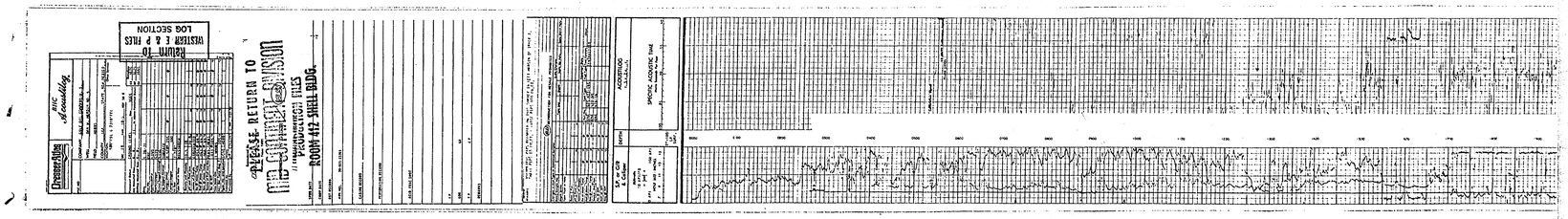
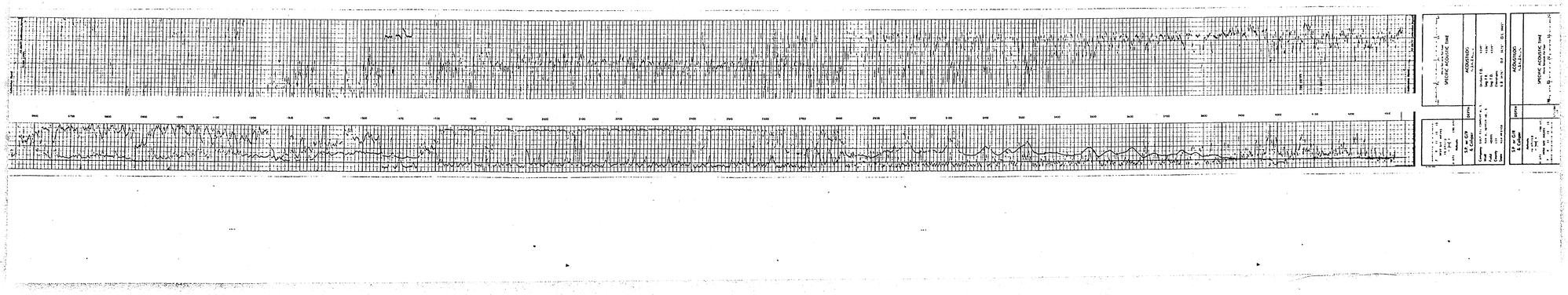

Dresser Atlas
Accoustilog
RETURN TO
RECORDS MANAGEMENT FILES
ROOM 417 SHELL BLDG.
RETURN TO
HISTORY & P FILES
LOG SECTION
ACOUSTILOG
SPECIFIC ACOUSTIC TIME

U.S.G.S. PHOTOGRAPHICS
BEST AVAILABLE COPY



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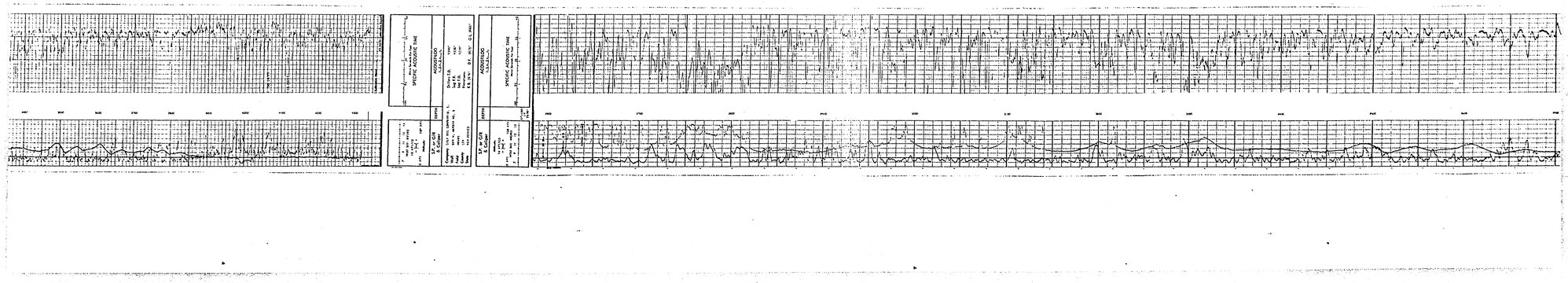
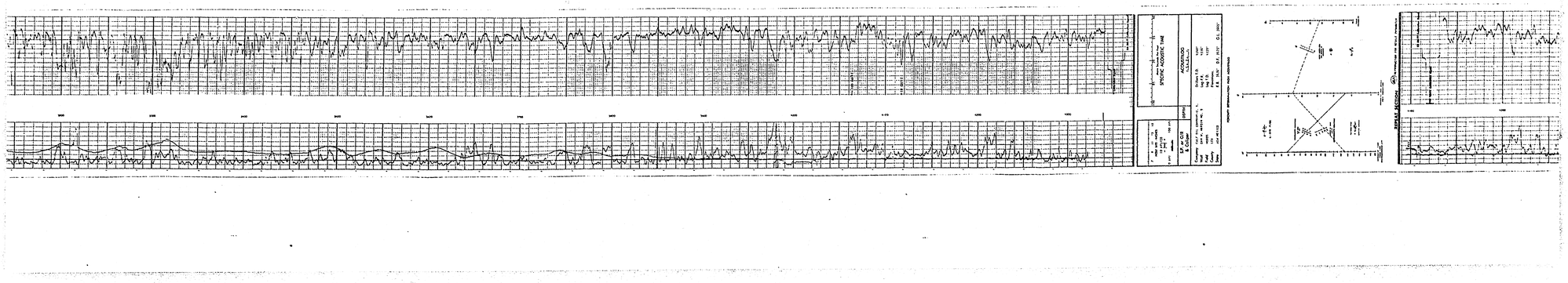


U.S.G.S. HEADQUARTERS

BEST AVAILABLE COPY



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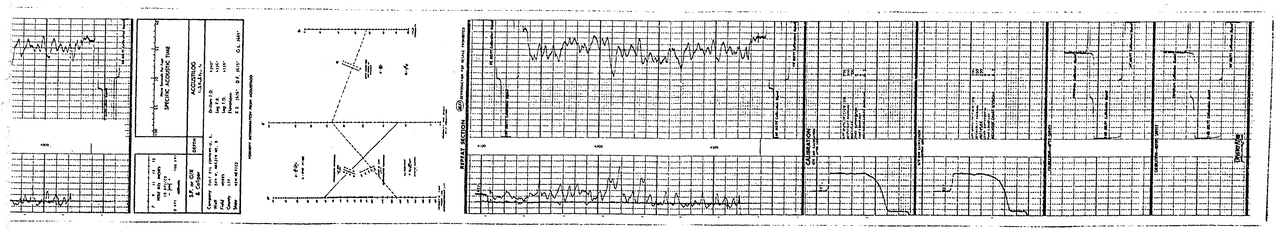

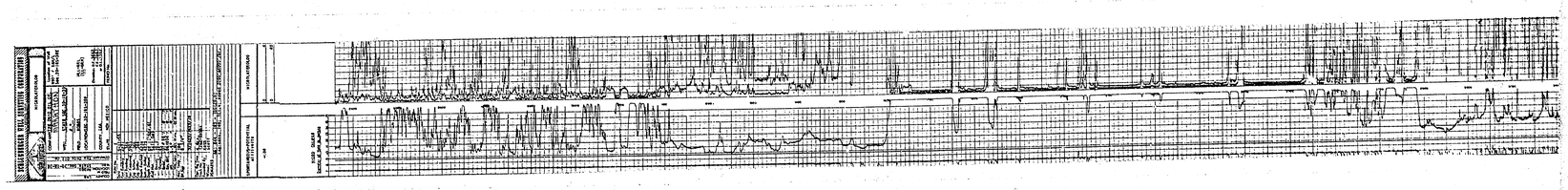

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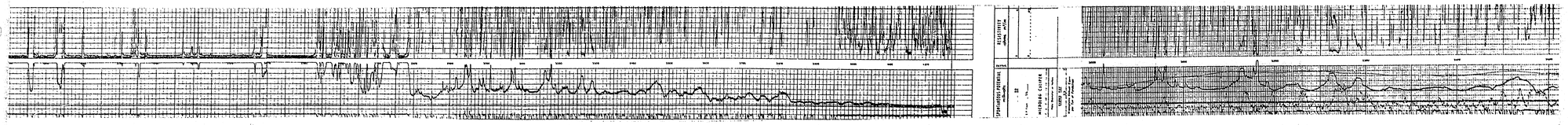

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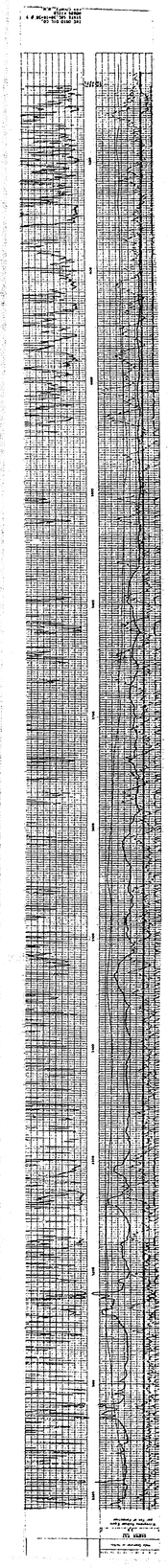

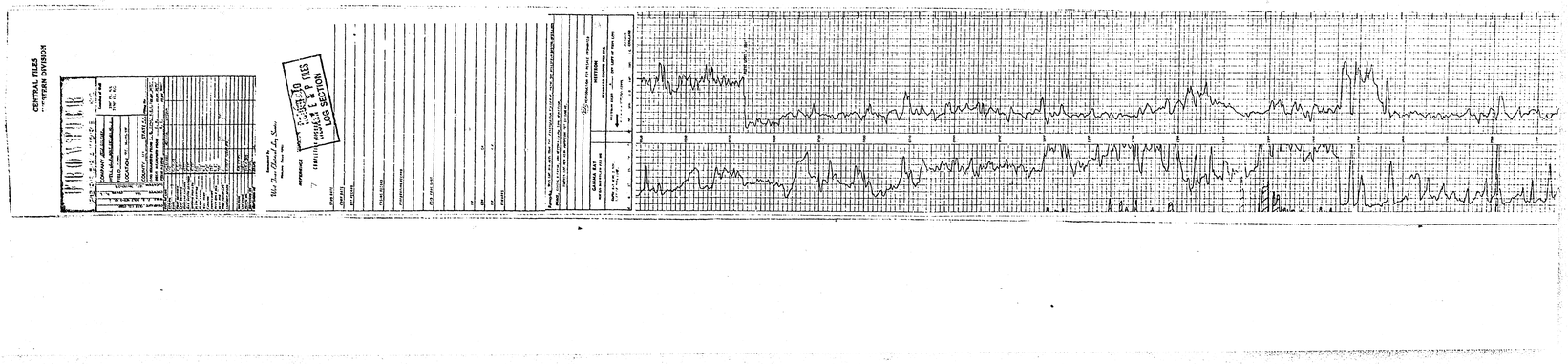

U.S.G.S. LIBRARIES
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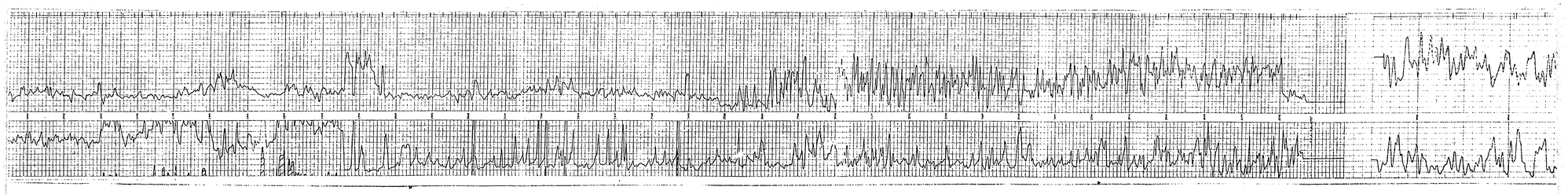

U.S.A.F.C.F. RESEARCHERS

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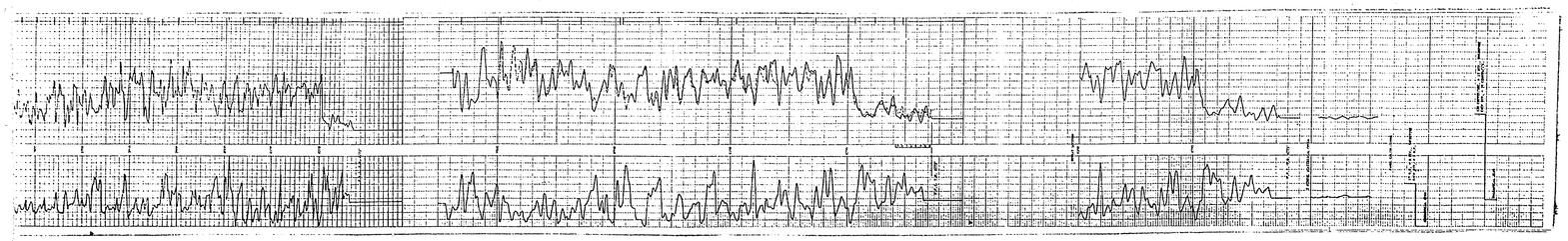

V.P.A.C.T. RADIOGRAPHICS

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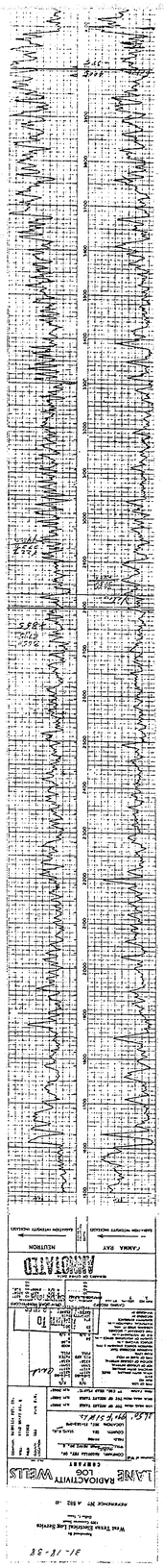


LANE RADIOACTIVITY WELLS

COMPANY

LOG

Schlumberger
West Texas Electrical Log Service
Abilene, Texas

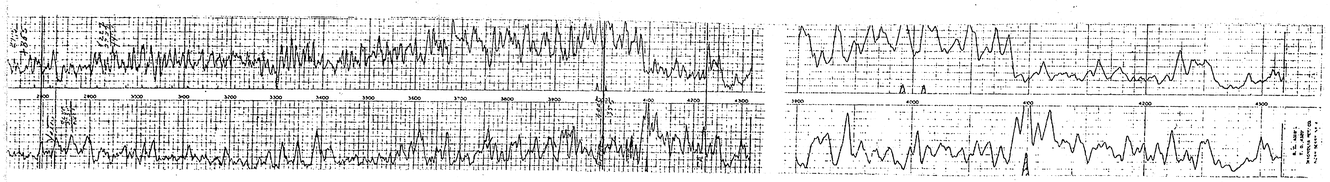
RECORDED BY A. Bill Jr.

31-12-5E

NEUTRON

GAMMA RAY

AMERADA



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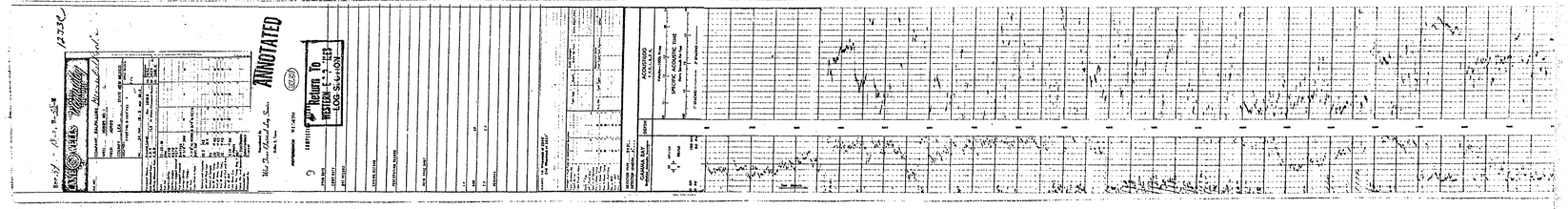

U.S.G.S. RESTON
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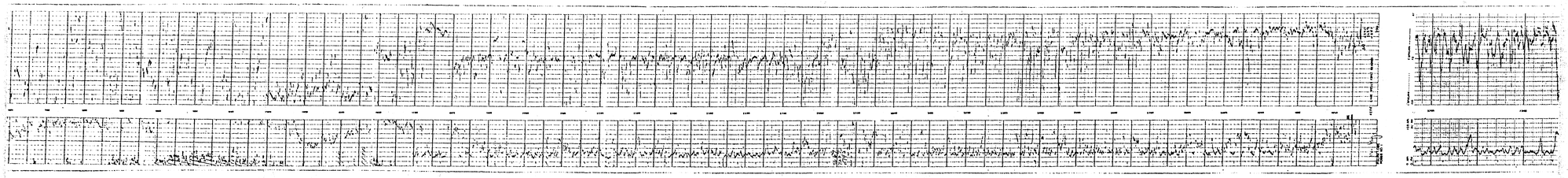

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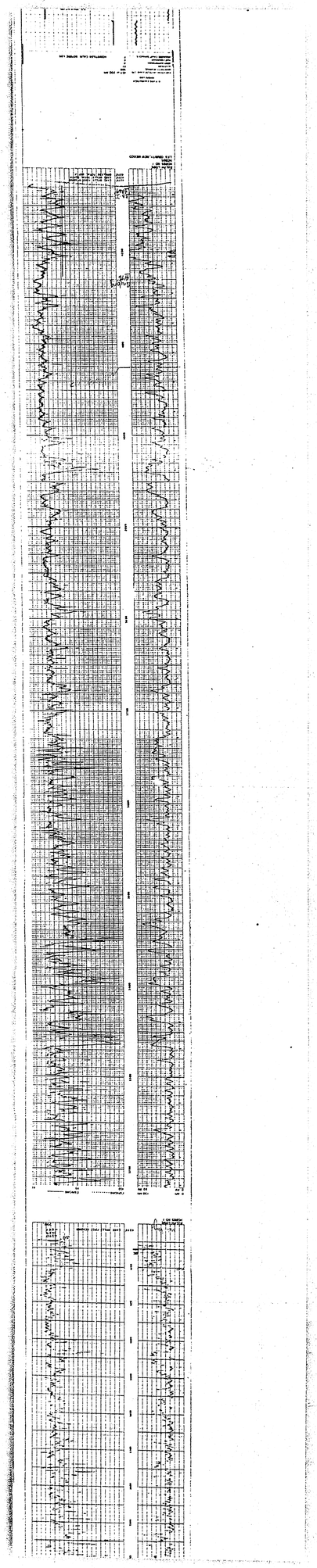
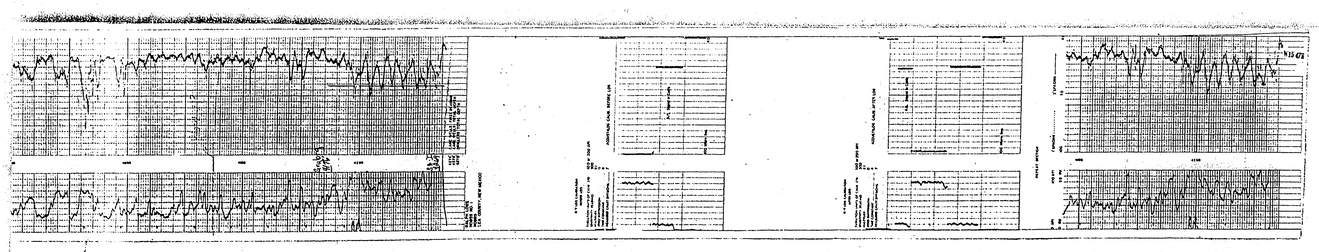




V.A.M.C.J. WASHINGTON D.C.

BEST AVAILABLE COPY

Sec 23 T-12-S R-32-E

SPECIAL CORE ANALYSIS

Exploration Dept.-Roswell

12S 32E

SCHLUMBERGER WELL SERVICES CORPORATION

COMPANY SOUTHERN UNION GAS COMPANY

WELL Jicarilla A 6

FIELD Undesignated

COUNTY Lea STATE New Mexico

Other Services

Permanent Datum: Ground Elev. 4141 ft. above Perm. Datum

Log Measured From: KB 15 ft. above Perm. Datum

Drilling Measured From: KB

Elev.: K.B. 4156 G.L. 4141

Date: 10-17-59

Run No.: One

Depth-Driller: 5300

Depth-Logger: 5304

Bottom Logged Interval: 5304

Top Logged Interval: 1200

Type Fluid in Hole: Salt Water

Salinity, PPM Cl: 180,000

Density: 10.0

Level: Full

Max. Rec. Temp. Deg. F.: 115

Operating Rig Time: 18 hrs.

Recorded By: Hall

Witnessed By: Mr. Hughes

Return To
WESTERN E & P FILES
LOG SECTION

Processed by
West Texas Electrical Log Service
Hobbs, N. Mex.

ANNOTATED

REFERENCE RECORDS

15 COMPLETION RECORD

SPUD DATE

COMP DATE

DST RECORDS

CASING RECORD

PERFORATING RECORD

ACID SHOT DATA

I.P.

GOR

I.P.

REMARKS

REMARKS

Density or Mud Type or Additional Services
Mud Resistivity (Rm) @ Meas. Temp.
Mud Filtrate Resistivity (Rmf) @ Meas. Temp.
Mud Cake Resistivity (Rmc) @ Meas. Temp.
Run No. One
Source of Rmf & Rmc
Rm @ BHT
Rmf @ BHT
Rmc @ BHT
Time Since Circ.
Max. Rec. Temp. Deg. F.
Equip. Location
Recorded By
Witnessed By

Density
Viscosity
pH
Fluid Loss
Source of Sample
Rm @ Meas. Temp.
Rmf @ Meas. Temp.
Rmc @ Meas. Temp.
Source of Rmf & Rmc
Rm @ BHT
Time Since Circ.
Max. Rec. Temp. Deg. F.
Equip. Location
Recorded By
Witnessed By

Run No. One
Bit Size
Type Fluid in Hole
Casing-Driller
Casing-Logger
Bottom Logged Interval
Top Logged Interval
Type Fluid in Hole
Salinity, PPM Cl
Density
Level
Max. Rec. Temp. Deg. F.
Operating Rig Time
Recorded By
Witnessed By

NEUTRON

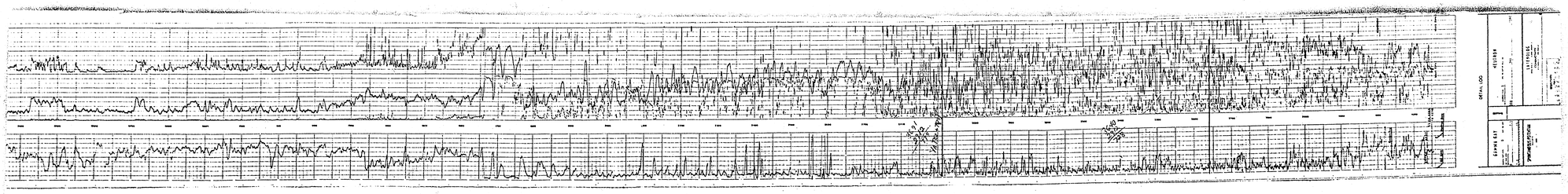
Run No.	Date	Depth-Driller	Depth-Logger	Bottom Logged Interval	Top Logged Interval	Casing-Driller	Casing-Logger	Bit Size	Type Fluid in Hole	Density	Viscosity	pH	Fluid Loss	Source of Sample	Rm @ Meas. Temp.	Rmf @ Meas. Temp.	Rmc @ Meas. Temp.	Source of Rmf & Rmc	Rm @ BHT	Time Since Circ.	Max. Rec. Temp. Deg. F.	Equip. Location	Recorded By	Witnessed By
One	10-17-59	5300	5304	5304	1200	8 5/8 @ 1200		7 7/8	Salt Water	10.0														

GAMMA RAY

SPONTANEOUS POTENTIAL

NEUTRON

LATEROLOG
CONDUCTIVITY



U.S.A.C.F. MICROGRAPHICS

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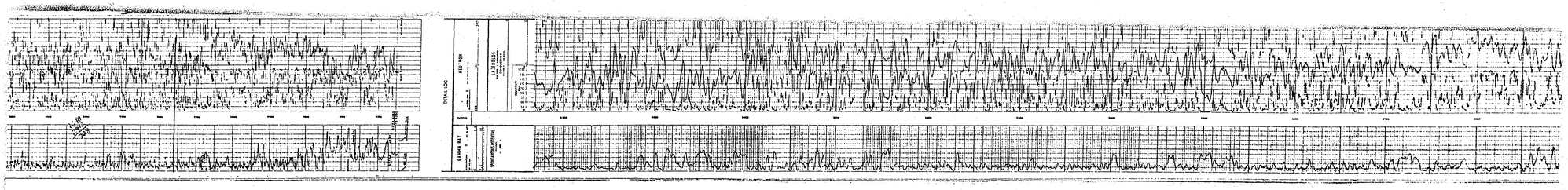

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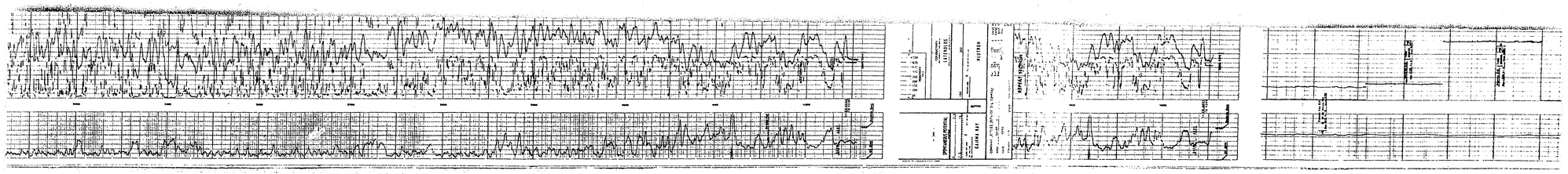

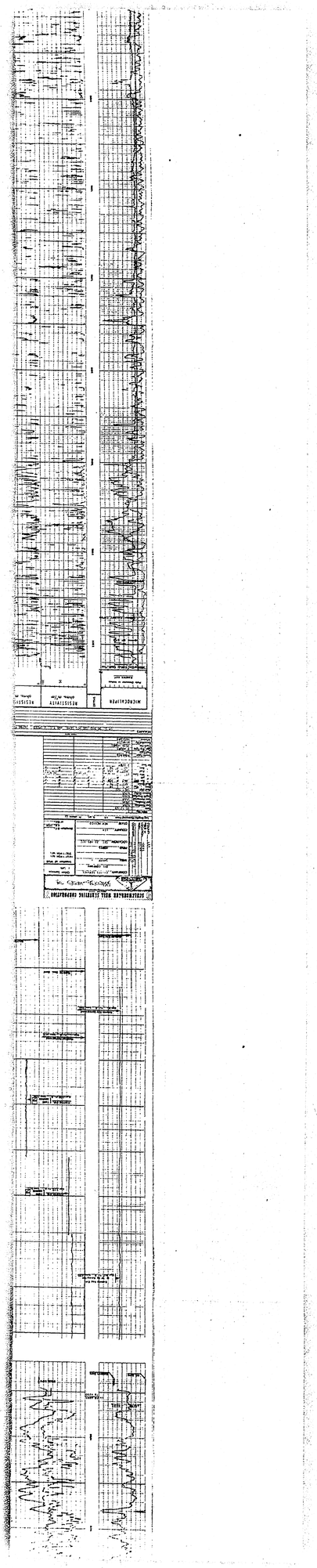

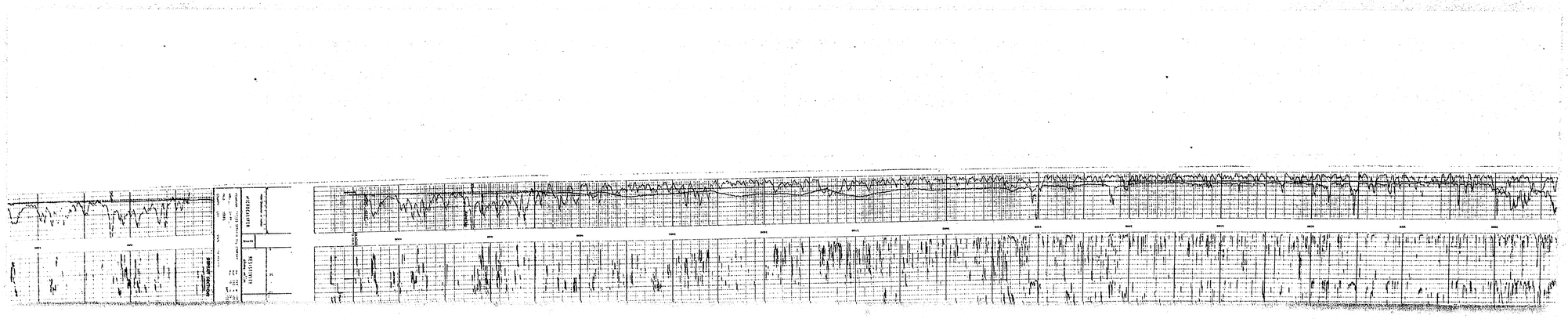

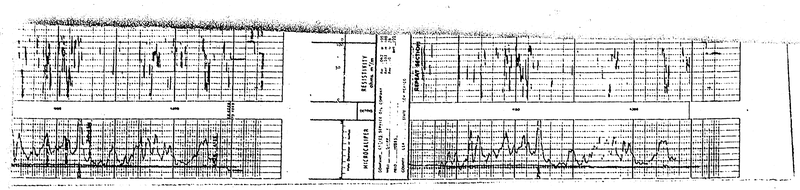

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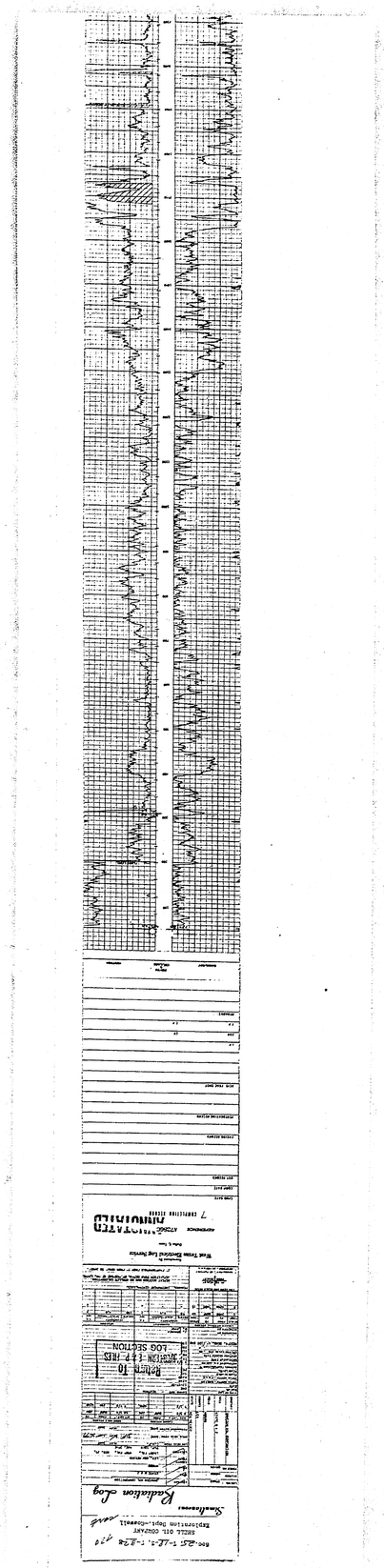
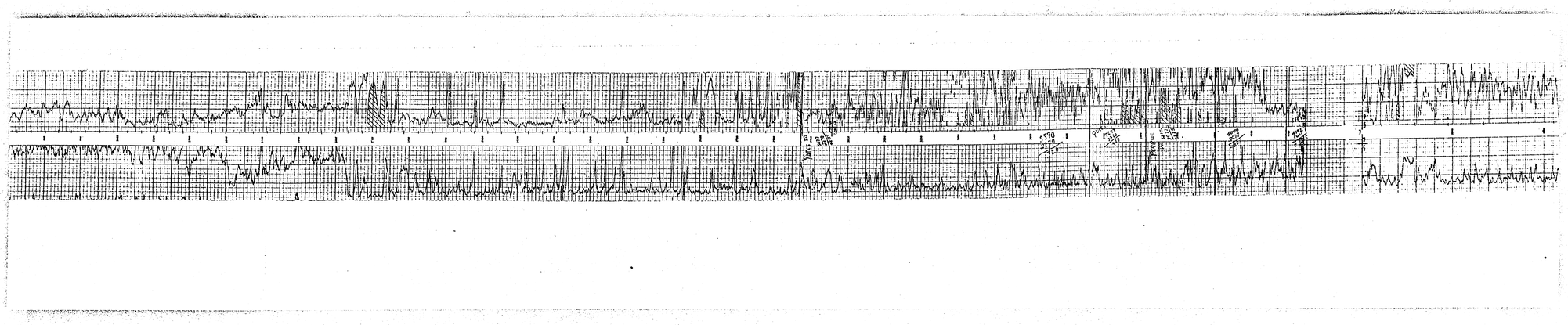

ANADARKO
7
Radiation log
Run 1
Run 2
Run 3
Repeat
Main
LOG SECTION



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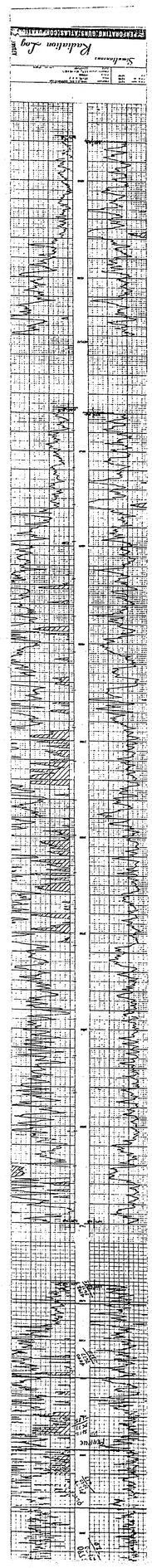
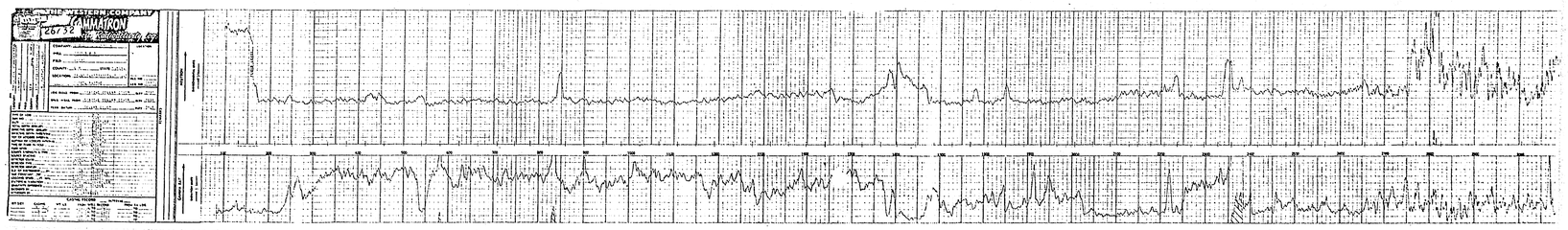

Schlumberger
Radiation Log



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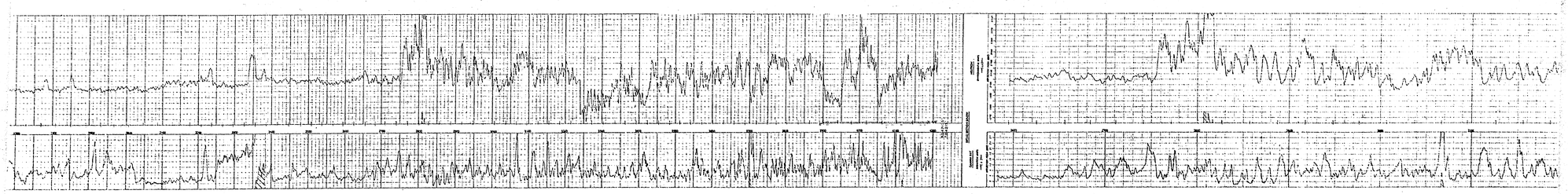

V.P.A.C.F. MICROGRAPHICS

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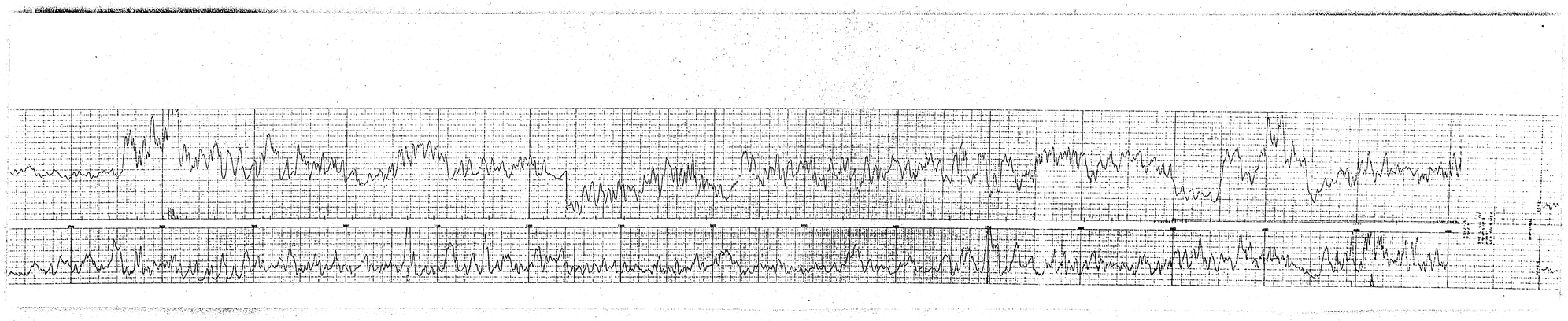

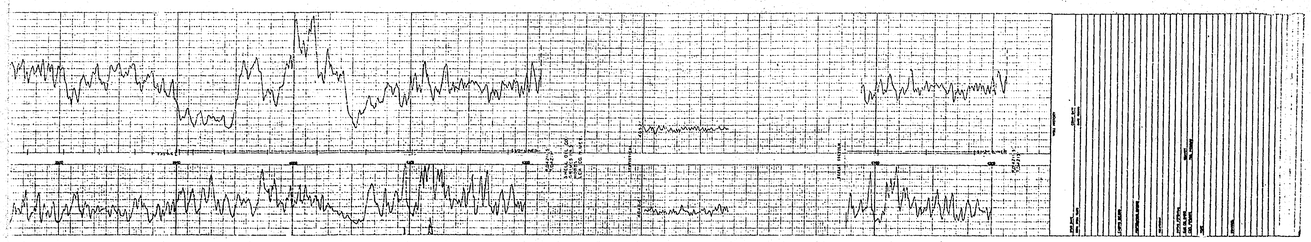

U.S.D.A. NONCOMMERCIAL

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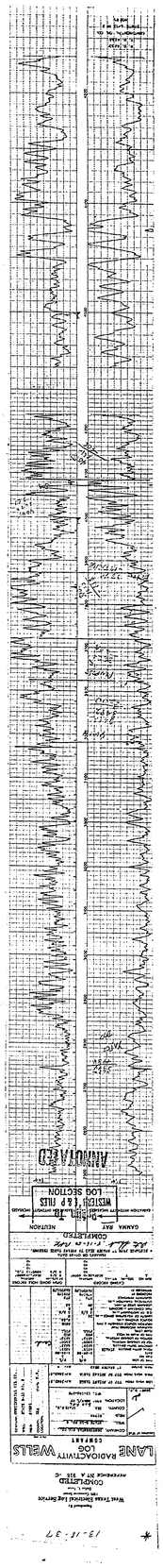
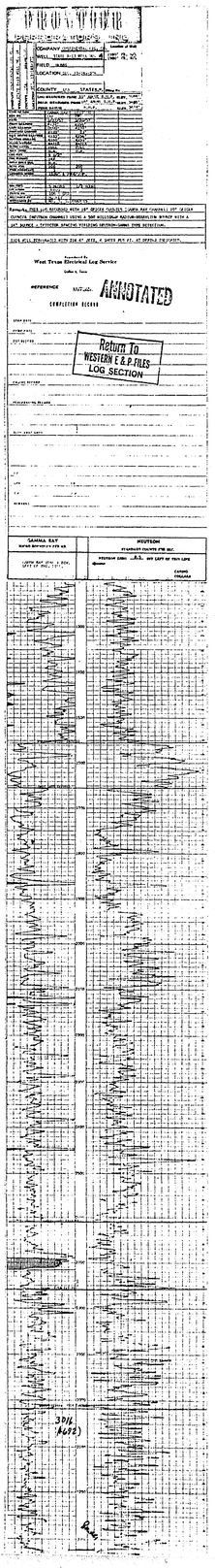
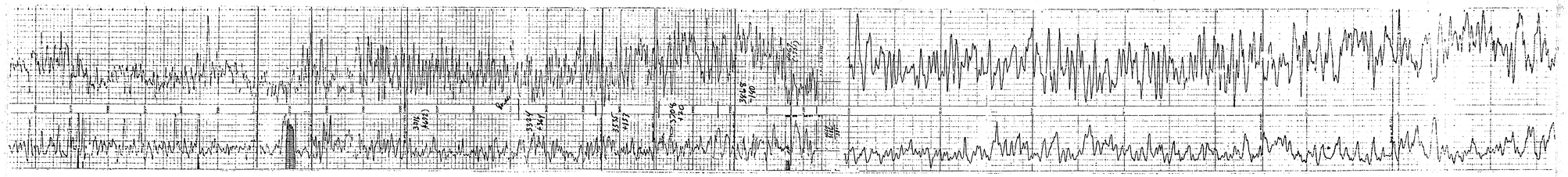

LANE RADIOACTIVITY WELLS
LOG
COMPANY
CONTROLLED
AMENDED
LOG SECTION
GAMMA RAY
NEUTRON
COMPLETED
13-12-37


PRODUCER
COMPANY
WELL
FIELD
LOCATION
COUNTY
STATE
Elevation
Return To
WESTERN E & P FILES
LOG SECTION
Recorded By
West Texas Electrical Log Service
REFERENCE
ANNOTATED
COMPLETION RECORD
GAMMA RAY
NEUTRON
3114
(2674)



U.S.D.A.-C.F. MICROGRAPHICS

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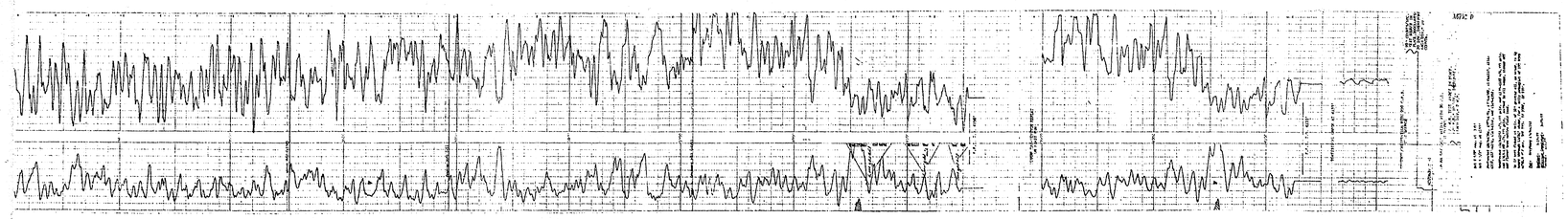

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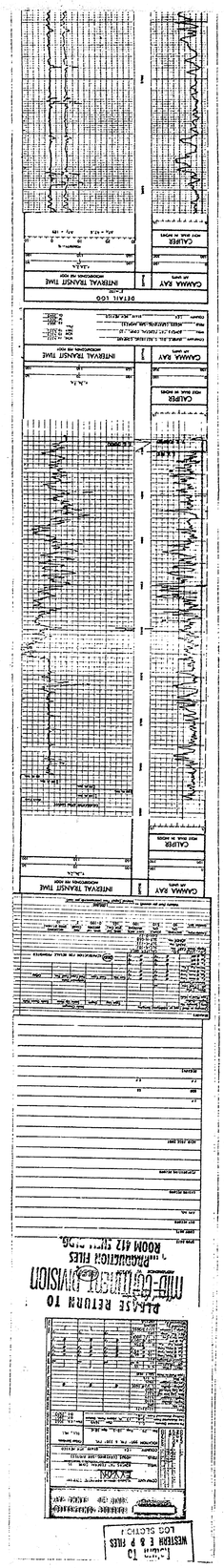

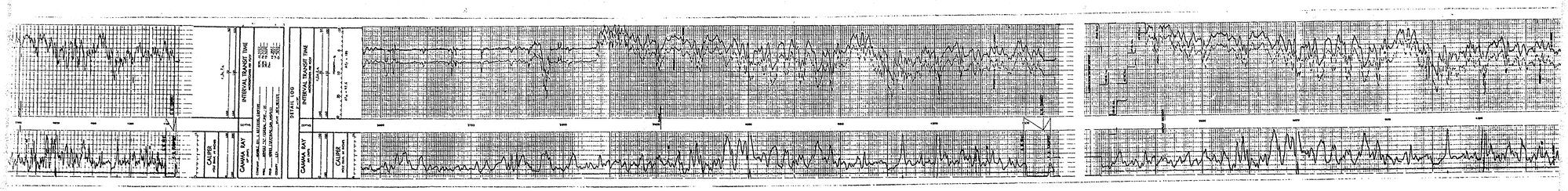

V.P.R.C.F. MICROGRAPHICS

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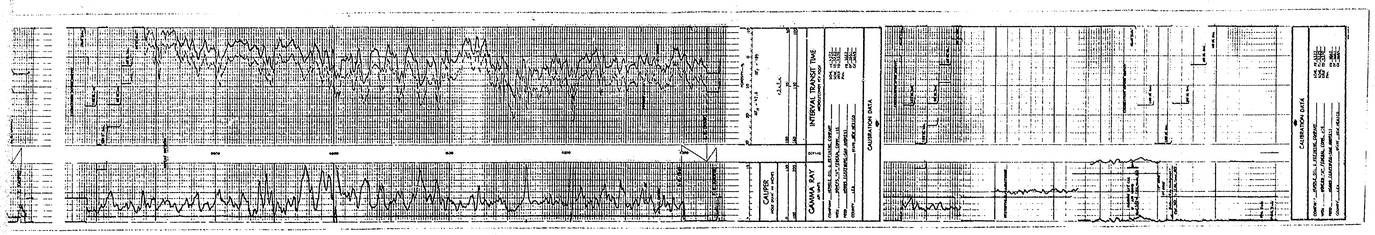
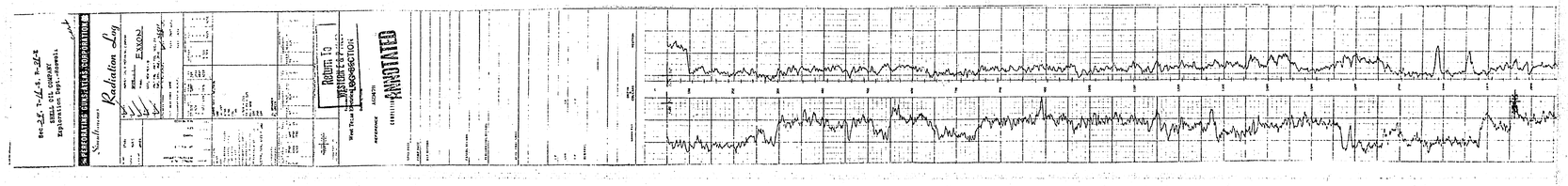

INTERVAL TRANSIT TIME
GAMMA RAY
CALIPER
CALIBRATION DATA



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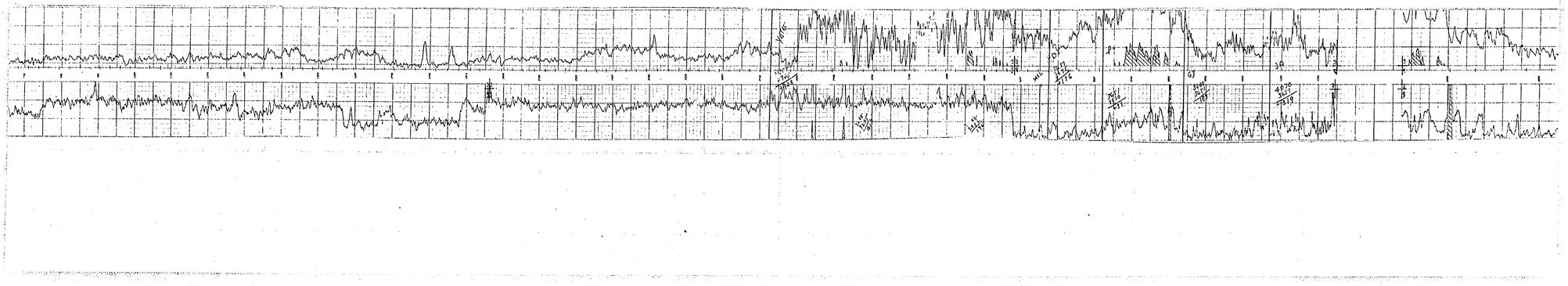
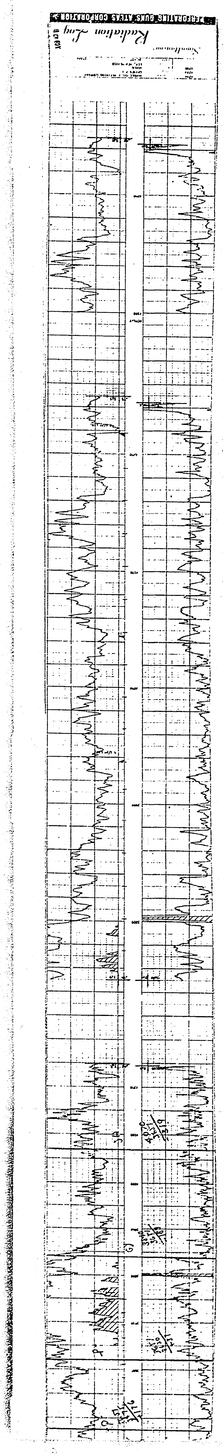
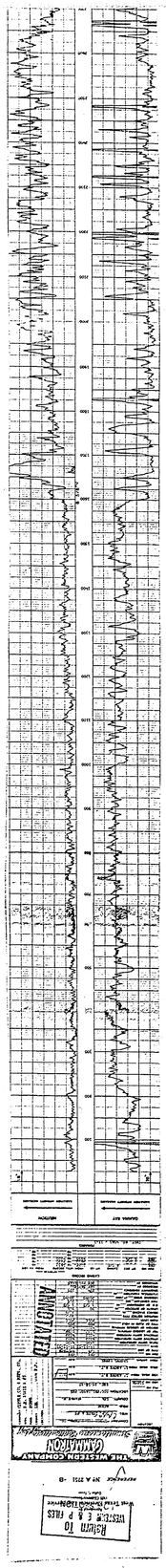
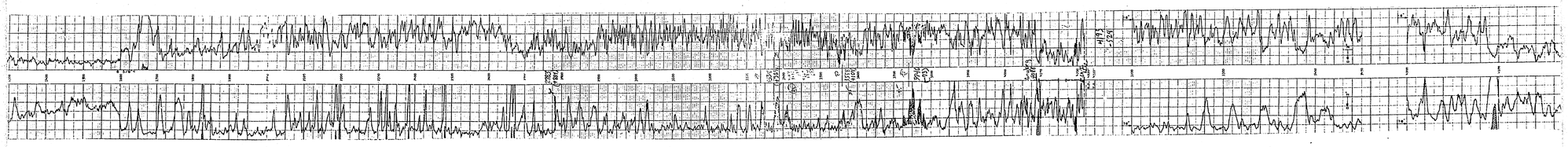
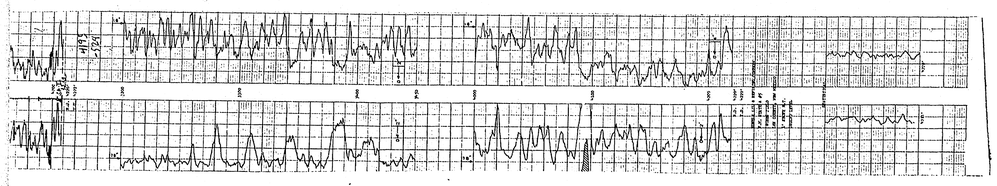



Kathleen Lee
TRIGEMINAL-OCULAR REFLEX SOMATOSTATIN

VAULT DOCUMENT
DO NOT REMOVE

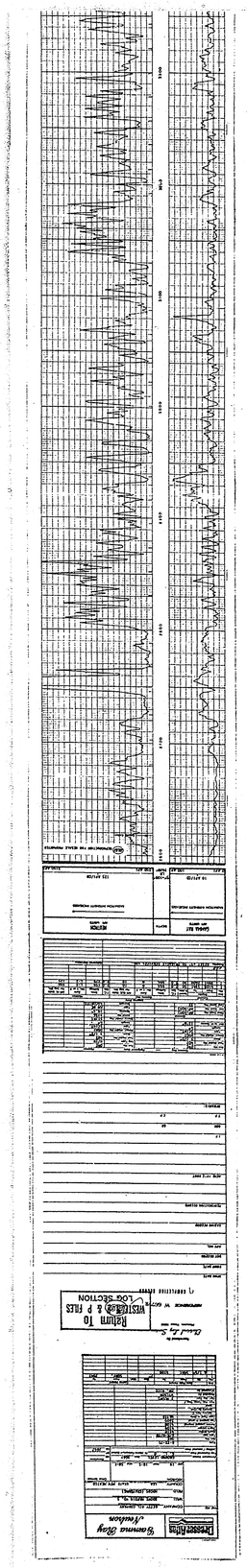






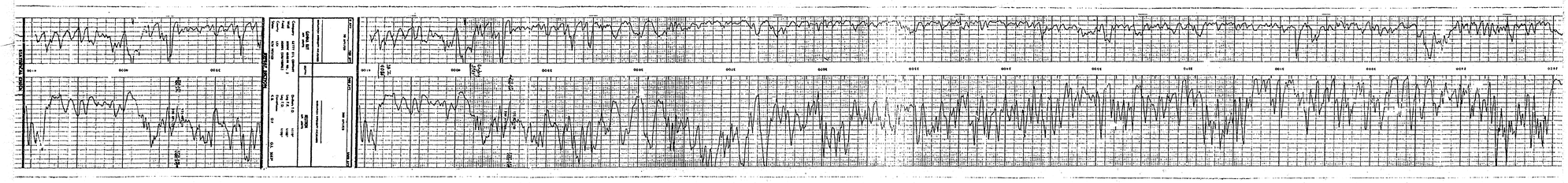
U.S.N.A.F. NEUROLOGICS

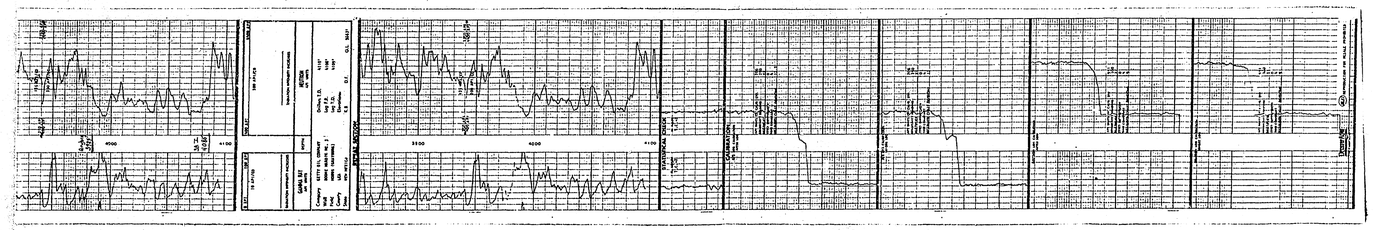
BEST AVAILABLE COPY



Return To
WESTCORE E & P FILES
LOG SECTION

BEST AVAILABLE COPY





U.S.A.T.C. DOCUMENT
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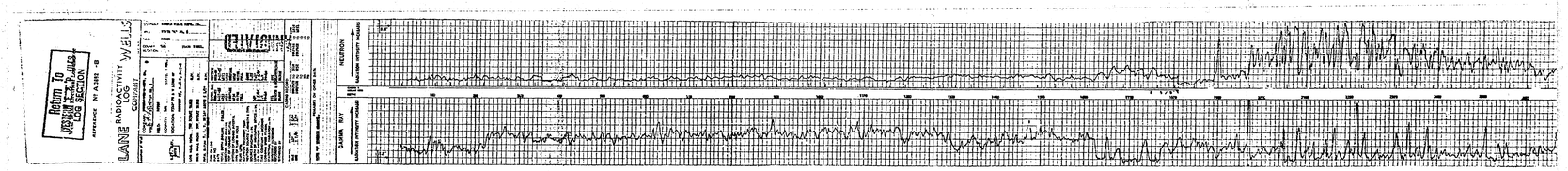

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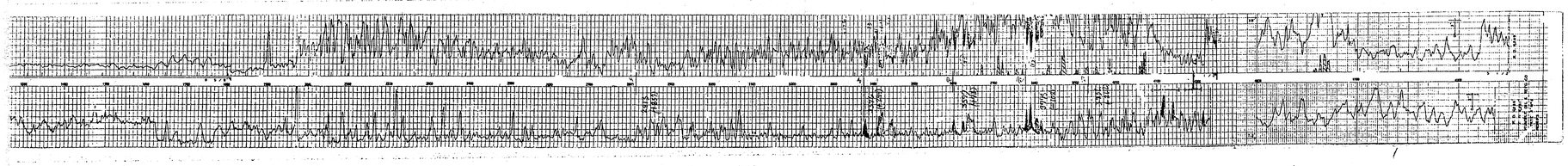
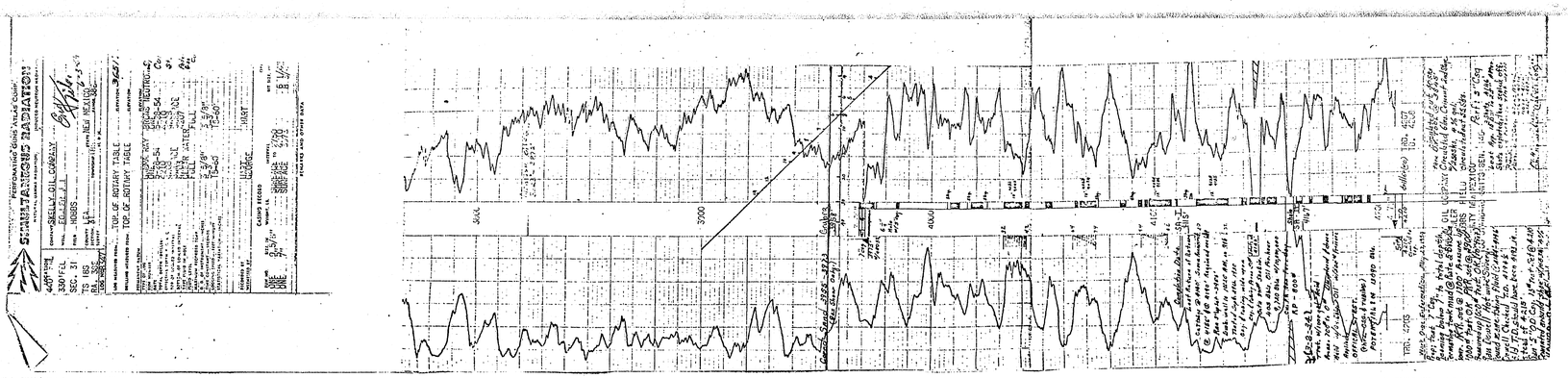


BEST AVAILABLE COPY


PERFORATING GUNS, ATLAS CORP.
SIDEWALL NEUTRON
SHELL OIL COMPANY
Bridwell
TOP OF ROTARY TABLE
TOP OF CASING FLANGE
DRILLERS DEPTH
LOGGER'S DEPTH
BOREHOLE RECORD
CASING RECORD
3700
4000