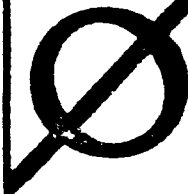


EXHIBIT # 2



DRESSER

Compensated **Densilog**[®]
Compensated **Neutron**
Gamma Ray



FILE NO	COMPANY <u>ANADARKO PRODUCTION CO.</u>	
API NO	WELL <u>BALLARD GESA TRACT 22 NO. 1</u>	
	FIELD <u>LOCO HILLS</u>	
	COUNTY <u>EDDY</u>	STATE <u>NEW MEXICO</u>
LOCATION		Other Services
<u>340' FSL - 1960' FWL</u>		DLL/MLL PROLOC
SEC. <u>5</u>	TWP. <u>10 S</u>	RGE. <u>29 E</u>

Permanent Datum <u>GROUND LEVEL</u>	Elev. <u>3550</u>	Elev. <u>3550</u>
Log Measured from <u>K.B.</u>	<u>17.2</u> Ft. Above Permanent Datum	OF <u>3550</u>
Drilling Measured from <u>K.B.</u>		GC <u>3550</u>

Date	<u>10-7-82</u>	<div style="border: 2px solid black; padding: 5px;"> <p style="text-align: center;">BEFORE EXAMINER'S OFFICE</p> <p style="text-align: center;">OIL CONSERVATION DIVISION</p> <p style="text-align: center;"><i>Anadarko</i> EXHIBIT NO. <u>4</u></p> <p style="text-align: center;">CASE NO. <u>8381</u></p> </div>			
Run No.	<u>ONE</u>				
Service Order	<u>54531</u>				
Depth - Driller	<u>2765</u>				
Depth - Logger	<u>2765</u>				
Bottom Logged Interval	<u>2765</u>				
Top Logged Interval	<u>SURFACE</u>				
Casing - Driller	<u>8.5 @ 380</u>	@	@	@	@
Casing - Logger	<u>377</u>				
Casing Size	<u>7.875</u>				
Type Fluid in Hole	<u>Salt Gel Starch</u>				
Density and Viscosity	<u>10.2 @ 32</u>				
pH and Fluid Loss	<u>8.5 NA cc</u>	cc	cc	cc	cc
Source of Sample	<u>PIT</u>				
Rm @ Meas Temp	<u>.057 @ 77 °F</u>	@ °F	@ °F	@ °F	@ °F
Rm @ Meas Temp	<u>.046 @ 77 °F</u>	@ °F	@ °F	@ °F	@ °F
Rm @ Meas Temp	<u>- @ - °F</u>	@ °F	@ °F	@ °F	@ °F
Source of Rmt and Rmc	<u>M</u>				
Rm @ BHT	<u>.045 @ 90 °F</u>	@ °F	@ °F	@ °F	@ °F
Time Since Circ	<u>4</u>				
Max Rec Temp Deg F	<u>96</u>	°F	°F	°F	°F
Equip. No. and Location	<u>631 Rm 102</u>				
Recorded By	<u>2/1/82</u>				
Witnessed By	<u>6/1/82</u>				

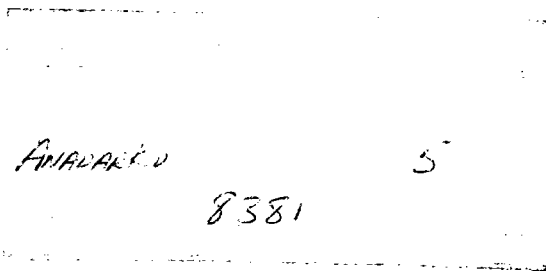
ILLEGIBLE

ANADARKO PRODUCTION COMPANY
BALLARD GSA UNIT - ADDITIONAL WATER INJECTION WELLS
DATA ON PROPOSED OPERATION

1. Proposed injection rates:
 - a) Average daily rate - 200 BWPD/well
 - b) Maximum daily rate - 400 BWPD/well
 - c) Total monthly volume - approximately 12,000 BW/well
2. Whether the system is open or closed: closed
3. Proposed injection pressures:
 - a) Average pressure - 1400 p.s.i.g.
 - b) Maximum pressure - 1500 p.s.i.g.
4. Type of injection fluid: The fluid will be a mixture of produced water from the Ballard GSA Unit and fresh water from the City of Carlsbad (see attached analyses and compatibility test).

GEOLOGICAL DATA

1. Geologic name of injection zone: water injection will be in the Grayburg formation, Metex and Premier sands.
2. Lithologic detail of injection zone: the Metex and Premier sands are gray, fine to medium grain, calcareous sandstones interbedded with dense dolomites and anhydrites.
3. Thickness of injection zone:
 - a) Average thickness - approximately 225 ft.
 - b) Range of thickness - approximately 220 ft. to 240 ft.
4. Depth of injection zone:
 - a) Average depth - approximately 2520 ft.
 - b) Range of depth - approximately 2450 - 2590 ft.
5. Geologic name and depth to bottom of all underground sources of drinking water (TDS of 10,000 mg/l or less) overlying or immediately under injection zone: Triassic sands from 0 - 150 ft., Rustler from 150-200 ft. Sampled fresh water well is of unknown depth but analysis indicates it is probably from the Rustler.



PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR

Ballard GSA Unit
LEASE

10-3
WELL NO.

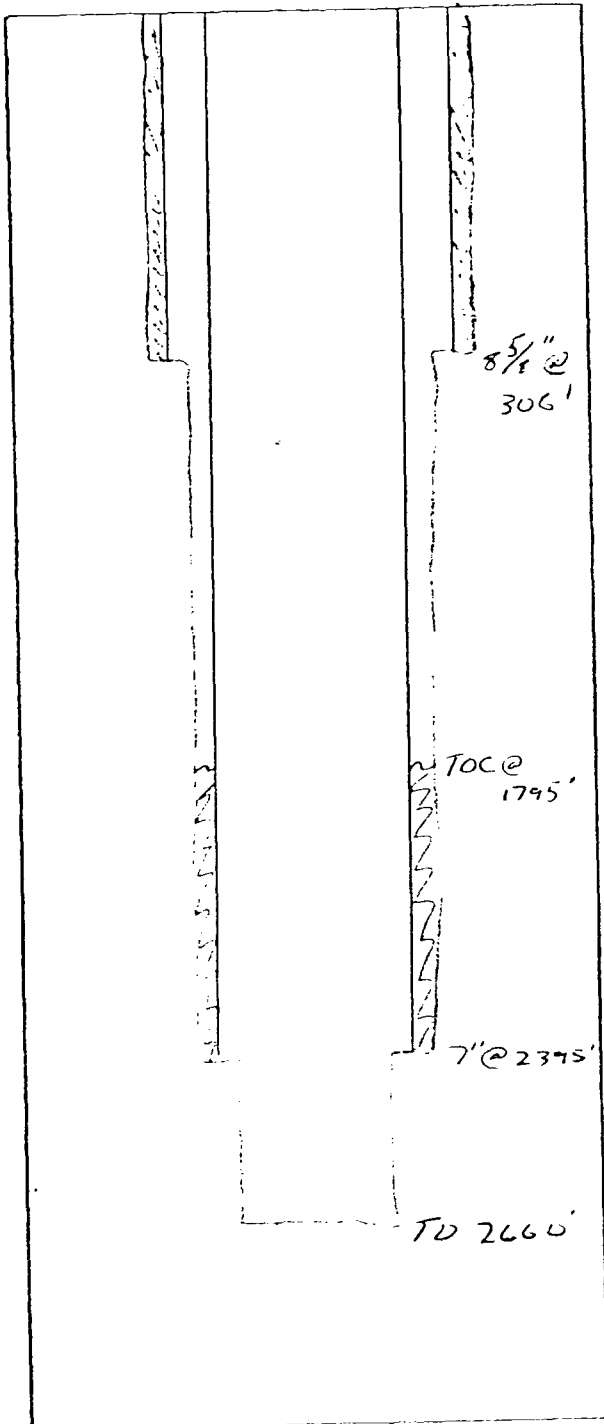
2310' FNL & 990' FWL
FOOTAGE LOCATION:

4
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic



Completion Date 4/15/39

Plugging Date 1948

Deepest Depth Drilled 2660

Surface Casing

Size 8-5/8 Set At 306 with 50 sxs

Left in Hole 306

Size Hole _____

Intermediate Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Production Casing

Size 7 Set At 2395 with 50 sxs

Left in Hole _____

Size Hole _____

Liner

Size _____ From _____

Cemented with _____

Size Hole _____

Left in Hole _____

Cement Plugs

Depth	Amount	At
-------	--------	----

NO RECORD

Anadarko
8381
6

Producing Zones

Depth	Name
-------	------

PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR

Ballard GSA Unit
LEASE

26-2
WELL NO.

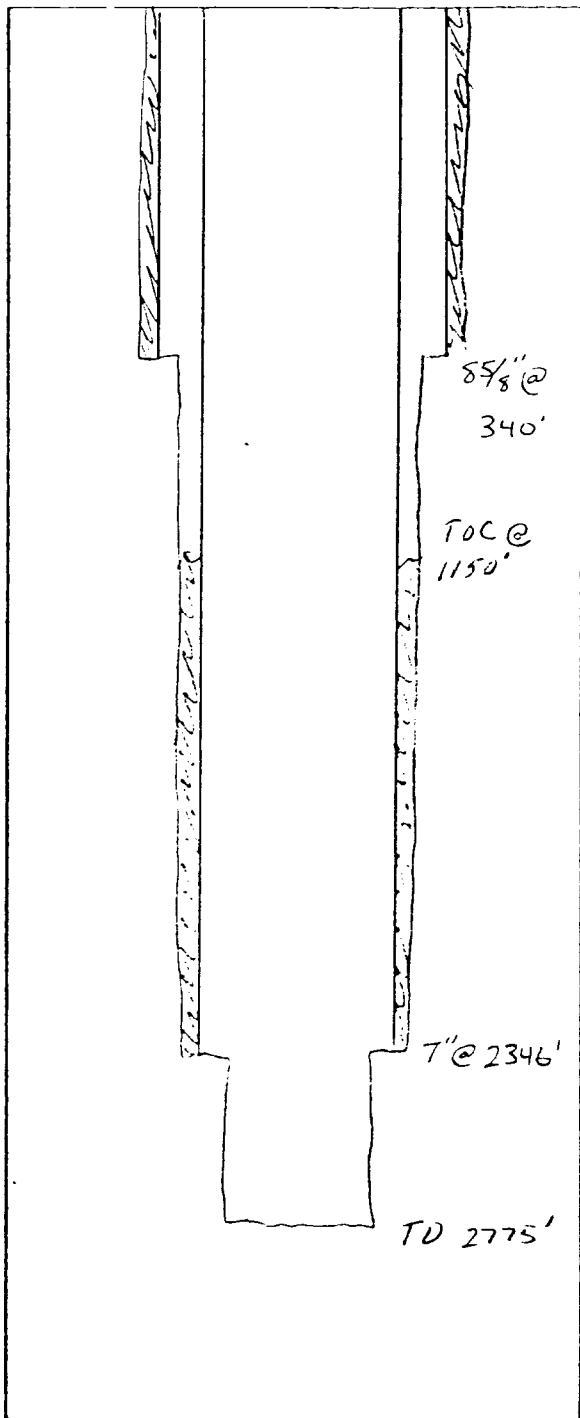
990' FWL & 330' FSL
FOOTAGE LOCATION

4
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic



Completion Date 12/28/39

Plugging Date --

Deepest Depth Drilled 2775

Surface Casing

Size 8-5/8 Set At 340 with 35 sxs

Left in Hole _____

Size Hole 10"

Intermediate Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Production Casing

Size 7 Set At 2346 with 100 sxs

Left in Hole _____

Size Hole 8"

Liner

Size _____ From _____

Cemented with _____

Size Hole _____

Left in Hole _____

Cement Plugs

Depth	Amount	At
-------	--------	----

NO RECORD

Producing Zones

Depth	Name
-------	------

PLUGGED WELL IN AREA OF REVIEW

Anadarko PRoduction Company
OPERATOR

Ballard GSA Unit
LEASE

10-2
WELL NO.

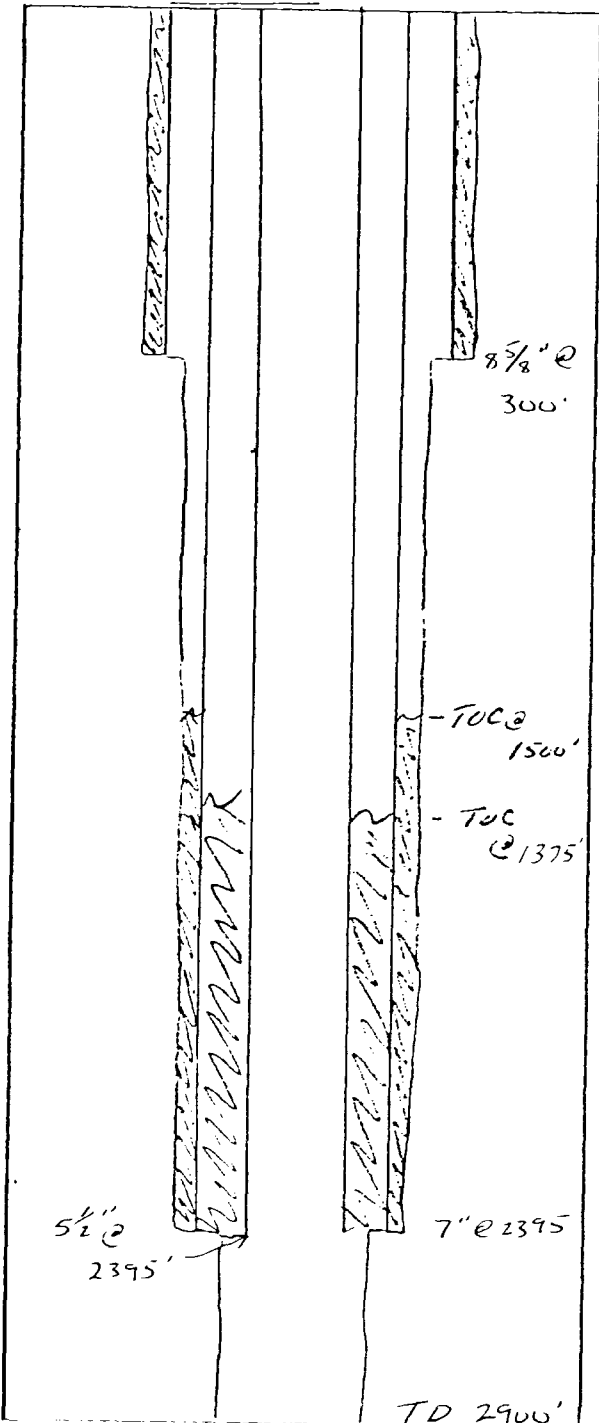
990' FNL & 330' FWL
FOOTAGE LOCATION

4
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic



Completion Date 11/13/39

Plugging Date --

Deepest Depth Drilled 2900

Surface Casing

Size 8-5/8 Set At 300 with 50 sxs

Left in Hole _____

Size Hole _____

Intermediate Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Production Casing

Size 7 Set At 2395 with 75 sxs

Left in Hole _____

Size Hole _____

Liner

Size 5-1/2 From Surface-2395'

Cemented with 50 sxs

Size Hole _____

Left in Hole _____

Cement Plugs

Depth	Amount	At
-------	--------	----

NO RECORD

Producing Zones

Depth	Name
-------	------

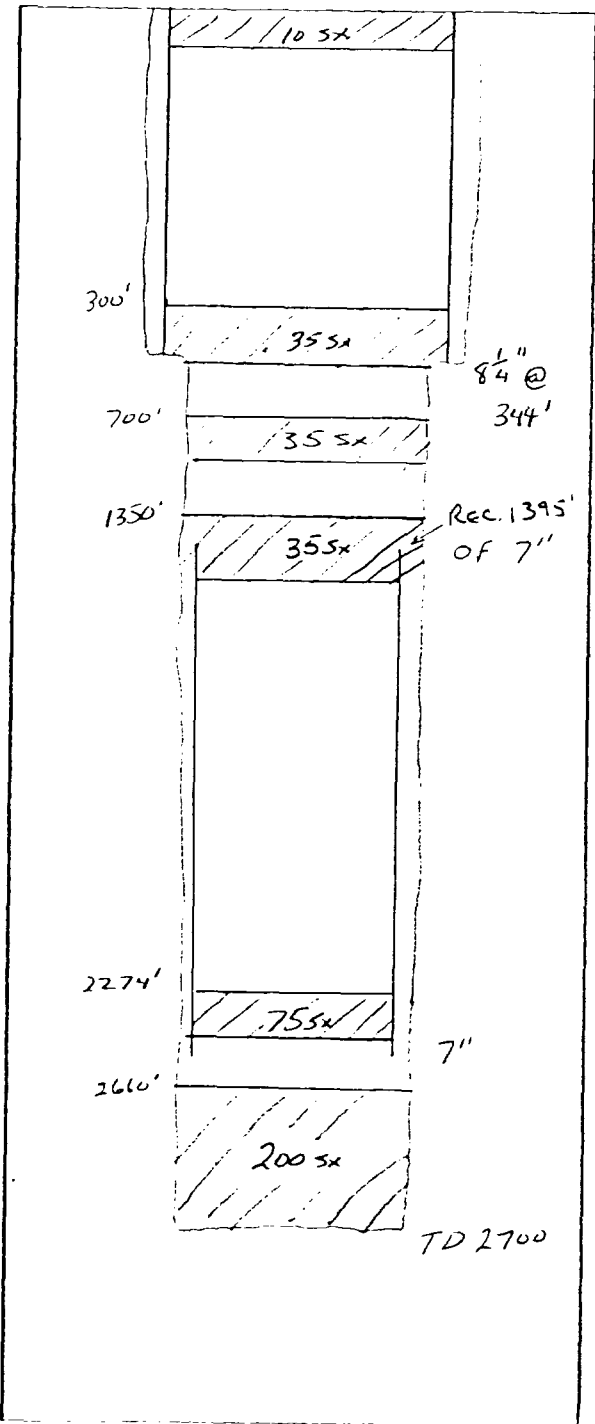
PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR
2310' FSL & 990' FWL
FOOTAGE LOCATION

Ballard GSA Unit
LEASE
5
SECTION

23-1
WELL NO.
18S
TOWNSHIP
29E
RANGE

Schematic



Completion Date 9/14/73
Plugging Date 1974
Deepest Depth Drilled 2700

Surface Casing
Size 8-1/4 Set At 344 with _____ sxs
Left in Hole 344
Size Hole _____

Intermediate Casing
Size _____ Set At _____ with _____ sxs
Left in Hole _____
Size Hole _____

Production Casing
Size 7 Set At -- with -- sxs
Left in Hole rec, 1395'
Size Hole _____

Liner
Size _____ From _____
Cemented with _____
Size Hole _____
Left in Hole _____

Cement Plugs

Depth	Amount	At
2660	200 sxs	Pay Interval
2274	75 sxs	--
1350	35 sxs	Csg stub
700	35 sxs	Base-Salt
300	35 sxs	Top-Salt
Surface	10 sxs	

Producing Zones

Depth	Name

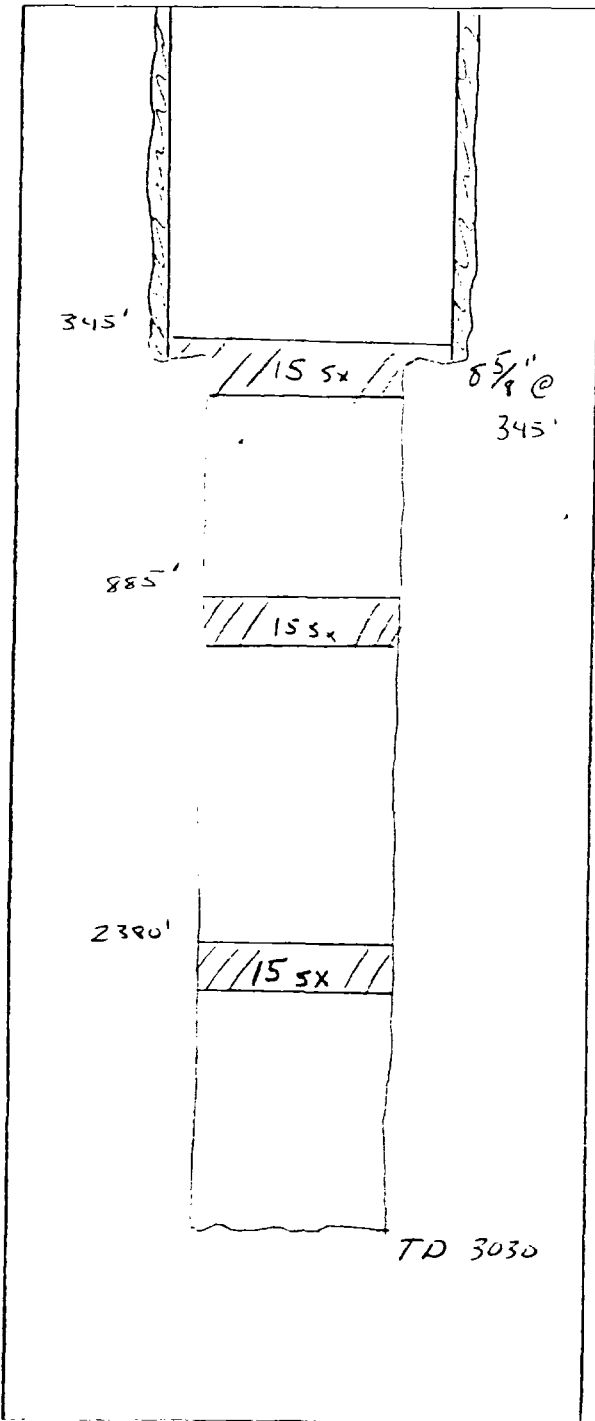
PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR
990' FNL & 330' FEL
FOOTAGE LOCATION

Ballard GSA Unit
LEASE
6
SECTION

11-5
WELL NO.
18S
TOWNSHIP
29E
RANGE

Schematic



Completion Date 2/28/50

Plugging Date --

Deepest Depth Drilled 3030

Surface Casing

Size 8-5/8 Set At 345 with 50 sxs

Left in Hole 345

Size Hole 10"

Intermediate Casing

Size Set At with sxs

Left in Hole

Size Hole

Production Casing

Size Set At with sxs

Left in Hole

Size Hole

Liner

Size From

Cemented with

Size Hole

Left in Hole

Cement Plugs

Depth	Amount	At
2380	15 sxs	Pay Interval
885	15 sxs	Base of Salt
345	15 sxs	Top of Salt

Producing Zones

Depth	Name
2520-36	Grayburg

PLUGGED WELL IN AREA OF REVIEW

Amoco Production Company
OPERATOR

Empire South Deep Unit
LEASE

9
WELL NO.

660' FNL & 990' FWL
FOOTAGE LOCATION

5
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic

Completion Date --

Plugging Date 7/22/76

Deepest Depth Drilled 11,194

Surface Casing

Size 13-3/8 Set At 400 with 400 sxs

Left in Hole 400

Size Hole

Intermediate Casing

Size 9-5/8 Set At 2900 with 1700 sxs

Left in Hole 2900

Size Hole 12-1/4

Production Casing

Size Set At with sxs

Left in Hole

Size Hole

Liner

Size From

Cemented with

Size Hole

Left in Hole

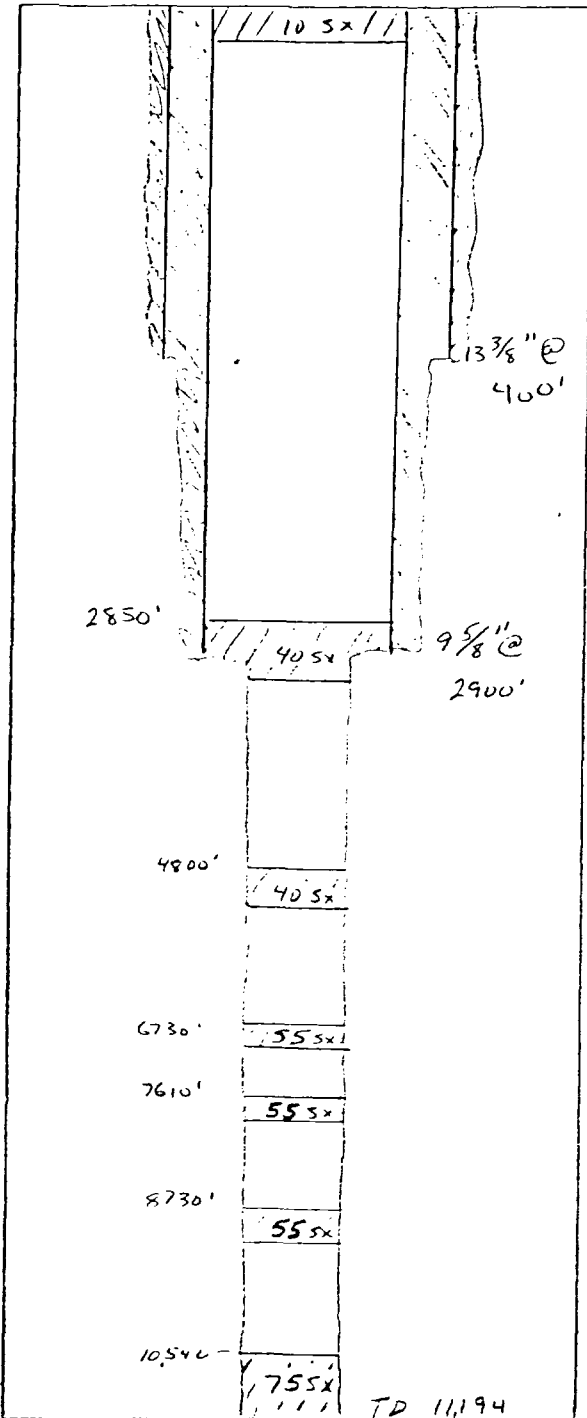
Cement Plugs

Depth	Amount	At
10,540	75 sxs	
8,730	55 sxs	
7,610	55 sxs	
6,730	55 sxs	
4,800	40 sxs	
2,850	40 sxs	
Surface	10 sxs	

Producing Zones

Depth Name

NONE



PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR

Ballard GSA Unit
LEASE

25-3
WELL NO.

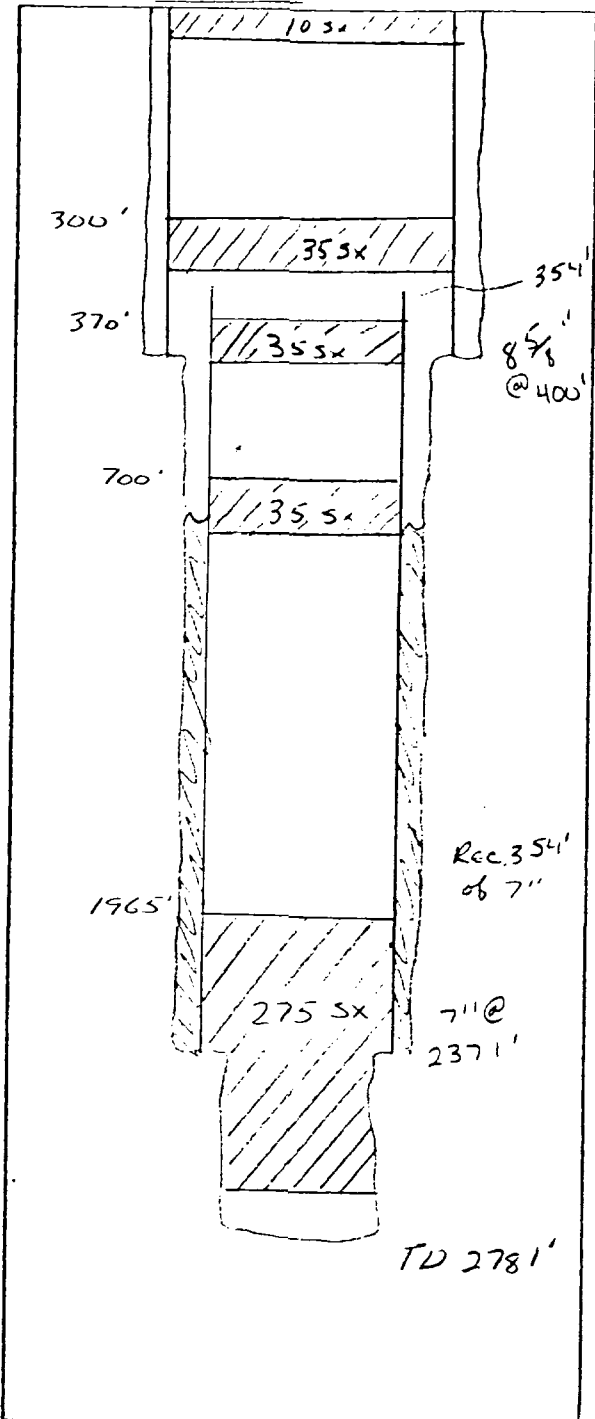
1980' FSL & 1980' FEL
FOOTAGE LOCATION

5
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic



Completion Date 4/16/74

Plugging Date 7/23/74

Deepest Depth Drilled 2781

Surface Casing

Size 8-5/8 Set At 400 with -- sxs

Left in Hole --

Size Hole ---

Intermediate Casing

Size --- Set At --- with --- sxs

Left in Hole ---

Size Hole ---

Production Casing

Size 7 Set At 2371 with 100 sxs

Left in Hole 2017

Size Hole ---

Liner

Size --- From ---

Cemented with ---

Size Hole ---

Left in Hole ---

Cement Plugs

Depth	Amount	At
1965-2712	275 sxs	Pay Interval
700	35 sxs	Base of Salt
370	35 sxs	Base of Salt
300	35 sxs	Top of Salt
Surface	10 sxs	

Producing Zones

Depth	Name
2400-2650	Grayburg

PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR

Ballard GSA Unit
LEASE

5-17
WELL NO.

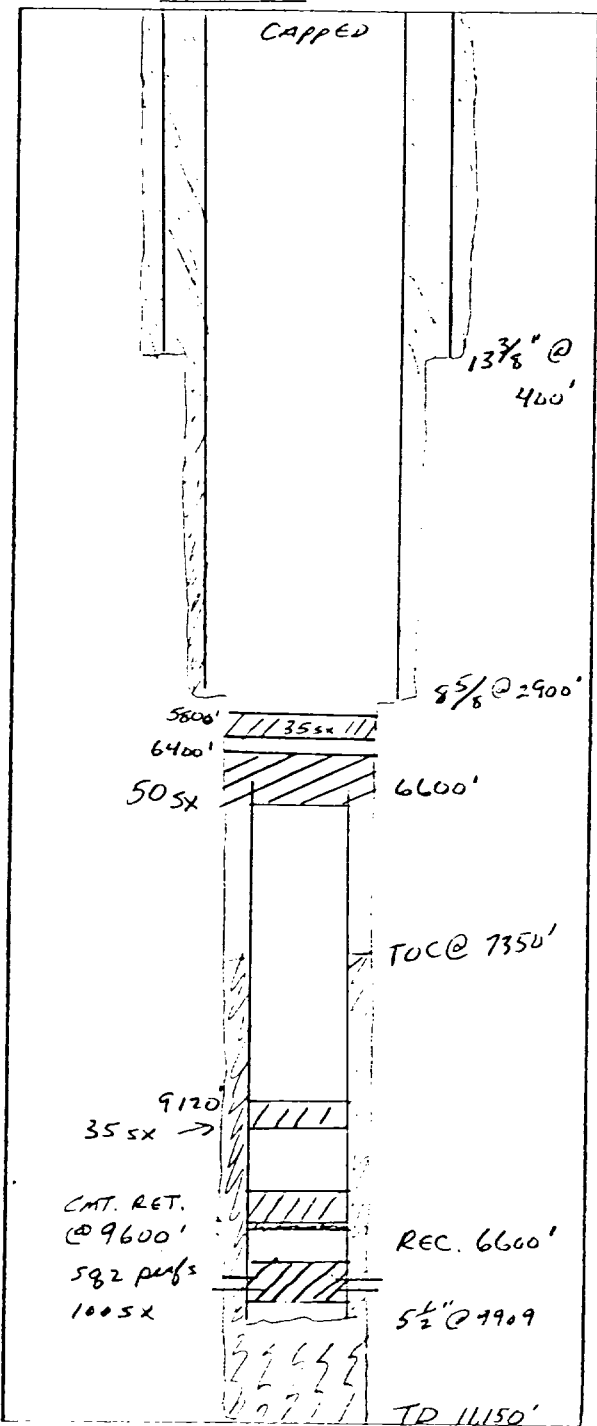
1980' FNL & 1980' FEL
FOOTAGE LOCATION

8
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic



Completion Date 1/7/78

Plugging Date TA

Deepest Depth Drilled 11,150

Surface Casing

Size 13-3/8 Set At 400 with 300 sxs

Left in Hole 400

Size Hole 17-1/2"

Intermediate Casing

Size 8-5/8 Set At 2900 with 1300 sxs

Left in Hole 2900

Size Hole 12-1/4"

Production Casing

Size 5-1/2 Set At 9909 with 500 sxs

Left in Hole 3309

Size Hole 7-7/8

Liner

Size _____ From _____

Cemented with _____

Size Hole _____

Left in Hole _____

Cement Plugs

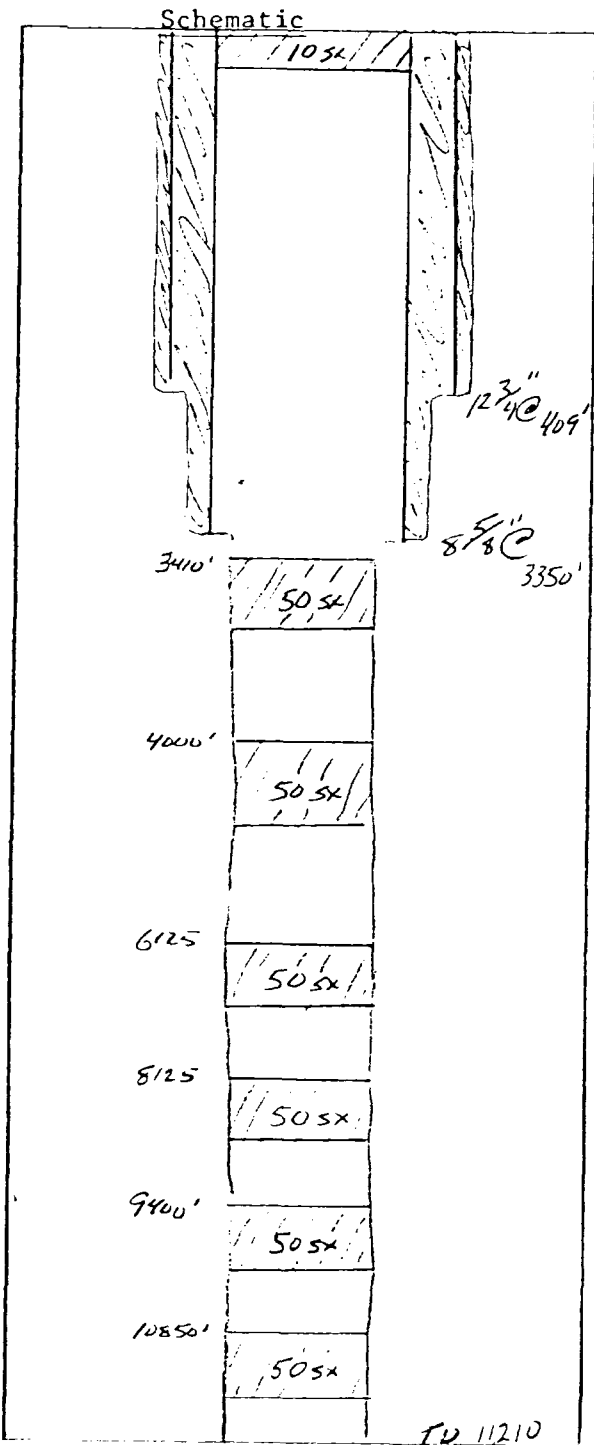
Depth	Amount	At
9670-80	100 sxs	Sqz perfs
9560-9600	--	40' on top of cmt. ret. Set @ 9600'.
9120-9324	35 sxs	
6485-6700	50 sxs	
5800-5900	35 sxs	

Producing Zones

Depth	Name
9670-80	Cisco

PLUGGED WELL IN AREA OF REVIEW

Depco, Inc. OPERATOR	Loco Hills Deep LEASE	1 WELL NO.
1980' FNL & 1980' FWL FOOTAGE LOCATION	9 SECTION	18S TOWNSHIP
		29E RANGE



Completion Date 2/5/77
 Plugging Date 2/5/77
 Deepest Depth Drilled 11,210

Surface Casing

Size 12-3/4 Set At 409 with 475 sxs
 Left in Hole 490
 Size Hole _____

Intermediate Casing

Size 8-5/8 Set At 3350 with 1050 sxs
 Left in Hole 3350
 Size Hole _____

Production Casing

Size _____ Set At _____ with _____ sxs
 Left in Hole _____
 Size Hole _____

Liner

Size _____ From _____
 Cemented with _____
 Size Hole _____
 Left in Hole _____

Cement Plugs

Depth	Amount	At
10,850	50 sxs	
9,400	50 sxs	
8,125	50 sxs	
6,125	50 sxs	
4,000	50 sxs	
3,410	50 sxs	
Surface	10 sxs	

Producing Zones

Depth _____ Name _____

PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR

J. L. Langford
LEASE

3
WELL NO.

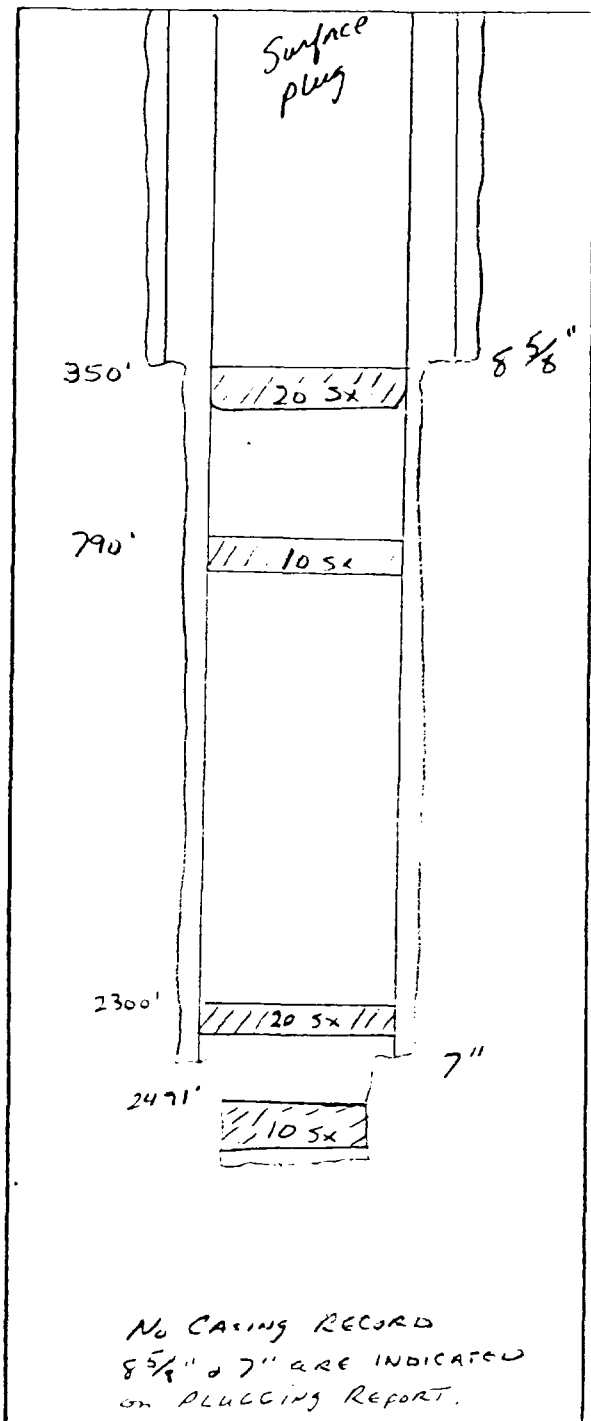
2310' FNL & 990' FWL
FOOTAGE LOCATION

9
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic



Completion Date _____

Plugging Date 1946

Deepest Depth Drilled _____

Surface Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Intermediate Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Production Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Liner

Size _____ From _____

Cemented with _____

Size Hole _____

Left in Hole _____

Cement Plugs

Depth	Amount	At
2491	10 sxs	Across Pay Zone
Approx. 2300	20 sxs	Bottom of 7"
790	10 sxs	Bottom of salt section
350	20 sxs	Bottom of 8-5/8"
Surface to 350'	--	--

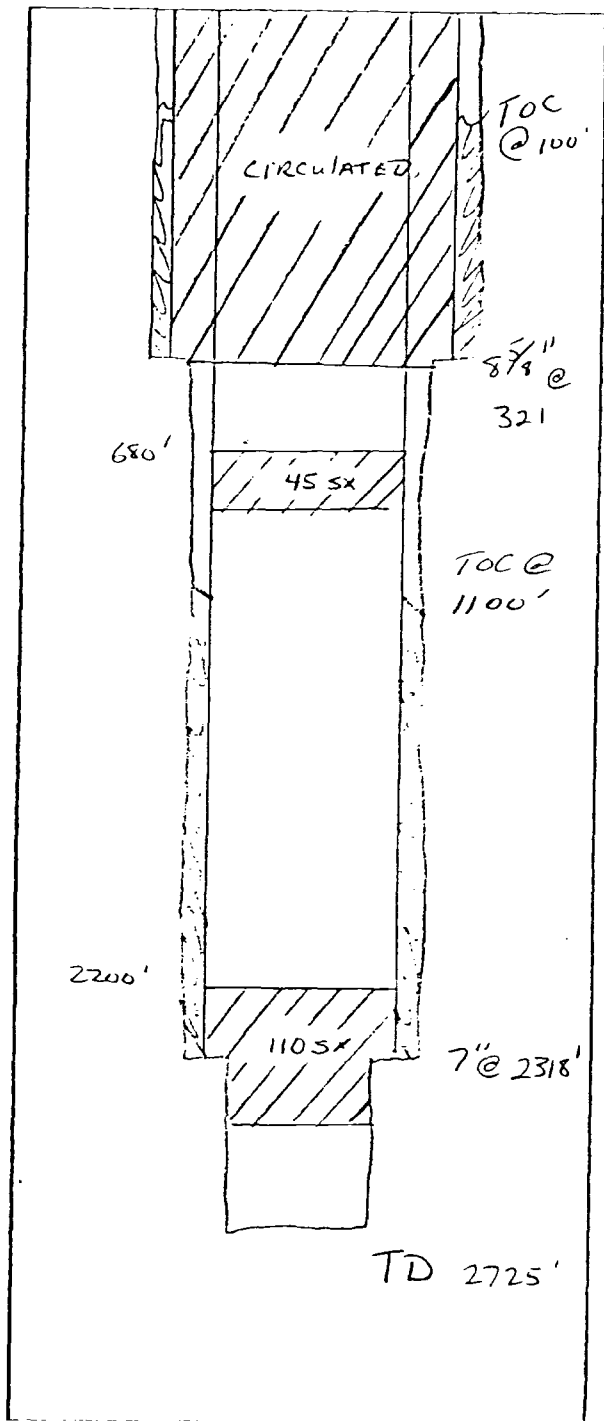
Producing Zones

Depth Name

PLUGGED WELL IN AREA OF REVIEW

Gordon Cone	J. L. Langford	1
OPERATOR	LEASE	WELL NO.
1980' FSL & 660' FWL	9	18S
FOOTAGE LOCATION	SECTION	TOWNSHIP
		29E
		RANGE

Schematic



Completion Date 8/15/39

Plugging Date 5/11/83

Deepest Depth Drilled 2725

Surface Casing

Size 8-5/8 Set At 321 with 25 sxs

Left in Hole 321

Size Hole 10"

Intermediate Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Production Casing

Size 7 Set At 2318 with 100 sxs

Left in Hole 2318

Size Hole 8"

Liner

Size _____ From _____

Cemented with _____

Size Hole _____

Left in Hole _____

Cement Plugs

Depth	Amount	At
2200-2450	110 sxs	Top of producing zone
680-820	45 sxs	Bottom of salt
Surface to 320	Circulated	
	Down 7" and out sqz holes @ 320'	
	and up 8-5/8" csg.	

Producing Zones

Depth	Name
2400-2725	Grayburg

PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR

J. L. Langford
LEASE

1
WELL NO.

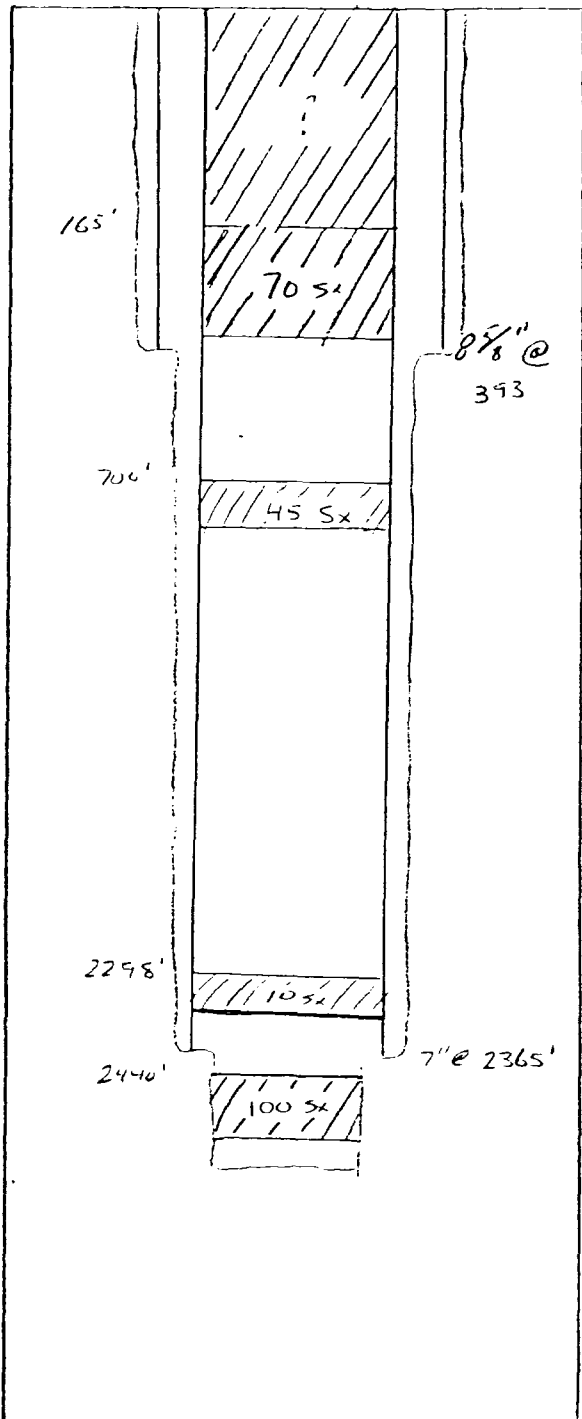
330' FNL & 2310' FWL
FOOTAGE LOCATION

9
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic



Completion Date 12/15/39

Plugging Date 5/20/83

Deepest Depth Drilled 2495

Surface Casing

Size 8-5/8 Set At 393 with -- sxs

Left in Hole 393

Size Hole 10"

Intermediate Casing

Size Set At with sxs

Left in Hole

Size Hole

Production Casing

Size 7 Set At 2365 with -- sxs

Left in Hole 2365

Size Hole 8"

Liner

Size From

Cemented with

Size Hole

Left in Hole

Cement Plugs

Depth	Amount	At
2440-60	100 sxs	Pay Zone
2298-2348	10 sxs	Bottom of 7"
700-840	45 sxs	Bottom of salt
165-370	70 sxs	Top of salt

Surface-165

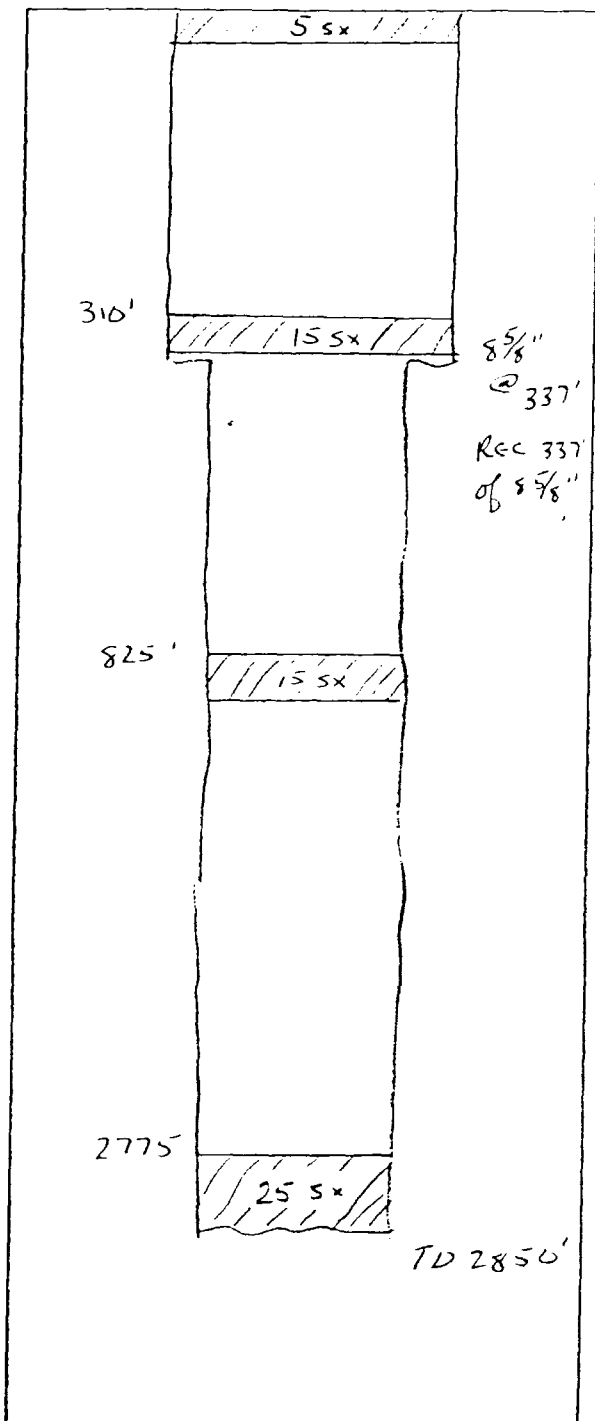
Producing Zones

Depth	Name
2500-2550	Loco Hills Sand

PLUGGED WELL IN AREA OF REVIEW

Depeco, Inc. OPERATOR	Miller LEASE	1 WELL NO.
1980' FNL & 1980' FWL FOOTAGE LOCATION	4 SECTION	18S TOWNSHIP
		29E RANGE

Schematic



Completion Date 8/26/60

Plugging Date 8/26/60

Deepest Depth Drilled 2850

Surface Casing

Size 8-5/8 Set At 337 with -- sxs

Left in Hole 0

Size Hole 12-1/4"

Intermediate Casing

Size Set At with sxs

Left in Hole

Size Hole

Production Casing

Size Set At with sxs

Left in Hole

Size Hole

Liner

Size From

Cemented with

Size Hole

Left in Hole

Cement Plugs

Depth	Amount	At
2775	25 sxs	
825	15 sxs	Base of Salt
310	15 sxs	Top of Salt
Surface	5 sxs	

Producing Zones

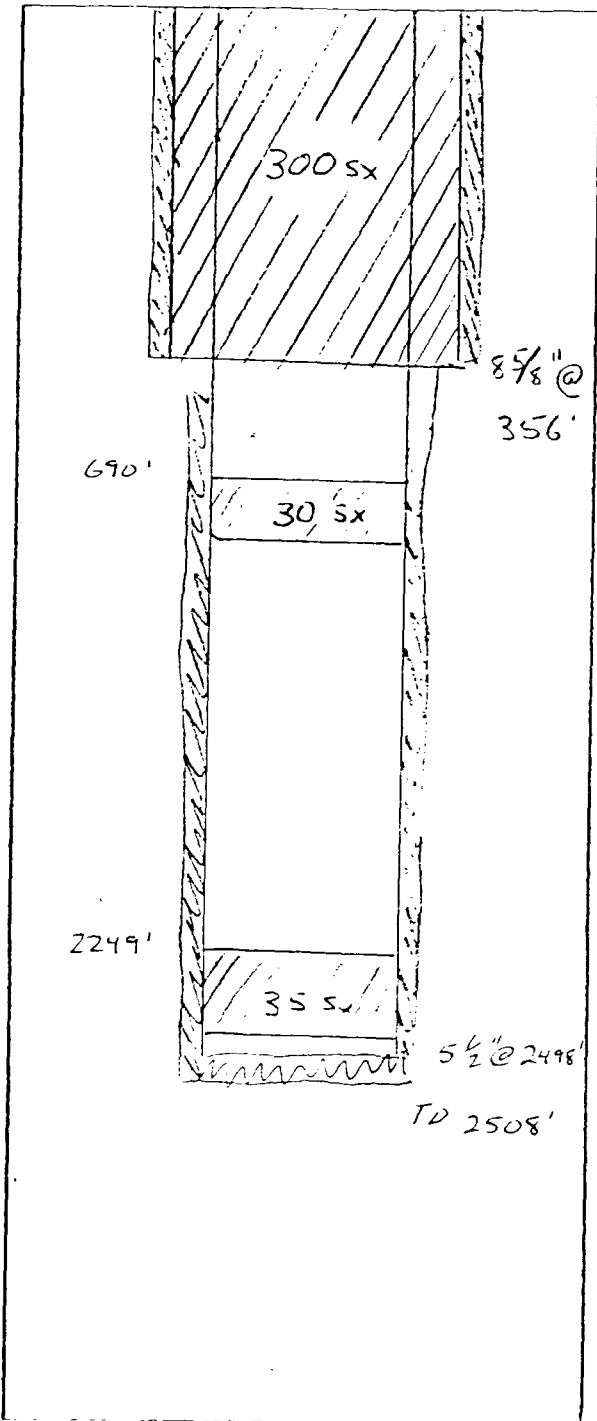
Depth Name

NONE

PLUGGED WELL IN AREA OF REVIEW

<u>Gordon Cone</u> OPERATOR	<u>Far West Loco Hills Sand Unit</u> LEASE	<u>10-33</u> WELL NO.
<u>1980' FSL & 1310' FWL</u> FOOTAGE LOCATION	<u>9</u> SECTION	<u>18S</u> TOWNSHIP
		<u>29E</u> RANGE

Schematic



Completion Date 1/4/73

Plugging Date 5/83

Deepest Depth Drilled 2508

Surface Casing

Size 8-5/8 Set At 356 with 150 sxs

Left in Hole 356

Size Hole 12-1/4"

Intermediate Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Production Casing

Size 5-1/2 Set At 2498 with 200 sxs

Left in Hole 2498

Size Hole 7-7/8"

Liner

Size _____ From _____

Cemented with _____

Size Hole _____

Left in Hole _____

Cement Plugs

Depth	Amount	At
2249-2485	35 sxs	Top of Pay Zone
690-815	30 sxs	Bottom of salt
Surface-355'	300 sxs	Circ. down 5-1/2" out sqz holes @ 355 & up 8-5/8".

Producing Zones

Depth	Name
2450-2500	Loco Hills Sand

PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR

H. G. Watson
LEASE

1
WELL NO.

2310' FSL & 1650' FWL
FOOTAGE LOCATION

4
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic

Completion Date 10/20/39

Plugging Date 3/26/51

Deepest Depth Drilled 2638

Surface Casing

Size 8-5/8 Set At 399 with 40 sxs

Left in Hole 0

Size Hole 10"

Intermediate Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Production Casing

Size 7 Set At 2385 with 100 sxs

Left in Hole 1849

Size Hole 8"

Liner

Size _____ From _____

Cemented with _____

Size Hole _____

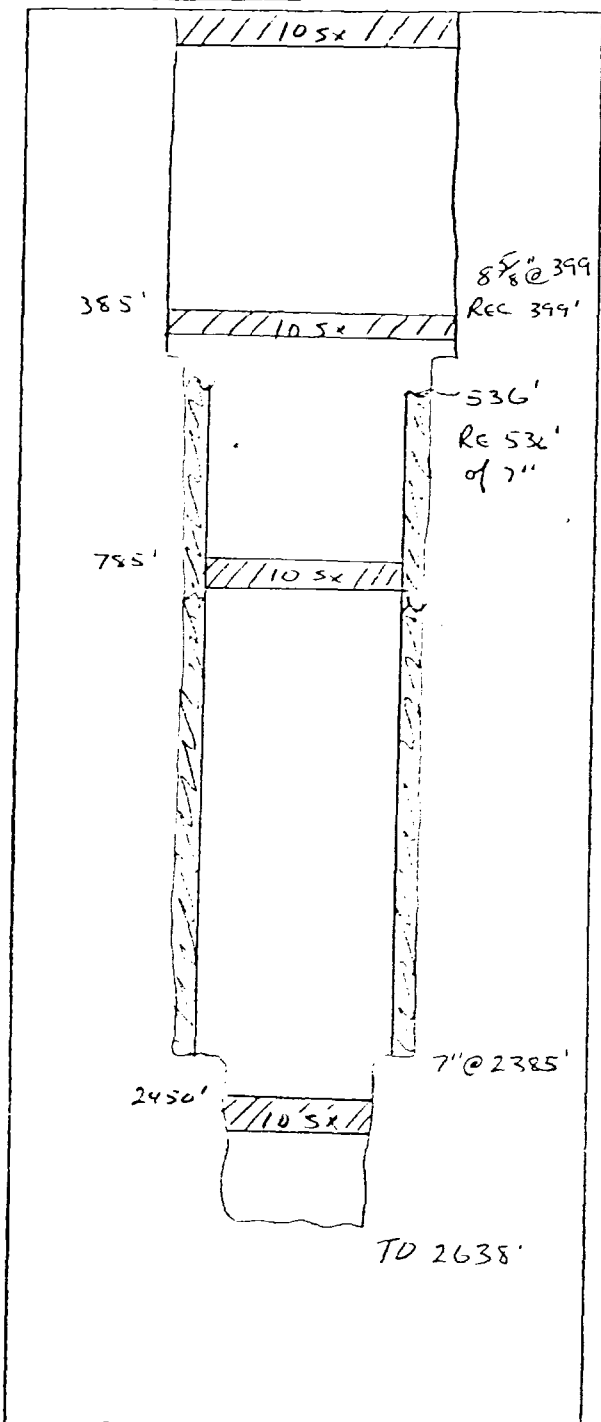
Left in Hole _____

Cement Plugs

Depth	Amount	At
2450	10 sxs	Pay Interval
785	10 sxs	Base of Salt
385	10 sxs	Top of Salt
Surface	10 sxs	

Producing Zones

Depth	Name
2500	Grayburg



TD 2638'

PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR

H. G. Watson
LEASE

3
WELL NO.

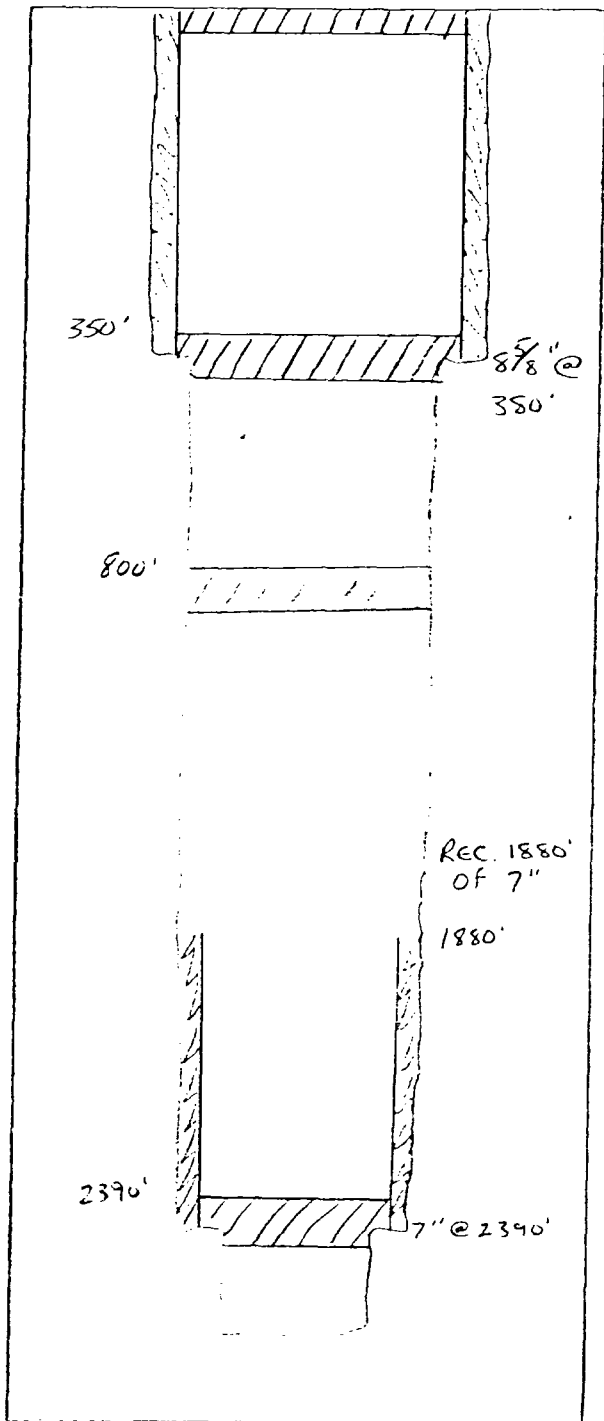
2310' FWL & 330' FSL
FOOTAGE LOCATION

4
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic



Completion Date 2/15/40

Plugging Date 4/7/48

Deepest Depth Drilled 2595

Surface Casing

Size 8-5/8 Set At 380 with 75 sxs

Left in Hole 380

Size Hole 10"

Intermediate Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Production Casing

Size 7 Set At 2390 with 100 sxs

Left in Hole 510

Size Hole 8"

Liner

Size _____ From _____

Cemented with _____

Size Hole _____

Left in Hole _____

Cement Plugs

Depth	Amount	At
2390	--	Pay Interval
800	--	Base of Salt
350	--	Top of Salt
Surface	--	

All depths are approximations, no cmt volumes given in plugging report.

Producing Zones

Depth	Name
2400	Grayburg

PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR

Far West Loco Hills Sand Unit
LEASE

8-27
WELL NO.

10' FSL & 2630' FEL
FOOTAGE LOCATION

4
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic

Completion Date 4/4/69

Plugging Date 5/23/83

Deepest Depth Drilled 2525

Surface Casing

Size 8-5/8 Set At 376 with 150 sxs

Left in Hole 376

Size Hole 12-1/4"

Intermediate Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Production Casing

Size 4-1/2 Set At 2525 with 200 sxs

Left in Hole 2525

Size Hole 7-7/8"

Liner

Size _____ From _____

Cemented with _____

Size Hole _____

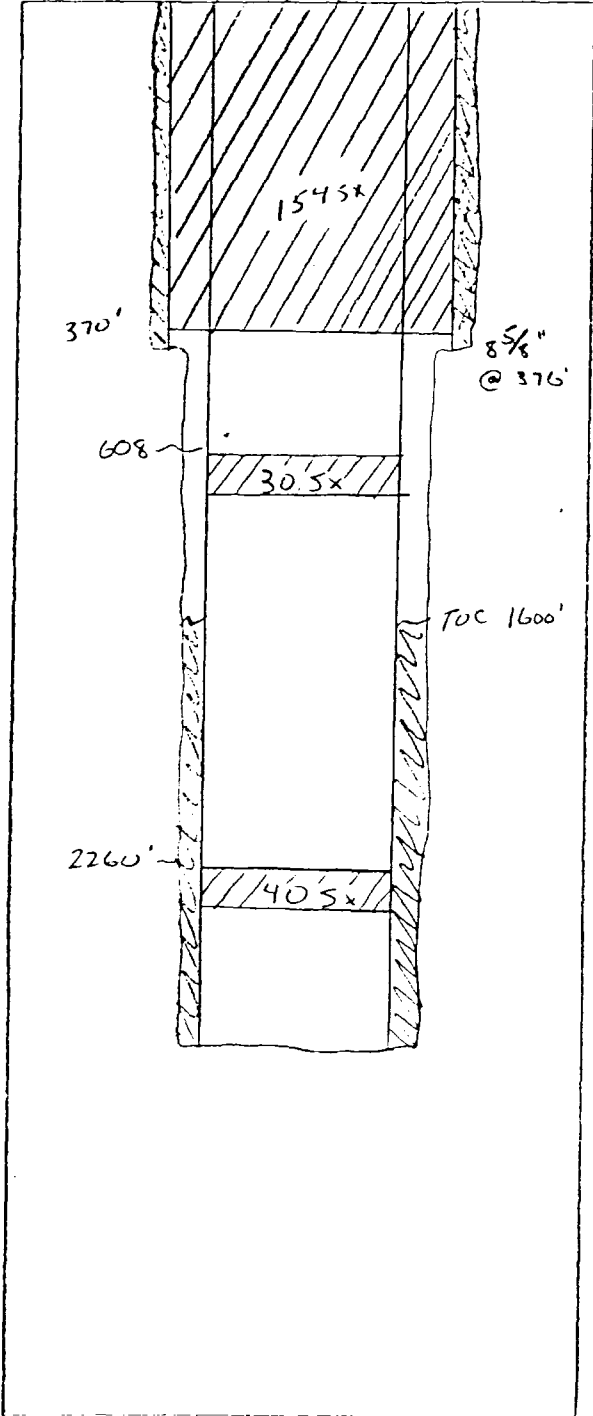
Left in Hole _____

Cement Plugs

Depth	Amount	At
2260-2470	40 sxs	Pay Interval
608-848	30 sxs	Base of Salt
Surface to 370	154 sxs	

Producing Zones

Depth _____ Name _____



PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR

H. G. Watson
LEASE

2
WELL NO.

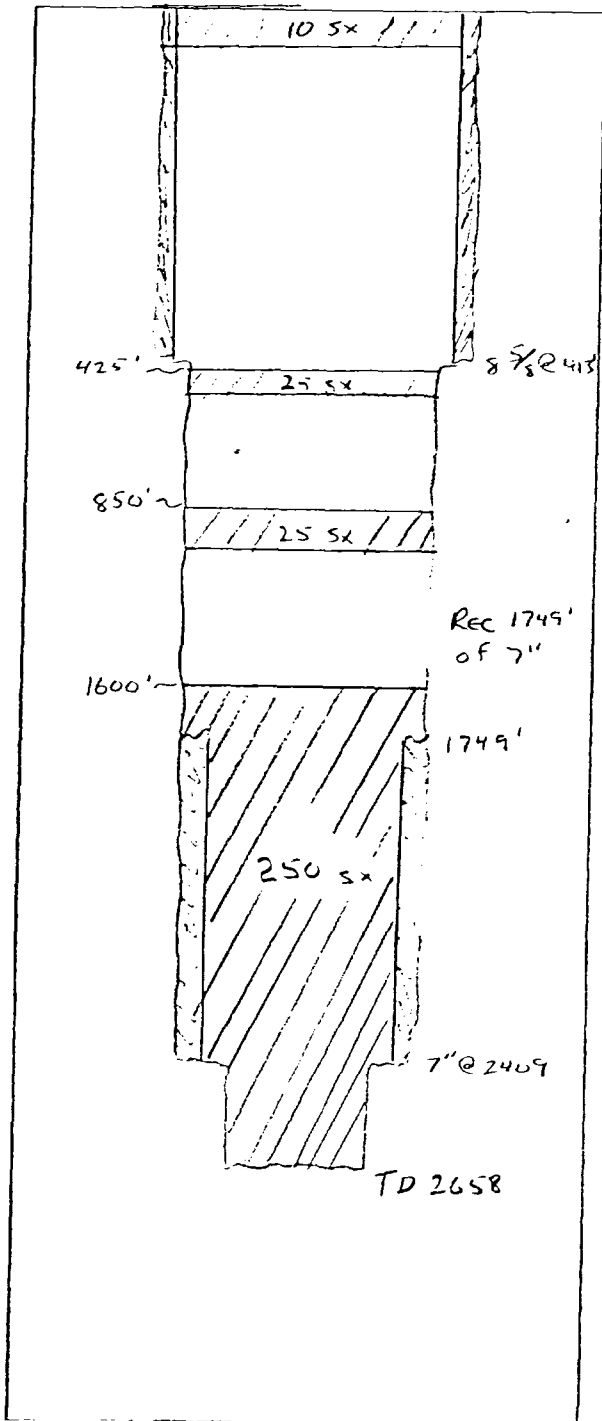
330' FSL & 1650' FEL
FOOTAGE LOCATION

4
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic



Completion Date 11/21/39

Plugging Date 4/16/71

Deepest Depth Drilled 2658

Surface Casing

Size 8-5/8 Set At 413 with 50 sxs

Left in Hole 413

Size Hole 10"

Intermediate Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Production Casing

Size 7 Set At 2409 with 100 sxs

Left in Hole 609

Size Hole 8"

Liner

Size _____ From _____

Cemented with _____

Size Hole _____

Left in Hole _____

Cement Plugs

Depth	Amount	At
1600-2650	250 sxs	Pay Interval
850	25 sxs	Base of Salt
425	25 sxs	Top of Salt
Surface	10 sxs	

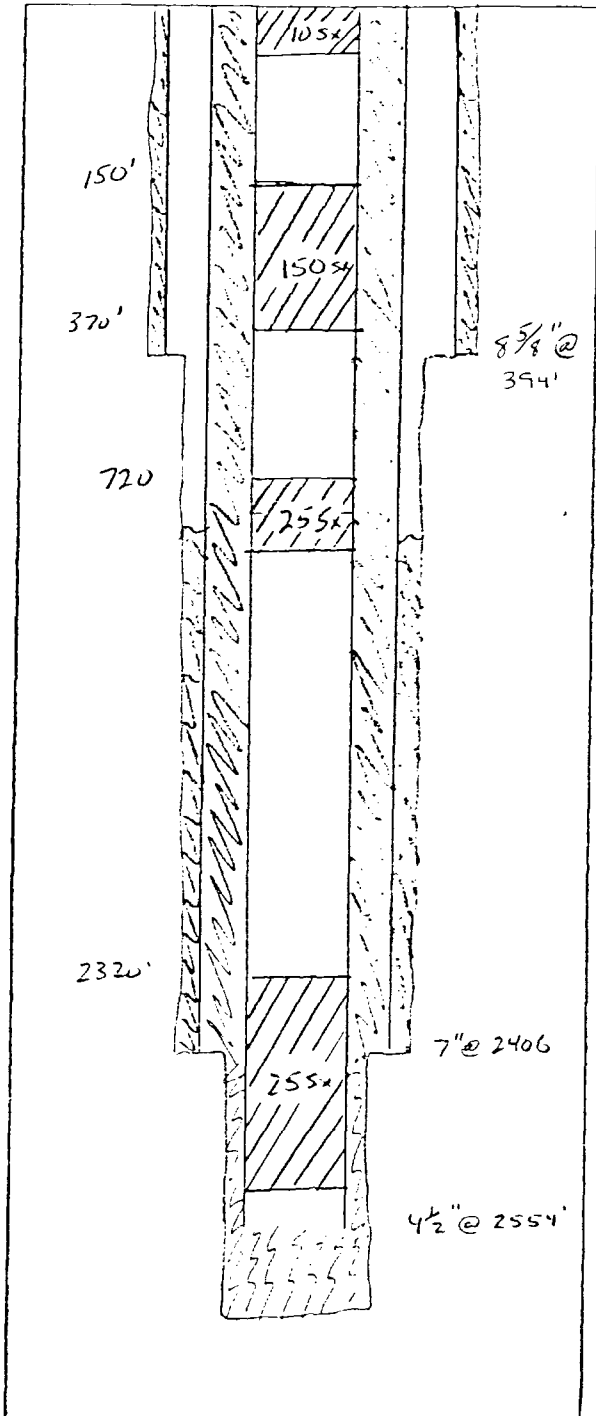
Producing Zones

Depth	Name
2409-2658	Grayburg

PLUGGED WELL IN AREA OF REVIEW

Depeco, Inc. OPERATOR	Miller LEASE	2 WELL NO.
2310' FNL & 1650' FEL FOOTAGE LOCATION	4 SECTION	18S TOWNSHIP
		29E RANGE

Schematic



Completion Date 6/11/70

Plugging Date 5/25/83

Deepest Depth Drilled 2860

Surface Casing

Size 8-5/8 Set At 394 with 50 sxs

Left in Hole 394

Size Hole 12-1/4"

Intermediate Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Production Casing

Size 7 Set At 2406 with 100 sxs

Left in Hole 2406

Size Hole 7-7/8"

Liner

Size 4-1/2 From Surface-2554'

Cemented with 250 sxs

Size Hole 6-1/4"

Left in Hole _____

Cement Plugs

Depth	Amount	At
2320-2530	25 sxs	Pay Interval
720-900	25 sxs	Base of Salt
105-375	150 sxs	Base of Salt
Surface	10 sxs	

Producing Zones

Depth	Name
2600-2800	Grayburg

PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR

H. G. Watson
LEASE

4
WELL NO.

1650' FSL & 1650' FEL
FOOTAGE LOCATION

4
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic

Completion Date 4/1/50

Plugging Date 6/14/71

Deepest Depth Drilled 2608

Surface Casing

Size 8-5/8 Set At 390 with 50 sxs

Left in Hole 390

Size Hole 12-1/4"

Intermediate Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Production Casing

Size 7 Set At 2430 with 100 sxs

Left in Hole 2430

Size Hole 8"

Liner

Size 5-1/2 From Surface-2580

Cemented with _____

Size Hole _____

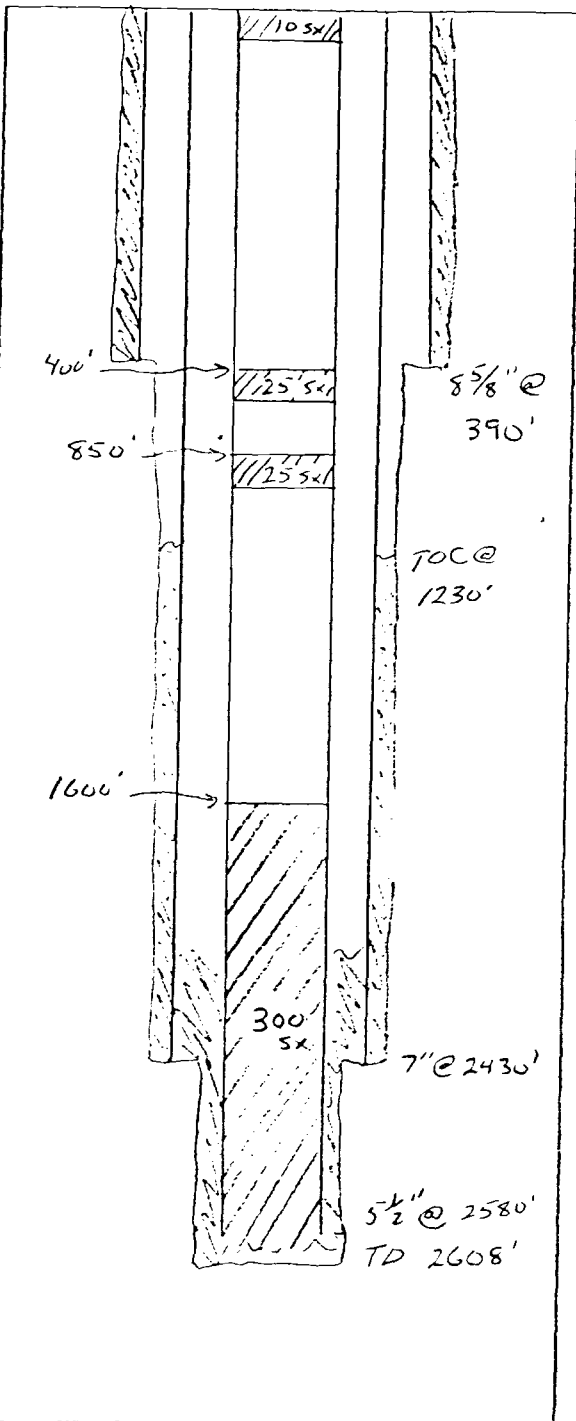
Left in Hole _____

Cement Plugs

Depth	Amount	At
1600-2600	300 sxs	Pay Interval
850	25 sxs	Base of Salt
400	25 sxs	Top of Salt
Surface	10 sxs	

Producing Zones

Depth	Name
2500	Grayburg



PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR

H. G. Watson
LEASE

7
WELL NO.

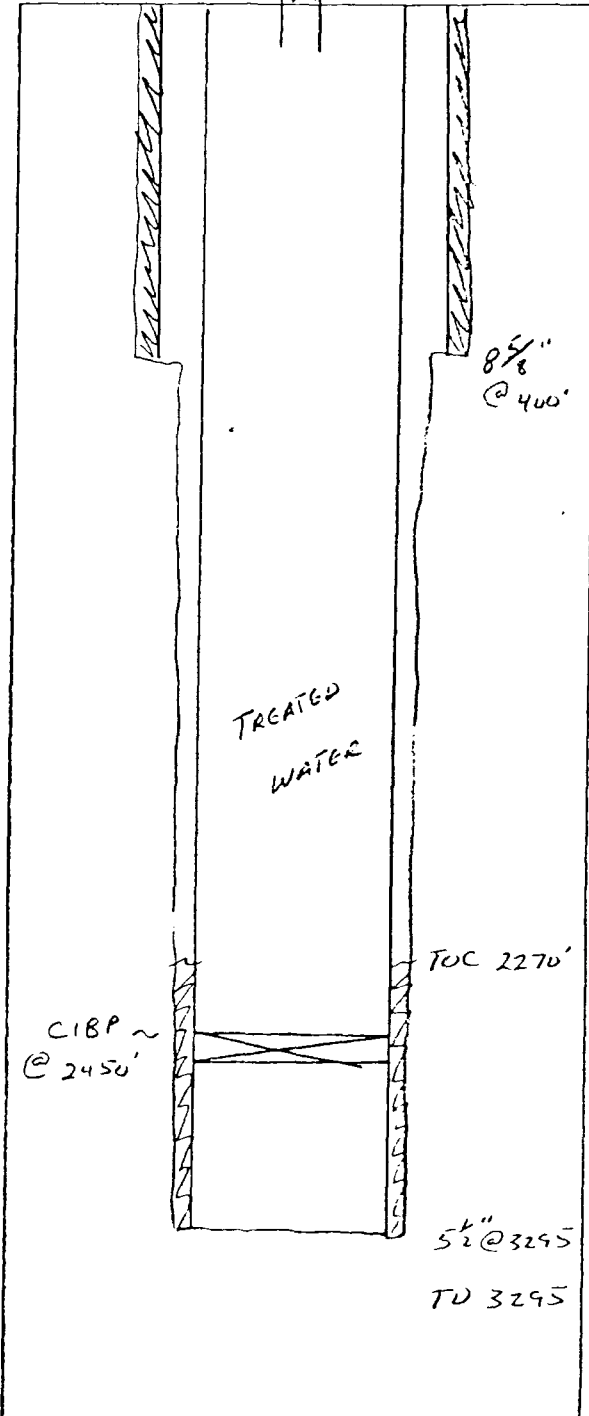
2310' FSL & 2310' FEL
FOOTAGE LOCATION

4
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic



Completion Date 4/8/59

Plugging Date TA - 4/12/84

Deepest Depth Drilled 3295

Surface Casing

Size 8-5/8 Set At 400 with 50 sxs

Left in Hole 400

Size Hole 12-1/4"

Intermediate Casing

Size _____ Set At _____ with _____ sxs

Left in Hole _____

Size Hole _____

Production Casing

Size 5-1/2 Set At 3295 with 150 sxs

Left in Hole 3295

Size Hole 7-7/8"

Liner

Size _____ From _____

Cemented with _____

Size Hole _____

Left in Hole _____

Cement Plugs

Depth	Amount	At
-------	--------	----

CIBP @ 2450'

Circulate hole w/fresh water & chemicals

Producing Zones

Depth	Name
2504-20	Loco Hills

PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company
OPERATOR

Ballard GSA Unit
LEASE

18-4
WELL NO.

2313' FNL & 1651' FEL
FOOTAGE LOCATION

6
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic

Completion Date 5/15/47

Plugging Date 12/14/64

Deepest Depth Drilled 4121

Surface Casing

Size 8-5/8 Set At 249 with -- sxs

Left in Hole 87

Size Hole 10"

Intermediate Casing

Size Set At with sxs

Left in Hole

Size Hole

Production Casing

Size Set At with sxs

Left in Hole

Size Hole

Liner

Size From

Cemented with

Size Hole

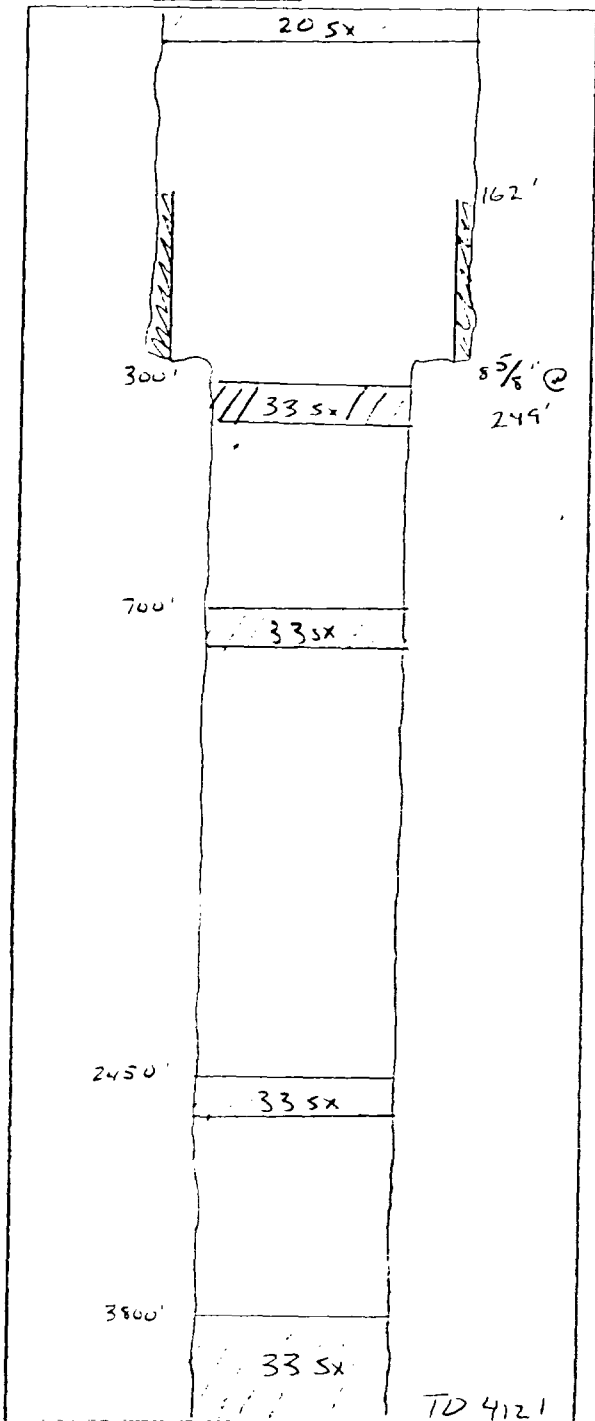
Left in Hole

Cement Plugs

Depth	Amount	At
3800	33 sxs	
2450	33 sxs	Grayburg
700	33 sxs	Base of Salt
300	33 sxs	Top of Salt
Surface	20 sxs	

Producing Zones

Depth Name



PLUGGED WELL IN AREA OF REVIEW

Anadarko Production Company

Ballard GSA Unit

10-4

OPERATOR

LEASE

WELL NO.

990' FNL & 660' FEL

5

18S

29E

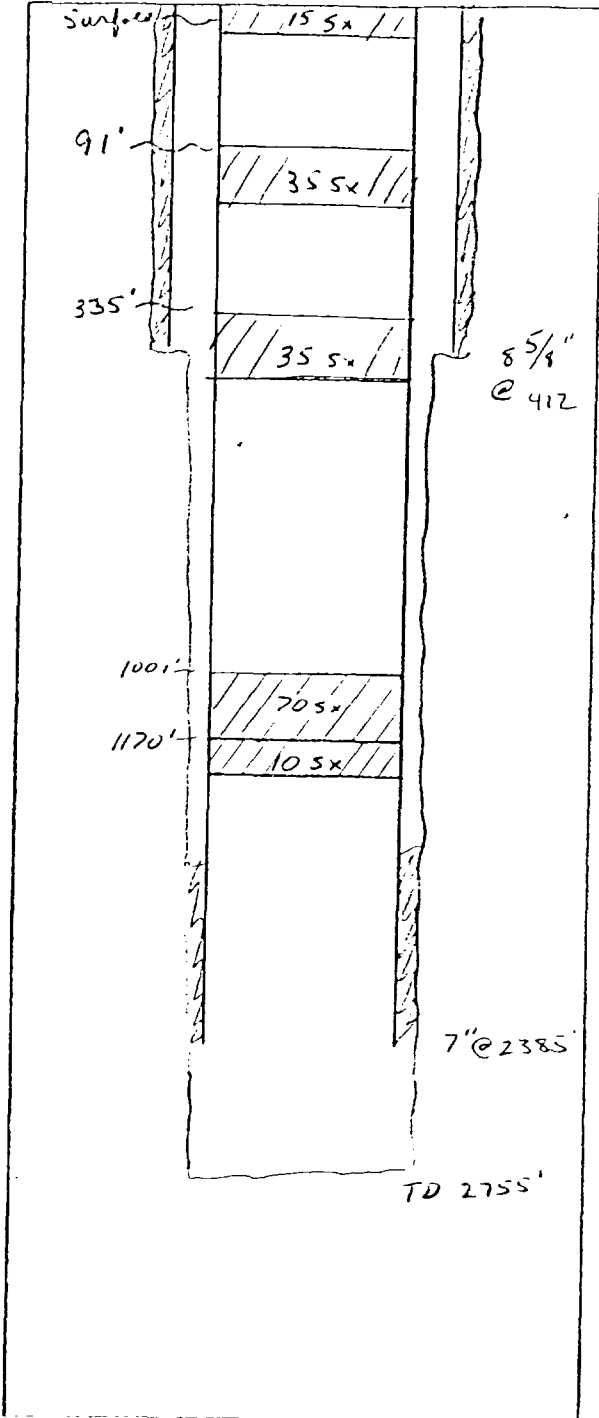
FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

Schematic



Completion Date ---

Plugging Date 2/22/78

Deepest Depth Drilled 2755

Surface Casing

Size 8-5/8 Set At 412 with 60 sxs

Left in Hole 412

Size Hole 10"

Intermediate Casing

Size Set At with sxs

Left in Hole

Size Hole

Production Casing

Size 7 Set At 2385 with 100 sxs

Left in Hole 2385

Size Hole 8"

Liner

Size From

Cemented with

Size Hole

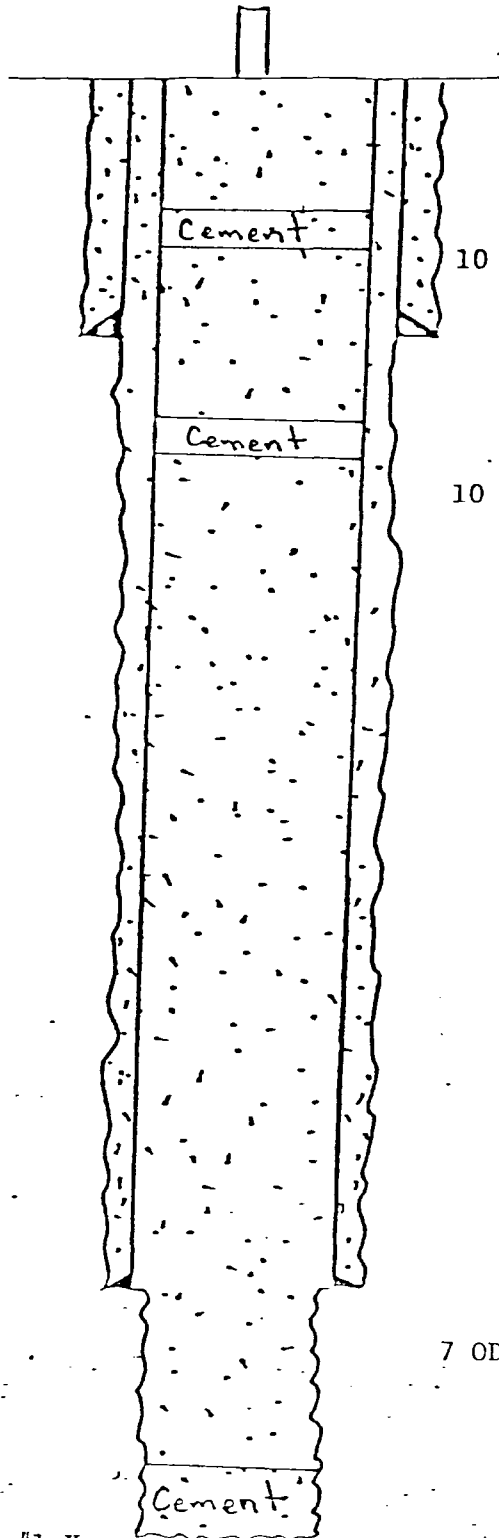
Left in Hole

Cement Plugs

Depth	Amount	At
1170	10 sxs	
1001	70 sxs	Base of Salt
335	35 sxs	Top of Salt
91	35 sxs	
Surface	15 sxs	

Producing Zones

Depth	Name
2550-2700	Grayburg



8-5/8 OD @ 450 w/50 sks

10 sks @ 295'

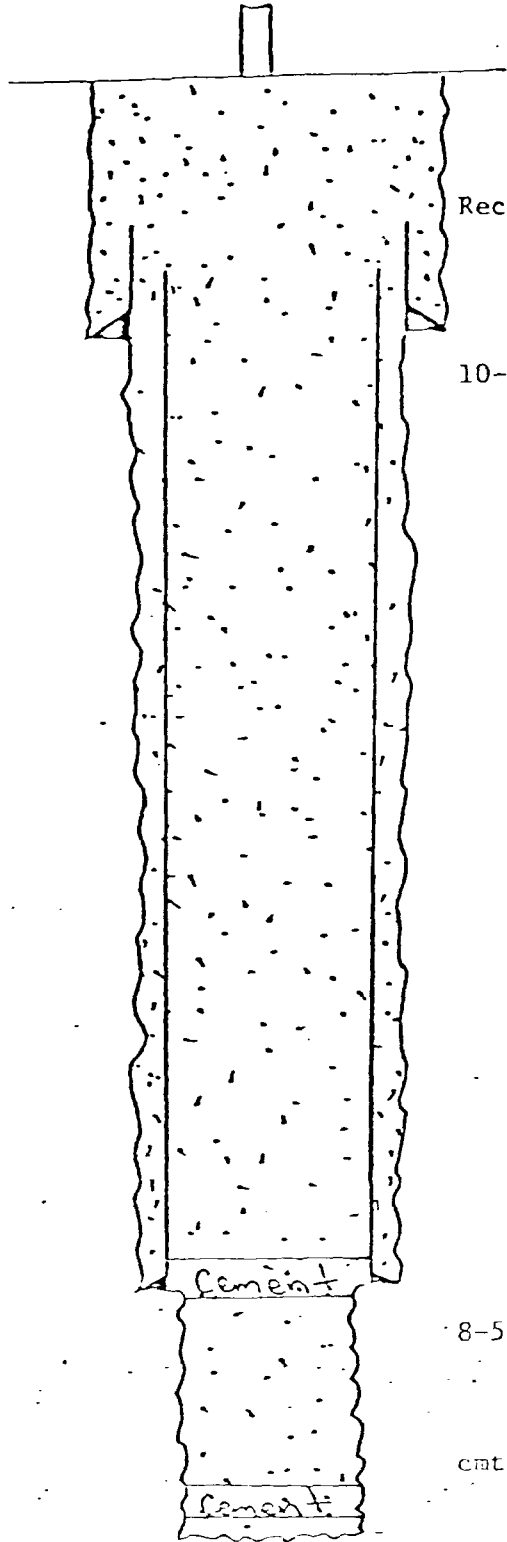
10 sks @ 760'

20 sks @ 2555

7 OD @ 2340 w/100 sks

Well Name & No. Stroup Yates #1-X
County Eddy State NM
Location sec 5-18S-29E

TD 2594



Rec 150' - 10-3/4" csg

10-3/4 @ 340 w/50 sks

Rec 250' - 8-5/8" csg

cmt: 750 - 800'

Cement

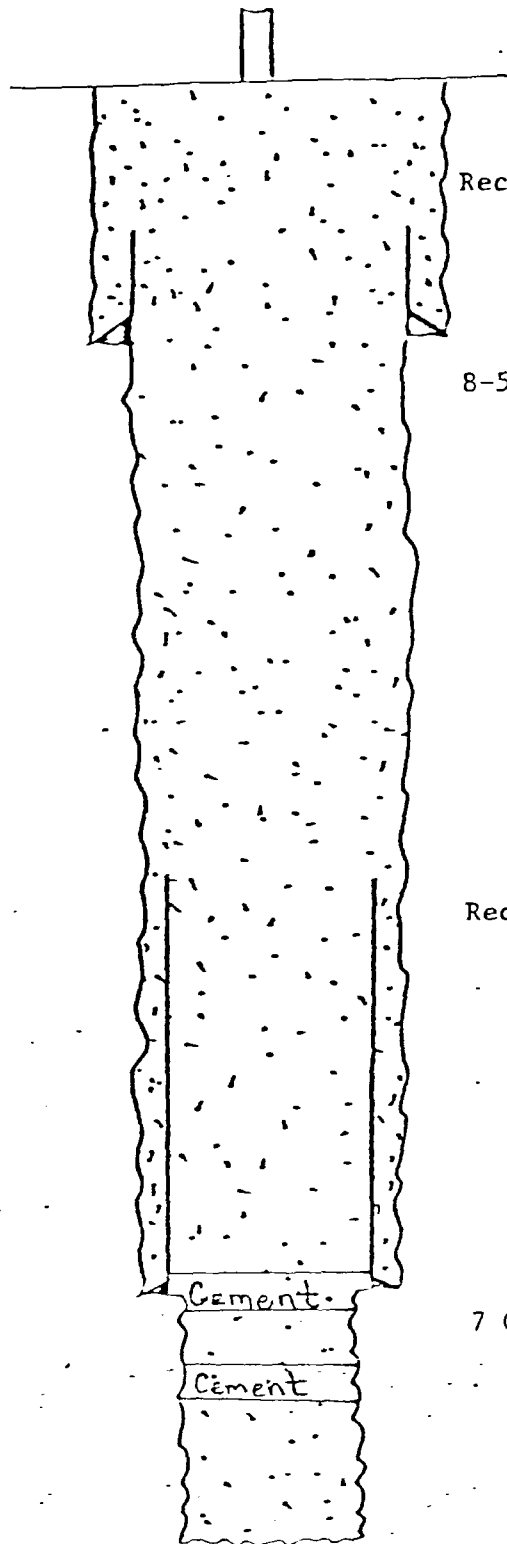
8-5/8 @ 770 w/150 sks

cmt: 2095 - 2540'

Cement

Well Name & No. Texas American Oil Corp
"Metex" #4
County Eddy State NM
Location sec 5-18S-29E 1980 FSL & 1980 FWL

TD 2590



Rec 18' - 8-5/8" csg

8-5/8 OD @ 366' w/50 sks

Rec 600' - 7" csg

Cement

Cement

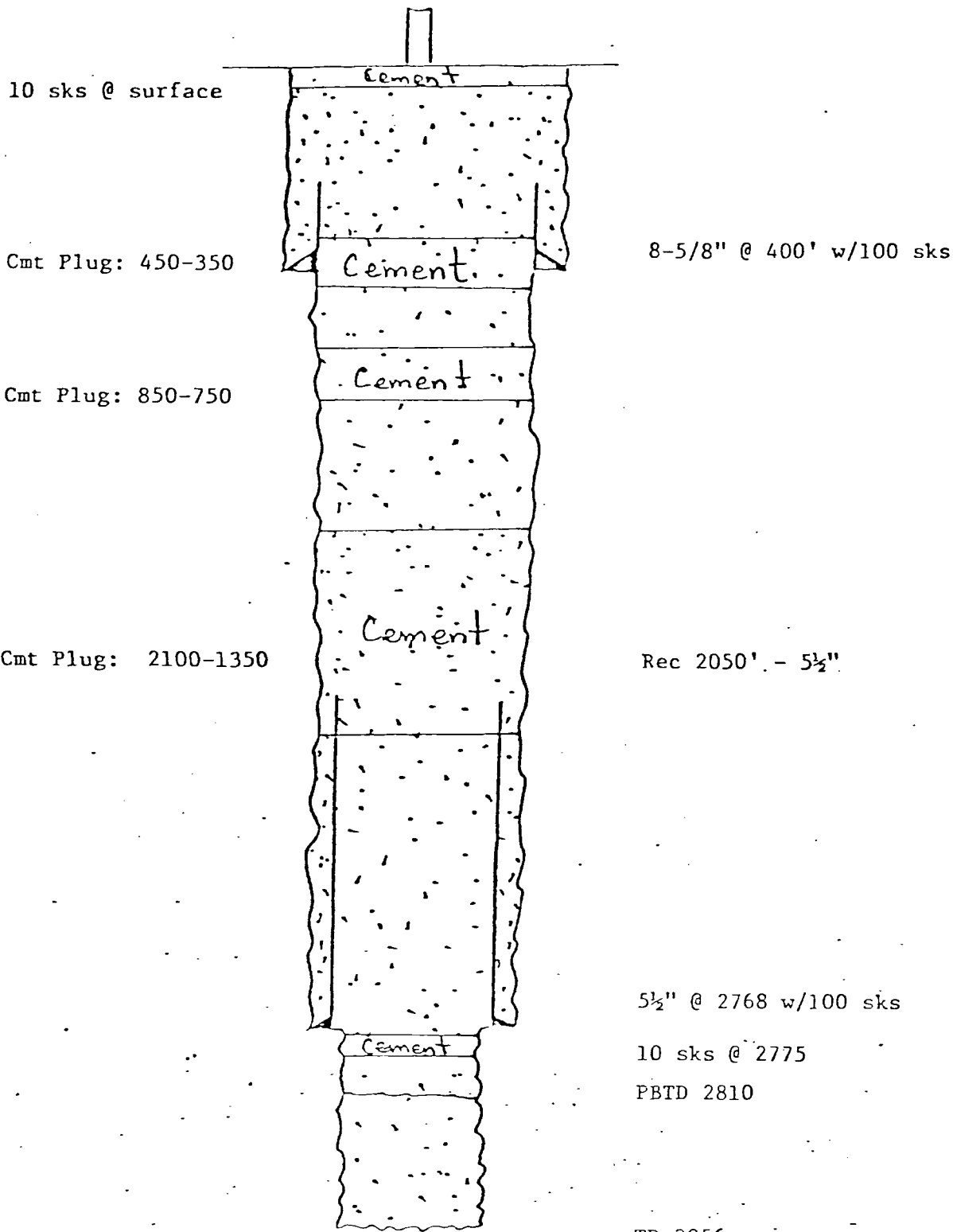
7 OD @ 2267 w/100 sks

10 sks @ 2270

30 sks @ 2400

Well Name & No. BGSAU 5-1
 Field Loco Hills
 County Eddy State NM
 Location Sec 8-18S-29E
660 FNL & 660 FEL

TD 3148



Well Name and No. Ballard GSAU 5-11
 County Eddy State NM
 Location Sec 8-18S-29E

TD 3056

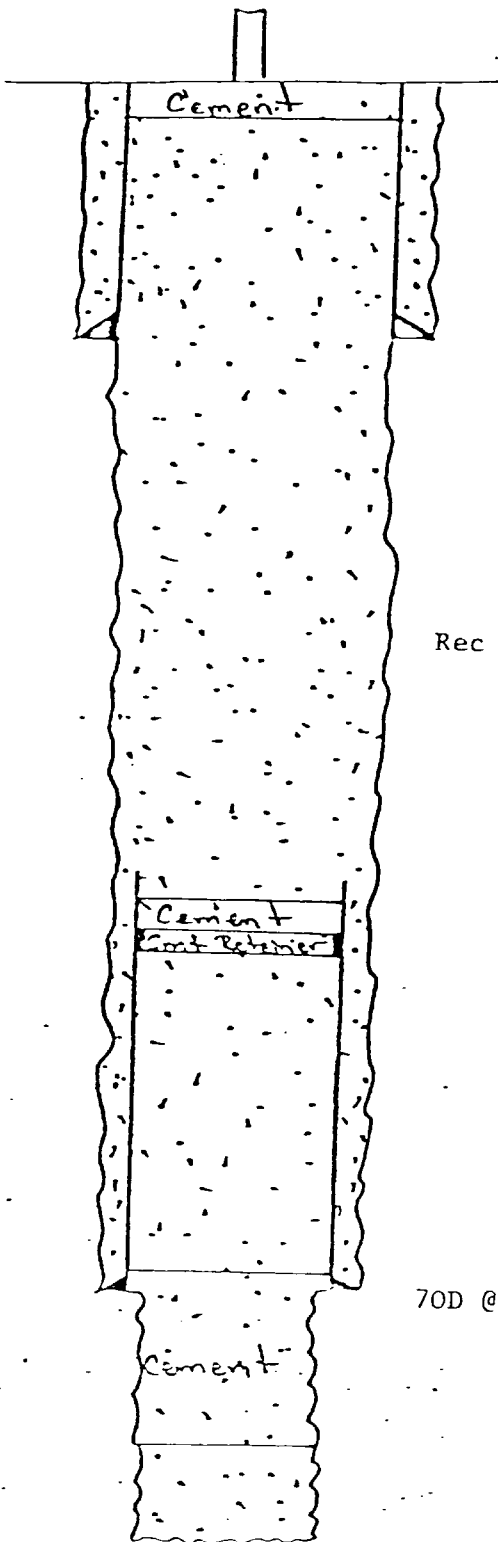
10 sks @ surface

8-5/8 OD @ 330 w/50 sks

Cmt Ret @ 482 w/70 sks

650 sks @ 2360

Well Name BGSAU 14-1
Field Loco Hills
County Eddy State NM
Location Sec 8-18S-29E
2310 FSL & 2310 FWL



Rec 469' - 7" csg

70D @ 2360 w/100 sks

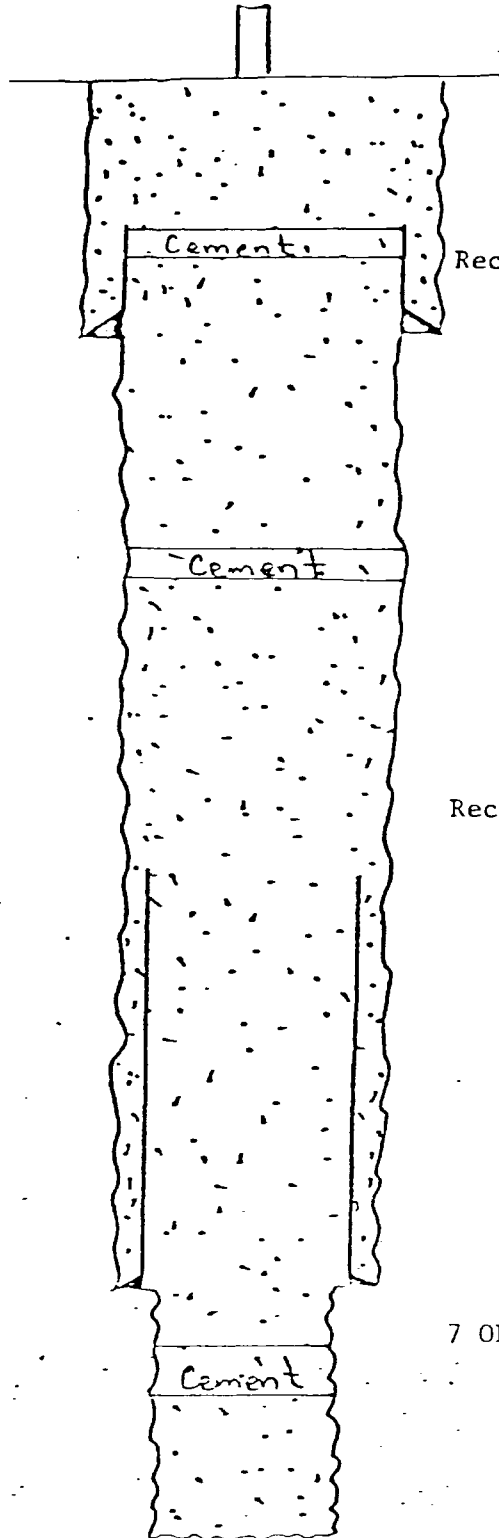
TD 2660

10 sks @ 240

8-5/8 OD @ 375 w/50 sks

20 sks @ 800

50 sks @ 2360



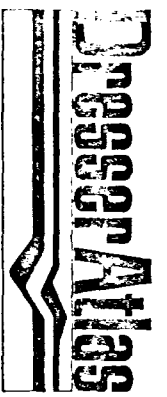
Rec 220' - 8-5/8 csg

Rec 1600' - 7" csg

7 OD @ 2285 w/100 sks

Well Name & No. BGSAU 5-2
 Field Loco Hills
 County Eddy State NM
 Location Sec 8-18S-29E
2310 FSL & 2310 FEL

TD 2719



BHC Acoustilog®

11000246

FILE NO. COMPANY ANADARKO PRODUCTION COMPANY

WELL ~~BALYARD UNIT NO. 111111~~

FIELD LOCO HILLS

COUNTY EDDY STATE NEW MEXICO

LOCATION: 2310' FNL & 330' FEL DUAL CAL.

SEC 6 TWP 18-S RGE 29-F

GROUND LEVEL Elev. 3588

Permanent Datum G. L. 0 Ft. Above Permanent Datum KB Elevations: DF 3588

Drilling Measured from G. L. GL 3588

Property of ANADARKO

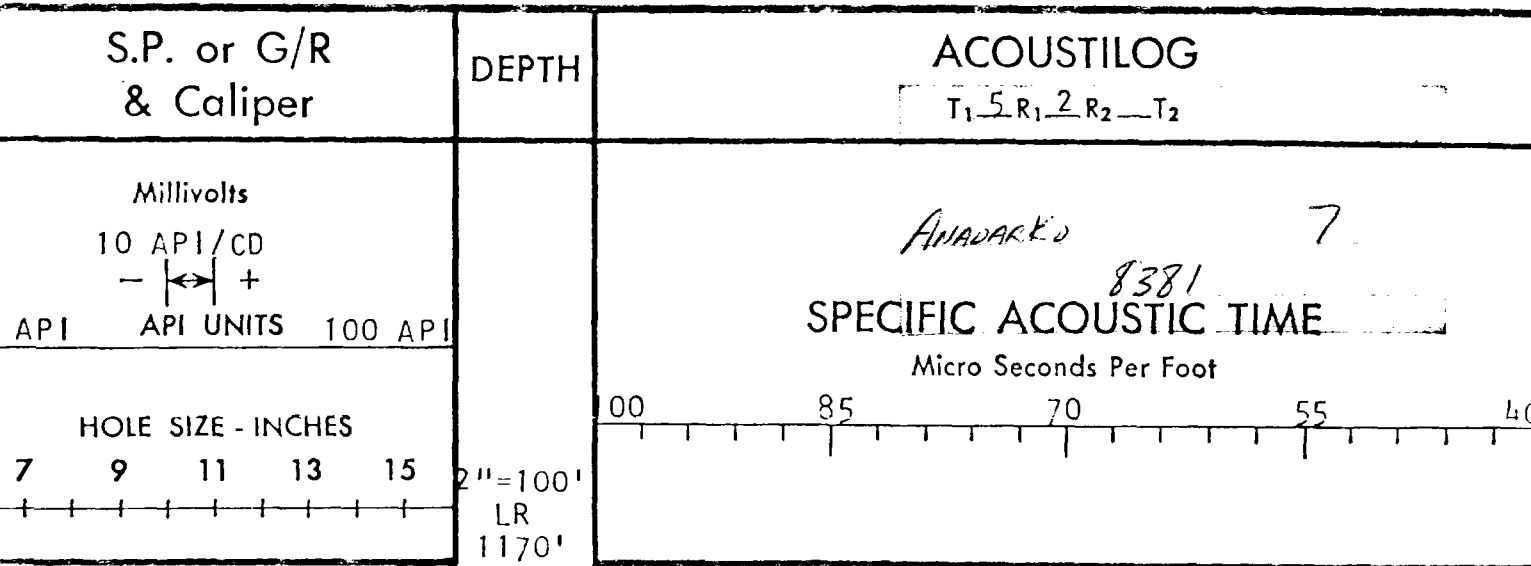
Date	5-17-75
Run No.	ONE
Depth-Driller	2675
Depth-Logger	2674
Bottom Logged Interval	2671
Top Logged Interval	1170
Casing-Driller	7" @ 2352
Casing-Logger	2349
Bit Size	5 1/4"
Type Fluid in Hole	WATER
Density and Viscosity	@ @ @ @ @
pH and Fluid Loss	- - - - -
Source of Sample	- - - - -
Rm @ Meas. Temp.	- @ @ @ @
Rmf @ Meas. Temp.	- @ @ @ @
Rmc @ Meas. Temp.	- @ @ @ @
Source of Rmf and Rmc	- - - - -
Rm @ BHT	- @ @ @ @
Time Since Circ.	- - - - -
Max. Rec. Temp. Deg. F.	- @ @ @ @
Equip. No. and Location	6010 HOBBS
Recorded By	MILLER

FOLD HERE THIS HEADING AND LOG CONFORMS TO API RECOMMENDED STANDARD PRACTICE RP-31

REMARKS OPEN HOLE SHOT WITH NITRO. CALIPER QUIT WHILE GOING IN HOLE. CONTINUED TO LOG ACOUSTIC AND RAN CALIPER ON SEPARATE RUN AT REQUEST OF CUSTOMER.

Equipment Used			
Series No.	626	422	625
Run No.	ONE	ONE	ONE
S.O.	90235	90235	90235
Tool No.	13726	12810	26501
Elec. No.	-	-	-
Panel No.	27050	26540	27050

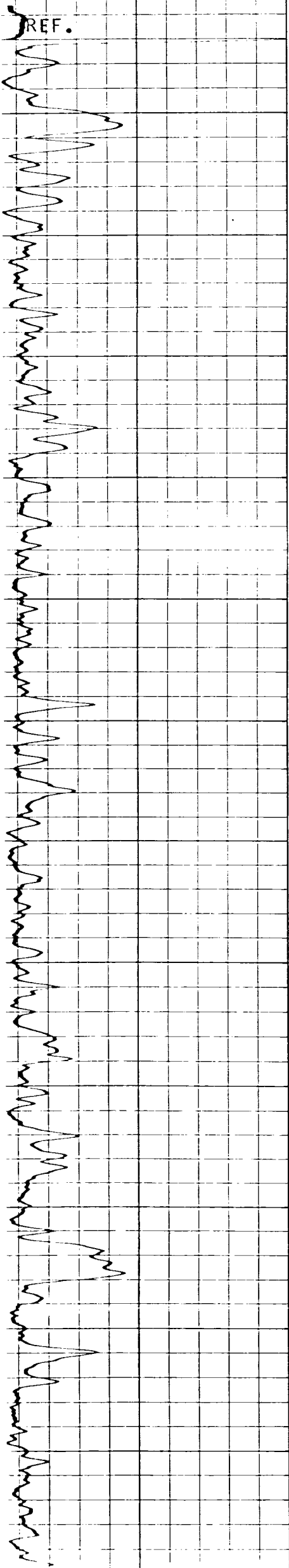
Changes in Mud Type or Additional Samples				Scale Changes			
Date	Sample No.	Type Log	Depth	Scale Up Hole	Scale Down Hole		
Depth-Driller							
Type Fluid in Hole							
Dens.	Visc.						
pH	Fluid Loss	cc	cc				
Source of Sample							
Rm @ Meas. Temp.	@ °F	@ °F	Run No.	Tool Type	Pad Type	Tool Position	Other
Rmf @ Meas. Temp.	@ °F	@ °F	ONE	SEE ABOVE		CENTRALIZED	
Rmc @ Meas. Temp.	@ °F	@ °F					
Source Rmf Rmc							
Rm @ BHT	@ °F	@ °F					
Rmf @ BHT	@ °F	@ °F					
Rmc @ BHT	@ °F	@ °F					



100 MS. FT. Calibration Signal

40 MS. FT. Calibration Signal

REF.



1200

1300

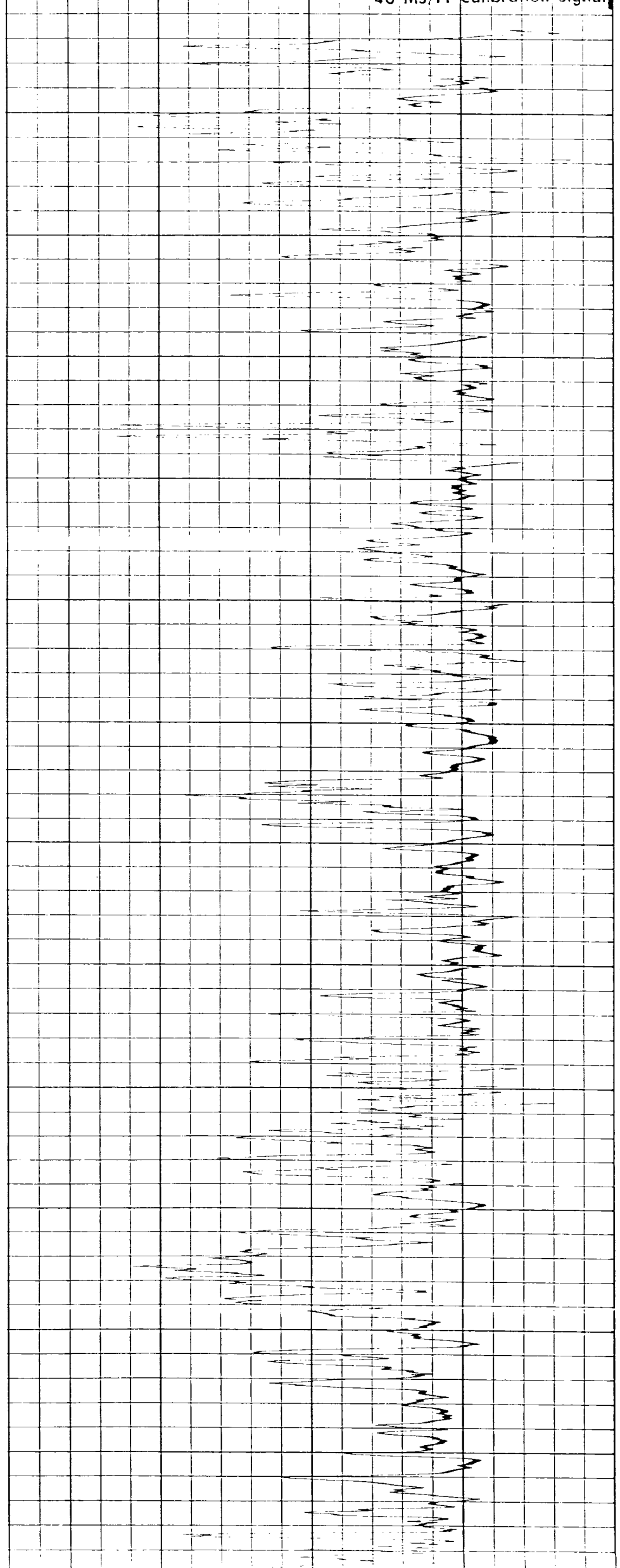
1400

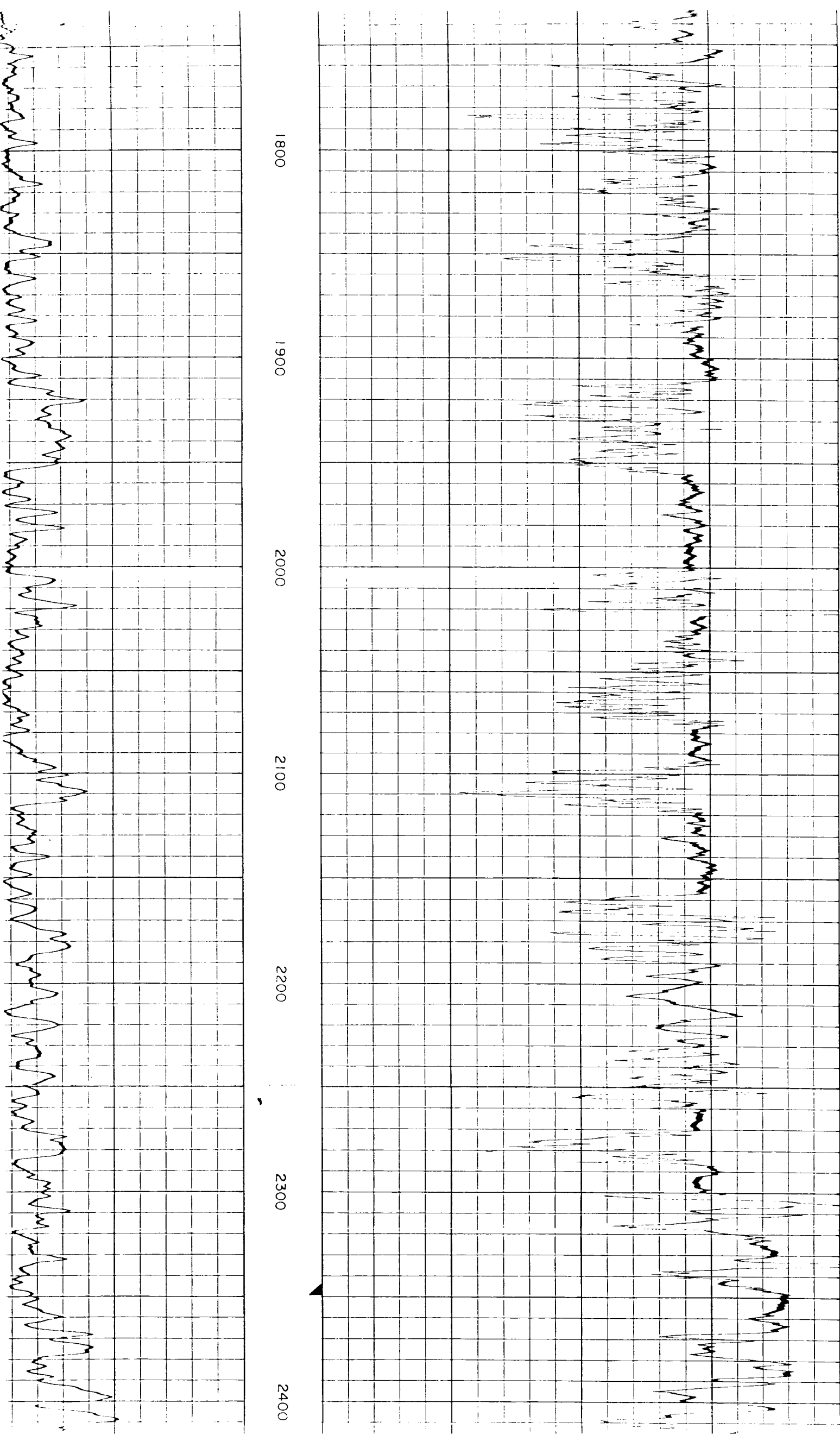
1500

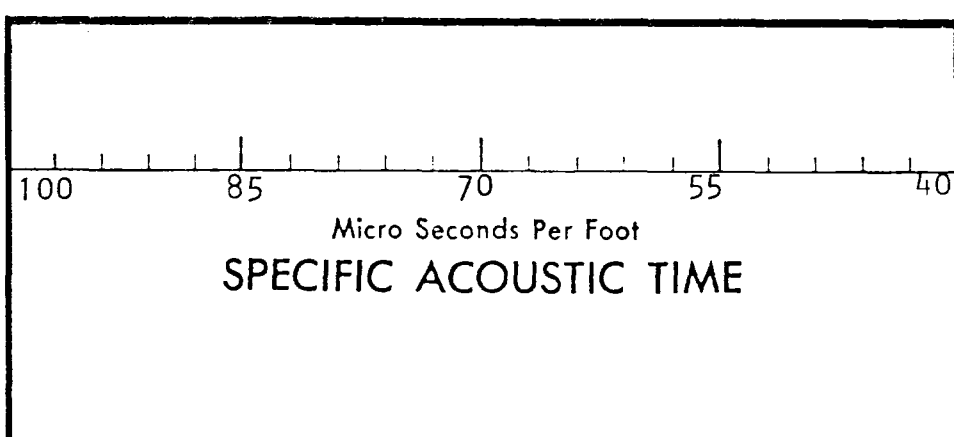
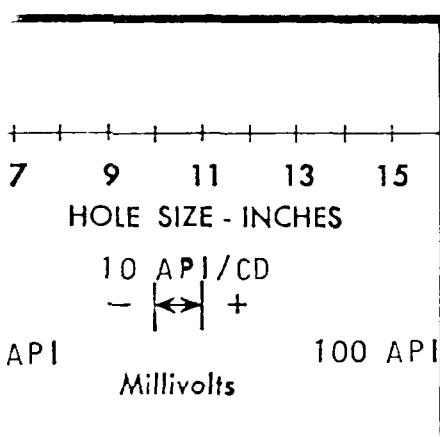
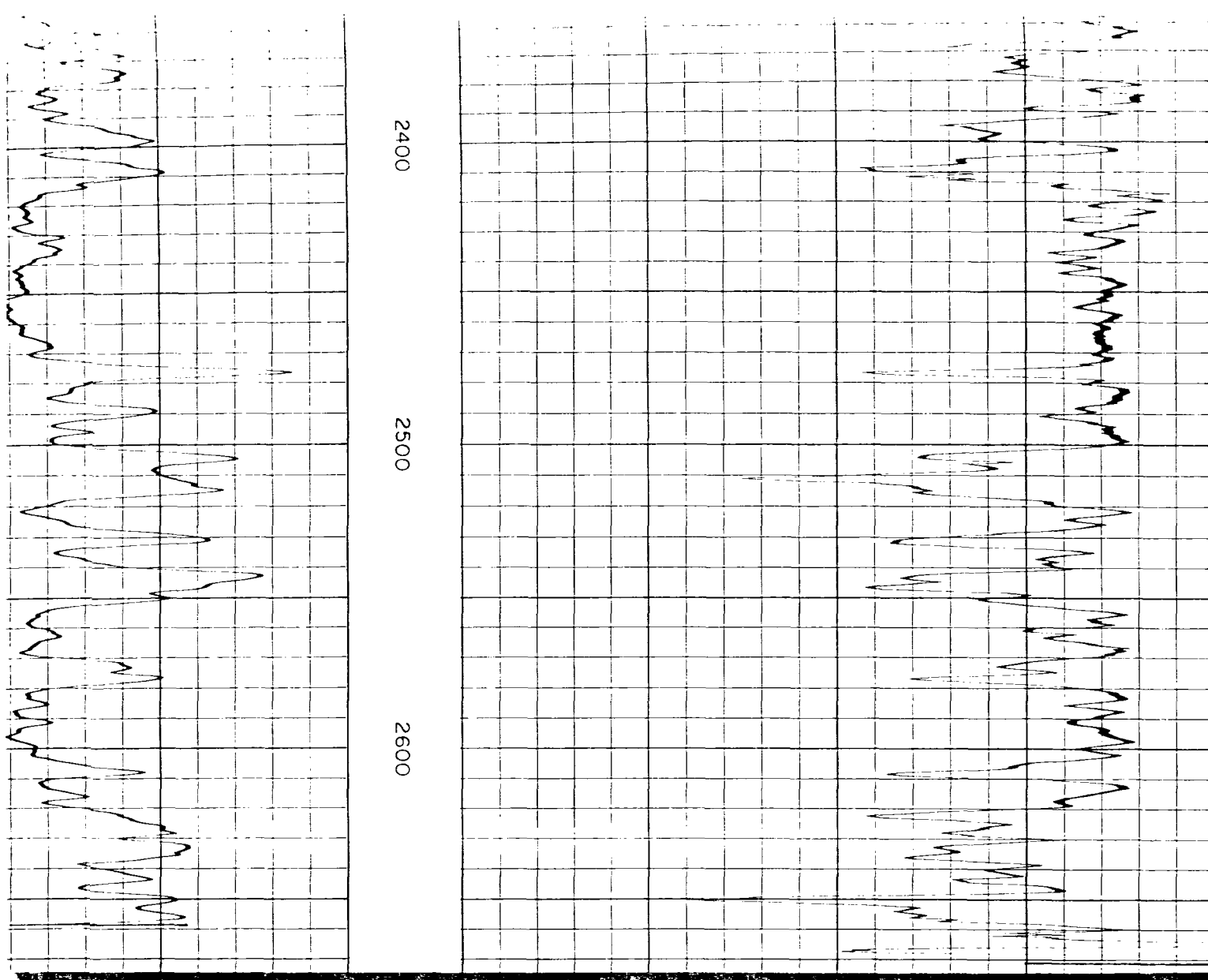
1600

1700

1800



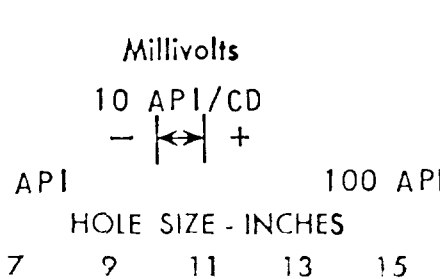


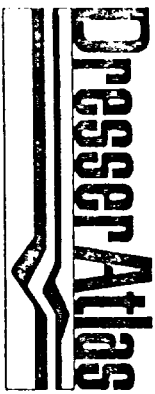


S.P. or G/R & Caliper	DEPTH	ACOUSTILOG T ₁ <u>5</u> R ₁ <u>2</u> R ₂ — T ₂
--------------------------	-------	---

Company	ANADARKO PRODUCTION COMPANY	Drillers T.D.	2675'
Well	BALLARD UNIT NO. 11-1	Log F.R.	2671'
Field	LOCO HILLS	Log T.D.	2674'
County	EDDY	Elevations:	
State	NEW MEXICO	K.B.	D.F. G.L. 3588'

S.P. or G/R & Caliper	DEPTH	ACOUSTILOG T ₁ <u>5</u> R ₁ <u>2</u> R ₂ — T ₂
--------------------------	-------	---





Compensated Neutron

FILE NO. COMPANY ANADARCO PETROLEUM COMPANY
WELL BALLARD UNIT NO. S-14
FIELD LOCO HILLS QUEENY GSA
COUNTY EDDY STATE NEW MEXICO
LOCATION: 990 FSL 4' 1310' FEL

SEC 8 TWP 18-S RGE 29-E
Other Services NONE

Permanent Datum G.L. Elev. 3501
Log Measured from G.L. 0 Ft. Above Permanent Datum
Drilling Measured from G.L. KB DF GL 3501
Elevations:

Date 11/11/78
Run No. ONE
Type Log N/TN
Depth-Driller 3100
Depth-Logger 3091
Bottom Logged Interval 3089
Top Logged Interval 1080
Type Fluid in Hole WATER
Salinity Ppm Cl -
Density Lb/Gal. -
Level -
Max. Rec. Temp. Deg. F. -
Oper. Rig Time -
Equip. No. and Location 6205 HOBBSS
Recorded By JACKSON
Witnessed By -

Bore Hole Record		Casing Record					
Run No.	Bit	From	To	Size	Wgt.	From	To
				4 1/2		Surface	3091

FOLD HERE I

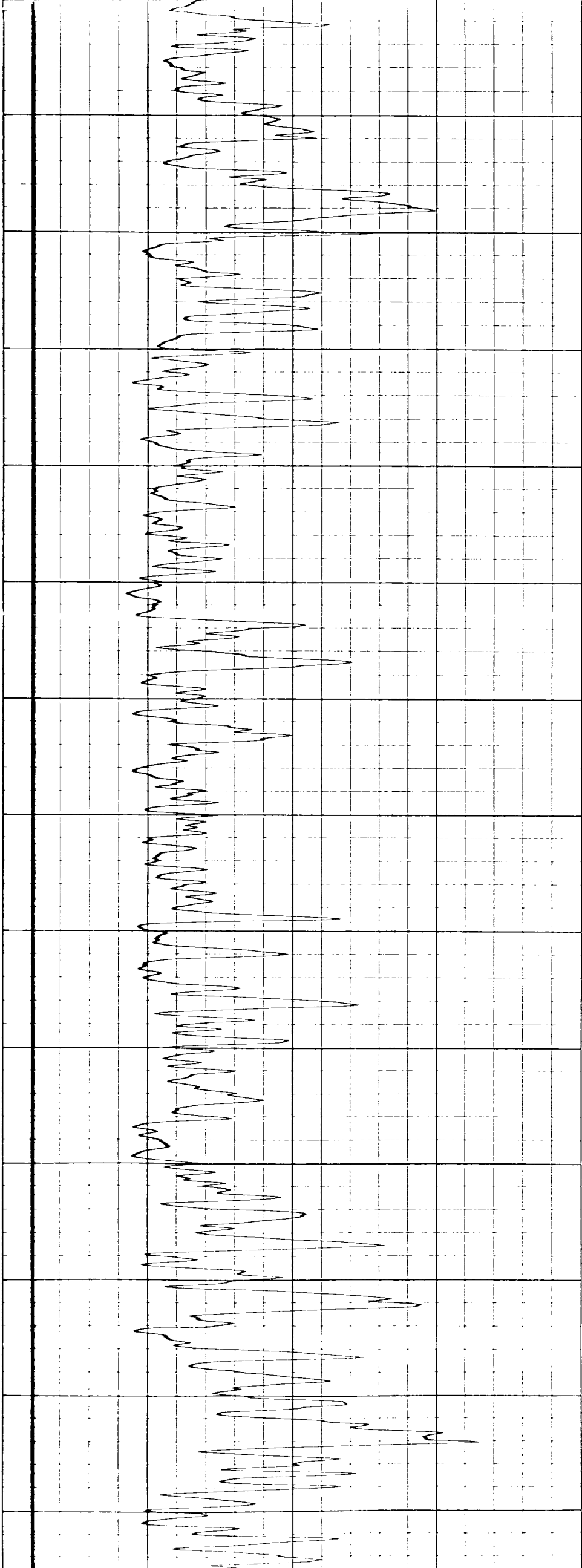
Remarks: CASING collars recorded ~~left~~ ^{right} Deep to left of Depth Column - corrected to RIGHT OF Depth Column
LOG RUN for VARIIFICATION of log RUN 11/2/78
Depth discrepancy between two logs.

Equipment Used			
Series No.	2413	1309	2306
Run No.	ONE		
S.O.			
Tool No.	42567	41745	3
Elec. No.			
Panel No.	70134	32538	32538

Gamma Ray		Equipment Data		Compensated Neutron	
Run No.	ONE	Run No.	ONE	Run No.	ONE
Tool Model No.	1309	Log Type	N/TN	Log Type	N/TN
Diam.	3 5/8	Tool Model No.	2413	Tool Model No.	2413
Detect. Model No.	DGG4	Serial No.	42567	Serial No.	42567
Type	SCINT	Diam.	3 5/8	Diam.	3 5/8
Length	6"	Detect. Model SS	D6N3	Detect. Model SS	D6N3
Dist. to N. Source	6'	Detect. Model LS	D6N3	Detect. Model LS	D6N3
Computer Data		Source Model No.	S175205L	Source Model No.	S175205L
		Serial No.	34354	Serial No.	34354
		Type	Am Be	Type	Am Be

General			Compensated Neutron						Gamma Ray					
Run No.	Depths		Speed Ft./Min.	T.C.		Sens.		Porosity		T.C. Sec.	Sens. Settings	Zero Div. L or R	API G.R. Units/Div	
	From	To		SS	LS	SS	LS	Zero	Units/Div					Scale
1	3089	1080	REC	2	2	150	145	P4.5	2	0-30	2	801	0	10

GAMMA RAY & CALIPER	DEPTH	POROSITY %
API UNITS		



1200

1300

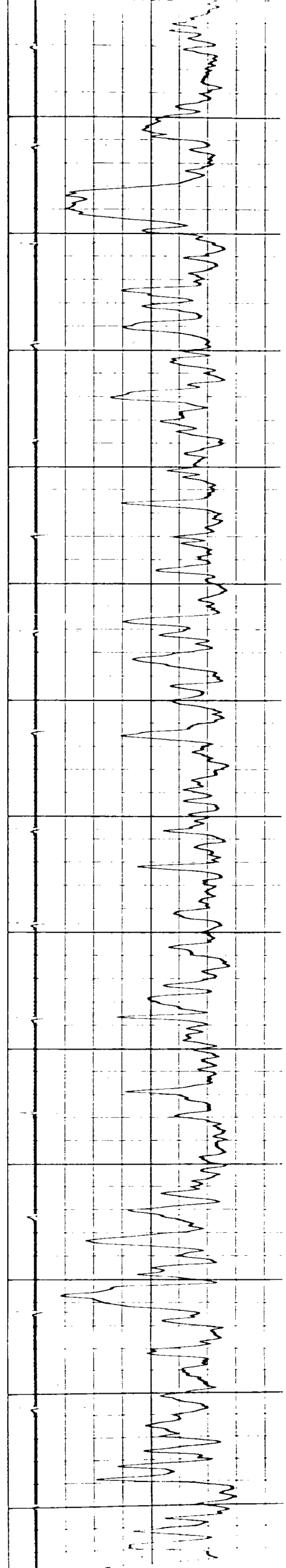
1400

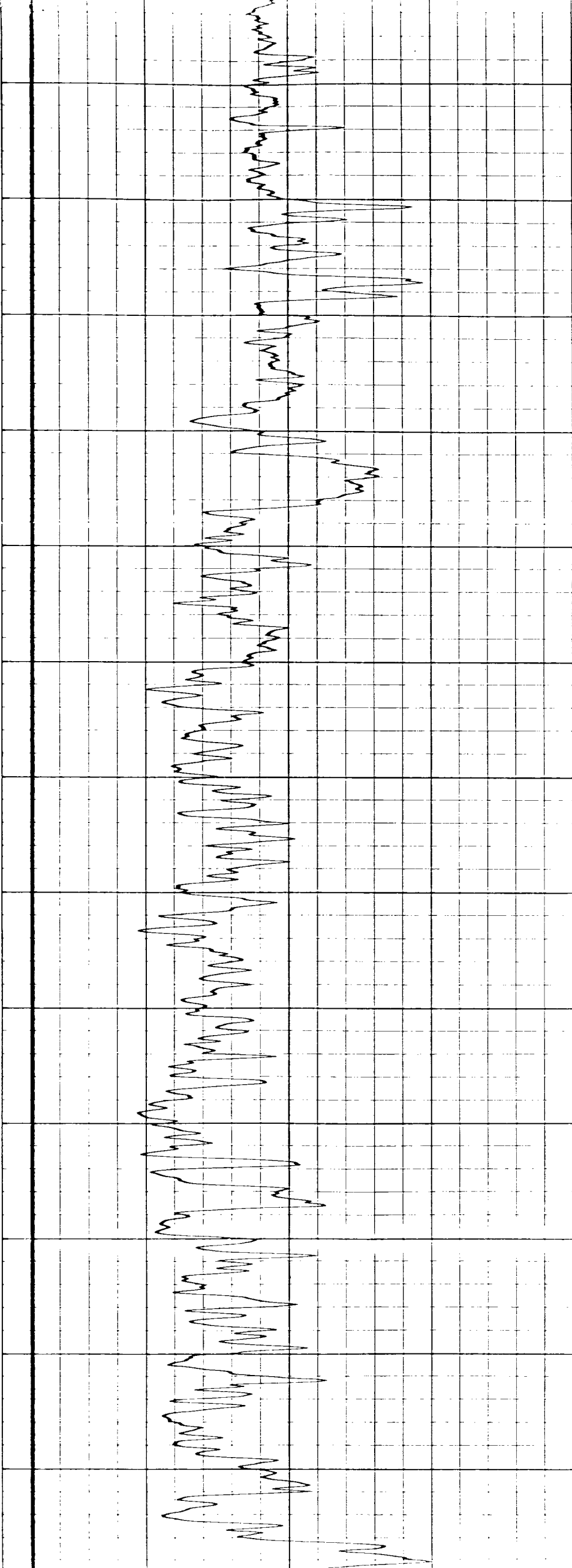
1500

1600

1700

18





2300

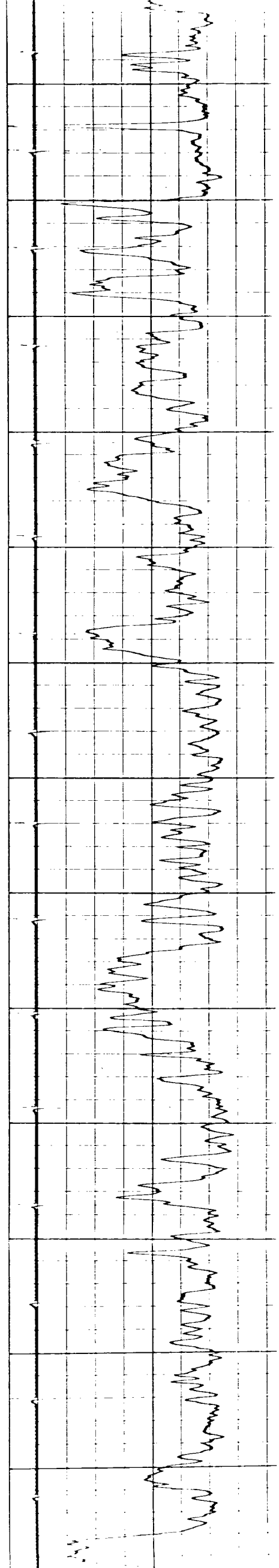
2200

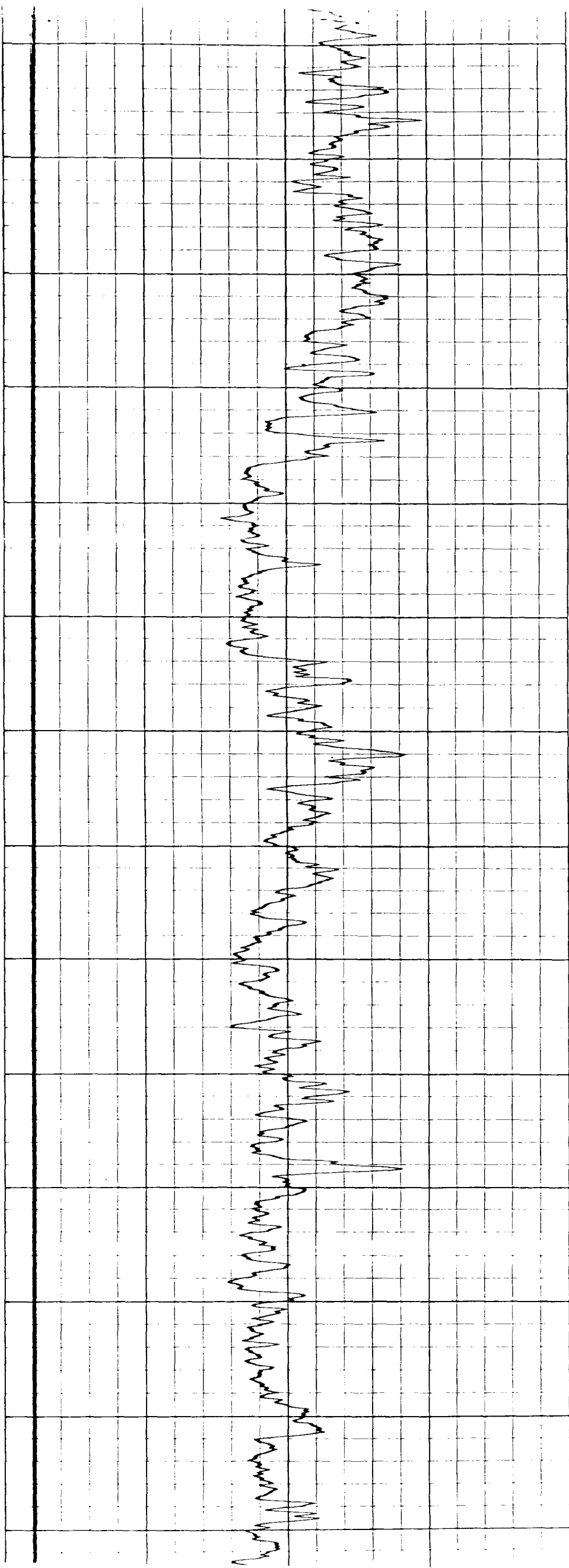
2100

2000

1900

1800





3000

2900

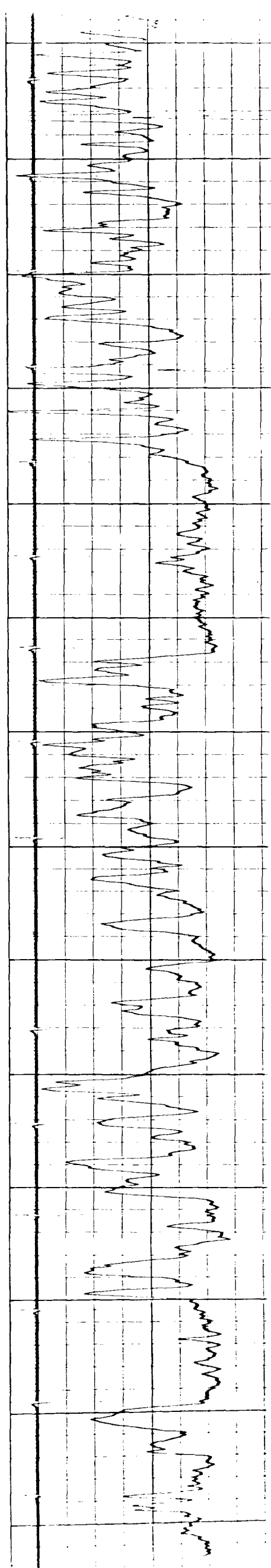
2800

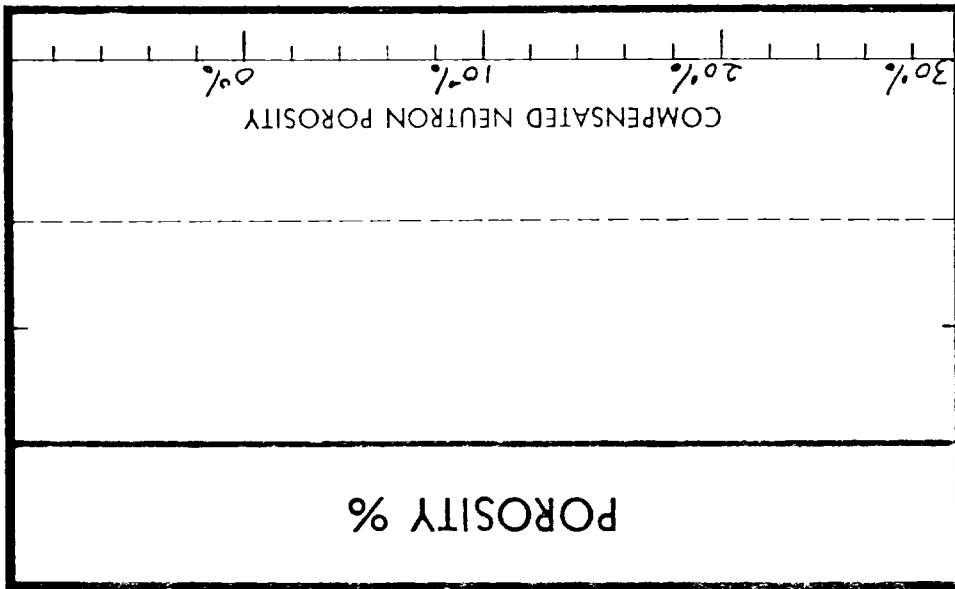
2700

2600

2500

2400



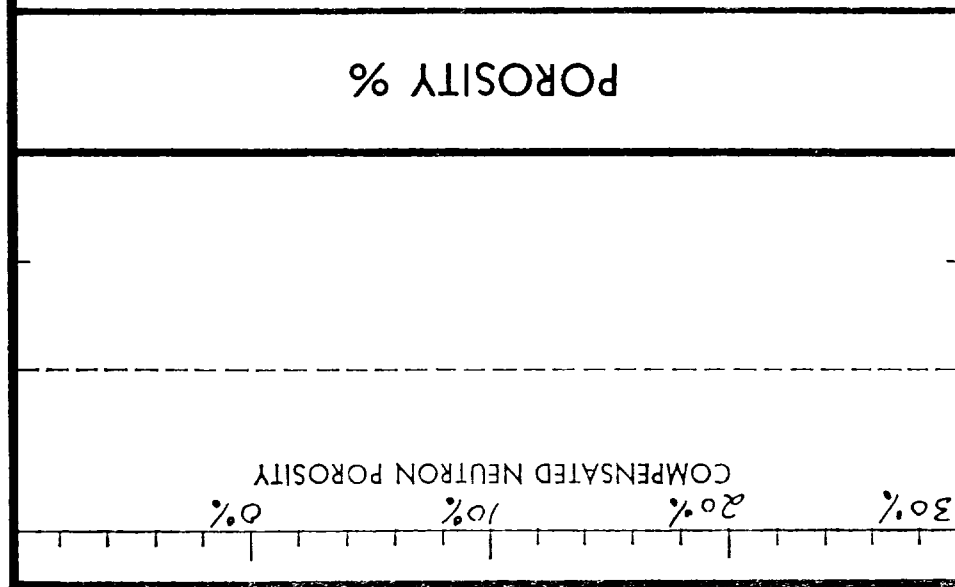


16	HOLE SIZE - INCHES
100	API UNITS
DEPTH	GAMMA RAY & CALIPER

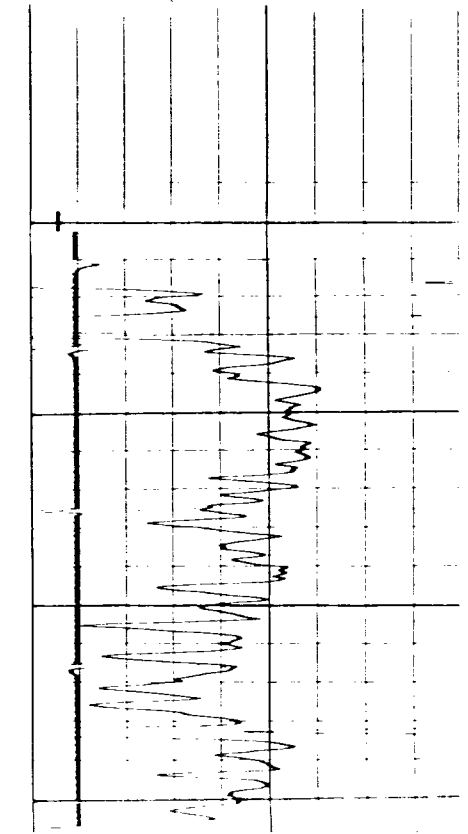
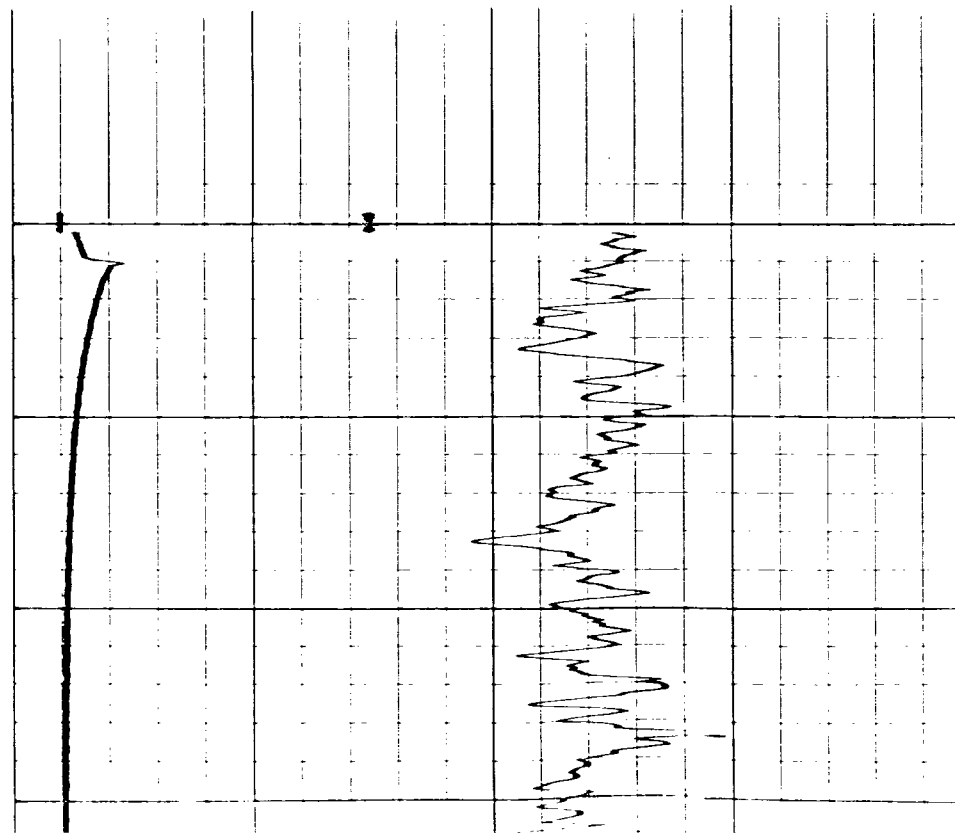
Company ANADARKO PETROLEUM COMPANY
 Well BALLARD UNIT NO. 5-14
 Field LOCOHILLS
 County EDDY
 State NEW MEXICO

Drillers T.D. 3100
 Log F.R. 3089
 Log T.D. 3091

Elevations:
 K.B. D.F. G.L. 3501



16	HOLE SIZE - INCHES
100	API UNITS
DEPTH	GAMMA RAY & CALIPER





WESTERN
WIRELINE
SERVICES
WEL-74 (REV. 11/75)

Compensated Neutron

RAE
KW

FILING NO. _____

DATE: 1-4-78

COMPANY: ANADARKO PRODUCTION COMPANY

WELL: Ballard Grayburg San Andres Unit 24-2

FIELD: Logo Hills (OGSA)

COUNTY: Eddy STATE: N.M.

LOCATION: 660' FSL 990' FHL

SEC: 5 TWP: 10S RGE: 29E

PERMANENT DATUM: [Ground Level] ELEV: 3522

LOG MEASURED FROM: NL FT ABOVE PERM DATUM

DRILLING MEASURED FROM: _____ ELEV: _____

DATE: 1-4-78

RUN NO: One

DEPTH: 2790

DEPTH LOGGERS: 2799

NOTED LOGGERS INTERVAL: 2797

TOP LOGGERS INTERVAL: 1200

TYPE FLUID IN HOLE: Fresh Water

SALINITY, PPM CL: _____

DENSITY: _____

LEVEL: Full

MAX REC TEMP, DEG. F: _____

OPERATING RIG TIME: _____

RECORDED BY: [Stamp]

WITNESSED BY: Mr. English

BORE-HOLE RECORD				TUBING AND CASING RECORD			
RUN NO.	BIT	FROM	TO	SIZE	WT	FROM	TO
1	Surface	300	300	7	29	Surface	1046
2	Surface	300	300	5	15	Surface	1046
3	Surface	300	300	5 7/8	24	Surface	300

**DO NOT REMOVE OR
ADD ANY MATERIAL TO
FOLDER**

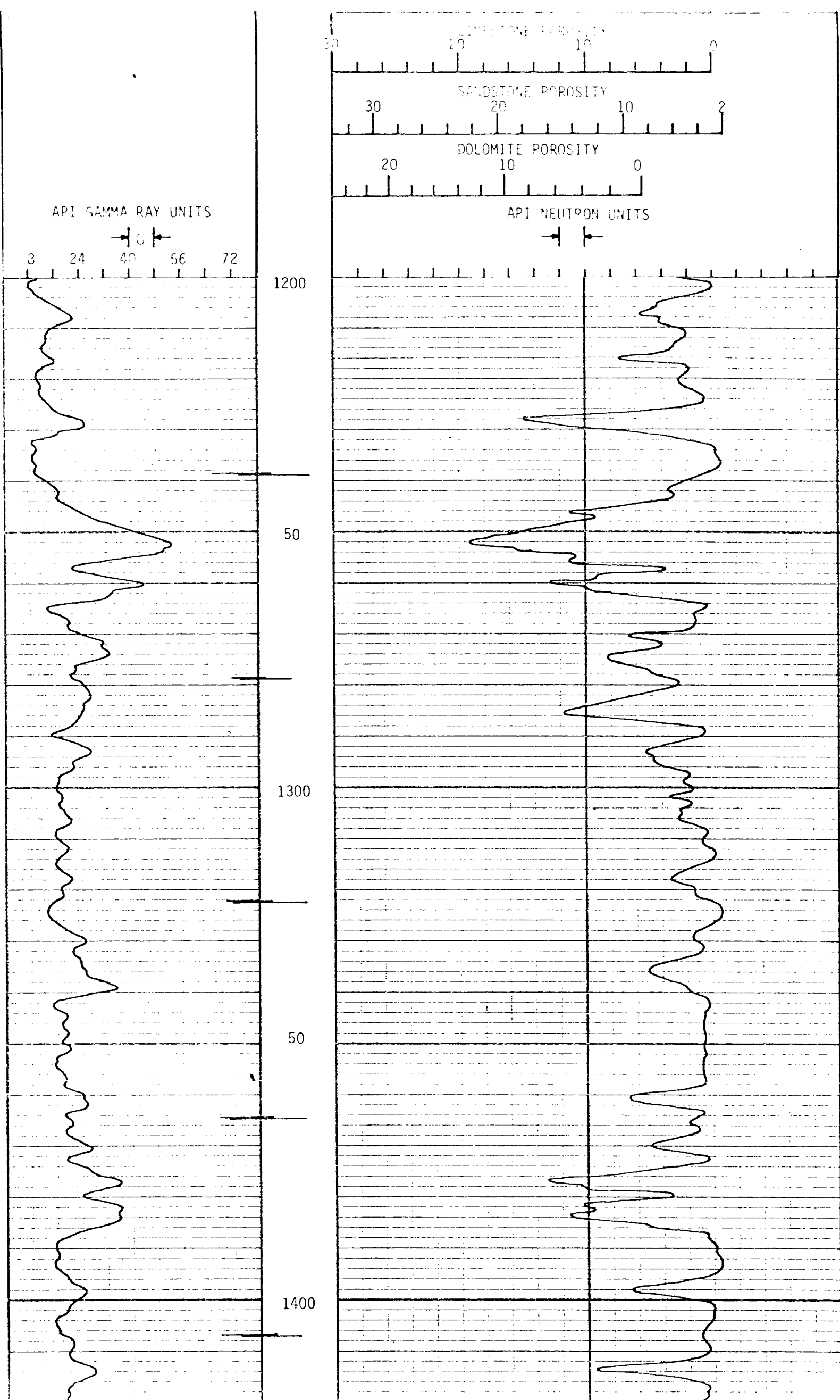
PLEASE COPY

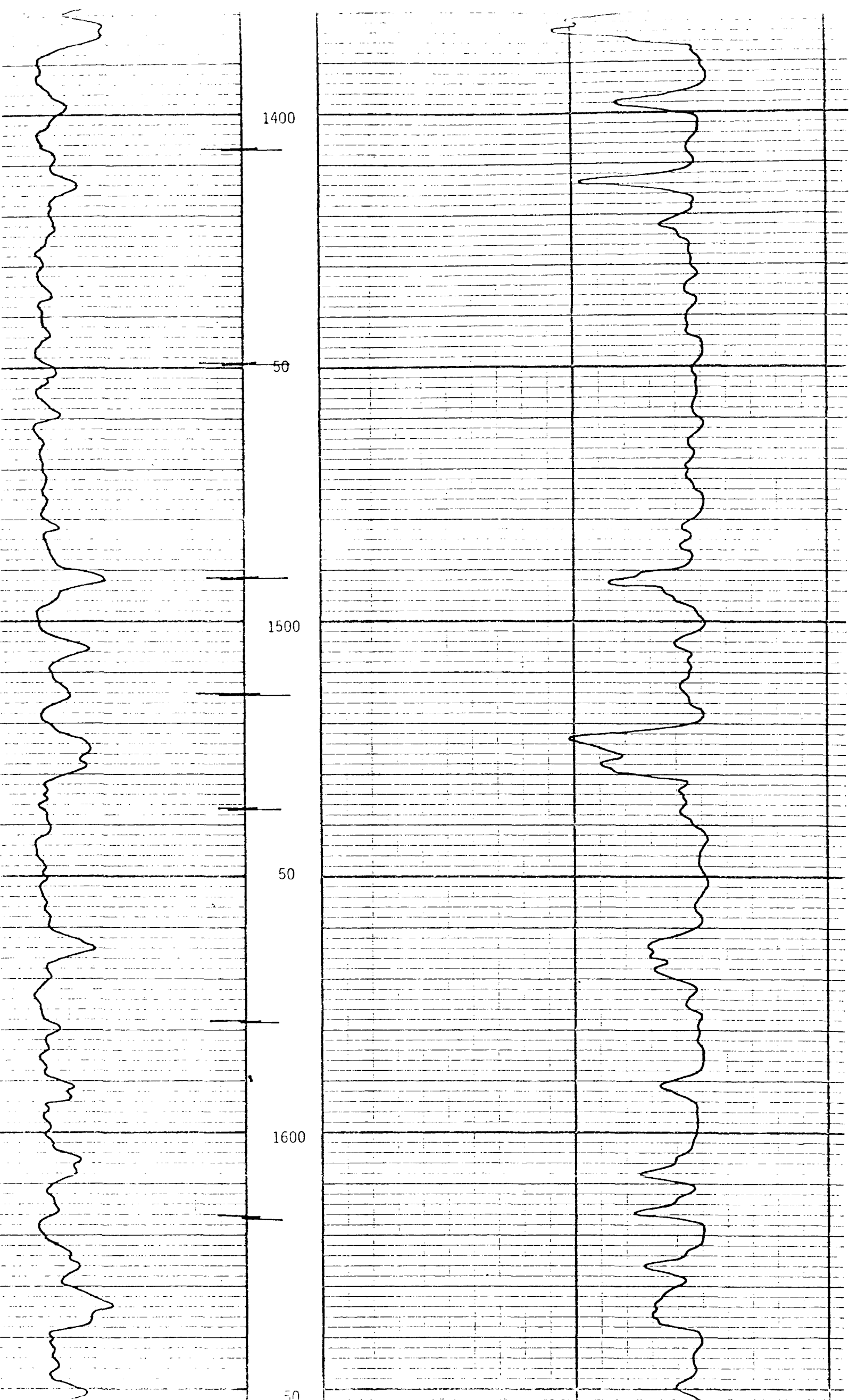
SURFACE	GAMMA RAY		NEUTRON	
	NS	NL	NS	NL
NO. 6237	One	One	One	One
NO. X910-003	DSN 160	DSN 160	DSN 160	DSN 160
NO. X782-004	3 1/8	3 1/8	3 1/8	3 1/8
NO. 990003	1.73 X 4.62	6 X 1.00	6 X 1.00	6 X 2.25
NO. 1030	Scint	HE-3	HE-3	HE-3
NO. 811	5"	6"	6"	8"
	DIST. TO N. SOURCE	105"		

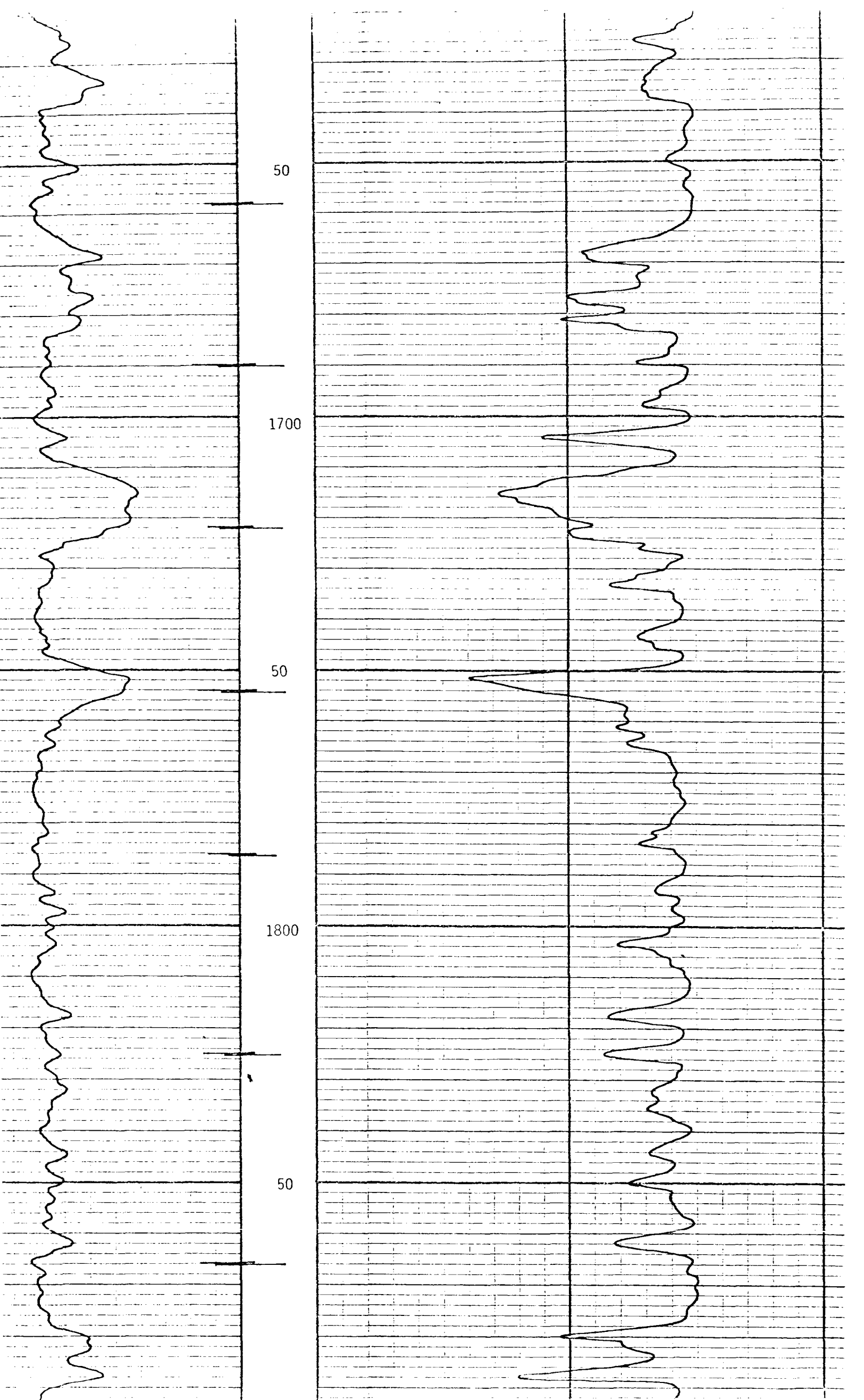
SOURCE DATA	POROSITY DATA		
	RUN #1	RUN #2	RUN #3
NO. 712A205	MATRIX	Limestone	
NO. NEEI 20	TIME CONSTANT	1	
TYPE AM 241 BE	SENSITIVITY	624	
STRENGTH 4.1 X 10 ¹	O-C1-C2	C1	
CAL NO. 71-1-234	BORE SIZE SETTING	8"	
	OH EH SAL SETTING		
	CH EH SAL SETTING		
	FORMATION SAL SETTING	50K	
	CSG-CMT SETTING	2"	
	K LOG SETTING	811	

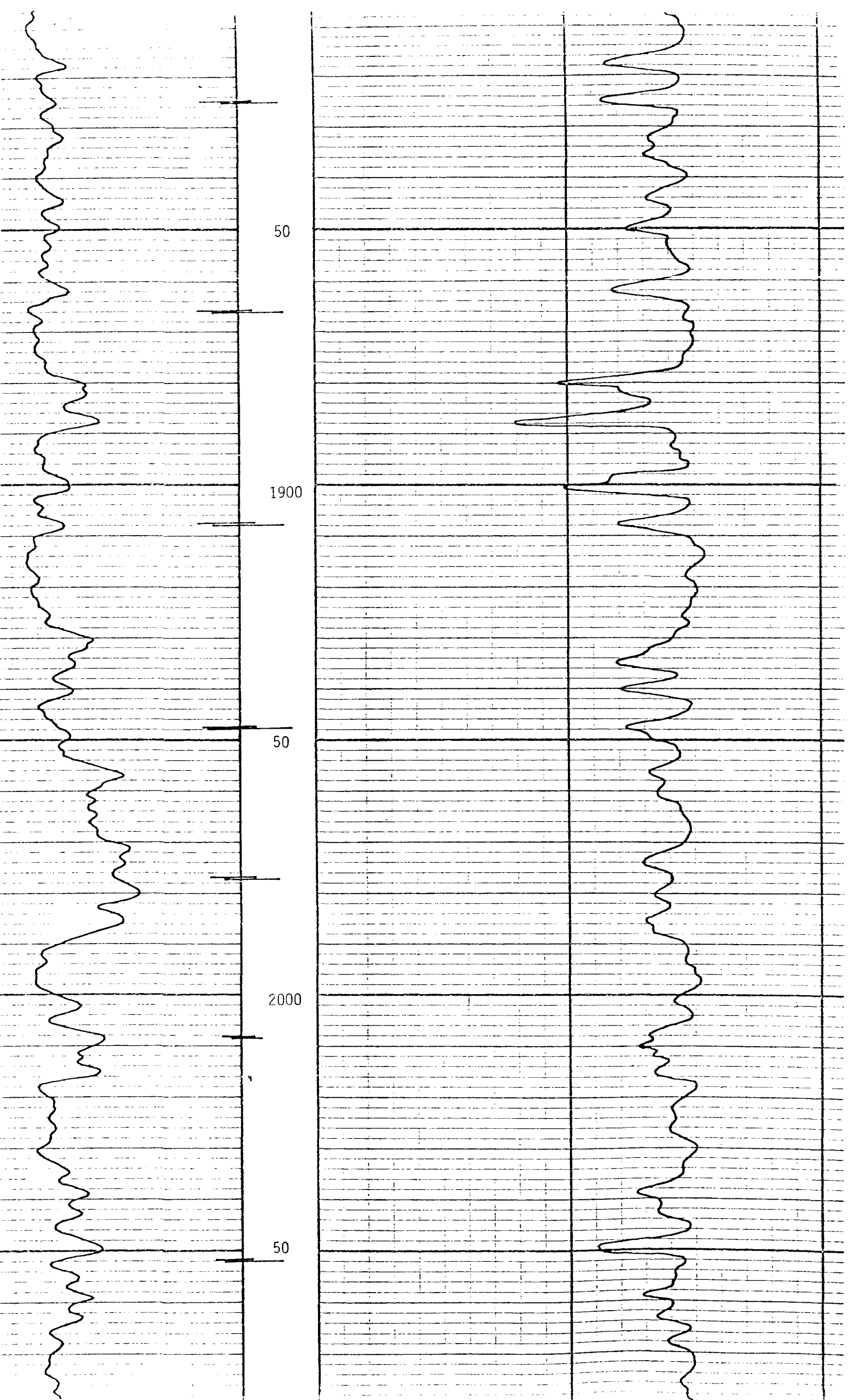
GENERAL				GAMMA RAY				NEUTRON				
DEPTHS		SPEED	T.C.	SETTINGS		Φ DIV.	API GR. UNITS	T.C.	SETTINGS		Φ DIV.	API N UNITS
FROM	TO	FT. MIN.	SEC.	FACTOR	RANGE	L OR R	PER LOG DIV.	SEC.	FACTOR	RANGE	L OR R	PER LOG DIV.
		30	2	649	500	0	8					

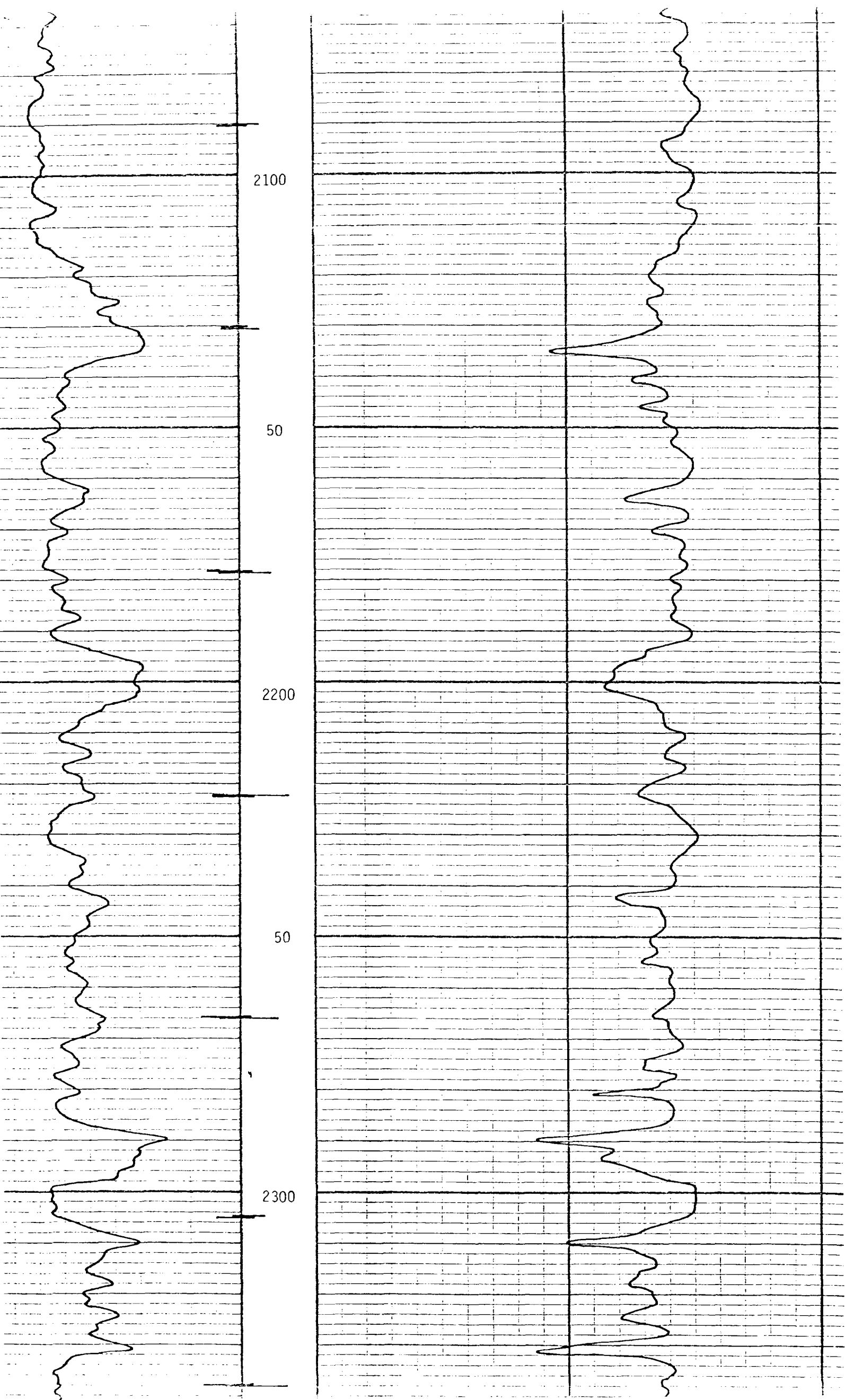
LOGGING DATA						REMARKS						
GENERAL		RATIO		POROSITY								
DEPTH	SPEED	T.C.	LOG	T.C.	LOG							
FROM	TO	FT. MIN.	SEC.	SENS.	SEC.	SENS.						
		30	1	624	1	624						

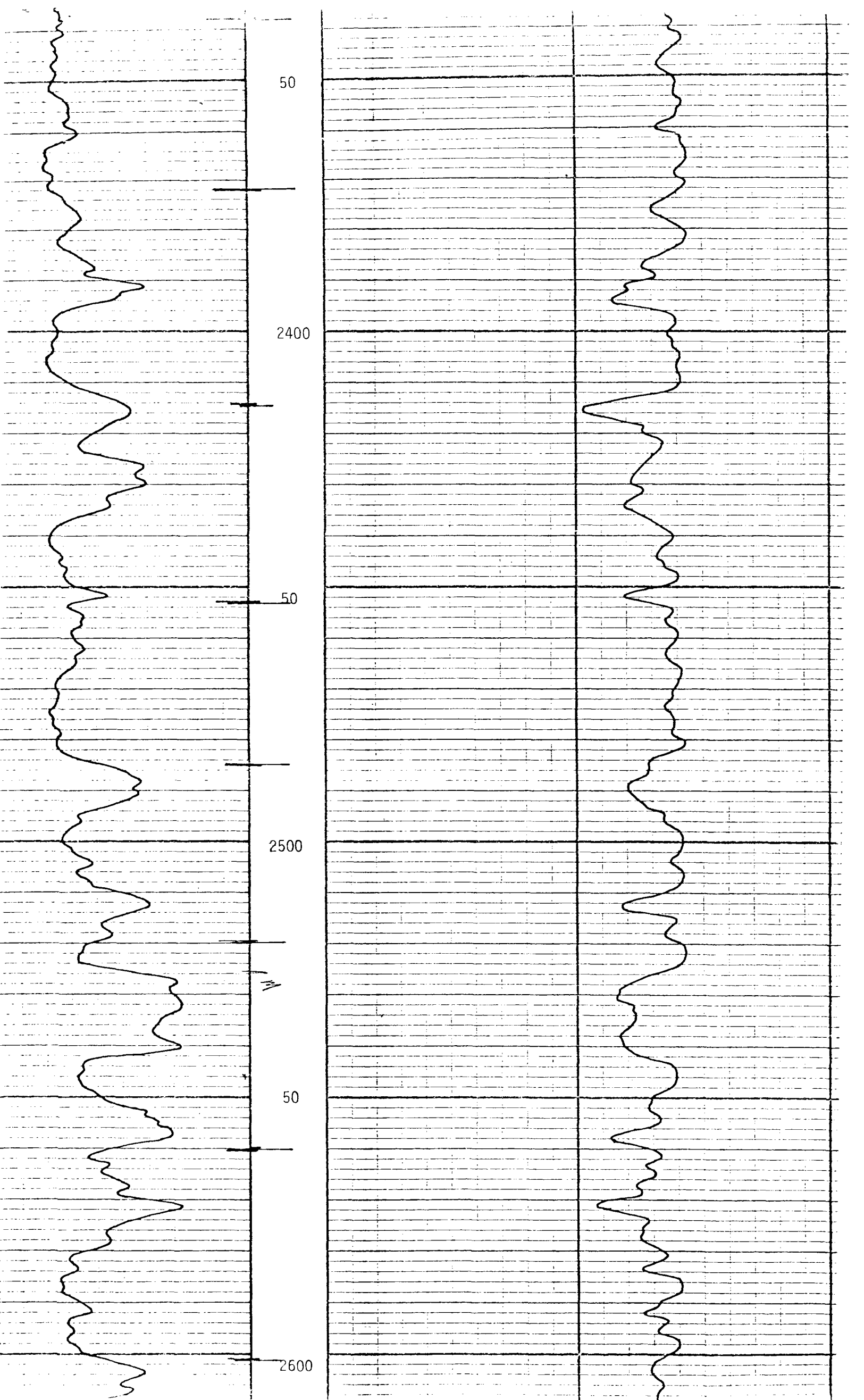


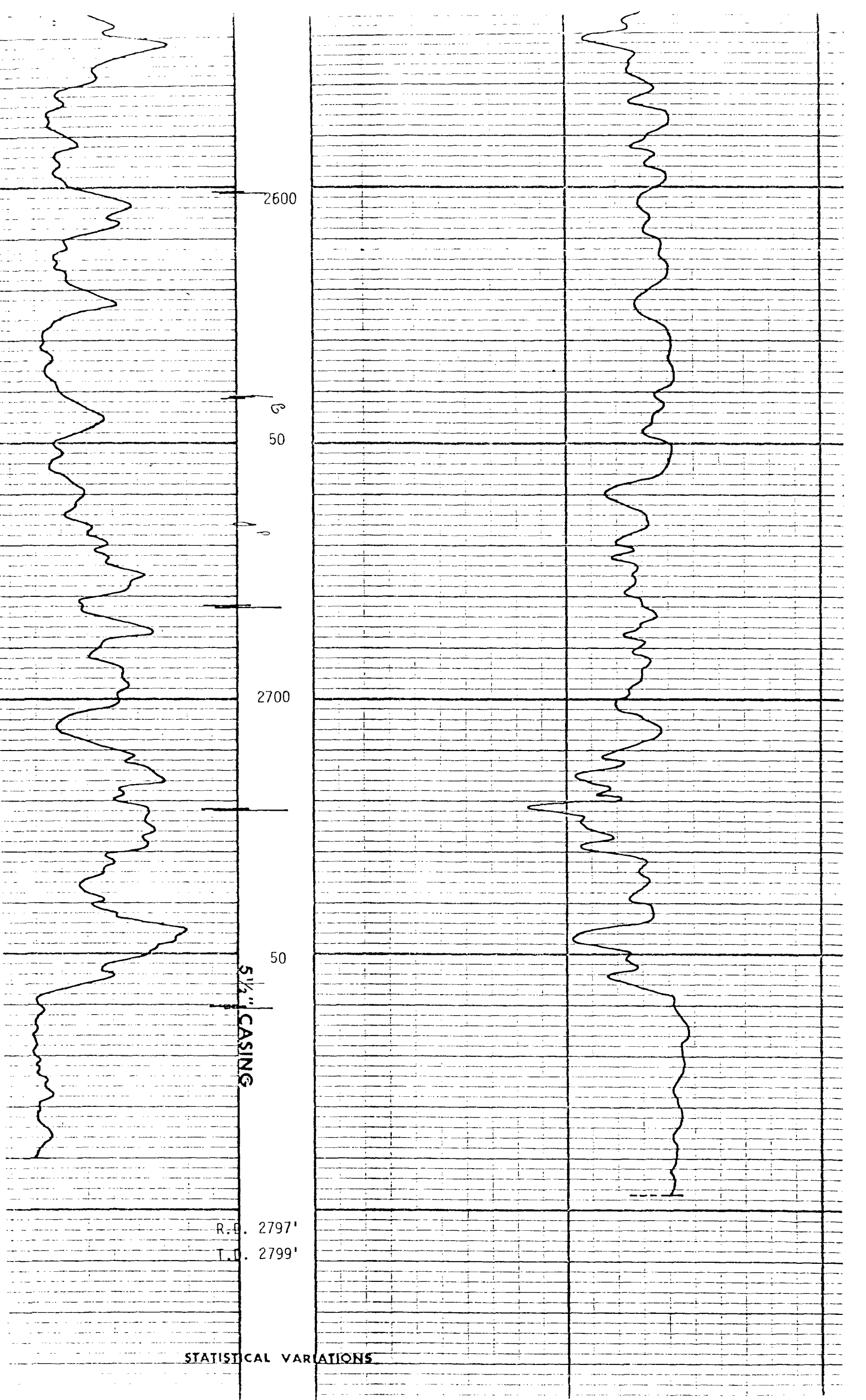












2600

50

50

2700

50

5 1/2" CASING

R.F. 2797'

T.D. 2799'

STATISTICAL VARIATIONS

WELEX



WALDIKO/ANCI/PIV/11/11
10009

COMPANY INTERNATIONAL OIL & GAS CORPORATION

WELL BAY MILLER # 2

FIELD LOCO HILLS

COUNTY EDDY STATE NEW MEXICO

Location 660' FNL 660' FWL

Sec. 5 Twp 18-S Rge 29-E

Other Services:
Calliper

COMPANY International
Oil & Gas Corp.
WELL Bay Miller # 2
FIELD Loco Hills
County Eddy State N.M.

Permanent Datum Ground Level Elev. 3578
Log Measured from C. H. F. 1 Ft. Above Perm. Datum Elev.: K.B. _____
Drilling Measured From _____ D.F. 3578
G.L. 3578

Date 6-24-63 6-24-63

Run No. - One - - One -

Type Log Gamma Neutron

Depth-Driller 2730 2730

Depth-Welex 2733 2733

Bottom Logged Interval 2723 2733

Top Logged Interval 10 20

Type Fluid in Hole Oil Oil

Salinity, PPM Cl. _____

Density _____

Level 890 890

Max. rec. temp., deg. F. 90 90

Operating Rig Time 1-1/2 hrs.

Recorded By P. C. Morris

Witnessed by Mr. Hodges

BORE-HOLE RECORD			CASING RECORD				
Run No.	Bit	From	To	Size	Wgt.	From	To
1	10"	0	-	7"		0	2245
	8"	-	2245				
	6"	2245	2730				

End Here

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
No.	- One -	Run No.	- One -
Model No.	2000	Log Type	Neutron-Gamma
Diameter	3-5/8"	Tool Model No.	2000
Detector Model No.	1E11	Diameter	3-5/8"
Type	C.M.	Detector Model No.	1C8
Length	28"	Type	G.M.
Distance to N. Source	108.9"	Length	14"
		Source Model No.	5 CU
		Serial No.	N-27
		Spacing	13.9"
		Type	PuBe
		Strength	8.5 x 10 ⁶ Neutrons/Sec.

LOGGING DATA

GENERAL		GAMMA RAY			NEUTRON		
Depth	Spread	Zero	API G.R. Units	Zero	API N. Units		
Ft. Min	Sec	Div. L or R	per Log Div.	Div. L or R	per Log Div.		
890	+	000	10	12 L	100		
900	+	000	10	6 L	75		

EQUIPMENT DATA

GAMMA RAY				NEUTRON			
Run No.	One	Run No.	One				
Log Type	Neutron-Gamma	Log Type	Neutron-Gamma				
Tool Model No.	2000	Tool Model No.	2000				
Diameter	3-5/8"	Diameter	3-5/8"				
Detector Model No.	1C8	Detector Model No.	1C8				
Type	G.M.	Type	G.M.				
Length	14"	Length	14"				
Source Model No.	5 CU	Source Model No.	5 CU				
Serial No.	N-27	Serial No.	N-27				
Spacing	13.9"	Spacing	13.9"				
Type	PuBe	Type	PuBe				
Strength	8.5 x 10 ⁶ Neutrons/Sec.	Strength	8.5 x 10 ⁶ Neutrons/Sec.				

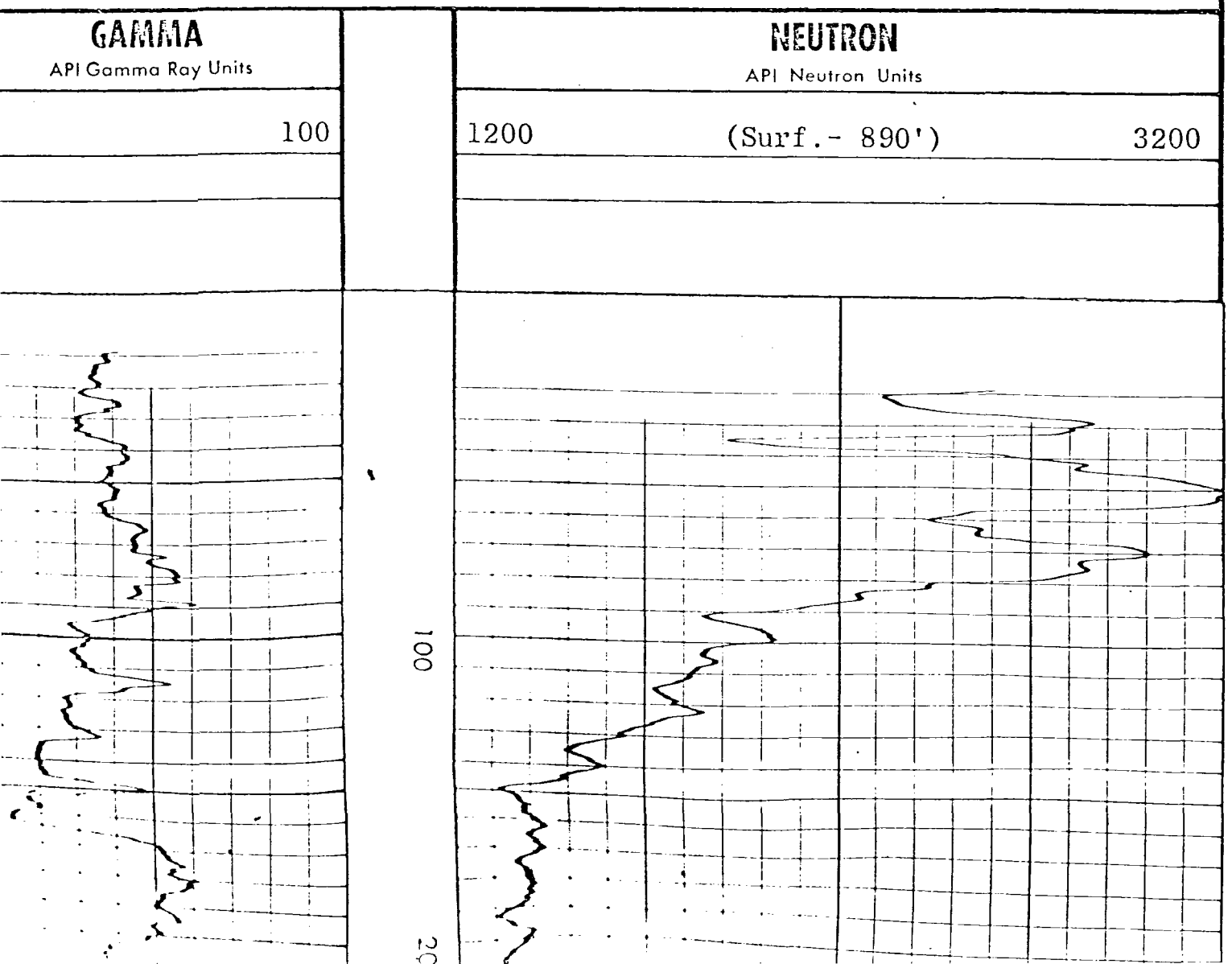
LOGGING DATA											
GENERAL				GAMMA RAY				NEUTRON			
Depths		Speed	T.C.	Sens.	Zero	API G.R. Units	T.C.	Sens.	Zero	API N. Units	
From	To	Ft. Min.	Sec.	Settings	Div. L or R	per Log Div.	Sec.	Settings	Div. L or R	per Log Div.	
Surf.	890	*	2	100	0	10	2	2000	12/L	100	
890	2660	*	2	100	0	10	2	1500	6/L	75	
2660	2733	*	2	100	0	10	2	1500	10/L	75	

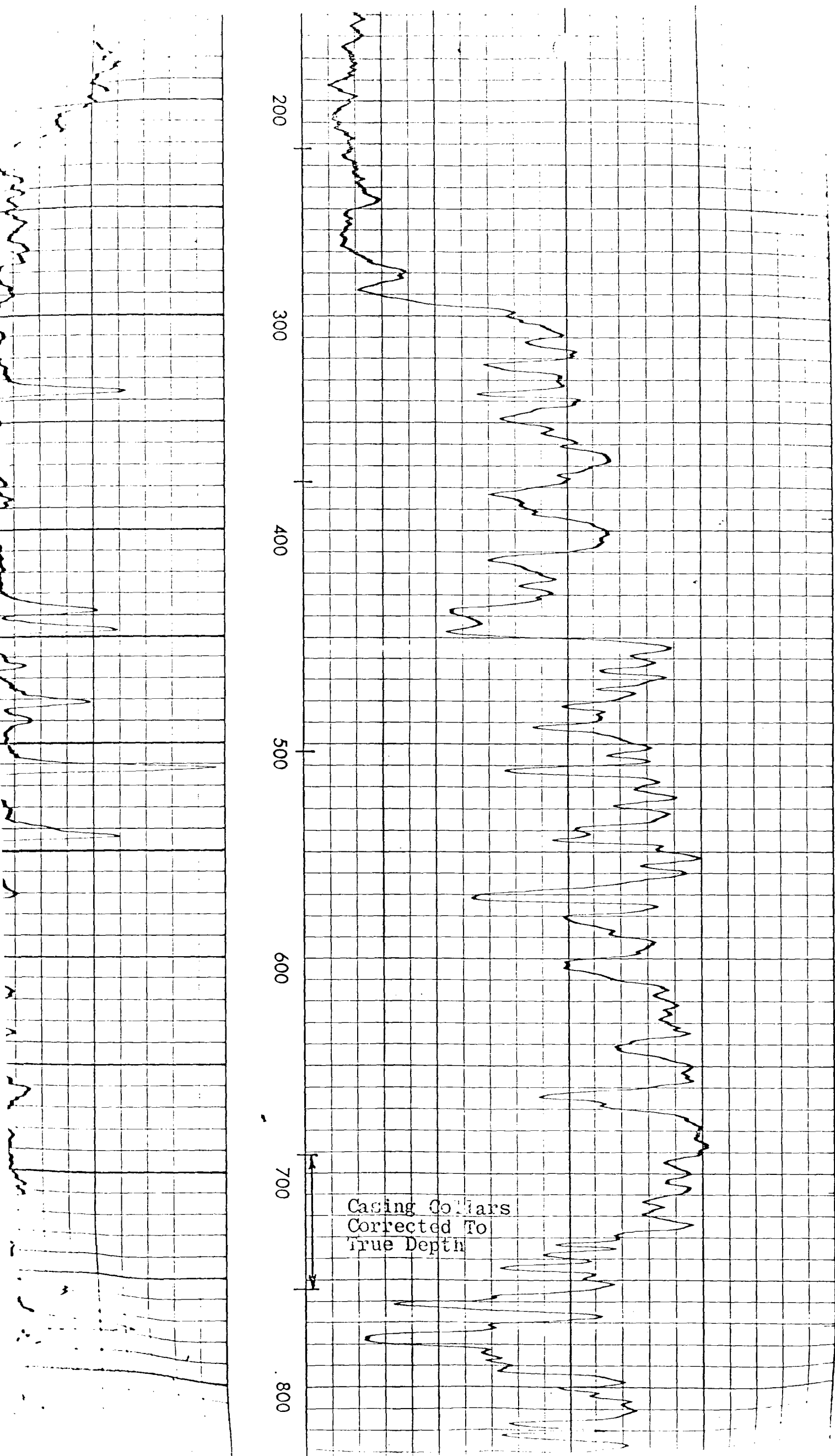
Reference literature: Welex Bulletin A-133
 * See interval markers on left

Remarks: Casing collars corrected to true depth

Fold Here

2" = 100'





200
300
400
500
600
700
800

Casing Collars
Corrected To
True Depth

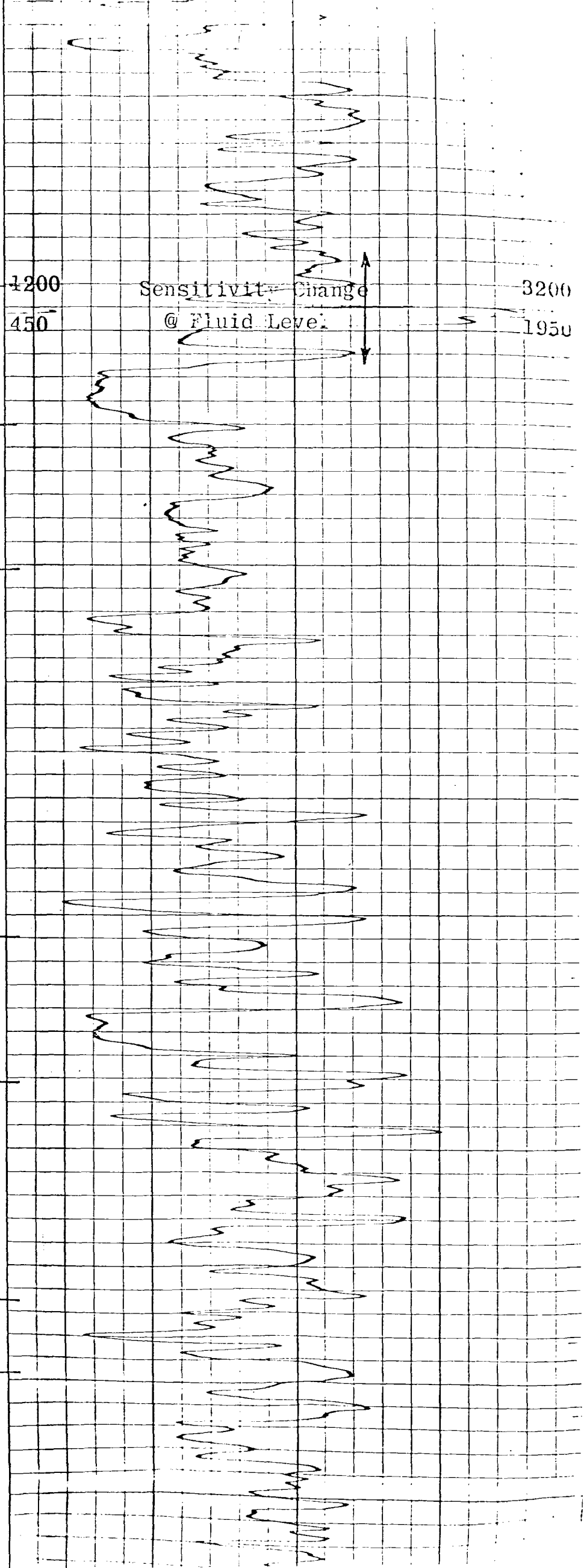
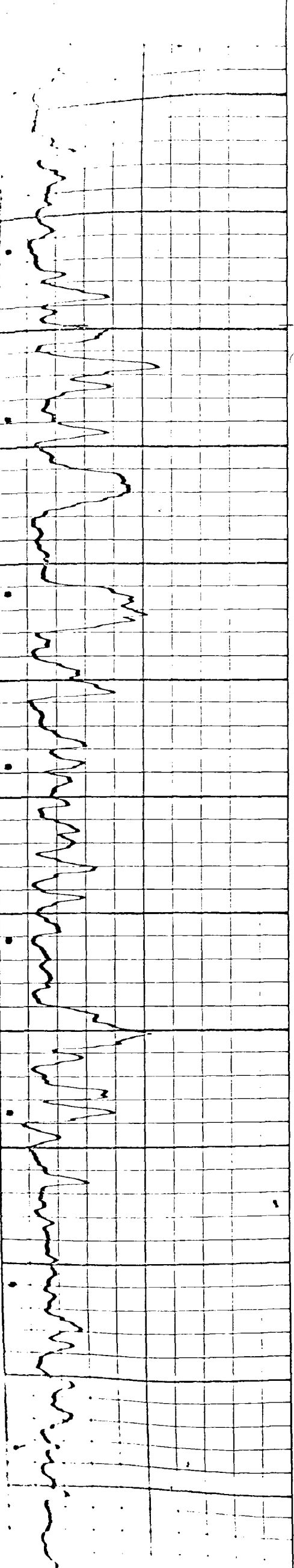
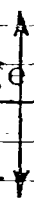
10.15
10.20
10.25

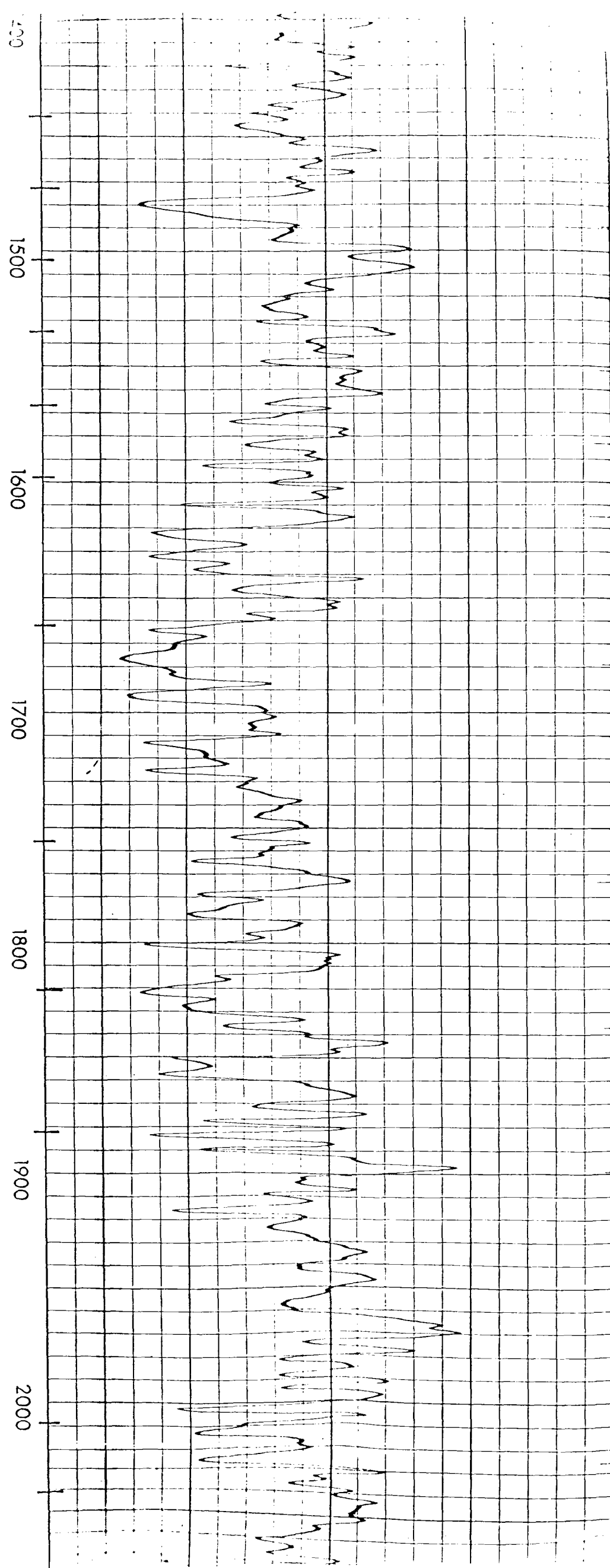
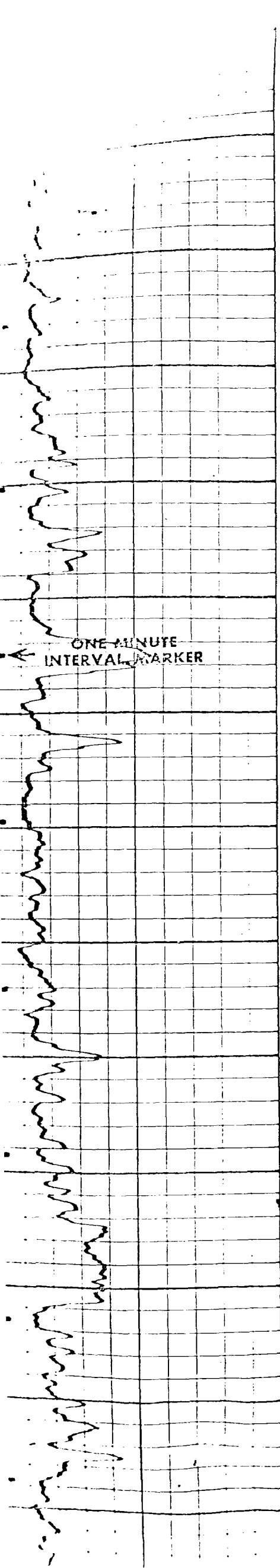
800 900 1000 1100 1200 1300 1400

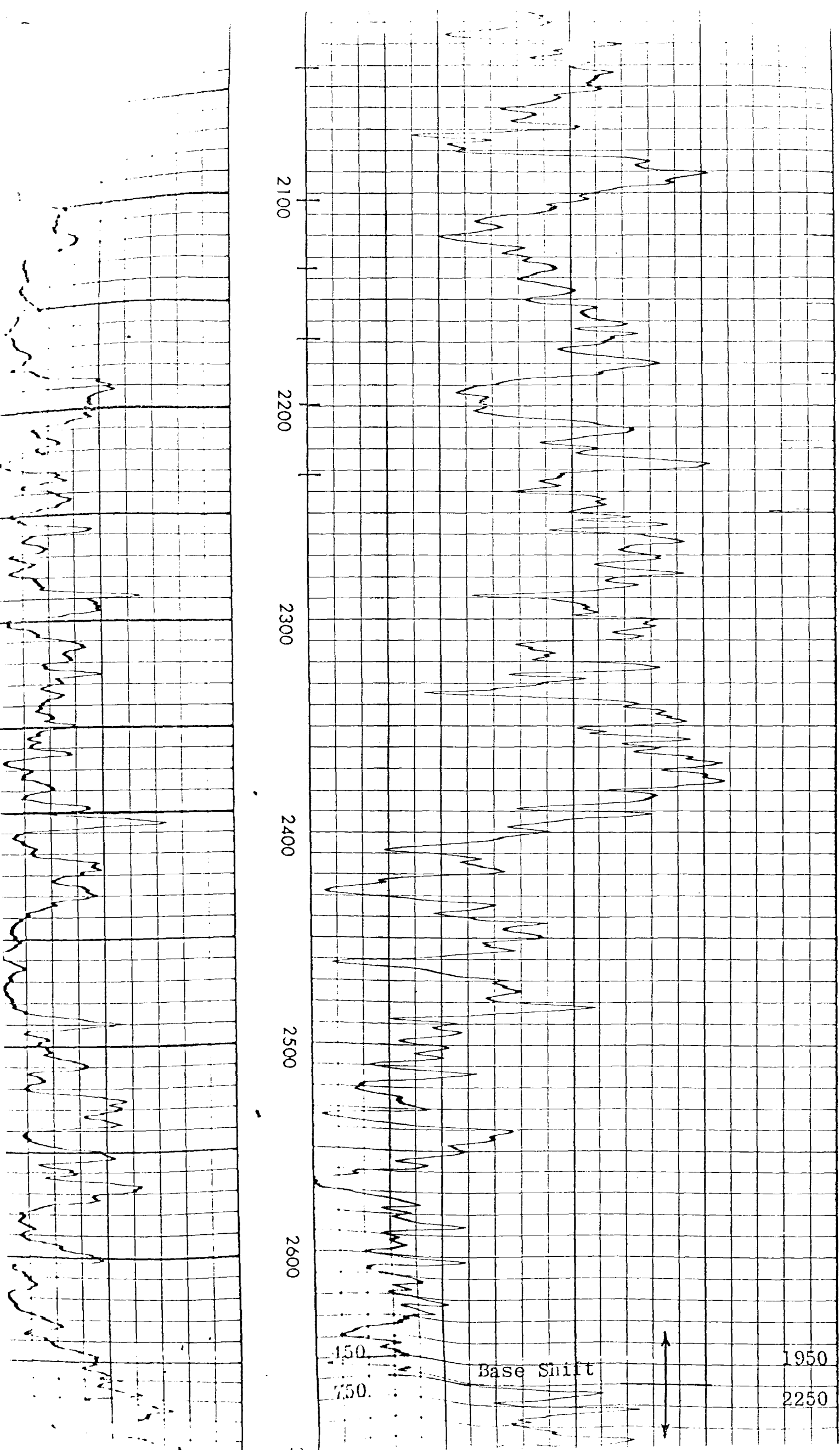
1200
450

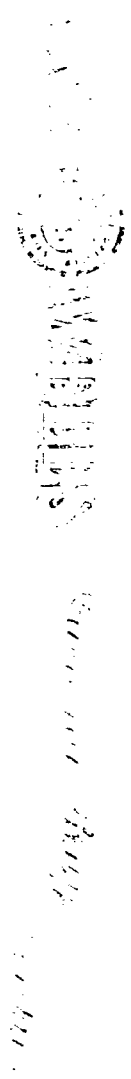
Sensitivity Change
@ Fluid Level:

3200
1950









WELL NO. _____ COMPANY INTERNATIONAL OIL & GAS CORP.

WELL BANNER NO. 4

FIELD LOCO HILLS

COUNTY EDDY STATE NEW MEXICO

LOCATION: 660' FNL & 1990' FEL

SEC 5 TWP 18-S RGE 29-E

Other Services
[Signature]

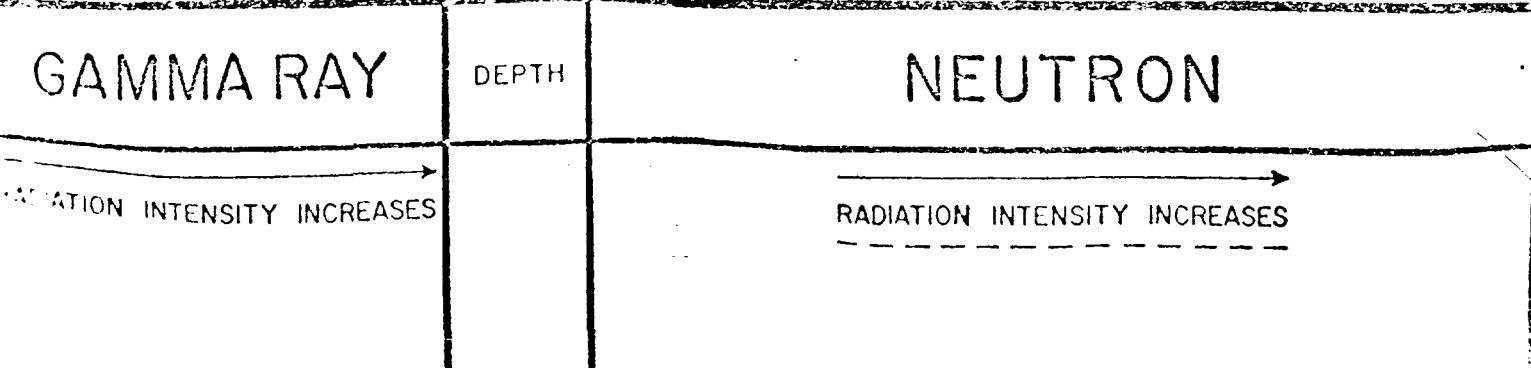
Permanent Datum: GROUND LEVEL Elev. 3567
 Measured from: GROUND LEVEL Ft. Above Permanent Datum
 Measured from: _____

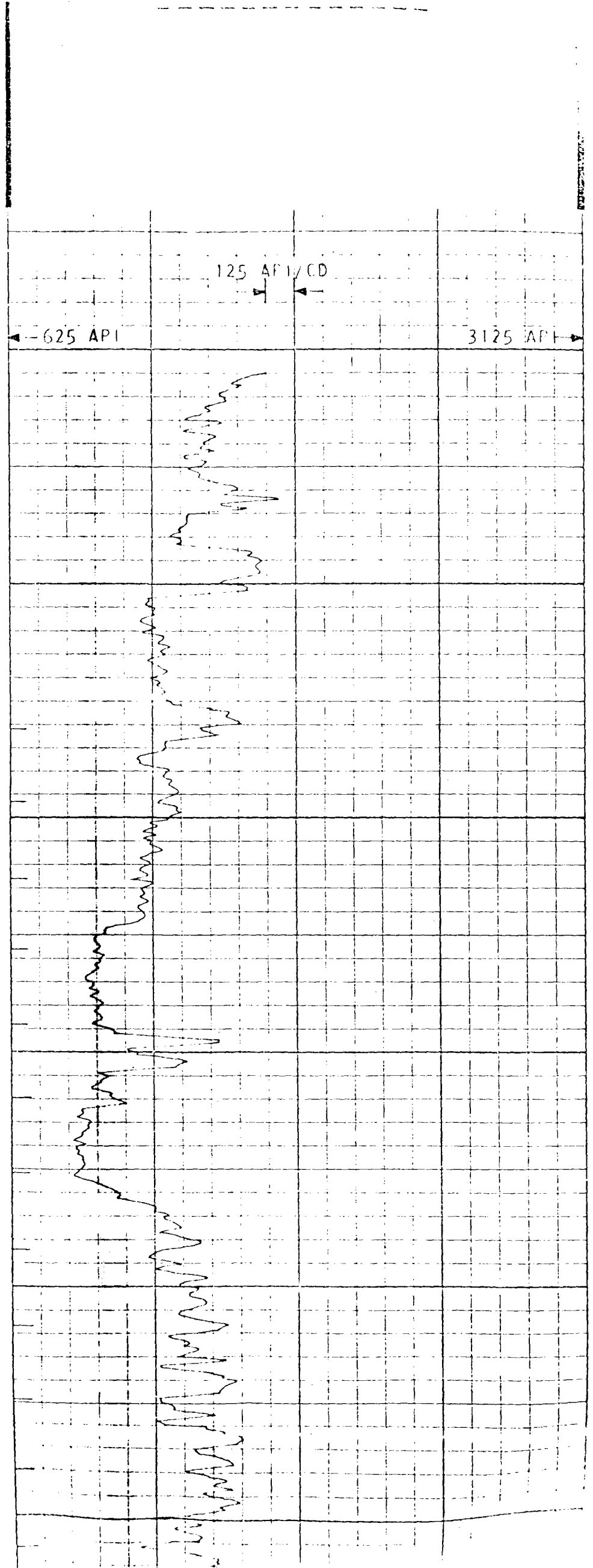
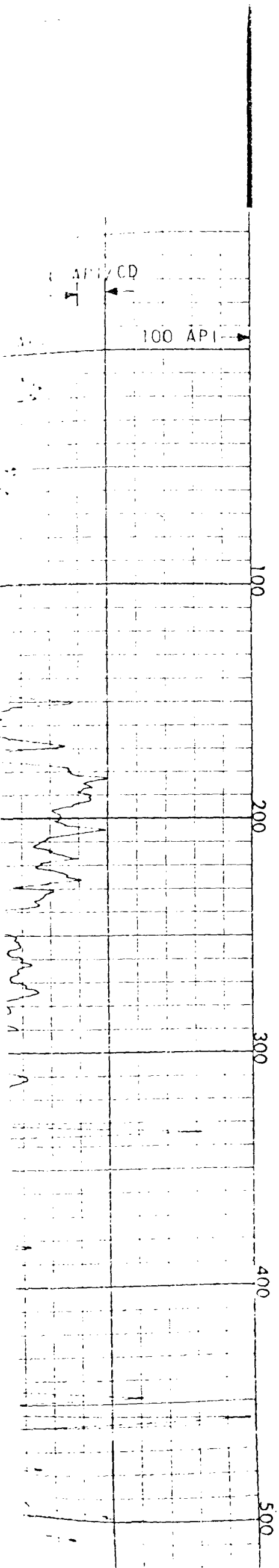
Date	Run No.	Tool	Interval	Depth	Time	By
3/11/63	ONE	GAMMA RAY	N/NEUTRON	1785	3 1/2 HOURS	JONES
			CALLIPER	1785	1 1/2 HOURS	JONES
						RAGSDALE
						RAGSDALE

Gamma Ray				Equipment Data				Neutron			
Run No.	ONE	Tool Model No.	402	Run No.	ONE	Log Type	N/NEUTRON	Run No.	ONE	Tool Model No.	402
Diam.	3 5/8"	Detect. Model No.	D4G1	Diam.	3 5/8"	Detect. Model No.	D6N1	Diam.	3 5/8"	Detect. Model No.	D6N1
Type	SCINT.	Length	4"	Type	SCINT.	Length	4"	Type	SCINT.	Length	4"
Dist. to N. Source	13'	Source Model No.	S10A3	Source Model No.	S10A3	Serial No.	3314	Source Model No.	S10A3	Serial No.	3314
		Serial No.		Serial No.		Spacing	13 5"	Serial No.		Spacing	13 5"
		Spacing		Spacing		Type	RA BE	Spacing		Type	RA BE
		Type		Type		Strength	300 MC.	Type		Strength	300 MC.

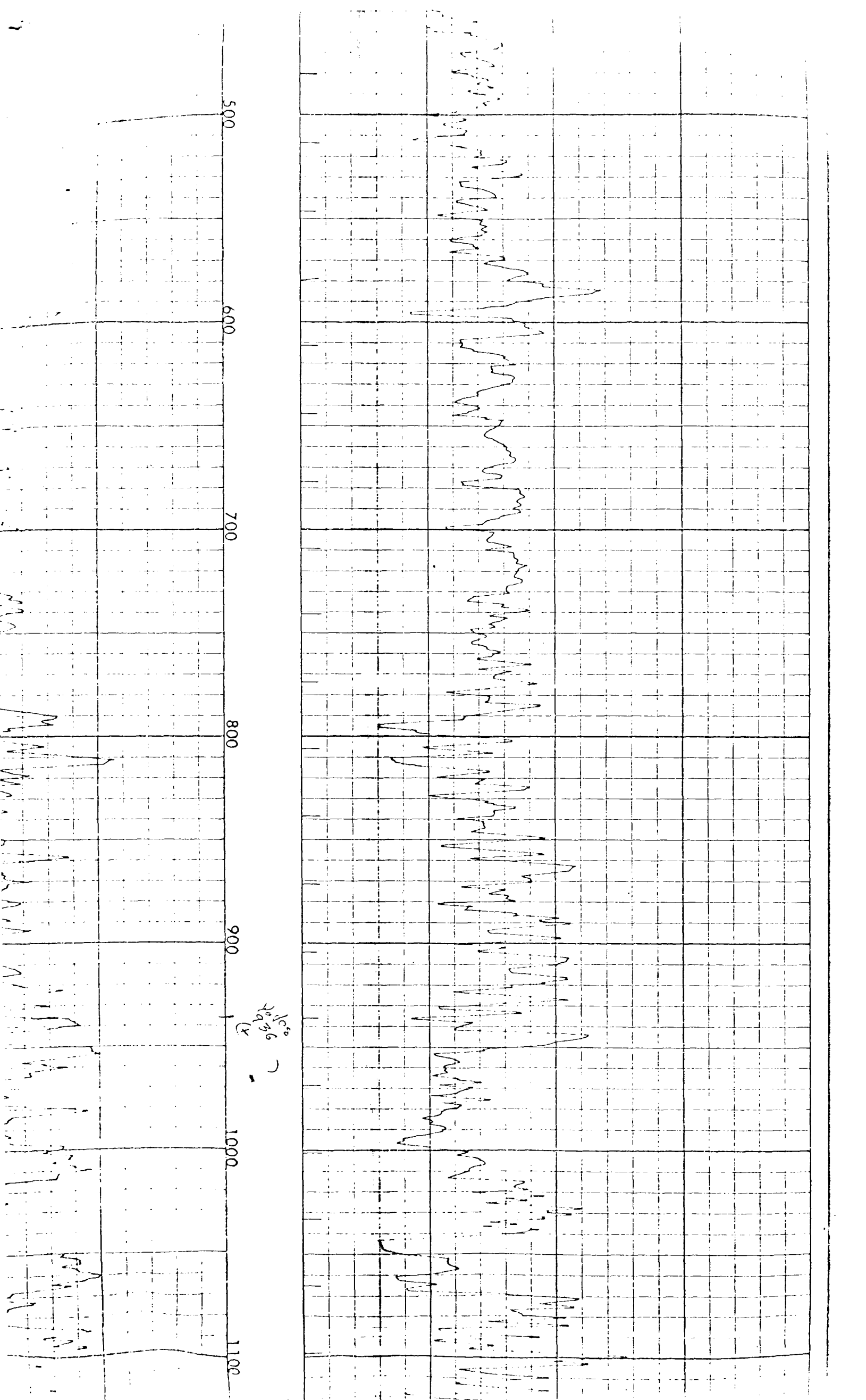
Logging Data											
General				Gamma Ray				Neutron			
Run No.	Depths		Speed	T.C.	Sens.	Zero	API G.R. Units	T.C.	Sens.	Zero	API N. Units
	From	To	Ft. Min.	Sec.	Settings	Div. L or R	Per Log Div.	Sec.	Settings	Div. L or R	Per Log Div.
1	2795	1795	30	2.0	490 X-1	0	10	2.0	82 X-1	0	125
1	2795	1793	60	0.9	490 X-1	0	10	0.9	82 X-1	0	125
1	1793	SURF	60	0.9	490 X-1	0	10	0.9	82 X-1	5-L	125

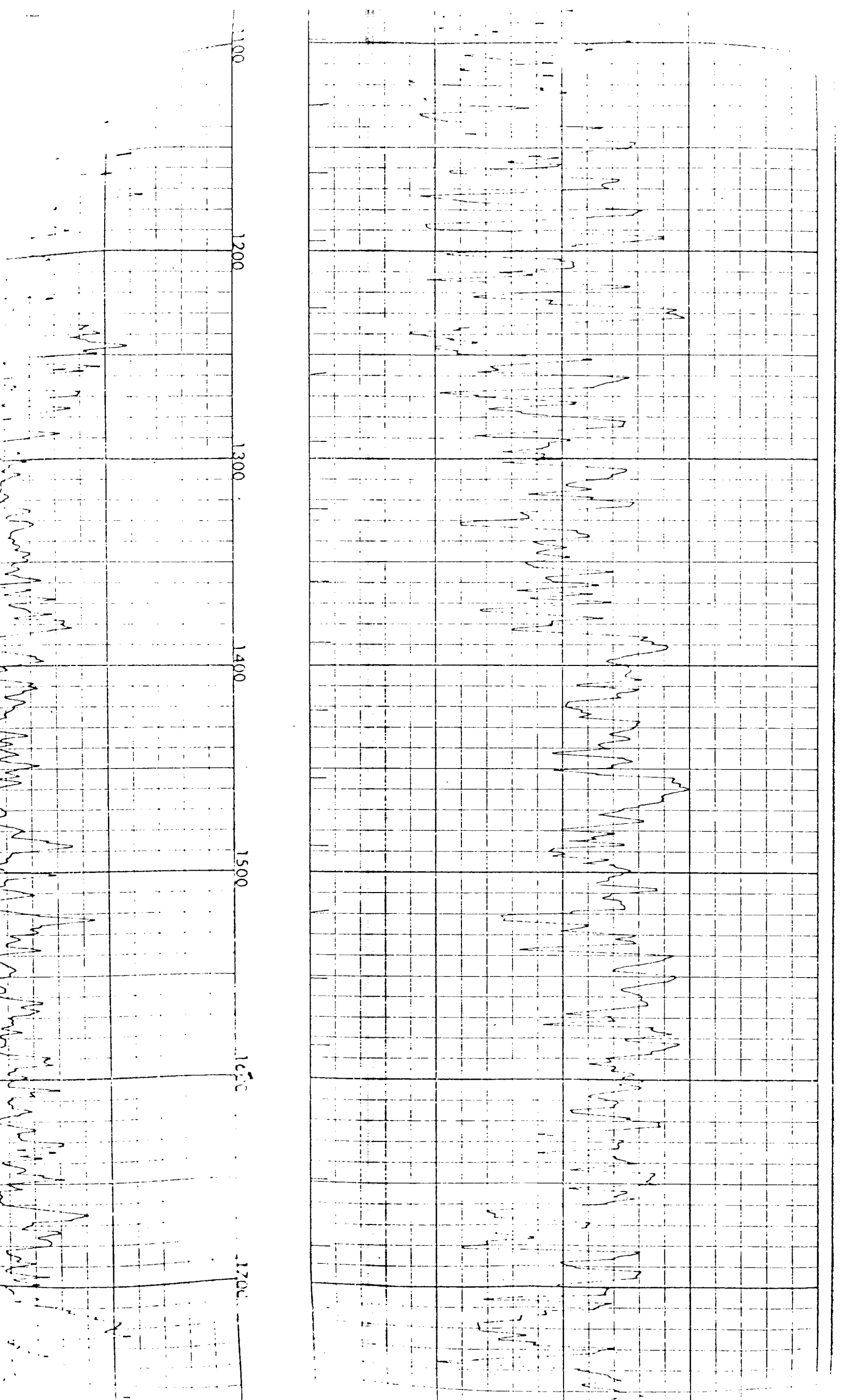
Remarks: _____ Reference Literature: _____

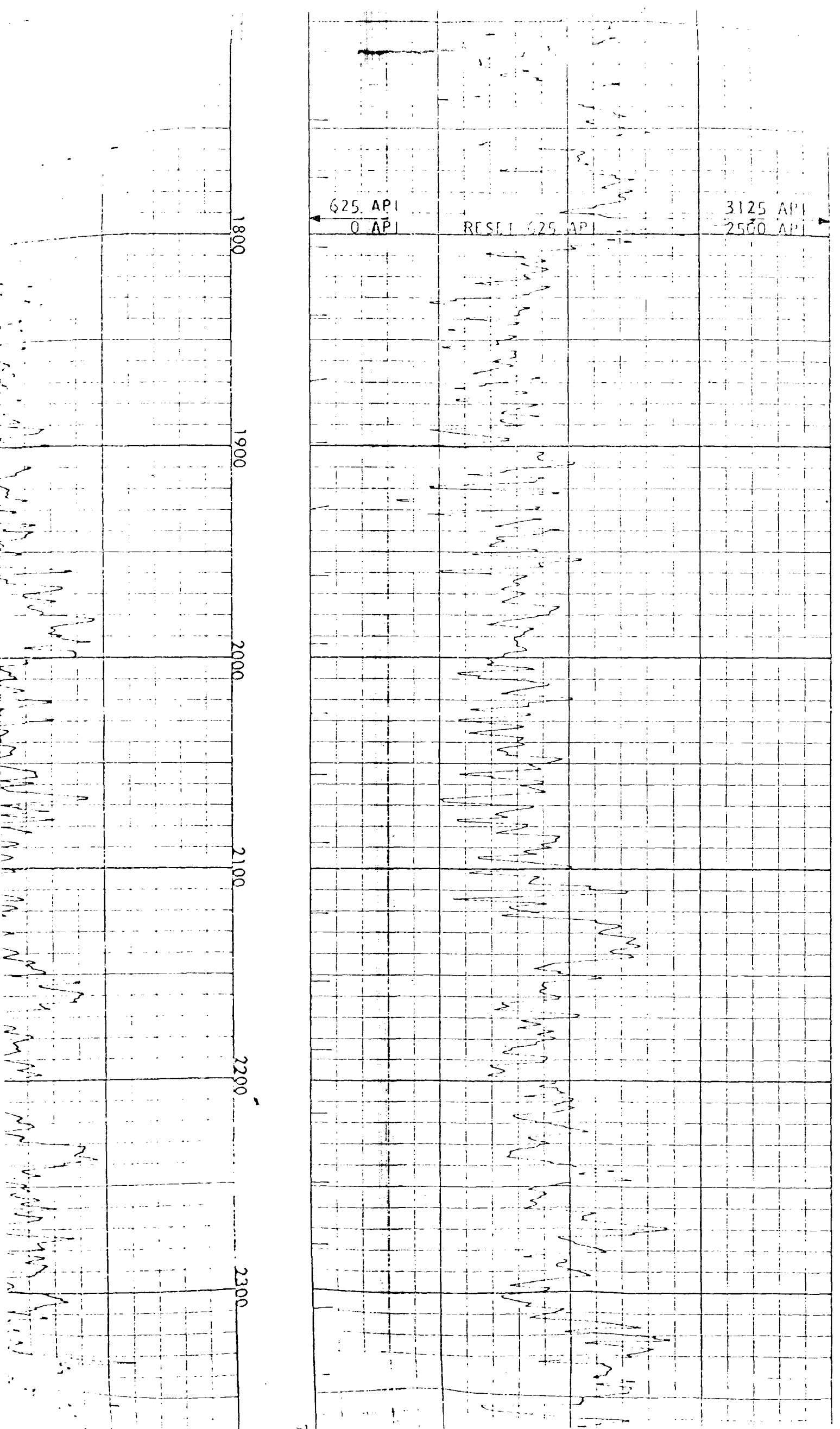


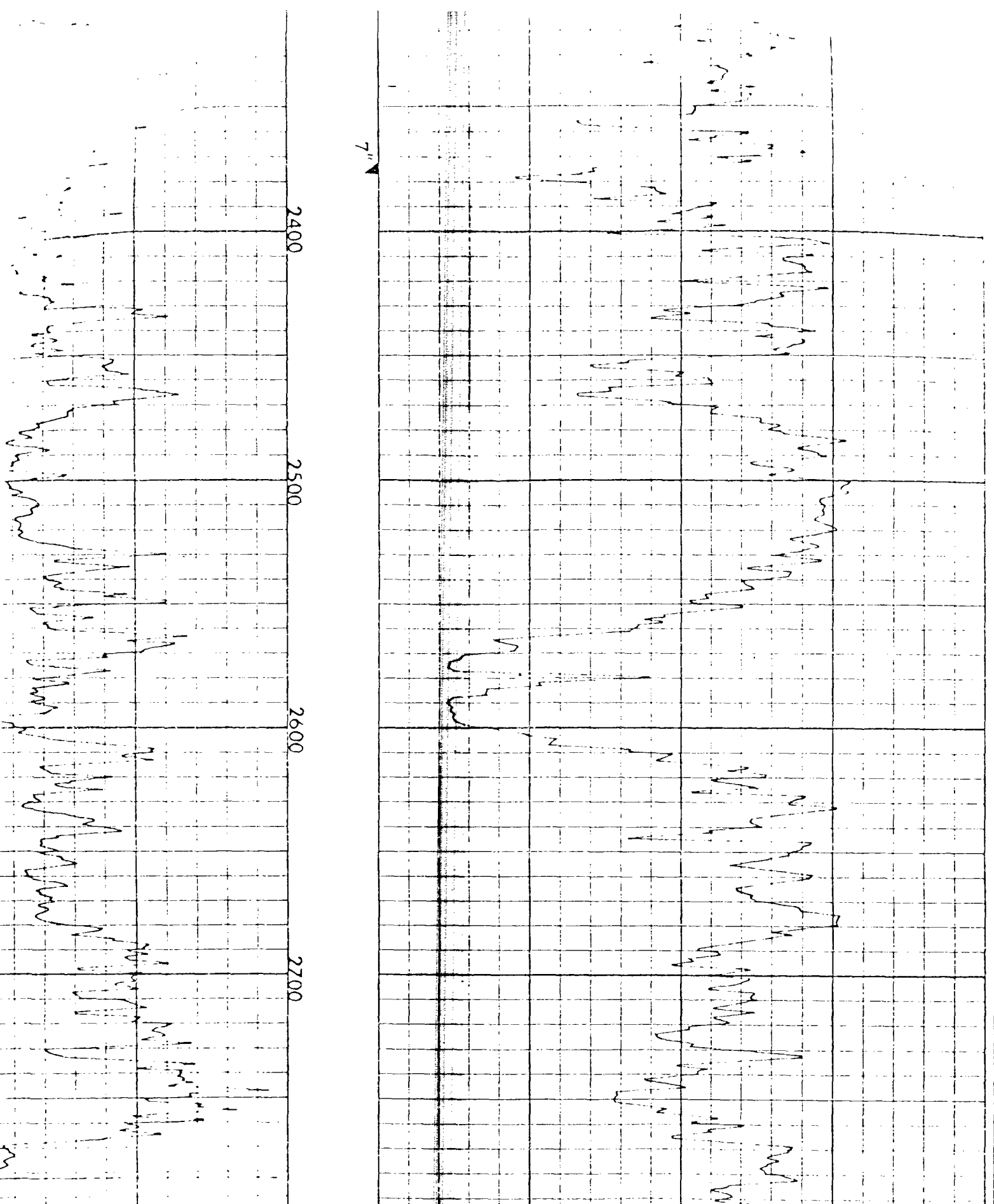


3125 API









R.D. 2793'
T.D. 2791'

R.D. 2795'
T.D. 2796'

0 API 100 API

← 0 API 2500 API →

CALIPER

POLE SIZE

5" 6" 7" 8" 9" 10" 12" 14" 16" 18" 20" 24" 28" 32"

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBT	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
Madarko Prod. Co. Date "L" 16 Well No. 1	Unit D, Sec. 16, 18S, 29E, 660' FNL & 660' FWL	Oil	9/17/39	11/9/39	2825	2812 Metex Premier	Perfs: 2564-71, 91-99, 2603-09, 38-48, 77-83, 97-2703, 08-18, 30-40, 53-63, 82- 85, 90-96. Csg: 8-5/8" @ 393' w/50 sxs, 7" @ 2289' w/100 sxs, 5-1/2" @ 2187-2817' w/600 sxs.
C. Thompson Davis Well No. 1	Unit A, Sec. 17, 18S, 29E, 330' FNL & 330' FEL	Oil	2/2/40	3/14/40	2585	2542 Loco Hills Sand	Perfs: OH 2300-2585 Csg: 8-1/4" @ 350' w/50 sxs, 7" @ 2300' w/100 sxs.
Madarko Prod. Co. allard GSA Unit Well No. 7A-2	Unit A, Sec. 17, 18S, 29E, 560' FNL & 660' FEL	Oil	6/29/82	8/8/82	2860	2790 Metex Premier	Perfs: 2521-32, 50-54, 60-70, 2598-2606, 37-43, 56-64, 70-74, 93-2703, 14-27, 50-54. Csg: 8-5/8" @ 365' w/350 sxs, 5-1/2" @ 2853' w/850 sxs.
Madarko Prod. Co. allard GSA Unit Well No. 7-1	Unit B, Sec. 17, 18S, 29E, 330' FNL & 1650' FEL	Oil	7/17/39	8/31/39	3090	3047 Premier Metex	Perfs: OH 2500-2585 OH 2630-2740 Csg: 8-1/4" @ 335' w/50 sxs, 7" @ 2345' w/100 sxs.
Madarko Prod. Co. allard GSA Unit Well No. 7-3	Unit B, Sec. 17, 18S, 29E, 660' FNL & 1980' FEL	WIW	8/26/76	11/8/76	2770	- Metex Premier	Perfs: 2454-57, 66-70, 2506-20, 36-40, 48-55, 84-90, 2640-44, 48-52, 73-78, 85-90, 94-2704, 09-14, 30-40. Csg: 8-5/8" @ 386' w/150 sxs, 4-1/2" @ 2770' w/250 sxs, 2-3/8" tbg w/Guiberson Uni-one pkr @ 2361'.

AMERARK
8381

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
Madarko Prod. Co. Hillard GSA Unit Well No. 20-4	Unit C, Sec. 17, 18S, 29E, 330' FNL & 1980' FWL	Oil	10/8/41	11/14/41	3068	3018 Grayburg Jackson	Perfs: OA 2225-3018 Csg: 8-5/8" @ 331' w/50 sxs, 7" @ 2225' w/150 sxs, 4-1/2" liner 2161-3014'.
C. Thompson L. Langford Well No. 1	Unit M, Sec. 9, 18S, 29E, 660' FSL & 660' FWL	Oil	5/19/39	6/25/39	2562	2475 Loco Hills Sand	Perfs: OH 2225-2475 Csg: 7" @ 2225'.
Madarko Prod. Co. L. Langford Well No. 1	Unit C, Sec. 9, 18S, 29E, 1980' FSL & 660' FWL	P&A 5/11/83	7/31/39	8/15/39	2725	Surface Loco Hills Sand	Csg: 8-5/8" @ 321' w/25 sxs, 7" @ 2318' w/100 sxs. P&A: 110 sxs @ 2200-2480, 45 sxs @ 680-820, Circ cmt down 7" @ 320' & out 8- 5/8".
Madarko Prod. Co. West Loco Hills and Unit Well No. 10-33	Unit K, Sec. 9, 18S, 29E, 1980' FSL & 1310' FWL	P&A	12/22/72	1/4/73	2508	Surface Loco Hills Sand	Csg: 8-5/8" @ 356' w/150 sxs, 5-1/2" @ 2498' w/200 sxs. P&A: 35 sxs @ 2249-2485, 30 sxs @ 690-815, 300 sxs Circ down 5-1/2" @ 355' & out 8-5/8".
Madarko Prod. Co. West Loco Hills and Unit Well No. 9-32	Unit F, Sec. 9, 18S, 29E,	Oil	5/29/71	6/9/71	2484	Loco Hills Sand	Perfs: OH 2432-84 Csg: 8-5/8" @ 392' w/200 sxs, 5-1/2" @ 2432' w/250 sxs.
Madarko Prod. Co. L. Langford Well No. 3	Unit E, Sec. 9, 18S, 29E, 2310' FNL & 990' FWL	P&A	(P&A 1946)				P&A: 10 sxs @ 2491', 20 sxs @ Bottom of 7", 10 sxs @ 790', 20 sxs @ bottom of 8-1/4" csg, fill hole to Surface.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBD	Zones(s)	Record of Completion: Perf(s) and Well Construction	
			Spudded	Completed				
Madarko Prod. Co. L. Langford Well No. 5	Unit E, Sec. 9, 18S, 29E, 1650' FNL & 330' FWL	Oil	12/23/56	1/30/57	3088	Grayburg	Perfs: 2524-31, 48-52, 2395-2420 Csg: 8-5/8" @ 410' w/100 sxs, 5-1/2" @ 2994' w/150 sxs.	
Madarko Prod. Co. L. Langford Well No. 1	Unit C, Sec. 9, 18S, 29E, 330' FNL & 2310' FWL	P&A 5/20/83	11/3/39	12/15/39	2495	Loco Hills Sand	Csg: 8-5/8" @ 393, 7" @ 2365'. P&A: 100 SXS @ 2440-60, CIBP 2348, 10 SXS @ 2298-2348, 45 SXS @ 700-840, 70 SXS @ 154-370, Cmt 165' to Surface.	
Madarko Prod. Co. L. Langford Well No. 6	Unit C, Sec. 9, 18S, 29E, 990' FNL & 1650' FWL	Oil	1/6/57	3/11/57	2970	Metex Premier	Perfs: 2545-49, 55-61, 71-75, 85-91, 2619-25, 55-60, 73-79, 84-88, 2743-07, 19-25, 29-37, 55-59, 67- 71. Csg: 8-5/8" @ 424' w/100 sxs, 5-1/2" @ 2813' w/150 sxs.	
Madarko Prod. Co. Hallard GSA Unit Well No. 22-4	Unit D, Sec. 9, 18S, 29E, 990' FNL & 330' FWL	WIW	12/16/56	1/5/57	2652	Grayburg	Perfs: 2534-48, 59-65. OH 2596-2652. Csg: 8-5/8" @ 412' w/50 sxs, 5-1/2" @ 2596' w/100 sxs.	
Harvey E. Yates Co. Loco Hills Welch Well No. 1	Unit D, Sec. 9, 18S, 29E, 480' FNL & 500' FWL	GAS	9/15/78	11/14/78	11,200	Morrow	Perfs: 10,876-882. Csg: 12-3/4" @ 402' w/475 sxs, 8-5/8" @ 2910' w/ 1300 sxs, 5-1/2" @ 11,199' w/725 sxs.	
Wepco, Inc. Loco Hills Deep Well No. 1	Unit F, Sec. 9, 18S, 29E 1980' FNL & 1980' FWL	P&A	11/30/76	2/5/77	11,210	Morrow	Csg: 12-3/4" @ 409' w/475 sxs, 8-5/8" @ 3350' w/1050 sxs P&A: 50 sxs @ 10850, 9400, 8125, 6125, 4000, 3410, 10 sxs @ surface.	

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBT	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
Madarko Prod. Co. Hallard GSA Unit Well No. 5-1	Unit P, Sec. 8, 18S, 29E 660' FSL & 660' FEL	P&A	1/17/40 (P&A IN 1957)	4/1/40	3148	Grayburg	Perfs: 2403-24 2625-40 Csg: 8-5/8" @ 366' w/50 sxs, 7" @ 2267' w/100 sxs. P&A: Rec 18' of 8-5/8" csg; rec 600' of 7" csg; 30 sxs @ 2400'; 10 sxs @ 2270'; 10 sxs @ surface.
Madarko Prod. Co. Hallard GSA Unit Well No. 5-11	Unit P, Sec. 8, 18S, 29E 990' FSL & 990' FEL	P&A	1/1/57 (P&A in 1959)	5/14/57	3056	Grayburg San Andres	Perfs: OH 2780-86 Csg: 8-5/8" @ 400' w/100 sxs, 5-1/2" @ 2768' w/100 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 5-14	Unit P, Sec. 8, 18S, 29E 990' FSL & 1310' FEL	Oil	10/20/78	12/16/78	3100	Metex Premier	Perfs: 2494-96, 2504-09, 36-44, 2678-82, 85-94, 2701, 17- 21, 26-29 Csg: 8-5/8" @ 396' w/250 sxs, 4-1/2" @ 3095' w/500 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 5-16	Unit O, Sec. 8, 18S, 29E 400' FSL & 2130' FEL	Oil	6/7/81	8/24/81	2830	Metex Premier	Perfs: 2505-08, 34-38, 66-76, 2602-06, 16-20, 22-28; 2646-50, 58-62, 78-85, 91-97, 2716-23. Csg: 8-5/8" @ 346' w/250 sxs, 5-1/2" @ 2829' w/575 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 5-3	Unit O, Sec. 8, 18S, 29E 330' FSL & 2310' FEL	WIW	6/30/41	9/26/41	3045	Grayburg San Andres	Perfs: OH 2863-3040 Csg: 8-5/8" @ 360' w/50 sxs, 7" @ 2275' w/100 sxs, 5-1/2" liner @ 2209-2578' w/230 sxs, 2-3/8" PL tbg w/Johnston 101-S tension pkr @ 2850'.
Madarko Prod. Co. Hallard GSA Unit Well No. 14-7	Unit N, Sec. 8, 18S, 29E 400' FSL & 2000' FWL	WIW	8/28/82	11/30/82	2760	Grayburg	Perfs: 2474-83, 2491-2500, 2511-17, 43-52, 78-83, 90-95, 2610-16, 21-26, 33-38, 42-50, 54-62 Csg: 8-5/8" @ 356' w/350 sxs, 4-1/2" @ 2759' w/850 sxs.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Completed	Depth		Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed		TD	PBTD		
Anadarko Prod. Co. Ballard GSA Unit Well No. 14-2	Unit N, Sec. 8, 18S, 29E 990' FSL & 2310' FWL	Oil	3/26/41	5/14/41		3087	--	Grayburg	Perfs: 2416-20, 27-33, 72-80, 92-96, 2506-10, 2596-2600, 2608-14, 18-22, 41-45, 49- 57, 60-64, 74-86. Csg: 8-5/8" @ 350' w/50 sxs, 7" @ 2330' w/100 sxs, 5-1/2" @ 2912' w/75 sxs.
Anadarko Prod. Co. Ballard GSA Unit Well No. 14-5	Unit N, Sec. 8, 18S, 29E 990' FSL & 1650' FWL	Oil	6/26/53	8/25/53		3056	3053	Grayburg San Andres	Perfs: OH OA 2460-3053 8-5/8" @ 330' w/50 sxs, 7" @ 2426' w/100 sxs.
Anadarko Prod. Co. Ballard GSA Unit Well No. 14-1	Unit K, Sec. 8, 18S, 29E 2310' FSL & 2310' FWL	P&A	11/27/40 (P&A in 1974)	1/30/41		2660	Surface	Grayburg	Perfs: OH 2360-2660 8-5/8" @ 330' w/50 sxs, 7" @ 2360' w/100 sxs. P&A: Rec 460' of 7" csg 650 sxs @ 2360' cmt ret + 70 sxs @ 482, 10 sxs @ surf.
Anadarko Prod. Co. Ballard GSA Unit Well No. 14-4	Unit K, Sec. 8, 18S, 29E 1980' FSL & 1980' FWL	Oil	5/5/50	9/6/50		3305	3116		Perfs: 2410-18, 50-60, 75-79, 89- 95; 2556-62, 76-82, 2605- 09, 20-30, 48-56. Csg: 8-5/8" @ 335' w/50 sxs, 5-1/2" @ 2872 w/100 sxs.
Anadarko Prod. Co. Ballard GSA Unit Well No. 5-4	Unit J, Sec. 8, 18S, 29E 1650' FSL & 2310' FEL	WIW	2/5/49	4/13/49		3050	--	Metex Premier	Perfs: 2438-42, 85-89, 2503-07, 16-20, 86-90, 2606-10, 2654-58, 60-64 Csg: 8-5/8" @ 380' w/50 sxs, 7" @ 2776' w/100 sxs. 2-3/8" PL tbg w/Guiberson Uni-one pkr @ 2345.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBTD	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
Madarko Prod. Co. Hallard GSA Unit Well No. 5-2	Unit J, Sec. 8, 18S, 29E 2310' FSL & 2310' FEL	P&A	2/24/41 (P&A in 1956)	6/10/41	2770 Surface	--	Perfs: OH 2628-2674 Csg: 8-5/8" @ 375' w/50 sxs; 7" 2 2285 w/100 sxs. P&A: Rec 220' of 8-5/8" csg, rec 1600' of 7" csg, 50 sxs @ 2360', 20 sxs @ 800', 10 sxs @ 240', 10 sxs @ surface.
Madarko Prod. Co. Hallard GSA Unit Well No. 5-8	Unit J, Sec. 8, 18S, 29E 2310' FSL & 1980' FEL	WIW	3/12/56	5/8/56	3044 --	Jackson	Perfs: 3003-3025 (perfs) 8-5/8"-368' 50 sxs Csg: 4-1/2" @ 2994' w/125 sxs Guiberson uni I @ 2970 Plastic lined.
Madarko Prod. Co. Hallard GSA Unit Well No. 5-7	Unit I, Sec. 8, 18S, 29E 2310' FSL & 990' FEL	Oil Producer	1/2/56	3/8/56	2860 2850	Metex, Premier Lovington	Perfs: 2494-2500, 2504-08, 21- 25, 36-42, 2629-34, 43- 47, 58-68, 84-94, 2710- 18, 2605-25; 2795-2815 Csg: 8-5/8" @ 334' w/50 sxs, 4-1/2" @ 2860' w/70 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 5-13	Unit I, Sec. 8, 18S, 29E 1310' FSL & 20' FEL	WIW	8/12/76	1/19/77	3206 NA	Grayburg San Andres	Perfs: 2470-74, 86-90, 2522-34, 44-77, 50-54, 64-70, 2600-06, 39-43, 58-62, 67-72, 84-89, 92-96, 2706-20, 2738-50, 2985- 91, 2996-3000, 04-10, 30- 36, 77-78, 86-89, 92-95, 3101-06, 3114-18, 3845 Csg: 8-5/8" @ 350' w/200 sxs, 4-1/2" @ 3200' w/250 sxs.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		TD	Depth PBTD	Zones(s)	Record of Completion:
			Spudded	Completed				Perf(s) and Well Construction
Madarko Prod. Co. Hallard GSA Unit Well No. 5-9	Unit H, Sec. 8, 18S, 29E 1980' FNL & 990' FEL	Oil	3/17/56	6/2/56	3054	--	Metex Premier	Perfs: 2546-50, 28-36, 11-15, 2490-98, 2698-2708, 2674- 82, 66-72, 44-50, 30-34, 18-22, 2596-2602 Csg: 8-5/8" @ 350' w/60 sxs, 5-1/2" @ 3054' w/150 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 5-5	Unit G, Sec. 8, 18S, 29E 2310' FNL & 2290' FEL	Oil	4/22/49	9/7/49	3050	3034	Metex Premier Jackson	Perfs: 2458-62, 2468-74, 80-88, 2498-2504; 2566-72, 88-92, 2600-06, 16-26, 44-52, 70-80; OH 2882-3034 Csg: 8-5/8" @ 355' w/50 sxs, 7" @ 2882' w/100 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 5-17 Formerly Depco Welch Fed. #1)	Unit G, Sec. 8, 18S, 29E 1980' FNL & 1980' FEL	TA	10/6/77	1/7/78	11,150	5800	Cisco	Csg: 13-3/8" @ 400' w/300 sxs, 8-5/8" @ 290' w/1300 sxs, 5-1/2" @ 9909' w/500 sxs. Rec 6600' 5-1/2" 100 sxs @ 9670, 35 sxs @ 9120, 50 sxs @ 6485, 35 sxs @ 5800
Madarko Prod. Co. Hallard GSA Unit Well No. 15-4	Unit F, Sec. 8, 18S, 29E 1650' FNL & 2310' FWL	Oil	3/4/44	5/16/44	3075	3041	Jackson	Perfs: OH 2903-3047 Csg: 8-5/8" @ 361' w/50 sxs, 7" 2 2316' w/100 sxs, 5-1/2" liner @ 2271-2850 w/225 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 15-6	Unit F, Sec. 8, 18S, 29E 1980' FNL & 1980' FWL	Oil	4/1/75	7/16/75	3089	--	Grayburg	Perfs: 2454-58, 65-68, 81-84, 92-98, 2561-66, 80-86, 2624-28, 32-40, 58-68, 2975, 2988, 2995, 3004, 3037 & 3045 Csg: 8-5/8" @ 343' w/150 sxs, 4-1/2" @ 3089' w/400 sxs.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBT	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
Madarko Prod. Co. Hallard GSA Unit Well No. 15-8	Unit F, Sec. 8, 18S, 29E 2310' FNL & 1880' FWL	WIW	10/9/82	11/17/82	2760 2755	Grayburg	Perfs: 2461-67, 76-82, 92-98, 2524-30, 57-63, 77-81, 2603-15, 23-37, 43-47, 52-58 Csg: 8-5/8" @ 350' w/440 sxs, 4-1/2" @ 2759' w/1900 sxs
Madarko Prod. Co. Hallard GSA Unit Well No. 15-2	Unit C, Sec. 8, 18S, 29E 660' FNL & 1980' FWL	Oil	11/18/43	1/19/44	3065 3060	Grayburg	Perfs: 2474-82, 2506-14, 70-74, 2664-74; OH 2900-81, OH 2990-30, 60 Csg: 8-5/8" @ 368' w/50 sxs, 7" @ 2301' w/100 sxs. 5-1/2" 2250-2858.
Madarko Prod. Co. Hallard GSA Unit Well No. 5-6	Unit B, Sec. 8, 18S, 29E 990' FNL & 2310' FEL	WIW	10/12/55	12/9/55	3058 --	Metex Premier Jackson	Perfs: 2453-60, 63-68, 81-84, 92-99, 2564-74, 89-92, 97-99, 2604-08, 15-21, 41-51, 2662-70 2943-46, 55-58, 77-85, 88-3000, 3004-09; OH 3033-58 Csg: 8-5/8" @ 345' w/50 sxs, 5-1/2" @ 3034' w/180 sxs, 2-3/8" plastic lined tbg w/Guiberson Uni-one pakr. @ 3040'.
Madarko Prod. Co. Hallard GSA Unit Well No. 5-12	Unit B, Sec. 8, 18S, 29E 330' FNL & 1650' FEL	Oil	11/8/61	2/1/62	3008 2730	Metex Premier	Perfs: 2489-95, 2514-20, 34-38, 2602-06, 28-34, 42-45, 2666-86, 2702-08 Csg: 8-5/8" @ 340 w/50 sxs, 5-1/2" @ 2762 w/125 sxs.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBTD	Zones(s)	Record of Completion: Perf(s) and Well Construction	
			Spudded	Completed				
adarko Prod. Co. G. Watson 11 No. 2	Unit O, Sec.4, 18S, 29E 330' FSL & 1650' FEL	P&A	10/13/39 Originally P&A'ed 1939 Re-entered 4/14/71 P&A - 4/16/71	11/21/39	2658	Grayburg	Csg: 8-5/8" @ 413' w/50 sxs, 7" @ 1800-2409' w/100 sxs. P&A: 250 sxs @ 1600-2650, 25 sxs @ 850', 25 sxs @ 425 10 sxs @ surface.	
adarko Prod. Co. G. Watson 11 No.8	Unit O, Sec.4, 18S, 29E 660' FSL & 1980' FEL	Oil	5/22/59	9/15/59	3166	Grayburg	Perfs: 2600-02, 08-14, 24-32, 84-95 cmt sqz perfs New perfs - 2484-2494 Csg: 8-5/8" @ 378' w/50 sxs, 5-1/2" @ 3153 w/150 sxs.	
adarko Prod. Co. West Loco Hills and Unit 11 No. 8-27	Unit N, Sec.4, 18S, 29E 10' FSL & 2630' FEL	P&A	3/19/69 (P&A in 5/23/83)	4/4/69	2525	Loco Hills Sand	Csg: 8-5/8" @ 376' w/150 sxs, 4-1/2" @ 2525' w/200 sxs. P&A: 40 sxs @ 2260-2470, 30 sxs @ 608-848, 154 sxs @ 370' to surface.	
adarko Prod. Co. G. Watson 11 No.3	Unit N, Sec.4, 18S, 29E 2310' FWL & 330' FSL	P&A	12/19/39 (P&A in 4/7/48)	2/15/40	2595	Loco Hills Sand	Csg: 8-5/8" @ 380' w/75 sxs, 7" @ 2390' w/100 sxs. P&A: Rec 1880' of 7" plugs @ 2400', 800, 380, surface	
Ervey E. Yates Co. Loco Hills Welch 11 No. 2	Unit N, Sec.4, 18S, 29E 660' FSL & 1980' FWL	Gas	10/18/79	12/13/79	11,430	Morrow	Perfs: 10,896-910 Csg: 13-3/8" @ 360' w/350 sxs, 8-5/8" @ 2905' w/900 sxs, 5-1/2 " @ 11,425' w/1000 sxs.	

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBTD	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
Madarko Prod. Co. . G. Watson Well No. 5	Unit N, Sec.4, 18S, 29E 1170' FSL & 2490' FWL	Oil	Re-spud 5/12/48	Re-complete 8/20/48	2724 2680	Grayburg	Perfs: 2471-75, 80-84 Csg: 8-5/8" @ 386' w/26 sxs, 7" @ 2383' w/50 sxs, 4-1/2" @ 2654' w/250 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 26-2	Unit M, Sec.4, 18S, 29E 990' FWL & 330' FSL	P&A	10/15/39	12/28/39	2775 2580	Grayburg	Csg: 8-5/8" @ 340' w/35 sxs, 7" @ 2346' w/100 sxs. P&A: No Record
Madarko Prod. Co. Hallard GSA Unit Well No. 26-3	Unit M, Sec.4, 18S, 29E 700' FSL & 430' FWL	Oil	4/17/81	6/15/81	2900 2885	Grayburg	Perfs: 2582-86, 92-98, 2614- 17, 30-34, 65-68, 2716- 22, 53-60, 75-76, 80-89, 92-94, 2803-06, 2809-12 Csg: 8-5/8" @ 373' w/250 sxs, 4-1/2" @ 2899' w/810 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 26-1	Unit L, Sec.4, 18S, 29E 330' FWL & 2300' FNL	WIW	7/12/39		2625	Grayburg	OH: 2435-2625 Csg: 8-5/8" @ 307' w/50 sxs, 7" @ 2435' w/100 sxs.
Madarko Prod. Co. . G. Watson Well No. 6	Unit K, Sec.4, 18S, 29E 2310' FSL & 1980' FWL	Oil	6/12/70	6/30/70 Recompleted 12/30/82	3133 2900	Grayburg	Perfs: 2485-92, 2495-2502 OH: 2552-2900 Csg: 8-5/8" @ 388' w/150 sxs, 5-1/2" @ 2552' w/250 sxs.
Madarko Prod. Co. . G. Watson Well No. 1	Unit K, Sec.4, 18S, 29E 2310' FSL & 1650' FWL	P&A	8/17/39 (P&A in 3/26/51	10/20/39	2638 Surface	Loco Hills Sand	Csg: 8-5/8" @ 399' w/40 sxs, 7" @ 2385' w/100 sxs. P&A: Pu;ed 536' of 7" 10 sx @ 2450' approx., 10 sxs @ 785', 10 sxs @ 350, 10 sxs @ surface.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBTID	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
Radarko Prod. Co. G. Watson Well No. 7	Unit J, Sec.4, 18S, 29E 2310' FSL & 2310' FEL	TA (4/12/84)	1/2/59	4/8/59	3295 2450	Grayburg	Perfs: 2504-20 8-5/8" @ 400' w/50 sxs, Csg: 5-1/2" @ 3295' w/150 sxs, T&A: Set CIBP @ 2450', Circ hole w/chemical & fresh water, Tested to 600 psi, left sub w/valve in WH.
Radarko Prod. Co. G. Watson Well No. 4	Unit J, Sec.4, 18S, 29E 1650' FSL & 1650' FEL	P&A	3/16/50 (Re-spud)	4/1/50 (Recompleted)	2608 Surface	Grayburg	Csg: 8-5/8" @ 390' w/50 sxs, 7" @ 2430' w/100 sxs, 5-1/2" @ 2580'. P&A: 300 sxs @ 1600'-2600', 25 sxs @ 850', 25 sxs @ 400', 10 sxs @ surface.
mpco, Inc. Miller Well No. 2	Unit G, Sec.4, 18S, 29E 2310' FNL & 1650' FEL	P&A	3/30/40 (Re-spud) 6/1/70 (P&A in 5/25/83)	6/10/40 (Recomplete) 6/11/70	2860 Surface	Metex Premier	Csg: 8-5/8" @ 394' w/50 sxs, 7" @ 2406' w/100 sxs, 4-1/2" @ 2554' w/250 sxs. P&A: 50 sxs @ 2320'-2530', 25 sxs @ 720-900, 150 sxs @ 105-375, 10 sxs surface- 105.
mpco, Inc. Miller Well No.1	Unit F, Sec.4, 18S, 29E 1980' FNL & 1980' FWL	P&A	5/22/60	8/26/60	2850 Surface	Grayburg	Csg: 8-5/8" @ 337'. P&A: Rec 336' 8-5/8", 25 sxs @ 2775-2848, 15 sxs @ 825-875, 15 sxs @ 310- 360, 5 sxs @ surface.
mpco, Inc. ederal "632" Well No. 2	Unit F, Sec.4, 18S, 29E 1650' FNL & 1650' FWL	Oil	12/20/81	2/5/82	3250 3211	San Andres	Perfs: 3104, 05, 06, 10, 11, 12, 22, 23, 25, 34, 35, 36, 38, 39, 40, 41, 96, 97, 98, 3207, 08, 09, Csg: 10-3/4" @ 400' w/550 sxs, 7" @ 3249' w/1300 sxs.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBT	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
adarko Prod. Co. lllard GSA Unit ll No. 10-6	Unit E, Sec.4, 18S, 29E	Oil	3/5/81		2850 2844	Grayburg	Perfs: 2592-2605, 2616-23, 36-41, 72-76, 2702-08, 32-39, 54-62, 73-79, 83-91, 2796-2805 Csg: 8-5/8" @ 380' w/200 sxs, 5-1/2" @ 2847' w/750 sxs
adarko Prod. Co. lllard GSA Unit ll No. 10-3	Unit E, Sec.4, 18S, 29E 2310' FNL & 990' FWL	P&A	7/11/39 (P&A in 1948)	9/15/39	3295 2660	Metex Premier	Csg: 8-5/8" @ 306' w/50 sxs, 7" @ 2380' w/50 sxs. P&A: No Report
adarko Prod. Co. lllard GSA Unit ll No. 10-2	Unit D, Sec.4, 18S, 29E 990' FNL & 330' FWL	P&A	6/11/39	11/13/39	2700 2635	Metex Premier	Csg: 8-5/8" @ 300' w/50 sxs, 7" @ 2395' w/75 sxs, 5-1/2" @ 2395' w/50 sxs. P&A: No Report
adarko Prod. Co. lllard GSA Unit ll No. 10-2X	Unit D, Sec.4, 18S, 29E 330' FWL & 990' FNL	WIW	6/10/39	10/27/39	2831 2817	Grayburg	OH: 2400-2817 Csg: 8-5/8" @ 389' w/50 sxs, 5-1/2" @ 2400' w/100 sxs.
adarko Prod. Co. lllard GSA Unit ll No. 10-7	Unit D, Sec.4, 18S, 29E 330' FNL & 990' FWL	Oil	4/21/82	7/14/82	2882 2852	Grayburg	Perfs: 2609-19, 33-39, 50-53, 83-91, 2724-30, 41-45, 53-59, 73-81, 2792-2805, 11-13 Csg: 8-5/8" @ 350' w/125 sxs, 5-1/2" @ 2881' w/1700 sxs
pc, Inc. deral "632" ll No. 1	Unit C, Sec.4, 18S, 29E 660' FNL & 1980' FWL	Oil	9/1/81	9/26/81	11,060 2900	Grayburg	Perfs: 2632-2850 Csg: 13-3/8" @ 407' w/400 sxs, 8-5/8" @ 2910' w/1200 sxs

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		TD	Depth PBTD	Zones(s)	Record of Completion:	
			Spudded	Completed				Perf(s)	and Well Construction
pcO, Inc. ederal "384" 11 No. 1	Unit B, Sec.4, 18S, 29E 990' FNL & 2300' FEL	Oil	4/27/82	6/4/82	3250	3146	Grayburg	Perfs: 2627-29, 34-37, 52-54, 2706-08 Csg: 10-3/4" @ 417' w/550 sxs, 7" @ 3249' w/1890 sxs.	

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBTD	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
Madarko Prod. Co. Willard GSA Unit Well No. 24-2	Unit P, Sec. 5, 18S, 29E, 660' FSL & 990' FWL	Oil	12/1/77	3/3/78	2850	2799	Metex Premier Perfs: 2511-14, 26-32, 36-42, 55-59, 70-73, 2658-62, 69-72, 85-88, 99-2702, 12-18, 20-30, 44-48, 52-56 Csg: 8-5/8" @ 381' w/150 sxs, 7" @ 1056' w/400 sxs, 5-1/2" @ 1787'.
Madarko Prod. Co. Willard GSA Unit Well No. 24-1X (formerly Stroup Well No. 1-X Yates)	Unit P, Sec. 5, 18S, 29E	P&A	5/17/40	7/17/40	2594	Surface	Csg: 8-5/8" @ 450' w/50 sxs, 7" @ 2340' w/100 sxs, Shot 2565-2585 (Comple- tion). P&A as follows: 20 sxs @ 2555', 10 sxs @ 760', cmt 320-295'. Mud to Surface.
Madarko Prod. Co. Willard GSA Unit Well No. 24-5	Unit O, Sec. 5, 18S, 29E, 450' FSL & 2100' FWL	Oil	2/24/81	3/31/81	2800	2784	Metex Premier Perfs: 2490-2504, 16-22, 31-36, 63-70, 78-84, 2600-07, 31-37, 42-47, 50-60, 70- 73, 76-86, 90-95, 2700- 08. Csg: 8-5/8" @ 364 w/250 sxs, 4-1/2" @ 2796' w/575 sxs.
Madarko Prod. Co. Willard GSA Unit Well No. 23-2	Unit N, Sec. 5, 18S, 29E, 990' FSL & 2310' FWL	Oil	12/21/43	2/20/44	3101	3067	Grayburg San Andres Perfs: 2450-80, 2656-60, 72-76, 2502-06, 16-11. Csg: 8-5/8" @ 326' w/50 sxs, 7" @ 2295' w/100 sxs, 5-1/2" Liner, 2212-2861' w/50 sxs.
Madarko Prod. Co. Willard GSA Unit Well No. 23-4	Unit N, Sec. 5, 18S, 29E, 330' FSL & 1980' FWL	WIW	9/29/82	12/3/82	2765	-	Grayburg Perfs: 2496-2501, 12-16, 29-32, 56-64, 92-98, 2610-14, 39-49, 58-62, 66-82, 86- 94. Csg: 8-5/8" @ 384' w/350 sxs, 4-1/2" @ 2764' w/900 sxs.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBTD	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
adarko Prod. Co. Hillard GSA Unit Well No. 25-1	Unit M, Sec.5, 18S, 29E, 660' FSL & 660' FWL	Oil	5/28/39	7/15/39	2735 -	Premier	Perf: OH 2515-2735 Csg: 8-5/8" @ 417' w/50 sxs, 7" @ 2360 w/100 sxs.
adarko Prod. Co. Hillard GSA Unit Well No. 23-1 formerly Bay Petro- lum Co., Well No.	Unit L, Sec.5, 18S, 29E, 2310' FSL & 990' FWL	P&A	7/23/43 (P&A in 1974)	9/14/43	2700 -	Grayburg	Csg: 8-1/4" @ 344'. P&A: 200 sxs @ 2660, 75 sxs @ 2274', 35 sxs @ 1350, 700, 300. 10 sxs @ surface. Rec. 1395' of 7".
adarko Prod. Co. Hillard GSA Unit Well No. 23-3	Unit L, Sec.5, 18S, 29E, 1900' FSL & 890' FWL	WIW	2/20/74	4/6/74	2750 -	Metex Premier	Perfs: 2493-98, 2500-07, 21-25, 34-37, 67-71, 2620-23, 63-78, 82-88. Plastic lined. Csg: 8-5/8" @ 353' w/150 sxs, 4-1/2" @ 2750' w/250 sxs, 2-3/8" tbg w/Johnston 101-5 tension pkr @ 2456'
adarko Prod. Co. Hillard GSA Unit Well No. 24-3	Unit K, Sec.5, 18S, 29E, 2180' FSL & 2255' FWL	Oil	12/13/77	3/11/78	2810 2796	Metex Premier	Perfs: 2492-95, 2506-12, 16-22, 34-40, 48-58, 2630-36, 40-43, 55-59, 68-72, 82- 86, 90-2700, 04-12. Csg: 8-5/8" @ 373' w/150 sxs, 4-1/2" @ 2810' w/400 sxs, 2-3/8" tbg @ 2723'.
adarko Prod. Co. Hillard GSA Unit Well No. 24-4 formerly Texas American Oil Metex Well No. 4)	Unit K, Sec.5, 18S, 29E, 1980' FSL & 1980' FWL	P&A	12/16/39	5/15/40	2590 Surface	Grayburg	P&A: 2540-2095 cmt, 750-800 cmt, 8" 250', 10-3/4 150' rec.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBT	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
Adarco Prod. Co. Empire South Deep Unit Well No. 12	Unit K, Sec. 5, 18S, 29E, 1980' FSL & 2120' FWL	Gas	11/5/76	2/1/77	11,165	Morrow	Perfs: 10,642-656, 730-750, 888-900. Csg: 13-3/8" @ 425' w/400 sxs, 9-5/8" @ 2900 W/2275' sxs, 5-1/2" @ 11,165' w/2225 sxs.
Adarco Prod. Co. Hillard GSA Unit 11 No. 25-3 formerly Harlan Prod. Company Yates 11 No. 3)	Unit J, Sec. 5, 18S, 29E, 1980' FSL & 1980' FEL	P&A	Re-Spud 4/8/64	Re-Completed 4/17/64	2781	Grayburg	Csg: 8-5/8" @ 400', 7" @ 2371' w/100 sxs. P&A: Rec 354' of 7" csg, 275 sxs @ 1965-2712, 35 sxs @ 700-800, 35 sxs @ 370- 470, 35 sxs @ 300-400, 10 sxs @ Surface.
Adarco Prod. Co. Hillard GSA Unit 11 No. 25-4	Unit J, Sec. 5, 18S, 29E, 1980' FSL & 1780' FEL	WIW	3/1/74	4/12/74	2800	Metex Premier	Perfs: 2550-62, 92-95, 2624-27, 31-34, 57-63, 2712-18, 30-45, 53-60. Csg: 8-5/8" @ 359' w/150 sxs, 4-1/2" @ 2786' w/250 sxs, 2-3/8" tbg w/Johnston 101 S tension pkr @ 2523".
Adarco Prod. Co. Hillard GSA Unit 11 No. 25-2X	Unit I, Sec. 5, 18S, 29E, 3300' FNL & 660' FEL	Oil	7/27/39		2632	Grayburg	Perfs: OH 2388-2632 Csg: 8-5/8" @ 447' w/50 sxs, 7" @ 2388 w/100 sxs.
Adarco Prod. Co. Hillard GSA Unit 11 No. 10-1	Unit H, Sec. 5, 18S, 29E,	Oil	Re-Spud 10/10/75	Re-Completed 10/16/75	3200	Grayburg San Andres	Perfs: 2580-91, 95-2606, 91-95, 2743-47, 58-63, 65-76, 79-88, 2994-3000. Csg: 8-5/8" @ 303' w/50 sxs, 7" @ 2382' w/100 sxs, 4-1/2" @ 2360-2984' w/ 150 sxs.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBT	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
oco Prod. Company pire South Deep it Well No. 14	Unit G, Sec.5, 18S, 29E, 1650' FNL & 2010' FEL	Gas	4/8/77	8/23/77	11,180 11,136	Morrow	Perfs: 10,735-46, 65-77, 91-804, Csg: 13-3/8" @ 386' w/450 sxs, 9-5/8" @ 2893' w/1714 sxs, 5-1/2" @ 11,180' w/ 2250 sxs.
adarko Prod. Co. llard GSA Unit ll No. 9-1	Unit G, Sec.5, 18S, 29E.	Oil	10/6/39	11/23/39	2805	Grayburg	Perfs: OH 2370-2800 Csg: 8-5/8" @ 435' w/50 sxs, 7" @ 2370' w/100 sxs.
adarko Prod. Co. llard GSA Unit ll No. 9-2	Unit F, Sec.5, 18S, 29E 1980' FNL & 3300' FEL	Oil	2/10/40	3/7/40	2727	Grayburg	Perfs: OH 2390-2720 Csg: 10-3/4" @ 327' w/50 sxs, 7" @ 2390' w/100 sxs.
adarko Prod. Co. llard GSA Unit ll No. 13-1	Unit E, Sec.5, 18S, 29E 1980' FNL & 660' FWL	Oil	8/2/43	10/6/43	2730	Grayburg	Perfs: OH: 2460-2730 Csg: 8-5/8" @ 404' w/50 sxs. 7" @ 2460' w/100 sxs.
adarko Prod. Co. llard GSA Unit ll No. 13-3	Unit D, Sec.5, 18S, 29E, 20' FNL & 1200' FWL	WIW	1/11/74	4/5/74	2797	Grayburg	Perfs: 2537-40, 2602-06, 47-55, 74-71, 92-2707. Csg: 8-5/8" @ 354' w/150 sxs, 4-1/2" @ 2779' w/250 sxs.
oco Prod. Company pire South Deep it Well No. 9	Unit D, Sec.5, 18S, 29E 660' FNL & 990' FWL	P&A 7/22/76	6/5/76	-	11,194	Morrow P&A: 75 sxs @ 10,540, 55 sxs @ 8730, 7610, 6730, 40 sxs @ 4500, 2850, 10 sxs @ surface.	Csg: 13-3/8" @ 400' w/400 sxs, 9-5/8" @ 2900' w/1700 sxs.
adarko Prod. Co. llard GSA Unit ll No. 8-3	Unit C, Sec. 5, 18S, 29E, 990' FNL & 2310' FWL	Oil	6/12/40	8/25/40	2762	Grayburg	Perfs: OH 2367-2762 Csg: 8-5/8" @ 371' w/65 sxs, 7" @ 2367' w/100 sxs.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		TD	Depth PBSD	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed				
Madarko Prod. Co. Hallard GSA Unit Well No. 8-6	Unit C, Sec.5, 18S-29E, 330' FNL & 2500' FWL	Oil	4/29/82	7/14/82	2845	2830	Grayburg	Perfs: 2554-60, 73-78, 86-92, 2624-30, 36-41, 50-55, 73-81, 2700-08, 13-24, 32-36. Csg: 8-5/8" @ 352' w/300 sxs, 5-1/2" @ 2844' w/700 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 8-4	Unit B, Sec.5, 18S, 29E, 660' FNL & 1980' FEL	Oil	7/27/39	9/21/39	2794	-	Grayburg	Perfs: OH 2377-2794. Csg: 8-5/8" @ 328' w/50 sxs, 7" @ 2377' w/100 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 8-5	Unit B, Sec.5, 18S, 29E, 20' FNL & 1500' FEL	WIW	1/19/74	4/5/74	2800	-	Grayburg	Perfs: 2563-67, 71-79, 88-94, 2636-45, 86-91, 94-97, 2721-30, 40-52. Csg: 8-5/8" @ 356' w/150 sxs, 4-1/2" @ 2800' w/250 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 10-4	Unit A, Sec.5, 18S, 29E, 990' FNL & 660' FEL	P&A	Re-Spud 1/27/78	Re-Completed 2/17/78	2755	Surface	Grayburg	Perfs: OH 2385-2755 Csg: 8-5/8" @ 412' w/60 sxs, 7" @ 2385' w/100 sxs. P&A: 10 sxs @ 1170, 70 sxs @ 1001, 35 sxs @ 335-435, 35 sxs @ 191-91, 15 sxs @ 20-0'.
Madarko Prod. Co. Hallard GSA Unit Well No. 10-5	Unit A, Sec.5, 18S, 29E 1065' FNL & 660' FEL	Oil	10/27/78	11/1/78	2855	2844	Grayburg	Perfs: 2580-84, 88-94, 2607-11, 2624-28, 2708-14, 34-38, 41-47, 62-70, 80-84. Csg: 8-5/8" @ 372' w/250 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 10-8	Unit A, Sec.5, 18S, 29E 330' FNL & 330' FEL	Oil	5/19/82	8/25/82	2880	2870	Grayburg	Perfs: 2584-94, 2606-12, 25-31, 51-62, 86-94, 2712-18, 22-29, 42-50, 65-76, 79- 84. Csg: 8-5/8" @ 363' w/350 sxs, 5-1/2" @ 2870 w/700 sxs.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBT	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
Madarko Prod. Co. Hallard GSA Unit Well No. 5-10	Unit A, Sec. 8, 18S, 29E 990' FNL & 990' FEL	WIW	7/15/56	9/11/56	3130	Jackson Lovington	Perfs: 2950-66-70-80, OH 2992- 3130, 2830-40 sq cmt'd Csg: 8-5/8" @ 380' w/50 sxs. 7" @ 2992' w/175 sxs. 2-3/8" Plastic lined w/ Guiberson Uni one pkr @ 2855' PL.
Madarko Prod. Co. Hallard GSA Unit Well No. 5-15	Unit A, Sec. 8, 18S, 29E 960' FNL & 1130' FEL	Oil	4/26/81	8/20/81	2850	Metex Premier	Perfs: 2492-2507, 2508-25, 35- 40, 68-73, 2605-11, 2625- 28, 34-37, 2655-58, 71- 87, 2704-12 Csg: 8-5/8" @ 378' w/250 sxs, 4-1/2" @ 2847' w/1350 sxs

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBT	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
Madarko Prod. Co. Hallard GSA Unit Well No. 6-1	Unit P, Sec.6, 18S, 29E, 660' FSL & 330' FEL	Oil	1/6/39	4/15/39	2651 2640	Grayburg	Perfs: OH 2400-2575 Csg: 8-5/8" @ 358' w/50 sxs, 7" @ 2350' w/100 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 6-18	Unit P, Sec.6, 18S, 29E 600' FSL & 600' FEL	Oil	8/17/82	12/2/82	2760 2730	Grayburg	Perfs: 2475-81, 94-98, 2506-10, 34-42, 51-55, 68-73, 77- 83, 95-2600, 11-15, 28- 43, 47-51. Csg: 8-5/8" @ 356' w/300 sxs, 4-1/2" @ 2759' w/800 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 6-3	Unit J, Sec.6, 18S, 29E, 1980' FSL & 2080' FEL	WIW	8/20/76	11/8/76	2750 -	Metex Premier	Perfs: 2466-70, 78-82, 94-98, 2503-08, 20-24, 32-38, 40-44, 64-68, 2603-10, 13-20, 34-38, 49-52, 58- 66, Plastic Lined. Csg: 8-5/8" @ 373' w/150 sxs, 4-1/2" @ 2750' w/250 sxs, 2-3/8" plastic lined tbg w/Guiberson Uni-one pkr @ 2381'.
Madarko Prod. Co. Hallard GSA Unit Well No. 6-2	Unit I, Sec.6, 18S, 29E, 2310' FSL & 990' FEL	Oil	7/12/40	9/15/40	3157 2723	Grayburg	Perfs: OH 2645-2675 Csg: 8-5/8" @ 380' w/50 sxs, 7" @ 2400' w/100 sxs.
Madarko Prod. Co. Hallard GSA Unit Well No. 18-4 Formerly Jeffers Well No. 4)	Unit G, Sec.6, 18S, 29E 2313' FNL & 1651' FEL	P&A	3/26/47 (P&A 12/14/64)	5/15/47	4121 Surface	Grayburg San Andres	Csg: 8-5/8" @ 249' P&A: Rec 162' of 8-5/8" csg, 33 sxs @ 3800-3900, 33 sxs @ 2450-2550, 33 sxs @ 700-800, 33 sxs @ 300- 400, 20 sxs @ Surface.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Completed	Depth		Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed		TD	PBTD		
Madarko Prod. Co. Allard GSA Unit Well No. 18-2	Unit G, Sec.6, 18S, 29E 1980' FNL & 1880' FEL	Oil	5/8/82	6/4/82		2780	2730	Grayburg	Perfs: 2524-27, 31-38, 49-54, 60-65, 94-98, 2640-48, 54-57, 65-75, 82-87, 90- 98. Csg: 8-5/8" @ 356' w/350 sxs, 5-1/2" @ 2779' w/700 sxs.
Madarko Prod. Co. Allard GSA Unit Well No. 11-1	Unit H, Sec.6, 18S, 29E, 2310' FNL & 330' FEL	Oil	11/20/39	1/13/40		2695	2674	Metex Premier	Perfs: OH 2460-2695. Csg: 8-5/8" @ 358' w/50 sxs, 7" @ 2352' w/100 sxs.
Madarko Prod. Co. Allard GSA Unit Well No. 11-5	Unit A, Sec.6, 18S, 29E, 990' FNL & 330' FEL	P&A	1/20/50	2/28/50		3030	Surface	Grayburg	Csg: 8-5/8" @ 345' w/50 sxs. P&A: 15 sxs @ 2380', 15 sxs @ 885', 15 sxs @ 345'.
Madarko Prod. Co. Allard GSA Unit Well No. 11-6	Unit A, Sec.6, 18S, 29E, 330' FNL & 200' FEL	Oil	6/23/81	8/21/81		2850	2847	Grayburg	Perfs: 2552-54, 59-67, 80-83, 98-2602, 26-30, 72-81, 88-90, 2702-09, 17-22, 26-33. Csg: 8-5/8" @ 321' w/525 sxs, 5-1/2" @ 2847' w/900 sxs.
Madarko Prod. Co. Allard GSA Unit Well No. 11-2	Unit A, Sec.6, 18S, 29E, 990' FNL & 990' FEL	Oil	4/13/40 Re-Spud 9/1/78	6/16/40 Re-Complete 10/1/78		2830	-	Grayburg	Perfs: OH 2524-2830 Csg: 8-5/8" @ 545' w/50 sxs, 7" @ 2524' w/100 sxs.
Madarko Prod. Co. Allard GSA Unit Well No. 17-3	Unit B, Sec.6, 18S, 29E 660' FNL & 1980' FEL	WIW	6/27/41 Converted to WIW 6/29/76	10/10/41		2722	2710	Grayburg	Perfs: OH 2437-2710 Csg: 8-5/8" @ 385' w/50 sxs, 7" @ 2437' w/100 sxs.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBTD	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
ARBOB Energy Corp. West Conoco State Well No. 1	Unit P, Sec.31, 17S, 29E, 330' FSL & 330' FEL	Oil	4/16/81	7/10/81	4022 4003	San Andres	Perfs: 3522-26, 53-59, 52-58, 3666-70, 3702-08, 52-54, 56-68, 3818-24, 3894-3900. Csg: 8-5/8" @ 288' w/225 sxs, 4-1/2" @ 4006' w/650 sxs, 2-3/8" tbg @ 3920'.
ARBOB Energy Corp. West Conoco State Well No. 2	Unit O, Sec.31, 17S, 29E, 330' FSL & 1650' FEL	Oil	10/23/81	1/2/82	3675 3673	San Andres	Perfs: 2953-55, 63-65, 70-73, 77-79, 3010-12, 3232-40, 64-68, 74-78, 3341-44, 62-65, 94-97, 3434-37, 74-78, 3507-10, 54-62, 58-92, 3615-17, 40-43. Csg: 8-5/8" @ 297' w/200 sxs, 4-1/2" @ 3675' w/625 sxs, 2-3/8" tbg @ 3663'.
ARBOB Energy Corp. Old Loco Unit Well No. 23	Unit L, Sec.32, 17S, 29E, 1650' FSL & 990' FWL	Oil	7/31/81	9/25/81	2820 2793	Grayburg San Andres	Perfs: 2404-08, 17-21, 2522-30, 2634-38, 42-44, 67-73, 82-86, 2774-84. Csg: 8-5/8" @ 315' w/225 sxs, 4-1/2" @ 2815' w/500 sxs.
ARBOB Energy Corp. Old Loco Unit Well No. 24	Unit M, Sec.32, 17S, 29E, 330' FSL & 450' FWL	Oil	11/7/81	12/3/81	2793 2768	Grayburg	Perfs: 2627-35, 41-43, 58-63, 73-77, 80-85. Csg: 8-5/8" @ 305' w/200 sxs, 4-1/2" @ 2793' 2/350 sxs, 2-3/8" tbg @ 2705'.
ersey & Company Old Loco Unit Well No. 13	Unit M, Sec.32, 17S, 29E, 990' FSL & 990' FWL	WIW	NA	6/8/67	3104 2686	Grayburg	Perfs: 2504-16, 2652-60, 2664- 70. Csg: 8-5/8" @ 360' w/100 sxs, 5-1/2" @ 2700' w/100 sxs.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBT	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
ARBOB Energy Corp. Old Loco Unit Well No. 18	Unit N, Sec.32, 17S, 29E, 990' FSL & 2310' FWL	Oil	11/13/79	12/15/79	2862 2850	Grayburg San Andres	Perfs: 2442-54, 2553-65, 2677-83 2706-13, 30, 32. Csg: 8-5/8" @ 239' w/175 sxs, 4-1/2" @ 2850' w/275 sxs.
ARBOB Energy Corp. Old Loco Unit Well No. 14 (formerly Cowell Well No. 1)	Unit N, Sec.32, 17S, 29E, 330' FSL & 2310' FWL	Oil	3/4/40	5/7/40	2636 2602	Grayburg	Perfs: OH 2352-2602 Csg: 8-5/8" @ 320' w/50 sxs, 7" @ 2352' w/100 sxs.
ARBOB Energy Corp. Old Loco Unit Well No. 17	Unit O, Sec.32, 17S, 29E, 330' FSL & 2310' FEL	Oil	11/5/79	12/12/79	2682 2833	Grayburg San Andres	Perfs: 2437-49, 2547-59, 2672- 78, 2702-08, 28-34. Csg: 8-5/8" @ 242' w/175 sxs, 4-1/2" @ 2850' w/275 sxs,
ARBOB Energy Corp. Old Loco Unit Well No. 15 (formerly Miller & Smith Dalager-Smith Well No. 1)	Unit O, Sec.32, 17S, 29E, 990' FSL & 1980' FEL		3/5/58	4/10/58	2766 NA	Grayburg	Perfs: 2566-72, 2688-92, 2742- 46. Csg: 8-5/8" @ 305' w/50 sxs, 4-1/2" @ 2766' w/200 sxs.
ARBOB Energy Corp. Old Loco Unit Well No. 16 (formerly Kersey & Company Cowell-State Well No. 1-18	Unit P, Sec.32, 17S, 29E, 330' FSL & 330' FEL	Oil	10/8/52	1/28/53	2592 NA	Grayburg	Perfs: OH 2532-92 Csg: 8-5/8" @ 395' w/45 sxs. 5-1/2" @ 2532' Cmt-NA
ARBOB Energy Corp. Old Loco Unit Well No. 19	Unit N, Sec.32, 17S, 29E, 990' FSL & 1650' FWL	Oil	2/4/80	3/21/80	2862 2834	Grayburg	Perfs: 2419-2684 Csg: 8-5/8" @ 310' w/15 sxs, 4-1/2" @ 2850' w/370 sxs.

Operator, Well Name Number	Location Unit, Sec., Twp., Range	Type	Date		Depth TD PBTD	Zones(s)	Record of Completion: Perf(s) and Well Construction
			Spudded	Completed			
ARBOB Energy Corp. Mid Loco Unit Well No. 20	Unit P, Sec.32, 17S, 29E, 990' FSL & 990' FWL	Oil	2/13/80	3/22/80	2862 2761	Grayburg	Perfs: 2446-2749 Csg: 8-5/8" @ 196' w/150 sxs, 4-1/2" @ 2850' w/375 sxs.
ARBOB Energy Corp. erry Leonard Well No. 3	Unit M, Sec.33, 17S, 29E, 330' FSL & 330' FWL	Oil	1/24/80	2/29/80	3576 3560	Grayburg	Perfs: 2444-50, 66-72, 2586-92, 2753-59, 76-82. Csg: 8-5/8" @ 309' w/125 sxs, 5-1/2" @ 3564' w/300 sxs.
ARBOB Energy Corp. erry Leonard Well No. 4	Unit N, Sec.33, 17S, 29E 330' FSL & 1650' FWL	Oil	2/21/80	9/5/80	3612 3560	San Andres	Perfs: 2598-2608 Csg: 8-5/8" @ 299' w/250 sxs, 4-1/2" @ 3612' w/575 sxs.
ARBOB Energy Corp. erry Leonard Well No. 5	Unit N, Sec.33, 17S, 29E 330' FSL & 2310' FWL	Oil	7/16/81	10/2/81	2850 2827	San Andres	Perfs: 2476-90, 2665-11, 2731- 33, 2744-46, 2766-70, 2792-96. Csg: 8-5/8" @ 318' w/200 sxs, 4-1/2" @ 2850' w/600 sxs.

WATER ANALYSIS

1. Produced water from Ballard #9-1.
2. Ogallala fresh water supply.
3. 50/50 mixture of #1 & #2.
4. Windmill (SE/4 SW/4 Sec.10-18S-29E).
5. Windmill (SE/4 SE/4 Sec.29-17S-29E).

ANALYZED

5381

9

UNICHEM INTERNATIONAL

601 NORTH LEECH

P.O. BOX 1499

HOBBS, NEW MEXICO 88240

COMPANY : ANADARKO
 DATE : 10-12-84
 FIELD LEASESWELL : BALLARD 9-1 PRODUCED WATER
 SAMPLING POINT:
 DATE SAMPLED : 10-9-84

SPECIFIC GRAVITY = 1.058
 TOTAL DISSOLVED SOLIDS = 85581
 PH = 7.24

		ME/L	MG/L
CATIONS			
CALCIUM	(CA)+2	213.	4275.
MAGNESIUM	(MG)+2	166.	2026.
SODIUM	(NA).CALC.	1099.	25285.
ANIONS			
BICARBONATE	(HCO3)-1	12.2	744.
CARBONATE	(CO3)-2	0	0
HYDROXIDE	(OH)-1	0	0
SULFATE	(SO4)-2	67.6	3250
CHLORIDES	(CL)-1	1400	50000
DISSOLVED GASES			
CARBON DIOXIDE	(CO2)	NOT RUN	
HYDROGEN SULFIDE	(H2S)	NOT RUN	
OXYGEN	(O2)	NOT RUN	
IRON(TOTAL)	(FE)		3.9
BARIUM	(BA)+2	NOT RUN	
MANGANESE	(MN)	NOT RUN	

IONIC STRENGTH (MOLAL) = 1.759

SCALING INDEX	TEMP
	30C
	86F
CARBONATE INDEX	1.08
CALCIUM CARBONATE SCALING	LIKELY
CALCIUM SULFATE INDEX	15.5
CALCIUM SULFATE SCALING	LIKELY

UNICHEM INTERNATIONAL

601 NORTH LEECH

P.O. BOX 1499

HOBBS, NEW MEXICO 88240

COMPANY : ANADARKO
 DATE : 10-12-84
 FIELD LEASE & WELL : BALLARD OGALLALA FRESH WATER
 SAMPLING POINT:
 DATE SAMPLED : 10-9-84

SPECIFIC GRAVITY = 1
 TOTAL DISSOLVED SOLIDS = 495
 PH = 8.1

		ME/L	MG/L
CATIONS			
CALCIUM	(CA)+2	3.2	65.1
MAGNESIUM	(MC)+2	3.1	38.2
SODIUM	(NA), CALC.	.92	21.1
ANIONS			
BICARBONATE	(HCO3)-1	3.2	195.
CARBONATE	(CO3)-2	0	0
HYDROXIDE	(OH)-1	0	0
SULFATE	(SO4)-2	1.1	54
CHLORIDES	(CL)-1	3	120
DISSOLVED GASES			
CARBON DIOXIDE	(CO2)	NOT RUN	
HYDROGEN SULFIDE	(H2S)	NOT RUN	
OXYGEN	(O2)	NOT RUN	
IRON(TOTAL)	(FE)		1.4
BARIUM	(BA)+2	.02	1.2
MANGANESE	(MN)	NOT RUN	

IONIC STRENGTH (MOLAL) = .011

SCALING INDEX

TEMP

CARBONATE INDEX
 CALCIUM CARBONATE SCALING

30C
 86F
 2.58
 LIKELY

CALCIUM SULFATE INDEX
 CALCIUM SULFATE SCALING

-17.
 UNLIKELY

UNICHEM INTERNATIONAL

601 NORTH LEECH

P.O. BOX 1499

HOBBS, NEW MEXICO 88240

COMPANY : ANADARKO

DATE 10-12-84

FIELD, LEASE & WELL : BALLARD OGALLALA FRESH WATER, 50% / BALLARD 9-1
PRODUCED WATER

SAMPLING POINT

DATE SAMPLED 10-9-84

SPECIFIC GRAVITY = 1.029
TOTAL DISSOLVED SOLIDS = 43093
PH = 7.67

		ME/L	MG/L
CATIONS			
CALCIUM	(CA)+2	108.	2170.
MAGNESIUM	(MG)+2	84.9	1035.
SODIUM	(NA), CALC.	550.	12664.
ANIONS			
BICARBONATE	(HCO3)-1	7.7	469.
CARBONATE	(CO3)-2	0	0
HYDROXIDE	(OH)-1	0	0
SULFATE	(SO4)-2	34.3	1652
CHLORIDES	(CL)-1	702	25100
DISSOLVED GASES			
CARBON DIOXIDE	(CO2)	NOT RUN	
HYDROGEN SULFIDE	(H2S)	NOT RUN	
OXYGEN	(O2)	NOT RUN	
IRON (TOTAL)	(FE)		2.6
BARIIUM	(BA)+2	.01	.6
MANCANESE	(MN)	NOT RUN	

IONIC STRENGTH (MOLAL) = .874

SCALING INDEX	TEMP
	30C
	86F
CARBONATE INDEX	1.04
CALCIUM CARBONATE SCALING	LIKELY
CALCIUM SULFATE INDEX	-16.
CALCIUM SULFATE SCALING	UNLIKELY

UNICHEM INTERNATIONAL

601 NORTH LEECH

P.O. BOX 1499

HOBBS, NEW MEXICO 88240

COMPANY : ANADARKO
 DATE : 10-12-84
 FIELD, LEASE & WELL : BALLARD SOUTHEAST WINDMILL
 SAMPLING POINT :
 DATE SAMPLED : 10-9-84

SPECIFIC GRAVITY = 1.004
 TOTAL DISSOLVED SOLIDS = 8534
 PH = 8.07

		ME/L	MG/L
CATIONS			
CALCIUM	(CA)+2	38	761.
MAGNESIUM	(MG)+2	26	316.
SODIUM	(NA).CALC.	74.7	1718.
ANIONS			
BICARBONATE	(HCO3)-1	1.8	109.
CARBONATE	(CO3)-2	0	0
HYDROXIDE	(OH)-1	0	0
SULFATE	(SO4)-2	60.9	2928.
CHLORIDES	(CL)-1	76	2700
DISSOLVED GASES			
CARBON DIOXIDE	(CO2)	NOT RUN	
HYDROGEN SULFIDE	(H2S)	NOT RUN	
OXYGEN	(O2)	NOT RUN	
IRON(TOTAL)	(FE)		4
BARIUM	(BA)+2	NOT RUN	
MANGANESE	(MN)	NOT RUN	

IONIC STRENGTH (MOLAL) = .203

SCALING INDEX	TEMP
	30C
	86F
CARBONATE INDEX	.834
CALCIUM CARBONATE SCALING	LIKELY
CALCIUM SULFATE INDEX	6.03
CALCIUM SULFATE SCALING	LIKELY

UNICHEM INTERNATIONAL

601 NORTH LEECH

P.O. BOX 1499

HOBBS, NEW MEXICO 88240

COMPANY : ANADARKO
 DATE : 10-12-84
 FIELD, LEASE & WELL : BALLARD NORTHEAST WINDMILL
 SAMPLING POINT:
 DATE SAMPLED : 10-9-84

SPECIFIC GRAVITY = 1.003
 TOTAL DISSOLVED SOLIDS = 5294
 PH = 7.92

		ME / L	MG / L
CATIONS			
CALCIUM	(CA)+2	34	681.
MAGNESIUM	(MG)+2	19	230.
SODIUM	(NA).CALC.	30.3	697.
ANIONS			
BICARBONATE	(HCO3)-1	2	122.
CARBONATE	(CO3)-2	0	0
HYDROXIDE	(OH)-1	0	0
SULFATE	(SO4)-2	53.3	2562.
CHLORIDES	(CL)-1	28	1000
DISSOLVED GASES			
CARBON DIOXIDE	(CO2)	NOT RUN	
HYDROGEN SULFIDE	(H2S)	NOT RUN	
OXYGEN	(O2)	NOT RUN	
IRON(TOTAL)	(FE)		.9
BARIUM	(BA)+2	NOT RUN	
MANGANESE	(MN)	NOT RUN	

IONIC STRENGTH (MOLAL) = .137

SCALING INDEX	TEMP
	30C
	86F
CARBONATE INDEX	.882
CALCIUM CARBONATE SCALING	LIKELY
CALCIUM SULFATE INDEX	7.94
CALCIUM SULFATE SCALING	LIKELY



~~CERTIFIED MAIL~~

September 21, 1984

To: Mailing List Attached

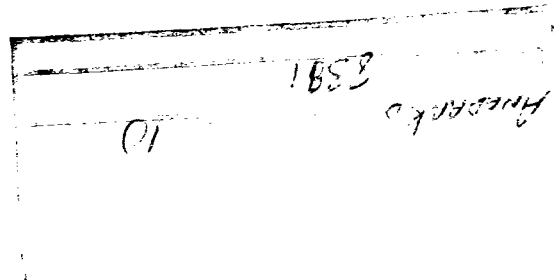
Gentlemen:

Anadarko Production Company is making application to the New Mexico Oil Conservation Division for Authority to Expand the Waterflood Project in the Ballard Grayburg-San Andres Unit, Eddy County, New Mexico. A copy of the Form C-108 and a map showing the proposed work are attached. Specifically, we plan to ask permission to drill two water injection wells and to convert eight producing wells to water injection service at locations shown below, all in township 18 south, range 29 east, Eddy County, New Mexico. Note that the two wells to be drilled are at unorthodox, lease-line locations.

<u>Well</u>	<u>Location</u>
Drill #10-9	1980' FNL & 1310' FWL, Section 4
Drill #26-4	800' FSL & 1310' FWL, Section 4
Convert #5-9	Unit Letter H, Section 8
Convert #5-14	Unit Letter P, Section 8
Convert #8-4	Unit Letter B, Section 5
Convert #9-2	Unit Letter F, Section 5
Convert #10-1	Unit Letter H, Section 5
Convert #11-1	Unit Letter H, Section 6
Convert #13-2	Unit Letter D, Section 5
Convert #24-2	Unit Letter P, Section 5

Injected water in all ten wells will be confined to the Loco Hills (Grayburg) Pool at an approximate depth of 2430-2850 feet. Injection volumes for each well are expected to be 200 BWPD at surface pressures of less than 1600 psig.

A public hearing to consider this application will be held before the N. M. O. C. D. Anyone wishing to file an objection to the application should notify the Oil Conservation Division at P. O. Box 2055, Santa Fe, New Mexico, 87501, within 15 days. If you have any questions, please call me at 915/682-1666.



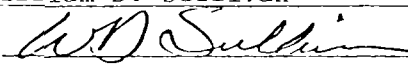
Yours very truly,

W.D. Sullivan

W. D. Sullivan
Division Reservoir Engineer

WDS/dkn

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no
- II. Operator: Anadarko Production Company
Address: P. O. Box 2497, Midland, Texas 79702
Contact party: M. O. Bridges Phone: 915/682-1666
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? yes no
If yes, give the Division order number authorizing the project R-4493 & R-7000.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- * VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- * X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- * XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification
- I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- Name: William D. Sullivan Title Division Reservoir Engineer
Signature:  Date: September 21, 1984
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

September 21, 1984
Ballard GSAU Waterflood Expansion Project
Page 2

Attachment: Map
Form C-108

cc: W. T. Kellahin
El Patio - 117 N. Guadalupe
P. O. Box 2265
Santa Fe, New Mexico 87501

M. O. Bridges
J. E. Buckles

MAILING LIST

Smith & Watson
Mrs. H. G. Watson
920 South Roselawn Avenue
Artesia, New Mexico 88210

Bogle Farms, Inc.
P. O. Box 441
Artesia, New Mexico 88210
Attn: Mr. Millard Derrick

United States Bureau of Land Management
P. O. Box 1397
Roswell, New Mexico 88201

Gordon M. Cone
P. O. Drawer 1509
Lovington, New Mexico 88260

J. C. Thompson & J. C. Thompson, Jr.
4500 Republic National Bank Tower
Dallas, Texas 75201

✓ Depco, Inc.
110 16th Street
Denver, Colorado 80202

Marbob Energy Corp.
P. O. Box 304
Artesia, New Mexico 88210

Kersey and Company
808 W. Grand Avenue
Artesia, New Mexico 88210

Cities Service Oil & Gas Company
6 Desta Drive
Suite 6002
Midland, Texas 79702

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, \$300



SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

RETURN
TO



Anadarko Production Company (WDS)
(Name of Sender)

P. O. Box 2497
(Street or P.O. Box)

Midland, Texas 79702
(City, State, and ZIP Code)

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, \$300



SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

RETURN
TO



Anadarko Production Company (WDS)
(Name of Sender)

P. O. Box 2497
(Street or P.O. Box)

Midland, Texas 79702
(City, State, and ZIP Code)

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, \$300



SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

RETURN
TO



ANADARKO PRODUCTION COMPANY (WDS)
(Name of Sender)

P. O. BOX 2497
(Street or P.O. Box)

MIDLAND TX 79702
(City, State, and ZIP Code)

● **SENDER:** Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
 Show to whom and date delivered
 Show to whom, date, and address of delivery .. 60c
 RESTRICTED DELIVERY
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL \$.60.

3. ARTICLE ADDRESSED TO:
Marbob Energy Corp.
P. O. Box 304
Artesia, NM 88210

4. TYPE OF SERVICE: ARTICLE NUMBER
 REGISTERED INSURED
 CERTIFIED COD P 402 614 896
 EXPRESS MAIL

(Always obtain signature of addressee or agent)
I have received the article described above.

SIGNATURE Addressee Authorized agent
[Signature]

5. DATE OF DELIVERY: POSTMARK
SEP 24 1984

6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE: 7a. EMPLOYEE'S INITIALS

PS Form 3811, Dec. 1980

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

● **SENDER:** Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
 Show to whom and date delivered
 Show to whom, date, and address of delivery .. 60c
 RESTRICTED DELIVERY
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL \$.60.

3. ARTICLE ADDRESSED TO:
Kersey and Company
808 W. Grand Avenue
Artesia, NM 88210

4. TYPE OF SERVICE: ARTICLE NUMBER
 REGISTERED INSURED
 CERTIFIED COD P 402 614 897
 EXPRESS MAIL

(Always obtain signature of addressee or agent)
I have received the article described above.

SIGNATURE Addressee Authorized agent
[Signature]

5. DATE OF DELIVERY: POSTMARK
SEP 22 1984

6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE: 7a. EMPLOYEE'S INITIALS

PS Form 3811, Dec. 1980

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

● **SENDER:** Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
 Show to whom and date delivered
 Show to whom, date, and address of delivery .. 60c
 RESTRICTED DELIVERY
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL \$.60.

3. ARTICLE ADDRESSED TO:
Smith & Watson
920 S. Roselawn Ave.
Artesia, NM 88210

4. TYPE OF SERVICE: ARTICLE NUMBER
 REGISTERED INSURED
 CERTIFIED COD P 402 614 890
 EXPRESS MAIL

(Always obtain signature of addressee or agent)
I have received the article described above.

SIGNATURE Addressee Authorized agent
[Signature]

5. DATE OF DELIVERY: POSTMARK
SEP 22 1984

6. ADDRESSEE'S ADDRESS (Only if requested)
920 S. ROSELAWN
ARTESIA, N. M. 88210

7. UNABLE TO DELIVER BECAUSE: 7a. EMPLOYEE'S INITIALS

PS Form 3811, Dec. 1980

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, \$300



SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

RETURN
TO



Anadarko Production Company (WDS)

(Name of Sender)

P. O. Box 2497

(Street or P.O. Box)

Midland, Texas 79702

(City, State, and ZIP Code)

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, \$300



SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

RETURN
TO



Anadarko Production Company (WDS)

(Name of Sender)

P. O. Box 2497

(Street or P.O. Box)

Midland, Texas 79702

(City, State, and ZIP Code)

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, \$300



SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

RETURN
TO



Anadarko Production Company (WDS)

(Name of Sender)

P. O. Box 2497

(Street or P.O. Box)

Midland, Texas 79702

(City, State, and ZIP Code)

● **SENDER:** Complete items 1, 2, 3, and 4. Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one):
 Show to whom and date delivered ¢
 Show to whom, date, and address of delivery.. 60¢
 RESTRICTED DELIVERY
(The restricted delivery fee is charged in addition to the return receipt fee.)

2. **RESTRICTED DELIVERY**
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL \$ 60

3. **ARTICLE ADDRESSED TO:**
 Depco, Inc.
 110 16th Street
 Denver, Colorado 80202

4. **TYPE OF SERVICE:** **ARTICLE NUMBER**
 REGISTERED INSURED P 402 614 895
 CERTIFIED COD
 EXPRESS MAIL

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE Addressee Authorized agent

5. **DATE OF DELIVERY** **POSTMARK**
 12/11/83 [Postmark]

6. **ADDRESSEE'S ADDRESS** (Only if required)

7. **UNABLE TO DELIVER BECAUSE:** **7A. EMPLOYEES INITIALS**

● **SENDER:** Complete items 1, 2, 3, and 4. Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one):
 Show to whom and date delivered ¢
 Show to whom, date, and address of delivery.. 60¢
 RESTRICTED DELIVERY
(The restricted delivery fee is charged in addition to the return receipt fee.)

2. **RESTRICTED DELIVERY**
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL \$ 60

3. **ARTICLE ADDRESSED TO:**
 U. S. BUREAU OF LAND MANAGEMENT
 P. O. BOX 1397
 ROSWELL, NM 88210

4. **TYPE OF SERVICE:** **ARTICLE NUMBER**
 REGISTERED INSURED P 402 614 892
 CERTIFIED COD
 EXPRESS MAIL

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE Addressee Authorized agent

5. **DATE OF DELIVERY** **POSTMARK**
 12/13/83 [Postmark]

6. **ADDRESSEE'S ADDRESS** (Only if required)
 Box 1397

7. **UNABLE TO DELIVER BECAUSE:** **7A. EMPLOYEES INITIALS**

● **SENDER:** Complete items 1, 2, 3, and 4. Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one):
 Show to whom and date delivered ¢
 Show to whom, date, and address of delivery.. 60¢
 RESTRICTED DELIVERY
(The restricted delivery fee is charged in addition to the return receipt fee.)

2. **RESTRICTED DELIVERY**
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL \$ 60

3. **ARTICLE ADDRESSED TO:**
 Bogle Farms, Inc.
 P. O. Box 441
 Artesia, NM 88210

4. **TYPE OF SERVICE:** **ARTICLE NUMBER**
 REGISTERED INSURED P 402 614 891
 CERTIFIED COD
 EXPRESS MAIL

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE Addressee Authorized agent

5. **DATE OF DELIVERY** **POSTMARK**
 12-24-83 [Postmark]

6. **ADDRESSEE'S ADDRESS** (Only if required)

7. **UNABLE TO DELIVER BECAUSE:** **7A. EMPLOYEES INITIALS**

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

SENDER INSTRUCTIONS

- Print your name, address, and ZIP Code in the space below.
- Complete items 1, 2, 3, and 4 on the reverse.
 - Attach to front of article if space permits, otherwise affix to back of article.
 - Endorse article "Return Receipt Requested" adjacent to number.

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, \$300



RETURN
TO



Anadarko Production Company (WDS)
(Name of Sender)

P. O. Box 2497
(Street or P.O. Box)

Midland, Texas 79702
(City, State, and ZIP Code)

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

SENDER INSTRUCTIONS

- Print your name, address, and ZIP Code in the space below.
- Complete items 1, 2, 3, and 4 on the reverse.
 - Attach to front of article if space permits, otherwise affix to back of article.
 - Endorse article "Return Receipt Requested" adjacent to number.

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, \$300



RETURN
TO



Anadarko Production Company (WDS)
(Name of Sender)

P. O. Box 2497
(Street or P.O. Box)

Midland, Texas 79702
(City, State, and ZIP Code)

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

SENDER INSTRUCTIONS

- Print your name, address, and ZIP Code in the space below.
- Complete items 1, 2, 3, and 4 on the reverse.
 - Attach to front of article if space permits, otherwise affix to back of article.
 - Endorse article "Return Receipt Requested" adjacent to number.

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, \$300



RETURN
TO



Anadarko Production Company (WDS)
(Name of Sender)

P. O. Box 2497
(Street or P.O. Box)

Midland, Texas 79702
(City, State, and ZIP Code)

● **SENDER:** Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
 Show to whom and date delivered
 Show to whom, date, and address of delivery.. 60¢
 RESTRICTED DELIVERY
 (The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL \$ 60

3. **ARTICLE ADDRESSED TO:**
Gordon M. Cone
P. O. Drawer 1509
Lovington, NM 88260

4. **TYPE OF SERVICE:** ARTICLE NUMBER
 REGISTERED INSURED
 CERTIFIED COD P 402 614 893
 EXPRESS MAIL

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE Addressee Authorized agent
Gordon M. Cone

5. **DATE OF DELIVERY** POSTMARK
 AUG 24 1984

6. **ADDRESSEE'S ADDRESS (Only if requested)**

7. **UNABLE TO DELIVER BECAUSE:** 7a. **EMPLOYEES INITIALS**

● **SENDER:** Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
 Show to whom and date delivered
 Show to whom, date, and address of delivery.. 60¢
 RESTRICTED DELIVERY
 (The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL \$ 60

3. **ARTICLE ADDRESSED TO:**
J. C. Thompson & J. C. Thompson, JR.
4500 Republic Natl Bank Tower
Dallas, Texas 75201

4. **TYPE OF SERVICE:** ARTICLE NUMBER
 REGISTERED INSURED
 CERTIFIED COD P 402 614 894
 EXPRESS MAIL

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE Addressee Authorized agent
J. C. Thompson

5. **DATE OF DELIVERY** POSTMARK
 AUG 24 1984

6. **ADDRESSEE'S ADDRESS (Only if requested)**

7. **UNABLE TO DELIVER BECAUSE:** 7a. **EMPLOYEES INITIALS**

● **SENDER:** Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
 Show to whom and date delivered
 Show to whom, date, and address of delivery.. 60¢
 RESTRICTED DELIVERY
 (The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL \$ 60

3. **ARTICLE ADDRESSED TO:**
Cities Service Oil & Gas Company
6 Desta Drive, Suite 6002
Midland, Texas 79702

4. **TYPE OF SERVICE:** ARTICLE NUMBER
 REGISTERED INSURED
 CERTIFIED COD P 402 614 898
 EXPRESS MAIL

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE Addressee Authorized agent
R. E. Hoyle

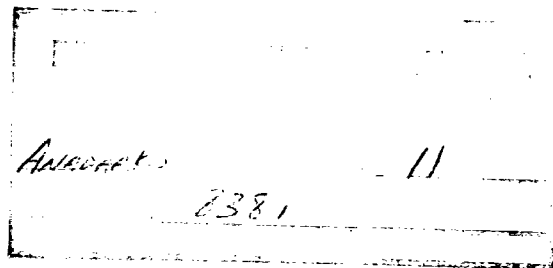
5. **DATE OF DELIVERY** POSTMARK
 SEP 20 1984

6. **ADDRESSEE'S ADDRESS (Only if requested)**

7. **UNABLE TO DELIVER BECAUSE:** 7a. **EMPLOYEES INITIALS**

BALLARD GSA UNIT
PROPOSED WATER INJECTION WELLS

<u>WELL</u>	<u>LOCATION</u>
Drill #10-9	1980' FNL & 1310' FWL, Section 4
Drill #26-4	800' FSL & 1310' FWL, Section 4
Convert #5-9	Unit Letter H, Section 8
Convert #5-14	Unit Letter P, Section 8
Convert #8-4	Unit Letter B, Section 5
Convert #9-2	Unit Letter F, Section 5
Convert #10-1	Unit Letter H, Section 5
Convert #11-1	Unit Letter H, Section 6
Convert #13-2	Unit Letter D, Section 5
Convert #24-2	Unit Letter P, Section 5



Anadarko Production Company
OPERATOR

Ballard GSA Unit
LEASE

Type Well *
WELL NO.

FOOTAGE LOCATION

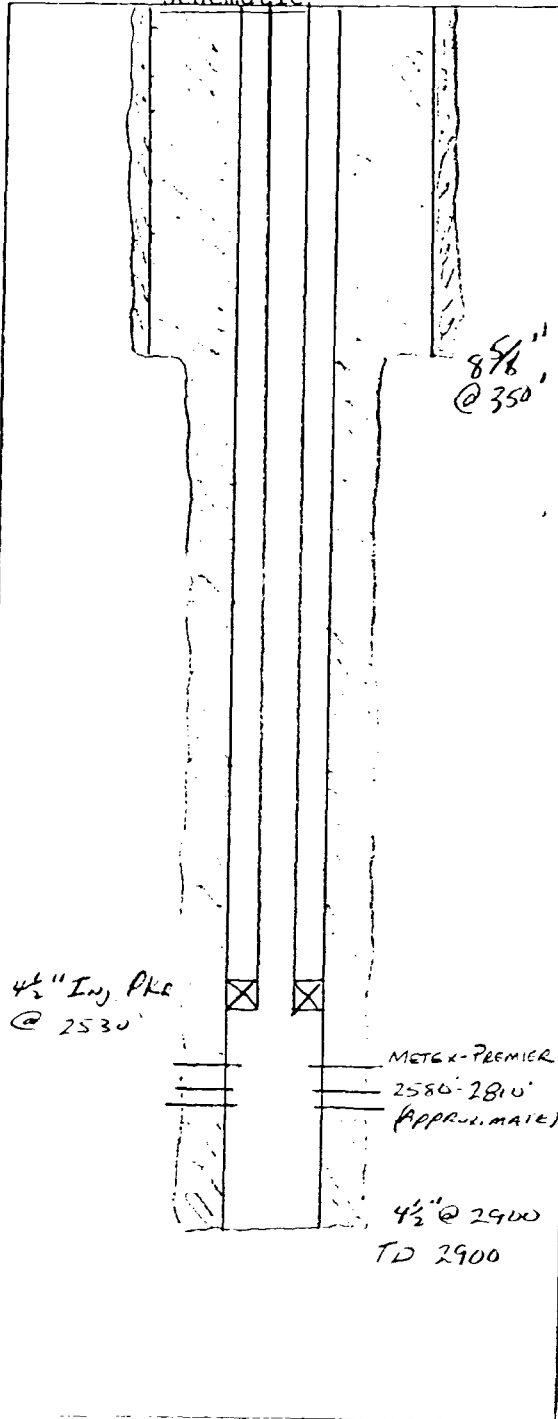
4
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic

Tabular Data



Surface Casing

Size 8-5/8 Set At 350 Cemented with 250 sxs

TOC surface feet determined by circulation

Hole Size 12-1/4"

Intermediate or Long String

Size 4-1/2 Set At 2900 Cemented with 500 sxs

TOC surface feet determined by circulation

Hole Size _____

Liner

Size _____ From _____ Cemented with _____ sxs

TOC _____ feet determined by _____

Hole Size _____

Total Depth 2900

Injection Interval	Zone	Perfs or O.H.
2580-2810' approx.	Metex-Premier	Perfs

4 1/2" I.D. PKE
@ 2530'

METEX-PREMIER
2580-2810'
(APPROXIMATE)

4 1/2" @ 2900
TD 2900

Completion Date NA

Original Operator and Well Name _____

*Well No. 26-4 - 800' FSL & 1310' FWL, Section 4
Well No. 10-9 - 1980' FNL & 1310' FWL, Section 4

Tubing Size 2-3/8 lined with Salta Plastic set in a _____
(material)

4-1/2" SL Arrow Tension packer at 2530 feet.

Other Data

- Name of the injection formation Grayburg (Metex-Premier)
- Name of field or Pool (if applicable) Loco Hills Queen Grayburg San Andres
- Is this a new well drilled for injection? X Yes No
If no, for what purpose was the well originally drilled _____
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sack of cement or bridge plug(s) used) No
- Give the depth of and name of any overlying and/or underlying oil or gas zones (pools) in this area. Overlying: None, Underlying: Loco Hills Cisco 9000-10,000 ft.

Anadarko Production Company
OPERATOR

Ballard GSA Unit
LEASE

5-9
WELL NO.

1980' FNL & 990' FEL
FOOTAGE LOCATION

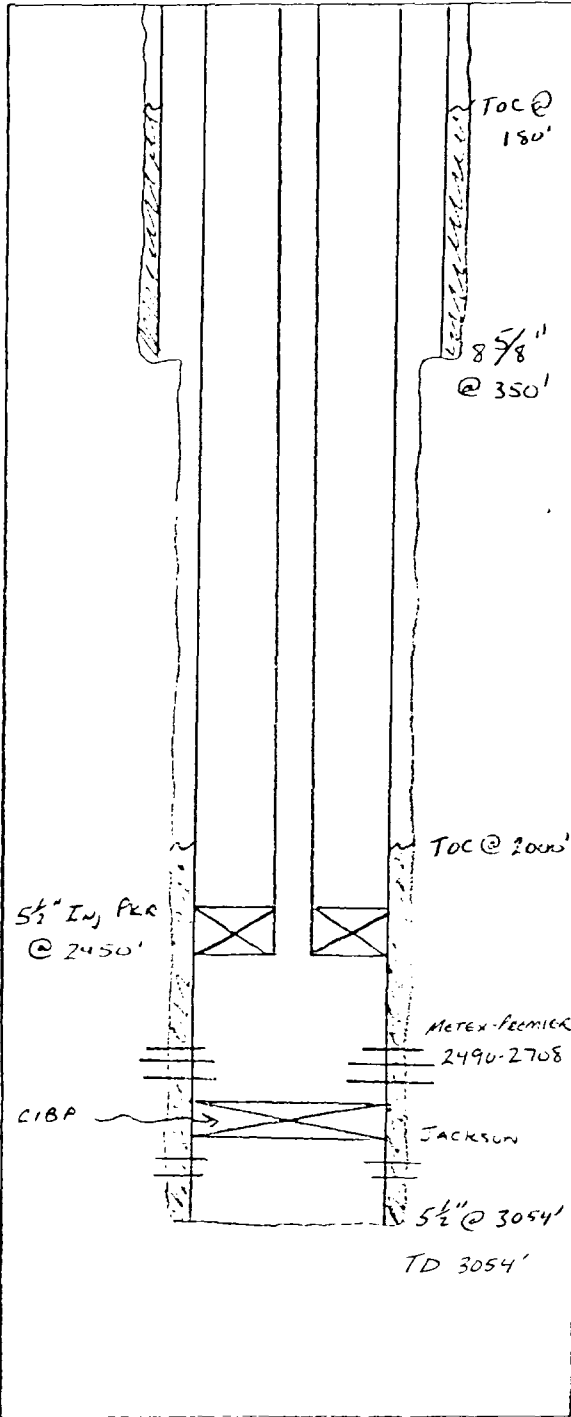
8
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic

Tabular Data



Surface Casing

Size 8-5/8 Set At 350 Cemented with 60 sxs

TOC 180 feet determined by calculation

Hole Size 12-1/4"

Intermediate or Long String

Size 5-1/2 Set At 3054 Cemented with 160 sxs

TOC 2000 feet determined by calculation

Hole Size 7-7/8"

Liner

Size From Cemented with sxs

TOC feet determined by

Hole Size

Total Depth 3054

Injection Interval	Zone	Perfs or O.H.
2490-98	Metex-Premier	Perfs
2511-2602	Metex-Premier	Perfs
2618-2708	Metex-Premier	Perfs

Completion Date 5/21/56

Original Operator and Well Name

Tubing Size 2-3/8" lined with Salta Plastic set in a (material)

5-1/2" SL Arrow Tension packer at 2450 feet.

Other Data

- Name of the injection formation Grayburg (Metex-Premier)
- Name of field or Pool (if applicable) Loco Hills Queen Grayburg San Andres
- Is this a new well drilled for injection? Yes X No
If no, for what purpose was the well originally drilled Production
- Has the well ever been perforated in any other zone(s)? List all such perforated interval and give plugging detail (sack of cement or bridge plug(s) used) Jackson:
3000-20', 34-44 Will set CIBP to isolate Jackson Perfs.
- Give the depth of and name of any overlying and/or underlying oil or gas zones (pools) in this area. Overlying: None, Underlying: Loco Hills Cisco 9000-10,000 ft.

660' FNL & 660' FWL

5

18S

29E

FOOTAGE LOCATION

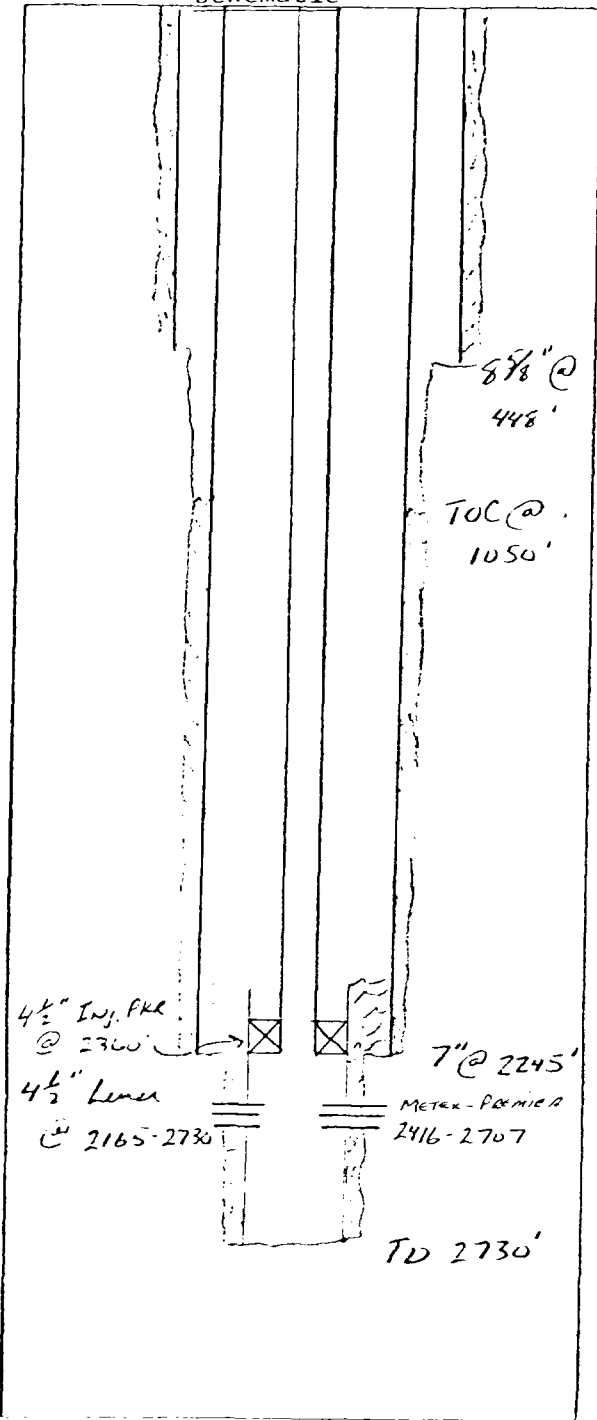
SECTION

TOWNSHIP

RANGE

Schematic

Tabular Data



Surface Casing

Size 8-5/8 Set At 448 Cemented with 50 sxs

TOC surface feet determined by calculation

Hole Size 10"

Intermediate or Long String

Size 7 Set At 2245 Cemented with 100 sxs

TOC 1050 feet determined by calculation

Hole Size 8"

Liner

Size 4-1/2 From 2165-2736 Cemented with 400 sxs

TOC 2165 feet determined by circulation

Hole Size 6-1/4"

Total Depth 2730

Injection Interval	Zone	Perfs or O.H.
2416-20	Metex-Premier	Perfs
2526-54	Metex-Premier	Perfs
2653-2707	Metex-Premier	Perfs

4 1/2" Inj. Pk. @ 2360'

4 1/2" Liner @ 2165-2730'

7" @ 2245'

METEX-PREMIER 2416-2707

TD 2730'

Completion Date 11/26/43

Original Operator and Well Name

Tubing Size 2-3/8" lined with Salta Plastic set in a (material)

4-1/2" SL Arrow Tension packer at about 2360 feet.

Other Data

- Name of the injection formation Grayburg
- Name of field or Pool (if applicable) Loco Hills Queen Grayburg San Andres
- Is this a new well drilled for injection? Yes No
If no, for what purpose was the well originally drilled Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sack of cement or bridge plug(s) used) No
- Give the depth of and name of any overlying and/or underlying oil or gas zones (pools) in this area. Overlying: None, Underlying: Loco Hills Cisco 9000-10,000 ft.

Anadarko Production Company
OPERATOR

Ballard GSA Unit
LEASE

5-14
WELL NO.

990' FSL & 1310' FEL
FOOTAGE LOCATION

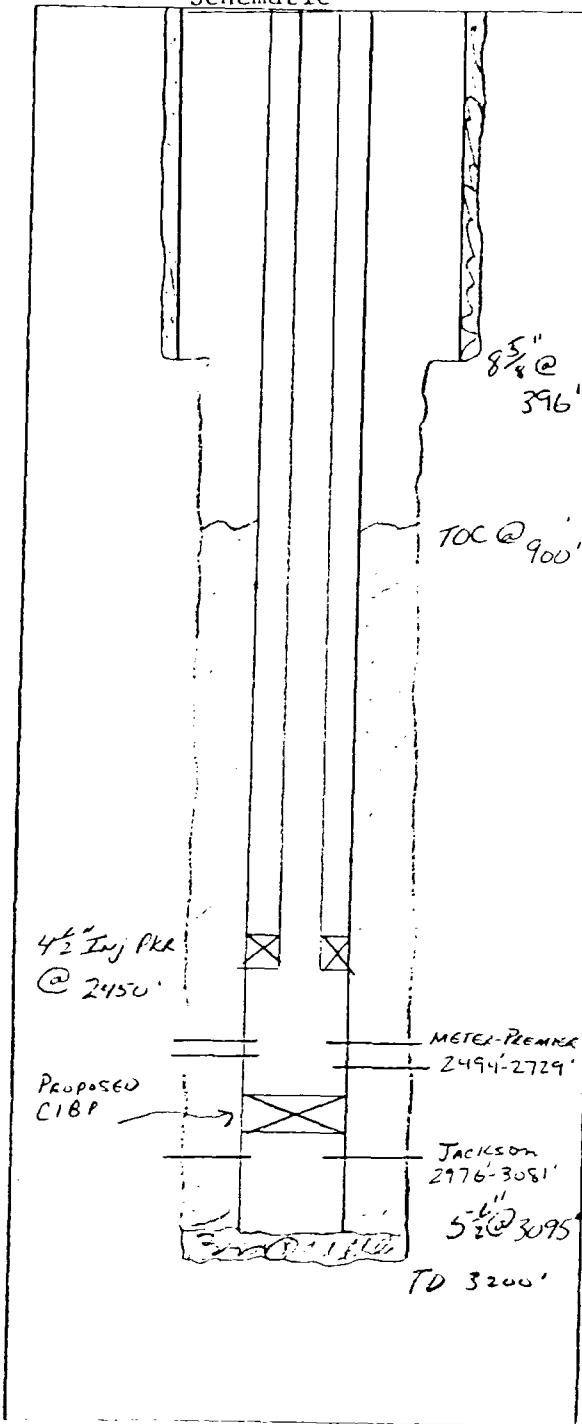
8
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic

Tabular Data



Surface Casing
Size 8-5/8 Set At 396 Cemented with 250 sxs

TOC Surface feet determined by Redi-mix

Hole Size 12-1/4

Intermediate or Long String

Size 4-1/2 Set At 3095 Cemented with 500 sxs

TOC 900 feet determined by temp survey

Hole Size 7-7/8"

Liner

Size _____ From _____ Cemented with _____ sxs

TOC _____ feet determined by _____

Hole Size _____

Total Depth _____

Injection Interval	Zone	Perfs or O.H.
2494-2544	Metex-Premier	Perfs
2678-2729	Metex-Premier	Perfs

Completion Date 1/22/79

Original Operator and Well Name _____

Tubing Size 2-3/8" lined with Salta Plastic set in a
(material)

4-12/" SL Arrow Tension packer at 2450 feet.

Other Data

- Name of the injection formation Grayburg (Metex-Premier)
- Name of field or Pool (if applicable) Loco Hills Queen Grayburg San Andres
- Is this a new well drilled for injection? Yes No
If no, for what purpose was the well originally drilled Production
- Has the well ever been perforated in any other zone(s)? List all such perforated interval and give plugging detail (sack of cement or bridge plug(s) used) Jackson: 2976-3081 (selectively). Will set CIBP to isolate Jackson perfs
- Give the depth of and name of any overlying and/or underlying oil or gas zones (pools) in this area.

660' FSL & 990' FEL
FOOTAGE LOCATION

5
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic

Tabular Data

Surface Casing

Size 8-5/8 Set At 381 Cemented with 150 sxs

TOC Surface feet determined by Redi-mix

Hole Size 12-1/4

Intermediate or Long String *

Size 5-1/2 Set At 2835 Cemented with 400 sxs

TOC 1240 feet determined by temp survey

Hole Size 7-7/8

Liner

Size From Cemented with sxs

TOC feet determined by

Hole Size

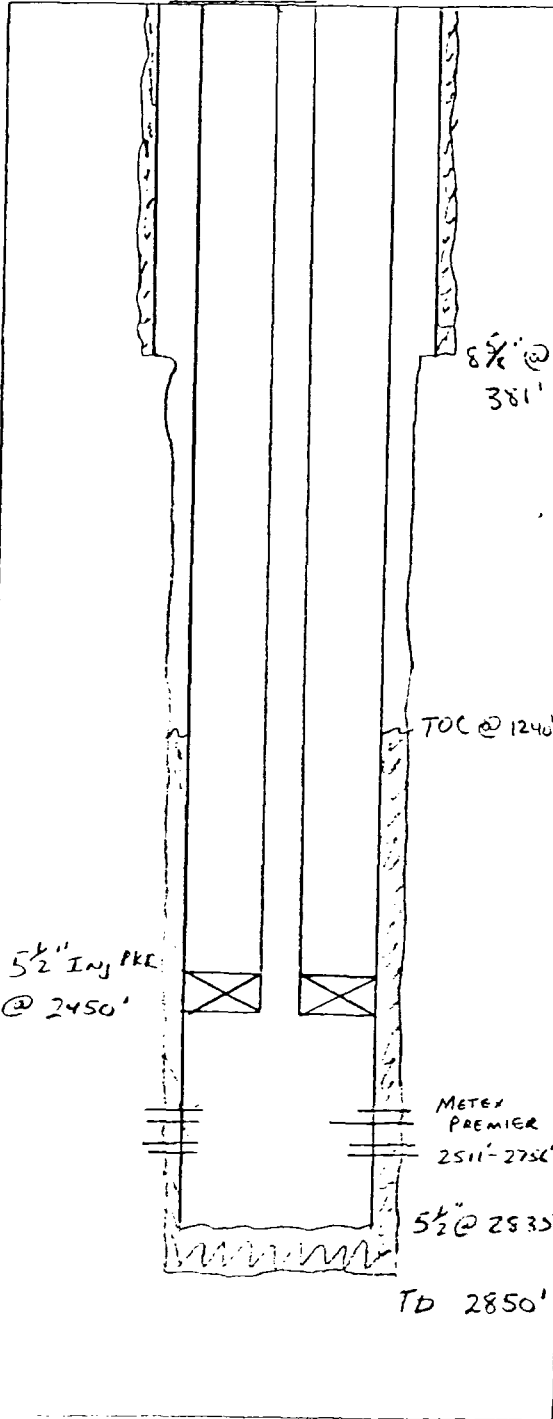
Total Depth 2850'

Injection Interval	Zone	Perfs or O.H.
2511-73	Metex-Premier	Perfs
2658-88	Metex-Premier	Perfs
2699-2702	Metex-Premier	Perfs
2712-56	Metex-Premier	Perfs

Completion Date 12/12/77

Original Operator and Well Name

* Combination String 5-1/2" 1779'
7" 1057'



Tubing Size 2-3/8" lined with Salta Plastic set in a
(material)
5-1/2" SL Arrow Tension packer at about 2450 feet.

Other Data

- Name of the injection formation Grayburg (Metex-Premier)
- Name of field or Pool (if applicable) Loco Hills Queen Grayburg San Andres
- Is this a new well drilled for injection? Yes X No
If no, for what purpose was the well originally drilled Production
- Has the well ever been perforated in any other zone(s)? List all such perforated interval and give plugging detail (sack of cement or bridge plug(s) used) No
- Give the depth of and name of any overlying and/or underlying oil or gas zones (pools) in this area. Overlying: None, underlying: Loco Hills Cisco 9000-10,000 ft.

OPERATOR

LEASE

WELL NO.

2310' FNL & 330' FEL
FOOTAGE LOCATION

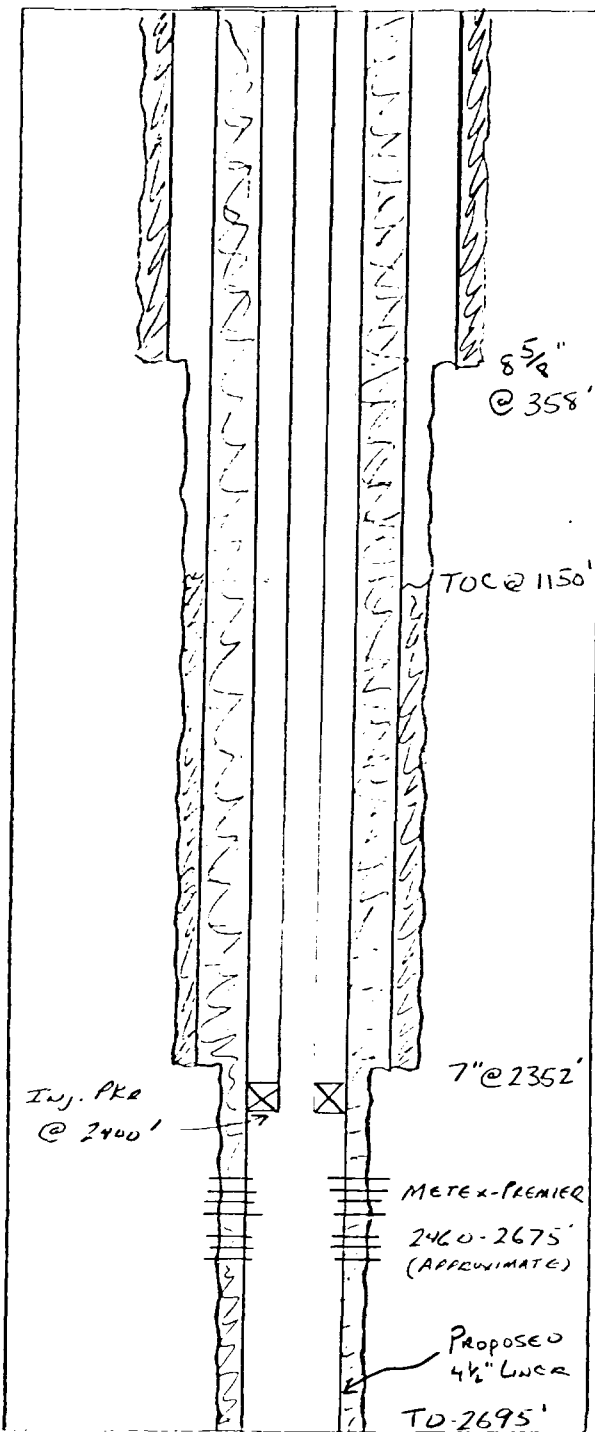
6
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic

Tabular Data



Surface Casing

Size 8-5/8 Set At 358 Cemented with 50 sxs

TOC surface feet determined by calculation

Hole Size 10"

Intermediate or Long String

Size 7 Set At 2352 Cemented with 100 sxs

TOC 1150 feet determined by calculation

Hole Size 8"

Liner *

Size 4-1/2 From surface to TD Cemented with 250 sxs

TOC surface feet determined by circulation

Hole Size 6-1/4"

Total Depth 2695

Injection Interval	Zone	Perfs or O.H.
2460-2675	Metex-Premier	Perfs

Completion Date 1/13/40

Original Operator and Well Name

* Proposed 4-1/2" liner

Tubing Size 2-3/8" lined with Salta Plastic set in a
(material)
4-1/2" SL Arrow Tension packer at about 2400 feet.

Other Data

- Name of the injection formation Grayburg (Metex-Premier)
- Name of field or Pool (if applicable) Loco Hills Queen Grayburg San Andres
- Is this a new well drilled for injection? Yes No
If no, for what purpose was the well originally drilled Production
- Has the well ever been perforated in any other zone(s)? List all such perforated interval and give plugging detail (sack of cement or bridge plug(s) used) No
- Give the depth of and name of any overlying and/or underlying oil or gas zones (pools) in this area. Overlying: None, Underlying: Loco Hills Cisco 9000-10,000 ft.

Anadarko Production Company
OPERATOR

Ballard GSA Unit
LEASE

8-4
WELL NO.

660' FNL & 1980' FEL
FOOTAGE LOCATION

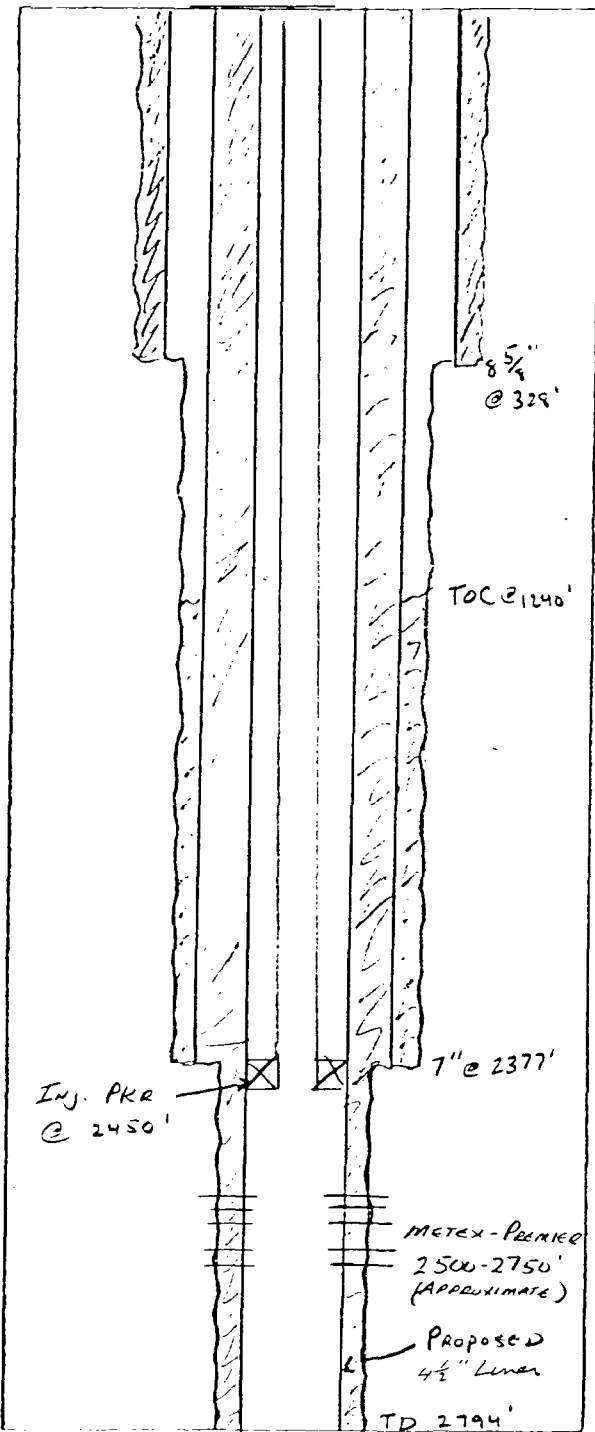
5
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic

Tabular Data



Surface Casing

Size 8-5/8 Set At 328 Cemented with 50 sxs

TOC surface feet determined by calculation

Hole Size 10"

Intermediate or Long String

Size 7 Set At 2377 Cemented with 100 sxs

TOC 1240 feet determined by calculation

Hole Size 8"

Liner *

Size 4-1/2 From surface to TD Cemented with 250 sxs

TOC surface feet determined by circulation

Hole Size 6-1/4"

Total Depth 2794

Injection Interval	Zone	Perfs or O.H.
2500-2750	Metex-Premier	Perfs

Completion Date 9/21/39

Original Operator and Well Name

*Proposed 4-1/2" liner

Tubing Size 2-3/8" lined with Salta Plastic set in a
(material)
4-1/2" SL Arrow Tension packer at 2450 feet.

Other Data

- Name of the injection formation Grayburg (Metex-Premier)
- Name of field or Pool (if applicable) Loco Hills Queen Grayburg San Andres
- Is this a new well drilled for injection? Yes No
If no, for what purpose was the well originally drilled Production
- Has the well ever been perforated in any other zone(s)? List all such perforated interval and give plugging detail (sack of cement or bridge plug(s) used) No
- Give the depth of and name of any overlying and/or underlying oil or gas zones (pools) in this area. Overlying: None, Underlying: Loco Hills Cisco 9000-10,000 ft.

1980' FNL & 660' FEL
FOOTAGE LOCATION

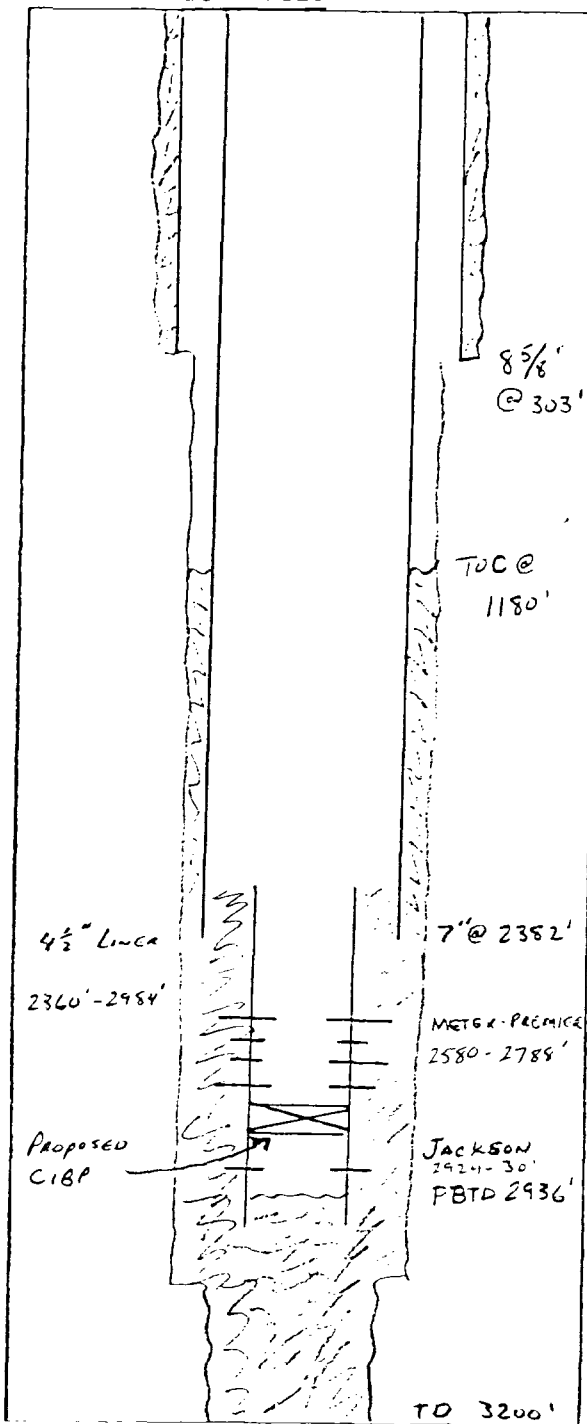
5
SECTION

18S
TOWNSHIP

29E
RANGE

Schematic

Tabular Data



Surface Casing
Size 8-5/8 Set At 303 Cemented with 50 sxs

TOC surface feet determined by calculation

Hole Size 10"

Intermediate or Long String

Size 7 Set At 2382 Cemented with 100 sxs

TOC 1180 feet determined by calculation

Hole Size 8"

Liner

Size 4-1/2 From 2360-2984 Cemented with -- sxs

TOC -- feet determined by --

Hole Size 6-1/4

Total Depth 3200

Injection Interval	Zone	Perfs or O.H.
2580-91	Metex-Premier	Perfs
2595-2606	Metex-Premier	Perfs
2758-63	Metex-Premier	Perfs
2765-88	Metex-Premier	Perfs

Completion Date Recompleted 10/16/75

Original Operator and Well Name

Tubing Size 2-3/8" lined with Salta Plastic set in a
(material)

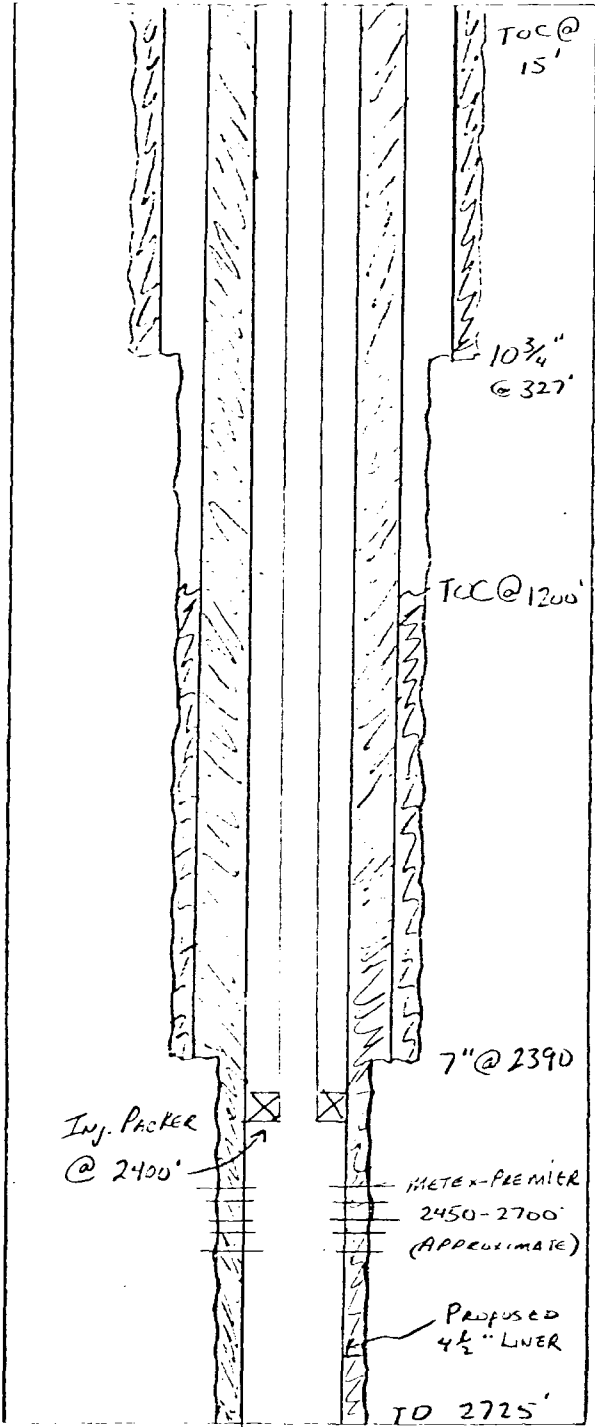
4-1/2" SL Arrow Tension packer at 2530 feet.

Other Data

- Name of the injection formation Grayburg (Metex-Premier)
- Name of field or Pool (if applicable) Loco Hills Queen Grayburg San Andres
- Is this a new well drilled for injection? Yes No
If no, for what purpose was the well originally drilled Production
- Has the well ever been perforated in any other zone(s)? List all such perforated interval and give plugging detail (sack of cement or bridge plug(s) used) Jackson:
2924-30 Will set CIBP to isolate Jackson perfs.
- Give the depth of and name of any overlying and/or underlying oil or gas zones (pools) in this area. Overlying: None, Underlying: Loco Hills Cisco 9000-10,000 ft.

Schematic

Tabular Data



Surface Casing
 Size 10-3/4 Set At 327 Cemented with 50 sxs
 TOC 15 feet determined by calculation
 Hole Size 12-1/4"
 Intermediate or Long String
 Size 7 Set At 2390 Cemented with 100 sxs
 TOC 1200 feet determined by calculation
 Hole Size 8"
 Liner *
 Size 4-1/2 From surface to TD Cemented with 250 sxs
 TOC surface feet determined by circulation
 Hole Size 6-1/4"
 Total Depth 2727
 Injection Interval Zone Perfs or O.H.
2450-2700 Metex-Premier Perfs
 Completion Date 3/7/40
 Original Operator and Well Name
 * Proposed 4-1/2" Liner

Tubing Size 2-3/8" lined with Salta Plastic set in a
 (material)
4-1/2" SL Arrow Tension packer at about 2400 feet.

Other Data

- Name of the injection formation Grayburg (Metex-Premier)
- Name of field or Pool, (if applicable) Loco Hills Queen Grayburg San Andres
- Is this a new well drilled for injection? Yes No
 If no, for what purpose was the well originally drilled Production
- Has the well ever been perforated in any other zone(s)? List all such perforated interval and give plugging detail (sack of cement or bridge plug(s) used) No
- Give the depth of and name of any overlying and/or underlying oil or gas zones (pools) in this area. Overlying: None, Underlying: Loco Hills Cisco 9000-10,000 ft.