submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

Sundry Notices and Reports on Wells

97 DEC 23 PM 2:15

070 FARMINGTON NM

5. **Lease Number**
SF-080673

1. **Type of Well**
GAS

6. **If Indian, All. or Tribe Name**

7. **Unit Agreement Name**

2. **Name of Operator**
BURLINGTON RESOURCES OIL & GAS COMPANY

San Juan 27-4 Unit

8. **Well Name & Number**
San Juan 27-4 ~~MP~~ #2

3. **Address & Phone No. of Operator**
PO Box 4289, Farmington, NM 87499 (505) 326-9700

9. **API Well No.**
30-039-07183

4. **Location of Well, Footage, Sec., T, R, M**
1650'FSL, 1650'FWL, Sec. 5, T-27-N, R-4-W, NMPM

10. **Field and Pool**
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	Type of Action	
_X_ Notice of Intent	___ Abandonment	___ Change of Plans
	___ Recompletion	___ New Construction
___ Subsequent Report	___ Plugging Back	___ Non-Routine Fracturing
	___ Casing Repair	___ Water Shut off
___ Final Abandonment	___ Altering Casing	___ Conversion to Injection
	_X_ Other - Pay add	

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 open hole will be plugged and abandoned.

RECEIVED
JAN - 2 1998
OIL CON. DIV.
DIST. 3

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

Signed [signature] (JLDOpps) Title Regulatory Administrator Date 10/28/97

(This space for Federal or State Office use)
APPROVED BY /S/ Duane W. Spencer Title _____ Date DEC 23 1997
CONDITION OF APPROVAL, if any:

NMOCD

San Juan 27-4 Unit #2

Lewis Pay Add Procedure
Unit K, Section 5, T27N, R4W
Lat: 36° - 35.9628 min./ Long: 107° - 16.60032 min.

Abandon the lower Mesaverde openhole and complete the Lewis. The Lewis will be sand fracture stimulated in three 100,000 lbs 20/40 sand stage using a 60Q 30 lb crosslinked gel for transport. A total of 300,000 lbs of sand will be utilized.

1. Inspect location and test rig anchors, if necessary. Comply with all NMOCD, BLM, Forestry & BR rules and regulations. Dig flowback pit or set flowback tank. Haul to location an inspected 5200', 2-3/8" production string, a 5000', 3-1/2" N-80 frac string, 3 jts of a 2-7/8" N-80 frac string, 1, 2-7/8 X 3-1/2" N-80 crossover and 3, 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. Attempt to TOOH with Mesaverde production string set at ± 5886'. If tubing is stuck, estimate where it is stuck using stretch calculations. Run gauge to 5300'. Wireline jet cut tubing at 5300'. Continue to TOOH and LD. Send string in to be inspected and salvaged, if possible.

4. PU and RIH with a 4-3/4" bit, 5-1/2" (15.5 lb/ft) casing scraper on the inspected 2-3/8" production string. Clean out to 5200' with air. TOOH.

5. RIH with a 5-1/2" CR on the 2-3/8" tubing. Set CR at 5150'. PT tubing to 2000 psi using the CR stinger configuration. RU cementing contractor. Establish an injection rate through the CR. Squeeze the lower Mesaverde openhole 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.

6. Roll the hole clean with 2% KCL water. TOOH 2-3/8" production string. PT CR and casing to 1000 psi. If casing doesn't hold pressure, isolate hole and contact Jennifer Dobson at ext. 4026 for squeeze procedure.

7. MIRU logging company. Run GR-CBL-CCL from PBTD to surface casing with 1000 psi surface pressure. Run GR-DSNL from PBTD to 4000'. Top of good cement must be above 4100' to continue. Evaluate CBL and send log copies to production and drilling.

LOWER LEWIS

8. Fill Tank #2 and Tank #3 with 485 bbls 2% KCL water. If necessary, filter all water to 25 microns. These two tanks are for the frac gel fluid. Add water to Tank #1 for the breakdown as necessary.

9. PU and TIH with 2-3/8 production string and spot 250 gals 15% HCL acid across lower Lewis perf interval 4800-5000'. TOH slowly for 5 stands. TOOH. Stand 2-3/8" tubing beside the 3-1/2" frac string will be.

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

10. Contact Jennifer Dobson at ext. 4026 for exact Lewis perforations. RU wireline services. RIH with 3-1/8" select 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 lower Lewis from top down. RD wireline services.

11. PU and RIH with 5-1/2" packer, tubing tester, 3 jts 2-7/8 N-80 tubing, 2-7/8 X 3-1/2" N-80 crossover and 3-1/2" frac string. Set packer at 4600'. PT frac string to 6500 psi.

12. RU stimulation company. Hold a tailgate safety meeting. Pressure test surface treating lines to 4600 psi. Breakdown lower Lewis with 1000 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 3600 psi. Use same acid additives as in Step 9. RD stimulation company.

13. Release packer and lower to 5000' to knock off perf balls. Pull packer back uphole to 4700' and set.

14. RU stimulation company. Hold tailgate safety meeting. Pressure test surface lines to 7500 psi. Frac lower Lewis down the 3-1/2" N-80 frac string with 45,900 gals of 60 quality foam using 30 lb crosslinked gel as the base fluid and 100,000 lbs 20/40 Arizona sand. Pump at 45 BPM. Monitor 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 6500 psi and estimated treating pressure is 6070 psi. Treat per the following schedule:

Stage	Downhole Foam Volume (gals)	Clean Gel Volume (gals)	N2 Volume (MSCF)	Sand Volume (lbs)
Pad	9,000	3,600	106.67	—
1.0 ppg	5,000	2,000	59.26	5,000
2.0 ppg	5,000	2,000	59.27	10,000
3.0 ppg	15,000	6,000	177.81	45,000
4.0 ppg	10,000	4,000	118.55	40,000
Flush	1,900	760	22.52	0
Totals	**45,900**	**18,360**	**544.08**	**100,000**

Treat frac fluid with the following additives per 1000 gals:

* 0.38 lbs XCIDE-207	Bacteriacide 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.
* 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	Bacteriacide 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.

15. 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.

16. PU and RIH with 5-1/2" CIBP, packer and 2-3/8" tubing. Set CIBP at 4780'. Release packer from CIBP and PUH. Set packer just above CIBP and pressure test to 3600 psi (75% of casing yield). Trickle 1 sack of sand and soap down tubing. Allow sand to settle.

MIDDLE LEWIS

17. Fill Tank #2 and Tanks #3 with 485 bbls 2% KCL water. If necessary, filter all water to 25 microns. These two tanks are for the frac gel fluid. Add water to Tank #1 for the breakdown as necessary.

18. Release the packer and spot 250 gals 15% HCL acid across middle Lewis perf interval 4560-4760'. TOH slowly for 5 stands. TOOH. Stand 2-3/8" beside 3-1/2" tubing.

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

19. Contact Jennifer Dobson at ext. 4026 with exact Lewis perforations. RU wireline services. RIH with 3-1/8" select fire carrier guns loaded with Owen 3125306P HSC 12 gm charges set at 1 SPF. (Av. perf diameter - 0.30", Av. pen. -17.48" in concrete). Perf the middle Lewis from top down. RD wireline services.

20. TIH with 5-1/2" packer, tubing tester, 3 jts 2-7/8" N-80 tubing, 2-7/8" X 3-1/2"N-80 crossover and remaining 3-1/2" frac string. Set packer at 4350'. Pressure test frac string to 6500 psi.

21. RU stimulation company. Hold a tailgate safety meeting. Pressure test surface treating lines to 4600 psi. Breakdown middle Lewis with 1000 gals 15% HCL acid. Drop 2, 7/8" 1.3 sp gr RCN perf balls per perforation. Space evenly throughout the job for diversion. Attempt to ball off to 3600 psi. Use same acid additives as in Step 18. RD stimulation company.

22. Release packer and lower to 4770' to knock off perf balls. Pull packer uphole to 4460'and set.

23. RU stimulation company. Hold a tailgate safety meeting. Pressure test surface lines to 7500 psi. Frac middle Lewis down the 3-1/2" N-80 frac string with 45,600 gals of 60 quality foam using 30 lb crosslinked gel as the base fluid and 100,000 lbs 20/40 Arizona sand. Pump at 45 BPM. Monitor 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 6500 psi and estimated treating pressure is 5825 psi. Treat per the following schedule:

Stage	Downhole Foam Volume (gals)	Clean Gel Volume (gals)	N2 Volume (MSCF)	Sand Volume (lbs)
Pad	9,000	3,600	102.28	---
1.0 ppg	5,000	2,000	56.83	5,000
2.0 ppg	5,000	2,000	56.83	10,000
3.0 ppg	15,000	6,000	170.50	45,000
4.0 ppg	10,000	4,000	113.67	40,000
Flush	1,600	640	18.19	0
Totals	**45,600**	**18,340**	**518.30**	**100,000**

Treat frac fluid with the following additives per 1000 gals:

* 0.38 lbs XCIDE-207	Bacteriacide 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.
* 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	Bacteriacide 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.

24. 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.

25. PU and RIH with 5-1/2" CIBP, packer and 2-3/8" tubing. Set CIBP at 4540'. Release packer from CIBP and PUH. Set the packer just above CIBP pressure test to 3600 psi (75% of casing yield). Trickle 1 sack of sand and soap down tubing. Allow sand to settle.

UPPER LEWIS

26. Fill Tank #2 and Tanks #3 with 481 bbls 2% KCL water. If necessary, filter all water to 25 microns. These two tanks are for the frac gel fluid. Add water to Tank #1 for the breakdown as necessary.

27. Release the packer and spot 250 gals 15% HCL acid across upper Lewis perf interval 4300-4520'. TOH slowly for 5 stands. TOOH. Stand 2-3/8" tubing beside 3-1/2" tubing.

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

28. Contact Jennifer Dobson at ext. 4026 for exact Lewis perforations. RU wireline services. RIH with 3-1/8" select fire carrier guns loaded with Owen 3125306P HSC 12 gm charges set at 1 SPF. (Av. perf diameter - 0.30", Av. pen. -17.48" in concrete). Perf the upper Lewis from top down. RD wireline services.

29. TIH with 5-1/2" packer, tubing tester, 3 jts 2-7/8" N-80 tubing, 2-7/8" X 3-1/2" N-80 crossover and remaining 3-1/2" frac string. Set packer at 4100'. Pressure test frac string to 6500 psi.

30. RU stimulation company. Hold a tailgate safety meeting. Pressure test surface treating lines to 4600 psi. Breakdown upper Lewis with 1000 gals 15% HCL acid. Drop 2, 7/8" 1.3 sp gr RCN perf balls per perforation. Space evenly throughout the job for diversion. Attempt to ball off to 3600 psi. Use same acid additives as in Step 27. RD stimulation company.

31. Release packer and lower to 4530' to knock off perf balls. Pull packer uphole to 4200' and set.

32. RU stimulation company. Hold a tailgate safety meeting. Pressure test surface lines to 7500 psi. Frac upper Lewis down the 3-1/2" N-80 frac string with 45,500 gals of 60 quality foam using 30 lb crosslinked gel as the base fluid and 100,000 lbs 20/40 Arizona sand. Pump at 45 BPM. Monitor 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 6500 psi and estimated treating pressure is 5571 psi. Treat per the following schedule:

Stage	Downhole Foam Volume (gals)	Clean Gel Volume (gals)	N2 Volume (MSCF)	Sand Volume (lbs)
Pad	9,000	3,600	97.66	—
1.0 ppg	5,000	2,000	54.26	5,000
2.0 ppg	5,000	2,000	54.26	10,000
3.0 ppg	15,000	6,000	162.80	45,000
4.0 ppg	10,000	4,000	108.54	40,000
Flush	1,500	600	16.28	0
Totals	**45,500**	**18,200**	**493.81**	**100,000**

Treat frac fluid with the following additives per 1000 gals:

* 0.38 lbs XCIDE-207	Bacteriacide 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.
* 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	Bacteriacide 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.

33. 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" frac string, 2-7/8" X 3-1/2" N-80 crossover, 3 ts 2-7/8" N-80 tubing and packer.

34. TIH with 4-3/4" bit on 2-3/8" tbg and CO with air/mist to CIBP at 4540'. **Take pitot gauges when possible.** When well is sufficiently clean, drill up CIBP at 4540'

35. Continue to CO with air/mist to CIBP at 4780'. **Take pitot gauges when possible.** When well is sufficiently clean, drill up CIBP at 4780'.

36. Continue to CO with air/mist to PBTD. If sand fill up is present within 100' of bottom perf, clean out to PBTD. Monitor gas and water returns when applicable.

37. When wellbore is sufficiently clean, TOH and RU Pro-Technics. Run After-Frac log from PBTD-4200'. RD Pro-Technics.

38. RU Blue Jet. Run Perforation Efficiency log from 5000-4300'. RD Blue Jet.

39. Squeeze to cover Ojo Alamo as necessary.

40. Rabbit and TIH with expendable check, one joint 2-3/8" tubing, standard SN and remaining 2-3/8" tubing. Tag PBTD for sand fill up. If needed, circulate sand off bottom with air. Land tubing at bottom perforation. Pump off expendable check. 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: _____ 10/24/97 Drilling Superintendent

Approved: _____ 10/2/97 Team Leader

VENDORS:

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

Jennifer Dobson 599-4026 (work) 564-3244 (home) 324-2461 (pager)

San Juan 27-4 Unit #2
Pertinent Data Sheet
Lat: 36° 35.9628 min./ Long: 107° 16.60032 min.

General Well Information:

Location: 1650 FSL, 1650 FWL, Unit K, Section 5, T27N, R4W, Rio Arriba County, NM.

Federal Lease #:	080673	DP #:	49504A
Property #:	012609600	GWI/NRI:	85.41/70.47
Current Field:	Blanco Mesaverde		
Spud:	9/18/53	Completed:	2/11/54
GL Elevation:	6830'	KB Elevation:	6840'
TD:	5960'	PBTD:	5960'

Casing Record:

Hole Size	Csg Size	Weight	Grade	Depth Set	Cmt Vol	Cmt Top
12-1/4"	9-5/8"	36 lb/ft	J-55	174'	150 sx	Circ. to sur.
8-3/4"	7"	20 lb/ft 23 lb/ft	J-55 J-55	0-3350' 3350-5380'	500 sx	2995' (TS)
6-1/8"	5-1/2"	15.5 lb/ft	J-55	5350'	250 sx	1300' (TS)

Tubing Record:

Tubing Size	Weight	Grade	Depth Set	Number of Jts
2"	4.7 lb/ft	J-55	5886'	191

Other Downhole Equipment:

Classification	Depth Set	Number of Jts
Anchor	5915'	1
Perforated Joint	5945'	1

Formation Tops:

Ojo Alamo:	3222'	Pictured Cliffs:	3693'	Menefee:	5518'
Kirtland Shale:	3265'	Lewis Shale:	3796'	Point Lookout:	5814'
Fruitland:	3472'	Cliff House :	5451'		

Logging Record:

Schlumberger Electrical (10/16/53), Gamma Ray (10/29/53) and Induction Log (10/29/53).

Completion:

Originally drilled an openhole section from 5380-6221' through the Mesa Verde. Shot the Mesa Verde with 1540 qts SNG (5457-6017'). This collapsed and parted the 7" casing at 3612'. Many squeeze jobs were attempted with no success. Sidetracked the wellbore at 3601' and drilled to 5350' and set 5-1/2" casing. The well was then deepened and the Mesa Verde openhole was sand oil frac'd with 5000 gals #2 diesel and 4700 lbs sand at 4.7 BPM and a maximum pressure of 2400 psi.

Workover History: None performed since original completion.

Production History:

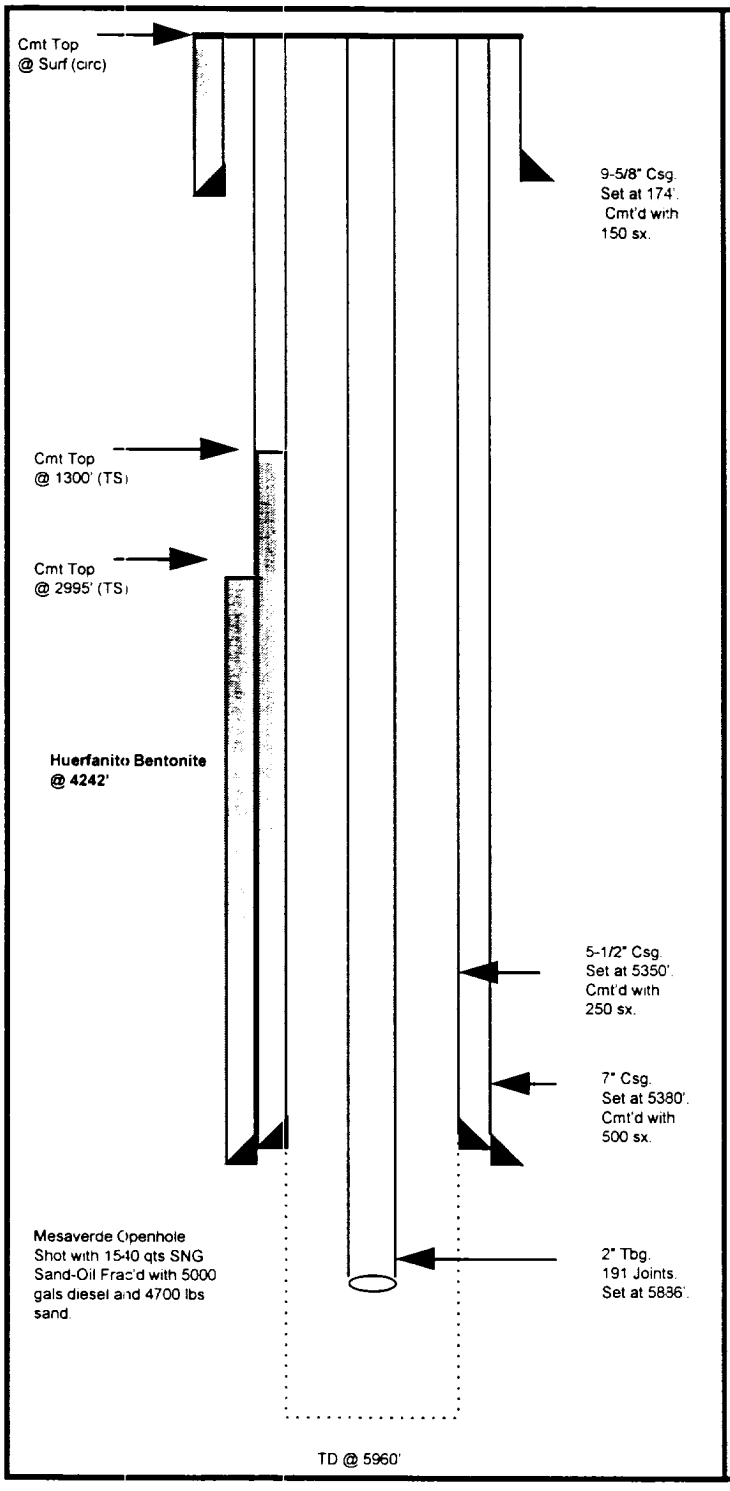
Currently shut in. The Mesaverde reserves were written off during the 1998 reserve review. Will need to abandon the lower Mesaverde formation. See attached production plot. Mesaverde EUR: 298 MMCF. Mesaverde Cum: 282 MMCF.

Pipeline: Williams Field Service (LP = 230 psi)

San Juan 27-4 Unit #2

Unit K, Section 5, T27N, R11W
Rio Arriba County, NM

Current Schematic



Proposed Schematic