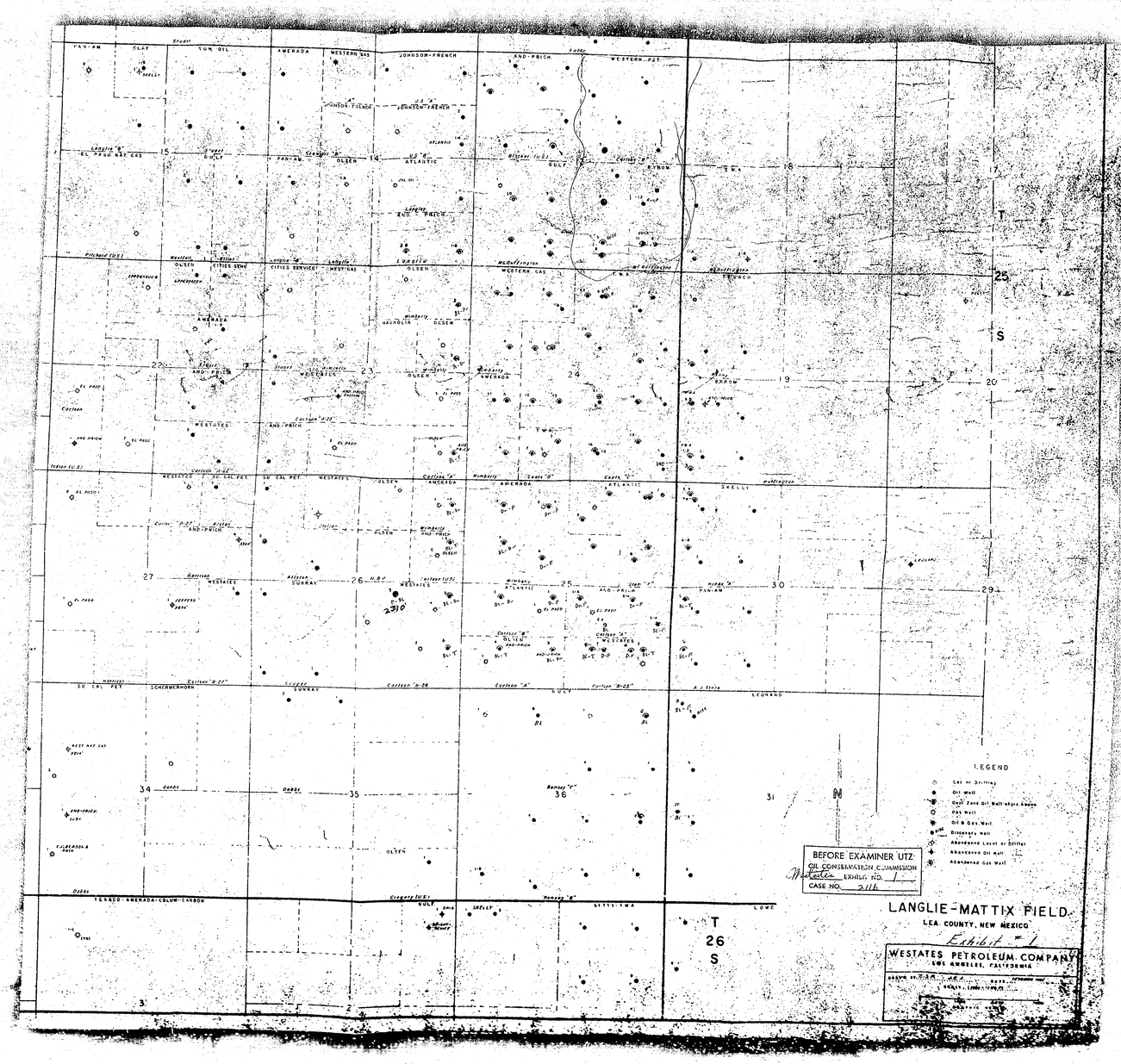
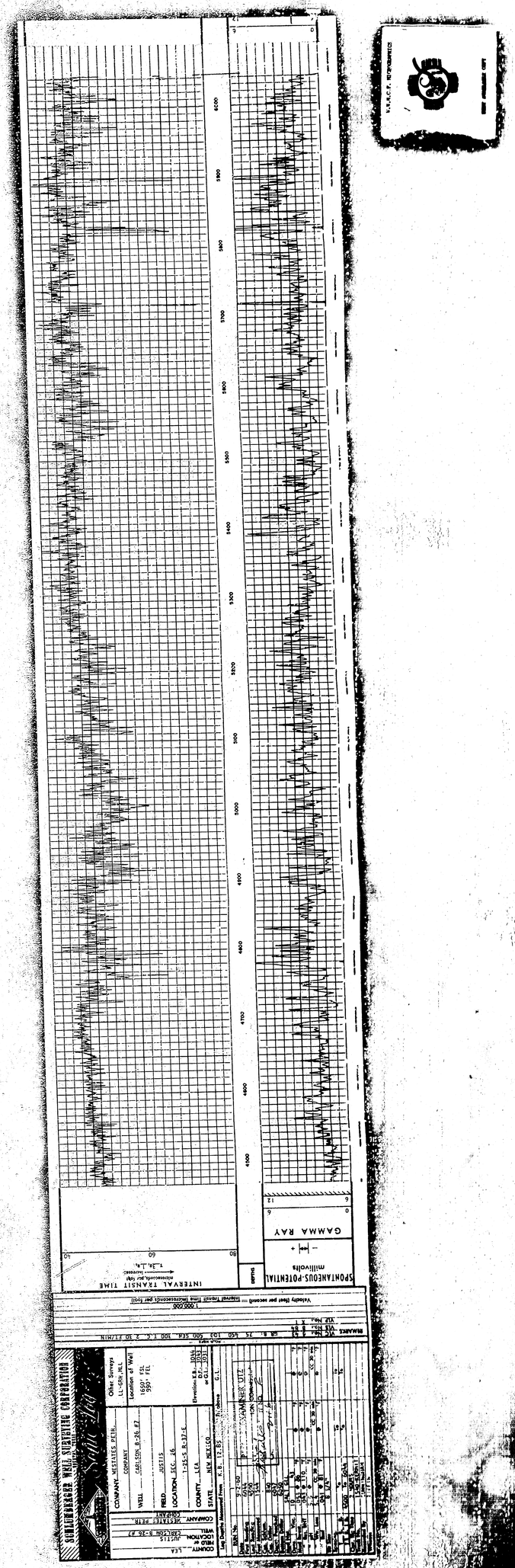
Case No.

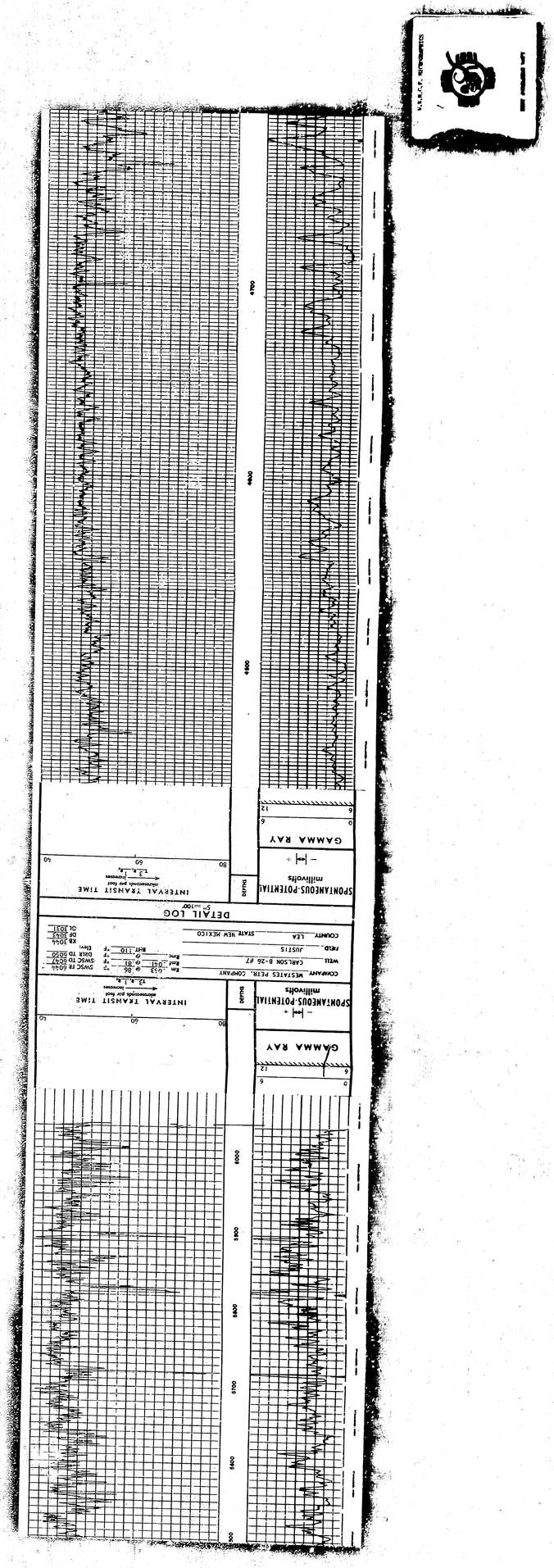
2116

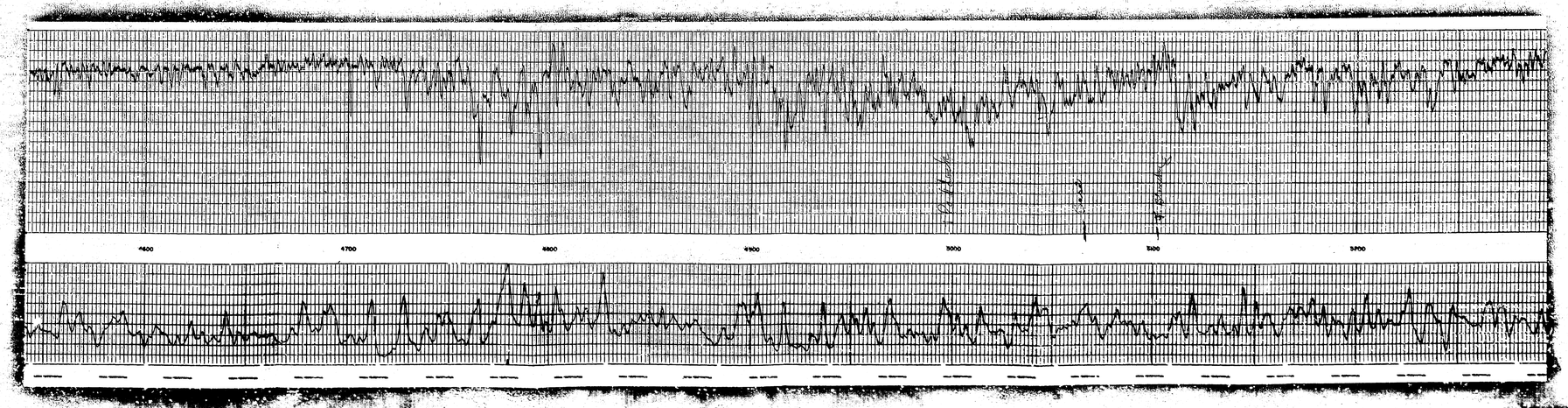
Log - Exhibits

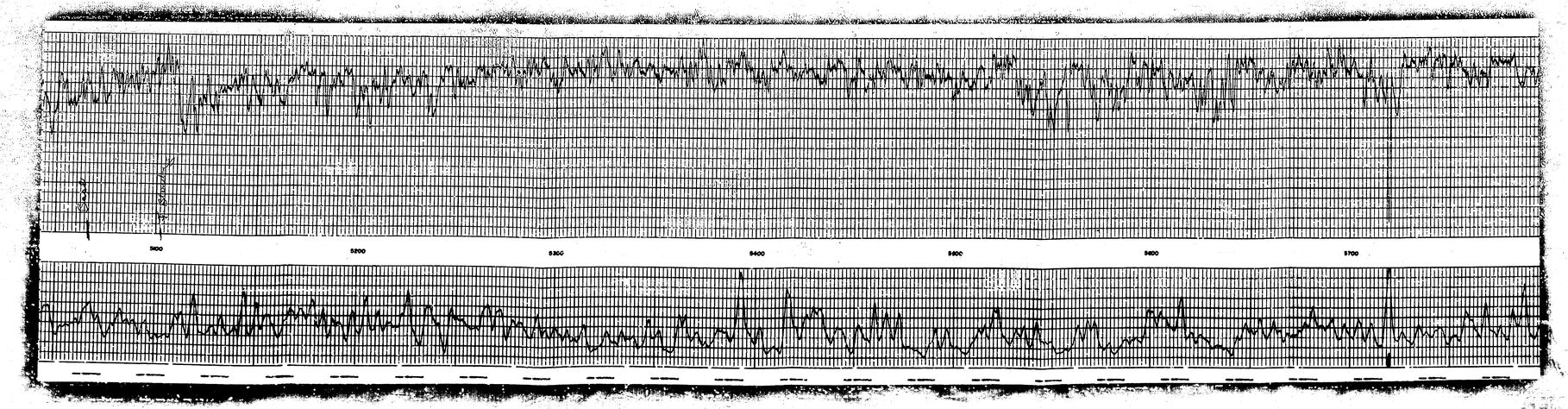


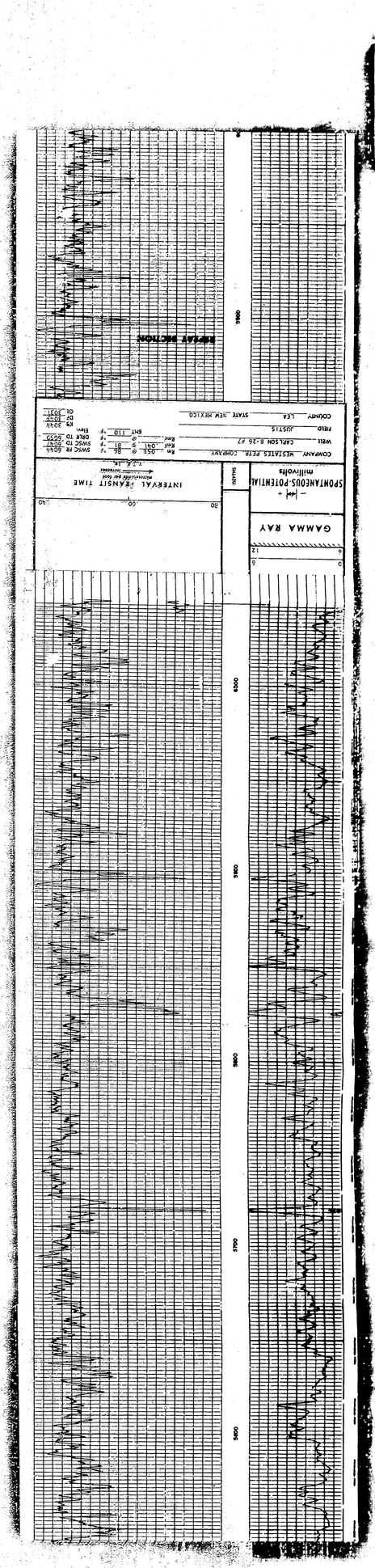
M.R.N.C.F. MICROGRAPHICS

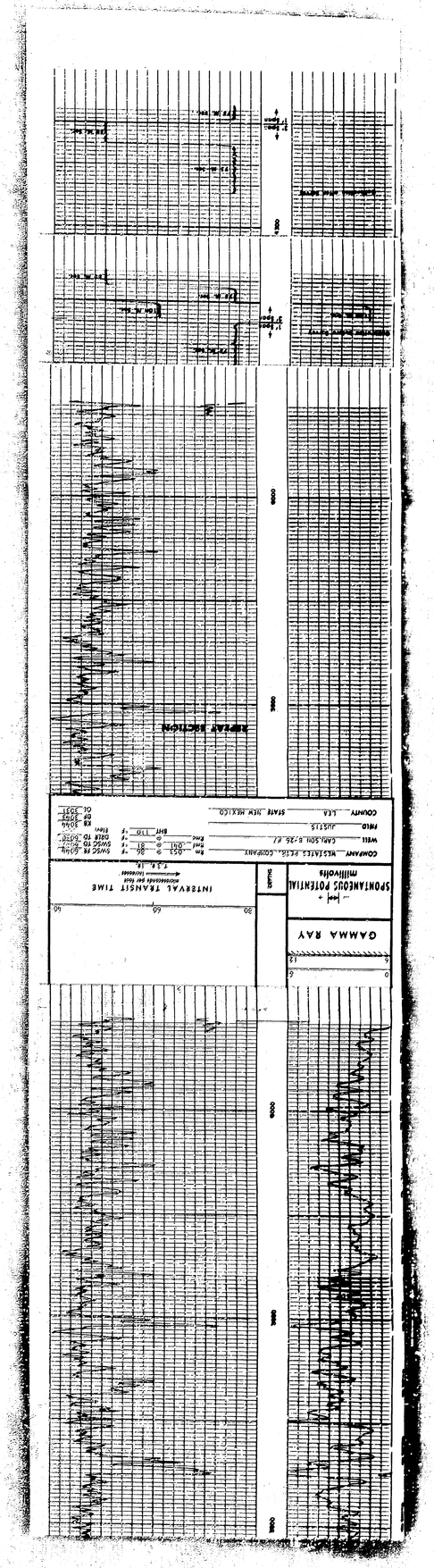

SCHLUMBERGER WELL SURVEYING CORPORATION
COMPANY ATLANTIC REFINING
WELL CARLSON B-26 #7
FIELD JUSTIS
COUNTY LEA
STATE NEW MEXICO
Other Services
LL-GRN-MLL
Location of Well
1650' FSL
990' FEL
Elevation KB 3043
DF 3042
GL 3031
Permanent Datum G.L.
Log Measured from K.B. 12.85 Ft. Above
Drilling Measured from K.B.
Date 9-2-52
Run No. ONE
Depth-Driller 5000
Depth-Logger 5000
Bottom Logged Interval 5000
Top Logged Interval 3500
Type Fluid in Hole SALT GEL
Salinity, P.P.M. Cl 150000
Density 10.0
Level FULL
Max. Rec. Temp. Deg. F. 120
Operating Rig Time 5 HRS
Recorded By SCHAUER UTZ
Witnessed By [illegible]
RUN NO. ONE
BIT SIZE 7 7/8
CASING-DRILLER 8 5/8 @ 3500
CASING-LOGGER 3500
BOTTOM LOGGED INTERVAL 5000
TOP LOGGED INTERVAL 3500
TYPE FLUID IN HOLE SALT GEL
DENSITY 10.0
LEVEL FULL
MAX. REC. TEMP. DEG. F. 120
RMF @ MEAS. TEMP. .75 @ 60
RMC @ MEAS. TEMP. .60 @ 60
RM @ BHT .45 @ 120
TIME SINCE CIRC. 5 HRS
TIME ON BOTTOM 2 30 EVENING
REMARKS
VIA No.1 X
VIA No.2 X
VIA No.3
VIA No.4
RUN NO. ONE 8, 75 450 10 500 SEA 100 T.C. 2 30 EVENING
Velocity (feet per second) — Interval Transit Time (microseconds per foot)
1 000 200
INTERVAL TRANSIT TIME
microseconds per foot
T-3s L-s
90 60 30
SHALE
SPONTANEOUS-POTENTIAL
millivolts
+ —
GAMMA RAY
0 6 12
4500 4600 4700 4800 4900 5000
3500 3600 3700 3800 3900 4000

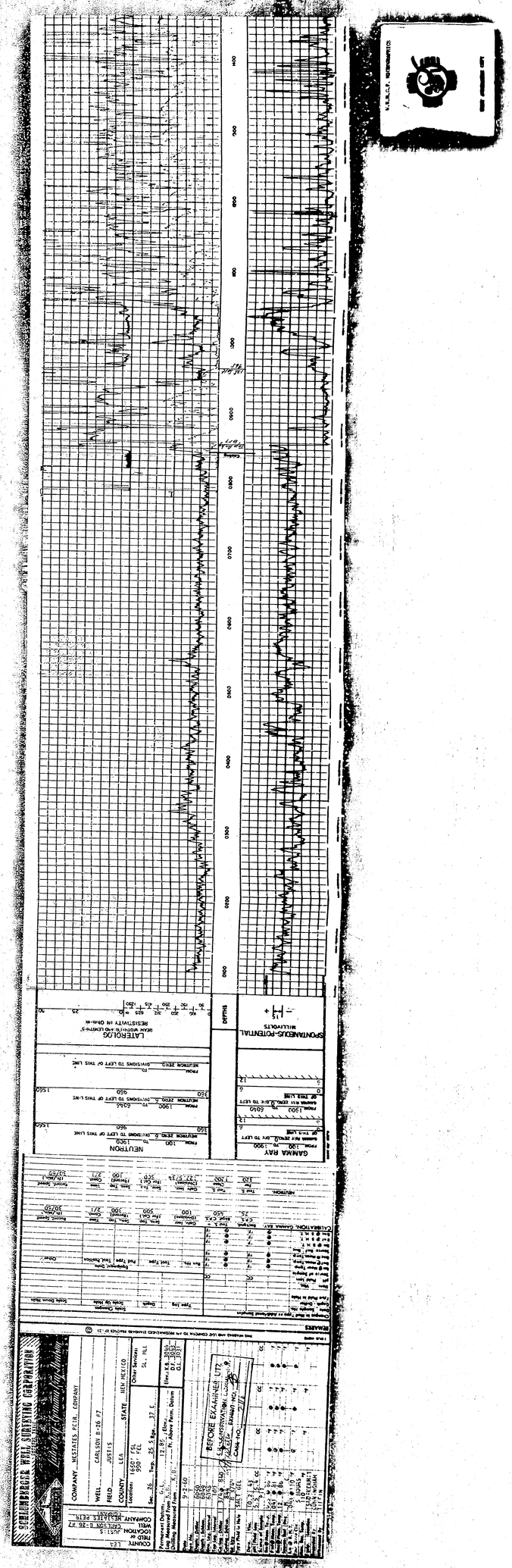

SCHLUMBERGER
SPONTANEOUS-POTENTIAL
millivolts
GAMMA RAY
DEPTH
INTERVAL TRANSIT TIME
microseconds per foot
DETAIL LOG
COMPANY WESTATES PETR. COMPANY
WELL CARLSON B-26 #7
FIELD JUSTIS
COUNTY LEA
STATE NEW MEXICO
5700
5600
5500
5400
5300
5200
5100
5000
4900
4800
4700

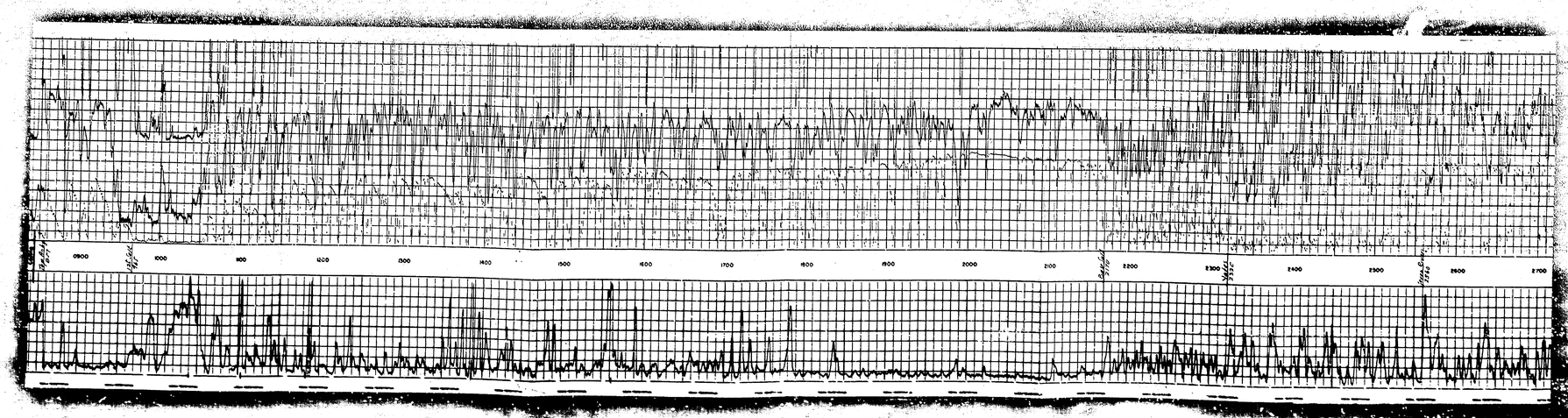

4600
4700
4800
4900
5000
5100
5200


5000
5100
5200
5300
5400
5500
5600
5700

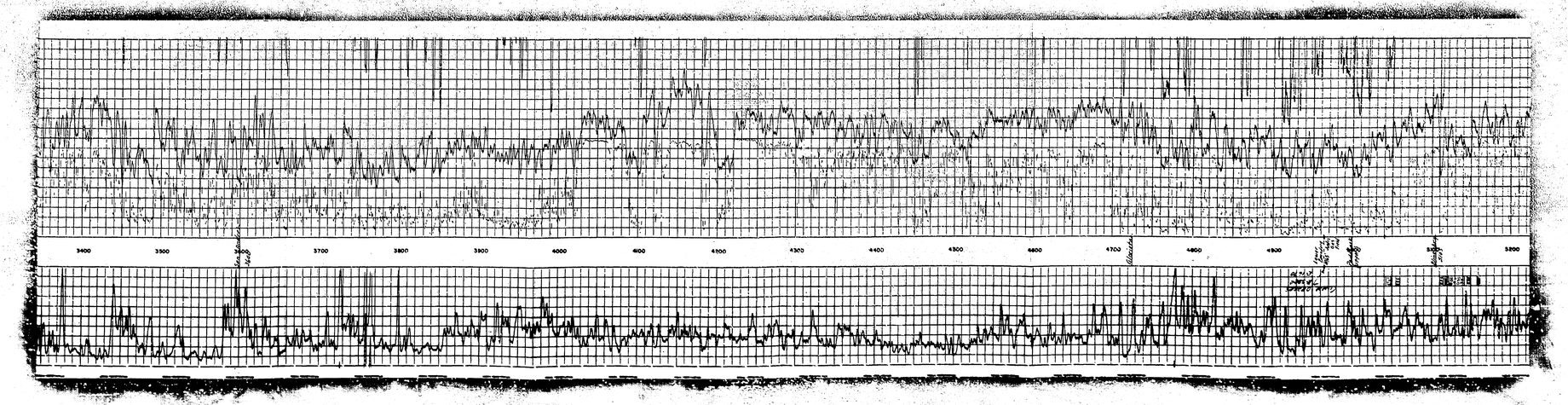

COMPANY WESTATES PETR. CORP/WY
WELL CARLSON B-26 #7
FIELD JUSTIS
COUNTY LEA STATE NEW MEXICO
DEPTH ACTION
GAMMA RAY
SPONTANEOUS-POTENTIAL
millivolts
INTERVAL TRANSIT TIME
microseconds per foot
5600
5700
5800
5900
6000

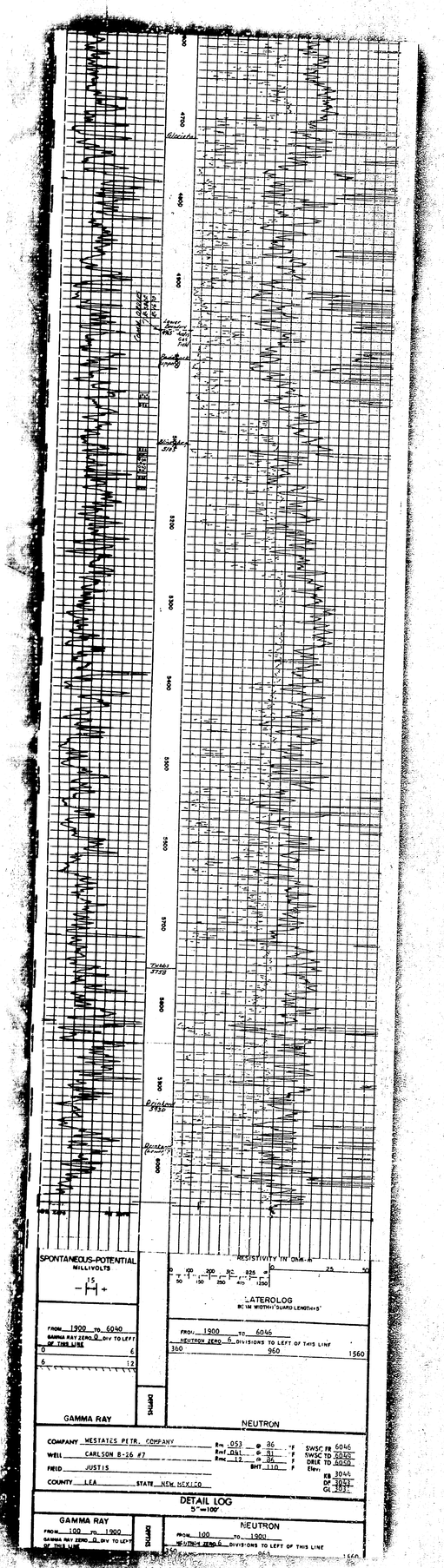

COMPANY WESTATES PETR. COMPANY
WELL CAPS.SOH. B-26 #1
FIELD JUSTIS
COUNTY LEA STATE NEW MEXICO
SPONTANEOUS POTENTIAL
millivolts
GAMMA RAY
INTERVAL TRANSIT TIME
microseconds per foot
SURFACE
3RFAY SECTION

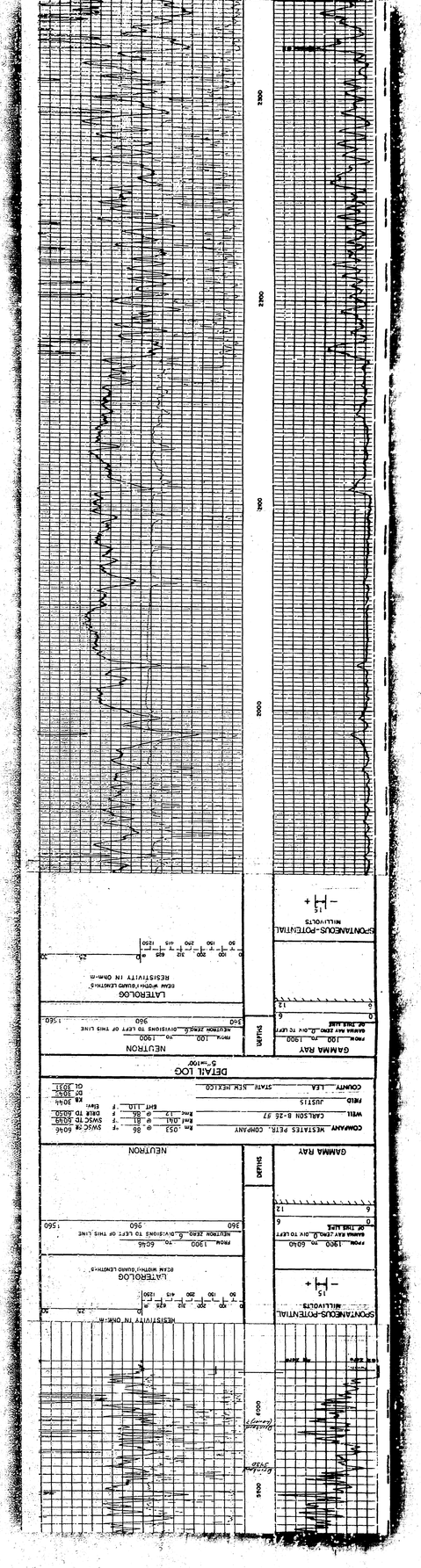

SCHLUMBERGER WELL SURVEYING CORPORATION
COMPANY MESTATES PETR. COMPANY
WELL CARLSON B-26 #7
FIELD JUSTIS
COUNTY LEA STATE NEW MEXICO
Location: 1650' FSL 990' FEL
Sec. 26 Twp. 25 S Rge. 37 E
Other Services: GL, FNL
Permanent Datum: G.L. Elev.: K.B. 3096
Log Measured From: K.B. 12.85' Above Perm. Datum D.F. 3085
Drilling Measured From: K.B. Ft. Above Perm. Datum G.L. 3083
Run No. 1
Type Log
Depth
Scale Up Hole
Scale Down Hole
Date
Time Logger on Bottom
Max. Rec. Temp. Deg. F
Equipment Data
Rec. No.
Type
Truck No.
Base
Unit No.
Type
Location
Max. Rec. Temp. Deg. F
Equipment Data
Rec. No.
Type
Truck No.
Base
Unit No.
Type
Location
Other Services
Time
Date
Recorded by
Witnessed by
BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
CASE NO. 7787
Run No. 1
Type Log
Depth
Scale Up Hole
Scale Down Hole
Date
Time Logger on Bottom
Max. Rec. Temp. Deg. F
Equipment Data
Rec. No.
Type
Truck No.
Base
Unit No.
Type
Location
Max. Rec. Temp. Deg. F
Equipment Data
Rec. No.
Type
Truck No.
Base
Unit No.
Type
Location
Other Services
Time
Date
Recorded by
Witnessed by
REMARKS
CALIBRATION GAMMA RAY
NEUTRON
GAMMA RAY
NEUTRON
LATEROLOG
SPONTANEOUS-POTENTIAL
DEPTHS

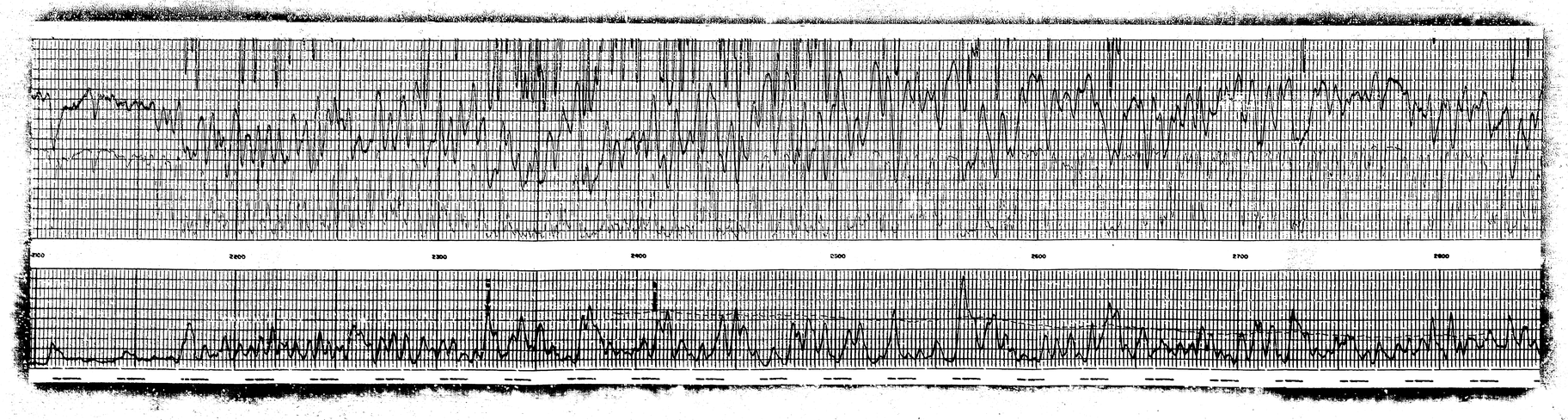

0900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700

N.E.M.C.F. MICROGRAPHICS

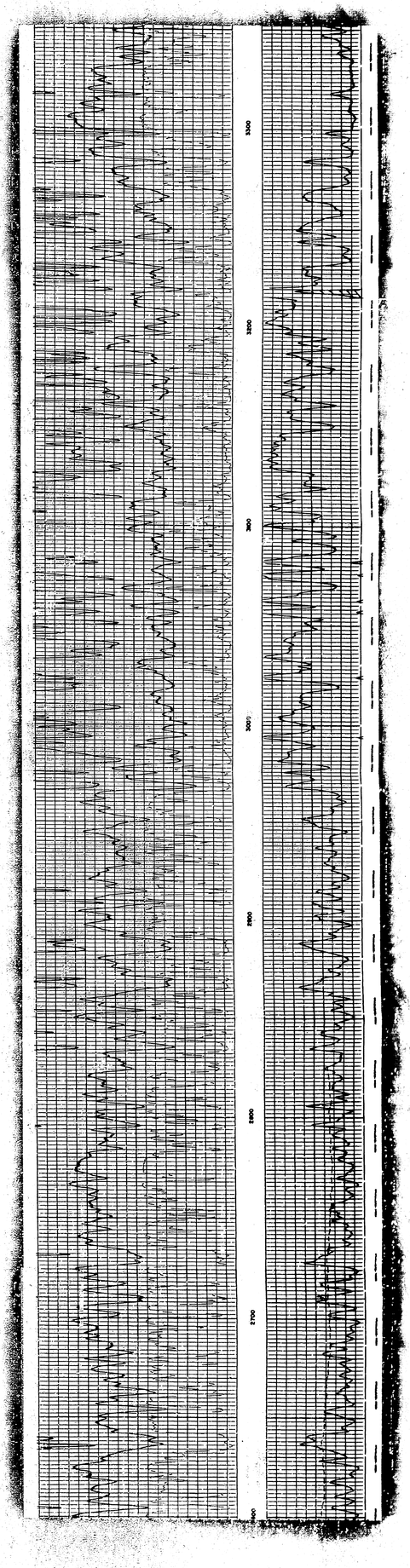

3400
3500
3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900
5000

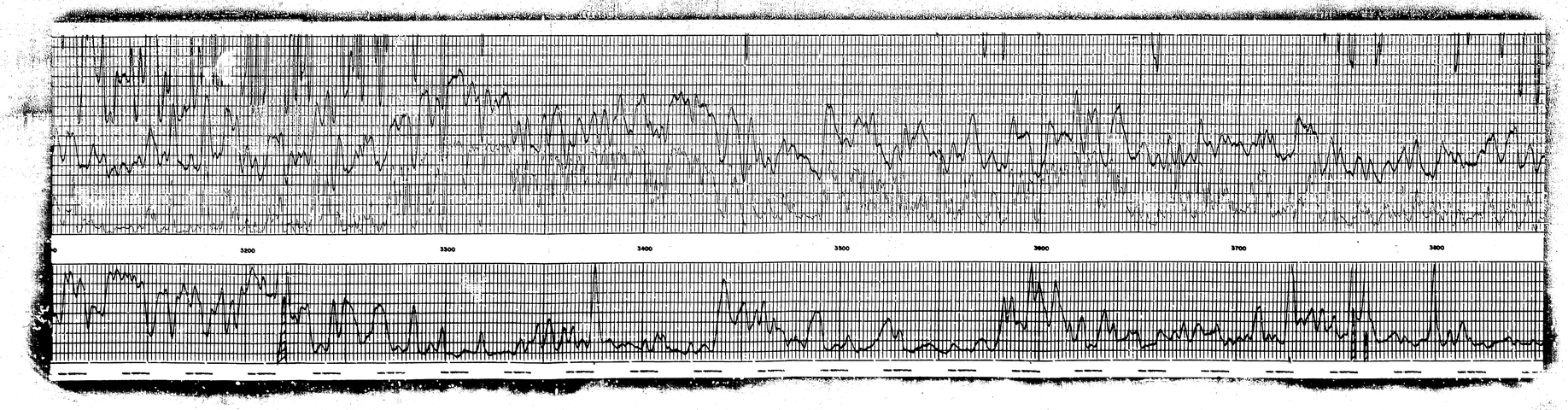

Glorieta
Tubb 5770
Drinkard 5930
Abo 6040
SPONTANEOUS-POTENTIAL
MILLIVOLTS
RESISTIVITY IN Ohm-m
LATEROLOG
GAMMA RAY
NEUTRON
DETAIL LOG
COMPANY WESTATES PETR. COMPANY
WELL CARLSON B-26 #7
FIELD JUSTIS
COUNTY LEA STATE NEW MEXICO
SWSC PB 6046
SWSC TD 6040
DRLR TD 6050
Elev:
KB 3044
DF 3043
GL 3031

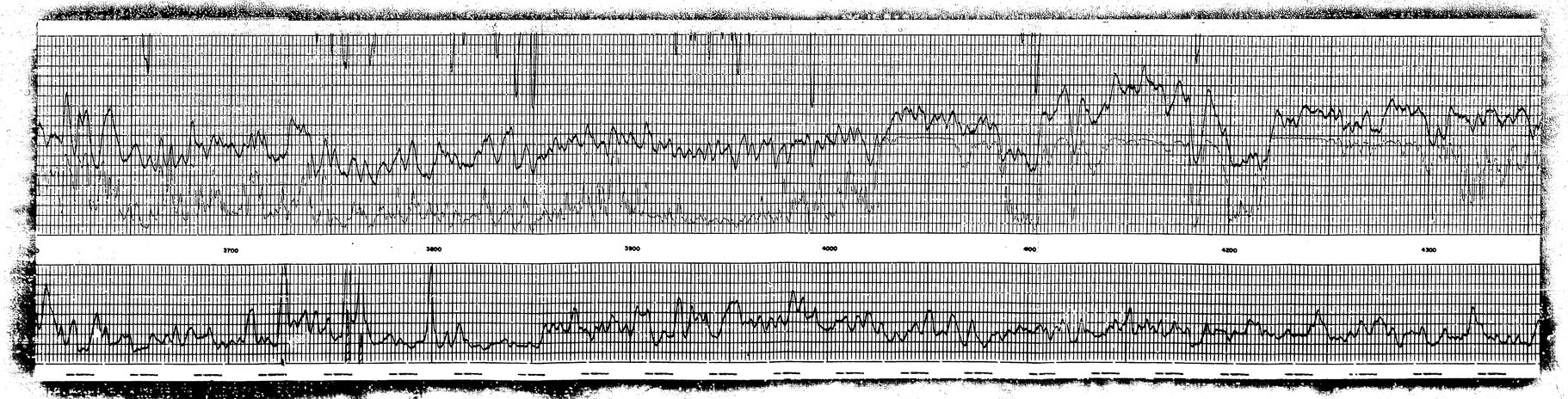

COMPANY WESTATES PETR. COMPANY
WELL CARLSON 8-26 #7
FIELD JUSTIS
COUNTY LEA STATE NEW MEXICO
DETAIL LOG
GAMMA RAY
NEUTRON
LATEROLOG
SPONTANEOUS-POTENTIAL
SHALE
2300
2400
2500
2600


2100
2200
2300
2400
2500
2600
2700
2800

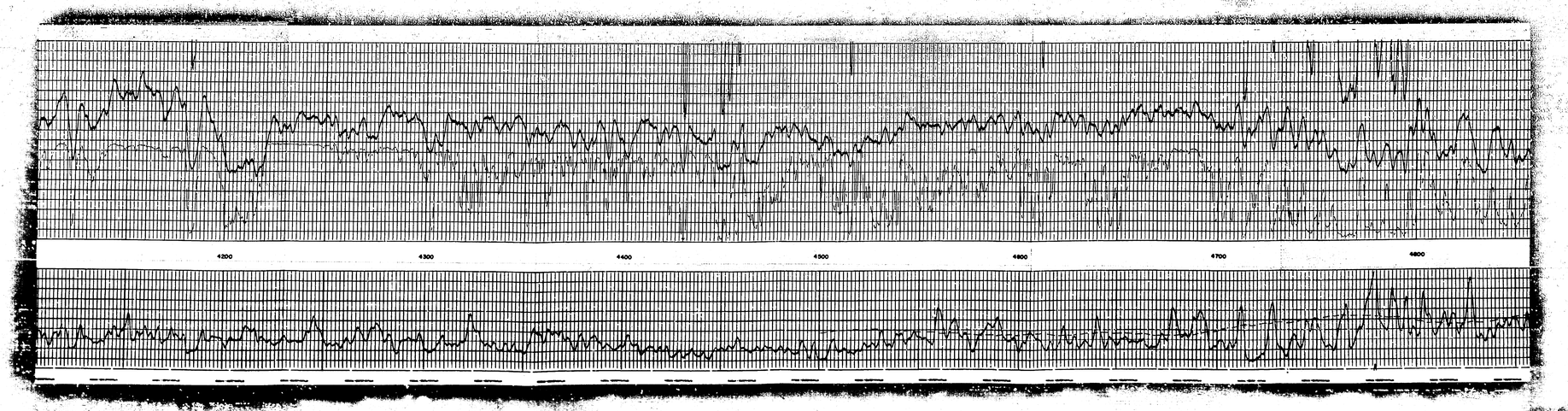
U.S.B.C.F. MICROGRAPHICS


3000
2900
2800
2700
2600

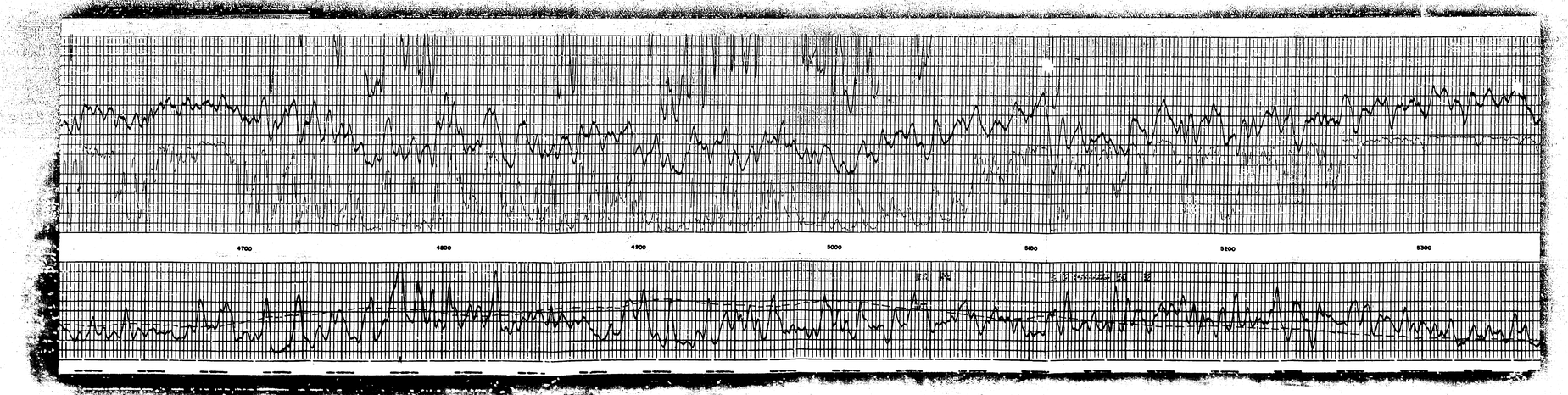

3200
3300
3400
3500
3600
3700
3800

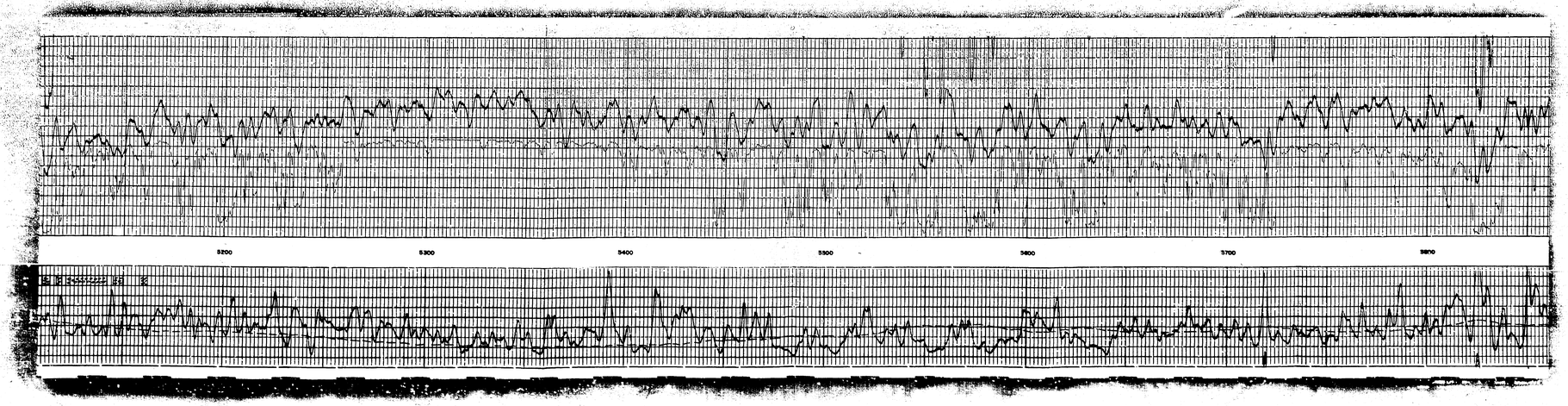


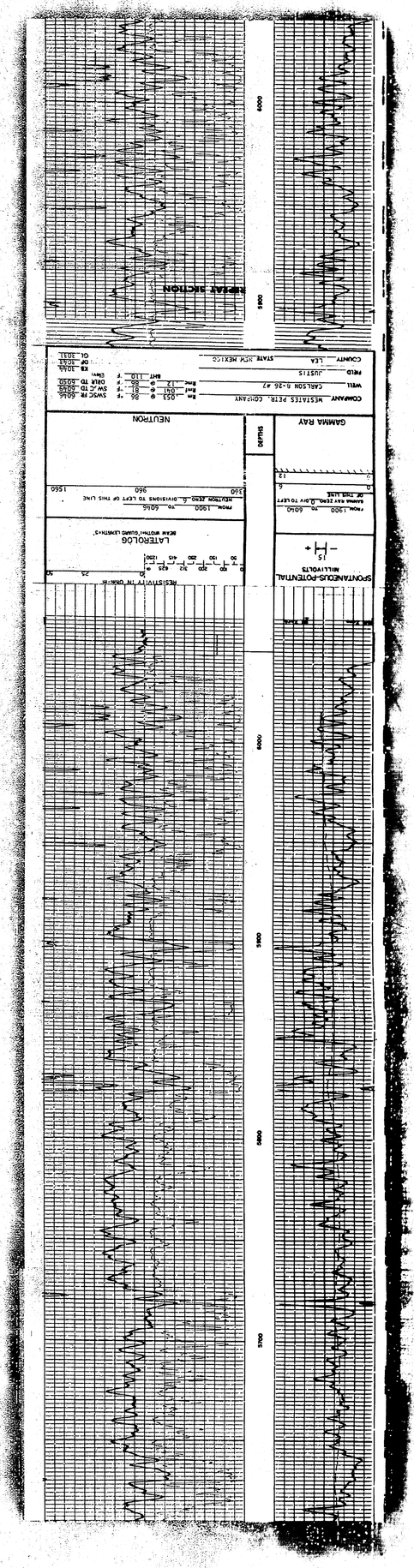
V.T.R.C.F. MICROGRAPHICS

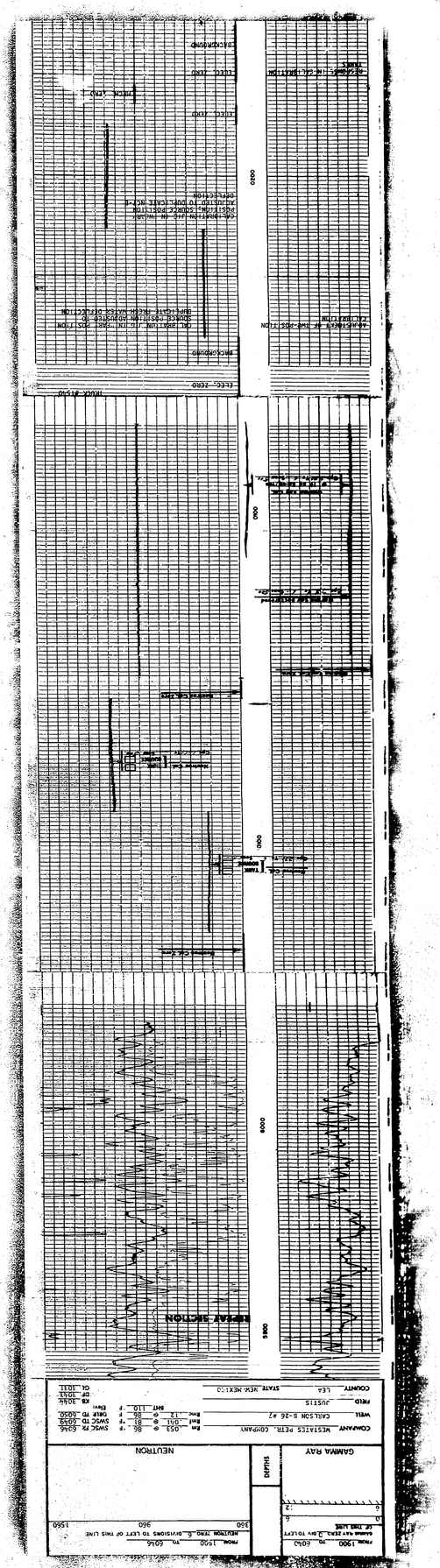


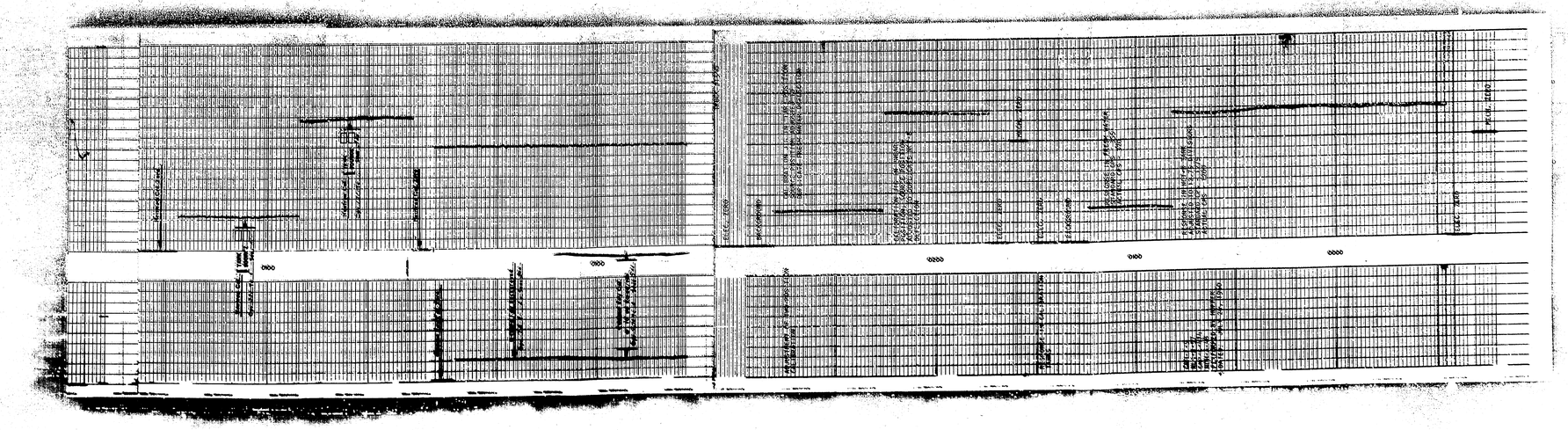
V.E.R.C.F. MICROGRAPHICS

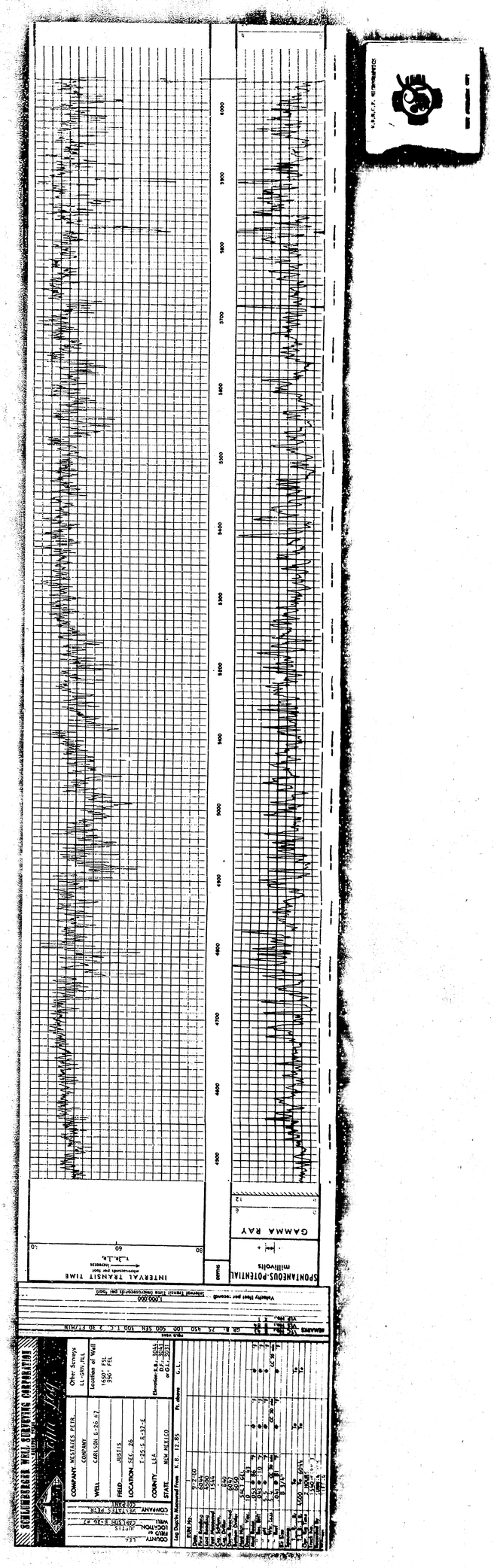

4700
4800
4900
5000
5100
5200
5300

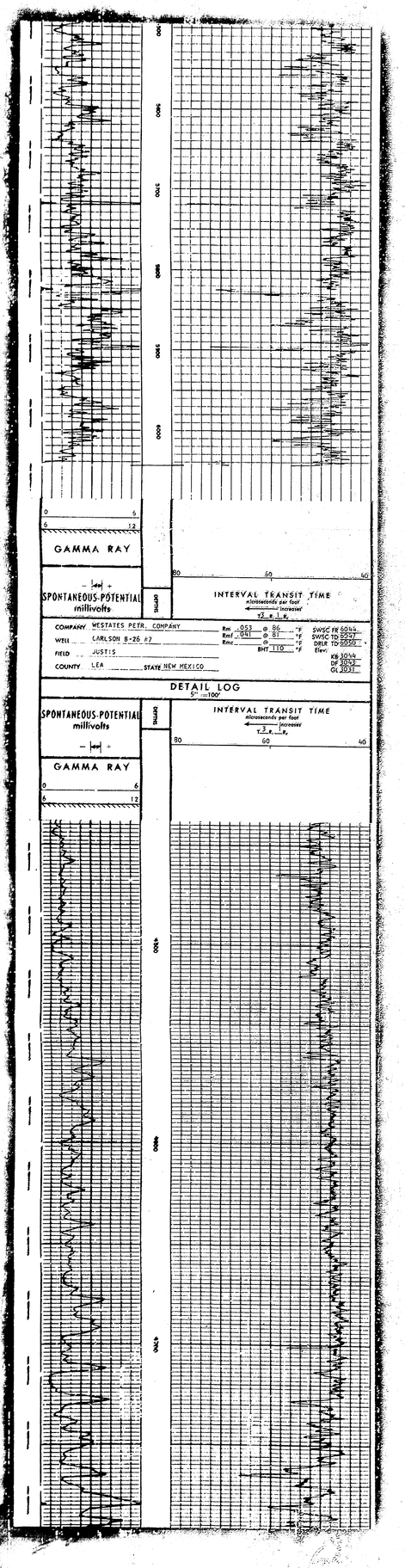

5200
5300
5400
5500
5600
5700
5800

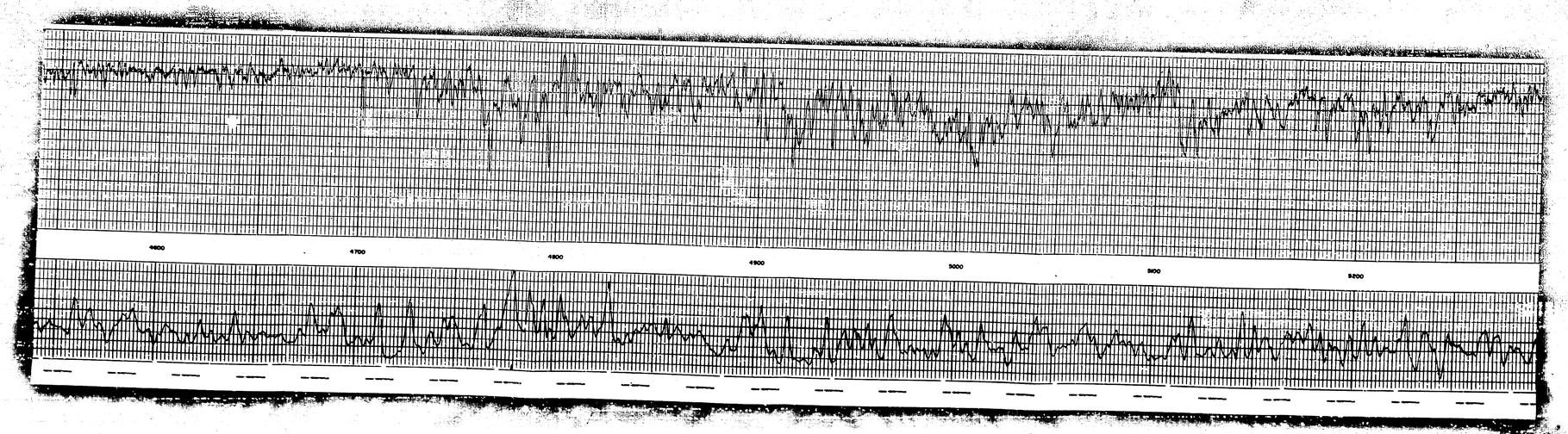

REPEAT SECTION
COMPANY WESTATES PETR. COMPANY
WELL CARLSON 8-26 #2
FIELD JUSTIS
COUNTY LEA STATE NEW MEXICO
GAMMA RAY
NEUTRON
SPONTANEOUS-POTENTIAL
MILLIVOLTS
LATEROLOG
RESISTIVITY IN OHMS-M

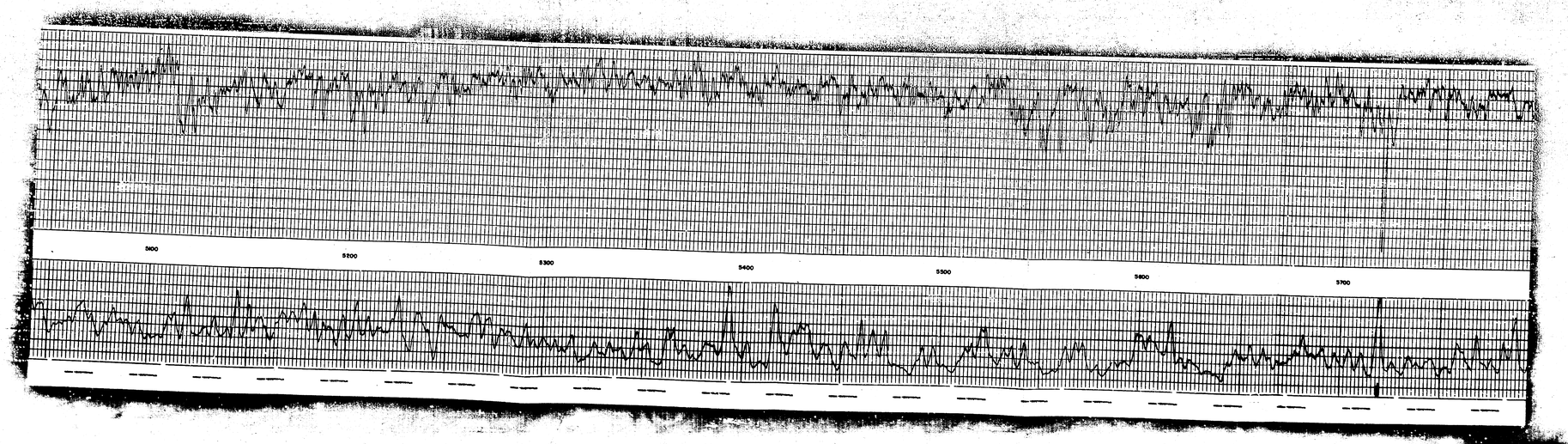

REPEAT SECTION
COMPANY WESTAIES PETR. COMPANY
WELL CARLSON B-26 #7
FIELD JUSTIS
COUNTY LEA STATE NEW MEXICO
GAMMA RAY
NEUTRON
DEPTHS



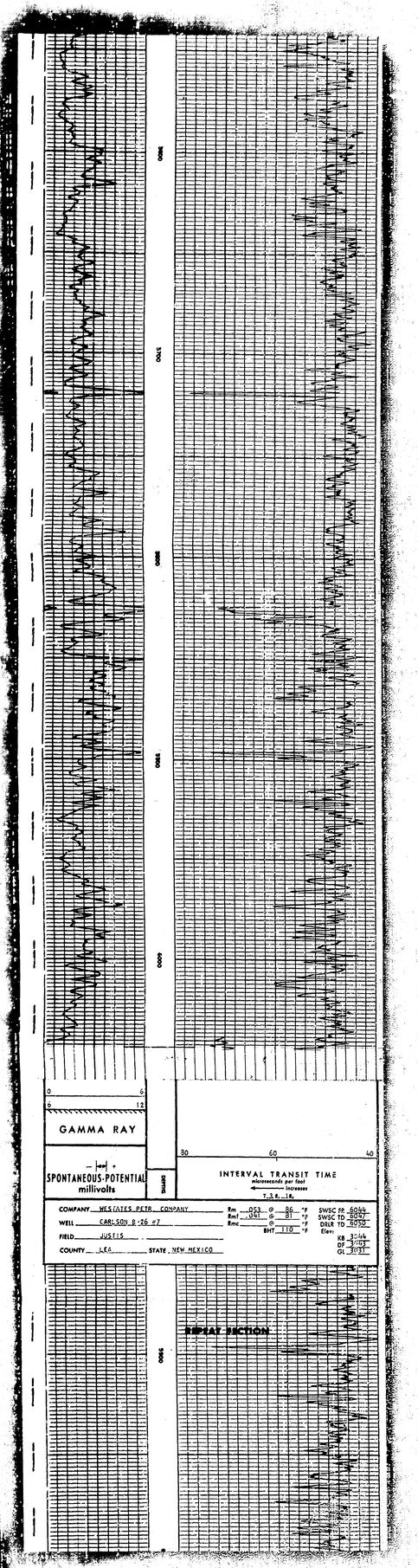

SCHLUMBERGER WELL SURVEYING CORPORATION
COMPANY MESTAIES PETR.
WELL CARLSON E-26-#2
FIELD JUSTIS
COUNTY LEA
STATE NEW MEXICO
Location of Well
1650' FSL
990' FEL
SEC. 26
T-25-S R-37-E
Other Surveys
LL-GRN, MCL
Elevation K.B. 3045
D.F. 3033
G.L. 3033
K.B. 12.85
Ft. above
Log Depths Measured From
Permanent Datum
Date
Run No.
Depth—Driller
Depth—Logger
Bottom Logged Interval
Top Logged Interval
Type Log
Type Fluid in Hole
Salinity, PPM Cl
Density
Level
Max. Rec. Temp. Deg. F.
Equip. No. & Location
Recorded By
Witnessed By
REMARKS
GR RT 75 450 100 500 SEN 100 1 C 2 10 FT/MIN
Velocity (feet per second) 7,000.000
Normal Transit Time (microseconds per foot)
SPONTANEOUS POTENTIAL
millivolts
GAMMA RAY
INTERVAL TRANSIT TIME
microseconds per foot
Increases
5000
5100
5200
5300
5400
5500
5600
5700
5800
5900
6000
4500
4600
4700
4800
4900

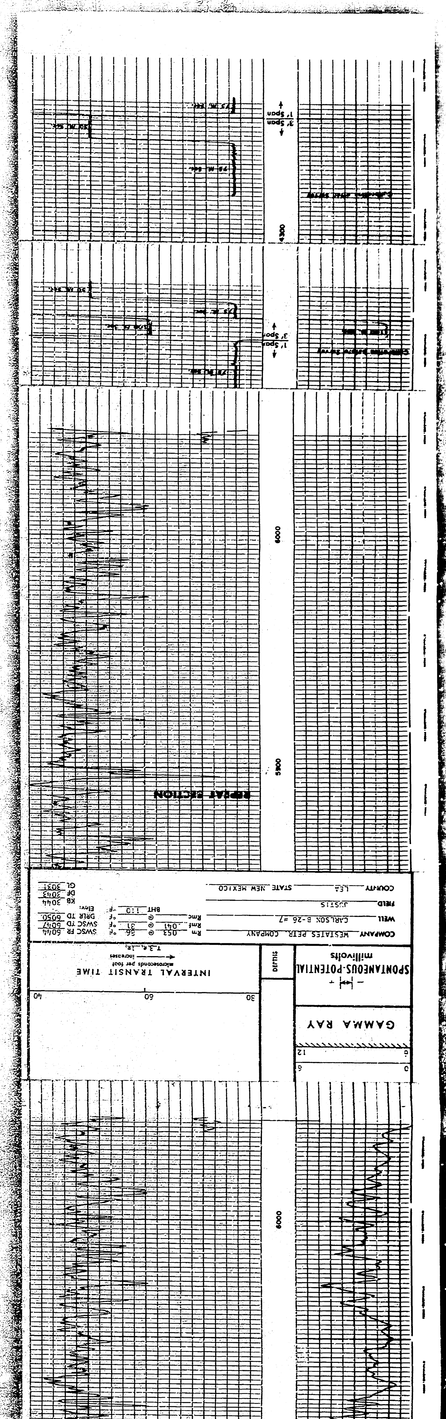

0 6
6 12
GAMMA RAY
– [sed] +
SPONTANEOUS-POTENTIAL
millivolts
DEPTHS
80 50 40
INTERVAL TRANSIT TIME
microseconds per foot
increases
COMPANY WESTATES PETR. COMPANY
WELL CARLSON B-26 #7
FIELD JUSTIS
COUNTY LEA STATE NEW MEXICO
Rm .053 @ 86 °F
Rmf .041 @ 81 °F
Rmc @ °F
BHT 110 °F
SWSC FR 6044
SWSC TD 6047
DRLR TD 6050
Elev.:
KB 3044
DF 3043
GL 3031
DETAIL LOG
5" = 100'
SPONTANEOUS-POTENTIAL
millivolts
– [sed] +
DEPTHS
INTERVAL TRANSIT TIME
microseconds per foot
increases
80 60 40
GAMMA RAY
0 6
6 12
5000
5100
5200
5300
5400
5500
5600
5700


4600
4700
4800
4900
5000
5100
5200



V.E.B.G.F. REICHSDRUCKEREI


5900
5800
5700
5600
5500
5400
5300
5200
5100
5000
0 6
6 12
GAMMA RAY
– +
SPONTANEOUS-POTENTIAL
millivolts
DEPTHS
80 60 40
INTERVAL TRANSIT TIME
microseconds per foot
increases
T-3 R-14
COMPANY WESTATES PETR. COMPANY
WELL CARLSON B-26 #7
FIELD JUSTIS
COUNTY LEA STATE NEW MEXICO
Rm .053 @ 86 °F
Rmf .041 @ 81 °F
Rmc @ °F
BHT 110 °F
SWSC PB 6049
SWSC TD 6047
DRLR TD 6050
Elev:
KB 3044
DF 3103
GL 3093
REPEAT SECTION


REPEAT SECTION
6000
6100
6200
COMPANY METALES PETR. COMPANY
WELL CARLSON B-26 #7
FIELD JESUS
COUNTY LEA STATE NEW MEXICO
SPONTANEOUS-POTENTIAL
millivolts
GAMMA RAY
INTERVAL TRANSIT TIME
microseconds per foot

SCHLUMBERGER WELL SURVEYING CORPORATION

Electrical Formation Resistivity Measurement

COMPANY WESTATES PETR. COMPANY

WELL CARLSON B-26 #2

FIELD JUSTIS

COUNTY LEA STATE NEW MEXICO

Location: 1650' FSL 990' FEL

Sec. 26 Twp. 25 S Rge. 37 E

Other Services: SL, HLL

Permanent Datum: G.L. Elev.: 12.85

Log Measured From K.B. ft. Above Perm. Datum

Drilling Measured From K.B.

Elev.: K.B. 3044 D.F. 3043 G.L. 3031

Run No.	1		
Date	9-2-60		
Depth - Driller	6090		
Depth - Schlum.	6092		
Btm. Log Interval	6086		
Top Log Interval	100		
Casing - Driller	7 5/8@ 810	@	@
Casing - Schlum.	8 3/8@		
Bit Size	6 3/4"		
Type Fluid in Hole	SALT GEL		
Dens. Visc.	10.2 44		
pH Fluid Loss	5.5 5.4 cc	cc	cc
Source of Sample	DS		
Rm @ Meas. Temp.	.053 @ 86	@	@
Rmf @ Meas. Temp.	.043 @ 84	@	@
Rmc @ Meas. Temp.	.112 @ 84	@	@
Source of Rmf & Rmc	Rmf		
Rm @ BHT	.036 @ 112	@	@
Time Since Circ.	5 HOURS		
Max. Rec. Temp.	112		
Equip. Location	LEA		
Recorded By	SANDERRITT		
Witnessed By	CUNNINGHAM		
	TIPPIN		

Run No. | Bit Size | Depth | Type Log | Top Log | Btm. Log | Casing Driller | Casing Schlum. | Bit Size | Type Fluid in Hole | Dens. | Visc. | 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. | Equip. Location | Recorded By | Witnessed By

1 | 6 3/4" | 6090 | GR | 100 | 6086 | 7 5/8@ 810 | 8 3/8@ | SALT GEL | 10.2 | 44 | 5.5 | 5.4 cc | DS | .053 @ 86 | .043 @ 84 | .112 @ 84 | Rmf | .036 @ 112 | 5 HOURS | 112 | LEA | SANDERRITT | CUNNINGHAM TIPPIN

RECORDED BY: Type of Tool & Type of Measurement

Gamma Ray

Neutron

Laterolog

Sonic

Caliper

Other

Run No. | Tool Pos. | Tool Type | Tool Position | Other | Run No. | Tool Pos. | Tool Type | Tool Position | Other

1 | | GR | | | 1 | | N | | |

CALIBRATION: Gamma Ray

Run	Det.	Gain	Time	Check Speed
1	GR-S	160	1/2	10/60

NEUTRON

Run	Det.	Gain	Time	Check Speed
1	SNP	580	1/2	10/60

LATEROLOG

Run	Det.	Gain	Time	Check Speed
1	DEEP	580	1/2	10/60

SONIC

Run	Det.	Gain	Time	Check Speed
1	Spac.	1305	1/2	10/60

VERIFICATION: Gamma Ray

NEUTRON

FROM 100 TO 1800

SECTION SERIAL No. DIVISIONS TO LEFT OF THIS LINE

560 960

FROM 1560 TO 6086

SECTION SERIAL No. DIVISIONS TO LEFT OF THIS LINE

1920 960

FROM 1560

SECTION SERIAL No. DIVISIONS TO LEFT OF THIS LINE

LATEROLOG

RESISTIVITY IN Ohm-m

FROM 1560 TO 6086

SECTION SERIAL No. 652 DIVISIONS TO LEFT OF THIS LINE 960

0 10 20 30 40 50

0 10 20 30 40 50

GAMMA RAY

FROM 100 TO 1800

GAMMA RAY SERIAL No. DIVISIONS TO LEFT OF THIS LINE

AT 1810 LINE 6

FROM 1800 TO 6086

GAMMA RAY SERIAL No. DIVISIONS TO LEFT OF THIS LINE

AT 1810 LINE 6

SPONTANEOUS-POTENTIAL

MILLIVOLTS

+ 0 -

DEPTHS

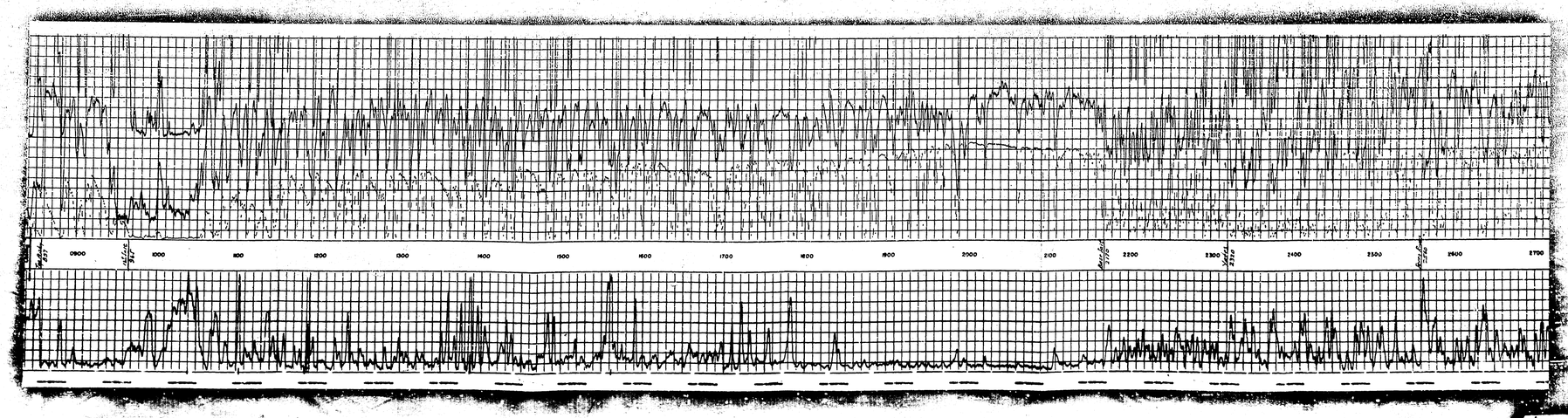
0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400

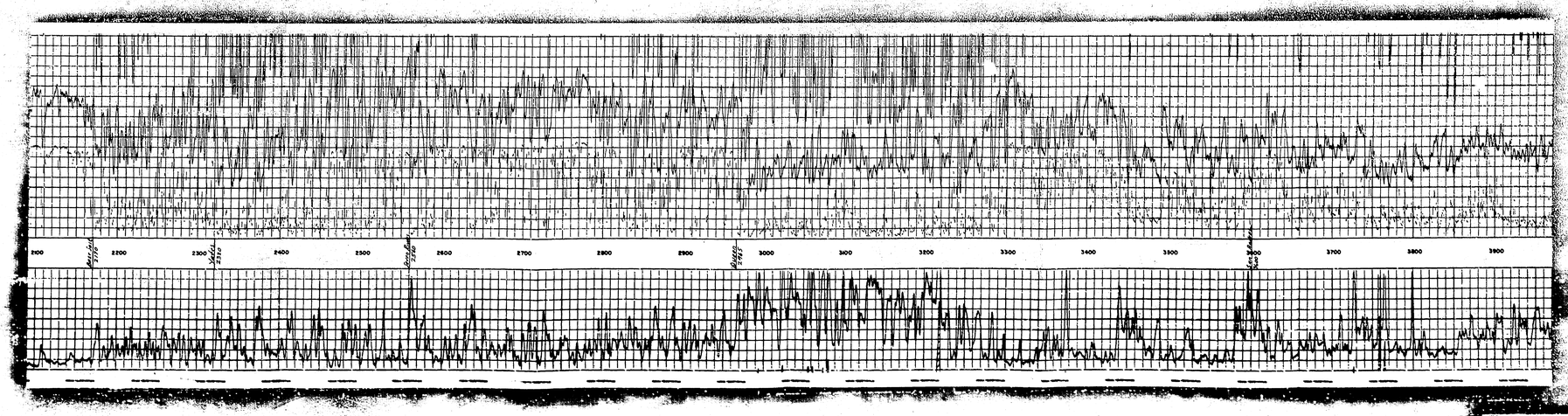
Casing 7 5/8" @ 810'

Hole Size 6 3/4" 6090'

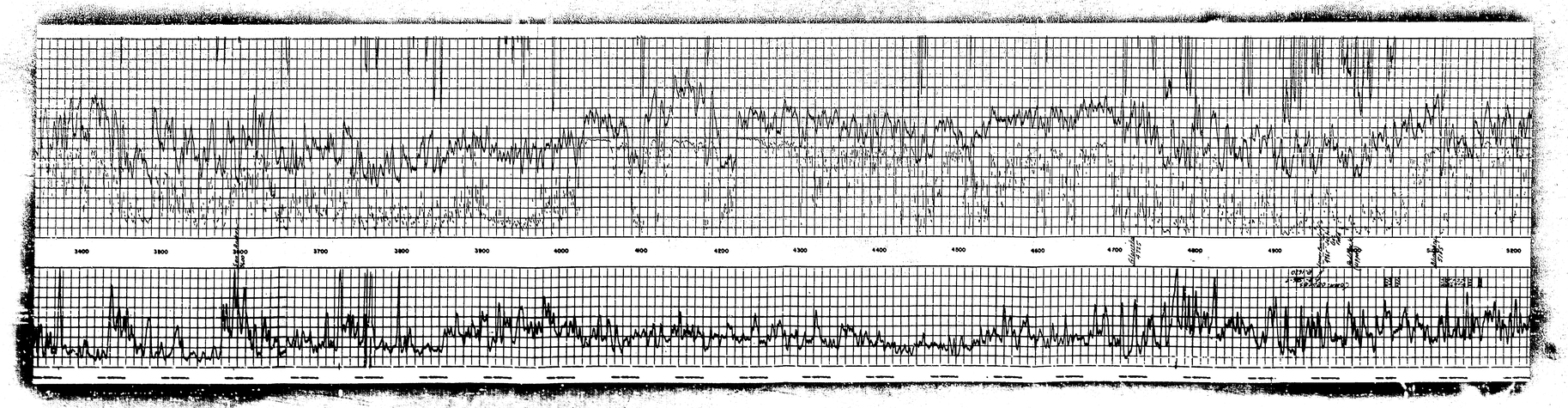
V.E.R.C.F. INTERNATIONAL

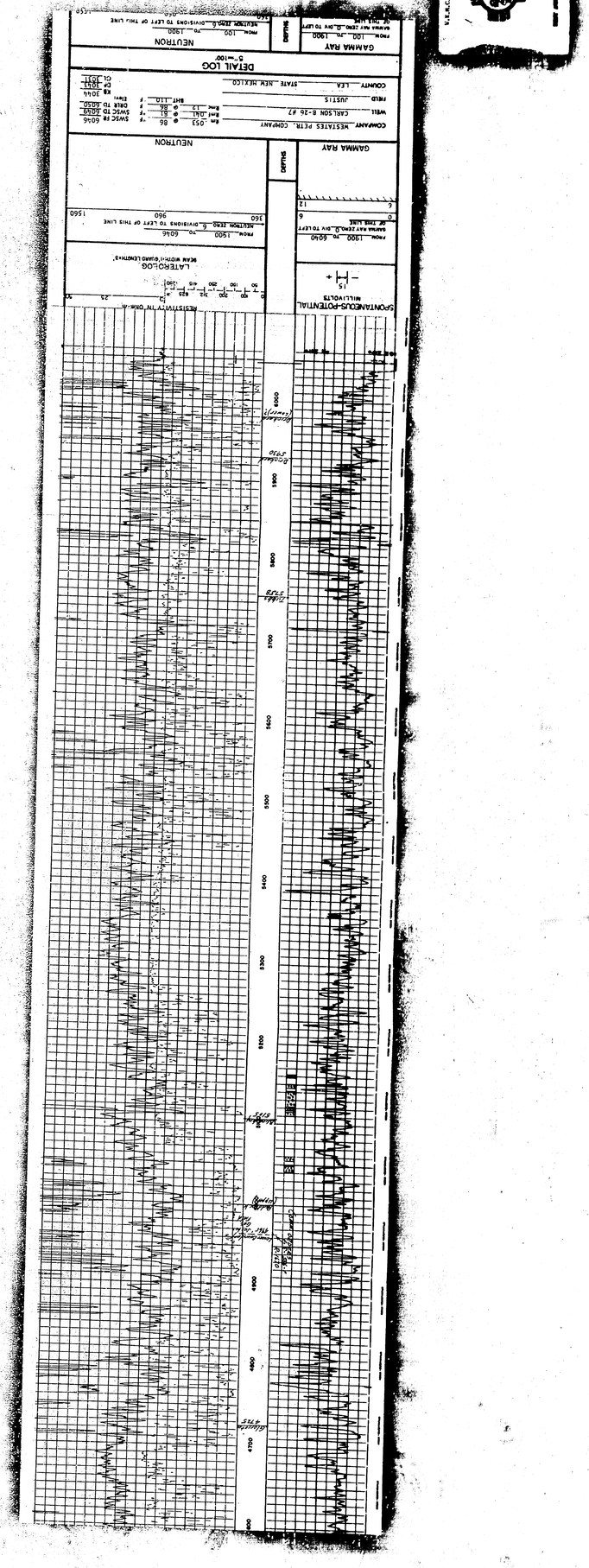
MADE IN GRAND PRAIRIE, TEXAS, U.S.A.

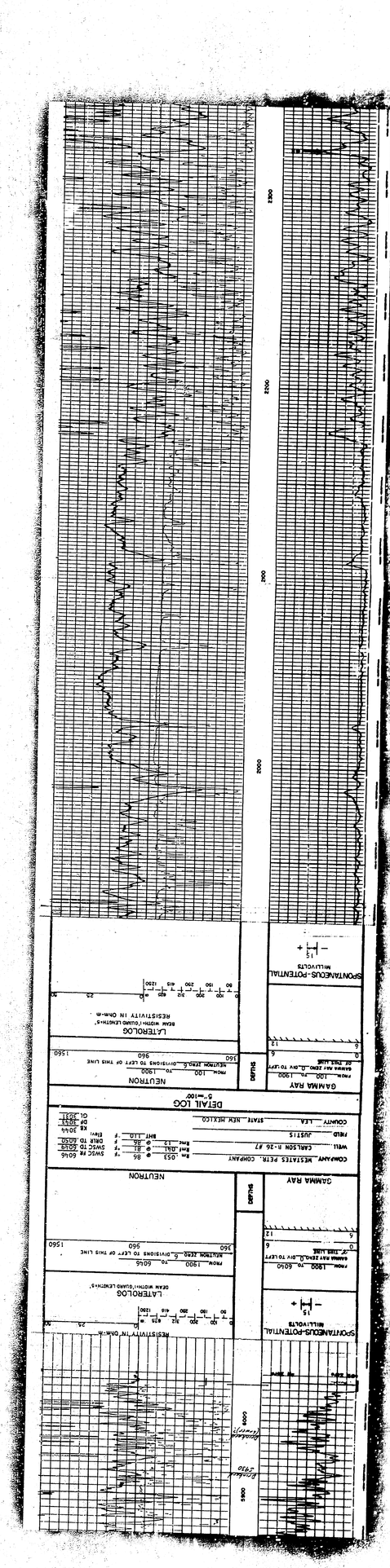

0900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700

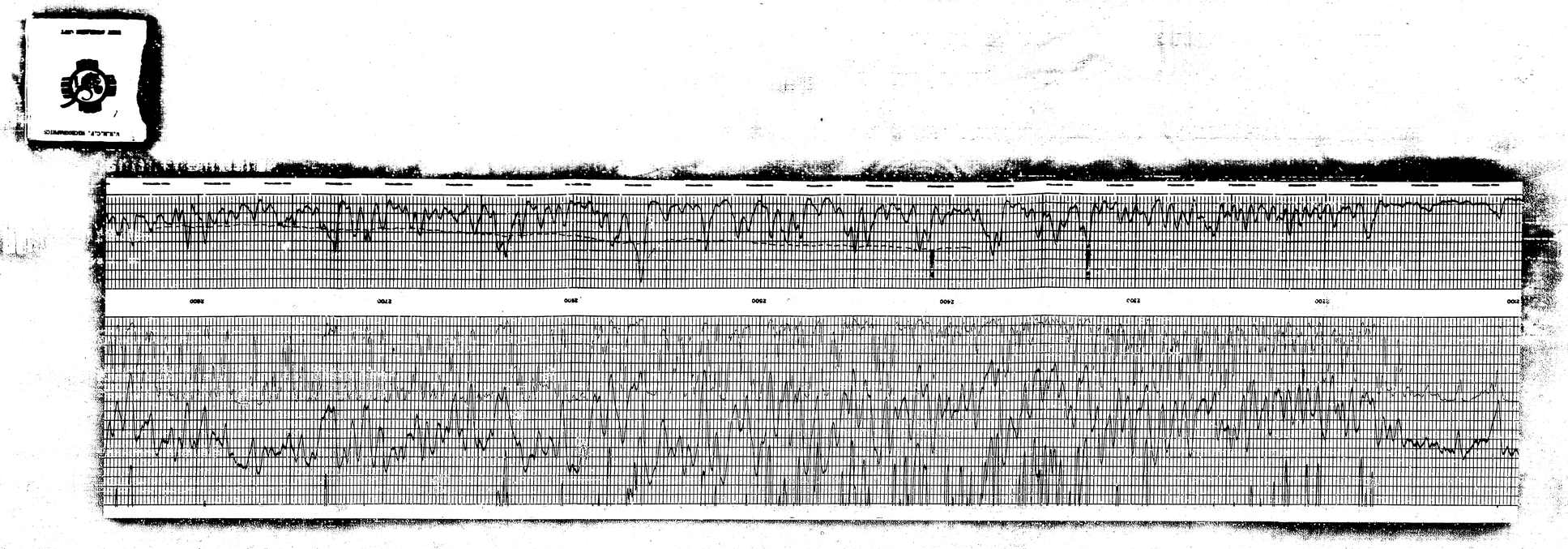


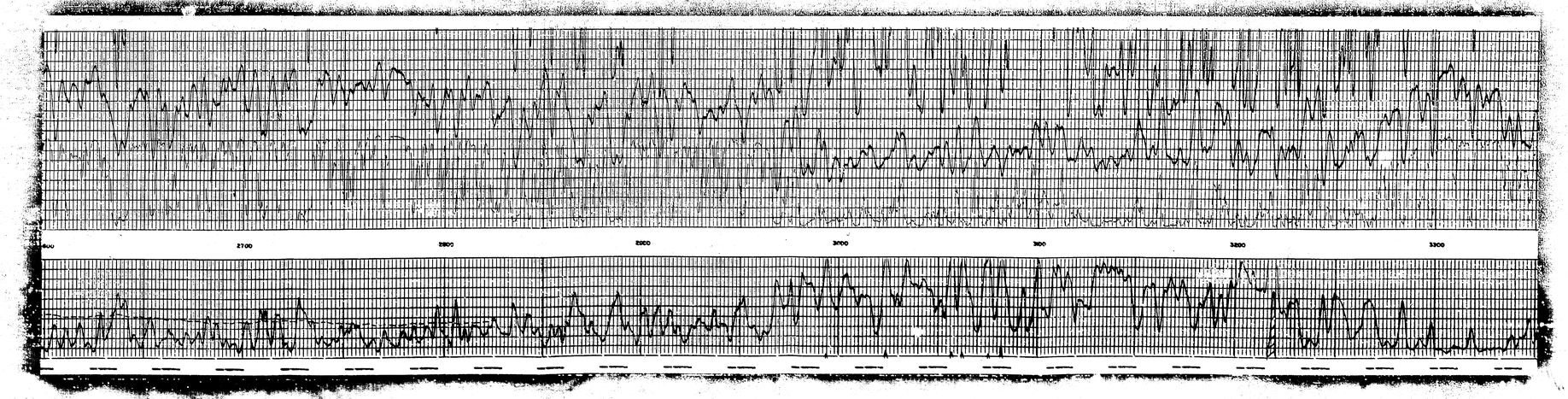
V.T.H.C.P. MICROGRAPHICS

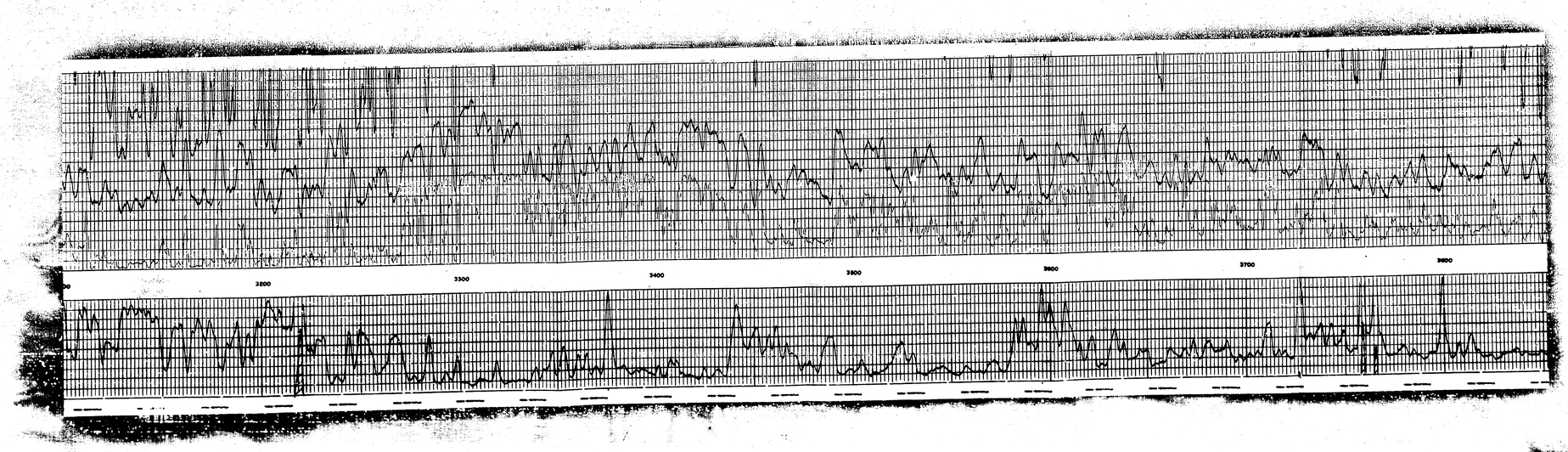

3400
3500
3600
3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900
5000
5100
5200

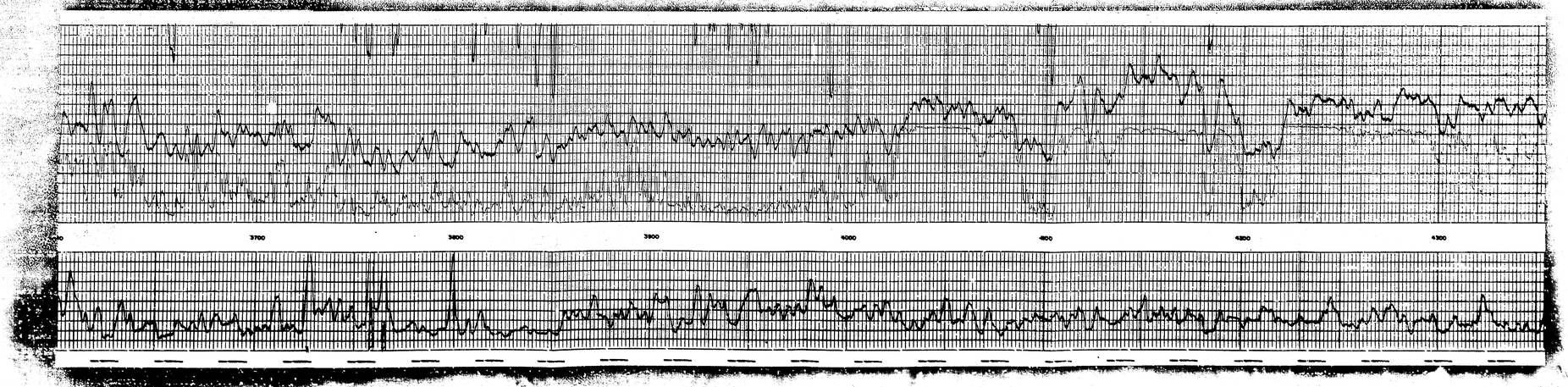

V.I.R.C.F. REPRODUCTIONS
NOT TO BE REMOVED FROM OFFICE
SPONTANEOUS-POTENTIAL
MILLIVOLTS
LATEROLOG
NEAR WIDTH GUARD LENGTH 3'
RESISTIVITY IN Ohm-m
GAMMA RAY
NEUTRON
DEPTHS
DETAIL LOG
COMPANY WESTATES PETR. COMPANY
WELL CARLSON B-26 #7
FIELD JUSTIS
COUNTY LEA STATE NEW MEXICO
GAMMA RAY
NEUTRON
5900
5800
5700
5600
5500
5400
5300
5200
5100
5000
4900
4800
4700
4600

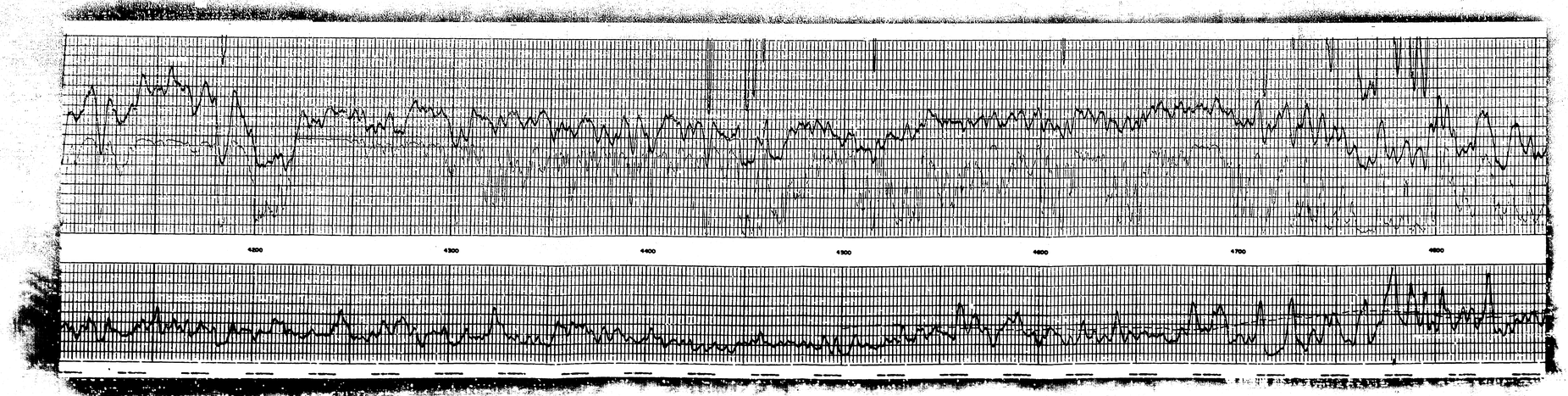

U.S.N.C.F. REGISTRATION
2300
2200
2100
2000
GAMMA RAY
NEUTRON
DEPTH
SPONTANEOUS-POTENTIAL
MILLIVOLTS
LATEROLOG
RESISTIVITY IN Ohm-m
DETAIL LOG
5"=100'
COMPANY NESTATES PETR. COMPANY
WELL CARLSON R-26 #7
FIELD JUSTIS
COUNTY LEA STATE NEW MEXICO
Bm .053 @ 86 °F
Bmf .046 @ 81 °F
Rmf 12 @ 86 °F
BHT 110 °F Elev.
SWSC FM 6046
SWSC TO 6056
DRLR TO 6050
KB 3044
DF 3034
GL 3021
6046
1560
960
360
0005
Schlumberger

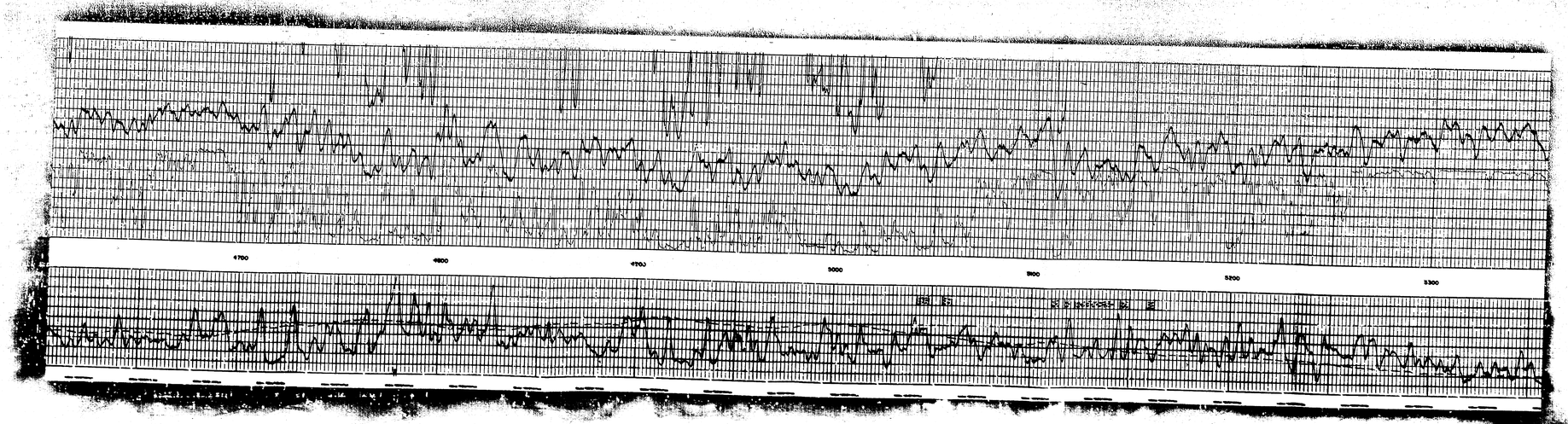


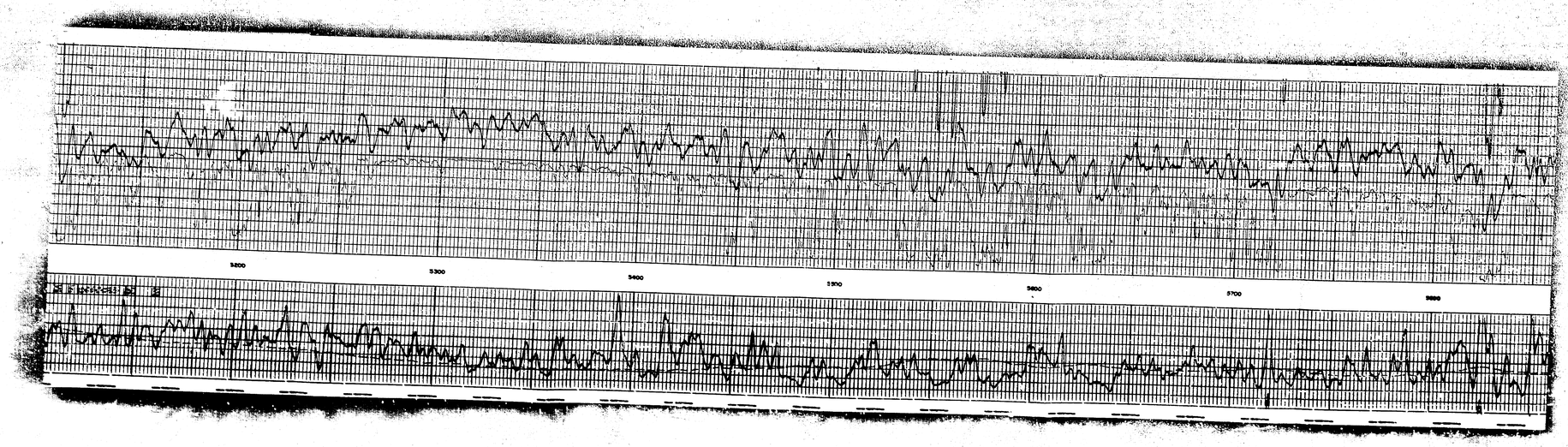

2700
2800
2900
3000
3100
3200
3300

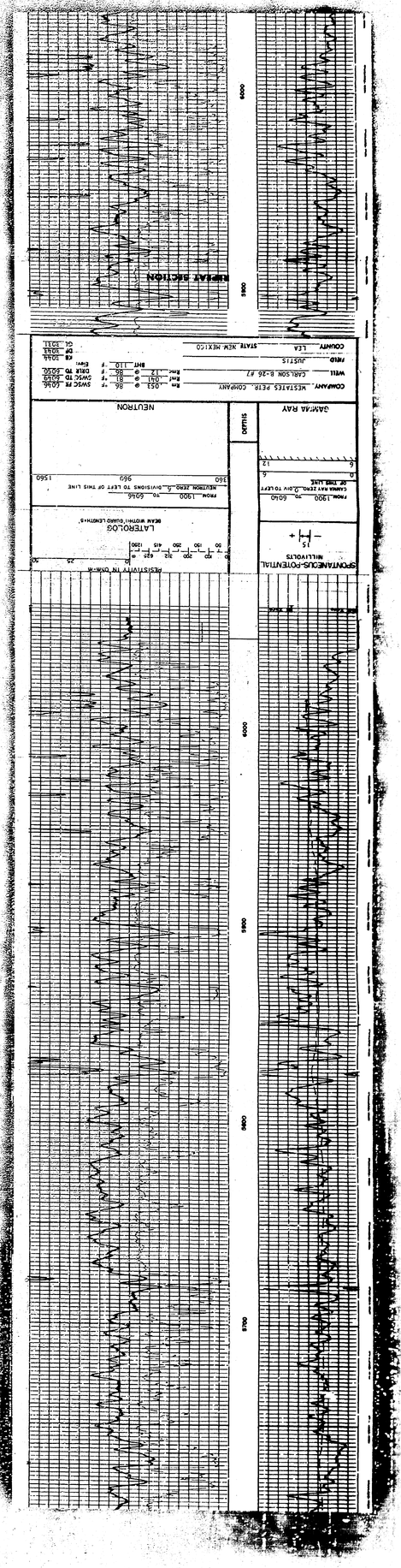

3200
3300
3400
3500
3600
3700
3800

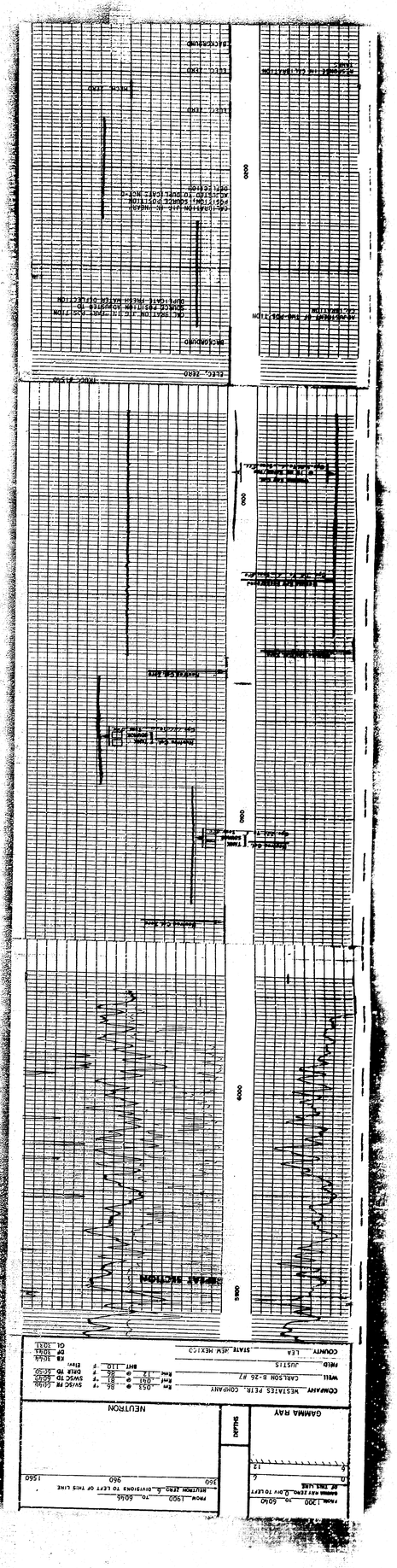

3700
3800
3900
4000
4100
4200
4300


4200
4300
4400
4500
4600
4700
4800


4700
4800
4900
5000
5100
5200
5300


5200
5300
5400
5500
5600
5700
5800


COMPANY WESTATES PETR. COMPANY
WELL CARLSON B-26 #7
FIELD JUSTIS
COUNTY LEA STATE NEW MEXICO
SPONTANEOUS-POTENTIAL MILLIVOLTS
LATEROLOG
GAMMA RAY
NEUTRON
6000
5900
5800


GAMMA RAY
NEUTRON
SHEAR
COMPANY MESTATES PETR. COMPANY
WELL CARLSON B-36 #7
FIELD JUSTIS
COUNTY LEA STATE NEW MEXICO
SPECIAL SECTION