SUNRAY MID-CONTINENT OIL COMPANY

P.O. BOX 2039

TULSA 2, OKLAHOMA

...F. PISS...Y OF PRES...DENT

...J. KERWIN, SUPERINTENDENT
PRODUCTION DIVISION

...W. GRIFFITH, GENERAL MANAGER
GAS GASOLINE DIVISION

...E. DOLMAN, MANAGER
...NT OPERATIONS DIVISION

W. S. PATTON, JR., MANAGER
ENGINEERING DIVISION

PRODUCTION DEPARTMENT

July 10, 1956

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

Enclosed herewith please find six copies of the following applications of Sunray Mid-Continent Oil Company:

(1) Application for establishing the Lane ~~Lower~~ Wolfcamp Field and drilling units for the ~~Lower~~ Wolfcamp, source of supply underlying SE/4 of Sec. 26; S/2 of Sec. 25; The #/2 of Sec. 35; All of Sec. 36-T9S-R33E; SW 30 and W/2 31-T9S-R34E; E/2 of Sec. 2, All of Sec. 1; NE/4 of Sec. 11; The N/2 of Sec. 12-T10S-R33E, W/2 of Sec. 6 and NW/4 of Sec. 7-T10S-R34E, Lea County, New Mexico.

(2) Application for establishing the Lane Cisco Field and drilling units for the Cisco, source of supply underlying SE/4 of Sec. 26; S/2 of Sec. 25; The E/2 of Sec. 35; All of Sec. 36-T9S-R33E; SW 30 and W/2 31-T9S-R34E; E/2 of Sec. 2, All of Sec. 1; NE/4 of Sec. 11; The N/2 of Sec. 12-T10S-R33E, W/2 of Sec. 6 and NW/4 of Sec. 7-T10S-R34E, Lea County, New Mexico.

(3) Application requesting permission for dual completion of wells in the Lower Wolfcamp common source of supply and the Cisco common source of supply underlying the area described above.

It is requested that these three applications be set for hearing on the August 15 docket before the Oil Conservation Commission.

Very truly yours,

SUNRAY MID-CONTINENT OIL COMPANY

John D. Gassett

John D. Gassett

JDG:ldh
Att'ms.

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF SUNRAY MID-CONTINENT OIL COMPANY FOR AN ORDER ESTABLISHING THE LANE ~~LOWER~~ WOLFCAMP FIELD AND UNIFORM DRILLING AND SPACING UNITS FOR THE FURTHER DEVELOPMENT OF THE ~~LOWER~~ WOLFCAMP, COMMON SOURCE OF SUPPLY UNDERLYING SE/4 OF SEC. 26; S/2 OF SEC. 25; THE E/2 OF SEC. 35; ALL OF SEC. 36-T9S-R33E; SW 30 AND W/2 31-T9S-R34E; E/2 OF SEC. 2, ALL OF SEC. 1; NE/4 OF SEC. 11; THE N/2 OF SEC. 12-T10S-R33E, W/2 OF SEC. 6 AND NW/4 OF SEC. 7-T10S-R34E, LEA COUNTY, NEW MEXICO

CASE NO. _____

A P P L I C A T I O N

TO THE HONORABLE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO:

COMES NOW Sunray Mid-Continent Oil Company and respectfully alleges as follows:

1. That the Applicant is the operator and owner of oil and gas leases within the following described area: Southeast Quarter of Section 26; South half of Section 25; the East half of Section 35; all of Section 36 in Township 9 South, Range 33 East; Southwest 30 and West half 31, Township 9 South, Range 34 East, the East half of Section 2, all of Section 1; the Northeast Quarter of Section 11; and North half of Section 12 in Township 10 South, Range 33 East; the West half of Section 6 and Northwest Quarter of Section 7, Township 10 South, Range 34 East, Lea County, New Mexico.

2. That Applicant has drilled thereon several wells penetrating the ~~Lower~~ Wolfcamp Formation, and that its State "F" No. 1 located in the Southeast of the Northwest of Section 1, Township 10 South, Range 33 East, is now producing oil and gas from said Lower Wolfcamp Formation. The productive portion of which is found in this well between the depth of 9644 feet to 9656 feet.

3. That Applicant believes that the ~~Lower~~ Wolfcamp Formation underlies the area described above, and is found at between the approximate depth of 9600 feet and 9750 feet; that it should be designated as the Lane Lower Wolfcamp Field.

4. That in the interest of preventing waste of oil and gas, eliminating the drilling of unnecessary wells, recovering the greatest amount of oil and gas, and protecting the correlative rights in the common source of supply, 80 acre drilling and spacing units should be formed for the production of oil and gas therefrom.

5. That Applicant suggests that a uniform drilling and spacing pattern may be achieved by dividing each governmental quarter section into 2 rectangular units by a line running North and South through the center thereof and that the permitted wells should be located with one in the center of the Northwest 40 acres of each quarter section and one in the center of the Southeast 40 acres of each quarter section; that tolerance of 150 feet on a line through the permitted location and only toward the center of the units should be allowed where surface conditions and obstructions make it undually hazardous and expensive to drill at the permitted locations.

6. That attached hereto and made a part hereof is a plat of the area sought to be spaced.

7. That a well location exception should be granted to all wells drilled or actually drilling at the time of the filing of this application and not located on the location prescribed by the Conservation Commission in any order pursuant to this application.

8. That a copy of this application was sent by registered mail, to the following:

Intex Oil Company, 717 Meadows Building, Dallas, Texas
Sinclair Oil & Gas Company, Box 521, Tulsa, Oklahoma
Aztec Oil & Gas Company, 920 Mercantile Securities Bldg., Dallas 1, Texas
Delhi-Taylor Oil Corporation, Oregon Tower Building, Dallas 1, Texas
Humble Oil & Refining Company, Box 1600, Midland, Texas
Skelly Oil Company, Box 1650, Tulsa, Oklahoma
Seaboard Oil Company, 1400 Continental Building, Dallas, Texas
Lion Oil Company, Lion Building, El Dorado, Arkansas

Midstates Oil Corporation, 7th Fl., Midstates Building, Tulsa, Oklahoma
Phillips Petroleum Company, Phillips Building, Bartlesville, Oklahoma
Cities Service Oil Company, Cities Service Building, Bartlesville, Oklahoma
The Texas Company, Box 1720, Ft. Worth, Texas
British-American Oil Producing Company, Box 749, Corrigan Tower Bldg., Dallas, Texas
J. F. Danglade, Lovington, New Mexico
J. E. Simmons, Lovington, New Mexico
Honolulu Oil Corporation, 204 West Illinois, Midland, Texas
Gulf Oil Corporation, Box 1290, Ft. Worth, Texas
Union Oil Company of California, 200 Union Oil Building, Midland, Texas

who are all of the parties interested in this application so far as is known to this Applicant.

WHEREFORE Applicant prays that this application be set for hearing, that notice thereof be given according to law and that upon hearing of said application, an order be entered herein establishing the Lane Lower Wolfcamp Field, and 80 acre drilling and spacing units for the development of and production of oil and gas from the Lower Wolfcamp, common source of supply, herein above described and for such other order as the Commission may deem proper.

Dated at Tulsa, Oklahoma this the 10th day of July, 1956.

SUNRAY MID-CONTINENT OIL COMPANY

By John D. Gassett
John D. Gassett, Attorney

By Burns H. Errebo
Burns H. Errebo, Attorney

CLASS OF SERVICE
This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION
TELEGRAM

W. P. MARSHALL, PRESIDENT

1201

SYMBOLS
DL=Day Letter
NL=Night Letter
LT=International Letter Telegram

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MAIN OFFICE OCC
1955 JUL 24 AM 11:44

P LA119 KB142 1956 JUL 24 AM 11 28 (20)

K TUA331 PD=FAX TULSA OKLA 24 1207PMC=

WARREN MANKIN, NEW MEXICO OIL CONSERVATION COMMISSION=

125 MABRY HALL CAPITOL BLDG TELEP ONE 3=7376 SANTA FE NNEX=

CONFIRMING YOUR TELEP ONE CONVERSATION WITH OUR MR. KELLOGG WE AGREE TO YOUR IDENTIFYING THE ZONES INVOLVED IN OUR APPLICATIONS FOR LANE FIELD AS WOLFCAMP AND PENNSYLVANIAN OIL RESPECTIVELY. WE HAVE NO OBJECTION TO YOUR CONSOLIDATING OUR APPLICATION FOR PURPOSES OF GIVING NOTICE=

SUNRAY MIDCONTINENT OIL CO BURNS H ERREBO=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

DEAN PENNSYLVANIAN POOL
PRODUCTION DATA (BBLS. & MCF)

Operator Lease & Well No.		1955 Dec.	1956 Jan.	Feb.	Mar.	Apr.	May	Per Well Totals
Sinclair State 735 #1	Oil	1941	7215	6759	7248	7090	6886	37139
	Gas	1544	12246	12185	12800	11970	11886	62631
	Wtr.	45	316	200	220	200	217	1198
Humble State "AJ" #1	Oil	1213	6906	6552	6759	6810	6882	35122
	Gas	20771	11830	11217	11592	11679	11803	78892
Magnolia Anderson Est. #1	Oil		7341	8013	8166	6866	6185	36571
	Gas		11342	11715	11939	30569	24096	89661
	Wtr.					60	62	122
Sinclair State 758 #1	Oil		933	6653	7216	7018	6877	28697
	Gas		1683	12600	12726	12130	11960	51099
Atlantic Federal Dow #1	Oil			6313	9426	9001	8757	33497
	Gas			7670	12508	11710	12093	43981
	Wtr.			13	19	9	9	50
Humble State "AJ" #2	Oil				2330	6789	6845	15964
	Gas				4210	12268	12369	28847
Magnolia Barbara Owens #1	Oil						3526	3526
	Gas						5060	5060
Tide Water State "AE" #1	Oil							Not Comp.
	Gas							
Humble State "AP" #1	Oil							Not Comp.
	Gas							
Monthly Field Totals	Oil	3154	22395	34290	41145	43574	45958	190516
	Gas	22315	37101	55387	65775	90326	89267	360171
	Wtr.	45	316	213	239	269	288	1370

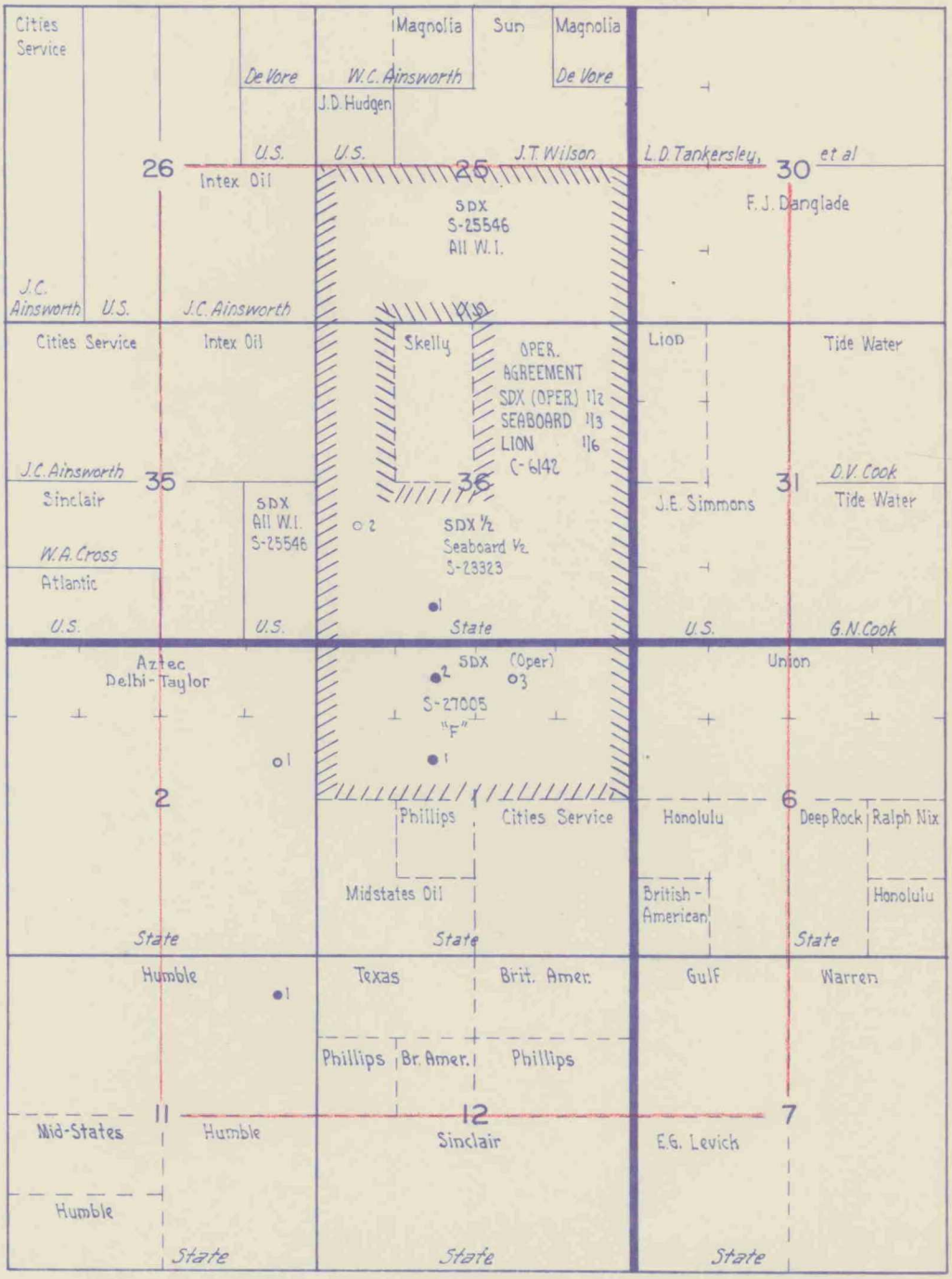
BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
SINCLAIR EXHIBIT No. 12
CASE 1102

R-33-E

R-34-E

T 9 S

T 10 S



PRODUCING FORMATION	SUNRAY OIL CORPORATION	PRODUCING LEASES
NAME / AVERAGE DEPTH	FIELD: LANE DISTRICT: N & W TEXAS GROUP TATUM COUNTY: LEA STATE: N. MEXICO SCALE 3000 1500 0 1500 3000 6000 FEET	STATE "F"

FORM 194

RGM CORE ANALYSIS LTD.

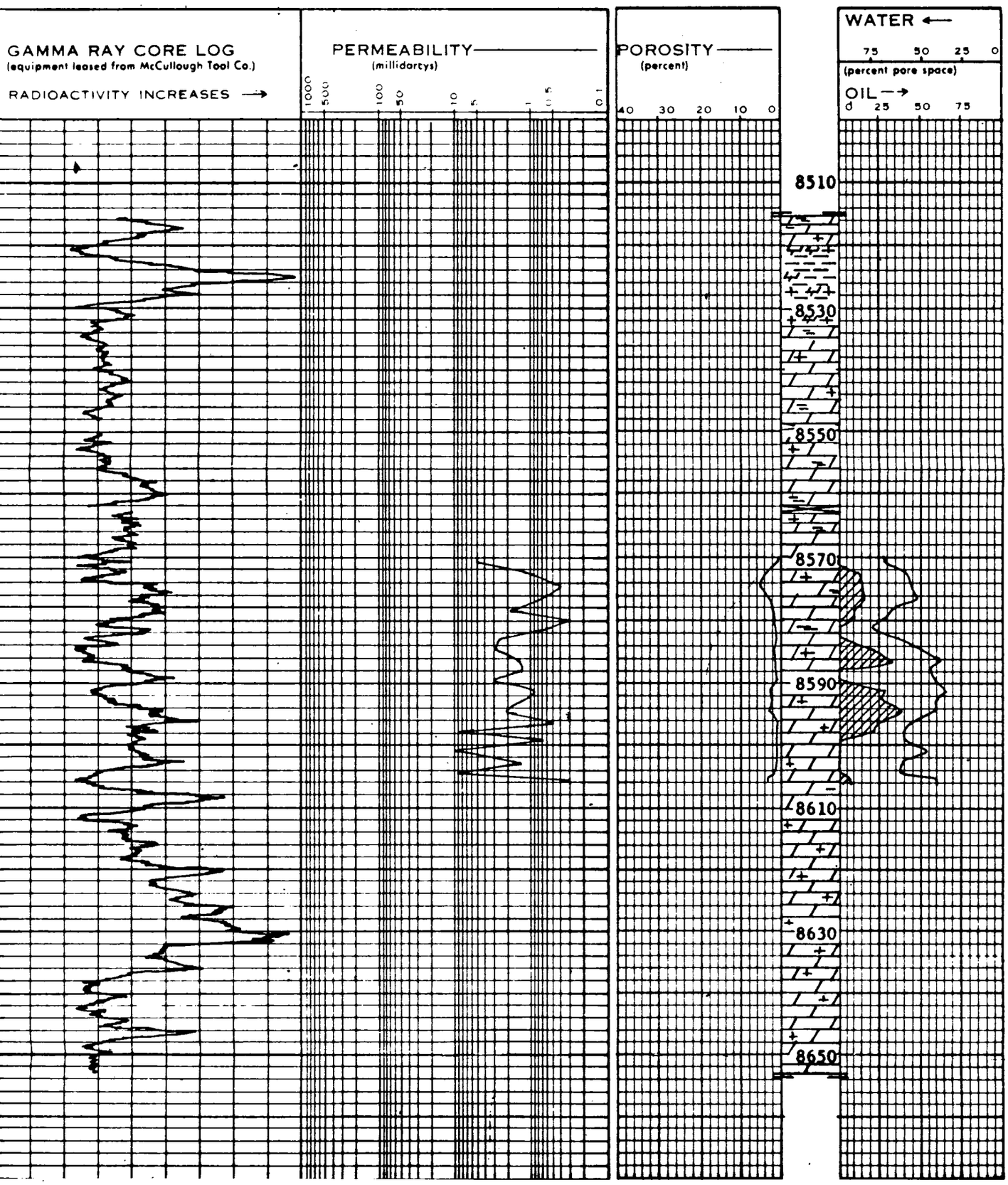
ABILENE, TEXAS — MONAHANS, TEXAS — HOBBS, NEW MEXICO
OKLAHOMA CITY, OKLAHOMA — MIDLAND, TEXAS

REPORT OF CORE ANALYSIS

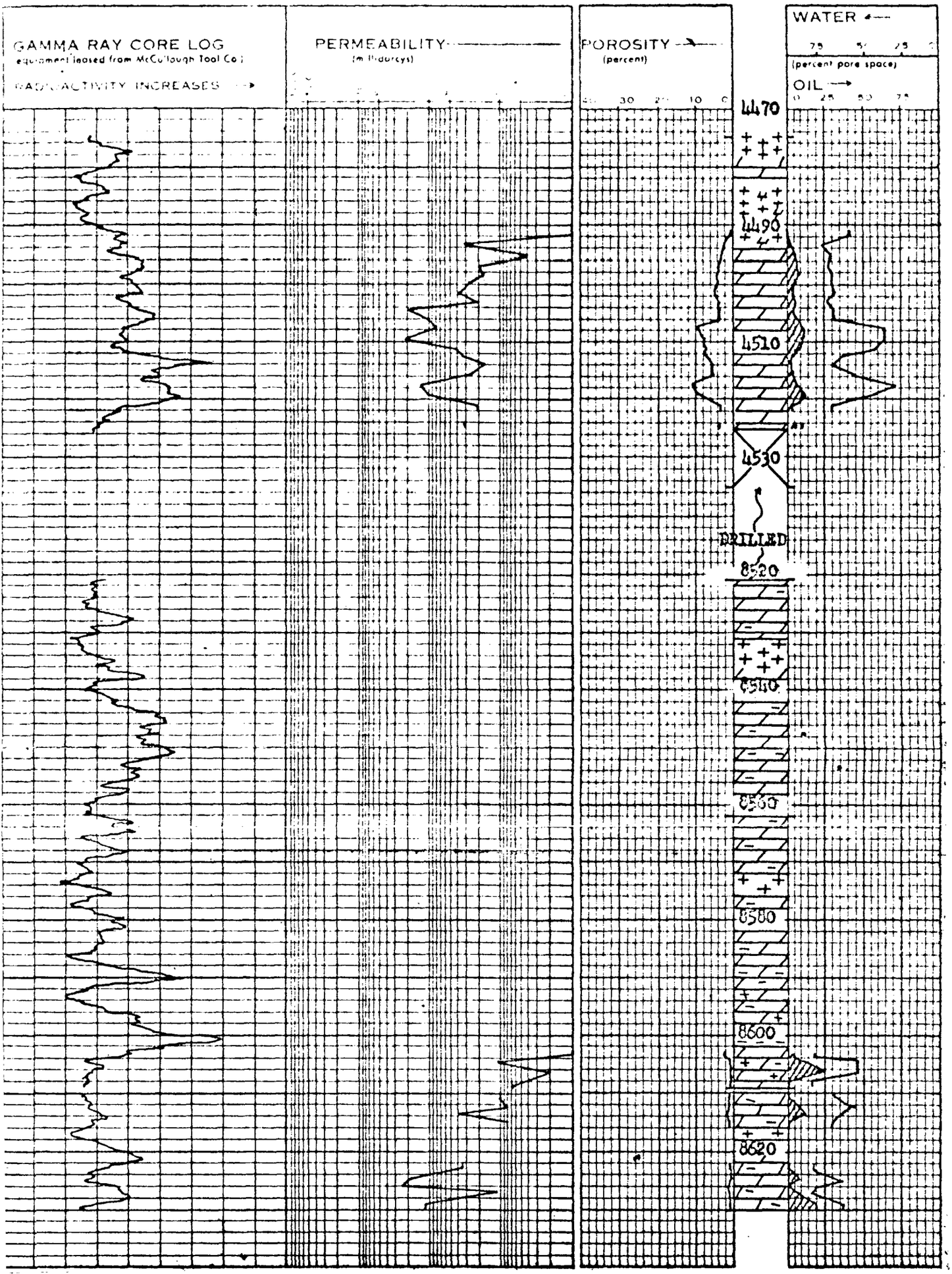
COMPANY Coastal States Gas Producing Company
FEE Skelly State WELL NO 1
FIELD Undesignated
LOCATION 1978' FNL & 1993' FWL, Sec.21, T9S, R33E
COUNTY Lea STATE New Mexico

ELEVATION 4376' KB
DRILLING FLUID Salt Water Base Mud/Oil Added
FORMATION Abo
TYPE OF CORE Diamond 3-1/2"
ANALYST JC, AB, BL SERVICE "C"
LAB NO H-498 DATE 10/19/63

GRAPHICAL PRESENTATION OF RESULTS



GRAPHICAL PRESENTATION OF RESULTS



COMPANY COASTAL STATES GAS PRODUCING COMPANY FILE NO. WP-3-2246

WELL SOUTHLAND MINERALS NO. 1-15 DATE 1-2-64 ENGRS. BOONE

FIELD FLYING "M" ABO FORMATION ABO ELEV. 4378' KB

COUNTY LEA STATE NEW MEXICO DRLG. FLD. WATER BASE MUD CORES DIAMOND 3 1/2"

LOCATION 660 FW & 1980 FSL S-15 T-17S-R-33E REMARKS SAMPLED AS DIRECTED BY CLIENT

COMPLETION COREGRAPH

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted) but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

SAND LIMESTONE CONGLOMERATE CHERT ANHYDRITE

SHALE DOLOMITE OOLITES

SAMPLE CHARACTERISTICS
F: Fractured L: Laminated FG; MG; CG: Type Grain Size S Stylolitic V: Vuggy

PROBABLE PRODUCTION
O: Oil W: Water G: Gas T: Transitional

TOTAL WATER
PERCENT PORE SPACE
75 50 25

1	8639.0-40.3	<0.1	<0.1	1.4	11.8	68.1	
2	8640.3-41.9	<0.1	<0.1	3.1	27.0	57.5	F
3	41.9-42.9	<0.1	<0.1	3.0	43.2	40.9	F
4	42.9-46.0	<0.1	<0.1	3.1	40.0	61.7	
5	8646.0-48.0	<0.1	<0.1	2.5	39.0	40.2	F
6	8665.0-66.0	<0.1	<0.1	2.9	24.1	45.5	
7	8669.0-70.0	<0.1	<0.1	0.9	8.8	75.8	

8620
8625
8626
DRILLER
8639
8640
8645
8650
8655
8660
8665
8670

HAROLD L WILLIAMS

PALEONTOLOGICAL LABORATORY
R. V. HOLLINGSWORTH
BOX 51 PHONE 2-4521
MIDLAND, TEXAS

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 5
CASE 1125

REPORT
January 15, 1956

LEA COUNTY, NEW MEXICO

Sunray Mid-Continent Oil Company
New Mexico-State No. 1-F Elev: 4262 DF
Sec. 1, T 10 S, R 33 E
1983.3 FNL & 1980 FWL of sec.
Comp: 12-10-55 TD: 12,637 PB: 9693 Producer

Summary and Suggested "Markers"

8860: Top Wolfcamp limestone, by lithology
8860-9680: Wolfcamp fusulines
8860-9450: Hueco types
8860-9120: Upper Hueco types
9580-9680: Bursum types
9747: Top Cisco series, by lithology
9750-10,190: Cisco fusulines
9750-9765: Lower Thrifty types
9767-10,190: Graham types
10,220: Top Canyon series, by lithology
10,220-10,410: Canyon fusulines
10,540: Top Strawn series, by lithology
10,550-11,100: Strawn fusulines
10,580-11,100: Lower Strawn types
11,100: Top Atoka series, by lithology
11,170-11,490: Atoka fusulines
By lithology only:
11,570: Top Morrow(?) series
11,865: Base Morrow(?) series
11,865: Top Mississippian limestone
12,360: Top "Kinderhook" zone
12,530: Top Woodford shale
12,600: Top Fusselman dolomite
12,637 TD: In Fusselman dolomite

Samples examined from 8600 to 12,637 feet, total depth.
Two sets of samples were examined from 11,300 to 11,865 feet.
Core cuts by courtesy of the Lion Oil Company.
¢ - Denotes core cuts.

Detailed Report

8600-8860: No fossils found

8860: Suggested top Wolfcamp limestone, by lithology

Lea County - Sunray Mid-Continent Oil, New Mexico-State No. 1-F

8860-9680: Wolfcamp fusulines
8860-9450: Hueco types
8860-9120: Upper Hueco types
8860-8950: Schwagerina - upper Hueco types
Schubertella @ 8890-8900 & 8930-50
Triticites @ 8890-8900
9040-9050: Schubertella; Schwagerina
9090-9100: Schwagerina
9110-9120: Schubertella; Schwagerina - upper Hueco types
9130-9140: Schwagerina - nondescript Hueco types
9150-9160: Schwagerina; Triticites
9210-9240: Schwagerina
9320-9330: Schwagerina
9390-9400: Triticites
9440-9450: Triticites - nondescript Hueco types
9460-9470: Triticites - nondescript Wolfcamp types
9500-9520: Schwagerina; Triticites
9530-9540: Oketaella; Schwagerina
9540-9570: Triticites - nondescript Wolfcamp types
9580-9680: Bursum types
9580-9620: Schwagerina; Triticites - nondescript Bursum types
9630-9680: Triticites - nondescript Bursum types

9680-9750: No usable fossils found

±9747: Suggested top Cisco series, by lithology

9750-10,190: Virgil (Cisco) fusulines
9750-9765: Lower Thrifty types
±9750-9761: Triticites - lower Thrifty types
±9761-9765: Dunbarinella - lower Thrifty types
9767-10,190: Graham types
±9767-9776: Triticites cf. Wayland types
9780-9790: Triticites - nondescript Graham types
9880-9970: Triticites
9970-9990: Dunbarinella; Triticites
10,010-10,100: Triticites
10,140-10,190: Triticites - nondescript Graham types

10,190-10,220: No usable fossils found

10,220: Suggested top Canyon series, by lithology

10,220-10,410: Missouri (Canyon) fusulines
10,220-10,230: Triticites - nondescript Canyon types
10,270-10,280: Triticites
10,360-10,370: Triticites
10,400-10,410: Triticites - nondescript Canyon types

10,410-10,550: No fossils found

Lea County - Sunray Mid-Continent Oil, New Mexico-State No. 1-F

10,540: Suggested top Strawn series, by lithology

10,550-11,100: Des Moines (Strawn) fusulines
- 10,550-10,560: Fusulina - nondescript Strawn types
- 10,580-11,100: Lower Strawn types
  - 10,580-10,590: Fusulina - lower Strawn types
  - 10,690-10,710: Fusulina
  - 10,720-10,730: Fusulina; "Fusulinella-Fusulina"
  - 10,780-10,810: Fusulina
  - 10,820-10,830: Fusulina; Wedekindellina
  - 10,860-10,870: Fusulina
  - 10,940-10,950: Wedekindellina
  - 10,960-10,970: "Fusulinella-Fusulina"; Wedekindellina
  - 11,010-11,030: Eoschubertella; Fusulina
  - 11,080-11,100: Eoschubertella; Fusulina - lower Strawn types

11,100: Suggested top Atoka series, by lithology

11,100-11,170: Few unusable fusuline fragments

11,170-11,490: Atoka fusulines
- 11,170-11,180: Fusulinella - Atoka in age
- 11,180-11,200: Eoschubertella
- 11,230-11,260: Fusulinella
- 11,320-11,330: Fusulinella
- 11,410-11,420: Fusulinella
- 11,480-11,490: Fusulinella - Atoka in age

11,490-12,637 TD: Fossils only as noted below.

11,570: Suggested top Morrow(?) series, by lithology
11,865: Suggested base Morrow(?) series, by lithology

11,865-12,530: Mississippian limestone
- 11,865-11,900: Limestone, very pale orange to grayish orange very fine to fine paurograined, slightly oolitic, with little white dull opaque chert included.
- 11,900-11,920: Oolitic limestone, grayish orange to pale yellowish brown micrograined to very fine paurograined, with little very light gray dull opaque chert included.
- 11,920-11,950: Oolitic limestone, yellowish gray to pale yellowish brown very fine paurograined, "silty"-textured, finely oolitic, with little chert as above included.
- 11,950-11,970: Oolitic limestone, very pale orange to grayish orange very fine paurograined, with little light brownish gray to medium gray dull to subvitreous translucent to opaque chert.
- 11,970-12,000: Cherty limestone, very pale orange to moderate yellowish brown micrograined to very fine paurograined, with some white to very light gray dull opaque chert included.

Lea County - Sunray Mid-Continent Oil, New Mexico-State No. 1-F

11,865-12,530: Mississippian limestone.....(Con't.)
12,000-12,140: Limestone, very pale orange to grayish orange micrograined to very fine paurograined, with little bluish white to very light gray dull to subvitreous translucent to opaque chert.
Thin interbeds of yellowish gray very fine paurograined "silty"-textured limestone in 12,030-140.
12,140-12,240: Argillaceous limestone, pale yellowish brown to moderate brown very fine to fine paurograined, slightly siliceous, with little very light gray to pale yellowish brown dull opaque chert included.
12,240-12,360: Argillaceous limestone, dark to dusky yellowish brown micrograined to very fine paurograined, slightly siliceous, with little light gray, gray-speckled, dull to subvitreous translucent to opaque chert included.
12,360-12,450: Argillaceous limestone, light olive gray to greenish gray micrograined to very fine paurograined, with streaks of light gray to light greenish gray soft platy slightly calcareous shale included.
12,450-12,490: Silt, yellowish gray to light gray fine- to medium-grained, slightly calcareous, with streaks of shale as above.
12,490-12,530: Silt, yellowish gray to pale yellowish brown fine- to medium-grained, very slightly calcareous, with streaks of shale as above included.
Correlation and Age: Based on lithology, stratigraphic position, and regional correlations. Strata from 12,360 to 12,530 feet are lithologically Kinderhook-like.

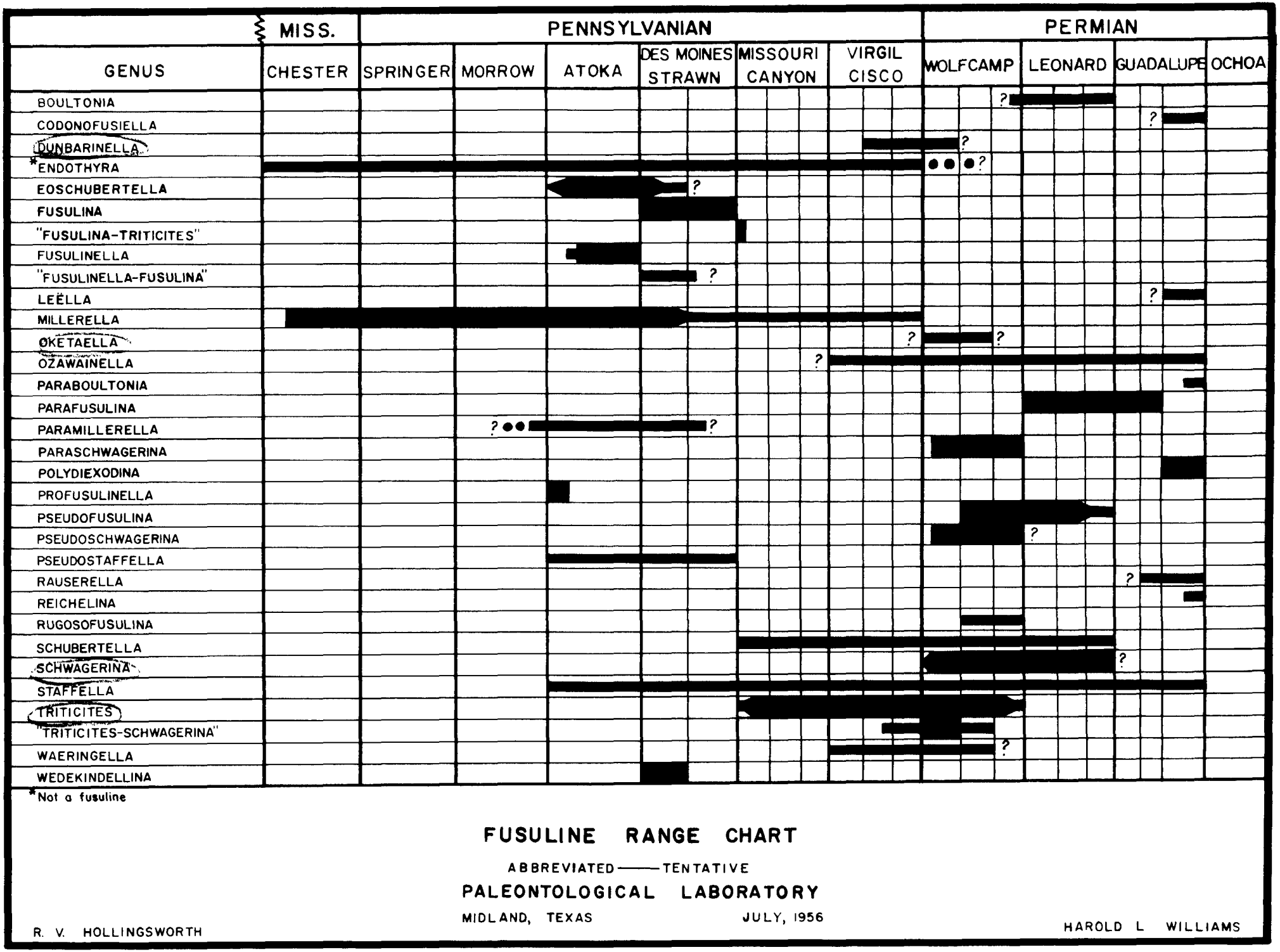
12,530-12,600: Woodford shale.....Mississippian(?)
12,530-12,600: Shale, dusky brown to brownish black, non-calcareous, with few black resinous fine-sized spores & little dark brown dull opaque chert included.
Streaks of very pale orange fine-grained silt in 12,580-600.
Correlation and Age: Based on lithology, presence of spores, stratigraphic position, and regional correlations.

12,600-12,637 TD: Fusselman dolomite.....Silurian
12,600-12,637 TD: Dolomite, white to very light gray fine paurograined to very fine mesograined, rhombic, with little light gray to light bluish gray dull to vitreous translucent to opaque chert included.
Correlation and Age: Based on lithology, stratigraphic position, and regional correlations.

Samples examined from 8600 to 12,637 feet, total depth.
Two sets of samples were examined from 11,300 to 11,865 feet.
Core cuts by courtesy of the Lion Oil Company.

R. V. HOLLINGSWORTH

RVH:emk



*Not a fusuline

FUSULINE RANGE CHART

ABBREVIATED —— TENTATIVE

PALEONTOLOGICAL LABORATORY

MIDLAND, TEXAS JULY, 1956

R. V. HOLLINGSWORTH

HAROLD L WILLIAMS

AVERAGE RESERVOIR CHARACTERISTICS
LANE FIELD, LEA COUNTY, NEW MEXICO

	WOLFCAMP	PENNSYLVANIAN
Subsurface Depth, Feet	-5,367	-5,546
Porosity, Percent	10.5	4.9
Permeability, Md.	373	8.7
Feet Cored		
N. M. State F-1	---	36
N. M. State F-2	13.7	38
Connate Water, Percent	20%	30%
Oil Gravity, °API	48	49
Original Reservoir Pressure, psia	3,539	3,564
Solution Gas-Oil Ratio, cu.ft./bbl.	1,638	1,638
Bubble Point Pressure, psia	3,405	3,405
Reservoir Temperature, °F	162	163
Formation Volume Factor, Original	1.822	1.820
Cumulative Recovery, 8-1-56	49,489	17,366
Original Stock Tank Oil, bbls./ac.ft.	370	146

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 6
CASE 1125

BEFORE THE
OIL CONSERV... COMMISSION
SANTA FE, N.M.
7
CASE 1125

WELL TEST DATA
LANE FIELD, LEA COUNTY, NEW MEXICO

WOLFCAMP

Operator	Lease	Well No.	Date of Test	Time Tested	Production			Choke Size	GOR
					Water Bbls/Day	Oil Bbls/Day	Gas MCF/Day		
Sunray Mid-Continent	N. M. State F	1	12-11-55	24 hrs.	0	341	682	14/64	2,000
"	"	1	3-28-56	24 hrs.	0	162	321	8/64	1,980
"	"	1	6- 9-56	6 hrs.	0	203	300	11/64	1,475
"	"	1	7- 1-56	4 hrs.	0	337	420	-	1,245
"	"	1	7-29-56	24 hrs.	0	181.81	238	10/64	1,309
"	"	1	7-28-56	24 hrs.	0	191.59	244	10/64	1,272
"	"	1	7-31-56	24 hrs.	0	174		9/64	1,709
Sunray Mid-Continent	N. M. State I	1	7-14-56	3 hrs.	0	198	337	13/64	1,702
Humble Oil & Refining	N. M. State AM	1	3-31-56	24 hrs.	627	54.1	93	Pump	1,715
"	"	1	4- 8-56	23½ hrs.	403	62.8	134	Pump	2,131
"	"	1	4-20-56	24 hrs.	346	81.2	154	Pump	1,895

PENNSYLVANIAN

Operator	Lease	Well No.	Date of Test	Time Tested	Production			Choke Size	GOR
					Water Bbls/Day	Oil Bbls/Day	Gas MCF/Day		
Sunray Mid-Continent	N. M. State F	2	4- 9-56	24 hrs.	0	299	478	12/64	1,600
"	"	2	6- 9-56	4 hrs.	0	188	283	-	1,504
"	"	2	7- 1-56	4 hrs.	0	236	338	13/64	1,432
"	"	2	7-27-56	24 hrs.	0	187.33	253	11/64	1,353
"	"	2	7-28-56	24 hrs.	0	179.06	253.8	10/64	1,408
"	"	2	7-31-56	24 hrs.	0	199.72		10/64	1,251
Sunray Mid-Continent	N. M. State I	1	7- 9-56	4½ hrs.	0	345	442	13/64	1,281

BOTTOM HOLE PRESSURE DATA
IANE FIELD, LEA COUNTY, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 6
CASE 1125

WOLFCAMP

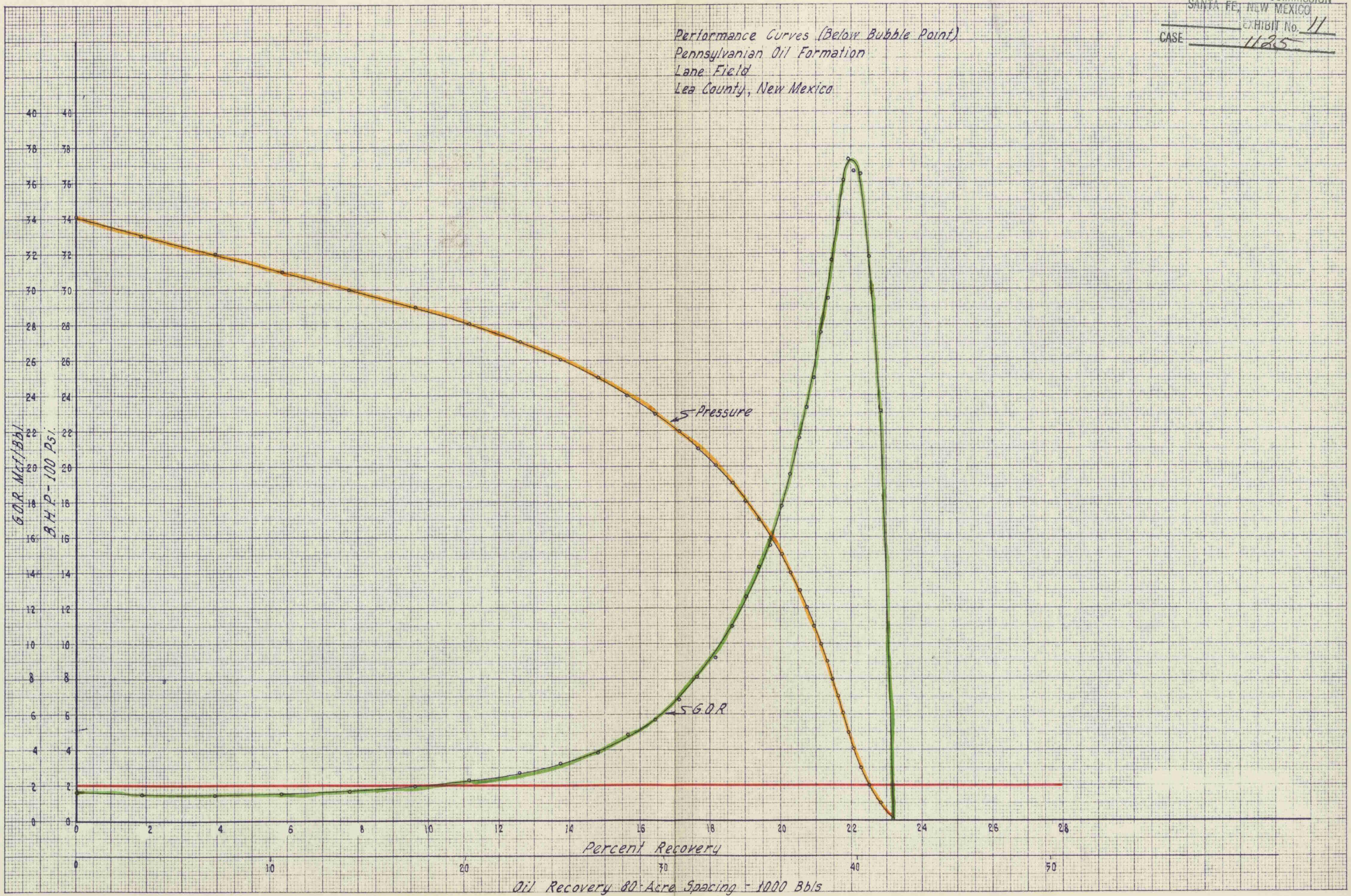
Operator	Lease	Well No.	Test Date	S.I. Time (hrs.)	Datum	BHP @ Datum PSIG
Sunray Mid-Continent	N. M. State F	1	12-31-55	168	-5,387	3,516
"	"	1	1-30-56	168	-5,387	3,512
"	"	1	4-17-56	49½	-5,387	3,487
"	"	1	6- 9-56	48	-5,387	3,479
"	"	1	7- 1-56	144	-5,387	3,479
"	"	1	8- 8-56	48	-5,387	3,514
Sunray Mid-Continent	N. M. State I	1	7-11-56	48	-5,387	3,510
"	"	1	8- 2-56	24	-5,387	3,514
Humble Oil & Refining	N. M. State AM	1	2,25-56	100	-5,387	3,466

PENNSYLVANIAN

Sunray Mid-Continent	N. M. State F	2	4-17-56	51½	-5,510	3,537
"	"	2	6- 9-56	25¼	-5,510	3,413
"	"	2	7- 1-56	144	-5,510	3,388
"	"	2	8- 8-56	47	-5,510	3,457
Sunray Mid-Continent	N. M. State I	1	7-11-56	48	-5,510	3,382
"	"	1	8- 2-56	24	-5,510	3,347

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 11
CASE 1125

Performance Curves (Below Bubble Point)
Pennsylvanian Oil Formation
Lane Field
Lea County, New Mexico



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PRINTED IN U.S.A.
NO. 419. MILLIMETERS. 380 BY 250 DIVISIONS.

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 10
CASE 1185

CODEX BOOK COMPANY, INC. NORWOOD, MASSACHUSETTS.
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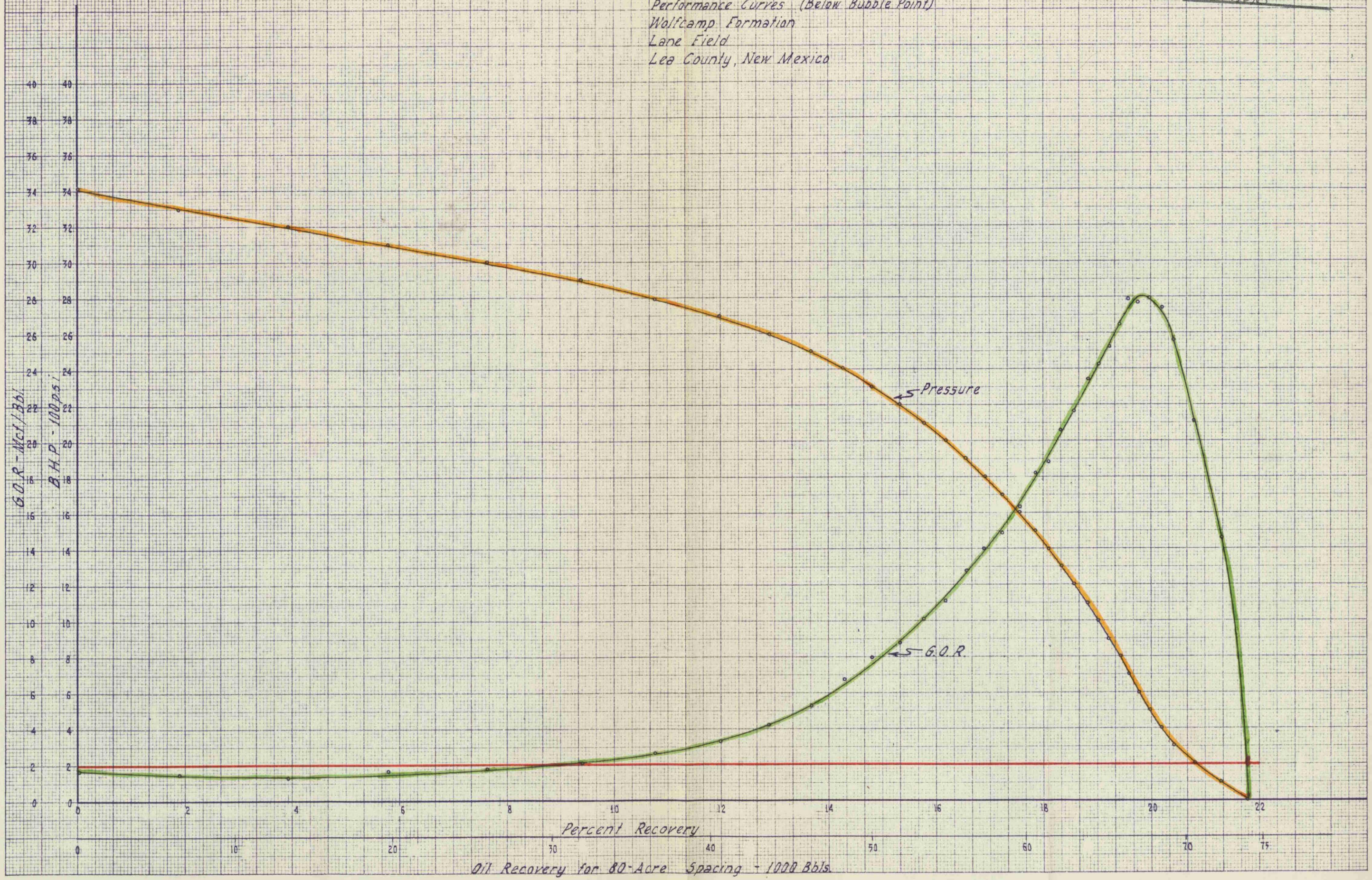
Performance Curves (Below Bubble Point)
Wolfcamp Formation
Lane Field
Lea County, New Mexico



BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 12
CASE 1125

ECONOMIC STUDY
LANE FIELD, LEA COUNTY, NEW MEXICO

	Wolfcamp	Penn.	Single Completion: Wolfcamp 40 Acres	Single Completion: Wolfcamp 80 Acres	Single Completion: Pennsylvanian 40 Acres	Single Completion: Pennsylvanian 80 Acres	Dual Completion 40 Acres	Dual Completion 80 Acres
Orig. ST Oil in Place, Bbls/acre foot @ BPP	369.2	145.5						
Average Net Pay Thickness, feet	11.5	15.5						
Orig. ST Oil in Place, Bbls/acre @ BPP	4246	2256						
Recovery Factor, Percent Oil in Place	20.8	22.5						
ST Oil in Place, Bbls			169,840	339,680	90,240	180,480	260,080	520,160
Recoverable Oil, Bbls			35,327	70,653	20,304	40,608	55,631	111,261
Recoverable Gas, Mcf			246,205	492,401	130,815	261,629	377,020	691,030
Sales Price:								
Oil, Dollars/Bbl	$2.83	$2.83						
Gas, Dollars/Mcf	$ .08	$ .08						
Gross Value Oil			$ 99,975	$199,947	$ 57,460	$114,920	$157,436	$314,869
Gross Value Gas			19,696	39,392	10,465	20,930	30,161	55,282
Gross Value of Hydrocarbons			$119,671	$239,339	$ 67,925	$135,850	$187,597	$370,151
Expenses:								
Development Cost			$172,000	$172,000	$172,000	$172,000	$192,000	$192,000
Operating Cost			14,131	21,196	8,122	12,182	19,470	27,815
Royalty	1/8		14,959	29,917	8,490	16,981	23,449	46,269
Direct Taxes			5,399	10,785	3,100	6,199	8,500	16,763
Total Expense			$206,489	$233,898	$191,712	$207,362	$243,419	$282,847
Net Profit (Or Loss) To Operator			($ 86,816)	$ 5,441	($123,787)	($ 71,512)	($ 55,822)	$ 87,304
(Operating Cost/Bbl			$ 0.40	$ 0.30	$ 0.40	$ 0.30	$ 0.35	$ 0.25
(Taxes on Oil/Bbl			$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13
(Taxes on Gas (on total value)			4.4%	4.4%	4.4%	4.4%	4.4%	4.4%

LANE FIELD, LEA COUNTY, NEW MEXICO

PERFORMANCE EQUATION
(ABOVE BUBBLE POINT)

1. PRESSURE DECLINE = $\frac{\text{CUMULATIVE PRODUCTION}}{\text{(AREA)(OIL IN PLACE/ACRE)(EXPANSION FACTOR)}}$

$$\Delta P = \frac{n}{(A)(N)(B)}$$

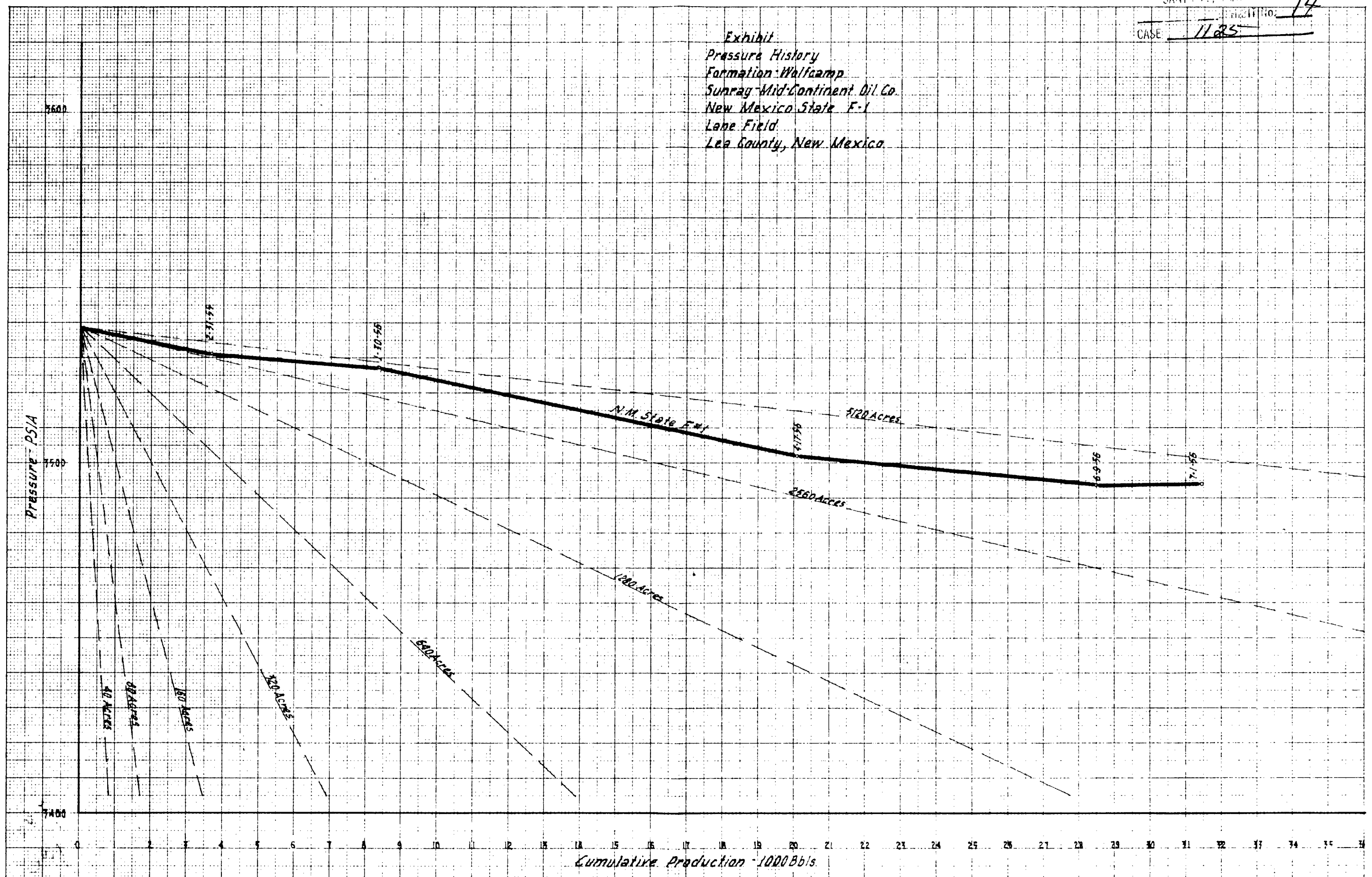
2. AREA = $\frac{\text{CUMULATIVE PRODUCTION}}{\text{(PRESSURE DECLINE)(OIL IN PLACE/ACRE)(EXPANSION FACTOR)}}$

$$A = \frac{n}{(\Delta P)(N)(B)}$$

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 10
CASE 1125

A = DRAINAGE AREA IN ACRES
B = COMPOSITE EXPANSION FACTOR OF RESERVOIR OIL, WATER, AND ROCK. BBL./BBL./PSI.
n = CUMULATIVE OIL PRODUCED - BBLS.
N = ORIGINAL STOCK TANK OIL IN PLACE/ACRE - BBLS./ACRE
ΔP = PRESSURE DECLINE FROM ORIGINAL CONDITIONS - PSI

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 14
CASE 1185



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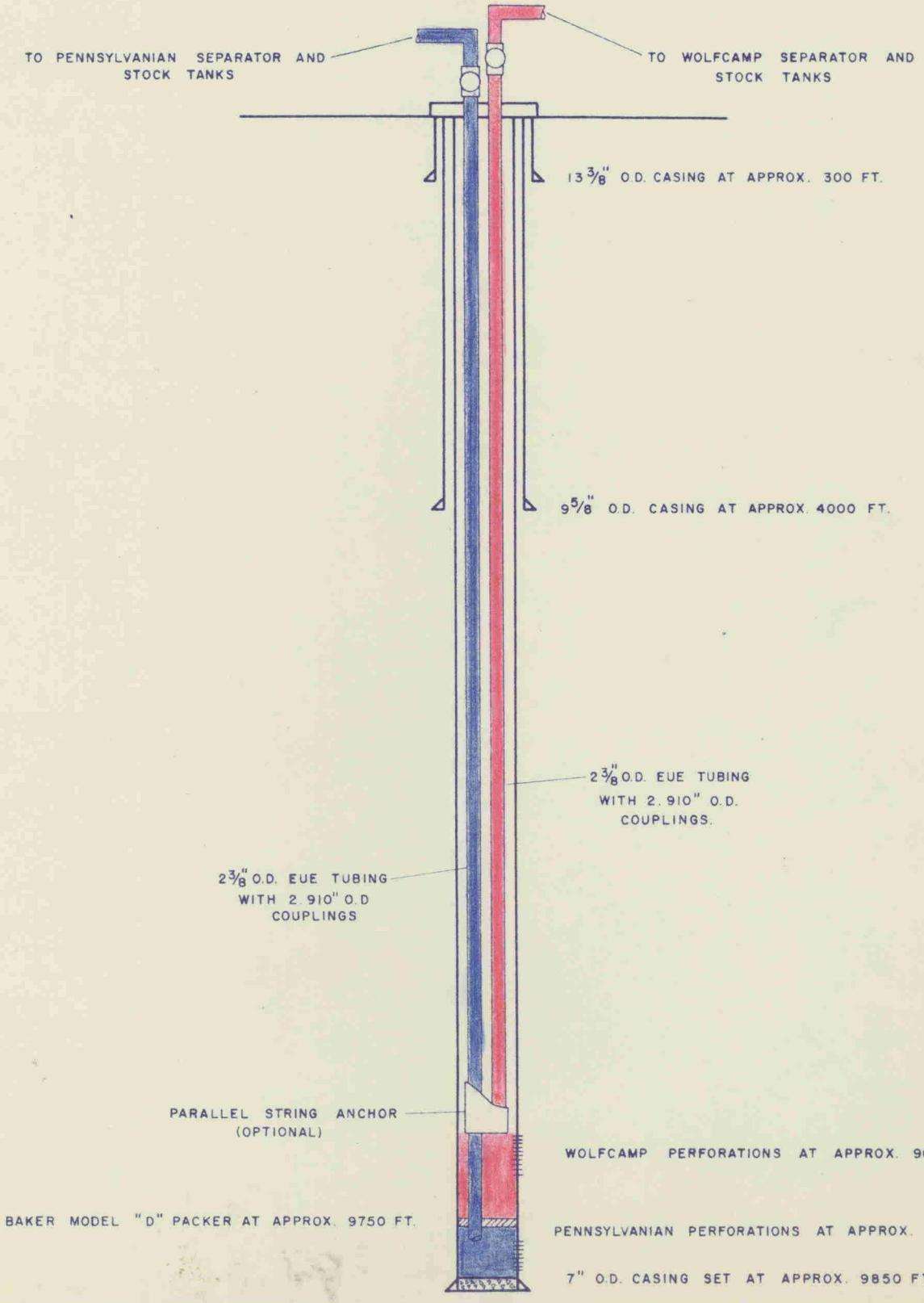
SUNRAY MID-CONTINENT OIL CO.

PROPOSED DUAL COMPLETION

WOLFCAMP AND PENNSYLVANIAN ZONES

LEA COUNTY, NEW MEXICO

WOLFCAMP AND PENNSYLVANIAN ZONES FLOWING



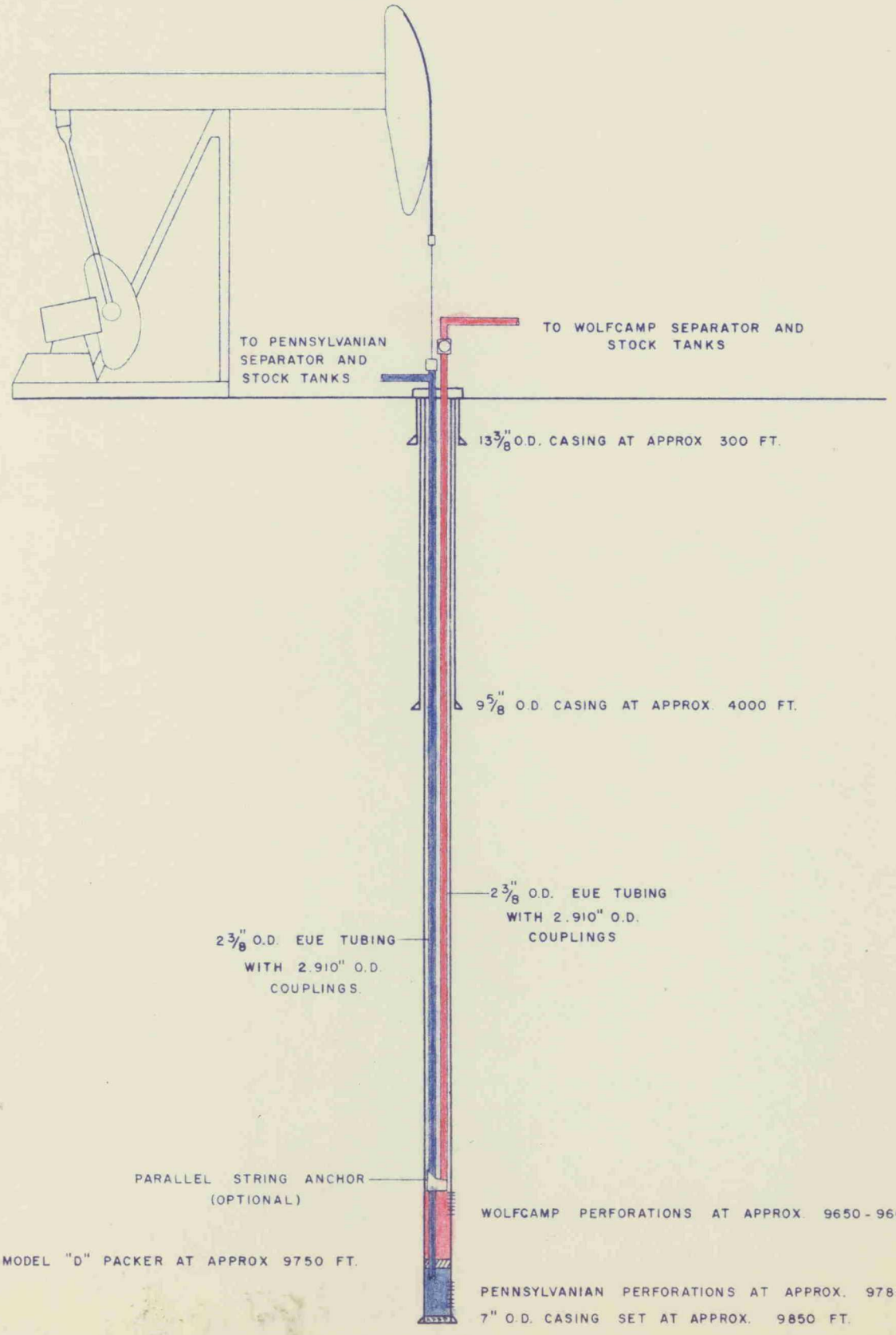
SUNRAY MID-CONTINENT OIL CO.

PROPOSED DUAL COMPLETION

WOLFCAMP AND PENNSYLVANIAN ZONES

LEA COUNTY, NEW MEXICO

WOLFCAMP ZONE FLOWING AND PENNSYLVANIAN ZONE PUMPING



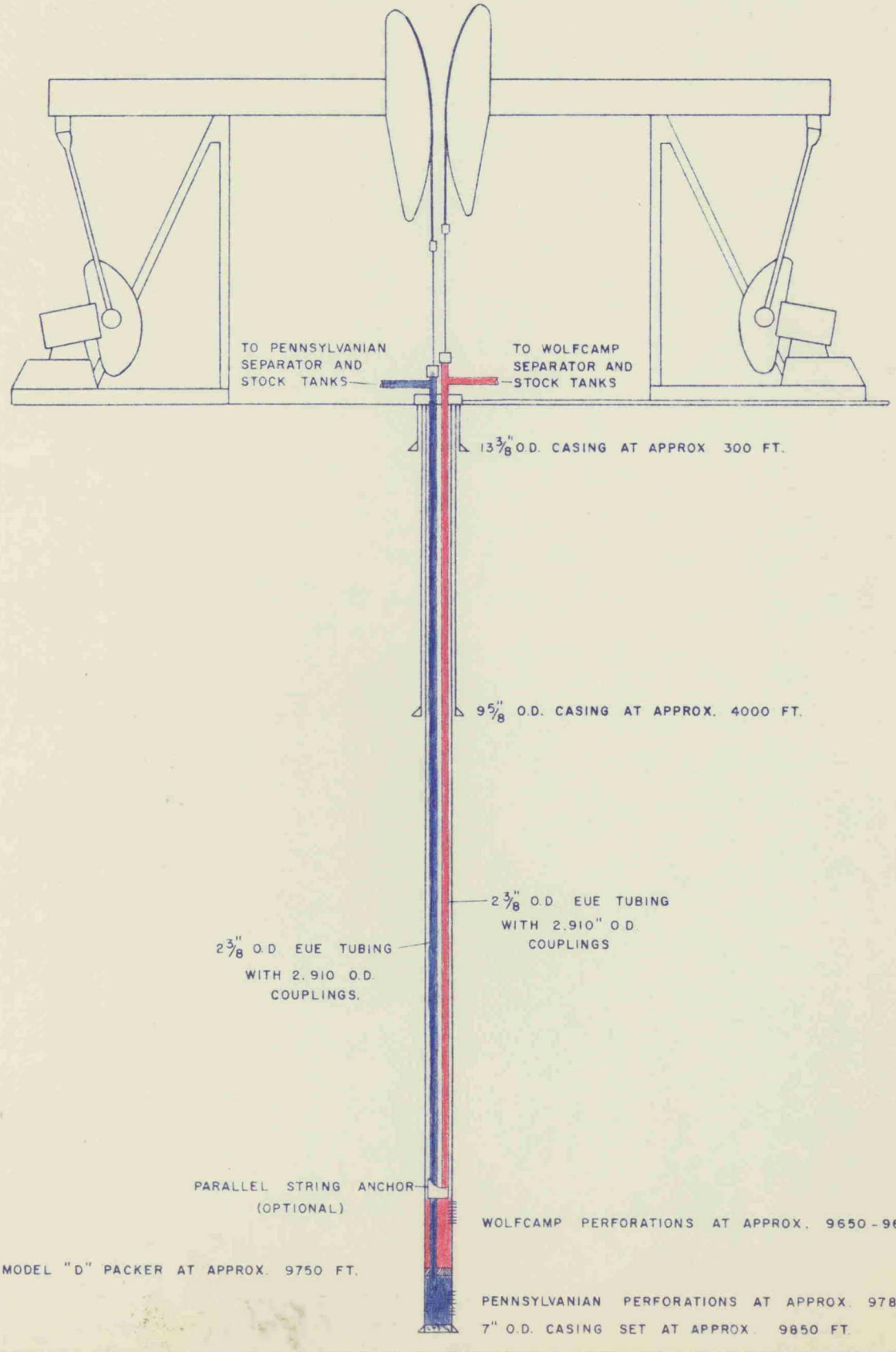
SUNRAY MID-CONTINENT OIL CO.

PROPOSED DUAL COMPLETION

WOLFCAMP AND PENNSYLVANIAN ZONES

LEA COUNTY, NEW MEXICO

WOLFCAMP AND PENNSYLVANIAN ZONES PUMPING



SUNRAY MID-CONTINENT OIL CO.

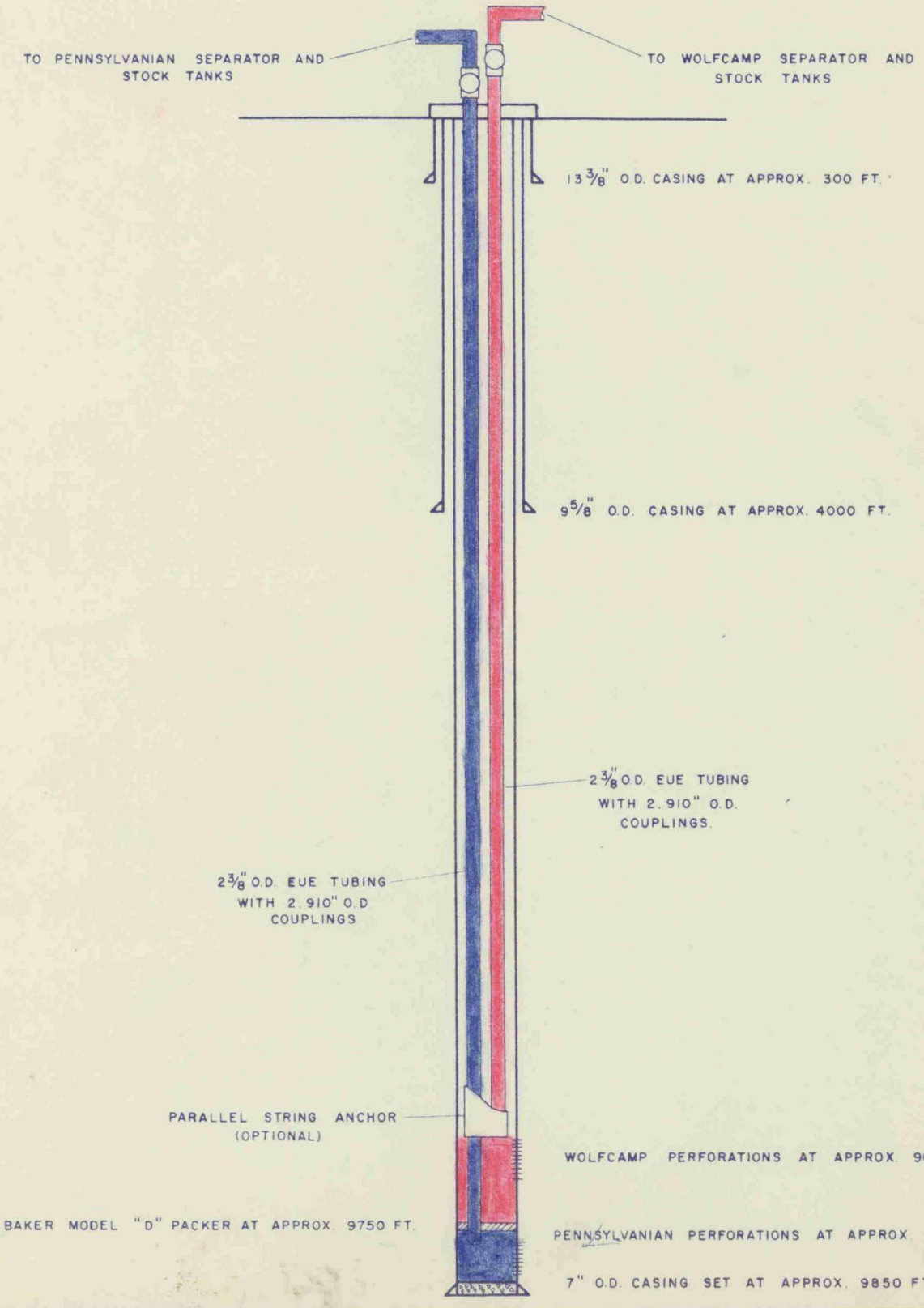
PROPOSED DUAL COMPLETION

WOLFCAMP AND PENNSYLVANIAN ZONES

LEA COUNTY, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 16
CASE 1125

WOLFCAMP AND PENNSYLVANIAN ZONES FLOWING



SUNRAY MID-CONTINENT OIL CO.

PROPOSED DUAL COMPLETION

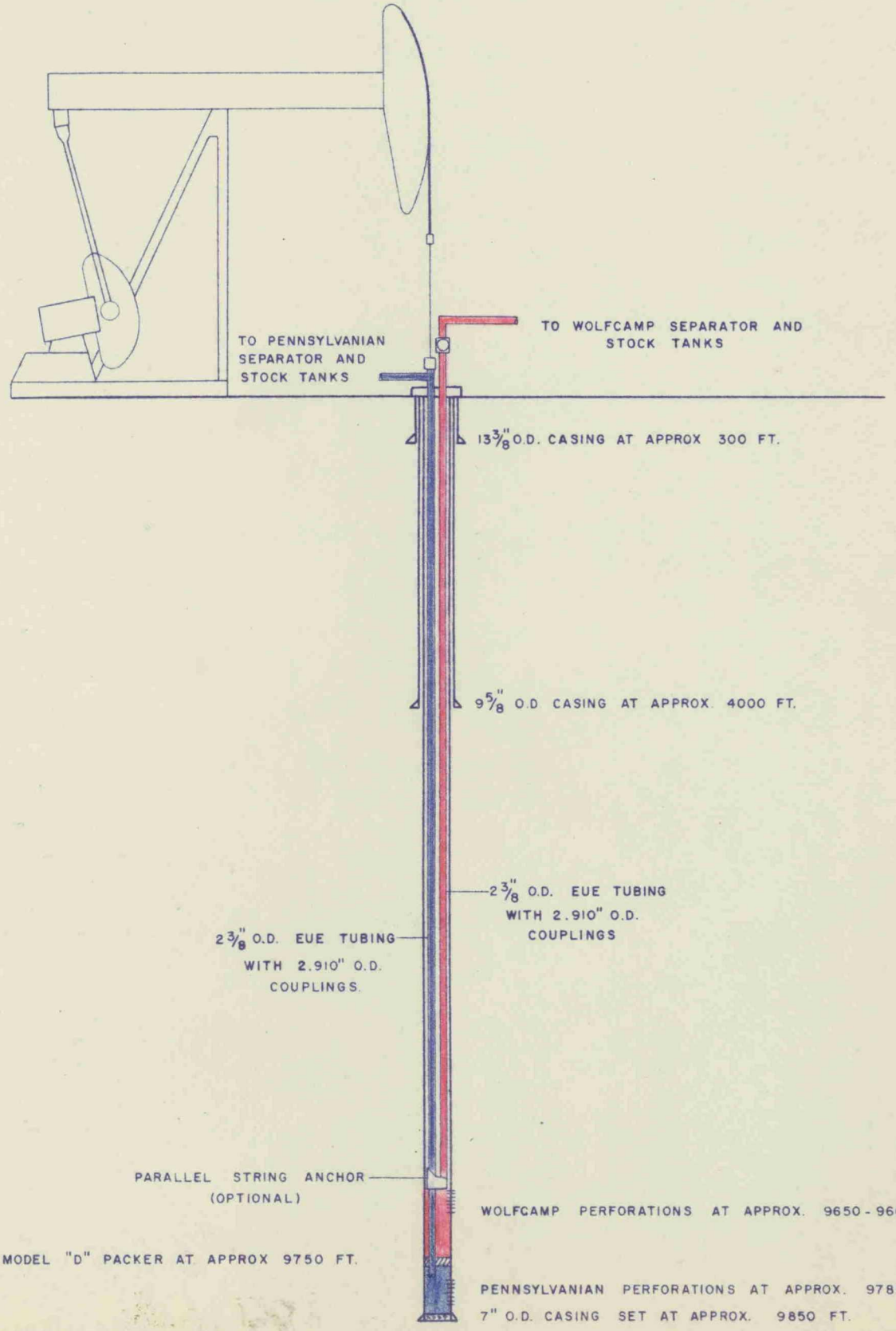
WOLFCAMP AND PENNSYLVANIAN ZONES

LEA COUNTY, NEW MEXICO

17

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 17
CASE 1125

WOLFCAMP ZONE FLOWING AND PENNSYLVANIAN ZONE PUMPING



SUNRAY MID-CONTINENT OIL CO.

PROPOSED DUAL COMPLETION

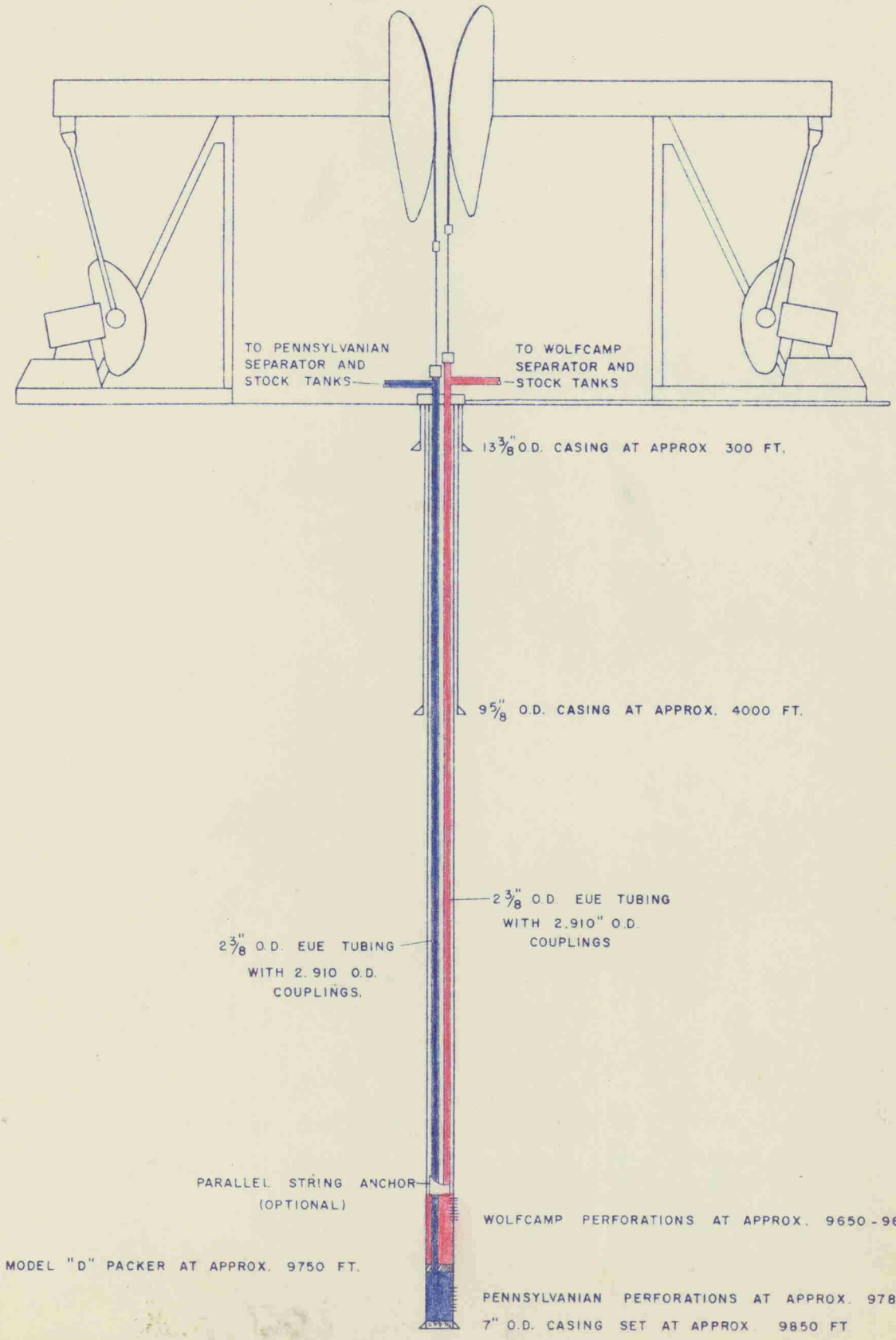
WOLFCAMP AND PENNSYLVANIAN ZONES

LEA COUNTY, NEW MEXICO

18

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 18
CASE 1125

WOLFCAMP AND PENNSYLVANIAN ZONES PUMPING



Statement to be read into Record

Case #1125

Prepared by H.N. Wade, The Texas Company.

The Texas Company believes that the testimony presented by Sunray Mid-Continent indicates that dual completions between the Wolfcamp and Pennsylvanian formations, and development of these formations on 80 acre spacing, are justified in the Lane Field. Therefore, The Texas Company concurs with Sunray Mid-Continent in requesting dual completion privileges and 80 acre development in this field.

SEABOARD OIL COMPANY
MID-CONTINENT DIVISION
CONTINENTAL BUILDING
DALLAS 1, TEXAS

NMOC # 1125

August 10, 1956

41-7 Field Rules
Lane Field

New Mexico Oil Conservation Commission
125 Mabry Hall
Capitol Building
Santa Fe, New Mexico

Gentlemen:

Seaboard Oil Company is a working interest owner in the leases operated by Sunray Mid-Continent Oil Company in the Lane Field, which may be described as all of Section 36 with the exception of the east half of the northwest quarter, Township 9 south, Range 33 east, and the north half of Section 1, Township 10 south, Range 33 east, Lea County, New Mexico.

Seaboard Oil Company concurs with Sunray Mid-Continent Oil Company's application to develop the Wolfcamp formation on 80-acre spacing, to develop the Cisco formation on 80-acre spacing, and to dually complete the wells by means of twin strings of tubing. Seaboard Oil Company believes this to be the most feasible method to develop these two reservoirs and strongly urges the Commission to establish such rules as will be applicable to grant Sunray Mid-Continent's applications at the Hearing on August 15, 1956.

Yours very truly,

SEABOARD OIL COMPANY

By: Ebb White, Manager
Production Department

PR:mj

cc: Mr. J. H. Douma
Sunray Mid-Continent Oil Co.
Box 2039
Tulsa, Oklahoma

cc: Mr. A. W. Wood
Lion Oil Company
Midland, Texas

CITIES SERVICE OIL COMPANY

CITIES SERVICE BUILDING
BARTLESVILLE, OKLAHOMA

8 August 1956

Oil Conservation Commission
State of New Mexico
P. O. Box 871
Santa Fe, New Mexico

Re: Case No. 1125-Application of Sunray Mid-Continent Oil Company to extend the Lane-Wolfcamp Pool to establish the Lane-Pennsylvanian Pool, to provide for 80-acre drilling and spacing units in said Pools, and for a blanket dual completion rule for said Pools.

Gentlemen:

We are in receipt of copies of the applications filed in the above captioned matter, and Docket No. 27-56 setting it for hearing on August 15, 1956. Cities Service Oil Company has a leasehold interest within the proposed delineated area for the Lane-Wolfcamp and Lane-Pennsylvanian Pools.

It is our opinion, based on the data available to us and our experience with similar type production in other areas, that a development program of one well to 80 acres will adequately and efficiently drain these respective pools. However, in the interests of greatest ultimate recovery we do not subscribe to a frozen development pattern. Experience has proven that more oil can ultimately be produced when more latitude is permitted in the selection of drilling sites so that structural features can be taken advantage of to a greater extent. In this connection we recommend that 80-acre drilling and spacing units be established by dividing quarter sections into either North and South or East and West halves, at the option of the operator, and that the location of the permitted well for each unit be restricted only to a distance not nearer than 330 feet to the unit boundary line. The incorporation of such a rule would also tend to expedite development, and eliminate unnecessary spacing exception hearings.

The policy of this company with respect to the dual completion of wells is the same throughout its entire area of operations. We believe that

in almost all fields comprising more than one oil producing reservoir, oil-oil dual completions are feasible and practical. In our judgment this is true in the instant case. As one of the companies who have pioneered dual completion practices, we have had occasion to field test many types of equipment required for these installations. As a result of this experience, and our observations of other operations, we know that wells can be dually equipped and efficiently produced with no commingling of fluids either with the use of one or two tubing strings. This is true regardless of whether the wells are flowing or produced by artificial lift.

It is our recommendation that a field wide dual completion rule be adopted for the Lane-Wolfcamp and Lane-Pennsylvanian Pools but that the type of such installation be left discretionary with the operator as long as it is in conformity with good engineering principles and practices that have been generally accepted and approved by the industry and other state regulatory agencies. We do not believe that the regimentation of dual completions can be justified as a sound conservation policy.

Yours very truly,

J. A. Cleverley
Vice President

JAC:dw