

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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OCT 18 2011

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

Bureau of Land Management
Surface, Coal, and Geothermal Resources Division

1a. Type of Work DRILL	5. Lease Number I-22-IND-2772 Unit Reporting Number
1b. Type of Well GAS	6. If Indian, All. or Tribe Ute Mountain Ute
2. Operator BURLINGTON RESOURCES Oil & Gas Company, LP	7. Unit Agreement Name RCUD MAY 10 '12 OIL CONS. DIV.
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name Ute Mountain Ute DIST. 3 9. Well Number 112
4. Location of Well Surface: Unit O (SWSE), 462' FSL & 1391' FEL Surface: Latitude: 36.996468° N (NAD83) Longitude: 108.274084° W LOT 400	10. Field, Pool, Wildcat Barker Dome Honsaker Trail/ Barker Dome Ismay 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 11, T32N, R14W API # 30-045- 35375
14. Distance in Miles from Nearest Town 33 miles to Farmington	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 462'	
16. Acres in Lease	17. Acres Assigned to Well 202.0
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 2368.5 UMU 88	
19. Proposed Depth 8954'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6964' GL	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	24. Authorized by: <u>Arleen Kellywood</u> Arleen Kellywood (Staff Regulatory Tech)

PERMIT NO. 151 BRAD DODD
APPROVED BY 151 BRAD DODD

APPROVAL DATE MAY 03 2012
APPROVED FOR A PERIOD
NOT TO EXCEED 2 YEARS

ASSOCIATE FIELD MANAGER

Archaeological Report attached

A gas recovery unit may or may not be used on this location.

Threatened and Endangered Species Report attached

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 any statement or presentation to any Federal, State, or local government or agency, or to any person acting on behalf of any such government or agency, which is false, fictitious, or fraudulent, or which contains any materially false, fictitious, or fraudulent statement or presentation, or which omits material or information necessary to make the statement or presentation not materially false, fictitious, or fraudulent.

Bond Numbers 5572452

SEE ATTACHED
CONDITIONS OF APPROVAL

for Directional Survey
and "As Drilled" plat -

RECEIVED MAY 17 2012
Arleen Kellywood

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

Hold C104 for NSL in Barker Dome
Honsaker Trail

Hold C104

NSL Req

Barker Dome Honsaker Trail NSL

District I

1625 N. Frenich Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised July 16, 2010
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35375		² Pool Code 97582/96354		³ Pool Name WC BARKER DOME, HONAKER TRAIL/ BARKER DOME ISMAY	
⁴ Property Code 18725		⁵ Property Name UTE MOUNTAIN UTE			⁶ Well Number 112
⁷ OGRID No. 14538		⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY, LP			⁹ Elevation 6964

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
O	11	32-N	14-W	100	462	SOUTH	1391	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 202.0	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

¹⁶		¹⁷ OPERATOR CERTIFICATION	
<p>22 23</p> <p>LA PLATA CO., COLORADO</p> <p>SAN JUAN CO., NEW MEXICO</p> <p>LOT 4</p> <p>LOT 3</p> <p>SECTION 11, T-32-N, R-14-W</p> <p>LOT 2</p> <p>I-22-IND-2772</p> <p>LOT 1</p> <p>1391'</p> <p>462'</p> <p>WELL FLAG</p> <p>NAD 83</p> <p>LAT: 36.996468° N</p> <p>LONG: 108.274084° W</p> <p>NAD 27</p> <p>LAT: 36°59.788152' N</p> <p>LONG: 108°16.406928 W</p> <p>BASIS OF BEARING IS GRID NORTH, COLORADO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD83 DERIVED BY GPS OBSERVATION AND NGS/OPUS SOLUTION.</p> <p>BLM 1986</p> <p>S 89°58' W</p> <p>S 88°17'15" E</p> <p>N 0°41'56" E 1647.1' (M)</p> <p>NORTH 1648.7' (R)</p> <p>5279.3' (R)</p> <p>5277.8' (M)</p> <p>BLM 1986</p>		<p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Arleen R. Kellywood 5/31/11</p> <p>Signature Date</p> <p>Arleen R. Kellywood</p> <p>Printed Name</p> <p>arleen.r.kellywood@conocophillips.com</p> <p>E-mail Address</p>	
		¹⁸ SURVEYOR CERTIFICATION	
		<p>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>Date of Survey: 4/06/11</p> <p>Signature and Seal of Professional Surveyor:</p> <p>Henry P. Broadhurst, Jr.</p> <p>PROFESSIONAL SURVEYOR</p> <p>Certificate Number: NM 11393</p>	
		<p>660-10 790 790</p> <p>R-46A</p>	

Ute Mountain Ute #112

Technical Plan

1. Geologic Tops

Surface bedrock formation is Cliff House.

Formation	Top		Fluid
	MD (FT)	TVD (FT)	
MASSIVE CLIFFHOUSE	340	340	No Fluids
MENEFEE	493	493	No Fluids
POINT LOOKOUT	868	868	No Fluids
MANCOS	1271	1271	No Fluids
UPPER GALLUP	2323	2323	No Fluids
GREENHORN	2642	2642	No Fluids
GRANEROS	2699	2699	No Fluids
TWO WELLS	2740	2740	Gas/Water
PAGUATE	3109	3109	Gas/Water
UPPER CUBERO	3113	3113	Gas/Water
LOWERCUBERO	3135	3135	Gas/Water
ENCINAL	3172	3172	Gas/Water
BURRO CANYON	3254	3254	Water
MORRISON	3369	3369	Water
BLUFF SANDSTONE	4216	4216	Water
TODILTO	4361	4361	Water
ENTRADA	4371	4371	Water
CHINLE	5020	5020	No Fluids
SHINARUMP	5548	5548	Water
MOENKOPI	5657	5657	No Fluids
DECHELLY	5719	5719	Water
CUTLER	5835	5835	Water
RICO	7422	7422	Water
HONAKER TRAIL	7684	7684	Gas/Water
ISMAY	8748	8748	Gas
DESERT CREEK	8854	8854	Gas

2. Pressure control equipment – See attached diagram

- Total Depth = 8,954 ft TVD/MD.
- Original Bottom Hole Pressure = 3,835 psi (estimated by reservoir engineer). Current estimated BHP = 1700 psi due to depletion.
- Minimum BOP Working Pressure = 3,835 psi – (3,835 ft * 0.23 psi/ft) = 2,950 psi
- Well will be drilled with 3,000 psi BOPE stack.

3. Complete information on the drilling equipment, casing and cementing program

Ute Mountain Ute #112

Proposed Casing And Cementing Program				
Size of Hole	Size of Casing	Wt./Foot	Setting Depth (MD)	Quantity of Cement
(Surface) 12-1/4"	9-5/8"	36#, J-55, LT&C, New	0' - 1450'	Cement to surface with 700 cu.ft, volume includes 50% excess in open hole, to consist of 700 cu.ft (560 sks) Type III cement + 0.25 lbs/sack Cello Flake + 58.9% Fresh Water mixed at 15.20 ppg. Compressive strength is 1200 psi after 8 hours.
(Production) 7-7/8"	5-1/2'	17#, L-80, LTC/BTC, New	0'-8954' Stage Tool +/- 7484'	Cement to 2240', 500' above the Two Wells Fm. in two stages, in the first stage , pump 312 cu.ft volume, includes 20% excess in open hole, to consist of a Scavenger : 52 cu.ft (17 sks) Premium Lite High Strength FM + 0.25 lbs/sack Cello Flake + 0.3% bwoc CD-32 + 6.25 lbs/sack LCM-1 + 1.0% bwoc FL-52 + 180.6% Fresh Water mixed at 11.00 ppg. Tail slurry : 260 cu.ft (131 sks) Premium Lite High Strength FM + 0.25 lbs/sack Cello Flake + 0.3% bwoc CD-32 + 6.25 lbs/sack LCM-1 + 1.0% bwoc FL-52 + 97.5% Fresh Water mixed at 12.50 ppg. Slurries are extended to achieve stated densities and may include various additives to control seepage. TOC for tail: near 7,800' MD to ensure good cement around production zone. Second stage , (20% excess in open hole) Scavenger : 52 cu.ft (17 sks) Premium Lite High Strength FM + 0.25 lbs/sack Cello Flake + 0.3% bwoc CD-32 + 6.25 lbs/sack LCM-1 + 1.0% bwoc FL-52 + 180.6% Fresh Water mixed at 11.00 ppg. Lead : pump 1038 cu.ft (524 sks) of Premium Lite High Strength FM + 0.25 lbs/sack Cello Flake + 0.3% bwoc CD-32 + 6.25 lbs/sack LCM-1 + 1.0% bwoc FL-52 + 97.5% Fresh Water mixed at 12.50 ppg

4. Information on Mud System

Mud Program				
Interval	Mud Type	Weight (ppg)	Water/Fluid Loss	Additives

Ute Mountain Ute #112

Surface	Gel/Water	Air or 8.3 – 9.2	No Control	Gel
Production	LSND	8.4-9.5	Some control	Polymer and LCM as required.

5. Testing, Logging, Coring -

- Logs at production section: Platform Express (triple combo) from TD to surface casing.
- Mudlogging: from 100' above Greenhorn (2542 ft MD/TVD) to final TD at 8,954 ft TD. Estimate 10' samples through potential pay in the Honaker Trail, and Ismay. 30'-50' sampling through non pay intervals.
- Coring: No coring is planned.
- DST and Formation Testing: none planned.
- Cased Hole Logging: GR/CBL planned in the production casing from PBTD to TOC.

6. Expected BHP, abnormal temperatures and pressures, and hazards –

- No over-pressured intervals expected
- Require H2S contingent drilling plan. (Attached H2S Contingency Plan)
- Not expecting lost circulation. The offset wells (Ute Mountain Ute #50 and Ute Mountain Ute #51) do not have lost circulation trouble reported. Attached are the operation summaries for these wells.

UTE MOUNTAIN UTE #50

Surface Location: 1800 FNL; 1850 FWL.

Drilled on March, 1998

Ground Elevation: 6,231 ft

RT Elevation: 6,231 ft

Rig Elevation: 14 ft

Mud Drill

Surface Shoe: 385 ft

Production Shoe: 8690 ft

Big A 54 drilled 12 1/4" surface hole to 389 ft. Ran 8 5/8" 24#/ft, K-55 casing to 385 ft. Cemented w/ 57.3 bbls of class B Lead cement, returns 8 bbls of cement to surface. No problem reported. Drilled production hole w/ 7 7/8" insert bit from 389' to 3475'. POOH to change bit and found lost cone in hole. It fished cone with magnet and junk sub. Continued drilling (Mud logger comments only Barker Dome well that has been this gassy in cutler, no new formation tops in last 24 hrs). POOH to change bit. Drilled to 7815 ft. POOH for new bit. Continued drilling to TD at 8692 ft. Attempt to run open hole log. Hit tight spot at 2524 ft and 2533, had to work tools free. POOH and R/D loggers. TIH w/clean assy, worked through bridges, raised vis to 80. finished TIH to cond mud. Ran open hole. TIH to clean hole. Ran 5 1/2" 17#/ft, L-80, LTC casing and set shoe at 8690 ft. No losses reported. Cemented In two stages, circulated 20 bbls in first stage and 195 bbls in second stage.

Note: There were two trips to clean hole due to logs tools hit tight spot at 2479' in first trip, 2524' second trip and stuck it at 2533' for reactive shale from 2400 ft to 2600 ft. No lost circulation trouble reported.

UTE MOUNTAIN UTE #51

Ute Mountain Ute #112

Surface Location: 1,500 FSL; 2,270 FWL.

Drilled on May, 1998

Ground Elevation: 6,884 ft

RT Elevation: 6,898 ft

Rig Elevation: 14 ft

Mud Drill

Surface Shoe: 8 5/8" at 1,436 ft

Production Shoe: 5 1/2" at 9,601 ft

Big A 54 drilled 12 1/4" surface hole to 1447 ft. Ran 8 5/8" 24#/ft, K-55 casing to 1436 ft. Cemented w/ 229 bbls of class G lead cement, returns 100 bbls of cement to surface. No problem reported. Drilled production hole w/ 7 7/8" insert bit from 1436' to 2301'. POOH for plugged bit. Continued drilling 4115'. POOH to change bit. Drilled to 6038 ft. POOH for new bit. Continued drilling to 7904 ft. POOH twice more for new bit and continued drilling to TD at 9602 ft. Attempt to run open hole log and stuck at 9447'. Recover all logging tool. TIH w/clean assy. Ran 5 1/2" 17#/ft, L-80, LTC casing and set shoe at 9601 ft. No losses reported. Cemented in two stages. Circulated 60 bbls in first stage and 93 bbls in second stage.

7. Other information -

This well will be drilled vertical to TD. The Ismay will be perforated and stimulated with acid/frac. The Honaker Trail will be perforated and stimulated with a foam frac. Anticipate the Ismay and Honaker Trail to be comingled with a tubing completion.

Burlington Resources Oil & Gas Company, LP
Tribal Lease: I-22-IND-2772
Well: Ute Mountain Ute #112
Location: 462' FNL & 1391' FEL
Sec. 11, T. 32 N., R. 14 W.
La Plata County, Colorado

3160

Conditions of Approval - Drilling Plan:

1. Notify this office at least **3 days** prior to:

- a. spudding the well
- b. running casing strings and cementing
- c. BOP tests
- d. Drill Stem Testing

For the above procedures, Operators must talk to BLM personnel directly. Do not leave messages on answering machines.

All Drilling activities MUST conform to Onshore Order #2.

2. All BOP tests will be performed with a test plug in place. The BOP will be tested to full stack working pressure and the annular preventer to 50% of the maximum stack working pressure. All 2M or greater systems require **adjustable** chokes.

2a. One of the valves in the kill line must be a check valve.

- 3. No additional zones will be commingled without UMU Tribal and BLM approval.
- 4. If a BLM Inspector is not present during the initial BOP test, please provide chart record.
- 5. Submit copies of all logs to this office both paper and in Log ASCII Standard (LAS) format.

6. If any operations are to start over the weekend, notify this office by noon Friday. If any problems arise after hours or on weekends, call BLM personnel using the home phone numbers listed on the following 'INFORMATIONAL NOTICE - APD's'. Do not leave messages on answering machines.

Continued on Page 2.

7. Increase the volume of cement on the production casing cementing so that cement overlaps into the Surface Casing a minimum of 300'. This overlap must be verified.
8. A CBL may be required if cement is not circulated to the surface during the cementing of the Surface Casing. The BLM must witness the topping-off of the Surface Casing cement job if topping off is required.
9. The tops of all major identifiable geologic units (formations) from TD to Surface will be logged and recorded.
10. Stabilized bottomhole pressure measurements and flowrates must be collected and submitted to the BLM. This data may be confidential and the operator may so specify upon submittal to the BLM.
11. Once the final version of the H2S Contingency Plan is signed, send an original signed copy to this office under a Sundry Notice, Subsequent Report form.
12. Please provide the following information if possible. All tests and operations on any well on subject lands shall be conducted at Operator's sole discretion.

All Wire Line Logs - Fields & Final Print (Electrical, Radioactive, Sonic, Velocity, Cement Bond, Temperature, etc with digitized and log analysis).

Drill Stem Tests - Field and Final Reports.

Core Analysis - Field and Final Reports.

Mud Log - Final Report.

Structure and Isopach Maps.

Location (Surveyors) Plat.

Application to Drill (Drilling Permit).

Daily Drilling Reports, Daily Work Over Reports and Final Drilling Report Summary.

Directional Survey.

Continued on page 3.

Geological Summary Report.

Completion Report.

Production Tests (All Production Tests during Completion, AOF, Potential, GOR, etc).

30 Day Well Production Test Record

Bottom Hole Pressure Surveys including build up tests.

Shut in Surface Pressure Surveys.

Gas, Oil and Water Analyses.

State and/or BLM Completion Reports.

State and/or BLM and/or MMS Monthly Production and OGOR Reports.

Additional Governmental Permits and Reports.

Drilling Contracts.

Operating Agreements.

Oil and Gas Sales Contracts.

Plug and Abandon Reports.

Monthly, Gas and/or Plant Products Purchasing Statements.

Sundry Notices to the BLM.

Well Bore Profiles.

Division Orders/Title Opinions.

AFEs.

Final Drill and Completion Costs.

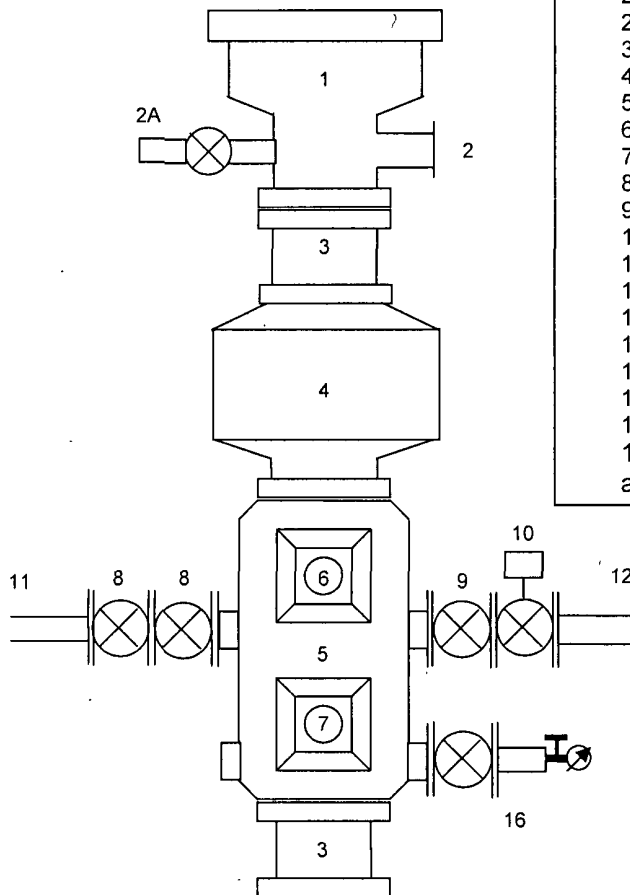
Other well file information as requested by the Tribal Department of Energy.

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM
3000 psi WP equipment

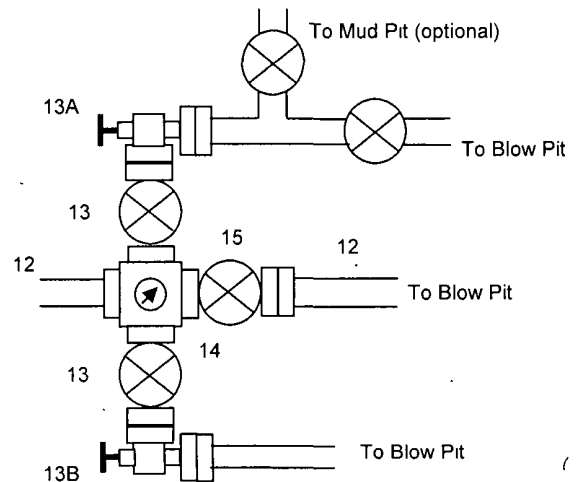
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NOV 02 2011

Bureau of Land Management
Durango, Colorado



1. Rotating Head
2. Flow line
- 2A. Fill up line and valve
3. Spacer Spools (as needed)
4. 11" 3M Annular Preventer
5. 11" 3M Double Ram Preventer
6. Blind Rams
7. Pipe Rams
8. 3M Gate Valves (2")
9. 3M gate Valve (3")
10. 3M HCR Valve (3")
11. Kill Line Connection
12. Choke Line (3" Hardline or Co-Flex)
13. 3M Valve (2")
- 13A. 3M Adjustable Choke (2")
- 13B. 3M Adjustable or Fixed Choke (2")
14. 3M Studded Cross & Manifold gauge
15. 3M Panic Line Valve (3")
16. Secondary outlet with valve, bull plug, needle valve, and pressure gauge



Pressure Tests:

Pressure test annular preventer to 250 psi for 3 minutes and 2100 psi (70%) for 10 minutes.
Pressure test ram preventer (blind and pipe rams) to 250 psi for 3 minutes and 3000 psi for 10 minutes.
Pressure test choke manifold to 250 psi for 3 minutes and 3000 psi for 10 minutes

Pressure test surface casing to 1500 psi for 30 minutes.