Case No:
2992

Large
Exhibits

F2

SCHLUMBERGER

LATEROLOG

WITH GUARD SLP

SCHLUMBERGER WELL SURVEYING CORPORATION
HOUSTON, TEXAS

COUNTY LEA
FIELD WILDCAT
WELL STATE OF NEW MEXICO AO # 1
COMPANY SUNRAY DX OIL COMPANY

COMPANY	SUNRAY DX OIL COMPANY
WELL	STATE OF NEW MEXICO AO # 1
FIELD	WILDCAT
LOCATION	SEC. 16-10S-34E
COUNTY	LEA
STATE	NEW MEXICO

Other Surveys: SGR, MLL

Location of Well: 660' FROM S/L, 660' FROM W/L

Elevation: K.B. 4225, D.F. 4224, or G.L. 4214

Log Depths Measured From KB, 11 Ft. above GL

RUN No.	ONE							
Date	10-20-63							
First Reading	10805							
Last Reading	4100							
Feet Measured	6705							
Csg. Schlum.	4100							
Csg. Driller	4100							
Depth Reached	10810							
Bottom Driller	10800							
Mud Hist.	SALT GEL STARCH							
Dens. Visc.	10.0 44							
Mud Resist.	.11 @ 70 °F	@ °F	@ °F
" Res. BHT	.526 @ 149 °F	@ °F	@ °F
" pH	8 @ °F	@ °F	@ °F
" Wtr. Loss	20 CC 30 min	CC 30 min	CC 30 min
" Rmf (at)	.076 @ 68 °F	@ °F	@ °F
" Rmc (at)	.15 @ 68 °F	@ °F	@ °F
Bit Size	7 7/8"	"	"
Laterolog 3	R= 6" A 5" M	A M	A M
Laterolog 7	R= " A " M	A M	A M
Opr. Rig Time	2 HOURS		
Truck No.	3701-HOBBS		
Recorded By	SCHAFFER		
Witness	BURGER		

SOURCE OF SAMPLES: RMF CAKE
RECORDED BY: SCHAFFER
WITNESSED BY: BURGER

RUN	BIT	FROM	TO
ONE	7 7/8"	4100	10810

CASING RECORD: SURF. STR. 10 3/4" @ 1274' W/600 SX; PROD. STR. 5 1/2" @ 10805' W/300 SX

TYPE LOG: LATEROLOG; LOG TYPE: GUARD SLP; LOG RECORDED: ONE; LOG RUN NO.: ONE; DEPTH DRILLER: 10800; DEPTH LOGGER: 10805; BTM. LOG INTERVAL: 10805; TOP LOG INTERVAL: 4100; CASING DRILLER: 4100; CASING LOGGER: 4100; BIT SIZE: 7 7/8"; TYPE FLUID IN HOLE: SALT GEL STARCH; DENS.: 10.0; VISC.: 44; PH: 8; FLUID LOSS: 20 CC; SOURCE OF SAMPLE: RMF CAKE; RM @ MEAS. TEMP.: .11 @ 70 °F; RMF @ MEAS. TEMP.: .076 @ 68 °F; RMC @ MEAS. TEMP.: .15 @ 68 °F; SOURCE RMF: RMC; RM @ BHT: .526 @ 149 °F; TIME CIRC.: 24; MAX. REC. TEMP.: 149 °F; EQUIP. NO.: 3701; LOCATION: HOBBS; RECORDED BY: SCHAFFER; WITNESSED BY: BURGER

REMARKS: CALIBRATION: MATCHING; SOURCE: CPL; RUN: ONE; DATE: 10-20-63; DEPTH: 4100

RECORDING: TIME; CONST.; ZERO (TO RIGHT); 60/60; 1000/500

RESISTIVITY ohms. m²/m — 0 — 50 — 100 — 150 — 200 — 250 — 300 — 312 — 416 — 625 — 1250

RESISTIVITY ohms. m²/m — 0 — 50 — 100 — 150 — 200 — 250 — 300 — 312 — 416 — 625 — 1250

DEPTHS: 4100 4200 4300 4400 4500 4600 4700 4800 4900 5000 5100

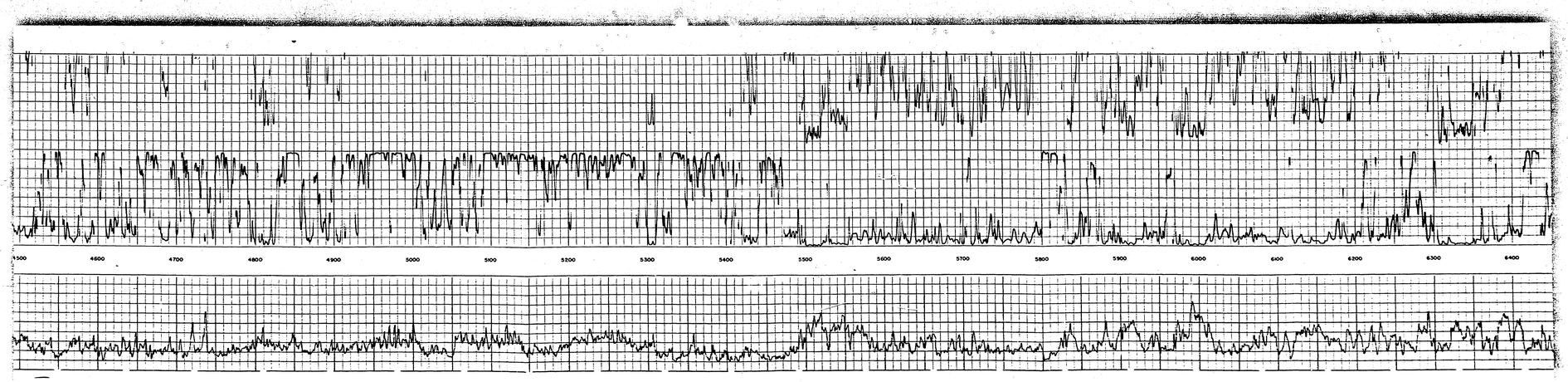
SPONTANEOUS-POTENTIAL millivolts — 0 — 125

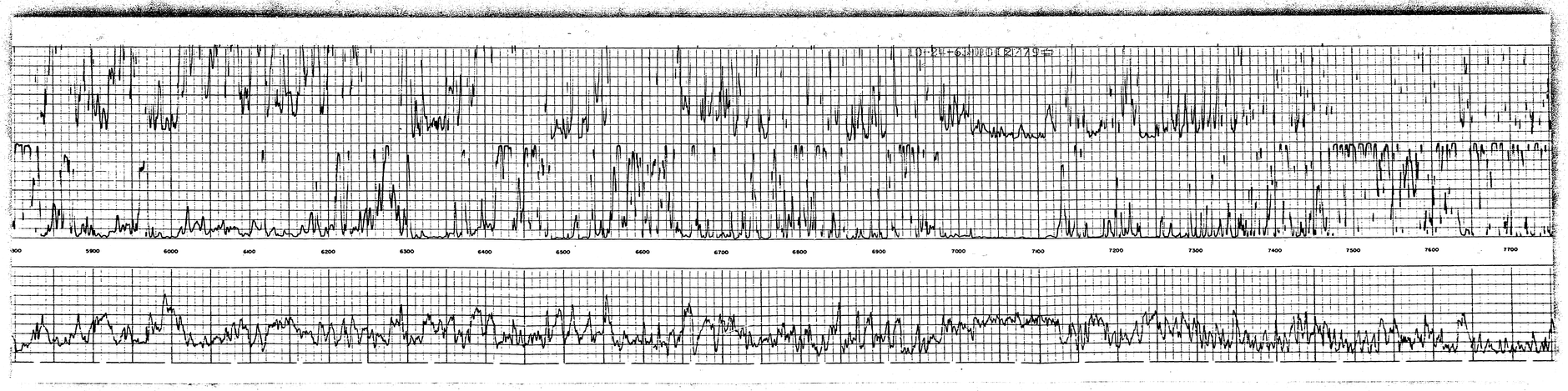
GAMMA RAY API UNITS — 0 — 125

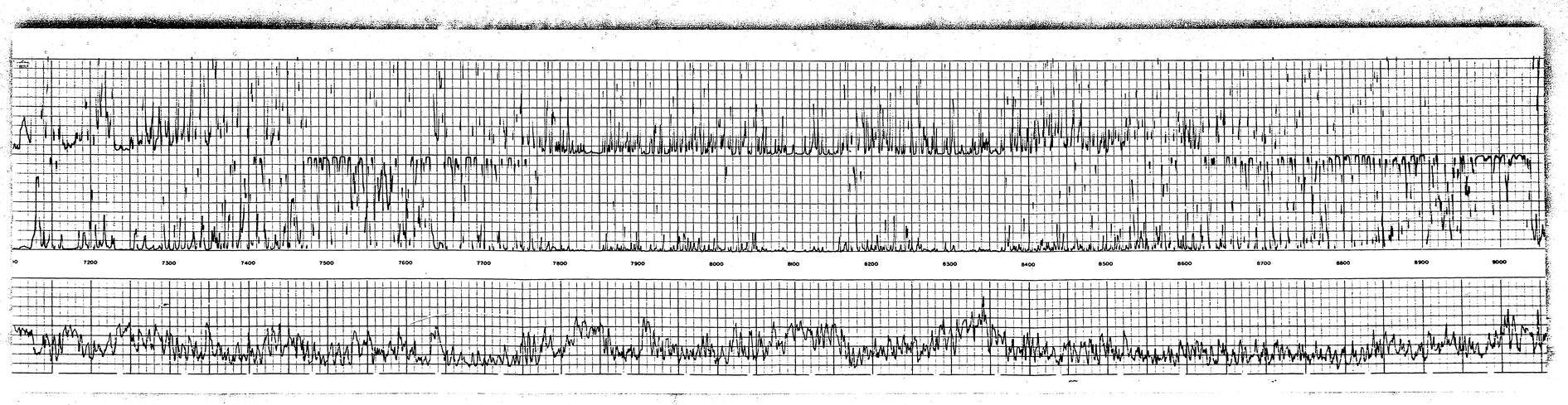
Casing

Gamma Ray

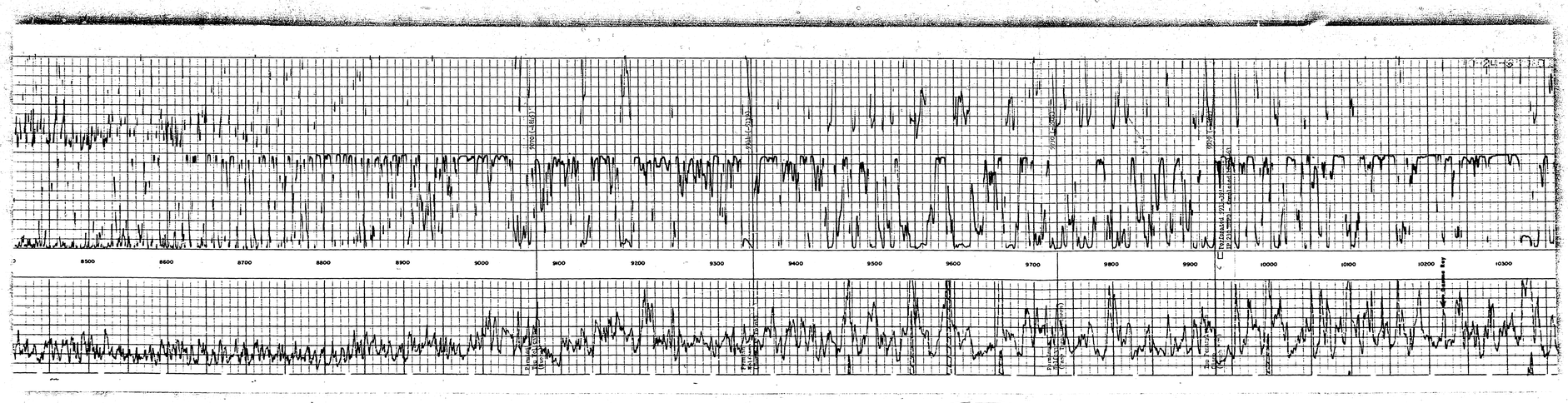
U.S.M.C.F. MICROGRAPHICS


4500
4600
4700
4800
4900
5000
5100
5200
5300
5400
5500
5600
5700
5800
5900
6000
6100
6200
6300
6400

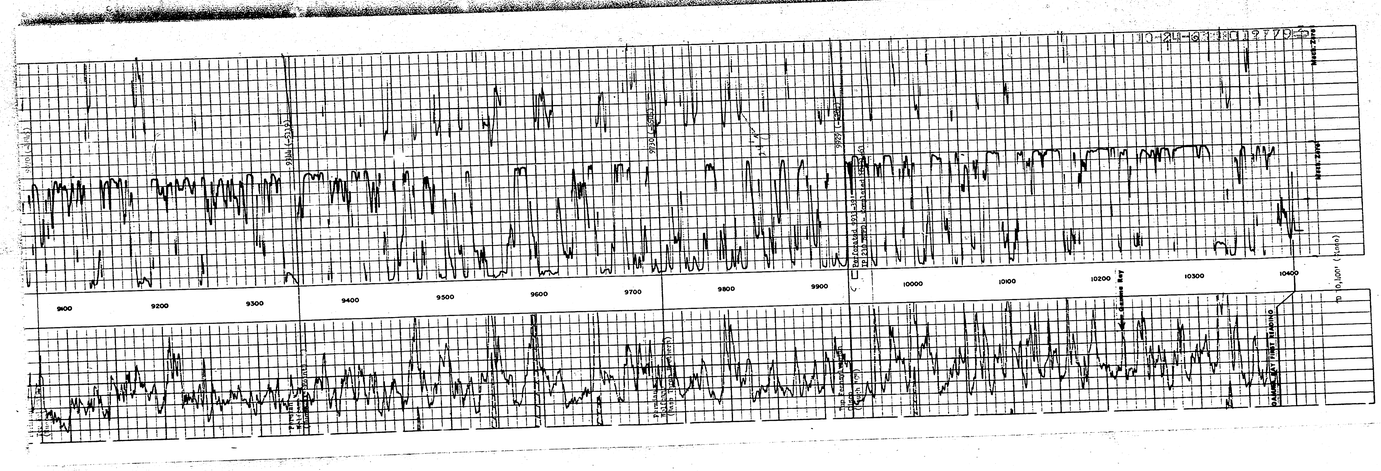

5900
6000
6100
6200
6300
6400
6500
6600
6700
6800
6900
7000
7100
7200
7300
7400
7500
7600
7700



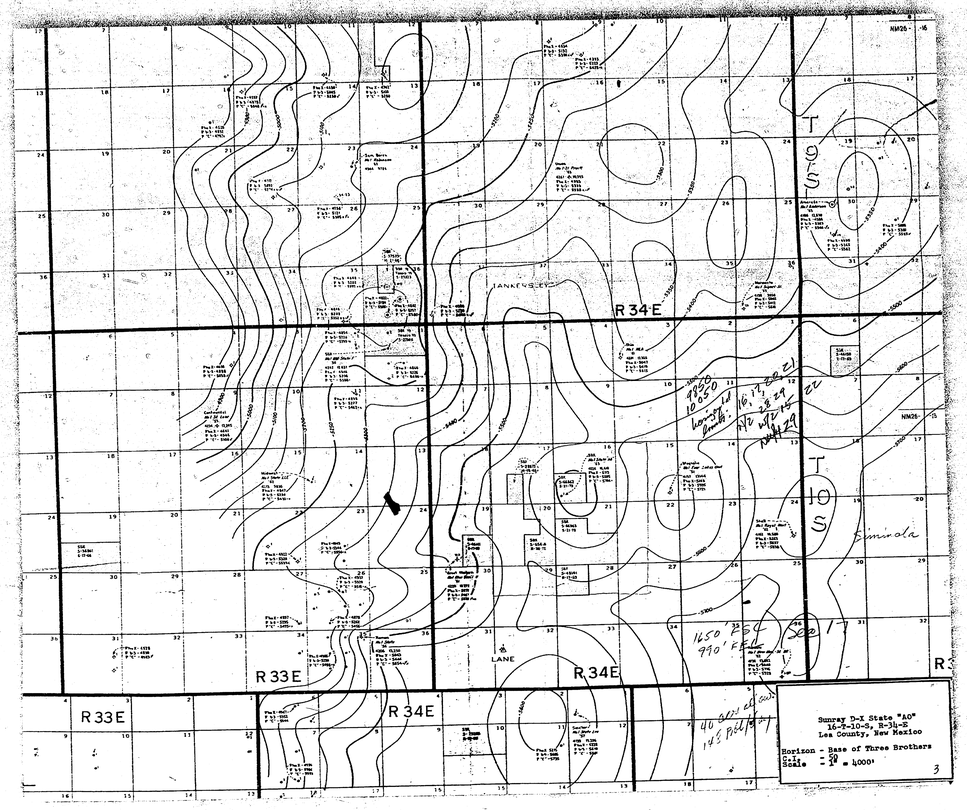
U.S.B.C.F. HYDROGRAPHICS



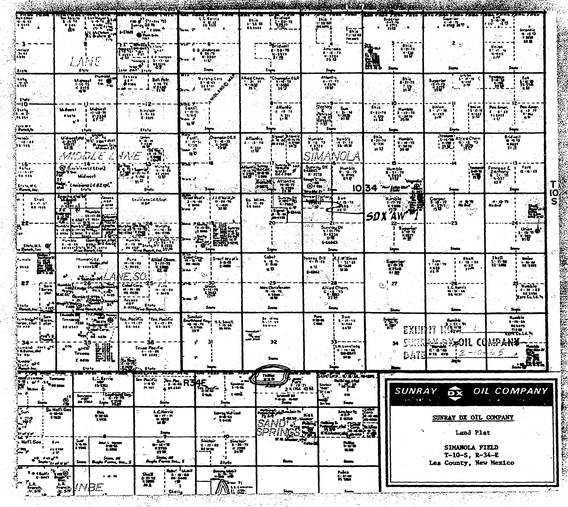
U.S.N.C.F. MICROGRAPHICS
BEST AVAILABLE COPY



U.S.S.R.C.F. GEOGRAPHICS

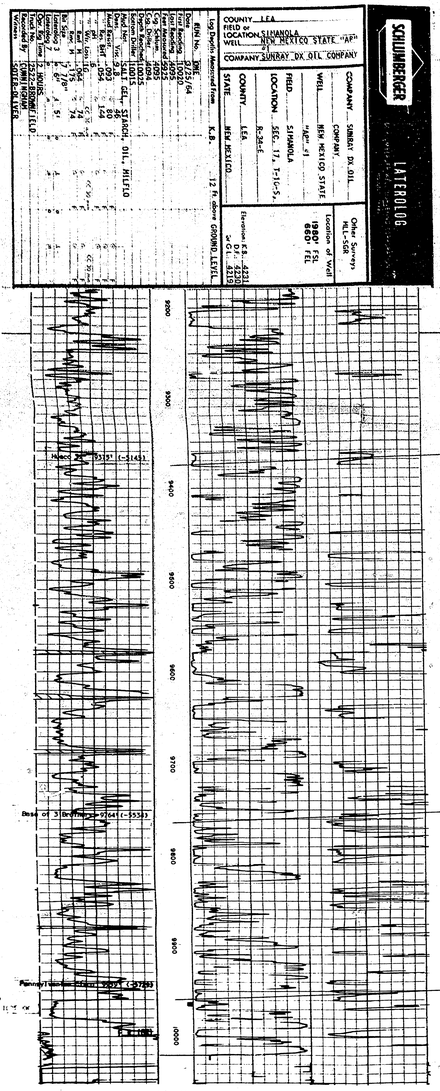


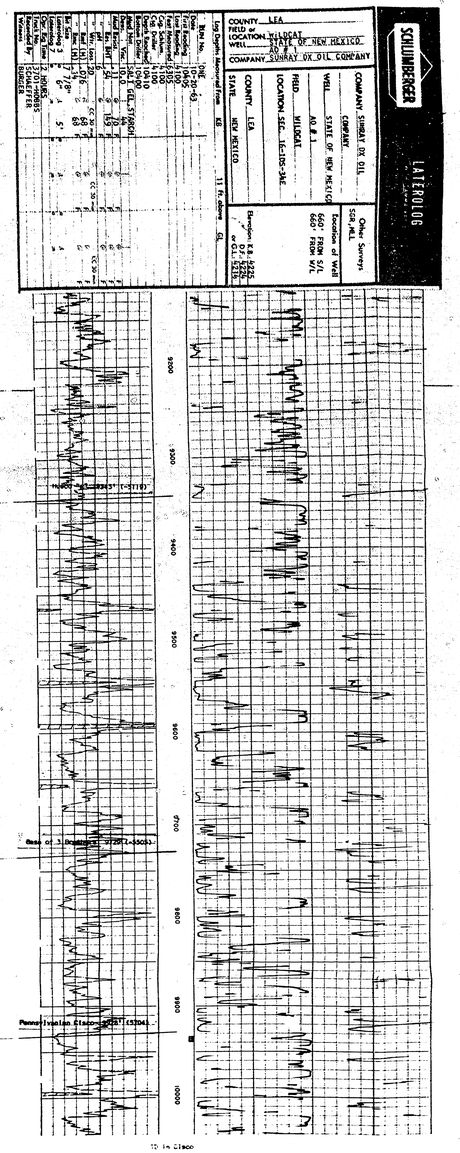
V.E.R.C.F. MICROGRAPHICS
BEST AVAILABLE COPY



U.S.G.S. TOPOGRAPHIC

T 9 S
R 34 E
T 10 S
SOX-NM #7
R 33 E
R 34 E
R 34 E
R 35 E
LANE
EXHIBIT NO. 2
SUNRAY DX OIL COMPANY
DATE 2-16-67
SUNRAY DX OIL COMPANY
Stanolind Field
Lea County, New Mexico
Structure Map
Datum: Base of 3 Brothers (Rb-3)
Scale: 1" = 4000' C. I.: 50'





A

DATUM SEA LEVEL - 5000'

WOLFCAMP "X"

BASE OF 3 BROTHERS (MAPPING HORIZON)

PENNSYLVANIAN CISCO (BOUGH "C")

A'

Total Depth 10,400'

DST 9935-9992' Open 40 minutes. Gas to surface in 5 minutes, gauged at 1300 MCFPD. Packers failed. Recovered 6500' oil and gas cut mud. 1 hour ISIP 3744 psi, flowing pressures 42 psi - 2930 psi. 30 minute FSIP 3614 psi.

DST 9964-10,088' Open 2 hours. Gas to surface in 3 minutes, mud to surface in 47 minutes, oil to surface in 56 minutes, flowed to pits for 1 hour, estimated 30-10 bbls. oil. Reversed out 120' oil, 400' heavy oil and gas cut mud. 45 minute ISIP 3426 psi, flowing pressures 660 psi - 2256 psi. 1 hour 40 minute FSIP 3426 psi.

Perforated 9955-9971' Potential flowed 230 BFPD on 32/64" choke, GOR 850, gravity 45.6, tubing pressure 850 psi.

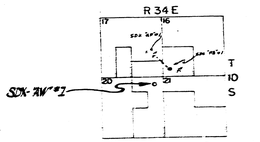
Completed October 31, 1965.

Total Depth: 10,015'

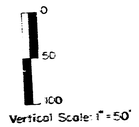
Cored 9915-9965'

Perforated 9962-9966', Swabbed 1005 salt water.

Temporarily Abandoned April 9, 1964.



Index Plat Scale 1" = 4000'



Vertical Scale: 1" = 50'

Horizontal Scale: None

SUNRAY DX OIL COMPANY

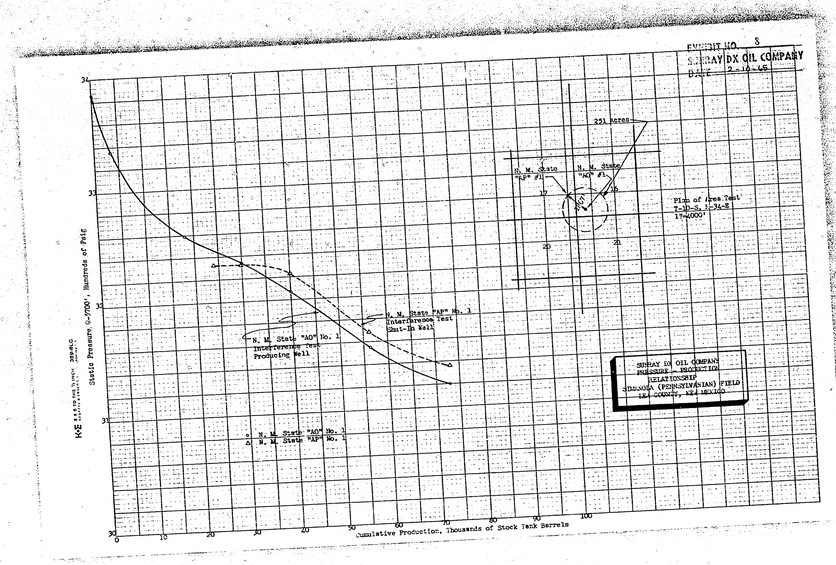
Structural Cross-Section

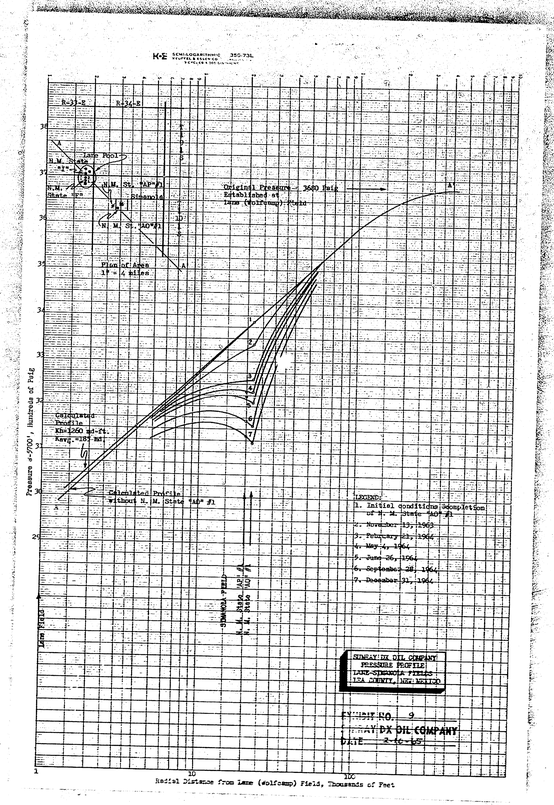
SIMONOSA FIELD
T-12-S, R-34-E
Lea County, New Mexico

DATE

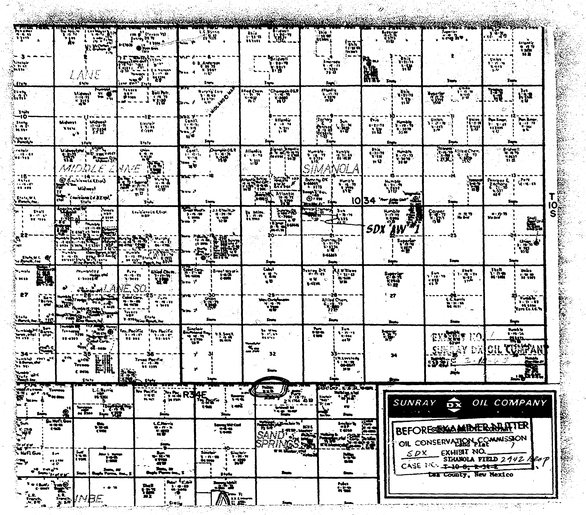
U.S.F. MICROGRAPHICS
PRECISION OPT

EXHIBIT NO. 5
SUNRAY DX OIL COMPANY
DATE 2-10-48

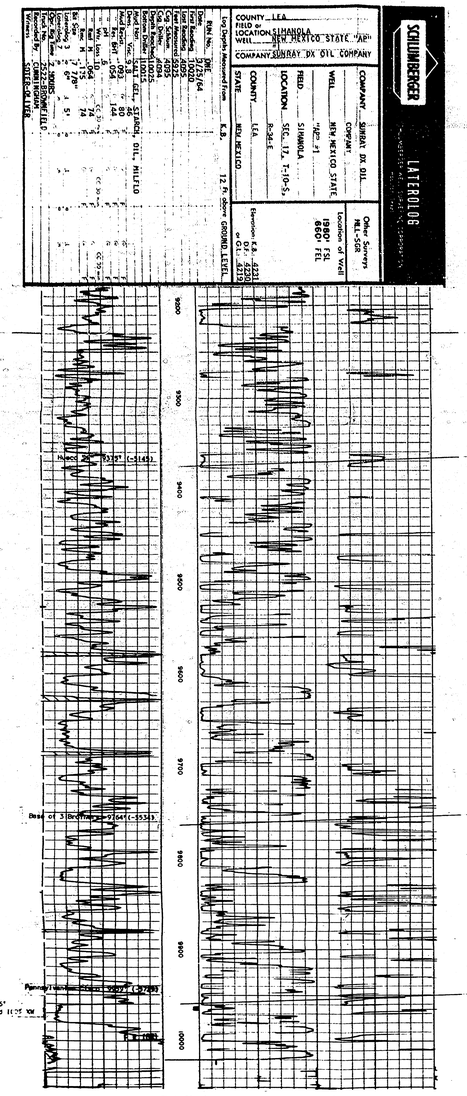


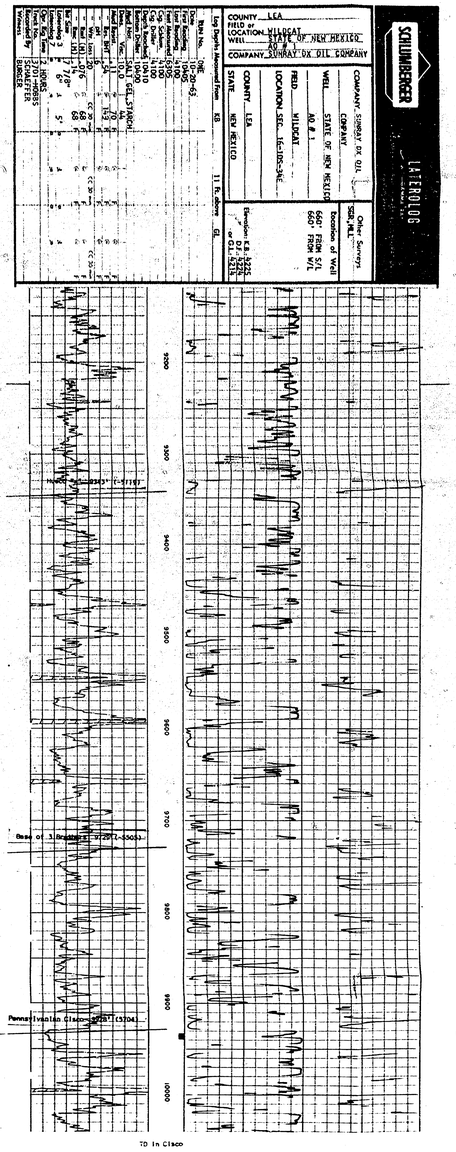


U.S.G.S. PHOTOGRAPHIC
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LANE
MIDDLE LANE
SIMANOLA
1034
SDI
SUNRAY DX OIL COMPANY
SANTA ROSA
SUNRAY DX OIL COMPANY
BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO.
CASE NO.
SIMANOLA FIELD
Lea County, New Mexico

R 34 E
T 10 S
R 33 E
R 34 E
R 34 E
R 35 E
SDX #11 #2
LANE
EXHIBIT NO. 2
SUNRAY DX OIL COMPANY
DATE 2-10-65
BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
SDX EXHIBIT NO. 2
CASE NO. 2742 Amended
SUNRAY DX OIL COMPANY
Stanolind Field
Lea County, New Mexico
Structure Map
Datum: Base of 3 Brothers (Pb-3)
Scale: 1" = 4000' C. I.: 50'





Total Depth 10,025'

Cored 9915-9965'

Perforated 9962-9966', Swabbed 100% salt water.

Temporarily Abandoned April 9, 1964.

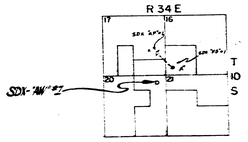
Total Depth 10,400'

DST 9878-9992' Open 40 minutes. Gas to surface in 5 minutes, gauged at 1300 MCFPD. Packers failed. Recovered 6500' oil and gas cut mud. 1 hour ISIP 3744 psi, Flowing pressures 142 psi - 2900 psi. 30 minute FSIP 3614 psi.

DST 9684-10,088' Open 2 hours. Gas to surface in 3 minutes, mud to surface in 42 minutes, oil to surface in 56 minutes, flowed to pits for 1 hour, estimated 5-10 bbls. oil. Reversed out 500' oil, 600' heavy oil and gas cut mud. 40 minute ISIP 3409 psi, Flowing pressures 582 psi - 2234 psi. 1 hour 46 minute FSIP 3409 psi.

Perforated 9934-9936' Pumped all flowed 230 BOPD on 12/64" choke, GOR 850, gravity 45.6, tubing pressure 850 psi.

Completed October 31, 1963.



Index Plat Scale 1" = 4000'

Vertical Scale: 1" = 50'

Horizontal Scale: None

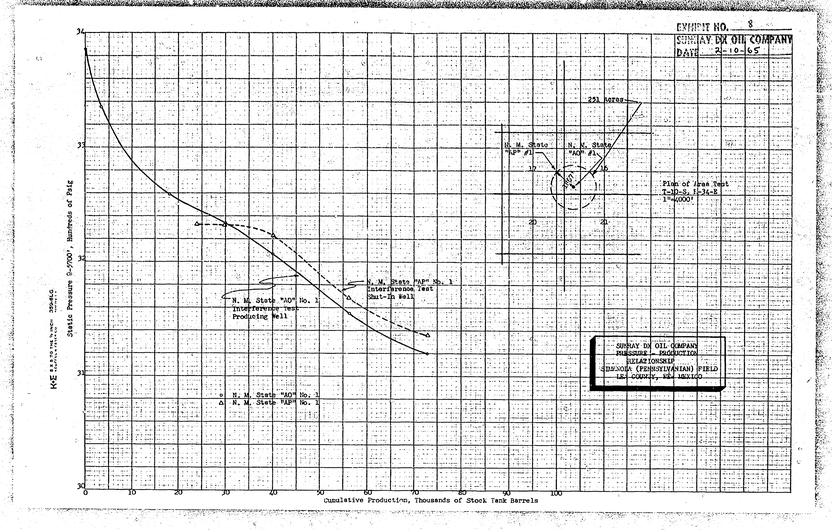
BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
CASE NO. 3015
EXHIBIT NO. 3

SUNRAY DX OIL COMPANY
Structural Cross-Section
SIMANOLA FIELD
T-10-S, R-34-E
Lea County, New Mexico

E... 3
...-2-65

W.C.P. RICHARDSON'S

EXHIBIT NO. 8
SUNRAY DX OIL COMPANY
DATE 2-10-65



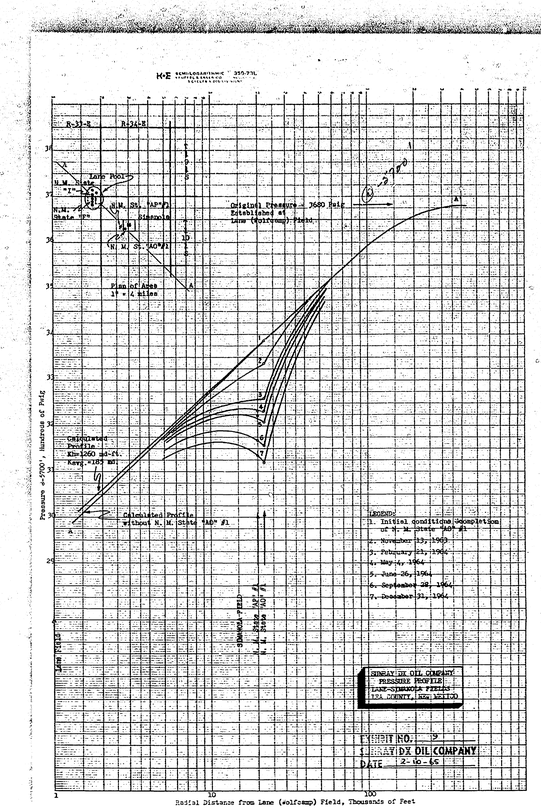

R-33-E
R-34-E
Lane Pool
N.M. State "A"
N.M. St. "AB" #1
Stanolind
N.M. St. (LOW) #1
Plan of Area
17 + 4 miles
Original Pressure - 3680 Psig
Established at
Lane (Wolfcamp) Field
Calculated Profile
Without N.M. State "AB" #1
Calculated Profile
K=1260 md-ft.
havg.=185 ft.
LEGEND
1. Initial conditions (completion of N. M. State "AB" #1
2. November 13, 1963
3. February 25, 1964
4. May 4, 1964
5. June 26, 1964
6. September 30, 1964
7. December 31, 1964
SINCLAIR OIL COMPANY
PRESSURE PROFILE
LANE-SIMMONS FIELDS
LEA COUNTY, NEW MEXICO
EXHIBIT NO. 7
SINCLAIR OIL COMPANY
DATE 2-24-65
Pressure at 7000', Hundreds of Psig
Radial Distance from Lane (wolfcamp) Field, Thousands of Feet
1
10
100

EXHIBIT NO. 10
SUNRAY DX OIL COMPANY
DATE 2-10-65

SUNRAY DX OIL COMPANY
CORE ANALYSIS DATA
~~1980'~~ 1990' NSL & ~~990'~~ 990' FEL of Sec. 17 - T10S- R34E
LEA COUNTY, NEW MEXICO

Depth Range-Ft.	Perm. - Mds. Max.	Perm. - Mds. 90°	Porosity - %
9949.0 - 9949.7	0.1	0.1	2.1
9950.7 - 9950.8	1.6	1.0	8.3
9950.8 - 9952.6	8.5	5.1	7.8
9952.6 - 9954.2	1.2	1.1	6.1
9954.2 - 9955.7	304.	263.	9.1
9955.7 - 9957.3	67.	67.	7.5
9957.3 - 9958.8	166.	79.	11.3
9958.8 - 9960.2	137.	110.	7.2
9960.2 - 9961.0	145.	13.	5.8
9961.0 - 9962.5	0.1	0.1	1.2
9962.5 - 9963.2	0.9	0.8	4.0
9963.2 - 9965.0	0.1	0.1	1.3

U.S.G.S. MICROGRAPHICS
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