

COPY TO O. C. C.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved by
Budget Bureau No. 42-R355.5.

5. LEASE DESCRIPTION AND SERIAL NO.

NM 053434

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Lea Unit

8. FARM OR LEASE NAME

Lea Unit Deep

9. WELL NO.

12

10. FIELD AND POOL, OR WILDCAT

Lea

Devonian

11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 13, T-20S, R-34E

12. COUNTY OR PARISH

Lea

13. STATE

NM

14. ELEVATIONS (DN, RSB, BT, GR, ETC.)*

15. DATE SPUNDED

7-10-79

16. DATE T.D. REACHED

2-1-80

17. DATE COMPL. (Ready to prod.)

February 28, 1980

18. ELEVATIONS (DN, RSB, BT, GR, ETC.)*

RKB 3693.57

19. ELEV. CASINGHEAD

3661.7'

20. TOTAL DEPTH, MD & TVD

16,553'

21. PLUG, BACK T.D., MD & TVD

14,388'

22. IF MULTIPLE COMPL., HOW MANY*

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

0 - 16,553

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

14,345 - 14,351 Devonian

25. WAS DIRECTIONAL SURVEY MADE

Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN

Gr-Sonic, Gr-Lateral log, Density-Neutron, CBL

27. WAS WELL CORED

Yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	48	900.5'	17 1/2"	500 sx Class "C" circ. to	sur.
9 5/8"	40 & 36	5,243	12 1/4	2 stages 4100 sx Lite	
7 5/8"	24	14,341	7 3/4	1500 sx Class "H"	200,000#

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
5 1/2"	14,030'	15,970'	160		2 7/8"	13134.23	13134.23 - 1314351
					2 3/8"	13143.51 - 14350.47	

30. TUBING RECORD

PERFORATION RECORD (Interval, size and number)	ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
14421 - 24, 14428, 14431 - 34 w/2JSPF	DEPTH INTERVAL (MD)
14345 - 51 w/2JSPF	AMOUNT AND KIND OF MATERIAL USED
	14421-24, 28, 31-34 Bridge plug @ 14400' w/1 sx cmt
	14345-51 1000 gal 15% HCl

31. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
February 28, 1980	Flowing	Producing

DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
March 6, 1980	24	8/64	→	151	42	119	278
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
340 psi	0 psig	→	151	42	119	53	

32. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

Bob Patterson

33. LIST OF ATTACHMENTS

Deviation Survey, Cementing history, Logs

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED *[Signature]* TITLE Production Engineer

DATE 3/10/80

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 13: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

31. SUMMARY OF POROSITY ZONES:				32. GEOLOGIC MARKERS		
SHOW ALL INTERVAL ZONES OF POROSITY AND CONTENTS THEREOF; CORRELATE INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL, TESTING, CEMENTATION TECH, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES						
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Bend Sand	12,748	13,428	90% Limestone, 10% shale	Anhydrite	1,760	
Devonian	14,332	14,500	100% Limestone	Bone Springs	8,246	
Fusselman	15,634	15,693	100% Dolomite attempt 2 DSTs could not get to bottom	B. Leonard	10,860	
				Wolfcamp	11,094	
				Strawn	12,023	
				Bend	12,382	
				U. Bend Sand	12,748	
				L. Bend Sand	13,172	
				Chester	13,428	
				Mississippian		
				Lime	13,570	
				Devonian	14,332	
				Fusselman	15,324	
				Montoya	15,710	
				Simpson	16,102	
PreCambrian	16,490	16,553	Core #1 dense and igneous rock 3' recovered	PreCambrian	16,490	

RECEIVED

MAR 18 1980

OIL CONSERVATION DIV.

DEVIATION SURVEY
Lea Unit Deep Well No. 12

<u>Type of Survey</u>	<u>Depth</u>	<u>Degree of Deviation</u>	<u>Displacement</u>	<u>Total Displacement</u>	<u>Direction</u>
TOTCO	207	3/4	2.7095	2.7095	
TOTCO	309	1/2	0.8901	3.5996	
TOTCO	429	1/2	1.0472	4.6468	
TOTCO	547	3/4	1.5446	6.1914	
TOTCO	637	1/4	0.3927	6.5841	
TOTCO	902	1/4	1.1563	7.7404	
TOTCO	1,131	1/2	1.9984	9.7388	
TOTCO	1,627	0	0	9.7388	
TOTCO	2,127	1	8.7262	18.4650	
TOTCO	2,519	3/4	5.1311	23.5961	
TOTCO	2,776	1 1/2	6.7275	30.3236	
TOTCO	3,023	2 1/4	9.6972	40.0203	
TOTCO	3,271	2 1/4	9.7364	49.7572	
TOTCO	3,662	1 1/2	10.2352	59.9924	
TOTCO	3,910	1	4.3282	64.3206	
TOTCO	4,189	1	4.8692	69.1898	
TOTCO	4,649	3/4	6.0212	75.2110	
TOTCO	5,143	1	8.6215	83.8325	
TOTCO	5,520	1 1/2	9.8687	93.7012	
TOTCO	5,691	1/2	1.4922	95.1934	
TOTCO	5,880	1/2	1.6493	96.8427	
TOTCO	6,065	1 1/4	4.0358	100.8785	
TOTCO	6,183	1	2.0594	102.9379	
TOTCO	6,283	1 1/2	2.6177	105.5556	
TOTCO	6,627	1 1/2	9.0049	114.5605	
TOTCO	6,750	2	4.2926	118.8531	
TOTCO	6,832	2	2.8618	121.7149	
TOTCO	7,091	2	9.0390	130.7538	
TOTCO	7,247	2	5.4443	136.1982	
TOTCO	7,310	2	2.1987	138.3969	
TOTCO	7,392	2	2.8618	141.2587	
TOTCO	7,576	1 1/2	4.8166	146.0753	
TOTCO	7,756	2	6.2819	152.3572	
TOTCO	7,975	2	7.6430	160.0002	
TOTCO	8,165	1 1/2	4.9736	164.9738	
TOTCO	8,290	1 1/2	3.2721	168.2459	
TOTCO	8,333	1 1/2	1.1256	169.3715	
TOTCO	8,395	1	1.0820	170.4535	
TOTCO	8,735	1	5.9338	176.3873	
TOTCO	8,786	3/4	0.6283	177.0156	
TOTCO	9,136	1 1/2	9.1619	186.1775	
TOTCO	9,206	2	2.4430	188.6205	
TOTCO	9,291	2	2.9665	191.5870	
TOTCO	9,414	2	4.2926	195.8796	
TOTCO	9,535	2	4.2228	200.1024	
TOTCO	9,623	2	3.0712	203.1736	
TOTCO	9,683	2	2.0940	205.2676	
TOTCO	9,775	2	3.2108	208.4784	
TOTCO	9,823	2	1.6752	210.1536	
TOTCO	9,880	2 3/4	2.7348	212.8884	
TOTCO	9,942	2 1/2	2.7044	215.5928	
TOTCO	10,017	2 1/2	3.2715	218.8643	
TOTCO	10,080	2 1/2	2.7480	221.6123	
TOTCO	10,498	2	14.5880	236.2003	
TOTCO	10,653	2	5.4094	241.6097	
TOTCO	10,903	1	4.3631	245.9728	
TOTCO	11,408	2	17.6242	263.5970	
TOTCO	11,769	2	12.5987	276.1957	
TOTCO	11,921	2 1/2	6.6301	282.8258	
TOTCO	11,957	1 1/2	0.9424	283.7682	
TOTCO	12,146	2	6.5960	290.3642	
TOTCO	12,306	2 1/2	6.9791	297.3433	

<u>Type of Survey</u>	<u>Depth</u>	<u>Degree of Deviation</u>	<u>Displacement</u>	<u>Total Displacement</u>	<u>Direction</u>
TOTCO	12,371	2 1/2	2.8353	300.1786	
TOTCO	12,416	2	1.5705	301.7491	
TOTCO	12,702	2 1/2	9.9813	311.7304	
TOTCO	12,789	2	3.0363	314.7667	
TOTCO	12,880	2 1/2	3.9684	318.7361	
TOTCO	13,026	2 1/2	6.3684	325.1045	
TOTCO	13,089	2	2.1987	327.3032	
TOTCO	13,140	2 3/4	2.4469	329.7501	
TOTCO	13,216	2 1/2	3.3151	333.0652	
TOTCO	13,347	3	6.8560	339.9212	
TOTCO	13,389	2 1/2	1.8320	341.7532	
TOTCO	13,515	2 1/2	5.4960	347.2492	
TOTCO	13,619	2 3/4	4.9897	352.2389	
TOTCO	13,681	2 3/4	2.9746	355.2135	
TOTCO	13,707	3	1.3607	356.5742	
TOTCO	13,764	3	2.9831	359.5573	
TOTCO	13,860	2 1/2	4.1875	363.7448	
TOTCO	13,921	3	3.1925	366.9373	
TOTCO	14,081	3 1/2	9.7678	376.7051	
TOTCO	14,206	3 1/2	7.6311	384.3362	
TOTCO	14,269	3 1/2	3.8461	388.1823	
TOTCO	14,341	4	5.0225	393.2048	
TOTCO	14,691	2 3/4	16.7923	409.9971	
TOTCO	15,003	1 3/4	9.5280	419.5251	
TOTCO	15,580	5 1/4	52.7964	472.3215	
TOTCO	15,693	6	11.8117	484.1332	
TOTCO	15,782	6 1/2	10.0751	494.2083	
TOTCO	15,947	7	20.1084	514.3167	
TOTCO	15,970	7	2.8030	517.1197	

No TOTCO Surveys were made from 15,970 - 16,775' due to small size drill collars.

Sperry Sun Magnetic Direction Survey

<u>Type of Survey</u>	<u>Depth</u>	<u>Degree of Deviation</u>	<u>Displacement</u>	<u>Total Displacement</u>	<u>Direction</u>
Sperry	16,000	14	7.2577	524.3774	N-26-E
Sperry	16,100	18	30.9017	555.2791	N-45-E
Sperry	16,200	32	52.9919	608.2710	N-56-E
Sperry	16,300	38	61.5661	669.8371	N-72-E
Sperry	16,400	46	71.9340	741.7711	N-77-E
Sperry	16,500	56	82.9038	824.6749	N-82-E
Sperry	16,600	60	86.6025	911.2774	N-79-E
Sperry	16,610	61	8.7462	920.0236	N-85-E

Plug back to 15,747'. Drill to 16,000'.

<u>Type of Survey</u>	<u>Depth</u>	<u>Degree of Deviation</u>	<u>Displacement</u>	<u>Total Displacement</u>	<u>Direction</u>
TOTCO	15,700	6	12.5434	484.865	
TOTCO	15,800	6	10.4528	495.3179	
TOTCO	15,900	6	10.4528	505.7707	
TOTCO	15,925	7	3.0467	508.8174	
TOTCO	15,950	8			

Sperry Sun Magnetic Directional Survey

Type of Survey	Depth	Degree of Deviation	Displacement	Total Displacement	Direction
Sperry	15,990	7.3	1.906	518.544	S-52-E
Sperry	16,000	6.4	1.1147	519.6587	N-30-W
Sperry	16,025	10.3	4.4701	524.1287	N-14-E
Sperry	16,050	14.15	6.1115	530.2402	N-32-E
Sperry	16,075	16.40	7.0585	537.2987	N-40-E
Sperry	16,100	23.5	9.9687	547.2675	N-45-E
Sperry	16,125	22.15	9.4258	556.6933	N-48-E
Sperry	16,150	21.3	9.0813	565.7746	N-48-E
Sperry	16,175	21.15	9.0203	574.79	N-52-E
Sperry	16,200	20.5	8.75518	583.55	N-51-E
Sperry	16,225	20.00	8.5505	592.1005	N-50-E
Sperry	16,250	19.55	8.3657	600.4663	N-50-E
Sperry	16,255	19.40	1.6608	602.1271	N-50-E
Sperry	16,260	19.30	1.6526	603.7796	N-50-E
Sperry	16,265	19.30	1.6526	605.4322	N-50-E
Sperry	16,270	19.15	1.6402	607.0724	N-51-E
Sperry	16,275	19.05	1.632	608.7044	N-49-E
Sperry	16,280	18.55	1.5907	610.295	N-50-E
Sperry	16,285	19.00	1.6278	611.9229	N-50-E
Sperry	16,290	19.00	1.6278	613.5507	N-51-E
Sperry	16,295	19.00	1.6278	615.1785	N-50-E
Sperry	16,300	18.5	1.5865	616.7650	N-50-E
Sperry	16,305	18.3	1.56996	618.3349	N-51-E
Sperry	16,310	18.1	1.5534	619.8884	N-51-E
Sperry	16,315	18.15	1.5575	621.4459	N-50-E
Sperry	16,320	18.1	1.5534	622.9993	N-50-E
Sperry	16,325	18.00	1.5451	624.5444	N-51-E
Sperry	16,330	18.1	1.5534	626.0978	N-51-E
Sperry	16,335	18.05	1.5492	627.647	N-51-E
Sperry	16,340	18.05	1.5492	629.1926	N-52-E
Sperry	16,345	18.00	1.5451	630.7412	N-50-E
Sperry	16,350	18.00	1.5451	632.2867	N-51-E
Sperry	16,355	17.45	1.4994	633.7861	N-50-E
Sperry	16,360	17.30	1.4869	635.2729	N-50-E
Sperry	16,365	17.30	1.4869	636.7598	N-47-E
Sperry	16,370	17.30	1.4869	638.2467	N-51-E
Sperry	16,375	17.45	1.4994	639.7461	N-50-E
Sperry	16,381	17.45	1.7992	641.5454	N-50-E
TOTCO	16,431	21	17.9184	659.4638	
TOTCO	16,465	23	13.2849	672.7487	
TOTCO	16,472	23	2.7351	675.4838	
TOTCO	16,512	24	16.2695	691.7532	
TOTCO	16,522	27	4.5399	696.2931	
TOTCO	16,545	28	10.7979	707.0910	

I hereby certify that the above data as set forth is true and correct to the best of my knowledge and belief.

Signature Ralph M. DePauw
Title Production Engineer

AFFIDAVIT

Before me, the undersigned authority, appeared Ralph M. DePauw known to me to be the person whose name is subscribed here below, who, on making deposition, under oath states that he is acting for and in behalf of the operator of the well identified above, and that to the best of his knowledge and belief such well is not intentionally deviated from the true vertical whatsoever.

Ralph M. DePauw
Affiant's Signature

Sworn and subscribed to in my presence on this the 10th day of March, 1980.

SEAL

My Commission expires 7-21, 1980

Alfred A. [Signature]
Notary Public in and for the
county of Lea, State
of New Mexico

Cementing Record for Lea Unit Deep No. 12

Surface

17 1/2" hole, 13 3/8" csg (48#, H-40)
TD 902. Set csg. shoe at 900.5

Cmt. w/500 sx Halliburton light w/1/4# Flocele + 2% CaCl_2
Tail w/300 sx Class "C" w/2% CaCl_2
Circ. 135 sx to pit
Bump plug w/1000 psi. Test okay.

Intermediate

12 1/4" hole, 9 5/8" 40# N-80 & 36# K-55
2 stages

1st stage

Cmt. w/1100 sx light w/15% salt + 5#/sx Gilsonite + 1/4# Flocele
Tailed w/400 sx Class "C" w/3#/sx salt
Bumped plug w/2000 psig
Opened DV tool and circ. 9 hours
Did not circ. cmt. to surface.

2nd stage

Cmt. w/3000 sx Halliburton light w/15#/sx salt + 5#/sx Gilsonite +
1/4# Flocele
Bumped plug w/2000 psig
Did not circ. cmt. to surface

Cement top 2600' by survey.
Test okay at 13.0 ppg equivalent

Production Casing

8 3/4" hole, 7 5/8" Hydrill casing float collar at 14,268'

Cmt. w/1200 sx Halliburton light w/.6% Halad 22, 5#/sx KCl + .5% CFR-2
Tail w/300 sx Class "H" w/.6% Halad 22, 5# KCl + .5% CFR-2
Displaced w/665 bbls. drilling mud
Bumped plug w/2500 psig
Full returns while cementing

Cmt. top at 8200 by survey
Tagged cmt at 14,180'. Test to 2000 psig. Test okay.
Tested csg seat and formation to 11.18 ppg equivalent

Liner

6 1/2" hole, 5 1/2" P-110 20#/ft SFJP liner 1912.82' incl. shoe, float collar
and hanger

Landed cmt. shoe at 15,970'
Float collar and landing shoe at 15,924'
Top of liner hanger at 14,030'
Cemented langer on bottom w/160 sx Class "H" w/4% Gel + 5#/sx Gilsonite +
.6% Halad 22 + 1/4# Flocele

Displaced w/144 bbls mud
Bumped plug w/3000 psig

Attempted to set packer-liner hanger had released - worked and reset hanger
at 1000 psig

Could not set packer. TOH w/packer and hanger tools

Test top of line w/2100 psi - okay

Test shoe w/2000 psi - okay

Test formation to 2000 psig (11.0 ppg equivalent) - okay

Top of cmt. tagged at 14026'

Plug back no. 1

TD 16,775 5 1/2" liner to 15,970 4 1/2" hole

Rigged up and spotted cement plug from 15,679 - 16,775

Cmt w/50 sx Class "H" w/1% CFR-2 + .5% HR-12 + 28# 100-mesh sand/gal

Displaced w/3 bbl. fresh H₂O + 94 bbl. mud

Tagged cmt at 15,747'

Plug back no. 2

TD 16,557 4 1/2" hole

Spotted cmt. plug from 15,750 - 16,557'

Cmt w/60 sx 50% poz + 50% Class "H" w/.4% HR-4 + .5% CFR-2

Displaced w/102 bbl. mud