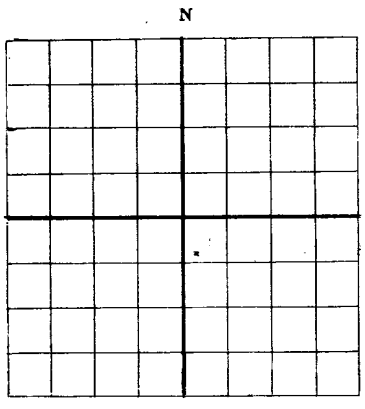
FORM C-105



AREA 640 ACRES
LOCATE WELL CORRECTLY

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

RECEIVED MAY 8 - 1939 HOBBS OFFICE

WELL RECORD

Mail to Oil Conservation Commission, Santa Fe, New Mexico, or its proper agent not more than twenty days after completion of well. Follow instructions in the Rules and Regulations of the Commission. Indicate questionable data by following it with (?). SUBMIT IN TRIPLICATE.

DUPLICATE

Standard Oil Company of Texas (Company or Operator) Box 1660, Midland, Texas (Address)

State 6-34 (Lease) Well No. 2 in SW/4 of Sec. 34, T. 17-S R. 35-E, N. M. P. M., Vacuum Field, Lea County.

Well is 1980 feet south of the ~~North~~ South line and 1980 feet west of the ~~East~~ West line of Section 34.

If State land the oil and gas lease is No. B-1845 Assignment No.

If patented land the owner is, Address

If Government land the permittee is, Address

The Lessee is, Address

Drilling commenced February 15, 1939. Drilling was completed April 3, 1939

Name of drilling contractor Loffland Bros., Address

Elevation above sea level at top of casing 3920 feet.

The information given is to be kept confidential until 19

OIL SANDS OR ZONES

No. 1, from 4525 to 4595 No. 4, from to

No. 2, from 4610 to 4649 No. 5, from to

No. 3, from to No. 6, from to

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from 4649 to 4632 feet. 10 bbls/hr.

No. 2, from to feet.

No. 3, from to feet.

No. 4, from to feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	THREADS PER INCH	MAKE	AMOUNT	KIND OF SHOE	CUT & FILLED FROM	PERFORATED FROM	PERFORATED TO	PURPOSE
13-3/8"	48	8	Chester	263	Tex.Pat.				WSO
9-5/8"	36	8	"	1634	Baker Float				Protect
7"	20	10	Spang	4190	" "				WSO

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
17-1/4"	13-3/8	278'	250	Halliburton		
12-1/4"	9-5/8	1648'	615	"		
8-3/4"	7	4201'	330	"		

PLUGS AND ADAPTERS

Heaving plug—Material Cement Length 47 Depth Set 4602' - 4649'

Adapters—Material Size

RECORD OF SHOOTING OR CHEMICAL TREATMENT

SIZE	SHELL USED	EXPLOSIVE OR CHEMICAL USED	QUANTITY	DATE	DEPTH SHOT OR TREATED	DEPTH CLEANED OUT
		Dowell Acid	500	3/18/39	4300 - 4649	

Results of shooting or chemical treatment Acid used to wash lime mud sheath. No acid forced back into formation

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto.

TOOLS USED

Rotary tools were used from 0 feet to 4649 feet, and from feet to feet

Cable tools were used from feet to feet, and from feet to feet

PRODUCTION

Put to producing April 3, 1939

The production of the first 24 hours was 162 barrels of fluid of which 99.3 % was oil; % emulsion; 0.7 % water; and % sediment. Gravity, Be

If gas well, cu. ft. per 24 hours Gallons gasoline per 1,000 cu. ft. of gas

Rock pressure, lbs. per sq. in.

EMPLOYEES

J. W. Vandervort, Driller B. J. Graham, Driller

H. W. Fannin, Driller T. A. Beavers, Driller

B. R. Deloach G. Everett

C. E. Earnest

FORMATION RECORD ON OTHER SIDE

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

Subscribed and sworn to before me this 5th day of May, 1939

W. C. Byrnes
Notary Public

My Commission expires 5-31-39

Midland, Texas (Place) May 5, 1939 (Date)

Name D. S. GOOGINS

Position Petroleum Engineer

Representing Standard Oil Company of Texas (Company or Operator)

Address Box 1660, Midland, Texas

FORMATION RECORD

FROM	TO	THICKNESS IN FEET	FORMATION
			Complete history and log attached.

WELL COMPLETION REPORT PRO-18-3

LOG AND HISTORY

WELL NO. 2 PROPERTY State 6-34 (B-1845) STANDARD OIL COMPANY OF TEXAS COMPANY

NOTE: FORMATIONS SHOWING OIL OR GAS SHOULD BE NOTED IN CAPITALS

FROM	TO	FEET	FORMATION DRILLED AND CORED
			February 15, 1939 - Authorization SOT-Pro-181 received to drill State 6-34 #2, located 1980' from the South and West lines of Section 34, Twp. 17-S, Rg. 35-E, Lea County, New Mexico.
			February 18, 1939 - Started cellar and pits.
			February 22, 1939 - Completed rigging up and started drilling 12-1/4" hole.
0	16	16	Cellar and substructure
16	38	22	Caliche
38	240	202	Sand and gravel
240	290	50	Red bed
			February 22, 1939 - Reamed 12-1/4" hole to 17-1/4" hole. Landed and cemented 263' of 13-3/8" casing at 278' with 250 sacks of El Toro Oil Well Cement by Halliburton Process, top plug only. Casing free, circulation good. 25 minutes mixing cement and pumping down plug.
			Casing Detail
			263' of 13-3/8", 48#, 10 thd., new welded Chester casing at 278'. Texas Pattern Shoe.
			February 25, 1939 - After standing cemented 48 hours, plug was drilled and casing and water shut off were tested by bailing hole dry. After standing one hour, hole was still dry. Casing and water shut off o.k.
			Drilled ahead in 8-3/4" hole.
290	539	249	Red bed
539	1100	561	Red bed and shells
1100	1372	272	Red rock and red bed
1372	1534	162	Red rock and shells
			Reamed 8-3/4" hole to 12-1/4" hole.
			Drilled ahead in 12-1/4" hole.
1534	1610	76	Red rock and shells
1610	1654	44	Anhydrite
			February 27, 1939 - Landed and cemented 1634' of 9-5/8" casing at 1648' with 615 sacks of El Toro Oil Well Cement by Halliburton Process, top plug only. Casing free, circulation good. 55 minutes mixing cement and pumping down plug. Maximum pump pressure 450 psi.

WELL COMPLETION REPORT PRO-18-3

LOG AND HISTORY

WELL NO. 2 PROPERTY State 6-34 (B-1845) STANDARD OIL COMPANY OF TEXAS COMPANY

NOTE: FORMATIONS SHOWING OIL OR GAS SHOULD BE NOTED IN CAPITALS

FROM	TO	FEET	FORMATION DRILLED AND CORED
			Casing Detail
			1634' of 9-5/8", 36#, 8 thd., new Chester welded casing at 1648'. Baker Float Shoe.
			March 1, 1939 - After standing cemented 48 hours, casing was tested with 1000 psi. 50 psi pressure drop in 30 minutes. Drilled plug and tested water shut off with 1000 psi. 60 psi pressure drop in 30 minutes. Casing and water shut off o.k.
			Drilled ahead in 8-3/4" hole.
1654	1725	71	Anhydrite
1725	2000	275	Salt and anhydrite shells
			March 2, 1939 - Twisted off drill pipe 1200' from surface. Fish recovered o.k.
2000	2670	670	Salt and anhydrite
2670	2855	185	Anhydrite and salt
2855	2900	45	Anhydrite and salt breaks
2900	3118	318	Anhydrite, gypsum and shale
3118	3270	152	Anhydrite
3270	3363	93	Anhydrite and shale
3363	3856	493	Anhydrite
3856	3898	42	Anhydrite and gypsum
3898	3976	78	Anhydrite
3976	4049	73	Anhydrite and lime
4049	4212	163	Lime
			SLM at 4212' = 4212'
			March 11, 1939 - Landed and cemented 4190' of 7" casing at 4201' with 330 sacks of El Toro Oil Well Cement by Halliburton method, top plug only. Casing free, circulation good.
			Casing Detail
			35' of 7", 24#, 10 thd., new, Grade "D" casing; 496' of 7", 24#, 10 thd., new, Grade "C" casing; 3659' of 7", 20#, 10 thd., new, Standard, seamless Spang casing. Baker Float Shoe. Total of 4190' of 7" casing at 4201'.
			March 15, 1939 - After standing cemented 72 hours, casing was tested with 1000 psi. No pressure loss in 30 minutes. Drilled plug and tested water shut off with 1000 psi. 40 psi pressure loss in 30 minutes. Casing and water shut off o.k.
			Drilled ahead in 6-1/4" hole.

WELL COMPLETION REPORT PRO-18-3

LOG AND HISTORY

WELL NO. 2 PROPERTY State 6-34 (B-1845) STANDARD OIL COMPANY OF TEXAS COMPANY

NOTE: FORMATIONS SHOWING OIL OR GAS SHOULD BE NOTED IN CAPITALS

FROM	TO	FEET	FORMATION DRILLED AND CORED
4212	4300	88	Lime
4300	4360	60	Lime
			March 15, 1939 - Changed to limedust drilling fluid at 4318'. Mixed 40 sacks Aquagel, 200 sacks limedust, and 350 barrels water.
4360	4601	241	Lime
4601	4645	44	Brown lime
			March 18, 1939 - Reached total depth of 4645'. SIM at 4645' = 4649'
			TOTAL DEPTH = 4649'
			Circulated mud for one hour. Pulled up into casing and replaced lime mud with water. Went back to bottom and circulated water out with oil. Laid down drill pipe and hung 4637' of 2" tubing at 4643'.
			Pumped in 500 gallons of Dowell XX acid to remove lime mud sheath from pay section. No acid forced into the formation. Allowed acid to react two hours and then started to swab. Well kicked off after swabbing 3 hours.
			March 19, 1939

Time	Gauge	Bbl/hr.
5:30 A.M.	2' - 2"	-
6:30 A.M.	3' - 0"	25
7:30 A.M.	4' - 2"	35
8:30 A.M.	5' - 5"	37-1/2
9:30 A.M.	6' - 6"	32-1/2
10:30 A.M.	7' - 7-1/2"	33

Well died. Pulled swab five times and well kicked off at 3:00 P.M.

Time	Gauge	Bbl/hr.	Cut
3:00 P.M.	1' - 11"	-	
4:00 P.M.	3' - 1"	35	40% silty, sul. wtr.
5:00 P.M.	4' - 2"	32-1/2	"
6:00 P.M.	5' - 2"	30	"
7:00 P.M.	6' - 1"	27-1/2	30% "
8:40 P.M.	3' - 9"	-	15% "
9:40 P.M.	4' - 10"	32-1/2	15% "
10:40 P.M.	5' - 10"	30	15% "

Shut well in at 10:40 P.M.

WELL COMPLETION REPORT PRO-18-3

LOG AND HISTORY

WELL NO. 2 PROPERTY State 6-34 (B-1845) STANDARD OIL COMPANY OF TEXAS COMPANY

NOTE: FORMATIONS SHOWING OIL OR GAS SHOULD BE NOTED IN CAPITALS

FROM	TO	FEET	FORMATION DRILLED AND CORED

March 20, 1939 - Opened well at 6:30 A.M. Well flowed 10 minutes and died. Apparently loaded up with water. Ran swab twice and well kicked off.

Time	Gauge	Bbl/hr.	Cut
5:45 P.M.	1' - 8"	-	-
6:45 P.M.	2' - 8"	30	15% slty. sul. wtr.
7:45 P.M.	3' - 8"	30	20 "
8:45 P.M.	4' - 10"	35	40 "
9:45 P.M.	5' - 7"	22-1/2	30 "
10:45 P.M.	6' - 8"	32-1/2	24 "
11:30 P.M.	4' - 5"	-	-
12:30 A.M.	5' - 5"	30	24 "
1:30 A.M.	6' - 4"	27-1/2	26 "

March 21, 1939 - Opened well 6:30 A.M. Flowed 10 minutes and died. Swabbed well in, then gradually shut it in over two-hour period to condition hole for Schlumberger Survey.

Started to pull tubing and well commenced flowing. Killed well with oil, pulled tubing and ran Schlumberger temperature survey and electric log. Temperature curve and resistivity curve showed water to be coming in at 4632'. Resistivity curve showed an impervious lime break 4602' - 4608'.

March 24, 1935 - Ran back tubing open-ended. Filled hole with water and pumped in 5 sacks hydrated lime, 2 sacks Aquagel, and 20 sacks El Toro Oil Well Cement. Cleared tubing and pulled up to 4558'. Reversed circulation. Pumped in 3 barrels water before getting returns. Maintained reverse circulation at 400 psi pressure for 45 minutes. Then gradually lowered tubing to 4600', maintaining the reverse circulation while lowering tubing.

Maintained reverse circulation at 4600' at 400 psi for 45 minutes, then pulled up to 4570' and replaced water with oil. Pulled tubing up into casing and shut well in.

March 27, 1939 - Well stood cemented 72 hours. Found top of cement at 4602'.

Tubing Detail

4589' of 2" UE 4.7#, 10thd., new, National, seamless tubing at 4594'. 31' anchor joint with bull plug topped with 3/4" hole 4594' - 4563'. 3' of perforations 4563' to 4560'.

WELL COMPLETION REPORT PRO-18-3

LOG AND HISTORY

WELL NO. 2 PROPERTY State 6-34 (B-1845) STANDARD OIL COMPANY OF TEXAS

NOTE: FORMATIONS SHOWING OIL OR GAS SHOULD BE NOTED IN CAPITALS

FROM	TO	FEET	FORMATION DRILLED AND CORED

March 28, 1939 - Swabbed well in at 3:30 A.M.

Time	Bbl/hr.	Cut
3:30 - 4:30 A.M.	14	10%
4:30 - 5:30 A.M.	15	8%
5:30 - 6:30 A.M.	20	8%
6:30 - 7:30 A.M.	Drained tanks	
7:30 - 9:30 A.M.	19	5%
9:30 - 11:30 A.M.	20	5%
11:30 - 1:30 A.M.	17-1/2	3%
1:30 - 3:30 P.M.	22-1/2	2%
4:15 - 8:15 P.M.	16	2%
8:15 - 12:15 P.M.	24	2%

Shut in for storage

March 29, 1939 - Opened well for 45 minutes. Well made 31 barrels oil, cut 0.2%, thru 1/2" choke. Tubing pressure 380 psi. Casing pressure 160 psi. Then shut well in.

April 3, 1939 - Flowed well 6 hours thru 1/2" choke for official potential test. Well made 162 barrels oil for an average of 27 barrels oil per hour.

Time	Cut	T. P.	C. P.
12 Noon - 1:00 P.M.	0.3%	380	120
1:00 - 2:00 P.M.	0.8%	130	120
2:00 - 3:00 P.M.	0.8%	130	120
3:00 - 4:00 P.M.	0.7%	130	120
4:00 - 6:00 P.M.	0.6%	130	120

EARL KIPP

Contractor: Loffland Bros.

Drillers: J. W. Vandervort, H. W. Fannin, B. J. Graham, T. A. Beavers, B. R. Deloach, C. E. Earnest, G. Everett

ek/bn
May 4, 1939

WELL COMPLETION REPORT PRO-18-3

LOG AND HISTORY

WELL NO. 2 PROPERTY State 6-34 (B-1845) STANDARD OIL COMPANY OF TEXAS COMPANY

NOTE: FORMATIONS SHOWING OIL OR GAS SHOULD BE NOTED IN CAPITALS

FROM	TO	FEET	FORMATION DRILLED AND CORED
			TOTCOS
			250' - 1° deviation
			750' - 0°
			1000' - 3/4°
			1250' - 1/4°
			1500' - 1/2°
			1700' - 1/4°
			1850' - 3/4°
			1950' - 1°
			2100' - 1/2°
			2250' - 3/4°
			2400' - 3/4°
			2500' - 0°
			2650' - 1/4°
			2750' - 1/4°
			2900' - 1/2°
			3190' - 1/4°
			3250' - 3/4°
			3400' - 1/2°
			3500' - 1/2°
			3750' - 1/2°
			4000' - 1°
			4185' - 1-1/4°

WELL COMPLETION REPORT PRO-15-3

LOG AND HISTORY

WELL NO. PROPERTY COMPANY

NOTE: FORMATIONS SHOWING OIL OR GAS SHOULD BE NOTED IN DETAIL

FROM	TO	FEET	FORMATION DRILLED AND LOGGED

PRO-15-3 7500 3-58

WELL COMPLETION REPORT PRO-18-3

LOG AND HISTORY

WELL NO. 2 PROPERTY State 6-34 (B-1845) STANDARD OIL COMPANY OF TEXAS COMPANY

NOTE: FORMATIONS SHOWING OIL OR GAS SHOULD BE NOTED IN CAPITALS

FROM	TO	MIN.	FORMATION DRILLED AND CORED
			DRILLING TIME
4212	4215	35	
4215	4220	56	
4220	4225	58	
4225	4230	67	
4230	4235	65	
4235	4240	67	
4240	4245	67	
4245	4250	61	
4250	4255	67	
4255	4260	75	
4260	4265	73	
4265	4270	72	
4270	4275	78	
4275	4280	90	
4280	4285	58	
4285	4290	52	
4290	4295	70	
4295	4300	100	
4300	4305	80	
4305	4310	71	
4310	4315	60	
4315	4320	50	
4320	4325	65	
4325	4335	70	
4335	4340	62	
4340	4345	83	
4345	4350	80	
4350	4355	76	
4355	4360	86	
4360	4365	90	
4365	4370	60	
4375	4380	46	
4380	4385	44	
4385	4390	56	
4390	4395	50	
4395	4400	51	
4400	4405	64	
4405	4410	80	
4410	4415	67	
4415	4420	68	
4420	4425	71	
4425	4430	62	
4430	4435	48	
4435	4440	38	
4440	4445	37	
4445	4450	52	
4450	4455	51	
4455	4460	50	
4460	4465	62	
4465	4470	40	
4470	4475	71	
4475	4480	43	
4480	4485	29	
4485	4490	45	
4490	4495	75	
4495	4500	61	
4500	4505	50	
4505	4510	45	
4510	4515	36	
4515	4520	31	
4520	4525	34	
4525	4530	25	
4530	4535	24	
4535	4540	15	
4540	4545	17	
4545	4550	15	
4550	4555	14	
4555	4560	14	
4560	4565	11	
4565	4570	14	
4570	4575	12	
4575	4580	11	
4580	4585	13	
4585	4590	15	
4590	4595	14	
4595	4600	15	
4600	4605	25	
4605	4610	28	
4610	4615	32	
4615	4620	27	
4620	4625	30	
4625	4630	30	
4630	4635	31	
4635	4640	28	
4640	4645	29	

WELL COMPLETION REPORT PRO-18-3

LOG AND HISTORY

WELL NO. PROPERTY COMPANY

NOTE: FORMATIONS SHOWING OIL OR GAS SHOULD BE NOTED IN CAPITALS

FROM	TO	FEET	FORMATION DRILLED AND CORED

WELL COMPLETION REPORT PRO-18-3

LOG AND HISTORY

WELL NO. 2 PROPERTY State 6-34 (B-1845) STANDARD OIL COMPANY OF TEXAS COMPANY

NOTE: FORMATIONS SHOWING OIL OR GAS SHOULD BE NOTED IN CAPITALS

FROM	TO	FEET	FORMATION DRILLED AND CORED
			POROSITY LOG
4500	4515		Gray and brown lime, streaks of anhydrite
4515	4525		" " " "
4525	4530		" " " ", 25% of samples show good porosity
4530	4535		" " " " 10% " " " " "
4535	4540		" " " " 5% " " " " "
4540	4545		" " " " 75% " " " " "
4545	4550		" " " " 75% " " " " "
4550	4555		" " " " 50% " " " " "
4555	4560		" " " " 75% " " " " "
4560	4565		" " " " 75% " " " " "
4565	4570		" " " " 90% " " " " "
4570	4575		" " " " 75% " " " " "
4575	4580		" " " " 75% " " " " "
4580	4585		" " " " 75% " " " " "
4585	4590		Tan oolitic lime 90% " " " " "
4590	4595		Gray and brown lime, 75% of " " " "
4595	4600		" " " " strks of anhy. 10% of samples show good porosity
4600	4605		" " " " " " " 25% " " " " "
4605	4610		" " " " " " " 25% " " " " "
4610	4615		" " " " " " " 25% " " " " "
4615	4620		Tan lime, 90% samples show good porosity
4620	4625		" " 90% " " " "
4625	4630		" " 75% " " " "
4630	4635		" " 90% " " " "
4635	4640		" " 90% " " " "
4640	4645		" " 75% " " " "

WELL COMPLETION REPORT PRO-18-3

LOG AND HISTORY

WELL NO. PROPERTY COMPANY

NOTE: FORMATIONS SHOWING OIL OR GAS SHOULD BE NOTED IN CAPITALS

FROM	TO	FEET	FORMATION DRILLED AND CHARGE