

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
P.O. 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

Form C-104
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
5 Copies

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

☐ AMMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator Name and Address MERIDIAN OIL, INC. PO Box 4289 Farmington, NM 87499 DHC-1009		² OGRID Number 14538
		³ Reason for Filing Code CH/01-01-96
⁴ API Number 30-045-1078900	⁵ Pool Name BLANCO MESAVERDE (PRORATED GAS)	⁶ Pool Code 72319
⁷ Property Code 10483	⁸ Property Name EAST	⁹ Well Number #1

II. ¹⁰Surface Location

UI or lot no. C	Section 14	Township 031N	Range 012W	Lot.Idn	Feet from the 990	North/South Line N	Feet from the 1650	East/West Line W	County SAN JUAN
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¹¹Bottom Hole Location

UI or lot no.	Section	Township	Range	Lot.Idn	Feet from the	North/South Line	Feet from the	East/West Line	County
¹² Lse Code	¹³ Producing Method Code	¹⁴ Gas Connection Date	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ POD	²¹ O/G	²² POD ULSTR Location and Description
25244	WILLIAMS FIELD SERVICES CO SALT LAKE CITY, UT 84158		G	C-14-T031N-R012W
9018	GIANT INDUSTRIES, INC. 5764 U.S. HWY. 64 FARMINGTON, NM 87401	2379010	O	C-14-T031N-R012W

IV. Produced Water

²³ POD	²⁴ POD ULSTR Location and Description
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V. Well Completion Data

²⁵ Spud Date	²⁶ Ready Date	²⁷ TD	²⁸ PBTD	²⁹ Perforations
³⁰ Hole Size	³¹ Casing & Tubing Size	³² Depth Set	³³ Sacks Cement	

VI. Well Test Data

³⁴ Date New Oil	³⁵ Gas Delivery Date	³⁶ Test Date	³⁷ Test Length	³⁸ Tbg. Pressure	³⁹ Csg. Pressure
⁴⁰ Choke Size	⁴¹ Oil	⁴² Water	⁴³ Gas	⁴⁴ AOF	⁴⁵ Test Method

⁴⁶ I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Dolores Diaz</i>		OIL CONSERVATION DIVISION Approved by: <i>378</i> SUPERVISOR DISTRICT #3	
Printed Name: DOLORES DIAZ		Title:	
Title: PRODUCTION ASSISTANT		Approved Date: JAN 12 1996	
Date: 1 JANUARY, 1996	Phone: (505) 326-9700		
⁴⁷ If this is a change of operator fill in the OGRID number and name of the previous operator 21281 SOUTHLAND ROYALTY COMPANY			
Previous Operator Signature Signature: <i>Dolores Diaz</i>		Printed Name DOLORES DIAZ	Title PRODUCTION ASSISTANT
		Date 1 JANUARY, 1996	

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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BLM

Sundry Notices and Reports on Wells

97 OCT 27 PM 2:42

1. Type of Well

GAS

070 FARMINGTON, NM

2. Name of Operator

**BURLINGTON
RESOURCES**

OIL & GAS COMPANY

3. Address & Phone No. of Operator

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

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

990' FNL, 1650' FWL, Sec. 14, T-31-N, R-12-W, NMPM

5. Lease Number

SF-077652

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

8. Well Name & Number
East #1

9. API Well No.

30-045-10789

10. Field and Pool
Blanco Mesaverde11. 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 - Pay add - abandon lower Mesaverde

13. Describe Proposed or Completed Operations

It is intended to add the Lewis formation to the subject well according to the attached procedure and wellbore diagram. The lower Mesaverde formation will be abandoned.

RECEIVED
NOV - 3 1997

OIL CON. DIV.
DIST. 3

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

Signed Joey Brannick (JLDopps) Title Regulatory Administrator Date 10/22/97

(This space for Federal or State Office use)

APPROVED BY /s/ Duane W. Spencer

Title _____

Date

OCT 30 1997

CONDITION OF APPROVAL, if any:

NMOC

East #1

Lewis Pay Add Procedure

Unit C, Section 14, T31N, R12W

Lat: 36° 54.1882 min./Long: 108° 4.07958 min.

Abandon the lower Mesaverde openhole and complete the Lewis. Due to poor cement coverage and two casing strings covering the Lewis, the 4-1/2" casing will be pulled. The Lewis will be sand fracture stimulated in a single 300,000 lbs 20/40 sand stage using a 60Q 30 lb crosslinked gel for transport.

1. Inspect location and test rig anchors, if necessary. Comply with all NMOC, BLM, Forestry & BR rules and regulations. Dig flowback pit or set flowback tank. Haul to location an inspected 4350', 2-3/8" production string, a 4290', 3-1/2" N-80 frac string and 5, 400 bbl frac tanks.
2. Fill Tank #1 with 400 bbls 2% KCL water. Blow well down and kill with 2% KCL water as necessary. ND WH and NU BOP with flow tee and stripping head. Test operation of rams. NU blooie line and 2-7/8" relief line.
3. TOOH with 2-3/8" Mesaverde production string at 5144' and LD. Send string in to be inspected and salvaged, if possible.
4. RU wireline company. Run a freepoint survey on 4-1/2" casing. Run a 4-1/2" gauge to freepoint. RIH with chemical cutter and cut 4-1/2" casing at freepoint determined by survey. Make sure cutting point is below 4350'. RD wireline company. TOOH with 4-1/2" casing and LD.
5. PU and RIH with a 6-1/4" bit, 7" casing scraper on the inspected 2-3/8" production string hauled to location. Clean out to top of 4-1/2" casing with air. TOOH.
6. RU wireline and set 7" RBP just above 4-1/2 casing. Load hole with 2% KCL water. Run GR-CBL-CCL from PBTD to 500'. Run GR-DSNL from PBTD to 3500'. Top of good cement must be above 3400' to continue. Evaluate CBL and send log copies to production and drilling. Contact Jennifer Dobson at ext. 4026 if squeeze procedure is required.
7. Pressure test 7" casing to 1000 psi. If test fails, PU 7" RBP retrieving head, packer and 2-3/8" tubing. Retrieve RBP in hole and search for casing leaks. If casing does not pass pressure test, contact Jennifer Dobson at ext. 4026.

Assuming 7" Casing Passes Pressure Test:

8. Fill Tank #2, Tank #3, Tank #4 and Tank #5 with 1328 bbls 2% KCL water. If necessary, filter all water to 25 microns. These four tanks are for the frac gel fluid. Add water to Tank #1 for the breakdown as necessary.
9. RIH with 7" RBP retrieving head and 2-3/8" tubing. Release RBP and TOOH. PU and RIH with 7" CR on the 2-3/8" tubing. Set CR at 4350'. PT tubing to 2000 psi using the CR stinger configuration. RU cementing contractor. Establish an injection rate through the CR. Squeeze the lower Mesaverde with 200 sx class B cement (100% excess). Sting out of CR, spot 2 sx cement on CR and reverse circulate tubing clean. RD cementing contractor.

East #1

1998 Priority Lewis Recompletion

Lat: 36° 54.1882 min./Long: 108° 4.07958 min.

10. Spot 1100 gals 15% HCL acid across the entire Lewis perf interval 3600-4200'. TOH slowly for 11 stands. TOOH. Stand back 2-3/8" production string.

All acid on this well to contain the following additives per 1000 gals.

2 gal	CI-22	Corrosion inhibitor
5 gal	Ferrotrol-300L	Iron Control
1 gal	Flo-back 20	Surfactant
0.5 gal	Clay Master-5C	Clay control

11. Contact Jennifer Dobson at ext. 4026 for exact Lewis perforations. RU wireline services. RIH with 3-1/8" selective fire carrier guns loaded with Owens 3125306P HSC 12 gm charges set at 1 SPF. (Av. perf diameter - 0.30", Av. pen. -17.48" in concrete). Perf the Lewis from top down. RD wireline services.
12. Set Pro-Technics RTD tool at 4180' on slickline.
13. PU and RIH with 7" packer, tubing tester and 3-1/2" frac string. Set packer at 3400'. PT frac string to 6000 psi.
14. RU stimulation company. Hold a tailgate safety meeting. Pressure test surface treating lines to 4000 psi. Breakdown Lewis with 2000 gals 15% HCL acid. Drop 2, 7/8" 1.3 sp gr RCN perf balls per perforation. Evenly space throughout the job for diversion. Attempt to ball off to 3000 psi. Use same acid additives as in Step 10. RD stimulation company.
15. Release packer and lower to 4200' to knock off perf balls. Pull packer back uphole to 3500' and set.
16. RU stimulation company. Hold tailgate safety meeting. Pressure test surface lines to 7000 psi. Frac Lewis down the 3-1/2" N-80 frac string with 129,948 gals of 60 quality foam using 30 lb crosslinked gel as the base fluid and 300,000 lbs 20/40 Arizona sand. Pump at a foam rate of 55 BPM. Monitor bottom hole and surface treating pressures, rate, foam quality and sand concentration with computer van. Sand laden fluid is to be tagged with 3 radioactive tracers. Max pressure is 6000 psi and estimated treating pressure is 5700 psi. Treat per the following schedule:

Stage	Downhole Foam Volume (gals)	Clean Gel Volume (gals)	N2 Volume (MSCF)	Sand Volume (lbs)
Pad	26,500	10,600	254.11	---
1.0 ppg	14,000	5,600	134.25	14,000
2.0 ppg	18,000	7,200	172.61	36,000
3.0 ppg	30,000	12,000	287.70	90,000
4.0 ppg	40,000	16,000	383.61	160,000
Flush	1,448	579	13.89	0
Totals	129,948	51,979	1246.17	300,000

Treat frac fluid w/the following additives per 1000 gallons:

* 0.38 lbs XCIDE-207	Bactericide to be mixed in tanks.
* 30 lbs GW-27	Guar gelling agent to be mixed in tanks.
* 5.0 gals FAW-1	Foaming agent to be mixed on fly.
* 2.5 gals BF-7L	Buffering agent to be mixed in tanks.
* 1.0 lbs ULTRA PERM CRB	Gel breaker to be mixed on fly.
* 1.0 lbs GBW-5	Gel Breaker to be mixed in last 3,998 gals.

East #1

1998 Priority Lewis Recompletion

- | | |
|------------------------|--|
| * 1.0 gals FLO-Back 20 | Non-ionic Surfactant mix in full tank. |
| * 1.0 gals XLW-30 | Crosslinker to be mixed on fly. |
| * 1.0 gals ENZYME G | Enzyme breaker to be mixed on fly. |

Treat flush fluid with the following additives per 1000 gals:


- | | |
|------------------------|---|
| * 0.38 lbs XCIDE-207 | Bactericide to be mixed in tanks. |
| * 30 lbs GW-27 | Guar gelling agent to be mixed in tanks. |
| * 5.0 gals FAW-1 | Foaming agent to be mixed on fly. |
| * 2.5 gals BF-7L | Buffering agent to be mixed in tanks. |
| * 1.0 gals FLO-Back 20 | Non-ionic Surfactant mix in full tank. |
| * 1.0 lbs GBW-5 | Gel Breaker to be mixed in last 798 gals. |
| * 1.0 gals ENZYME G | Enzyme breaker to be mixed on fly. |

RDMO stimulation company.

17. Flow well back after 30 minutes to 1 hour through a choke manifold at 20 BPH or less if sand is observed. After the well has cleaned up and pressures allow, release packer and TOOH. LD 3-1/2" N-80 tubing and packer.
18. TIH with overshot for Pro-Technics RTD pressure tool on 2-3/8" tubing and clean out to 4180' with air/mist. Fish RTD tool and TOOH.
19. RIH with notched collar on 2-3/8" tubing and tag PBTD. If sand fill up is present within 100' of bottom perf, clean out to PBTD (~4300'). Monitor gas and water returns when applicable.
20. When wellbore is sufficiently clean, TOH and RU Pro-Technics. Run After-Frac log from PBTD-3500'. RD Pro-Technics.
21. RU Blue Jet. Run Perforation Efficiency log from 4200-3600'. RD Blue Jet.
22. Squeeze to cover Ojo Alamo as necessary.
23. Rabbit and TIH with 2-3/8" tubing with a seating nipple one joint off bottom. Tag PBTD for sand fill up. If needed, circulate sand off bottom with air. Land tubing at 3720'. ND BOP. NU WH. Obtain final water and gas samples and flow rates. Contact Production Operations for well tie-in. RDMO.

Recommended: 
Production Engineer

Approved:  10/21/97
Drilling Superintendent

Approved:  10/21/97
Team Leader

VENDORS:

Wireline:	Blue Jet	325-5584
Fracturing:	BJ Services	327-6222
RA Tag:	Pro-Technics	326-7133
Treesaver:	WSI	327-3402

JLD

East #1
Pertinent Data Sheet
Lat: 36° 54.1882 min.
Long: 108° 4.07958 min.

General Well Information:

Location: 990 FNL, 1650 FWL, Unit C, Section 14, T31N, R12W, San Juan County, NM

Federal Lease #: SF 077652

DP #: 15390

Property #: 0020261

GWI/NRI: 25.00/21.75

Current Field: Blanco Mesaverde

Spud: 9/18/49

Completed: 12/21/49

GL Elevation:

KB Elevation: 6328'

TD: 5428'

PBTD: 5241'

Casing Record:

Hole Size	Csg Size	Weight	Grade	Depth Set	Cmt Vol	Cmt Top
13-3/4"	10-3/4"	32.75 lb/ft	H-40	128'	100 sx	Circ. Sur.
9"	7"	N/A	N/A	5154'	225 sx	3900' (Calc)
6-1/8"	4-1/2"	9.5 lb/ft	J-55	5401'	260 sx	5123' (TS)

Tubing Record:

Tubing Size	Weight	Grade	Depth Set	Number of Jts
2-3/8"	4.7 lb/ft	J-55	5144'	N/A

Formation Tops:

Ojo Alamo: 1157'

Pictured Cliffs: 2845'

Menefee: 4740'

Kirtland Shale: 1198'

Lewis Shale: 3110'

Point Lookout: 5120'

Fruitland: 2404'

Cliff House : 4446'

Logging Record:

Logging Record: Spontaneous Potential Log (10/16/49), Induction Log (10/16/49), Gamma Ray (11/26/49), Induction Log (11/26/49).

Completion: Originally drilled well as Mesaverde openhole. Shot the openhole with 1390 qts SNG. Ran 4-1/2" casing May 1962. Perforated the Mesaverde at 5164-84' and 5204-20' with 4 SPF. Frac'd these perms with 60,430 gals water and 45,000 lbs 20/40 sand and 15,000 lbs 10/20 sand at 27.3 BPM and 2150 psi.

Workover History: None performed since original completion.

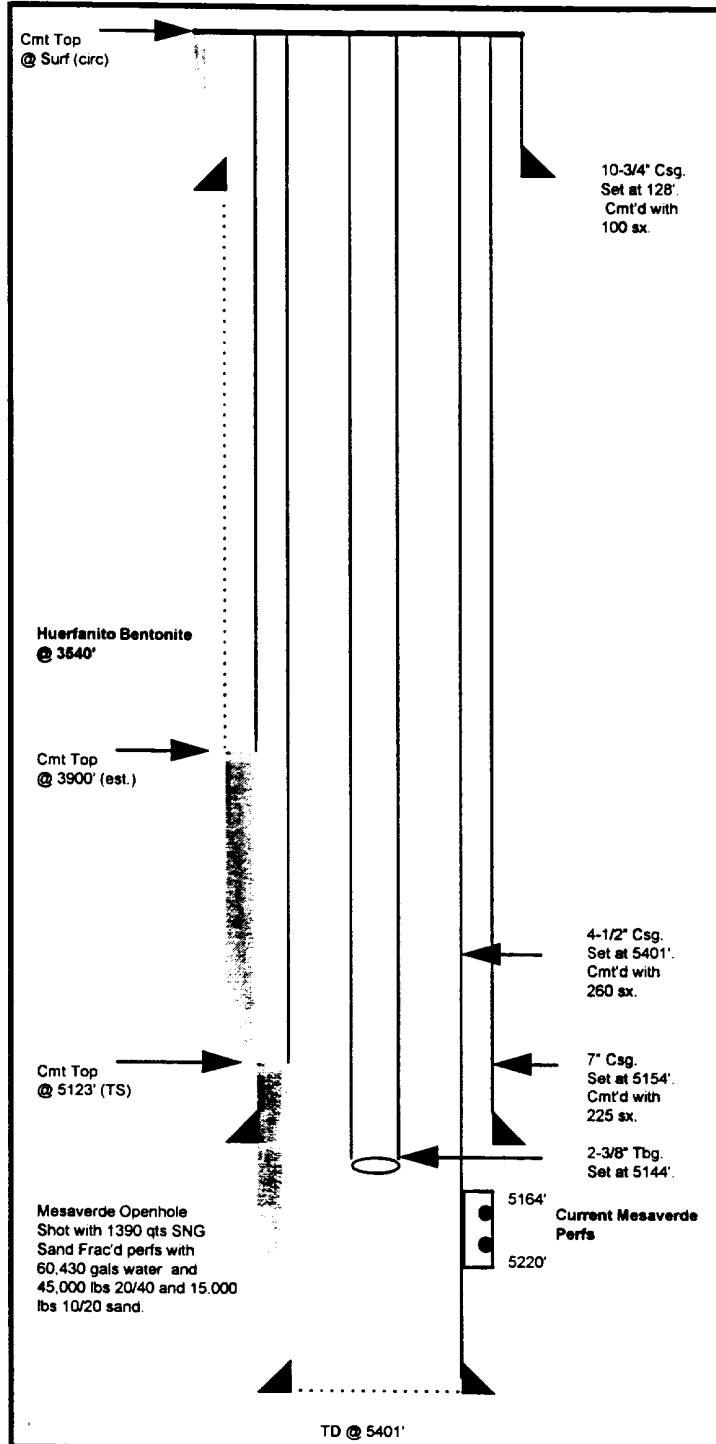
Production History: Currently has another Mesaverde producing in the same quarter section. Will need to abandon the lower Mesaverde formation.

Pipeline: Williams Field Service (LP = 275 psi)

East #1

Unit C, Section 14, T31N, R12W
San Juan County, NM

Current Schematic



Proposed Schematic

