

OIL CONSERVATION DIVISION

PO Box 2088

Santa Fe, NM 87504-2088

AMMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

<sup>1</sup> Operator Name and Address Burlington Resources Oil & Gas PO Box 4289 Farmington, NM 87499		<sup>2</sup> OGRID Number 14538
		<sup>3</sup> Reason for Filing Code CO - 7/11/96
<sup>4</sup> API Number 30-045-6366	<sup>5</sup> Pool Name FULCHER KUTZ P.C. (GAS)	<sup>6</sup> Pool Code 77200
<sup>7</sup> Property Code 007199	<sup>8</sup> Property Name JOHNSON	<sup>9</sup> Well Number #2

II. <sup>10</sup> Surface Location

UI or lot no.	Section	Township	Range	Lot.Idn	Feet from the	North/South Line	Feet from the	East/West Line	County
I	21	027N	010W		1625	S	1090	E	SAN JUAN

<sup>11</sup> Bottom Hole Location

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

III. Oil and Gas Transporters

<sup>18</sup> Transporter OGRID	<sup>19</sup> Transporter Name and Address	<sup>20</sup> POD	<sup>21</sup> O/G	<sup>22</sup> POD ULSTR Location and Description
7057	EL PASO FIELD SERVICES P.O. BOX 1492 EL PASO, TX 79978		G	I-21-T027N-R010W

IV. Produced Water

<sup>23</sup> POD	<sup>24</sup> POD ULSTR Location and Description
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V. Well Completion Data

<sup>25</sup> Spud Date	<sup>26</sup> Ready Date	<sup>27</sup> TD	<sup>28</sup> PBD	<sup>29</sup> Perforations
<sup>30</sup> Hole Size	<sup>31</sup> Casing & Tubing Size	<sup>32</sup> Depth Set	<sup>33</sup> Sacks Cement	

VI. Well Test Data

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

<p><sup>46</sup> 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.</p> <p>Signature: <i>Dolores Diaz</i></p> <p>Printed Name: Dolores Diaz</p> <p>Title: Production Associate</p> <p>Date: 7/11/96</p> <p>Phone: (505) 326-9700</p>	OIL CONSERVATION DIVISION			
	Approved by: Frank T. Chavez			
	Title: District Supervisor			
	Approved Date: July 11, 1996			

<sup>47</sup> If this is a change of operator fill in the OGRID number and name of the previous operator

14538 Meridian Oil Production	Previous Operator Signature	Printed Name	Title	Date
	Signature: <i>Dolores Diaz</i>	Dolores Diaz	Production Associate	7/11/96

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

RECEIVED  
BLL

OCT 28 PM 2:21

1. Type of Well  
GAS

5. Lease Number  
SF-077386A  
If Indian, All. or  
Tribe Name

2. Name of Operator

**BURLINGTON  
RESOURCES** OIL & GAS COMPANY

7. Unit Agreement Name

3. Address & Phone No. of Operator

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

8. Well Name & Number  
Johnson #2

9. API Well No.  
30-045-06366

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

1625'FSL, 1090'FEL, Sec. 21, T-27-N, R-10-W, NMPM

10. Field and Pool  
Basin Fruitland Coal/  
Fulcher Kutz PC

11. 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	
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment	<input checked="" type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other - Fruitland Coal pay add	

13. Describe Proposed or Completed Operations

It is intended to add pay to the Fruitland Coal formation of the subject well according to the attached procedure and wellbore diagram. The Pictured Cliffs formation will be plugged and abandoned.

RECEIVED  
NOV - 5 1997

OIL CON. DIV.  
BLL 3

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

Signed [Signature] (PMPOpps) Title Regulatory Administrator Date 10/27/97

(This space for Federal or State Office use)

APPROVED BY \_\_\_\_\_ Title \_\_\_\_\_ Date NOV 03 1997

CONDITION OF APPROVAL, if any:

JOHNSON #2 FRTC  
Workover Procedure  
1 21 27 10  
San Juan County, N.M.  
Lat-Long: 36-33.24 - 107-53.55

**PROJECT SUMMARY:** Squeeze off the depleted PC and foam frac the FRTC in this 1953 vintage PC well that was recompleted to a commingled PC-FRTC in 1990.

1. Comply to all NMOCD, BLM, and BROG rules and regulations. MOL and RU completion rig. NU 7-1/16" 3000 psi BOP w/flow tee and stripping head. NU blooie line and 2-7/8" relief line.
2. TOH w/58 jts 2-3/8" tbg.
3. Run 4-3/4" bit on 2-3/8" tbg and drill out CIBP @ 1850' w/air/mist. TOH.
4. Set cmt ret @ 1856' on wireline using collars from attached neutron log. Run cmt ret stinger on 2-3/8" tbg to just above cmt ret (1855'). Load hole w/water. Sting into ret test position and test tbg to 3000 psi. Sting into cmt ret and while monitoring csg, est rate into PC open hole. If no communication exists w/FRTC, sq PC open hole w/20 sx cl "B" cmt. This will fill the open hole w/over 100% excess cmt. Sting out of ret and reverse out cmt from the top of the cmt ret. TOH.
5. Run CBL from 1856' to top of cmt and coorelate to attached neutron log.
6. Spot and fill 3-400 bbl. frac tanks w/1% KCL water. If necessary, filter all water to 25 microns. Two tanks are for gel and one tank for breakdown water. Usable water required for frac is 503 bbls.
7. If cmt bond is OK, perf additional FRTC w/4 spf @ 1856'-50', 1734'-30', 1643'-36', 1603'-1600', 1532'-30'. Total 88 (additional) holes. Perf using 3-1/8" hollow steel carrier guns loaded w/Owen HSC 13 gm. charges phased at 180 degrees. Average perf dia. = 0.48". Average penetration is 18" in Berea.
8. Run straddle pkr w/4' treating interval on 2-3/8" tbg and breakdown all perms w/2000 gal 15% HCL acid. Max pressure is 4000 psi. TOH.  
All acid on this well to contain the following additives per 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
9. TIH w/5-1/2" pkr on 3-1/2" 9.3# N-80 w/shaved collars (4.25" O.D. 2.992" I.D.) rental frac string and set @ 1400'. (Run 2 jts 2-7/8" N-80 tbg above pkr). Pressure to 300 psi on annulus and prepare to frac.
10. Fracture treat FRTC down frac string w/70,000 gals. of 70 quality foam using 30# gel as the base fluid and 130,000# 20/40 Arizona sand. Pump at 45 BPM. Monitor bottomhole and surface treating pressures, rate, foam quality, and sand concentration with computer van. Sand to be tagged w/ 3 RA tracers. Max. pressure is 5000 psi and estimated treating pressure is 3500 psi. Treat per the folowing schedule:

JOHNSON #2 FRTC - FRAC EXISTING FRTC

<u>Stage</u>	<u>Foam Vol. (Gals.)</u>	<u>Gel Vol. (Gals.)</u>	<u>Sand Vol. (lbs.)</u>
Pad	15,000	4,500	--
1.0 ppg	15,000	4,500	15,000
2.0 ppg	15,000	4,500	30,000
3.0 ppg	15,000	4,500	45,000
4.0 ppg	10,000	3,000	40,000
Flush	( 511)	(153)	0
Totals	70,000	21,000	130,000#

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# J-48 (Guar Gel mix in full tank - 16,000 gal)
- \* 1.0 gal. Aqua Flow (Non-ionic Surfactant mix in full tank)
- \* 1.0# GVW-3 (Enzyme Breaker mix on fly)
- \* 1.0# B - 5 (Breaker mix on fly)
- \* 5.0 gal Fracfoam I (Foamer mix on fly)
- \* 0.38# FracCide 20 (Bacteriacide mix on full tank)

11. Open well through choke manifold and monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. **Take pitot gauges when possible.**
12. Release pkr and TOH w/frac string. TIH w/notched collar on 2-3/8" tbg and clean out to 1856' w/air/mist.
13. Monitor gas and water returns and **take pitot gauges when possible.**
14. When wellbore is sufficiently clean, TOH and run after frac gamma-ray log and perf eff log from 1856'-1300'.
15. TIH w/2-3/8" tbg w/standard seating nipple one joint off bottom and again cleanout to 1856'. When wellbore is sufficiently clean, land tbg @ 1800' KB. **Take final water and gas samples and rates.**
16. ND BOP and NU wellhead and tree. Rig down and release rig.

Recommended:   
Production Engineer

Approved:  10/24/97  
Drilling Superintendent

Approved:  9/2/97  
Team Leader

VENDORS:

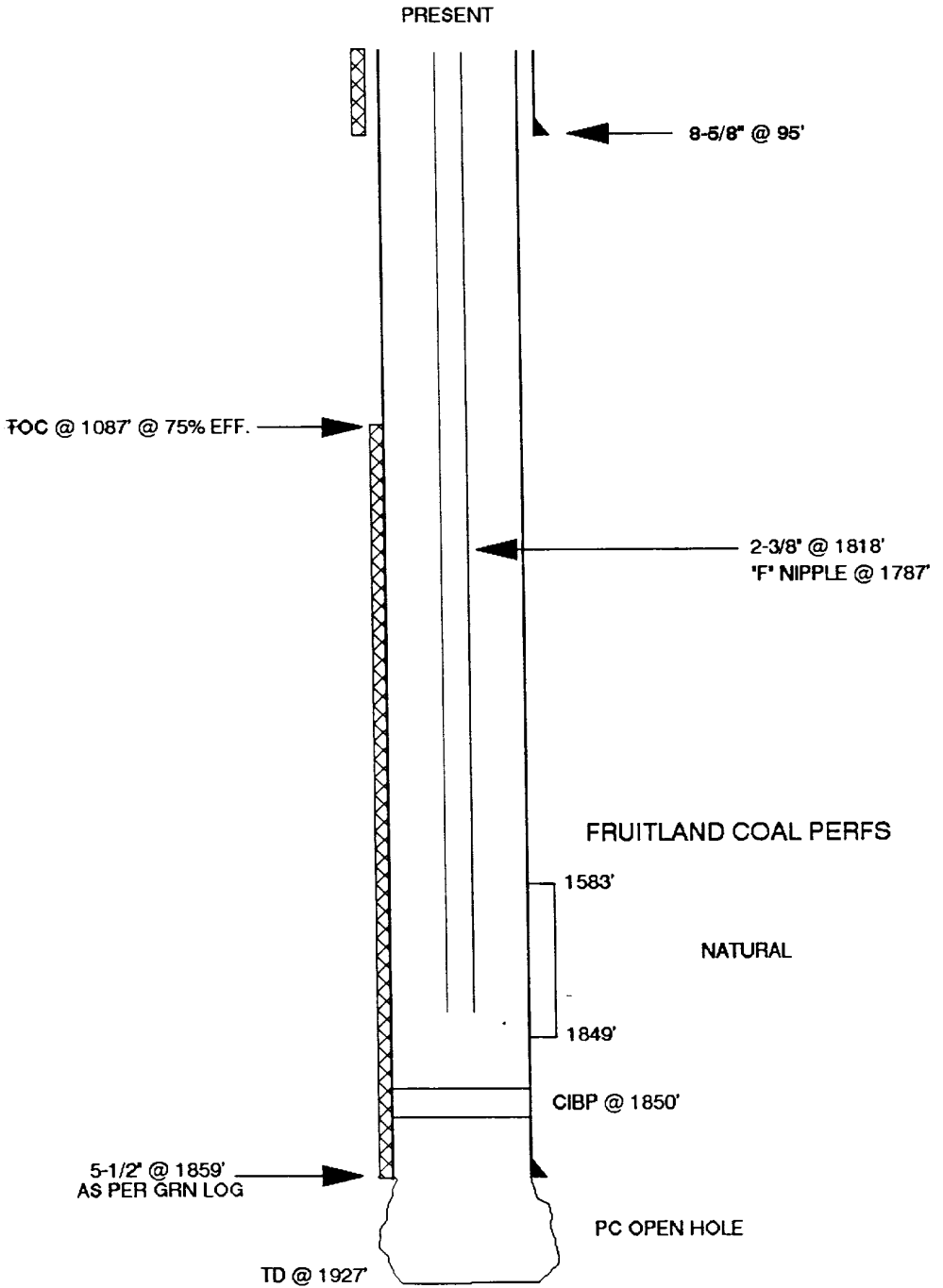
Wireline:	Basin	327-5244
Fracturing:	BJ	327-6222
RA Tagging:	Pro-Technics	326-7133
Packers:	Schlum.	325-5006

PMP

9/18/972

# JOHNSON #2 FRTC

UNIT I SECTION 21 T27N R10W  
SAN JUAN COUNTY, NEW MEXICO



**Pertinent Data Sheet - JOHNSON #2 FRTC**

1 21 27 10

**Location:** 1625' FSL & 1090' FEL, Unit I, Section 21, T27N, R10W, San Juan County, New Mexico

**Field:** Basin Fruitland Coal

**Elevation:** 6091' GL  
KB=10'

**TD:** 1927'

**PBTD:** 1850'

**Spud Date:** 4/19/53

**Lease#:** Fed. SF-077386A

**DP #:** 50883B

**GWI:** 100%

**NRI:** 75.062%

**Prop#:** 071293400

**Casing Record:**

<u>Hole Size</u>	<u>Csg Size</u>	<u>Wt. &amp; Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>Cement (Top)</u>
N/A	8-5/8"	32#	95'	90 sx	N/A
7-7/8"	5-1/2"	17#	1859*	150 sx	1087'@75% Eff.
4-3/4"	Open Hole		1859'-1927**		

\*Depths as per attached GRN log.

**Tubing Record:**

2-3/8"	4.7# J-55	1818'	58 Jts
	"F" nipple @	1787'	

**Formation Tops:**

Ojo Alamo:	817'
Kirtland Shale:	995'
Fruitland:	1529'
Pictured Cliffs:	1855'

**Logging Record:** Electric Log (53), Cased Hole Nuetron (90)

**Stimulation:** 5/53: Shot open hole w/160 qts SNG 1859'-1927'.

**Workover History:** 11/90: Perfed FRTC @ 1583'-85', 1645'-47', 1693'-1700', 1702'-06', 1735'-37', 1740'-43', 1834'-39', 1846'-49' w/4 spf. Completed as a dual PC/FRTC.

10/23/94: Set CIBP @ 1850'. TIH w/pressure gauges

12/13/95: Pulled pressure gauges & ran 2-3/8" tbg to 1818'.

**Production History:** PC cum = 589 MMCF. FRTC cum = 378 MMCF. FRTC rem = 1021 MMCF w/current production rate of 175 MCF/D. See attached production curve. This well has a wellhead compressor.

**Pipeline:** EPNG