

CASE 4215: Appli. of STANDARD OIL
OF TEXAS TO DIRECTIONALLY DRILL,
EDDY COUNTY, NEW MEXICO

Case Number.

4215

Application

Transcripts.

Small Exhibits

ETC.



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SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
September 10, 1969

EXAMINER HEARING

IN THE MATTER OF:)

Application of Standard Oil Company)
of Texas to directionally drill,)
Eddy County, New Mexico.)

Case No. 4215

BEFORE: Daniel Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: Case 4215.

MR. HATCH: Case 4215. Application of Standard Oil Company of Texas to directionally drill, Eddy County, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason Kellahin, Kellahin and Fox, Santa Fe, appearing for the Applicant. I have one witness I would like to have sworn.

(Witness sworn.)

(Whereupon, Applicant's Exhibit A, 1 through 7, was marked for identification.)

JIM SLATER

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A My name is Jim Slater.

Q By whom are you employed and in what position, Mr. Slater?

A I am employed by Standard Oil Company of Texas as a proration engineer in Houston, Texas.

Q Have you testified before the Oil Conservation Commission and made your qualifications a matter of

record?

A Yes, I have.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

Q (By Mr. Kellahin) Mr. Slater, are you familiar with the application of Standard Oil Company of Texas in the case presently before the Commission?

A Yes, sir.

Q What is proposed by Standard in this application?

A In this application Standard of Texas proposes to directionally drill an existing well, plug back an existing well and directionally drill it such that the new well bore would bottom up a distance of 200 feet east of a present bottom hole location.

Q Now, this would be an approximate distance, would it not?

A Yes, it would.

Q Referring to what has been marked as the Applicant's Exhibit A, and specifically to Exhibit 1 of Exhibit A, would you identify that, please?

A Exhibit 1 is an area plat -- shows Section 34. This Section 34 is a Standard of Texas and Atlantic

jointly owned 640-acre lease. The Smith Federal Well No. 1 is located 1650 feet from the south line and 1650 feet from the east line of Section 34, Township 20 South, Range 24 East, Eddy County, New Mexico.

This is a wildcat location. The nearest production to this location is Marathon's North Indian Basin Well No. 3, which is located approximately 1.8 miles to the southwest and this Marathon producer is shown on the plat in the southwest corner.

Q Would you give a brief summary of the history of this well?

A On September 15, 1968, drilling operation commenced on this Smith Federal No. 1. On October 22, 1968, we had reached a drilling depth of 7763 feet. At this time drill stem test number five was run on the well.

The test interval was 7763 feet to 7763 feet, a 100 foot interval. This drill stem test recovered 2330 feet of oil which was 4.1 degree API gravity.

Also recovered in this test was 1000 feet of heavily oil cut mud and 180 feet of sulphur water. These are recoveries in the drill stem.

On October 26, 1968, we reached TD of 7848 feet. At this point we ran and cemented a five and a

half inch oil string with 400 sacks of cement. Then, November 2, 1968, through January 14 of 1969, was a period in which we attempted to make a completion. The well was thoroughly tested. We could not establish oil production without excessive water production from the well.

Q Now, is this on a federal lease?

A Yes, it is.

Q Have you received permission to deviate the well bore from the United States Geological Survey?

A Yes, we have; but, this permission is, of course, subject to like approval from the New Mexico Oil Conservation Commission.

Q Referring to what has been marked as Exhibit No. 2 of Exhibit A, would you identify that exhibit?

A Exhibit 2 is a letter to Standard Oil Company of Texas from the Department of Interior, United States Geological Survey. This letter approves the application as it is set out for this hearing subject to like approval by the New Mexico Oil Conservation Commission, and this letter is signed by John A. Anderson, Regional Oil and Gas Supervisor, Roswell, New Mexico.

Q Now referring to what has been marked as Exhibit No. 3 of the Exhibit A, would you identify that exhibit?

A Exhibit 3 is a U. S. G. S. form 9-331. This form was submitted by Standard Oil Company of Texas. It is a notice that we propose to pull or alter casing for change of plans to attempt completion.

On the bottom of this form, in form of notes, is an outline of the work which has been done attempting to complete the existing well and I might read that for the record.

"From the period of November 2, 1968, to January 14 of 1969, perforated 7793 feet to 7795 feet, unable to pump in formation. Set Baker Model K. cement retainer perforated 7784 to 7760 feet acidized with 500 gallons. Zone making excessive water. Squeeze perforations 7740 to 7760 feet with 45 sacks of cement; perforated 7740 feet to 7750 feet; acidized with 250 gallons; zone making excessive water. Squeezed perforations 7740 to 7750 feet with 28 sacks through a Baker Model K. retainer set at 7735 feet. Perforated 7724 feet to 7730 feet and acidized with 125 gallons. Swab tested and installed rod pumping equipment. Well, again, produced excessive water. At

that time the well was shut in to evaluate the results."

Q Does the exhibit also reflect what you proposed to do with this well?

A Yes, it does, and I might also read that for the record. "Set 15 sacks of cement, plug 7735 feet to 7620 feet. Shoot off and pull five and a half inch casing from approximately 6000 feet. Set a 35 sack cement plug across the stub of five and a half inch casing. Set 100 sack cement, plug 5700 feet to 5300 feet. Sidetrack and redrill well to approximately 7740 feet. This exhibit has been approved by the U. S. G. S. again subject to NMOCC approval after the hearing.

Q Do you feel that the cement job on the oil string was effective in shutting off the water?

A No, sir. We think this was the whole problem with the attempted completion on the existing well. We just got a poor cement job and could not shut off the water after attempting to squeeze.

Q Now referring to Exhibit 4 of Exhibit A, would you identify that exhibit?

A Exhibit 4 is U. S. G. S. form 9-331 C. This is the application to deepen the Smith Federal No. 1 Well.

Q The exhibit reflects the present casing and cementing program on the well, does it not?

A Yes. This form shows the casing record of the existing well and also on the bottom again is a proposed procedure for plugging back similar to what I just described.

Q Now referring to Exhibit 5 of Exhibit A, would you identify that exhibit? Did you have something to add in connection with Exhibit 4?

A Just one moment, please. Yes. On Exhibit 4 in the notes this does point out our intent to directionally deviate the well on the redrill and I believe that's all. This form also is approved by the U. S. G. S. subject to NMOCC approval.

Q Now referring to Exhibit 5, would you identify that exhibit?

A Exhibit 5 is New Mexico Oil Conservation Commission form C102. This shows the lease plat, the dedicated acreage, surface location and proposed bottom hole location.

Q Now, you are familiar with the state-wide Rule 104 requiring well locations for wildcat wells, are you not?

A Yes, I am.

Q Is this classified as a wildcat well?

A Yes, it is.

Q And the resulting deviation of the drilling would place you closer than the 330 feet from the outter boundary of the unit dedicated to the well, would it not?

A It would place us closer than 330 feet from the 40 acres dedicated to the well. However, I would like to point out we are on a 640-acre lease. The surface location is 1650 feet from the nearest boundary of this 640-acre lease.

Q There would be a possibility that the bottom of the well could be located on the adjacent 40-acre tract, could it not?

A Yes. I think this is a good possibility.

Q In that case you could dedicate the other 40 acres to the well, could you not?

A I expect we could.

Q Now referring to what has been marked as Exhibit No. 6, would you identify that?

A Exhibit No. 6 is a schematic diagram showing the present condition of the Smith Federal No. 1 Well. This shows the casing setting depths and the cementing

record for each casing string. From the cement bond log to the top of the cement-lined, the five and a half inch oil string is indicated to be at 6047 feet.

Q Now referring to Exhibit No. 7, would you identify that exhibit?

A Exhibit No. 7 is a schematic diagram which shows condition of the Smith Federal No. 1 Well as it would be after it is plugged back and ready for whipstock.

Q That reflects the proposed completion as you have already discussed it?

A Yes. This just shows a schematic of the various plugs which we would propose to place and the position where we intend to cut off the five and a half casing and pull it.

The top cement plug, of course, would be set considerably higher than 5500 feet, but it would be drilled out and dressed off at 5500 feet for whipstock.

Q Now, do you know where the location of this hole is below the surface at the present time, Mr. Slater?

A Well, we don't exactly. This well was drilled with the standard procedure and obviously there is slight deviation when you drill a well. To the best of our

knowledge this is a straight hole and I would suspect that the bottom hole location is presently essentially the same as the surface location.

Q Will you run a directional survey prior to deviating the well with whipstock?

A Yes, sir. Our plan is to first run a directional survey on the well as it stands before plugging it back and determine the two existing bottom hole locations. Next, we propose to whipstock the well and drill it in such a manner that the new bottom hole location be as nearly as possible 200 feet east of the present bottom hole location.

Q Now, you will file your deviation test with the Commission, will you not?

A Yes, sir.

Q You will comply with any provisions they make in regard to such directional surveys?

A Yes, sir.

Q What is your reason for wishing to deviate the well in an easterly direction 200 feet?

A Well, we have two reasons for wanting to bottom the well two hundred feet away from and east of

the present bottom hole location. First studies indicate that a build-up pay is most likely to exist to the east of the present location. Second, we feel that a minimum of 200 feet distance should be maintained from the existing well bore to the new well bore in the event that excessive water production experienced was a result of localized highly fractured system in the pay zone. We feel that a minimum, 200 feet distance should be maintained.

Q Now, do you anticipate that you will obtain oil production at this --

A Yes, we do.

Q Would there be any economic saving to the Applicant if the Commission sees fit to approve the application to directionally drill the well?

A Yes, I would. Economics are prime considerations in this proposal. We estimate the savings which would result if this proposal is approved over the cost of what it would be to drill a new hole amounts to \$75,800.00. This is what we figure we would save with this proposal.

Q In the event the wells were to be bottomed on the adjacent 40, do you have that available to dedicate to the well?

A Yes, we do.

Q Would there be any difference in the ownership?

A No, sir.

Q Be exactly the same?

A Yes.

Q Was Exhibit A, consisting of separate exhibits 1 through 7, prepared by you or under your supervision?

A Yes, they were.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibit A consisting of 7 exhibits.

MR. NUTTER: Applicant's Exhibit A, including 7 Exhibits, is hereby admitted in evidence.

MR. KELLAHIN: That's all I have, Mr. Nutter.

THE WITNESS: We feel that a successful oil completion can be made based on our experience in testing the existing well and we believe that the proposed directionally drilled well, if approved, will result in an oil pool discovery for New Mexico and we urge the New Mexico Oil Conservation Commission to approve this application.

CROSS EXAMINATION

BY MR. NUTTER:

Q There has been at least a dry hole drilled between this location and the Indian Basin Pool, is that

correct?

A That is correct. I believe Standard of Texas had a dry hole in there. Yes, on block 34 there was a dry hole drilled.

Q Well, now, Mr. Slater, the application and the notice for hearing was for directionally drilling a well to bottom it approximately 200 feet east of the present bottom hole location. We don't know what the bottom hole location is at the present time.

Exhibit No. 5 shows that the bottom of the well would be approximately 200 feet east of the surface location and you stated that you thought the bottom hole location was under the surface location; but, you don't know that yet because you haven't run that directional survey on the well yet?

A That is correct.

Q Now, in the event that it turns up that there has been considerable deviation of the well, the original well that was drilled, you would still want to go 200 feet east of that bottom hole location?

A Right.

Q Say you had the deviation and you are already under this next 40, then you would want to go 200 feet east of that?

A Correct.

Q Do you have a tabulation of the totco surveys?

A Yes, I have.

(Whereupon, Applicant's Exhibit B was marked for identification.)

THE WITNESS: This is a tabulation of the deviation angles at the different depth at which the totco surveys were run and if you accumulatively total these up, the cumulative displacement is 236.29 feet.

Q (By Mr. Nutter) So, you can't be off that 40?

A I didn't understand.

Q You can't be off this 40 at the present time, then?

A We would be --

Q That's a 330 location.

A Right. We could not be off and also it is very unlikely it would be 236 feet off. This would require that all these were oriented in the same direction which I think is very unlikely. But, as I said, we feel that

this is essentially a straight hole.

There was no deviation attempts when the well was drilled and the angles are relatively small.

Q The biggest deviation was three and a half degrees?

A Right.

Q Now, can we have something a little more specific as to the bottom of it than approximately two hundred feet; could we have a target area? Normally these directional drilling orders prescribe that a well will be located within so many feet of the point 200 feet of the area?

A I see. I think that would be appropriate. However, I'm not familiar at this time with the accuracy of the -- which you can hit your target on a survey. I think they are quite accurate. I don't know what would be a safe target.

Would you propose something?

Q We have seen on other occasions when it was proposed that a well be bottomed within a radius of 50 feet of a point which would give you a 100 foot circle to land in.

A You are referring to a point which is 200 feet

east of the present bottom hole location?

Q Which is unknown?

A It would not be established until we run the survey.

Q You would establish that?

A Yes.

Q You could bottom the well within 50 feet of a point 200 feet east of that?

A I believe we could. Like I say, I don't know what our target location is until we know where the bottom hole location is. I believe a 50-foot radius would be accurate.

Q You are going to take a complete survey of the entire well bore prior to any directional drilling?

A Yes, sir.

Q Then, you could take a complete directional survey after the directional drilling to find out where the bottom is with respect to the point of take-off?

A Right.

Q You would have established the point of take-off in the first survey?

A Yes, sir. This is correct. There will be two complete surveys, one before we plugged back and one

after TD.

MR. NUTTER: Are there further questions of Mr. Slater? He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: No, that's all I have, Mr. Nutter.

MR. NUTTER: Does anyone have anything to offer in case 4215?

MR. KELLAHIN: We would like to offer Exhibit B.

MR. NUTTER: Exhibit B will be admitted in evidence.

Does anyone have anything further they wish to add in case 4215? We will take the case under advisement and all Case 4216.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
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E X H I B I T S

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Applicant's Exhibit B	15

STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, GLENDA BURKS, Court Reporter in and for the
 County of Bernalillo, State of New Mexico, do hereby
 certify that the foregoing and attached Transcript of
 Hearing before the New Mexico Oil Conservation Commission
 was reported by me; and that the same is a true and correct
 record of the said proceedings to the best of my knowledge,
 skill and ability.

Glenda Burks
 Notary Public

My Commission Expires:

March 12, 1973

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Examiner hearing of Case No. 4212
 heard by me on 9/10 1969.

[Signature] Examiner
 New Mexico Oil Conservation Commission

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Examiner hearing of Case No. 4212
 heard by me on 9/10 1969.

[Signature] Examiner
 New Mexico Oil Conservation Commission

SPERRY-SUN WELL SURVEYING COMPANY

JNO. G. PEW
PRESIDENT
C. E. HAWK
VICE PRESIDENT

P.O. Box 2133
Odessa, Texas
October 6, 1969

JOS. T. WILSON, JR.
SECRETARY-TREASURER

STANDARD OIL COMPANY OF TEXAS
3610 Avenue S
Snyder, Texas 79549

Att: Mr. Bob Davidson

Gentlemen:

The enclosed film and five folders show the results of our Gyroscopic Multishot Directional Survey No. SU-3-6736 performed on the Smith Federal lease Well No. 1, in the Malco Field, Eddy County, New Mexico on October 1, 1969. This survey was run from surface to a depth of 7596 feet.

One of these folders contains the original of the computation sheets, field data sheets, horizontal projection, and certification. Bottom hole location has been plotted in relation to surface location on the certified plat furnished by you and copies of same have been included in all folders.

All copies have been certified and a copy is being sent by Registered Mail to the New Mexico Oil Conservation Commission, Box 2088, Santa Fe, New Mexico 87501 and at Drawer DE, Artesia, New Mexico 88210.

It has been a pleasure to perform this survey for you.

Very truly yours,

SPERRY-SUN WELL SURVEYING COMPANY

Carl Kisinger, Jr.

Carl Kisinger, Jr.
District Manager

CK
Enclosures
REGISTERED MAIL

cc: New Mexico Oil Conservation Commission - Santa Fe w/enclosure
New Mexico Oil Conservation Commission - Artesia w/enclosure
REGISTERED MAIL

OCT 8 1969

SPERRY-SUN

DIRECTIONAL SURVEY REPORT

FOR

STANDARD OIL COMPANY OF TEXAS



TYPE OF SURVEY: Slimhole Gyroscopic Multishot

SURVEY DEPTH: FROM Zero FT. TO 7596 FT.

LEASE: Smith Federal WELL NO. 1

FIELD: Malco

COUNTY/PARISH: Eddy STATE New Mexico

DATE OF SURVEY: October 1, 1969 JOB NO. SU-3-6736

OFFICE: Odessa, Texas Area 915-563-1106

1/11/74, Carl Kissinger, Jr.

_____, in the employ of the Directional Surveying Department of
 Sperry-Sun Well Surveying Company, did on the 1st day of October 1969
 and the _____ day of _____ 19____
 and the _____ day of _____ 19____
 and the _____ day of _____ 19____

dictated:
from a depth of Zero feet to 7596 feet by Gyroscopic/Magnetic/Oriented ~~Survey~~ Survey
depth of _____ feet to _____ feet by Gyroscopic/Magnetic/Oriented Survey
depth of _____ feet to _____ feet by Gyroscopic/Magnetic/Oriented Survey
depth of _____ feet to _____ feet by Gyroscopic/Magnetic/Oriented Survey

with records of inclination and direction of inclination being taken at approximately every 100 feet.

This survey was conducted at the request of Standard Oil Company of Texas
for their Smith Federal Well No. 1

Sec. 34, T20S, R24E Survey, Eddy County, ~~PRICK~~

State of New Mexico, in the Malco Field.

I/~~we~~ certify that this is a true and correct report of such survey and that it affords a true and correct representation of our findings as to the nature and conditions of the well at the time the survey was/~~surveys were~~ made.

Carl Krieger, Jr.

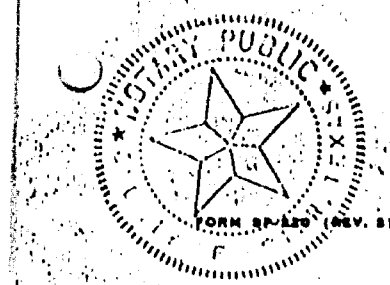
STATE OF TEXAS
COUNTY/PARISH OF ECTOR

Before me the undersigned authority/~~authorities~~, on this day personally appeared Carl Kisinger, Jr.,
_____, _____, _____,
known to me to be the person/~~persons~~ whose name is/names are subscribed to this instrument, who after being
by me duly sworn on oath, states that he has/they have knowledge of all the facts stated above and that the same
is a true and correct statement of the facts therein recited.

Subscribed and sworn to before me this the 3rd day of October 1969

Annie Mae Hill
ANNIE MAE HILL

Notary Public in and for Ector County, Texas



**MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

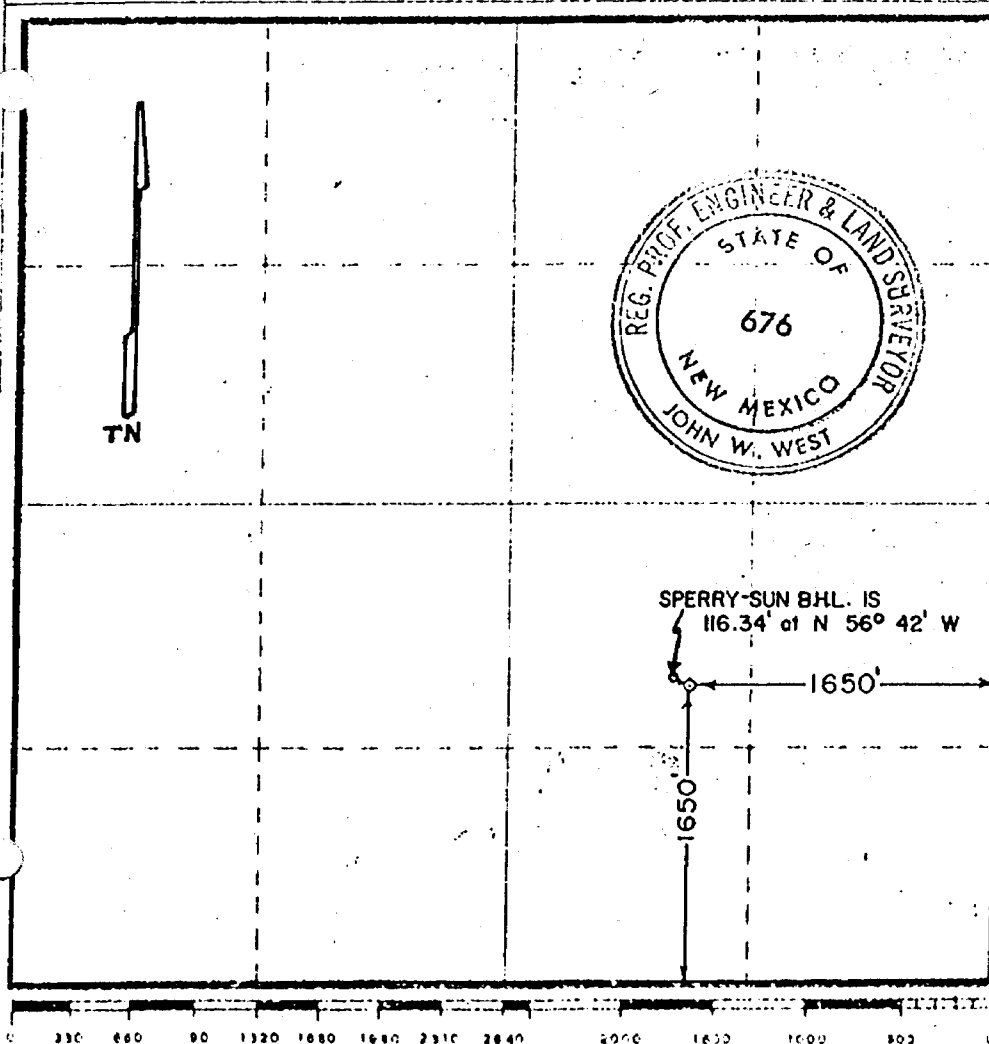
Operator STANDARD OIL CO. OF TEXAS			Lease SMITH & FEDERAL		Well No. 1
Section Letter J	Section 34	Township 20 SOUTH	Range 24 EAST	County EDDY	
Actual Footage Location of Well:					
1650 feet from the SOUTH line and		1650 feet from the EAST line			
Ground Level Elev. 3698.3	Producing Formation Clisco-Canyon	Pool Undesignated	Dedicated Acreage 40 60		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

E. W. McCants
E. W. McCants

District Engineer

Standard Oil Company of Texas

August 26, 1968

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

AUGUST 22, 1968

Registered Professional Engineer and/or Land Surveyor

John W. West
John W. West
676

17109

STANDARD OIL COMPANY OF TEXAS SNYDER TEXAS
 SMITH FEDERAL WELL NO 1
 MALCO FIELD
 EDDY COUNTY NEW MEXICO
 SLIMHOLE GYROSCOPIC MULTISHOT DIRECTIONAL SURVEY

PAGE 1
 DATE OF SURVEY OCTOBER 1 1969
 VERTICAL SECTION COMPUTED ALONG CLOSURE

SU-3-6736

SPERRY-SUN WELL SURVEYING COMPANY
 RECORD OF SURVEY

MEASURED DEPTH	TRUE VERTICAL DEPTH	INCLINATION		DIRECTION DEG	DOG-LEG SEVERITY DEG/100	VERTICAL SECTION	RECTANGULAR COORDINATES			
		DEG	MIN				NORTH	SOUTH	EAST	WEST
0	0.00					ZERO AT SURFACE	0.00		0.00	
100	100.00	0	15	S 54 E	.25	-.44		.26	.35	
200	200.00	0	0	S 54 E	.25	-.44		.26	.35	
300	299.99	0	45	S 13 W	.75	-.89		1.53	.06	
400	399.98	0	45	S 14 W	.01	-1.32		2.80		.26
500	499.97	0	45	S 22 E	.46	-2.40		4.02	.23	
600	599.96	1	0	S 13 E	.28	-3.66		5.72	.62	
700	699.94	1	0	S 13 E	0.00	-4.92		7.42	1.02	
800	799.90	1	45	S 37 E	.93	-7.80		9.86	2.86	
900	899.84	2	0	S 35 E	.26	-11.04		12.71	4.86	
1000	999.77	2	0	S 31 E	.14	-14.18		15.71	6.65	
1100	1099.70	2	15	S 25 E	.33	-17.52		19.26	8.31	
1200	1199.64	2	0	S 22 E	.27	-20.39		22.50	9.62	
1300	1299.58	2	0	S 27 E	.17	-23.42		25.61	11.21	
1400	1399.50	2	15	S 26 E	.25	-26.80		29.14	12.93	
1500	1499.42	2	15	S 27 E	.04	-30.21		32.64	14.71	
1600	1599.36	2	0	S 22 E	.31	-33.08		35.87	16.02	
1700	1699.31	1	45	S 14 E	.36	-35.32		38.84	16.75	
1800	1799.28	1	30	S 3 E	.40	-36.87		41.45	16.89	
1900	1899.25	1	30	S 12 W	.39	-37.82		44.01	16.35	
2000	1999.22	1	15	S 3 E	.44	-39.11		46.19	16.46	

1110

STANDARD OIL COMPANY OF TEXAS SNYDER TEXAS
 SMITH FEDERAL WELL NO 1
 MALCO FIELD
 EDDY COUNTY NEW MEXICO
 SLIMHOLE GYROSCOPIC MULTISHOT DIRECTIONAL SURVEY

PAGE 2
 DATE OF SURVEY OCTOBER 1 1969
 VERTICAL SECTION COMPUTED ALONG CLOSURE

SU-3-6736

SPERRY-SUN WELL SURVEYING COMPANY
 RECORD OF SURVEY

MEASURED DEPTH	TRUE VERTICAL DEPTH	INCLINATION		DIRECTION	DOG-LEG SEVERITY DEG/100	VERTICAL SECTION	RECTANGULAR COORDINATES			
		DEG	MIN				NORTH	SOUTH	EAST	WEST
2100	2099.21	1	0	S 6 E	.26	-40.22		47.92	16.64	
2200	2199.18	1	15	S 11 E	.27	-41.74		50.07	17.06	
2300	2299.17	1	0	S 6 E	.27	-42.84		51.80	17.24	
2400	2399.16	0	45	S 4 E	.25	-43.64		53.11	17.33	
2500	2499.15	0	30	S 7 W	.28	-44.02		53.97	17.23	
2600	2599.15	0	30	S 37 W	.26	-43.97		54.67	16.70	
2700	2699.15	0	15	N 88 W	.41	-43.59		54.65	16.27	
2800	2799.15	0	15	N 49 W	.17	-43.16		54.37	15.94	
2900	2899.15	0	15	N 34 W	.07	-42.76		54.01	15.69	
3000	2999.14	0	30	N 33 W	.25	-41.96		53.27	15.22	
3100	3099.13	1	0	N 42 W	.51	-40.27		51.98	14.05	
3200	3199.11	1	15	N 33 W	.31	-38.28		50.15	12.86	
3300	3299.08	1	15	N 36 W	.07	-36.23		48.38	11.58	
3400	3399.03	1	45	N 46 W	.56	-33.23		46.26	9.38	
3500	3498.94	2	30	N 45 W	.75	-28.96		43.18	6.30	
3600	3598.78	3	15	N 37 W	.85	-23.63		38.65	2.89	
3700	3698.62	3	15	N 33 W	.23	-18.44		33.90		.20
3800	3798.48	3	0	N 27 W	.41	-13.89		29.23		2.58
3900	3898.34	3	0	N 25 W	.10	-9.44		24.49		4.79
4000	3998.21	3	0	N 24 W	.05	-5.03		19.71		6.92
4100	4098.07	3	0	N 29 W	.26	-.40		15.13		9.45

1011

STANDARD OIL COMPANY OF TEXAS SNYDER TEXAS
 SMITH FEDERAL WELL NO 1
 MALCO FIELD
 EDDY COUNTY NEW MEXICO
 SLIMHOLE GYROSCOPIC MULTISHOT DIRECTIONAL SURVEY

PAGE 3
 DATE OF SURVEY OCTOBER 1 1969
 VERTICAL SECTION COMPUTED ALONG CLOSURE

SU-3-6736

SPERRY-SUN WELL SURVEYING COMPANY
 RECORD OF SURVEY

MEASURED DEPTH	TRUE VERTICAL DEPTH	INCLINATION		DIRECTION	DOG-LEG SEVERITY DEG/100	VERTICAL SECTION	RECTANGULAR COORDINATES			
		DEG	MIN				NORTH	SOUTH	EAST	WEST
4200	4197.91	3	15	N 34 W	.37	4.83		10.43		12.62
4300	4297.67	4	0	N 47 W	1.11	11.70		5.67		17.73
4400	4397.39	4	15	N 49 W	.29	19.05		.81		23.32
4500	4497.01	5	0	N 56 W	.94	27.76	4.06			30.54
4600	4596.51	5	45	N 63 W	.99	37.72	8.61			39.47
4700	4696.00	5	45	N 66 W	.30	47.61	12.69			48.62
4800	4795.58	5	15	N 61 W	.69	56.73	17.12			56.63
4900	4895.24	4	45	N 55 W	.72	65.01	21.87			63.41
5000	4994.97	4	15	N 51 W	.59	72.39	26.54			69.17
5100	5094.72	4	0	N 50 W	.26	79.31	31.02			74.51
5200	5194.54	3	30	N 45 W	.60	85.29	35.34			78.83
5300	5294.37	3	15	N 39 W	.43	90.69	39.74			82.40
5400	5394.21	3	15	N 40 W	.06	96.12	44.09			86.04
5500	5494.08	3	0	N 34 W	.41	100.95	48.42			88.97
5600	5593.94	3	0	N 33 W	.05	105.74	52.81			91.82
5700	5693.80	3	0	N 37 W	.21	110.67	56.99			94.97
5800	5793.69	2	45	N 37 W	.25	115.18	60.83			97.86
5900	5893.57	2	45	N 40 W	.14	119.78	64.50			100.94
6000	5993.46	2	45	N 43 W	.14	124.44	68.01			104.21
6100	6093.40	2	0	N 44 W	.75	127.84	70.52			106.64
6200	6193.35	1	45	N 48 W	.28	130.86	72.56			108.91

17112

STANDARD OIL COMPANY OF TEXAS SNYDER TEXAS
SMITH FEDERAL WELL NO 1
MALCO FIELD
EDDY COUNTY NEW MEXICO
SLIMHOLE GYROSCOPIC MULTISHOT DIRECTIONAL SURVEY

PAGE 4
DATE OF SURVEY OCTOBER 1 1969
VERTICAL SECTION COMPUTED ALONG CLOSURE

SU-3-6736

SPERRY-SUN WELL SURVEYING COMPANY
RECORD OF SURVEY

MEASURED DEPTH	TRUE VERTICAL DEPTH	INCLINATION		DIRECTION	DOG-LEG SEVERITY DEG/100	VERTICAL SECTION	RECTANGULAR COORDINATES			
		DEG	MIN				NORTH	SOUTH	EAST	WEST
6300	6293.33	1	15	N 46 W	.50	133.01	74.08			110.48
6400	6393.30	1	15	N 53 W	.15	135.18	75.39			112.22
6500	6493.28	1	15	N 87 W	.73	137.07	75.51			114.40
6600	6593.26	1	0	S 62 W	.65	137.91	74.69			115.94
6700	6693.24	1	15	N 57 W	1.16	140.09	75.87			117.77
6800	6793.24	0	0	N 58 W	1.25	140.09	75.87			117.77
6900	6893.19	1	45	S 57 E	1.75	137.03	74.21			115.21
7000	6993.12	2	15	S 55 E	.50	133.11	71.96			111.99
7100	7093.00	2	45	S 55 E	.50	128.31	69.21			108.06
7200	7192.92	2	15	S 56 E	.50	124.39	67.01			104.80
7300	7292.89	1	30	S 58 E	.75	121.77	65.62			102.58
7400	7392.87	1	15	S 70 E	.38	119.65	64.88			100.53
7500	7492.84	1	15	S 73 E	.07	117.55	64.24			98.45
7596	7588.83	0	45	S 72 E	.52	116.34	63.85			97.25

THE CALCULATION PROCEDURES ARE BASED ON THE USE OF THE TANGENTIAL OR CHORD METHOD

HORIZONTAL DISPLACEMENT = 116.34 FEET AT NORTH 56 DEG. 42 MIN. WEST (TRUE)

NOV 21 1969

SPERRY-SUN WELL SURVEYING COMPANY

JNO. G. PEW
PRESIDENT
C. E. HAWK
VICE PRESIDENT

P.O. Box 2133
Odessa, Texas
November 18, 1969

JOS. T. WILSON, JR.
SECRETARY-TREASURER

STANDARD OIL COMPANY OF TEXAS
3610 Avenue S
Snyder, Texas 79549

Att: Mr. Bob Davidson

Gentlemen:

The enclosed film and five folders show the results of our Gyroscopic Multishot Directional Survey No. SU-3-6736 and our Magnetic Multishot Directional Survey No. MS-6764 performed on the Smith Federal lease Well No. 1, in the Malco Field, Eddy County, New Mexico on October 1, 1969 and November 14, 1969. These surveys were run from surface to a depth of 7755 feet.

One of these folders contains the original of the computation sheets, field data sheets, horizontal projection, and certification. Bottom hole location has been plotted in relation to surface location on the certified plat furnished by you and copies of same have been included in all folders.

All copies have been certified and a copy is being sent by Registered Mail to the New Mexico Oil Conservation Commission, Box 2088, Santa Fe, New Mexico 87501 and at Drawer DD, Artesia, New Mexico 88210.

It has been a pleasure to perform this service for you.

Very truly yours,

SPERRY-SUN WELL SURVEYING COMPANY

Carl Kisinger, Jr.
Carl Kisinger, Jr.
District Manager

CK
Enclosures
REGISTERED MAIL

cc: New Mexico Oil Conservation Commission - Santa Fe w/enclosure
New Mexico Oil Conservation Commission - Artesia w/enclosure
REGISTERED MAIL

SPERRY-SUN

DIRECTIONAL SURVEY REPORT

FOR

STANDARD OIL COMPANY OF TEXAS



TYPE OF SURVEY: Slimhole Gyroscopic and Magnetic Multishots

SURVEY DEPTH: FROM Zero FT. TO 7755 FT.

LEASE: Smith Federal WELL NO. 1

FIELD: Malco

COUNTY/PARISH Eddy STATE New Mexico

DATE OF SURVEY 10-1-69; 11-14-69 JOB NO. SU-3-6736, MS-6764

OFFICE: Odessa, Texas Area 915 563-1106

STATE OF TEXAS
COUNTY/PARISH OF ECTOR

I/~~WE~~, Carl Kisinger, Jr.

_____, in the employ of the Directional Surveying Department of
Sperry-Sun Well Surveying Company, did on the 1st day of October 1969
and the _____ day of _____ 19____
and the _____ day of _____ 19____
and the _____ day of _____ 19____

respectively conduct or supervise the taking of a Multi-shot/~~Single Shot~~ Directional survey by method in-
dicated:

from a depth of Zero feet to 7596 feet by Gyroscopic/~~Magnetic/Oriented~~ Survey
depth of _____ feet to _____ feet by Gyroscopic/Magnetic/Oriented Survey
depth of _____ feet to _____ feet by Gyroscopic/Magnetic/Oriented Survey
depth of _____ feet to _____ feet by Gyroscopic/Magnetic/Oriented Survey

with records of inclination and direction of inclination being taken at approximately every 100 feet.

This survey was conducted at the request of Standard Oil Company of Texas,

for their Smith Federal Well No. 1,

Sec. 34, T20S, R24E Survey, Eddy County/~~PARISH~~,

State of New Mexico, in the Malco Field.

I/~~WE~~ certify that this is a true and correct report of such survey and that it affords a true and correct repre-
sentation of our findings as to the nature and conditions of the well at the time the survey was/~~surveys were~~
made.

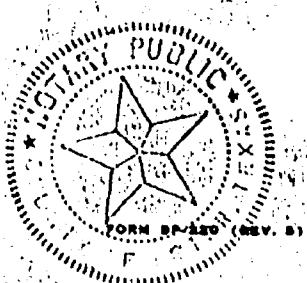
Carl Kisinger, Jr.

STATE OF TEXAS
COUNTY/PARISH OF ECTOR

Before me the undersigned authority/~~authorities~~, on this day personally appeared Carl Kisinger, Jr.,

known to me to be the person/~~persons~~ whose name is/names are subscribed to this instrument, who after being
by me duly sworn on oath, states that he has/they have knowledge of all the facts stated above and that the same
is a true and correct statement of the facts therein recited.

Subscribed and sworn to before me this the 3rd day of October 1969.



Annie Mae Hill

ANNIE MAE HILL

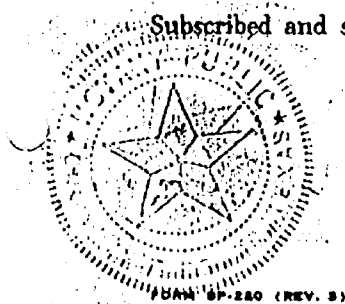
Notary Public in and for Ector County, Texas

I/~~W~~ Carl Kissinger, Jr.

on the well at the time the survey was conducted.

Carl Kisinger

Ann Marie Hee
Notary Public in and for Ector County, Texas



**MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-12a
Effective 1-1-65

All distances must be from the outer boundaries of the Section

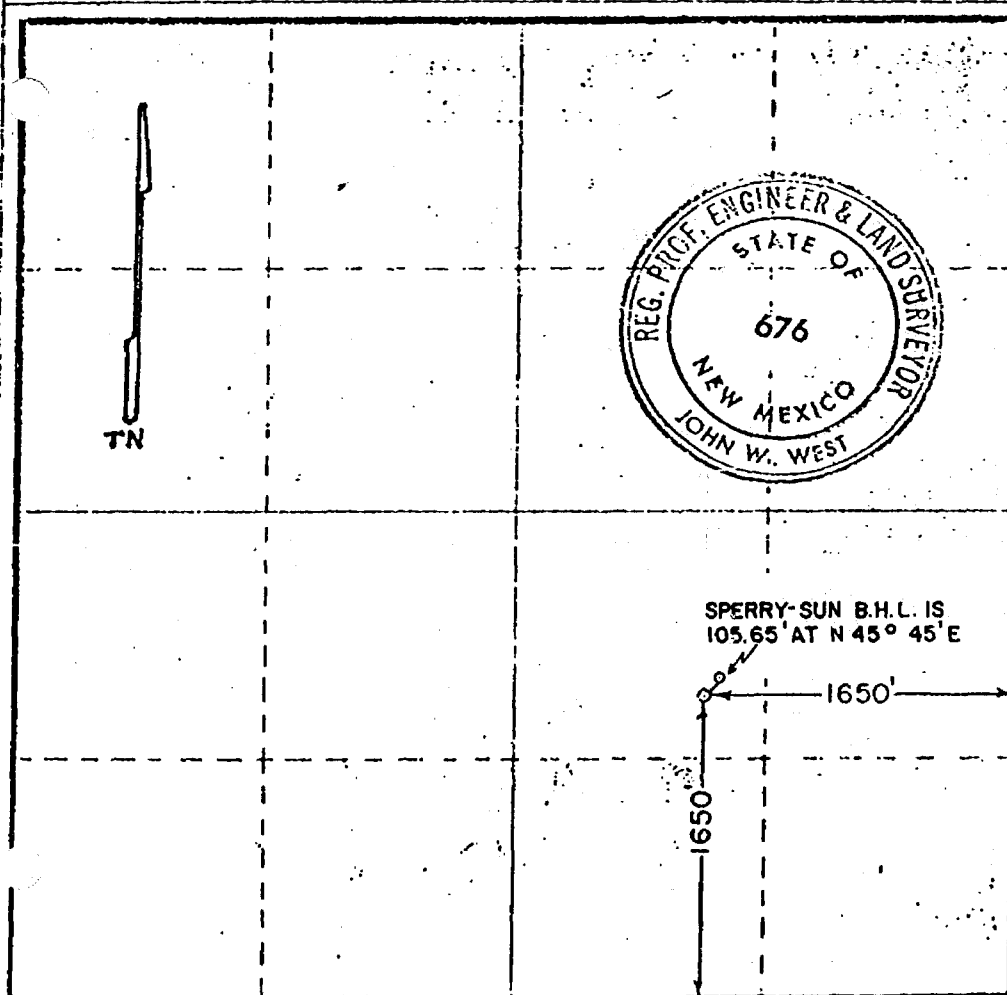
Location STANDARD OIL CO. OF TEXAS				Lease SMITH & FEDERAL		Well No. 1
Section Letter J	Section 34	Township 20 SOUTH	Range 24 EAST	County EDDY		
Actual Footage Location of Well:						
1650 feet from the SOUTH line and		1650 feet from the EAST line				
Ground Level Elev. 3698.3	Producing Formation Clisco-Canyon		Pool Undesignated	Dedicated Acreage 40 6/10 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

John W. McCants
E. W. McCants

District Engineer

Standard Oil Company of Texas

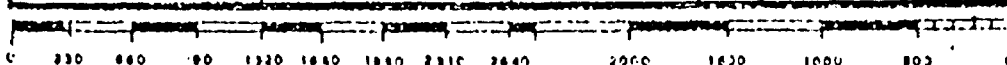
August 26, 1968

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
AUGUST 22, 1968

Registered Professional Engineer and/or Land Surveyor

John W. West
John W. West
676



17409

STANDARD OIL COMPANY OF TEXAS SNYDER TEXAS
 SMITH FEDERAL LEASE WELL NO 1
 MALCO FIELD
 EDDY COUNTY NEW MEXICO
 SLIMHOLE GYROSCOPIC AND MAGNETIC MULTISHOTS

PAGE 1

DATE OF SURVEY NOVEMBER 14 1969
 VERTICAL SECTION COMPUTED ALONG CLOSURE
 11 DEG EAST MAGNETIC CORRECTION APPLIED
 SU-3-6736 MS-6764

SPERRY-SUN WELL SURVEYING COMPANY
 RECORD OF SURVEY

MEASURED DEPTH	TRUE VERTICAL DEPTH	INCLINATION		DIRECTION	DOG-LEG SEVERITY DEG/100	VERTICAL SECTION	RECTANGULAR COORDINATES			
		DEG	MIN				DEG	NORTH	SOUTH	EAST
0	-0.00	ORIGIN AT SURFACE					-0.00		-0.00	
100	100.00	0	15	S 54 E	.25	.07		.26	.35	
200	200.00	0	0	S 54 E	.25	.07		.26	.35	
300	299.99	0	45	S 13 W	.75	-1.03		1.53	.06	
400	399.98	0	45	S 14 W	.01	-2.14		2.80		.26
500	499.97	0	45	S 22 E	.46	-2.64		4.02	.23	
600	599.96	1	0	S 13 E	.28	-3.54		5.72	.62	
700	699.94	1	0	S 13 E	0.00	-4.45		7.42	1.02	
800	799.90	1	45	S 37 E	.93	-4.83		9.86	2.86	
900	899.84	2	0	S 35 E	.26	-5.39		12.71	4.86	
1000	999.77	2	0	S 31 E	.14	-6.19		15.71	6.65	
1100	1099.70	2	15	S 25 E	.33	-7.49		19.26	8.31	
1200	1199.64	2	0	S 22 E	.27	-8.81		22.50	9.62	
1300	1299.58	2	0	S 27 E	.17	-9.84		25.61	11.21	
1400	1399.50	2	15	S 26 E	.25	-11.07		29.14	12.93	
1500	1499.42	2	15	S 27 E	.04	-12.24		32.64	14.71	
1600	1599.36	2	0	S 22 E	.31	-13.56		35.87	16.02	
1700	1699.31	1	45	S 14 E	.36	-15.10		38.84	16.75	
1800	1799.28	1	30	S 3 E	.40	-16.82		41.45	16.89	
1900	1899.25	1	30	S 12 W	.39	-19.00		44.01	16.35	
2000	1999.22	1	15	S 3 E	.44	-20.44		46.19	16.46	

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STANDARD OIL COMPANY OF TEXAS SNYDER TEXAS
 SMITH FEDERAL LEASE WELL NO 1
 MALCO FIELD
 EDDY COUNTY NEW MEXICO
 SLIMHOLE GYROSCOPIC AND MAGNETIC MULTISHOTS

PAGE 2
 DATE OF SURVEY NOVEMBER 14 1969
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 11 DEG EAST MAGNETIC CORRECTION APPLIED
 SU-3-6736 MS-6764

SPERRY-SUN WELL SURVEYING COMPANY
 RECORD OF SURVEY

MEASURED DEPTH	TRUE VERTICAL DEPTH	INCLINATION		DIRECTION		DOG-LEG SEVERITY DEG/100	VERTICAL SECTION	RECTANGULAR COORDINATES			
		DEG	MIN	DEG				NORTH	SOUTH	EAST	WEST
2100	2099.21	1	0	S 6 E		.26	-21.52		47.92	16.64	
2200	2199.18	1	15	S 11 E		.27	-22.71		50.07	17.06	
2300	2299.17	1	0	S 6 E		.27	-23.79		51.80	17.24	
2400	2399.16	0	45	S 4 E		.25	-24.64		53.11	17.33	
2500	2499.15	0	30	S 7 W		.28	-25.32		53.97	17.23	
2600	2599.15	0	30	S 37 W		.26	-26.18		54.67	16.70	
2700	2699.15	0	15	N 88 W		.41	-26.49		54.65	16.27	
2800	2799.15	0	15	N 49 W		.17	-26.52		54.37	15.94	
2900	2899.15	0	15	N 34 W		.07	-26.44		54.01	15.69	
3000	2999.14	0	30	N 33 W		.25	-26.27		53.27	15.22	
3100	3099.13	1	0	N 42 W		.51	-26.20		51.98	14.05	
3200	3199.11	1	15	N 33 W		.31	-25.78		50.15	12.86	
3300	3299.08	1	15	N 36 W		.07	-25.47		48.38	11.58	
3400	3399.03	1	45	N 46 W		.56	-25.56		46.26	9.38	
3500	3498.94	2	30	N 45 W		.75	-25.62		43.18	6.30	
3600	3598.78	3	15	N 37 W		.85	-24.90		38.65	2.89	
3700	3698.62	3	15	N 33 W		.23	-23.80		33.90		.20
3800	3798.48	3	0	N 27 W		.41	-22.24		29.23		2.58
3900	3898.34	3	0	N 25 W		.10	-20.52		24.49		4.79
4000	3998.21	3	0	N 24 W		.05	-18.71		19.71		6.92
4100	4098.07	3	0	N 29 W		.26	-17.33		15.13		9.45

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STANDARD OIL COMPANY OF TEXAS SNYDER TEXAS
 SMITH FEDERAL LEASE WELL NO 1
 MALCO FIELD
 EDDY COUNTY NEW MEXICO
 SLIMHOLE GYROSCOPIC AND MAGNETIC MULTISHOTS

PAGE 3
 DATE OF SURVEY NOVEMBER 14 1969
 VERTICAL SECTION COMPUTED ALONG CLOSURE
 11 DEG EAST MAGNETIC CORRECTION APPLIED
 SU-3-6736 MS-6764

SPERRY-SUN WELL SURVEYING COMPANY
 RECORD OF SURVEY

MEASURED DEPTH	TRUE VERTICAL DEPTH	INCLINATION		DIRECTION DEG	DOG-LEG SEVERITY DEG/100	VERTICAL SECTION	RECTANGULAR COORDINATES			
		DEG	MIN				NORTH	SOUTH	EAST	WEST
4200	4197.91	3	15	N 34 W	.37	-16.32		10.43		12.62
4300	4297.67	4	0	N 47 W	1.11	-16.66		5.67		17.73
4400	4397.39	4	15	N 49 W	.29	-17.27		.81		23.32
4500	4497.01	5	0	N 56 W	.94	-19.04	4.06			30.54
4600	4596.51	5	45	N 63 W	.99	-22.26	8.61			39.47
4700	4696.00	5	45	N 66 W	.30	-25.98	12.69			48.62
4800	4795.58	5	15	N 61 W	.69	-28.61	17.12			58.03
4900	4895.24	4	45	N 55 W	.72	-30.16	21.87			63.41
5000	4994.97	4	15	N 51 W	.59	-31.03	26.54			69.17
5100	5094.72	4	0	N 50 W	.26	-31.73	31.02			74.51
5200	5194.54	3	30	N 45 W	.60	-31.81	35.34			78.83
5300	5294.37	3	15	N 39 W	.43	-31.29	39.74			82.40
5400	5394.21	3	15	N 40 W	.06	-30.87	44.09			86.04
5468	5462.10	3	15	N 35 W	.42	-30.25	47.24			88.25
5498	5492.05	3	30	N 30 W	1.29	-29.80	48.83			89.17
5529	5522.99	3	30	N 39 W	1.77	-29.63	50.30			90.36
5560	5553.95	2	45	N 42 W	2.48	-29.57	51.41			91.36
5591	5584.94	2	0	N 51 W	2.69	-29.70	52.09			92.20
5622	5615.93	1	30	N 56 W	1.68	-29.86	52.54			92.87
5653	5646.91	1	30	N 50 W	.51	-29.94	53.06			93.49
5684	5677.90	1	45	N 49 W	.81	-30.02	53.68			94.20

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STANDARD OIL COMPANY OF TEXAS SNYDER TEXAS
 SMITH FEDERAL LEASE WELL NO 1
 MALCO FIELD
 EDDY COUNTY NEW MEXICO
 SLIMHOLE GYROSCOPIC AND MAGNETIC MULTISHOTS

PAGE 4
 DATE OF SURVEY NOVEMBER 14 1969
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SPERRY-SUN WELL SURVEYING COMPANY
 RECORD OF SURVEY

MEASURED DEPTH	TRUE VERTICAL DEPTH	INCLINATION		DIRECTION	DOG-LEG SEVERITY DEG/100	VERTICAL SECTION	RECTANGULAR COORDINATES			
		DEG	MIN				NORTH	SOUTH	EAST	WEST
5779	5772.90	0	30	S 66 E	2.35	-29.71	53.35			93.45
5872	5865.86	1	30	N 50 E	1.46	-27.29	54.91			91.58
5966	5959.81	2	0	N 46 E	.55	-24.00	57.19			89.22
6061	6054.51	4	30	S 44 E	5.18	-24.04	51.84			84.05
6155	6147.96	6	15	S 63 E	2.63	-20.75	47.18			74.93
6249	6241.30	6	45	S 67 E	.72	-16.48	42.86			64.76
6344	6335.49	7	30	S 65 E	.83	-12.08	37.62			53.52
6438	6428.40	8	45	S 70 E	1.53	-5.87	32.73			40.08
6532	6521.48	8	0	N 80 E	4.66	4.94	35.01			27.20
6627	6615.38	8	45	N 67 E	2.14	18.41	40.65			13.89
6719	6706.18	9	15	N 58 E	1.62	32.86	48.49			1.35
6812	6797.55	10	45	N 56 E	1.66	49.93	58.19		13.03	
6907	6891.44	8	45	N 56 E	2.11	64.16	66.27		25.01	
7002	6985.52	8	0	N 62 E	1.21	76.85	72.48		36.68	
7096	7078.87	6	45	N 71 E	1.81	86.84	76.07		47.13	
7189	7171.55	4	45	N 74 E	2.17	93.63	78.20		54.53	
7283	7265.42	3	0	S 87 E	2.28	96.97	77.94		59.44	
7377	7359.31	2	45	S 83 E	.34	99.79	77.39		63.92	
7472	7454.27	1	45	S 77 E	1.08	101.36	76.74		66.75	
7566	7548.21	2	0	S 66 E	.47	102.57	75.40		69.74	
7661	7643.15	2	0	S 70 E	.15	104.01	74.27		72.86	

17413

STANDARD OIL COMPANY OF TEXAS SNYDER TEXAS
SMITH FEDERAL LEASE WELL NO 1
MALCO FIELD
EDDY COUNTY NEW MEXICO
SLIMHOLE GYROSCOPIC AND MAGNETIC MULTISHOTS

PAGE 5
DATE OF SURVEY NOVEMBER 14 1969
VERTICAL SECTION COMPUTED ALONG CLOSURE
11 DEG EAST MAGNETIC CORRECTION APPLIED
SU-3-6736 MS-6764

SPERRY-SUN WELL SURVEYING COMPANY
RECORD OF SURVEY

MEASURED DEPTH	TRUE VERTICAL DEPTH	INCLINATION		DIRECTION DEG	DOG-LEG SEVERITY DEG/100	VERTICAL SECTION	RECTANGULAR COORDINATES			
		DEG	MIN				NORTH	SOUTH	EAST	WEST
7755	7737.11	1	45	S 79 E	.41	105.65	73.72			75.68

THE CALCULATION PROCEDURES ARE BASED ON THE USE OF THE TANGENTIAL OR CHORD METHOD
HORIZONTAL DISPLACEMENT ■ 105.65 FEET AT NORTH 45 DEG. 45 MIN. EAST (TRUE)



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

September 12, 1969

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Re: Case No. 4215
Order No. R-3839
Applicant:
Standard Oil Co. of Texas

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

ALP/ir

Copy of order also sent to:

Hobbs OCC x

Artesia OCC x

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. 4215
Order No. R-3839

APPLICATION OF STANDARD OIL COMPANY
OF TEXAS TO DIRECTIONALLY DRILL, EDDY
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 10, 1969, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 12th day of September, 1969, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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, Standard Oil Company of Texas, is the owner and operator of the Smith Federal Well No. 1, a wildcat well located 1650 feet from the South line and 1650 feet from the East line of Section 34, Township 20 South, Range 24 East, NM2M, Eddy County, New Mexico.

(3) That the subject well was originally drilled to a total depth of 7845 feet into the Cisco-Canyon formation where, due to mechanical difficulties, the well has produced an excessive amount of water.

(4) That the applicant now seeks approval for the plugging of said well back to approximately 5500 feet, setting a whipstock at said depth and directionally drilling to a true vertical depth

-2-

CASE No. 4215

Order No. R-3839

of approximately 7750 feet to bottom said well in the Cisco-Canyon formation at a point approximately 200 feet east of the present bottom-hole location.

(5) That the applicant proposes to determine the present bottom-hole location of the subject well by means of a continuous multi-shot directional survey conducted prior to said directional drilling.

(6) That approval of the subject application will prevent the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Standard Oil Company of Texas, is hereby authorized to plug back its Smith Federal Well No. 1, located 1650 feet from the South line and 1650 feet from the East line of Section 34, Township 20 South, Range 24 East, NMPM, Eddy County, New Mexico, to approximately 5500 feet, set a whipstock at said depth and to directionally drill in an easterly direction to bottom said well in the Cisco-Canyon formation at a true vertical depth of approximately 7750 feet at a point within a radius of 50 feet of a point 200 feet east of the present bottom-hole location;

PROVIDED HOWEVER, that prior to commencing the aforesaid operations, a continuous multi-shot directional survey shall be made of the well bore with shot points not more than 100 feet apart in order to determine the present bottom-hole location; that the operator shall cause the surveying company to forward a copy of the survey report directly to the Santa Fe office of the Commission, Box 2088, Santa Fe, New Mexico; and that the operator shall notify the Commission's Artesia District Office of the date and time said survey is to be commenced.

(2) That subsequent to the above-described directional drilling, a continuous multi-shot directional survey shall be made of the well bore from total depth to the whipstock point with shot points not more than 100 feet apart; that the operator shall cause the surveying company to forward a copy of the survey report directly to the Santa Fe office of the Commission, Box 2088, Santa Fe, New Mexico, and that the operator shall notify

-3-

CASE No. 4215
Order No. R-3839

the Commission's Artesia District Office of the date and time said survey is to be commenced.

(3) That Form C-105 shall be filed in accordance with Commission Rule 1108 and the operator shall indicate thereon true vertical depths in addition to measured depths.

(4) That Unit J of said Section 34 shall be dedicated to the subject well if the well bottoms in Unit J.

(5) That Unit I of said Section 34 shall be dedicated to the subject well if the well bottoms in Unit I.

(6) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID F. CARGO, Chairman


ALEX J. ARMILJO, Member

A. L. PORTER, Jr., Member & Secretary


esr/

Docket No. 25-69

DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 10, 1969

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or
Elvis A. Utz, Alternate Examiner:

CASE 4210: Application of Mobil Oil Corporation for a special gas-oil ratio limitation, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 506 of the Commission Rules and Regulations to provide for a limiting gas-oil ratio in excess of the existing ratio of 2000 cubic feet of gas per barrel of oil in the Lightcap (Devonian) Pool, Chaves County, New Mexico.

CASE 4211: Application of Mobil Oil Corporation for a special gas-oil ratio limitation, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 506 of the Commission Rules and Regulations to provide for a limiting gas-oil ratio in excess of the existing ratio of 2000 cubic feet of gas per barrel of oil in the Lightcap-Pennsylvanian Pool, Chaves County, New Mexico.

CASE 3857: (Reopened)

In the matter of Case No. 3857 being reopened pursuant to the provisions of Order No. R-3504, which order established 160-acre spacing units and 80-acre proportional factors of 4.77 for the Tulk-Pennsylvanian Pool, Lea County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on less than 160-acre spacing units and why the 80-acre proportional factor of 4.77 should or should not be retained.

CASE 4212: Application of General American Oil Company of Texas for an unorthodox oil well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its Maddren "B" Well No. 12, a producing oil well, at an unorthodox location 1295 feet from the West line and 1815 feet from the South line of Section 27, Township 17 South, Range 30 East, as an infill well in its Grayburg Jackson Premier Unit Waterflood Project area, Grayburg-Jackson Pool, Eddy County, New Mexico.

CASE 4213: Application of Texo Oil Company for pool redelineation, creation of a new gas pool, an unorthodox gas well location, and non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the redelineation of the vertical limits of the South Corbin-Queen Pool to permit the

(Case 4213 continued)

creation of a new basal Penrose gas pool for its Buffalo unit Well No. 11 located at an unorthodox gas well location 2310 feet from the South line and 330 feet from the West line of Section 35, Township 18 South, Range 33 East, Lea County, New Mexico. Applicant further seeks approval of an 80-acre non-standard gas proration unit comprising the N/2 SW/4 of said Section 35, to be dedicated to the above-described well.

CASE 4214: Application of Amerada Hess Corporation for approval of an unorthodox injection well location and the amendment of Order No. R-2197, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox water injection well location for its Langlie-Mattix Woolworth Unit Well No. 710 at a point 1950 feet from the North line and 50 feet from the East line of Section 27, Township 24 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico. Applicant also seeks further amendment of Order No. R-2197 to provide for an administrative procedure whereby additional injection wells might be approved at locations no closer than 50 feet to the outer boundary of the unit area.

CASE 4215: Application of Standard Oil Company of Texas to directionally drill, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to directionally drill its Smith Federal Well No. 1, a wildcat located 1650 feet from the South and East lines of Section 34, Township 20 South, Range 24 East, Eddy County, New Mexico. Said well was drilled to a total depth of 7845 feet. Applicant proposes to plug the well back to approximately 5500 feet, set a whipstock at said depth and directionally drill to a depth of approximately 7800 feet to bottom said well in the Cisco formation at a point approximately 200 feet East of the present bottom hole location.

CASE 4216: Application of Tamarack Petroleum Company, Inc. for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Northeast Pearl-Queen Unit Area comprising 920 acres, more or less, of State and fee lands in Sections 15, 22, 23, and 24, Township 19 South, Range 35 East, Pearl-Queen Pool, Lea County, New Mexico.

Examiner Hearing - September 10, 1969

-3-

Docket No. 25-69

CASE 4217: Application of Tamarack Petroleum Company, Inc. for a water-flood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a water-flood project in its Northeast Pearl-Queen Unit Area by the injection of water into the Queen formation through eight wells located in Sections 15, 22, 23, and 24, Township 19 South, Range 35 East, Pearl-Queen Pool, Lea County, New Mexico.

CASE 4181: (Continued from the August 6, 1969, Examiner Hearing)

Application of J. M. Huber Corporation for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete it Stoltz Federal Well No. 1 located in Unit J of Section 12, Township 15 South, Range 34 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Morton-Wolfcamp Pool and the disposal of produced salt water through the 8 5/8 X 4 1/2-inch casing-casing annulus into the San Andres, Tubb, Abo, and possibly other formations in the open-hole interval from approximately 4330 feet to 9750 feet.



STANDARD OIL COMPANY OF TEXAS

A DIVISION OF CHEVRON OIL COMPANY

P. O. BOX 1249 HOUSTON TEXAS 77001

August 15, 1969

C. N. SEGNAIR
CHIEF ENGINEER

Application to Intentionally Deviate
Smith Federal #1 (Lse. # NM-045276)
Loc. Unit J, 1650' FSL & 1650' FEL
of Section 34, T-20-S, R-24-E,
Eddy County, New Mexico

Case 4215

United States Geological Survey
P. O. Drawer 1857
Roswell, New Mexico 88201

Gentlemen:

Standard Oil Company of Texas, A Division of Chevron Oil Company, is applying to the New Mexico Oil Conservation Commission for authority to intentionally deviate our Smith Federal Well No. 1 in Eddy County, New Mexico to attempt a successful completion in the indicated productive Cisco formation.

The enclosed application sets forth our planned general procedure and outlines the major points to be covered at the hearing.

We would appreciate your approval of the proposed application to intentionally deviate the Smith Federal Well No. 1 from approximately 5500 feet to a projected total depth of approximately 7800 feet in such a manner that the deviated hole would bottom at a location approximately 200 feet east of the present bottom hole location.

Yours very truly,

C. N. Segnair

JAS:mkf

Enclosure

cc: New Mexico Oil Conservation Commission
P. O. Box 2088, Santa Fe, New Mexico 87501

DOCKET MANLED

Date 5-28-69

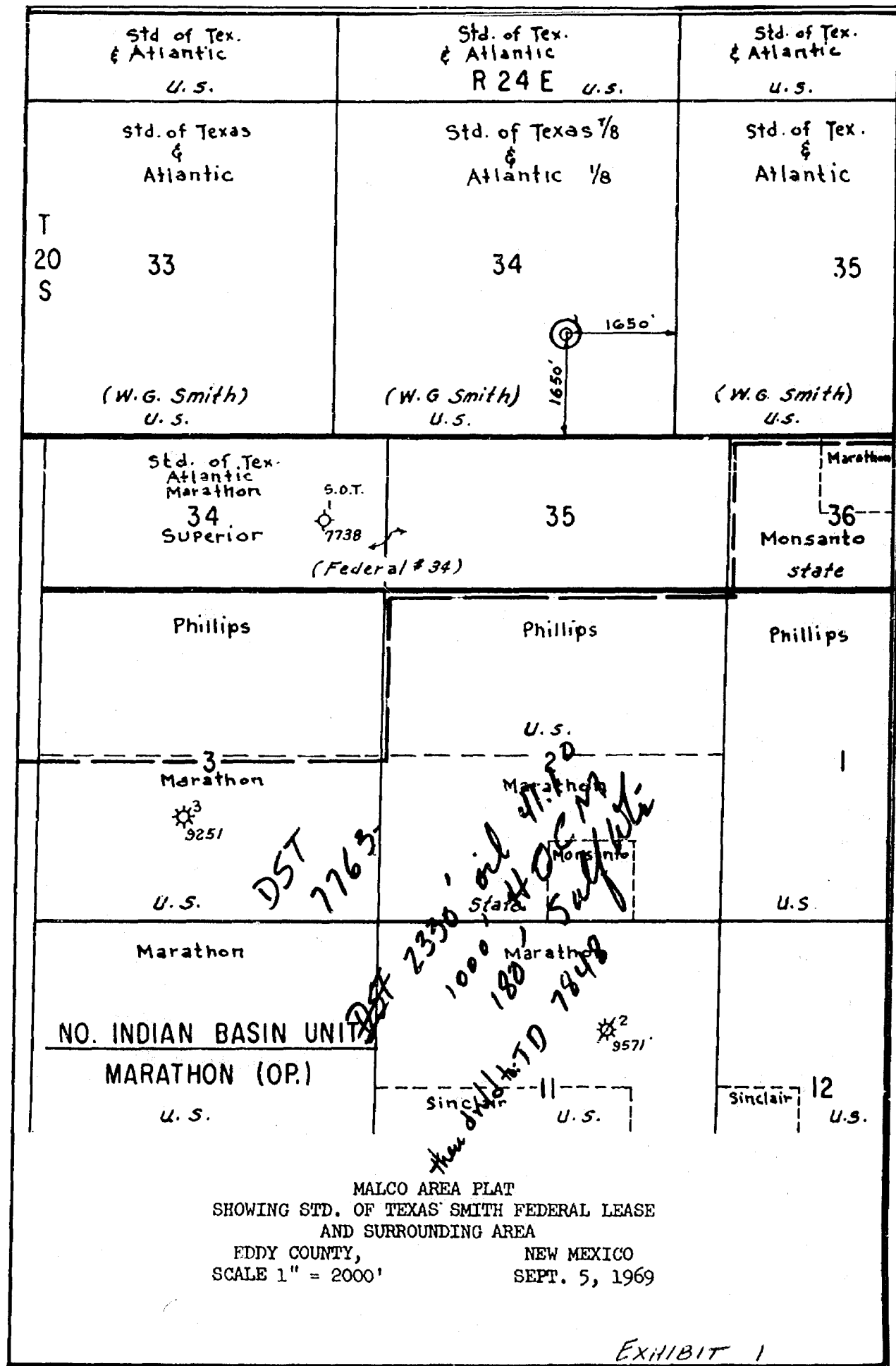
CASE 4215

APPLICATION TO DIRECTIONALLY DRILL
EDDY COUNTY, NEW MEXICO

EXHIBITS OF
STANDARD OIL COMPANY OF TEXAS
A DIVISION OF CHEVRON OIL COMPANY

9-10-69 SANTA FE, NEW MEXICO

BEFORE EXAMINER NUTTER	
OIL CONSERVATION COMMISSION	
<i>Standard</i>	EXHIBIT NO. <u>A</u>
CASE NO. <u>4215</u>	





UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Drawer 1857
Roswell, New Mexico 88201

August 25, 1969

Standard Oil Company of Texas
P. O. Box 1249
Houston, Texas 77001

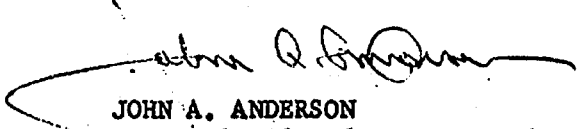
Attention: Mr. C. N. Segnar

Gentlemen:

Your application of August 15 requests approval to intentionally deviate your well No. 1 Smith Federal, located in the NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T. 20 S., R. 24 E., N.M.P.M., Eddy County, New Mexico, on Federal lease New Mexico 045276, under controlled conditions to reach a total depth of approximately 7,800 feet at a location approximately 200 feet east of the present bottom hole location.

Your application to intentionally deviate the No. 1 Smith Federal is hereby approved, subject to like approval by the New Mexico Oil Conservation Commission.

Sincerely yours,


JOHN A. ANDERSON
Regional Oil and Gas Supervisor

Copies: GAS 8/23/69
TDC

EXHIBIT 2

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
NM-045276

6. IF INDIAN, ALLOTTED OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Smith Federal

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Undesignated

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 34, T-20-S, R-24-E, NMPM

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR
Standard Oil Company of Texas - A Division of Chevron Oil Co.

3. ADDRESS OF OPERATOR
3610 Avenue S, Snyder, Texas 79549

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
Unit J, 1650' FSL and 1650' FEL, Section 34, T-20-S, R-24-E.

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3698.3 GR

12. COUNTY OR PARISH
Eddy

13. STATE
New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

(Other) ☐

PULL OR ALTER CASING ☒

MULTIPLE COMPLETE ☐

ABANDON* ☐

CHANGE PLANS ☒

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐

FRACTURE TREATMENT ☐

SHOOTING OR ACIDIZING ☐

(Other) ☐

REPAIRING WELL ☐

ALTERING CASING ☐

ABANDONMENTS* ☐

Completion Attempt ☒

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

11-2-68 Perforated 7793-7795. Unable to pump in formation. Set Baker Model 'K' cement
to retainer. Perforated 7740-60'. Acidized with 500 gals. Zone making excessive
1-14-69 water. Squeezed perms 7740-60' with 45 sacks cement. Perforated 7740-50'.
Acidized with 250 gals. Zone making excessive water. Squeezed perms 7740-50'
with 28 sacks through Baker Model 'K' retainer set at 7735'. Perforated 7724-
7730'. Acidized with 125 gals. Swab tested and installed rod pumping equipment.
Well produced excessive water. Shut well in to evaluate results.

Propose to abandon present zone approximately 10-25-69 as follows:

Set 15 sack cement plug 7735-7620'.

Shoot off and pull 5 1/2" casing from approximately 6000'.

Set 35 sack cement plug across stub of 5 1/2" casing.

Set 100 sack cement plug 5700' to 5300'.

Sidetrack and redrill well to approximately 7740'.

*will drill
true bottom hole
prior to PB
then will attempt
to drill to 7000'*

18. I hereby certify that the foregoing is true and correct

SIGNED B. Davidson

TITLE District Drilling Supervisor DATE August 27, 1969

(This space for Federal or State office use)

APPROVED BY
AUG 28 1969
R. L. BECKMAN
ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side

EXHIBIT 2

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☐DEEPEN ☒PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐OTHER ☐SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Standard Oil Company of Texas - A Division of Chevron Oil Company

3. ADDRESS OF OPERATOR

3610 Avenue S, Snyder, Texas 79549

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

Unit J, 1650' FSL and 1650' FEL, Section 34, T-20-S, R-24-E

At proposed prod. zone

Unit J, 1650' FSL and 1450' FEL, Section 34, T-20-S, R-24-E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

25 miles northwest of Carlsbad, New Mexico

16. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drg. unit line, if any)

1450'

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

None

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3698.3' GR

5. LEASE DESIGNATION AND SERIAL NO.

NM-045276

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Smith Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Undesignated

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREASec. 34, T-20-S, R-24-E,
NMPM

12. COUNTY OR PARISH

Eddy

13. STATE

New Mexico

16. NO. OF ACRES IN LEASE

640

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

19. PROPOSED DEPTH

7765

20. ROTARY OR CABLE TOOLS

Rotary

22. APPROX. DATE WORK WILL START*

11-1-69

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13-3/8"	48 lb.	268	550 sacks to surface*
12 1/2" - 11"	8-5/8"	24 lb.	2300	800 sacks to surface*
7-7/8"	5-1/2"	17, 15.5, 14 16.	7750	400 sacks

*Note: These casing strings have been set and cementing detail reported.

10" Series 900 preventer on intermediate.

6" Series 900 preventer on oil string.

Present perforations will be plugged as shown on 9-331 dated August 27, 1969.

5 1/2" casing will be pulled and bore hole will be side tracked at approximately
5500' and redrilled to a measured depth of approximately 7765' (TVD - 7750')
approximately 200' to 250' due east of surface location.

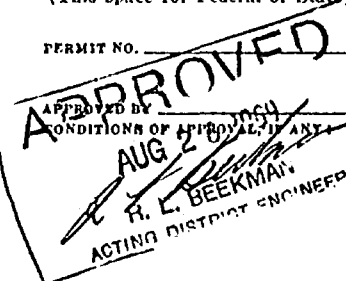
IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED B. Davidson TITLE District Drilling Supervisor DATE August 27, 1969

(This space for Federal or State office use)

PERMIT NO.



APPROVAL DATE

TITLE

DATE

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Superseded C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

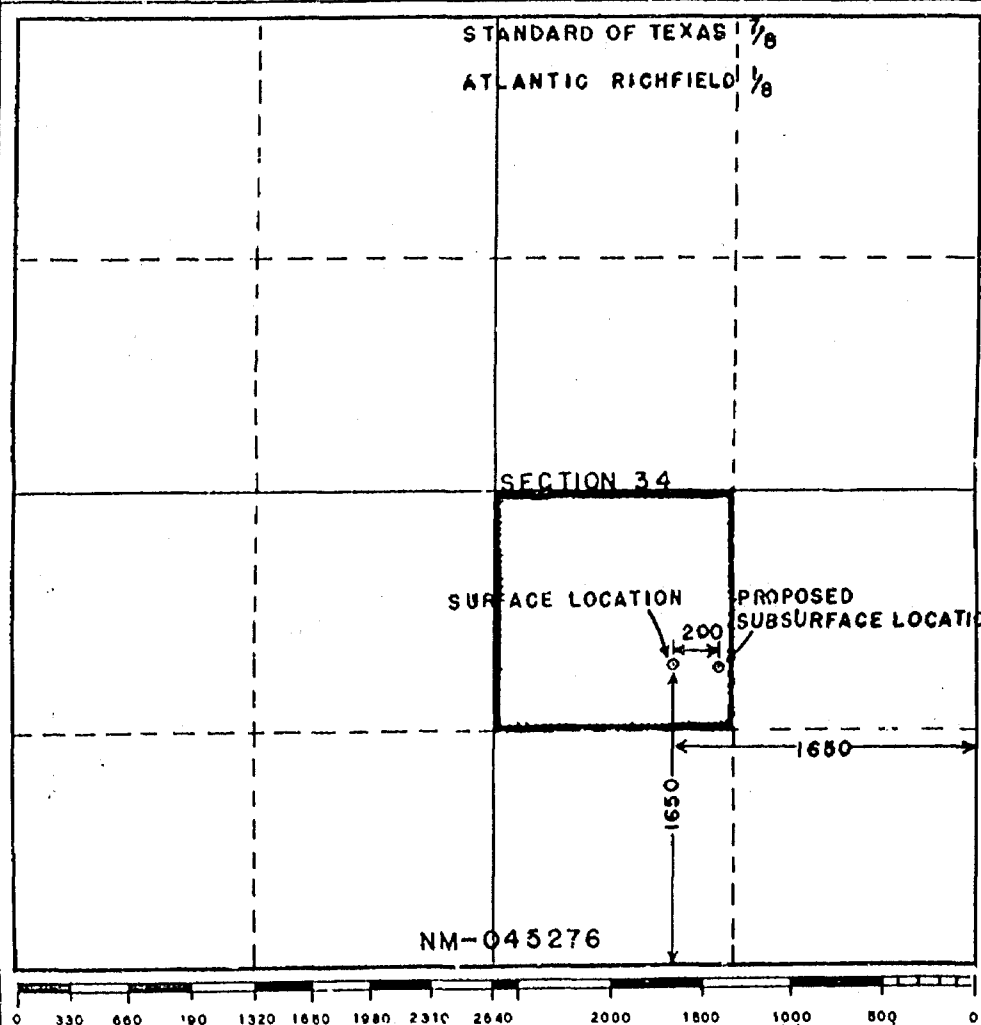
Standard Oil Company of Texas A Division of Chevron Oil Company			Lease Smith Federal		Well No. 1
Unit Letter J	Section 34	Township T-20-S	Range R-24-E	County Eddy	
Actual Footage Location of Well:					
1650 feet from the South line and		1650 feet from the East line			
Ground Level Elev: 3698.3	Producing Formation Cisco-Canyon	Pool Undesignated	Dedicated Acreage: 40 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Drilling Unit

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

B. Davidson

Name
B. Davidson

Position
District Drilling Supervisor

Company
Standard Oil Company of Texas

Date
August 26, 1969

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
August 22, 1968

Registered Professional Engineer
and/or Land Surveyor

John W. West

Certificate No.
676

EXHIBIT 5

PRESENT CONDITION
SMITH FEDERAL NO. 1, MALCO AREA
EDDY COUNTY, NEW MEXICO

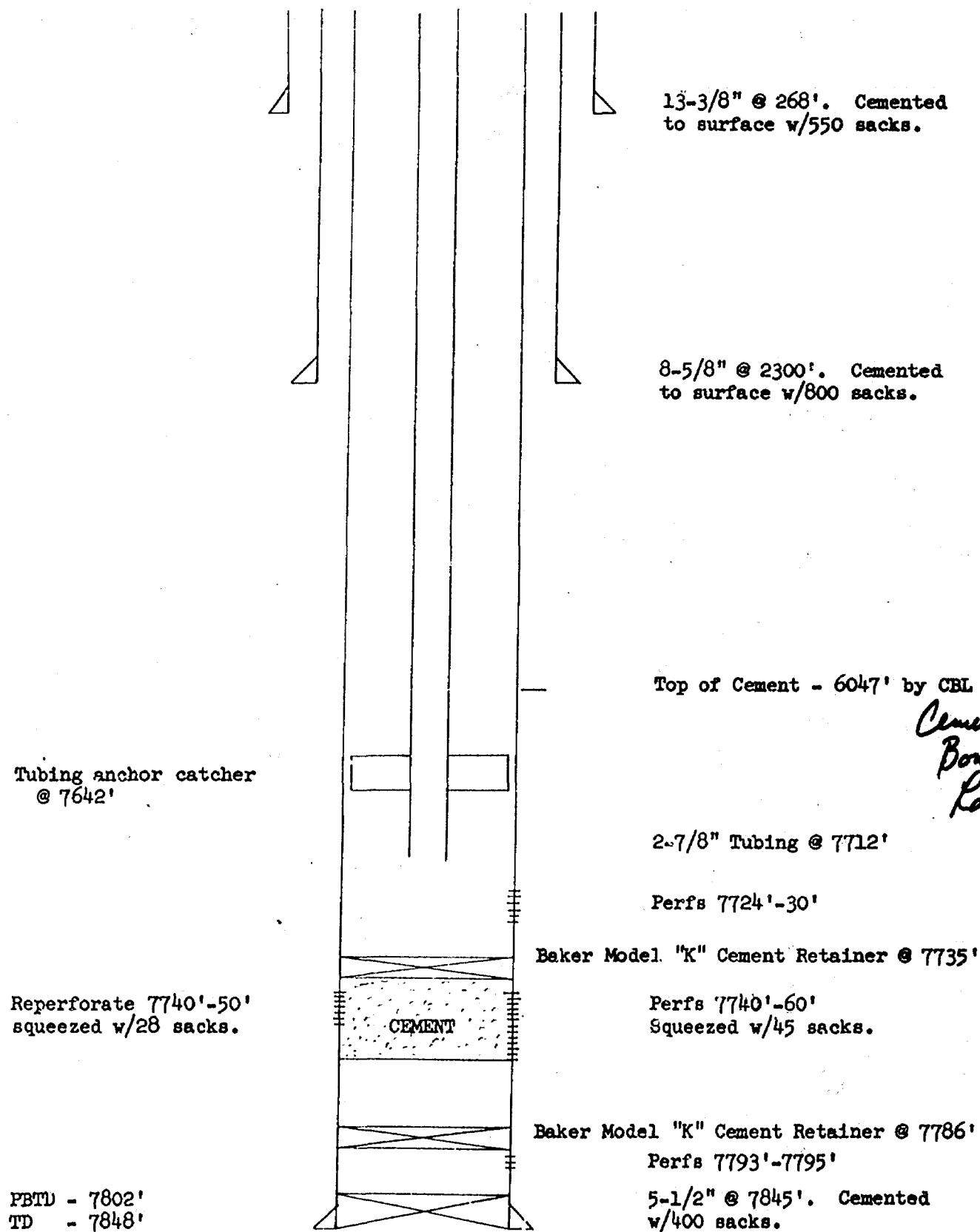


EXHIBIT 6

PROPOSED CONDITION AFTER PLUGGING
PRIOR TO SIDETRACK
SMITH FEDERAL NO. 1, MALCO AREA
EDDY COUNTY, NEW MEXICO

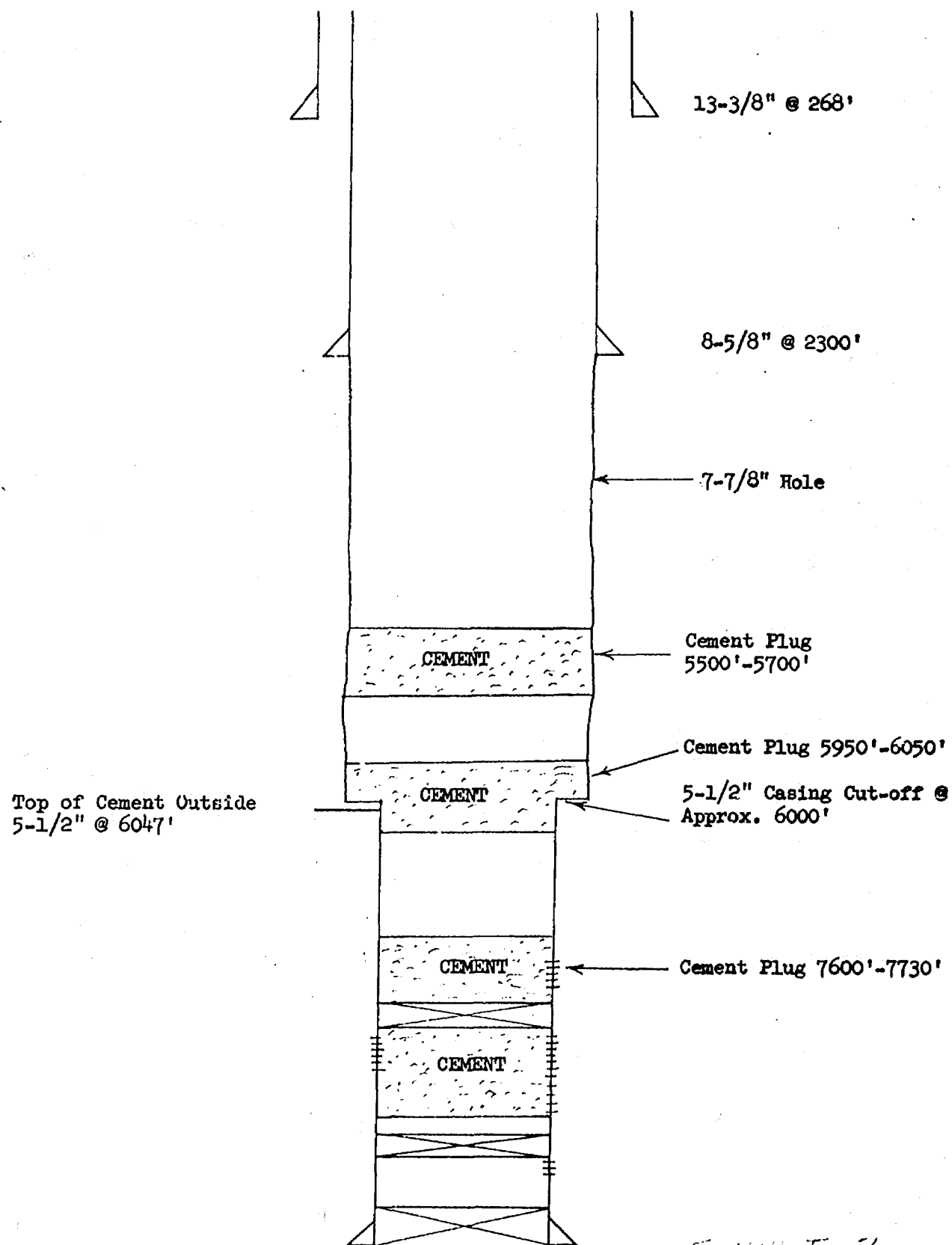


EXHIBIT 7

SMITH FEDERAL NO. 1, MALCO AREA
EDDY COUNTY, NEW MEXICO

<u>Depth</u>	<u>Interval</u>	<u>Deviation</u>	<u>True Interval</u>	<u>TVD</u>	<u>Horizontal Displacement</u>	<u>Accumulative Displacement</u>
125	125	1/2	125.00	125.00	1.09	1.09
418	293	1/2	293.00	418.00	2.55	3.64
900	482	1	481.90	899.90	8.44	12.08
1359	459	1-1/2	458.86	1358.76	12.03	24.11
1653	294	1-1/2	293.91	1652.67	7.70	31.81
2282	629	2	628.62	2281.29	21.95	53.76
2503	221	1	220.96	2502.25	3.87	57.63
3060	557	1/2	557.00	3059.25	4.85	62.48
3497	437	2	436.74	3495.99	15.25	77.73
4000	503	1-3/4	502.75	3998.74	15.34	93.07
4500	500	3	499.30	4498.04	26.15	119.22
5000	500	3-1/2	499.05	4997.09	30.50	149.72
5520	520	3-1/4	519.17	5516.26	29.48	179.20
5986	466	2	465.72	5981.98	16.26	195.46
6400	414	1-1/2	413.88	6395.86	10.85	206.31
7003	603	1-1/4	602.88	6998.74	13.14	219.45
7480	477	1-1/4	476.90	7475.64	10.40	229.85
7848	368	1	367.93	7843.57	6.44	236.29

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

APP. EXHIBIT NO. B

CASE NO. 4215



STANDARD OIL COMPANY OF TEXAS

A DIVISION OF CHEVRON OIL COMPANY
P. O. BOX 1249 HOUSTON TEXAS 77001

August 15, 1969

'69 AUG 18 AM 8 55

Case 4215

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Enclosed in triplicate is the application of Standard Oil Company of Texas, A Division of Chevron Oil Company, for authority to intentionally deviate its Smith Federal Well No. 1, a wildcat well located on a 640 acre lease, (lease No. NM-045276) Unit J, 1650' FSL and 1650' FEL of Section 34, T-20-S, R-24-E, Eddy County, New Mexico.

It is requested that this application be set for hearing at the examiner hearing on September 10, 1969.

Very truly yours,

John T. Cameron
John T. Cameron
Supervising Proration Engineer

JAS:mkf

Enclosures

cc: United States Geological Survey
P. O. Drawer 1857, Roswell, New Mexico 88201

Mr. Jason W. Kellahin
P. O. Box 1769, Santa Fe, New Mexico 87501

DOCKET MAILED

Date 8-28-69

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

APPLICATION OF STANDARD OIL COMPANY OF TEXAS,
A DIVISION OF CHEVRON OIL COMPANY, FOR AUTHORITY
TO INTENTIONALLY DEVIATE SMITH FEDERAL WELL, NO.
1, A WILDCAT WELL LOCATED ON SMITH FEDERAL 640
ACRE LEASE #MM-045276, UNIT J, 1650' FSL AND
1650' FEL OF SEC. 34, T-20-S, R-24-E, EDDY COUNTY,
NEW MEXICO

CASE NO. *4215*

APPLICATION

Standard Oil Company of Texas, A Division of Chevron Oil Company, hereby applies to the Oil Conservation Commission of the State of New Mexico for an order authorizing intentional deviation from the vertical to permit sidetracking of the existing well bore (T.D. 7845') at an approximate depth of 5500 feet in such a manner that the deviated hole would bottom at a location approximately 200 feet east of the bottom hole location of the existing well bore at an approximate depth of 7800 feet.

In support of this application, the applicant will show the Commission:

1. That completion attempts in the existing well bore were unsuccessful due to probable mechanical problems.
2. That the existing well would be properly plugged back to an approximate depth of 5500 feet if this application is approved.
3. That approval of this application should result in prevention of economic waste.
4. That approval of this application should result in a completion in an indicated productive Cisco formation.

The following parties are believed interested in this application:

Atlantic Richfield Company, P. O. Box 1710, Hobbs, New Mexico 88240
Marathon Oil Company, P. O. Box 220, Hobbs, New Mexico 88240
Superior Oil Company, P. O. Box 1900, Midland, Texas 79701

The applicant requests that this application be set for hearing at the examiner's hearing, September 10, 1969.

Respectfully submitted,

STANDARD OIL COMPANY OF TEXAS
A DIVISION OF CHEVRON OIL COMPANY

By

John T. Cameron
John T. Cameron
Supervising Production Engineer

DRAFT

GMH/esr

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. 4215

Order No. R- 3839

APPLICATION OF STANDARD OIL COMPANY
OF TEXAS TO DIRECTIONALLY DRILL, EDDY
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 10, 1969,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of September, 1969, the Commission, a
quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, 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, Standard Oil Company of Texas, is
the owner and operator of the Smith Federal Well No. 1, a wildcat
well located 1650 feet from the South line and 1650 feet from the
East line of Section 34, Township 20 South, Range 24 East, NMPM,
Eddy County, New Mexico.

(3) That the subject well was originally drilled to a total
depth of 7845 feet into the Cisco-Canyon formation where, due
to mechanical difficulties, the well has produced an excessive amount of
it was unproductive. water.

(4) That the applicant now seeks approval for the plugging
of said well back to approximately 5500 feet, setting a whipstock
at said depth and directionally drilling to a ^{true vertical} depth of approximately
⁷²⁵⁰
~~7800~~ feet to bottom said well in the ^{Canyon} Cisco formation at a point
approximately 200 feet east of the present bottom-hole location.

(5) *That the applicant proposes to determine the present bottom-hole location of the subject well by means of a continuous multi-shot directional survey conducted prior to said directional drilling.*

(6) That approval of the subject application will prevent the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Standard Oil Company of Texas, is hereby authorized to plug back its Smith Federal Well No. 1, located 1650 feet from the South line and 1650 feet from the East line of Section 34, Township 20 South, Range 24 East, NMPM, Eddy County, New Mexico, to approximately 5500 feet, set a whipstock at said depth and to directionally drill ~~to a depth of approximately~~ *in an easterly direction to bottom*

in the Chico - Canyon formation at a true vertical depth of approximately 7750 feet at a point within a radius of 50 feet of a point 200 feet east of the present bottom-hole location.

Provided However; that prior to commencing the aforesaid

operations ~~That~~ a continuous multi-shot directional survey shall be made of the well bore with shot points not more than 100 feet apart ~~in order to determine the present bottom-hole location~~; that the operator shall cause the surveying company to forward a copy of the survey report directly to the Santa Fe office of the Commission, Box 2088, Santa Fe, New Mexico; and that the operator shall notify the Commission's Hobbs District Office of the date and time said survey is to be commenced.

subsequent to the above-described directional drilling,
(2) That a continuous multi-shot directional survey shall
from total depth to the whipstock point
be made of the well bore with shot points not more than 100 feet
apart; that the operator shall cause the surveying company to
forward a copy of the survey report directly to the Santa Fe
Office of the Commission, Box 2088, Santa Fe, New Mexico, and
that the operator shall notify the Commission's Artesia District
Office of the date and time said survey is to be commenced.

(3) That Form C-105 shall be filed in accordance with
Commission Rule 1108 and the operator shall indicate thereon
true vertical depths in addition to measured depths.

(6)(a) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

... .., New Mexico.

(4)(a) That Unit ^J of said Section ³⁴ shall be dedicated to the subject well if the well bottoms in Unit ~~J~~ J.

(5)(a) That Unit ^I of said Section ³⁴ shall be dedicated to the subject well if the well bottoms in Unit ~~I~~ I.

aforeaid operation