

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	2002 NOV 12 PM 2:22 070 12 11 11:11	5. Lease Number SF-078103 A Unit Reporting Number
1b. Type of Well GAS		6. If Indian, All. or Tribe
2. Operator BURLINGTON RESOURCES Oil & Gas Company		7. Unit Agreement Name Huerfano Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM-87499 (505) 326-9700		8. Farm or Lease Name Huerfano Unit 9. Well Number 552
4. Location of Well 660' FNL, 1945' FEL NWNE Latitude 36° 27.0, Longitude 107° 46.4		10. Field, Pool, Wildcat Basin Fruitland Coal 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 34, T-26-N, R-9-W API # 30-045- 31130
14. Distance in Miles from Nearest Town Bloomfield- 28 Miles		12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 660'		
16. Acres in Lease <small>Information is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4</small>		17. Acres Assigned to Well 320 E/2
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 2600'		
19. Proposed Depth 2273 <small>DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".</small>		20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6460 Gr		22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u><i>David J. Mankiewicz</i></u> Regulatory/Compliance Supervisor		Date <u>5-15-02</u>

PERMIT NO. _____ APPROVAL DATE OCT 16 2002
APPROVED BY /s/ David J. Mankiewicz TITLE _____ DATE _____

Archaeological Report to be submitted

Threatened and Endangered Species Report to be submitted

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or presentations as to any matter within its jurisdiction.

11000

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-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045 31130		*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code 7139	*Property Name HUERFANO UNIT		*Well Number 552
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP		*Elevation 6460'

¹⁰ Surface Location

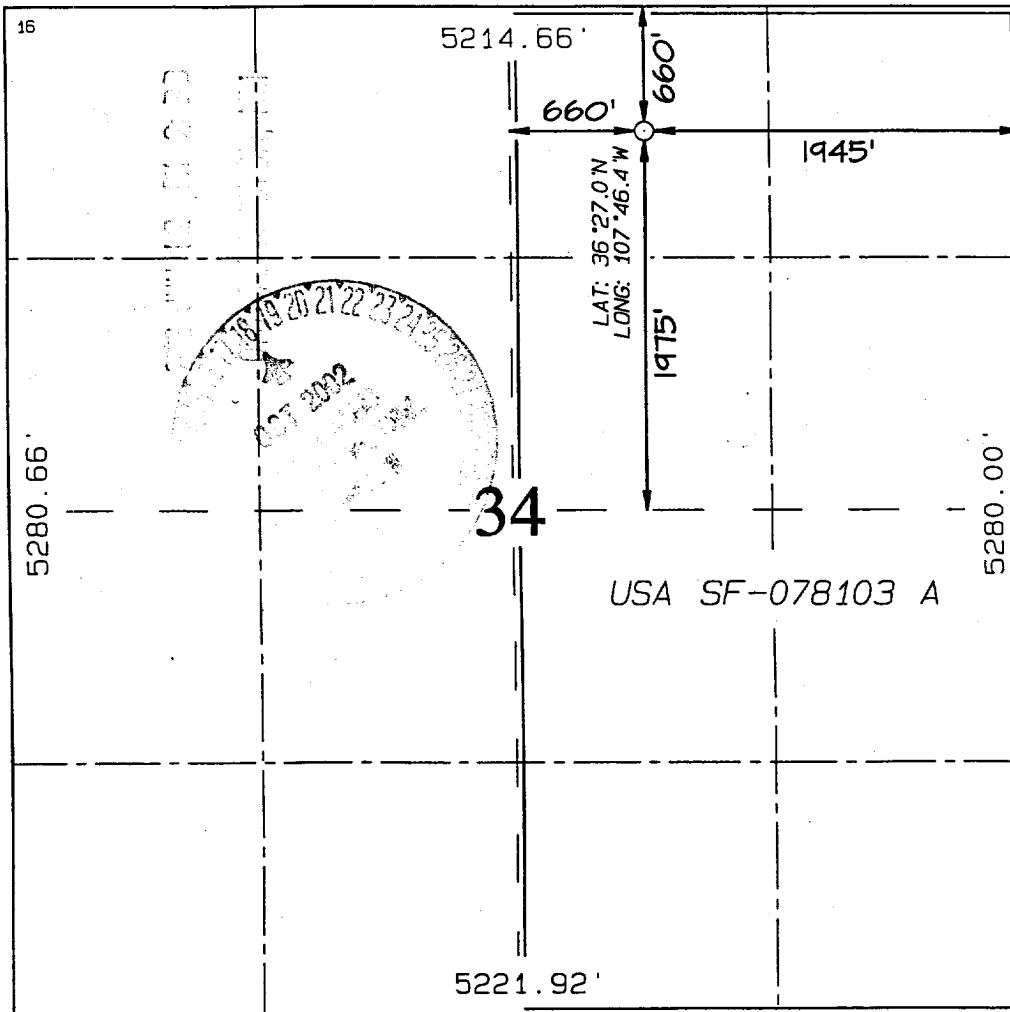
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	34	26N	9W		660	NORTH	1945	EAST	SAN JUAN

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 E-320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

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



¹⁷ OPERATOR CERTIFICATION

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

Peggy Cole
Signature

Peggy Cole

Printed Name

Regulatory Supervisor

Title

5-15-02

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.

Survey Date: JANUARY 18, 2002

Signature and Seal of Professional Surveyor



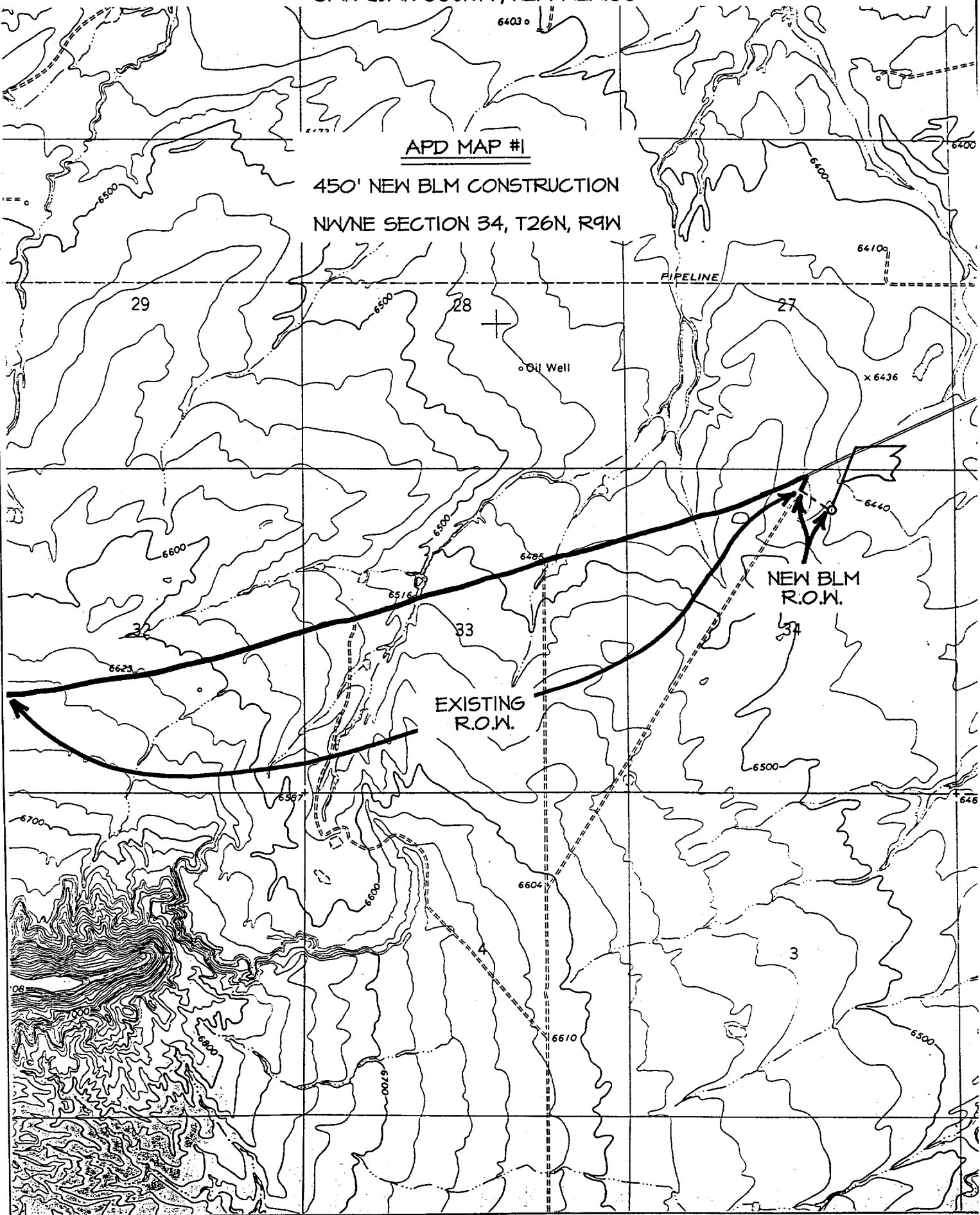
JASON C. EDWARDS
Certificate Number 15269

BURLINGTON RESOURCES OIL & GAS COMPANY HUERFANO UNIT #552

660' FNL & 1945' FEL, SECTION 34, T26N, R9W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO

APD MAP #1

450' NEW BLM CONSTRUCTION
NW/NE SECTION 34, T26N, R9W



OPERATIONS PLAN

Well Name: Huerfano Unit 552
Location: 660' FNL, 1945' FEL Section 34, T-26-N, R-9-W
San Juan County, NM
Formation: Basin Fruitland Coal
Elevation: 6460' GR

Formation:	Top	Bottom	Contents
Surface	San Jose	1181'	
Ojo Alamo	1181'	1335'	aquifer
Kirtland	1335'	1741'	gas
Fruitland	1741'	2023'	gas
B/Basal Coal	2023'	2037'	gas
Pictured Cliffs	2037'		gas
Total Depth	2273'		

Logging Program:

Platform Express: TD to Surface

Mudlog: 1335' to TD

Coring Program: none

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud	8.4-9.0	40-50	no control
120-2273'	Non-dispersed	8.4-9.5	30-60	no control

Casing Program (as listed, the equivalent, or better):

Hole Size	Depth Interval	Csg. Size	Wt.	Grade
9 7/8"	0' - 120'	7"	20.0#	J-55
6 1/4"	0' - 2273'	4 1/2"	10.5#	J-55

Tubing Program:

0' - 2273'	2 3/8"	4.7#	J-55
------------	--------	------	------

Float Equipment: 7" surface casing - saw tooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.

4 1/2" production casing - guide shoe and self-fill float collar. Three centralizers run every other joint above shoe. Seven centralizers run every 3rd joint to the base of the Ojo Alamo @ 1335'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1335'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

Wellhead Equipment: 7" x 4 1/2" x 2 3/8" x 11" 2000 psi screw on independent wellhead.

Cementing:

7" surface casing - cement with 27 sx Class A,B Portland Type I, II,
(32 cu.ft. of slurry, bring cement to surface through 3/4" line. WOC 8 hrs.
Test casing to 600 psi for 30 minutes.

4 1/2" production casing - Lead w/135 sx Premium Lite cement w/3% calcium chloride, 1/4 pps Cello-Flake, 5 pps LCM-1, 0.4% FL-52, and 0.4% SMS. Tail w/90 sx Type III cement w/1% calcium chloride, 1/4 pps Cello-Flake, and 0.2% FL-52 (411 cu.ft. of slurry, 75% excess to circulate to surface.) If cement is not circulated to surface, a temp survey or CBL will be run during drilling or completion operations to determine TOC.

Note: If open hole logs are run, cement volumes will be based
on 25% excess over caliper volumes.

BOP and tests:

Surface to TD - 11" 2000 psi (minimum double gate BOP stack (Reference Figure #1). Prior to drilling out surface casing, test rams to 600 psi/30 min.

Completion - 7 1/16" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 2000 psi/15 min.

From surface to TD - choke manifold (Reference Figure #3).

Pipe rams will be actuated to least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

BOP and tests (If a coiled tubing drilling (CTD) rig is utilized.):

Surface to TD: 7-1/16" 2000 psi (minimum) Torus annular BOP stack (Reference Figure #1b). Prior to drilling out surface casing, test annular BOP to 600psi/30 min.

Completion: 7-1/16" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test blind rams and casing to 1500 psi for 30 minutes; all pipe rams and casing to 1500 psi for 30 minutes each.

From surface to TD: choke manifold (Reference Figure #3).

The annular BOP will be actuated to close on drill pipe (coiled tubing) at least once each day and to close on open hole once each trip to test proper functioning.

Additional information:

- * Anticipated pore pressure for the Fruitland is 500 psi.
- * This gas is dedicated.
- * The east half of Section 34 is dedicated to the Fruitland Coal.

Sean Lorigan
Drilling Engineer

May 21, 2002
Date