Case No.

565

Application, Transcript, Small Exhibits, Etc.

FORM 402 LN 5-51 16M
PRINTED IN U.S.A.

Case 564

LOS NIETOS COMPANY

IN REPLY GIVE NO.

CARBON COPY

200 Wilkinson-Foster Building
Midland, Texas
July 17, 1953

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

Attention of Mr. R. R. Spurrier, State Geologist

Gentlemen:

This letter is to submit our formal application to drill directionally Los Nietos Company's State Gross No. 2 well in East Caprock Field, Lea County, New Mexico.

The well has a surface location of 1980 feet from the north and east lines of Section 2, T-12-S, R-32-E, Lea County, New Mexico. The well was spudded at 9:00 a.m., January 7, 1953, and was drilled to 11,260 feet without reaching the Devonian pay section. A directional survey was run to 11,248 feet; and the hole was found to be off 99.55' N 70° 44' E at a true vertical depth of 11,245.35 feet. This would make the sub-surface location 1943.18 feet from the north line and 1883.71' from the east line of Section 2.

It was decided at this point to plug back and directionally drill part of the hole. Mr. R. W. Yarbrough, our district engineer in Hobbs, received verbal approval from Mr. Spurrier to do this work with this formal application to follow.

On April 19, 1953, the first whipstock was set at 9679 feet with the whipstock face oriented to S 1° E. The directional hole was finished July 2, 1953, with 19¼°. S 35° E at 11,290 feet. The true vertical depth was 11,259.06 feet. The final sub-surface location is 2208.11 feet from the north line and 1811.54 feet from the east line of Section 2, T-12-S, R-32-E, Lea County, New Mexico.

The well was potentialed July 9, 1953, for 334.34 bbl./day after acidizing casing perforations with 500 gallons mud acid.

Submitted with this application are the sub-surface surveys and a plat for a relationship of surface and sub-surface locations.

Your kind and prompt consideration of this matter will be greatly appreciated.

Very truly yours

Bryan L. Benson
Division Engineer

BLB:BM
Enclosures

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. 564
ORDER NO. R-360

THE MATTER OF THE APPLICATION OF LOS NIETOS COMPANY FOR PERMISSION TO DRILL DIRECTIONALLY ITS STATE GROSS NO. 2 WELL, SW/4 NE/4 SECTION 2, TOWNSHIP 12 SOUTH, RANGE 32 EAST, THE WELL TO BE PLUGGED BACK FROM A TOTAL DEPTH OF 11,260' AND WHIPSTOCKED IN ORDER TO DEVIATE AND ATTEMPT TO REACH THE DEVONIAN PAY SECTION OF THE EAST CAP-ROCK-DEVONIAN POOL AT A POINT APPROXIMATING A SURFACE LOCATION OF 2208.11' FROM THE NORTH LINE and 1811.54' FROM THE EAST LINE OF SAID SECTION 2.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a. m., on August 20, 1953, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 17th day of September, 1953, the Commission, a quorum being present, having considered the testimony adduced and exhibits received at said hearing, and being fully advised in the premises,

FINDS:

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

(2) That by reason of structural conditions the State Gross No. 2 was bottomed dry at 11,260'.

(3) That with Commission approval, the applicant plugged back and whipstocked at 9639', thereafter directionally drilling to a predetermined bottom 2208.11' from north line and 1811.54' from the east line in the Devonian formation at a depth of 11,259'.

(4) That applicant has caused subsurface and directional drilling surveys to be made as required by Commission rules.

(5) No objections by offset operators were presented.

IT IS THEREFORE ORDERED:

That the application of Los Nietos Company for permission to directionally drill its State Gross No. 2 Well, located in the SW/4 NE/4 of Section 2,

Case No. 564
Order No. R-360

Township 12 South, Range 32 East, NMPM, Lea County, New Mexico, in the East Caprock-Devonian Pool, be, and the same hereby is approved.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

E. L. Mechem

Edwin L. Mechem, Chairman

E. S. Walker

E. S. Walker, Member

R. R. Spurrier

R. R. Spurrier, Secretary

S E A L

RETURN TO
FIELD DEPT.

DIRECTIONAL DRILLI

DATE JULY 7, 1953

COMPANY Los Nietos Co. ~~UNION OIL COMPANY OF CALIFORNIA~~

WELL STATE CROSS NO. 2

FIELD EAST CAPROCK

LOCATION

COUNTY CHAVES

STATE NEW MEXICO

MAGNETIC DECLINATION

HOMCO

REG. U. S. PAT. OFF.

HOUSTON OIL FIELD MATERIAL COMPANY, INC.

DIRECTIONAL DRILLING

COMPANY: Los Nietos Co. ~~UNION OIL COMPANY OF CALIFORNIA~~ EAST CAPROCK FIELD DATE: JULY 7, 1953

WELL NO.: STATE GROSS NO. 2 LOCATION: CHAVES COUNTY, NEW MEXICO PAGE: 1 OF 3

DISC NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE	TRUE VERTICAL DEPTH	COURSE DEVIATION	DIRECTION OF DEVIATION	TOTAL COORDINATES NORTH	SOUTH	EAST	WEST
	Coordinates at 9613 feet taken from HOMCO Multiple Shot Survey									
	9613'			9612.23'				3.32'	12.38'	
	9679	66'	1 30	9678.21	1.73	N 71 E		2.75	14.02	
	9690	11	4 45	9689.17	.91	S 76 E		2.97	14.90	
	9702	12	5 00	9701.12	1.05	S 77 E		3.20	15.92	
	9724	22	5 15	9723.03	2.01	S 75 E		3.72	17.86	
	9760	36	5 15	9758.88	3.29	S 75 E		4.58	21.04	
	9795	35	4 45	9793.76	2.90	S 72 E		5.48	23.80	
	9823	28	5 15	9821.64	2.56	S 72 E		6.27	26.23	
	9857	34	4 45	9855.52	2.82	S 72 E		7.14	28.91	
	9889	32	4 15	9887.43	2.37	S 78 E		7.64	31.23	
	9895	6	3 30	9893.42	.37	S 36 E		7.94	31.45	
	9924	29	3 30	9922.37	1.77	S 30 E		9.48	32.34	
	9949	25	3 30	9947.32	1.53	S 26 E		10.86	33.01	
	10020	71	4 15	10018.12	5.26	S 23 E		15.70	35.06	
	10063	43	5 15	10060.94	3.93	S 25 E		19.26	36.72	
	10116	53	6 45	10113.57	6.23	S 29 E		24.71	39.74	
	10141	25	7 00	10138.38	3.05	S 31 E		27.32	41.32	
	10195	54	7 45	10191.89	7.28	S 33 E		33.42	45.28	
	10226	31	8 30	10222.55	4.58	S 35 E		37.18	47.90	
	10287	61	9 15	10282.76	9.81	S 36 E		45.12	53.67	
	10314	27	7 15	10309.54	3.41	S 27 E		48.16	55.22	
	10341	27	6 45	10336.35	3.17	S 26 E		51.01	56.61	
	10382	41	6 15	10377.11	4.46	S 25 E		55.06	58.49	
	10441	59	6 15	10435.76	6.42	S 19 E		61.13	60.58	
	10505	64	7 00	10499.28	7.80	S 24 E		68.25	63.76	

(Cont. Page 2)

HOUSTON OIL FIELD MATERIAL COMPANY, INC.

DIRECTIONAL DRILLING

COMPANY: ~~UNION OIL COMPANY OF CALIFORNIA~~ Los Nietos Co.
WELL NO.: STATE GROSS NO. 2
LOCATION: EAST CAPROCK FIELD, CHAVES COUNTY, NEW MEXICO
DATE: JULY 7, 1953
PAGE: 2 OF 3

DISC NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE	TRUE VERTICAL DEPTH	COURSE DEVIATION	DIRECTION OF DEVIATION	TOTAL COORDINATES NORTH	SOUTH	EAST	WEST
	Continued from page no. 1									
	10505	64	7 00	10499.28	7.80	S 24 E		68.25	63.76	
	10563	58	7 15	10556.82	7.32	S 24 E		74.95	66.75	
	10595	32	7 45	10588.53	4.32	S 26 E		78.84	68.64	
	10617	22	8 15	10610.30	3.16	S 26 E		81.68	70.03	
	10634	17	10 30	10627.02	3.10	S 27 E		84.44	71.44	
	10665	31	11 00	10657.45	5.92	S 27 E		89.72	74.13	
	10698	33	11 15	10689.52	6.44	S 27 E		95.46	77.05	
	10738	40	12 15	10728.91	8.49	S 29 E		102.89	81.17	
	10772	34	12 45	10762.07	7.50	S 30 E		109.39	84.92	
	10835	63	13 30	10823.33	14.71	S 33 E		121.73	92.93	
	10876	41	14 00	10863.11	9.92	S 34 E		129.95	98.47	
	10920	44	14 45	10905.66	11.20	S 35 E		139.12	104.89	
	10997	77	16 00	10979.68	21.22	S 36 E		156.29	117.36	
	11037	40	16 00	11018.13	11.03	S 36 E		164.21	123.85	
	11090	53	16 30	11068.95	15.05	S 36 E		177.39	132.70	
	11170	80	17 15	11145.35	23.72	S 35 E		196.82	146.30	
	11208	38	18 00	11181.49	11.74	S 36 E		206.32	153.21	
	11261	53	18 45	11231.68	17.04	S 35 E		220.28	162.98	
	11290	29	19 15	11259.06	9.56	S 35 E		228.11	168.46	
	Continued on page no. 3									

HOUSTON OIL FIELD MATERIAL COMPANY, INC.

DIRECTIONAL DRILLING

COMPANY: Las Nietos Co. ~~UNION OIL COMPANY OF CALIFORNIA~~ EAST CAPROCK FIELD DATE: JULY 7, 1953

WELL NO.: STATE GROSS NO. 2 LOCATION: CHAVES COUNTY, NEW MEXICO PAGE: 3 OF 3

DISC NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE	TRUE VERTICAL DEPTH	COURSE DEVIATION	DIRECTION OF DEVIATION	TOTAL COORDINATES NORTH	SOUTH	EAST	WEST
	Continued from page no. 3									
	11290'	29'	19 15	11259.06	9.56'	S 35 E		228.11	168.16	
	CLOSURE:	Direction - South 36° 27' East Deflection - 283.58 feet								
	HOMCO OPERATOR:	H. C. HARRIS, JR.								

I certify that this is a true and correct report and that it affords a true and correct representation of the nature and conditions of the well at the time the survey was made.

Linn H. Gaebener
Superintendent
DIRECTIONAL DRILLING DEPARTMENT

Subscribed and sworn to before me this 8 th day of July, 1953, A.D., at Houston, Harris County, Texas.

Lillian Cooles
Notary Public in and for Harris County, Texas

Case 564

COMPANY UNION OIL COMPANY of CALIFORNIA WELL STATE GROSS NO. 2 LOCATION E. CAPROCK, QUAY COUNTY, NEW MEXICO

SUBSURFACE SURVEY

HOMCO

HOUSTON OIL FIELD MATERIAL COMPANY, Inc.

HOUSTON, TEXAS

P. O. Box 2589 Phone WO. 1731

OIL INDUSTRY'S MOST *Complete* SERVICE

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
JUL 20 1953

SUBSURFACE SURVEY

DATE APRIL 10, 1953

COMPANY UNION OIL COMPANY OF CALIFORNIA
WELL STATE GROSS NO. 2
FIELD EAST CAPROCK FIELD
LOCATION

COUNTY CHAVES
STATE NEW MEXICO
MAGNETIC DECLINATION 12° EAST

HOMCO
REG. U. S. PAT. OFF.

HOUSTON OIL FIELD MATERIAL COMPANY, INC.

SUBSURFACE SURVEY

COMPANY: UNION OIL COMPANY OF CALIFORNIA EAST CAPROCK FIELD **DATE:** 4-10-53

WELL NO: STATE GROSS NO. 2 **LOCATION:** CHAVES COUNTY, NEW MEXICO **PAGE:** 1 **OF** 3

DISC NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE	TRUE VERTICAL DEPTH	COURSE DEVIATION	DIRECTION OF DEVIATION	TOTAL COORDINATES NORTH	SOUTH	EAST	WEST
	3663'			3663.00'	Assumed Vertical					
	3843	180'	0 30	3843.00	1.57'	N 68 W	.59'			1.47'
	4024	181	0 45	4023.98	2.37	N 72 W	1.32			3.72
	4204	180	0 45	4023.96	2.36	N 88 W	1.40			6.08
	4386	182	0 45	4385.94	2.38	N 38 W	3.28			7.55
	4566	180	1 00	4565.91	3.15	S 08 E	.16			7.11
	4746	180	1 00	4745.88	3.15	S 12 E		2.91		6.46
	4924	178	1 00	4923.85	3.11	S 08 E		5.99		6.03
	5106	182	1 00	5105.82	3.18	S 30 E		8.74		4.44
	5286	180	0 45	5285.80	2.36	S 48 E		10.32		2.69
	5468	182	0 45	5467.78	2.38	S 23 E		12.51		1.76
	5647	179	0 30	5646.78	1.56	S 27 W		13.90		2.47
	5827	180	Vert.	5826.78	-	-		13.90		2.47
	6009	182	0 15	6008.78	.80	S 58 E		14.32		1.79
	6189	180	0 30	6188.78	1.58	N 70 E		13.78		.30
	6369	180	0 45	6368.76	2.36	S 39 E		15.61	1.19'	
	6551	182	Vert.	6550.76	-	-		15.61	1.19	
	6731	180	0 30	6730.76	1.57	S 42 W		16.78	.13	
	6912	181	1 00	6911.73	3.16	S 55 W		18.59		2.46
	7092	180	Vert.	7091.73	-	-		18.59		2.46
	7274	182	1 00	7273.70	3.18	S 47 E		20.76		.13
	7454	180	Vert.	7453.70	-	-		20.76		.13
	7634	180	0 45	7633.68	2.36	S 72 W		21.49		2.37
	7814	180	0 45	7813.66	2.36	- W -		21.49		4.73
	7994	180	0 30	7993.66	1.57	N 54 W		20.56		6.01
	8175	181	0 45	8174.64	2.37	S 80 W		20.97		8.34

(Continued on page no. 2)

HOUSTON OIL FIELD MATERIAL COMPANY, INC.

SUBSURFACE SURVEY

COMPANY: UNION OIL COMPANY OF CALIFORNIA EAST CAPROCK FIELD **DATE:** 4-10-53

WELL NO: STATE GROSS NO. 2 **LOCATION:** CHAVES COUNTY, NEW MEXICO **PAGE:** 2 OF 3

DISC NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE	TRUE VERTICAL DEPTH	COURSE DEVIATION	DIRECTION OF DEVIATION	TOTAL COORDINATES			
							NORTH	SOUTH	EAST	WEST
	Continued from page no. 1									
	8355'	180'	Vert.	8354.64'	-	-		20.97		8.34'
	8533	178	Vert.	8532.64	-	-		20.97		8.34
	8713	180	1 00	8712.61	3.15	N 26 E		18.15		6.96
	8893	180	1 30	8892.55	4.71	N 32 E		14.16		4.46
	9073	180	2 15	9072.41	7.07	N 42 E		8.91	.27	
	9252	179	1 45	9251.32	5.46	N 57 E		5.94	4.85	
	9432	180	1 15	9431.28	3.93	N 55 E		3.69	8.07	
	9522	90	1 30	9521.25	2.36	S 89 E		3.73	10.43	
	9613	91	1 15	9612.23	1.99	N 78 E		3.32	12.38	
	9702	89	1 30	9701.20	2.33	N 71 E		2.56	14.58	
	9792	90	2 00	9791.15	3.14	N 76 E		1.80	17.63	
	9881	89	1 45	9880.11	2.72	N 73 E		1.00	20.23	
	9971	90	2 00	9970.06	3.14	N 69 E	.13		23.16	
	10061	90	2 15	10059.99	3.53	N 72 E	1.22		26.52	
	10151	90	2 45	10149.89	4.32	N 77 E	2.19		30.73	
	10241	90	3 45	10239.70	5.89	N 73 E	3.91		36.36	
	10332	91	3 30	10330.53	5.56	N 73 E	5.54		41.68	
	10422	91	3 15	10421.38	5.16	N 70 E	7.31		46.53	
	10514	91	3 15	10512.23	5.16	N 67 E	9.33		51.28	
	10604	90	3 15	10602.09	5.16	N 70 E	11.10		56.13	
	10694	90	3 45	10691.90	5.89	N 74 E	12.72		61.79	
	10783	89	3 45	10780.71	5.82	N 63 E	15.36		66.98	
	10874	91	4 00	10871.49	6.35	N 60 E	18.54		72.48	
	10965	91	4 15	10962.24	6.74	N 57 E	22.21		78.13	
	11054	89	4 30	11050.97	6.98	N 54 E	26.32		83.77	
	(Continued on page no. 3)									

HOUSTON OIL FIELD MATERIAL COMPANY, INC.

SUBSURFACE SURVEY

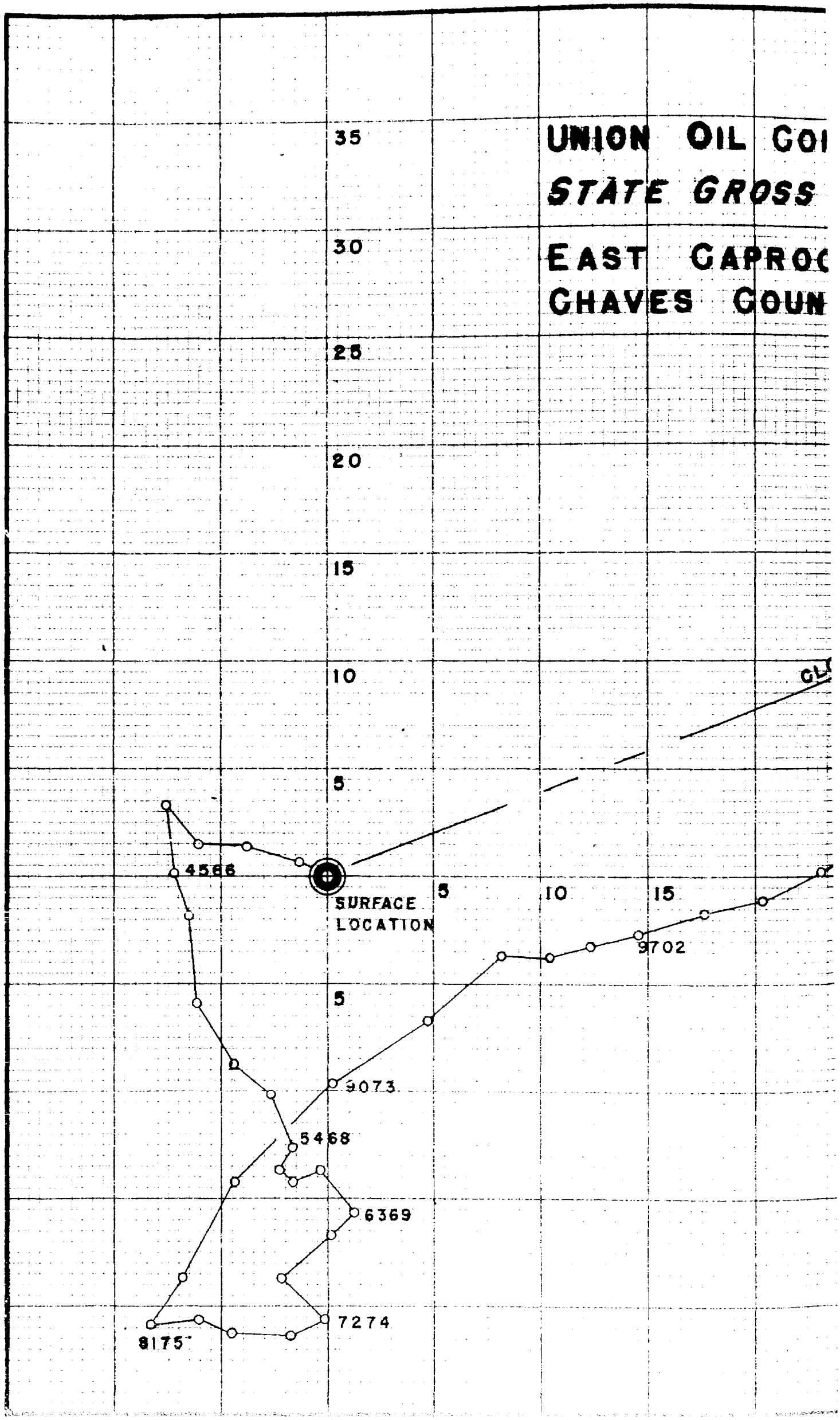
COMPANY: UNION OIL COMPANY OF CALIFORNIA EAST CAPROCK FIELD **DATE:** 4-10-53

WELL NO: STATE GROSS NO. 2 **LOCATION:** CHAVES COUNTY, NEW MEXICO **PAGE:** 3 OF 3

DISC NO.	MEASURED DEPTH	COURSE LENGTH	DRIFT ANGLE	TRUE VERTICAL DEPTH	COURSE DEVIATION	DIRECTION OF DEVIATION	TOTAL COORDINATES			
							NORTH	SOUTH	EAST	WEST
	Continued from page no. 2									
	11143	89	4 45	11139.96	7.37	N 55 E	30.55		89.80	
	11234	91	5 00	11230.31	7.93	N 45 E	36.16		95.41	
	11248	14	4 30	11244.27	1.10	N 53 E	36.82		96.29	
	CLOSURE:	Direction: North 69° 03' East Distance: 102.97 feet								

HOMCO OBSERVER: N.R. (JACK) VAUGHT

April 10, 1953: - Conducted sub surface directional survey from 3663 feet to 11,248 feet inside 6-1/8" X 18' K-Monel collar on 3-1/2 I.F. drill pipe using H-K- go-devil surveying instrument.


UNION OIL CO
STATE GROSS
EAST CAPROC
CHAVES COUN
35
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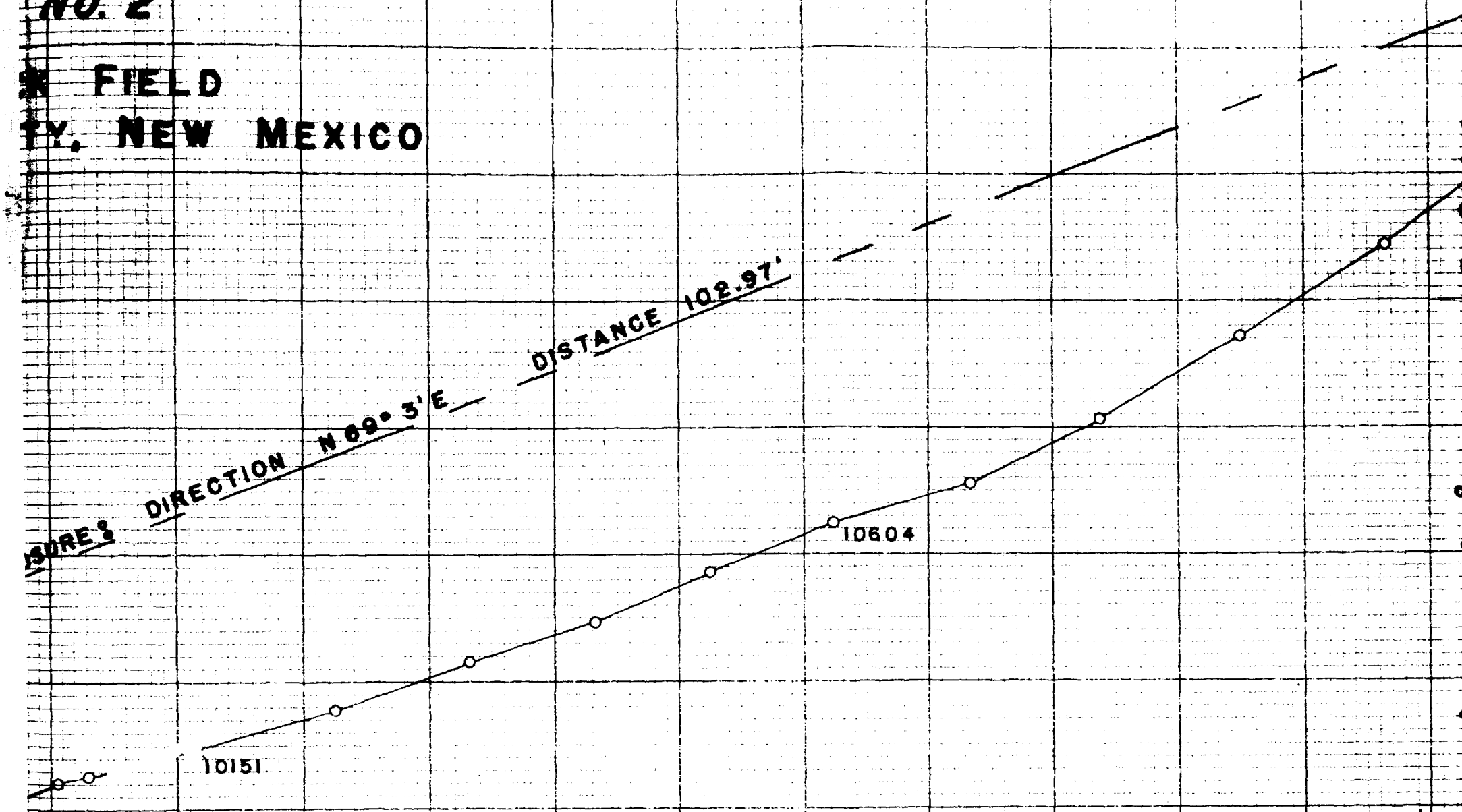
4566
SURFACE
LOCATION
9702
9073
5468
6369
7274
8175

PANY OF CALIFORNIA

NO. 2

FIELD

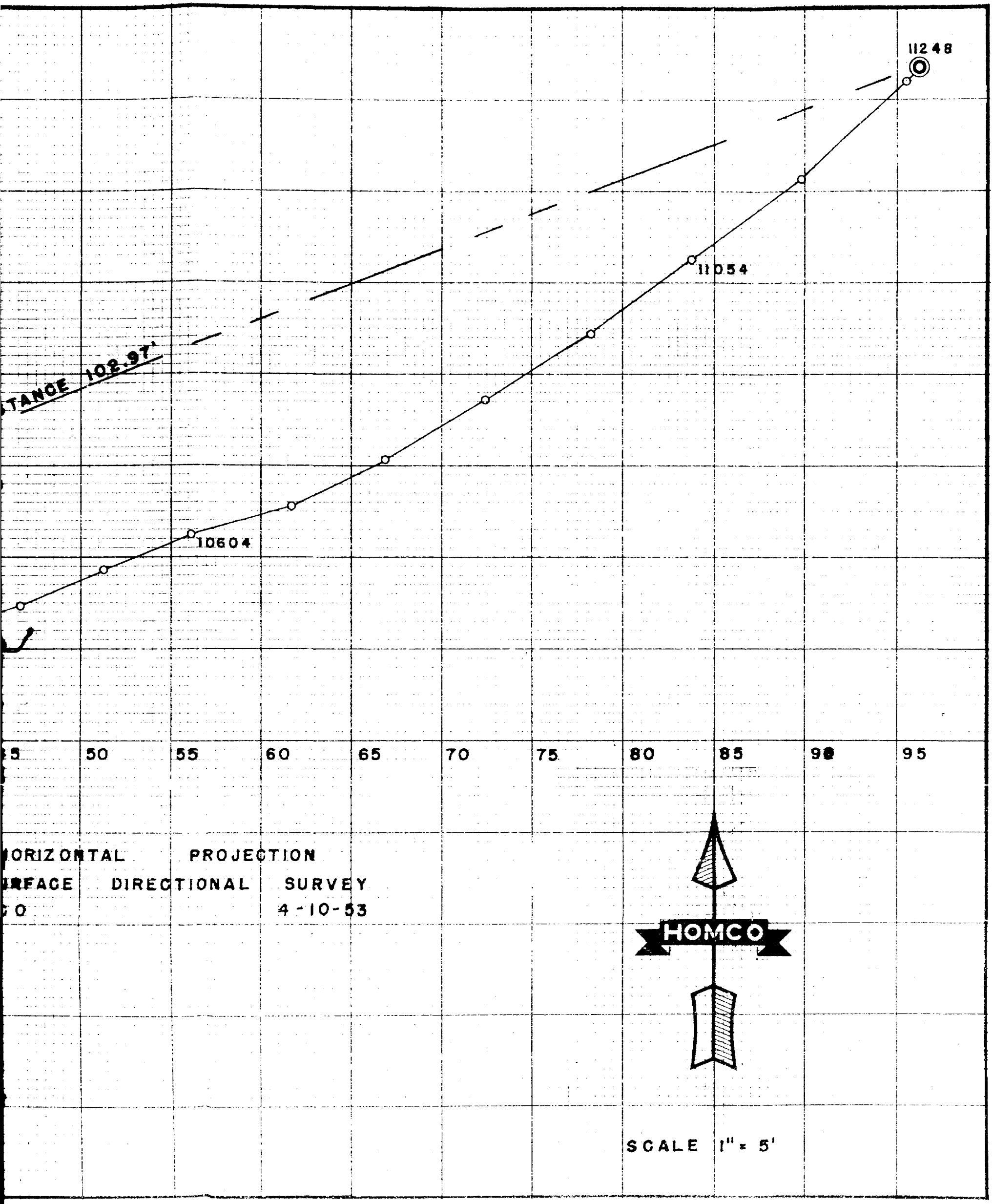
TY, NEW MEXICO



HORIZONTAL PROJECTION

SUBSURFACE DIRECTIONAL SURVEY

HOMCO 4-10-53


11248
11054
10604
STANCE 102.97'
50
55
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75
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90
95
ORIZONTAL PROJECTION
RFACE DIRECTIONAL SURVEY
O
4-10-53
HOMCO
SCALE 1" = 5'

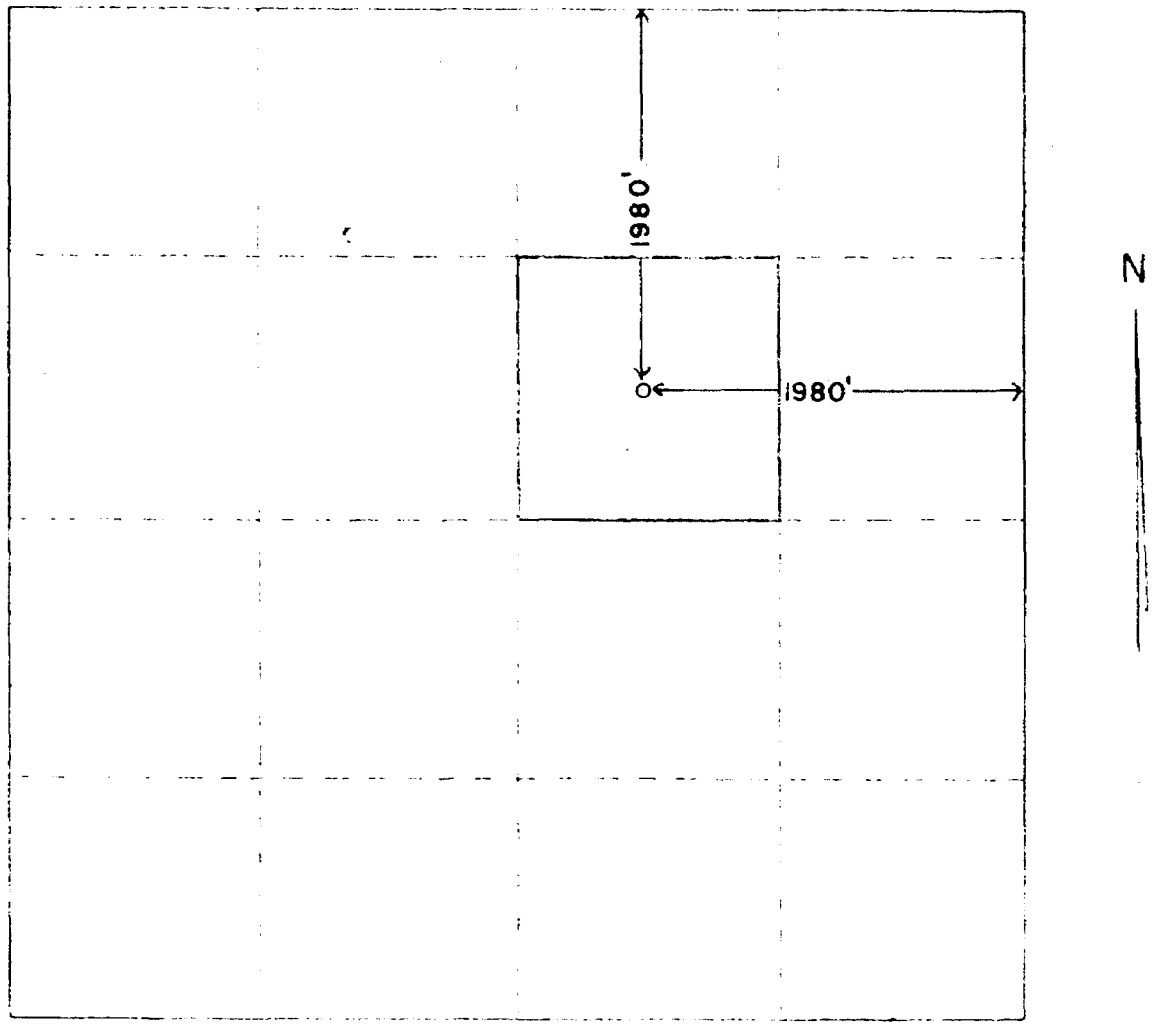
Exhibit "A"

WELL LOCATION SURVEY PLAT

OPERATOR LOS NIETOS CO.

LEASE STATE—GROSS

WELL NO. 2



SEC. 2, TWP. 12 S., RGE. 32 E., N.M.P.M.

I HEREBY CERTIFY THAT THIS PLAT WAS MADE FROM NOTES TAKEN IN THE FIELD BY ME AND THAT THE SAME IS TRUE AND CORRECT TO BEST OF MY KNOWLEDGE AND BELIEF.

John W West

JOHN W. WEST, P.E. & L.S. NO. 676

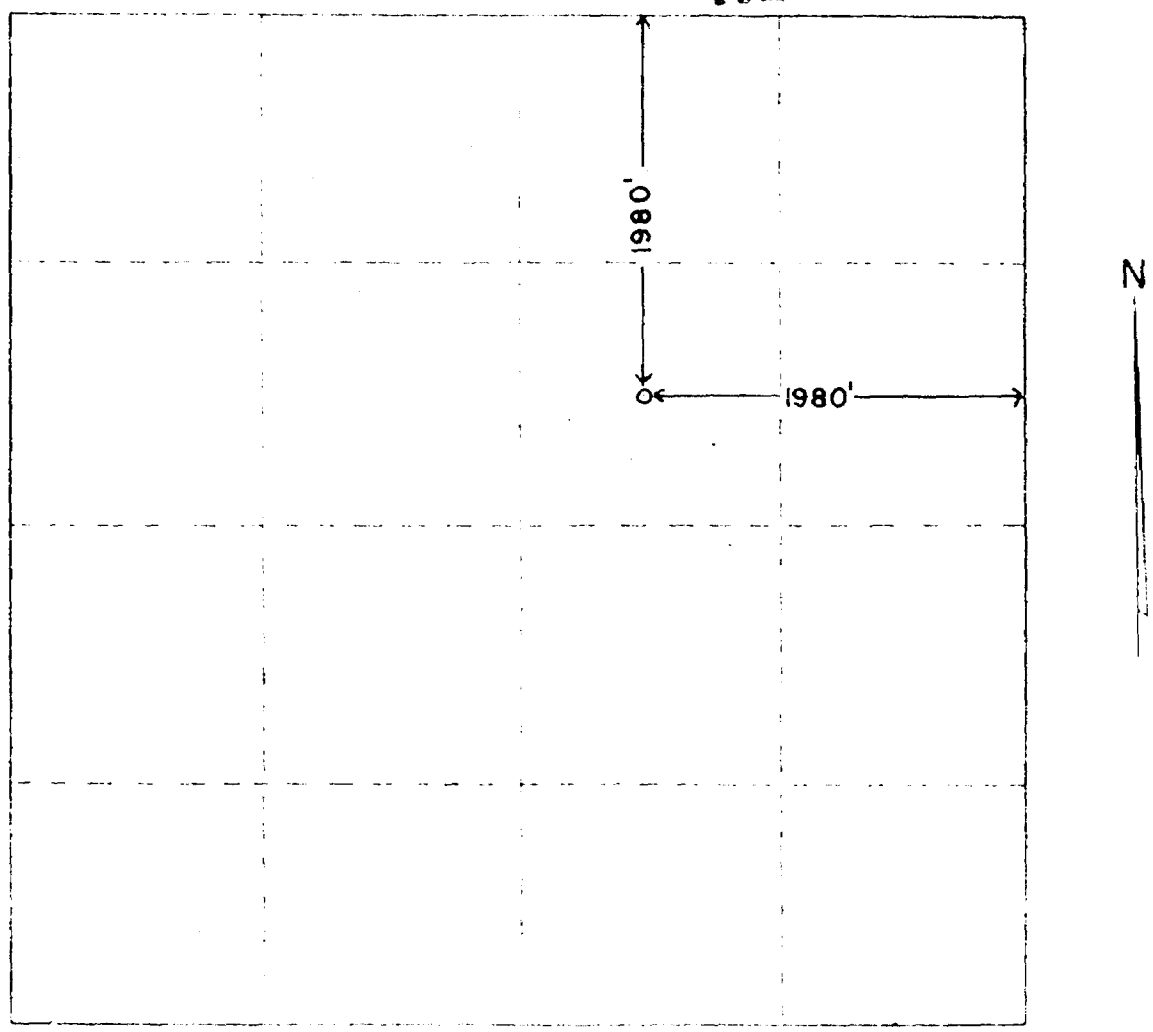
DEC. 30, 1952.

Case 564

WELL LOCATION SURVEY

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO.
JUL 2 0 1953

OPERATOR LOS NIETOS CO.
LEASE STATE—GROSS
WELL NO. 2



SEC. 2 ,TWP. 12 S., RGE. 32 E., N.M.P.M.

I HEREBY CERTIFY THAT THIS PLAT WAS MADE FROM NOTES TAKEN IN THE FIELD BY ME AND THAT THE SAME IS TRUE AND CORRECT TO BEST OF MY KNOWLEDGE AND BELIEF.

John W. West

JOHN W WEST, P E & L S NO 676

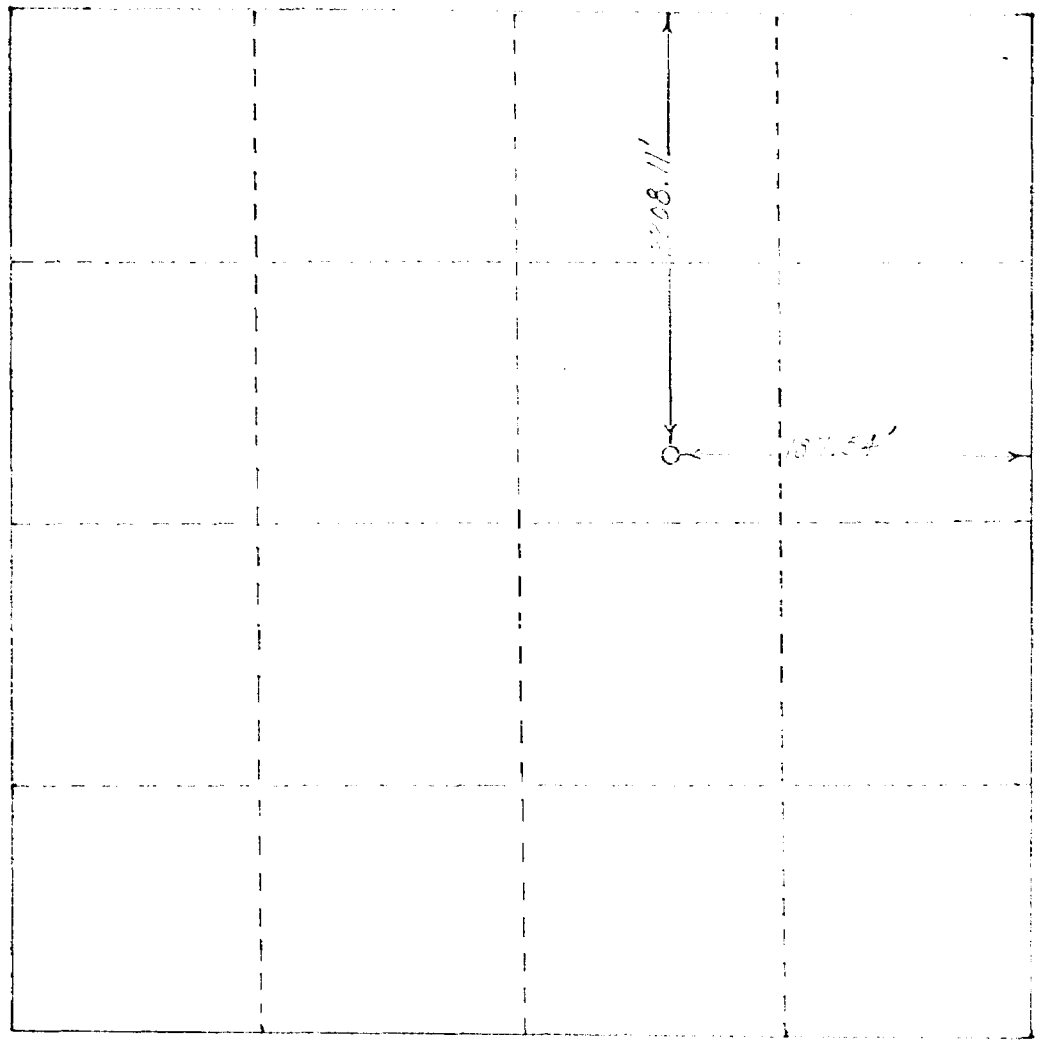
DEC. 30, 1952.

Case 364

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO.
RECEIVED
JUL 20 1953

SUB-SURFACE LOCATION PLAT

OPERATOR: LOS NIETOS COMPANY
LEASE: STATE-GROSS
WELL NO.: 2



SECTION 2, TWP 12 S., Range 32 E, N.M.P.M.

I, James E. Pryor, representing Los Nietos Company, certify that the conditions shown on this plat are true and correct.

James E. Pryor

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

August 3, 1953

C
O
P
Y

Mr. Bryan L. Denson
LOS NIETOS COMPANY
200 Wilkinson-Foster Bldg.
MIDLAND, TEXAS

Dear Sir:

Your company's application for permission to drill directionally your State Gross No. 2 Well, SW/4 NE/4 Section 2, Township 12 South, Rge. 32 East, NMPM, has been set up as Case 564 and scheduled for hearing at 9 a.m. August 20, 1953, State Capitol, Santa Fe, N. M.

Very truly yours,

W. B. Macey
Chief Engineer

WBM:nr

FORM 402 LN 5-51 16M
PRINTED IN U.S.A.

Case 564

LOS NIETOS COMPANY

IN REPLY GIVE NO.

CARBON COPY

200 Wilkinson-Foster Building
Midland, Texas
July 17, 1953

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

Attention of Mr. R. R. Spurrier, State Geologist

Gentlemen:

This letter is to submit our formal application to drill directionally Los Nietos Company's State Gross No. 2 well in East Caprock Field, Lea County, New Mexico.

The well has a surface location of 1980 feet from the north and east lines of Section 2, T-12-S, R-32-E, Lea County, New Mexico. The well was spudded at 9:00 a.m., January 7, 1953, and was drilled to 11,260 feet without reaching the Devonian pay section. A directional survey was run to 11,248 feet; and the hole was found to be off 99.55' N 70° 44' E at a true vertical depth of 11,245.35 feet. This would make the sub-surface location 1943.18 feet from the north line and 1883.71' from the east line of Section 2.

It was decided at this point to plug back and directionally drill part of the hole. Mr. R. W. Yarbrough, our district engineer in Hobbs, received verbal approval from Mr. Spurrier to do this work with this formal application to follow.

On April 19, 1953, the first whipstock was set at 9679 feet with the whipstock face oriented to S 1° E. The directional hole was finished July 2, 1953, with 19½°. S 35° E at 11,290 feet. The true vertical depth was 11,259.06 feet. The final sub-surface location is 2208.11 feet from the north line and 1811.54 feet from the east line of Section 2, T-12-S, R-32-E, Lea County, New Mexico.

The well was potentialed July 9, 1953, for 334.34 bbl./day after acidizing casing perforations with 500 gallons mud acid.

Submitted with this application are the sub-surface surveys and a plat for a relationship of surface and sub-surface locations.

Your kind and prompt consideration of this matter will be greatly appreciated.

Very truly yours

Bryan L. Denson
Division Engineer

BLD:NN
Enclosures

Case 564

LOS NIETOS COMPANY

200 Wilkinson-Foster Building
Midland, Texas
July 17, 1953

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO.
RECEIVED
JUL 20 1953

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

Attention of Mr. R. R. Spurrier, State Geologist

Gentlemen:

This letter is to submit our formal application to drill directionally Los Nietos Company's State Gross No. 2 well in East Caprock Field, Lea County, New Mexico.

The well has a surface location of 1980 feet from the north and east lines of Section 2, T-12-S, R-32-E, Lea County, New Mexico. The well was spudded at 9:00 a.m., January 7, 1953, and was drilled to 11,260 feet without reaching the Devonian pay section. A directional survey was run to 11,248 feet; and the hole was found to be off 99.55' N 70° 44' E at a true vertical depth of 11,245.35 feet. This would make the sub-surface location 1943.18 feet from the north line and 1883.71' from the east line of Section 2.

It was decided at this point to plug back and directionally drill part of the hole. Mr. R. W. Yarbrough, our district engineer in Hobbs, received verbal approval from Mr. Spurrier to do this work with this formal application to follow.

On April 19, 1953, the first whipstock was set at 9679 feet with the whipstock face oriented to S 1° E. The directional hole was finished July 2, 1953, with 19¼°. S 35° E at 11,290 feet. The true vertical depth was 11,259.06 feet. The final sub-surface location is 2208.11 feet from the north line and 1811.54 feet from the east line of Section 2, T-12-S, R-32-E, Lea County, New Mexico.

The well was potentialed July 9, 1953, for 334.34 bbl./day after acidizing casing perforations with 500 gallons mud acid.

Submitted with this application are the sub-surface surveys and a plat for a relationship of surface and sub-surface locations.

Your kind and prompt consideration of this matter will be greatly appreciated.

Very truly yours

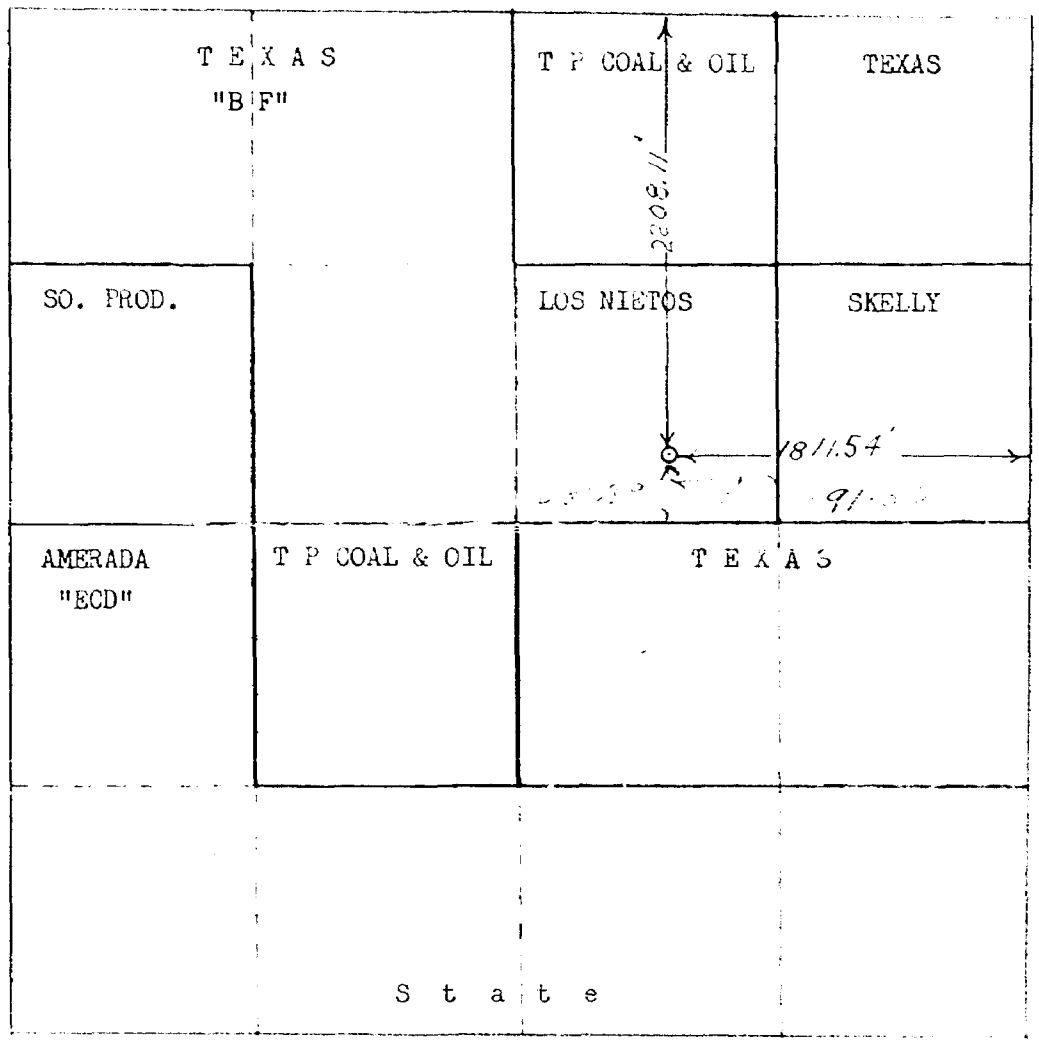
Bryan L. Benson
Division Engineer

BLB:EM
Enclosures

Exhibit "B"

SUB-SURFACE LOCATION PLAT

OPERATOR: LOS NIETOS COMPANY
LEASE: STATE-GROSS
WELL NO.: 2



SECTION 2, TWP 12 S., Range 32 E, N.M.P.M.

I, James E. Pryor, representing Los Nietos Company, certify that the conditions shown on this plat are true and correct.

James E. Pryor

No. 5564
Order K-360.

In the application of Jos Nietos
et al.

Order of the Commission

By the Commission:

Now: [illegible]

Finds:

1. Due notice having been given [illegible] jurisdiction —

(2) That by reason of a geological fault the State Gross No 2 well was bottomed dry on the down throw side at 11,260' with a deviation from the vertical in excess of that permitted by the Rules.

(3). That with Commission approval, the Applicant plugged back and whipstocked at 9639 ft thereafter directionally drilling to a predetermined bottom hole location at 11,254 ft [illegible] 208.11 ft [illegible] meridian on the upthrown side of the fault for production from the base.

(4) That Applicant has [illegible] surveys [illegible] deviation [illegible] by the [illegible] required by [illegible] rules

(5). [illegible] by [illegible] provided.

IT IS THEREFORE ORDERED

THAT the Application of Los Vientos Company FOR PERMISSION TO TAKE ADDITIONAL WELL ITS State Gross No 2 WELL Located in the SW¼ NE¼ of Section 2, Twp 12 S. R. 32 E. N.M.P.M., Lea County, New Mexico in the East Caprock Devonian Pool, Be, AND the SAME HEREBY IS APPROVED.

Done at Santa Fe, New Mexico on the date first above written.

State of New Mexico

Oil Cons Com

ESW

Gov.

Approved

Secy: HANS CHRISTIAN ANDERSON

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

CASE 564: In the matter of the application of Los Nietos Company for permission to drill directionally its State Gross No. 2, SW/4NE/4 Section 2, Township 12 South, Range 32 East, NMPM, the well to be plugged back from a total depth of 11,260 feet and whipstocked in order to deviate and attempt to reach the Devonian pay section of the East Caprock-Devonian Pool at a point approximating a surface location of 2208.11 feet from the north line and 1811.54 feet from the east line of said Section 2.

TRANSCRIPT OF HEARING

August 20, 1953

Before: Honorable Ed. L. Mechem, Governor
Honorable E. S. Walker, Land Commissioner
Honorable R. R. Spurrier, OCC Director

STATE OF NEW MEXICO)
) ss.
COUNTY OF LOS ALAMOS)

I hereby certify that the within transcript of proceedings before the Oil Conservation Commission is a true record of the same to the best of my knowledge, skill and ability.

TRANSCRIBED at Los Alamos, New Mexico this 1st day of September, 1953.

Audrey M. Henrickson
Notary Public

My commission expires September 22, 1955.

NEW MEXICO OIL CONSERVATION COMMISSION

Regular Hearing

9:00 a.m., August 20, 1953

MR. McNULTY: For the record, my name is J. G. McNulty, and I'm superintendent of the Los Nietos Company.

This is with respect of the Los Nietos Company's application to drill their Gross No. 2 well at a location 1980 feet north of the east line of Section 2, Township 12 South, Range 32 East in the East Caprock Pool, Lea County, New Mexico.

This well was spudded at 9:00 a.m. January 7, 1953 and drilled to a total depth of 11,248 feet to reach the Devonian pay zone. A directional survey was run and the hole was found to be 99.55 feet north, 70 degrees point 4 minutes east with a true vertical depth of approximately 11,245 feet, making the sub-surface location 1940.18 feet from the north, and 1887.17 feet east of the line of Section 2. There is about 75 feet in the Devonian zone and the well is drilled about 830 feet south of its original location.

Consequently, we have contacted the New Mexico Oil Conservation Commission and the State Land Office and we have received verbal approval to proceed with the directional drilling with the stipulation that we submit formal application and that all pertinent information be submitted.

The well is plugged back and whipstocked at 9639 feet. It is completed at a true vertical depth of 11,259.068 being 2208.11 feet

from the north line and 1811.54 feet from the east line of Section 2. The well was completely - - completed on July 9, 1953.

I have here Exhibit A which is a plat showing the sur-surface location and a certified copy of all the directional work.

MR. SPURRIER: Do you want to introduce these as evidence?

MR. McNULTY: Yes.

MR. SPURRIER: Without objection they will be received.

Does anyone have a question of this witness?

VOICE: Do you know how far away is the closest off-set?

MR. McNULTY: No.

MR. SPURRIER: If there are no further questions of the witness, he may be excused. Is there any further comment in this case?

We will take the case under advisement and move on to Case 565.

New Mexico
OIL CONSERVATION COMMISSION

GOVERNOR EDWIN L. MECHEM
CHAIRMAN
LAND COMMISSIONER E.S. WALKER
MEMBER
STATE GEOLOGIST R.R. SPURRIER
SECRETARY AND DIRECTOR

P. O. BOX 871
SANTA FE, NEW MEXICO

September 7, 1953

Memo to Commission

Case No. 564 - The Application of Los Nietos Company for permission to directionally drill its State Gross No. 2, SW/4 NE/4 of Section 2, Township 12 South, Range 32 East, Lea County, New Mexico in the East Caprock-Devonian Pool.

Recommendation:

It is recommended that the application be approved and an order entered. The original location of the well was 1980 feet from the north and east lines of the section. The final location of the hole after being directionally drilled is 2208.11 feet from the north line and 1811.54 feet from the east line of Section 2. The reason for the directional drilling is that originally the well was drilled to a total depth of 11,248 feet. At that point they were on the downthrown side of the fault and it was necessary for them to plug back to 9639 feet and directionally drill to a true vertical depth of 11,259 feet in order to get on the upthrown side of the fault and obtain commercial production.

W. B. Macey

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

September 25, 1953

Mr. Bryan L. Denson
Los Nietos Company
200 Wilkinson-Foster Building
MIDLAND, TEXAS

Dear Sir:

We enclose two copies of Order No. R-564 issued by the Commission in Case 360, heard on your company's petition at the August 20, 1953, hearing.

Very truly yours,

WBM:nr

For W. B. Macey, Chief Engineer

COPY

Case No.

565

Application, Transcript,
Small Exhibits, Etc.

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

CASE 565: In the matter of the Application of Gulf Oil Corporation for permission to deviate from vertical its Lillie No. 2 Well, presently drilling at a surface location 750' south of north line and 560' east of west line, Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico; this directional drilling contemplated because of geologic trends established in obtaining production from Gulf's Lillie No. 1 Well 241' to the northwest; and to result, if effected, in the well's being bottomed at a point equivalent to a surface location 662.3 feet south of the north line and 329.5 feet east of the west line, Section 23, Township 24 South, Range 37 East, NMPM.

TRANSCRIPT OF HEARING

August 20, 1953

BEFORE: Honorable Ed. L. Mechem, Governor
Honorable E. S. Walker, Land Commissioner
Honorable R. R. Spurrier, Director, OCC

STATE OF NEW MEXICO)
) ss.
COUNTY OF LOS ALAMOS)

I hereby certify that the within transcript of proceedings before the Oil Conservation Commission is a true record of the same to the best of my knowledge, skill and ability.

TRANSCRIBED at Los Alamos, New Mexico this 1st day of September, 1953.

Audrey M. Henrickson
Audrey M. Henrickson
Notary Public

My commission expires September 22, 1955.

NEW MEXICO OIL CONSERVATION COMMISSION

Regular Hearing

9:00 a.m., August 20, 1953

MR. CAMPBELL: Jack Campbell of Roswell, New Mexico on behalf of the Gulf Oil Corporation, I would like to request that Case 565 be continued to the regular September hearing.

The practice of the Commission has been indicated in prior applications and because of the ambiguous nature of the rule of the Commission involving deviation from vertical that the person chosing to deviate from the vertical requests permission from the Conservation Commission and proceeds to drill the well. In order the avoid two hearings, because seldom do these wells end up where they are contemplated, the Commission has followed the practice of authorizing that and at the time the well is completed, the applicant comes in and presents it to the Commission, - - - the necessary evidence. I assume that if the Commission was not satisfied, that all they would have to do would be refuse to give an allowable to the well.

That's the reason for the request for continuance. The well has not yet been completed.

MR. SPURRIER: Is there objection to Mr. Campbell's motion? Without objection, we will continue the case until September 17th. The next case on the docket is Case 566.

[illegible]

etc. —

[illegible] A-384

Case 565

In re Gulf, etc.

Order of the Commission

By the Commission —

This cause came on for hearing on the — day of September 1953, before the Texas Oil Conservation Commission hereinafter referred to as the Commission,

Now on this — day of Oct 1953, the Commission, a quorum being present, having considered the letter of Official, and motion of Applicant for dismissal,

Finds, that said motion is well taken, and

IT IS Therefore Ordered that Case 565, be, and the same hereby is dismissed —

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

[illegible]

PETROLEUM AND ITS PRODUCTS

GULF OIL CORPORATION

P. O. DRAWER 1290 · FORT WORTH 1, TEXAS

F. J. ADAMS
VICE-PRESIDENT

FORT WORTH
PRODUCTION DIVISION

OCT 5 1953

October 1, 1953

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

Re: Case 565, Application Of Gulf Oil Corporation For Permission To Directionally Drill Its Lillie No. 2 Well, Located In The NW/4 Section 23, T-24-S, R-37-E, Lea County, New Mexico

Gentlemen:

In compliance with provisions of Rule 111 of the New Mexico Oil Conservation Commission, Gulf Oil Corporation filed its application for permission to directionally drill its Lillie Well No. 2 so as to complete as an oil producer in the Silurian pay zone at a depth indicated to be productive in Gulf's Lillie No. 1 Well.

As requested, the Commission set this application for hearing as Case 565. The well was drilled to a total depth of 8,300 feet and bottomed at a point equivalent to a surface location of 749.47 feet south of the north line and 346.49 feet east of the west line of Section 23, T-24-S, R-37-E. The actual vertical depth is 8274.9 feet and located 213.51 feet west and 10.53 feet north of the surface location of Lillie No. 2. Since we were unable to make a Silurian producer, we propose to plug back above the whipstock and test an upper horizon. Gulf Oil Corporation, therefore, requests that Case 565 be dismissed and withdrawn from the docket.

If you desire further information in this matter, please advise.

Yours very truly,

F. J. ADAMS

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

August 3, 1953

Gulf Oil Corporation
P. O. Drawer 1290
Ft. Worth, Texas

Attention: Mr. G. H. Fisher, Vice President

Gentlemen:

Your application for approval of deviation of your Lillie Well No. 2 has been set up as Case 565 and scheduled for hearing before the Commission here in Santa Fe at 9 a.m. on August 20, 1953.

Very truly yours,

W. B. Macey
Chief Engineer

WBM:nr

COPY

CASE 565: (Continued Case) Gulf's application for permission to deviate its Lillie No. 2 well, drilling at a surface location 750' S of N line and 560' E of W line, 23-24S-37E; this directional drilling contemplated because of geologic trends established in obtaining production from its Lillie No. 1 well 241' to the northwest, and to result, if effected, in the well's being bottomed at a point equivalent to a surface location 662.3' S of N line and 329.5' E of W line of Section 24.

TRANSCRIPT OF HEARING
September 17, 1953

BEFORE: Honorable E. S. Walker, Land Commissioner
Honorable R. R. Spurrier, Secretary-Director, OCC

STATE OF NEW MEXICO)
COUNTY OF SANTA FE) ss.

I HEREBY CERTIFY That the within transcript of proceedings before the Oil Conservation Commission is a true record of the same to the best of my knowledge, skill and ability.

DONE at Santa Fe, New Mexico, this 21st day of September, 1953.

Virginia M. Chavez
Notary - Reporter

My Comm. Ex.:
August 8, 1956

CASE 565 (a continued case)

MR. SPURRIER: The meeting will come to order, please. The next case on the docket is Case 565, which appears as Number 4.

(Mr. Graham reads the notice)

MR. SPURRIER: Mr. Campbell.

MR. CAMPBELL: If the Commission please, Jack M. Campbell of Roswell, New Mexico appearing for Gulf Oil Corporation, the applicant. May I first correct the Notice read - I believe it should be Section 23, I don't believe they are going to extend it quite that far. The last line of that should be Section 23. At the last hearing we requested a continuance of this case in view of the Commission's practice relative to these wells which are deviating from the vertical. The well has still not been completed and I would like to request, in behalf of the applicant, that this case be continued until the October hearing at which time, if it is a well, it will have been completed.

MR. GRAHAM: May I make a statement to the effect that I read from the docket and I have referred to the original advertisement and it shows Section 23.

MR. SPURRIER: Is there any one else to be heard in this case? Is there objection to Mr. Campbell's motion? If not, the case will be continued to October 15, the regular October hearing.

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

October 21, 1953

Mr. Jack Campbell, Attorney
Atwood, Malone and Campbell
ROSWELL, NEW MEXICO

Dear Mr. Campbell: RE: Case 565, Order R-384

Enclosed you will find two signed copies of Order R-384, the dismissal order issued by the Commission in Case 565 upon request of the applicant, Gulf Oil Corporation.

Very truly yours,

W. B. Macey,
Chief Engineer

WBM:nr

COPY

BEFORE THE

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

CASE 565: In the matter of the application of Gulf Oil Corporation for permission to deviate from vertical its Lillie No. 2 Well, presently drilling at a surface location 750' south of the north line and 560' east of the west line, Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico; this directional drilling contemplated because of geologic trends established in obtaining production from Gulf's Lillie No. 1 Well 241 feet to the northwest; and to result, if effected, in the well's being bottomed at a point equivalent to a surface location 662.3 feet south of the north line and 329.5 feet east of the west line, Section 23, Township 24 South, Range 37 East, NMPM.

****

TRANSCRIPT OF HEARING

OCTOBER 15th, 1953

BEFORE: Honorable Ed. L. Mechem, Governor
Honorable E. S. Walker, Land Commissioner
Honorable R. R. Spurrier, Director, OCC

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I HEREBY CERTIFY that the within transcript of proceedings before the Oil Conservation Commission is a true record of the same to the best of my knowledge, skill and ability.

DONE at Santa Fe, N.M., this 9th day of November, 1953.

Marjorie C. Allan
Reporter

SWORN to before me this 9th day of November, 1953

Notary Public

My Commission Expires:

CASE 565:

In the matter of the application of Gulf Oil Corporation for permission to deviate from vertical its Lillie No. 2 Well, presently drilling at a surface location 750' south of the north line and 560' east of the west line, Section 23, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico; this directional drilling contemplated because of geologic trends established in obtaining production from Gulf's Lillie No. 1 Well 241 feet to the northwest; and to result, if effected, in the well's being bottomed at a point equivalent to a surface location 662.3 feet south of the north line and 329.5 feet east of the west line, Section 23, Township 24 South, Range 37 East, NMPM.

****

COM. SPURRIER: The meeting will come to order. In case some of you are interested and have dockets available, the next case on the docket is 565. If you will just mark the cases as I call the number, then they will be in the same order as the Commission's is. The next number is 4, applying to Case 579, then 6, then 7, then 5, then 3, then 8, then 9 and the rest of the cases are consecutive, 10, 11, 12 and 13. The next cases is 565.

(Mr. Graham reads the advertisement of the case.)

****

JACK M. CAMPBELL

having been first duly sworn testified as follows:

I am Jack M. Campbell, of Roswell, New Mexico, who is appearing here for the Gulf Oil Corporation. I would like to offer in evidence in this case a letter dated October 11th, 1953 from the Gulf

Oil Corporation to the Commission, advising the Commission that Gulf was unable to obtain production at the lower depth and that they are undertaking to complete the well at an upper horizon, above the whipstock. Therefore, they ask that the case be dismissed and withdrawn from the docket.

COM. SPURRIER: Is there any objection to Gulf's Motion?

(No objection indicated.)

COM. SPURRIER: Without objection, the case will be dismissed.

****

[illegible]
[illegible]
NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. [illegible]-394
ORDER NO. 535

THE APPLICATION OF [illegible] OIL CORPORATION FOR PERMISSION TO DRILL [illegible] WELL ITS LEASE NO. 2 WELL, PRESENTLY DRILLING AT A SURFACE LOCATION [illegible] SOUTH OF THE NORTH LINE AND 560' EAST OF THE WEST LINE, SECTION 23, TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 o'clock a.m. on October 17, 1956, and was continued from the August 20, 1953, hearing, before the Oil Conservation Commission at Santa Fe, New Mexico.

NOW, on this 15th day of October, 1953, the Commission, a quorum being present, having considered applicant's letter of October 1, and motion of applicant for dismissal,

FINDS: That said motion is well taken, and

IT IS THEREFORE ORDERED:

That Case 565 be, and the same hereby is dismissed.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

E. S. Walker, Chairman

E. S. Walker
Member

R. R. Spurrier
Member

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

APPLICATION OF GULF OIL CORPORATION FOR PERMIT TO DIRECTIONALLY DRILL ITS LILLIE NO. 2 WELL, LOCATED IN THE NORTHWEST QUARTER (NW/4) OF SECTION 23, T-24-S, R-37-E, LEA COUNTY, NEW MEXICO

Gentlemen:

Gulf Oil Corporation is the owner of an oil and gas lease executed by Lillie B. Knight and others covering the Northwest Quarter (NW/4) of Section 23, T-24-S, R-37-E, Lea County, New Mexico.

Gulf Oil Corporation is presently drilling a well designated as Lillie No. 2, located 750 feet South of the North line and 560 feet East of the West line of Section 23, T-24-S, R-37-E, Lea County, New Mexico; this well is in a new field which is undesignated; it topped the Silurian Limestone at 8243 feet, datum -5012 feet, being 262 feet lower than Gulf Oil Corporation's Lillie No. 1 Well, which is located 241 feet to the Northwest of its Lillie No. 2 Well.

The surface location of Lillie No. 1 is 241 feet N 81° 43' West of the surface location of Lillie No. 2. In an effort to reach the Silurian pay zone at indicated productive depth encountered in Lillie No. 1, Gulf Oil Corporation plans to directionally drill Lillie No. 2 so that the bottom of Lillie No. 2 will be at a vertical depth 8094 feet below rotary table and located 215 feet from the surface location of Lillie No. 2 in a direction N 81° 43' West. The bottom of the hole will be in a position equivalent to a surface location of 662.3 feet South of the North line and 329.5 feet East of the West line of Section 23, T-24-S, R-37-E, Lea County, New Mexico.

In compliance with the provisions of Rule 111, DEVIATION TESTS, of the New Mexico Oil Conservation Commission, Gulf Oil Corporation files this its application for a permit to directionally drill and requests that the Commission give notice of such application and set it for hearing; that upon hearing the Commission authorize Gulf Oil Corporation to set a whipstock in its Lillie No. 2 at a depth of approximately 6700 feet and to proceed with the directional drilling of such well following the pre-determined direction hereinabove outlined.

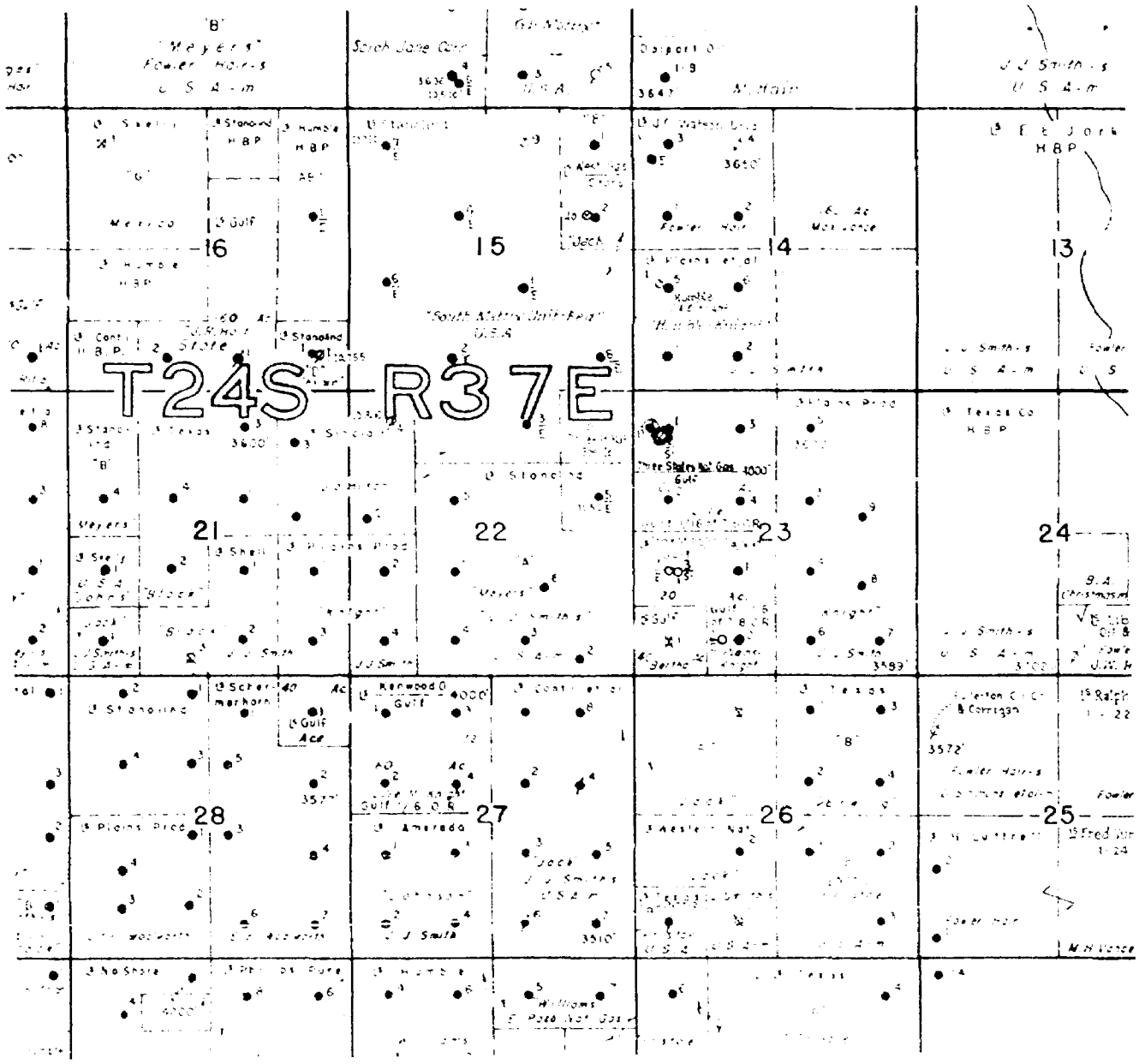
A plat showing location of Gulf Oil Corporation's Lillie No. 1 and of its Lillie No. 2 now drilling is attached.

Respectfully submitted,

GULF OIL CORPORATION

By S. W. Fisher
Attorney-in-Fact

July 9, 1953
Fort Worth, Texas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