submitted in lieu of Form 3160-5

UNITED STATES DEPARTMENT OF THE INTERIOR

| BUREAU OF LAND MANAGEMENT | |
|---|---|
| Sundry Notices and Reports on Wel | 1s - 16-2-2 0110:59 |
| 1. Type of Well GAS | 5. Lease Number SF-077764 of the or |
| | 7. Unit Agreement Name |
| 2. Name of Operator MERIDIAN OIL | 8. Well Name & Number |
| 3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700 | Schumacher #3 9. API Well No. 30-045-09447 |
| 4. Location of Well, Footage, Sec., T, R, M 990'FSL, 1650'FWL Sec.18, T-30-N, R-10-W, NMPM | 10. Field and Pool Basin Ft Coal/Aztec 11. County and State San Juan Co, NM |
| 12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE Type of Submission | x Change of Plans New Construction Non-Routine Fracturing Water Shut off Conversion to Injectio |
| 13. Describe Proposed or Completed Operations A sundry notice was submitted and approved 06-22-94 to add the Fruitland Coa and commingle the production. It is now intended to set a CIBP open the Fruitland Coal formation, and produce the Fruitland Coattached. | at 2819' to isolate the Pictured Cliffs, |
| | DECEIVED N dec - 8 1994 OIL COM. DIV. Dist. 3 |
| 14. I hereby certify that the foregoing is true and c | correct. |
| Signed Stanfiel (LJB2) Title Regulatory Af | <u>fairs</u> Date 12/2/94 |
| (This space for Federal or State Office use) APPROVED BY Title | Date |
| APPROVED BYTitle CONDITION OF APPROVAL, if any: | APPROVED |
| | DEC U 2 1994 DISTRICT MANAGER |

SCHUMACHER #3

Recommend Completion Procedure SW/4 Section 18 T30N R10W

- 1. Test rig anchors and repair if necessary. Install 1-400 bbl frac tank on location and fill with 2% KCl water. Filter all water to 25 microns. Heat water as required by weather.
- 2. MOL and RU. Comply to all NMOCD, BLM and MOI rules and regulations. Hold safety meeting. ND wellhead. NU BOP. Test operation of rams. NU two relief lines.
- 3. TOOH laying down 2896' of 1" 1.7# tubing, tally and inspect.
- 4. TIH with 2-3/8" work-string and 4-3/4" bit and clean out to open hole TD at 2920'. TOOH.
- 5. TIH with 2-3/8" tubing, 5-1/2" casing scraper and 4-3/4" bit and clean out to the casing shoe at 2822'. Load hole with 2% KCl water. TOOH.
- 6. RU and RIH with CNL-CCL-GR and log from casing shoe at 2822' to 822'.
- 7. RIH and wireline set 5-1/2" CIBP at 2819'. Correlate with CNL-CCL-GR to ensure CIBP is set between PC and basal FTC. Load hole with 2% KCl water. TOOH.
- 8. Run CBL from PBTD (2819') to surface. If CBL appears inadequate, re-run log with 500 psi surface pressure. If bond still appears unacceptable, contact production engineering. Send copy of CBL to production engineering and drilling.

LOWER COAL

- 9. TIH with 2-3/8" tubing and set 5-1/2" full bore packer at 2700'. Load hole with 2% KCl water and test CIBP and casing to 3500 psi for 15 minutes. Test tubing and casing annulus to 500 psi. for 15 minutes. Equalize pressure and unseat packer. TOOH.
- 10. RU wireline and perforate the following coal interval with 3-1/8" HSC with 16.0 gram charges, 0.4" holes at 2 SPF (correlate depths to CNL-CCL-GR log).

2800' - 2812'

Total: 12 feet: 24 holes

- 11. Breakdown with 240 gallons 15% HCl acid with SAP tool on 2-3/8" tubing. Max. pressure 5000 psi. Acid to contain 1 gal/1000 Coal surf, 5 gal/1000 Citric Acid (Iron Control), and 2 gal/1000 I-22 (corrosion inhibitor).
- 12. TIH with 5-1/2" fullbore packer on 2-7/8" buttress tubing frac string and set packer at 2700'.

SCHUMACHER #3

Recommend Completion Procedure SW/4 Section 18 T30N R10W Page 2

- 13. RU treatment company for frac. Hold safety meeting with <u>all</u> personnel. Pressure test surface lines to 5000 psi. Fracture treat lower coal according to attached schedule with 70Q foam at 20 BPM with 95,000 lbs of 20/40 mesh Arizona sand and TAIL WITH 10,000 #'s 12/20 mesh Arizona sand. Tag with 0.4 mCi/1000# Ir-192 tracer. Flush with 13 bbls 2% KCl. Estimated treating pressure is 3792 psi. <u>MAXIMUM PRESSURE IS LIMITED TO 5000 PSI!</u> Monitor backside and braden head pressures during frac. Monitor bottomhole and surface treating pressure, rate, foam quality and sand concentration with computer van. Frac during daylight only.
- 14. Shut in well for 1 hours for gel break.
- 15. After gel break, open well through choke manifold and monitor flow. Flow at 20 bbls/hr, or less if sand is observed.
- 16. When well ceases to flow, TOOH with 2-7/8" frac string and packer.
- 17. TIH with 2-3/8" tubing and notched collar and clean out to 2819'. TOOH.
- 18. TIH and set 5-1/2" RBP at 2730' on wireline.
- 19. Refill 400 bbl frac tank with 2% KCl water and filter to 25 microns. Heat water as required by weather. (80 deg F).

UPPER COAL

- 20. TIH with 2-3/8" tubing and set 5-1/2" full bore packer at 2503'. Load hole with 2% KCl water and test RBP and casing to 3500 psi for 15 minutes. Test tubing and casing annulus to 500 psi. for 15 minutes. Equalize pressure and unseat packer. TOOH.
- 21. RU wireline and perforate the following coal interval with 3-1/8" HSC with 16.0 gram charges at 2 SPF (correlate depths to CNL-CCL-GR log).

2603' - 2610' 2626' - 2634' 2641' - 2650' 2671' - 2680'

Total: 33 feet: 66 holes

22. Breakdown with 660 gallons 15% HCl acid with SAP tool on 2-3/8" tubing. Max. pressure 4500 psi. Acid to contain 1 gal/1000 Coal surf, 5 gal/1000 Citric Acid (Iron Control), and 2 gal/1000 I-22 (corrosion inhibitor).

SCHUMACHER #3

Recommend Completion Procedure SW/4 Section 18 T30N R10W Page 3

- 23. RU treatment company for frac. Hold safety meeting with <u>all</u> personnel. Pressure test surface lines to 5000 psi. Fracture treat upper coal according to attached schedule with 70Q foam at 30 BPM with 122,500 lbs of 20/40 mesh Arizona sand and 10,000 #'s 12/20 mesh Arizona sand. Tag with 0.4 mCi/1000# Ir-192 tracer. Flush with 14 bbls 2% KCl. Estimated treating pressure is 4707 psi. <u>MAXIMUM PRESSURE IS</u> <u>LIMITED TO 5000 PSI!</u> Monitor backside and braden head pressures during frac. Monitor bottomhole and surface treating pressure, rate, foam quality and sand concentration with computer van. Frac during daylight only.
- 24. Shut in well for 1 hours for gel break.
- 25. After gel break, open well through choke manifold and monitor flow. Flow at 20 bbls/hr, or less if sand is observed.
- 26. When well ceases to flow, TOOH with packer and lay down frac string.
- 27. TIH with 2-3/8" tubing and retrieving head and clean out upper zone until sand flow stops. <u>Take Pitot gauge before releasing BP.</u> Release RBP set at 2730'.
- 28. TIH with notched collar on 2-3/8" tubing and clean out to CIBP set at 2819'. After clean up, flow test for 24 hours, taking pitot gauges every 6 hours. Take final Pitot gauge. TOOH.
- 29. RU wireline and run After Frac GR. log from 2819' to top of tracer activity.
- 30. TIH with 2799' of 2-3/8" tubing with standard seating nipple one joint off bottom and pump-off plug on bottom. Land tubing string.
- 31. ND BOP and NU independent wellhead. Pump off plug. <u>Take final Pitot gauge.</u> Rig down and release rig.

| | Approve: | | | |
|-------------|-------------|------------|-------|--|
| | | P. W. Bent | • • • | |
| | | | | |
| | | | | |
| | | | | |
| VENDORS: | | | | |
| Wireline: | Petro | 326-6669 | | |
| Fracturing: | Western | 327-6222 | | |
| RA Tagging: | Protechnics | 326-7133 | | |