

**CONTINENTAL OIL COMPANY** 

Hobbs, New Mexico May 4, 1950

IN THE MATTER OF THE APPLICATION OF CONTINENTAL OIL COMPANY FOR AN ORDER GRANTING PERMISSION TO DUALLY COMPLETE "M. E. WANTZ NO. 3-D WELL", DRINKARD POOL, NW/4 SE/4, SECTION 21, TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

#### APPLICATION

COMES NOW Continental Oil Company, a Delaware Corporation, operating in New Mexico from a field office in Hobbs, New Mexico, and respectfully represents to the Oil Conservation Commission of the State of New Mexico that it has completed the M. E. Wantz No. 3-D well, located in the NW/4 SE/4, Section 21, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico. This well is presently producing from the Drinkard formation through perforated intervals extending from 6546 feet to 6584 feet and is equipped with 2 1/2<sup>m</sup> EUE tubing. Seveninch casing is set at 6627 feet.

Applicant further represents that a high pressure gas zone exists at an approximate depth of 6150 feet in the Tubb Sand section of the M. E. Wantz N o. 3-D well as evidenced by gas production from the Tubb section in the North offset to said well and a drill-stem test yielding 4301.4 MCF gas per day from the Tubb section in the South offset to said well and that it is practical and economically feasible to dually complete this well to produce liquid hydrocarbons through the tubing and gas through the annulus between the casing and tubing with proper packer and wellhead connections.

WHEREFORE, applicant asks that permission be granted to recomplete said well to produce oil from the Drinkard formation and gas from the Tubb formation.

Attached hereto is (1) plat showing well to be dually completed and other wells in the vicinity and (2) diagram showing proposed method of dual completion. Copies of this application with attached plat and diagram have been furnished to all offset operators.

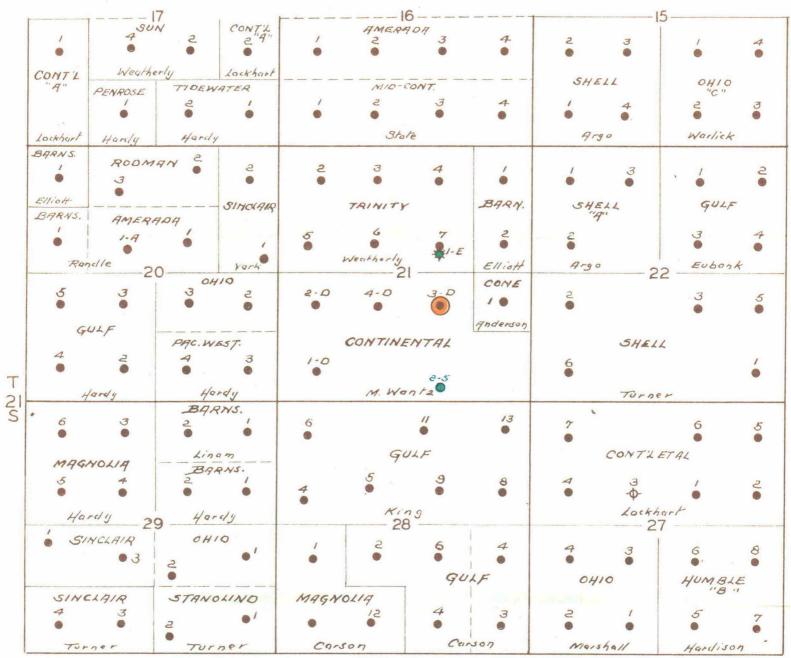
Done at Hobbs, New Mexico on this \_\_\_\_\_ day of May 1950.

Respectfully submitted, CONTINENTAL OIL COMPANY

EIS-MFM Enc.

- CC: Oil Conservation Commission Santa Fe, New Mexico - 3 Oil Conservation Commission Hobbs, New Mexico C. G. Staley Hobbs, New Mexico HLJ-2 HM
- Trinity Drilling Company Barnaidall Oil Company S. E. Cone et al Shell Oil Company Gulf Oil Corpn. Ohio Oil Company Pacific Western Oil Company Repolle Oil Company

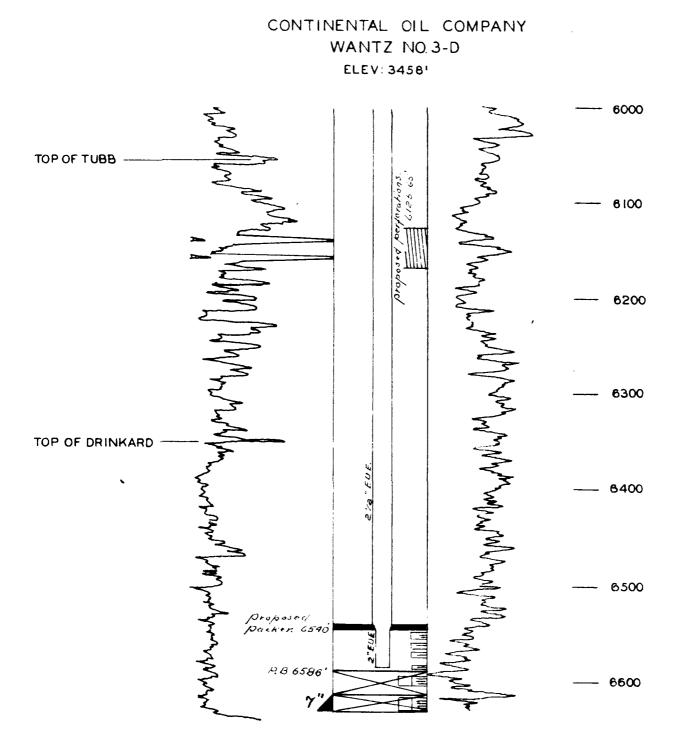
R-37-E



CONTINENTAL OIL COMPANY WANTZ NO.3-D AND OFFSET WELLS SCALE : I INCH=2000 FT.

N.M. DIST. OFFICE

MAY 5th, 1950.



•

PROPOSED METHOD OF DUAL COMPLETION

#### NOTICE OF PUBLICATION STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

The State of New Mexico by its Cil Conservation Commission hereby gives notice pursuant to law and the rules and regulations of said Commission promulgated thereunder, of the following public hearing to be held May 23, 1950, beginning at 10:00 o'clock a.m. on that day in the City of Santa Fe, New Mexico, in the Capitol (Hall of Representatives).

#### STATE OF NEW MEXICO TO:

# All named parties in the following cases and notice to the public:

#### Case 220

In the matter of the application of the Skelly Oil Company for an exception to Rule 104 for the formation of an unorthodox unit in Section 2, Township 23S, Range 36E, N.M.P.M., Langlie-Mattix pool, Lea County, New Mexico.

#### Case 221

In the matter of the application of Continental Oil Company for an order granting permission to dually complete its "M.E. Wantz No. 3-D" well, located in the NW/4 SE/4 Section 21, Township 21S, Range 37E, N.M.P.M., Lea County, New Mexico, for producing gas from the Tubb sand, and oil from the Drinkard formation.

#### Case 222

In the matter of the application of Barnett and Rector for an order permitting the drilling of an unorthodox location 1370 ft. from the south line and 330 ft. from the west line (SW/4 NW/4 SW/4) of Section 20, Township 17S, Range 35E, N.M.P.M., along the northern limits of the Vacuum pool, Lea County, New Mexico.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on May 9, 1950.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

/s/ R. R. SPURRIER, SECRETARY

LEA COUNTY OPERATORS COMMITTEE HOBES, NEW MEXICO Hay 11, 1950 SKELLY OIL COMPANY Tulsa 2, Oklahoma May 5, 1950

Mr. R. R. Spurrier Box 871. Oil Conservation Commission Santa Fe, New Mexico

Dear Sir:

In furtherance of our application which we believe is set for hearing at 10 o'clock a. m. Tuesday May 23rd we find that both our application and letter fails to state that El Paso Natural Gas Company should be advised of our application and hearing and should therefore receive notice of our hearing. Their address is 1901 National Standard Building, Houston 2, Texas, to the attention of Mr. Tucker.

We also wish to make a correction in Paragraph 4 of our application following the word "unit", in the 3rd line by striking the remainder of the sentence which reads, "and it is the understanding of this applicant that they will propose to locate their gas well in the center of the W/2 of their 160 acre unit."

Very traly yours,

/s/ George W. Selinger

GWS:

DEA COUNTY OPPRATORS COMMITTEE NOBBS, NEW MEXICO May 11, 1950

#### BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF ) THE SKELLY OIL COMPANY FOR AN EXCEPTION ) TO RULE 10/ FOR THE FORMATION OF AN ) UNORTHODOX UNIT IN SECTION 2, ) TOWNSHIP 23 SOUTH, RANGE 36 EAST, ) LANGLIE-MATTIX, LEA COUNTY, NEW MEXICO ) CAUSE\_\_\_\_\_

<u>A P P L I C A T I O N</u>

Comes now Skelly Oil Company and alleges and states:

1. That it is the owner of Lease No. 16629, described as the S/2 SE/4 Section 2, Township 23 South, Range 36 East, and Lease No. 5943, described as the S/2 Sw/4 Section 2, Township 23 South, Range 36 East, Lea County, New Mexico, which leases lie in the so-called Langlie-Mattix Field in an area where gas wells are located.

2. That since August, 1948, applicant has been attempting to form a unit to comprise the SE/4 of Section 2, Township 23 South, Range 36 East, but has been unsuccessful in so forming a unit due to the particular circumstances in which the El Paso Natural gas Company has certain arrangements with Shell Oil Company as to gas rights and Shell Oil Company retaining oil rights, and due to such provisions of their contract applicant is unable to negotiate a unit covering such SE/4 of said Section 2-23S-36E.

3. That applicant seeks an exception to Rule 104 so as to permit the assignment of 160 surface contiguous acres and to permit the drilling of a well in the center of the E/2 of such proposed unit.

4. That El Paso Natural Gas Company and Shell Oil Company, in the provisions of their contract on the remainder of the S/2 of said Section 2-235-36E and can assign a similar 160-acre unit, and it is the understanding of this applicant that they will propose to locate their gas well in the center of the W/2 of their 160-acre unit.

5. That the establishment of such units as an exception to Rule 104 will not be detrimental to any of the offset operators insofar as only two wells will be located on the S/2 of Section 2-23S-36E.

6. The following offset operators to applicant's two leases should be notified of the filing of this application:

Shell Oil Company, Midland, Texas Sinclair Oil & Gas Company, Fair Building, Fort Worth, Texas Texas Pacific Coal & Oil Company, Ft. Worth National Bank Building, Fort Worth, Texas Cities Service Oil Company, Bartlesville, Oklahoma Gulf Oil Corporation, Fort Worth, Texas Tide Water Associated Oil Company, Mellie Esperson, Houston, Texas R. Olsen Oil Company, Apco Tower, Oklahoma City, Oklahoma Continental Oil Company, Fair Building, Fort Worth, Texas Atlantic Oil & Refining Company, Box 2819, Dallas, Texas Stanolind Cil & Gas Company, Fair Building, Fort Worth, Texas Stanolind Oil Company of Texas, Box 1249, Houston, Texas Application Fage 2

> Western Natural Gas Company, El Paso,-Texas Magnolia Petroleum Company, Dallas, Texas

WHEREFORE, premises considered, applicant prays that this Commission set this matter down for hearing after the giving of proper notices and that from the evidnece adduced at such hearing, grant this applicant an exception to assign the S/2 of the S/2 of Section 2, Township 23 South, Range 36 East, Langlie-Mattix Gas Field, Lea County, New Mexico, and permit the drilling of a well in the center of the E/2 thereof, and for such other orders, rules and regulations that may be necessary in the premises.

Respectfully submitted,

SKELLY CIL COMPANY

By: George W. Selinger

LEA COUNTY OPERATORS COMMITTEE HOBBS, NEW MEXICO May 11, 1950

### LEA COUNTY NEW MEXICO

T 23S - R 36 E

r					
SINCLAIR CLAY	GUL	۲ ۲	R. OLSEN		
₩4		**1	<b>∛</b> 1		
3	SHE	SHELL			
	SKELLY 5943	SKELLY ~ 1 16629	1+ <del>;</del> -		
CITILS T.P.C& SERVICE	0. T.P.C.& O.	T.P.C.& O. ₩16	CONTINENTAL CLAY ≭1		
10			WESTERN GAS		

#### CONTINENTAL OIL COMPANY Hobbs, New Mexico May 4, 1950

IN THE MATTER OF THE APPLICATION OF CONTINENTAL OIL COMPANY FOR AN ORDER GRANTING PERMISSION TO DUALLY COMPLETE "M. E. WANTZ NO. 3-D WELL", DRINKARD FOOL, NW/4 SE/4, SECTION 21, TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

#### APPLICATION

COMES NOW Continental Oil Company, a Delaware Corporation, operating in New Mexico from a field office in Hobbs, New Mexico, and respectfully represents to the Oil Conservation Commission of the State of New Mexico that it has completed the M. E. Wantz No. 3-D well, located in the NW/4 SE/4, Section 21, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico. This well is presently producing from the Drinkard formation through perforated intervals extending from 6546 feet to 6584 feet and is equipped with 2 1/2" EUE tubing. Seven-inch casing is set at 6627 feet.

Applicant further represents that a high pressure gas zone exists at an approximate depth of 6150 feet in the Tubb Sand section of the M. E. Wantz No. 3-D well as evidenced by gas production from the Tubb section in the North offset to said well and a drill-stem test yielding 4301.4 MCF gas per day from the Tubb section in the South offset to said well and that it is practical and economically feasible to dually complete this well to produce liquid hydrocarbons through the tubing and gas through the annulus between the casing and tubing with proper packer and wellhead connections.

WHEREFORE, applicant asks that permission be granted to recomplete said well to produce oil from the Drinkard formation and gas from the Tubb formation.

Attached hereto is (1) plat showing well to be dually completed and other wells in the vicinity and (2) diagram showing proposed method of dual completion. (Not included.) Copies of this application with attached plat. have Application Page 2

been furnished to all offset operators.

.

Done at Hobbs, New Mexico on this 4th day of May 1950.

Respectfully submitted,

CONTINENTAL OIL COMPANY

/s/ E. L. Shafer

ELS-MFM Enc.

LEA COUNTY OPERATORS COMMITTEE May 11, 1950 HOBBS, NEW MEXICO

77	7			16				1	5
	1 2 x	Cont 11 2 1141 x	l x	Amerada 2 x	3 x	4 x	2 x	3 x	l x
Weathe	erly	Lockhart					She]	٦	Ohio
Penrose	Tidewa 2	ter	7	Mid-cont		, 1			2
l x	x x	x	l x	x	3 x	4 x	l x	4 x	x
Hardy	Hardy			State	•		Are	go	Warlick
Rodman 3 x	2 x	2 x	2 x	3 x	4 x	l x	l x	3 x	l x
Amerac	<b></b> ło	Sinclair		Trinity		Barn.	Shel	7 <sup>EX</sup>	Gulf
1-A	x	1	5 X	6 x	7 01-E	<u>ş</u>	2	<b>4</b>	3
Randle 20	)	York x	We	atherly 21	· •••	ELLIOU	Argo	2	Eubank
3 x	Oh 3 x	io 2 <b>x</b>	2-D x	4-D x	3-D	Cone 1 x	2 x	~.	3 x
Gulf				<u> </u>		Anderson	L	~	
2	Pac. W	I	l-D	Continent	ar	t	,	Shel	L
2 x	·4 X	3 x	τ <b>-</b> υ		2		6 <b>x</b>		
Hardy	Ha	rdv		M. Wan	$2_{\overline{\mathbf{x}}}^{\mathbf{s}}$		-+	Turne	r
3 X	Bar 2 x	the second s	6 x		11	13 X			6 x
x			x		x	x	×		
Magnolia	Lin			Gul	ſ	•		Cont 1	Et Al
-	Bar 2 x	ns. 1		5 <b>x</b>	9 x	8 x	4 *	3	l
4 X	x	x	4 <b>x</b>			x	X		
Hardy 29	Har	dy	·····	King 28				Lockha 2'	art 7
Sinclair	Chi	٥	,		4				•
x 3	2	xl	l x	2 x	6 x	4 x	4 x	3 x	6 x
	2 x				Gul	f	-	io	Humble
Sinclair	Stanol	ind	Magno	lia					
3	2	xl	x	12 x	4 X	3 X	2 x	1	5 x
x Turner	2 x Turn	or	,	son		son	**	hall	Hardison
	10111	<u> </u>	Vd1	<u>BOII</u>	Val		1,821,5		TIGTUTSUI

CONTINENTAL OIL COMPANY WANTZ NO. 3-D and OFFSET WELLS SCALE: 1 INCH = 2000 FT.

N.M. DIST. OFFICE

MAY 5th, 1950

R-37-E

COPY

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO RECEIVED: MAY 9, 1950

Box 670 Roswell, New Mexico May 8, 1950

AIR MAIL

Mr. R. R. Spurrier, New Mexico Oil Conservation Commission, Santa Fe, New Mexico.

Dear Sir:

Reference is made to my letter of April 24th and your reply of April 27th, regarding our request for a hearing before the Commission, for the purpose of obtaining approval to drill an irregular location.

The proposed location is 1370 feet from the South line and 330 feet from the West line of Sec. 20, T. 17 S., R. 35 E., Lea County, New Nexico. We have completed our State No. 1-F well, on the same lease, at a location 330 feet from the South line and 660 feet from the West line of Sec. 20; initial production was 72 barrels of oil per day, swabbing and flowing. We know that a location to the North should be structurally lower, and it is believed that a regular location on the north 40 acres of our lease might prove non-commercial. The proposed location does not crowd or involve any outside operators. The entire West half of the Southwest Quarter of Section 20 is a part of State Lease B-2245, and the leasthold rights above 5000 feet are held by Barnett & Rector, under a farmout from The Ohio Oil Company. Barnett & Rector also hold the leasehold rights above 4800 feet on the offsetting acreage to the West; this is a part of State Lease B-1398. A sketch of the location and adjoining acreage is attached.

We wish to request that a hearing before the Commission be scheduled at an early date, for the purpose of presenting our request, and looking toward approval of the irregular location.

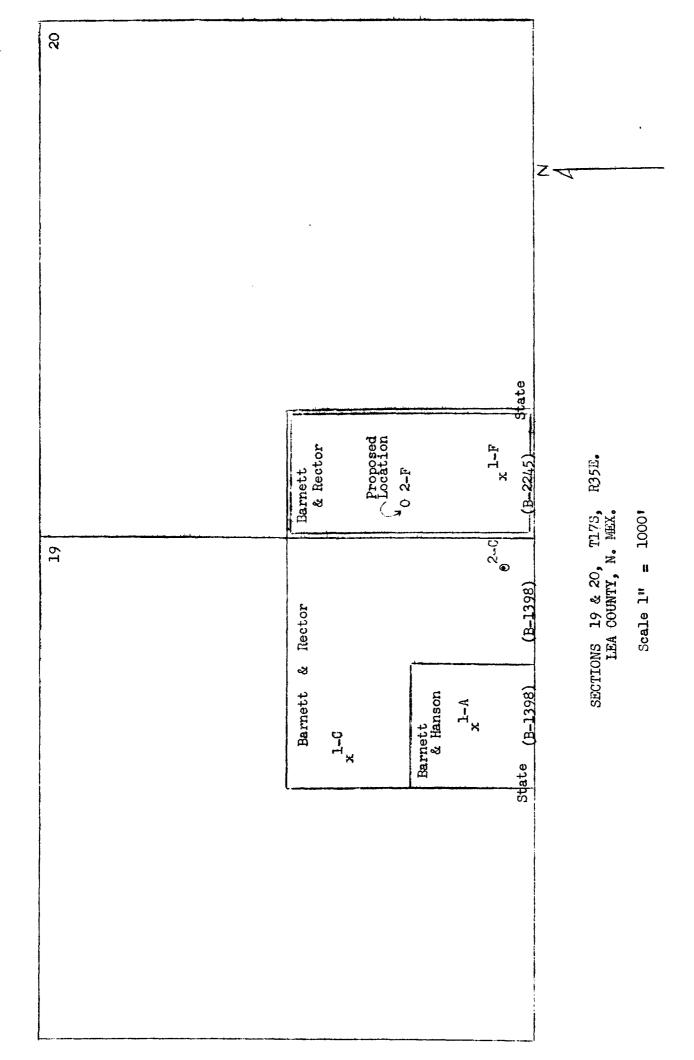
Thanking you, we are

	Yours very truly,
	BARNETT & RECTOR
/s/	John A. Barnett

JAB:b

P.S. This was informally discussed with Mr. Spurrier in Roswell last night, and he requests that this be handled promptly, in order that it be included in the agenda for the hearing now scheduled for May 23, 1950.

J.A.B.



#### NOTICE FOR PUBLICATION STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the rules and regulations of said Commission promulgated thereunder, of the following public hearing to be held May 23, 1950, beginning at 10:00 o'clock a.m. on that day in the City of Santa Fe, New Mexico, in the Capitol (Hall of Representatives).

#### STATE OF NEW MEXICO TO:

All named parties in the following case and notice to the public;

#### <u>Case 223</u>

In the matter of application of Cooperative Producing Association for the establishment of a secondary recovery program on all of Section 31, Twp. 12S, R. 32E., N.M.F.M., Lea County, New Mexico.

Given under the seal of the Oil Conservation Commission of New Mexico at Santa Fe, New Mexico on May 10, 1950.

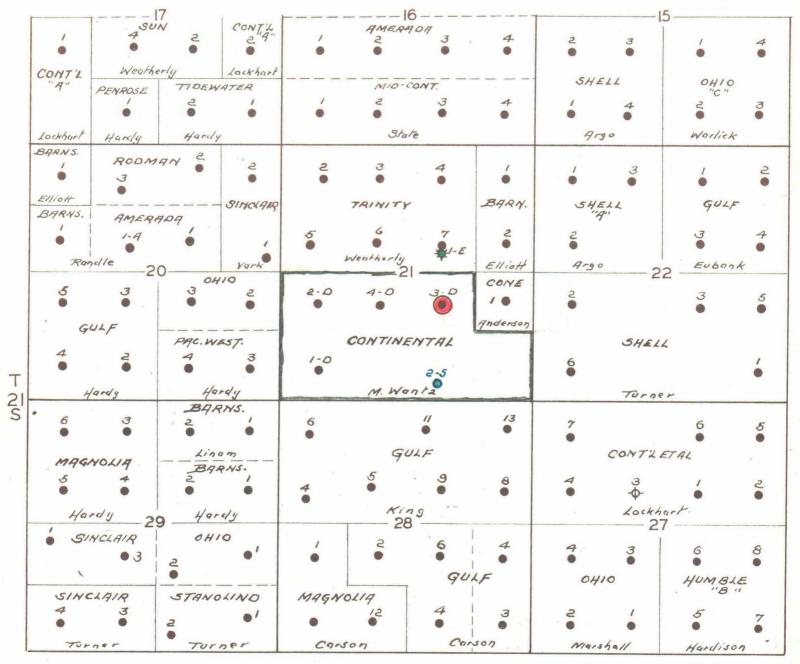
STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

R. R. SPURRIER, SECRETARY

LEA COUNTY OPERATORS COMMITTEE HOBBS, NEW MEXICO May 15, 1950

applicanta schibit 20.1 Lase 221

## R-37-E



## CONTINENTAL OIL COMPANY WANTZ NO. 3-D OFFSET WELLS SCALE : I INCH=2000 FT.

N.M. DIST. OFFICE

MAY 5th, 1950.

NOTIOE SIN FURLICATION STATE OF REF. MEXICO OIL CONSERVATION COMMISSION The State of New Medico by its Oil Conservation Commission hereby gives no- tice pursuant to hav and the rules and regulations of said Commission promul- gated therminier, of the following public hearing to fit heid May 23, 1960 heginning at 18:06 which Fe, New Mexico, in: the City of Santa Fe, New Mexico, in: the Capital (Hall of Representiatives). STATE OF NEW MIXING TO: All manue Daties in the following	Affidavit of Publication				
cases and notice to the public: Case 220 In the matter of the application of the	State of New Mexico County of Santa Fe				
Skelly Oil Company for an exception to Rule 104 for the formation of an un- orthodox unit is Section 2. Township 285, Range 36E, N.M.P.M., Langfle-Mattir pool, Les. County, New Merrico. Case 221	I,, being first duly sworn,				
In the motter of the continuity of gun	declare and say that I am the (Business Manager) (Editor) of the Sinta Fe				
In the basic to an application of Con- tinental Oil Company for an order provide its "M.E. Wants No. 3-D" well, located in the NW/4 SE/4 Section 21, Township 218, Range 375, N.M.P.K., Les County, New Moxico, for producing gas from the Tubb sand, and all from the Drinkard formation. Case 353 In the matter of the application of Barnett and Rector for an order perimi- ting the define of a monthodox forestion 1970 ft. from the south has and 210 ft. from the west has: dSW/4, NW/4 SW/4) of Section 20, Township 175, Range 35E, N.M.P.M., along the horthern limits of	, a daily newspaper, published in the English Language, and having a general circulation in the City and County of Santa Fe, State of New Mexico, and being a newspaper duly qualified to publish legal notices and adver- tisements under the provisions of Chapter 167 of the Session Laws of 1937; that the publication, a copy which is hereto attached, was published in said paper once each week				
Content of the seed of the Office of the office of the seed of the Office offic	for				
Pub.: May 11, 1850.	tion on the, day of, 19; that payment for said advertisement has been (duly made), or (assessed as court costs); that the undersigned has personal knowledge of the matters and things set forth in this affidavit.				
PUBLISHER'S BILL	Cultor-Manager.				
Lu lines, one time at \$					
lines,times, \$	Subscribed and sworn to before me this / 2-th				
Tax \$	day of Mary, A.D., 1900				
Total \$	A second to the second se				
Received payment,	My Commission expires				
• 	June 14 1953				
By					

## TESTIMONY

#### WANTZ NO. 3-D DUAL COMPLETION

#### 1. LEASE DESCRIPTION

The Mary E. Wantz Lease consists of 280 acres of patented land in Sec. 21, T-21-S, R-37-E, Lea County New Mexico. The lease has two producing wells in the Penrose-Skelly pay operated by the Trinity Drilling Company. There are also four producing wells in the Drinkard, two in the Hare Pool (McKee Sand) and two in the Brunson Pool (Ellenburger) all operated by the Continental Oil Company. Since these oil producing horizons are recognized as separate reservoirs, the remaining portion of this testimony concerns only the "Drinkard Sandy Member" and Lower Yeso.

#### 2. PRODUCING FORMATIONS

In Bulletin No. 29, published by the New Mexico Bureau of Mines and Mineral Resources, the author, E. Russell Lloyd, has divided the Yeso formation into four parts. These are Upper, Middle, Drinkard Sandy Member and Lower. The Drinkard Sandy Member is also commonly referred to as the "Tubb Sand." To avoid confusion "Tubb Sand" is used here. Between the top of this sand and the base of the Drinkard pay horizon there is approximately 600 feet of

Case 221

formation. This can be divided as follows:

- Tubb, 160 feet, chiefly sand and sandy dolomite.
- 150 feet of dolomite to the top of the Drinkard.
- 3. 300 feet of Drinkard pay horizon, chiefly lime and dolomite. Oil and gas accumulation being mainly in the bottom 200 feet.

A number of drill stem tests on wells in the area have shown the presence of gas in the lower portion of the Tubb Sand. A north offset to the Wantz No. 3-D was completed in this section for a potential of 6,000 MCF gas per day. While drilling a well, the Wantz No. 2-S, to the McKee Sand, one location south of the Wantz No. 3-D, the Continental Oil Company took a drill stem test of the Tubb Sand. During the test the section produced gas at the rate of 4,300 MCF per day.

The Wantz No. 3-D plus three direct and two diagonal offsets are producing oil from the lower 200 feet of the Drinkard.

Electrical logs, sample analysis and drill stem tests all indicate the 150 feet of dolomite between the base of the Tubb Sand and the top of the Drinkard to be mainly

-2-

dense and barren. The Continental Oil Company's Wantz No. 1-S was cored through the Drinkard section. The core analysis of the top 30 feet showed no permeability while the next 70 feet showed only a few scattered feet with permeability.

This information all indicates that the Drinkard pay and the gas horizon in the Tubb Sand are separate reservoirs.

In the Wantz No. 3-D the top of the Tubb Sand is at 6050 feet and extends to 6210 feet. The section carrying gas is, by correlation with other wells, between 6120 feet and 6195 feet.

The top of the Drinkard pay horizon is at 6345 feet while the main porosity and permeability start at 6500 feet. The well was drilled to a total depth of 6630 feet, the base of the Drinkard.

#### 3. WELL AND OFFSET DATA

The Wantz No. 3-D was completed January 7, 1948 for an initial potential of 240 barrels oil per day. This production was through casing perforations in the Drinkard pay at 6546-53, 6558-64, 6568-73 and 6580-84 feet.

On February 9, 1950, the well tested 32 1/2 barrels oil in 4 1/2 hours. Cumulative production as of April 1, 1950, was 32,080 barrels.

The 40 acre unit offsetting the Wantz 3-D to the north is operated by the Trinity Drilling Company. It contains two wells, one producing oil from the Drinkard and the other gas from the Tubb Sand. The Trinity Drilling Company's

-3-

M. Weatherly No. 7 was completed February 5, 1948, for an initial potential of 228 barrels oil per day. This was from the Drinkard through perforations at 6516-28, 6534-58 and 6566-84 feet. During March 1950, this well produced 1,692 barrels. The cumulative production to April 1, 1950, was 58,771 barrels. The Trinity Drilling Company's Weatherly No. 1-E was completed April 27, 1949, for an initial potential of 6,000 MCF gas per day. This was from the Tubb section through perforations 6143-53 and 6158-80 feet. During March 1950, the well produced 38,612 MCF gas plus approximately 1,250 barrels distillate. Cumulative production to April 1, 1950 was 78,080 MCF gas and 2,378 barrels distillate.

The east offset to Wantz No. 3-D is the Gordon Cone, Anderson No. 1. This well was completed April 29, 1948, for an initial potential of 446 barrels oil per day from the Drinkard through perforations 6510-35, 6550-80 and 6590-28 feet. During March 1950, the well produced 2,092 barrels of oil. It had a cumulative production as of April 1, 1950, of 60,814 barrels.

The west offset is Continental Oil Company's Wantz No. 4-D. It was completed for an initial potential of 360 barrels oil per day on August 25, 1948. It was completed in the Drinkard through perforations 6570-6602 and 6630-40 feet. During March 1950, the well produced 943 barrels of oil. The cumulative production as of April 1, 1950 was 19,842 barrels.

-4-

#### 4. COMPLETION METHOD

The proposed method of dual completion will prevent commingling of the Tubb Sand and Drinkard production inside the casing. Separation of production from the two zones will be accomplished by means of a Baker Model "D" retainer type production packer. This packer was designed for dual completion work and is capable of withstanding a differential pressure of 2,000 pounds per square inch. The packer has two sets of slips which set in the casing. After both slips have been set and the packer rubber has been expanded against the pipe, it is impossible to move the packer up or down and it can be removed only by drilling it out. The packer has a circular opening in the center through which the production string is run. On the production string is an O-ring seal assembly which seats in the packer and forms a perfect seal. This O-ring seal is recognized throughout the oil industry as the best type of seal for such uses. Once the production string is in place, oil from the Drinkard formation will be produced through the tubing and gas from the Tubb Sand will be produced through the annular space between the tubing and casing.

The static bottom hole pressure of the Drinkard pay in the Wantz No. 3-D was 1,502 pounds in November 1949. It is estimated that the flowing bottom hole pressure is greater than 700 pounds. The Tubb Sand is expected to have a static

-5-

formation pressure of 2,400 pounds (The shut-in drill stem test pressure on Wantz No. 2-S was 2,377 pounds). Flowing pressure from this zone is expected to be 2,000 pounds. The maximum differential pressure across the dual completion packer would occur when the Drinkard pay was producing oil and the gas horizon was shut in. Under that condition a differential of 1,700 pounds would exist. This is below that for which the packer is designed.

This completion method will allow both zones to be produced to depletion.

The Drinkard oil will be flowed through the  $2 \frac{1}{2}$  inch tubing. When natural flow ceases, it will be possible to pump or gas lift the remaining recoverable oil.

The gas horizon is expected to flow to depletion through the annulus.

#### 5. ECONOMICS

It is economically sound to dually complete the Wantz No. 3-D because two producing offsets can be met with one well.

To dually complete the present Wantz No. 3-D will cost approximately \$10,000. To drill a gas well to meet the offset producing from the Tubb Sand would cost \$75,000. A saving of \$65,000 can, therefore, be expected by dual completion of the Wantz No. 3-D.

-6-

#### Case 220 - Skelly

Copies of Application and Notice of Publication:

Glenn Staley Shell Oil Co., Midland, Texas Sinclair Oil & Gas Co., Ft. Worth Texas Pacific Coal & Oil, Ft. Worth Cities Service Oil Co., Bartlesville Bulf Oil Corp. Tide Water Associated, Houston R. Olsen, Oklahoma City Continental Oil, Ft. Worth Atlantic Oil & Refg. Co., Dallas Stanolind, Ft. Worth Std. Oil of Texas, Houston Western Gas Co., El Paso Magnolia Petroleum, Dallas

حريره

Copy of Notice to El Paso Natural Gas Co. - Houston. Copy of Notice to G. W. Selinger, Scelly Oil Co., Tulsa.

May 9, 1950

tions - continental + Bornett also to Staley.