

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

TYPE OF WORK

DRILL ☒

RE-enter

DEEPEN ☐PLUG BACK ☐

TYPE OF WELL

OIL ☒GAS
WELL ☐

OTHER Re-enter

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

NAME OF OPERATOR

enneco Oil Company

ADDRESS OF OPERATOR

Box 1031, Midland, Texas 79701

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

560' FNL 660' FWL Section 18, T-9-S, R-36-E, Lea County, N.M.
at proposed prod. zone

Same

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

3 miles NE of Crossroads, New Mexico

DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

660'

DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

1320'

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

4109 D.F.

16. NO. OF ACRES IN LEASE

160

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

19. PROPOSED DEPTH

9664'

20. ROTARY OR CABLE TOOLS

R.T.

22. APPROX. DATE WORK WILL START*

Upon approval

PROPOSED Casing and Cementing Program

Present

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"		376'	450 sx.
12-1/4"	8-5/8"		4213'	2100 sx.
7-7/8"	5-1/2"		9663'	1650 sx.

Originally Proposed to 10,000' 2 later

Propose to re-enter, clean out to the original T.D. and test for production.
5' casing to hole was cut at 4019 feet. Will run casing back on hole
to the 5' casing in hole back to surface and pressure test.

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

William J. Mathis

TITLE District Drilling Engineer

DATE 8-6-69

(This space for Federal or State office use)

PERMIT NO.

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

APPROVAL DATE

APPROVED

AUG 8 1969

ARTHUR R. BROWN
DISTRICT ENGINEER

DATE

*See Instructions On Reverse Side

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal 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.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

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 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency officers.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

U. S. LAND OFFICE New Mexico

SERIAL NUMBER 01616

LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Forest Oil Corporation Address Box 3222 Odessa, Texas
Lessor or Tract Federal-Larren Field house State New Mexico
Well No. 2 Sec. 18 T. 2 S. R. 36 E. Meridian N. 1/4 County Lea
Location 660 ft. N. of 4 Line and 660 ft. E. of 4 Line of N. 1/4 N. 1/4 Elevation 4199
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon
so far as can be determined from all available records.

Signed J. R. Wright
Title District Production Supt.

Date 12-23-50

The summary on this page is for the condition of the well at above date.

Commenced drilling October 6, 1950 Finished drilling December 12, 1950

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 9630 to 9635 No. 4, from _____ to _____
No. 2, from 9647 to 9653 No. 5, from _____ to _____
No. 3, from 9651 to 9657 No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from 170 to 200 No. 3, from _____ to _____
No. 2, from _____ to _____ No. 4, from _____ to _____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
13 3/8	18	8	J. L.	360.19	Float shoe				
8 5/8	32	8	J. L.	1138.70	Float shoe collar				
5 1/2	17	8	J. L.	9653	Float shoe collar.				
							owco multistage collar		
							9647	9653	to produce

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13 3/8	570.19	150	Pump plug		
8 5/8	1212.78	1900 1/2 200 e.	Pump plug		
5 1/2	9653	150 3/4 1000 1/2	ent. Pump plug		

PLUGS AND ADAPTERS

Heaving plug—Material 0 Length _____ Depth set _____
Size _____
Adapters—Material _____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from 0 feet to 260 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

12-23-50, 1950 Put to producing 12-22, 1950
The production for the first 24 hours was 252.50 barrels of fluid of which 99.7 % was oil; .3 %
emulsion; 0 % water; and 0 % sediment. Gravity, °Bé. 17.6
If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____
Rock pressure, lbs. per sq. in. 570

EMPLOYEES

J. L. Looney, Driller Jean Hollow, Driller
J. L. Thomas, Driller Lloyd Hanson, Fusher, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	175	175	Caliche & red bed
175	283	108	Red bed
283	400	117	Red bed & shells
400	1252	852	Red bed
1252	1856	604	Red bed & shale
1856	2095	239	Red bed & shells
2095	2189	94	Red bed & shale
2189	2215	56	Anhy.
2215	2485	270	Anhy. & salt
2485	2680	195	Salt, Anhy. & cyp.
2680	2882	202	Anhy. & cyp.
2882	3125	243	Anhy. & cyp. salt
3125	3416	291	Salt, anhy.
3416	3590	174	Salt, anhy. & cyp.
3590	4025	435	Anhy. & salt
4025	4136	111	Anhy.
4136	4225	89	Anhy. & lime
4225	4362	137	Lime
4362	4697	335	Lime & shale
4697	4750	53	Shale
4750	4891	141	Lime & shale
4891	4923	32	Shale Anhy.
4923	4960	37	Lime & shale
4960	4990	30	Shale anhy.
4990	5045	55	Shale lime
5045	5085	40	Shale & Anhy. trks.

FORMATION RECORD-Continued

FROM-	TO-	TOTAL FEET	FORMATION
8085	8192	107	Shale - lime
8192	8225	33	Shale
8225	8155	230	Shale - lime
8155	8159	4	Shale - lime chert
8159	8527	48	Shale - lime
8527	8550	23	Shale - lime & chert
8550	8919	369	Shale - lime
8919	8938	19	Lime
8938	8950	12	Lime & shale
8950	8997	47	Lime
8997	9010	13	Lime & shale
9010	9028	18	Lime & shale
9028	9664	36	Lime & shale with staining porosity
9664	T.B.		Top Wolfcamp 8905 Top Bouch 9629

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

This well was spudded 10-6, 1950 by Arrow Drilling Co. on 12-7-50 at a depth of 102'. 13 3/8" CD surface casing was run and cemented at 376' with 150 sacks of regular cement which circulated.

On 10-18-50 at a depth of 1230, 8 5/8" CD casing was cemented at 1213' with 2200 sacks cement which came up to 305' from the surface.

At 4.66' on 12-7-50 a Schlumberger electric log was run for correlation purposes. Coring with a diamond bit started on 12-10-50 from a depth of 9610'. The first core was a full recovery from 9610-9637. The second core was a full recovery from 9657 to 9664 (T.B.).

Drill stem test was run 12-13-50 which resulted in a flow of oil and gas. On 12-14-50 a Schlumberger electric log was run to total depth. On 12-16-50 casing was cemented at 9663' with 1150 sacks cement. A 10000 multi-stage cementing collar was used at 8910'. The first stage was 150 sacks 35 jet cement. The following 5 hrs later with the same stage of 1500 sacks of 4 1/2 jet cement. The top of this cement was found at 5023'.

On 12-18-50 the plugs were drilled out and the casing tested above and below the cementing collar. A lane-nalis gamma ray detector was run to check the cement zone from inside the casing after which the casing was perforated from 9647' to 9653' with 2 1/2 jet shots. A 1000 O packer was set at 9630 and a drill stem test taken to check penetration of the pay section. After a short flow period packer was set by wire line at 9630 after which tubing was run and oil was circulated to a surface flow line. After packing off tubing head and setting in packer, the well was subsequently flow on 12-21-50. On 12-22-50 a potential test was taken.

LOG OF OIL OR GAS WELL

GEORGE OIL COMPANY

DEPARTMENT OF THE INTERIOR

UNITED STATES

1950-1-1

201-1-1

1950-1-1