submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
BLM

Sundry Notices and Reports on Wells

96 NOV 20 PM 1:28

070 FARMINGTON, NM

1. **Type of Well**
GAS

5. **Lease Number**
SF-076958

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

7. **Unit Agreement Name**

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

8. **Well Name & Number**
Hare #9

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

9. **API Well No.**
30-045-08397

4. **Location of Well, Footage, Sec., T, R, M**
990'FNL, 990'FEL, Sec.15, T-29-N, R-10-W, NMPM
A

10. **Field and Pool**
Basin Fruitland Coal/
Aztec Pictured Cliffs

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 | |
|---|---|---|
| _X_ Notice of Intent | ___ Abandonment | ___ Change of Plans |
| | _X_ Recompletion | ___ New Construction |
| ___ Subsequent Report | _X_ Plugging Back | ___ Non-Routine Fracturing |
| | ___ Casing Repair | ___ Water Shut off |
| ___ Final Abandonment | ___ Altering Casing | ___ Conversion to Injection |
| | _X_ Other - abandon Pictured Cliffs | |

13. **Describe Proposed or Completed Operations**

It is intended to recomplete the subject well in the Fruitland Coal formation according to the attached procedure and wellbore diagram. The Pictured Cliffs formation will be abandoned.

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OIL CON. DIV.
DIST. 3

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

Signed Peggy Bradfield (PMP2) Title Regulatory Administrator Date 11/18/96

(This space for Federal or State Office use)
APPROVED BY _____ Title _____ Date _____
CONDITION OF APPROVAL, if any:

APPROVED
/S/ Duane W. Spencer
NOV 21 1996
DISTRICT MANAGER

NMOCD

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

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

Form C-10
Revised February 21, 199
Instructions on bac
Submit to Appropriate District Offic
State Lease - 4 Copie
Fee Lease - 3 Copie

☐ AMENDED REPOR

# WELL LOCATION AND ACREAGE DEDICATION PLAT

| [1] API Number | [2] Pool Code | [3] Pool Name |
|---|---|---|
| 30-045-08397 | 71629/71280 | Basin Fruitland Coal/Aztec Pict.Cliffs |

| [4] Property Code | [5] Property Name | [6] Well Number |
|---|---|---|
| 7091 | Hare | 9 |

| [7] OGRID No. | [8] Operator Name | [9] Elevation |
|---|---|---|
| 14538 | BURLINGTON RESOURCES OIL & GAS COMPANY | 5729 ' |

## [10] Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| A | 15 | 29-N | 10-W | | 990 | North | 990 | East | S.J. |

## [11] Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| [12] Dedicated Acres | [13] Joint or Infill | [14] Consolidation Code | [15] Order No. |
|---|---|---|---|
| PC -160<br>FTC-N/318.38 | | | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

Not resurveyed, prepared from a plat by Ernest V. Echohawk dated 3-2-59.

990'
990'

15

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DIST. 3

## [17] OPERATOR CERTIFICATION

*I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief*

Peggy Bradfield
Signature

Peggy Bradfield
Printed Name

Regulatory Administrator
Title

11-19-96
Date

## [18] SURVEYOR CERTIFICATION

*I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.*

11/18/96
Date of Survey

Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

Certificate Number

HARE #9 FRTC
Workover Procedure
A 15 29 10
San Juan County, N.M.
Lat-Long: 36.731064 - 107.866104

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/ 1" tbg & lay down. TIH w/4-1/2" scraper on 2-7/8" 6.5# N-80 w/shaved collars (3.5" O.D. 2.441" I.D.) rental tbg to 2158' (run 2 jts 2-3/8" N-80 on top of scraper).. TOH Run a dual spaced neutron log from 2158'-1700'. Hot-shot log to Production Engineer.

3. Run 4-1/2" cmt ret on 2-7/8" tbg & set @ 2106' (run 2 jts 2-3/8" N-80 on top of cmt ret). Sq PC perfs w/8 sx Cl "B" cmt. This will fill inside csg from bottom perf to cmt retainer w/100% excess cmt. Sting out of ret, reverse out cmt & pressure test csg to 300 psi. TOH.

Ojo Alamo btm. @ 1095' Top @ 909'

4. Perf 2 sq holes (50'below ~~top~~ bottom of Ojo Alamo) @ ~~1044~~ 1095'. Run 4-1/2" fullbore pkr on 2-7/8" tbg (Run 2 jts 2-3/8" N-80 on top of pkr) & set @ 700'. Establish circ & circ cmt out bradenhead valve, about 82 sx Release pkr, reverse out cmt, reset & repressure. WOC.
??? Amount volume - 165 ft3

5. TIH w/3-7/8" bit on 2-7/8" tbg (Run 2 jts 2-3/8" N-80 on top of bit) & drill cmt & C.O. w/air/mist to 2106'. Pressure test to 300 psi. Roll hole w/1% KCL water.

6. Using log, perf about 20' of Lower Fruitland Coal w/2 spf. Perf using 3-1/8" hollow steel carrier guns loaded w/Owen HSC 13 gm. charges phased at 180 degrees & 2 spf. Average perf dia. = 0.48". Average penetration is 18" in Berea.

7. 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 289 bbls.

8. 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 @ 1800'. (Run 2 jts 2-3/8" N-80 on top of pkr). Load backside w/1% KCL water. Pressure backside to 300 psi & monitor during breakdown & frac job.

9. Breakdown & attempt to ball-off w/1000 gal 15% HCL acid & 50 7/8" 1.3 sp gr RCN perf balls. Max pressure is 5000 psi. Lower pkr to 2105' to knock off perf balls. Reset pkr @ 1900'.

10. Fracture treat Lower FRTC down frac string w/40,000 gals. of 70 quality foam using 30# gel as the base fluid & 60,000# 20/40 Arizona sand. Pump at 35 BPM. Monitor bottomhole & surface treating pressures, rate, foam quality, & sand concentration with computer van. Sand to be tagged w/ 0.4 mCi/1000# Ir-192 tracer. Max. pressure is 5000 psi & estimated treating pressure is 3000 psi. Treat per the folowing schedule:

| Stage | Foam Vol. (Gals.) | Gel Vol. (Gals.) | Sand Vol. (lbs.) |
|---|---|---|---|
| Pad | 10,000 | 3,000 | --- |
| 1.0 ppg | 10,000 | 3,000 | 10,000 |
| 2.0 ppg | 10,000 | 3,000 | 20,000 |
| 3.0 ppg | 10,000 | 3,000 | 30,000 |
| Flush | ( 486) | (145) | 0 |
| Totals | 40,000 | 12,000 | 60,000# |

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 & monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. **Take pitot gauges when possible.**

12. Release pkr & TOH w/frac string. Set 4-1/2" ret BP @ 1990' & top w/1 sx sand. Load hole w/1% KCL water & pressure test to 300 psi.

13. Using log, perf about 20' of Upper Fruitland Coal w/2 spf. Perf using 3-1/8" hollow steel carrier guns loaded w/Owen HSC 13 gm. charges phased at 180 degrees & 2 spf. Average perf dia. = 0.48". Average penetration is 18" in Berea.

14. 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 289 bbls.

15. 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 @ 1985'. (Run 2 jts 2-3/8" N-80 on top of pkr). Pressure test ret BP @ 1990' to 5000 psi. Load backside w/1% KCL water. Reset pkr @ 1700'. Pressure backside to 300 psi & monitor during breakdown & frac job.

16. Breakdown & attempt to ball-off w/1000 gal 15% HCL acid & 50 7/8" 1.3 sp gr RCN perf balls. Max pressure is 5000 psi. Lower pkr to 1985' to knock off perf balls. Reset pkr @ 1850'.

17. Fracture treat Upper FRTC down frac string w/40,000 gals. of 70 quality foam using 30# gel as the base fluid & 60,000# 20/40 Arizona sand. Pump at 35 BPM. Monitor bottomhole & surface treating pressures, rate, foam quality, & sand concentration with computer van. Sand to be tagged w/ 0.4 mCi/1000# Ir-192 tracer. Max. pressure is 5000 psi & estimated treating pressure is 3000 psi. Treat per the folowing schedule:

| Stage | Foam Vol. (Gals.) | Gel Vol. (Gals.) | Sand Vol. (lbs.) |
|---|---|---|---|
| Pad | 10,000 | 3,000 | --- |
| 1.0 ppg | 10,000 | 3,000 | 10,000 |
| 2.0 ppg | 10,000 | 3,000 | 20,000 |
| 3.0 ppg | 10,000 | 3,000 | 30,000 |
| Flush | ( 451) | (135) | 0 |
| Totals | 40,000 | 12,000 | 60,000# |

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) |

18. Open well through choke manifold & monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. **Take pitot gauges when possible.**

19. Release pkr & TOH w/frac string. TIH w/retreiving head on 1-1/4" tbg & clean out to ret BP @ 1990' w/air/mist. Monitor gas & water returns & **take pitot gauges when possible.**

20. When wellbore is sufficiently clean, retreive BP @ 1990' & TOH.

21. TIH w/notched collar on 1-1/4" tbg & C.O. w/air/mist to 2106' & **take pitot gauges when possible.**. When wellbore is sufficiently clean, TOH & run after frac gamma-ray log & perf eff log from 2106'-1500'.

22. TIH w/1-1/4" tbg w/standard seating nipple one joint off bottom & again cleanout to 2106'. When wellbore is sufficiently clean, land tbg @ 2050' KB. **Take final water & gas & rates.**

23. ND BOP & NU wellhead & tree. Rig down & release rig.

Recommended: _____ 11/4/96
Production Engineer

Approve: _____ 11/12/96
Drilling Superintendent

VENDORS:

| | | |
|---|---|---|
| Wireline: | Basin | 327-5244 |
| Fracturing: | BJ | 327-6222 |
| RA Tag: | Pro-Technics | 326-7133 |

PMP

# Pertinent Data Sheet - HARE #9

**Location:** 990' FNL & 990' FEL, Unit A, Section 15, T29N, R10W, San Juan County, New Mexico

**Field:** Aztec PC

**Elevation:** 5729' GL
7' KB

**TD:** 2178'
**PBTD:** 2158'

**Completed:** 4/3/59

**Spud Date:** 3/28/59

100% SRC Trust = 100%GWI & 82.5% NRI

**DP #:** 27233
**Lease:** Fed: SF 076958
**GWI:** 25.00%
**NRI:** 21.00%
**Prop#:** 0020373

**Initial Potential:** PC=AOF=2063MCF/D; SICP=640 psi

**Casing Record:**

| Hole Size | Csg Size | Wt. & Grade | Depth Set | Cement | Cement (Top) |
|---|---|---|---|---|---|
| 12-1/4" | 8-5/8" | 24# J-55 | 136' | 100 sx. | Circ Cmt |
| 6-3/4" | 4-1/2" | 9.5# J-55 | 2178' | 75 sx. | 1450'@ 75% EFF.<br>1525' - Survey |

**Tubing Record:**

| Tbg. Size | Wt. & Grade | Depth Set | |
|---|---|---|---|
| 1" | 1.7# J-55 | 2146' | 87 Jts |

**Formation Tops:**

| | |
|---|---|
| Ojo Alamo: | 994' |
| Kirtland Shale: | 1046' |
| Fruitland: | 1662' |
| Pictured Cliffs: | 2108' |

**Logging Record:** Induction, Temp Survey

**Stimulation:** Perfed PC @ 2154'-39', 2138'-23' w/2 spf & 2123'-15' w/4 spf & fraced w/60,000# sand in water.

**Workover History:** NONE

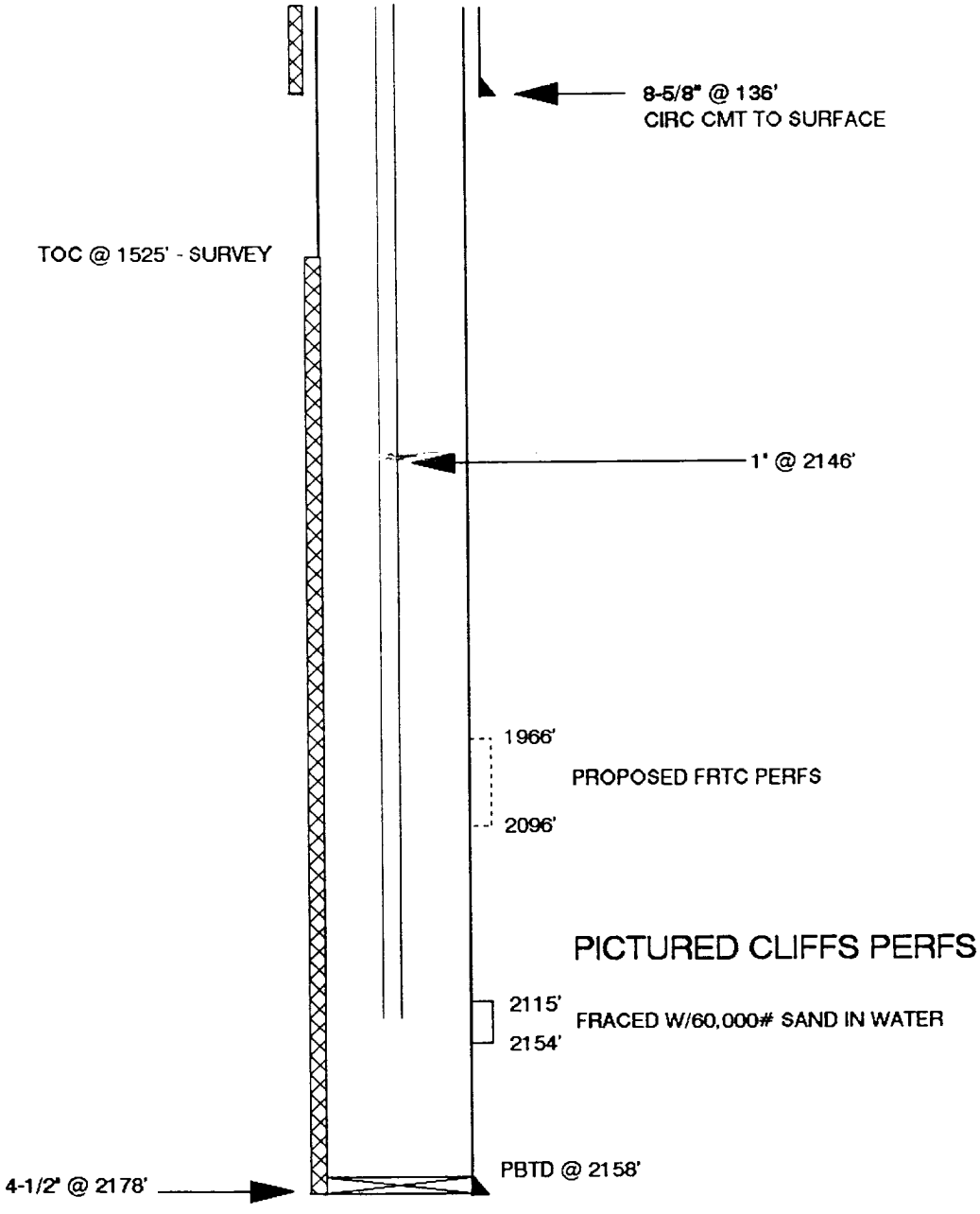
**Production history:** PC 1st delivered 4/28/59. Current PC capacity is 0 MCF/D. PC cum is 522 MMCF..W/ 0MMCF booked. This well currently has a bradenhead flow of clear water & a bradenhead build-up of 19 psi.

**Pipeline:** Williams Field Service

# HARE #9 FRTC

UNIT A SECTION 15 T29N R10W

SAN JUAN COUNTY, NEW MEXICO



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Farmington District Office
1235 La Plata Highway
Farmington, New Mexico 87401

IN REPLY REFER TO:

**Attachment to Notice of**

**Intention to Workover**

**Re: Plug Back and Recomplete**

**Well: 9 Hare**

CONDITIONS OF APPROVAL

1. Perforate 50 feet below the bottom of the Ojo Alamo (Kirtland top) at 1095'. (Ojo Alamo bottom @ 1045', top @ 909') Recalculate the cement volume necessary to circulate cement to the surface.

2. **Mike Flaniken** with the Farmington District Office is to be notified at least 24 hours before the workover operations commence (505) 599-8907.