

1/93

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

APPLICATION OF ATLANTIC RICHFIELD
COMPANY FOR APPROVAL OF A PRESSURE
MAINTENANCE PROJECT FOR THE EMPIRE ABO
POOL TO BE EMBRACED WITHIN THE EMPIRE
ABO UNIT AREA CONSISTING OF 11,339.15
ACRES IN TOWNSHIPS 17 AND 18 SOUTH,
RANGES 27, 28 AND 29 EAST, EDDY COUNTY,
NEW MEXICO, INCLUDING EIGHT GAS INJEC-
TION WELLS AND FOR APPROVAL OF SPECIAL
POOL RULES INCLUDING A PROJECT ALLOWABLE

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Comes Atlantic Richfield Company, acting by and through the undersigned attorneys, and hereby makes application for approval of a pressure maintenance project for the Empire Abo Pool to be embraced within the Empire Abo Unit Area consisting of 11,339.15 acres in Townships 17 and 18 South, Ranges 27, 28 and 29 East, Eddy County, New Mexico, including eight injection wells and for the approval of special pool rules including a project allowable, and in support thereof respectfully shows:

1. That there is filed herewith a plat showing the location of the proposed injection wells and the location of all other wells within a radius of 2 miles from the proposed injection wells and the formation from which said wells are producing or have produced. The plat also shows the boundaries of the proposed unit area and shows the owners of the oil and gas leases within an area of 2 miles of the proposed unit area.

2. As indicated by Exhibit "A" filed herewith, there are 8 proposed injection wells. All of the injection wells consist of presently producing wells to be converted to injection wells. All of said wells will be completed in such a way as to provide for the injection of gas into the gas zone of the Empire Abo Pool which includes the Abo formation. There are filed herewith logs of all the wells. There are also filed herewith diagrammatic sketches of all the proposed injection wells, showing all casing strings, including diameters and

setting depths, quantities used and tops of cement, perforated or open hole intervals, tubing strings, including diameters and setting depths, and types and location of packers to be used.

3. The proposed pressure maintenance project is within the boundaries of the proposed Unit Agreement for the Empire Abo Unit Area and application has been filed for approval of the unit agreement by the Commission.

4. It is proposed to inject gas for increased recovery purposes into the Empire Abo Pool which includes the Abo formation only. The unit agreement identifies the top of the formation at 5325 feet on the Welx Radioactivity Log dated December 21, 1958 for the Amoco Production Company's State of New Mexico "AU" Well No. 1 located 1980 feet from the south line and 1830 feet from the west line of Section 2, Township 18 South, Range 27 East and the bottom of the formation at 6533 feet on the log.

5. That applicant proposes to inject Abo residue gas from the Amoco Empire Gasoline Plant and the Phillips Artesia Gasoline Plant and that it is anticipated that approximately 37,000 MCF per day will be injected after all wells which are to be converted to injection wells have been converted. Maximum wellhead injection pressure is to be approximately 2,000 psig.

6. That applicant also desires a project allowable to be approved, in accordance with Rule 701 of the Commission rules.

7. Applicant also submits an Initial Plan of Operation as provided by Paragraph 11 of the Unit Agreement, said Plan of Operation to include details of special field rules requested.

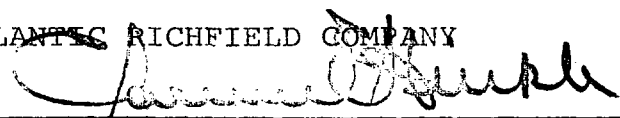
8. That the special pool rules to be adopted include a project allowable as well as provision for the administrative approval of the conversion of additional wells for injection purposes.

9. In the opinion of applicant, said pressure maintenance project will be in the interest of conservation, prevention of waste, the protection of correlative rights and will tend to promote the greatest ultimate recovery of oil and gas from that portion of the Empire Abo Pool covered by the project.

10. Applicant requests that this matter be set down for hearing at the examiner's hearing to be held on April 25, 1973.

Respectfully submitted,

ATLANTIC RICHFIELD COMPANY

By 

Member of the Firm of
HINKLE, BONDURANT, COX & EATON
Attorneys for Applicant

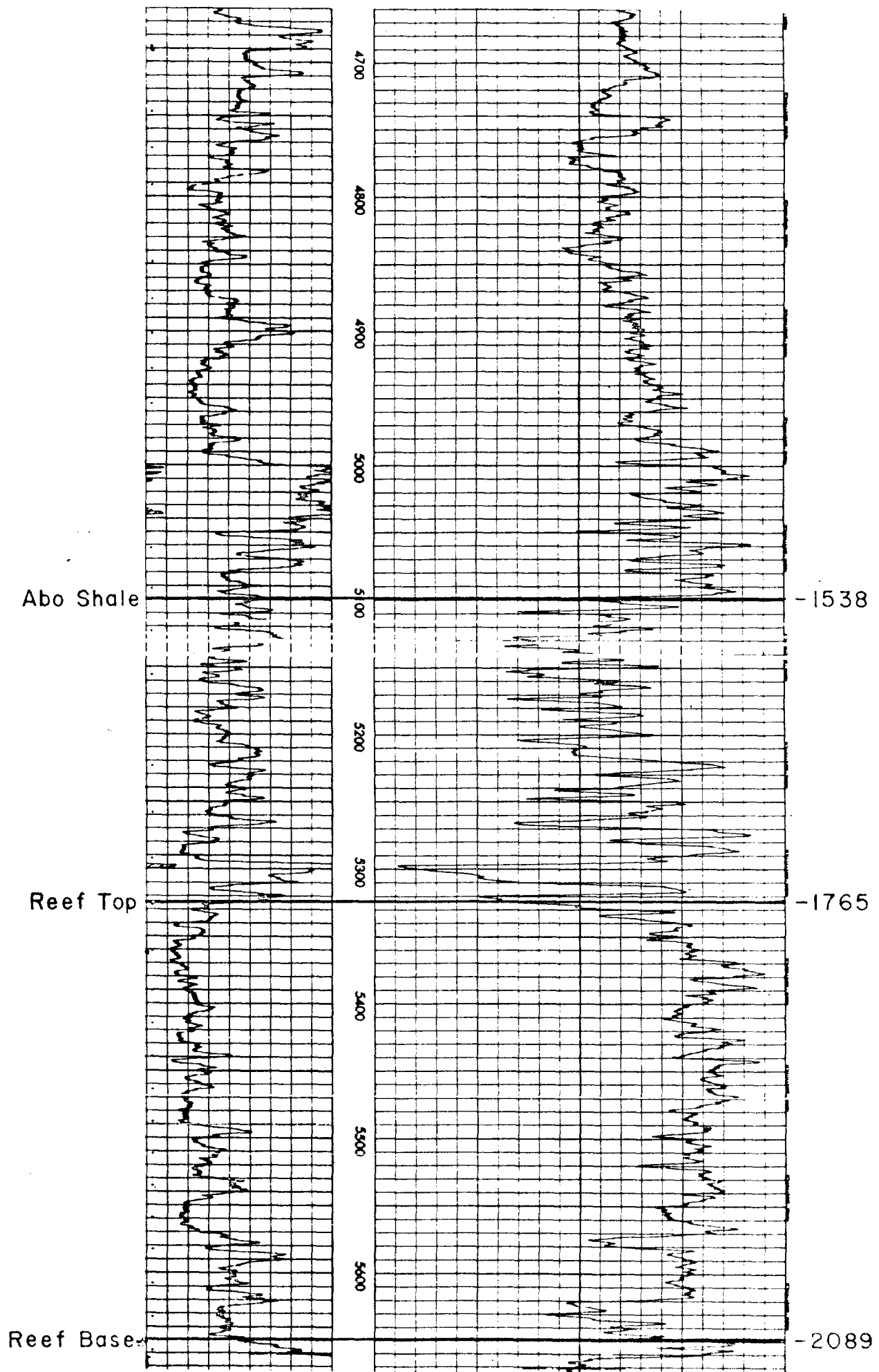
HUMBLE OIL AND REFINING COMPANY

Chalk Bluff Draw Unit A Well No. 4

990' FNL & 2310' FWL SEC. 9, T-18-S, R-27-E

EDDY COUNTY, NEW MEXICO

GAMMA RAY - NEUTRON



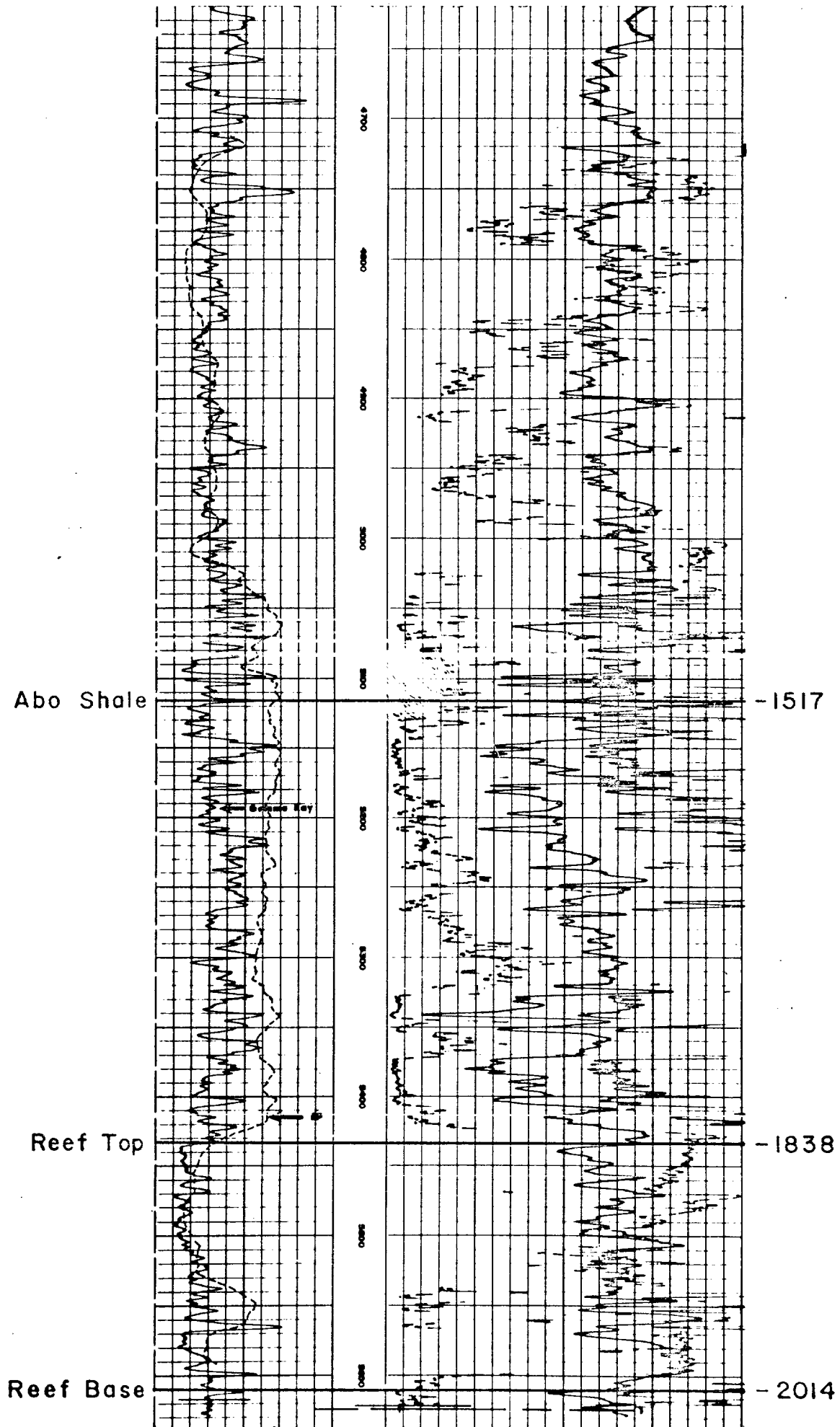
AMOCO PRODUCTION COMPANY

R.H. Windfohr Well No. 4

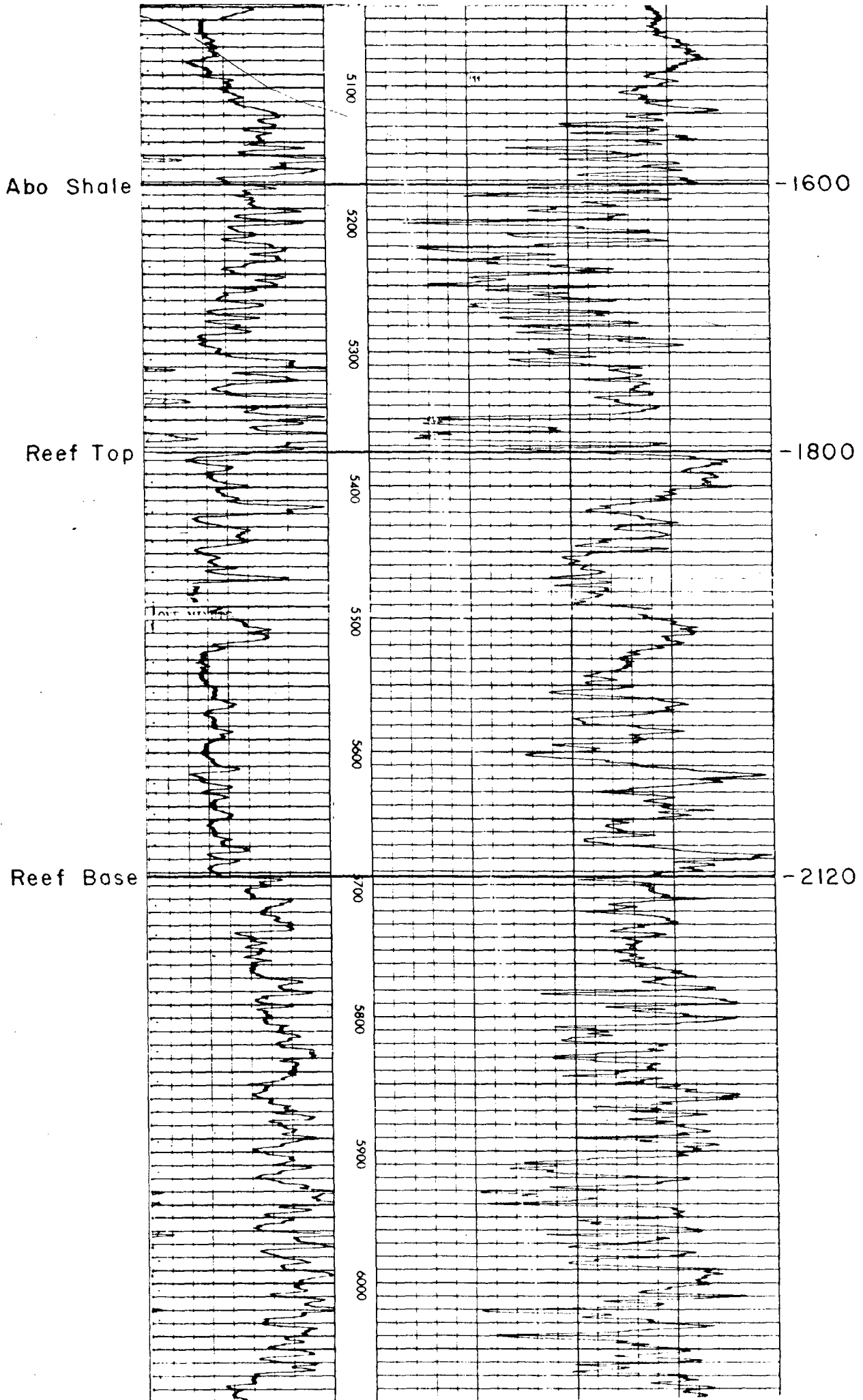
1582' FSL & 1645' FEL SEC. 4, T-18-S, R-27-E

EDDY COUNTY, NEW MEXICO

GAMMA RAY - NEUTRON - LATEROLOG



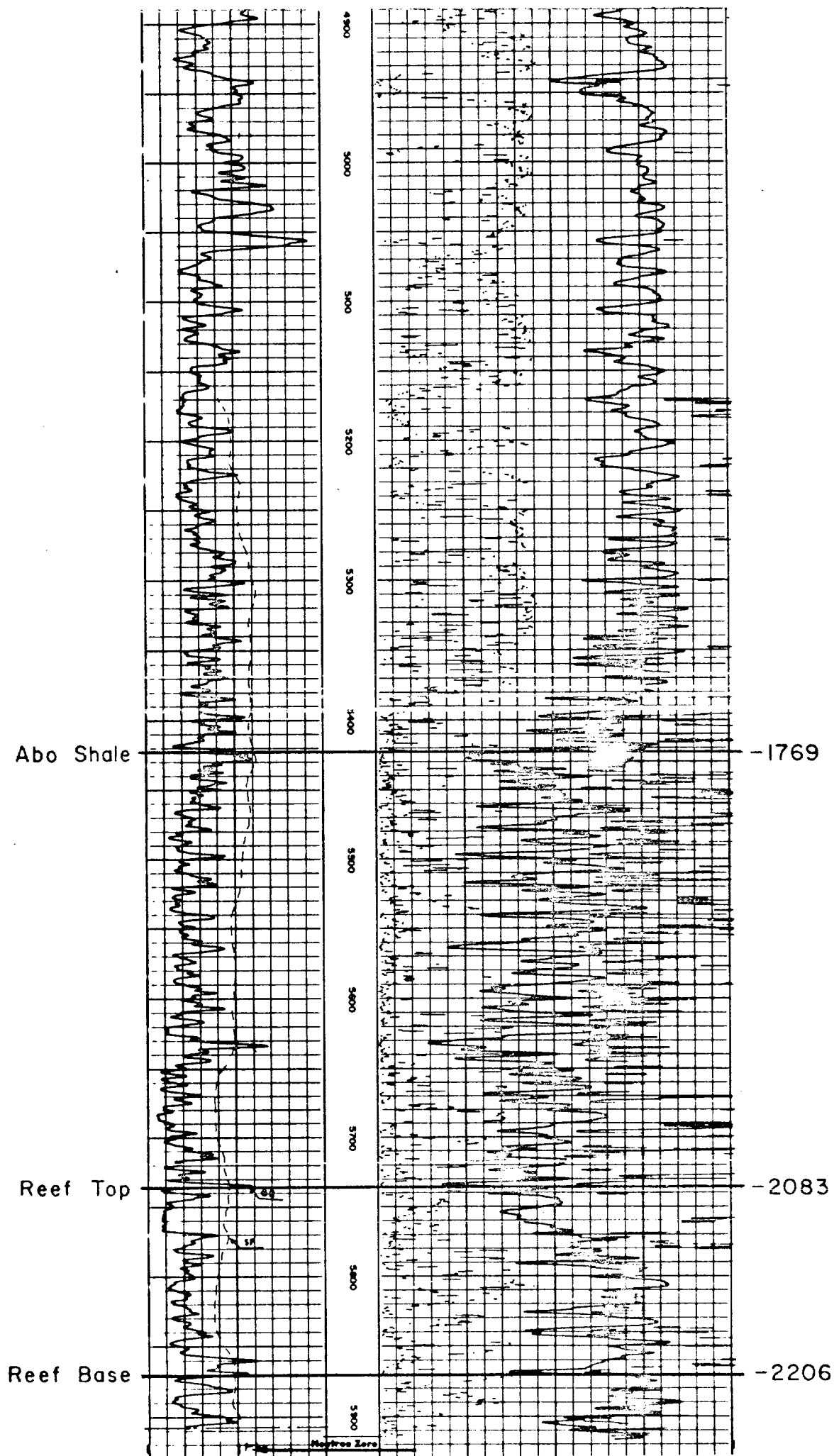
AMOCO PRODUCTION COMPANY
Malco "H" Federal Well No. 2
1980' FNL & 660' FEL SEC. 3, T-18-S, R-27-E
EDDY COUNTY, NEW MEXICO
GAMMA RAY - NEUTRON



MARTIN YATES, III
Dooley State ABO No. 2

1650' FSL & 1650' FEL SEC. 36, T-17-S, R-27-E

EDDY COUNTY, NEW MEXICO
LATEROLOG-GAMMA RAY-NEUTRON



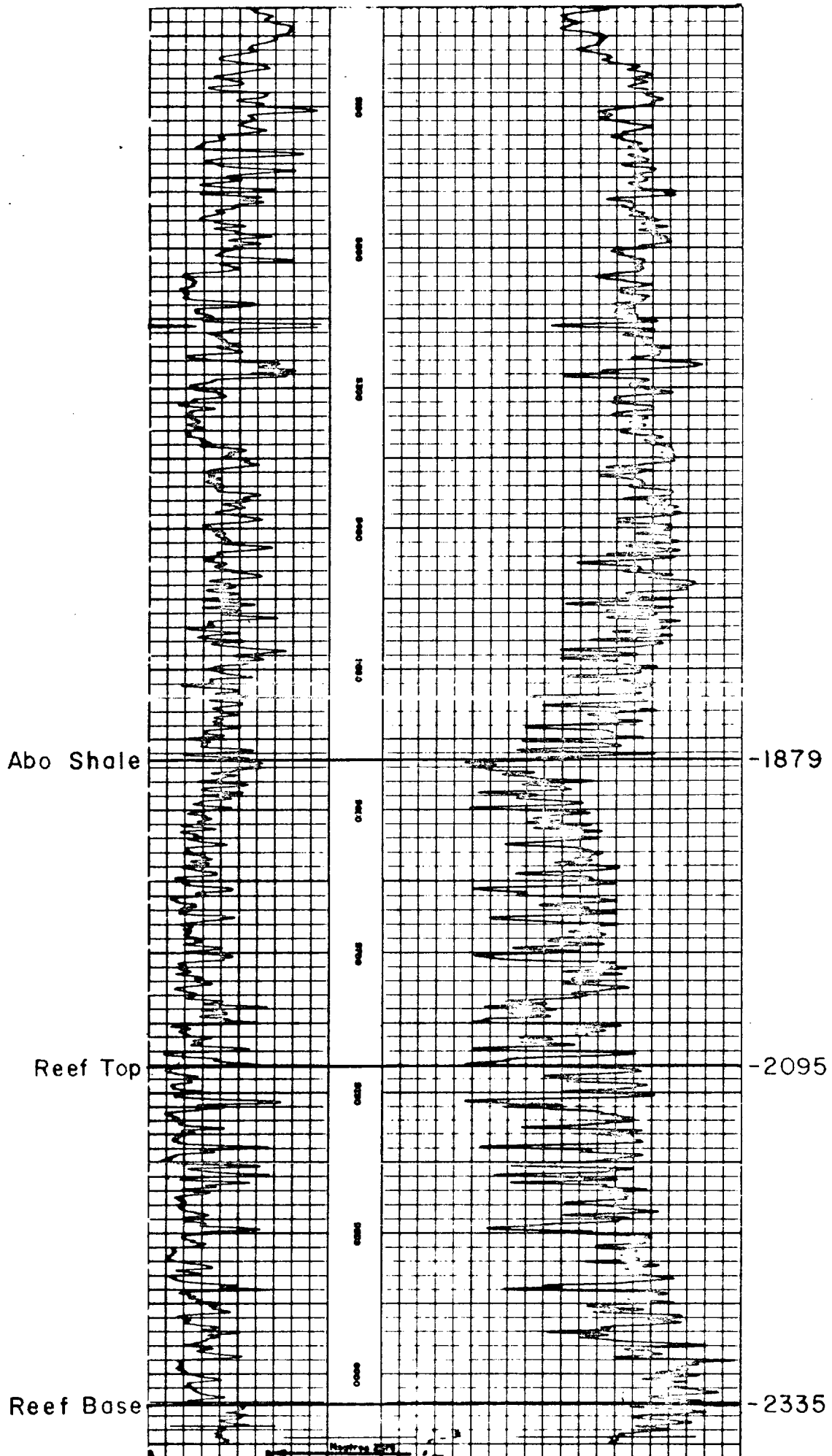
AMOCO PRODUCTION COMPANY

State "BM" Well No. 1

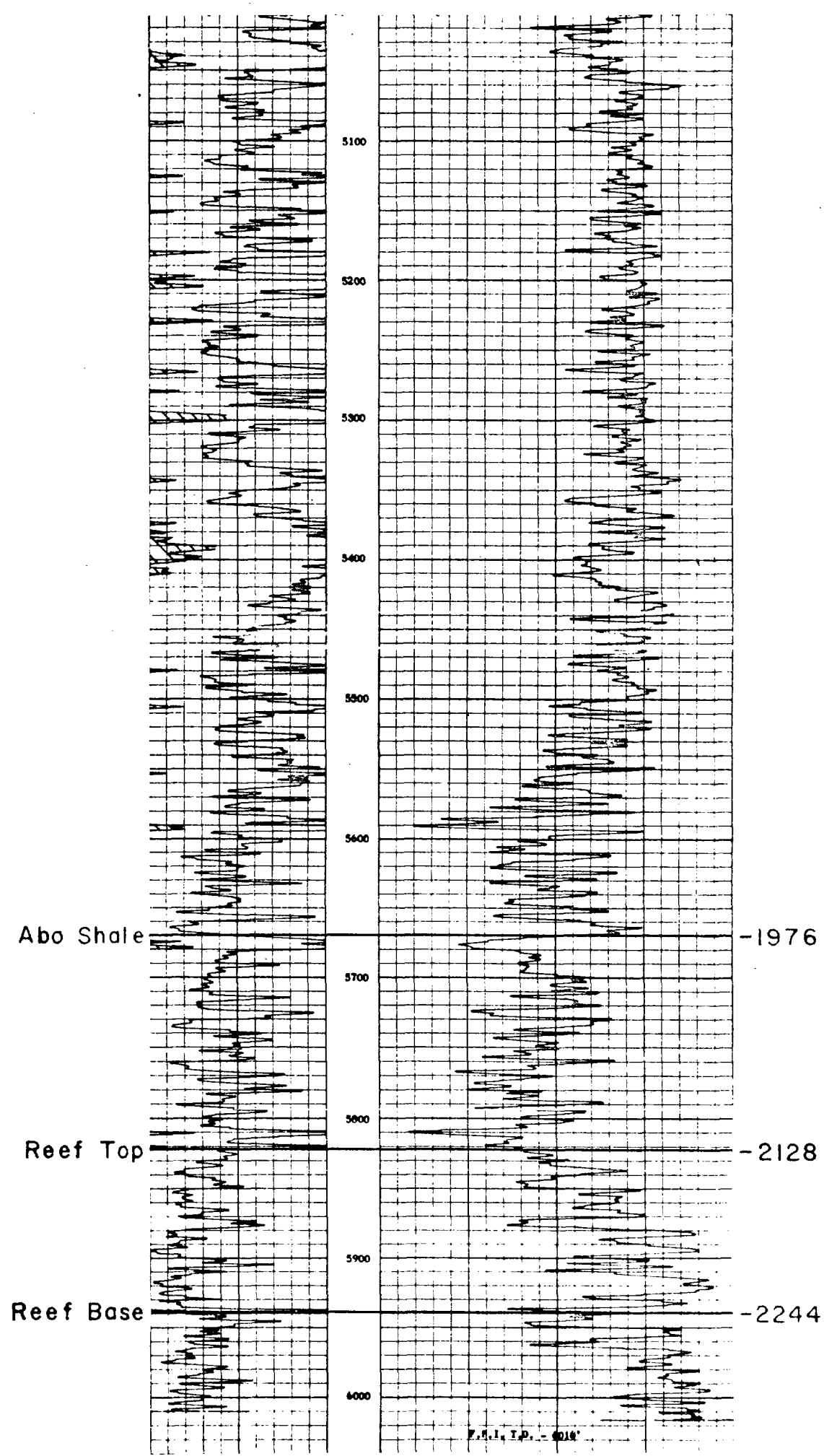
1650' FSL & 2387' FWL SEC. 31, T-17-S, R-28-E

EDDY COUNTY, NEW MEXICO

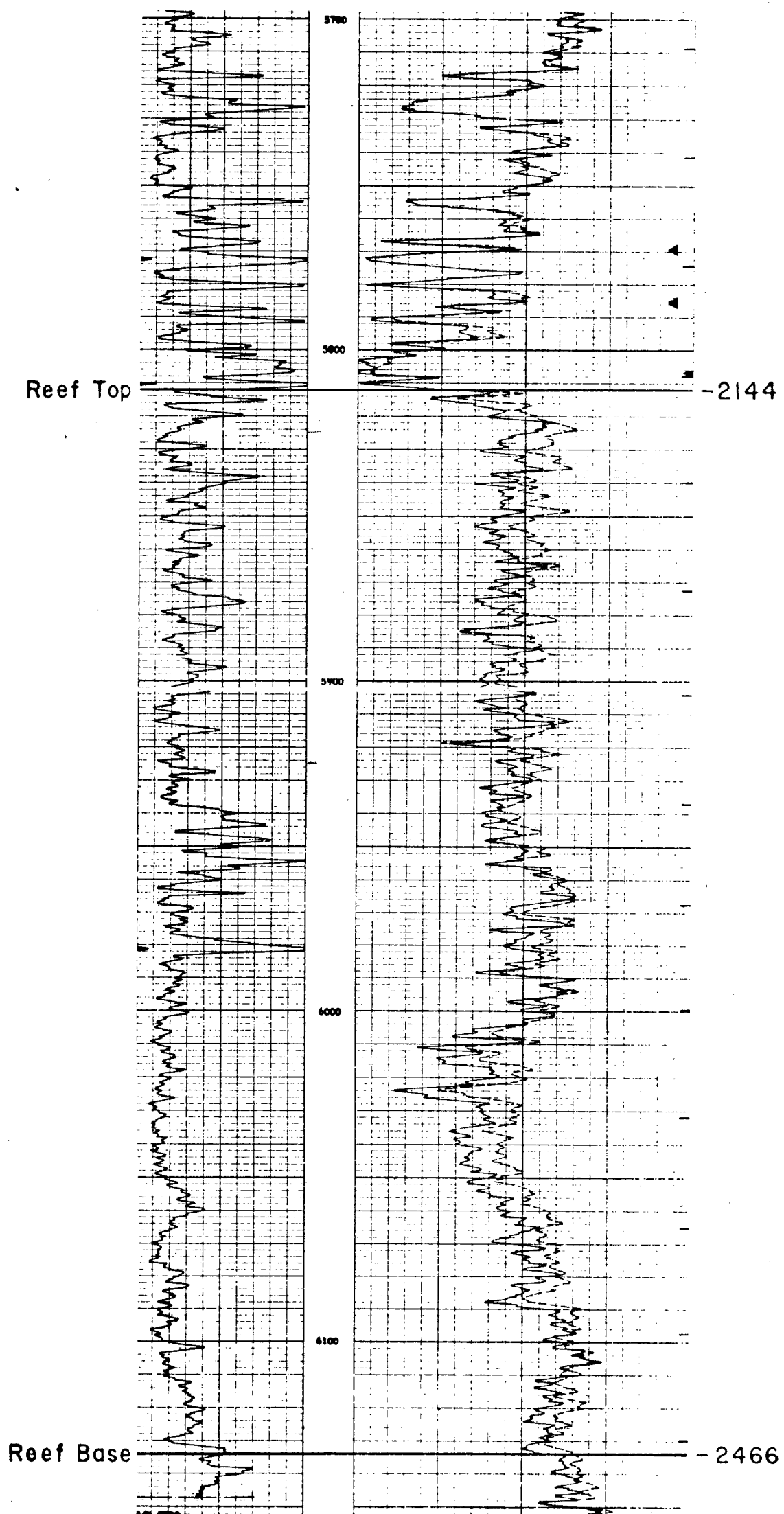
GAMMA RAY - NEUTRON



AMOCO PRODUCTION COMPANY
State "BV" Well No. 1
2280' FNL & 978' FEL SEC. 32, T-17-S, R-28-E
EDDY COUNTY, NEW MEXICO
GAMMA RAY — ISOTRON



ATLANTIC RICHFIELD COMPANY
M. Yates "B" (ARC) Well No. 8
1980' FNL & 2130' FEL SEC. 33, T-17-S, R-28-E
EDDY COUNTY, NEW MEXICO
GAMMA RAY - ISOTRON



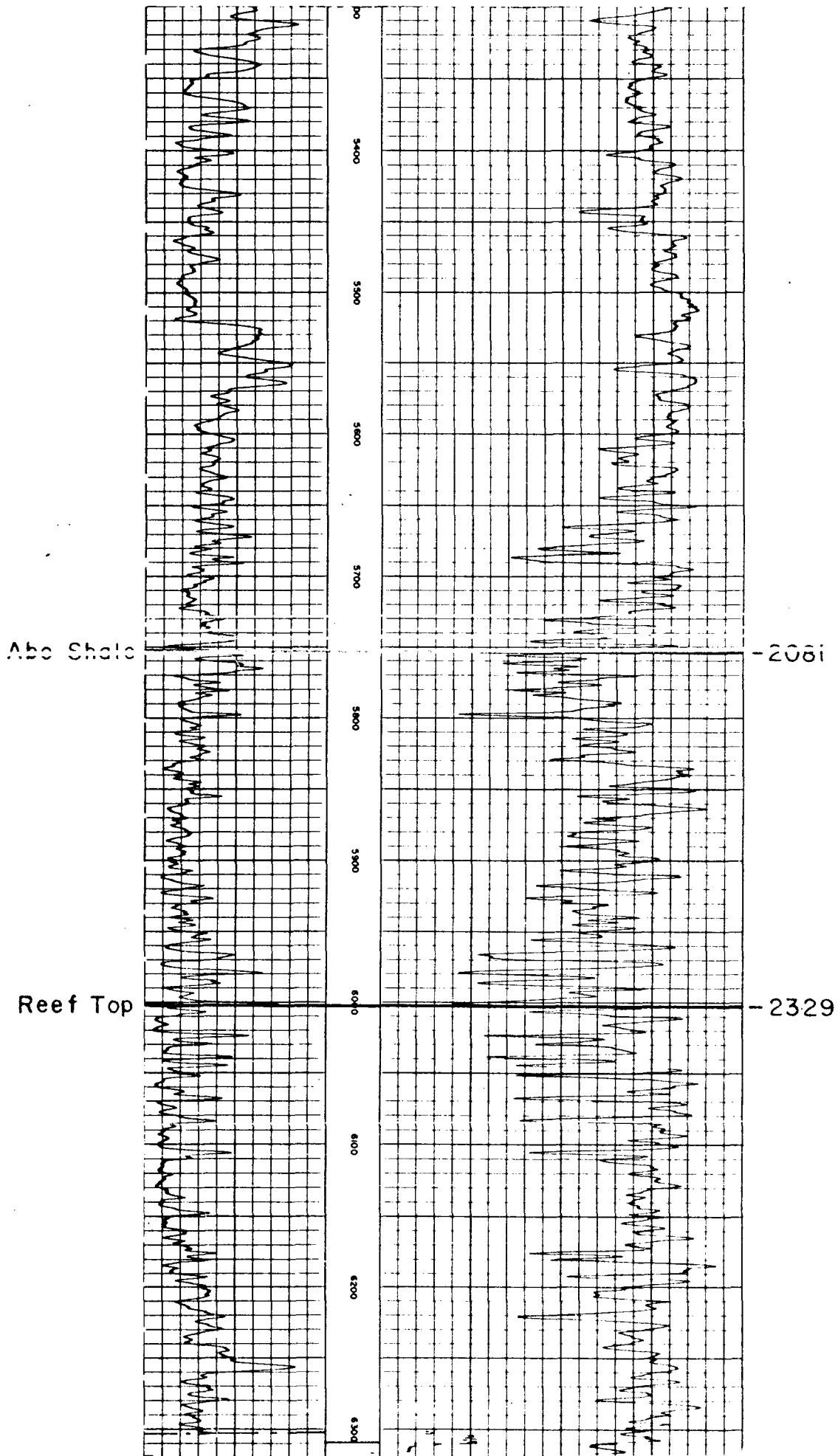
HONDO OIL AND GAS COMPANY
(ATLANTIC RICHFIELD COMPANY)

State "A" Well No. 21

1650' FSL & 1980' FWL SEC. 26, T-17-S, R-28-E

EDDY COUNTY, NEW MEXICO

GAMMA RAY - NEUTRON



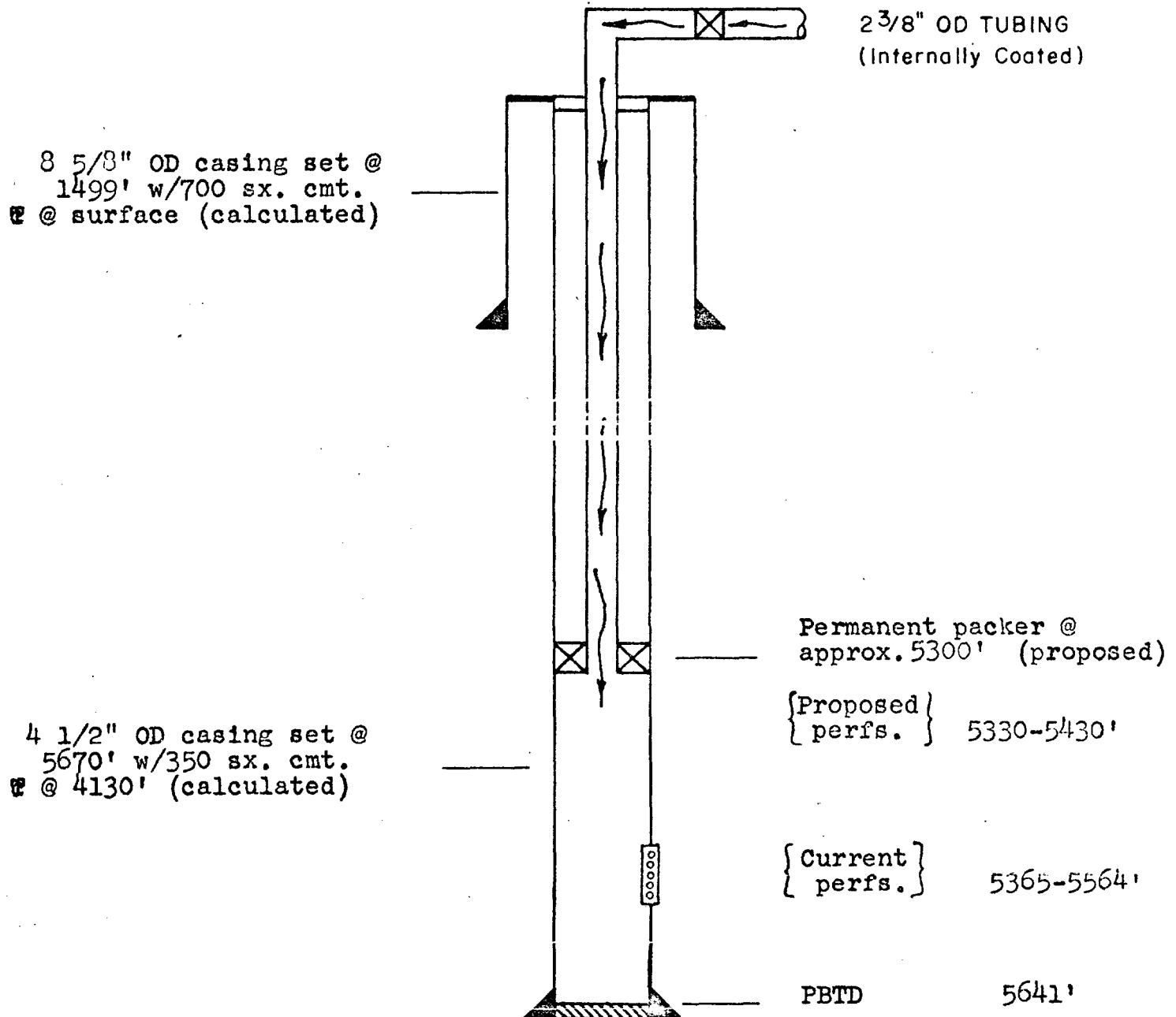
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EDDY COUNTY, NEW MEXICO

INJECTION WELL DIAGRAM



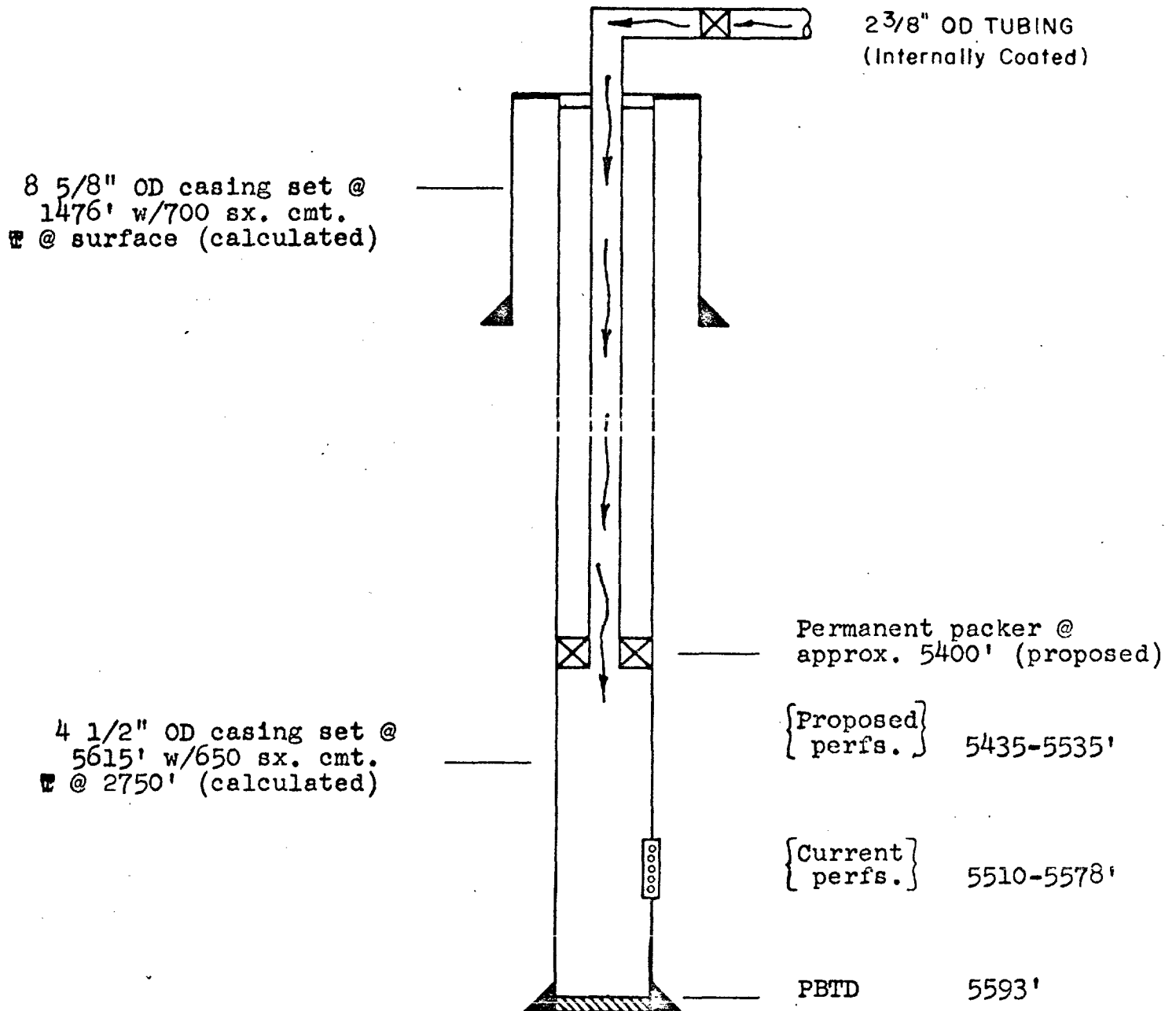
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EDDY COUNTY, NEW MEXICO

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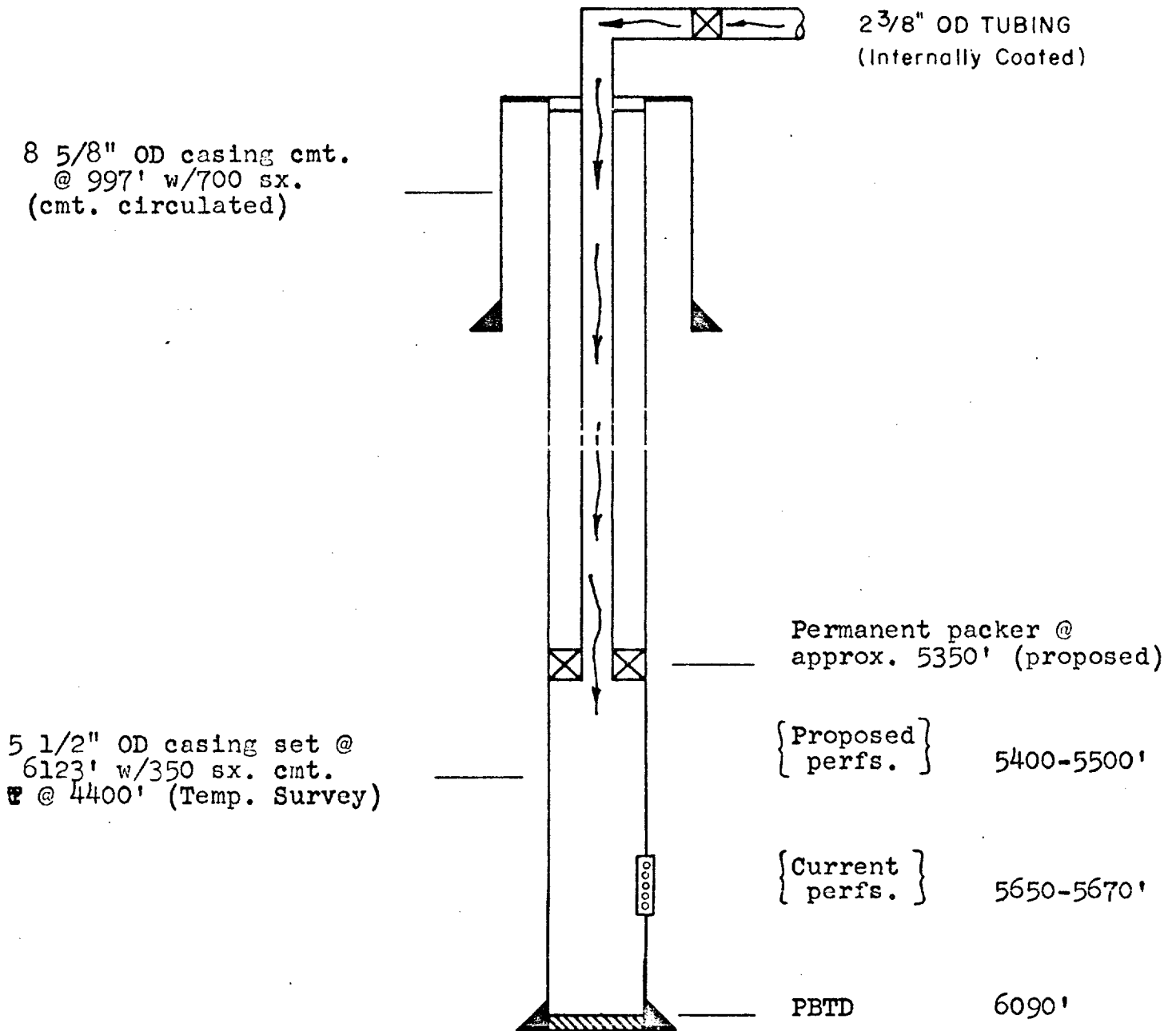
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EDDY COUNTY, NEW MEXICO

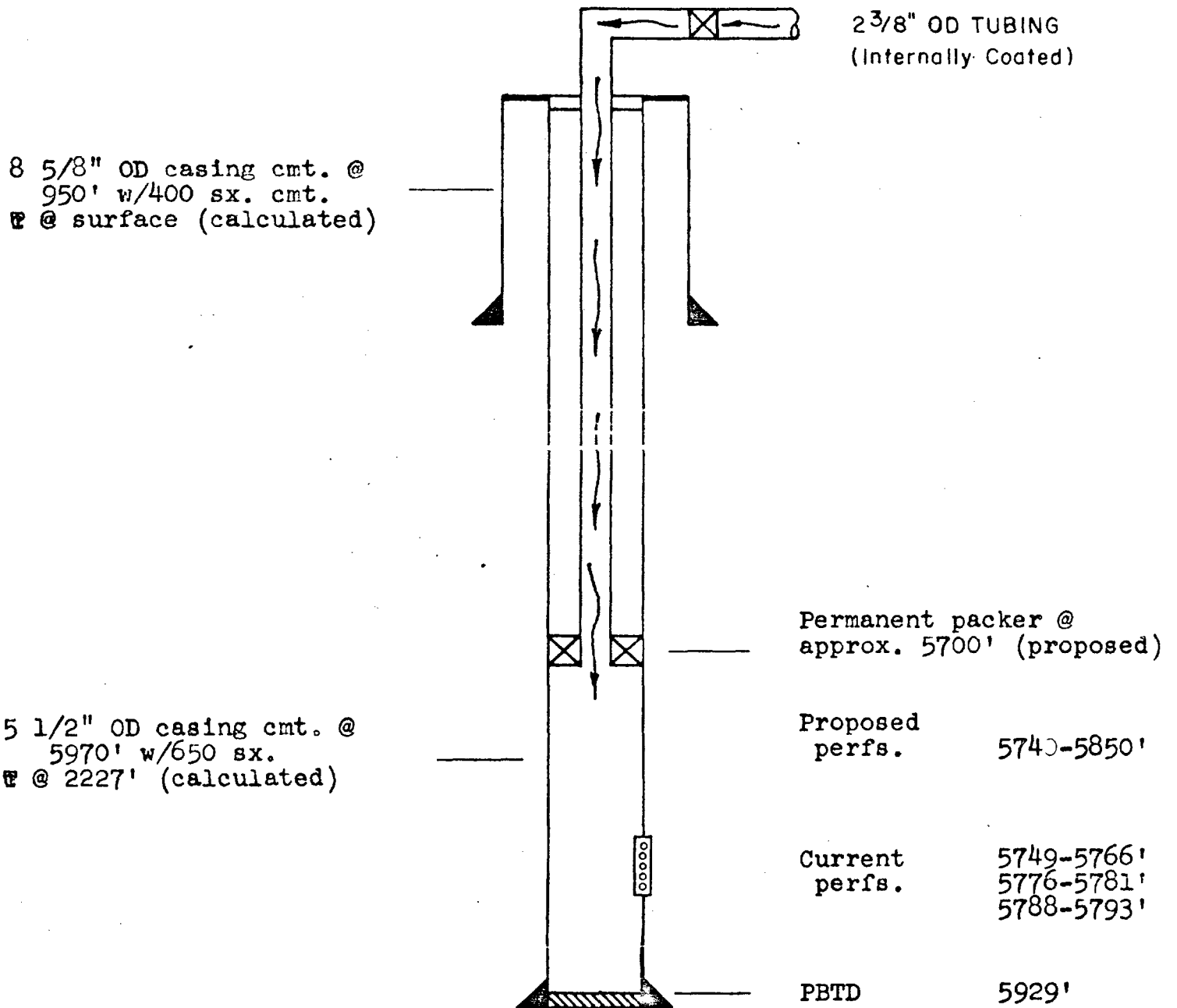
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EDDY COUNTY, NEW MEXICO
INJECTION WELL DIAGRAM



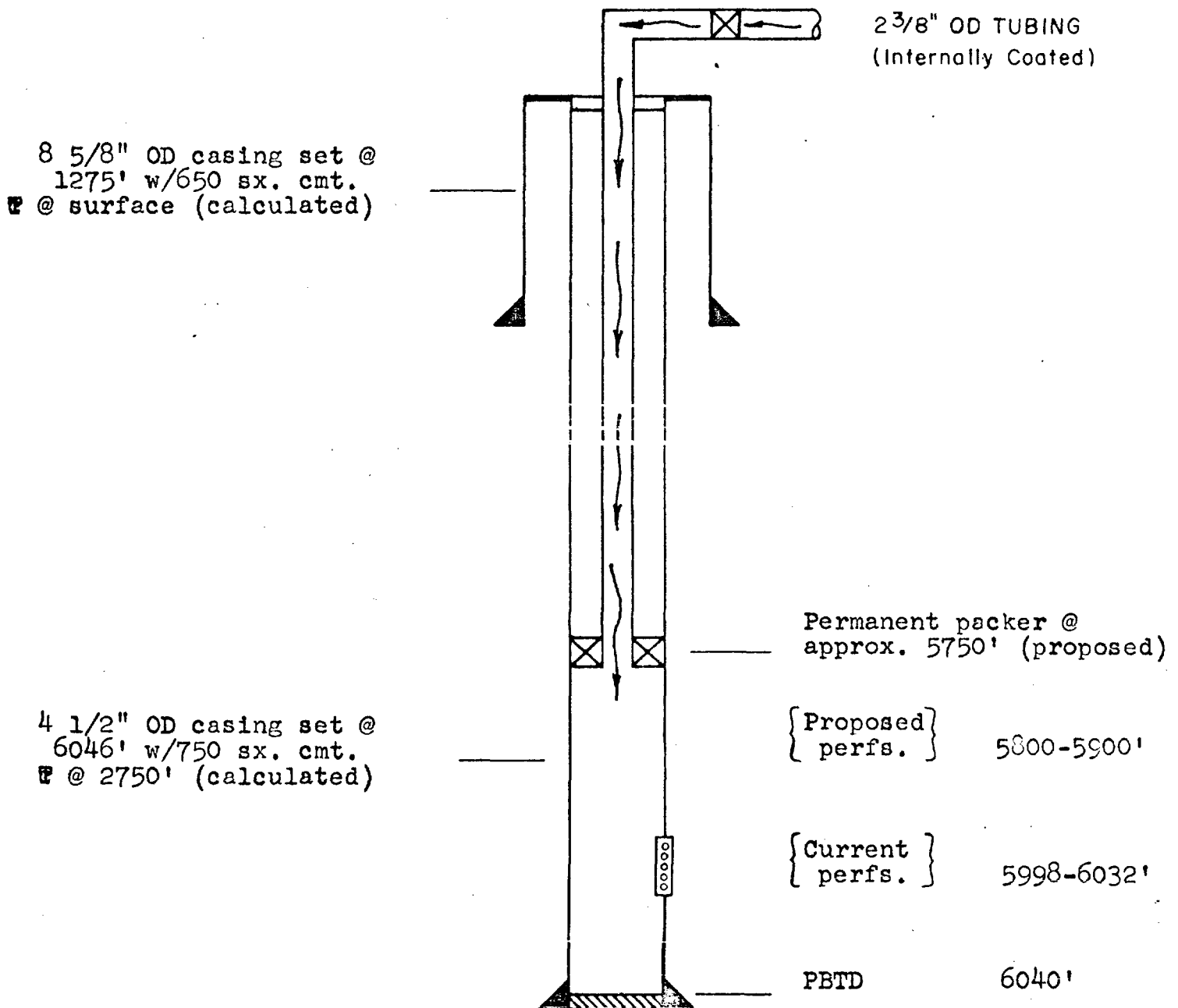
AMOCO PRODUCTION COMPANY

State "BM" Well No. 1

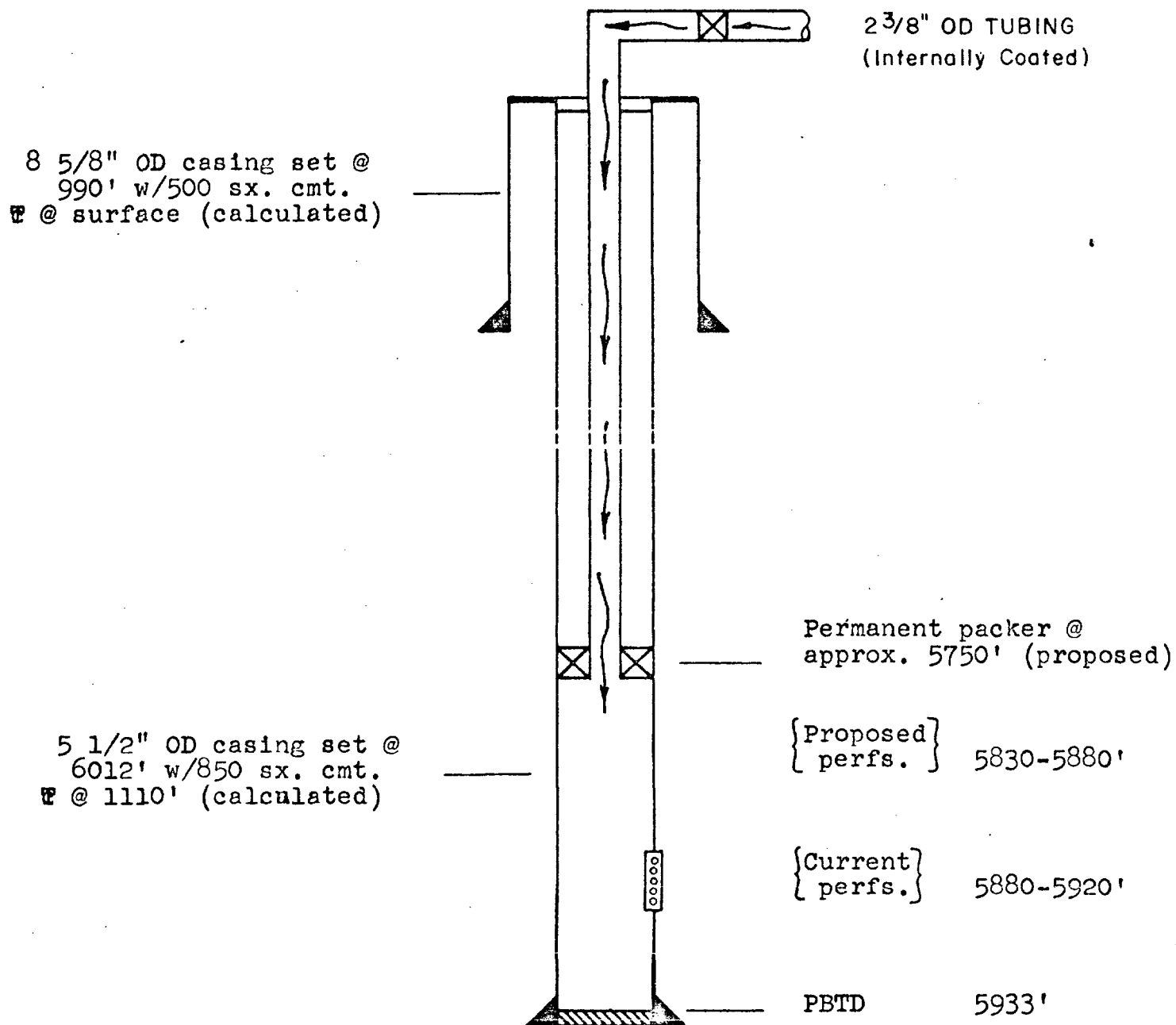
1650' FSL & 2387' FWL SEC. 31, T-17-S, R-28-E

EDDY COUNTY, NEW MEXICO

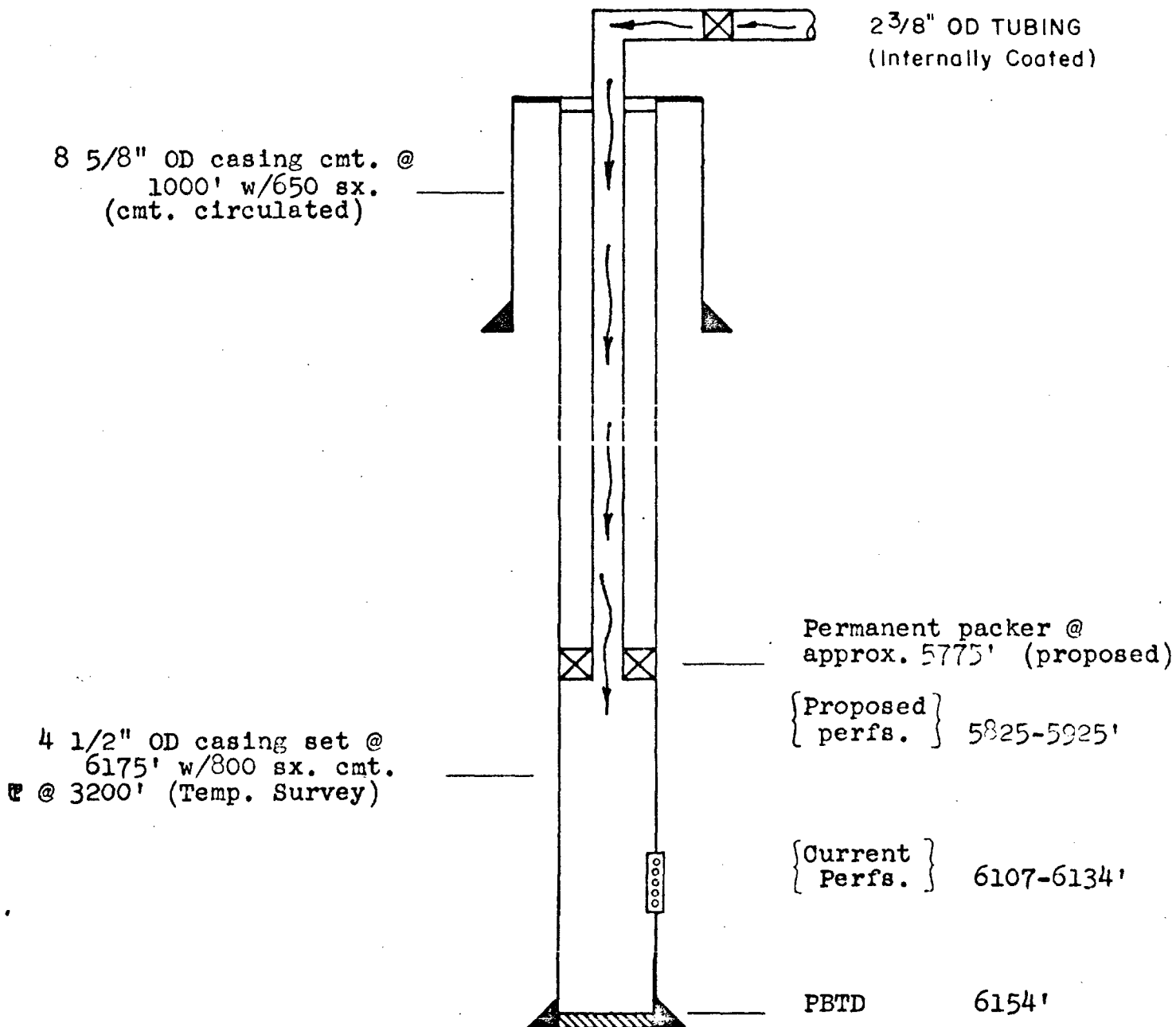
INJECTION WELL DIAGRAM



AMOCO PRODUCTION COMPANY
State "BV" Well No. 1
 2280' FNL & 978' FEL SEC. 32, T-17-S, R-28-E
 EDDY COUNTY, NEW MEXICO
 INJECTION WELL DIAGRAM



ATLANTIC RICHFIELD COMPANY
M. Yates "B" (ARC) Well No. 8
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 EDDY COUNTY, NEW MEXICO
 INJECTION WELL DIAGRAM



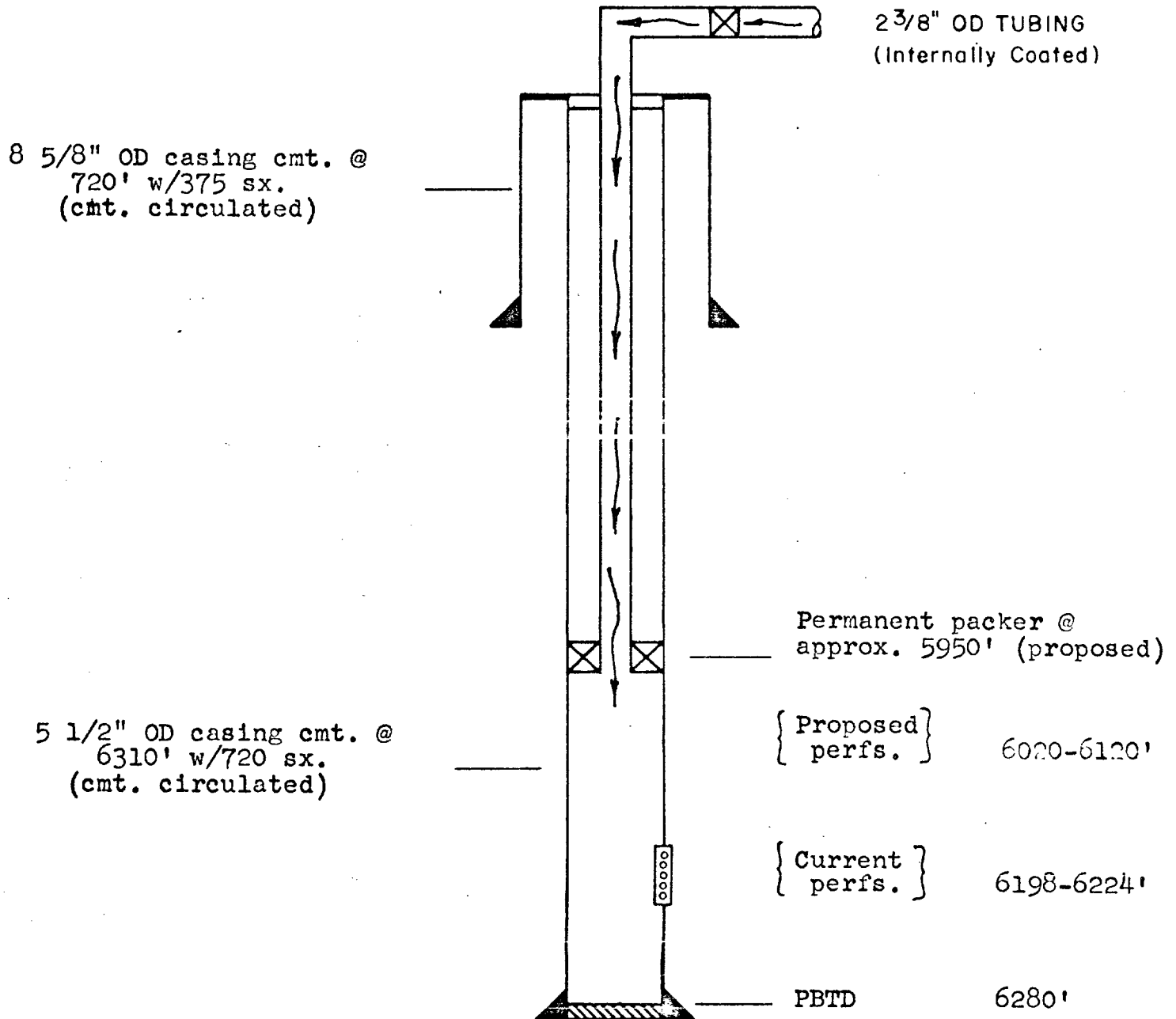
HONDO OIL AND GAS COMPANY
(ATLANTIC RICHFIELD COMPANY)

State "A" Well No. 21

1650' FSL & 1980' FWL SEC. 26, T-17-S, R-28-E

EDDY COUNTY, NEW MEXICO

INJECTION WELL DIAGRAM





*NAI000 Copy of Plan of Operation
(To go with Applications)*

March 28, 1973

United States Department
of the Interior
Geological Survey
P. O. Drawer 1857
Roswell, New Mexico 88201

Attention: Mr. N. O. Frederick (6)
Oil and Gas Supervisor

State of New Mexico
Mr. Alex J. Armijo
Commissioner of Public Lands
P. O. Box 1148
Santa Fe, New Mexico

Attention: Mr. Ray D. Graham, Director (3)
Oil and Gas Department

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

Attention: Mr. A. L. Porter, Jr. (3)
Secretary Director

Working Interest Owners
Empire Abo Unit
(see attached address list)

Re: Initial Plan of Operation
Empire Abo Unit
Eddy County, New Mexico

Gentlemen:

In compliance with Section 11 of the Unit
Agreement, Empire Abo Unit, Eddy County,
New Mexico, Atlantic Richfield Company, as

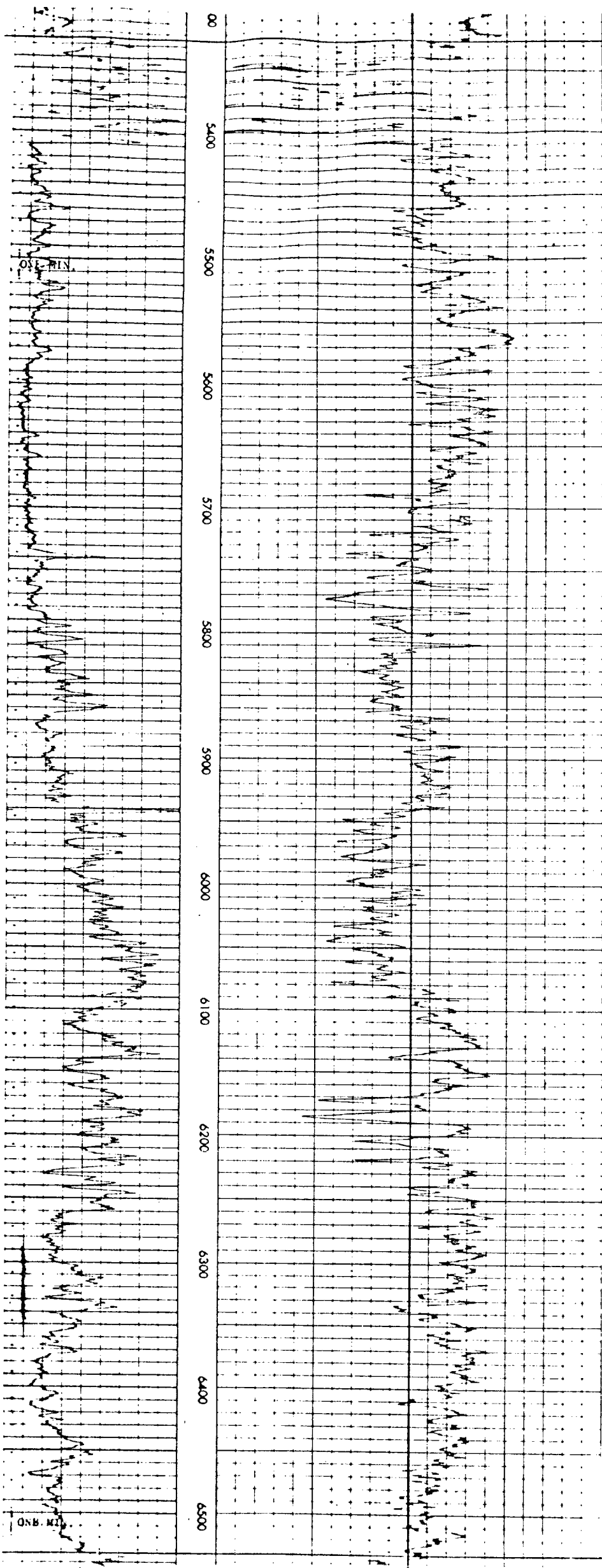
United States Department
of the Interior
Page 2
March 28, 1973

Unit Operator on behalf of itself and the other participating working interest owners, hereby submits for your approval a Plan of Operation to cover the period beginning with the effective date of the Unit Agreement and extending through the remainder of calendar year 1973.

RADIOACTIVITY LOG

BASE OF
THE
DRINKARD

5325 (-1784)

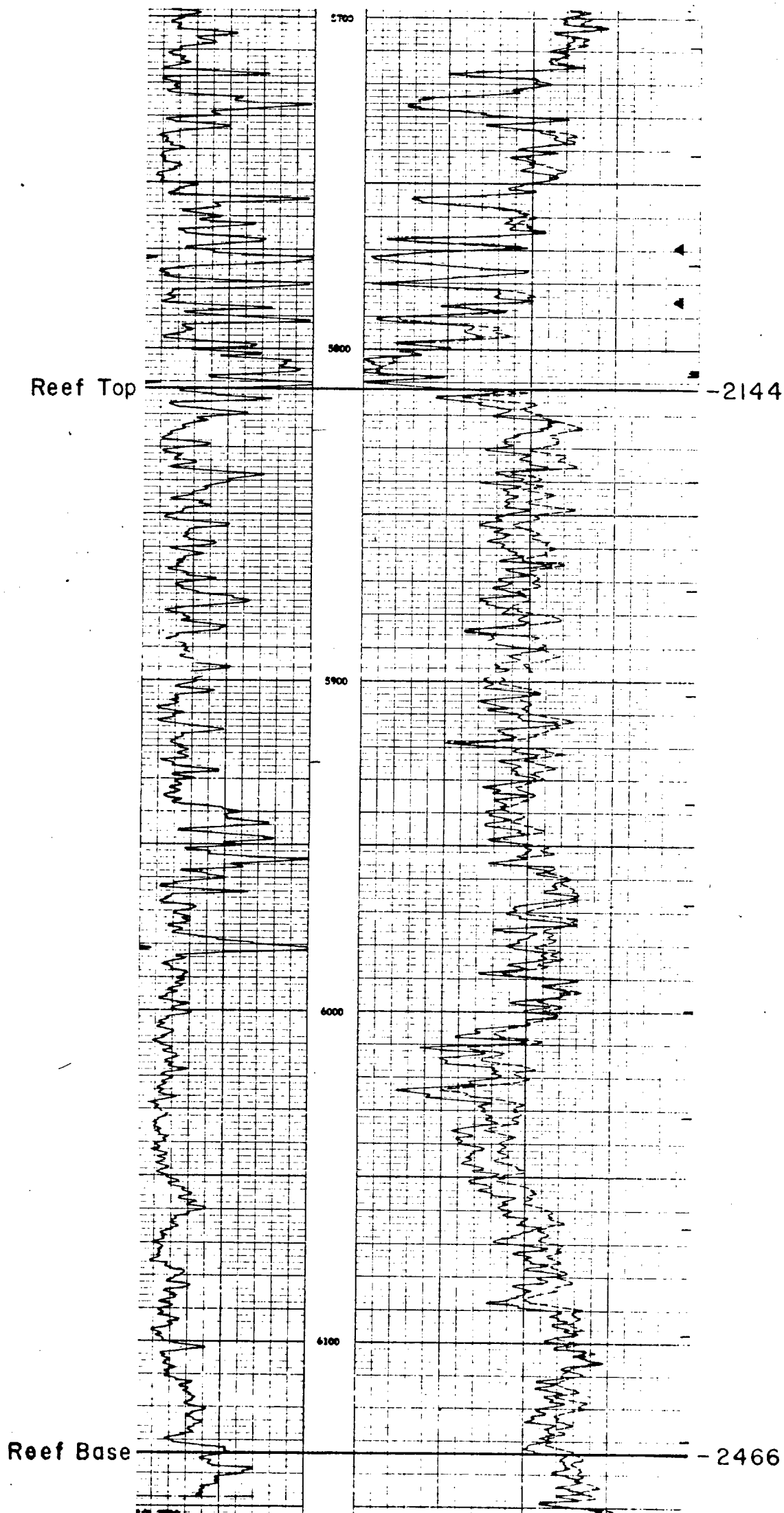


TOP OF THE
WOLFCAMP
(LIMESTONE)

6533 (-2992)

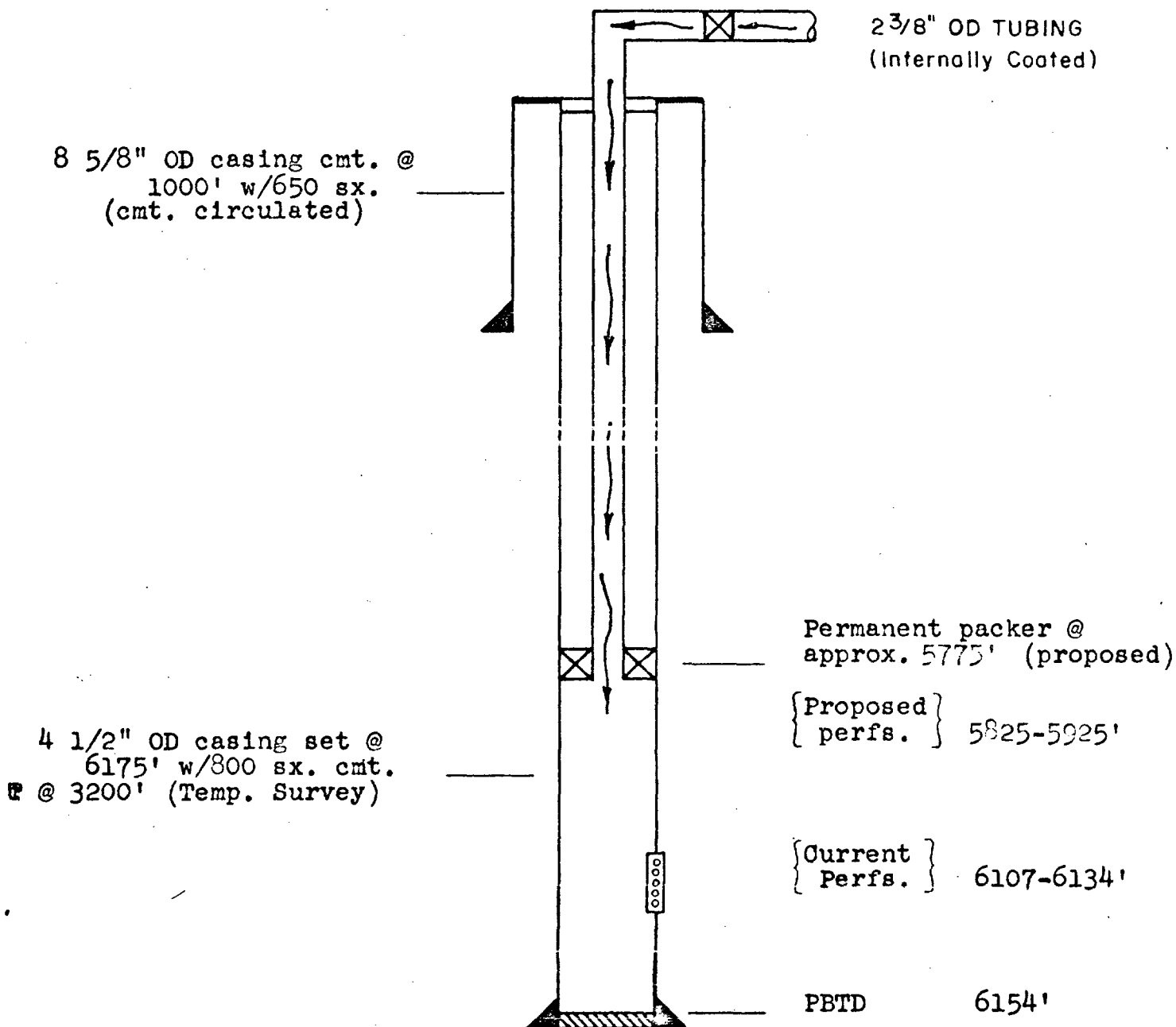
ATLANTIC RICHFIELD COMPANY
M. Yates "B" (ARC) Well No. 8
1980' FNL & 2130' FEL SEC. 33, T-17-S, R-28-E
EDDY COUNTY, NEW MEXICO
GAMMA RAY - ISOTRON

EMPIRE ABO UNIT
PLAN OF OPERATION
EXHIBIT 3



ATLANTIC RICHFIELD COMPANY
M. Yates "B" (ARC) Well No. 8
1980' FNL & 2130' FEL SEC. 33, T-17-S, R-28-E
EDDY COUNTY, NEW MEXICO
INJECTION WELL DIAGRAM

EMPIRE ABO UNIT
PLAN OF OPERATION
EXHIBIT 4



Well Re-designation- Empire Abo Unit

Tract No.	Present Designation	Location		New Designation
		Unit	Sec. T-R	
1	General American Oil Company of Texas			<u>Empire Abo Unit Tract No. 1</u>
	Green A No. 5	G	30-17S-29E	Well No. 2
	Green A No. 6	H	30-17S-29E	Well No. 1
2	Cities Service Oil Company			Not Qualified
	Russell C No. 9	N	35-17S-27E	
	Russell C No. 10	O	35-17S-27E	
3	Cities Service Oil Company			<u>Empire Abo Unit Tract No. 3</u>
	Hudson B No. 1	E	3-18S-27E	Well No. 1
4	Amoco Production Company			<u>Empire Abo Unit Tract No. 4</u>
	Chalk Bluff Draw P No. 3	H	8-18S-27E	Well No. 1
5	Cities Service Oil Company			<u>Empire Abo Unit Tract No. 5</u>
	Hudson A No. 1	F	3-18S-27E	Well No. 1
6	Cities Service Oil Company			Not Qualified
	Magruder A No. 13	P	35-17S-27E	
	Magruder A No. 14	M	35-17S-27E	
7	Amoco Production Company			<u>Empire Abo Unit Tract No. 7</u>
	Windfohr Federal No. 1	P	4-18S-27E	Well No. 4
	Windfohr Federal No. 2	I	4-18S-27E	Well No. 1
	Windfohr Federal No. 3	O	4-18S-27E	Well No. 3
	Windfohr Federal No. 4	J	4-18S-27E	Well No. 2
8	Amoco Production Company			<u>Empire Abo Unit Tract No. 8</u>
	Mann Federal No. 1	M	3-18S-27E	Well No. 2
	Mann Federal No. 2	L	3-18S-27E	Well No. 1
9	DEPCO Incorporated			<u>Empire Abo Unit Tract No. 9</u>
	Leonard Federal No. 7	J	30-17S-29E	Well No. 1
10	Amoco Production Company			<u>Empire Abo Unit Tract No. 10</u>
	MALCO R Federal No. 10	D	1-18S-27E	Well No. 1
11	Amoco Production Company			<u>Empire Abo Unit Tract No. 11</u>
	Trigg Federal No. 1	P	34-17S-27E	Well No. 1
12A	Amoco Production Company			<u>Empire Abo Unit Tract No. 12-A</u>
	MALCO K Federal No. 1	P	9-18S-27E	Well No. 1
	MALCO K Federal No. 3	O	9-18S-27E	Well No. 2
12B	Amoco Production Company			<u>Empire Abo Unit Tract No. 12-B</u>
	MALCO H Federal No. 1	I	3-18S-27E	Well No. 2
	MALCO H Federal No. 3	N	3-18S-27E	Well No. 5
	MALCO H Federal No. 4	J	3-18S-27E	Well No. 3
	MALCO H Federal No. 5	K	3-18S-27E	Well No. 4
	MALCO H Federal No. 9	C	3-18S-27E	Well No. 1
	MALCO D Federal RAB No. 4	H	10-18S-27E	Well No. 6
	MALCO D Federal RAB No. 5	G	10-18S-27E	Well No. 7
12C	Amoco Production Company			<u>Empire Abo Unit Tract No. 12-C</u>
	MALCO H Federal No. 2	H	3-18S-27E	Well No. 4
	MALCO H Federal No. 6	G	3-18S-27E	Well No. 3
	MALCO H Federal No. 7	A	3-18S-27E	Well No. 1
	MALCO H Federal No. 8	B	3-18S-27E	Well No. 2

Well Re-Designation- Empire Abo Unit

Tract No.	Present Designation	Location		New Designation
		Unit	Sec. T-R	
12D	Amoco Production Company MALCO D Federal No. 1 MALCO D Federal No. 2	A B	10-18S-27E 10-18S-27E	Empire Abo Unit Tract No. 12-D Well No. 1 Well No. 2
13A	Amoco Production Company MALCO B Federal No. 2 MALCO B Federal No. 3	D E	11-18S-27E 11-18S-27E	Empire Abo Unit Tract No. 13-A Well No. 1 Well No. 2
13B	Amoco Production Company MALCO A Federal No. 1	C	11-18S-27E	Empire Abo Unit Tract No. 13-B Well No. 1
13C	Amoco Production Company MALCO C Federal No. 1	B	11-18S-27E	Empire Abo Unit Tract No. 13-C Well No. 1
13D	Amoco Production Company MALCO J Federal No. 1	A	11-18S-27E	Empire Abo Unit Tract No. 13-D Well No. 1
14	Exxon Corporation CBDU A No. 17	P	8-18S-27E	Empire Abo Unit Tract No. 14 Well No. 1
15	Exxon Corporation CBDU A No. 1 CBDU A No. 3 CBDU A No. 7 CBDU A No. 10	K N M L	9-18S-27E 9-18S-27E 9-18S-27E 9-18S-27E	Empire Abo Unit Tract No. 15 Well No. 1 Well No. 4 Well No. 3 Well No. 2
17	Exxon Corporation CBDU A No. 22	I	8-18S-27E	Empire Abo Unit Tract No. 17 Well No. 1
18A	Exxon Corporation CBDU A No. 26	K	17-18S-27E	Empire Abo Unit Tract No. 18-A Well No. 1
18B	Exxon Corporation CBDU P No. 4 CBDU A No. 11	G H	17-18S-27E 17-18S-27E	Empire Abo Unit Tract No. 18-B Well No. 2 Well No. 1
18C	Exxon Corporation CBDU A No. 24 CBDU A No. 25	J I	17-18S-27E 17-18S-27E	Empire Abo Unit Tract No. 18-C Well No. 2 Well No. 1
19	Exxon Corporation Empire Abo Federal No. 1 Empire Abo Federal No. 2 Empire Abo Federal No. 4 Empire Abo Federal No. 5	J I P O	1-18S-27E 1-18S-27E 1-18S-27E 1-18S-27E	Empire Abo Unit Tract No. 19 Well No. 2 Well No. 1 Well No. 4 Well No. 3
20	Amoco Production Company MALCO L Federal No. 1	H	4-18S-27E	Empire Abo Unit Tract No. 20 Well No. 1
21A	Amoco Production Company MALCO N Federal No. 1	D	15-18S-27E	Empire Abo Unit Tract No. 21-A Well No. 1
22A	Amoco Production Company MALCO G Federal No. 1 MALCO G Federal No. 2 MALCO G Federal No. 3 MALCO G Federal No. 4 MALCO G Federal No. 6 MALCO G Federal No. 7 MALCO G Federal No. 8 MALCO G Federal No. 9 MALCO G Federal No. 11 MALCO G Federal No. 12 MALCO G Federal No. 14 MALCO G Federal No. 15 MALCO E Federal No. 1 MALCO E Federal No. 2	C D A E I F J L B M G H P O	10-18S-27E 10-18S-27E 9-18S-27E 10-18S-27E 9-18S-27E 10-18S-27E 9-18S-27E 10-18S-27E 9-18S-27E 10-18S-27E 9-18S-27E 9-18S-27E 3-18S-27E 3-18S-27E	Empire Abo Unit Tract No. 22-A Well No. 3 Well No. 4 Well No. 5 Well No. 9 Well No. 12 Well No. 10 Well No. 13 Well No. 11 Well No. 6 Well No. 14 Well No. 7 Well No. 8 Well No. 1 Well No. 2

Well Re-Designation- Empire Abo Unit

Tract No.	Location		New Designation
	<u>Present Designation</u>	<u>Unit</u> <u>Sec. T-R</u>	
23	<u>Exxon Corporation</u> CBDU A No. 5	N 4-18S-27E	<u>Empire Abo Unit Tract No. 23</u> Well No. 1
24A	<u>Exxon Corporation</u> CBDU A No. 2 CBDU A No. 4 CBDU A No. 8	F 9-18S-27E C 9-18S-27E E 9-18S-27E	<u>Empire Abo Unit Tract No. 24-A</u> Well No. 3 Well No. 1 Well No. 2
27	<u>Amoco Production Company</u> MALCO F Federal No. 1 MALCO F Federal No. 2 MALCO F Federal No. 3 MALCO F Federal No. 4 MALCO F Federal No. 5 MALCO F Federal No. 6 MALCO F Federal No. 7 MALCO F Federal No. 8 MALCO F Federal No. 9 MALCO F Federal No. 11 MALCO F Federal No. 12	L 1-18S-27E E 1-18S-27E M 1-18S-27E F 1-18S-27E K 1-18S-27E B 1-18S-27E G 1-18S-27E C 1-18S-27E H 1-18S-27E A 1-18S-27E N 1-18S-27E	<u>Empire Abo Unit Tract No. 27</u> Well No. 9 Well No. 4 Well No. 10 Well No. 5 Well No. 8 Well No. 2 Well No. 6 Well No. 3 Well No. 7 Well No. 1 Well No. 11
28	<u>Robert G. Cox</u> Federal EA No. 1	D 12-18S-27E	Not Qualified
29-1	<u>Amoco Production Company</u> Simon Federal No. 1	M 4-18S-27E	<u>Empire Abo Unit Tract No. 29-1</u> Well No. 1
29-2	<u>General American Oil</u> <u>Company of Texas</u> Green A Tract 1 No. 7 Green A Tract 1 No. 9	E 29-17S-29E K 29-17S-29E	<u>Empire Abo Unit Tract No. 29-2</u> Well No. 1 Well No. 2
30	<u>Cities Service Oil</u> <u>Company</u> Ohio B State No. 1 Ohio B State No. 2	G 5-18S-28E H 5-18S-28E	Not Qualified
31	<u>Amoco Production Company</u> State BE No. 1 State BE No. 2	M 31-17S-28E L 31-17S-28E	<u>Empire Abo Unit Tract No. 31</u> Well No. 2 Well No. 1
32	<u>Martin Yates, III</u> State 647 No. 1	K 27-17S-28E	<u>Empire Abo Unit Tract No. 32</u> Well No. 1
34	<u>Atlantic Richfield</u> <u>Company</u> M. Yates B ARC No. 1 M. Yates B ARC No. 2 M. Yates B ARC No. 3 M. Yates B ARC No. 4 M. Yates B ARC No. 5 M. Yates B ARC No. 6 M. Yates B ARC No. 7 M. Yates B ARC No. 8 M. Yates B ARC No. 9 M. Yates B ARC No. 10 M. Yates B ARC No. 11 M. Yates B ARC No. 12 M. Yates B ARC No. 13 M. Yates B ARC No. 14 M. Yates B ARC No. 15	M 33-17S-28E K 33-17S-28E E 33-17S-28E L 33-17S-28E F 33-17S-28E N 33-17S-28E J 33-17S-28E G 33-17S-28E I 33-17S-28E H 33-17S-28E A 33-17S-28E P 33-17S-28E C 33-17S-28E B 33-17S-28E O 33-17S-28E	<u>Empire Abo Unit Tract No. 34</u> Well No. 12 Well No. 10 Well No. 4 Well No. 11 Well No. 5 Well No. 13 Well No. 9 Well No. 6 Well No. 8 Well No. 7 Well No. 1 Well No. 15 Well No. 3 Well No. 2 Well No. 14
35	<u>Amoco Production Company</u> State BK No. 1	C 5-18S-28E	<u>Empire Abo Unit Tract No. 35</u> Well No. 1
36	<u>Amoco Production Company</u> State BU No. 1	E 34-17S-28E	<u>Empire Abo Unit Tract No. 36</u> Well No. 1

Well Re-Designation- Empire Abo Unit

Tract No.	Present Designation	Location		New Designation
		Unit	Sec. T-R	
37A	<u>Hondo Oil and Gas Company</u>			<u>Empire Abo Unit Tract No. 37-A</u>
	State A No. 1	G	6-18S-28E	Well No. 36
	State A No. 2	A	6-18S-28E	Well No. 34
	State A No. 3	N	32-17S-28E	Well No. 33
	State A No. 4	M	32-17S-28E	Well No. 32
	State A No. 5	P	31-17S-28E	Well No. 31
	State A No. 6	H	6-18S-28E	Well No. 35
	State A No. 7	K	32-17S-28E	Well No. 28
	State A No. 8	L	32-17S-28E	Well No. 29
	State A No. 9	I	31-17S-28E	Well No. 30
	State A No. 10	J	34-17S-28E	Well No. 27
	State A No. 11	I	34-17S-28E	Well No. 26
	State A No. 12	F	35-17S-28E	Well No. 21
	State A No. 13	L	35-17S-28E	Well No. 25
	State A No. 14	B	35-17S-28E	Well No. 19
	State A No. 15	C	35-17S-28E	Well No. 20
	State A No. 16	M	26-17S-28E	Well No. 9
	State A No. 17	A	35-17S-28E	Well No. 18
	State A No. 18	N	26-17S-28E	Well No. 10
	State A No. 19	O	26-17S-28E	Well No. 11
	State A No. 20	M	25-17S-28E	Well No. 13
	State A No. 21	K	26-17S-28E	Well No. 7
	State A No. 22	G	35-17S-28E	Well No. 22
	State A No. 23	K	25-17S-28E	Well No. 3
	State A No. 24	J	26-17S-28E	Well No. 6
	State A No. 25	P	26-17S-28E	Well No. 12
	State A No. 26	I	26-17S-28E	Well No. 5
	State A No. 28	L	25-17S-28E	Well No. 4
	State A No. 29	N	25-17S-28E	Well No. 14
	State A No. 30	I	6-18S-28E	Well No. 37
	State A No. 31	L	26-17S-28E	Well No. 8
	State A No. 32	J	25-17S-28E	Well No. 2
	State A No. 34	O	25-17S-28E	Well No. 15
	State A No. 37	I	25-17S-28E	Well No. 1
	State A No. 39	K	35-17S-28E	Well No. 24
	State A No. 40	H	35-17S-28E	Well No. 23
	State A No. 42	D	36-17S-28E	Well No. 17
	State A No. 44	P	25-17S-28E	Well No. 16
37B	<u>DEECO Incorporated</u>			<u>Empire Abo Unit Tract No. 37-B</u>
	State A No. 46	B	32-17S-28E	Well No. 1
37C	<u>Hondo Oil and Gas Company</u>			<u>Empire Abo Unit Tract No. 37-C</u>
	State A No. 33	H	32-17S-28E	Well No. 3
	State A No. 35	G	32-17S-28E	Well No. 2
	State A No. 38	A	32-17S-28E	Well No. 1
38	<u>Amoco Production Company</u>			<u>Empire Abo Unit Tract No. 38</u>
	State BS No. 1	F	34-17S-28E	Well No. 1
40	<u>Exxon Corporation</u>			<u>Empire Abo Unit Tract No. 40</u>
	CBDU A No. 9	D	16-18S-27E	Well No. 1
	CBDU A No. 15	K	16-18S-27E	Well No. 2
	CBDU A No. 16	L	16-18S-27E	Well No. 3
42	<u>Cities Service Oil Company</u>			Not Qualified
	State CE No. 5	C	2-18S-27E	
43	<u>Amoco Production Company</u>			<u>Empire Abo Unit Tract No. 43</u>
	State BC No. 1	D	4-18S-28E	Well No. 1

Well Re-Designations- Empire Abo Unit

Tract No.	Present Designation	Location		New Designation
		Unit	Sec. T-R	
44	Martin Yates, III			Not Qualified
	Dooley Abo State No. 1	N	36-17S-27E	
	Dooley Abo State No. 2	J	36-17S-27E	
	Dooley Abo State No. 3	K	36-17S-27E	
45	Kersey and Company			Empire Abo Unit Tract No. 45
	Ramapo No. 4	P	36-17S-27E	Well No. 2
	Ramapo No. 5	I	36-17S-27E	Well No. 1
46	Cities Service Oil Company			Not Qualified
	Wright A State No. 4	B	2-18S-27E	
47	Amoco Production Company			Empire Abo Unit Tract No. 47
	State BO No. 1	P	32-17S-28E	Well No. 2
	State BO No. 2	I	32-17S-28E	Well No. 1
48	Franklin, Aston, and Fair, Incorporated			Empire Abo Unit Tract No. 48
	State BJ No. 1	O	31-17S-28E	Well No. 2
	State BJ No. 2	J	31-17S-28E	Well No. 1
49	Samedan Oil Corporation			Not Qualified
	Walker State No. 1	O	27-17S-28E	
50	Amoco Production Company			Empire Abo Unit Tract No. 50
	State BZ No. 1	P	27-17S-28E	Well No. 3
	State BZ No. 2	I	27-17S-28E	Well No. 1
	State BZ No. 3	J	27-17S-28E	Well No. 2
51	Amoco Production Company			Empire Abo Unit Tract No. 51
	State BQ No. 1	K	34-17S-28E	Well No. 1
	State BQ No. 2	L	34-17S-28E	Well No. 2
	State BQ No. 3	M	34-17S-28E	Well No. 3
	State BQ No. 4	N	34-17S-28E	Well No. 4
52	Amoco Production Company			Empire Abo Unit Tract No. 52
	State BX No. 1	H	34-17S-28E	Well No. 1
53	Amoco Production Company			Empire Abo Unit Tract No. 53
	State BH No. 1	A	5-18S-28E	Well No. 1
	State BH No. 2	B	5-18S-28E	Well No. 2
55	Penroc Oil Corporation			Not Qualified
	DELHI A State No. 1	D	33-17S-28E	
56	Penroc Oil Corporation			Not Qualified
	State No. 2	P	28-17S-28E	
58	Amoco Production Company			Empire Abo Unit Tract No. 58
	State AE No. 1	C	32-17S-28E	Well No. 1
59	Rutter and Wilbanks Brothers			Empire Abo Unit Tract No. 59
	Hudson State No. 1	G	2-18S-27E	Well No. 1
60	Franklin, Aston, and Fair, Incorporated			Empire Abo Unit Tract No. 60
	State F No. 1	F	31-17S-28E	Well No. 1
61A	Amoco Production Company			Empire Abo Unit Tract No. 61-A
	State AT No. 2	E	2-18S-27E	Well No. 1
61B	Amoco Production Company			Empire Abo Unit Tract No. 61-B
	State AT No. 3	F	2-18S-27E	Well No. 1

Well Re-Designation - Empire Abo Unit

Tract No.	Present Designation	Location		New Designation
		Unit	Sec. T-R	
61C	<u>Amoco Production Company</u> <u>State AT No. 1</u>	L	2-18S-27E	<u>Empire Abo Unit Tract No. 61-C</u> <u>Well No. 1</u>
61D	<u>Amoco Production Company</u> <u>State AR No. 1</u>	N	2-18S-27E	<u>Empire Abo Unit Tract No. 61-D</u> <u>Well No. 1</u>
62	<u>Amoco Production Company</u> <u>State BR No. 1</u>	A	16-18S-27E	<u>Empire Abo Unit Tract No. 62</u> <u>Well No. 1</u>
64	<u>Amoco Production Company</u> <u>State BM No. 1</u>	K	31-17S-28E	<u>Empire Abo Unit Tract No. 64</u> <u>Well No. 1</u>
65	<u>Franklin, Aston, and Fair,</u> <u>Incorporated</u> <u>State BD No. 1</u>	N	31-17S-28E	<u>Empire Abo Unit Tract No. 65</u> <u>Well No. 1</u>
66	<u>Amoco Production Company</u> <u>State BW No. 1</u>	M	27-17S-28E	<u>Empire Abo Unit Tract No. 66</u> <u>Well No. 1</u>
67	<u>Amoco Production Company</u> <u>State AU No. 1</u>	K	2-18S-27E	<u>Empire Abo Unit Tract No. 67</u> <u>Well No. 1</u>
68	<u>Atlantic Richfield Company</u> <u>Hudson A State No. 1</u>	A	2-18S-27E	<u>Empire Abo Unit Tract No. 68</u> <u>Well No. 1</u>
69	<u>Estate of Fred Turner, Jr.</u> <u>State B9391 No. 1</u>	H	2-18S-27E	Not Qualified
70	<u>Exxon Corporation</u> <u>New Mexico BF State No. 1</u> <u>New Mexico BF State No. 2</u>	B G	16-18S-27E 16-18S-27E	<u>Empire Abo Unit Tract No. 70</u> <u>Well No. 1</u> <u>Well No. 2</u>
72	<u>Exxon Corporation</u> <u>CBDU A No. 14</u>	F	16-18S-27E	<u>Empire Abo Unit Tract No. 72</u> <u>Well No. 1</u>
73A	<u>Amoco Production Company</u> <u>State CM No. 1</u>	L	36-17S-27E	Not Qualified
73B	<u>Amoco Production Company</u> <u>State BG No. 1</u>	O	32-17S-28E	Not Qualified
73C	<u>C & K Petroleum,</u> <u>Incorporated</u> <u>Delhi Taylor State No. 2</u>	O	34-17S-28E	Not Qualified
74	<u>Exxon Corporation</u> <u>New Mexico BE State No. 1</u>	C	4-18S-28E	<u>Empire Abo Unit Tract No. 74</u> <u>Well No. 1</u>
75	<u>Sun Oil Company</u> <u>New Mexico V State No. 1</u> <u>New Mexico V State No. 2</u>	E D	35-17S-28E 35-17S-28E	<u>Empire Abo Unit Tract No. 75</u> <u>Well No. 2</u> <u>Well No. 1</u>
77	<u>Resler and Sheldon</u> <u>State No. 1</u>	B	6-18S-28E	<u>Empire Abo Unit Tract No. 77</u> <u>Well No. 1</u>
78A	<u>Franklin, Aston, and Fair,</u> <u>Incorporated</u> <u>State BB No. 1</u> <u>State BB No. 2</u> <u>State BB No. 3</u> <u>State BB No. 4</u> <u>State BB No. 5</u>	E F C L K	6-18S-28E 6-18S-28E 6-18S-28E 6-18S-28E 6-18S-28E	<u>Empire Abo Unit Tract No. 78-A</u> <u>Well No. 2</u> <u>Well No. 3</u> <u>Well No. 1</u> <u>Well No. 5</u> <u>Well No. 4</u>
78B	<u>Franklin, Aston, and Fair,</u> <u>Incorporated</u> <u>State BN No. 1</u>	D	5-18S-28E	<u>Empire Abo Unit Tract No. 78-B</u> <u>Well No. 1</u>
79	<u>C & K Petroleum, Incorporated</u> <u>ABO No. 1</u>	N	27-17S-28E	Not Qualified

Well Re-Designation - Empire Abo Unit

Tract No.	Present Designation	Location		New Designation
		Unit	Sec. T-R	
80	<u>Amoco Production Company</u> State EB No. 1	M	36-17S-27E	<u>Empire Abo Unit Tract No. 80</u> Well No. 1
81	<u>Atlantic Richfield Company</u> Eddy 32 State No. 1 Eddy 32 State No. 2	D F	34-17S-28E 32-17S-28E	<u>Empire Abo Unit Tract No. 81</u> Well No. 1 Well No. 2
82	<u>Exxon Corporation</u> CBDU A No. 13	E	16-18S-27E	<u>Empire Abo Unit Tract No. 82</u> Well No. 1
83	<u>Amoco Production Company</u> State BP No. 1	J	32-17S-28E	<u>Empire Abo Unit Tract No. 83</u> Well No. 1
84	<u>Tenneco Oil Company</u> State H No. 2	F	5-18S-28E	Not Qualified
85A	<u>Exxon Corporation</u> CBDU A No. 6	C	16-18S-27E	<u>Empire Abo Unit Tract No. 85-A</u> Well No. 1
85B	<u>Gulf Oil Corporation</u> Eddy BU State No. 1	J	16-18S-27E	<u>Empire Abo Unit Tract No. 85-B</u> Well No. 1
86	<u>Continental Oil Company</u> State S 30 No. 1 State S 30 No. 2 State S 30 No. 3	E F L	30-17S-29E 30-17S-29E 30-17S-29E	<u>Empire Abo Unit Tract No. 86</u> Well No. 2 Well No. 1 Well No. 3
87	<u>Gulf Oil Corporation</u> Eddy I NCT A No. 1 Eddy I NCT B No. 1 Eddy I NCT C No. 1	M P O	2-18S-27E 2-18S-27E 36-17S-27E	<u>Empire Abo Unit Tract No. 87</u> Well No. 3 Well No. 2 Well No. 1
88	<u>Amoco Production Company</u> State BA No. 1	D	2-18S-27E	<u>Empire Abo Unit Tract No. 88</u> Well No. 1
89	<u>Amoco Production Company</u> State BV No. 1	E	32-17S-28E	<u>Empire Abo Unit Tract No. 89</u> Well No. 1
90	<u>Amoco Production Company</u> State BT No. 1 State BT No. 2 State BT No. 3	G B C	34-17S-28E 34-17S-28E 34-17S-28E	<u>Empire Abo Unit Tract No. 90</u> Well No. 3 Well No. 1 Well No. 2
91	<u>Signal Oil and Gas Company</u> State E No. 1 State M No. 2	E M	5-18S-28E 6-18S-28E	Not qualified
92	<u>Amoco Production Company</u> State BY No. 1	A	34-17S-28E	<u>Empire Abo Unit Tract No. 92</u> Well No. 1
93	<u>Amoco Production Company</u> State AS No. 1	O	2-18S-27E	<u>Empire Abo Unit Tract No. 93</u> Well No. 1
94B	<u>Amoco Production Company</u> State CE No. 1	H	16-18S-27E	<u>Empire Abo Unit Tract No. 94-B</u> Well No. 1
95A	<u>Sun Oil Company</u> New Mexico AU State No. 1	N	6-18S-28E	Not Qualified
95B	<u>Sun Oil Company</u> New Mexico T State No. 1	J	6-18S-28E	<u>Empire Abo Unit Tract No. 95-B</u> Well No. 1
96	<u>Exxon Corporation</u> New Mexico BK State No. 1	K	30-17S-29E	<u>Empire Abo Unit Tract No. 96</u> Well No. 1
97	<u>Atlantic Richfield Company</u> State AO No. 1 State AO No. 2	J I	2-18S-27E 2-18S-27E	<u>Empire Abo Unit Tract No. 97</u> Well No. 2 Well No. 1
98	<u>Amoco Production Company</u> State EA No. 1	D	6-18S-28E	<u>Empire Abo Unit Tract No. 98</u> Well No. 1