orm 31:0-5 June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM AP	PRC	DVED
Budget Bureau	No.	1004-0135

BUREAU OF LAND MANAGEMENT	Expires: March 31, 1993	
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals	5. Lease Designation and Serial No. SF - 079602 6. If Indian, Alottee or Tribe Name	
SUBMIT IN TRIPLICATE	7. If Unit or CA, Agreement Designation	
1. Type of Well: OIL GAS OTHER	8. Well Name and Number L L MCCONNELL	
Name of Operator TEXACO EXPLORATION & PRODUCTION, INC.	13	
3. Address and Telephone No. 3300 N. Butler Suite 100, Farmington NM 87401 325-4397	9. API Well No. 3003923008	
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Unit Letter N: 970 Feet From The SOUTH Line and 1800 Feet From The WEST Line Section 31 Township 25N Range 3W	10. Field and Pool, Exploaratory Area LINDRITH GALLUP-DAKOTA, WEST 11. County or Parisn, State RIO ARRIBA, NM	
12. Check Appropriate Box(s) To Indicate Nature of Notice, Re	eport, or Other Data	
	YPE OF ACTION	
Abandonment Recompletion Plugging Back Subsequent Report Final Abandonment Office of Intent JUL 1 1 1995 Casing Repair Atlering Casing OTHER: SIDE-TRACK	Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log Form.)	
13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including the state of th	uding estimated date of starting any proposed work. and zones pertinent to this work,)*.	
TEXACO E. & P., INC. PROPOSES THE FOLLOWING TO THE SUBJECT WELL: UPON APPROVAL FROM THE N.M.O.C.D. AND B.L.M., TEXACO PROPOSES TO RE-ENTER TH SHORT RADIUS HORIZONTAL LATERAL INTO THE GALLUP FORMATION. THE PROPOSED AC		
 SQUEEZE THE EXISTING PERFS, SET CEMENT TO 6850'. MILL OUT A 40' SECTION OF 5-1/2" CASING AT +/- 6780' - 6820'. SPOT KICK-OFF CEMENT PLUG 200' ABOVE WINDOW. DRILL CEMENT AND DRESS OFF F. DRILL SHORT RADIUS CURVE SECTION IN EAST DIRECTION. KICK-OFF POINT IS 6790', T. BEGINNING OF HORIZONTAL SECTION. PLANNED BUILD RATE OF 57 DEGREES / 100 FEET V. DRILL A 2500' HORIZONTAL SECTION IN EAST DIRECTION. THE TARGETED TVD OF THE F. SET COMPLETION EQUIPMENT. TEST WELL. 	ARGET DEPTH OF 6890' (TVD) FOR NITH 100' RADIUS.	
THE ATTACHED PROCEDURE WILL BE USED. PLEASE REFER TO ATTACHED WELLBORE DIA	AGRAMS.	
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SIGNATURE JQ C J TITLE Operating Unit Manager	DATE	6/2/95
TYPE OR PRINT NAME Ted A. Tipton		
APPROVED ROBERT RESOurces CONDITIONS OF APPROVAL, IF ANY:TITLETITLETITLETITLETITLETITLETITLETITLETITLETITLETITLE	JUL_	1 1 1995

Attachment I

L. L. McCONNELL #13 HORIZONTAL SINGLE LATERAL REENTRY

The subject well is a producing well. It is to be reentered and a single horizontal lateral is to be drilled in the Gallup formation. The existing perforations will be squeeze cemented and a 40' section is to be milled in the casing. A short radius horizontal lateral will be drilled in the east direction approximately 2500' long. The well will be acidized using coiled tubing, if necessary, and then production tested.

WELL PREPARATION:

- 1) MIRUSU. Pull and LD rods. Nipple up 3M BOPE.
- 2) Kill well with produced water.
- 3) TOH and lay down 2-7/8" production tubing.
- 4) TIH with 4-3/4" bit on 2-7/8" work string and clean out to PBTD. TOH.

SQUEEZE EXISTING PERFORATIONS:

- 5) TIH with cement retainer on tubing and set above perfs (6892'-7147') at 6850'.
- Space out tubing in neutral position and test tubing to 3000 psi. Rig up squeeze manifold. Establish rate into perforations (2 BPM), note pump in pressure. Pressure up annulus to 1000 psi, monitor basing during job.
- 7) Cement squeeze with 150 sx Class "G" with 0.2% D156 and 0.2% D65 to obtain a fluid loss of 200-300 cc/30 min. (determine by lab testing) followed by 100 sx Class "G" neat, mixed at 15.8 ppg. Minimum pump time 150 minutes at 175°F.
 - a) Spot cement to end of tubing.
 - b) Sting into retainer.
 - c) When cement reaches perforations, slow rate to 1/2 BPM
 - d) Maximum squeeze pressure 3000 psi.
 - e) Displace cement to retainer.
- 8) Pull out of retainer, reverse out cement and check for flow. Pull tubing to 4000' and shut-in for 24 hours. TOH with tubing.

L. L. McConnell #13 Horizontal Reentry Rio Arriba County, New Mexico Drilling & Completion Procedure

- 9) Trip in hole with 4-3/4" bit, drill collars and tubing and drill out retainer and cement to 6850'.
- 10) Circulate hole clean. Shut in backside and test casing to 500 psi.

MILL 5 1/2" CASING:

11) Circulate hole with mud for milling. TOH with tubing and bit.

MUD: Starch

Volume: $(6800^{\circ} * .0238 \text{ bbl/ft} = 162 \text{ bbls} + 200 \text{ bbls for pit} = 362 \text{ bbls})$

Weight: 8.5 - 8.7 Funnel Visc.: 75-80

- 12) If casing collar log is not available in Area, Run GR-CCL to determine position of collars. (Window may be moved +/- 10 to avoid milling a casing collar).
- TIH with mill for 5 1/2" casing on 2 7/8" workstring. Mill 40' section of casing from +/-6780' 6820'. While milling, run paper sweeps in the mud to ensure the hole is clean. Place ditch magnets in return lines to catch metal cuttings. Any time a trip is made, make sure the noie is clean and the blades are retracted.
- 14) TOH with mill.

SPOT KICK OFF PLUG:

- 15) TIH with diverter tool and +/- 400' 2 3/8" (2 1/16" if available) on 2 7/8" work string
- to PBTD 6850'. Circulate Starch mud out of hole. Pull up hole so diverter tool is across milled section and wash section. TIH to PBTD.
- Spot 50 sx Class "G" mixed at 17.5 PPG from 6850' to +/- 6580' (200' above window). Batch mix cement. Pull out of cement plug slow to approximately 4000'. Do not reverse circulate. Shut in for 24 hours minimum. TOH with tubing.

L. L. McConnell #13 Horizontal Reentry Rio Arriba County, New Mexico Drilling & Completion Procedure

- TIH with 4 3/4" bit and dress off cement to the KOP at 6790'. TOH with 4 3/4" bit. 17) Cement must drill 1.5-2 min/ft with 10 pts and 50 RPM to insure the plug is hard for kickoff. enough
- Circulate hole clean. 18)

DRILL CURVE SECTION (EAST DIRECTION):

19) Displace hole with starch mud. TOH with bit.

MUD:

Starch

Volume:

(6800' * .0238 bbl/ft + 200 bbls for pit + 2500' * .0219 bbl/ft)

(162 bbls + 200 bbls + 55 bbls = 417 bbls)

Weight:

8.7

Funel Visc.: 35-40

Pick up kick-off motor and test on surface. TIH with kick-off BHA s follows: 20)

4 3/4" bit.

Kick-off motor (with 2.5-3.0° bent sub)

Float/ orientation sub.

1 it 2 7/8" flexible monel collars.

Enough P-110 tubing to reach from KOP to end of planned horizontal wellbore.

Drili collars

2 7/8", Grade G, AOH DP. to surface.

- TIH to KOP (6790'). Run GYRO and Orient motor to east direction. Break 21) circulation and establish off bottom pressure at operating flow rates. Planned build rate is 57°/100' with a radius of 100'.
- Slowly lower motor to bottom, adjusting toolface as necessary to compensate for 22) reactive torque. Drill approximately 20' of build section with kick-off motor. TOH with kick-off motor and lay down. Pick up build motor (3 restricted articulations to maintain build rates below 70°/100') and TIH. Continue drilling curve while maintaining proper toolface orientation. Drill curve section to target depth of 6890' TVD for start of horizontal.

L. L. McConnell #13
Horizontal Reentry
Rio Arriba County, New Mexico
Drilling & Completion Procedure

23) Circulate hole clean. TOH with curve motor.

DRILL HORIZONTAL LATERAL (EAST DIRECTION):

- 24) TIH with lateral motor BHA. (Same as step 22 but motor has lower build rate.)
- Drill the horizontal lateral (2500') adjusting tool face as needed to the target. The end of the horizontal target depth is 6980' TVD. There is a window around the target line which the well path is to stay within. (see attached well plan for well path and hardlin 3). While drilling the lateral section, run sweeps of 5 bbls. water, 3 bbls prenydrated gel (90+ viscosity), and 1 gallon polymer.
- 26) At TD circulate hole clean with mud. TOH. Release directional equipment.

COMPLETION:

- TIH with muleshoe, 6 jts P-110 tbg and 5-1/2" casing on 2 7/8" tubing. Space out so P-110 tubing is across curve section and packer is in the casing. Set the packer.
- 28) Rig up coiled tubing unit. TIH with "PERFCLEAN" jetting sub on 1 1/2" coiled tubing to TD. Circulate mud out of hole
- Wash 1st lateral open hole with 25.000 gallons 15% NEFE. Rate 2 BPM. POH with coile: tubing while acidizing so entire open hole is stimulated.
- 30) Displace acid to the end of the tubing. SI for 15 min.
- 31) Flow well until dead. TOH with coiled tubing.
- 32) TOH with workstring. TIH with production equipment and test well as needed.



L.L. McCONNELL No. 13

CURRENT COMPLETION

LOCATION:

Unit N, 970' FSL & 1800' FWL SE/4, SW/4, Sec. 31, T26N, R03W **Rio Arriba County**

SPUD DATE: 6-14-82 COMPL. DATE: 6-26-82

FORMATION TOPS:

Ojo Alamo 3092'

Kirtland 3278'

Fruitland 3440'

Pictured Cliffs 3541'

Chacra 4438

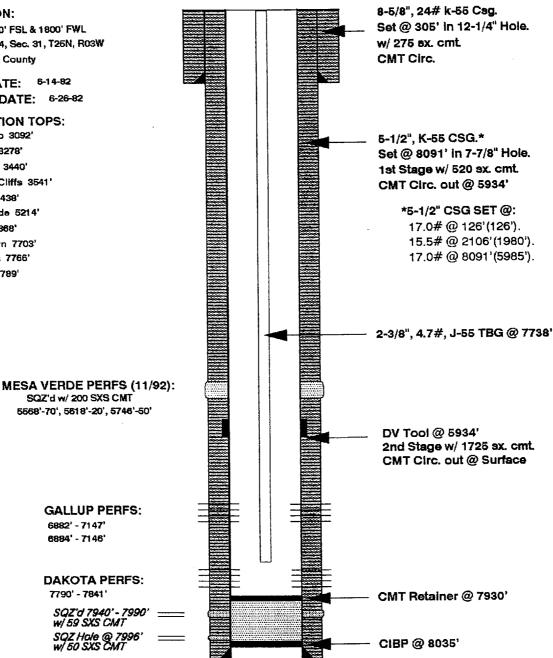
Mesa Verde 5214'

Gailup 6868'

Greenhorn 7703'

Graneros 7766'

Dakota 7789'



SQZ'd w/ 200 SXS CMT 5568'-70', 5618'-20', 5746'-50'

GALLUP PERFS:

6882' - 7147'

6884' - 7146'

DAKOTA PERFS:

7790' - 7841'

SQZ'd 7940' - 7990' w/ 59 SXS CMT SQZ Hole @ 7996 w/ 50 SXS CMT

> PBTD - 7930' TD - 80911



L.L. McCONNELL No. 13 PROPOSED SIDETRACK COMPLETION

