

CASE 4706: Application of KENNEDY
OIL COMPANY FOR A WATERFLOOD
PROJECT, EDDY COUNTY, N. MEX.

Case Number

4706

Application

Transcripts

Small Exhibits

ETC.

dearnley-meier reporting service

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
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FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
CONFERENCE ROOM, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
May 5, 1972

EXAMINER HEARING

IN THE MATTER OF:)

Application of Kennedy Oil Company)
for a waterflood project, Eddy)
County, New Mexico.)

CASE NO. 4706

BEFORE: Elvis A. Utz
Examiner

TRANSCRIPT OF HEARING

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MR. UTZ: Case 4706.

MR. HATCH: Application of Kennedy Oil Company
for a waterflood project, Eddy County, New Mexico.

MR. KENNEDY: I am Robert V. Kennedy, owner of
Kennedy Oil and I have testified before.

MR. UTZ: Will you stand up and be sworn?

ROBERT V. KENNEDY,

appeared as a witness on his own behalf, and after being
duly sworn, testified as follows:

MR. UTZ: You are representing yourself?

THE WITNESS: I am representing Kennedy Oil
Company.

MR. UTZ: You may proceed.

THE WITNESS: I will refer you, at this time to
Exhibit Number 1, it is a plat of the area in question and
it shows all the surrounding wells within a radius of two
miles. This is the same plat previously submitted by
Atlantic richfield Company.

The producing formations and zones are so identified
on this. As to legend at the bottom of this particular map,
the Kennedy Oil Company acreage is outlined in red, being
the west half of the SW/4 of 19, 17, 31.

I will now refer you to Exhibit Number 2, Exhibit
Number 2 is a gamma ray neutron log of our State "B" Well
Number 1, located in the NW/4 of the SW/4 of Section 19, 17, 31.

1 With reference to this log, you will note that
2 we have noted perforations in the well, and the casing
3 setting point which is 3,053.

4 We show on the log an open hole section from
5 3,053 to approximately 3,120.

6 Referring to Exhibit Number 3, it is a drawing of
7 the proposed injection well and it again shows the perforation
8 and cement tops which are estimated to be in the open hole
9 section I previously referred to.

10 Our tube string will have Packer Tests at
11 approximately 3,006 feet. Again, making reference to the
12 reduced hole I previously pointed out, the section of the
13 open hole is producing from the San Andres.

14 Referring to Exhibit 4, Exhibit 4 shows the
15 Grayburg-Jackson Wells that we have on this lease. We have
16 completed to date, a total depth casing to the perforation
17 so listed.

18 With reference to Exhibit 5, that shows the
19 accumulation of these wells as of March 1, 1972. This
20 shows the total accumulative production. The water will
21 be injected at the proposed minimum of 100 barrels a day and
22 a maximum of 500 barrels a day with a pressure of 1,500 to
23 1,600 pounds.

24 We propose a pressure test on casing at 2,500
25 pounds per square inch. If we have failure or anything we

1 will repair or reset the Packer, if possible.

2 We do have a set of perforations above the Packer
3 setting point and the perforation is 2,804 to 2,816. We are
4 going to initially just flood the portion from 3,006 to
5 3,115.

6 Our water source will be from the Arco waterflood
7 supply system and produced water will be returned to the system,
8 treated, and reinjected.

9 The life of the project is estimated at ten years
10 depending on the economic conditions.

11 I estimate the recovery to be approximately 50,000
12 barrels of water.

13 In conclusion, I will state that this is a lease
14 line cooperative effort of Arco and ourselves and by working
15 together, we hope to recover additional oil that otherwise would
16 not be recovered.

17 Correlative rights will be protected and this is
18 a State lease we are working on.

19 I would like to introduce Exhibits 1 through 5,
20 all of which were prepared by myself except for the map which
21 I borrowed from Atlantic Richfield.

22 MR. UTZ: Without objection, Exhibits 1 through 5
23 will be entered into the record.

24 (Whereupon Applicant's Exhibits 1 through 5 were
25 admitted in evidence.)

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
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FIRST NATIONAL BANK BLDG., EAST ALBUQUERQUE, NEW MEXICO 87106

1 MR. UTZ: Mr. Kennedy, referring to your Exhibit
2 Number 3, and the perforation of 2,804 to 2,818, what
3 zone is that?

4 MR. KENNEDY: The upper member of the Grayburg.

5 MR. UTZ: How about the perforation from 3,814 to
6 3,816?

7 MR. KENNEDY: There again, it will be the upper
8 Grayburg.

9 Now, sometimes this is classified as Loco Hills.

10 MR. UTZ: And the same is true for the perforation
11 at 3,454?

12 MR. KENNEDY: Yes, that is Grayburg.

13 MR. PORTER: What is below the open hole section?

14 MR. KENNEDY: Grayburg.

15 MR. PORTER: More Grayburg?

16 MR. KENNEDY: I mean San Andres, the open hole
17 section is San Andres.

18 MR. UTZ: What material do you have below the
19 lead plug?

20 MR. KENNEDY: I will fill that with gravel as
21 noted on Exhibit 3.

22 MR. UTZ: Will that effectively seal it off?

23 MR. KENNEDY: Yes, sir.

24 MR. UTZ: What is the purpose in separating the
25 two Grayburg sections with the Packer?

1 MR. KENNEDY: Atlantic Richfield, in a
2 cooperative effort, wanted to confine the flowing to these
3 lower sections. They do not have an upper section open in
4 many of their wells, if any.

5 MR. UTZ: They are not injecting in the upper zone?

6 MR. KENNEDY: No, they are going to confine
7 theirs to the same intervals outlined on my gamma-ray neutron.

8 MR. UTZ: Any other questions of the witness?

9 (No response.)

10 MR. UTZ: You may be excused.

11 (Witness excused.)

12 MR. UTZ: Any statements in the Case?

13 (No response.)

14 MR. UTZ: The Case will be taken under advisement.
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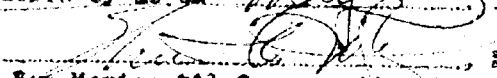
dearnley-meier reporting services

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
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1 STATE OF NEW MEXICO)
2) SS
3 COUNTY OF BERNALILLO)

4 I, RICHARD E. McCORMICK, a Certified Shorthand Reporter,
5 in and for the County of Bernalillo, State of New Mexico,
6 do hereby certify that the foregoing and attached Transcript
7 of Hearing before the New Mexico Oil Conservation Commission
8 was reported by me; and that the same is a true and correct
9 record of the said proceedings to the best of my knowledge,
10 skill and ability.

11 
12 CERTIFIED SHORTHAND REPORTER

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22 I do hereby certify that the foregoing is
23 a complete record of the proceedings of
24 the Executive Hearing of Case No. 706
25 heard by the Oil Conservation Commission on May 5, 1972.

Richard E. McCormick, Reporter
New Mexico Oil Conservation Commission

dearnlay-meier reporting services

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
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WITNESS:

ROBERT V. KENNEDY

PAGE

3

E X H I B I T S

APPLICANT'S: (Kennedy)

ORDERED

ADMITTED

Exhibit Number 1
Exhibit Number 2
Exhibit Number 3
Exhibit Number 4
Exhibit Number 5

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OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

June 2, 1972

File

GOVERNOR
BRUCE KING
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMJO
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

Mr. Robert B. Kennedy
Kennedy Oil Company
Post Office Box 151
Artesia, New Mexico 88210

Dear Sir:

Reference is made to Commission Order No. R-4302, recently entered in Case No. 4706, approving the Kennedy State B Grayburg Jackson Waterflood Project.

Injection into the one authorized water injection well shall be through tubing under a packer into perforations and open-hole in the overall interval from 3008 feet to 3115 feet. It is our understanding that you may later also flood through the casing-tubing annulus into perforations 2804-2816 feet. It will be necessary, when you start this annular injection, to continuously treat the water for corrosion prevention and to conduct corrosion coupon tests and report the results thereof quarterly to the Commission.

As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 112 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the Commission and the appropriate district proration office.

In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both

-2-

Mr. Robert B. Kennedy
Kennedy Oil Company
Post Office Box 151
Artesia, New Mexico 88210

of the aforementioned Commission offices by letter of any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

Your cooperation in keeping the Commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,



A. L. PORTER, Jr.
Secretary-Director

ALP/DSN/ir

cc: OCC-Hobbs and Artesia, New Mexico
Mr. D. E. Gray, State Engineer Office, Santa Fe, N. Mex.



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

GOVERNOR
BRUCE KING
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMJO
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

May 17, 1972

Mr. Robert B. Kennedy
Kennedy Oil Company
Post Office Box 151
Artesia, New Mexico 88210

Re: Case No. 4706
Order No. R-4302
Applicant:
Kennedy Oil Company

Dear Sir:

Enclosed herewith is a copy of the above-referenced Commission order recently entered in the subject case. Letter pertaining to conditions of approval and maximum allowable to follow.

Very truly yours,

A handwritten signature in cursive script that reads "A. L. Porter, Jr.".

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x
Artesia OCC x
Aztec OCC _____
State Engineer x

Other _____

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 4706
Order No. R-4302

APPLICATION OF KENNEDY OIL
COMPANY FOR A WATERFLOOD
PROJECT, EDDY COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 5, 1972,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 16th day of May, 1972, the Commission, a
quorum being present, having considered the testimony, the
record, and the recommendations of the Examiner, and being
fully advised in the premises,

FINDS:

(1) That due public notice having been given as required
by law, the Commission has jurisdiction of this cause and the
subject matter thereof.

(2) That the applicant, Kennedy Oil Company, seeks
authority to institute a waterflood project in the Grayburg-
Jackson Pool by the injection of water into the Grayburg
formation through its State "B" Well No. 1, located in the
NW/4 SW/4 of Section 19, Township 17 South, Range 31 East,
NMPM, Eddy County, New Mexico.

(3) That the wells in the project area are in an advanced
state of depletion and should properly be classified as "stripper"
wells.

(4) That the proposed waterflood project should result
in the recovery of otherwise unrecoverable oil, thereby pre-
venting waste.

(5) That the subject application should be approved and
the project should be governed by the provisions of Rules 701,
702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Kennedy Oil Company, is hereby
authorized to institute a waterflood project in the Grayburg-

-2-

CASE NO. 4706
Order No. R-4302

Jackson Pool by the injection of water into the Grayburg formation through its State "B" Well No. 1, located in the NW/4 SW/4 of Section 19, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico.

(2) That the subject waterflood project is hereby designated the Kennedy State B Grayburg Jackson Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



Bruce King
BRUCE KING, Chairman

Alex J. Armijo
ALEX J. ARMISO, Member

A. L. Porter, Jr.
A. L. PORTER, Jr., Member & Secretary

S E A L

dr/

4706

Heard, 5-5-72

Rec. 5-8-72

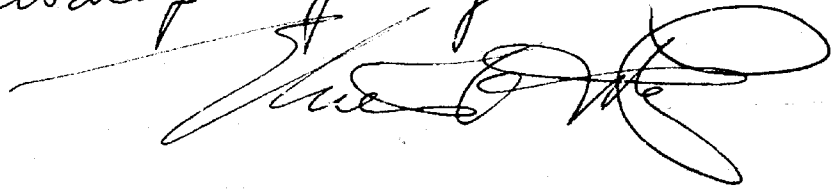
Grant Kenney by Cit Co. permission
to convert their St. B' #1, L

19-175-31E. Lyby-Jackson Pool
to own 20 Injection wells. Injection
to be thru tubing and under a packer
into the Lyby. at 3088-14 + 3046-54.

Also thru the Casina; Tubing
and slus into Lyby perps

2804-16.

Designated E/2 SW/4 19-17-31
as a waterfld. project.



- CASE 4700: Application of Penasco Corporation for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Penasco Shugart Queen Sand Unit Area, Shugart Pool, by the injection of water into the Queen formation through four wells located in Sections 8, 9, 16, and 17, Township 18 South, Range 31 East, Eddy County, New Mexico. Applicant further seeks a procedure whereby additional injection wells within the unit area may be approved administratively.
- CASE 4701: Application of Wynn Oil Company for an unorthodox location and a dual completion, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion of its Largo Federal Well No. 2 to produce gas from the Blanco-Mesaverde and Busin-Dakota Pools at an unorthodox location for the Blanco-Mesaverde Pool 1500 feet from the South line and 1100 feet from the East line of Section 13, Township 27 North, Range 8 West, San Juan County, New Mexico.
- CASE 4702: Application of Penroc Oil Corporation for a special gas-oil ratio limitation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an amendment of the special rules and regulations for the Hobbs-Drinkard Pool, Lea County, New Mexico, to provide for a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil for said pool.
- CASE 4703: Application of Continental Oil Company for special pool rules, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the West Lindrith Gallup-Dakota Oil Pool, Rio Arriba County, New Mexico, including provisions defining a gas well in the pool as one producing with a gas-liquid ratio of 30,000 cubic feet of gas per barrel of oil or one which produces oil with a gravity of 60° API or greater, a gas-oil ratio limitation for oil wells of 10,000 cubic feet of gas per barrel of oil, and 160-acre spacing units for both oil and gas wells.
- CASE 4709: Application of Continental Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Eumont Gas Pool and the Penrose Skelly Oil Pool in the wellbore of its Lockhart A-17 Well No. 1 located in Unit L of Section 17, Township 21 South, Range 37 East, Lea County, New Mexico.
- CASE 4710: Application of Hanson Oil Corporation for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, to dispose into unlined surface pits water produced by 22 wells located

Docket No. 10-72

DOCKET: EXAMINER HEARING - FRIDAY - MAY 5, 1972

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 4689: (Continued from the April 5, 1972, Examiner Hearing)

Application of Petroleum Corporation of Texas for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, to dispose into unlined surface pits water produced by its Dexter Federal Well No. 15 located in Unit J of Section 15, and all of its wells located or to be located in the NW/4 of Section 20, Township 17 South, Range 30 East, Grayburg-Jackson Pool, Eddy County, New Mexico.

CASE 4697: Application of Texaco Inc. for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (tubingless) of its V. M. Henderson Well No. 9 located in Unit G of Section 30, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Paddock and Tubb Pools through parallel strings of casing, cemented in a common well-bore.

CASE 4698: Application of David Fasken for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of his Arco "9" Morrison Well No. 1 located in Unit B of Section 9, Township 19 South, Range 25 East, Eddy County, New Mexico, in such a manner as to produce gas from an undesignated Cisco gas pool through tubing and gas from the Boyd-Morrow Gas Pool through the casing-tubing annulus.

CASE 4711: Application of Shell Oil Company for commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle North Vacuum Abo production from its State VB Com Well No. 1 located in Unit B of Section 19, Township 17 South, Range 35 East, Lea County, New Mexico, and from its State K Lease comprising the SE/4 of said Section 19 after separately metering the State VB Com production and determining the State K production by means of the subtraction method.

CASE 4699: Application of Penasco Corporation for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Penasco Shugart Queen Sand Unit Area comprising 520 acres, more or less, of Federal and State lands in Sections 8, 9, 16, and 17, Township 18 South, Range 31 East, Shugart Pool, Eddy County, New Mexico.

Docket No. 10-72
Examiner Hearing - Friday, May 5, 1972

(Case 4710 continued)

or to be located in Sections 24, 25, 26, 34, and 35, Township 18 South, Range 30 East, Shugart Pool, Eddy County, New Mexico.

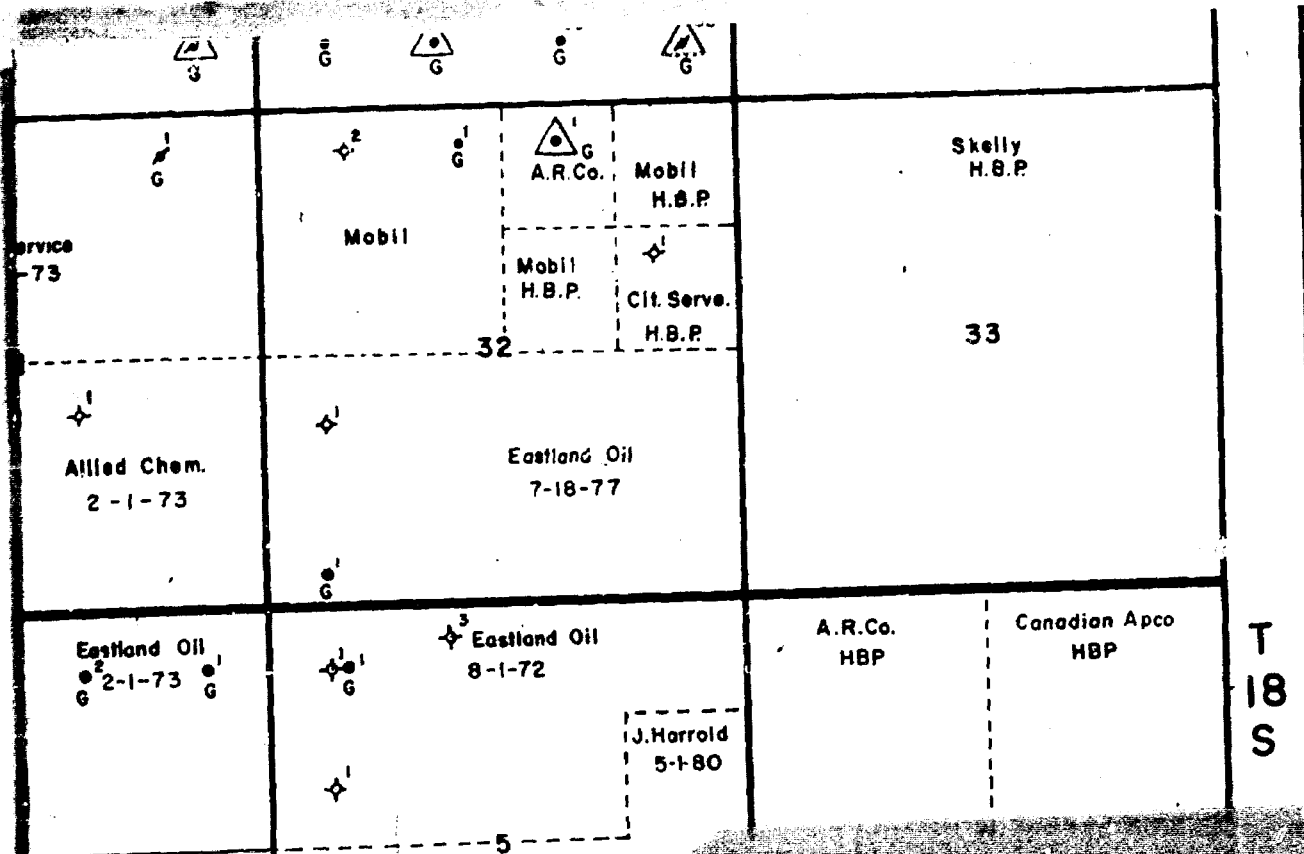
CASE 4704: Application of Atlantic Richfield Company for rededication of acreage, Lea County, New Mexico. Applicant, in the above-styled cause, seeks amendment of Order No. R-1932 to permit the 240-acre non-standard gas proration unit comprising the NE/4 NE/4 of Section 33 and the NW/4 and NW/4 NE/4 of Section 34, Township 19 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico, established by said order to be dedicated simultaneously to its J. H. Williams "Com" Well No. 3 and its J. H. Williams Well No. 5 located, respectively, in Units E and F of said Section 34.

CASE 4705: Application of Atlantic Richfield Company for waterflood projects, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks to institute three waterflood projects on its leases in Sections 19 and 30, Township 17 South, Range 31 East, Grayburg-Jackson Pool, Eddy County, New Mexico, by the injection of water into the Grayburg formation through five wells located in said Sections 19 and 30.

CASE 4706: Application of Kennedy Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Grayburg-Jackson Pool by the injection of water into the Grayburg formation through its State "B" Well No. 1 located in the NW/4 SW/4 of Section 19, Township 17 South, Range 31 East, Eddy County, New Mexico.

CASE 4708: Application of Jake L. Hamon for salt water disposal, Lea County, New Mexico. Applicant- in the above-styled cause, seeks authority to dispose of produced salt water into the Pennsylvanian and Devonian formations in perforated and open-hole interval from 10,492 feet to 13,100 feet in his State B-2330 Well No. 1 located in Unit C of Section 31, Township 16 South, Range 36 East, East Shoebar-Devonian Field, Lea County, New Mexico.

CASE 4707: Application of Blackrock Oil Company for a dual completion, salt water disposal, and unorthodox location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Bates McIntyre Federal Well No. 1 at an unorthodox location 1980 feet from the North line and 660 feet from the East line of Section 9, Township 6 South, Range 27 East, Chaves County, New Mexico, in such a manner as to produce gas from the Haystack Cisco Gas Pool through tubing and to dispose of salt water down the casing-tubing annulus into the San Andres and other formations in the open-hole interval from 1186 feet to 4389 feet, the N/2 of said Section 9 would be dedicated to the well.



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nt Injection Well
 sed Injection Well

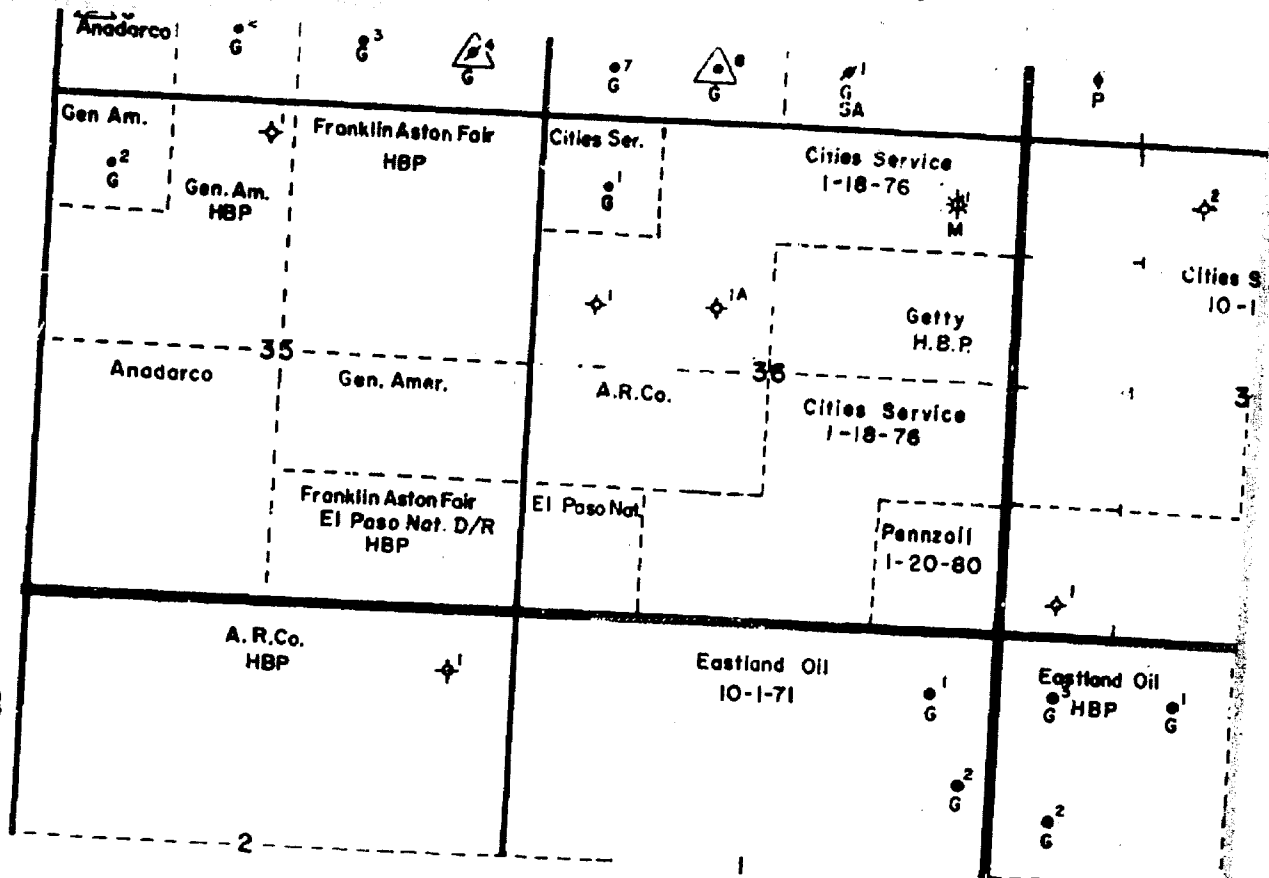
AREA PLAT
 GRAYBURG-JACKSON FIELD
 EDDY COUNTY, NEW MEXICO



BY C. D. OWENS	DRAWN BY C. D. OWENS	DATE
DATE	REVISION BY	DATE
DEPT. WEST ENG.	DATE	

EXHIBIT NO. _____

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Unit L
Unit M #
240's + 2

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION

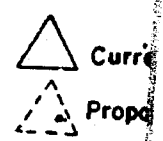
EXHIBIT NO. 1

CASE NO. A 706

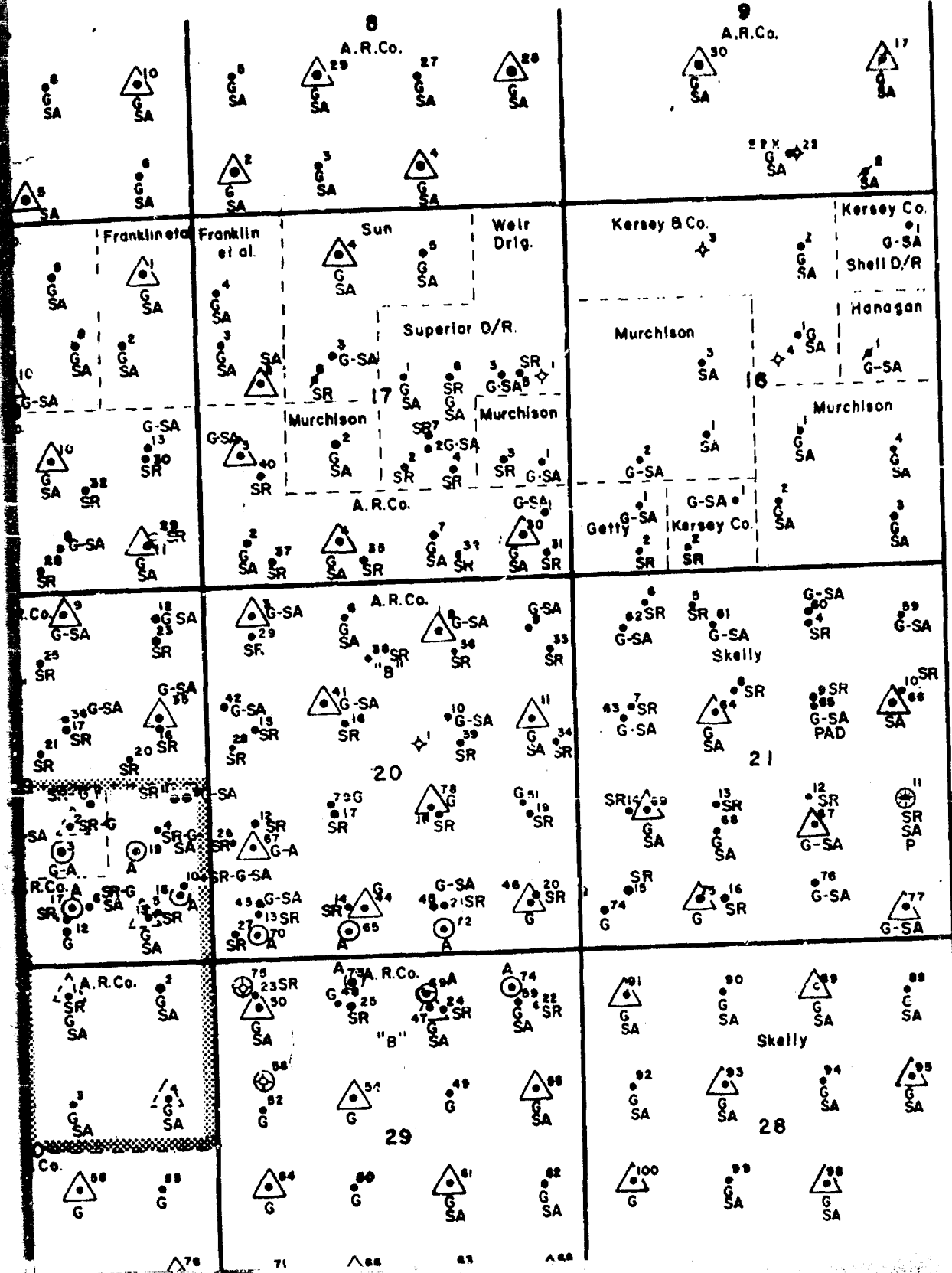
Submitted by Kenneth Bell

Hearing Date May 5, 1972

- LEGEND**
- SR — Seven Rivers
 - G — Grayburg
 - SA — San Andres
 - PAD — Paddock
 - A — Abo
 - M — Morrow
 - P — Pennsylvanian

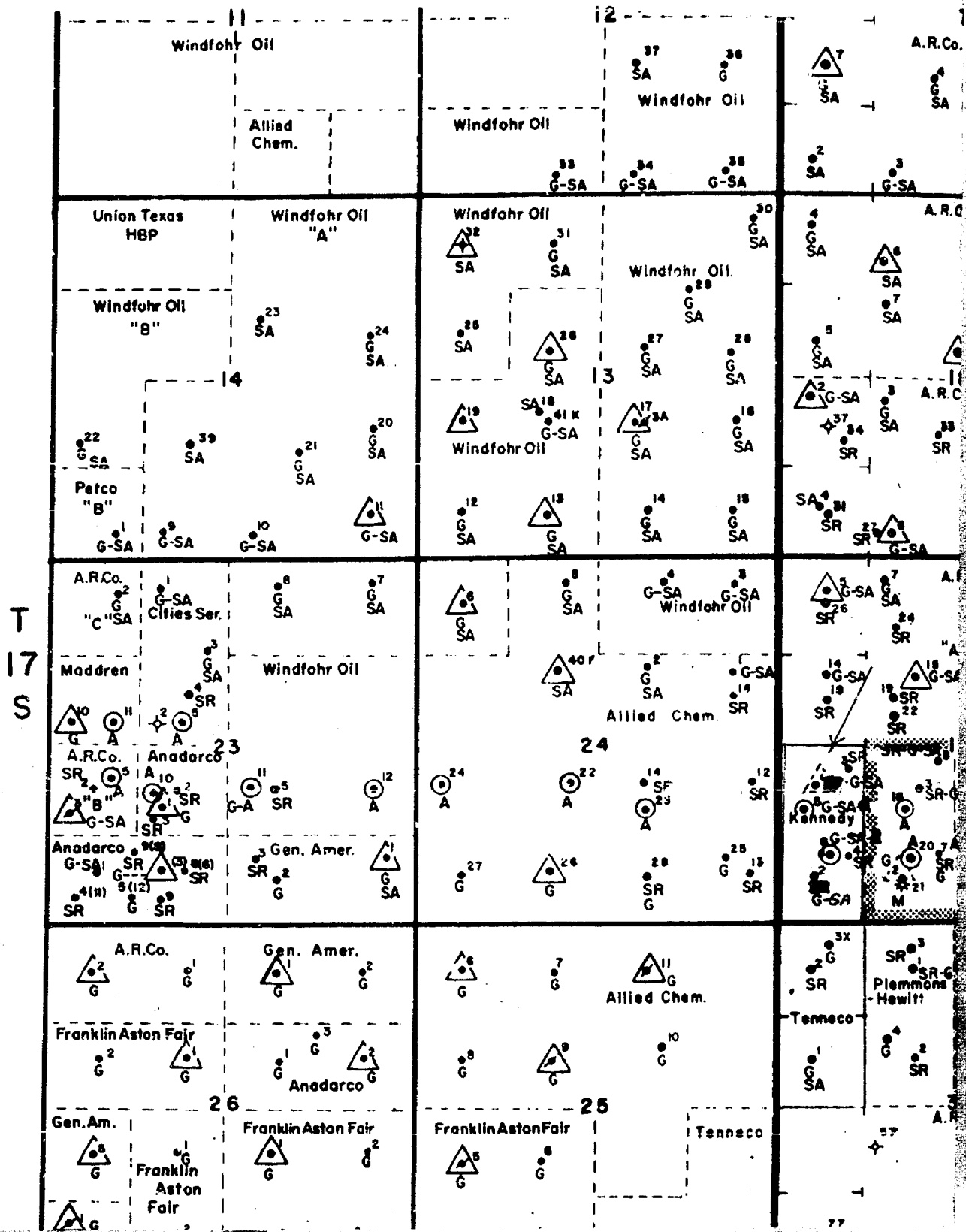


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LANE WELLS

*Gamma Ray
Ventures*

BEFORE EXAMINER UTZ CONSERVATION COMMISSION EXHIBIT NO. 2 A 7c.6 dated by Kennedy Oil Co. Date 11/29/66	FILE NO.	COMPANY KENNEDY OIL COMPANY					
		WELL	STATE "B" NO. 1				
		FIELD	GRAYBURG JACKSON				
		COUNTY	EDDY	STATE	NEW MEXICO		
		LOCATION:	NW/SW				
		SEC	19	TWP 17-S RGE 31-E			
		Permanent Datum	GROUND LEVEL	Elev. 3628			
		Log Measured from	G. L.	-0- Ft. Above Permanent Datum			
		Drilling Measured from	G. L.				
				Elevations: KB DF GL 3628			
Date	11/29/66	11/29/66	11/22/66				
Run No.	ONE	ONE	ONE				
Type Log	GAMMA RAY	N/TN	CALIPER				
Depth-Driller	3597	3597	3586				
Depth-Logger	3595	3595	3586				
Bottom Logged Interval	3594	3594	3581				
Top Logged Interval	2590	2590	3000				
Type Fluid in Hole	OIL & WATER	OIL & WATER	OIL & WATER				
Salinity Ppm Cl.							
Density lb./Gal.							
Level		3266'					
Max. Rec. Temp. Deg. F							
Opr. Rig Time							
Recorded By	HURST & JONES	HURST & JONES	SHANKS				
Witnessed By	MR. KENNEDY	MR. KENNEDY	MR. KENNEDY				
Run No.	Bore Hole Record			Casing Record			
	Bit	From	To	Size	Wgt.	From	To
1	5 1/4"	3053	3105	5 1/2"		SURFACE	3053
1	4 7/8"	3105	3597				

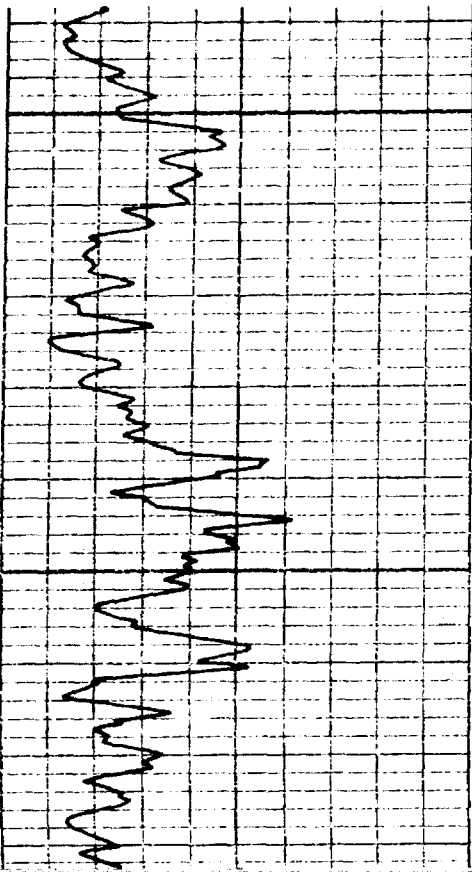
Field GRAYBURG JACKSON
County EDDY
State NEW MEXICO

Lane-Wells T.D. 3595'

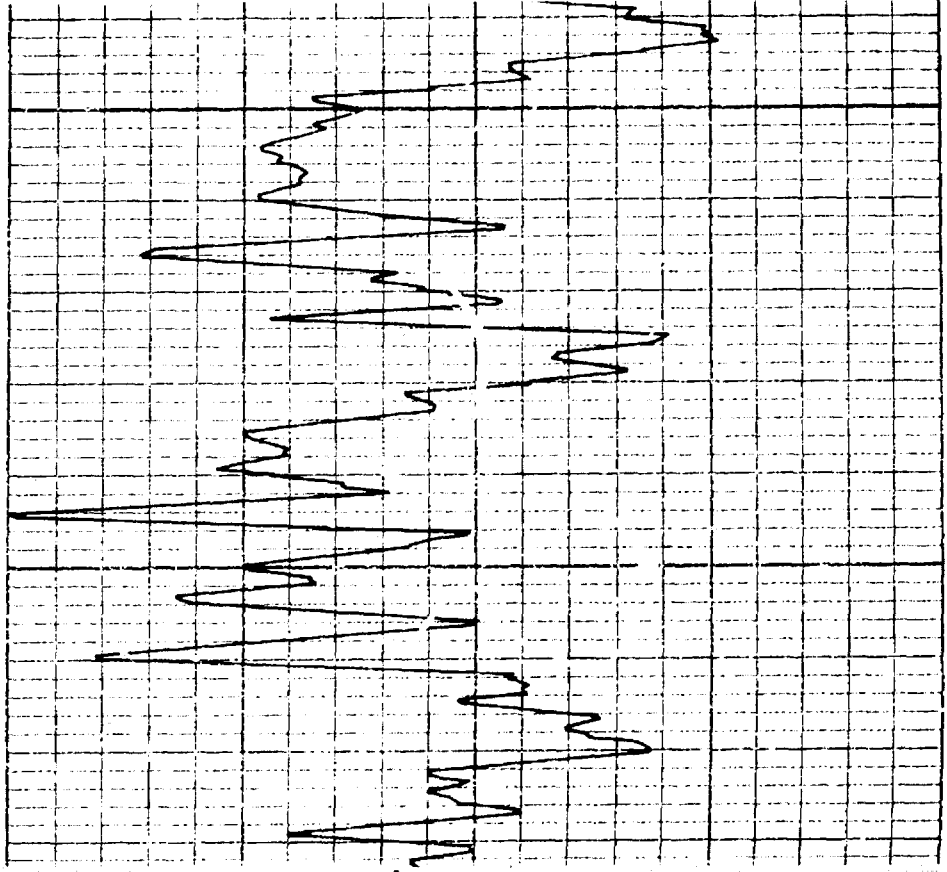
Elevations:

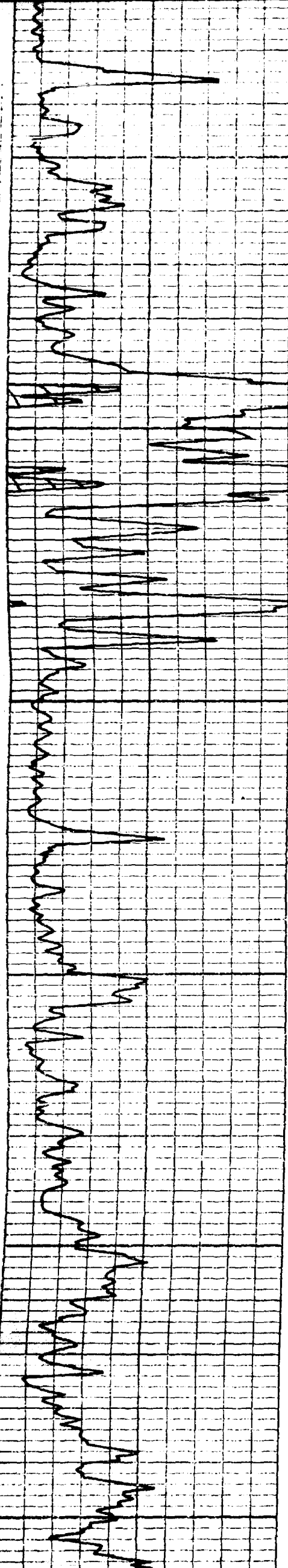
K.B. D.F. G.L. 3628'

REPEAT SECTION



3400

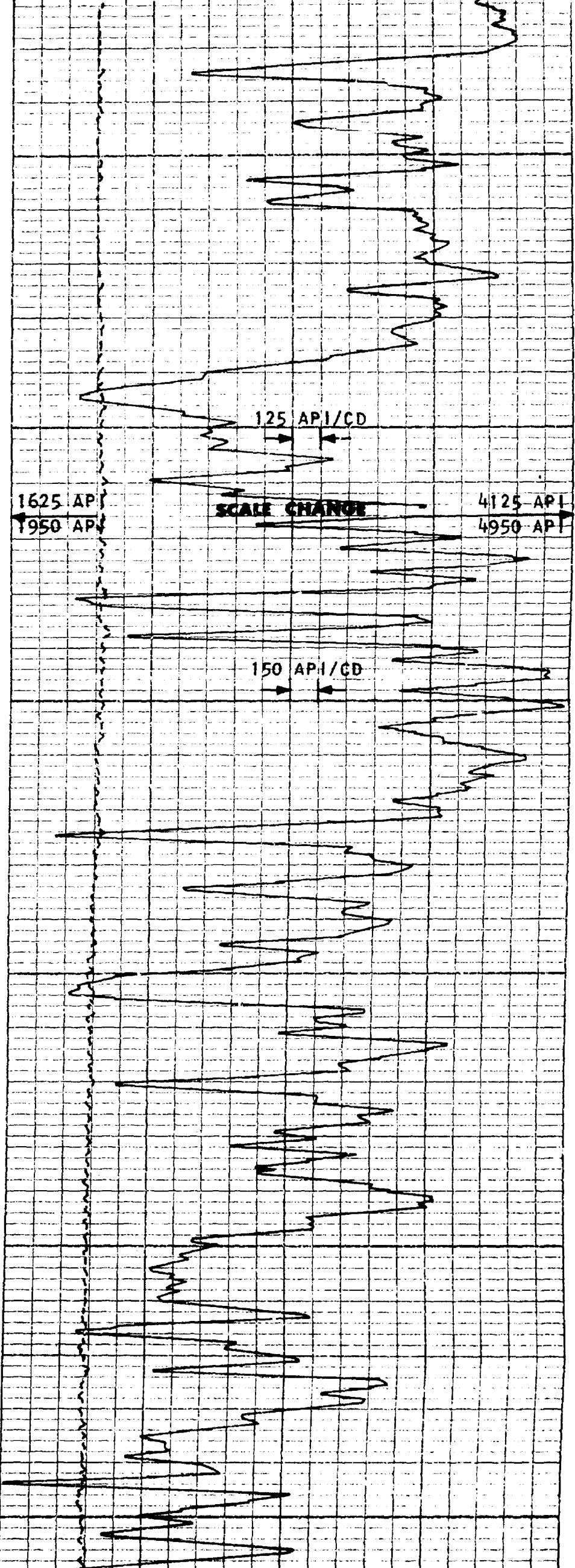


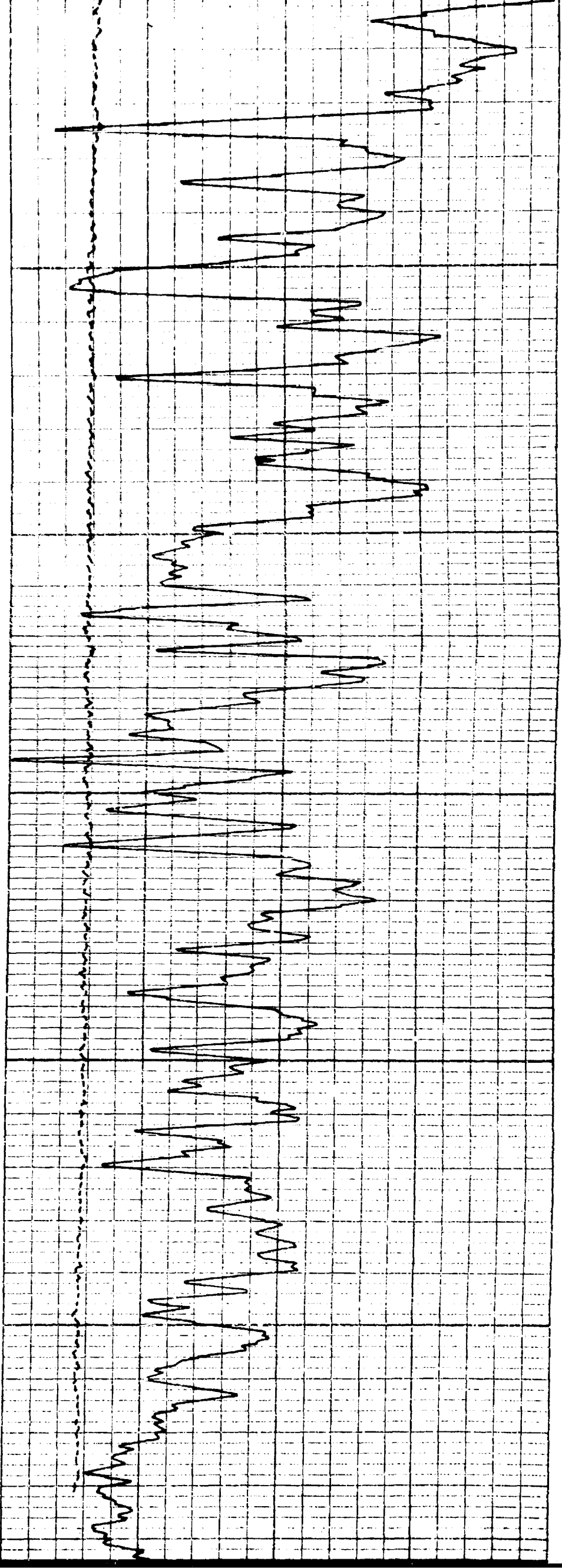


3200

3300

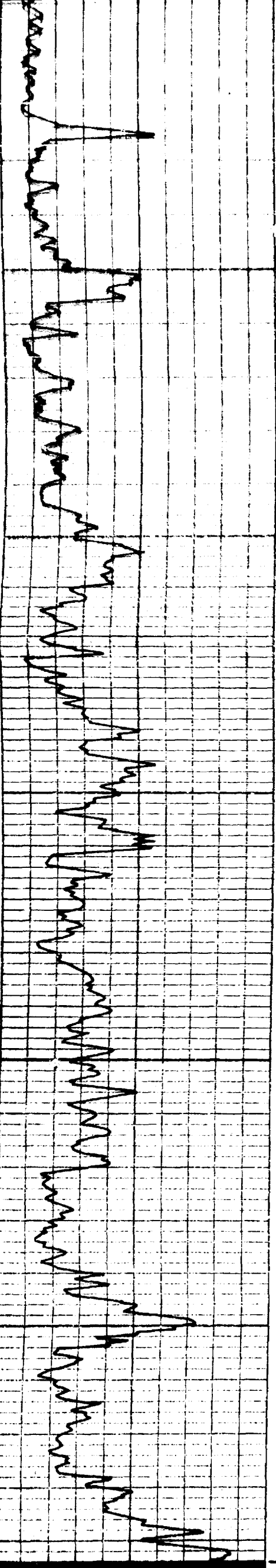
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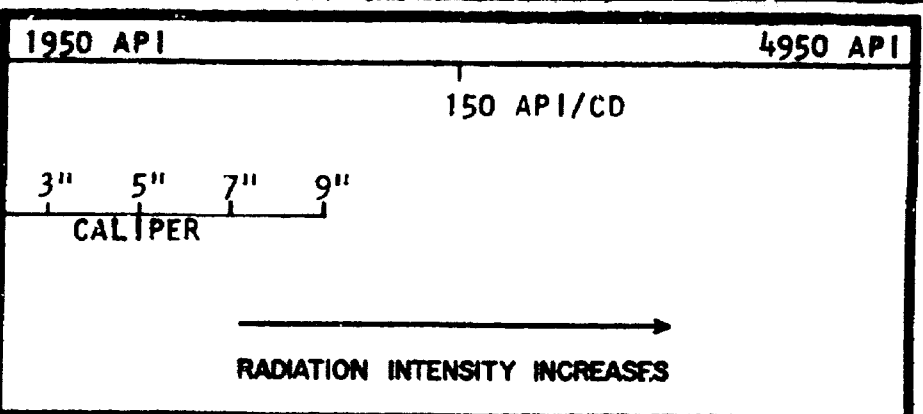
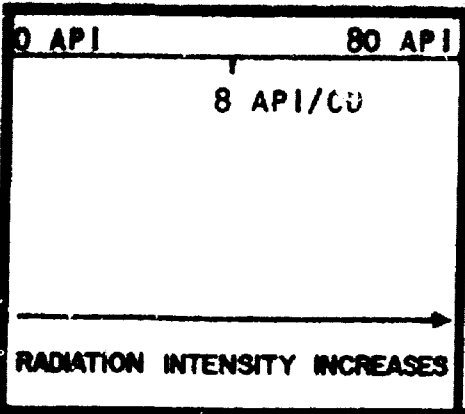
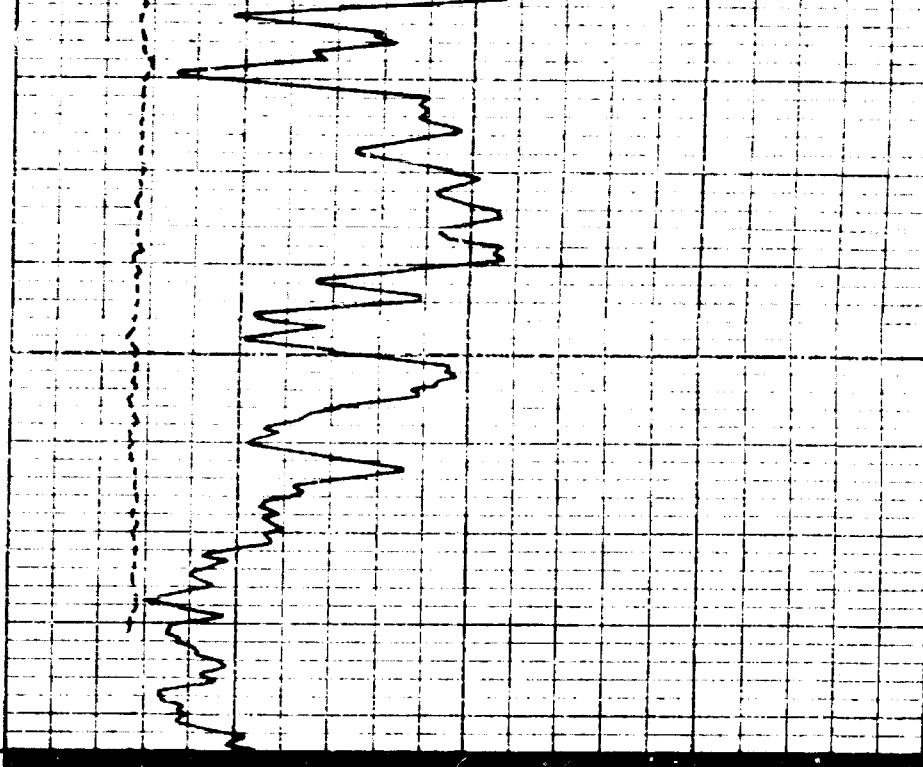
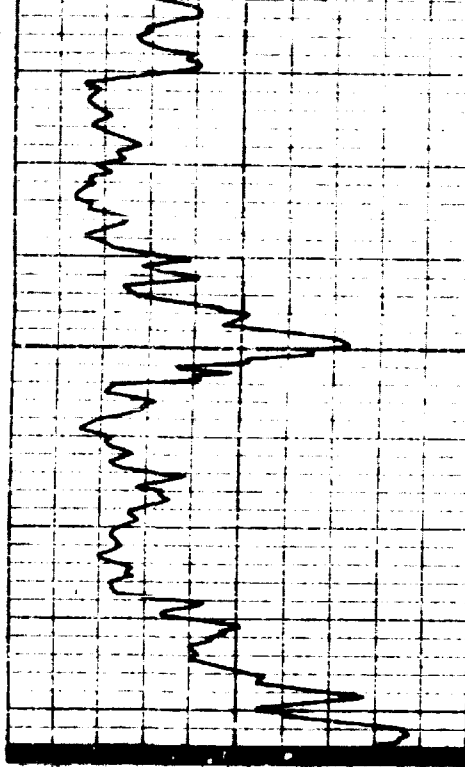




3400

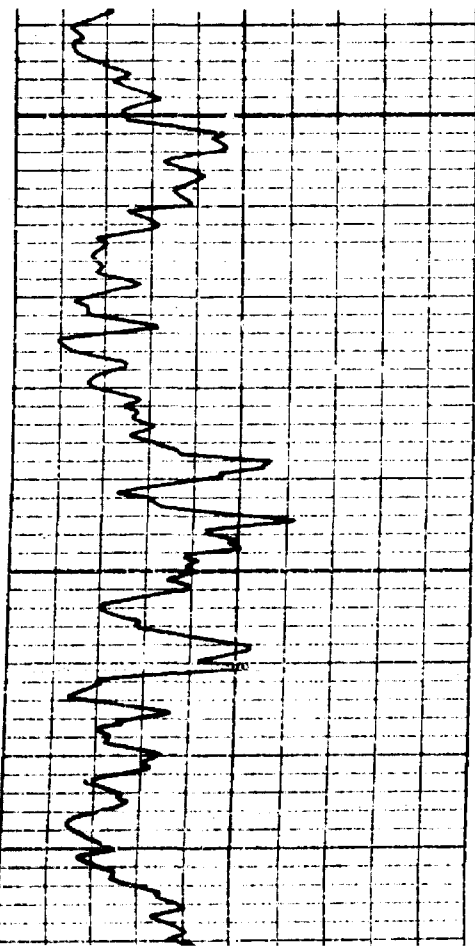
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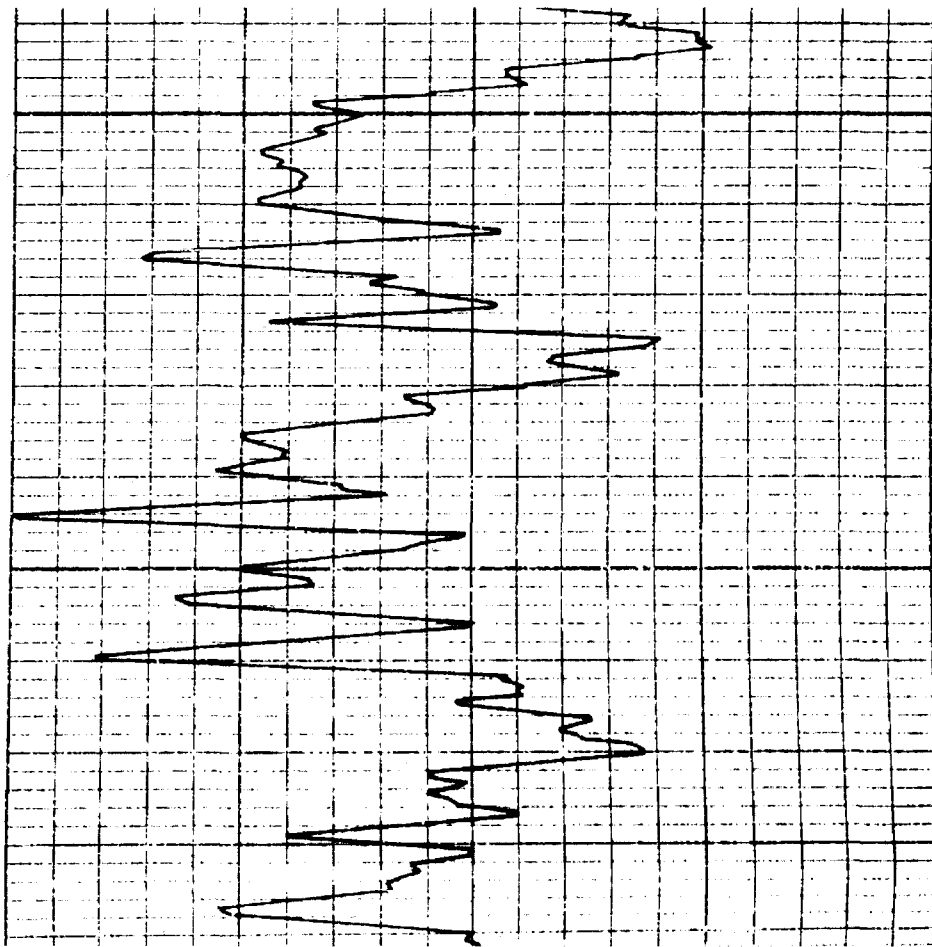


GAMMA RAY API UNITS		DEPTH	NEUTRON API UNITS		
Company	KENNEDY OIL COMPANY		Drillers T.D.	3597'	
Well	STATE "B" NO. 1		Lane-Wells F.R.	3594'	
Field	GRAYBURG JACKSON		Lane-Wells T.D.	3595'	
County	EDDY		Elevations:		
State	NEW MEXICO		K.B.	D.F.	G.L. 3628'

REPEAT SECTION



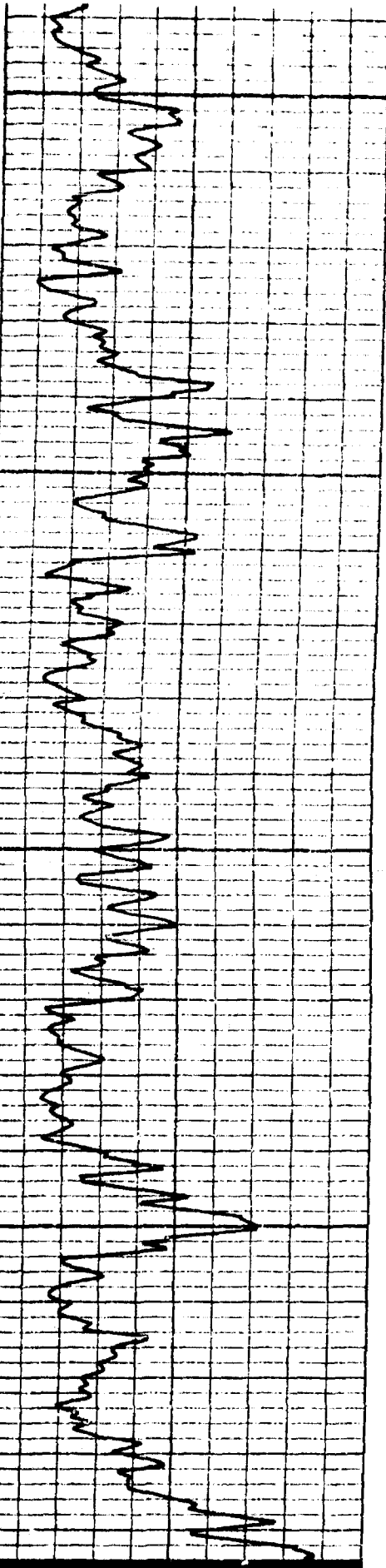
3400



Company KENNEDY OIL COMPANY
 Well STATE "B" NO. 1
 Field GRAYBURG JACKSON
 County EDDY
 State NEW MEXICO

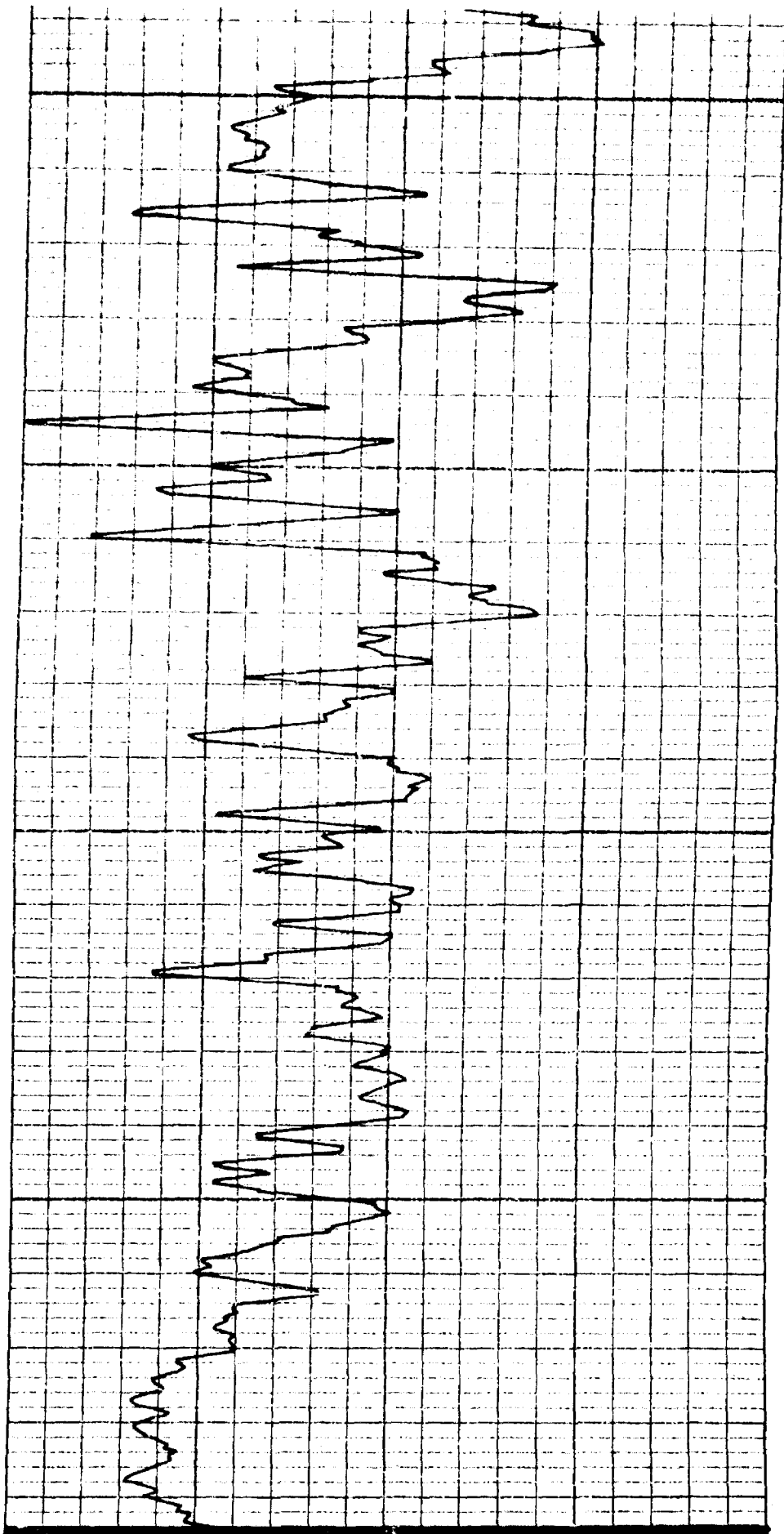
Drillers T.D. 3597'
 Lane-Wells F.R. 3594'
 Lane-Wells T.D. 3595'
 Elevations:
 K.B. D.F. G.I. 3628'

REPEAT SECTION



3400

3500



CALIBRATION

G/R LOG CALIBRATION
 BEFORE LOG

API UNITS OF CALIB STD	206
SENSITIVITY READING	500
MULTIPLIER	X-1
ZERO SUPPRESSION	0
TIME CONSTANT	4
MEASURED CHART DIVISIONS	21.8

Handwritten signature or note

Handwritten notes at top left of the page.

Handwritten notes at top center of the page.

CALIBRATION

G/R LOG CALIBRATION
BEFORE LOG

API UNITS OF CALIB STD	206
SENSITIVITY READING	500
MULTIPLIER	X-1
ZERO SUPPRESSION	0
TIME CONSTANT	4
MEASURED CHART DIVISIONS	21.8

Vertical handwritten notes on the right side of the first calibration section.



G/R LOG CALIBRATION
BEFORE LOG

API UNITS OF CALIB STD	573
SENSITIVITY READING	200
MULTIPLIER	X-1
ZERO SUPPRESSION	0
TIME CONSTANT	4
MEASURED CHART DIVISIONS	12.4

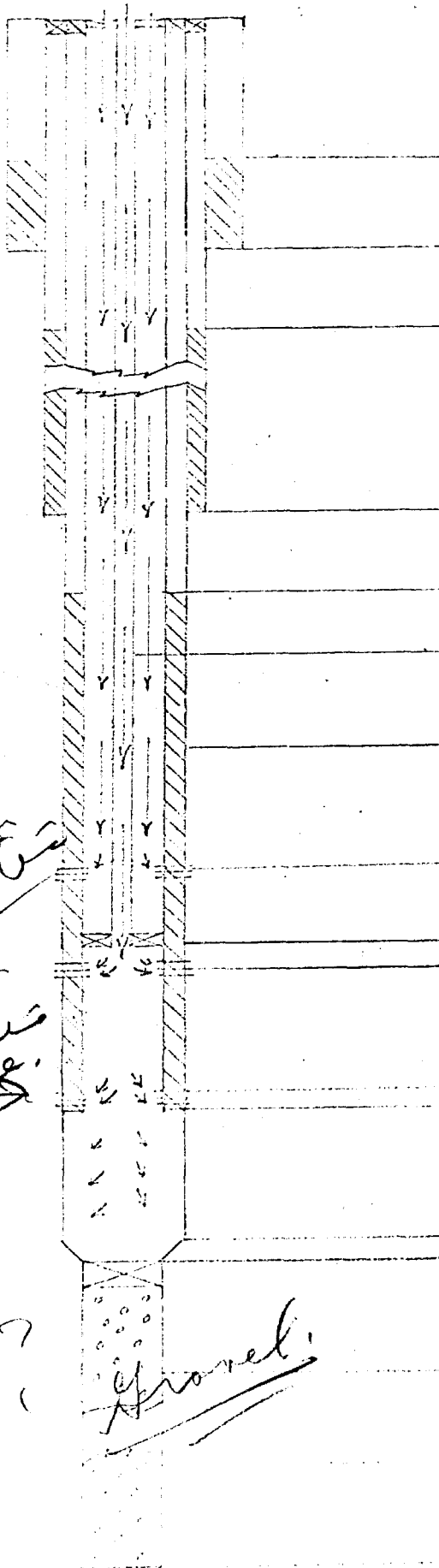
Vertical handwritten notes on the right side of the second calibration section.



LANE WELLS

SCHEMATIC DRAWING OF PROPOSED INJECTION WELL

KENNEDY OIL COMPANY - STATE "B" # 1
 LOT-3 (NW/4 SW/4) Sec. 19, T-17S, R-31E NMPM
 STATE "B" FLOOD PROJECT
 GRAYBURG-JACKSON FIELD
 EDDY COUNTY, NEW MEXICO



Top cement behind 8 1/4" csg. 334' est.

8 1/4" 28# casing set at 500' (used)

Top cement behind 7" csg. 718' est.

7" 20# casing set at 1836' (new)

Top cement behind 5 1/2" csg. 2335' est.

2 3/8" EUE 8rd, seamless tubing

Grayburg Section 2718-3115'

Perforations 2804-2816 (4/1)

High upper

2" x 5 1/2" Tension Packer @ 3006'

Perforations 3008-3014 (4/1)

High upper (above bits)

Perforations 3046-3054 (4/1)

High upper (above bits)

5 1/2" 14# casing J Seamless set @ 3053' (new)

6 1/2" Open Hole 3053'-3105'

500# Lead Wool Plug set @ 3115-3125'

4 7/8" Open Hole 3105-3595'

BEFORE EXAMINER UTZ
 OIL CONSERVATION COMMISSION

Gravel 3595-3125'

CASE NO. 4706

Submitted by George Chubb
 Total Depth 3595'
 Hearing Date May 5, 1972

not in Atlantic

Atlantic zone

SA?

gravel

KENNEDY OIL COMPANY
 STATE "B" FLOOD PROJECT
 GRAYBURG JACKSON FIELD
 EDDY COUNTY, NEW MEXICO

Lot 3&4 (W/2 SW/4)
 Sec. 19, T-17S, R-31E NEM

LEASE & WELL NO.	COMPLETION DATE	ELEVATION	T.D.	SIZES	CASING DEPTH	CEMENT	PERFORATIONS
State "B" # 1	4/29/55	3628	3597	8 1/4" 28# 7" 20# 5 1/2" 14#	500 1836 3053	50 100 60	2204-2316 3008-3014 3046-3053 3053-3595 Open Hole
State "B" # 2	3/9/55	3606	3568	8 1/4" 28# 7" 20# 5 1/2" 14#	495 1851 3056	50 110 65	2980-2985 3008-3011 3013-3015 3020-3023 3056-3525 Open Hole
State "B" # 5	7/9/68 PB	3630	3490 PB	8 5/8" 24# 4 1/2" 9.5# 10.5#	1370 7128	200 850	2841-2845 2850-2854 3046-3052 3169-3183 3189-3195
State "B" # 6	4/4/69 PB	3617	3470 PB	8 5/8" 24# 4 1/2" 9.5# 10.5#	1252 7088	200 870	2857, 2860, 2861, 2867, 2868, 2869, 3070, 3077, 3078, 3079, 3100, 3131, 3163, 3172, 3203, 3204, 3206, 3212, 3220, 3222, 3255, 3256, 3269, 3270, 3274, 3287, 3288, 3321, 3324, 3325, 3332, 3340, 3358, 3359, 3371, 3395, & 3410.

BEFORE EXAMINER UTZ
 OIL CONSERVATION COMMISSION
 EXHIBIT NO. 7
 ASE NO. 4-716
 Submitted by *Quinn LLC*
 Hearing Date *May 5, 1972*

ACCUMULATIVE OIL PRODUCTION

Proration Unit	Accumulative to 1-1-72	January 1972	February 1972	Total Production from Proration Unit
Sec. 19, T-17S, R-31E, NMPM				
NW/4 SW/4 State "B" 1-5	35,028	100	134	2,112
SW/4 SW/4 State "B" 2-6	47,834	101	135	48,070

KENNEDY OIL COMPANY
 STATE "B" FLOOD PROJECT
 GRAYBURG-JACKSON FIELD
 EDDY COUNTY, NEW MEXICO

BEFORE EXAMINER UTZ
 OIL CONSERVATION COMMISSION
 EXHIBIT NO. 5
 CASE NO. 4706
 Submitted by Jessie D. ...
 Hearing Date May 5, 1972

1402 W. WASHINGTON

PHONE ~~505-677-2132~~
505-677-2132

Kennedy Oil Company

— OIL PRODUCERS —

P. O. Box 151

Artesia, New Mexico

March 14, 1972

RECEIVED

MAR 14 1972

NEW MEXICO OIL CONSERVATION COMMISSION

Case 4786

Mr. A.L. Porter, Jr.
Secretary-Director
New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico

Dear Mr. Porter:

Enclosed herewith you will please find three copies of the Application of Kennedy Oil Company for a waterflood project in the Grayburg-Jackson Field, Eddy County, New Mexico, with the attached data therein described.

Please do not schedule this application for hearing until you receive an Application, which is forthcoming from Atlantic Richfield Company, for an offset waterflood project.

I would appreciate your scheduling the ARCO hearing and Kennedy hearing in sequence, with the ARCO case first.

Thanking you, we remain.

Very truly yours,

Kennedy Oil Company

Robert B. Kennedy
Robert B. Kennedy

yes - note →

DOCKET MARKED

Date

4-21-72

RECEIVED
1-19-72
COMM:

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION :
OF KENNEDY OIL COMPANY FOR A :
WATERFLOOD PROJECT, GRAYBURG :
JACKSON POOL, EDDY COUNTY, NEW :
MEXICO :

No. 4706

APPLICATION

COMES KENNEDY OIL COMPANY, by its engineer, Robert B. Kennedy, and states:

1. That it is the operator of four producing oil wells in the Grayburg-Jackson Field, Eddy County, New Mexico, and within the proposed project area covered by this Application, to-wit:

Township 17 South, Range 31 East, N.M.P.M.

Section 19: Lots 3&4 (W/2 SW/4)

containing 65.32 acres, more or less.

2. There is attached hereto and by reference made a part hereof, a plat showing the location of the wells covered by this Application and the location of all other wells and leases within a radius of two miles from the proposed project area, and designating the formations from which said wells are producing.

3. That the four producing wells within the project area covered by this application have reached an advanced or "stripper" state of depletion and the Applicant proposes to inject water into the producing or once producing Grayburg formation in sufficient quantities and under sufficient pressure to stimulate the production of oil from the producing wells in the project area.

4. That the Applicant proposes to commence injecting water into the Grayburg formation through the following proposed injection well, to-wit:

Kennedy Oil Company, State "B" # 1
located in Lot-3 (NW/4 SW/4) of Section 19
Township 17 South, Range 31 East, N.M.P.M.

5. There is attached hereto and by reference made a part hereof a copy of the log of the Kennedy Oil Company, State "B" # 1.

6. There is attached hereto and by reference made a part hereof a diagrammatic sketch of the proposed injection well, and designated as the Kennedy Oil Company, State "B" # 1, showing all casing strings, including diameters and setting depths, quantities used and estimated tops of cement, perforated intervals and open hole sections, tubing string, including diameter and setting depth, and the type and location of the packer.

7. That Applicant proposes to contract for the purchase of water from the Atlantic Richfield Company, which in turn has a water supply system.

8. That Applicant proposes to inject water into the injection well at pressures up to 1800 p.s.i., and at rates up to 500 barrels per day.

9. That Applicant states that produced water will be returned to the injection plant, treated as necessary, and then re-injected in the waterflood area.

10. That the approval of this waterflood project will be in the interest of conservation and will prevent waste and protect correlative rights.

WHEREFORE, Applicant prays the orders of the Commission as follows:

1. That this matter be set for hearing before an examiner duly appointed by the Commission and that due notice be given thereof as required by law.

2. That after hearing, an order be entered authorizing the Applicant to institute the aforesaid waterflood project.

3. And for such other relief as may be just in the premises.

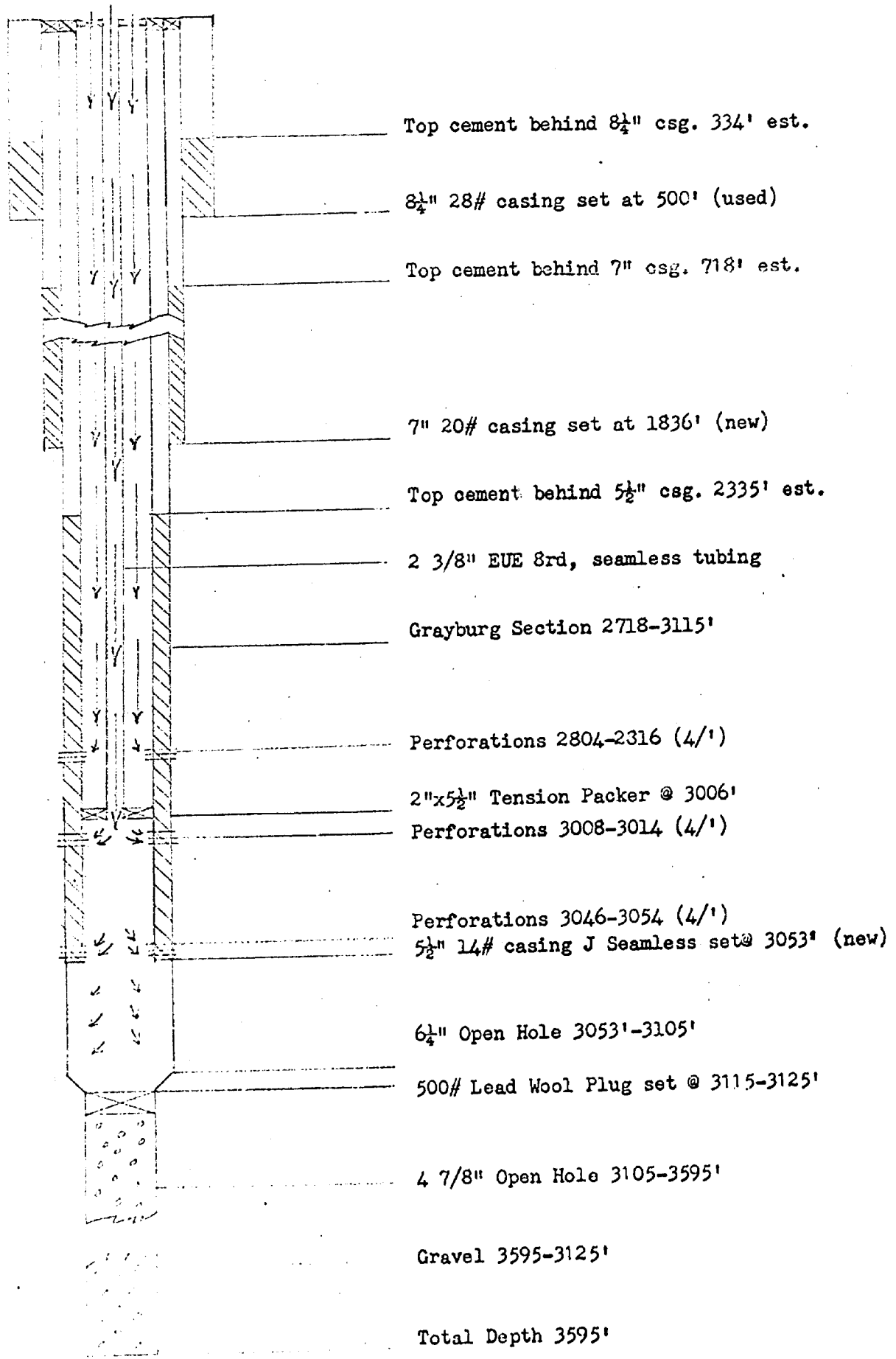
Kennedy Oil Company

By Robert B. Curney

Plan 4706

SCHEMATIC DRAWING OF PROPOSED INJECTION WELL

KENNEDY OIL COMPANY - STATE "B" # 1
LOT-3 (NW/4 SW/4) Sec. 19, T-17S, R-31E NMPM
STATE "B" FLOOD PROJECT
GRAYBURG-JACKSON FIELD
EDDY COUNTY, NEW MEXICO



KENNEDY OIL COMPANY
 STATE "B" FLOOD PROJECT
 CRAYBURG JACKSON FIELD
 EDDY COUNTY, NEW MEXICO

Lot 3&4 (W/2 SW/4)
 Sec. 19, T-17S, R-31E NMPM

LEASE & WELL NO.	COMPLETION DATE	ELEVATION	T.D.	SIZES	CASING DEPTH	CEMENT	PERFORATIONS
State "B" # 1	4/29/55	3628	3577	8 1/4" 28# 7" 20# 5 1/2" 14#	500 1836 3053	50 100 60	2804-2816 3008-3014 3046-3053 3053-3595 Open Hole
State "B" # 2	3/9/55	3606	3568	8 1/4" 28# 7" 20# 5 1/2" 14#	495 1851 3056	50 110 65	2980-2985 3008-3011 3013-3015 3020-3023 3056-3525 Open Hole
State "B" # 5	7/9/68 PB	3630	3490 PB	8 5/8" 24# 4 1/2" 9.5# 10.5#	1370 7128	200 850	2841-2845 2850-2854 3046-3052 3169-3183 3189-3195
State "B" # 6	4/4/69 PB	3617	3470 PB	8 5/8" 24# 4 1/2" 9.5# 10.5#	1252 7088	200 870	2857, 2860, 2861, 2867, 2868, 2869, 3070, 3077, 3078, 3079, 3100, 3131, 3163, 3172, 3203, 3204, 3206, 3212, 3220, 3222, 3255, 3256, 3269, 3270, 3274, 3287, 3288, 3321, 3324, 3325, 3333, 3340, 3358, 3359, 3371, 3395, & 3410.

4-1-66

ACCUMULATIVE OIL PRODUCTION

Proration Unit	Accumulative to 1-1-72	January 1972	February 1972	Total Production from Proration Unit
<u>Sec. 19, T-17S, R-31E, MMPM</u>				
NW/4 SW/4 State "B" 1-5	35,028	100	134	35,262
SW/4 SW/4 State "B" 2-6	47,834	101	135	48,070

KENNEDY OIL COMPANY
 STATE "B" FLOOD PROJECT
 GRAYBURG-JACKSON FIELD
 EDDY COUNTY, NEW MEXICO

Case 4766

DRAFT

GMH/dr

(Handwritten initials)

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

John A. Utz,
Spec. Atty.,
Asst.

WMS

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

5-11-72

CASE No. 4706

Order No. R- 4302

AP

APPLICATION OF KENNEDY OIL
COMPANY FOR A WATERFLOOD
PROJECT, EDDY COUNTY, NEW
MEXICO.

(Handwritten signature)

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 5, 1972,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this day of May, 1972, the Commission, a
quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, Kennedy Oil Company, seeks authority
to institute a waterflood project ~~in the~~ in the
~~Unit Area~~ Grayburg-Jackson Pool, by the injection of water into
the Grayburg formation through its State "B" Well No. 1, located
~~in Unit~~ the NW 1/4 SW 1/4
in ~~Unit~~ of Section 19, Township 17 South, Range 31 East,
NMPM, Eddy County, New Mexico.

(3) That the applicant further seeks an administrative procedure whereby said project could be expanded to include additional injection wells in the area of the said project as may be necessary in order to complete an efficient injection pattern; that said administrative procedure should provide for administrative approval for conversion to water injection in exception to the well response requirements of Rule 701 E-5 of the Commission Rules and Regulations.

(3) ~~(4)~~ That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) ~~(5)~~ That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) ~~(6)~~ That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations, ~~provided however, that the showing of well response as required by Rule 701 E-5 should not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.~~

IT IS THEREFORE ORDERED:

(1) That the applicant, Kennedy Oil Company, is hereby authorized to institute a waterflood project in the ~~Unit Area~~ *Unit Area* Grayburg-Jackson Pool, by the injection of water into the Grayburg formation through its State "B" Well No. 1, located in ~~Unit~~ *the NW/4 SW/4* of Section 19, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico.

(2) That the subject waterflood project is hereby designated the *Kennedy State B Grayburg Jackson* Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve expansion of the above-described waterflood project to include such additional injection wells in the area of said project as may be necessary to complete an efficient water injection pattern; that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

ROUGH DRAFT FOR WATERFLOOD LETTERS

Mr. Robert B. Kennedy
Kennedy Oil Company
Post Office Box 151
Artesia, New Mexico 88210

Dear Sir:

Reference is made to ^{recently} Commission Order No. R-4302, entered in Case No. 4706, approving the Kennedy State B Grayburg Jackson Waterflood Project.

Injection into the one authorized water injection well shall be through tubing, ^{under a packer} into perforations and open hole in the overall interval from 3008 feet to 3115 feet. It is our understanding that you may later also flood through the casing-tubing annulus into perforations 2804-2816 feet. It will be necessary when you start this annular injection, to continue to treat the water for corrosion prevention and to conduct

As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 112 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the Commission and the appropriate district proration office.

In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both of the aforementioned Commission offices by letter of any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

Your cooperation in keeping the Commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

cc: OCC: Hobbs x
 Artesia x
 Aztec

USGS

~~XXXXXXXXXX~~, State Engineer Office, Santa Fe, New Mexico

Mr. D. E. Gray,

corrosion coupon tests and report the results thereof quarterly to the Commission.

**CASE 4707: Application of BLACK-
ROCK OIL CO. FOR DUAL COMPLETION,
SALT WATER DISPOSAL & UNORTH. LOC.**