

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

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'FSL, 990'FWL, Sec.35, T-31-N, R-10-W, NMPM

5. Lease Number  
NM-0607

6. If Indian, All. or  
Tribe Name

7. Unit Agreement Name

8. Well Name & Number  
Atlantic C #1

9. API Well No.  
30-045-10075

10. Field and Pool  
Blanco Mesaverde

11. County and State  
San Juan 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 - Menefee pay add

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut off

☐ Conversion to Injection

13. Describe Proposed or Completed Operations

It is intended to add the by passed Menefee zone to the already producing Mesaverde pay according to the attached procedure and wellbore diagram.

RECEIVED  
OCT 17 1994  
OIL CON. DIV.  
DIST. 3

OCT 13 1994  
OCT 13 1994

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

Signed [Signature] (JK5) Title Regulatory Affairs Date 10/13/94

(This space for Federal or State Office use)

APPROVED BY \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

CONDITION OF APPROVAL, if any:

APPROVED

OCT 18 1994

DISTRICT MANAGER

**Atlantic C #1 - Mesaverde**  
**Menefee Payadd**  
Lat-Long by GITI: 36.852295 - 107.857269  
SW/4 Section 35, T31N-R10W  
October 3, 1994

1. Hold safety meeting. MIRU. Install safety equipment and fire extinguishers in strategic locations. Install 6x400 bbl frac tanks and 1x400 bbl rig tank. Fill each frac tank with 5#'s of biocide and a total of 2253 bbls filtered (25 micron) 2% KCl water.
2. ND WH, NU BOP. TOOH with 2-3/8" 4.7# J-55 tubing set at 5698'. Replace bad tubing as needed.
3. Pick up 3-7/8" bit and 4-1/2" 10.5# casing scraper and TIH. Make scraper run to PBTD of 5767'. TOOH. Lay down casing scraper and bit.
4. TIH with tubing and 4-1/2" RBP. Set RBP @ 4700'. Load hole with fresh water. Pressure test the casing to 700 psi for 15 minutes. If casing fails, contact engineering for changes in procedure. Release RBP, TIH to 5310'. Set RBP @ 5310'. TOOH.
5. RU wireline with full lubricator. Hold safety meeting. Run CCL-GR correlation strip from PBTD to 4900'. Dump 10' of sand on top of RBP with dump bailer. Perforate the following intervals underbalanced at 0.3" diameter holes utilizing 3-1/8" HSC guns: (15 holes total)

5028	5198
5050	5206
5060	5212
5068	5220
5102	5248
5110	5256
5120	5266
5192	

Inspect guns to ensure all perforations fired.

6. PU 5000' of 2-7/8" (N-80 butress or turned down collars) fracstring. TIH with fracstring and 4-1/2" packer. Set packer @ 4990'. Balloff Menefee perforations with 1500 gallons of 15% HCl acid and 30 RCN balls. Maximum allowable treating pressure is 5000 psi. TOOH.
7. TIH with an "F" nipple on the bottom of a 5-1/2" X 2-7/8" frac liner and set across the Cliff House formation from 4730' to 4950' (total of 220'). Run the frac liner (two Baker hydraulically set packers) on 2-7/8" fracstring. Drop blanking plug and set packers. Attempt to load annulus through casing valves and pressure test tubing to 5000 psi. Retrieve blanking plug with slick line. SI well for 24 hours with an Amerada pressure bomb set @ 5147'. TOOH with pressure bomb. Have BHP information sent to engineering within 24 hours.
8. Install 5000# frac valve on top of the 2-7/8" fracstring.
9. RU Western. Hold safety meeting. Test surface lines to 6000 psi. **Maximum surface treating pressure is 5000 psi.** Fracture Menefee according to attached procedure. Shut in well immediately after completion of the stimulation until pressure falls to zero. RD frac company.
10. Remove frac valve. Release packers and TOH. Lay down packers.

11. SI well for 6 hours after stimulation then flow-back naturally as long as possible. When either flow has ceased or returns have reached a level allowing re-entry of wellbore, TIH with 2-7/8" fracsting with notched collar. CO to PBTD of 5310'. PU above the Mesaverde perforations and flow the well naturally, making short trips for clean up when necessary.
12. When returns have diminished (both sand and water), TOOH laying down 2-7/8" fracsting. PU 4-1/2" packer and TIH with 2-3/8" tubing. Set packer @ 4990'. Flow test the Menefee for 3 hours. Report the results to engineering before proceeding. Release packer and TOOH.
13. PU retrieving head and TIH. Clean out to PBTD. Release RBP @ 5310' and TOOH.
14. TIH with tubing and clean out to PBTD of 5767'. When water rates and sand production have diminished, TOOH.
15. TIH with one joint of 2-3/8" tubing w expendable check, an F-nipple, then the remaining 2-3/8" tubing. CO to COTD. Land tubing 5698'.
16. ND BOP's, NU WH. Obtain final pitot. RDMO. Return well to production.

Approval:

\_\_\_\_\_  
Drilling Superintendent

**Vendors:**

Stimulation - Western (327-6222)  
Perforating - Blue Jet (325-5584)

**Stimulation Procedure  
Meridian Oil Inc.**

General Information		Well Configuration		Formation and Stimulation Data	
Well Name:	Atlantic C #1	Casing:	2-7/8" 6.4# Tubing from 0 - 4990'	Max Treating Pressure	5000 psi
Location:	SW/4 Section 35, T31N-R10W	Liner:		Frac Gradient:	0.7 psi/ft
Formation:	Menefee	Capacity:	0.0058 bbl/ft	BH Temp:	150 deg. F
Vendors		PBTD	5310 ft	Vol. to: (gals)	
Stimulation:	Western (327-6222)	Top Perf:	5028 ft	PBTD	1,291
Tagging:		Bot Perf:	5266 ft	Top Per:	1,223
		Midpoint:	5147 ft	^20'	1,218
Fluid:	30# Linear Gel	Perforations		Antic. Treating Rate:	25 BPM
Note:		1 spf	0.3 " holes	Antic. BH Treating Pres:	3,603 psi
		15 holes	12 " penetration	Antic. Surf Treating Pres:	4,874 psi
				Percent Pad:	10%
				Net Pay:	95 ft
				lb prop/net ft pay:	1,263 lb/ft
				Job Duration:	91.0 min

**Stimulation Schedule**

Sand Data						Fluid Data				Rate and Time Data			Comments
Tag	Stage	Sand	Conc	Stage	Cum	Stage	Cum	Stage	Cum	Slurry	Stage	Cum	
		Mesh	ppg	lbs	lbs	Fluid	Fluid	Slurry	Slurry	Rate	Time	Time	
	Pad	N/A	0.0	0	0	8,889	8,889	8,889	8,889	25.0	8.5	8.5	
no	2	20/40	1.0	40,000	30,000	40,000	48,889	41,824	50,713	25.0	39.8	48.3	
no	3	20/40	2.0	80,000	110,000	40,000	88,889	43,648	94,361	25.0	41.6	89.9	
	Flush	N/A	0.0	0	110,000	1,218	90,107	1,218	95,579	25.0	1.2	91.0	
Total					lb/ft	Total	Total	Total	Total	Ave.	Total		
120,000					1.263	90,107	95,579			25.0	91.0		

**Volumes and Additives**

**Equipment**

VOLUMES AND ACTIVITIES							Tanks: 6 x 400 bbl frac tanks(supplied by MOI).								
Water Volume=		90,107		treat +		4,505		excess =		94,612 gallons		(MOI)		Filled w/ 2,253 useable bbls of filtered 2% KCl water	
Water Volume=		2,145		treat +		107		excess =		2,253 bbls		(MOI)			
Fluid Volume:		2,253 bbl		designed treating volume										Mix on the fly equipment.	
20/40 Arizona Sand:		120,000 lbs												Mountain Mover.	
Fluid:		30# Linear Guar Gel		designed for 3 hour break @ 145F										Blender.	
		Filtered 2% KCl water		(supplied by MOI)										Fluid Pumps as required.	
Radioactive Tagging															
None															

**Comments and Special Instructions**

**MAXIMUM ALLOWABLE TREATING PRESSURE IS 5000 PSI.**

Hold safety meeting with everyone on location before pressure testing surface lines.

Pressure test surface lines to 6000 psi (1000 over max allowable but less than working pressure).

Adjust flush rate and volume according to potential for well to be on vacuum

Production Engineer: Jay Knaebel

**Stimulation Procedure  
Meridian Oil Inc.**

General Information			Well Configuration			Formation and Stimulation Data		
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Tagging:			Bot Perf:	5266 ft	Top Per:	1,223	Antic. Surf Treating Pres:	4,874 psi
			Midpoint:	5147 ft	^ -20' :	1,218	Percent Pad:	10%
Fluid:	30# Linear Gel		Perforations			Net Pay:	95 ft	
Note:			1 spf	0.3 " holes		Lb prop/net ft pay:	1,263 lb/ft	
			15 holes	12 " penetration		Job Duration:	91.0 min	

**Stimulation Schedule**

Sand Data						Fluid Data				Rate and Time Data			Comments
Tag	Stage	Sand	Conc	Stage	Cum	Stage	Cum	Stage	Cum	Slurry	Stage	Cum	
	Pad	N/A	0.0	0	0	Fluid	Fluid	Slurry	Slurry	Rate	Time	Time	
	Mesh	ppg	lbs	lbs	lbs	gals	gals	gals	gals	bpm	min	min	
no	2	20/40	1.0	40,000	30,000	40,000	48,889	41,824	50,713	25.0	39.8	48.3	
no	3	20/40	2.0	80,000	110,000	40,000	88,889	43,648	94,361	25.0	41.6	89.9	
	Flush	N/A	0.0	0	110,000	1,218	90,107	1,218	95,579	25.0	1.2	91.0	
					Total	Total	Total	Total		Ave.	Total		
					120,000	1,263	90,107	95,579		25.0	91.0		

**Volumes and Additives**

Water Volume=	90,107	treat +	4,505	excess =	94,612 gallons (MOI)
Water Volume=	2,145	treat +	107	excess =	2,253 bbls (MOI)
Fluid Volume:	2,253 bbl designed treating volume				
20/40 Arizona Sand:	120,000 lbs				
Fluid:	30# Linear Guar Gel designed for 3 hour break @ 145F				
	Filtered 2% KCl water (supplied by MOI)				

**Equipment**

Tanks:	6	x 400 bbl frac tanks (supplied by MOI).
Filled w/	2,253	useable bbls of filtered 2% KCl water
Mix on the fly equipment.		
Mountain Mover.		
Blender.		
Fluid Pumps as required.		

**Radioactive Tagging**

None

**Comments and Special Instructions**

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Production Engineer: Jay Knaebel

Atlantic C #1  
SW 1/4 Sec. 35, T31N, R10W  
San Juan County, NM

