

DEPCO, Inc.

PRODUCTION & EXPLORATION

March 28, 1978

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. Jim Kapteina

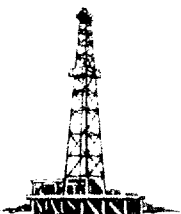
RE: DEPCO, Inc.
Artesia Flood
Waterflood Expansion
Convert 4 Wells to Injection
No.'s: 18, 24, 34, and 39

Gentlemen:

DEPCO, Inc. is asking the Commission to approve administratively the application to convert four (4) additional wells numbers 18, 24, 34, and 39 to water injection in the Artesia Flood. These injectors are necessary to expand the flood. The Artesia Flood was approved by R-2876 and R-3311.

Injection will be into the Grayburg at an approximate depth of 2400 feet. Fresh water will be injected at approximately 300 barrels per day per well. The fresh water will be obtained from a system owned by the City of Carlsbad.

The location of each well to be converted to injection is marked on the attached plat. This plat shows the location of present injection wells. These wells are located as follows: No. 24 Unit I in Sec. 34-T17S-R28E, No. 18 Unit K in Sec. 36-T17S-R28E, No. 34 Unit B in Sec. 2-T18S-R28E and No. 39 Unit C in Sec. 3-T18S-R28E, Eddy County, New Mexico. These wells are necessary to complete injection patterns and expand the flood.



New Mexico Oil Conservation Commission

March 28, 1978

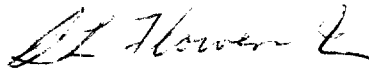
Page 2

Enclosed for your information are copies of logs available over the Grayburg of these wells and a diagrammatic sketch of each well to be converted.

The Commission's administrative approval of this request will be appreciated.

Yours very truly,

DEPCO, INC.

A handwritten signature in cursive script, appearing to read "R. L. Flowers, Jr.", written in dark ink.

R. L. Flowers, Jr.
Chief Engineer

Enc.

RLF:jz

DEPCO, Inc.

PRODUCTION & EXPLORATION

March 29, 1978

To: Offset Operators
(See Attached List)

RE: DEPCO, Inc.
Artesia Flood
Artesia Field
Eddy County, New Mexico

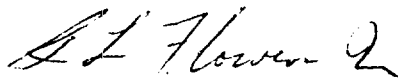
Gentlemen:

DEPCO, Inc. is asking the Commission to approve administratively, the application to convert four additional wells to water injection in the Artesia Flood. These wells are Artesia Unit No. 18, 24, 34, and 39. Injection will be into the Grayburg formation at an approximate depth of 2400 feet.

A copy of the application is attached, DEPCO would appreciate your waiver of objection to this application. Three copies of a waiver letter are attached. Please sign, send one copy to the Commission, and return one copy to DEPCO.

Yours very truly,

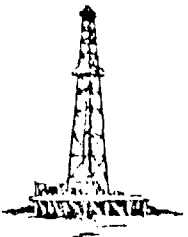
DEPCO, INC.



R. L. Flowers, Jr.
Chief Engineer

RLF:jz

Enc.



Artesia Flood
Waterflood Expansion

OFFSET OPERATORS

Atlantic Richfield
Box 129
Artesia, New Mexico 88210

✓ T. L. Ingram
Box 1757
Roswell, New Mexico 88201

✓ Shenandoah Oil Corporation
Box 1326
Maljamar, New Mexico 88210

J. B. Adamson
Box 727
Artesia, New Mexico 88210

✓ William E. Jeffers
Box 65
Artesia, New Mexico 88210

✓ Cities Service Oil Company
Box 4906
Midland, Texas 79701

Featherstone Development Corporation
1717 W. 2nd Street
Roswell, New Mexico 88201

American Petrofina
Box 1311
Big Spring, Texas 79720

✓ C. O. Fulton
Box 1121
Artesia, New Mexico 88210

Donnelly Drilling Company
Box 433
Artesia, New Mexico 88210

Yates Petroleum Corporation
Yates Building
207 South 4th Street
Artesia, New Mexico 88210

C. E. LaRue & B. M. Muncy, Jr.
Box 196
Artesia, New Mexico 88210

Marbob Energy Corporation
Box 304
Artesia, New Mexico 88210

March 28, 1978

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. J. E. Kapteina
Engineer

Gentlemen:

As an offset operator, _____ hereby waives
any objection to the conversion and injection of water into DEPCO, Inc.
Artesia Unit Nos. 18, 24, 34, and 39 in the Grayburg formation as re-
quested in their application for expansion of the Artesia Unit dated
March 28, 1978.

For _____

By _____

Date _____

ARTESIA UNIT WELL NO. 18
Unit K Sec 36-T17S-R28E
Eddy County, New Mexico

8-5/8" csg set @ 445'
Cmt'd w/75 sx

Hole size - 8"

Calculated Top of Cement
@ 1689'

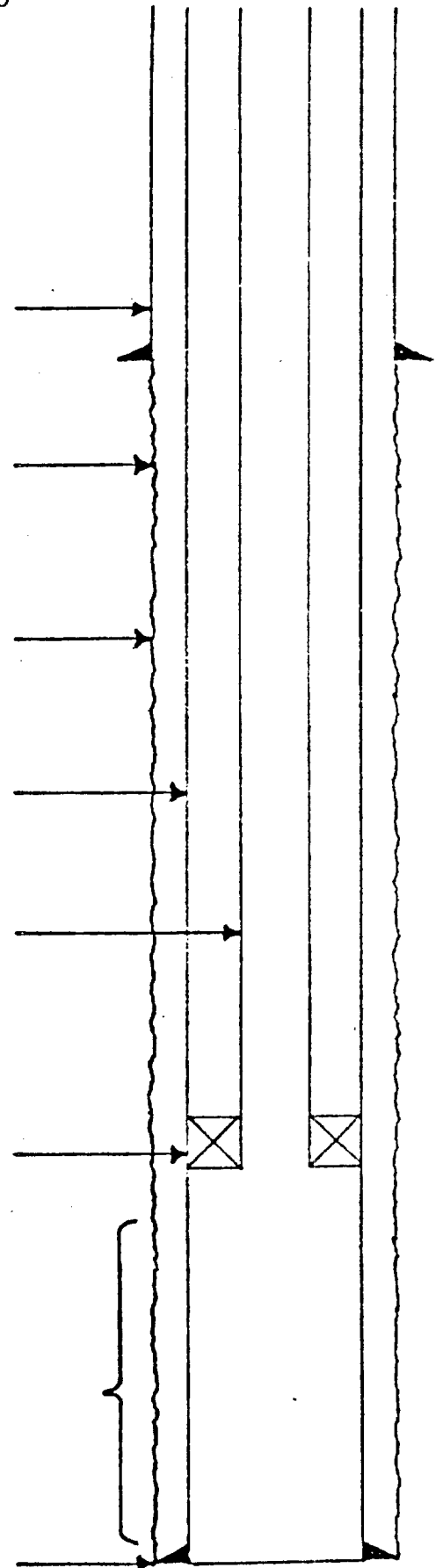
4½" csg set @ 2782'
Cmt'd w/200 sx

2-3/8" Plastic Coated Tubing

Plastic-Coated Packer @ 2300'

	2356' - 2361'
	2587' - 2591'
Perforated @	2597' - 2600'
	2614' - 2620'
	2624' - 2630'
	2742' - 2750'

TD - 2784'



ARTESIA UNIT WELL NO. 24
Unit I Sec 34-T17S-R28E
Eddy County, New Mexico

7" csg set @ 580'
Cmt'd w/75 sx

Hole size $6\frac{1}{4}"$

Calculated Top of Cement
@ 1313'

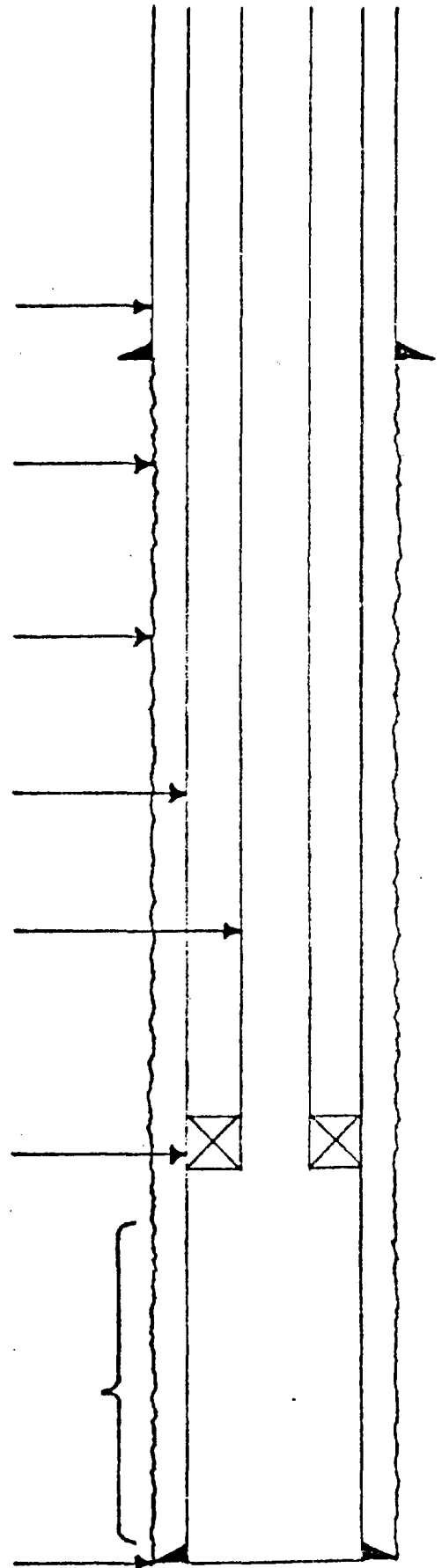
$4\frac{1}{2}"$ csg set @ 2317'
Cmt'd w/150 sx

2-3/8" Plastic-Coated Tbg
Annulus Loaded w/Corrosion
Inhibited Water

Plastic-Coated Packer Set
@ 1950'

Perforated @ 2014'-28'
2250'-58'
2286'-94'

TD - 2317'



ARTESIA UNIT WELL NO. 34
Unit B Sec 2-T18S-R28E
Eddy County, New Mexico

8-5/8" Csg Set @ 559'
Cmt'd w/75 sx

Hole Size Unknown

Calculated Top of Cement
Unknown

5 1/2" Csg set @ 2700'
Cmt'd w/100 sx

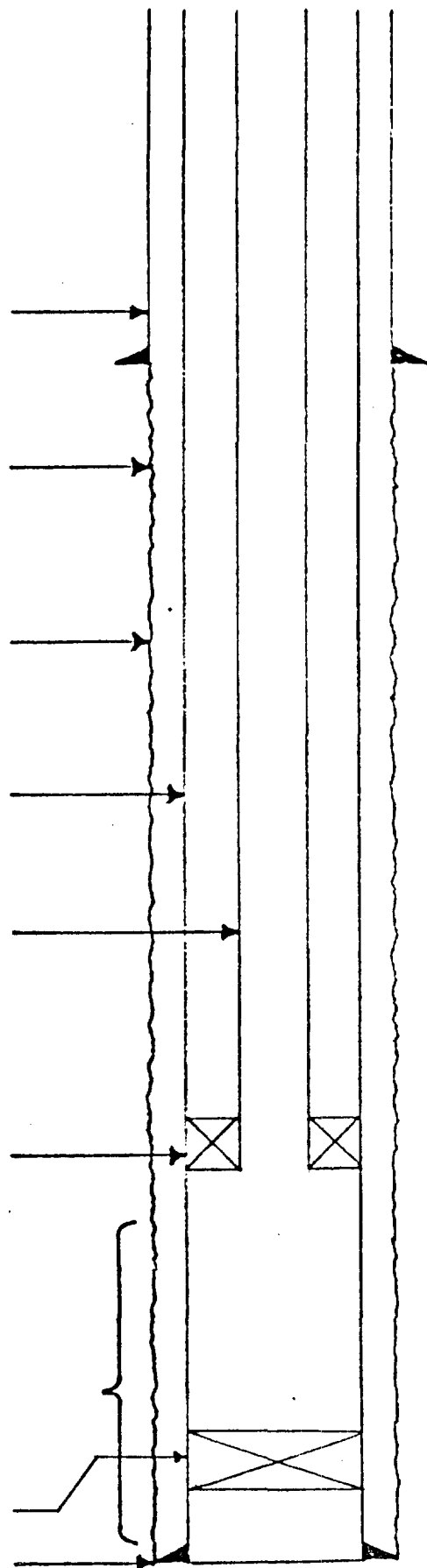
2-3/8" Plastic Coated Tbg

Plastic-Coated Packer Set
@ 2430'

	2460' - 66'
	2518' - 23'
Perforations @	2544' - 49'
	2556' - 62'
	2678' - 86'

Bridge Plug @ 2600'

TD - 2706'



ARTESIA UNIT WELL NO. 39
Unit C Sec 3-T18S-R28E
Eddy County, New Mexico

8-5/8" csg set @ 521'
Cmt'd w/50 sx

Hole Size - 8"

Calculated Top of Cement
@ 1995'

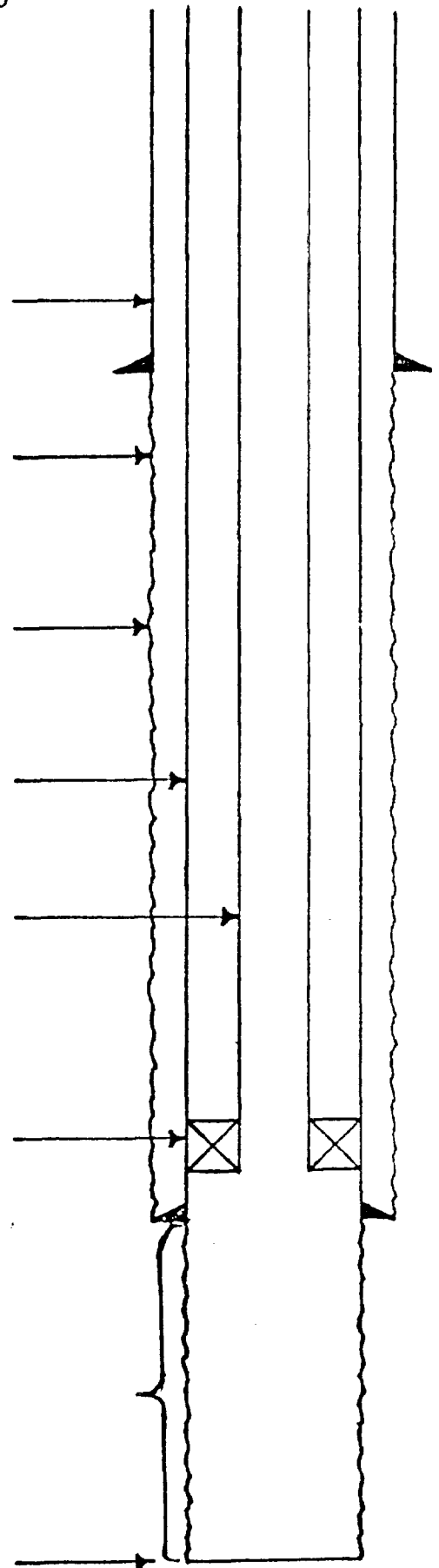
5½" csg set @ 2315'
Cmt'd w/75 sx

2-3/8" Plastic-Coated Tubing.
Annulus Loaded w/Corrosion -
Inhibited Water.

Plastic-Coated Packer
Set @ 2300'

Open Hole 2315' - 2401'

TD - 2401'



March 28, 1978

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. J. E. Kapteina
Engineer

Gentlemen:

As an offset operator, Bendrook Oil Corp hereby waives any objection to the conversion and injection of water into DEPCO, Inc. Artesia Unit Nos. 18, 24, 34, and 39 in the Grayburg formation as requested in their application for expansion of the Artesia Unit dated March 28, 1978.

For Bendrook Oil Corp

By C. M. Bowring Jr.
Date 4-12-78

March 28, 1978

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. J. E. Kapteina
Engineer

Gentlemen:

As an offset operator, Featherstone Dev. Corp. hereby waives any objection to the conversion and injection of water into DEPCO, Inc. Artesia Unit Nos. 18, 24, 34, and 39 in the Grayburg formation as requested in their application for expansion of the Artesia Unit dated March 28, 1978.

For Charles W. Liden
Vice President

By _____
Date 4-11-78

March 28, 1978

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. J. E. Kapteina
Engineer

Gentlemen:

As an offset operator, **CITIES SERVICE COMPANY** hereby waives any objection to the conversion and injection of water into DEPCO, Inc. Artesia Unit Nos. 18, 24, 34, and 39 in the Grayburg formation as requested in their application for expansion of the Artesia Unit dated March 28, 1978.

For **CITIES SERVICE COMPANY**

By *LaQuan Ham* **MANAGER PRODUCTION**
Date 4/24/78 **SOUTHWEST REGION**

YPC

March 28, 1978

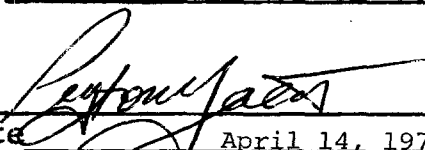
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. J. E. Kapteina
Engineer

Gentlemen:

As an offset operator, Yates Petroleum Corporation hereby waives any objection to the conversion and injection of water into DEPCO, Inc. Artesia Unit Nos. 18, 24, 34, and 39 in the Grayburg formation as requested in their application for expansion of the Artesia Unit dated March 28, 1978.

For Yates Petroleum Corporation

By 

Date April 14, 1978

March 28, 1978

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. J. E. Kapteina
Engineer

Gentlemen:

As an offset operator, Marbob Energy Corp. hereby waives any objection to the conversion and injection of water into DEPCO, Inc. Artesia Unit Nos. 18, 24, 34, and 39 in the Grayburg formation as requested in their application for expansion of the Artesia Unit dated March 28, 1978.

For MARBOS ENERGY CORPORATION
P. O. BOX 304
ARTESIA, NEW MEXICO 88210

By Mark C. Chan
Date 4-10-78

March 28, 1978

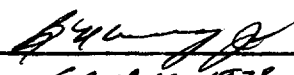
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. J. E. Kapteina
Engineer

Gentlemen:

As an offset operator, C.E. LaRue and B.N. Muncy, Jr. hereby waives any objection to the conversion and injection of water into DEPCO, Inc. Artesia Unit Nos. 18, 24, 34, and 39 in the Grayburg formation as requested in their application for expansion of the Artesia Unit dated March 28, 1978.

For C.E. LaRue and B.N. Muncy, Jr.

By 
Date April 10, 1978

March 28, 1978

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. J. E. Kapteina
Engineer

Gentlemen:

As an offset operator, American Petrofina Co. of Texas hereby waives any objection to the conversion and injection of water into DEPCO, Inc. Artesia Unit Nos. 18, 24, 34, and 39 in the Grayburg formation as requested in their application for expansion of the Artesia Unit dated March 28, 1978.

For American Petrofina Company of Texas

By J. C. Chapman J. C. Chapman for R. C. Bott
Date April 10, 1978

March 28, 1978

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. J. E. Kapteina
Engineer

Gentlemen:

As an offset operator, Tom L. Ingram hereby waives any objection to the conversion and injection of water into DEPCO, Inc. Artesia Unit Nos. 18, 24, 34, and 39 in the Grayburg formation as requested in their application for expansion of the Artesia Unit dated March 28, 1978.

For _____

By Tom L. Ingram
Date 4-12-78

March 28, 1978

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. J. E. Kapteina
Engineer

Gentlemen:

As an offset operator, C. O. Fulton hereby waives any objection to the conversion and injection of water into DEPCO, Inc. Artesia Unit Nos. 18, 24, 34, and 39 in the Grayburg formation as requested in their application for expansion of the Artesia Unit dated March 28, 1978.

For C. O. Fulton

By C. O. Fulton
Date 4-16-78

March 28, 1978

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. J. E. Kapteina
Engineer

Gentlemen:

As an offset operator, W.E. Jeffers hereby waives any objection to the conversion and injection of water into DEPCO, Inc. Artesia Unit Nos. 18, 24, 34, and 39 in the Grayburg formation as requested in their application for expansion of the Artesia Unit dated March 28, 1978.

For _____

By W.E. Jeffers

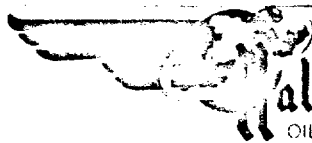
Date _____

April 18 - 1978

Reproduced By
West Texas Electrical Log Service

Dallas 2, Texas

REFERENCE N° A 5997 -C



OIL WELL CEMENTING CO.

RADIOACTIVITY LOG

NATURAL GAMMA RADIATION

INDUCED GAMMA RADIATION

COMPANY RESLER & YATES	FILE	1980' fr. N.L.
	STATE #134	660' fr. E.L.
	FIELD Artesia	Sec. 34
	County Eddy	Twp. 17-S
	State N.M.	Rge. 28-E
WELL STATE # 134		GR-NG
FIELD Artesia		Elev. D.F. N.A.
COUNTY Eddy STATE New Mex.		K.B. N.A.
SEC. 34 TWP. 17-S RGE. 28-E		Grid. N.A.
SURVEY		
Log Measured From Derrick Floor		Elevation N.A.
Drilling Measured From Derrick Floor		Elevation N.A.
Permanent Datum Derrick Floor		Elevation N.A.
Type Log	GAMMA	N. GAMMA
Run No.	ONE	ONE
Date	12-14-56	12-14-56
Footage Logged	2288'	2288'
Total Depth, Driller	2317'	2317'
Total Depth, Logged	2308'	2318'
Type of Fluid in Hole	Oil	Oil
Fluid Level	Full	
Max. Temp.	90 F	90 F
Neutron Source Strength	400mg	
Source to Center of Counter	19 in.	in.
Length Meas. Device in	29 in.	14 in.
O.D. of Instrument in	3 5/8"	3 5/8"
Time Constant - sec	2	2
Logging Speed Ft. min.	SEE REMARKS	
Neutron Source Code	Blue	
Truck No.	4132	4132
Recorded by	G.F. AYRES	
Witnessed by	L. EVANS	

CASING RECORD				OPEN HOLE RECORD			
RUN NO.	SIZE - IN	WT. - LB.	INTERVAL	BIT-SIZE-IN	INTERVAL		
ONE	7"		Surface TO 580'	8 3/4"	Surface TO	580'	
	4 1/2"		Surface TO 2317'	6 1/4"	580' TO	2317'	
			TO		TO		
			TO		TO		
			TO		TO		

REMARKS: - THIS LOG MADE WITH F.M. EQUIPMENT.
GR-NG TOOL # 2044
RECORDED SPOTS ON LEFT INDICATE GR LOGGING SPEED.
CASING COLLARS RECORDED AT TRUE DEPTH.
DERRICK FLOOR 3' ABOVE GROUND LEVEL

COMPLETION RECORD

SPUD DATE 12-7-56

COMP DATE 12-12-56

DST RECORD

CASING RECORD 7 / 580 / 75 sax

4 1/2 / 2317 / 150 sax

PERFORATING RECORD

perf 28 h 2014-28

16 h 2250-58

ALD FRAC SHOT 16 h 2286-94

Sand Frac with 30,000 gals.

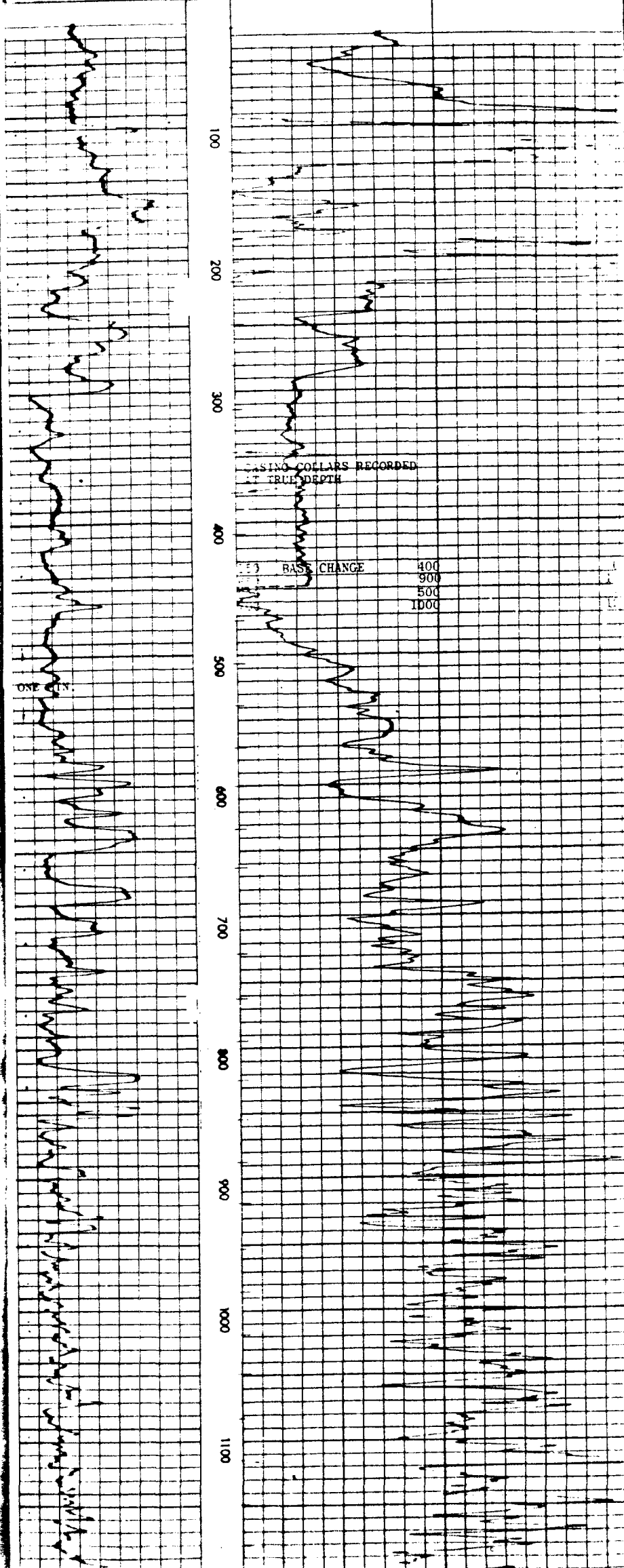
I.P. F 50 BOPD (int)

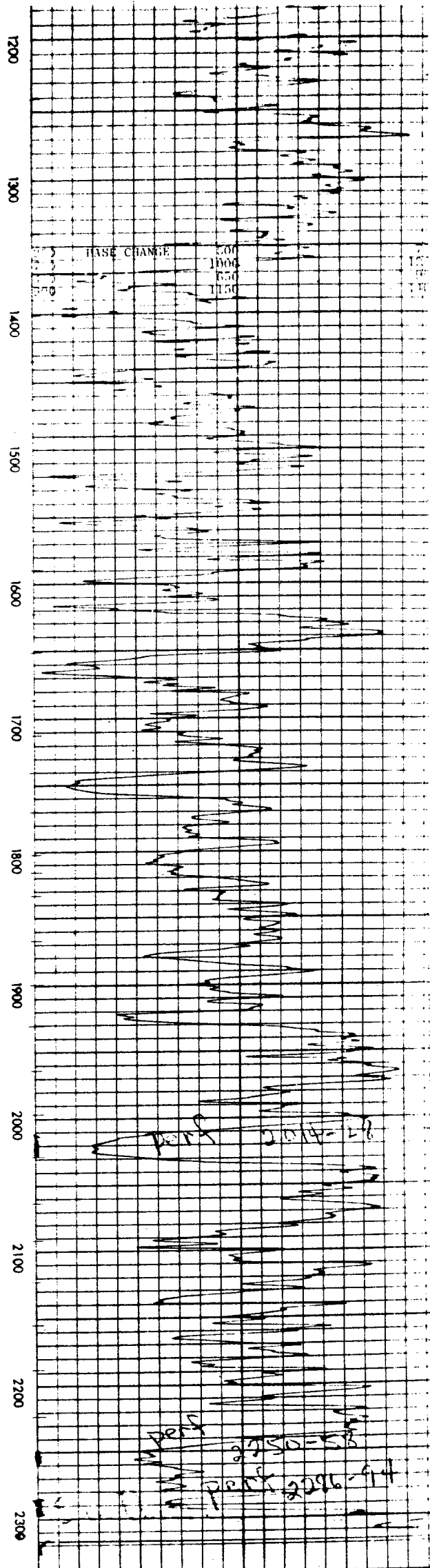
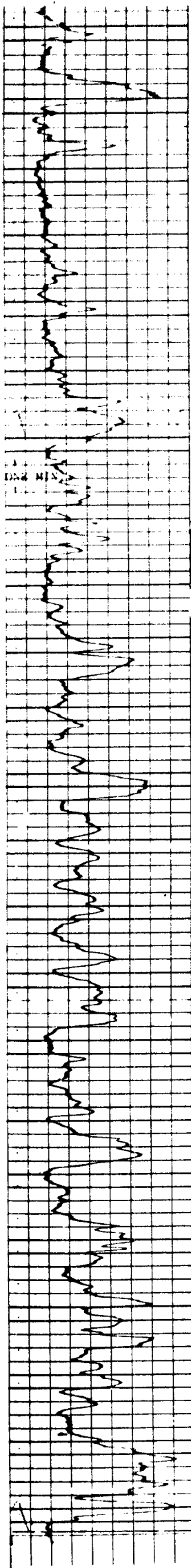
GOR GR 37

I.P. G.P.

REMARKS

GAMMA COUNTS PER SECOND		NEUTRON - GAMMA COUNTS PER SECOND	
90 90/////////180 Time Constant 2 Sec.		Sensitivity 30'-450'	
		150	400
		550	900
		Sensitivity 450'-1372'	
		250	500
		750	1000
		Sensitivity 1372'-2318'	
		400	650
		900	1150
		Time Constant 2 Sec.	



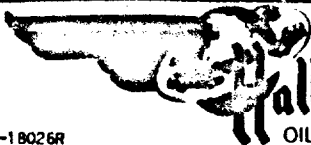


RESLER & YATES
STATE # 134
Artemia Field
Eddy County, New Mexico

T.D. LOGGED 2318'
T.D. DRILLER 2317'
T.D. REACHED 2318'

DEMO ARTESIA UNIT #24

216'



RM-18026R

OIL WELL CEMENTING CO.

RADIOACTIVITY LOG

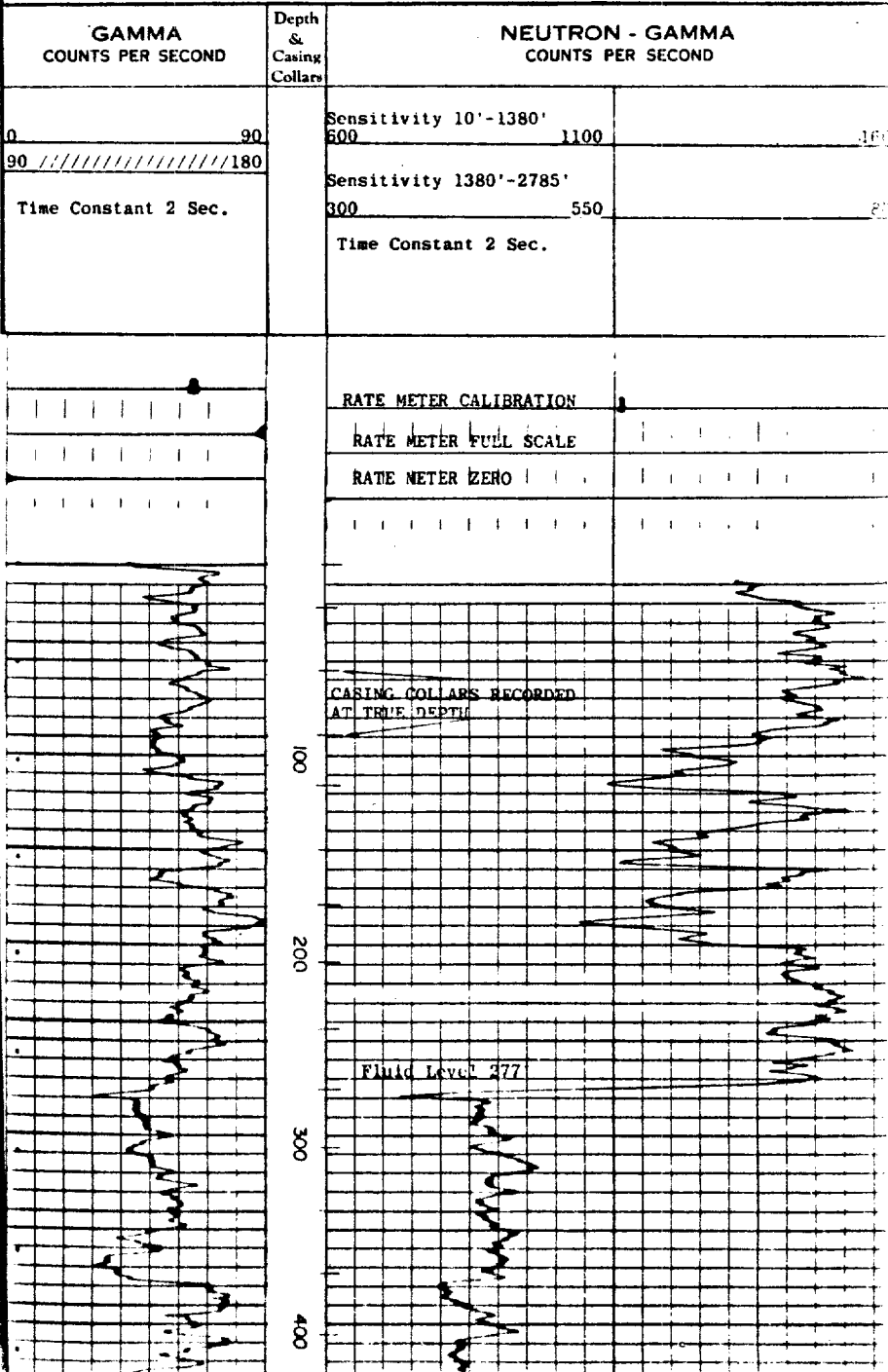
NATURAL GAMMA RADIATION

INDUCED GAMMA RADIATION

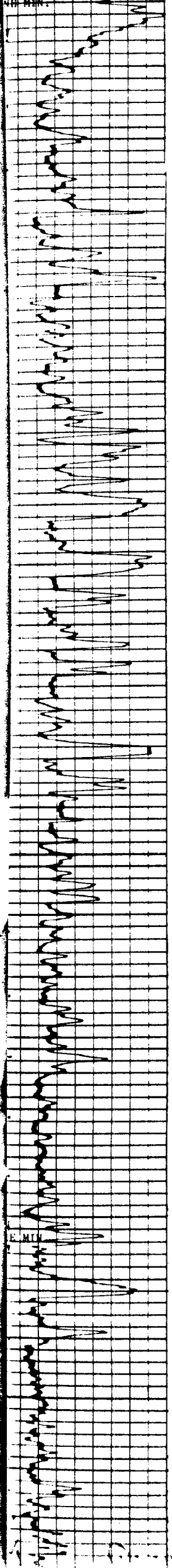
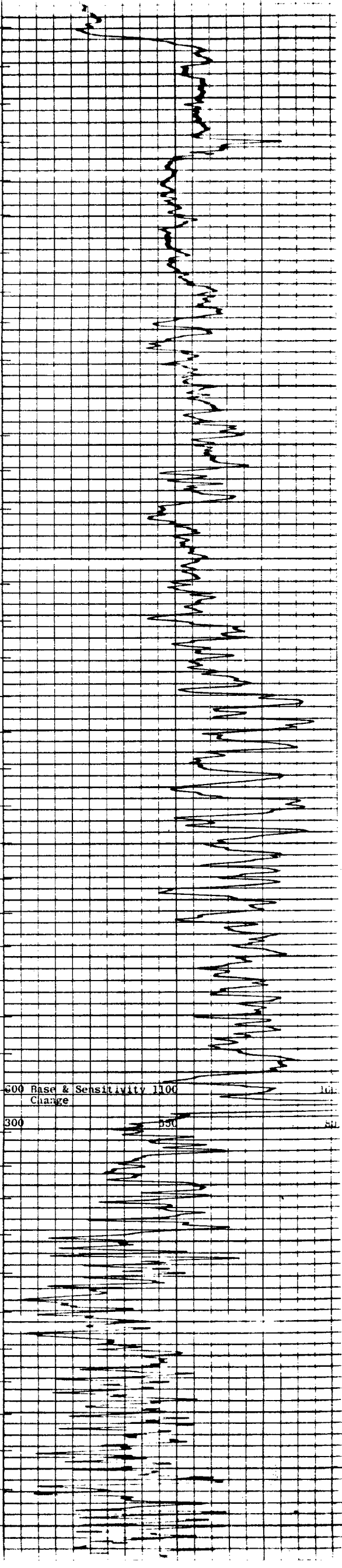
COMPANY WESTERN STATES FILE STATE 447#14 WELL STATE 447#14 FIELD ARTESIA COUNTY EDGY STATE NEW MEX	COMPANY WESTERN STATES	Location 1980' from S 1 1980' from W 1
	FILE	Sec. 36
	WELL STATE 447 # 142	Twp. 17-S
	FIELD Artesia	Sec. 28-E
	COUNTY Edgy STATE New Mex	GRNG
SEC. 36 TWP 17-S RGE 28-E	Elev. D.F. 3671	K.B. S.A.
SURVEY		Grd. 3670
Log Measured From	Perrick Floor	Elevation 3671
Drilling Measured From	Perrick Floor	Elevation 3670
Permanent Datum	Ground Level	Elevation 3670
Type Log	GAMMA	N. GAMMA
Run No.	ONE	ONE
Date	5-21-57	5-21-57
Footage Logged	2775'	2775'
Total Depth, Driller	2784'	2784'
Total Depth, Logged	2775'	2785'
Type of Fluid in Hole	Oil	Oil
Fluid Level	277'	
Max. Temp.	87 F	87 F
Neutron Source Strength		400 mg
Source to Center of Counter	19 in.	19 in.
Length Meas. Device-in	29 in	14 in
O.D. of Instrument-in	3 5/8"	3 5/8"
Time Constant-sec.	2	2
Logging Speed Ft. min.	Sec. Remarks	
Neutron Source Code	Purple	
Truck No.	4018	
Recorded by	P.C. Harris	
Witnessed by	Mr. Evans	

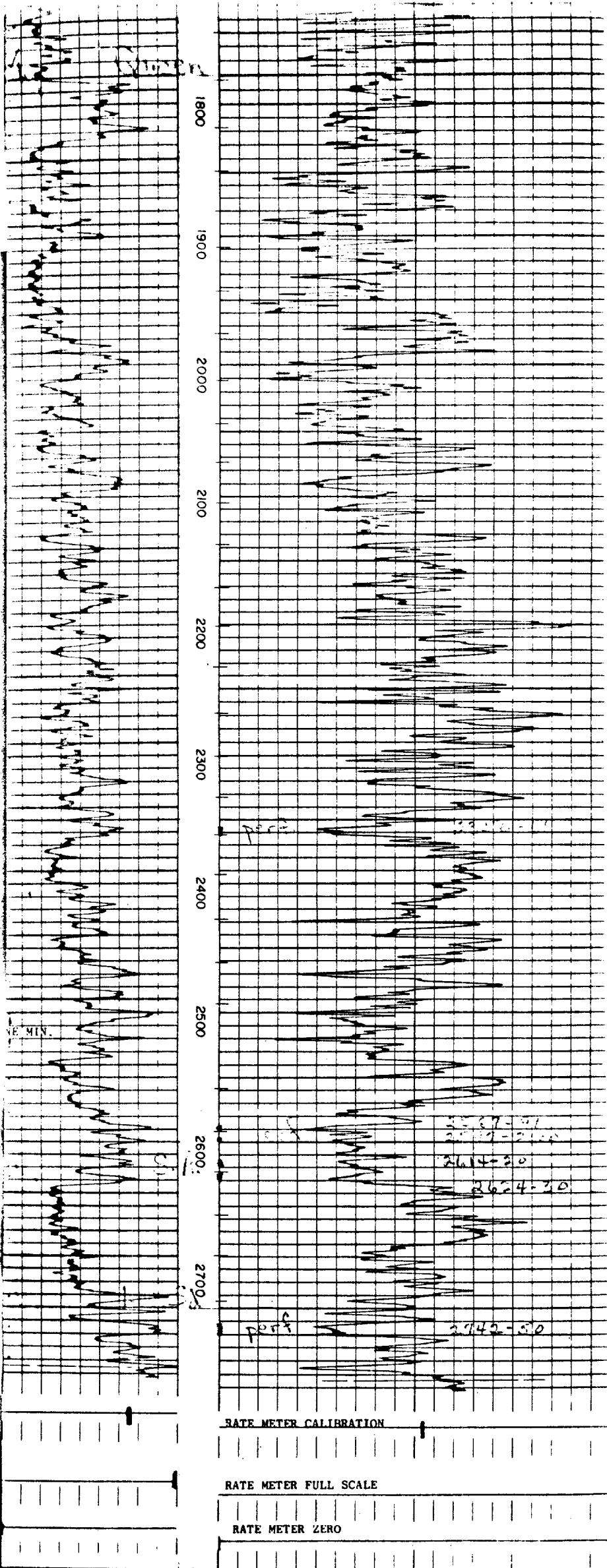
CASING RECORD				OPEN HOLE RECORD			
RUN NO.	SIZE - IN.	WT. - LB.	INTERVAL	BIT-SIZE-IN	INTERVAL		
ONE	8 5/8"	24 #	Surface TO 445'	10"	Surface TO	445'	
ONE	4 1/2"	9.5 #	Surface TO 2782'	8"	445' TO	2784'	
			TO		TO		
			TO		TO		
			TO		TO		

REMARKS: - THIS LOG MADE WITH F.M. EQUIPMENT.
GR-NG TOOL # 2031.
RECORDED SPOTS ON LEFT INDICATE GR LOGGING SPEED.
CASING COLLARS RECORDED AT TRUE DEPTH.



500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700



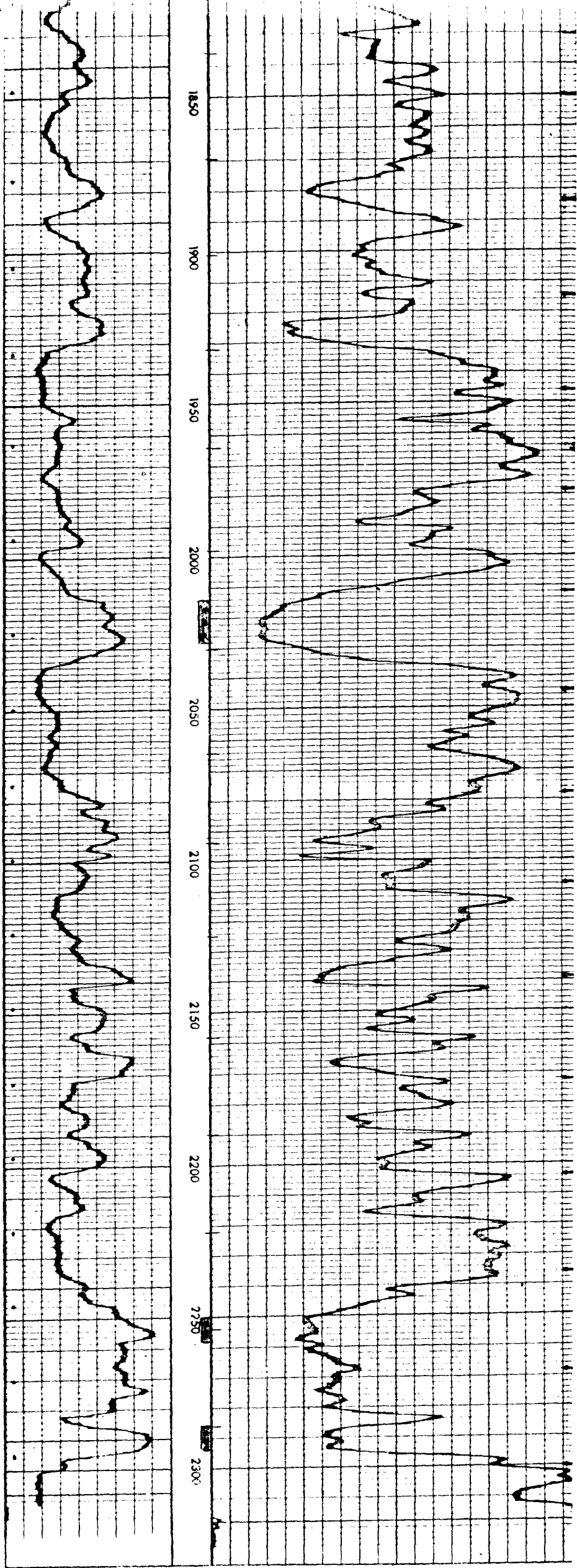


WESTERN-YATES
STATE 847 # 142
Artesia Field
Eddy County, New Mexico

T.D. LOGGED 2785'
T.D. DRILLER 2781'
T.D. REACHED 2785'

DEPCO ARTESIA Unit # 13

DEPCO
Artesia Unit # 18
Unit K - Sec 36
T 17S R 28E



RESLER & YATES
STATE #134
Artesia Field
Eddy County, New Mexico
DEPRO

T.D. LOGGED 2318'
T.D. DRILLER 2317'
T.D. REACHED 2318'

Artesia Unit #24 Unit I Sec 34
T17S R28E



Date: 3 - 23 - 78 Scale: 1" = 2000'