

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
BLM

Sundry Notices and Reports on Wells

94 AUG 11 AM 10:18

070 FARMINGTON, NM
Lease Number
SF-079266

1. Type of Well

GAS

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

2. Name of Operator

MERIDIAN OIL

8. Well Name & Number
Vaughn #15

3. Address & Phone No. of Operator

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

9. API Well No.
30-039-20377

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

1030'FNL, 990'FEL, Sec.28, T-26-N, R-6-W, NMPM

10. Field and Pool
Blanco MV/Basin DK11. County and State
Rio Arriba 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 repair this wellbore per the attached procedure and wellbore diagram. The Dakota will be temporarily abandoned beneath a CIBP, and recompletion in the Blanco Mesaverde will be performed. The Mesaverde will be flowed to sales for a period of 6 months before downhole commingling will be done.

RECEIVED
AUG 25 1994

OIL CON. DIV.
DIST. 3

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

Signed Deputy Superintendent (TEM3) Title Regulatory Affairs Date 8/4/94

(This space for Federal or State Office use)

APPROVED BY _____ Title _____ Date _____

CONDITION OF APPROVAL, if any:

APPROVED

AUG 17 1994

Signed: STEPHEN MASON
DISTRICT MANAGER

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

PO Box 2088
Santa Fe, NM 87504-2088

Form C-
Revised February 21, 1
Instructions on b
Submit to Appropriate District Of
State Lease - 4 Co
Fee Lease - 3 Co

070 FARMINGTON, NM

☐ AMENDED REPO

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-20377		Pool Code 72319-71599		Pool Name Blanco Mesaverde/Basin Dakota	
Property Code 7623		Property Name Vaughn			Well Number 15
OGRID No. 14538		Operator Name Meridian Oil Inc.			Elevation 6669'

10 Surface Location

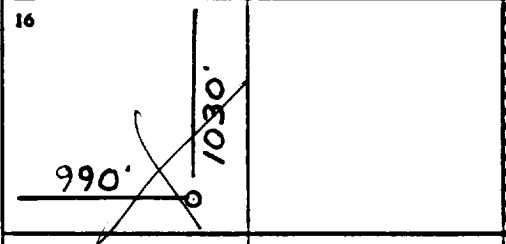
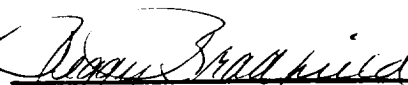
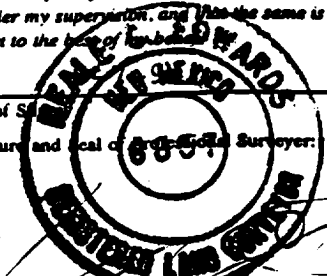
UL or lot no. A	Section 28	Township 26N	Range 6W	Lot Idn	Feet from the 1030	North/South line North	Feet from the 990	East/West line East	County R.A.
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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12 Dedicated Acres E/320	13 Joint or Infill	14 Consolidation Code	15 Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16 	Not re-surveyed: Prepared from plat: Dated: March 25, 1970 By: David O. Wilven	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Peggy Bradfield Printed Name Regulatory Affairs Title 8-9-94 Date	
			18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by or under my supervision, and that the same is true and correct to the best of my knowledge and belief.  Date of Survey Signature and Seal of Registered Surveyor: 6857 Certificate Number

Vaughn # 15
T26NR06W28A
 Mesaverde & Dakota
 Workover

GL @ 6675'

Current

GL @ 6675'

Proposed

13-3/4" Hole
 9-5/8" Casing @ 238'
 w/ 190 sxs to Surface

Nacimiento Top	@ 260'
Ojo Alamo Top	@ 2227'
Kirtland Top	@ 2446'
Fruitland Top	@ 2742'
Pictured Cliffs	@ 2918'
Lewis Top	@ 2968'
Chacra Top	@ 3800'
Cliff House	@ 4580'
Manefee	@ 4632'
Point Lookout	@ 5154'
Mancos	@ 5326'
Niobrara	@ 6222'
Juana Lopez	@ 6769'
Greenhorn	@ 7098'
Graneros	@ 7156'
Two Wells	@ 7212'
Paguate	@ 7266'
Cubero	@ 7300'
Oak Canyon	@ 7402'
Encinal Canyon	@ 7414'
Burro Canyon	@ 7428'
Morrison	@ 7504'

TOC @ 2250'
 Temp Survey

Stage Tool @
 3084'
 w/ 185 sxs

2-3/8" Tubing
 @ 7240'

Stage Tool @
 5441'
 w/ 210 sxs

Model R-3 PKR
 @ 7013'

Dakota Perforations
 120 Holes
 7214' to 7420'

7-7/8" Hole
 4-1/2" Casing @ 7541'
 w/ 300 sxs

PBTD @ 7520'
 TD @ 7543'

TOC @ 2250'
 Temp Survey

2-3/8" Tubing
 @ 6350'

Stage Tool @
 3084'
 w/ 185 sxs

Mesaverde Perforations
 20 Holes
 5156' to 5372'

Stage Tool @
 5441'
 w/ 210 sxs

Dakota Perforations
 120 Holes
 7214' to 7420'

7-7/8" Hole
 4-1/2" Casing @ 7541'
 w/ 300 sxs

PBTD @ 7520'
 TD @ 7543'

This well will be commingled in the Mesaverde and Dakota. An allocation Formula will be finalized after a 3 month online sales testing period. MOI will work with the NMOCD in developing this allocation formula. Prior to commingle, the Dakota will be Temporarily Abandoned under a cast iron bridge plug, while the Mesaverde will be produced separately to help determine commingled production.

Vaughn # 15
Blanco Mesaverde/Basin Dakota Workover
UnitA-Sec28-T26N-R06W

Prior to Moving on Workover Rig, Inspect Location, Verify All Appropriate Equipment is on Hand. Dig work pit for water/cement recovery/flare pit, fence pits. Comply with all BLM, NMOCD, & MOI rules & regulations. **Always Hold Safety Meetings.**

-
- Ensure all approvals for Commingle work necessary have been approved.
 - Utilize EPNG Drill Gas.
 - Spot Five (5) Tanks & Fill Four (4) 400 bbl tanks with risers to pre-gel. Pre-Gel 2 tanks.
 - Use Only True 2% KCl water, (or substitute) Filter Frac & Acid water to 25 microns.
 - Two-hundred-Sixty (260) joints 2-3/8" 4.7# EUE N-80 tubing on location.
 - Six (6) 3-1/8" Drill Collars on location.
 - Will utilize trucked Nitrogen after initial work in place of drill gas.
 - 900 series BOP, 7" blooie line, manifold, & 1/4", 1/2", & 3/4" chokes as appropriate.
 - 2-7/8" N-80 Buttress Frac String (5000' +/- required).
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1. Move In workover rig. Record and report SI pressures on tubing, casing, & bradenhead. Lay blowdown line. Blow down casing & tubing. Pump 20 bbls 2% KCl down tubing. ND WH, NU BOP & stripping head. Test all equipment!
2. PU & release Model R-3 PKR @ 7013'. TOOH, rabbit, & strap 2-3/8" tubing (from 7240', SN @ 7277'). Flow well out blooie line. Visually inspect tubing, service PKR since it will be rerun. Note any scale in tubing. Stand production string back in derrick. Lay down bottom 1800' of this pipe on a float.
3. PU 3-7/8" bit, float, 3-1/8" Drill Collars & 2-3/8" 4.7# N-80 EUE workstring. Rabbit & Strap pipe in the hole. RU powerswivel. Drill & Clean out with Gas & Foam sweeps to 7450', true PBTD 7520'. Note Drilling Mud in returns if any. Once cleaned up. TOOH with bit & collars. Use of N2 may be required to clean out fill.
5. PU 4-1/2" RBP & 4-1/2" Packer Combination on 2-3/8". TIH & set RBP @ 7150'. Roll hole with 2% KCl water from bottom. Set PKR above RBP & Test RBP & tubing to 3500 psi. Hold for 10 minutes. Release PKR, close pipe rams, & Pressure test entire Casing string to 500 psi for 10 minutes. If PT does not hold Pull above each DV tool & test below to 1500 psi. TOOH.
6. RU wireline. Run GR-CCL-CBL from 7150' to surface. No gaps. Run with 500-1000 psi over entire interval hole. Note and report all cement tops and quality of bond over Mesaverde Interval. Run GR-dual spaced neutron log across (6200' to 7150', 3700' to 5500', & 2700' to 3000') 3050' of log. Actual Perforations will be verified by Engineering prior to shooting!!
7. PU retrieving head & TIH on 2-3/8". Retrieve Model 'G' RBP @ 7150' & TOOH. PU 4-1/2" CIBP & PKR combination. Set CIBP at 5420'. (Use of CIBP will facilitate use of a cement retainer should one be required.) Load hole from Bottom. Set PKR and test BP to 3000 psi. Release PKR & test Casing from surface to 3000 psi. Hold and record for 15 minutes on chart. If casing integrity is not sound, identify leaks, & Engineering will recommend squeeze procedure & modify stimulation work. TOOH
8. Complete all squeeze cementing operations which will be determined at this time per Engineering design. WOC. Drill out Cement. Pressure test to 1200 psi.

Vaughn # 15
Meridian Oil Inc.
07/26/94

9. Perforate Mesaverde Interval with 3-1/8" HSC gun select fire 180 degree phasing 1 SPF JRC C-3130234 charges 10.5 gram 0.30" holes (0.30" is the Maximum Hole Size Preferred) bottom up as follows: (20 holes). Engineering may modify perforations based upon bond character.

5158', 5173', 5179', 5184', 5190', 5205', 5209', 5212', 5215', 5219',

5246', 5261', 5264', 5266', 5274', 5304', 5319', 5323', 5345', 5372'

10. PU 4-1/2" SAP/SPIT tool (4' spacing & MICV if necessary) on 2-3/8" N-80 tubing. Strap pipe in hole verifying previous tally. TIH below perms on clean pipe/cement and test RBP and SAP tool to 3500 psi. **MAX PRESSURE 4000 PSI**. Will utilize **2000 gallons acid**. Pull up and treat each perforation with 100 gallons 10 % HCl acid w/ 1 gal/1000 clay stabilizer, 2 gal/1000 inhibitor, & 2 gal/1000 iron control. Ensure each perforation is open. Use excess acid on last 2 settings (Previous workovers have not broken down these perforations). TOOH when complete. 4000

11. PU 2-7/8" N-80 buttress Frac String & PKR, w/profile nipple. TIH to ²⁵3400' +/- or good bonded pipe below DV tool. RU Frac Crew. Install 10,000 psi working pressure full opening surface valve. **MAXIMUM SURFACE TREATING PRESSURE WILL BE 5000 PSI** or higher determined based upon friction effects. Hold 500 psi on annulus. Stimulate Mesaverde per attached schedule w/ 100,000# 20/40 Arizona, 20,000# 20/40 curable resin coated sand in 30# X-link Gel at 35 BPM. SI well. test CIBP

11. SI well for 8 hrs or more for sand to set. Flow well back through choke manifold limiting fluid production to 20 BLPH. When possible, Release PKR & TOOH laying down 2-7/8" N-80. TIH w/ notch collar, float, and clean well out to CIBP @ 5420' with gas. Clean well up approximately 48 hrs. TOOH Laying down 2-3/8" N-80 tubing.

12. RU wireline. Run AFTER FRAC GAMMA RAY. RD wireline.

13. Prepare to run production tubing string as follows for Mesaverde: expendable check, one joint 2-3/8" tubing, 'F' nipple, 75 joints, **Model R-3 PKR** and remaining tubing. Land tubing @ 5350', ensure PKR is below DV tool of 3084' or failure by two joints. ND BOP, NU WH. Pump off expendable check and flow well up tubing obtain Mesaverde production gauge. RD & Release Rig to next location.

14. Operations will remanifold wellhead, and produce well for 30 days into EPNG pipeline. At end of 30 days, Run pressure bomb in SN and SI well. Leave well SI 7 days. Pull Bomb, and return Mesaverde to production until workover rig returns, 180 days of flow.

15. Move In, RU workover rig. Lay all lines and manifolds. Record flowing casing & tubing pressures. Blow casing and tubing down. Kill tubing with 20 bbls 2% KCl water. ND WH, NU BOP. TOOH with 2-3/8". TIH w/ 3-7/8" bit, 4-3-1/8" drill collars & drill CIBP clean well out with Nitrogen. TOOH & LD bit & collars.

16. TIH with final production tubing string for commingled production as follows: expendable check, one joint 2-3/8", F nipple, and remaining 2-3/8" tubing, space **Model R-3 PKR**- in string as previous below DV @ 3084'. Land tubing @ 7400'. ND BOP, NU WH. Pump off check w/ water & Nitrogen. Flow well up tubing verifying check pumped. RD release rig to next location.

17. Notify Marketing & government agencies that commingled production will occur in order to finalize allocation formula. At end of 90 days, the allocation formula will be submitted to NMOC for approval, **production will commence prior to actual allocation approval.**

Vaughn # 15
Meridian Oil Inc.
07/26/94

Approved:

PJB.
Drilling Superintendent

TEM

Recommended Vendors:

Stimulation(Acid,Fracturing,Nitrogen)
Radioactive Tagging
Cased Hole Services (Perforating, Logging)
Frac String (2-7/8")
Bridge Plugs, Packers, WAPP tool
Engineering

Western Company	327-6222
Protechnics, Intl	326-7133
Petro Wireline	326-6669
Cave Enterprises	325-3401
Baker Service Tools	325-0216
T. E. Mullins	326-9546-W
	325-9361-H

Tem