Case No
7548

Large Exhibits

Dresser Atlas

Sidewall Neutron
Gamma Ray

NO. 5-1-71
Dry, Gas or Inj.
1377' KBM
2 wire 3/3
fore Rule are.

COMPANY D & B OIL INCORPORATED
WELL SCHAUBLE NO. 1
FIELD WEST SAWYER
COUNTY LEA STATE NEW MEXICO
LOCATION: 660' FSL & 3300' FEL
SEC 28 TWP 9-S RGE 37-E
Other Services: LL

Permanent Datum G.L. Elev. 3990
Log Measured from K.B. 11 Ft. Above Permanent Datum
Drlg Measured from K.B.

K.B. 4001
D.F. 3989
G.L. 3990

Date	2-26-71		
Run No.	ONE		
Depth—Driller	5020		
Depth—Logger	5022		
Bottom Logged Interval	5021		
Top Logged Interval	SURFACE		
Casing—Driller	8 5/8 @ 978	@	@
Casing—Logger	978		
Bit Size	7 7/8		
Type Fluid in Hole	SALT MUD		
Density and Viscosity	10.5 41		
pH and Fluid Loss	- 8 cc	cc	cc
Source of Sample	PIT		
Rm @ Meas. Temp.	.092 @ 92 °F	@ °F	@ °F
Rmf @ Meas. Temp.	.068 @ 92 °F	@ °F	@ °F
Rmc @ Meas. Temp.	.110 @ 92 °F	@ °F	@ °F
Source of Rmf and Rmc	M M		
Rm @ BHT	.061 @ 125 °F	@ °F	@ °F
Time Since Circ.	4 HR		
Max. Rec. Temp. Deg. F.	125		
Equip. No. and Location	0010 HOBBS		
Recorded By	J. BOYD		
Witnessed By	MR. MINTON		

FIELD PRINT

Gamma Ray — Neutron — Compensated Neutron

Run No. ONE
Type Log GR-N
Depth-Driller 5020
Depth-Logger 5022
Bottom Logged Interval 5021
Top Logged Interval SURFACE
Type Fluid in Hole SALT MUD
Salinity, PPM Cl 190,000
Density 10.5
Level FULL
Max. Rec. Temp. Deg. F. 125
Operating Rig Time 4 HR
Recorded By J. BOYD
Witnessed By MR. MINTON

Equipment Numbers

	Gamma Ray	Neutron	Compensated Neutron
Type	GR	N	
Serial No.	1160	1160	
Model No.	30	30	
Detector Serial No.	1237	1237	
Detector Model No.	SCINTILLOG	SCINTILLOG	
Type			
Source Strength	5 MICRO CURIES	5 MICRO CURIES	
Spacing		15 1/2 INCHES	

Logging Data

Run No.	Tool Position	Depth—Driller	Depth—Logger	Bottom Logged Interval	Top Logged Interval	Casing—Driller	Casing—Logger	Bit Size	Type Fluid in Hole	Density	Viscosity	Fluid Loss
ONE	CENTERED	5020	5022	5021	SURFACE	8 5/8 @ 978	978	7 7/8	SALT MUD	10.5	41	8

Gamma Ray Neutron — Sensitivity 250
Gamma Ray Standardization — Before Survey: Yes — After Survey: Yes

Recorded: 2-26-71 at 5022 — Run No. ONE — T.C. Sec. 1.6 — Sens. Setting 250 — Unit/Inch 10 — Speed 60 — Log Dist. Int. 5020 to 3800

Caliper — Recorded: 2-26-71 at 5022 — Run No. ONE — T.C. Sec. 1.6 — Sens. Setting 30 — Speed 60 — Log Dist. Int. 5020 to 3800

Remarks: Minimum Casing Recovery 1967'

GAMMA RAY & CALIPER
API UNITS 0 to 100
HOLE SIZE - INCHES 6 to 16

DEPTH

POROSITY %
30% 20% 10% 0
LIMESTONE POROSITY

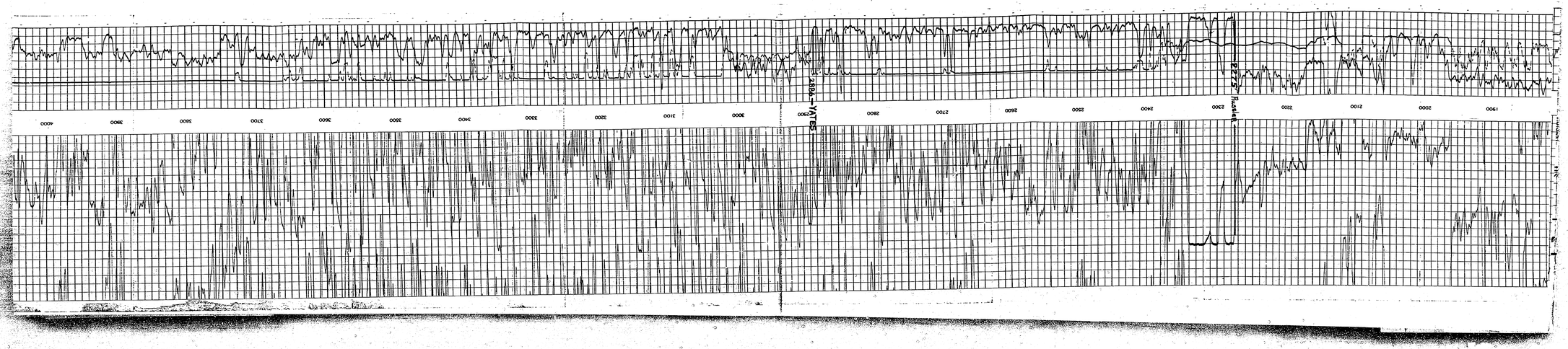
0000 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000

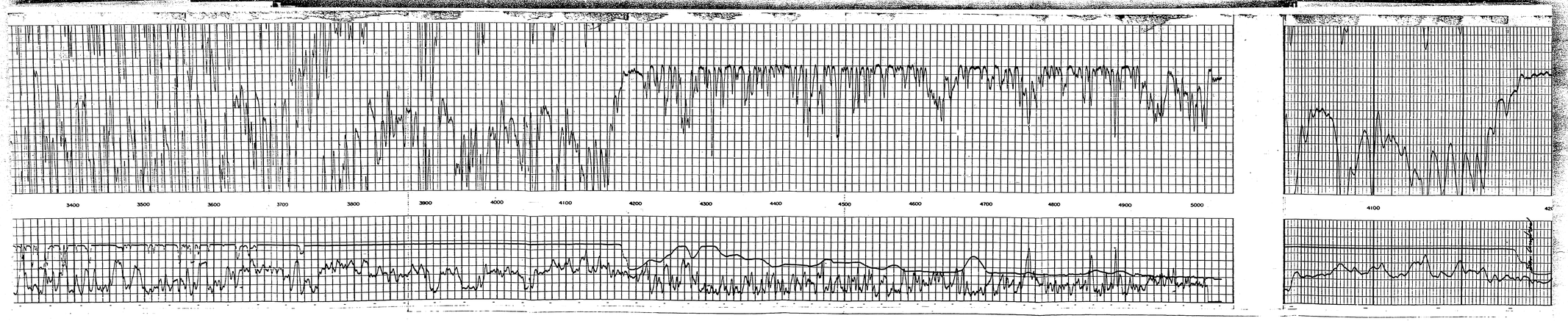
GR Range

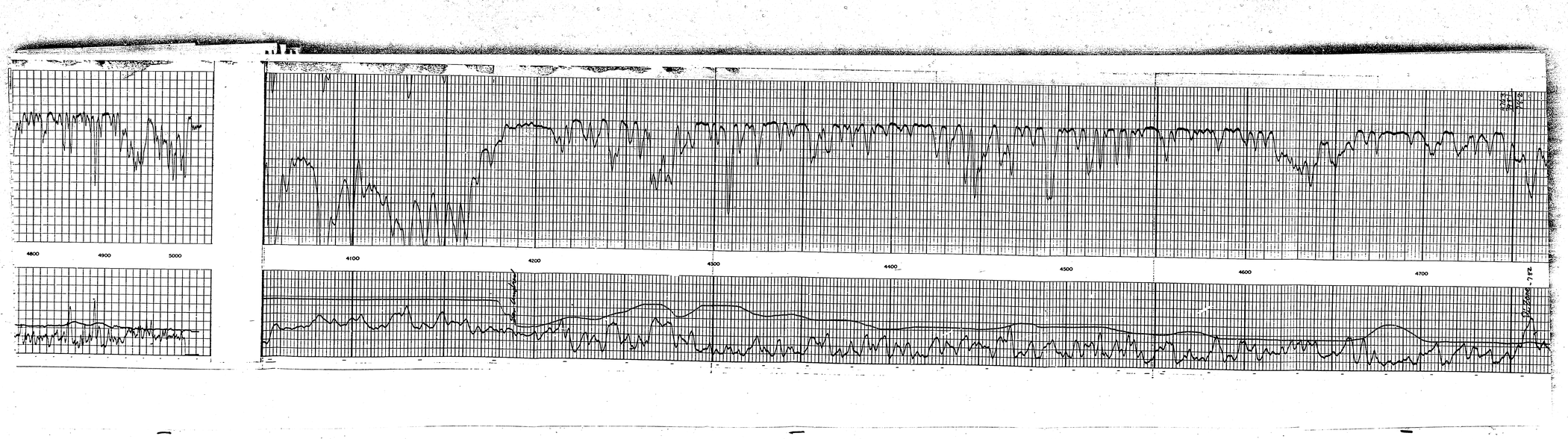


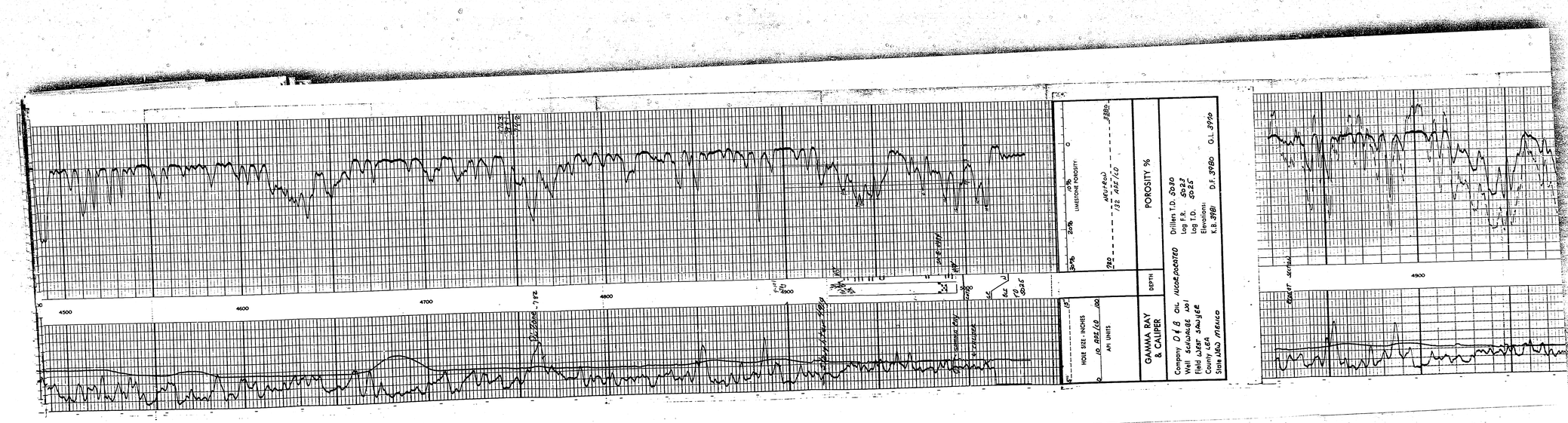
0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500

Rusler 22.28

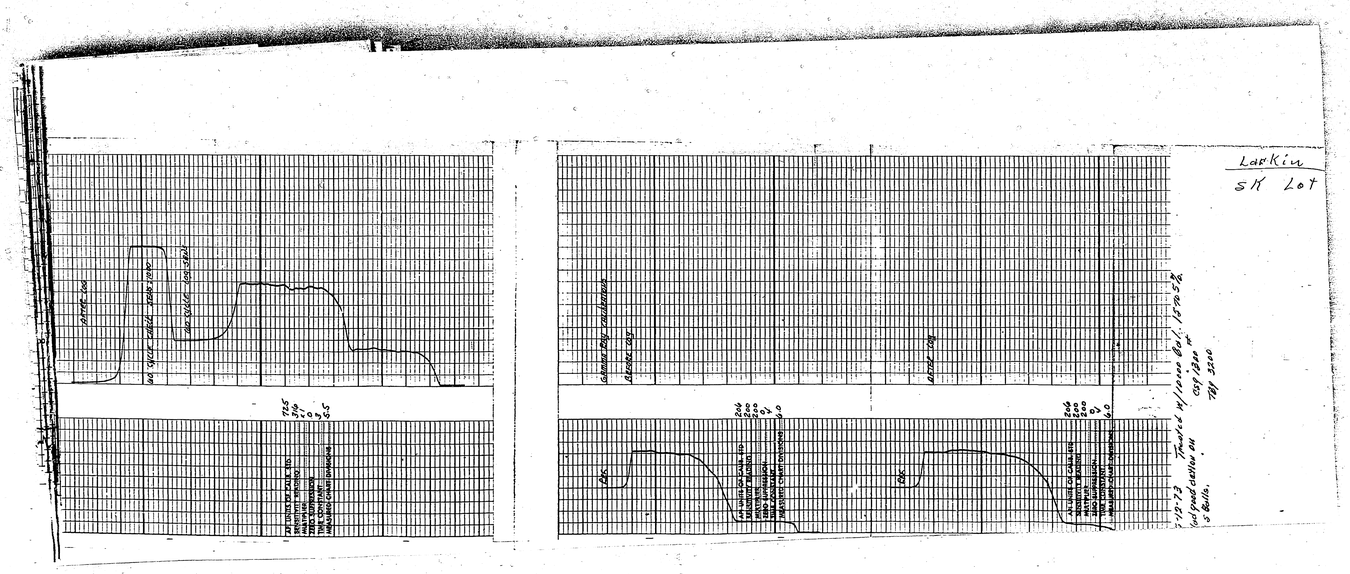



3400
3500
3600
3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900
5000
4100


4800
4900
5000
4100
4200
4300
4400
4500
4600
4700


GAMMA RAY & CALIPER
HOLE SIZE - INCHES
API UNITS
DEPTH
POROSITY %
LIMESTONE POROSITY
Company D & B OIL
Well SCHOENES 101
Field DEEP SAN JOE
County LEA
State NEW MEXICO
Drillers T.D. 5020
Log F.R. 5022
Log T.D. 5025
Elevations:
K.B. 3920
D.F. 3920
G.L. 3910
4500
4600
4700
4800
4900

HOLE SIZE - INCHES
6 10 6 1/2 6 10
API UNITS
GAMMA RAY & CALIPER
DEPTH
POROSITY %
LIMESTONE POROSITY
0
30%
20%
10%
3780
MEDIUM
12 1/2 7/8
3880
Company O & G OIL ASSOCIATED
Well Lea Unit #1
Field Lea Delaware
County Lea
State New Mexico
Drillers T.D. 3920
Log F.R. 3923
Log T.D. 3925
Elevations:
K.B. 3981
D.F. 3980
G.L. 3970
Gamma Ray Caliper
Basic Log
4900
5000
Gamma Ray Caliper
Basic Log
Gamma Ray Caliper
Basic Log
4" Size Collar Locations
4" Size Collar Locations
4" Size Collar Locations
4" Size Collar Locations
Basic Log
Basic Log
715
3/4
0
0.5
715
3/4
0
0.5
ZA POINTS OF FAILURE
SENSITIVE RECORD
TIME CONSTANT
FULL SCALE CALIBRATION
MAXIMUM CHART DIVISIONS
ZA POINTS OF FAILURE
SENSITIVE RECORD
TIME CONSTANT
FULL SCALE CALIBRATION
MAXIMUM CHART DIVISIONS


Larkin
SK Lot
7-15-73
Tested w/ Iowa Bell 1570 SP
Cal Pad section on
3 Bells.
CSG 320'
TBG 3200'
ATTACH CK CABLES
MULTIPLEX MODEL
TRD CONTENTS
MEASURE CHART DIVISIONS
Gamma Ray Calibration
Neutron Log
Density Log
Caliper Log
Gamma Ray Log
Resistivity Log
SP Log
Spontaneous Potential Log
Gamma Ray Calibration
Neutron Log
Density Log
Caliper Log
Gamma Ray Log
Resistivity Log
SP Log
Spontaneous Potential Log

DresserAtlas

Sidewall Neutron Gamma Ray

LE NO. 4-4-11

COMPANY D & B Oil, INCORPORATED

WELL SCHAEFER No. 1

FIELD WEST SAWYER

COUNTY LEA STATE NEW MEXICO

LOCATION: 660' FSL & 560' FEL

SEC. 28 TWP. 9-S RGE. 30-E

Other Services: LL

Permanent Datum: G.L. Elev. 3990 KB 3997

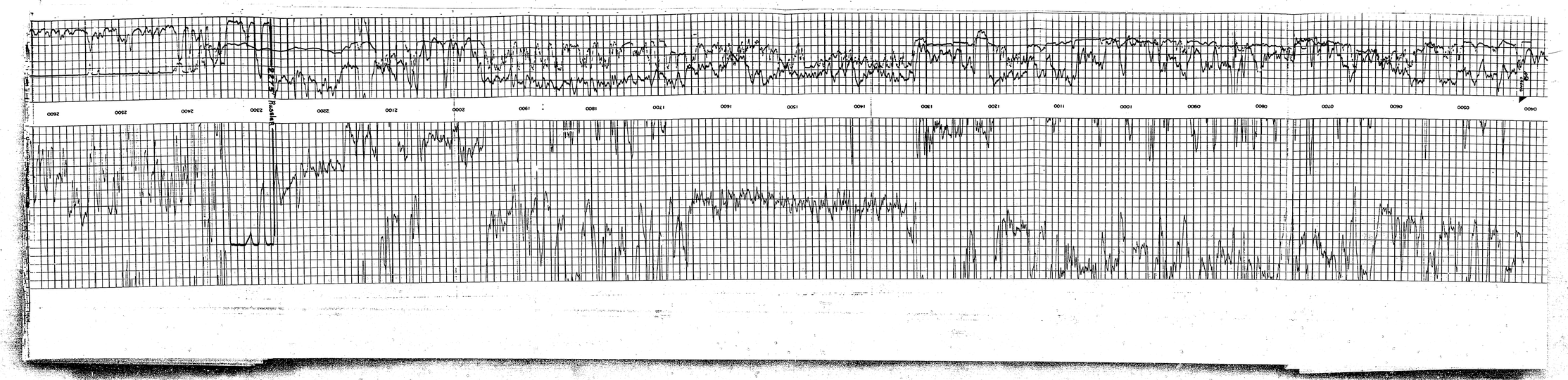
Log Measured from: K.B. 11 Ft. Above Permanent Datum DF 3980 GL 3979

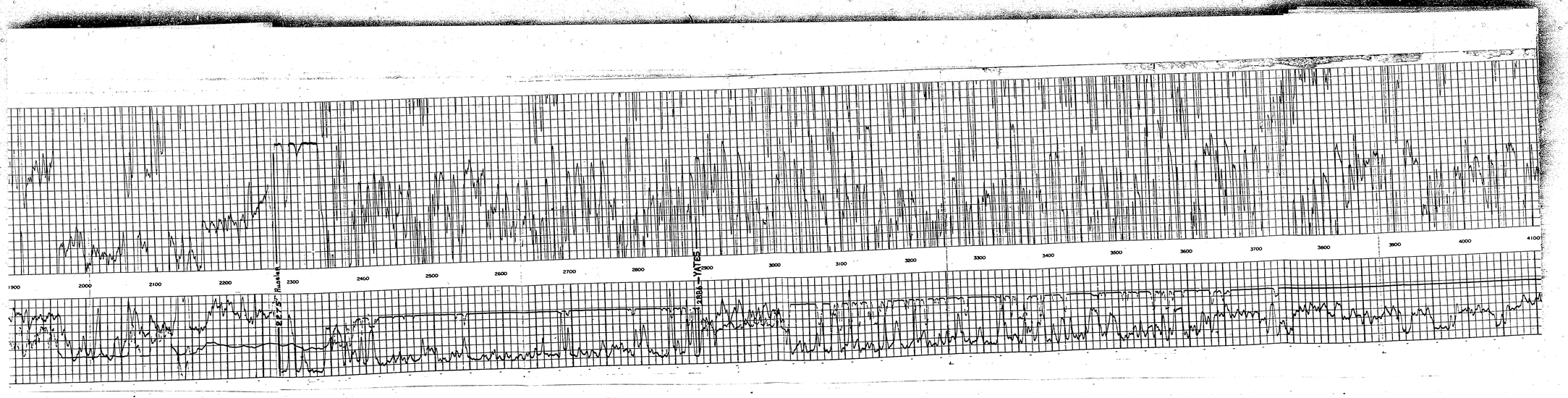
Date	3-24-11			
Run No.	ONE			
Depth—Driller	5030			
Depth—Logger	5025			
Btm. Logged Interval	5028			
Top Logged Interval	SURFACE			
Casing—Driller	8 5/8 @ 978	@	@	
Casing—Logger	978			
Bit Size	7 7/8			
Type Fluid in Hole	SALT MUD			
Density and Viscosity	10.2	41		
pH and Fluid Loss	11.5	6 cc	cc	cc
Source of Sample	PIT			
Rm @ Meas. Temp.	.484 @ 72 °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	.408 @ 72 °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	1.110 @ 72 °F	@ °F	@ °F	@ °F
Source of Rmf and Rmc	M	M	M	M
Rm @ BHT	.260 @ 108 °F	@ °F	@ °F	@ °F
Time Since Circ.	7 HRS			
Max. Rec. Temp. Deg. F.	108 °F	°F	°F	°F
Equip. No. and Location	3003	3003		
Recorded By	R. BLACK			
Witnessed By	MR. MILLER			

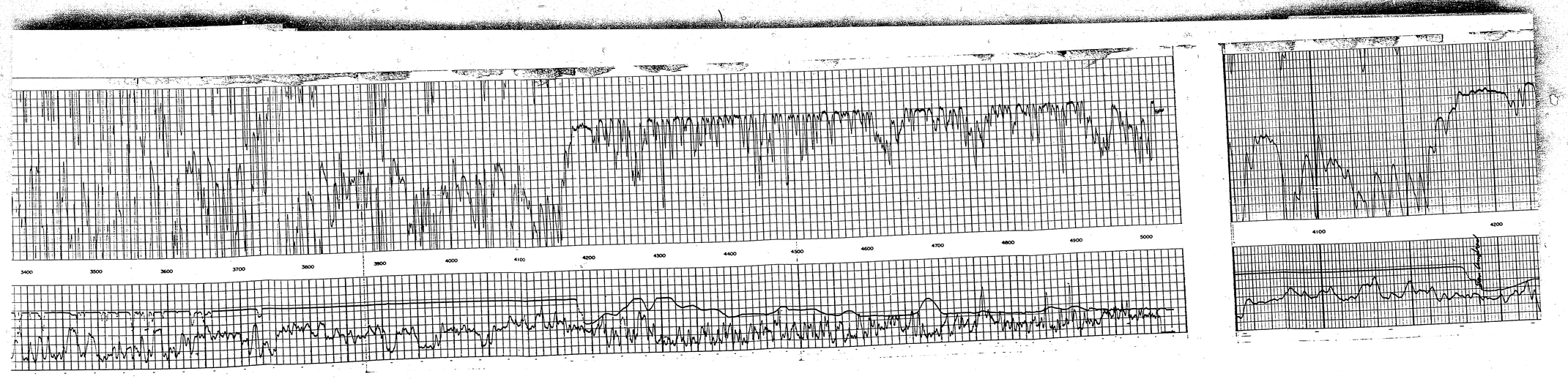
FIELD PRINT

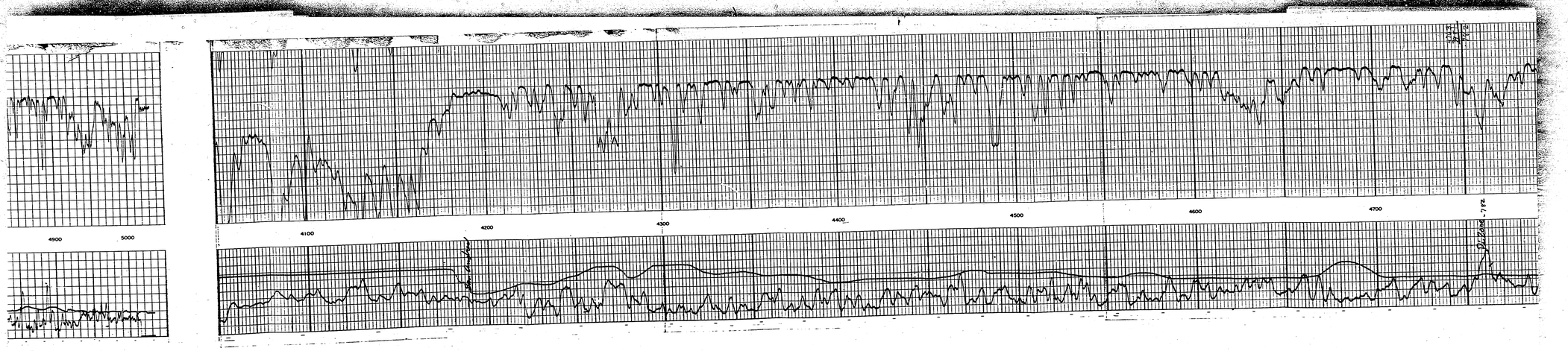
Run No. ONE
Bit No. 1
Depth—Driller 5030
Depth—Logger 5025
Btm. Logged Interval 5028
Top Logged Interval SURFACE
Type Fluid in Hole SALT MUD
Salinity, PPM Cl 150,000
Density 10.2
Viscosity 41
Fluid Loss 6 cc
Source of Sample PIT
Rm @ Meas. Temp. .484 @ 72 °F
Rmf @ Meas. Temp. .408 @ 72 °F
Rmc @ Meas. Temp. 1.110 @ 72 °F
Source of Rmf and Rmc M M
Rm @ BHT .260 @ 108 °F
Time Since Circ. 7 HRS
Max. Rec. Temp. Deg. F. 108 °F
Equip. No. and Location 3003
Recorded By R. BLACK
Witnessed By MR. MILLER

Gamma Ray Neutron
Run No. ONE
Diameter Bit To 978
Depth—Driller 5030
Depth—Logger 5025
Btm. Logged Interval 5028
Top Logged Interval SURFACE
Casing—Driller 8 5/8 @ 978
Casing—Logger 978
Bit Size 7 7/8
Type Fluid in Hole SALT MUD



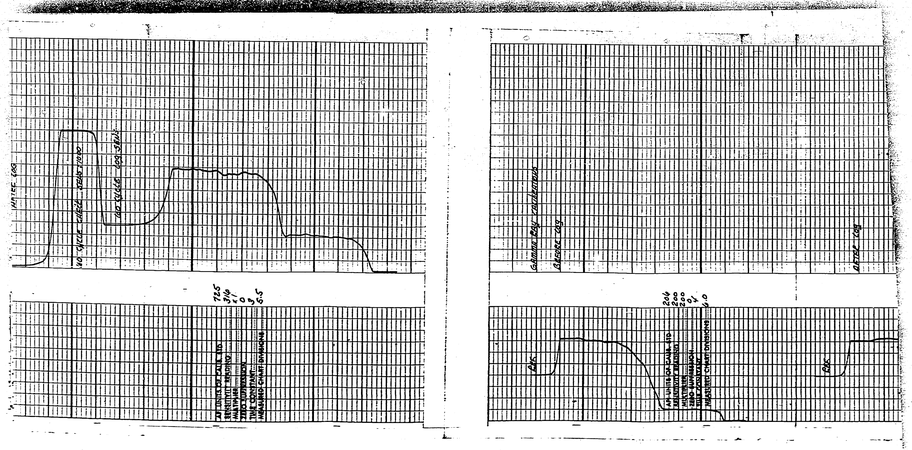

1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000
4100
2827' Russell
2886' Yates


3400
3500
3600
3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900
5000
4100
4200

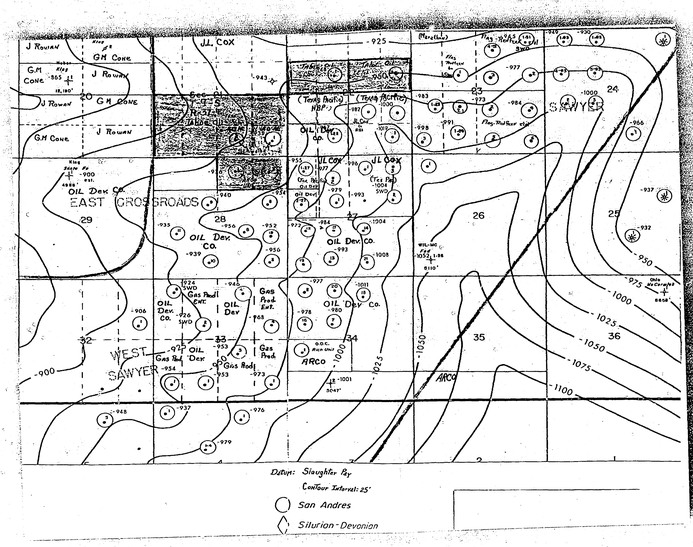

4900
5000
4100
4200
4300
4400
4500
4600
4700

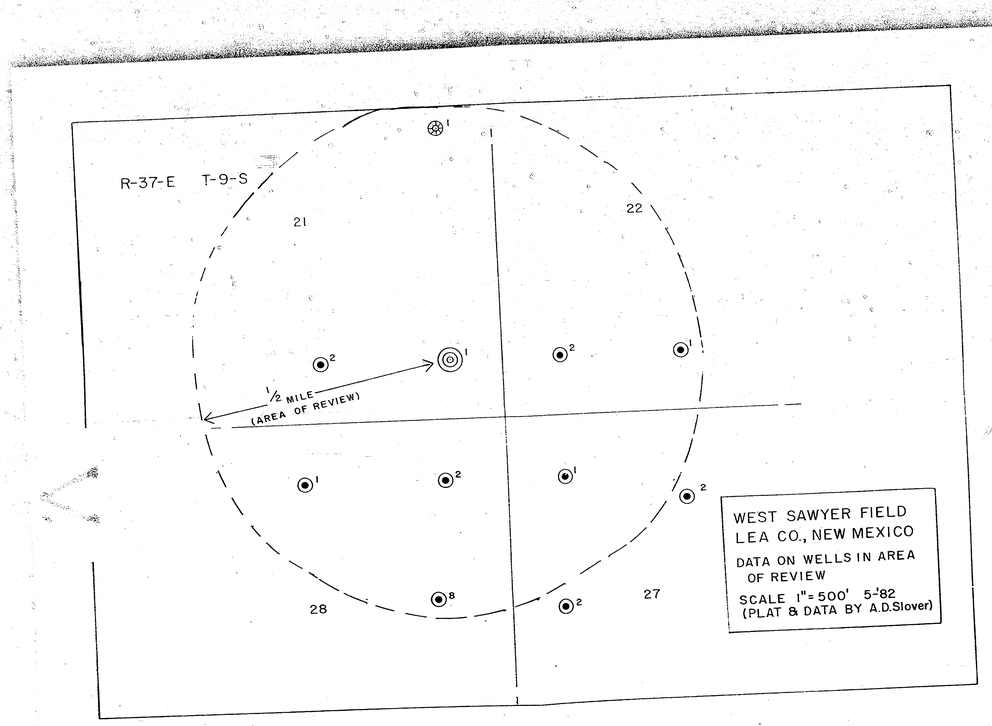
GAMMA RAY & CALIPER
HOLE SIZE - INCHES
API UNITS
DEPTH
POROSITY %
LIMESTONE POROSITY
Company Oil Co. MOORE-FOSTER
Well SEMINOLE #31
Field EAST SAWYER
County LEA
State NEW MEXICO
Drillers T.D. 3930
Log F.R. 3932
Log T.D. 3925
Elevations:
K.B. 3980
D.F. 3980
G.L. 3970
4600
4700
4800
4900

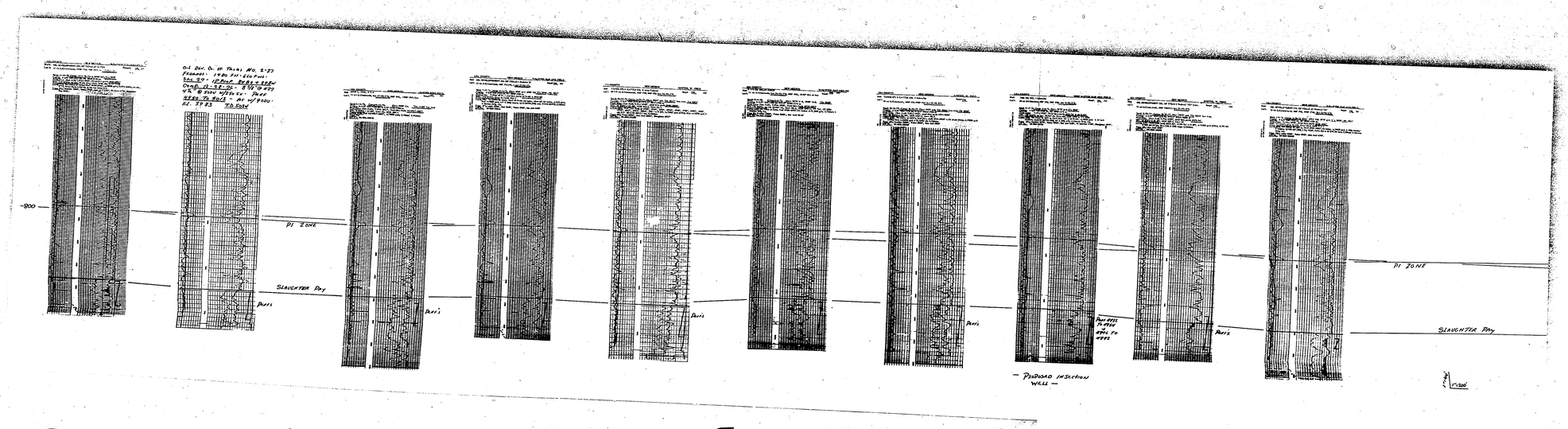
10 OHMS/IN 100
API UNITS
GAMMA RAY & CALIPER
DEPTH
3780
POROSITY %
Company OIL INCORPORATED
Well SCHAUB NO 1
Field WEST SKAGGS
County LEA
State NEW MEXICO
Drilled T.D. 3830
Log F.R. 3823
Log T.D. 3825
Elevations:
K.B. 3780
D.F. 3780
G.L. 3770
4900
5000
FEET
SONIC
INDUCTION-ELECTRICAL
INDUCTION-LATEROLOG
MICROLOG
MICROLATEROLOG
MICROCALIPER
SPONTANEOUS POTENTIAL
GAMMA RAY-NEUTRON
GAMMA RAY-CALIPER
DENSITY

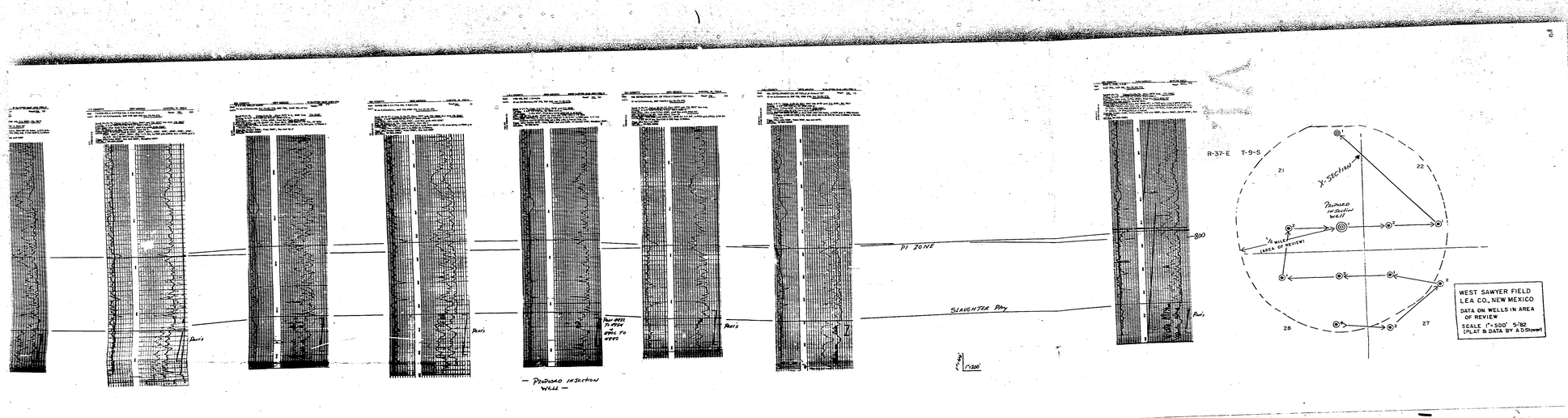

WATER LOG
NO VISUAL CABLE SIGNATURE
NO VISUAL CABLE SIGNATURE
GAMMA RAY CALIBRATION
GAMMA RAY
DEPTH
GAMMA RAY
DEPTH
GAMMA RAY
DEPTH
GAMMA RAY
DEPTH
UNIVERSITY OF CALIFORNIA
LAWRENCE RADIATION LABORATORY
LIVERMORE, CALIFORNIA
HEALING CRACK DIVISION
UNIVERSITY OF CALIFORNIA
LAWRENCE RADIATION LABORATORY
LIVERMORE, CALIFORNIA
HEALING CRACK DIVISION




J. Rowan
GM Conoc
G.M. Conoc
J. Rowan
GM Conoc
J. Rowan
GM Conoc
J.L. Cox
Phillips
(Texas Pacific)
(Texas Pacific)
Gas Prod. Ext.
Gas Prod.
Gas Prod.
OIL Dev. Co.
OIL Dev. Co.
OIL Dev. Co


R-37-E
T-9-S
21
22
1
1/2 MILE
(AREA OF REVIEW)
28
27
WEST SAWYER FIELD
LEA CO., NEW MEXICO
DATA ON WELLS IN AREA
OF REVIEW
SCALE 1"= 500' 5-'82
(PLAT & DATA BY A.D.Slover)


-900
PI ZONE
SLAUGHTER Pay
Perfs
PI ZONE
SLAUGHTER Pay
— PRODUCED INJECTION WELL —


Paris
Paris
Paris
Paris
— PROPOSED INJECTION WELL —
PI ZONE
SLAUGHTER Bay
800
1"=200'
R-37-E
T-9-S
21
22
28
27
X-SECTION
PROPOSED INJECTION WELL
½ MILE AREA OF REVIEW
WEST SAWYER FIELD
LEA CO., NEW MEXICO
DATA ON WELLS IN AREA OF REVIEW
SCALE 1"=500' 5-82
(PLAT & DATA BY A.D.Stowell)