N.M. OIL CONS. COMMISSION P.O. BOX 1980 HOBBS, NEW MEXICO 8824J

or representations as to any matter within its jurisdiction.

Form 3160-5 (June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

Expires: March 31, 1993

5. Lease Designation and Serial No.

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

LC 032096B

6. If Indian, Allottee or Tribe Name

| 038 ATTEIOATTOTT 5 | | | | |
|--|--|--|--|--|
| SUBMIT IN | 7. If Unit or CA, Agreement Designation | | | |
| 1 Type of Weil | | | | |
| Oil Gas Weil Other Name of Operator | 8. Well Name and No. LOCKHART B-13A #5 | | | |
| Conoco Inc. | 9. API Well No. | | | |
| 3 Address and Telephone No. | W 70705 - 1045 1000 5 104 | 30-025-06559. 10. Field and Pool, or Exploratory Area | | |
| O Desta Drive STE 100W. Midland, T | | | | |
| 4 Location of Well (Footage, Sec., T., R., M., or Survey Descript | tion) | RIINERRY OIL AND CAT | | |
| 0601 F3L & 19801 FWL, SEC 13, T-21S | R-87E, UNIT LTR 1N1 | LEA. NM | | |
| 12. CHECK APPROPRIATE BOX(s) T | O INDICATE NATURE OF NOTICE, RE | EPORT, OR OTHER DATA | | |
| TYPE OF SUBMISSION | TYPE OF AC | TION | | |
| Notice of Intent | Abandonment | Change of Plans | | |
| | Recompletion | New Construction | | |
| Subsequent Report | Plugging Back | Non-Routine Fracturing Water Shut-Off | | |
| No. | Casing Repair Altering Casing | Conversion to Injection | | |
| Final Abandonment Notice | Other | Dispose Water | | |
| | | | | |
| 13. Describe Proposed or Completed Operations (Clearly state all pertagive subsurface locations and measured and true vertical described by the control of t | pths for all markers and zones pertunent to this work.)* | (Note: Report results of multiple completion on W. Completion or Recompletion Report and Log form f starting any proposed work. If well is directionally dril | | |
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Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements

LOCKHART B-13A NO 5 PLUG AND ABANDONMENT

INTRODUCTION:

This well went down on March 14, 1994 due to downhole pump problems. Production rates did not economically justify a pulling job and the well was left shut-in. The well has no remaining potential and should be permanently plugged and abandoned.

WELL DATA:

Location: 660' FSL & 1980' FWL, Sec 13, T-21-S, R-37E, Lea County, New Mexico

G.L. Elevation: 3420'

EQUIPMENT:

Bethlehem 228D w/ 25 HP motor. Rods and 2 3/8" tubing are still in the hole.

REGULATORY:

This well is completed in the Terry Blinebry Pool. Regulatory approval is required for this work.

CASING & TUBING SPECS:

| OD (inches) | TW (fqq) | Grade | Drift ID (inches) | Depth | Coliapse @ 100% (psi) | Burst @ 100% (psi) | Capacity (bpf) | Capacity (cfpf) |
|----------------|-------------|-------|-------------------------|-------|-----------------------------|--------------------------|-------------------|--------------------|
| 10 3/4 | 32.75 | H-40 | * | 289' | 880 | 1820 | * | * |
| 7 5/8 | 24 | H-40 | * | 3149' | 2040 | 2750 | * | * |
| 5 1/2 | 14/15.5 | J-55 | 4.887 | 6049' | 3,120 | 4,270 | .0244 | .1370 |
| 2 3/8 | 4.7 | J-55 | 1.901 | 5720' | 8,100 | 7,700 | .00387 | .0217 |

NOTE: The records do not indicate the cross-over point for the different weight 5 1/2" production casing. Due to the lack of information and vintage of the casing, use caution when pressuring up the pipe. The 5 1/2" data listed above is for 14 ppf pipe.

RECOMMENDED PROCEDURE:

- 1. MIRU workover rig. Kill well if necessary. POOH with rods & pump. ND WH & NU BOPE. TFF and POOH with tubing.
- 2. RIH with 4 3/4" bit & 5 1/2" casing scrapers on tubing to 5700'. POOH.
 - NOTE: 1. Use Class C cement mixed at 14.8 ppg with 2% CaCL, for all cement work except final surface plug which will contain 18% CaCl. Yield = 1.32 ft³/sx.
 - 2. For remainder of procedure use P&A brine 10 ppg brine with 25 lbs/bbl of salt gel.

- 3. RIH with 5 1/2" CIBP & set at 5700'. Pick up tubing and circulate hole with P&A brine. Spot 25 sx (240') cement cap on CIBP.
- 4. PUH to 5100' and spot 65 sxs cement plug (625') to cover San Andres injection interval in offsetting SWD well (Lockhart B-13A No 4).
- 5. Slowly PUH well above top of San Andres plug at +/- 4475' and reverse cement out of tubing. POOH w/tbg.
- 6. RIH and perforate 5 1/2" casing at 3155' (7 5/8" casing shoe) at 4 JSPF.
- 7. RIH and set cement retainer at 3125'. Establish injection rate into perfs with water. Pump 20 sxs cement. (This volume of cement calculates to a 265' plug behind 5 1/2" casing in 5 1/2" csg x 6 3/4" hole annulus).
- 8. PU out of retainer and reverse circulate cement out of tubing. POOH w/tbg.
- RIH and perforate 5 1/2" casing at 295' (10 3/4" casing shoe) @ 4 JSPF.
 NOTE: Guns should be loaded heavy enough to penetrate both 5 1/2" and 7 5/8" casing.
- 10. RIH w/2 jts of tubing. Close rams and establish circulation with water through perfs and up both 10 3/4" X 7 5/8" annulus and 7 5/8" x 5 1/2" annulus to surface. Pump 165 sxs (50% excess) to circulate both annuli to surface and leave 5 1/2" casing plugged to sfc.
- 11. If cement does not circulate in 5 1/2" x 7 5/8", bullhead 25 sxs cement down annulus. If cement does not circulate in 7 5/8" x 10 3/4", bullhead 60 sxs cement down annulus.
- 12. Plug back with cement to surface in 5 1/2" casing. Cut off casing 3' below surface. Weld 1/4" thick metal plate on wellbore. Install P&A marker with well name and location inscribed on marker.

es 6/21/9f

13. Restore location.

LOCKHART B13A NO 5 PLUG & ABANDONMENT

COST ESTIMATE

| Rig Time (3 days @ \$1500/day) | | \$4,500 |
|--------------------------------|--------------|---------------------|
| Rentals | | 3,000 |
| Cementing | | 3,500 |
| Water | | 1,000 |
| Perforating | | 900 |
| CIBP & Cement Retainer | | 2000 |
| Location Cleanup | | 5,500 |
| Total | Gross Net | \$20,400 \$5,100 |

WELLBORE DIAG. AM LOCKHART B-13A NO.5

660' FSL,1980' FWL.
SEC.13,T21S,R37E
LEA COUNTY, NEW MEXICO

SALT: TOP-1490' BASE-2545'

SURFACE CASING

10-3/4*, 32-3/4*,H-40 @289' W/250 SX (CIRC.)

TOPS:
YATES 2678'
7R 2944'
QUEEN 3512'
PENROSE 3665'
GLORIETTA 5310'
BLINEBRY 5760'

INTERMIATE CASING

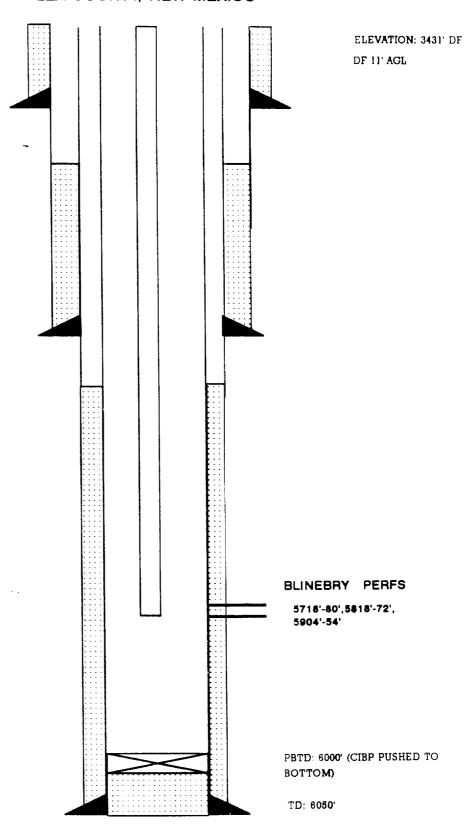
7-5/8° 24#, H-40 @3149' IN 9-7/8° HOLE W/1335 SX TOC @1475' (TS)

TUBING: 2-3/8*,4.7#,J-55
W/MA @5762'

PUMPING EQUIP: BETHLEHEM 228 D W/25 HP MOTOR

PRODUCTION CASING

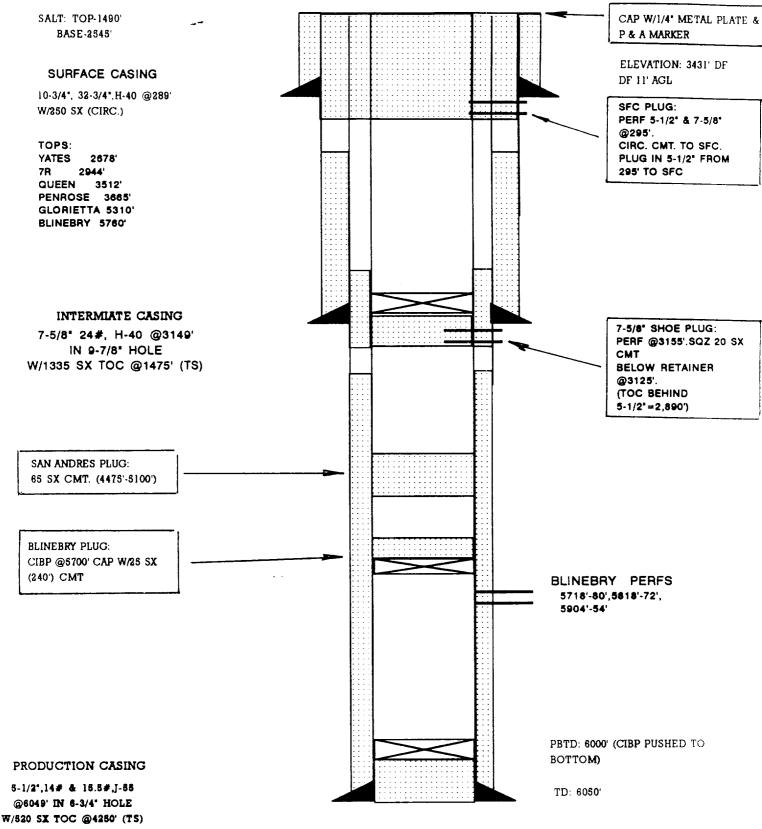
5-1/2*,14# & 15.5#,J-55 @6049* IN 8-3/4* HOLE W/520 SX TOC @4250* (TS)



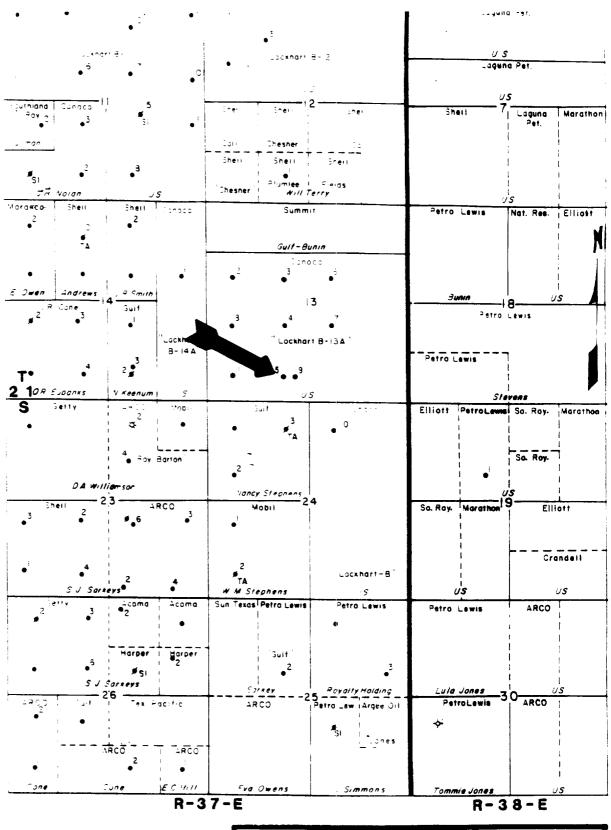
DATE: 06/27/94 BY: JOEL PORTER

PROPOSED P & A LOCKHART B-13A NO.5

660' FSL,1980' FWL SEC.13,T21S,R37E LEA COUNTY, NEW MEXICO



DATE: 06/27/94 BY: JOEL PORTER



| PRODUCTION DEPARTMENT | conoco | HOBBS Noisivic |
|--------------------------|----------------------|-------------------|
| | | |
| | | |
| | | |
| l. E | A COUNTY, NEW MEXICO | |
| | SCALE | |