

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.22, T-31-N, R-10-W, NMPM

5. Lease Number

NM-013688

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

8. Well Name & Number
Atlantic #6

9. API Well No.
30-045-10486

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 - 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 pay to the existing Menefee production per the attached procedure and wellbore diagram.

RECEIVED
OCT 26 1994
OIL CON. DIV.
DIST. 3

OIL CON. DIV.
DIST. 3

OCT 11 PM 3:13

RECEIVED
OCT 11 PM 3:13

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

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

(This space for Federal or State Office use)

APPROVED BY _____ Title _____ Date _____

CONDITION OF APPROVAL, if any:

APPROVED

OCT 12 1994

DISTRICT MANAGER

Pertinent Data Sheet

Location: 1650' FSL, 990' FWL, Section 22, T31N, R10W, San Juan County, New Mexico

Field: Blanco Mesaverde

Elevation: 6246' GL

TD: 5608'

Completed: 10/17/71

Casing Record:

<u>Hole Size</u>	<u>Csg Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>Top/Cement</u>
	9 5/8"	25.4#	170'	125 sxs	Surface/Circ
8 3/4"	7"	23#	4648'	300 sxs	2835' (Temp. Survey)
6 1/4"	4 1/2"	10.5#	5621'	150 sxs	3710' (Temp. Survey)

Tubing Record:

<u>Tbg Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>
2 3/8"	4.7# J-55	5578'

Formation Tops:

Ojo Alamo	2214'
Kirtland	2273'
Fruitland	2606'
Pictured Cliffs	3008'
Lewis	3068'
Cliff House	4702'
Menefee	4812'
Point Lookout	5220'

Logging Record:

ES, GRN, Density, Ind.

Stimulation:

9/21/71.

Perf 4760'-4818', Frac with 29,790 gal water and 28,000# sand .

Perf 5234'-5407', Frac with 27,560 gal water and 31,000# sand .

Perf 5436'-5512', Frac with 30,160 gal water and 34,000# sand .

Workover History:

9/16/71 - 9/20/91. Cut off stuck tubing at 4798', pulled tubing and set cement retainer at 4552', squeezed open hole with 150 sks. cement. Perf squeeze hole at 2272', set cement retainer at 2213', squeezed perf with 125 sks. cement. Sidetracked from 4662' to 5621', ran 172 joints 4 1/2", 10.5#, K-55 production casing, 5909' set at 5621' with 125 sks. cement.

Transporter:

EPNG

Atlantic #6 - Mesaverde
Menefee Payadd
Lat-Long by GITI: 36.881210 - 107.875381
SW/4 Section 22, T31N-R10W
October 5, 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 2252 bbls filtered (25 micron) 2% KCl water.
2. ND WH, NU BOP. TOOH with 2-3/8" 4.7# J-55 tubing set at 5578'. 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 5608'. TOOH. Lay down casing scraper and bit.
4. TIH with tubing and 4-1/2" RBP. Set RBP @ 4600'. 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 5228'. Set RBP @ 5228'. TOOH.
5. RU wireline with full lubricator. Hold safety meeting. Run CCL-GR correlation strip from PBTD (5228') to 4760'. Dump 10' of sand on top of RBP with dump bailer. Perforate the following intervals under balanced at 0.3" diameter holes utilizing 3-1/8" HSC guns: (16 holes total)

4860	5009
4870	5036
4898	5058
4924	5109
4935	5122
4948	5158
4978	5178
4989	5210

Inspect guns to ensure all perforations fired.

6. PU 5230' of 2-7/8" (N-80 butress or turned down collars) fracstring. TIH to 5218' and set packer. Pressure test tubing and BP to 3600 psi. Release packer and PUH to 4836'. Set packer @ 4836'. Balloff Menefee perforations with 1500 gallons of 15% HCl acid and 32 RCN balls. Maximum allowable treating pressure is 5000 psi. Release packer, TIH and knock balls off. TOOH.
7. TIH with an "F" nipple on the bottom of a 4-1/2" X 2-7/8" frac liner and set across the Cliff House formation from 4745' to 4845' (total of 100'). 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 @ 5035'. 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 TOOH. 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 2-3/8" fracstring with notched collar. CO to PBTD of 5228'. 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 2-3/8" fracstring. PU 4-1/2" packer and TIH with 2-3/8" tubing. Set packer @ 4836'. 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 @ 5228' and TOOH.
14. TIH with tubing and clean out to PBTD of 5608'. 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 PBTD. Land tubing at 5578'.
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)
Engineering - Mary Ellen Lutey (599-4052)
 or home (325-9387)

**Stimulation Procedure
Meridian Oil Inc.**

General Information			Well Configuration			Formation and Stimulation Data		
Well Name:	Atlantic #6		Casing:	2-7/8" 6.4# Tubing from 0 - 4836'		Max Treating Pressure	5000 psi	
Location:	SW/4 Section 22, T31N-R10W		Liner:			Frac Gradient:	0.7 psi/ft	
Formation:	Menefee		Capacity:	0.0058 bbl/ft		BH Temp:	150 deg. F	
Vendors			PBTD	5228 ft	Vol. to: (gals)	Antic. Treating Rate:	25 BPM	
Stimulation:	Western (327-6222)		Top Perf:	4860 ft	PBTD	1,271	Antic. BH Treating Pres:	3,525 psi
Tagging:			Bot Perf:	5210 ft	Top Per:	1,182	Antic. Surf Treating Pres:	4,645 psi
			Midpoint:	5035 ft	^-20' :	1,177	Percent Pad:	10%
Fluid:	30# Linear Gel		<u>Perforations</u>			Net Pay:	49 ft	
Note:			1 spf 0.3 " holes			lb prop/net ft pay:	2,449 lb/ft	
			16 holes 12 " penetration			Job Duration:	91.0 min	

Stimulation Schedule

<u>Sand Data</u>						<u>Fluid Data</u>				<u>Rate and Time Data</u>			<u>Comments</u>
Tag	Stage	Mesh	Sand Conc	Stage Sand	Cum Sand	Stage Fluid	Cum Fluid	Stage Slurry	Cum Slurry	Slurry Rate	Stage Time	Cum 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	40,000	40,000	48,889	41,824	50,713	25.0	39.8	48.3	
no	3	20/40	2.0	80,000	120,000	40,000	88,889	43,648	94,361	25.0	41.6	89.9	
	Flush	N/A	0.0	0	120,000	1,177	90,066	1,177	95,538	25.0	1.1	91.0	
					Total	lb/ft		Total	Total	Ave.	Total		
					120,000	2,449		90,066	95,538	25.0	91.0		

Volumes and Additives

Water Volume=	90,066	treat +	4,503	excess =	94,569 gallons	(MOI)
Water Volume=	2,144	treat +	107	excess =	2,252 bbls	(MOI)
Fluid Volume:	2,252 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/	2,252	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

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: Mary Ellen Lutey

ATLANTIC #6

SW/4, SEC 22, T31N, R10W, SAN JUAN COUNTY, NM

AS OF 10/6/94

COMPLETED 7/13/53
SIDETRACKED 9/17/71
STIMULATED 9/21/71

OJO ALAMO @ 2214'

KIRTLAND @ 2273'

FRUITLAND @ 2606'

PICTURED CLIFFS @ 3008'

LEWIS @ 3068'

CLIFF HOUSE @ 4702'

MENEFEE @ 4812'

PT. LOOKOUT @ 5220'

9-5/8" 25.4# SW CSG SET @ 170'
CIRC. CEMENT TO SURFACE

TOC @ 1504'
CALC W/ 70% EFFICIENCY

SQ @ 2272' W/125 SX CMT

2-3/8" 4.7# J-55 TBG SET @ 5578'

TOC @ 2835' (TEMP. SURVEY)

TOC @ 3710'

7" 23# J-55 CSG SET @ 4648'
CMT WITH 300 SX

PERF 4760'-4818'
FRAC WITH 29,790 GAL
WATER & 28,000# SAND

PERF 5234'-5407'
FRAC WITH 27,560 GAL
WATER & 31,000# SAND

PERF 5436'-5512'
FRAC WITH 30,160 GAL
WATER & 34,000# SAND

4-1/2" 10.5# KS CSG SET @ 5621'
CMT WITH 125 SX

TD 5608'
PBD 5621'