

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

1. Type of Well

GAS

2. Name of Operator

MERIDIAN OIL

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M

1650'FNL, 1650'FWL, Sec.2, T-27-N, R-12-W, NMPM

5. Lease Number

SF-078936

6. If Indian, All. or Tribe Name

7. Unit Agreement Name

8. Well Name & Number

Harmon A #2

9. API Well No.

30-045-06888

10. Field and Pool

Basin Fruitland Coal/
W. Kutz Pictured Cliffs

11. County and State

San Juan Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

Type of Action

☒ Notice of Intent☐ Abandonment☐ Change of Plans☐ Subsequent Report☒ Recompletion☐ New Construction☐ Final Abandonment☐ Plugging Back☐ Non-Routine Fracturing☐ Casing Repair☐ Water Shut off☐ Altering Casing☐ Conversion to Injection☐ Other -

13. Describe Proposed or Completed Operations

It is intended to add and complete by perforating and fracture stimulating the Fruitland Coal formation of this wellbore according to the attached procedure and wellbore diagram. Production from the Pictured Cliffs and Fruitland Coal will then be commingled. Application has been made to the NMOCD for commingling and NSL.

RECEIVED
OCT 11 1994

OIL CON. DIV.
DIST. 3

OCT 11 1994

OCT 11 1994

RECEIVED

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

Signed James D. [Signature] (LJB2) Title Regulatory Affairs Date 10/4/94

(This space for Federal or State Office use)

APPROVED BY _____ Title _____

Date _____

CONDITION OF APPROVAL, if any:

C-104 For NSL to plot @

APPROVED

OCT 04 1994
Signed: STEPHEN M. [Signature]
DISTRICT MANAGER

HARMON A #2
Recommend Remediation/Recompletion Procedure
NW/4 Section 2 T27N R12W

1. Test rig anchors and repair if necessary. Install 2-400 bbl frac tank on location and fill with 2% KCl water. Filter all water to 25 microns.
 2. MOL and RU. Comply to all NMOCD, BLM and MOI rules & regulations. Hold safety meeting. ND wellhead. NU BOP. Test operation of rams. NU two relief lines.
 3. Unseat packer set @1534', TOO H w/ 1615' (48 jts) of 1-1/2" tbg, tally & inspect. PU 2-7/8" workstring.
 4. TIH w/ 4-3/4" bit and 5-1/2" casing scraper on 2-7/8" tbg and clean out to 5-1/2" casing shoe @ 1601', load hole w/ 25 bbls 2% KCl. TOO H.
 5. RU wireline and run CNL-CCL-GR to 1300'.
 6. RIH and set 5-1/2" CIBP @ 1550'. Load hole w/ water.
 7. Pressure test csg to 500 psi to assure that holes exist in csg. TIH w/ workstring and pkr and pressure test under pkr to determine depth of deepest hole. TOO H.
 8. RU wireline and run CBL-CCL-GR from PBTD (1550') to 150'. Run MTT-Calliper csg inspection log from PBTD to 150'. Send copy of CBL and MTT logs to production engineering.
 9. PU and install csg spear. PU 5-1/2" csg to release csg slips. RU wireline and run "Free-Point". Determine csg Free-Point. Cut casing at depth to be determined from MTT-Caliper log and "Free-Point".
 10. Condition and circulate hole clean with mud. TOO H w/ 5-1/2" casing.
 11. PU skirted mill. RIH and polish off top of 5-1/2" csg. TOO H.
 12. RIH w/ new 5-1/2" csg w/ "Bowen Lead Seal" casing patch, 1 10' jt of 5-1/2" 15.5# K-55 casing, 1 DV stage tool, followed by 5-1/2" 15.5# K-55 casing to surface, tie into existing csg in well. Set seal. Pressure test csg and patch to 500 psi. If seal and casing hold pressure Drop ball to open stage tool. Cement w/ **(0.41 sxs/ft of replacement casing)** class "B" neat cement w/ 2% CaCl₂ (100% excess to circulate to surface). Set csg in slips and cut off top of csg.
 13. TIH w/ 4-3/4" bit and four 3-1/2" drill collars on 2-7/8" tbg and drill out stage tool, then drill out CIBP (set @ 1550') and clean out to TD (@1693'). TOO H, LDDC.
 14. TIH w 4-3/4" bit on 2-7/8" to 1550 ft. Unload hole and clean out open hole portion of well bore to TD with air and foam sweeps. TOO H to 1550'.
 15. Close wing valves and pipe rams, pump into formation with air, monitoring pressure, do not exceed 500 psi, for 1 hour. Shut well in for 30 minutes. Open wing valve and flow well to pit. TIH and cleanout to TD. TOO H to 1550'. Continue process for 8 hours. TIH and cleanout to TD. TOO H
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HARMON A #2
Recommend Remediation/Recompletion Procedure
NW/4 Section 2 T27N R12W

Page 2

16. TIH w/ 5 1/2" packer on 2-7/8" tubing to 1595', set packer @1595', spot 200 gallons 15% HCl acid, displace acid with Nitrogen into formation, shut well in for 2 hrs, flow well overnight. Release packer, TOOH w/ packer & tubing.

17. TIH to TD and clean out fill. Swab well if necessary to establish flow, gauge PC. TOOH

18. RU wireline and RIH w/ 5-1/2" RBP and set @ 1598'

19. TIH w/ 5 1/2" fullbore packer on 2-7/8" tubing to 1595', load hole w/ 2% KCl water, set packer @1595', test bridge plug to 2500 psi. TOOH

FRUITLAND COAL

19. RU wireline and perf the following coal interval w/ 4" HSC w/ 19.8 gram charges @ 4 SPF (correlate depths to CNL-CCL-GR log).

1447-1449'

1498-1500'

1584-1596'

Total: 23 feet: 92 holes

20. PU 5-1/2" SAP TOOL on 2-7/8" tubing. TIH to 1594' set packer, load backside w/ 2% KCl water. SAP perforations in 2' intervals w/ 20 gallons of 15%HCl acid per foot (460 gallons total). TOOH w/ 2-7/8" tbg & SAP tool.

21. PU 5-1/2" fullbore packer on 2-7/8" 6.4#, N-80 Frac string. TIH to 1400', set packer, load backside w/ 2% KCl water, set blanking plug in tubing @ 1375', test tubing to 5000 psi, release pressure, remove blanking plug, pressure test annulus to 500 psi to test packer.

22. Fracture treat lower coal according to attached schedule w/ 70Q foam at 25 BPM with 165,000 lbs of 20/40 mesh Arizona sand and 10,000 lbs 12/20 mesh Brady sand. Tag pad and sand as stated in attached **Nitrogen Foam Stimulation Procedure**. Flush with 7 bbls 2% KCl water. Estimated treating pressure is 2800 psi. **MAXIMUM PRESSURE IS LIMITED TO 5000 PSI!** 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**.

23. SI well for 3 hours for gel break.

24. After gel break, open well through choke manifold & monitor flow. Flow @ 20 bbls/hr, or less if sand is observed.

25. When well ceases to flow, TOOH w/ pkr and frac string. TIH w/ 2-7/8" tbg and 4-3/4" bit and clean out to TD until sand flow stops. Take Pitot gauge. TOOH.

26. TIH & retrieve RBP set @1598

27. TIH w/ 1-1/2" tbg and seating nipple, notched collar on bottom, 1 jt 1-1/2, std seating nipple, tbg to surface. Tag bottom, pick up no more than 10'. Land tbg @ 1680'.

28. ND BOP, NU wellhead. RD move to next location.

Chris Welker, Jr.
8/25/14

HARMON A #2 50849A

CURRENT - AUGUST 10, 1994

WEST KUTZ PICTURED CLIFFS (GAS)

UNIT F, SEC 2, T27N, R12W, SAN JUAN COUNTY, NM

COMPLETED
08/30/51



8-5/8" CSG SET @90' CMT TO SURFACE

OJO ALAMO @392'

KIRTLAND 505"

1-1/2" TBG @1606'
BAKERAD-1 PRODUCTION PACKER
SET @1534'

TOC UNKNOWN

FRUITLAND @1430"

PICTURED CLIFFS 1597'

5-1/2" CSG SET @1601'
PERF @1610'-1693' SHOT W NITROGLYCERIN
200

TD
1693'

HARMON A #2 50849A/B

PROPOSED - AUGUST 10, 1994

WEST KUTZ FRACTURED CLIFFS (GAS)

UNIT F, SEC 2, T27N, R12W, SAN JUAN COUNTY, NM

COMPLETED
08/30/51

8-5/8" CSG SET @ 90' CMT TO SURFACE

OJO ALAMO @ 392'

KIRTLAND 505'

1-1/2" TBG @ 1650'

FRUITLAND @ 1430'

TOC TO BE DETERMINED
AND EVALUATED FOR
REPAIR

FTC PERFS

1447'

1596'

FRACTURED CLIFFS 1597'

5-1/2" CSG SET @ 1601'

PERF @ 1610'-1693' SHOT W/ NITROGLYCERIN
200

TD
1693'