

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division

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
990' FSL, 890' FWL, Sec. 2, T-26-N, R-9-W, NMPM, San Juan County

API # (assigned by OCD)
30-045-11727

5. Lease Number

6. State Oil & Gas Lease #
B-11122

7. Lease Name/Unit Name
Huerfanito Unit

8. Well No.
106

9. Pool Name or Wildcat
Ballard PC/Basin DK

10. Elevation:

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

13. Describe Proposed or Completed Operations

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

RECEIVED
MAR - 2 1999
OIL CON. DIV.
DIST. 3

SIGNATURE Regan Spaulding (PMPOps) Regulatory Administrator March 1, 1999

(This space for State Use)

Approved by ORIGINAL SIGNED BY ERNIE BUSCH Title DEPUTY OIL & GAS INSPECTOR, DIST. #3 Date MAR 18 1999

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

District II
PO Drawer 00, 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-1
Revised February 21, 1999
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Cop.
Fee Lease - 3 Cop.

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-11727	² Pool Code 71439/71599	³ Pool Name Ballard Pictured Cliffs/Basin Dakota
⁴ Property Code 7138	⁵ Property Name HUERFANITO UNIT	⁶ Well Number 106
⁷ OGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	⁹ Elevation 6247'

¹⁰ Surface Location

UL or lot no. M	Section 2	Township 26N	Range 9W	Lot ID#	Feet from the 990	North/South line SOUTH	Feet from the 890	East/West line WEST	County SAN JU.
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot ID#	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres PC - 160 DK-W/320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

<p>*NOT RESURVEYED* PREPARED FROM A PLAT BY DAVID O. VILVEN DATED MAY 24, 1966</p> <p>890'</p> <p>Ob</p>	<p>RECEIVED MAR - 2 1999 OIL CON. DIV. DIST. 2</p>	<p>¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Peggy Bradfield</i> Signature Peggy Bradfield Printed Name Regulatory Administrator Title 3-1-99 Date</p>
		<p>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.</p> <p>FEBRUARY 27, 1999 Date of Survey Signature and Seal of Professional Surveyor <i>NEALE C. EDWARDS</i> NEW MEXICO 6857 Certificate Number 6857</p>

HOLD COPY FOR *FRANK #17 (E)*

HUERFANITO UNIT #106 PC
Recompletion Procedure
M 2 26 9
San Juan County, N.M.
Lat-Long: 36 – 30.75' – 108 – 45.83'

PROJECT SUMMARY: Plugback this 1966 vintage depleted Dakota well to the PC and foam frac.

1. Comply to all NMOCD, BLM, and BROG rules and regulations. MOL and RU completion rig. NU BOP w/flow tee and stripping head. Test operation of rams. NU blooie line and 2-7/8" relief line.
2. Set blanking plug in SN of 2-3/8" tbg @ 6492' and pressure test to 3000 psi. TOH w/2-3/8" tbg.
3. Run 4-1/2" csg scraper on 2-3/8" tbg to 6309' (50' above top DK perf). TOH. Run 4-1/2" cmt retainer on 2-3/8" tbg and set @ 6309'. Sq DK perms w/50 sx cl "G" cmt. This will fill inside the pipe from 6641' to 6309' w/100% excess cmt. Sting out of ret and spot 5 sx cmt on top of cmt ret @ 6309'. Reverse out cmt.
4. Load hole w/water and pressure test to 500 psi. TOH.
5. Perf 2 sq holes @ 5493 (50' below top of Gallup). Attempt to establish rate into sq holes down csg at less than 500 psi. TIH w/4-1/2" cmt ret on 2-3/8" tbg and set @ 5393' (50' above top of Gallup). Sq perms w/41 sx cmt. This will fill outside and inside 4-1/2" csg 50' above and below the top of Gallup w/50% excess cmt. Sting out of cmt ret and spot 5 sx cmt on top ret. Reverse out cmt. TOH.
6. Perf 2 sq holes @ 3577' (50' below top of MV). Attempt to establish rate into sq holes down csg at less than 500 psi. TIH w/4-1/2" cmt ret on 2-3/8" tbg and set @ 3477' (50' above top of MV). Sq perms w/41 sx cmt. This will fill outside and inside 4-1/2" csg 50' above and below the top of MV w/50% excess cmt. Sting out of cmt ret and spot 5 sx cmt on top ret. Reverse out cmt. TOH.
7. MI Basin. Run CBL from 2200' to top of cmt and correlate to attached open hole log (stg tool @ 2157'). Pressure csg to 800 psi if necessary to see bond. Hot-shot log to Mike Pippin (326-9848) so sq perms can be picked, if necessary.
8. Set 4-1/2" CIBP @ 2150' on wireline. Pressure test 4-1/2" csg and CIBP to 800 psi. TIH w/2-3/8" tbg open ended and spot 100 gal 15% HCL acid (1981'-2068').
All acid on this well to contain the following additives per 1000 gal:

2 gal	Cl-22	corrosion inhibitor
5 gal	Ferrotrol-300L	iron control
1 gal	Flo-back 20	Surfactant
0.5 gal	Clay Master-5C	clay control
9. Perf PC @ 1981', 84', 92', 96', 2002', 07', 13', 19', 22', 31', 35', 39', 45', 51', 57', 68'.
Total 16 holes. Perf w/select fire HSC gun using HSC-3125-302T 10 gr Owen jets which should give a 0.29" hole and 16.64" of penetration in concrete.

HUERFANITO UNIT #106 PC - RECOMPLETE TO PC WELL

10. Fill 3 - 400 bbl. frac tanks with 1% KCL water. If necessary, filter all water to 25 microns. Two tanks are for gel and one tank for breakdown water. Usable gel water required for frac is 717 bbls.
11. 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 2 jts 2-3/8" N-80 on top of pkr).and set @ 1800'. W/ 500 psi on annulus, breakdown and attempt to balloff FRTC perfs w/1500 gal 15% HCL acid and 40 RCN 7/8" 1.3 sp gr perf balls. Use same acid additives as in step #8. Max. pressure is 4500 psi. Lower pkr to 2080' to knock off perf balls. Reset pkr @ 1900'.
12. With 500 psi on annulus, frac PC down 2-7/8" frac string w/75,000 gals. of 70 quality foam using 20# gel as the base fluid and 220,000# 20/40 Arizona sand. Pump at 40 BPM. Monitor bottomhole and surface treating pressures, rate, foam quality, and sand concentration with computer van. Sand to be tagged w/ 3 RA isotope tracers. Max. pressure is 6000 psi and estimated Max. treating pressure is 5350 psi. Pipe friction @ 40 BPM is 3188 psi. Treat per the folowing schedule:

<u>Stage</u>	<u>Foam Vol. (Gals.)</u>	<u>Gel Vol. (Gals.)</u>	<u>Sand Vol. (lbs.)</u>
Pad	20,000	6,000	---
1.0 ppg	10,000	3,000	10,000
2.0 ppg	20,000	6,000	40,000
3.0 ppg	30,000	9,000	90,000
4.0 ppg	20,000	6,000	80,000
Flush	(462)	(139)	0
Totals	100,000	30,000	220,000#

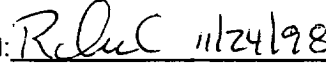
Treat frac fluid w/the following additives per 1000 gallons:

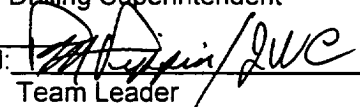
- * 20# J-48 (Guar Gel mix in full tank - 16,000 gal)
- * 1.0 gal. Aqua Flow (Non-ionic Surfactant mix in full tank)
- * 1.0# GVW-3 (Enzyme Breaker mix on fly)
- * 1.0# B - 5 (Breaker mix on fly)
- * 3.0 gal Fracfoam I (Foamer mix on fly)
- * 0.38# FracCide 20 (Bacteriacide mix on full tank)

13. Open well through choke manifold and monitor flow. Flow @ 20 bbl/hr. or less, if sand is observed. Take pitot gauges when possible. TOH w/pkr.
14. TIH w/notched collar on 2-3/8" tbg and C.O. to 2150' w/air/mist. Monitor gas and water returns and Take pitot gauges when possible.
15. When wellbore is sufficiently clean, TOH and run after frac gamma-ray log and perf eff log from 2150'-1800'.
16. TIH w/ 2-3/8" 4/7# J-55 EUE tbg w/standard seating nipple one joint off bottom and again cleanout to 2150'. When wellbore is sufficiently clean, land tbg @ 2000' KB. Take final water and gas rates.
17. ND BOP and NU wellhead and tree. Rig down and release rig.

HUERFANITO UNIT #106 PC - RECOMPLETE TO PC WELL

Recommended:  11/23/98
Production Engineer

Approved:  11/24/98
Drilling Superintendent

Approved:  LWC
Team Leader

VENDORS:

Wireline:	Basin	327-5244
Fracturing:	Howco	325-3575
RA Tag:	Pro-Technics	326-7133

PMP

Huerfanito Unit #106

CURRENT

Basin Dakota

990' FSL, 890' FWL,
SW Section 2, T-26-N, R-09-W, San Juan County, NM
Latitude/Longitude: 36.512558 / 107.763809
36.30.75 107.45.83

Today's Date: 4-18-96

Spud: 6-23-66

Completed: 7-15-66

Elevation: 6247' (GL)

N/A (KB)

Logs: IES, FDC-GR,

G-CCL, Temp Survey 12-1/4" hole

Workovers:

(7/67) Set Gas Lift Valves,

(5/78) Set Cmt Retainer,

Remove Gas Lift Valves,

(8/94) Cleanout

Nacimiento @
Surface

8-5/8", 24.0#, J-55, Csg set @ 299',
Cmt w/210 sx (Circulated to Surface)

Ojo Alamo @ 1048'

Kirtland @ 1290'

Fruitland @ 1738'

Pictured Cliffs @ 1976'

TOC @ 1630' (TS)

Stg Tool @ 2157',
Cmt w/125 sx (235 cf)

210
200 jts, 2-3/8", 4.7#, J-55, tbg set @ 6478',
(Otis type SN @ 6492')

Cliff House @ 3527'

Menefee @ 3632'

TOC @ 3647' (75%)

Point Lookout @ 4314'

Stg Tool @ 4668',
Cmt w/165 sx (310 cf)

Gallup @ 5443'

Fish ? (1 Stand of Tbg) 6632'

TOC @ 6288' (75%)

Greenhorn @ 6276'

Graneros @ 6330'

Dakota @ 6448'

Dakota Perforations:
6359' - 6543', 6637' - 6641',
Total 80 holes

Cmt Retainer @ 6590'

FC @ 6672'

4-1/2", 10.5#, J-55, Csg set @ 6703',
Cmt w/100 sx (126 cf)

7-7/8" hole

TD 6703'

Initial Potential

Initial AOF: 6,410 Mcfd (7/66)
Current SICP: 2093 psig (7/66)

Production History

Cumulative: 985.7 MMcf
Current: 0.0 Mcfd

Gas

Oil

6.9 Mbo
0.0 bbls/d

Ownership

GWI: 95.29%
NRI: 77.39%
TRUST: 1.17%

Pipeline

EPNG