

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number NM-04226 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
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87401 (505) 326-9700	8. Farm or Lease Name McManus 9. Well Number #8R
4. Location of Well 1305' FNL, 1110' FEL Latitude 36° 26.9', Longitude 107° 43.1'	10. Field, Pool, Wildcat Ballard Pict'd Cliffs 11. Sec., Twn, Rge, Mer. (NMPM) A Sec. 31, T-26-N, R-8-W API # 30-045-30794
14. Distance in Miles from Nearest Town 32 miles from Bloomfield, NM	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1110'	
16. Acres in Lease	17. Acres Assigned to Well 145.74 NE/4
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 126'	
19. Proposed Depth 2220'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6366' GR	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Randy Cole</u> Regulatory/Compliance Supervisor	Date <u>7-11-01</u>

PERMIT NO. _____ APPROVAL DATE 10/31/01
APPROVED BY J. Mantec TITLE AFM minerals DATE 10/31/01

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.

NMOCB

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
811 South First, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045- 30794	² Pool Code 71439	³ Pool Name Ballard Pictured Cliffs
⁴ Property Code 7309	⁵ Property Name McMANUS	⁶ Well Number 8R
⁷ OGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS INC.	⁹ Elevation 6366


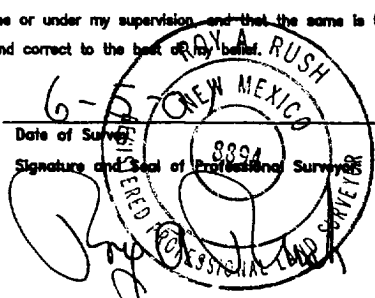
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	31	26-N	8-W		1305	NORTH	1110	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

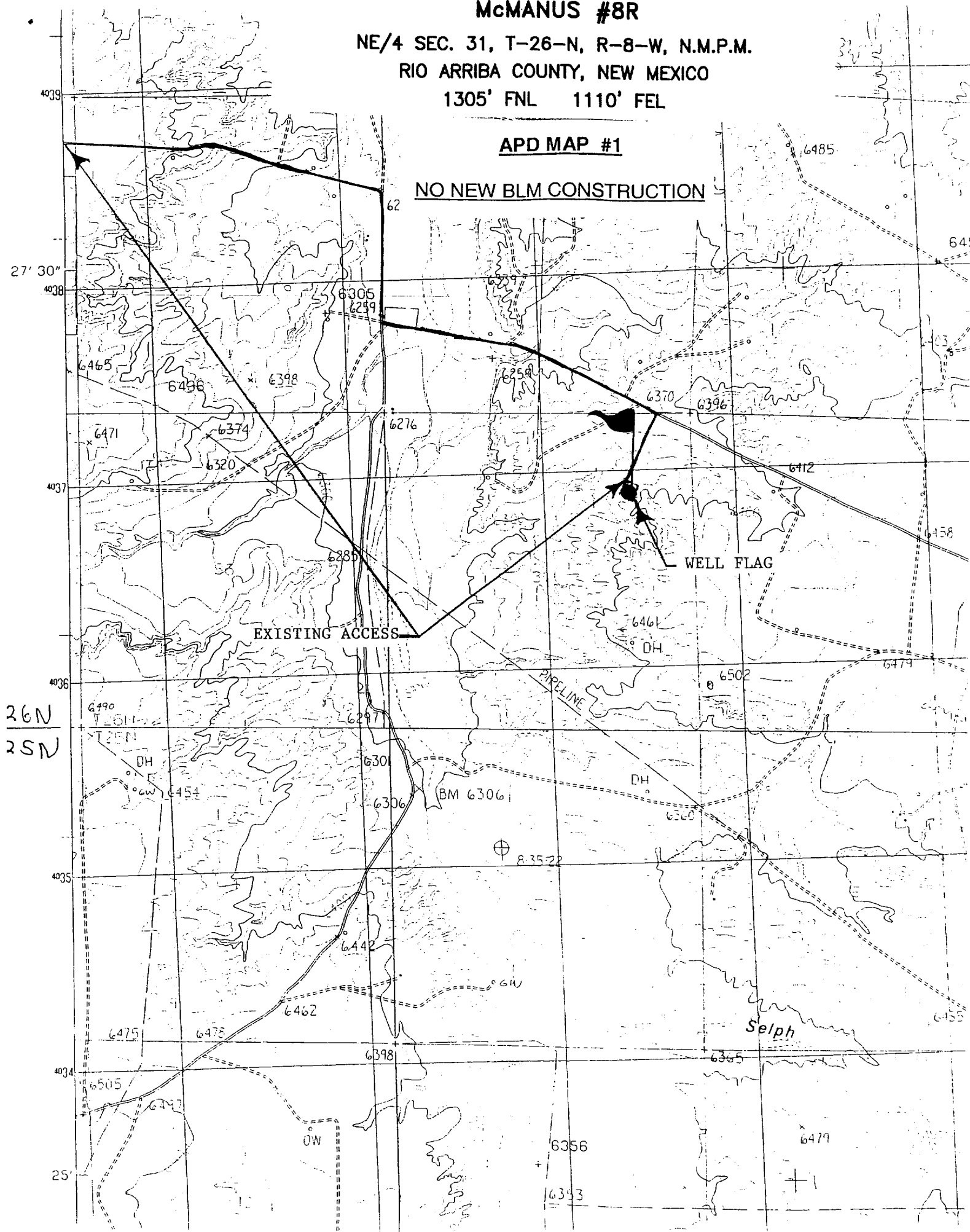
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres PC 145.74 NE			¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.		

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

<div>16</div> <div>LOT 1</div> <div>FD 2 1/2" BLM 1956 BRASS CAP</div>				<div>N 89°44'16" W 2593.92' (M)</div> <div>LOT 6</div> <div>1305'</div> <div>LOT 5</div> <div>FD 2 1/2" BLM 1956 BRASS CAP</div>				<div>17 OPERATOR CERTIFICATION</div> <div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</div> <div> Signature</div> <div>Peggy Cole Printed Name</div> <div>Regulatory Supervisor Title</div> <div>7-11-01 Date</div>
<div>LOT 2</div> <div>LAT: 36°26.9' N. LONG: 107°43.1' W.</div> <div>NM-04226</div> <div>LOT 7</div> <div>21'</div> <div>LOT 8</div>				<div>18 SURVEYOR CERTIFICATION</div> <div>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.</div> <div> Date of Survey Signature and Seal of Professional Surveyor</div> <div>8894 Certificate Number</div>				
<div>LOT 12</div> <div>LOT 13</div> <div>LOT 14</div> <div>LOT 15</div>				<div>LOT 9</div> <div>LOT 10</div> <div>LOT 11</div> <div>LOT 16</div> <div>FD 2 1/2" GLO 1947 BRASS CAP</div>				

NE/4 SEC. 31, T-26-N, R-8-W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO
1305' FNL 1110' FEL

NO NEW BLM CONSTRUCTION



OPERATIONS PLAN

Well Name: McManus #8R
Location: 1305' FNL, 1110' FEL, Section 31, T-26-N, R-8-W
San Juan County, New Mexico
Latitude 36° 26.9', Longitude 107° 43.1'
Formation: Ballard Pictured Cliffs
Elevation: 6366' GR

Formation:	Top	Bottom	Contents
Surface	San Jose	1249'	
Ojo Alamo	1249'	1339'	aquifer
Kirtland	1339'	1775'	gas
Fruitland	1775'	2013'	gas
Pictured Cliffs	2013'		gas
Total Depth	2220'		

Logging Program: cased hole - CBL/GR/CCL TD to surface

Coring Program: None

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud	8.4-9.0	40-50	no control
120-2220'	FW	8.4-9.0	32-45	no control

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

Hole Size	Depth Interval	Csg. Size	Wt.	Grade
9 7/8"	0 - 120'	7"	20#	J-55
6 1/4"	0 - 2220'	2 7/8"	6.5#	J-55

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

2 7/8" production casing - float shoe on bottom. Three centralizers run every other joint above shoe. Seven centralizers run every 3rd joint to the base of the Ojo Alamo @ 1339'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1339'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

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

Cementing:

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

2 7/8" production casing - Lead w/291 sx Premium Lite cement w/3% calcium chloride, 1/4 pps flocele, 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 flocele, and 0.2% FL-52 (746 cu.ft. of slurry, 100% excess to circulate to surface).

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. **Same as in original APD operations plan.**

From surface to TD: choke manifold (Reference Figure #3). **Same as in original APD operations plan.**

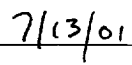
The annular BOP will be actuated to close on drill pipe (coiled tubing) at least once each day and to close on open hole once each trip to test proper functioning.

Additional information:

- * The Pictured Cliffs formation will be completed.
- * Anticipated pore pressure for the Pictured Cliffs is 500 psi.
- * This gas is dedicated.
- * The northeast quarter of Section 31 is dedicated to the Pictured Cliffs.



Drilling Engineer



Date