

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

Union Texas Petroleum Corp.

3. ADDRESS OF OPERATOR

P.O. Box 2120 Houston, TX 77252-2120

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

At surface

1850' FNL & 790' FWL

At proposed prod. zone

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

20 miles NW Ojito, NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

790'

16. NO. OF ACRES IN LEASE

640

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

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

19. PROPOSED DEPTH

3198

20. ROTARY OR CABLE TOOLS

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

7081 GL

22. APPROX. DATE WORK WILL START*

8-1-89

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	9 5/8		214	120
7	5 1/2		3355	150

We propose to plug the Pictured Cliffs Formation and recomplete and test the uphole Fruitland Coal zone. Plug back procedure attached.

OIL CON. DIV.
DIST. 3

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

Lee White

TITLE

Reg. Permit Coord.

DATE

7/19/89

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Hold 1000' from 100' S.C.

RECEIVED

SEPT 1989

*See Instructions on Reverse Side

Revised

LAND SURVEY COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Supervisor's Office
Bureau of Land Management

All distances must be from the corner boundaries of the Section

SOUTHERN UNION PRODUCTION COMPANY

JICARILLA "H"

4

E

19

26 North

4 West

Rio Arriba

1850

North

790

West

6624

FRUITLAND COAL

BASIN

320 Acres

1. Outline the acreage dedicated to the subject well by color or boundary or hatchure marks on the plat.
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, forced pooling, or?

☒ Yes

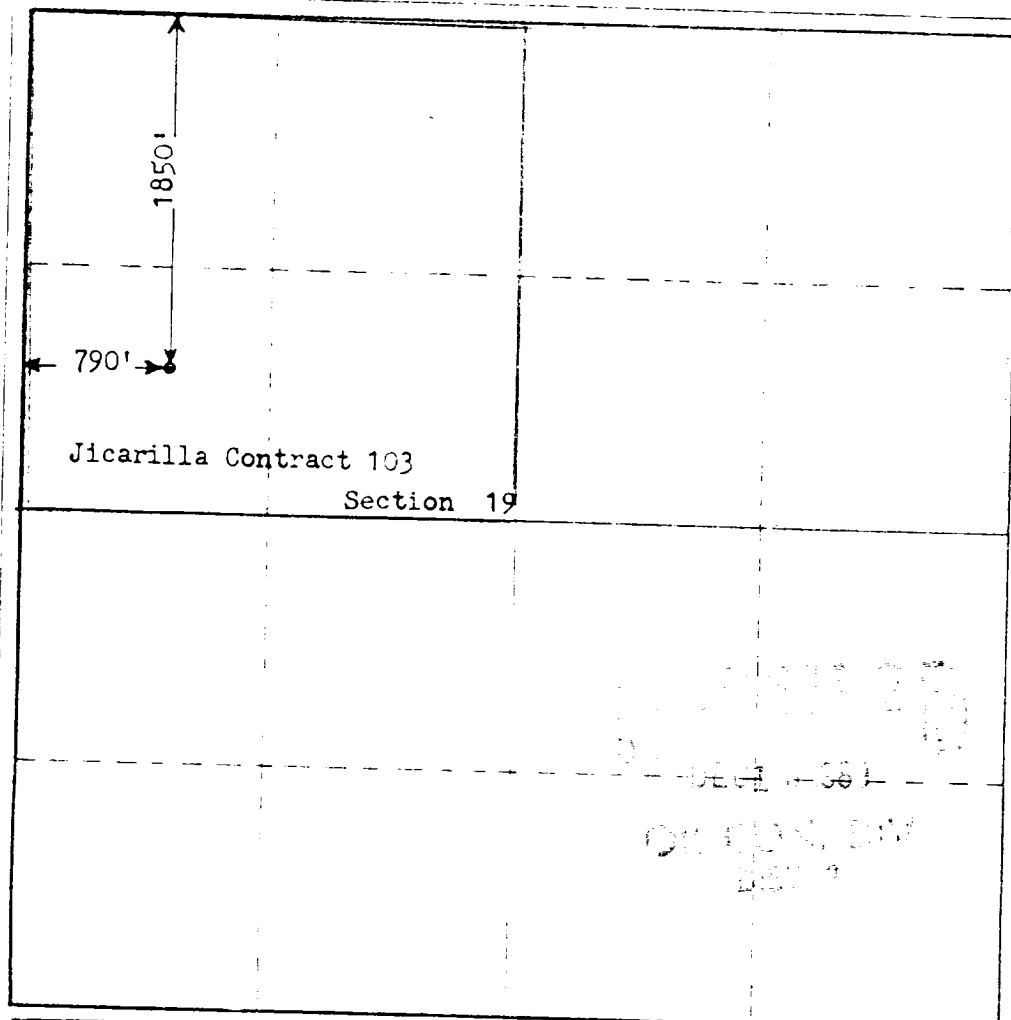
☐ No

If answer is "Yes" type in consolidation

Operating Agreement

If answer is "No" list the owners and tract descriptions who have actually been consolidated. Use reverse side of this form if necessary.

No allowable well be assigned to the well until all interests have been consolidated by communitization, unitization, forced pooling, or otherwise or until a nonstandard 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.

Gilbert D. Noland, Jr.

Gilbert D. Noland, Jr.

Drilling Superintendent

Southern Union Production Co

February 16, 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.

April 16, 1959

Registered Professional Engineer and State Surveyor

Certificate No.

RECOMMENDED PROCEDURE

Jicarilla "H" #4

1. Set rig anchors, dig blow pit and lay blow lines.
2. MIRUSU. TOH w/2-3/8" tubing.
3. Set 5-1/2" cement retainer on wireline at 3220'. Test 5-1/2" casing and retainer to 500 psi.
4. Sting into cement retainer with tested 2-3/8" tubing and squeeze PC perfs with 150 sacks class G with 0.4% halad 322 (fluid loss). TOH.
5. Run CBL and dual spaced neutron log 3220'- 2500'.
6. Using log, perf approximately 30' of Basal Fruitland Coal (3170'-3200') with 4-0.5" SPF.
7. Run 5-1/2" packer on rental 3-1/2", 9.3# N-80 (4.25" O.D. 2.992" I.D.) frac string and set at 3000'. Monitor 500 psi on backside.

Rig up frac tanks and frac crew to allow for mixing gel on the fly. Frac Basal Coal down 5-1/2" casing at 40 BPM with 30# cross linked borate gel and the following sand schedule.

STAGE	FLUID	STAND SIZE	AMOUNT
PAD	20,000 Gals		
(Fluid Loss) 1 PPG	10,000 gals	40/70	10,000#
(Fluid Loss) 2 PPG	5,000 gals	40/70	10,000#
2 PPG	10,000 gals	20/40	20,000#
3 PPG	10,000 gals	20/40	30,000#
4 PPG	10,000 gals	20/40	40,000#
5 PPG	2,000 gals	20/40	10,000#
Flush	(1266 gals)		
	67,000 gals		120,000#

Maximum pressure = 5000 PSI. Tag all sand with IR-192. Use computer van to monitor treating pressure. Anticipated average treating pressure = 4400 PSI.

8. TOH with frac string and packer. If necessary, kill well with CaCl₂/ZnCl₂ brine water. (12.2 #/gal).
9. TIH with 4-3/4" bit on 2-3/8" tested tubing and clean out to PBTD 3220' with air/mist.

10. Run after frac gamma ray log 3220'-3000'.
11. TTH with 32' mud anchor with purge valve, 4' perforated sub, and standard seating nipple on 2-3/8" tubing. land tubing at 3190'.
12. Test well for gas and water producing rate.

WORKOVER DATA SHEET

WELL NAME JICARILLA H #4

DATE 05/15/89

LOCATION 1850' FNL; 790' FWL
Section 19, T26N-R4W
Rio Arriba County, NM

DATUM DF (8'
above G.L.)

ELEVATION 6623' G.L.

TOTAL DEPTH 3355'

FIELD FORMATION Undesignated Fruitland Coal

UNICON W.I. 50%
NRI=43.75%

COMPLETED

INITIAL POTENTIAL

PLUG BACK TOTAL DEPTH

07/09/59

AOF=3083 MCF/D;979 PSI

3329'

<u>CASING RECORD</u>	<u>CASING SIZE</u>	<u>WT. & GRADE</u>	<u>DEPTH SET</u>	<u>CEMENT</u>	<u>TOP CEMENT</u>
7-7/8" HOLE	9-5/8"	32.3# H-40	204'	120 sx	Circ. cmt
	5-1/2"	15.5 J-55	3375'	150 sx	

TUBING RECORD

2-3/8"	4.7# J-55	3231'
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WELL HEAD 9-5/8" x 5-1/2' Csg Head
5-1/2" x 3" Rector Tbg Head

LOGGING RECORD

Induction Electric Log

STIMULATION

Drilled Fruitland & PC w/9.6-9.9#/gal fluid
Perf PC 3230'-36', 3240'-64', 3290'-97', 3306'-12', 3318'-28', & Fraced
w/1000,000# sand in water.

WORKOVER HISTORY

None

PRODUCTION HISTORY

P.C. First Delivered 10/59
P.C. gas is 1174 BTU
See attached Production Curve for P.C.
Cumulative Production P.C.= 204 MMCF as of 2/1/89
P.C. Capacity 12 MCF/D

WELL BORE DIAGRAM FOR Jicarilla H #4

1850' FNL, 790' FWL, Section 19, T26N, R4W
Rio Arriba County, New Mexico
Elevation - 6623' GL

