

submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

1. Type of Well
GAS

CONFIDENTIAL

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, 1780' FEL, Sec.22, T-25-N, R-3-W, NMPM

5. Lease Number
NM-04075
6. If Indian, All. or
Tribe Name
7. Unit Agreement Name
8. Well Name & Number
Arco Hill #1
9. API Well No.
30-039-23838
10. Field and Pool
W.Lindrith Gal/DK/
Blanco Mesaverde
11. County and State
Rio Arriba Co, NM

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

Type of Submission

☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment

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

13. Describe Proposed or Completed Operations

It is intended to plug back the subject well according to the attached procedure and wellbore diagram.

RECEIVED
JAN 31 1995
OIL CON. DIV.
BUREAU

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

Signed [Signature] (CAN9) Title Regulatory Affairs Date 6/8/95

(This space for Federal or State Office use)
APPROVED BY [Signature] Title Chief, Lands and Mineral Resources

CONDITION OF APPROVAL, if any: _____ Date JUN 26 1995

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,
Instructions on
Submit to Appropriate District O
State Lease - 4 Co
Fee Lease - 3 Co
☐ AMENDED REP

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-23838		Pool Code 72319	Pool Name Blanco Mesaverde
Property Code 6789	Property Name ARCO Hill		Well Number 1
OGRID No. 14538	Operator Name MERIDIAN OIL INC.		Elevation 7333'

10 Surface Location

UL or lot no. G	Section 22	Township 25N	Range 3W	Lot Ida	Feet from the 1650	North/South line North	Feet from the 1780	East/West line East	County Rio Ar
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	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 resurveyed, prepared from a plat dated 2-3-86 by K.L. Flinn.	17 OPERATOR CERTIFICATE I hereby certify that the information contained herein true and complete to the best of my knowledge and Signature Peggy Bradfield Printed Name Regulatory Affairs Title 6-12-95 Date
RECEIVED JAN 3 1995 OIL CONSERV. DIV. SANTA FE, NM	18 SURVEYOR CERTIFICATE I hereby certify that the well location shown on this was plotted from field notes of actual surveys made or under my supervision, and that the same is true correct to the best of my belief. 6-9-95 Date of Survey Signature and Title of Surveyor Certificate Number

Pertinent Data Sheet - Arco Hill #1

Location: 1650' FNL. 1780' FEL. Unit G. Section 22. T-25-N. R-03-W: Rio Arriba County, NM
Lat. 36-23-10. Long. 107-7-44' GITI

Current Field: Ojito Gallup/Dakota

Spud: 8/29/85

Completed: 1/28/86

Elevation: 7333' @ GL
7347' @ KB

TD/PBTD: 8402'/8313'

Casing Record:

<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight/Grade</u>	<u>Depth Set</u>	<u>Cmt Vol./Top</u>
12-1/4"	8-5/8"	24#/J-55	504'	350 sks/surface
7-7/8"	5-1/2"	17#/K-55 & L-80	8398'	2220 sks (3 stg.)/2665 (TS)
Stage Tool	5-1/2"		6003'	
Stage Tool	5-1/2"		3615'	

Tubing Record:

<u>Size</u>	<u>Weight/Grade</u>	<u>Depth Set/Jts.</u>	<u>Other</u>	<u>Depth</u>
2-7/8"	6.5#/J-55	8186' (254 jts)		
2-7/8"			Seating Nipple	8153'

Formation Tops:

Ojo Alamo	3440'	Lower Mancos	7725'
Kirtland	3555'	Greenhorn	7905'
Fruitland	3665'	Graneros	7975'
Lewis	3880'	Dakota "A"	8010'
Cliffhouse	5400'	Dakota "B"	8070'
Menefee	5560'	Dakota "C"	8150'
Point Lookout	5910'	Dakota "D"	8245'
Upper Mancos	6090'	Morrison	8260'
Gallup	6980'		

Logging Record: DIFL/GR, CDL/CN/GR

Present Completion: Gallup
Perforations: 7090' - 7366' (selective)
Dakota
Perforations: 8156' - 8190' (selective)

Arco Hill #1
Unit G. Sect. 22. T25N. R03W
Mesaverde Recompletion

Inspect location and install and/or test rig anchors. Install 1 -400 bbl rig tank.
Comply with all BLM, NMOCD, Forestry, and MOI rules and regulations. **BE SAFE**

*******All vendors/service companies on location will be responsible for protection of the environment, any questions call _____ at ____-____.*******

1.0 Load Hole with 2% KCl and Pull Production Tubing

- 1.1 Hold Safety Meeting. MIRU. Place fire and safety equipment in easily accessible locations. NU relief line and bleed line to laydown flow tank. Obtain and record all wellhead pressures.
- 1.2 Blow well down and load hole with 2% KCl water. ND WH. NU BOP. PU one joint of 2-7/8" tubing and drop below perforations. Circulate hole clean with 2% KCl water. PBTD is 8.313'.
- 1.3 TOH with 8.186' of 2-7/8" 6.5# tubing. Visually inspect and tally tubing on TOH. Lay down any bad joints and leave approximately $\pm 6,300'$ (100 stands) in the derrick for the Mesaverde recompletion.
- 1.4 MIRU electric line unit. RIH with 5-1/2" 17# gauge ring to 7,000' (90' above existing Gallup perms). POOH. RIH with 5-1/2" cement retainer and set same at 7,000'. POOH and RD electric line unit.

2.0 Abandon Existing Gallup/Dakota Completion

- 2.1 PU retainer stinger and TIH on 2-7/8" tubing. Sting into retainer at 7,000' and test backside to 1,000 psi surface pressure.
- 2.2 MIRU cement company. Test surface lines to 3,000 psi. Establish injection rate into Gallup/Dakota perms.
- 2.3 Perform running squeeze on perforations with 200 sks of neat cement + additives. Sting out and balance 10' of cement on top of retainer. Pull above plug top and reverse out two tubing volumes. TOH and lay down stinger. WOC.

3.0 Run Cement Bond Log and Evaluate Cement Coverage

- 3.1 Top off casing with 2% KCl water and test casing and cement retainer to 3,000 psi surface pressure (DO NOT exceed 4,250 psi = 80% of burst rating of 5-1/2" 17# K-55 csg). If leak is detected, contact production engineer for procedure to repair casing.
- 3.2 RU electric line unit. Run GR/CBL/CCL inside 5-1/2" liner from PBTD to 3,000' with 500 psi surface pressure. Top of cement across Mesaverde must be at least 5,372' (50' above top shot) to continue. Top of cement across Ojo Alamo must be at least $\pm 3,440'$ to continue. If remedial cementing is necessary, contact production engineer for squeeze procedure.
- 3.3 POOH and RD electric line unit. Send copy of bond log to production engineer and drilling superintendent for evaluation.

4.0 Perforate and Stimulate Point Lookout

- 4.1 TIH w/ 2-7/8" tubing and spot 7.5% HCl acid across the Point Lookout interval. TOH w/ tubing.
- 4.2 RU electric line unit. RIH and select-fire perforate the following intervals from top down w/ 3-1/8" HSC -3125-306, 12 gram Owen charges 0.31" holes w/ 12.02 " penetration, 2 spf, 90° phasing:

5,846' - 6,120'. (192 holes)

Actual select fire settings will be provided to the perforators prior to moving on the well.

POOH and RD electric line unit.

- 4.3 TIH w/ one stand 2-7/8" tubing and 5-1/2" packer. RU stimulation company and prepare to breakdown and balloff with acid. Hold safety meeting and test surface treating lines to 4,000 psi. Pump 3,000 gals. of 7.5% HCl Acid @ 8-10 bbl/min. Drop a total of 300, 7/8" diameter, 1.3 specific gravity RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job. **Maximum treating pressure is 3,000 psi.**
- 4.4 RD stimulation company and TIH w/ 2-7/8" tubing and knock balls off perforations. Pull up hole and set packer on the end of one stand.

- 4.5 RU stimulation company. Hold safety meeting and test surface treating lines to 4,000 psi. **Maximum treating pressure is 3,000 psi.** Fracture stimulate the Lower Point Lookout interval according to attached procedure. Immediately upon completion of the stimulation, shut-in well to keep in static condition. TOH w/ tubing and packer.
- 4.6 RU electric line unit. RIH with 5-1/2" RBP and set same at 5,830'. Pressure test bridge plug to 3,000 psi for 15 minutes. POOH and RD electric line unit.

5.0 Perforate and Stimulate Menefee

- 5.1 TIH w/ 2-7/8" tubing and spot 7.5% HCl acid across the Menefee interval. TOH w/ tubing.
- 5.2 RU electric line unit. RIH and select-fire perforate the following intervals from top down w/ 3-1/8" HSC -3125-306. 12 gram Owen charges 0.31" holes w/ 12.02 " penetration. 2 spf, 90° phasing:

5,584' - 5,796'. (144 holes)

POOH and RD electric line unit.

- 5.3 TIH w/ one stand 2-7/8" tubing and 5-1/2" packer. RU stimulation company and prepare to breakdown and balloff with acid. Hold safety meeting and test surface treating lines to 4,000 psi. Pump 2,500 gals. of 7.5% HCl Acid @ 8-10 bbl/min. Drop a total of 220, 7/8" diameter, 1.3 specific gravity RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job. **Maximum treating pressure is 3,000 psi.**
- 5.4 RD stimulation company and TIH w/ 2-7/8" tubing and knock balls off perforations. Pull up hole and set packer on the end of one stand.
- 5.5 RU stimulation company. Hold safety meeting and test surface treating lines to 4,000 psi. **Maximum treating pressure is 3,000 psi.** Fracture stimulate the Lower Point Lookout interval according to attached procedure. Immediately upon completion of the stimulation, shut-in well to keep in static condition. TOH w/ tubing and packer.
- 5.6 RU electric line unit. RIH with 5-1/2" RBP and set same at 5,570'. Pressure test bridge plug to 3,000 psi for 15 minutes. POOH and RD electric line unit.

6.0 Perforate and Stimulate Cliffhouse

6.1 TIH w/ 2-7/8" tubing and spot 7.5% HCl acid across the Cliffhouse interval. TOH w/ tubing.

6.2 RU electric line unit. RIH and select-fire perforate the following intervals from top down w/ 3-1/8" HSC -3125-306. 12 gram Owen charges 0.31" holes w/ 12.02 " penetration. 2 spf. 90° phasing:

5,422' - 5,560' selective (174 holes)

POOH and RD electric line unit.

6.3 TIH w/ one stand 2-7/8" tubing and packer. RU stimulation company and prepare to breakdown and balloff with acid. Hold safety meeting and test surface treating lines to 4,000 psi. Pump 3,000 gals. of 7.5% HCl Acid @ 8-10 bbl/min. Drop a total of 260, 7/8" diameter, 1.3 specific gravity RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job. **Maximum treating pressure is 3,000 psi.**

6.4 RD stimulation company and TIH w/ 2-7/8" tubing and knock balls off perforations. Pull up hole and set packer on the end of one stand.

6.5 RU stimulation company. Hold safety meeting and test surface treating lines to 4,000 psi. **Maximum treating pressure is 3,000 psi.** Fracture stimulate the Menefee/Cliffhouse interval according to attached procedure. Immediately upon completion of the stimulation, flow back well until it flow rate is low enough to come out of the hole. TOH w/ tubing and packer.

7.0 Clean Out, Test Intervals, and Land Tubing

7.1 Stage in the hole with retrieving head and 2-7/8" tubing and clean out to RBP @ 5,570' with air mist then pull above perforations and flow naturally. Continue this cycle until sand production and water production are minimal. **Obtain flow gauge.** Latch on to the RBP @ 5,570', TOH, and LD RBP.

7.2 Stage in the hole with retrieving head and 2-7/8" tubing and clean out to RBP @ 5,830' with air mist then pull above perforations and flow naturally. Continue this

Arco Hill #1
Recompletion Procedure
Page 5

cycle until sand production and water production are minimal. **Obtain flow gauge.** Latch on to the RBP @ 5.830' TOH. and LD RBP.

- 7.3 PU and TIH with one joint 2-7/8" tubing, seating nipple and expendable check valve. (2.313" ID) and 2-7/8" production tubing for the MV. Rabbit production tubing and record final tubing tally for well file. Blow check and clean out to PBTD @ 6.990'. **Obtain final gauge of entire Mesaverde interval.** ND BOP and NU WH. Rig down and release rig.

Approved: _____
Drilling Superintendent

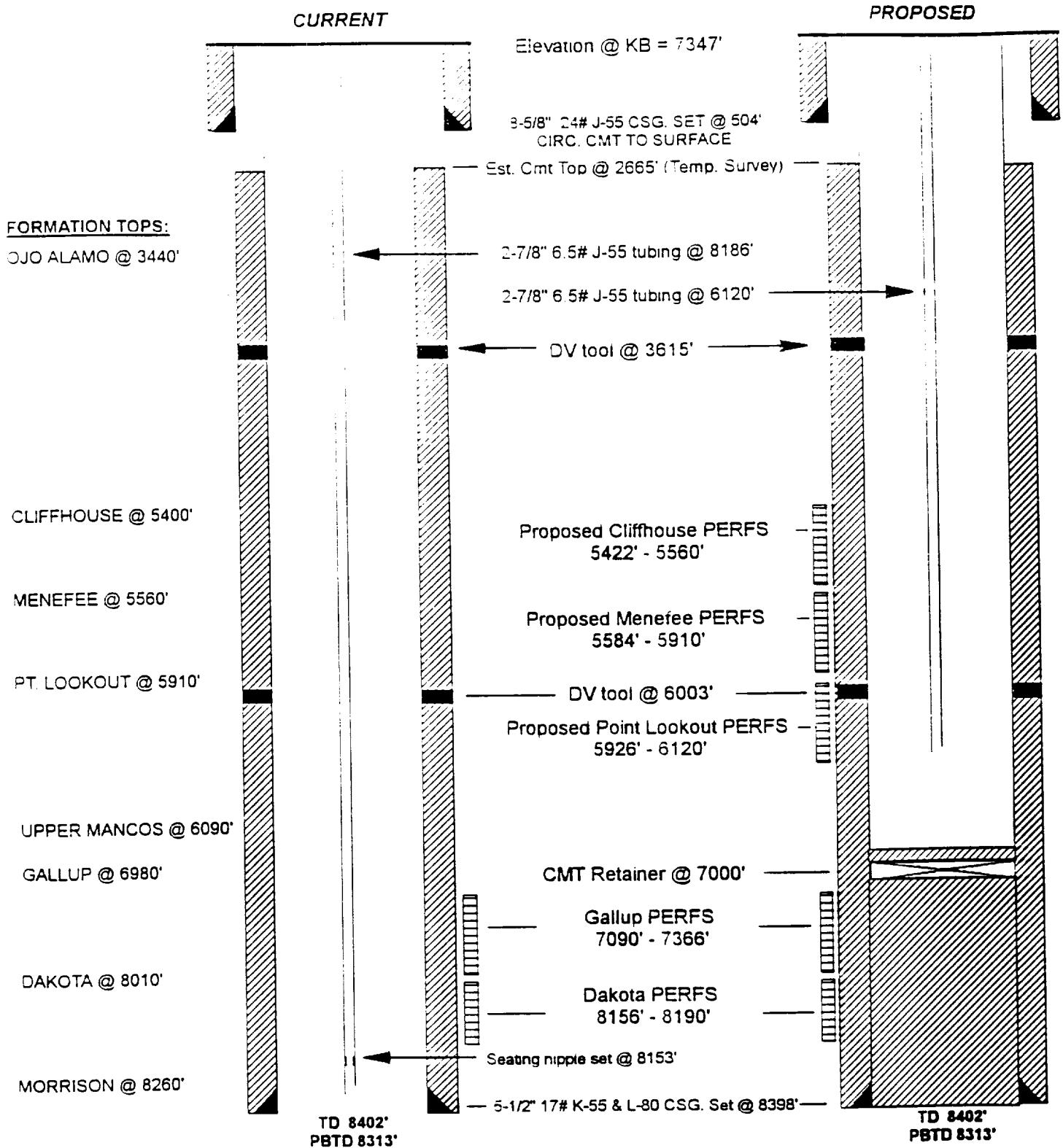
Suggested Vendors/Contacts:

Water haul:	Chief Transport	325-2396
Wireline:	Blue Jet	325-5584
Tubing:	MOI, District Tools	326-9826
Stimulation:	DS	325-5096
Packer/RBP:	Mountain States	326-5141
Rig Supervisor:	_____	_____
Production Oper.:	Bruce Voiles	326-9571
Engineering:	Curtis Newstrom	326-9710 w 327-0722 h

Arco Hill #1

Unit G. Sec. 22, T25N, R03W, Rio Arriba County, NM
Lat. 36 - 23 - 10 Long. 107 - 7 - 44

Mesaverde Recompletion



TD 8402'
PBD 8313'

