

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division  
1625 N. French Dr.  
Hobbs, NM 88240

FORM APPROVED  
Budget Bureau No. 1004-0135  
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

**SUBMIT IN TRIPLICATE**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Conoco Inc

3. Address and Telephone No.

10 DESTA DR. STE. 100W, MIDLAND, TX 79705-4500 (915) 686-5580

4. Location of Well (Footage, Sec., T. R. M. or Survey Description)

770' FSL & 2306' FEL, Sec. 17, T17S, R32E, O

5. Lease Designation and Serial No.

LC 029405A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Elvis #2

9. API Well No.

30-025-33854

10. Field and Pool, or Exploratory Area

Maljamar, West Devonian 90682

11. County or Parish, State

Lea, NM

**CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION

- ☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☒ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☐ Other \_\_\_\_\_
- ☐ 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 estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Conoco is requesting approval to Recomplete to the Wolfcamp, per the attached justification and procedure.

14. I hereby certify that the foregoing is true and correct

Signed

*Reesa R. Wilkes*

Title

Reesa R. Wilkes

Sr. Staff Regulatory Assistant

Date

11/04/99

(This space for Federal or State office use)

Approved by

(ORIG. SGD.) ALEXIS C. SWOBODA

Title

PETROLEUM ENGINEER

Date

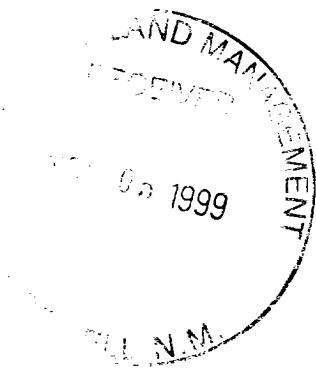
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Conditions of approval if any:

BLM(6), NMOCD(1), SHEAR, PONCA, COST ASST, FILE ROOM, FIELD

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 or representations as to any matter within its jurisdiction.

\*See Instruction on Reverse Side



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## AFE JUSTIFICATION ELVIS NO. 2 WOLFCAMP RECOMPLETION

Funds in the amount of \$118,000 are requested to recomplate the Elvis No. 2 in the upper and lower Wolfcamp zones. Conoco holds a 100% working interest in this lease. The well is located within the MCA unit boundary in the SWSE quarter of Section 17 and is currently TSI. The Elvis No. 2 was drilled as a Devonian step out to the Elvis No. 1 well and found the oil water contact. The well was tested extensively in the Devonian and commercial production was not established. The well has been inactive since mid 1997. The Wolfcamp zones look more prospective than any other potential pay zones behind casing and need to be tested before the well is abandoned. It is expected the upper and lower Wolfcamp zones combined will produce 50 BOPD after their initial completion and ultimate recovery will be 68,000 BO gross. Economics for this project show it has a 123% ROR, a 2.26 PI and a \$149 M NPV. The payout period is 11 months before FIT and 13.2 months after taxes. The average oil price over the life of the well is \$17.69. The last quarter average oil price for the Maljamar area has been over \$20 per BO.

There are several prospective zones behind casing in this well which need to be tested before the well is plugged. The lower Wolfcamp zone is at 9974-9989' and has an average porosity of 7.5%. There was a drilling break in this interval and some fluorescence (15%) was noted. The mud log and PE curve indicate the zone is 100% limestone. The upper Wolfcamp zone had no shows, but looks even better on the logs. It has an average porosity of 8% and the caliper log shows a reduction in hole size, which is probably from a thick mud cake. This would suggest the zone may be under pressured relative to the mud column, but should have very good permeability. None of the other behind pipe zones look as encouraging as the upper and lower Wolfcamp zones. Other potential horizons reviewed for recompletion potential include the Abo, Strawn, Canyon, and Cisco. These zones appear to be very risky candidates based on the log analysis, sidewall core data and shows.

The Conoco Hudson lease in Section 21 is the closest known isolated Wolfcamp production. Some other wells in Section 22 have the Wolfcamp commingled with the ABO and other horizons. The Hudson No. 1 well has produced nearly 200 MBO and 0.5 BCFG from just the Wolfcamp since its completion in 1965. The majority of the production occurred following stimulation in 1977 (see decline curve, attached). Since the closest offset well completed in the Wolfcamp is over a mile away, and the zone is very heterogeneous, the Wolfcamp in the Elvis No. 2 should be at or near original pressure.

The cost to perforate and swab test these Wolfcamp zones individually is about \$100,000. The plan for the recompletion includes the cost of permanently abandoning the Devonian interval by setting a CIBP and capping it with cement. Next the lower Wolfcamp pay zone will be perforated and broken down with acid. After swab testing is completed and the lower perforations are isolated, the upper Wolfcamp zone will be tested similar to the lower. Since the well already has a full string of 2.875" tubing in it, the cost to equip this well for a pump test is only \$25,000, which includes funds for a new rod string, new pump and setting a pumping unit. AFE funds for a pumping unit were not included since the Elvis No. 4 has a 912-pumping unit on it that Conoco owns 100%. This well is only producing 7 BOPD and does not need this large of a pumping unit. This AFE includes funds to move this pumping unit to the Elvis No. 2 for pump testing. Depending on the results of the pump testing, another pumping unit may need to be transferred from the MCA Unit for one of these wells. With Conoco's high working interest in the MCA Unit, the cost to purchase the non-Conoco owned share will be minimal.

In order to produce the Wolfcamp a surface commingling permit for the Elvis No. 1 and 4 wells will need to be amended to include the Wolfcamp from the Elvis No. 2. Until this permit is amended with the NMOCD, all production from the well will need to be kept separate from the other Elvis wells. The Elvis No. 2 is already connected to the Elvis No. 1 battery.

## ELVIS No. 2 WOLFCAMP RECOMPLETION PROCEDURE

1. MIRU derrick rig and hold prejob safety meeting covering the details of this workover. Remove tree and rig up BOP's. Test BOP's to assure they operate correctly.
2. Wellview records indicate there is a packer in the hole, set at 13,600'. Release the packer and POOH with tubing and packer.
3. Pick up a retrieving head for a bridge plug and RIH with it on the tubing to 13,872'.
4. Spot 150 bbls. of packer fluid from 13872' to +/- 10,000'.
5. Latch onto the plug, release it, and POOH. Lay down the last 3800' of tubing.
6. Rig up an electric line truck and run a gauge ring with a junk basket to 13,750'. POOH.
7. Contact the <sup>BLM</sup> NMOCD to witness setting of this plug, since it will constitute the abandonment of the Devonian completion. At least 24 hours advance notice should be given.
8. Pick up a CIBP for 7", 29 lb/ft casing and RIH with the plug and a CCL to 13,750'. Correlate with Wedge Dialog RAL dated 5/27/97 and set the plug at +/- 13,725'. POOH to 10,200'. Run the CCL from 10,200' to 9200'. Correlate with same Wedge Dialog RAL. POOH.
9. Spot <sup>35'</sup> 10' of Class H cement on top of the plug with a wireline bailer. POOH and rig down electric line truck.
10. Pick up the retrievable bridge plug on the tubing and RIH to 10,100'. Set the plug in the middle of the closest joint to 10,100', but do not set it above 10,100'.
11. Spot 300 gallons of acetic acid on bottom. Displace acid with 2% KCL water. POOH.
12. Dump 2 sacks of 20-40 sand from surface down the casing. Let the sand settle on top of the plug. This should provide 9-10' of sand on top of the bridge plug.
13. Fill the hole with 2% KCL water.
14. Rig up Jarrel Services to perforate the lower Wolfcamp. RIH with GR-CCL and correlate with log strip run in step 8 above. POOH.
15. Pick up 5" expendable HSC casing gun and RIH to 10,000'. Correlate and perforate the lower Wolfcamp from 9974 - 9989' with 4 JSPF, 90 or 120-degree phasing (see perforating detail). POOH and rig down perforators.
16. RIH with a retrievable full-bore treating packer and seating nipple to 9875'. Set the packer at 9875'. Swab test lower Wolfcamp zone to determine if it is productive. If the zone swabs dry or if a perforation breakdown is required proceed with next step. Otherwise skip to step 27.
17. Release the packer and POOH with the tubing and packer.
18. Pick up a Pinpoint injection packer (or any other perforation isolation treating packer) with a 3' spacing between elements and RIH on the tubing to 10,050'. Set the packer and fill the tubing with 2% KCL water.

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RECOMPLETION PROCEDURE  
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19. Rig up BJ Services and surface treating lines. Pressure test treating lines to 5000 psig. Pressure test the tubing to 3500 psig.
20. Release the packer and spot 1000 gallons of 15% HCL acid with additives as per BJ Services treating proposal attached to the packer. Displace the acid with 2% KCL water. Drop the fluid control valve.
21. Pull up to the bottom 3' of perforations, set the packer and break down the perforations with 200 gallons of acid at 0.5 to 1 BPM. Maximum pressure is 3500 psig. Make sure the casing-tubing annulus is closed while pumping the acid.
22. After 200 gallons is pumped, shut down, release the packer and pull up to next 3' of perforations and set the packer. Break down the perforations with 200 gallons of acid at 0.5 to 1 BPM.
23. Repeat step 22 until all of the perforations have been treated.
24. Pull packer up above all of the perforations to +/- 9900' and retrieve the fluid control valve with sand line.
25. Spot another 1000 gallons of 15% HCL acid to the packer. Set the packer at 9900' and pump acid into the perforations at 3-5 BPM. Maximum pressure is 3500 psig. Displace acid with 2% KCL water. Let acid soak for an hour while rigging down BJ Services.
26. Rig up to swab back acid load. Swab back as much load as is possible the same day of the acid job.
27. Swab test zone, recording rates, recoveries and fluid levels. Release the packer and POOH.
28. Once testing is completed, make determination as to whether the zone will be commercial. If it looks prospective, RIH with a retrieving head for the bridge plug and wash the sand off of the top of the bridge plug. Release it and pull it up hole to +/- 9800'.
29. Set the bridge plug at 9800' and spot 300 gallons of acetic acid on bottom. Displace acid with 2% KCL water. POOH.
30. Dump 2 sacks of 20-40 sand from surface down the casing. Let the sand settle on top of the plug. This should provide 9-10' of sand on top of the bridge plug.
31. Fill the hole with 2% KCL water.
32. Rig up Jarrel Services to perforate the upper Wolfcamp. RIH with GR-CCL and correlate with log strip run in step 8 above. POOH.
33. Pick up 5" expendable HSC casing gun and RIH to 9700'. Correlate and perforate the upper Wolfcamp from 9690-9714' with 4 JSPF, 90 or 120-degree phasing (see perforating detail). POOH and rig down perforators.
34. RIH with a retrievable full-bore treating packer and seating nipple to 9625'. Set the packer at 9625'. Swab test upper Wolfcamp zone to determine if it is productive. If the zone swabs dry or if a perforation breakdown is required proceed with next step. Otherwise skip to step 45.

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RECOMPLETION PROCEDURE  
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35. Release the packer and POOH with the tubing and packer.
36. Pick up a Pinpoint injection packer (or any other perforation isolation treating packer) with a 3' spacing between elements and RIH on the tubing to 9750'. Set the packer and fill the tubing with 2% KCL water.
37. Rig up BJ Services and surface treating lines. Pressure test treating lines to 5000 psig. Pressure test the tubing to 3500 psig.
38. Release the packer and spot 1600 gallons of 15% HCL acid with additives as per BJ Services treating proposal attached to the packer. Displace the acid with 2% KCL water. Drop the fluid control valve.
39. Pull up to the bottom 3' of perforations, set the packer and break down the perforations with 200 gallons of acid at 0.5 to 1 BPM. Maximum pressure is 3500 psig. Make sure the casing-tubing annulus is closed while pumping the acid.
40. After 200 gallons is pumped, shut down, release the packer and pull up to next 3' of perforations and set the packer. Break down the perforations with 200 gallons of acid at 0.5 to 1 BPM.
41. Repeat step 40 until all of the perforations have been treated.
42. Pull packer up above all of the perforations to +/- 9625' and retrieve the fluid control valve with sand line.
43. Spot another 1600 gallons of 15% HCL acid to the packer. Set the packer at 9625' and pump acid into the perforations at 3-5 BPM. Maximum pressure is 3500 psig. Displace acid with 2% KCL water. Let acid soak for an hour while rigging down BJ Services.
44. Rig up to swab back acid load. Swab back as much load as is possible the same day of the acid job.
45. Swab test zone, recording rates, recoveries and fluid levels. Release the packer and POOH.
46. Once testing is completed, make determination as to whether the zone will be commercial. If it looks prospective, RIH with a retrieving head for the bridge plug and wash the sand off of the top of the bridge plug. Release it and POOH.
47. RIH with a conventional mud anchor, seating nipple, and tubing anchor on the tubing to +/- 10,050'. Land tubing so the seating nipple is at least 25' below the bottom perforation to provide a natural gas anchor.
48. Pick up an insert pump sized for the estimated capacity of these zones and RIH with a tapered 86 rod string. Seat the pump and fill the tubing with water.
49. Set up wellhead for a pumping well. Set an appropriately sized pumping unit. Tie in tubing to existing flow line.
50. Place well on production. Monitor rates and fluid levels until the well pumps down.