

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM 0557686
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Conoco Inc.		7. UNIT AGREEMENT NAME SEMU
3. ADDRESS OF OPERATOR 10 Desta Drive West, Midland, TX 79705		8. FARM OR LEASE NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1980' FSL & 660' FWL At proposed prod. zone		9. WELL NO. 115
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*		10. FIELD AND POOL, OR WILDCAT Weir Drinkard
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)	16. NO. OF ACRES IN LEASE	11. SEC., T., R., M., OR BLK. AND SUBSECT OR AREA Sec. 23, T20S, R37E
13. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	17. NO. OF ACRES ASSIGNED TO THIS WELL 40	12. COUNTY OR PARISH Lea
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3523' G.L.	19. PROPOSED DEPTH	13. STATE NM
22. APPROX. DATE WORK WILL START*		

PROPOSED CASING AND CEMENTING PROGRAM

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	54.5 lb	K-55	STC	1264'	1225 Sx circ.
12 1/4"	8 5/8"	32	K-55	STC	2780'	1233 Sx circ.
7 7/8"	5 1/2"	15.5	K-55	STC	6987'	2547 Sx circ.

It is proposed to plug back from the Drinkard formation and recomplete this wellbore in the Tubb formation as outlined by the attached procedure and wellbore diagram.

RECEIVED  
Aug 1 10 40 AM '90  
CARTER AREA

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 <u>Jerry W. Hoover</u>		TITLE <u>Regulatory Coordinator</u>	DATE <u>7/26/90</u>
(This space for Federal or State office use)			
PERMIT NO.	APPROVAL DATE		
APPROVED BY	TITLE		
CONDITIONS OF APPROVAL, IF ANY:	DATE <u>8-2-90</u>		

\*See Instructions On Reverse Side

Procedure Summary:

1. MIRU. POOH with production equipment.
2. RIH with 2-7/8" workstring and a 5-1/2"-17# scraper to 6625'. POOH and lay down scraper.
3. RIH w/CIBP and set at  $\pm 6600'$ . Spot 2 sacks Class "C" neat cement on bridge plug (17' plug).
4. Selectively perforate Tubbs from 6370' to 6565'.
5. Perform acid breakdown.
6. Swab/flow back load and obtain production test.
7. Perform foam acid frac.
8. Swab/flow back load and obtain production test.
- 9a) If well is commercial, RIH w/production equipment required and place on production.
- 9b) If uneconomical, set CIBP at 6350'. A plug and abandonment procedure will follow.

Plug and Abandon Drinkard and Recomplete to Monument Tubb

Procedure

1. MIRU.
2. POOH w/production equipment.
3. Pick up and RIH with 5-1/2" - 17# casing scraper and 2-7/8" workstring to 6625'. POOH and lay down scraper.
4. RIH w/CIBP on wireline and set it at  $\pm 6600'$ . With a bailer, dump 2 sacks (17') cement on top of CIBP.
5. Pressure test casing to 1000 psig.
6. Run a base Gamma Ray-Temperature-CCL from 6583' (PBTD) to 6200'. This will be used for a comparison with a second log run after breakdown to determine degree of channeling.
7. RIH w/2-7/8" workstring to 6565'.
  - a. Pickle tubing.
    1. Pump 750 gals 15% HCl-NE-FE acid followed by 20.0 bbls of completion fluid.
    2. Reverse out two tubing volumes (76 bbls) with completion fluid.
    3. Spot 5 bbls of 15% HCl-NE-FE from 6565' to 6370'.
    4. POOH w/workstring.
8. GIH w/4" hollow carrier select fire casing gun with CCL, loaded with 2 JSPF, 180 degree phasing, centralized gun, premium charge (>22 gram, min EHD = 0.44") and perforate the Tubb from top down as follows:
 

6370	6411	6428	6483
6372	6415	6443	6531
6374	6418	6447	6537
6376	6420	6455	6539
6401	6422	6465	6545
6409	6424	6480	6565

Total Holes = 48
9. RIH w/treating packer and workstring. Set packer at 6320'. Test backside to 500 psig.
10. Open the bypass and pump 2500 gallons 15% HCl-NE-FE (inhibited for 48 hours at 110°F and tagged with Cardinal's Tagmaster system) acid dropping

a total of 72 each 7/8" balls to divert the acid. Flush with 1800 gallons of 2% KCl water.

11. Rig up wireline company with 3000 psig lubricator and run Gamma Ray-Temperature-CCL post acid log.
12. Flow/swab back load and test well's productivity.
13. Pressure up casing to 500 psig and hold.
14. Acid frac Tubb at 15 BPM as follows:
  - A. Pump 5000 gals 15% gelled HCl plus 2142 gal CO<sub>2</sub>.
  - B. Drop 8 7/8" ball sealers.
  - C. Pump 5000 gallons 15% gelled HCl plus 2142 gallons CO<sub>2</sub>.
  - D. Drop 8 7/8" ball sealers.
  - E. Pump 5000 gallons 15% gelled HCl plus 2142 gallons CO<sub>2</sub>.
  - F. Flush with 1800 gallons 2% KCl water plus 770 gallons CO<sub>2</sub>.
  - G. Obtain 0 min, 5 min, 10 min, and 15 min shut-in pressures.
15. Shut-in for two hours.
16. Flow/swab back load and test productivity.
  - A. If commercial, place on production.
  - B. If uneconomical, P&A procedure to follow.

Acid Specifications per 1000 Gallons  
(BJ Titan Products or Equivalent)

Acid Breakdown:	15% HCl		
	1 gallon	CI-23	Inhibitor
	1 gallon	NE-2	Non Emulsifier
	5 gallons	FE-300L	Iron Sequesterant
Acid Frac:	15% HCl		
	1 gallon	CI-23	Inhibitor
	1 gallon	NE-2	Non Emulsifier
	5 gallons	FE-300L	Iron Sequesterant
	30 gallons	AG-11	Gel
	3 gallons	FAW-16	Foaming Agent

WELL: SEMU No. 115

PREPARED BY: JFMC

DATE: 3/27/90

LOCATION: 1980' FSL & 660' FWL  
COUNTY: LEA  
DATUM: 3535

STATE: NM  
SECTION: 23  
TOWNSHIP: 20 SOUTH  
RANGE: 37 EAST

GROUND LEVEL: 3523

TD: 6988  
PBITD: 6945

CURRENT WELLBORE DIAGRAM

PROPOSED WELLBORE DIAGRAM

