# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on W	ells	
		1:29
		5. Lease Number
	~ · · · · · · ·	SF-076934A 6. If Indian, All. or
1. Type of Well GAS		6.4 If Indian, All. or Tribe Name
2. Name of Orangeon	<u> </u>	7. Unit Agreement Name
2. Name of Operator		
BURLINGTON RESOURCES OIL 5 CAS COMPANY		
RESOURCES OIL & GAS COMPANY		0 Mall Warra & Market
2 Address & Phone We of Openston	<u> </u>	8. Well Name & Number Florance B #1
3. Address & Phone No. of Operator	0	9. API Well No.
PO Box 4289, Farmington, NM 87499 (505) 326-970	0	30-045-09275
4. Location of Well, Footage, Sec., T, R, M		10. Field and Pool
790'FSL, 1650'FWL, Sec.20, T-30-N, R-9-W, NMPM		Blanco Pict.Cliffs
		Blanco Mesaverde
		11. County and State
DHC-1488		San Juan Co, NM
Subsequent Report — Recompletion Plugging Back Casing Repair Altering Casing X Other - Mesaver  13. Describe Proposed or Completed Operations  It is intended to add pay to the Mesaverde for to the attached procedure and wellbore formation will also be restimulated. The commingled under DHC-1488.  Please cancel intent sundry approved 3-5-97 to	Non-Routi Water Shu Conversion de pay add and mation of the diagram. The He	ne Fracturing t off n to Injection commingle subject well according
riease cancer intent sundry approved 3-3-37 to	Commingre.	
		DECEN ED
		OIL CON. NV.
14. I hereby certify that the foregoing is true an	nd correct.	DIST. 2
Signed Many (RG5) Title Regulat	cory Administra	tor_Date 9/24/97
(This space for Federal or State Office use)		SEP 2 5 1997
APPROVED BY	Date	



San Juan County, NM Latitude: 36 Deg., 47.53 Min Longitude: 107 Deg., 48.38 Min.

#### Summary:

The subject well is a 1998 Pictured Cliffs/ Mesa Verde commingle completion in 7" casing and 4-1/2" liner section. This well was originally drilled in 1962 and completed in the Pictured Cliffs and Mesa Verde formation. The subject well has not been completed in the Menefee interval in this quarter section and will be recompleted during the proposed workover. The Pictured Cliffs formation will be stimulated with 29,160 gal of 70Q N<sub>2</sub> foamed 25# linear guar gel and 100,000# 20/40 mesh sand. The Menefee interval will be fracture stimulated with 45,772 gal. of 15# cross-linked gel as the base fluid and 100,000# 20/40 mesh sand. The well will then be cleaned-up and placed on production.

- Comply to all NMOCD, BLM and BR regulations. Conduct daily safety meetings for all personnel on location. Notify BR regulatory (Peggy Bradfield 326-9727) and the appropriate Regulatory Agency prior to pumping any cement job. If an unplanned cement job is required, approval is required before the job can be pumped. If verbal approval is obtained, document the approval in Dims. adequate notice prior to the pump time for the Agency to witness the cementing operation.
- Inspect location and wellhead and install rig anchors prior to rig move.
- Construct blow pit.
- MOL, hold safety meeting and RU completion rig. Insure all safety equipment is strategically 1. located and functioning properly. NU relief lines to blow pit. Set four (4) 400 BBL frac tanks and fill w/ 2% KCL. Blow well down and kill well with 2% KCL water as necessary. ND wellhead and NU 7-1/16" 3M BOP, stripping head and blooie line. Test BOP.
- TOOH w/ 1-1/4" Pictured Cliffs tbg. set @ 2706' and lay down (during 1995 workover, new tbg. 2. depth and number of jts. used was not reported). TOOH w/2-1/16" Mesa Verde tbg. set @ 4984' and Baker Model "G" seal assy, and lay down.
- PU Baker CJ milling tool on 2-3/8" 4.7# J-55 workstring and TIH. Mill on Baker Model "D" pkr. 3. with air/mist (minimum mist rate is 12 BBL/hr). Recover pkr. and TOOH.
- PU 3-7/8" bit and 4-1/2" 10.5# casing scraper on 2-3/8" 4.7# J-55 workstring and clean out to 4. PBTD of +/- 5130. Obtain pitot gauge and record on morning report. TOOH.
- RU wireline and run CBL/CCL/GR and dual spaced neutron log from PBTD @ 5130' to 1500'.\*\* 5. Send logs to office immediately and perforations and setting depths will be supplied for the Menefee and Pictured Cliffs interval only. A squeeze procedure will be provided if TOC does not cover the Fruitland and Ojo Alamo interval.
  - \*\* Tie into liner top @ 2860'
- RIH and wireline set a 4-1/2" RBP @ 4940'. POOH. RD wireline company. 6.
- TIH w/ 7" fullbore packer and two (2) jts. of 2-7/8" N-80 BUTTRESS tbg. Set packer and pressure 7. test casing and RBP to 3000 psi. Release packer and TOOH standing back tubing.
- TIH w/2-3/8" 4.7# J-55 workstring to +/- 4940' and spot 300 gal 15% HCL acid across Menefee 8. interval (approx. +/- 4940' - +/-4550').\*\* TOOH.

\*\* All acid to contain the following additives/1000 gal.:

2 gal. C1-22

corrosion inhibitor

5 gal Ferrotrol-300L

iron control

1 gai Flo-back 20 surfactant

0.5 gal Clay Master-5C clay control

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- 9. Perforate approximately 21 holes in the Menefee interval (+/- 4494' +/- 4994') top down, using 3-1/8" HSC select fire guns with 12 gram charges and 0.27" diameter holes. (Perforations will be provided after reviewing logs).\*\* RD wireline company.
- 10. TIH w/ 4-1/2" pkr., two (2) jts. 2-3/8" 4.7# J-55 tbg. and 2-7/8" N-80 BUTTRESS frac string and set @ 4490'. RU stimulation company. Pressure test surface lines to 6000 psi. Breakdown perforations @ 12-15 BPM w/1000 gal. 15% HCL acid.\*\* Drop forty two (42) 7/8" 1.1 SG RCN balls @ 4 balls/bbl. Displace acid w/2% KCL water to bottom perforation. Balloff to maximum pressure of 4000 psi. Record breakdown pressure, ball action and ISIP. RD stimulation company.

\*\* All acid to contain the following additives/1000 gal.:

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. Release pkr. and TIH knocking balls off perforations.
- 12. RU stimulation company to frac down frac valve and 2-7/8" N-80 <u>BUTTRESS</u> frac string. Hold pre-job safety meeting. Pressure test surface lines to 6000 psi prior to stimulation. Maximum allowable surface treating pressure is 5000 psi.
- 13. Fracture stimulate in 1.0 to 4.0 ppg stages @ 25 BPM constant downhole rate with 45,772 gal. 15# cross-linked gel as base fluid and 100,000# 20/40 mesh sand. When sand concentration begins to drop, call flush. Flush to top perf @ +/- 4494'\*\*. Fracture Upper Point Lookout formation to the following schedule:

Stage	Water Vol. (gal)	Sand Vol. (lbs.)	<u>Type</u>
Pad	7,000	0	20/40 AZ
1.0 ppg	5,000	5,000	20/40 AZ
2.0 ppg	12,500	25,000	20/40 AZ
3.0 ppg	10,000	30,000	20/40 AZ
4.0 ppg	10,000	40,000	20/40 AZ
Flush	1,272	0	
Totals	45,772	100,000	

Treat frac fluid with the following additives per 1000 gallons:

* 3 # Bacteriacide	(added before filling with water)
* 0.3 mCi Sb-124	(Zero wash radioactive sand mixed on fly, 1-2 ppg stage)
* 0.3 mCi Sc-46	(Zero wash radioactive sand mixed on fly, 3 ppg stage)
* 0.4 mCi Ir-192	(Zero wash radioactive sand mixed on fly, 4-5 ppg stage)

<sup>\*\*</sup> After 75% of flush volume has been pumped (+/-954 gal), cut rate to 10 BPM. If well goes on a vacuum, shut down. Otherwise flush to top perf @ +/- 4494'.

- 14. Release pkr. and TOOH standing back 2-7/8" N-80 <u>BUTTRESS</u> frac string.
- 15. RIH and wireline set a 7" RBP @ +/- 2790'. Dump 10' of sand on top of RBP w/ dump bailer.

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- 16. TIH w/7" fullbore pkr. and approx. 87 jts. 2-7/8" N-80 BUTTRESS frac string and set pkr. @ +/-2710'.
- 17. RU stimulation company. Pressure test surface lines to 4500 psi. Pump 300 gal of 15% HCL @ BPM across Pictured Cliffs Perforations prior to pad stage in frac job.\*\* Maximum downhole pressure of 3500 psi.

\*\* All acid to contain the following additives/1000 gal.:

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

18. Fracture stimulate the Pictured Cliffs interval in 1.0 to 5.0 ppg stages @ ± 40 BPM constant downnole rate with 29,160 gal. of 70Q N<sub>2</sub> foamed 25# linear guar gel and 100,000 lbs of 20/40 mesh Arizona sand. Maintain a bottom hole frac gradient of 0.65 psi/ft throughout job. When sand is in hopper and the concentration begins to drop, call flush. Flush to top perforation with +/-5.5 fluid bbls and 1400 scf N<sub>2</sub>. Monitor bottomhole treating pressure, surface treating pressure, downhole rate, foam quality and sand concentration with computer van. Treat per the following schedule:

<b>Stage</b>	Foam Volume (gal)	Clean Gel Volume (gal)	SandVolume (lbs)	<u>Type</u>
Pad	3,000	900	0	20/40 Az
1 ppg	1,000	314	1,000	20/40 Az
2 ppg	2,000	655	4,000	20/40 Az
3 ppg	5,000	1,705	15,000	20/40 Az
4 ppg	7,500	2,660	30,000	20/40 Az
5 ppg	10,000	3,684	50,000	20/40 Az
Flush	660	198	0	
Totals	29,160	10,116	100,000	

Treat frac fluid with the following additives per 1000 gallons:

(Gelling agent pre-mixed if full tank) \* 25# GW-27 \* 1.0 gal Inflow-150 (Non-ionic surfactant pre-mixed in full tank) \* 1.0 # GWB-10 (Enzyme breaker mixed on fly) \* 1.0# GWB-5 (Oxidizer breaker mixed on fly) \* 5.0 gal FAW-1 (Foamer mixed on fly) (Bacteriacide pre-mixed in full tank) \* 0.38# X-CIDE-207 (Zero wash radioactive sand mixed on fly, 1-2 ppg stage) \* 0.3 mCi Sb-124 (Zero wash radioactive sand mixed on fly, 3 ppg stage) \* 0.3 mCi Sc-46 \* 0.4 mCi lr-192 (Zero wash radioactive sand mixed on fly, 4-5 ppg stage)

19. Shut well in after frac and record ISIP, 5, 10 and 15 shut-in pressure. RD stimulation company. Install flowback line above frac valve. Wait for 30 minutes to 1 hour before commencing flowback. Open well to pit in accordance to flowback schedule listed in the table below. If choke plugs off, shut well in and remove obstruction from choke and return to flowback schedule. Do not replace with next larger choke size until schedule dictates. Continue cleaning well up until fluid returns are negligible. Take pitot gauges when possible.

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8/64 choke from 10/64 choke from 12/64 choke from shut-in psi to 300 psi 300 psi to 150 psi 150 psi till well dies

NOTE: If well begins making sand during flowback, drop to next smaller choke size.

- 20. Release packer and TOOH laying down 2-7/8" N-80 BUTTRESS frac string.
- 21. TIH w/ 6-1/4" bit on 2-3/8" 4.7# J-55 workstring and CO to RBP set @ +/- 2790'. Obtain accurate pitot gauge for Pictured Cliffs interval. Record a three (3) hour Pictured Cliffs pitot gauge in report. (Gauge will be used for allocation formula in commingling approval.)
- 22. Retrieve RBP set @ ± 2790'. TOOH. TIH w/3-7/8" bit on 2-3/8" 4.7# J-55 workstring and CO to RBP set @ +/-4940'. TOOH. TIH w/ 3-7/8" bit on 2-3/8" 4.7# J-55 workstring and CO to PBTD (5130'). TOOH and stand back workstring.
- 23. RU wireline company. Run After Frac GR from +/- 4940' to top of tracer activity. RD wireline.
- 24. Perform squeeze procedure as needed to ensure TOC covers Ojo Alamo interval.
- 25. TIH with one joint of 2-3/8", 4.7#, J-55 tubing w/ expendable check, a seating nipple, then the remaining 2-3/8" production tubing. Land tubing near bottom Mesa Verde perforation (5026').
- 26. ND BOP's, NU single tubing hanger wellhead. Pump off expendable check. Obtain final pitot up tubing. If well will not flow on it's own, make swab run to seating nipple. If swab run is not necessary, run a broach on slickline to ensure that the tubing is clear. RD and MOL. Return well to production.

Approve:		Approve:		
	Leader			Drilling Superintendent
VENDORS:				
Wireline: Stimulation: Tracer Survey: Packer: Bridge Plug:	Schlumberge Dowell/Schle Protechnics Baker Oil To Baker Oil To	umberger ools	325-5006 325-5096 326-7133 325-0216 325-0216	
Steve Campbell Bob Goodwin Jennifer Dobson Mike Pippin	Home 325-8218 Home 599-0992 Home 564-3244 Home 327-4573	Office :	326-9546 326-9713 326-9708 326-9848	Pager 564-1902 Pager 564-7096 Pager 324-2461 Pager 324-2559

## Florance B #1 Unit N. Sec. 20, T30N, R09W

Location:

790' FSL. 1650' FWL

San Juan County, NM

Latitude:

36-47.53

11/26/62

Longitude:

107-48.38

Current Field:

Blanco PC/Mesaverde

Logs Run: Completed: GR-Ind.; Electric; Gammatron

Spud: Elev GL:

TD:

11/14/62

6049' 5130'

Elev KB: PBTD:

CASING RECORD:

Hole Size

Casing Size 9-5/8"

Weight 40#

Grade **S95** 

Depth Set

Cmt Vol 230 sx

Cmt Top Surface (circ.)

13-1/4" 8-3/4"

20#

J-55

303' 2909'

393 sx (2 stg)

Surface (circ.)

LINER RECORD:

Hole Size 6-1/4"

Casing Size 4-1/2"

Weight 10.5#

Grade J-55 Liner Depth Set 2860'-5130' Cmt Vol 330 sx

**Cmt Top** Liner top

**TUBING RECORD:** 

**Tubing Size** 2-1/16"

1-1/4"

Weight N/A N/A

**Grade** J-55 IJ N/A

Depth Set 4984' 2706'

**Joints** 147

Other

Depth

83

Baker Model D PKR **DV** Collar 2763' 2295'

**FORMATION TOPS:** 

Ojo Alamo

Kirtland

Fruitland

1528' 1591' 2370'

Pictured Cliffs Cliffhouse

Menefee

2719' 4333' 4490' Pt Lookout Gallup

4942'

Dakota

### Completions:

Mesaverde

Perfs: 4366'-5026'

Frac'd w/59,000 gal water & 60,000# sand.

Pictured Cliffs

Perfs: 2726'-2734'

Frac'd w/59,000 gai water & 20,000# sand.

### Cementing Information

9-5/8" csg: 230 sx reg. cmt, 1/4 c.f. Strata-Crete "6"/sx, & 2% HA-5.

7" csg: 85 sx 1:1 POZ mix & El Toro "35", 1/4 c.f. Strata-Crete "6"/sx & 1/8# Flocele/sx. 7" csg: 308 sx 1:1 POZ mix & El Toro "35", 1/4 c.f. Strata-Crete "6"/sx, 1/4 c.f. Flocele/sx. 4-1/2" csg: 330 sx reg. cmt., 4% gel, & .25# fine tuffplug.

Workover History:

2/09/95

Lowered MV tbg. PC tbg. was landed. (Assume same depth-Reports do not indicate new depth for PC

MEL:plh 9/10/97

## **FLORANCE B 1**

### BLANCO PCITURED CLIFFS/MESAVERDE

### UNIT N, SEC 20, T30N, R9W, RIO ARRIBA, NM

