

CASE 2188: Application of CONTINENTAL
for permission to shut-in one well
and transfer its allowable to other
wells.

month
test

Case No.

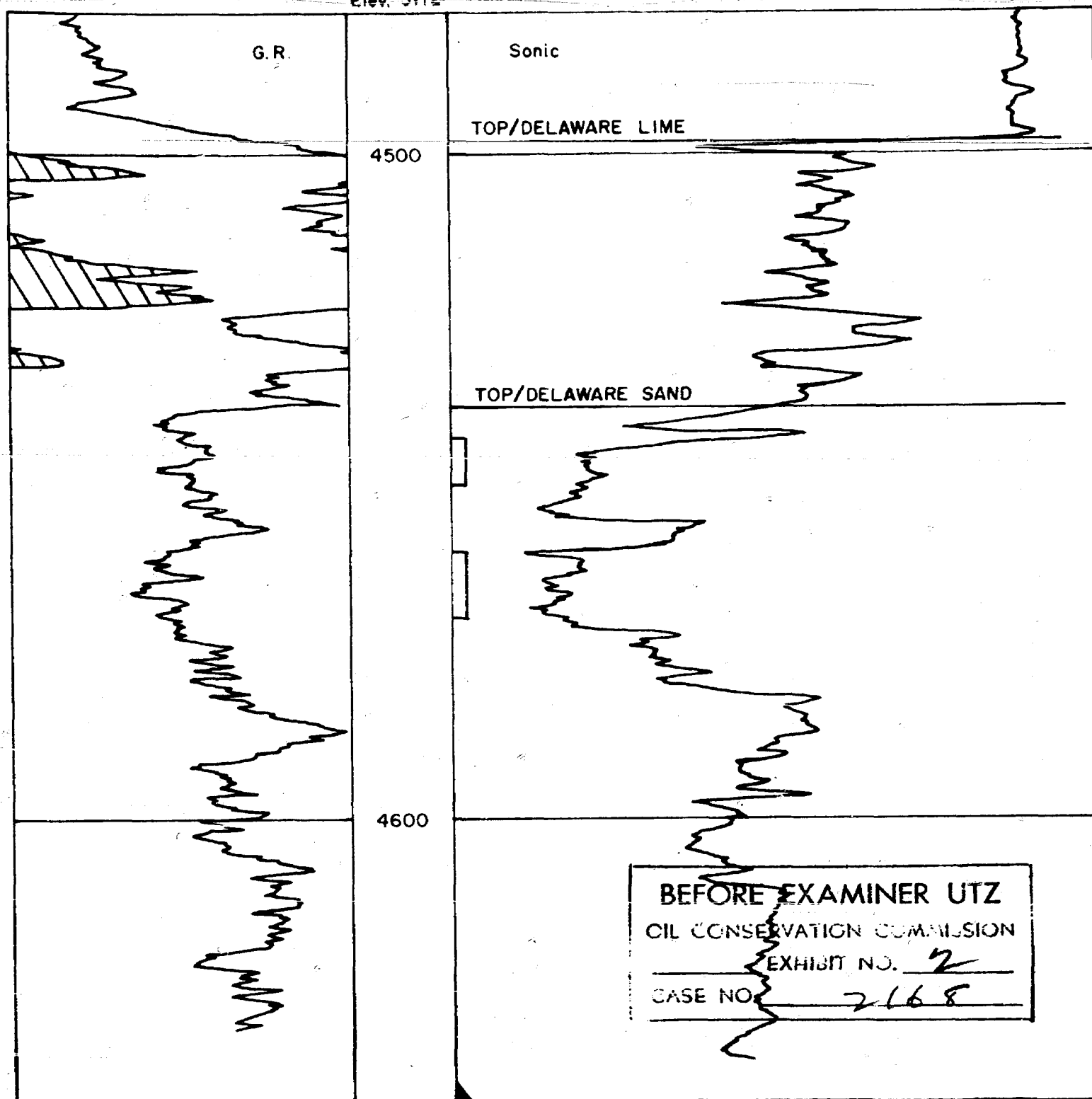
2168

Application, Transcript,
Small Exhibits. Etc.

CONTINENTAL OIL COMPANY

Wilder No. 20

Elev. 3112'

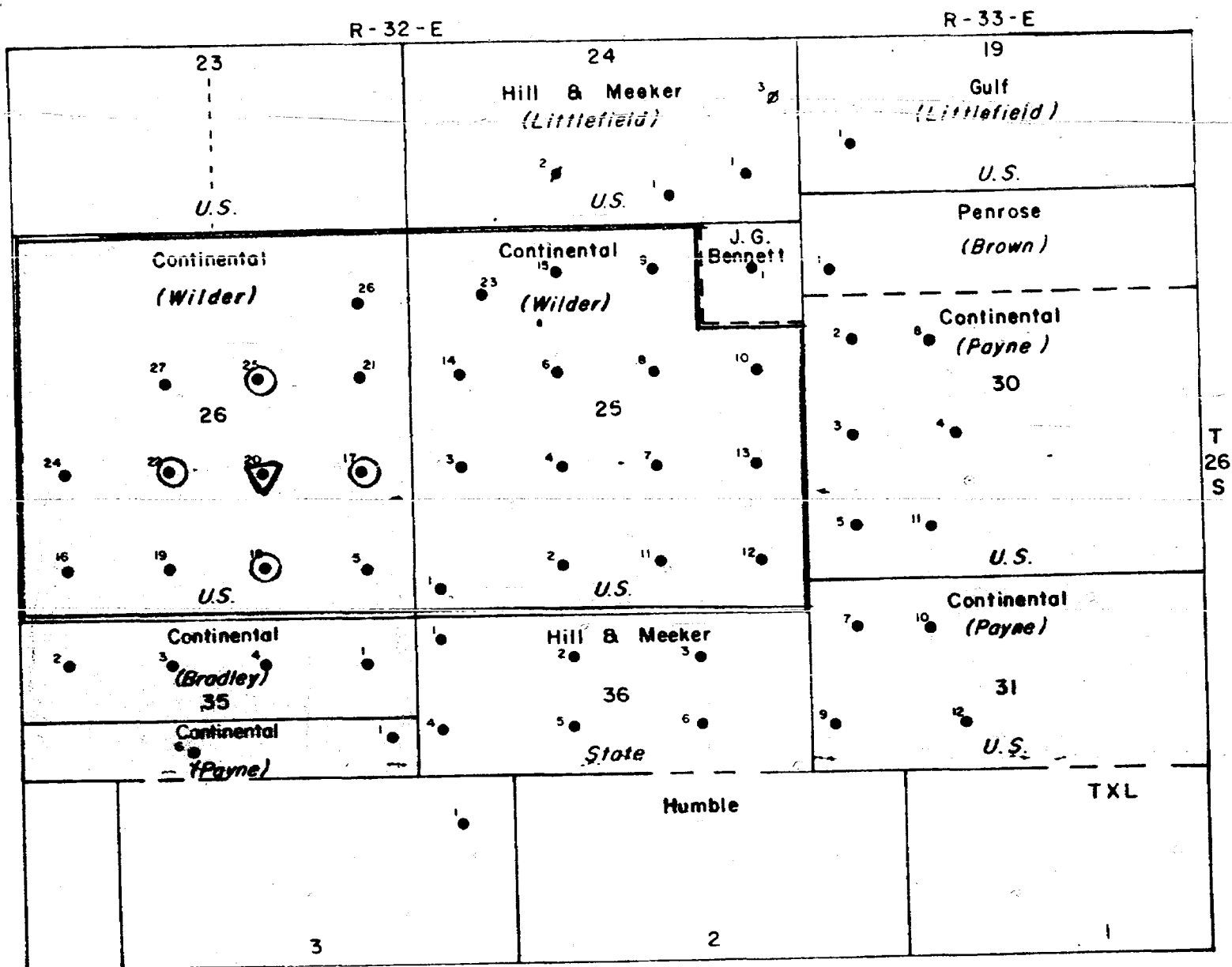


WILDER NO. 20 - EL MAR DELA POOL

TD 4643', KB 11', ELEV 3112' KB, PAY DELA SD 4544-71', NET EFFECTIVE PAY 17', CSG PT 4 1/2" AT 4643', PERF 4544-51', 4561-71' W/4 JSPF BY COLLAR LOG, TOPS: RUSTLER 529', SALT 940', BASE SALT 4277', TOP DELA LM 4498', TOP DELA SD 4538'. LOG COMPARISON: 4544' ON COLLAR IS 4541' ON CORE, 4543' SONIC. IP FLWD 35 BELS 40 DEG GRAV OIL, 0 BW, IN 4 HRS, 16/64" CHK, TP 700 LBS, CP 300 LBS, W/147.5 MCFGPD, GOR 702, DOR 210 BELS. EST DAILY ALLOW 35 BO. TRTD W/500 GALS ACID, FRACED W/3000 GALS CRUDE, 4500 LBS SD, 150 LBS ADOMITE, 30 BALL SEALERS. PL CONN CACTUS PETROLEUM, INC. DRIG STARTED 4-9-60, COMP 4-20-60, TSTD 4-23-60, RIG RELEASED 4-20-60. CONOCO W I 100 PC.

RECENT PRODUCTION TEST DATA

<u>Lease, Well No.</u>	<u>Date</u>	<u>Method</u>	<u>Chk. Size</u>	<u>Hours</u>	<u>Oil (Bbls)</u>	<u>Wtr. (Bbls.)</u>	<u>G.O.R. (Ft³/Bbl.)</u>
Wilder 17	9-30-60	F	10/64"	24	97	0	919
Wilder 18	12-1-60	F	15/64"	5	45	0	547
Wilder 20	9-25-60	F	9/64"	24	57	0	1,003
Wilder 22	9-23-60	F	15/64"	3	48	0	373
Wilder 25	12-9-60	F	8/64"	24	49	6	561



CONTINENTAL OIL COMPANY
Location Plat
El Mar Lease
 Scale: 1" = 2000'

BEFORE EXAMINER UTZ OIL CONSERVATION COMMISSION EXHIBIT NO. <u>1</u> CASE NO. <u>2168</u>	
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NEW MEXICO OIL CONSERVATION COMMISSION

Field No. 111
Date 7-5-60

Company **Continental Oil Company**

Well Name **El Mar Delaware**

El Mar Delaware

-1450

72

100

Well No.	Depth	Interval	Time	Pressure	Temperature	Flow	Notes	Pressure	Temperature	Flow	Notes
1	35-26-32	1-4	74:30	3098	4548	.31		1826	1826	1901	7-5-60
2	35-26-32	1-4	72:45	3106	3688	.33		1643	1925	1927	7-5-60
3	35-26-32	1-4	74:30	3106	Sonic Survey				1426	1900	7-5-60
4	35-26-32	1-4	75:15	3108	4558	.31		1938	1938	1917	7-5-60
5	35-26-32	1-4	76:30	3097	4547	.31		1797	1797	1834	7-5-60
6	30-26-33	1-4	74:45	3137	Sonic Survey				1483	1834	7-5-60
7	30-26-33	1-5	75:00	3132	4582	.32		1862	1862	1967	7-5-60
8	30-26-33	1-5	77:45	3130	4580	Gas		1086	1086	1410	7-5-60
9	30-26-33	1-5	75:15	3144	4594	.31		1858	1858	1900	7-5-60
10	35-26-32	1-4	73:00	3101	4471	.31		1897	1897	1931	7-5-60
11	31-26-33	1-5	72:30	3105	4555	.32		1826	1826	1860	7-5-60
12	30-26-33	1-5	70:45	3137	Sonic Survey				1410	1849	7-5-60
13	31-26-33	1-5	75:00	3097	4547	.32		1826	1826	1907	7-5-60
14	31-26-33	1-5	74:00	3101	Sonic Survey				520	1822	7-5-60
15	31-26-33	1-5	73:30	3102	Sonic Survey				343	1822	7-5-60
16	31-26-33	1-5	73:45	3103	Sonic Survey				403	1822	7-5-60
17	25-26-32	1-4	72:45	3100	4552	.31		1873	1873	1814	7-5-60
18	25-26-32	1-4	73:15	3104	4554	.32		1823	1823	1847	7-5-60
19	25-26-32	1-4	73:30	3107	4557	.31		1836	1836	1881	7-5-60
20	25-26-32	1-4	73:45	3104	4554	.31		1831	1831	1871	7-5-60
21	25-26-32	1-4	73:30	3102	Sonic Survey				1831	1871	7-5-60
22	25-26-32	1-4	73:00	3104	4555	.31		1827	1827	1841	7-5-60
23	25-26-32	1-4	72:00	3122	Sonic Survey				1831	1841	7-5-60
24	25-26-32	1-4	73:30	3110	4560	.31		1831	1831	1841	7-5-60
25	25-26-32	1-4	73:00	3107	4557	.31		1831	1831	1841	7-5-60
26	25-26-32	1-4	72:45	3104	4560	.31		1831	1831	1841	7-5-60
27	25-26-32	1-4	72:30	3103	4555	.31		1831	1831	1841	7-5-60

Continental Oil Company
El Mar Delaware
7-5-60

NEW MEXICO OIL CONSERVATION COMMISSION

Page 2

FORM O-101
(Rev. 1-64)COMPANY Continental Oil Company

BOTTOM HOLE PRESSURES

El Mar Delaware Pool

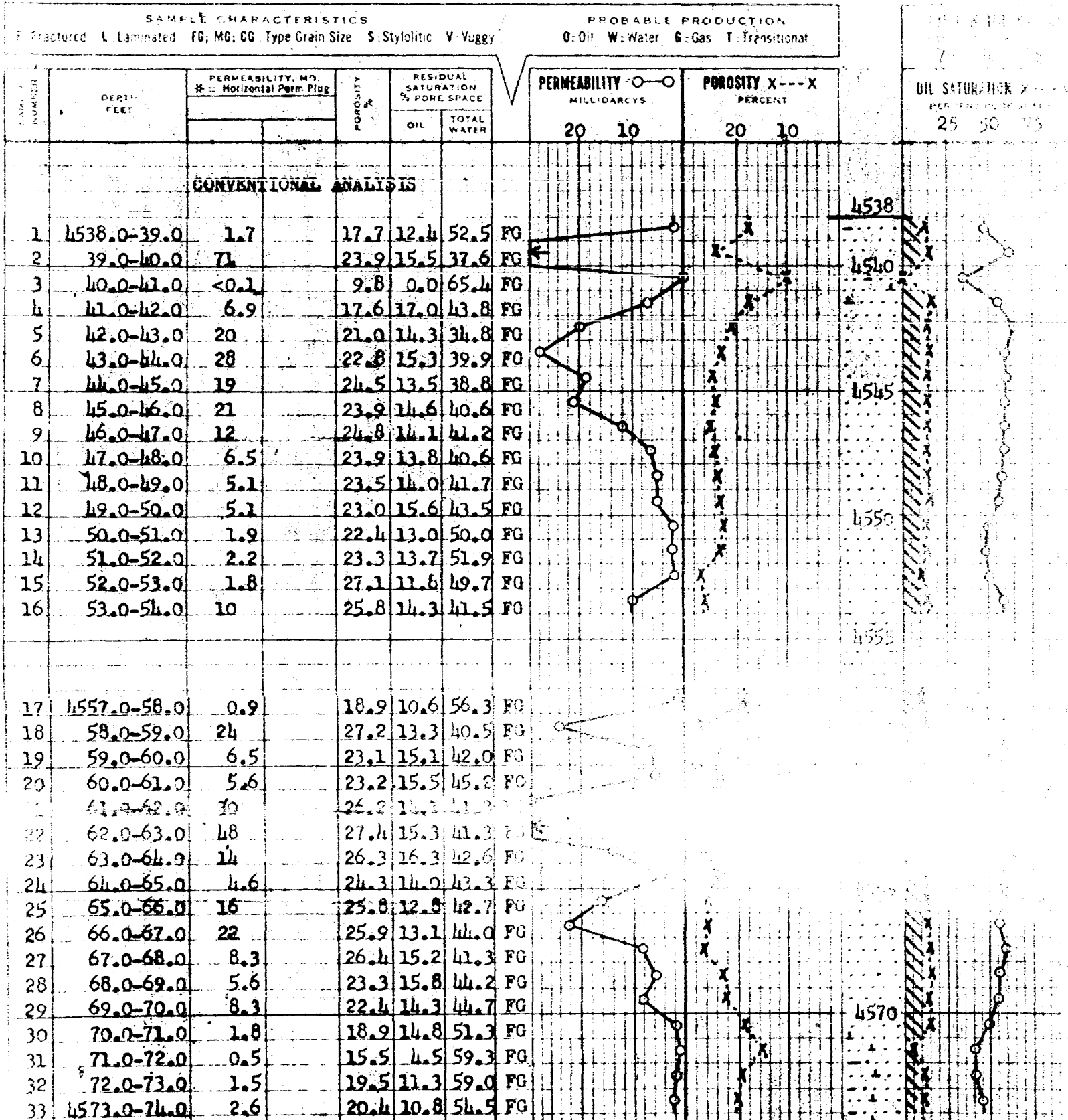
POOL

POOL DATUM -1450NOMINAL SHUT-IN TIME 72WRS: AVERAGE POOL TEMPERATURE 100 °F

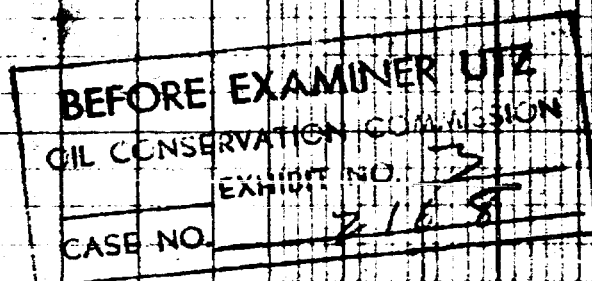
WELL NO.	UNIT	S-T-R	DATE PRESS.	TIME S-I. HRS. MINS.	D.P. ELEV.	GAUGE DEPTH	GRADIENT PSI.	B.H.P. 3		B.H.P. 2		PREVIOUS TEST	
								GAUGE DEPTH	POOL DATUM	DATE PRESS.	DATE		
*Wilcox	12	P	25-26-32	1-5	76:15	3113	4563	.32	1931	1931	1974	7-6-60	
	13	I	25-26-32	1-5	74:45	3122	4577	.31	1596	1596	1650	7-6-60	
	14	E	25-26-32	1-4	72:45	3114	4564	.32	1867	1867	1968	7-6-60	
	15	C	25-26-32	1-5	72:15	3132	4582	.31	1850	1850	1924	7-6-60	
	16	M	26-26-32	1-4	77:45	3107	4507	.32	1955	1970	2020	7-5-60	
	17	I	26-26-32	1-4	74:30	3114	4564	.31	1903	1903	1999	7-5-60	
	18	C	26-26-32	1-4	75:15	3112	4519	.32	1965	1978	2029	7-5-60	
	19	N	26-26-32	1-4	73:45	3109	4599	.32	1945	1964	2067	7-5-60	
	20	J	26-26-32	1-5	78:45	3112	4545	.32	1905	1910	1988	7-5-60	
	21	H	26-26-32	1-4	76:00	3121	4571	.32	1879	1879	2029	7-5-60	
	22	K	26-26-32	1-4	77:30	3109	4540	.32	1943	1949	2059	7-5-60	
	23	D	25-26-32	1-4	74:45	3129	4579	.31	1815	1815	1890	7-6-60	
	24	L	26-26-32	1-4	73:30	3093	Sonic Survey			1117	No Previous Survey		
	25	Q	26-26-32	1-4	72:45	3105	4555	.31	1867	1867	No Previous Survey		
	26	A	26-26-32	1-4	72:15	3109	Sonic Survey			1492	No Previous Survey		
	27	S	26-26-32	1-4	72:45	3108	Sonic Survey			1303	No Previous Survey		

COMPANY CONTINENTAL OIL COMPANY
WELL WILDER NO. 20
FIELD EL MAR
COUNTY LEA STATE NEW MEXICO DRUG FLD WATER BASE MUD
LOCATION 1980 FS & EL SEC 26-T26S-R32E
DATE 4-18-60
FORMATION DELAWARE
ELEV 3100
CORING DEAN
REMARKS SAMPLED AS DIRECTED BY CLIENT

COMPLETION COREGRAPH



SLIGHT SHOW





CONTINENTAL OIL COMPANY

825 PETROLEUM BUILDING
ROSWELL, NEW MEXICO

January 4, 1961

WM. A. MEAD
DIVISION SUPERINTENDENT
OF PRODUCTION
NEW MEXICO DIVISION

New Mexico Oil Conservation Commission
Box 871
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr., Secretary-Director

Re: APPLICATION OF CONTINENTAL
OIL COMPANY FOR PERMISSION
TO TRANSFER THE ALLOWABLE
FROM WELL NO. 20 TO WELL NOS.
17, 18, 22 AND 25 ON ITS W.W.
WILDER LEASE IN SECTION 26,
T-26S, R-32E, NMPM, EL MAR
DELAWARE POOL, LEA COUNTY,
NEW MEXICO

Gentlemen:

Please find attached three copies of Continental Oil
Company's application for permission to transfer the allowable
from Well No. 20 to Well Nos. 17, 18, 22 and 25 on its W. W.
Wilder Lease in Section 26, T-26S, R-32E, NMPM, El Mar Delaware
Pool, Lea County, New Mexico.

We respectfully request that this matter be set for
hearing at the earliest convenient date.

Yours very truly,

W. A. Mead

WAM-sk
Enc.

cc: RGP, HGD, JWK, JRP

*Noted
Mailed
1-12-61*

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BEFORE THE OIL AND NATURAL GAS COMMISSION
C. T. C.
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
CONTINENTAL OIL COMPANY FOR PERMISSION
TO TRANSFER THE ALLOWABLE FROM WELL NO.
20 TO WELLS NOS. 17, 18, 22 AND 25 ON
ITS W. W. WILDER LEASE IN SECTION 26,
T-26S, R-32E, NMPM, EL MAR DELAWARE
POOL, LEA COUNTY, NEW MEXICO

A P P L I C A T I O N

Comes now applicant, Continental Oil Company, and respectfully requests permission to transfer the allowable from Well No. 20 to Wells Nos. 17, 18, 22 and 25 on its W. W. Wilder Lease, El Mar Delaware Pool, Lea County, New Mexico, and in support thereof would show:

1. That applicant is the owner of the W. W. Wilder Lease consisting of Section 26, W/2, W/2 E/2, E/2 SE/4 and SE/4 NE/4 Section 25, T-26S, R-32E, NMPM, Lea County, New Mexico.
2. That applicant has drilled and completed as oil producers 27 wells on the said lease in the El Mar Delaware Pool.
3. That the said pool is considered a good prospect for secondary recovery operations in the future.
4. That in evaluating the pool for secondary recovery, it is desirable to conduct interference tests between wells in the pool.
5. That applicant proposes to shut-in Well No. 20, located 1980 feet from south and east lines of Section 26, T-26S, R-32E and transfer its allowable to surrounding wells in the following manner:

25%	Well No.	17	Located 1980' FSL - 660' FEL
25%	Well No.	18	Located 660' FSL - 1980' FEL
25%	Well No.	22	Located 1980' FSL - 1980' FWL
25%	Well No.	25	Located 1980' FNL - 1980' FEL

All in Section 26, T-26S, R-32E, Lea County, New Mexico

6. That the said interference test is proposed to embrace the period between January 1, 1961, and July 1, 1961, after which allowable allocation shall revert to the present status.
7. That the proposed test will be taken without waste and without violation of correlative rights.

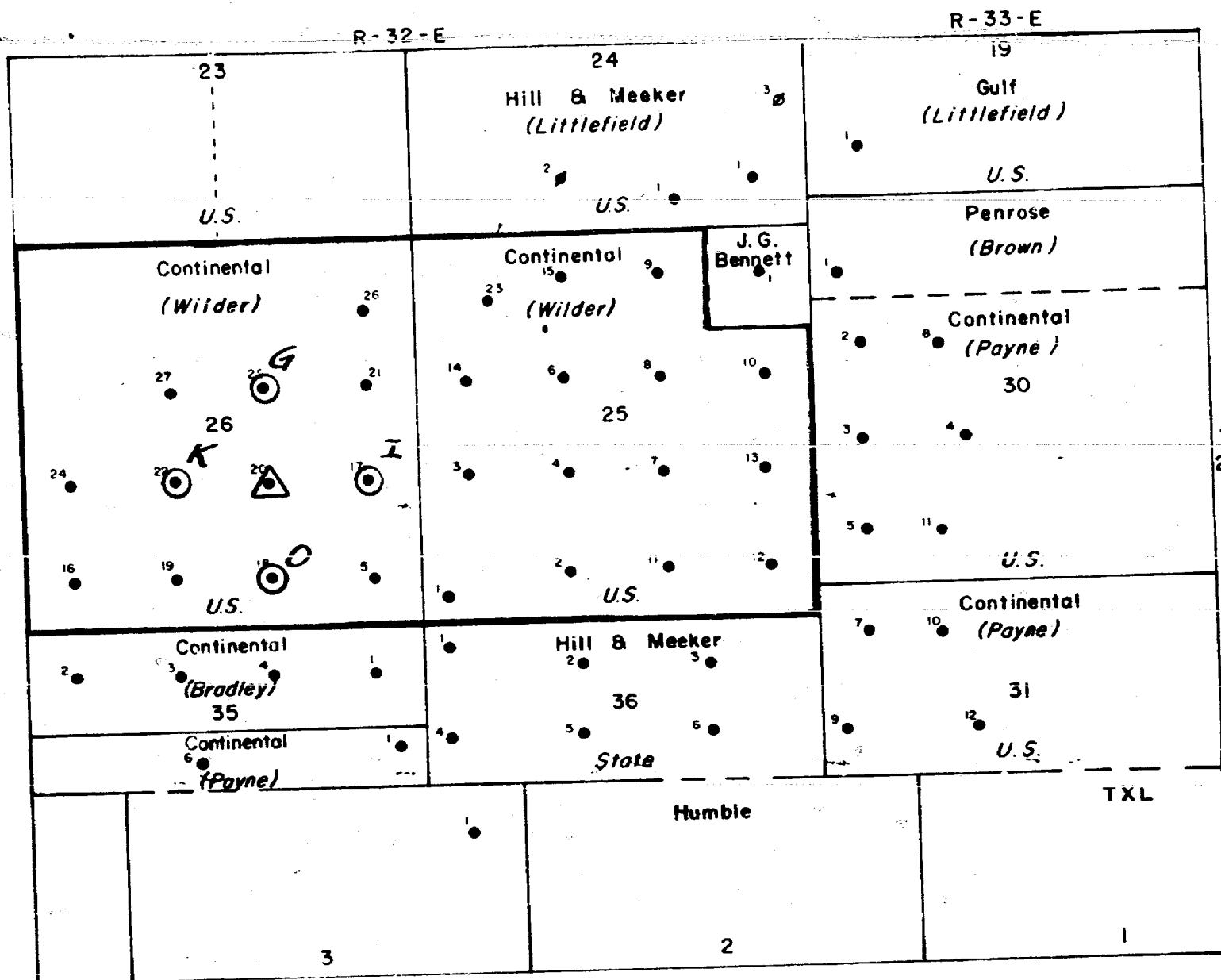
Wherefore, applicant prays that this application be set for hearing before the Commission's duly appointed examiner, that appropriate notice thereof be given, and that upon hearing an order be entered granting applicant permission to transfer allowables as described above.

Respectfully submitted

CONTINENTAL OIL COMPANY

W. A. Mead

W. A. Mead
Division Superintendent
of Production
New Mexico Division



CONTINENTAL OIL COMPANY
Location Plat
Ei Mar Lease
Scale: 1" = 2000'

- △ Well to be shut-in
○ Well to which allowable to be transferred
— W. W. Wilder lease boundary

26-32
2258-
W. W. Wilder - Delaware

Order 2168

DOCKET: EXAMINER HEARING - WEDNESDAY, JANUARY 25, 1961
OIL CONSERVATION COMMISSION - 9 a.m., CONFERENCE ROOM - STATE LAND OFFICE
BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz Examiner, or Oliver E. Payne, attorney, as alternate examiner:

CASE 2159: Application of Continental Oil Company for three non-standard gas proration units. Applicant, in the above-styled cause, seeks the establishment of the following-described non-standard gas proration units in the Jalmat Gas Pool, Lea County, New Mexico:

A 320-acre non-standard gas proration unit consisting of the W/2 E/2 and E/2 W/2 of Section 19, Township 25 South, Range 37 East, to be dedicated to the Sholes B-19 Well No. 1, located in the center of the SE/4 SW/4 of said Section 19.

A 320-acre non-standard gas proration unit consisting of the E/2 and NE/4 NW/4 of Section 1, Township 25 South, Range 36 East, to be dedicated to the Wells B-1 Well No. 1, located in the center of the NE/4 NE/4 of said Section 1.

A 360-acre non-standard gas proration unit consisting of the SE/4, E/2 W/2 and SW/4 SW/4 of Section 29, Township 22 South, Range 36 East, to be dedicated to the Meyer A-29 Well No. 3, located in the center of the SE/4 SW/4 of said Section 29.

CASE 2160: Application of Continental Oil Company for a quadruple completion. Applicant, in the above-styled cause, seeks an order authorizing the quadruple completion of its North-east Haynes-Apache 9 No. 1 Well, located in the NW/4 SW/4 of Section 9, Township 24 North, Range 5 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of hydrocarbons from the Greenhorn formation through a string of 2 7/8-inch casing, the production of hydrocarbons from the Dakota formation through 2 3/8-inch tubing installed within a string of 4 1/2-inch casing, the production of hydrocarbons from the Mesaverde formation through the 2 3/8 x 4 1/2-inch annulus of the latter casing string, and the production of hydrocarbons from the Gallup formation through 2 3/8-inch tubing installed within a second string of 4 1/2-inch casing, the three strings of casing being cemented in a common well bore.

CASE 2161: Application of Texaco, Inc. for a triple completion. Applicant, in the above-styled cause, seeks an order authorizing the triple completion of the C. H. Weir "B" Well No. 4, located in Unit I, Section 11, Township 20 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of gas from the Eumont Gas Pool, the production of oil from the Skaggs-Glorieta Pool and the production of oil from the Skaggs-Drinkard Pool through the casing-tubing annulus, through 2 3/8-inch tubing, and through 2 3/8-inch tubing respectively.

CASE 2162: Application of The Atlantic Refining Company for an automatic custody transfer system. Applicant, in the above-styled cause, seeks permission to install an automatic custody transfer system to handle the commingled Justis Tubb-Drinkard and Justis-Blinbry production from the following-described leases:

Langlie Federal Lease, N/2 SE/4 of Section 14

Langlie Federal "A" Lease, S/2 NE/4 of Section 14

Langlie Federal "B" Lease, N/2 NE/4 of Section 14

all in Township 25 South, Range 37 East, Lea County, New Mexico.

CASE 2163: Application of Yates Drilling Company for an automatic custody transfer system. Applicant, in the above-styled cause, seeks permission to install an automatic custody transfer system to handle the Pennsylvanian formation production from all wells presently completed or hereafter drilled on Federal Lease NM 03283, comprising the W/2 of Section 31, Township 8 South, Range 37 East, Roosevelt County, New Mexico.

CASE 2164: Application of Hudson and Hudson for an exception to Rule 506 (A) of the Commission Rules and Regulations and for permission to transfer allowables. Applicant, in the above-styled cause, seeks an exception to Rule 506 (A) by increasing the limiting gas-oil ratio for the West Tonto Yates Seven Rivers Pool, Lea County, New Mexico, from 2,000 to 6,000 cubic feet of gas per barrel of oil. Applicant further seeks permission to shut-in one well in said pool and transfer its allowable to another well.

CASE 2165: Application of Pan American Petroleum Corporation for two unorthodox oil well locations and a non-standard oil proration unit. Applicant, in the above-styled cause, seeks approval of two unorthodox oil well locations in the Cha Cha-Gallup Oil Pool, San Juan County, New Mexico, said locations to be as follows:

Navajo Tribal "E" Well No. 7, to be located 250 feet from the South line and 800 feet from the West line of Section 16.

Navajo Tribal "G" Well No. 5, to be located 1830 feet from the South line and 885 feet from the East line of Section 18, both in Township 29 North, Range 14 West.

Applicant also seeks an 88.7-acre non-standard oil proration unit in said pool comprising that portion of the SW/4 of Section 16, within the Navajo Reservation lying South of the mid-channel of the San Juan River, Township 29 North, Range 14 West, to be dedicated to said Navajo Tribal "E" Well No. 7.

CASE 2166: Application of Pan American Petroleum Corporation for permission to take interference tests and transfer allowables. Applicant, in the above-styled cause, seeks permission to take interference tests in the Cha Cha-Gallup Oil Pool, San Juan County, New Mexico, by shutting in its Navajo Tribal "E" Well No. 3, located in the NE/4 SW/4 of Section 21, Township 29 North, Range 14 West and transferring the allowable of said well in equal parts to the other five wells on the said Navajo "E" Lease.

CASE 2167: Application of Chambers & Kennedy for a 200-acre non-standard gas proration unit and for an unorthodox gas well location. Applicant, in the above-styled cause, seeks the establishment of a 200-acre non-standard gas proration unit in the Eumont Gas Pool, Lea County, New Mexico, comprising the NE/4 NE/4, S/2 NE/4, and the N/2 SE/4 of Section 34, Township 19 South, Range 37 East. Said unit is to be dedicated to the Monument State Well No. 1, located on an unorthodox location at a point 1649 feet from the South line and 2197 feet from the East line of said Section 34.

CASE 2168:

Application of Continental Oil Company for permission to shut-in one well and transfer its allowable to other wells. Applicant, in the above-styled cause, seeks permission to shut-in its Wilder Well No. 20, located 1980 feet from the South and East lines of Section 26, Township 26 South, Range 32 East, El Mar-Delaware Pool, Lea County, New Mexico, and transfer its allowable to the following offset wells in said Section 26: Wilder Lease Well Nos. 17, 18, 22 and 25.

CASE 2169:

Application of Gulf Oil Corporation for a salt water disposal well. Applicant, in the above-styled cause, seeks an order authorizing the disposal of produced salt water into the Grayburg and San Andres formations through its J. F. Janda "F" Well No. 17, located in Unit A, Section 4, Township 22 South, Range 36 East, Lea County, New Mexico, with the proposed injection interval from 3999 feet to 5650 feet.

CASE 2170:

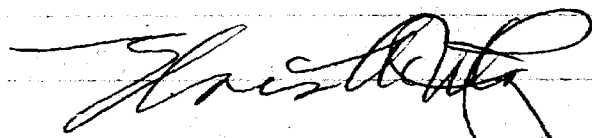
Application of Amerada Petroleum Corporation for an amendment of Order R-1750. Applicant, in the above-styled cause, seeks an amendment of Order No. R-1750, which authorized the triple completion of its Wimberly Well No. 13, located in Unit M, Section 24, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico, to substitute an undesignated oil pool, probably Paddock, for the Langlie-Mattix which was previously authorized. Applicant also proposes to use three parallel strings of tubing rather than two as provided in Order R-1750.

Case 7168

Heard 1-25-61

1-26-61

1. Grant Court request for interference tests in the E & M Delaware oil pool. They are to S.I. their Wilder # 20, 19 & 15 & E 26-265-32 E and transfers allowable from this well to their Wilder # 17, 18, 22 & 25 in equal proportion.
2. Purpose of this test is evaluate the reservoir conditions for ~~primary~~ secondary recovery.
3. The Test shall be limited to 6 mos. from Oct. 1, 1961 and the transfers shall be effective Oct. 1, 1961.



4. Provide Admin. procedure for shortening or lengthening the 6 mos. period.

GOVERNOR
JOHN BURROUGHS
CHAIRMAN

State of New Mexico
Oil Conservation Commission

LAND COMMISSIONER
MURRAY E. MORGAN
MEMBER



P. O. BOX 871
SANTA FE

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

February 3, 1961

Mr. Jason Kellahin
Kellahin & Fox
Box 1713
Santa Fe, New Mexico

Re: Case No. 2168
Order No. R-1545
Applicant:
Continental Oil Company

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. PORTER, Jr.,
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC X
Artesia OCC
Aztec OCC

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. 2168
Order No. R-1865

APPLICATION OF CONTINENTAL OIL
COMPANY FOR PERMISSION TO TRANSFER
ALLOWABLES, EL MAR-BELMARE POOL,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 25, 1961, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

Now, on this 3rd day of February, 1961, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, 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, Continental Oil Company, seeks permission to shut-in its Wilder Well No. 20, located 1988 feet from the South line and 1988 feet from the East line of Section 26, Township 26 South, Range 32 East, NMRN, Lea County, New Mexico, and transfer its allowable in approximately equal parts to Wilder Well Nos. 17, 18, 22, and 25, all in said Section 26 for the purpose of taking interference tests in the El Mar-Belmare Pool.

(3) That the applicant seeks permission to take interference tests in order to evaluate reservoir conditions for secondary recovery purposes.

(4) That all ~~interference~~ tests should be completed by August 1, 1961; provided, however, that extensions of time in three-month increments should be granted administratively at the discretion of the Secretary-Director of the Commission for good cause shown.

-2-

CASE No. 2168
Order No. R-1865

IT IS THEREFORE ORDERED:

(1) That the applicant, Continental Oil Company, is hereby authorized to take interference tests in the El Mar-Balsmore Pool, Lea County, New Mexico, by shutting in its Wilder Well No. 20, located 1900 feet from the South line and 1900 feet from the East line of Section 26, Township 26 South, Range 32 East, NEMM, Lea County, New Mexico, and transferring the allowable of said well in approximately equal parts to Wilder Well Nos. 17, 18, 22, and 23, all in said section 26.

(2) That all interference tests shall be completed by August 1, 1961; provided, however, that extensions of time in three-month increments may be granted administratively by the Secretary-Director of the Commission for good cause shown.

(3) That the effective date of the allowable transfer shall be the date said Wilder Well No. 20 is shut-in or February 1, 1961, whichever date is later.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


S. L. M.

HERWIN L. MCKEN, Chairman

E. S. Walker

E. S. WALKER, Member

A. L. Porter, Jr.

A. L. PORTER, JR. Member & Secretary

ccr/

DRAFT

RSM/esr
February 1

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. 2168

Order No. R-1865

2/1/61
2-1-60
APPLICATION OF CONTINENTAL OIL
COMPANY FOR PERMISSION TO TRANSFER
ALLOWABLES, EL MAR-DELAWARE POOL,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
January 25, 1961, at Santa Fe, New Mexico, before Elvis A. Utz,
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with Rule 1214 of the Commission Rules and Regulations.

NOW, on this _____ day of February, 1961, the Commission,
a quorum being present, having considered the application, the
evidence adduced, and the recommendations of the Examiner, Elvis A.
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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, Continental Oil Company, seeks
permission to shut-in its Wilder Well No. 20, located 1980 feet
from the South line and 1980 feet from the East line of Section
26, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico,
and transfer its allowable in approximately equal parts to Wilder
Well Nos. 17, 18, 22, and 25, all in said Section 26 for the
purpose of taking interference tests in the El Mar-Delaware Pool.

(3) That the applicant seeks permission to take inter-
ference tests in order to evaluate reservoir conditions for
secondary recovery purposes.

(4) That all interference tests should be completed by
August 1, 1961; provided, however, that extensions of time in
~~one~~ ^{three} month increments should be granted administratively at the
discretion of the Secretary-Director of the Commission for good
cause shown.

IT IS THEREFORE ORDERED:

(1) That the applicant, Continental Oil Company, is hereby authorized to take interference tests in the El Mar-Delaware Pool, Lea County, New Mexico, by shutting in its Wilder Well No. 20, located 1980 feet from the South line and 1980 feet from the East line of Section 26, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico, and transferring the allowable of said well in approximately equal parts to Wilder Well Nos. 17, 18, 22, and 25, all in said Section 26.

(2) That all interference tests shall be completed by August 1, 1961, provided, however, that extensions of time in ~~one~~^{three} month increments may be granted administratively by the Secretary-Director of the Commission *for good cause shown.*

(3) That the effective date of the allowable transfer shall be ~~February 1, 1961~~ *the date said Wilder Well No 20 is shut-in or February 1, 1961, whichever date is later.*

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

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

June 21, 1961

C
O
P
Y

Continental Oil Company
P. O. Box 68
Eunice, New Mexico

Attention: Mr. J. R. Parker

Gentlemen:

Reference is made to your letter of June 6, 1961, wherein you request that the term permitted for the interference tests on your Wilder Lease in the El Mar-Delaware Pool be extended from August 1, 1961, to November 1, 1961.

Inasmuch as reservoir characteristics appear to be such as to preclude obtaining satisfactory test results within the time authorized by Order No. R-1965, the test time together with the allowable transfer provisions as set forth in the order are hereby extended to November 1, 1961.

Very truly yours,

A. L. FORNER, Jr.
Secretary-Director

ALP/DSH/lr

cc: Mr. J. D. Ramsey
Oil Conservation Commission
Hobbs, New Mexico

Case File 2168



CONTINENTAL OIL COMPANY

P. O. Box 68
Eunice, New Mexico
June 6, 1961

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

Attention: Mr. A. L. Porter, Jr.
Secretary-Director

Re: Extension of Testing Time
On Wilder No. 20, El Mar
Delaware Pool, Lea County,
New Mexico

Gentlemen:

Under the provisions of Order No. R-1865, our Wilder well no. 20 in Section 26, T-26S, R-32E, Lea County, New Mexico, was shut-in and its allowable distributed equally between wells nos. 17, 18, 22 and 25, the direct offsets. The purpose of this procedure was to secure an indication of the degree of communication between wells in this reservoir for possible use in evaluating future secondary recovery operations.

Wilder No. 20 was shut-in on January 1, 1961, and its bottom-hole pressure has been carefully measured at frequent intervals. To date no reduction in pressure has been observed. Discussions with other operators, in pools producing from the Delaware Sand, indicate that a period slightly in excess of six months is usually required to observe a pressure decline.

In order that the information which we are seeking may be obtained, it is respectfully requested that an extension be granted under the terms of Order No. R-1865, whereby the Wilder No. 20 may remain shut-in and its allowable be transferred to offsetting wells for an additional three month period, ending November 1, 1961.

Yours very truly,

J. R. PARKER
District Superintendent
of Production
Eunice District

JRP-BFH

CC: Mr. J. A. Queen (3)

OIL CONSERVATION COMMISSION

P. O. BOX 871
SANTA FE, NEW MEXICO

October 30, 1961

Continental Oil Company
P. O. Box 68
Eunice, New Mexico

Attention: Mr. J. R. Parker

Gentlemen:

Reference is made to your letter of October 23, 1961, wherein you have requested an extension of time from November 1, 1961, to January 1, 1962, in which to shut-in your Wilder Well No. 20, El Mar Delaware Pool, and transfer its allowable to certain other wells on the same lease.

Inasmuch as it would appear that the value of the interference tests conducted to date will be increased considerably if they are continued on until the pool bottom-hole pressure survey is taken January 1, 1962, this office concurs in your request and hereby approves same.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/BSH/lr

cc: Mr. J. D. Ramsey
Oil Conservation Commission
Hobbs, New Mexico

Case 2168



CONTINENTAL OIL COMPANY

P. O. Box 68
Eunice, New Mexico
October 23, 1961

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

Attention: Mr. A. L. Porter, Jr., Secretary-Director

Re: Extension of Testing Time on Wilder
No. 20, El Mar Delaware Pool, Lea
County, New Mexico.

Gentlemen:

In accordance with the terms of Order No. R-1865, our Wilder Well No. 20 in Section 26, T-24S, R-32E, Lea County, New Mexico, was shut-in and its allowable distributed equally between wells nos. 17, 18, 22 and 25. Well No. 20 was shut-in on January 1, 1961, and its bottom hole pressure has been carefully checked at frequent intervals. We have now detected a drop in the bottom hole pressure.

Your letter dated June 21, 1961, authorized us to continue the reservoir communication test until November 1, 1961. An additional field-wide bottom hole pressure test is scheduled to be conducted approximately January 1, 1962. In order that the pressure performance in the shut-in well may be compared to field-wide conditions to be observed on that date, it is respectfully requested that permission be granted to continue the reservoir communication test until January 1, 1962. After that date we propose to resume production from well no. 20 and restore normal allowables to the offsetting wells.

Yours very truly,

J. R. PARKER
District Superintendent
of Production
Eunice District

JRP-BPH

cc: Mr. Joe D. Ramey, Hobbs

WAM (3)

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 25, 1961

EXAMINER HEARING

IN THE MATTER OF:

Application of Continental Oil Company for permission to shut-in one well and transfer its allowable to other wells. Applicant, in the above-styled cause, seeks permission to shut-in its Wilder Well No. 20, located 1980 feet from the South and East lines of Section 26, Township 26 South, Range 32 East, El Mar-Delaware Pool, Lea County, New Mexico, and transfer its allowable to the following offset wells in said Section 26: Wilder Lease Well Nos. 17, 18, 22 and 25.

Case
2168

BEFORE:

Elvin A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: 2168.

MR. PAYNE: 2168, application of Continental Oil Company for permission to shut-in one well and transfer its allowable to other wells.

MR. KELLAHIN: Jason Kellahin, Kellahin & Fox, Santa Fe, representing the applicant. We have the same witness that testified in the preceding case. May the record show he has been sworn?

MR. UTZ: Yes, sir.

LEO CICHOWICZ

called as a witness, having been previously duly sworn, testified as follows:



DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Leo S. Cichowicz.

Q Are you the same Mr. Cichowicz that testified in the preceding case, No. 2159?

A Yes, sir.

Q Mr. Cichowicz, are you familiar with the application in Case 2168?

A Yes, sir.

Q Would you please state, briefly, what is proposed in this application?

A This is Continental Oil Company's application for permission to transfer the allowable from Well No. 20 to Wells Nos. 17, 18, 22 and 25 on the W. W. Wilder Lease, El Mar Delaware Pool, Lea County, New Mexico.

Q What is the purpose of this application to transfer allowables?

A Continental Oil Company proposes to conduct the interference tests in this pool to determine the degree of communication between wells and, at the same time, to evaluate the reservoir for secondary recovery prospects at the earliest possible date.

Q Do you have a location and ownership map showing the Wilder Lease?

A ~~Exhibit No. 1 is a location and ownership map showing the~~

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W. W. Wilder Lease and the surrounding area, the location of the wells and the ownership thereof. As outlined in red, the lease consists of Section 26, W/2, and the W/2 of the E/2, E/2 of the SE/4 SE/4 of the NE/4 of Section 25, Township 26 South, Range 32 East. Well No. 20, from which allowable is proposed to be transferred, is designated by a green triangle. Wells Nos. 17, 18, 22 and 25, to which the allowable is proposed to be transferred, are shown circled in red.

Q Do you have a log on the No. 20 well?

A Exhibit No. 2 is a copy of the acoustic type log run on Well No. 20. By notations on the Exhibit, the top of the Delaware line, the top of the Delaware sand and the intervals perforated are shown.

Q Do you have a core analysis on the well?

A Exhibit No. 3 is a copy of the core analysis run on the Well No. 20.

Q Is there any information shown on that exhibit which you would like to comment about?

A No, only that the subsequent, or the next exhibits, will show the average porosity and permeabilities of not only Well No. 20 but of all the offsets to which we have requested transfer of allowables.

Q That is a cross-section, Exhibit No. 4?

A Exhibit 4 is a cross-section drawn from the south to north through Wells 18, 20 and 25. Under each well are shown the com-

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plotion data, the average porosity and average permeabilities. As shown on the exhibit, the zones completed are continuous and can be correlated between wells.

Exhibit No. 5 is a cross-section drawn from west to east through Wells 22, 20 and 17. Below each well is shown the completion data, average porosity and average permeability. This shows the pay intervals are continuous and can be correlated between wells.

Q You stated that that also showed permeability and porosity information?

A Yes, sir.

Q Would you comment on that, please?

A Noted on the cross-section is, the porosities are very similar from well to well, and have the average permeabilities, which range from approximately 18 to 24 millidarcies.

Q Do you have a tabulation of recent well tests on the wells involved?

A Exhibit 6 is a tabulation of recent well tests on Wells 17, 18, 20, 22 and 25. These data show that the Well No. 20 is presently capable of producing top allowable for the El Mar Delaware Pool. It also shows that 17, 18, 22 and 25 are capable of producing top allowable for the pool and, in addition, one-fourth of the allowable normally assigned to Well No. 20.

Q You say they can produce one-fourth of the allowable normally assigned to Well No. 20. Is it your proposal that each of the wells be assigned one-fourth of it?

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A We feel that the distribution of the allowable of Well No. 20 should be done equitably to the four offset wells.

Q Have you run any bottomhole pressure surveys on the wells involved?

A Exhibit 7 is a copy of the bottomhole survey run January 4th and 5th, 1961. On Page 2 of this exhibit the bottomhole pressures for Wells No. 17, 18, 20, 22 and 25 are circled in red. This exhibit shows that the bottomhole pressures for the five wells involved are reasonably similar. I believe this also shows there will be no undue migration in either direction because of large differences in pressures. You see, the pressure varies only 40 pounds in any one well.

Q What is the nature of the El Mar Delaware Pool?

A The El Mar Delaware Pool produces from a blanket-type, fine-grained sand reservoir. It is believed that the reservoir is a good prospect for secondary recovery upon recovery of the primary reserves. It is believed that all engineering data that may be required to evaluate this prospect should be obtained at the earliest possible date. In order to assist the evaluation of the pool, Continental proposes to conduct interference tests in the pool to determine the degree of communication between wells. In selecting the location for the test, this interference test, the following factors were taken into consideration: (1) The well spacing between the shut-in well and the direct offset should be uniform. (2) ~~The proposed test area should not directly offset~~



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other operators. (3) The shut-in well and the wells to which allowable is transferred should all be located on the same lease. (4) Sufficient pay should be perforated to be representative of the entire pay interval. (5) The well selected should have a history of small water production. (6) The area selected should have reasonably uniform bottomhole pressure.

Q Do these wells meet the tests you have outlined?

A The wells selected for this test meet the above requirements.

Q Under what procedure do you propose to conduct your interference tests?

A The procedure under which the test is to be run is proposed as follows: During the field-wide bottomhole pressure survey to be conducted January 4th and 5th, 1961, the bottomhole pressure on all flowing wells will be measured by sub-surface bomb.

Q That has been done?

A Yes, sir.

Q That is reflected by one of the exhibits here?

A Yes, sir. The bottomhole pressure on pumping wells will be calculated with the aid of the fluid level determined by an acoustical well sounder and the shut-in surface pressures. Upon completion of the survey, the pressure bomb will be re-run in Well No. 20 and left for a period of several days in an attempt to detect the initial decrease in pressure due to production from surrounding wells. The well will remain shut-in until the test is



completed. A bottomhole pressure bomb will be run into the well at least monthly to measure the pressure performance in the reservoir. The well will remain shut-in no longer than the interval of time between field-wide bottomhole pressure surveys. The next bottomhole pressure survey is scheduled to take place in July, 1961.

Q In other words, you would anticipate that the test you are contemplating, and the transfer of the allowables, would only extend to July of 1961?

A Yes, sir. We would like to point out that the proposed test should provide considerable information in regard to the degree of pressure communication in the reservoir. The tests will be conducted without waste, in that no well will be produced at excessive rates. In view of the inside location the test will be conducted without any impairment of correlative rights.

In view of these facts, it is respectfully requested that permission be granted to transfer the allowable from Well No. 20 and distribute it equally between Wells Nos. 17, 18, 22 and 25, and that adjustment of allowables be continued during the period of field-wide bottomhole pressure surveys, not to exceed a six-month period. It is also requested that the interference test may be discontinued and the allowable returned to normal before the end of six months duration by proper notification in the event we obtain the information we are striving to obtain.

Q As I understand your testimony the annual bottomhole survey was made in the early part of January; is that correct?

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A Yes, sir.

Q Has your proposed test well been shut-in since that date?

A Yes, it has, and we would like to further add that if the Commission approves that, that they see fit to make the transfer of allowable retroactive to the time this well was shut in.

Q Which was what date?

A I believe it was the first week in January, about January 4th, thereabouts, retroactive to January 1st so that the entire allowable may be transferred. I believe the wells were shut in as of January 1st.

Q Have you examined Exhibits Nos. 1 through 7, inclusive?

A Yes, I have.

Q In your opinion are they correct and accurate?

A Yes, sir.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibits 1 through 7 inclusive.

MR. UTZ: Without objection Exhibits 1 through 7 may be entered into the record.

MR. KELLAHIN: That is all the questions I have, Mr. Utz.

MR. UTZ: Any questions of the witness?

BY MR. PAYNE:

Q This isn't a water-drive reservoir, is it?

A We haven't had a chance to build up sufficient bottomhole pressure on which to definitely establish whether this is a water-drive. I personally believe that the reservoir is under gas solution



drive. However, that is my own personal observation.

Q That is why you feel it is a good prospect for secondary recovery?

A Yes, sir.

Q In your opinion, then, it probably wouldn't be rate-sensitive?

A That's right.

Q Do you think there is any possibility that during the six-month period that you are conducting that test that the shut-in well might decline where, had it produced, it could not have produced top allowable?

A You mean, to actually destroy some of the producing or, in effect, damage the well so that it would not provide those reserves which it would have produced had not the well been shut in; is that your question?

Q I assume you want to transfer top unit allowable, divided four ways?

A Yes, sir.

Q Do you have any reason to believe that if this well stayed on production, during the six-month period it would no longer be capable of producing top unit allowable?

A No, I believe the well would be capable of producing top allowable in either event.

Q There has been no indication in this pool that these wells would decline rapidly?

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A No. Productivity has not been declining. There has been some evidence of that offered on the recent tests. You will notice the choke size in most instances is close to 10 64, which is very small, and the production ranges from 45 to 97 barrels through this small size choke. That is some indication, at least for six months we shouldn't have the condition arise that you are questioning.

MR. UTZ: Other questions: Witness may be excused. Any statements in this case? Case will be taken under advisement.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, JUNE PAIGE, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 6th day of February, 1959.

June Paige
Notary Public - Court Reporter

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I N D E X

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E X H I B I T S

<u>NUMBER</u>	<u>EXHIBIT</u>	<u>IDENTIFIED</u>	<u>OFFERED</u>	<u>ADMITTED</u>
Ex.#1	Location Map	3	8	8
Ex.#2	Acoustic Log	3	8	8
Ex.#3	Core Analysis	3	8	8
Ex.#4	Cross-Section, S-N	3	8	8
Ex.#5	Cross-Section, W-E	4	8	8
Ex.#6	Tabulation	4	8	8
Ex.#7	Bottomhole Survey	5	8	8

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 2168.
heard by me on Jan. 25, 1961.
_____, Examiner
New Mexico Oil Conservation Commission

DEARNLEY-MEIER REPORTING SERVICE, Inc.

ALBUQUERQUE, NEW MEXICO

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