

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

**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

1850' FNL, 1580' FEL, Sec. 4, T-29-N, R-10-W, NMPM

G

5. Lease Number
NM-03561

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

8. Well Name & Number
Grenier B #4

9. API Well No.
30-045-08772

10. Field and Pool
Blanco MV/Basin DK

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 - Stimulate Dakota and commingle
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut off
☐ Conversion to Injection

13. Describe Proposed or Completed Operations

It is intended to stimulate the existing Dakota formation of the subject well and commingle with the existing Mesaverde formation according to the attached procedure and wellbore diagram. A down-hole commingle order will be obtained from the New Mexico Oil Conservation Division.

RECEIVED
NOV 23 1996

OIL CONSERVATION DIVISION

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

Signed [Signature] (PMP2) Title Regulatory Administrator Date 11/13/96

(This space for Federal or State Office use)

APPROVED BY _____ Title _____

CONDITION OF APPROVAL, if any:

APPROVED

NOV 15 1996

Chip Hanada
DISTRICT MANAGER

NMOCD

GRENIER B #4 MV/DK
Workover Procedure
G 4 29 10
San Juan County, N.M.
Lat-Long: 36.756317 - 107.885773

1. Comply to all NMOCD, BLM, & MOI rules & regulations. MOL and RU completion rig. NU 6" 900 series BOP w/flow tee and stripping head. Test operation of rams. NU blooie line & 2-7/8" relief line.
2. TOH w/ 218 Jts 2-3/8" tbg & Mod. "R" pkr. TIH w/4-1/2" scraper on 2-3/8" tbg to 6950'. If perms 6918'-40' are covered, C.O. w/air/mist to 6950'. TOH.
3. TIH w/4-1/2" pkr on 2-7/8" 6.5# N-80 w/shaved collars (3.5" O.D. 2.441" I.D.) rental frac string. (Run 4 jts 2-3/8" N-80 on top of pkr). W/pkr @ 6940', spot 100 gal 15% HCL acid over lower DK perms (6918'-40'). PU & set pkr @ 6880'. Monitor backside during breakdown & frac.
4. Spot & fill 2-400 bbl. frac tanks w/1% KCL water. If necessary, filter all water to 25 microns. One tank is for gel & one tank is for breakdown water. Usable gel water required for frac is 133 bbls.
5. Breakdown w/1000 gal 15% HCL acid. Max pressure is 6000 psi. Prepare to frac.
 - * 2 gal I-22 (Corrosion Inhibitor)
 - * 5 gal Ferrotrol -300I (Iron Control)
 - * 1 gal Inflo 150 (Surface Tension Reducer)
6. Fracture treat Lower DK down frac string w/17,000 gals. of 30# X-linked gel & 21,000# 20/40 ottawa sand. Pump at 20 BPM. Monitor bottomhole & surface treating pressures, rate, & sand concentration with computer van. Sand to be tagged w/ 0.4 mCi/1000# Ir-192 tracer. Max. pressure is 6000 psi & estimated treating pressure is 5701 psi. Treat per the following schedule:

<u>Stage</u>	<u>Gel Vol. (Gals.)</u>	<u>Sand Vol. (lbs.)</u>
Pad	5,000	---
1.0 ppg	5,000	5,000
2.0 ppg	5,000	10,000
3.0 ppg	2,000	6,000
Flush	(1,673)	0
Totals	17,000	21,000#

Shut well in after frac for six hours in an attempt to allow the gel to break. Treat frac fluid w/the following additives per 1000 gallons:

- * 30# GW-27 (Guar Gel mix in full tank - 16,000 gal)
- * 1.0 gal. XLW-32 (Crosslinker)
- * 1.0# GBW-12 (Enzyme Breaker mix on fly)
- * 1.0# Ultra Perm CRB (Gel Breaker)
- * 1.0 gal Inflo 150 (Surface Tension Reducer)
- * 0.38# FracCide 20 (Bacteriacide mix on full tank)
- * 2 gal BF-7L (Buffering Agent)

GRENIER B #4 MV/DK - FRAC LOWER DK INTERVALS & COMMINGLE MV & DK

7. Open well through choke manifold & monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. **Take pitot gauges when possible.**
8. Release pkr & TOH w/frac string. MI wireline truck. Set 4-1/2" ret BP (**w/modified bottom to accommodate Baker DMR electronic pressure recorders**) @ 6880' & top w/1 sx sand.
9. Fill 2-400 bbl. frac tanks w/1% KCL water. If necessary, filter all water to 25 microns. One tank is for gel & one tank is for breakdown water. Usable gel water required for frac is 211 bbls.
10. TIH w/4-1/2" pkr on 2-7/8" 6.5# N-80 w/shaved collars (3.5" O.D. 2.441" I.D.) rental frac string & set @ 6870'. (Run 4 jts 2-3/8" N-80 on top of pkr). Pressure test ret BP to 6000#. W/ pkr @ 6856', spot 100 gal 15% HCL acid over middle DK perms (6836'-56'). PU pkr, & set @ 6820'. Monitor backside of pkr during breakdown & frac job.
11. Breakdown w/1000 gal 15% HCL acid. Max pressure is 6000 psi. Prepare to frac.
 - * 2 gal I-22 (Corrosion Inhibitor)
 - * 5 gal Ferrotrol -300I (Iron Control)
 - * 1 gal Inflo 150 (Surface Tension Reducer)
12. Fracture treat middle DK down frac string w/28,000 gals. of 30# X-linked gel & 40,000# 20/40 ottawa sand. Pump at 20 BPM. Monitor bottomhole & surface treating pressures, rate, sand concentration with computer van. Sand to be tagged w/ 0.4 mCi/1000# Ir-192 tracer. Max. pressure is 6000 psi & estimated treating pressure is 5642 psi. Treat per the following schedule:

<u>Stage</u>	<u>Gel Vol. (Gals.)</u>	<u>Sand Vol. (lbs.)</u>
Pad	8,000	—
1.0 ppg	5,000	5,000
2.0 ppg	10,000	20,000
3.0 ppg	5,000	15,000
Flush	(1,658)	0
Totals	28,000	40,000#

Shut well in after frac for six hours in an attempt to allow the gel to break. Treat frac fluid w/the following additives per 1000 gallons:


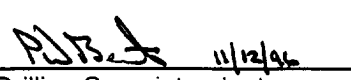
- * 30# GW-27 (Guar Gel mix in full tank - 16,000 gal)
- * 1.0 gal. XLW-32 (Crosslinker)
- * 1.0# GBW-12 (Enzyme Breaker mix on fly)
- * 1.0# Ultra Perm CRB (Gel Breaker)
- * 1.0 gal Inflo 150 (Surface Tension Reducer)
- * 0.38# FracCide 20 (Bacteriacide mix on full tank)
- * 2 gal BF-7L (Buffering Agent)

13. Open well through choke manifold & monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. **Take pitot gauges when possible.**
14. Release pkr & TOH w/frac string & lay down. TIH w/retrieving head on 2-3/8" tbg & clean out to ret BP @ 6880' w/air/mist. Monitor gas & water returns & **take pitot gauges when possible.**

GRENIER B #4 MV/DK - FRAC LOWER DK INTERVALS & COMMINGLE MV & DK

15. When wellbore is sufficiently clean (less than 1 BWPH), retrieve BP @ 6880' (w/pressure recorders) & TOH.
16. TIH w/notched collar on 2-3/8" tbg & C.O. w/air/mist to 6960' & take pitot gauges when possible. When wellbore is sufficiently clean (less than 1 BWPH), TOH & run after frac gamma-ray log & perf eff log from 6960'-6500'.
17. TIH w/2-3/8" tbg w/standard seating nipple one joint off bottom & again cleanout to 6960'. When wellbore is sufficiently clean, land tbg @ 6800' KB. Take final water & gas & rates.
18. ND BOP & NU wellhead & tree. Rig down & release rig. Complete well as a commingled Mesaverde - Dakota.

Recommended: 
Production Engineer


Approve:  11/12/96
Drilling Superintendent

VENDORS:

Wireline:	Basin	327-5244
Fracturing:	BJ	327-6222
RA Tag:	Pro-Technics	326-7133
Tools & Pressure Gauge:	Baker	325-0216

PMP

Pertinent Data Sheet - Grenier B #4 MV/DK

Location: 1850' FNL & 1580' FEL, Unit G, Section 4, T29N, R10W, San Juan County, New Mexico

Field: Blanco Mesaverde
Basin Dakota

Elevation: 5931' GR
9' KB

TD: 6985'
PBTD: 6960'
Lease: Fed:NM-03561
DP #: DK: 25663
MV: 25669
GWl: MV&DK=25%
NRI: MV&DK=20.75%
Prop#: 0020376B

Completed: 4/26/62

Spud Date: 4/9/62

100% SRC Trust

Initial Potential:

DK: AOF=3067 MCF/D, Q=2709 MCF/D, SICP=2078 PSI

MV: AOF=2192 MCF/D, Q=1968 MCF/D, SICP=1010 PSI

Casing Record:

<u>Hole Size</u>	<u>Csg Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>Cement (Top)</u>
12-1/4"	8-5/8"	24.0#	319'	225 sx	Circ Cmt
7-7/8'	4-1/2"	9.5# & 11.6#	6985'	250 sx	1300' - CBL
		DV Tool @	4888'	575 sx	5540' - Survey
		Baker Model "R" Pkr @	5120'		

Tubing Record:

<u>Tbg. Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>	
2-3/8"	4.70# J-55 EUE	6924'	218 Jts

Formation Tops:

Ojo Alamo	1124'		
Kirtland	1305'		
Fruitland	2107'	Gallup	5870'
Pictured Cliffs:	2370'	Greenhorn:	6600'
Cliff House:	3931'	Graneros:	6658'
Point Lookout:	4660'	Dakota:	6780'

Logging Record: Induction, Neutron-Density, CBL, CNL

Stimulation: DK: Sand-water fracd 6782'-6802', 6836'-56', 6918'-40' w/ 69,000# sand in water w/60 perf balls.

Workover History: 4/17/73 Perf'd PL @ 4650'-4720' Frac'd w/45,000# sand in water. Set Model "D" Baker Production Packer @ 6770' w/tbg @ 5770'. Completed dual MV/DK.

3/29/96: Milled out pkr. Pumped 150 gal 15% HCL acid & swabbed lower DK - TSTM. Pumped 150 gal 15% HCL acid & swabbed middle DK - TSTM. Pumped 150 gal 15% HCL acid & swabbed upper DK - 204 MCF/D. Perf'd lower Menefee @ 4410'-16', 4442', 4448.-4454', 4467'-4474', 4583'-4592' & fraced w/60,000# sand in slick water. Perf'd upper Menefee @ 4093'-4100', 4109'-14', 4227', 4270'-75', 4332', 4352'-4360', 4363'-4370' & fraced w/70,000# sand in slick water. Completed dual MV/DK w/final gauges: MV=539MCF/D & DK=54MCF/D.

Production History: MV 1st del 6/28/73. DK 1st del 7/31/62. Cum: MV=519MMCF & DK=1056MMCF. Current rates: MV=100 MCF/D & DK=0 MCF/D.

Pipeline: Williams Field Service

GRENIER B #4 MV/DK

UNIT G SECTION 4 T29N R10W
SAN JUAN COUNTY, NEW MEXICO

