

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>						<b>1. WELL NAME and NUMBER</b> 8-16D-46 BTR				
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						<b>3. FIELD OR WILDCAT</b> ALTAMONT				
<b>4. TYPE OF WELL</b> Oil Well Coalbed Methane Well: NO						<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b>				
<b>6. NAME OF OPERATOR</b> BILL BARRETT CORP						<b>7. OPERATOR PHONE</b> 303 312-8164				
<b>8. ADDRESS OF OPERATOR</b> 1099 18th Street Ste 2300, Denver, CO, 80202						<b>9. OPERATOR E-MAIL</b> BHilgers@billbarrettcorp.com				
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> 20G0005608			<b>11. MINERAL OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>				
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>				
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>				
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b> Uintah and Ouray			<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			<b>19. SLANT</b> VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>				
<b>20. LOCATION OF WELL</b>		<b>FOOTAGES</b>		<b>QTR-QTR</b>	<b>SECTION</b>	<b>TOWNSHIP</b>	<b>RANGE</b>	<b>MERIDIAN</b>		
LOCATION AT SURFACE		1555 FNL 739 FEL		SENE	16	4.0 S	6.0 W	U		
Top of Uppermost Producing Zone		1979 FNL 804 FEL		SENE	16	4.0 S	6.0 W	U		
At Total Depth		1980 FNL 810 FEL		SENE	16	4.0 S	6.0 W	U		
<b>21. COUNTY</b> DUCHESNE			<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 810			<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 640				
			<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 13041			<b>26. PROPOSED DEPTH</b> MD: 7505 TVD: 7474				
<b>27. ELEVATION - GROUND LEVEL</b> 6239			<b>28. BOND NUMBER</b> LPM8874725			<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> Duchesne City Culinary Water Dock				
<b>Hole, Casing, and Cement Information</b>										
<b>String</b>	<b>Hole Size</b>	<b>Casing Size</b>	<b>Length</b>	<b>Weight</b>	<b>Grade &amp; Thread</b>	<b>Max Mud Wt.</b>	<b>Cement</b>	<b>Sacks</b>	<b>Yield</b>	<b>Weight</b>
<b>Cond</b>	26	16	0 - 80	65.0	Unknown	8.8	Unknown	0	0.0	0.0
<b>Surf</b>	12.25	9.625	0 - 1200	36.0	J-55 ST&C	8.8	Halliburton Light , Type Unknown	140	3.16	11.0
							Halliburton Premium , Type Unknown	210	1.36	14.8
<b>Prod</b>	8.75	5.5	0 - 7505	17.0	P-110 LT&C	9.7	Unknown	600	2.31	11.0
							Unknown	850	1.42	13.5
<b>ATTACHMENTS</b>										
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>										
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
<b>NAME</b> Venessa Langmacher			<b>TITLE</b> Senior Permit Analyst			<b>PHONE</b> 303 312-8172				
<b>SIGNATURE</b>			<b>DATE</b> 09/07/2011			<b>EMAIL</b> vlangmacher@billbarrettcorp.com				
<b>API NUMBER ASSIGNED</b> 43013509530000			<b>APPROVAL</b>			 Permit Manager				

**DRILLING PLAN**

BILL BARRETT CORPORATION

**8-16D-46 BTR Well Pad**

SE NE, 1555' FNL and 739' FEL, Section 16, T4S-R6W, USB&amp;M (surface hole)

SE NE, 1980' FNL and 810' FEL, Section 16, T4S-R6W, USB&amp;M (bottom hole)

Duchesne County, Utah

**1 - 2. Estimated Tops of Geological Markers and Formations Expected to Contain Water, Oil and Gas and Other Minerals**

<b><u>Formation</u></b>	<b><u>Depth – MD</u></b>	<b><u>Depth – TVD</u></b>
Lower Green River*	3,197'	3,177'
Douglas Creek	4,036'	4,007'
Black Shale	4,858'	4,827'
Castle Peak	5,078'	5,047'
Uteland Butte	5,363'	5,332'
Wasatch*	5,588'	5,557'
TD	7,505'	7,474'

\*PROSPECTIVE PAY

The Wasatch and the Lower Green River are primary objectives for oil/gas.

Base of Useable Water = 4,300'

**3. BOP and Pressure Containment Data**

<b><u>Depth Intervals</u></b>	<b><u>BOP Equipment</u></b>
0 – 1,200'	No pressure control required
1,200' – TD	11" 5000# Ram Type BOP 11" 5000# Annular BOP
- Drilling spool to accommodate choke and kill lines;	
- Ancillary equipment and choke manifold rated at 5,000 psi. All BOP and BOPE tests will be in accordance with the requirements of onshore Order No. 2;	
- The BLM and the State of Utah Division of Oil, Gas and Mining will be notified 24 hours in advance of all BOP pressure tests.	
- BOP hand wheels may be underneath the sub-structure of the rig if the drilling rig used is set up To operate most efficiently in this manner.	

**4. Casing Program**

<b><u>Hole Size</u></b>	<b><u>SETTING DEPTH</u></b>		<b><u>Casing Size</u></b>	<b><u>Casing Weight</u></b>	<b><u>Casing Grade</u></b>	<b><u>Thread</u></b>	<b><u>Condition</u></b>
	<b><u>(FROM)</u></b>	<b><u>(TO)</u></b>					
26"	Surface	80'	16"	65#			
12 1/4"	Surface	1,200'	9 5/8"	36#	J or K 55	BT&C	New
8 3/4"	Surface	TD	5 1/2"	17#	P-110	LT&C	New
<b>NOTE: In addition, 8 3/4" hole size may change to 7 7/8" at the point the bit is changed out.</b>							

Bill Barrett Corporation  
 Drilling Program  
 #8-16D-46 BTR  
 Duchesne County, Utah

5. **Cementing Program**

<b>Casing</b>	<b>Cementing</b>
16" Conductor Casing	<i>Grout</i>
9 5/8" Surface Casing	<p><i>Lead</i> with approximately 140 sx Halliburton Light Premium with additives mixed at 11.0 ppg (yield = 3.16 ft<sup>3</sup>/sx) circulated to surface with 75% excess. Top of lead estimated at surface.</p> <p><i>Tail</i> with approximately 210 sx Halliburton Premium cement with additives mixed at 14.8 ppg (yield = 1.36 ft<sup>3</sup>/sx), calculated hole volume with 75% excess. Top of tail estimated at 700'.</p>
5 1/2" Production Casing	<p><i>Lead</i> with approximately 600 sx Tuned Light cement with additives, mixed at 11.0 ppg (yield = 2.31 ft<sup>3</sup>/sx,) . Top of lead estimated at 700'.</p> <p><i>Tail</i> with approximately 850 sx Halliburton Econocem cement with additives mixed at 13.5 ppg (yield = 1.42 ft<sup>3</sup>/sx). Top of tail estimated at 4,358'.</p>

6. **Mud Program**

<b>Interval</b>	<b>Weight</b>	<b>Viscosity</b>	<b>Fluid Loss (API filtrate)</b>	<b>Remarks</b>
0' – 80'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
80' – 1,200'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
1,200' – TD	8.6 – 9.7	42-52	20 cc or less	DAP Polymer Fluid System
Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce torque and drag.				

7. **Testing, Logging and Core Programs**

Cores	None anticipated
Testing	None anticipated; drill stem tests may be run on shows of interest;
Sampling	30' to 50' samples; surface casing to TD. Preserve samples all show intervals;
Surveys	MWD as needed to land wellbore;
Logging	DIL-GR-SP, FDC-CNL-GR-CALIPER-Pe-Microlog, Sonic-GR (all TD to surface). FMI & Sonic Scanner to be run at geologist's discretion.

Bill Barrett Corporation  
Drilling Program  
#8-16D-46 BTR  
Duchesne County, Utah

**8. Anticipated Abnormal Pressures or Temperatures**

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 3770 psi\* and maximum anticipated surface pressure equals approximately 2126 psi\*\* (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

\*Max Mud Wt x 0.052 x TD = A (bottom hole pressure)

\*\*Maximum surface pressure = A - (0.22 x TD)

**9. Auxiliary Equipment**

- a) Upper kelly cock; lower Kelly cock will be installed while drilling
- b) Inside BOP or stab-in valve (available on rig floor)
- c) Safety valve(s) and subs to fit all string connections in use
- d) Mud monitoring will be visually observed

**10. Location and Type of Water Supply**

Water for the drilling and completion will be trucked from the Duchesne City Culinary Water Dock located in Sec. 1, T4S, R5W.

**11. Drilling Schedule**

Location Construction: June 2012  
Spud: June 2012  
Duration: 15 days drilling time  
45 days completion time

**PRESSURE CONTROL EQUIPMENT** – Schematic Attached

**A. Type: Eleven (11) Inch Double Gate Hydraulic BOP with Eleven (11) Inch Annular Preventer.** The blow out preventer will be equipped as follows:

1. One (1) blind ram (above).
2. One (1) pipe ram (below).
3. Drilling spool with two (2) side outlets (choke side 3-inch minimum, kill side 2-inch minimum).
4. 3-inch diameter choke line.
5. Two (2) choke line valves (3-inch minimum).
6. Kill line (2-inch minimum).
7. Two (2) chokes with one (1) remotely controlled from the rig floor.
8. Two (2) kill line valves, and a check valve (2-inch minimum).
9. Upper and lower kelly cock valves with handles available.
10. Safety valve(s) & subs to fit all drill string connections in use.
11. Inside BOP or float sub available.
12. Pressure gauge on choke manifold.
13. Fill-up line above the uppermost preventer.

**B. Pressure Rating:** 5,000 psi

**C. Testing Procedure:**

Annular Preventer

At a minimum, the Annular Preventer will be pressure tested to 50% of the rated working pressure for a period of ten (10) minutes or until provisions of the test are met, whichever is longer.

At a minimum the above pressure test will be performed:

1. When the annular preventer is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition, the Annular Preventer will be functionally operated at least weekly.

Blow-Out Preventer

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the BOP stack (if isolated from the surface casing by a test plug) or to 70% of the internal yield strength of the surface casing (if the BOP is not isolated from the casing by a test plug). Pressure will be

maintained for a period of at least ten (10) minutes or until the requirements of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the BOP is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition the pipe and blind rams will be activated each trip, but not more than once each day. All BOP drills and tests will be recorded in the IADC driller's log.

**D. Choke Manifold Equipment:**

All choke lines will be straight lines unless turns use tee blocks or are targeted with running tees, and will be anchored to prevent whip and vibration.

**E. Accumulator:**

The accumulator will have sufficient capacity to open the hydraulically-controlled choke line valve (if so equipped), close all rams plus the annular preventer, and retain a minimum of 200 psi above precharge on the closing manifold without the use of closing unit pumps. The fluid reservoir capacity will be double the usable fluid volume of the accumulator system capacity and the fluid level of the reservoir will be maintained at the manufacturer's recommendations.

The BOP system will have two (2) independent power sources to close the preventers. Nitrogen bottles (3 minimum) will be one (1) of these independent power sources and will maintain a charge equal to the manufacturer's specifications.

The accumulator precharge pressure test will be conducted prior to connecting the closing unit to the BOP stack and at least once every six (6) months thereafter. The accumulator pressure will be corrected if the measured precharge pressure is found to be above or below the maximum or minimum limits specified in the *Onshore Oil & Gas Order Number 2*.

A manual locking device (i.e. hand wheels) or automatic locking device will be installed on all systems of 2M or greater. A valve will be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve will be maintained in the open position and will be closed only when the power source for the accumulator is inoperative.

Remote controls shall be readily accessible to the driller. Remote controls for all 3M or greater systems will be capable of closing all preventers. Remote controls for 5M or greater systems will be capable of both opening and closing all preventers. Master controls will be at the accumulator and will be capable of opening and closing all preventers and the choke line valve (if so equipped).

**F. Miscellaneous Information:**

The Blow-Out Preventer and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of *Onshore Oil & Gas Order Number 2*. The hydraulic BOP closing unit will be located at least twenty-five (25) feet from the well head but readily accessible to the driller. Exact locations and configurations of the hydraulic BOP closing unit will depend upon the particular rig contracted to drill this hole.

A flare line will be installed after the choke manifold, extending 125 feet (minimum) from the center of the drill hole to a separate flare pit.



# Bill Barrett Corporation

## LAKE CANYON & BLACK TAIL RIDGE CEMENT VOLUMES

**Well Name:** 8-16D-46 BTR

### Surface Hole Data:

Total Depth:	1,200'
Top of Cement:	0'
OD of Hole:	12.250"
OD of Casing:	9.625"

### Calculated Data:

Lead Volume:	383.7	ft <sup>3</sup>
Lead Fill:	700'	
Tail Volume:	274.0	ft <sup>3</sup>
Tail Fill:	500'	

### Cement Data:

Lead Yield:	3.16	ft <sup>3</sup> /sk
% Excess:	75%	
Top of Lead:	0'	

### Calculated # of Sacks:

# SK's Lead:	140
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Tail Yield:	1.36	ft <sup>3</sup> /sk
% Excess:	75%	
Top of Tail:	700'	

# SK's Tail:	210
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### Production Hole Data:

Total Depth:	7,505'
Top of Cement:	700'
Top of Tail:	4,358'
OD of Hole:	8.750"
OD of Casing:	5.500"

### Calculated Data:

Lead Volume:	1386.0	ft <sup>3</sup>
Lead Fill:	3,658'	
Tail Volume:	1192.5	ft <sup>3</sup>
Tail Fill:	3,147'	

### Cement Data:

Lead Yield:	2.31	ft <sup>3</sup> /sk
Tail Yield:	1.42	ft <sup>3</sup> /sk
% Excess:	50%	

### Calculated # of Sacks:

# SK's Lead:	600
# SK's Tail:	850

<b>8-16D-46 BTR Proposed Cementing Program</b>
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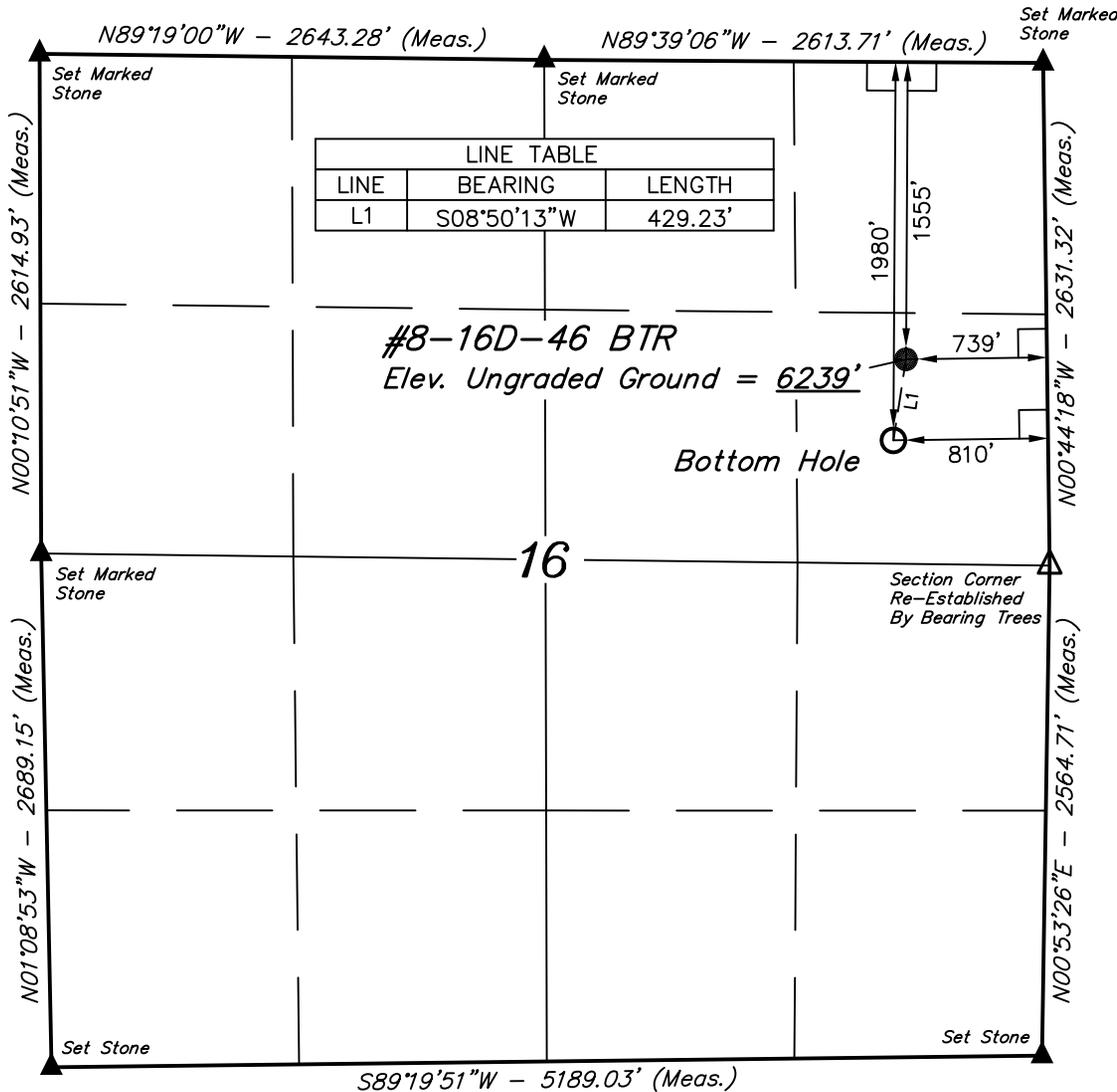
<u>Job Recommendation</u>	<u>Surface Casing</u>
<b>Lead Cement - (700' - 0')</b>	
Halliburton Light Premium	Fluid Weight: 11.0 lbm/gal
5.0 lbm/sk Silicalite Compacted	Slurry Yield: 3.16 ft <sup>3</sup> /sk
0.25 lbm/sk Kwik Seal	Total Mixing Fluid: 19.48 Gal/sk
0.125 lbm/sk Poly-E-Flake	Top of Fluid: 0'
2.0% Bentonite	Calculated Fill: 700'
	Volume: 68.33 bbl
	<b>Proposed Sacks: 140 sks</b>
<b>Tail Cement - (TD - 700')</b>	
Premium Cement	Fluid Weight: 14.8 lbm/gal
2.0% Calcium Chloride	Slurry Yield: 1.36 ft <sup>3</sup> /sk
	Total Mixing Fluid: 6.37 Gal/sk
	Top of Fluid: 700'
	Calculated Fill: 500'
	Volume: 48.80 bbl
	<b>Proposed Sacks: 210 sks</b>

<u>Job Recommendation</u>	<u>Production Casing</u>
<b>Lead Cement - (4358' - 700')</b>	
Tuned Light™ System	Fluid Weight: 11.0 lbm/gal
	Slurry Yield: 2.31 ft <sup>3</sup> /sk
	Total Mixing Fluid: 10.65 Gal/sk
	Top of Fluid: 700'
	Calculated Fill: 3,658'
	Volume: 246.84 bbl
	<b>Proposed Sacks: 600 sks</b>
<b>Tail Cement - (7505' - 4358')</b>	
Econocem™ System	Fluid Weight: 13.5 lbm/gal
0.125 lbm/sk Poly-E-Flake	Slurry Yield: 1.42 ft <sup>3</sup> /sk
1.0 lbm/sk Granulite TR 1/4	Total Mixing Fluid: 6.61 Gal/sk
	Top of Fluid: 4,358'
	Calculated Fill: 3,147'
	Volume: 212.37 bbl
	<b>Proposed Sacks: 850 sks</b>

T4S, R6W, U.S.B.&M.

BILL BARRETT CORPORATION

Well location, #8-16D-46 BTR, located as shown in the SE 1/4 NE 1/4 of Section 16, T4S, R6W, U.S.B.&M., Duchesne County, Utah.

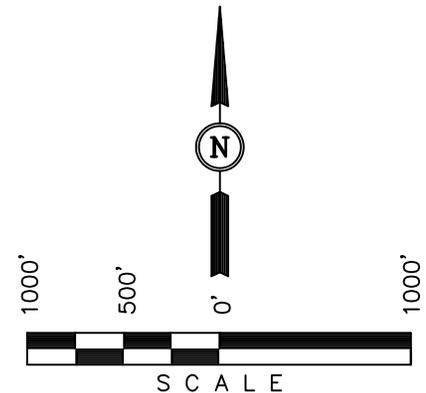


BASIS OF ELEVATION

BENCH MARK (M67) LOCATED IN THE SW 1/4 OF SECTION 9, T5S, R4W, U.S.B.&M., TAKEN FROM THE DUCHESNE SE, QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6097 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

ROBERT L. KAY  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

REVISED: 05-03-11

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.
- △ = SECTION CORNERS RE-ESTABLISHED. (Not Set on Ground.)

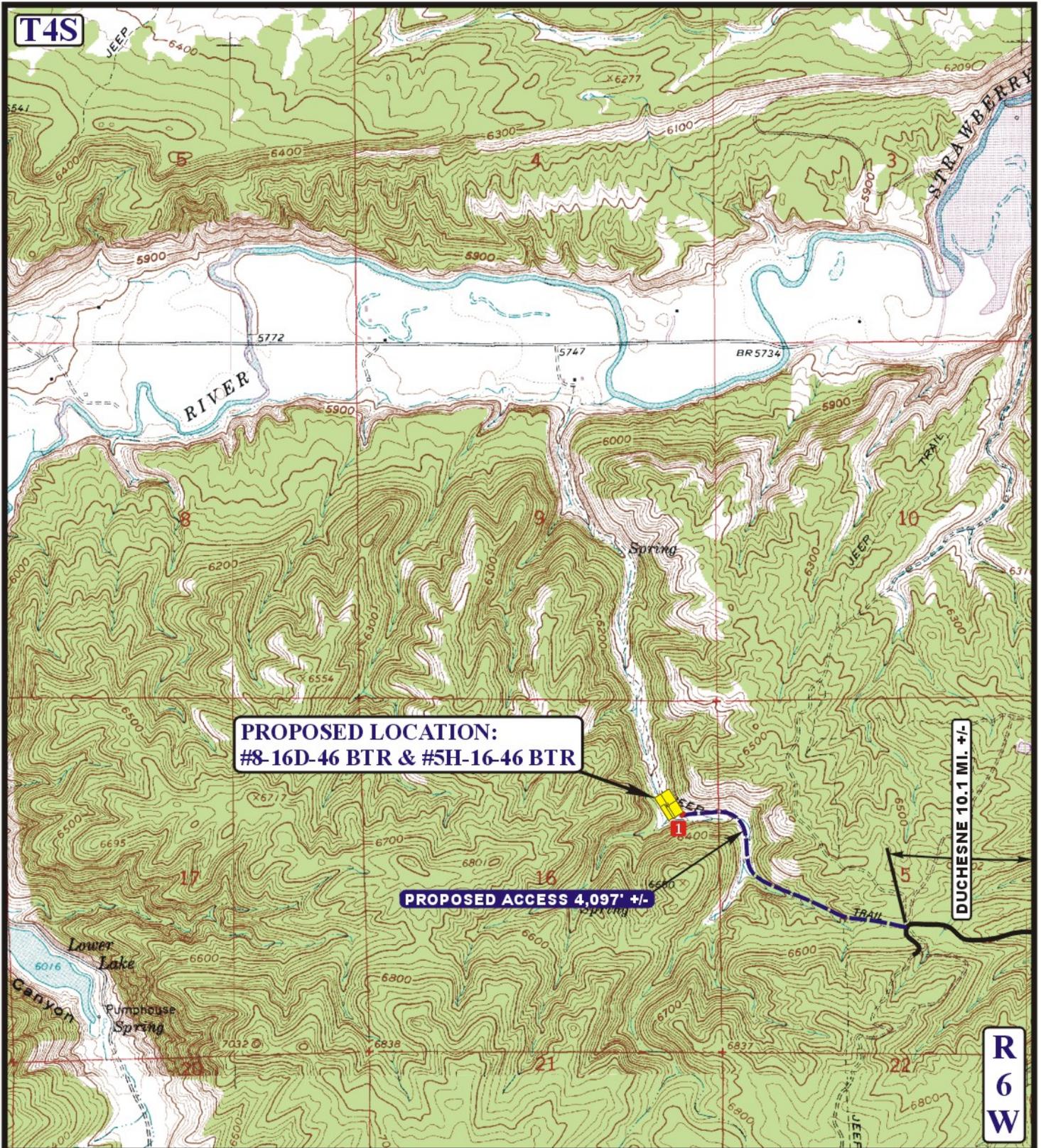
NAD 83 (TARGET BOTTOM HOLE)		NAD 83 (SURFACE LOCATION)	
LATITUDE = 40°08'05.10" (40.134750)	LONGITUDE = 110°33'40.90" (110.561361)	LATITUDE = 40°08'09.30" (40.135917)	LONGITUDE = 110°33'40.06" (110.561128)
NAD 27 (TARGET BOTTOM HOLE)		NAD 27 (SURFACE LOCATION)	
LATITUDE = 40°08'05.26" (40.134794)	LONGITUDE = 110°33'38.34" (110.560650)	LATITUDE = 40°08'09.45" (40.135958)	LONGITUDE = 110°33'37.50" (110.560417)

SCALE 1" = 1000'	DATE SURVEYED: 01-17-11	DATE DRAWN: 02-16-11
PARTY T.A. C.W. C.C.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE BILL BARRETT CORPORATION	

API Well Number: 43013509530000

RECEIVED: September 07, 2011





**LEGEND:**

-  EXISTING ROAD
-  PROPOSED ACCESS ROAD
-  48" CMP REQUIRED

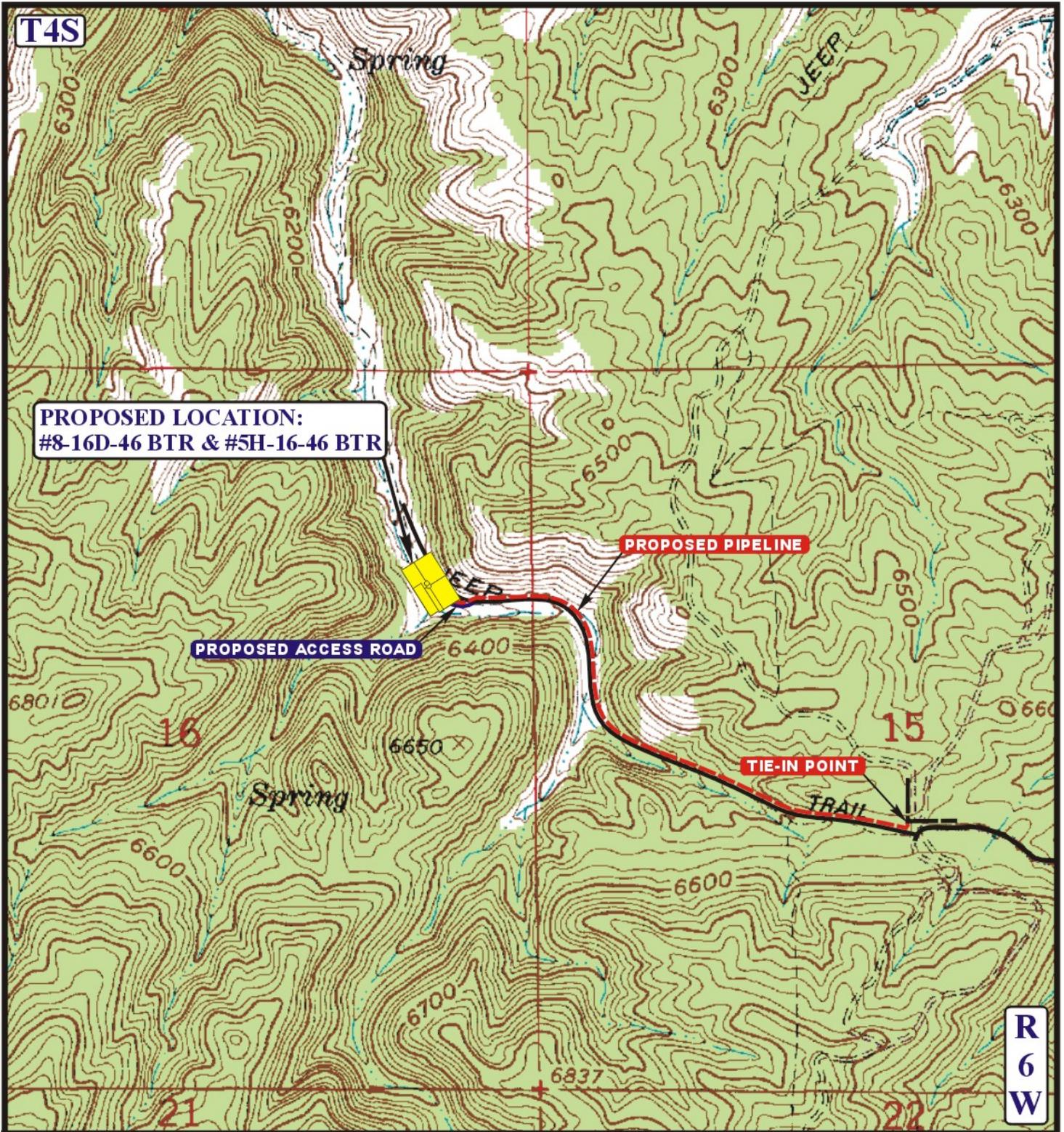
**U&L S** Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



**BILL BARRETT CORPORATION**

**#8-16D-46 BTR & #5H-16-46 BTR**  
**SECTION 16, T4S, R6W, U.S.B.&M.**  
**SE 1/4 NE 1/4**

<b>ACCESS ROAD</b>	<b>01</b>	<b>18</b>	<b>11</b>	<b>B</b>
<b>MAP</b>	MONTH	DAY	YEAR	
SCALE: 1" = 2000'	DRAWN BY: J.J.		REV: 08-19-11 C.I.	<b>TOPO</b>



**APPROXIMATE TOTAL PIPELINE DISTANCE = 4,181' +/-**

**LEGEND:**

-  PROPOSED ACCESS ROAD
-  EXISTING PIPELINE
-  PROPOSED PIPELINE
-  PROPOSED PIPELINE (SERVICING OTHER WELLS)

**BILL BARRETT CORPORATION**

**#8-16D-46 BTR & #5H-16-46 BTR  
SECTION 16, T4S, R6W, U.S.B.&M.  
SE 1/4 NE 1/4**



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



**TOPOGRAPHIC  
MAP**

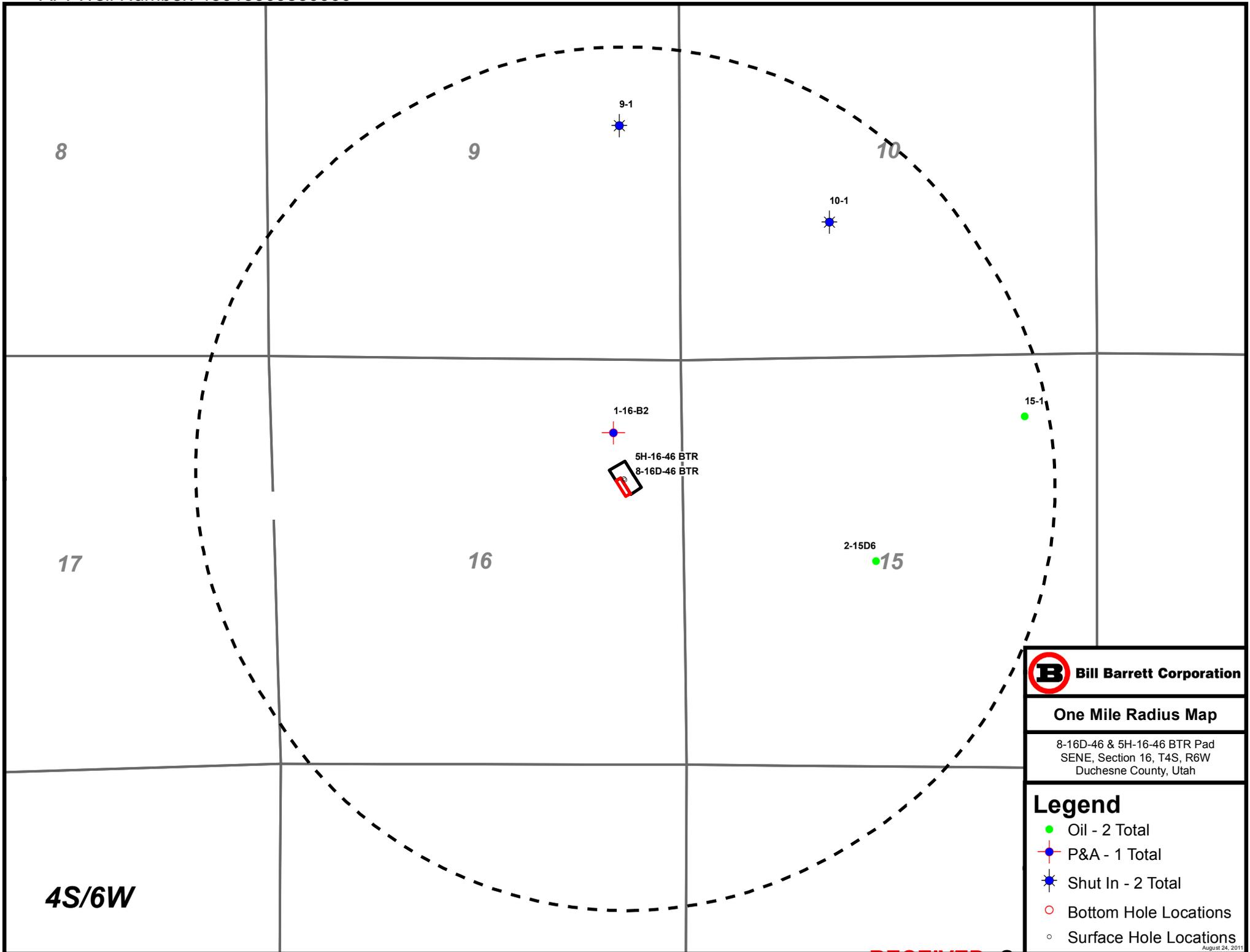
**01 18 11**  
MONTH DAY YEAR

SCALE: 1" = 1000'

DRAWN BY: J.J.

REV: 07-27-11 C.I.





**B** Bill Barrett Corporation

**One Mile Radius Map**

8-16D-46 & 5H-16-46 BTR Pad  
SENE, Section 16, T4S, R6W  
Duchesne County, Utah

- Legend**
- Oil - 2 Total
  - ★ P&A - 1 Total
  - ★ Shut In - 2 Total
  - Bottom Hole Locations
  - Surface Hole Locations



SITE DETAILS: 8-16D-46 BTR

Blacktail Ridge

Site Centre Latitude: 40° 8' 9.449 N  
Longitude: 110° 33' 37.501 W

Positional Uncertainty: 0.0  
Convergence: 0.60  
Local North: True

COMPANY DETAILS: BILL BARRETT CORP

Calculation Method: Minimum Curvature  
Error System: ISCWSA  
Scan Method: Closest Approach 3D  
Error Surface: Elliptical Conic  
Warning Method: Error Ratio

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
8-16D 3PT MKR	4392.0	-424.0	-65.1	40° 8' 5.258 N	110° 33' 38.340 W	Rectangle (Sides: L200.0 W200.0)
8-16D PBHL	7474.0	-424.0	-65.1	40° 8' 5.258 N	110° 33' 38.340 W	Rectangle (Sides: L200.0 W200.0)

SECTION DETAILS

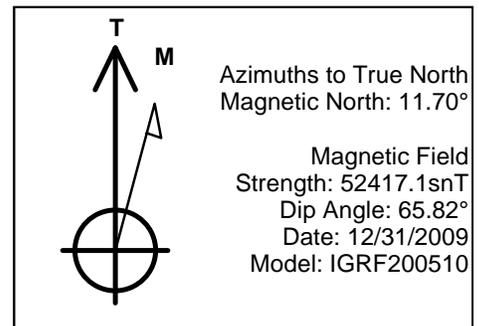
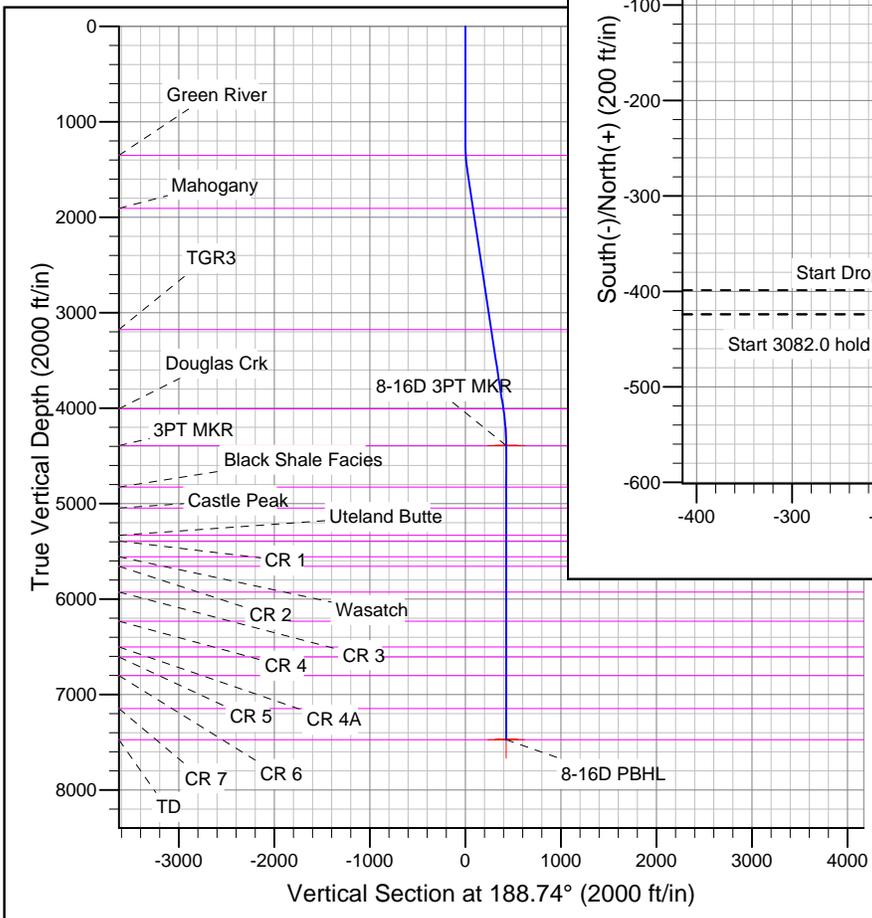
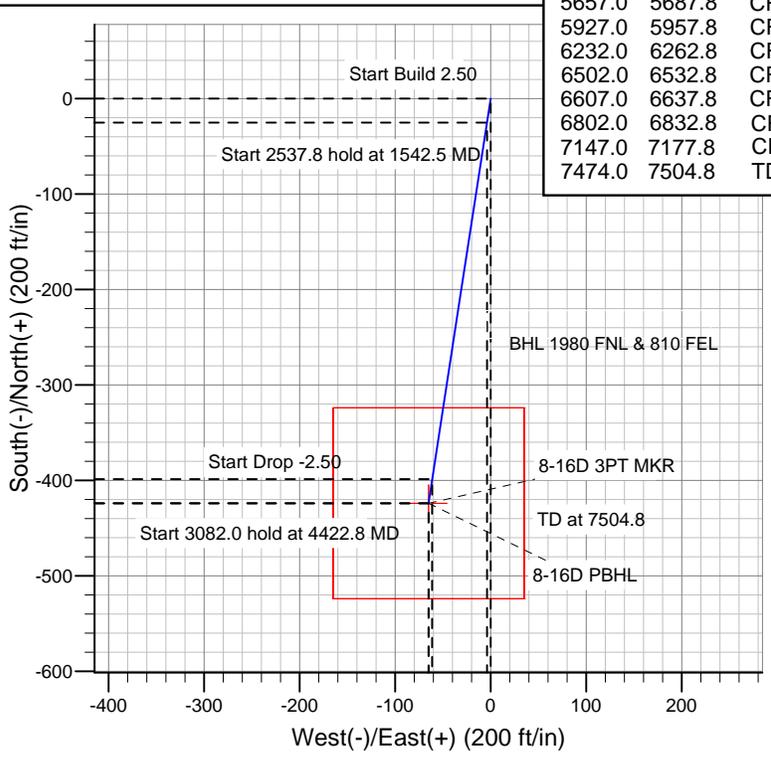
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	1542.5	8.56	188.74	1541.2	-25.3	-3.9	2.50	188.74	25.5	
4	4080.3	8.56	188.74	4050.8	-398.7	-61.3	0.00	0.00	403.4	
5	4422.8	0.00	0.00	4392.0	-424.0	-65.1	2.50	180.00	429.0	8-16D 3PT MKR
6	7504.8	0.00	0.00	7474.0	-424.0	-65.1	0.00	0.00	429.0	8-16D PBHL

FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
1352.0	1352.1	Green River
1907.0	1912.4	Mahogany
3177.0	3196.7	TGR3
4007.0	4036.1	Douglas Crk
4392.0	4422.8	3PT MKR
4827.0	4857.8	Black Shale Facies
5047.0	5077.8	Castle Peak
5332.0	5362.8	Uteland Butte
5392.0	5422.8	CR 1
5557.0	5587.8	Wasatch
5657.0	5687.8	CR 2
5927.0	5957.8	CR 3
6232.0	6262.8	CR 4
6502.0	6532.8	CR 4A
6607.0	6637.8	CR 5
6802.0	6832.8	CR 6
7147.0	7177.8	CR 7
7474.0	7504.8	TD

CASING DETAILS

No casing data is available



**Bill Barrett Corp**  
Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well 8-16D-46 BTR
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6255.0ft (Original Well Elev)
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 27)	<b>MD Reference:</b>	WELL @ 6255.0ft (Original Well Elev)
<b>Site:</b>	8-16D-46 BTR	<b>North Reference:</b>	True
<b>Well:</b>	8-16D-46 BTR	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	8-16D-46 BTR		
<b>Design:</b>	Design #1		

<b>Project</b>	DUCHESNE COUNTY, UT (NAD 27)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Ground Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Utah Central 4302		

<b>Site</b>	8-16D-46 BTR				
<b>Site Position:</b>		<b>Northing:</b>	657,947.76 ft	<b>Latitude:</b>	40° 8' 9.449 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,262,692.72 ft	<b>Longitude:</b>	110° 33' 37.501 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"	<b>Grid Convergence:</b>	0.60 °

<b>Well</b>	8-16D-46 BTR, 1555 FNL & 739 FEL					
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	657,947.76 ft	<b>Latitude:</b>	40° 8' 9.449 N
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	2,262,692.72 ft	<b>Longitude:</b>	110° 33' 37.501 W
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	6,239.0 ft

<b>Wellbore</b>	8-16D-46 BTR				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	12/31/2009	11.70	65.82	52,417

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	188.74

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,542.5	8.56	188.74	1,541.2	-25.3	-3.9	2.50	2.50	0.00	188.74	
4,080.3	8.56	188.74	4,050.8	-398.7	-61.3	0.00	0.00	0.00	0.00	
4,422.8	0.00	0.00	4,392.0	-424.0	-65.1	2.50	-2.50	0.00	180.00	8-16D 3PT MKR
7,504.8	0.00	0.00	7,474.0	-424.0	-65.1	0.00	0.00	0.00	0.00	8-16D PBHL

**Bill Barrett Corp**  
Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well 8-16D-46 BTR
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6255.0ft (Original Well Elev)
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 27)	<b>MD Reference:</b>	WELL @ 6255.0ft (Original Well Elev)
<b>Site:</b>	8-16D-46 BTR	<b>North Reference:</b>	True
<b>Well:</b>	8-16D-46 BTR	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	8-16D-46 BTR		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	2.50	188.74	1,300.0	-2.2	-0.3	2.2	2.50	2.50	0.00
1,352.1	3.80	188.74	1,352.0	-5.0	-0.8	5.0	2.50	2.50	0.00
<b>Green River</b>									
1,400.0	5.00	188.74	1,399.7	-8.6	-1.3	8.7	2.50	2.50	0.00
1,500.0	7.50	188.74	1,499.1	-19.4	-3.0	19.6	2.50	2.50	0.00
1,542.5	8.56	188.74	1,541.2	-25.3	-3.9	25.5	2.50	2.50	0.00
1,600.0	8.56	188.74	1,598.1	-33.7	-5.2	34.1	0.00	0.00	0.00
1,700.0	8.56	188.74	1,697.0	-48.4	-7.4	49.0	0.00	0.00	0.00
1,800.0	8.56	188.74	1,795.9	-63.1	-9.7	63.9	0.00	0.00	0.00
1,900.0	8.56	188.74	1,894.7	-77.9	-12.0	78.8	0.00	0.00	0.00
1,912.4	8.56	188.74	1,907.0	-79.7	-12.2	80.6	0.00	0.00	0.00
<b>Mahogany</b>									
2,000.0	8.56	188.74	1,993.6	-92.6	-14.2	93.7	0.00	0.00	0.00
2,100.0	8.56	188.74	2,092.5	-107.3	-16.5	108.6	0.00	0.00	0.00
2,200.0	8.56	188.74	2,191.4	-122.0	-18.7	123.4	0.00	0.00	0.00
2,300.0	8.56	188.74	2,290.3	-136.7	-21.0	138.3	0.00	0.00	0.00
2,400.0	8.56	188.74	2,389.2	-151.4	-23.3	153.2	0.00	0.00	0.00
2,500.0	8.56	188.74	2,488.1	-166.2	-25.5	168.1	0.00	0.00	0.00
2,600.0	8.56	188.74	2,586.9	-180.9	-27.8	183.0	0.00	0.00	0.00
2,700.0	8.56	188.74	2,685.8	-195.6	-30.1	197.9	0.00	0.00	0.00
2,800.0	8.56	188.74	2,784.7	-210.3	-32.3	212.8	0.00	0.00	0.00
2,900.0	8.56	188.74	2,883.6	-225.0	-34.6	227.7	0.00	0.00	0.00
3,000.0	8.56	188.74	2,982.5	-239.7	-36.8	242.6	0.00	0.00	0.00
3,100.0	8.56	188.74	3,081.4	-254.5	-39.1	257.5	0.00	0.00	0.00
3,196.7	8.56	188.74	3,177.0	-268.7	-41.3	271.9	0.00	0.00	0.00
<b>TGR3</b>									
3,200.0	8.56	188.74	3,180.2	-269.2	-41.4	272.3	0.00	0.00	0.00
3,300.0	8.56	188.74	3,279.1	-283.9	-43.6	287.2	0.00	0.00	0.00
3,400.0	8.56	188.74	3,378.0	-298.6	-45.9	302.1	0.00	0.00	0.00
3,500.0	8.56	188.74	3,476.9	-313.3	-48.1	317.0	0.00	0.00	0.00
3,600.0	8.56	188.74	3,575.8	-328.1	-50.4	331.9	0.00	0.00	0.00
3,700.0	8.56	188.74	3,674.7	-342.8	-52.7	346.8	0.00	0.00	0.00
3,800.0	8.56	188.74	3,773.6	-357.5	-54.9	361.7	0.00	0.00	0.00
3,900.0	8.56	188.74	3,872.4	-372.2	-57.2	376.6	0.00	0.00	0.00
4,000.0	8.56	188.74	3,971.3	-386.9	-59.4	391.5	0.00	0.00	0.00
4,036.1	8.56	188.74	4,007.0	-392.2	-60.3	396.8	0.00	0.00	0.00
<b>Douglas Crk</b>									
4,080.3	8.56	188.74	4,050.8	-398.7	-61.3	403.4	0.00	0.00	0.00
4,100.0	8.07	188.74	4,070.2	-401.6	-61.7	406.3	2.50	-2.50	0.00
4,200.0	5.57	188.74	4,169.5	-413.3	-63.5	418.1	2.50	-2.50	0.00
4,300.0	3.07	188.74	4,269.2	-420.7	-64.6	425.7	2.50	-2.50	0.00

**Bill Barrett Corp**  
Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well 8-16D-46 BTR
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6255.0ft (Original Well Elev)
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 27)	<b>MD Reference:</b>	WELL @ 6255.0ft (Original Well Elev)
<b>Site:</b>	8-16D-46 BTR	<b>North Reference:</b>	True
<b>Well:</b>	8-16D-46 BTR	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	8-16D-46 BTR		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,400.0	0.57	188.74	4,369.2	-423.9	-65.1	428.9	2.50	-2.50	0.00
4,422.8	0.00	0.00	4,392.0	-424.0	-65.1	429.0	2.50	-2.50	0.00
<b>3PT MKR - 8-16D 3PT MKR</b>									
4,500.0	0.00	0.00	4,469.2	-424.0	-65.1	429.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,569.2	-424.0	-65.1	429.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,669.2	-424.0	-65.1	429.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,769.2	-424.0	-65.1	429.0	0.00	0.00	0.00
4,857.8	0.00	0.00	4,827.0	-424.0	-65.1	429.0	0.00	0.00	0.00
<b>Black Shale Facies</b>									
4,900.0	0.00	0.00	4,869.2	-424.0	-65.1	429.0	0.00	0.00	0.00
5,000.0	0.00	0.00	4,969.2	-424.0	-65.1	429.0	0.00	0.00	0.00
5,077.8	0.00	0.00	5,047.0	-424.0	-65.1	429.0	0.00	0.00	0.00
<b>Castle Peak</b>									
5,100.0	0.00	0.00	5,069.2	-424.0	-65.1	429.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,169.2	-424.0	-65.1	429.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,269.2	-424.0	-65.1	429.0	0.00	0.00	0.00
5,362.8	0.00	0.00	5,332.0	-424.0	-65.1	429.0	0.00	0.00	0.00
<b>Uteland Butte</b>									
5,400.0	0.00	0.00	5,369.2	-424.0	-65.1	429.0	0.00	0.00	0.00
5,422.8	0.00	0.00	5,392.0	-424.0	-65.1	429.0	0.00	0.00	0.00
<b>CR 1</b>									
5,500.0	0.00	0.00	5,469.2	-424.0	-65.1	429.0	0.00	0.00	0.00
5,587.8	0.00	0.00	5,557.0	-424.0	-65.1	429.0	0.00	0.00	0.00
<b>Wasatch</b>									
5,600.0	0.00	0.00	5,569.2	-424.0	-65.1	429.0	0.00	0.00	0.00
5,687.8	0.00	0.00	5,657.0	-424.0	-65.1	429.0	0.00	0.00	0.00
<b>CR 2</b>									
5,700.0	0.00	0.00	5,669.2	-424.0	-65.1	429.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,769.2	-424.0	-65.1	429.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,869.2	-424.0	-65.1	429.0	0.00	0.00	0.00
5,957.8	0.00	0.00	5,927.0	-424.0	-65.1	429.0	0.00	0.00	0.00
<b>CR 3</b>									
6,000.0	0.00	0.00	5,969.2	-424.0	-65.1	429.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,069.2	-424.0	-65.1	429.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,169.2	-424.0	-65.1	429.0	0.00	0.00	0.00
6,262.8	0.00	0.00	6,232.0	-424.0	-65.1	429.0	0.00	0.00	0.00
<b>CR 4</b>									
6,300.0	0.00	0.00	6,269.2	-424.0	-65.1	429.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,369.2	-424.0	-65.1	429.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,469.2	-424.0	-65.1	429.0	0.00	0.00	0.00
6,532.8	0.00	0.00	6,502.0	-424.0	-65.1	429.0	0.00	0.00	0.00
<b>CR 4A</b>									
6,600.0	0.00	0.00	6,569.2	-424.0	-65.1	429.0	0.00	0.00	0.00
6,637.8	0.00	0.00	6,607.0	-424.0	-65.1	429.0	0.00	0.00	0.00
<b>CR 5</b>									
6,700.0	0.00	0.00	6,669.2	-424.0	-65.1	429.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,769.2	-424.0	-65.1	429.0	0.00	0.00	0.00
6,832.8	0.00	0.00	6,802.0	-424.0	-65.1	429.0	0.00	0.00	0.00
<b>CR 6</b>									
6,900.0	0.00	0.00	6,869.2	-424.0	-65.1	429.0	0.00	0.00	0.00
7,000.0	0.00	0.00	6,969.2	-424.0	-65.1	429.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,069.2	-424.0	-65.1	429.0	0.00	0.00	0.00

**Bill Barrett Corp**

Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well 8-16D-46 BTR
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	WELL @ 6255.0ft (Original Well Elev)
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 27)	<b>MD Reference:</b>	WELL @ 6255.0ft (Original Well Elev)
<b>Site:</b>	8-16D-46 BTR	<b>North Reference:</b>	True
<b>Well:</b>	8-16D-46 BTR	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	8-16D-46 BTR		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,177.8	0.00	0.00	7,147.0	-424.0	-65.1	429.0	0.00	0.00	0.00
<b>CR 7</b>									
7,200.0	0.00	0.00	7,169.2	-424.0	-65.1	429.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,269.2	-424.0	-65.1	429.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,369.2	-424.0	-65.1	429.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,469.2	-424.0	-65.1	429.0	0.00	0.00	0.00
7,504.8	0.00	0.00	7,474.0	-424.0	-65.1	429.0	0.00	0.00	0.00
<b>TD - 8-16D PBHL</b>									

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,352.1	1,352.0	Green River		0.00	
1,912.4	1,907.0	Mahogany		0.00	
3,196.7	3,177.0	TGR3		0.00	
4,036.1	4,007.0	Douglas Crk		0.00	
4,422.8	4,392.0	3PT MKR		0.00	
4,857.8	4,827.0	Black Shale Facies		0.00	
5,077.8	5,047.0	Castle Peak		0.00	
5,362.8	5,332.0	Uteland Butte		0.00	
5,422.8	5,392.0	CR 1		0.00	
5,587.8	5,557.0	Wasatch		0.00	
5,687.8	5,657.0	CR 2		0.00	
5,957.8	5,927.0	CR 3		0.00	
6,262.8	6,232.0	CR 4		0.00	
6,532.8	6,502.0	CR 4A		0.00	
6,637.8	6,607.0	CR 5		0.00	
6,832.8	6,802.0	CR 6		0.00	
7,177.8	7,147.0	CR 7		0.00	
7,504.8	7,474.0	TD		0.00	

**SURFACE USE PLAN**

BILL BARRETT CORPORATION

**8-16D-46 BTR Well Pad**

SE NE, 1555' FNL and 739' FEL, Section 16, T4S-R6W, USB&M (surface hole)

SE NE, 1980' FNL and 810' FEL, Section 16, T4S-R6W, USB&M (bottom hole)

Duchesne County, Utah

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The onsite inspection for this pad occurred on August 18, 2011. Site specific conditions or changes as a result of that onsite are indicated below. Plat changes requested at the onsite are reflected within this APD.

- a) Temporary road closure during drilling is allowed;
- b) One 48-inch culvert to be installed at the pad entrance;
- c) Divert drainages around corners 2 and 8 following drilling;
- d) Complete interim reclamation prior to spring run-off;
- e) Cut and treat existing tamarisk along the proposed access road;

The excavation contractor would be provided with an approved copy of the surface use plan of operations before initiating construction.

1. Existing Roads:

- a. The proposed well site is located approximately 10.9 miles southwest of Duchesne, Utah. Maps and directions reflecting the route to the proposed well site are included (see Topographic maps A and B).
- b. The existing State Highway 191 would be utilized from Duchesne for 3.5 miles to the existing BBC maintained Skitzzy Road that would be utilized for 6.6 miles and provides access to the planned new access road.
- c. Project roads would require routine year-round maintenance to provide year-round access. Maintenance would include inspections, reduction of ruts and holes, maintenance to keep water off the road, replacement of surfacing materials, and clearing of sediment blocking ditches and culverts. Should snow removal become necessary, roads would be cleared with a motor grader and snow would be stored along the down gradient side to prohibit runoff onto the road. Aggregate would be used as necessary to maintain a solid running surface and minimize dust generation.
- d. Vehicle operators would obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions. Travel would be limited to the existing access roads and proposed access road.
- e. The use of roads under State and Duchesne County Road Department maintenance are necessary to access the project area with no improvements proposed. No encroachment or pipeline crossing permits are required.

Bill Barrett Corporation  
Surface Use Plan  
#8-16D-46 BTR  
Duchesne County, UT

- f. All existing roads would be maintained and kept in good repair during all phases of operation.

2. Planned Access Road:

- a. Approximately 4,097 feet of two-track upgrade trending northwest is planned from the existing Skitzzy access road (see Topographic Map B). The access road crosses entirely Ute Tribe surface.
- b. The planned access road would be constructed to a 30-foot ROW width with an 18-foot travel surface. See section 12.d. below for disturbance estimates.
- c. New road construction and improvements of existing roads would typically require the use of motor graders, crawler tractors, 10-yard end dump trucks, and water trucks. The standard methodology for building new roads involves the use of a crawler tractor or track hoe to windrow the vegetation to one side of the road corridor, remove topsoil to the opposing side of the corridor, and rough-in the roadway. This is followed by a grader or bulldozer to establish barrow ditches and crown the road surface. Where culverts are required, a track hoe or backhoe would trench the road and install the culverts. Some hand labor would be required when installing and armoring culverts. Road base or gravel in some instances would be necessary and would be hauled in and a grader used to smooth the running surface.
- d. The proposed road would be constructed to facilitate drainage, control erosion and minimize visual impacts by following natural contours where practical. No unnecessary side-casting of material would occur on steep slopes.
- e. A maximum grade of 10% would be maintained throughout the project with minimum cuts and fills, as necessary, to access the well.
- f. Excess rock from construction of the pad may be used for surfacing of the access road if necessary. Any additional aggregate necessary would be obtained from private or State of Utah lands in conformance with applicable regulations. Aggregate would be of sufficient size, type, and amount to allow all weather access and alleviate dust.
- g. Where topsoil removal is necessary, it would be windrowed (i.e. stockpiled/accumulated along the edge of the ROW and in a low row/pile parallel with the ROW) and re-spread over the disturbed area after construction and backfilling are completed. Vegetation removed from the disturbed area would also be re-spread to provide protection, nutrient recycling, and a seed source for reclamation.
- h. Turnouts are not proposed.

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Surface Use Plan  
#8-16D-46 BTR  
Duchesne County, UT

- i. One 48-inch culvert and no low-water crossings are anticipated. Adequate drainage structures, where necessary, would be incorporated into the remainder of the road to prevent soil erosion and accommodate all-weather traffic.
- j. No gates or cattle guards are anticipated at this time.
- k. Surface disturbance and vehicular travel would be limited to the approved location access road. Adequate signs would be posted, as necessary, to warn the public of project related traffic.
- l. All access roads and surface disturbing activities would conform to the appropriate standard, **no higher than necessary**, to accommodate their intended function adequately as outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, Fourth Edition – Revised 2007.
- m. The operator would be responsible for all maintenance needs of the new access road.

3. Location of Existing Wells (see One-Mile Radius Map):

- a. Following is a list of wells with surface hole locations within a one-mile radius of the proposed pad:
  - i. water wells none
  - ii. injection wells none
  - iii. disposal wells none
  - iv. drilling wells none
  - v. temp shut-in wells two
  - vi. producing wells two
  - vii. abandoned wells one

4. Location of Production Facilities

- a. Surface facilities would consist of a wellhead, separator, gas meter, (1) 500 gal methanol tank, (1) 500 glycol tank, (3) 500 bbl oil tanks, (1) 500 bbl water tank, (1) 500 bbl test tank, (1) 1000 gal propane tank, a pumping unit or Roto-flex unit or gas lift unit with a natural gas fired motor, solar panels, solar chemical and methanol pumps and one trace pump. See attached proposed facility diagram.
- b. Most wells would be fitted with a pump jack or Roto-flex unit or gas lift to assist liquid production if liquid volumes and/or low formation pressures require it. Plunger lift systems do not require any outside source of energy. The prime mover for pump jacks or Roto-flex units would be small (75 horsepower or less), natural gas-fired internal combustion engines. If a gas lift is installed, it would be set on a 10 ft x 15 ft pad and the prime mover would be a natural gas-fired internal combustion engine rated at 200 horsepower or less or an electric compressor of similar horsepower powered by a generator.

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Surface Use Plan  
#8-16D-46 BTR  
Duchesne County, UT

- c. The tank battery would be surrounded by a secondary containment berm of sufficient capacity to contain 1.1 times the entire capacity of the largest single tank and sufficient freeboard to contain precipitation. All loading lines and valves would be placed inside the berm surrounding the tank battery or would utilize catchment basins to contain spills. All liquid hydrocarbon production and measurement shall conform to the provisions of 43 CFR 3162.7-2 and Onshore Oil and Gas Order No. 4 for the measurement of oil.
- d. Gas meter run(s) would be constructed and located on lease within 500 feet of the wellheads. Meter runs would be housed and/or fenced. As practicably feasible, meters would be equipped with remote telemetry monitoring systems. All gas production and measurement shall comply with the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.
- e. A combustor may be installed at this location for control of associated condensate tank emissions. A combustor ranges from 24 inches to 48 inches wide and is approximately 27 ft tall. Combustor placement would be on existing disturbance.
- f. Approximately 4,181 feet of pipeline corridor (see Topographic Map C) containing up to three lines (one gas pipeline up to 8 inch in diameter, one water line up to 4 inch in diameter and one residue line up to 4 inch in diameter) is proposed trending southeast to the existing Skitzzy area pipeline corridor. Pipelines would be constructed of steel, polyethylene or fiberglass and would connect to the proposed pipeline servicing nearby BBC wells. The pipeline crosses entirely Ute Tribe surface.
- g. The new segment of gas pipeline would be surface laid within a 30 foot wide pipeline corridor adjacent to the proposed access road. See 12.d below for disturbance estimates.
- h. Construction of the ROW would temporarily utilize the 30 foot disturbed width for the road for a total disturbed width of 60 foot for the road and pipeline corridors. The use of the proposed well site and access roads would facilitate the staging of the pipeline construction.
- i. Pipeline construction methods and practices would be planned and conducted by BBC with the objective of enhancing reclamation and fostering the re-establishment of the native plant community.
- j. All permanent above-ground structures would be painted a flat, non-reflective Beetle Green color, to match the standard environmental colors. All facilities would be painted the designated color at the time of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.

Bill Barrett Corporation  
 Surface Use Plan  
 #8-16D-46 BTR  
 Duchesne County, UT

- k. Site security guidelines identified in 43 CFR 3162.7-5 and Onshore Oil and Gas Order No. 3 would be adhered to. Any modifications to proposed facilities would be reflected in the site security diagram submitted.
- l. The site would require periodic maintenance to ensure that drainages are kept open and free of debris, and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.

5. Location and Type of Water Supply:

- a. Water for the drilling and completion would be trucked from any of the following locations:

Water Right No. and Application or Change No.	Applicant	Allocation	Date	Point of Diversion	Source
43-180	Duchesne City Water Service District	5 cfs	8/13/2004	Knight Diversion Dam	Duchesne River
43-1202, Change a13837	Myton City	5.49 cfr and 3967 acre feet	3/21/1986	Knight Diversion Dam	Duchesne River
43-10444, Appln A57477	Duchesne County Upper Country Water	2 cfs	1994	Ditch at Source	Cow Canyon Spring
43-10446, Appln F57432	Duchesne County Upper Country Water	1.58 cfs	1994	Ditch at Source	Cow Canyon Spring
43-1273, Appln A17462	J.J.N.P. Company	7 cfs	1946	Strawberry River	Strawberry River
43-1273, Appln t36590	J.J.N.P. Company	4 cfs	6/03/2010	Strawberry River	Strawberry River

- b. No new water well is proposed with this application.
- c. Should additional water sources be pursued they would be properly permitted through the State of Utah – Division of Water Rights.
- d. Water use would vary in accordance with the formations to be drilled but would be up to approximately 5.41 acre feet for drilling and completion operations.

6. Source of Construction Material:

- a. The use of materials would conform to 43 CFR 3610.2-3.
- b. No construction materials would be removed from the lease or EDA area.

Bill Barrett Corporation  
 Surface Use Plan  
 #8-16D-46 BTR  
 Duchesne County, UT

- c. If any additional gravel is required, it would be obtained from a local supplier having a permitted source of materials within the general area.

7. Methods of Handling Waste Disposal:

- a. All wastes associated with this application would be contained and disposed of utilizing approved facilities.
- b. The reserve pit would be constructed so as not to leak, break or allow any discharge.
- c. The reserve would be lined with 12 mil (minimum) thickness polyethylene nylon reinforced liner material. The liner(s) would overlay straw, dirt and/or bentonite if rock is encountered during excavation. The liner would overlap the pit walls and be covered with dirt and/or rocks to hold them in place. No trash, scrap pipe, or other materials that could puncture the liner would be discarded in the pit. A minimum of two feet of free board would be maintained between the maximum fluid level and the top of the reserve pit at all times.
- d. To deter livestock from entering the pit, the three sides exterior to the location would be fenced before drilling starts. Following the conclusion of drilling and completion activities, the fourth side would also be fenced.
- e. Drill cuttings would be contained in the pit and buried on-site for a period not to exceed six months, weather permitting
- f. Produced fluids from the well other than water would be decanted into steel test tank(s) until such time as construction of production facilities is completed. Any oil that may be accumulated would be transferred to a permanent production tank. Produced water may be used in further drilling and completion activities, evaporated in the pit, or would be hauled to one of the state-approved disposal facilities below:

<b>Disposal Facilities</b>
1. RNI Industries, Inc. – Pleasant Valley Disposal Pits, Sec. 25, 26, 35 & 36, T4S-R3W
2. Pro Water LLC – Blue Bench 13-1 Disposal Well (43-013-30971) NENE, Sec. 13, T3S-R5W
3. RN Industries, Inc. – Bluebell Disposal Ponds, Sec. 2, 4 & 9, T2S-R2W
4. Water Disposal, Inc. – Harmston 1-32-A1 Disposal Well (43-013-30224), UTR #00707, Sec. 32, T1S-R1W
5. Unified Water Pits – Sec. 31, T2S-R4W
6. Iowa Tank Line Pits – 8500 BLM Fence Road, Pleasant Valley

- g. Any salts and/or chemicals, which are an integral part of the drilling system, would be disposed of in the same manner as the drilling fluid.

Bill Barrett Corporation  
Surface Use Plan  
#8-16D-46 BTR  
Duchesne County, UT

- h. Any spills of oil, condensate, produced or frac water, drilling fluids, or other potentially deleterious substances would be recovered and either returned to its origin or disposed of at an approved disposal site, most likely in Duchesne, Utah.
- i. Chemicals on the EPA's Consolidated List of Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) may be used or stored in quantities over reportable quantities. In the course of drilling, BBC could potentially store and use diesel fuel, sand (silica), hydrochloric acid, and CO<sub>2</sub> gas, all described as hazardous substances in 40 CFR Part 302, Section 302.4, in quantities exceeding 10,000 pounds. In addition, natural gas condensate and crude oil and methanol may be stored or used in reportable quantities. Small quantities of retail products (paint/spray paints, solvents {e.g., WD-40}, and lubrication oil) containing non-reportable volumes of hazardous substances may be stored and used on site at any time. No extremely hazardous substances, as defined in 40 CFR 355, would be used, produced, stored, transported or disposed of in association with the drilling, testing or completion of the wells.
- j. Portable toilets and trash containers would be located onsite during drilling and completion operations. A commercial supplier would install and maintain portable toilets and equipment and would be responsible for removing sanitary waste. Sanitary waste facilities (i.e. toilet holding tanks) would be regularly pumped and their contents disposed of at approved sewage disposal facilities in Duchesne, and/or Uintah Counties, in accordance with applicable rules and regulations regarding sewage treatment and disposal. Accumulated trash and nonflammable waste materials would be hauled to an approved landfill once a week or as often as necessary. All debris and waste materials not contained in the trash containers would be cleaned up, removed from the construction ROW, well pad, or worker housing location, and disposed of at an approved landfill. Trash would be cleaned up everyday.
- k. Sanitary waste equipment and trash bins would be removed from the Project Area upon completion of access road or pipeline construction; following drilling and completion operations at an individual well pad; when worker housing is no longer needed; or as required.
- l. A flare pit may be constructed a minimum of 110 feet from the wellhead(s) and may be used during completion work. In the event a flare pit proves to be unworkable, a temporary flare stack or open top tank would be installed. BBC would flow back as much fluid and gas as possible into pressurized vessels, separating the fluids from the gas. In some instances, due to the completion fluids utilized within the Project Area, it is not feasible to direct the flow stream from the wellbore through pressurized vessels. In such instances BBC proposes to direct the flow to the open top tanks until flow through the pressurized vessels is feasible. At which point the fluid would either be returned to the reserve pit or placed into a tank(s). The gas would be directed to the flare pit, flare stack (each with a constant source of ignition), or may be directed into the sales pipeline.

Bill Barrett Corporation  
Surface Use Plan  
#8-16D-46 BTR  
Duchesne County, UT

- m. Hydrocarbons would be removed from the reserve pit as soon as practical. In the event immediate removal is not practical, the reserve pit would be flagged overhead or covered with wire or plastic mesh to protect migrating birds.

8. Ancillary Facilities:

- a. Garbage containers and portable toilets would be located on the well pad.
- b. On well pads where active drilling and completion is occurring, temporary housing would be provided on location for the well pad supervisor, geologist, tool pusher, and others that are required to be on location at all times. The well pad could include up to five single wide mobile homes or fifth wheel campers/trailers.
- c. A powerline corridor is not proposed at this time but may be applied for in the future.

9. Well Site Layout:

- a. The well would be properly identified in accordance with 43 CFR 3162.6.
- b. The pad layout, cross section diagrams and rig layout are enclosed (see Figures 1 and 2).
- c. The pad and road designs are consistent with industry specifications.
- d. The pad has been staked at its maximum size of 390 feet x 250 feet with an inboard reserve pit size of 70 feet x 235 feet x 8 feet deep. See section 12.d below for disturbance estimates.
- e. Within the approved well pad location, a crawler tractor would strip whatever topsoil is present and stockpile it along the edge of the well pad for use during reclamation. Vegetation would be distributed along the sides of the well pad.
- f. Fill from pit excavation would be stockpiled along the edge of the pit and the adjacent edge of the well pad.
- g. Use of erosion control measures, including proper grading to minimize slopes, diversion terraces and ditches, mulching, terracing, riprap, fiber matting, temporary sediment traps, and broad-based drainage dips or low water crossings would be employed by BBC as necessary and appropriate to minimize erosion and surface runoff during well pad construction and operation. Cut and fill slopes would be constructed such that stability would be maintained for the life of the activity.
- h. All cut and fill slopes would be such that stability can be maintained for the life of the activity.

Bill Barrett Corporation  
Surface Use Plan  
#8-16D-46 BTR  
Duchesne County, UT

- i. Diversion ditches would be constructed, if necessary, around the well site to prevent surface waters from entering the well site area.
- j. Water application may be implemented if necessary to minimize the amount of fugitive dust.
- k. All surface disturbing activities would be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.

10. Plan for Restoration of the Surface:

- a. A site specific reclamation plan would be submitted, if requested, within 90 days of location construction to the surface managing agency.
- b. Site reclamation would be accomplished for portions of the well pad not required for the continued operation of the well on this pad within six months of completion, weather permitting.
- c. The operator would control noxious weeds along access road use authorizations and well site by spraying or mechanical removal, according to the Utah Noxious Weed Act and as set forth in the approved surface damage agreements.
- d. Rat and mouse holes would be filled and compacted from bottom to top immediately upon release of the drilling rig from location. Upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1. The reserve pit would be allowed to dry prior to the commencement of backfilling work. No attempts would be made to backfill the reserve pit until it is free of standing water. Once dry, the liner would be torn and perforated before backfilling.
- e. The reserve pit and that portion of the location not needed for production facilities/operations would be recontoured to the approximate natural contours. Areas not used for production purposes would be backfilled and blended into the surrounding terrain, reseeded and erosion control measures installed. Mulching, erosion control measures and fertilization may be required to achieve acceptable stabilization. Back slopes and fore slopes would be reduced as practical and scarified with the contour. The reserved topsoil would be evenly distributed over the slopes and scarified along the contour. Slopes would be seeded with the Ute Tribe specified seed mix.
- f. Topsoil salvaged from the drill site and stored for more than one year would be placed at the location indicated on the well site layout drawing and graded to a depth optimum to maintain topsoil viability, seeded with the Ute Tribe prescribed seed mixture and covered with mulch for protection from wind and water erosion and to discourage the invasion of weeds.

Bill Barrett Corporation  
Surface Use Plan  
#8-16D-46 BTR  
Duchesne County, UT

11. Surface and Mineral Ownership:

- a. Surface ownership – Ute Indian Tribe - 988 South 7500 East; Ft. Duchesne, Utah 84026; 435-725-4982.
- b. Mineral ownership – Ute Indian Tribe - 988 South 7500 East; Ft. Duchesne, Utah 84026; 435-725-4982.

12. Other Information:

- a. Montgomery Archeological Consultants has conducted a Class III archeological survey. A copy of the report has been submitted under separate cover to the appropriate agencies by Montgomery as MOAC Report No. 11-178 dated June 23, 2011.
- b. BBC would require that their personnel, contractors, and subcontractors to comply with Federal regulations intended to protect archeological and cultural resources.
- c. Project personnel and contractors would be educated on and subject to the following requirements:
  - No dogs or firearms within the Project Area.
  - No littering within the Project Area.
  - Smoking within the Project Area would only be allowed in off-operator active locations or in specifically designated smoking areas. All cigarette butts would be placed in appropriate containers and not thrown on the ground or out windows of vehicles; personnel and contractors would abide by all fire restriction orders.
  - Campfires or uncontained fires of any kind would be prohibited.
  - Portable generators used in the Project Area would have spark arrestors.

Disturbance estimates:

**Approximate Acreage Disturbances**

Well Pad		3.099	acres
Access	4,097 feet	2.822	acres
Pipeline	4,181 feet	2.876	acres
	<b>Total</b>	<b>8.797</b>	<b>acres</b>

Bill Barrett Corporation  
Surface Use Plan  
#8-16D-46 BTR  
Duchesne County, UT

OPERATOR CERTIFICATION

Certification:

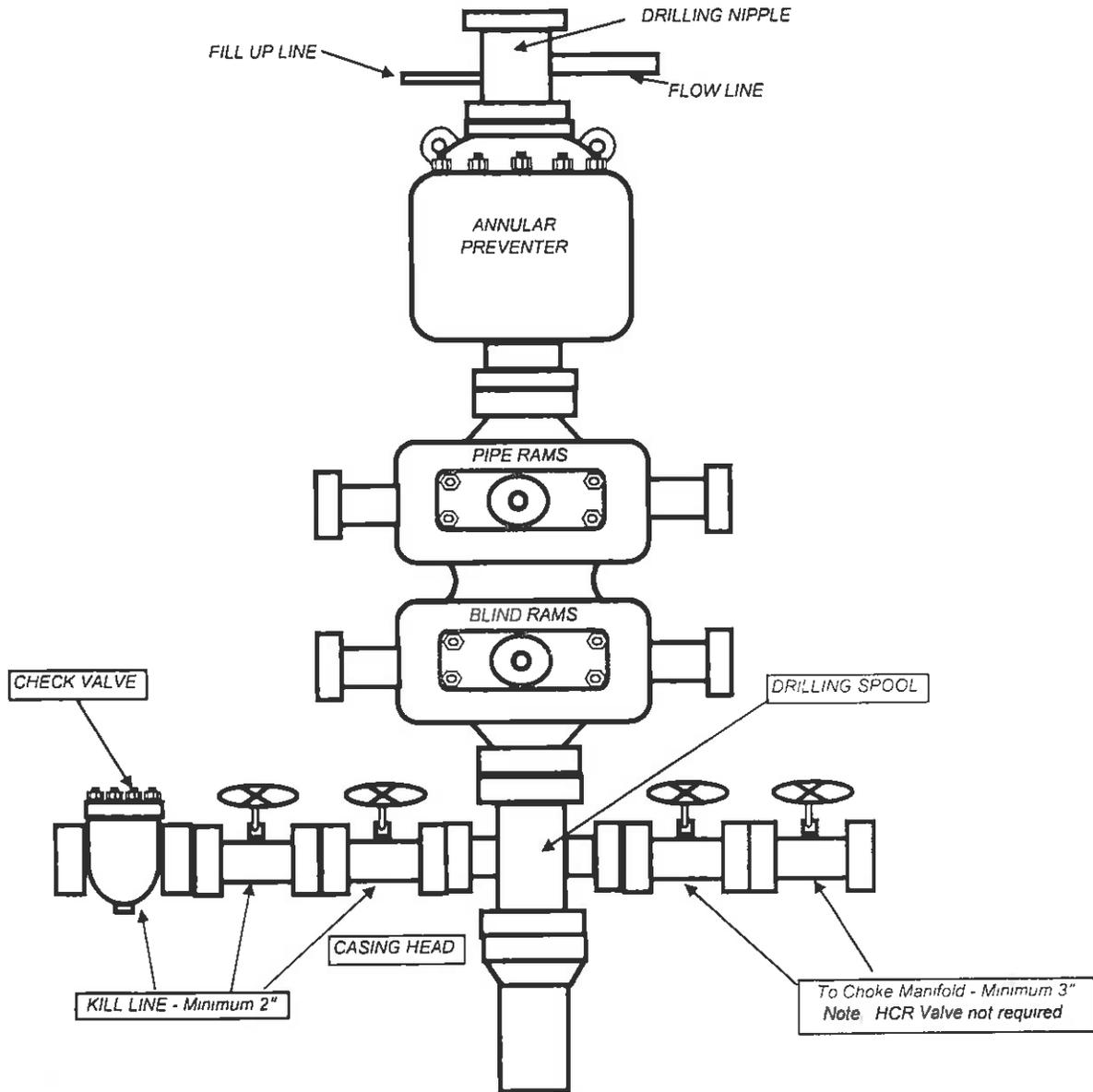
I hereby certify that I, or someone under my direction supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein would be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application and that bond coverage is provided under Bill Barrett Corporations federal nationwide bond. These statements are subject to the provisions of 18 U.S.C. 1001 for the filings of false statements.

Executed this 7<sup>th</sup> day of September 2011  
Name: Venessa Langmacher  
Position Title: Senior Permit Analyst  
Address: 1099 18<sup>th</sup> Street, Suite 2300, Denver, CO 80202  
Telephone: 303-312-8172  
E-mail: vlangmacher@billbarrettcorp.com  
Field Representative Kary Eldredge / Bill Barrett Corporation  
Address: 1820 W. Highway 40, Roosevelt, UT 84066  
Telephone: 435-725-3515 (office); 435-724-6789 (mobile)  
E-mail: keldredge@billbarrettcorp.com

Venessa Langmacher  
Venessa Langmacher, Senior Permit Analyst

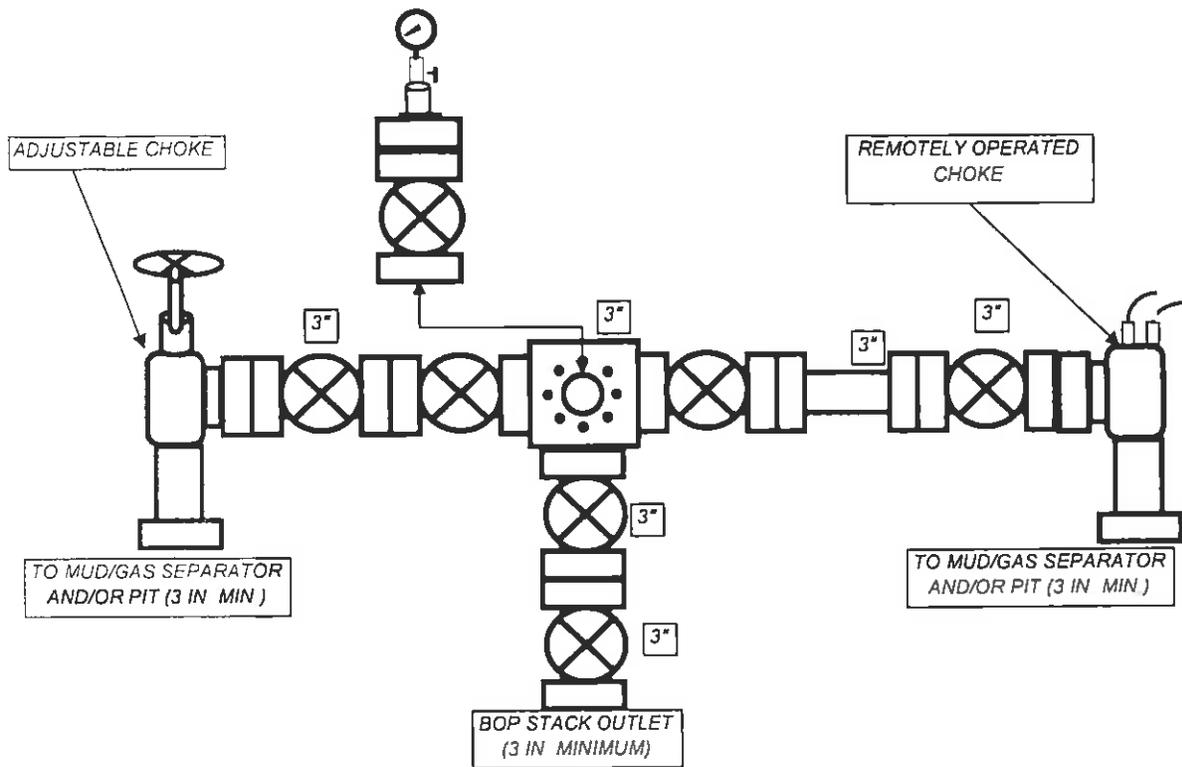
# BILL BARRETT CORPORATION

## TYPICAL 5,000 p.s.i. BLOWOUT PREVENTER



# BILL BARRETT CORPORATION

## TYPICAL 5,000 p.s.i. CHOKE MANIFOLD





September 7, 2011

Ms. Diana Mason – Petroleum Technician  
State of Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
P. O. Box 145801  
Salt Lake City, Utah 84114-5801

Re: Directional Drilling R649-3-11  
**Blacktail Ridge Area #8-16D-46 BTR Well**  
Surface: 1,555' FNL & 739' FEL, SENE, 16-T4S-R6W, USM  
Bottom Hole: 1,980' FNL & 810' FEL, SENE, 16-T4S-R6W, USM  
Duchesne County, Utah

Dear Ms. Mason,

Pursuant to the filing of Bill Barrett Corporation's ("BBC") Application for Permit to Drill the above referenced well, we hereby submit this letter in accordance with Oil & Gas Conservation Rules R649-2, R649-3, R649-10 and R649-11, pertaining to the Location and Siting of Wells.

- The proposed location is within our Blacktail Ridge Area.
- BBC is permitting this well as a directional well in order to minimize surface disturbance. By locating the well at the surface location and directionally drilling from this location, BBC will be able to utilize the existing road and pipelines in the area.
- The well will be drilled under an Exploration and Development Agreement between the Ute Indian Tribe and Ute Distribution Corporation. Ute Energy, LLC owns a right to participate in this well.
- BBC certifies that it is the working interest owner of all lands within 460 feet of the proposed well location, and together with Ute Energy, LLC, we own 100% of the working interest in these lands.

Based on the information provided, BBC requests that the permit be granted pursuant to R649-3-11. Should you have any questions or need further information, please contact me at 303-312-8544.

Sincerely,

A handwritten signature in blue ink that reads 'David Watts'. The signature is written in a cursive style and is positioned above the printed name.

David Watts  
Landman

1099 18<sup>TH</sup> STREET  
SUITE 2300  
DENVER, CO 80202  
P 303.293.9100  
F 303.291.0420

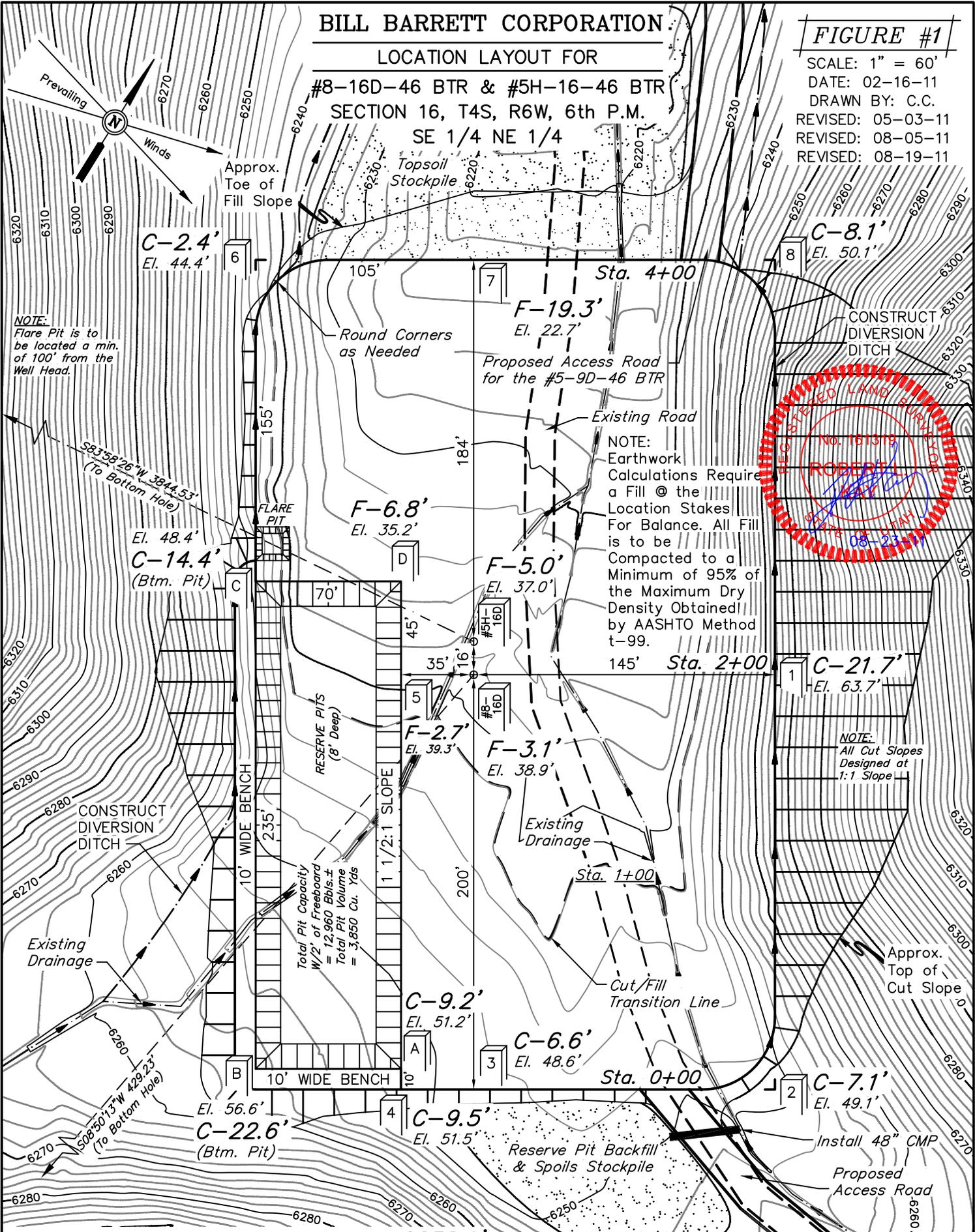
# BILL BARRETT CORPORATION

## LOCATION LAYOUT FOR

#8-16D-46 BTR & #5H-16-46 BTR  
SECTION 16, T4S, R6W, 6th P.M.  
SE 1/4 NE 1/4

FIGURE #1

SCALE: 1" = 60'  
DATE: 02-16-11  
DRAWN BY: C.C.  
REVISED: 05-03-11  
REVISED: 08-05-11  
REVISED: 08-19-11



NOTE:  
Flare Pit is to be located a min. of 100' from the Well Head.

NOTE:  
Earthwork Calculations Require a Fill @ the Location Stakes For Balance. All Fill is to be Compacted to a Minimum of 95% of the Maximum Dry Density Obtained by AASHTO Method t-99.



NOTE:  
All Cut Slopes Designed at 1:1 Slope

Elev. Ungraded Ground At #8-16D Loc. Stake = 6238.9'  
FINISHED GRADE ELEV. AT #8-16D LOC. STAKE = 6242.0'

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

RECEIVED: September 07, 2011

**BILL BARRETT CORPORATION**

**TYPICAL CROSS SECTIONS FOR**

**#8-16D-46 BTR & #5H-16-46 BTR**

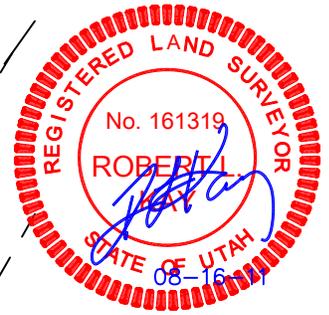
**SECTION 16, T4S, R6W, 6th P.M.**

**SE 1/4 NE 1/4**

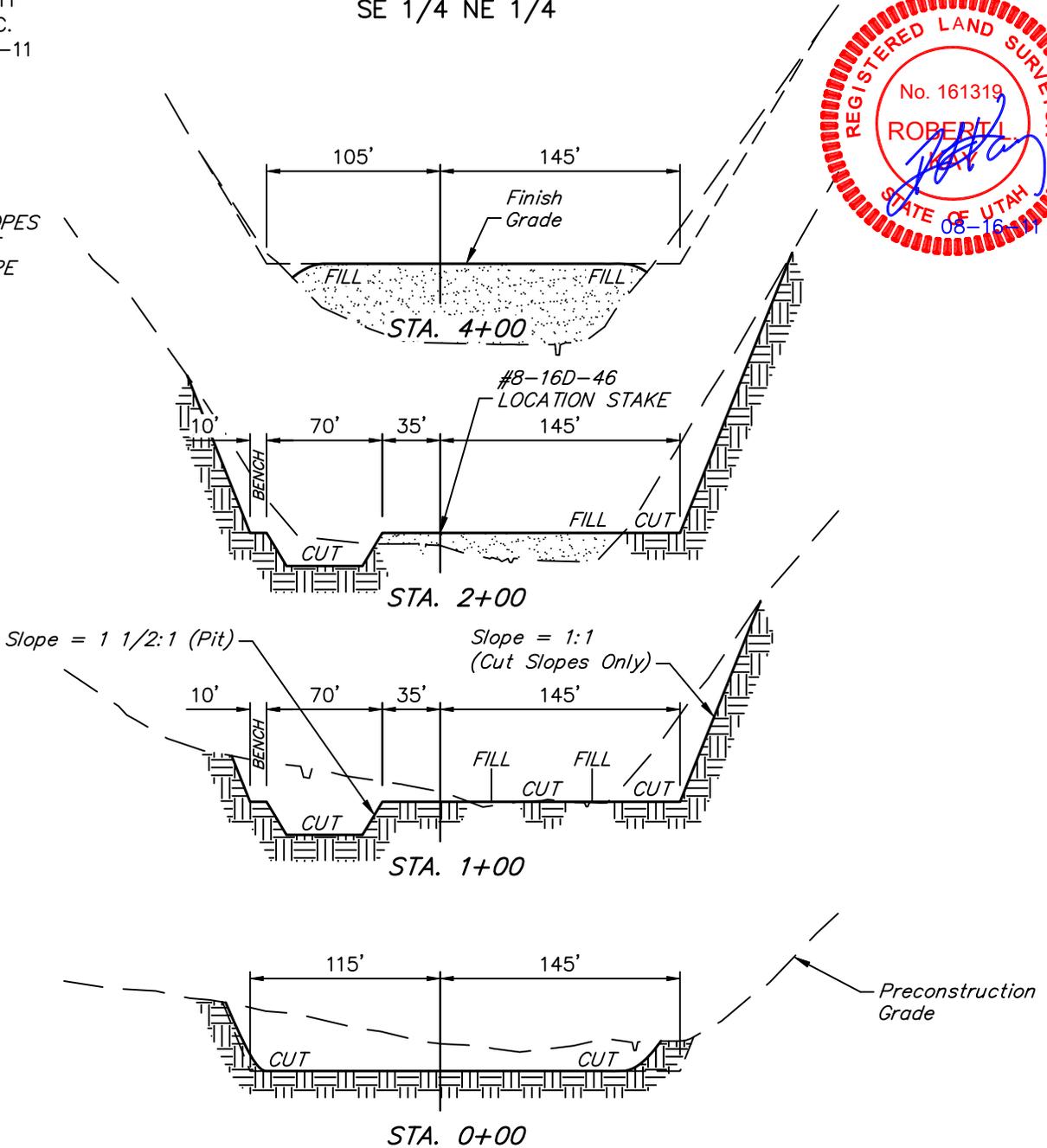
**FIGURE #2**

X-Section Scale  
1" = 40'  
1" = 100'

DATE: 02-16-11  
DRAWN BY: C.C.  
REVISED: 08-05-11



NOTE:  
ALL FILL SLOPES  
DESIGNED AT  
1 1/2:1 SLOPE



**APPROXIMATE ACREAGES**

WELL SITE DISTURBANCE = ± 3.099 ACRES  
ACCESS ROAD DISTURBANCE = ± 2.822 ACRES  
PIPELINE DISTURBANCE = ± 2.876 ACRES  
TOTAL = ± 8.797 ACRES

\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

**APPROXIMATE YARDAGES**

(12") Topsoil Stripping = 5,640 Cu. Yds.  
Remaining Location = 24,170 Cu. Yds.  
TOTAL CUT = 29,810 CU.YDS.  
FILL = 22,240 CU.YDS.

EXCESS MATERIAL = 7,570 Cu. Yds.  
Topsoil & Pit Backfill = 7,570 Cu. Yds.  
(1/2 Pit Vol.)  
EXCESS UNBALANCE = 0 Cu. Yds.  
(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

**RECEIVED: September 07, 2011**

# BILL BARRETT CORPORATION

## TYPICAL RIG LAYOUT FOR

#8-16D-46 BTR & #5H-16-46 BTR  
SECTION 16, T4S, R6W, 6th P.M.  
SE 1/4 NE 1/4

FIGURE #3

SCALE: 1" = 60'

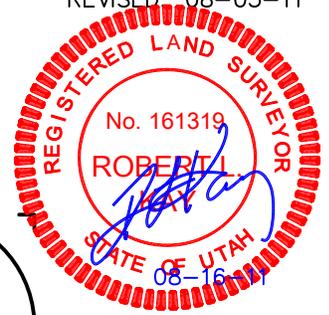
DATE: 02-16-11

DRAWN BY: C.C.

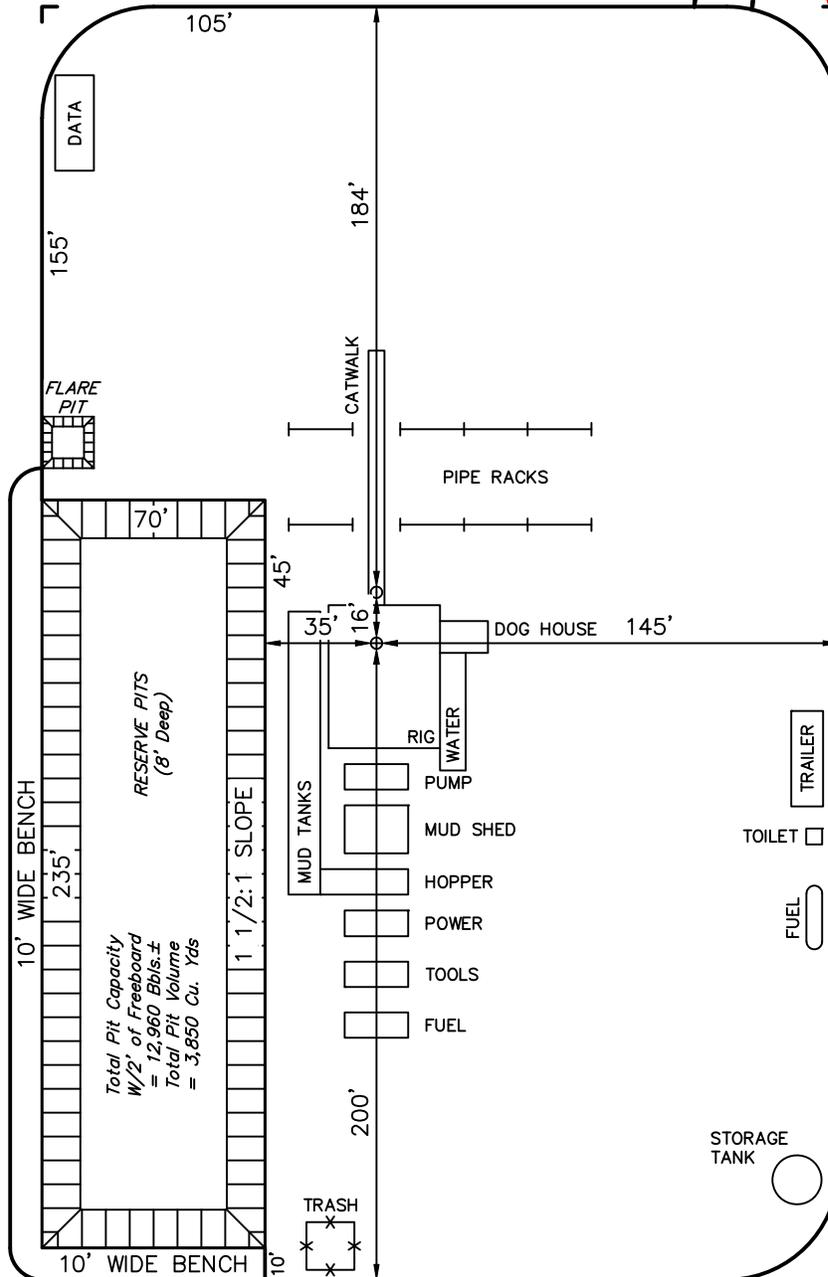
REVISED: 08-05-11



Proposed Access Road  
for the #5-9D-46 BTR



NOTE:  
Flare Pit is to  
be located a min.  
of 100' from the  
Well Head.



Proposed  
Access Road

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

RECEIVED: September 07, 2011

# BILL BARRETT CORPORATION

INTERIM RECLAMATION PLAN FOR  
#8-16D-46 BTR & #5H-16-46 BTR  
SECTION 16, T4S, R6W, 6th P.M.  
SE 1/4 NE 1/4

FIGURE #4

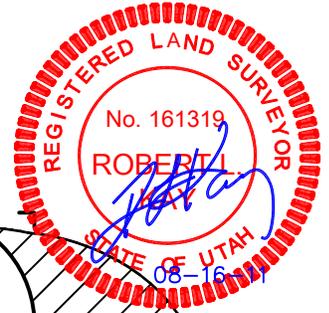
SCALE: 1" = 60'

DATE: 08-11-11

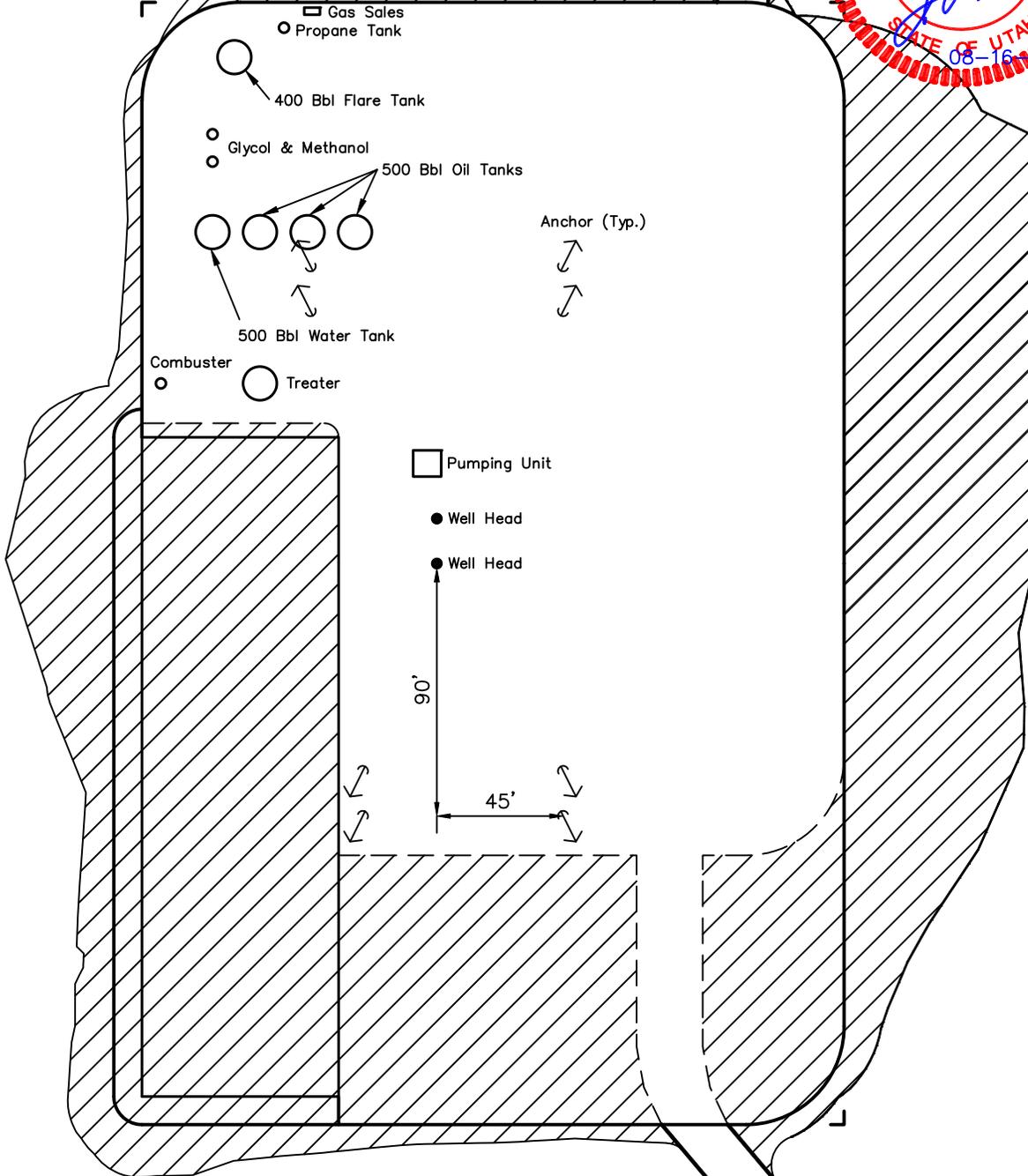
DRAWN BY: C.C.



Access Road  
for the #5-9D-46 BTR



**NOTE:**  
Flare Pit is to  
be located a min.  
of 100' from the  
Well Head.



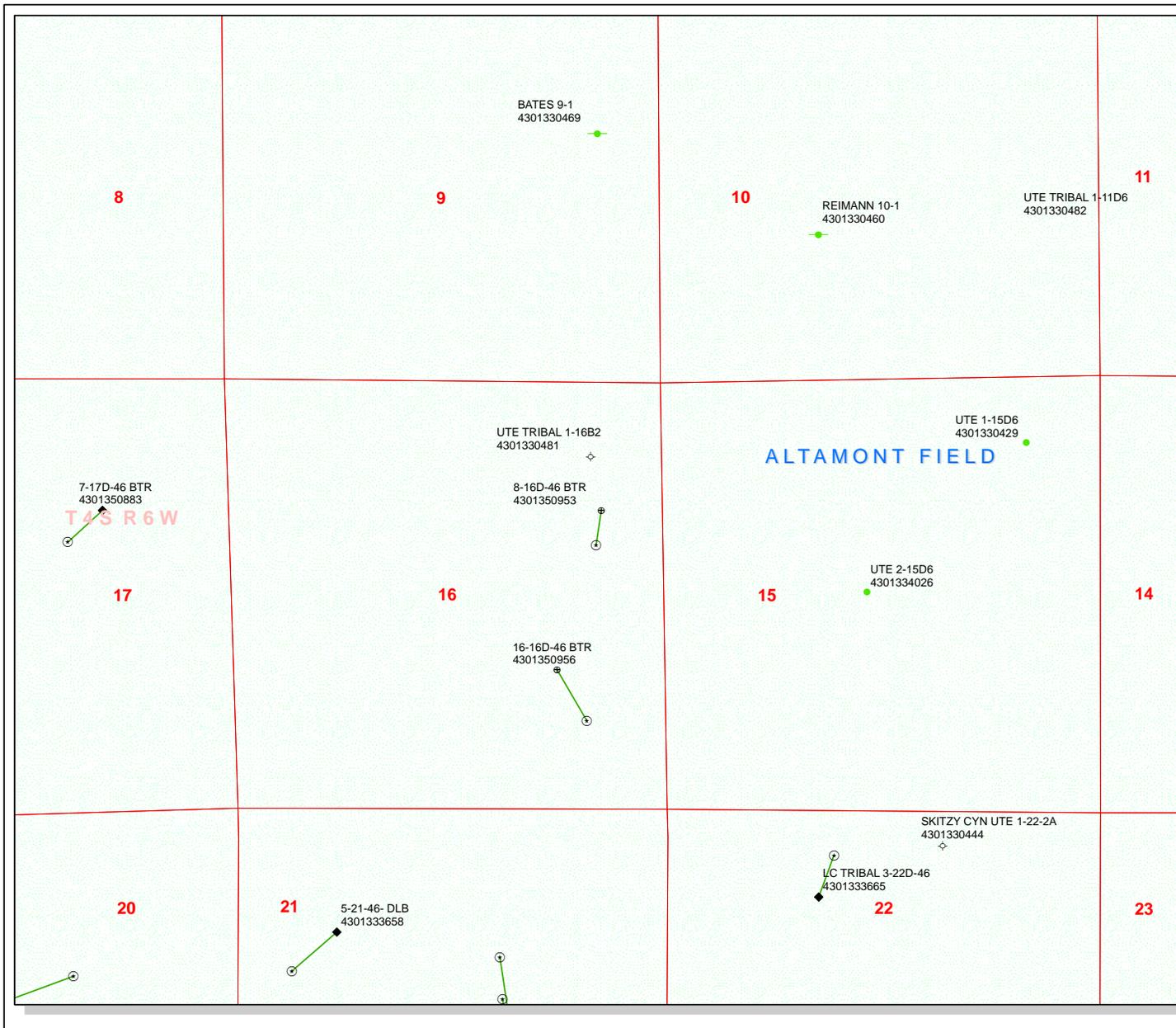
Access Road

APPROXIMATE ACREAGES  
UN-RECLAIMED = ± 1.531 ACRES

INTERIM RECLAMATION

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

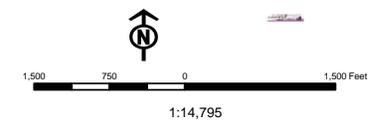
**RECEIVED: September 07, 2011**



**API Number: 4301350953**  
**Well Name: 8-16D-46 BTR**  
 Township T0.4 . Range R0.6 . Section 16  
**Meridian: UBM**  
 Operator: BILL BARRETT CORP

Map Prepared:  
 Map Produced by Diana Mason

- |               |                                    |
|---------------|------------------------------------|
| <b>Units</b>  | <b>Wells Query</b>                 |
| <b>STATUS</b> | <b>Status</b>                      |
| ACTIVE        | APD - Approved Permit              |
| EXPLORATORY   | DRL - Spudded (Drilling Commenced) |
| GAS STORAGE   | GIW - Gas Injection                |
| NF PP OIL     | GS - Gas Storage                   |
| NF SECONDARY  | LA - Location Abandoned            |
| PI OIL        | LOC - New Location                 |
| PP GAS        | OPS - Operation Suspended          |
| PP GEOTHERML  | PA - Plugged Abandoned             |
| PP OIL        | PGW - Producing Gas Well           |
| SECONDARY     | POW - Producing Oil Well           |
| TERMINATED    | RET - Returned APD                 |
| <b>Fields</b> | SGW - Shut-in Gas Well             |
| <b>STATUS</b> | SOW - Shut-in Oil Well             |
| Unknown       | TA - Temp. Abandoned               |
| ABANDONED     | TW - Test Well                     |
| ACTIVE        | WDW - Water Disposal               |
| COMBINED      | WIW - Water Injection Well         |
| INACTIVE      | WSW - Water Supply Well            |
| STORAGE       |                                    |
| TERMINATED    |                                    |
| Sections      |                                    |
| Township      |                                    |



## WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 9/7/2011

**API NO. ASSIGNED:** 43013509530000

**WELL NAME:** 8-16D-46 BTR

**OPERATOR:** BILL BARRETT CORP (N2165)

**PHONE NUMBER:** 303 312-8172

**CONTACT:** Venessa Langmacher

**PROPOSED LOCATION:** SENE 16 040S 060W

**Permit Tech Review:**

**SURFACE:** 1555 FNL 0739 FEL

**Engineering Review:**

**BOTTOM:** 1980 FNL 0810 FEL

**Geology Review:**

**COUNTY:** DUCHESNE

**LATITUDE:** 40.13588

**LONGITUDE:** -110.56046

**UTM SURF EASTINGS:** 537445.00

**NORTHINGS:** 4442721.00

**FIELD NAME:** ALTAMONT

**LEASE TYPE:** 2 - Indian

**LEASE NUMBER:** 2OG0005608

**PROPOSED PRODUCING FORMATION(S):** GREEN RIVER-WASATCH

**SURFACE OWNER:** 2 - Indian

**COALBED METHANE:** NO

**RECEIVED AND/OR REVIEWED:**

- PLAT
- Bond: INDIAN - LPM8874725
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: Duchesne City Culinary Water Dock
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

**Commingling Approved**

**LOCATION AND SITING:**

- R649-2-3.
- Unit:**
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No:** Cause 139-84
- Effective Date:** 12/31/2008
- Siting:** 660' Fr Drl U Bdry & 1320' Fr Other Wells
- R649-3-11. Directional Drill

**Comments:** Presite Completed

**Stipulations:** 4 - Federal Approval - dmason  
15 - Directional - dmason



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

### Permit To Drill

\*\*\*\*\*

**Well Name:** 8-16D-46 BTR  
**API Well Number:** 43013509530000  
**Lease Number:** 2OG0005608  
**Surface Owner:** INDIAN  
**Approval Date:** 9/19/2011

**Issued to:**

BILL BARRETT CORP, 1099 18th Street Ste 2300, Denver, CO 80202

**Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-84. The expected producing formation or pool is the GREEN RIVER-WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

**Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

**General:**

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <http://oilgas.ogm.utah.gov>

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

**Approved By:**

A handwritten signature in black ink, appearing to read "John Rogers", written in a cursive style.

For John Rogers  
Associate Director, Oil & Gas

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

SEP 03 2011

FORM APPROVED  
OMB No. 1004-0136  
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. 20G0005608
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator BILL BARRETT CORPORATION Contact: VENESSA LANGMACHER E-Mail: vlangmacher@billbarrettcorp.com		7. If Unit or CA Agreement, Name and No.
3a. Address 1099 18TH STREET SUITE 2300 DENVER, CO 80202		8. Lease Name and Well No. 8-16D-46 BTR
3b. Phone No. (include area code) Ph: 303-312-8172 Fx: 303-291-0420		9. API Well No. 43-013-50953
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SENE 1555FNL 739FEL 40.135917 N Lat, 110.561128 W Lon At proposed prod. zone SENE 1980FNL 810FEL 40.134750 N Lat, 110.561361 W Lon		10. Field and Pool, or Exploratory ALTAMONT
14. Distance in miles and direction from nearest town or post office* 10.9 MILES SOUTHWEST OF DUCHESNE, UT		11. Sec., T., R., M., or Blk. and Survey or Area Sec 16 T4S R6W Mer UBM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 810' (BOTTOM HOLE)	16. No. of Acres in Lease 66101.00	12. County or Parish DUCHESNE
17. Spacing Unit dedicated to this well 640.00	13. State UT	18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. NONE
19. Proposed Depth 7505 MD 7474 TVD	20. BLM/BIA Bond No. on file LPM8874725	21. Elevations (Show whether DF, KB, RT, GL, etc.) 6239 GL
22. Approximate date work will start 06/01/2012	23. Estimated duration 60 DAYS (D&C)	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature (Electronic Submission)	Name (Printed/Typed) VENESSA LANGMACHER Ph: 303-312-8172	Date 09/07/2011
Title SENIOR PERMIT ANALYST		
Approved by (Signature) 	Name (Printed/Typed) Jerry Kenczka	Date JUN 05 2012
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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 representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #117069 verified by the BLM Well Information System  
For BILL BARRETT CORPORATION, sent to Vernal  
Committed to AFMSS for processing by LESLIE ROBINSON on 09/13/2011 ()

NOTICE OF APPROVAL

RECEIVED  
JUN 11 2012  
DIV. OF OIL, GAS & MINING

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

11550789A9

NG-8/2/11



**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE**



170 South 500 East

VERNAL, UT 84078

(435) 781-4400

**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

**Company:** Bill Barrett Corporation  
**Well No:** 8-16D-46 BTR  
**API No:** 43-013-50953

**Location:** SENE, Sec. 16, T4S, R6W  
**Lease No:** 2OG0005608  
**Agreement:** N/A

**OFFICE NUMBER: (435) 781-4400**

**OFFICE FAX NUMBER: (435) 781-3420**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	- The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	- Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: <a href="mailto:blm_ut_vn_opreport@blm.gov">blm_ut_vn_opreport@blm.gov</a> .
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**Additional Stipulations:**

- Production Equipment will be painted Beetle Green to help blend into the surrounding vegetation.
- See Exhibit One of the approved EA U&O-FY12-Q2-059 for additional mitigation measures that must be followed for each of the proposed well locations.
- Major drainage concerns have been noted. Both drainages must be diverted properly around corners 2 and 8 during drilling and following drilling. Reclamation work must be completed before spring runoff events to decrease the chance of water affecting the pad and affecting erosion rates to the area.

**General Conditions of Approval:**

- A 30' foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipelines.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.
- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- Bill Barrett Corporation will implement a "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's, COA's, and/or ROW permits/authorizations on their person(s) during all phases of construction.

- All vehicular traffic, personnel movement, construction/restoration operations shall be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- The personnel from the Ute Tribe Energy & Minerals Department shall be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.

**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

- Production casing cement shall be brought up and into the surface casing. The minimum cement top is 400 ft. above the surface casing shoe.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person

making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to BLM\_UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at [www.ONRR.gov](http://www.ONRR.gov).
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9  <b>5.LEASE DESIGNATION AND SERIAL NUMBER:</b> 2OG0005608
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE
<b>1. TYPE OF WELL</b> Oil Well		<b>7.UNIT or CA AGREEMENT NAME:</b>
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>8. WELL NAME and NUMBER:</b> 8-16D-46 BTR
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>9. API NUMBER:</b> 43013509530000
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1555 FNL 0739 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 16 Township: 04.0S Range: 06.0W Meridian: U		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 8/1/2013	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input checked="" type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:			
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:			
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

BBC requests a one year extension for the subject APD.

**Approved by the Utah Division of Oil, Gas and Mining**

**Date:** August 28, 2012

**By:**

<b>NAME (PLEASE PRINT)</b> Venessa Langmacher	<b>PHONE NUMBER</b> 303 312-8172	<b>TITLE</b> Senior Permit Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/16/2012	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

**Request for Permit Extension Validation Well Number 43013509530000**

API: 43013509530000

Well Name: 8-16D-46 BTR

Location: 1555 FNL 0739 FEL QTR SENE SEC 16 TWNP 040S RNG 060W MER U

Company Permit Issued to: BILL BARRETT CORP

Date Original Permit Issued: 9/19/2011

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated?  Yes  No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?  Yes  No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?  Yes  No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?  Yes  No
- Has the approved source of water for drilling changed?  Yes  No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?  Yes  No
- Is bonding still in place, which covers this proposed well?  Yes  No

Signature: Venessa Langmacher

Date: 8/16/2012

Title: Senior Permit Analyst Representing: BILL BARRETT CORP

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9	
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 20G0005608	
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE	
<b>1. TYPE OF WELL</b> Oil Well		<b>7. UNIT or CA AGREEMENT NAME:</b>	
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>8. WELL NAME and NUMBER:</b> 8-16D-46 BTR	
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>9. API NUMBER:</b> 43013509530000	
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1555 FNL 0739 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 16 Township: 04.0S Range: 06.0W Meridian: U		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT	
		<b>COUNTY:</b> DUCHESNE	
		<b>STATE:</b> UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:  <input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 5/2/2013  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.			
This well was spud on 5/2/13 by Triple A Drilling at 1:00 pm; Rig #TA 4037, Type Soilmec SR/30. Continuous drilling is planned to commence on 5/25/13.			
<b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY May 03, 2013</b>			
<b>NAME (PLEASE PRINT)</b> Venessa Langmacher		<b>PHONE NUMBER</b> 303 312-8172	<b>TITLE</b> Senior Permit Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 5/2/2013	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	
<b>1. TYPE OF WELL</b> Oil Well	<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 20G0005608
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202	<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1555 FNL 0739 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 16 Township: 04.0S Range: 06.0W Meridian: U	<b>8. WELL NAME and NUMBER:</b> 8-16D-46 BTR
<b>PHONE NUMBER:</b> 303 312-8134 Ext	<b>9. API NUMBER:</b> 43013509530000
<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT	<b>COUNTY:</b> DUCHESNE
	<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 5/31/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Well Spud in May 2013. Drilling to resume in June 2013.

**Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
 FOR RECORD ONLY  
 June 11, 2013**

<b>NAME (PLEASE PRINT)</b> Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	<b>TITLE</b> Permit Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 6/5/2013	



SENE S-16 T04S R06W API# 4301350953

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## RIG MOVE

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**Naborsm22** <naborsm22@billbarrettcorp.com>

Thu, Jun 13, 2013 at 6:21 PM

To: Naborsm22 <naborsm22@billbarrettcorp.com>, Venessa Langmacher <vangmacher@billbarrettcorp.com>, Tracey Fallang <tfallang@billbarrettcorp.com>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "richardpowell@utah.gov" <richardpowell@utah.gov>, "ut\_vn\_opreport@blm.gov" <ut\_vn\_opreport@blm.gov>

ON NABORS M22 FOR BILL BARRETT CORP. WE WILL BE MOVING FROM THE 7-19-46 DLB TO THE 8-16D-46 BTR STARTING 6/14/13 AROUND 11:00 AM PLEASE CALL WITH ANY QUESTIONS OR CONCERNS

JEREMY MEJORADO

BILL BARRETT CORP

NABORS M22

303-353-5350

RECEIVED

JUN 13 2013

DIV. OF OIL, GAS & MINING

BLM - Vernal Field Office - Notification Form

Operator Bill Barrett Corp Rig Name/# Nabors M22  
Submitted By JEREMY MEJORADO Phone Number 303-353-5350  
Well Name/Number 8-16D-46 BTR  
Qtr/Qtr SE/NE Section 16 Township 4S Range 6W  
Lease Serial Number \_\_\_\_\_  
API Number 43-013-50953

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM  PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time 6/19/13 9:00 AM  PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

Date/Time \_\_\_\_\_ AM  PM

Remarks PLEASE CALL WITH ANY QUESTIONS OR CONCERNS

**RECEIVED**  
**JUN 19 2013**  
**DIV. OF OIL, GAS & MINING**

BLM - Vernal Field Office - Notification Form

Operator Bill Barrett Corp Rig Name/# Nabors M22  
Submitted By JEREMY MEJORADO Phone Number 303-353-5350  
Well Name/Number 8-16D-46 BTR  
Qtr/Qtr SE/NE Section 16 Township 4S Range 6W  
Lease Serial Number \_\_\_\_\_  
API Number 43-013-50953

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM  PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time 6/19/13 9:00 AM  PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

**RECEIVED**

JUN 19 2013

**DIV. OF OIL, GAS & MINING**

Date/Time \_\_\_\_\_ AM  PM

Remarks PLEASE CALL WITH ANY QUESTIONS OR CONCERNS

BLM - Vernal Field Office - Notification Form

Operator Bill Barrett Corp Rig Name/# Nabors M22  
Submitted By JEREMY MEJORADO Phone Number 303-353-5350  
Well Name/Number 8-16D-46 BTR  
Qtr/Qtr SE/NE Section 16 Township 4S Range 6W  
Lease Serial Number \_\_\_\_\_  
API Number 43-013-50953

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM  PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time \_\_\_\_\_ AM  PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

Date/Time 6/20/13 4:00 AM  PM

Remarks PLEASE CALL WITH ANY QUESTIONS OR CONCERNS

**RECEIVED**  
JUN 20 2013  
DIV. OF OIL, GAS & MINING

BLM - Vernal Field Office - Notification Form

Operator Bill Barrett Corp Rig Name/# Nabors M22  
Submitted By JEREMY MEJORADO Phone Number 303-353-5350  
Well Name/Number 8-16D-46 BTR  
Qtr/Qtr SE/NE Section 16 Township 4S Range 6W  
Lease Serial Number \_\_\_\_\_  
API Number 43-013-50953

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM  PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time 6/23/13 5:00 AM  PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

RECEIVED

JUN 22 2013

DIV. OF OIL, GAS & MINING

Date/Time \_\_\_\_\_ AM  PM

Remarks WE WILL BE CEMENTING PROD CASING AROUND 12:00 AM 6/24/13 PLEASE CALL WITH ANY QUESTIONS OR CONCERNS

—

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 20G0005608
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE
		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> 8-16D-46 BTR	
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP	<b>9. API NUMBER:</b> 43013509530000	
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202	<b>PHONE NUMBER:</b> 303 312-8134 Ext	<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1555 FNL 0739 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 16 Township: 04.0S Range: 06.0W Meridian: U		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 6/30/2013	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Attached is the June 2013 Drilling Activity for this well.		
<b>Accepted by the          Utah Division of          Oil, Gas and Mining          FOR RECORD ONLY          July 11, 2013</b>		
<b>NAME (PLEASE PRINT)</b> Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	<b>TITLE</b> Permit Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 7/9/2013	

**8-16D-46 BTR 6/14/2013 06:00 - 6/15/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	13.50	19:30	1	RIGUP & TEARDOWN	RIGGING DOWN WITH CREWS - BREAK DOWN MUD TANKS - R/D FLOOR - SCOPE DERRICK - PULL PRAGMA & BOP WRANGLER PREP TO LOWER SUB & LOWER SUB - PREP TO LOWER DERRICK & LOWERE DERRICK - R/D ALL ELECTRICAL - R/D FLOWLINE, MUD LINE, FLARE LINES - HAUL PIPE, 400 BBLs UPRIGHTS, CEMENT SILOS, PRAGMA AND MUD PRODUCTS TO NEW LOCATION RIG IS 90% RIGGED DOWN & 5% MOVED
19:30	10.50	06:00	1	RIGUP & TEARDOWN	WAIT ON DAYLIGHT

**8-16D-46 BTR 6/15/2013 06:00 - 6/16/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.50	06:30	1	RIGUP & TEARDOWN	WAIT ON DAYLIGHT
06:30	12.50	19:00	1	RIGUP & TEARDOWN	PREP DERRICK - UNPIN DERRICK & LOAD OUT, SPLIT SUBS, MOVE MUD TANKS, MUD PUMPS, MOTORS, VFD, DOG HOUSE, CHOKE HOUSE, GAS BUSTER, & MISC LOADS - SET MATTING BOARDS - RIG IS 100% RIGGED DOWN 5% RIGGED UP & 80% MOVED
19:00	11.00	06:00	1	RIGUP & TEARDOWN	WAIT ON DAYLIGHT

**8-16D-46 BTR 6/16/2013 06:00 - 6/17/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.50	06:30	1	RIGUP & TEARDOWN	WAIT ON DAYLIGHT
06:30	12.50	19:00	1	RIGUP & TEARDOWN	SET MUD TANKS, PUMPS, VFD, GEN SETS, SHAKERS, CHOKE HOUSE, R/U GAS BUSTER - SET SUBS, PIN CENTER SECTION, PIN STARTER LEGS - PREP DERRICK & PIN DERRICK TO STARTER LEGS, PIN DERRICK BOARD - PREP DERRICK, RAISE DERRICK - R/U ELECTRICAL - MOVE & SET CAMPS - RIG IS 95% MOVED & 50% RIGGED UP
19:00	11.00	06:00	1	RIGUP & TEARDOWN	WAIT ON DAYLIGHT

**8-16D-46 BTR 6/17/2013 06:00 - 6/18/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	1	RIGUP & TEARDOWN	PREP SUB TO RAISE - RAISE SUB, SET BOP WRANGLER, STAIRS, & PRAGMA, FINISH MOVING TUBULARS TRUCKS RELEASED @ 12:00 - PREP TO SCOPE DERRICK, SCOPE DERRICK, R/U MUD LINE, KELLY HOSE, FLARE LINES, FILL MUD TANKS, DRESS OUT SHAKERS, TEST MUD PUMPS, R/U RIG FLOOR - R/U TOP DRIVE - NIPPLE UP DIVERTER (PER NABORS) HANDS BENT HCR VALVE STEM WAITING FOR NEW HCR VALVE - R/U FLOW LINE

**8-16D-46 BTR 6/18/2013 06:00 - 6/19/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	6.00	12:00	1	RIGUP & TEARDOWN	WAIT ON HCR VALVE - CHANGE OUT HCR VALVE - R/U CHOKE LINE - (RIG BACK ON DAYWORK @ 1200 HRS 6/18/13)
12:00	3.00	15:00	21	OPEN	LOAD PIPE RACKS & STRAP BHA
15:00	2.00	17:00	20	DIRECTIONAL WORK	P/U MUD MOTOR - M/U BIT, SHOCK SUB, REAMER & NMDC
17:00	1.00	18:00	21	OPEN	M/U KELLY STAND - INSTALL ROT HEAD
18:00	0.50	18:30	7	LUBRICATE RIG	RIG SERVICE
18:30	0.50	19:00	2	DRILL ACTUAL	W/418 GPM, 25 RPM, 12K WT ON BIT, 300-450 DIFF PRESS, 2K TQ
19:00	1.50	20:30	20	DIRECTIONAL WORK	P/U ANTANA SUB & GAP SUB - LOAD MWD TOOL & OREINT SAME - P/U NMDC, & REAMER
20:30	8.50	05:00	2	DRILL ACTUAL	W/758 GPM, 50 RPM, 18K WT ON BIT, 300-550 DIFF PRESS, 5K TQ
05:00	1.00	06:00	5	COND MUD & CIRC	CIRC TWO B/U

**8-16D-46 BTR 6/19/2013 06:00 - 6/20/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	2.00	08:00	6	TRIPS	WIPER TRIP F/1353' T/180'
08:00	1.00	09:00	5	COND MUD & CIRC	CIRC PUMP HIGH VIS SWEEP
09:00	2.50	11:30	6	TRIPS	T.O.O.H.
11:30	1.50	13:00	20	DIRECTIONAL WORK	L/D DIR TOOLS - PULL MWD TOOL - BREAK BIT - L/D MUD MOTOR
13:00	4.00	17:00	12	RUN CASING & CEMENT	S/M - R/U CSG CREW & RUN 31 JOINTS 9 5/8 36# J-55 CSG WITH 8 CENTRALIZERS - CSG SET @ 1323'
17:00	1.00	18:00	5	COND MUD & CIRC	CIRC & COND MUD
18:00	1.50	19:30	12	RUN CASING & CEMENT	S/M - R/U CEMENTERS - TEST LINES @ 2000 PSI - PUMP 10 BBLS WATER, 40 BBLS SUPER FLUSH, 10 BBLS WATER, 90 BBLS 160 SKS 11 PPG 3.16 YIELD LEAD CEMENT MIXED @ 19.48 GAL/SK, 58.3 BBLS 245 SKS 14.8 PPG 1.33 YIELD TAIL CEMENT MIXED @ 6.31 GAL/SK, SHUT DOWN DROP PLUG & DISPLACE WITH 100.1 BBLS FRESH WATER - FINAL LIFT PRESSURE=480 PSI BUMP PLUG AND PRESSURE UPTO 930 PSI - RELEASE PRESSURE FLOATS HELD - FULL RETURNS DURING JOB - 60 BBLS CEMENT TO SURFACE - CSG GOT STUCK 23' OFF BOTTOM WHILE WORKING PIPE DURING CEMENT JOB (CSG SET @ 1323')
19:30	1.50	21:00	13	WAIT ON CEMENT	WOC
21:00	0.50	21:30	12	RUN CASING & CEMENT	RUN 100' 1" PIPE - PUMP 21 BBLS 100 SKS 15.8 PPG 1.17 YIELD TOP OUT CEMENT MIXED @ 5.02 GAL/SK
21:30	1.50	23:00	13	WAIT ON CEMENT	WOC
23:00	1.00	00:00	21	OPEN	CUT OFF CSG
00:00	1.00	01:00	14	NIPPLE DOWN B.O.P	NIPPLE DOWN DIVERTER
01:00	2.50	03:30	21	OPEN	WELD ON WELL HEAD
03:30	2.50	06:00	14	NIPPLE UP B.O.P	NIPPLE UP BOP - CHANGE OUT PIPE RAMS

**8-16D-46 BTR 6/20/2013 06:00 - 6/21/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	14	NIPPLE UP B.O.P	NIPPLE UP BOP
07:00	4.00	11:00	15	TEST B.O.P	R/U TESTER & TEST BOP (PIPE RAMS, BLIND RAMS, CHOKE LINE, CHOKE VALVES, KILL LINE, FOSV, INSIDE BOP, UPPER KELLY, LOWER KELLY, CHOKE MANIFOLD, HCR AND MANUAL VALVES ALL @ 10MIN 5000 PSI HIGH 5MIN 250 PSI LOW, ANNULAR @ 10 MIN 2500 PSI HIGH 5MIN 250 PSI LOW, CSG @ 30MIN 1500 PSI - R/D TESTER
11:00	0.50	11:30	21	OPEN	SET WEAR BUSHING
11:30	1.50	13:00	20	DIRECTIONAL WORK	P/U MUD MOTOR - M/U BIT - LOAD MWD TOOL & ORIENT SAME
13:00	1.50	14:30	6	TRIPS	T.I.H.
14:30	1.00	15:30	2	DRILL ACTUAL	DRLG CEMENT FLOAT COLLAR & SHOE W/340 GPM, 25 RPM, 8-12K WT ON BIT
15:30	0.50	16:00	2	DRILL ACTUAL	W/340 GPM, 25 RPM, 8K WT ON BIT
16:00	0.50	16:30	21	OPEN	EMW TEST W/8.8 PPG MUD WT - PRESSURE UP TO 121 PSI - PRESSURE HELD
16:30	1.00	17:30	2	DRILL ACTUAL	W/ 630 GPM, 50 RPM, 18K WT ON BIT, 400-650 DIFF PRESS, 4K TQ
17:30	0.50	18:00	7	LUBRICATE RIG	RIG SERVICE
18:00	1.50	19:30	2	DRILL ACTUAL	W/630 GPM, 45 RPM, 18K WT ON BIT, 300-650 DIFF PRESS, 4K TQ
19:30	1.50	21:00	8	REPAIR RIG	ENGINES OVERHEATING DUE TO ELECTRIC FANS SHUTTING OFF - REPAIR RADIATOR FAN SWITCH
21:00	8.50	05:30	2	DRILL ACTUAL	W/630 GPM, 50 RPM, 20K WT ON BIT, 350-650 DIFF PRESS, 6K TQ
05:30	0.50	06:00	7	LUBRICATE RIG	RIG SERVICE

**8-16D-46 BTR 6/21/2013 06:00 - 6/22/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	11.50	17:30	2	DRILL ACTUAL	W/630 GPM, 55 RPM, 22K WTON BIT, 300-600 DIFF PRESS, 8K TQ
17:30	0.50	18:00	7	LUBRICATE RIG	RIG SERVICE
18:00	10.50	04:30	2	DRILL ACTUAL	W/630 GPM, 60 RPM, 24-28K WT ON BIT, 350-800 DIFF PRESS, 11K TQ

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
04:30	0.50	05:00	7	LUBRICATE RIG	RIG SERVICE
05:00	0.50	05:30	2	DRILL ACTUAL	W/630 GPM, 60 RPM, 28K WT ON BIT, 350-750 DIFF PRESS, 11K TQ
05:30	0.50	06:00	5	COND MUD & CIRC	CIRC - PUMP HIGH VIS SWEEP

**8-16D-46 BTR 6/22/2013 06:00 - 6/23/2013 06:00**

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013509530000	UT	Duchesne	Black Tail Ridge	COMPLETION	6,920.0	Drilling & Completion

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.50	06:30	5	COND MUD & CIRC	CIRC
06:30	5.50	12:00	6	TRIPS	WIPER TRIP F/6920' T/1300'
12:00	0.50	12:30	5	COND MUD & CIRC	CIRC PUMP HIGH VIS SWEEP
12:30	5.00	17:30	6	TRIPS	T.O.O.H. F/6920' T/0'
17:30	1.50	19:00	20	DIRECTIONAL WORK	L/D DIR TOOLS - BREAK BIT & L/D MUD MOTOR
19:00	5.00	00:00	11	WIRELINE LOGS	R/U LOGGERS & LOG - LOGGERS DEPTH=6917' - R/D LOGGERS
00:00	4.00	04:00	6	TRIPS	T.I.H. F/0' T/6920'
04:00	1.00	05:00	5	COND MUD & CIRC	CIRC PUMP HIGH VIS SWEEP
05:00	1.00	06:00	6	TRIPS	L/D DRILL PIPE F/6920' T/5500'

**8-16D-46 BTR 6/23/2013 06:00 - 6/24/2013 06:00**

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013509530000	UT	Duchesne	Black Tail Ridge	COMPLETION	6,920.0	Drilling & Completion

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.50	10:30	6	TRIPS	Finish LDDP.
10:30	0.50	11:00	21	OPEN	Pull wear bushing.
11:00	7.50	18:30	12	RUN CASING & CEMENT	Run 5 1/2", 17#, P-110, LT&C csg as follows. Float shoe, 2 jts csg, Float collar, 154 jts csg (156 total), MJ's @ 6264', 5579', 3415'. Ran centralizers on bottom jt, top of jt 3 & 4, every other jt to 4838', every third jt to surf csg.
18:30	4.00	22:30	5	COND MUD & CIRC	C&C mud f/cmt. PV - 14, YP - 9, FL - 12. Circ extra 2 hrs waiting on proper cmt head f/Halliburton. HSM. RU Halliburton.
22:30	4.00	02:30	12	RUN CASING & CEMENT	Cement prod csg as follows: Press test lines to 5000 psi. Pump 10 bbl fresh water spacer. Pump 40 bbls (39 sx) Tuned Spacer @ 10.7 ppg, 5.76 yld, 38.24 gps H2O. Mix and pump 200 bbls (485 sx) Lead Tuned Lite cmt @ 11 ppg, 2.32 yld, 10.61 gps H2O. Tail in w/163 bbls (630 sx) Econocem cmt @ 13.5 ppg, 1.45 yld, 6.85 gps H2O. Shutdown, wash lines to pit, drop plug. Displace w/158 bbls H2O w/Cla-web & Aldacide. Full returns, max press 1890 psi, bump plug to 2485 psi. Bled back 2 bbls, floats held. 8 bbls cmt to surface. RD Halliburton.
02:30	3.50	06:00	21	OPEN	NDBOP, set slips w/145k, cut csg off, installed nightcap. Clean pits, rig released @ 06:00.

**8-16D-46 BTR 6/28/2013 06:00 - 6/29/2013 06:00**

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013509530000	UT	Duchesne	Black Tail Ridge	COMPLETION	6,920.0	Drilling & Completion

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	5.00	11:00	LOCL	Lock Wellhead & Secure	WSI And Secured. Construction Crew Working On Facilities.
11:00	3.00	14:00	IWHD	Install Wellhead	Safety Meeting With Cameron, Check Surface Casing & 5.5" For Pressure, 0 Psi On Both Sides. N/D 11" Night Cap, Cleaned And Dressed Up 5.5" Csg Top, Set And N/U 11" x 7 1/16" 5k Tbg. Head With 2 1/16" x 5k Gate Valves. Tested Hanger Seals To 7100 Psi, Good Test. Secured Well Head With 7" 5K Night Cap.
14:00	16.00	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured. Construction Crew Working On Facilities.



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		5. LEASE DESIGNATION AND SERIAL NUMBER: 20G0005608
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well		8. WELL NAME and NUMBER: 8-16D-46 BTR
2. NAME OF OPERATOR: BILL BARRETT CORP		9. API NUMBER: 43013509530000
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300 , Denver, CO, 80202	PHONE NUMBER: 303 312-8134 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1555 FNL 0739 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENE Section: 16 Township: 04.0S Range: 06.0W Meridian: U		COUNTY: DUCHESNE
		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 7/31/2013	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
Attached is the July 2013 Drilling Activity for this well		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> August 06, 2013		
NAME (PLEASE PRINT) Brady Riley	PHONE NUMBER 303 312-8115	TITLE Permit Analyst
SIGNATURE N/A	DATE 8/5/2013	

**8-16D-46 BTR 7/9/2013 06:00 - 7/10/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	NU Frac Mandrel, Test. NU Frac Tree, Test Casing. Plumb In FlowBack And SandTrap, Test. Finish Filling Frac Line. Heat KCL. HES Set Mover And Manifold. Prep For Frac.

**8-16D-46 BTR 7/10/2013 06:00 - 7/11/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	2.00	08:00	LOCL	Lock Wellhead & Secure	WSI And Secured. 0 Psi. On Well.
08:00	2.00	10:00	SRIG	Rig Up/Down	SLB WireLine Arrive On Location, Hold Safety Meeting. Rig Up Equipment, Arm Gun, Rig Up To Well.
10:00	1.00	11:00	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 23 Gms., .44 Dia. Holes. Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013. Found And Correlated To Short Joint At 6,253 - 6,275'. Drop Down To Depth, Perforate Stage 1 CR-5/CR-4A/CR-4 Zone, 6,505 - 6,780'. 51 Holes. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.
11:00	3.00	14:00	SRIG	Rig Up/Down	HES On Location At 12:00 Hrs. Rig Up Equipment
14:00	16.00	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured. SDFD.

**8-16D-46 BTR 7/11/2013 06:00 - 7/12/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.00	06:00	LOCL	Lock Wellhead & Secure	HES Crew On Location At 0400 Hrs., Prime Chemical And Fluid Pumps, Pressure Test To 9000 Psi., Ran QC On Fluid, Looks Good.
06:00	0.00	06:00	SMTG	Safety Meeting	Safety Meeting. Talk About Smoking Area, PPE, Escape And Mustering Areas, Communication, And Red Zone.
06:00	0.00	06:00	FRAC	Frac. Job	Frac Stage 1. Fluid System: Hybor G 16 Open Well, 56 Psi. ICP. BrokeDown At 10.0 Bpm And 2,571 Psi.. Pump 3900 Gals. 15% HCL And 102 Bio Balls, Attempt BallOut. Let Balls Fall. Get Stabilized Injection Of 75.4 Bpm And 3,434 Psi., Get ISIP, 1,835 Psi.. 0.71 Psi./Ft. F.G.. 40/51 Holes. Con't With SlickWater Pad, 45,161 Gals.. Stage Into Hybor Pad, 74.7 Bpm At 3,190 Psi.. On Perfs, 74.7 Bpm At 3,454 Psi., 11,371 Gals. Stage Into 2.0# 20/40 White Prop, 74.6 Bpm At 3,443 Psi.. On Perfs, 74.7 Bpm At 3,092 Psi., 8,104 Gals. Stage Into 3.0# 20/40 White Prop, 74.7 Bpm At 3,046 Psi.. On Perfs, 74.7 Bpm At 2,816 Psi., 22,155 Gals. Stage Into 3.5# 20/40 White Prop, 74.8 Bpm At 2,748 Psi.. On Perfs, 74.8 Bpm At 2,637 Psi., 8,395 Gals. Stage Into 4.0# 20/40 White Prop, 74.7 Bpm At 2,631 Psi.. On Perfs, 74.8 Bpm At 2,570 Psi., 8,874 Gals. Stage Into Flush, Flush 15 Bbls. Over Bottom Perf.. Get ISDP, 1,919 Psi.. 0.73 Psi./Ft. F.G.. WSI And Secured. Total 20/40 White Prop - 140,400# Total Clean - 122,444 Gals.. 2,915 Bbls.. Produced Water - 61,607 Gals.. 2% KCL - 58,899 Gals.. BWTR - 3,072 Bbls. Max. Rate - 74.9 Bpm Avg. Rate - 74.7 Bpm Max. Psi. - 3,459 Psi. Avg. Psi. - 3,012 Psi.
06:00	0.25	06:15	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.



## Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:15	1.09	07:20	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 23 Gms., .44 Dia. Holes. Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013. Found And Correlated To Short Joint At 6,253 - 6,275'. Drop Down To Depth, Set CBP At 6,500'. 1,700 Psi.. Perforate Stage 2 CR-4/CR-3 Zone, 6,192 - 6,780'. 45 Holes. 1,700 Psi.. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.
07:20	0.08	07:25	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.
07:25	1.00	08:25	FRAC	Frac. Job	Frac Stage 2. Fluid System: Hybor G 16 Open Well, 1,618 Psi. ICP. BrokeDown At 10.0 Bpm And 2,092 Psi.. Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall. Get Stabilized Injection Of 74.1 Bpm And 3,075 Psi., Get ISIP, 1,811 Psi.. 0.72 Psi./Ft. F.G.. 45/45 Holes. Con't With SlickWater Pad, 48,419 Gals.. Stage Into Hybor Pad, 74.9 Bpm At 3,106 Psi.. On Perfs, 74.7 Bpm At 3,367 Psi., 12,190 Gals. Stage Into 2.0# 20/40 White Prop, 74.7 Bpm At 3,340 Psi.. On Perfs, 74.6 Bpm At 3,006 Psi., 7,114 Gals. Stage Into 3.0# 20/40 White Prop, 74.8 Bpm At 2,967 Psi.. On Perfs, 74.8 Bpm At 2,757 Psi., 26,420 Gals. Stage Into 3.5# 20/40 White Prop, 74.8 Bpm At 2,707 Psi.. On Perfs, 74.7 Bpm At 2,641 Psi., 8,155 Gals. Stage Into 4.0# 20/40 White Prop, 74.8 Bpm At 2,638 Psi.. On Perfs, 74.8 Bpm At 2,593 Psi., 8,737 Gals. Stage Into Flush, Flush 15 Bbls. Over Bottom Perf.. Get ISDP, 1,917 Psi.. 0.74 Psi./Ft. F.G.. WSI And Secured. Total 20/40 White Prop - 150,100# Total Clean - 128,943 Gals.. 3,070 Bbls.. Produced Water - 64,346 Gals.. 2% KCL - 62,616 Gals.. BWTR - 3,240 Bbls. Max. Rate - 75.0 Bpm Avg. Rate - 74.8 Bpm Max. Psi. - 3,367 Psi. Avg. Psi. - 2,955 Psi.
08:25	0.17	08:35	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.
08:35	1.08	09:40	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 23 Gms., .44 Dia. Holes. Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013. Found And Correlated To Short Joint At 5,568 - 5,590'. Drop Down To Depth, Set CBP At 6,187'. 1,800 Psi.. Perforate Stage 3 CR-3/CR-2 Zone, 5,936 - 6,169'. 45 Holes. 1,750 Psi.. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.
09:40	0.08	09:45	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.



## Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
09:45	1.00	10:45	FRAC	Frac. Job	<p>Frac Stage 3. Fluid System: Hybor G 16  Open Well, 1,635 Psi. ICP. BrokeDown At 11.4 Bpm And 2,539 Psi..  Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall.  Get Stabilized Injection Of 74.1 Bpm And 3,525 Psi., Get ISIP, 1,818 Psi.. 0.74 Psi./Ft.  F.G.. 36/45 Holes.  Con't With SlickWater Pad, 48,418 Gals..  Stage Into Hybor Pad, 75.0 Bpm At 3,172 Psi..  On Perfs, 75.0 Bpm At 3,445 Psi., 12,249 Gals.  Stage Into 2.0# 20/40 White Prop, 75.0 Bpm At 3,455 Psi..  On Perfs, 74.9 Bpm At 3,108 Psi., 6,912 Gals.  Stage Into 3.0# 20/40 White Prop, 74.9 Bpm At 3,095 Psi..  On Perfs, 74.9 Bpm At 2,864 Psi., 27,198 Gals.  Stage Into 3.5# 20/40 White Prop, 75.1 Bpm At 2,790 Psi..  On Perfs, 75.0 Bpm At 2,767 Psi., 7,906 Gals.  Stage Into 4.0# 20/40 White Prop, 75.0 Bpm At 2,779 Psi..  On Perfs, 75.0 Bpm At 2,773 Psi., 8,230 Gals.  Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..  Get ISDP, 2,028 Psi.. 0.77 Psi./Ft. F.G.. WSI And Secured.  Total 20/40 White Prop - 149,700#  Total Clean - 128,187 Gals.. 3,052 Bbls..  Produced Water - 63,768 Gals..  2% KCL - 62,495 Gals..  BWTR - 3,221 Bbls.  Max. Rate - 75.2 Bpm  Avg. Rate - 74.9 Bpm  Max. Psi. - 3,458 Psi.  Avg. Psi. - 3,036 Psi.</p>
10:45	0.34	11:05	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.
11:05	0.92	12:00	PFRT	Perforating	<p>RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 23 Gms., .44 Dia. Holes. Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013. Found And Correlated To Short Joint At 5,568 - 5,590'.  Drop Down To Depth, Set CBP At 5,916'. 1,800 Psi..  Perforate Stage 4 CR-2/Wasatch Zone, 5,618 - 5,896'. 45 Holes. 1,200 Psi..  POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.</p>
12:00	0.08	12:05	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.
12:05	1.08	13:10	FRAC	Frac. Job	<p>Frac Stage 4. Fluid System: Hybor G 16  Open Well, 510 Psi. ICP. BrokeDown At 10.0 Bpm And 2,732 Psi..  Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall.  Get Stabilized Injection Of 75.3 Bpm And 3,961 Psi., Get ISIP, 1,432 Psi.. 0.69 Psi./Ft.  F.G.. 31/45 Holes.  Con't With SlickWater Pad, 51,605 Gals..  Stage Into Hybor Pad, 75.5 Bpm At 2,862 Psi..  On Perfs, 75.3 Bpm At 3,132 Psi., 13,053 Gals.  Stage Into 2.0# 20/40 White Prop, 75.3 Bpm At 3,163 Psi..  On Perfs, 75.2 Bpm At 2,877 Psi., 6,722 Gals.  Stage Into 3.0# 20/40 White Prop, 75.2 Bpm At 2,843 Psi..  On Perfs, 75.5 Bpm At 2,518 Psi., 31,635 Gals.  Stage Into 3.5# 20/40 White Prop, 75.4 Bpm At 2,553 Psi..  On Perfs, 75.3 Bpm At 2,547 Psi., 7,507 Gals.  Stage Into 4.0# 20/40 White Prop, 75.4 Bpm At 2,559 Psi..  On Perfs, 75.4 Bpm At 2,520 Psi., 8,116 Gals.  Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..  Get ISDP, 1,701 Psi.. 0.73 Psi./Ft. F.G.. WSI And Secured.  Total 20/40 White Prop - 160,400#  Total Clean - 135,335 Gals.. 3,222 Bbls..  Produced Water - 66,314 Gals..  2% KCL - 67,033 Gals..  BWTR - 3,400 Bbls.  Max. Rate - 75.6 Bpm  Avg. Rate - 75.3 Bpm  Max. Psi. - 3,263 Psi.  Avg. Psi. - 2,819 Psi.</p>
13:10	0.08	13:15	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.



Time Log					
Start Time	Dur (hr)	End Time	Code	Category	Com
13:15	0.92	14:10	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 23 Gms., .44 Dia. Holes. Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013. Found And Correlated To Short Joint At 3,412 - 3,432'. Drop Down To Depth, Set CBP At 5,611'. 1,550 Psi.. Perforate Stage 5 Wasatch/CR-1 Zone, 5,389 - 5,591'. 45 Holes. 1,450 Psi.. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.
14:10	0.08	14:15	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.
14:15	1.17	15:25	FRAC	Frac. Job	Frac Stage 5. Fluid System: Hybor G 16 Open Well, 1,301 Psi. ICP. BrokeDown At 9.9 Bpm And 2,359 Psi.. Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall. Get Stabilized Injection Of 74.6 Bpm And 2,940 Psi., Get ISIP, 1,432 Psi.. 0.69 Psi./Ft. F.G.. 31/45 Holes. Con't With SlickWater Pad, 51,675 Gals.. Stage Into .75# 100 Mesh Pad, 75.5 Bpm At 2,808 Psi.. On Perfs, 75.7 Bpm At 2,982 Psi., 19,127 Gals. Stage Into 1.0# 20/40 White Prop, 75.6 Bpm At 3,003 Psi.. On Perfs, 75.5 Bpm At 2,866 Psi., 6,284 Gals. Stage Into 2.0# 20/40 White Prop, 75.5 Bpm At 2,855 Psi.. On Perfs, 75.6 Bpm At 2,702 Psi., 6,308 Gals. Stage Into 3.0# 20/40 White Prop, 75.6 Bpm At 2,682 Psi.. On Perfs, 75.5 Bpm At 2,574 Psi., 30,291 Gals. Stage Into 3.5# 20/40 White Prop, 75.5 Bpm At 2,642 Psi.. On Perfs, 75.5 Bpm At 2,642 Psi., 7,306 Gals. Stage Into 4.0# 20/40 White Prop, 75.4 Bpm At 2,640 Psi.. On Perfs, 75.4 Bpm At 2,619 Psi., 7,482 Gals. Stage Into Flush, Flush 15 Bbls. Over Bottom Perf.. Get ISDP, 1,790 Psi.. 0.76 Psi./Ft. F.G.. WSI And Secured. 100 Mesh - 14,400# Total 20/40 White Prop - 160,100# Total Clean - 144,572 Gals.. 3,442 Bbls.. Produced Water - 65,806 Gals.. 2% KCL - 76,798 Gals.. BWTR - 3,632 Bbls. Max. Rate - 76.1 Bpm Avg. Rate - 74.7 Bpm Max. Psi. - 3,007 Psi. Avg. Psi. - 2,756 Psi.
15:25	0.08	15:30	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.
15:30	1.00	16:30	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 23 Gms., .44 Dia. Holes. Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013. Found And Correlated To Short Joint At 3,412 - 3,432'. Drop Down To Depth, Set CBP At 5,378'. 1,400 Psi.. Perforate Stage 6 Castle Peak Zone, 5,168 - 5,358'. 45 Holes. 1,200 Psi.. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.
16:30	13.50	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured. SDFD.

**8-16D-46 BTR 7/12/2013 06:00 - 7/13/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Time Log					
Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.33	06:19	LOCL	Lock Wellhead & Secure	HES Crew On Location At 0400 Hrs., Prime Chemical And Fluid Pumps, Pressure Test To 9000 Psi., Ran QC On Fluid, Looks Good.
06:19	0.26	06:35	SMTG	Safety Meeting	Safety Meeting. Talk About Smoking Area, PPE, Escape And Mustering Areas, Communication, And Red Zone.



## Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:35	1.08	07:40	FRAC	Frac. Job	<p>Frac Stage 6. Fluid System: Hybor G 16  Open Well, 1,024 Psi. ICP. BrokeDown At 9.9 Bpm And 2,255 Psi..  Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall.  Get Stabilized Injection Of 75.7 Bpm And 3,183 Psi., Get ISIP, 1,382 Psi.. 0.70 Psi./Ft.  F.G.. 35/45 Holes.  Con't With SlickWater Pad, 48,468 Gals..  Stage Into .75# 100 Mesh Pad, 75.6 Bpm At 2,655 Psi..  On Perfs, 76.0 Bpm At 2,864 Psi., 18,041 Gals.  Stage Into 1.0# 20/40 White Prop, 76.0 Bpm At 2,863 Psi..  On Perfs, 76.0 Bpm At 2,737 Psi., 6,128 Gals.  Stage Into 2.0# 20/40 White Prop, 76.0 Bpm At 2,719 Psi..  On Perfs, 76.0 Bpm At 2,581 Psi., 6,075 Gals.  Stage Into 3.0# 20/40 White Prop, 76.0 Bpm At 2,560 Psi..  On Perfs, 76.0 Bpm At 2,446 Psi., 27,687 Gals.  Stage Into 3.5# 20/40 White Prop, 76.0 Bpm At 2,539 Psi..  On Perfs, 76.0 Bpm At 2,584 Psi., 7,100 Gals.  Stage Into 4.0# 20/40 White Prop, 76.0 Bpm At 2,623 Psi..  On Perfs, 75.8 Bpm At 2,780 Psi., 7,541 Gals.  Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..  Get ISDP, 1,659 Psi.. 0.75 Psi./Ft. F.G.. WSI And Secured.  100 Mesh - 13,600#  Total 20/40 White Prop - 150,100#  Total Clean - 136,212 Gals.. 3,243 Bbls..  Produced Water - 61,633 Gals..  2% KCL - 72,572 Gals..  BWTR - 3,409 Bbls.  Max. Rate - 76.2 Bpm  Avg. Rate - 75.7 Bpm  Max. Psi. - 2,886 Psi.  Avg. Psi. - 2,658 Psi.</p>
07:40	0.17	07:50	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.
07:50	0.92	08:45	PFRT	Perforating	<p>RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf,  .36" Penetration Charges, 23 Gms., .44 Dia. Holes. Correlating To HES Spectral  Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013.  Found And Correlated To Short Joint At 3,412 - 3,432'.  Drop Down To Depth, Set CBP At 5,145'. 1,400 Psi..  Perforate Stage 7 Castle Peak/Black Shale/3PT MKR Zone, 4,831 - 5,125'. 45 Holes.  1,200 Psi..  POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.</p>
08:45	0.08	08:50	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
08:50	1.08	09:55	FRAC	Frac. Job	<p>Frac Stage 7. Fluid System: Hybor G 16            Open Well, 1,197 Psi. ICP. BrokeDown At 10.0 Bpm And 1,483 Psi..            Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall.            Get Stabilized Injection Of 75.8 Bpm And 2,643 Psi., Get ISIP, 1,409 Psi.. 0.72 Psi./Ft.            F.G.. 45/45 Holes.            Con't With SlickWater Pad, 48,333 Gals..            Stage Into .75# 100 Mesh Pad, 76.0 Bpm At 2,587 Psi..            On Perfs, 49.6 Bpm At 1,900 Psi., 17,967 Gals.            Stage Into 1.0# 20/40 White Prop, 76.6 Bpm At 2,756 Psi..            On Perfs, 74.7 Bpm At 2,622 Psi., 5,798 Gals.            Stage Into 2.0# 20/40 White Prop, 74.7 Bpm At 2,621 Psi..            On Perfs, 74.5 Bpm At 2,516 Psi., 5,778 Gals.            Stage Into 3.0# 20/40 White Prop, 74.5 Bpm At 2,497 Psi..            On Perfs, 74.5 Bpm At 2,352 Psi., 28,764 Gals.            Stage Into 3.5# 20/40 White Prop, 74.8 Bpm At 2,330 Psi..            On Perfs, 74.8 Bpm At 2,284 Psi., 6,767 Gals.            Stage Into 4.0# 20/40 White Prop, 74.8 Bpm At 2,281 Psi..            On Perfs, 74.8 Bpm At 2,230 Psi., 8,526 Gals.            Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..            Get ISDP, 1,574 Psi.. 0.75 Psi./Ft. F.G.. WSI And Secured.            100 Mesh - 13,420#            Total 20/40 White Prop - 149,620#            Total Clean - 137,045 Gals.. 3,263 Bbls..            Produced Water - 61,507 Gals..            2% KCL - 73,600 Gals..            BWTR - 3,456 Bbls.            Max. Rate - 76.0 Bpm            Avg. Rate - 73.5 Bpm            Max. Psi. - 2,767 Psi.            Avg. Psi. - 2,456 Psi.</p>
09:55	0.33	10:15	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up CBP Plug Assembly. Equalize To Well Pressure.
10:15	0.75	11:00	PFRT	Perforating	<p>RIH With 3 1/8" CCL/Sinker Bar And CBP Plug Assemblt.            Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB            CBL/CCL Dated 06/30/2013.            Found And Correlated To Short Joint At 3,412 - 3,432'.            Drop Down To Depth, Set CBP At 4,800'. 1,400 Psi..            Bleed Pressure Off Well.            POOH. LayDown Tools, WSI And Secured.</p>
11:00	3.00	14:00	SRIG	Rig Up/Down	RigDown WireLine And Frac Crews, MOL. RDSU FROM 9-5D-35. ROAD RIG TOWARDS LOCATION.
14:00	16.00	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured. Batch Water. Move Frac Tanks.

**8-16D-46 BTR 7/13/2013 06:00 - 7/14/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL.
07:00	2.00	09:00	SRIG	Rig Up/Down	HSM. ROAD RIG TO LOCATION. ND FRAC VALVES. NU 7" 5K BOP AND HYDRIL. RUSU. RU FLOOR. SPOT CATWALK AND PIPE RACKS
09:00	1.00	10:00	GOP	General Operations	UNLOAD AND PREP TBG.
10:00	3.00	13:00	RUTB	Run Tubing	MU 4-3/4" BIT, POBS, 1-JT, AND 2.31 XN NIPPLE. RIH AS PU TBG TO TAG KILL PLUG AT 4800'.
13:00	1.00	14:00	PTST	Pressure Test	RU PWR SWIVEL. FILL TBG. PRES TEST BOP AND LINES TO 2500 PSI. GOOD.
14:00	3.00	17:00	DOPG	Drill Out Plugs	<p>EST CIRC AND D/O PLUGS</p> <p>#1 AT 4800'. C/O 0' SAND. D/O IN 8 MIN. FCP 700 PSI ON 30/64". RIH            #2 AT 5145'. C/O 20' SAND. D/O IN 10 MIN. FCP 800 PSI ON 28/64". RIH            #3 AT 5378'. C/O 20' SAND. D/O IN 9 MIN. FCP 800 PSI ON 34/ 64". RIH            #4 AT 5611'. C/O 19' SAND. D/O IN 7 MIN. FCP 750 PSI ON 34/64" .</p> <p>CIRC CLEAN.</p>
17:00	1.00	18:00	FBCK	Flowback Well	LINE OUT GOING TO PRODUCTION W/ FBC.
18:00	12.00	06:00	FBCK	Flowback Well	CREW TRAVEL. WELL FLOWING TO PRODUCTION W/ FBC.

**8-16D-46 BTR 7/14/2013 06:00 - 7/15/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL.	
07:00	4.50	11:30	DOPG	Drill Out Plugs	WELL FLOW 960 BBLS ON 26/64 AND 600 PSI IN 12 HRS. OPEN TO FBT AND CONT RIH.  #5 AT 5916'. C/O 194' SAND. D/O IN 10 MIN. FCP 700 PSI ON 32/64". RIH #6 AT 6187'. C/O 20' SAND. D/O IN 8 MIN. FCP 750 PSI ON 32/64". RIH #7 AT 6500'. C/O 21' SAND. D/O IN 11 MIN. FCP 750 PSI ON 32/64". RIH C/O 49' SAND TO FB AT 6814'. D/O FC AND 56' CMT TO PBTD AT 6870' W/ 218-JTS IN.  CIRC CLEAN. RD PWR SWIVEL	
11:30	1.50	13:00	PULT	Pull Tubing	POOH AS LD 68-JTS 2-7/8" L-80 TBG. LUBE IN AND LAND HANGER W/ EOT AT 4742.26'.  TBG DETAIL KB 22.00 7" 5K HANGER .80 149-JTS 2-7/8" L-80 TBG 4648.07 2.31 XN 1.15 1-JT 2-7/8" L-80 31.43 POBS .81 EOT 4742.26	
13:00	2.00	15:00	GOP	General Operations	RD FLOOR. ND BOP. NU WH. POBS AT 2200 PSI. PLUMB IN FLOW LINES. SICP 800. FTP 650. TURN OVER TO FBC AND SALES. RDSU. MOVE OFF LOCATION.	
15:00	15.00	06:00	FBCK	Flowback Well	CREW TRAVEL. WELL ON PRODUCTION.	

Form 3160-4  
(August 2007)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

5. Lease Serial No.  
20G0005608

1a. Type of Well  Oil Well  Gas Well  Dry  Other

b. Type of Completion  New Well  Work Over  Deepen  Plug Back  Diff. Resvr.  
Other \_\_\_\_\_

2. Name of Operator: BILL BARRETT CORP Contact: CHRISTINA HIRTLER  
E-Mail: chirtler@billbarrettcorp.com

3. Address: 1099 18TH STREET SUITE 2300 DENVER, CO 80202 3a. Phone No. (include area code) Ph: 303-312-8597

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*  
At surface SENE 1555FNL 739FEL  
At top prod interval reported below SENE 1990FNL 829FEL  
At total depth SENE 2011FNL 848FEL

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

8. Lease Name and Well No. 8-16D-46 BTR

9. API Well No. 43-013-50953

10. Field and Pool, or Exploratory DUCHESNE

11. Sec., T., R., M., or Block and Survey or Area Sec 16 T4S R6W Mer UBM

12. County or Parish Uintah 13. State UT

14. Date Spudded 05/02/2013 15. Date T.D. Reached 06/22/2013 16. Date Completed  D & A  Ready to Prod. 07/14/2013

17. Elevations (DF, KB, RT, GL)\* 6239 GL

18. Total Depth: MD 6942 TVD 6907 19. Plug Back T.D.: MD 1278 TVD 1243 20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each) CBL,GR,CCL, MUD

22. Was well cored?  No  Yes (Submit analysis)  
Was DST run?  No  Yes (Submit analysis)  
Directional Survey?  No  Yes (Submit analysis)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
26.000	16.000 COND	65.0	0	80	80				
12.250	9.625 J-55	36.0	0	1353	1323	505	169	0	
8.750	5.500 P110	17.0	0	6920	6910	1115	363	3670	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	6759							

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) GREEN RIVER	4831	5591	4831 TO 5591	0.380	135	OPEN
B) WASATCH	5618	6780	5618 TO 6780	0.380	186	OPEN
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
4831 TO 5591	GREEN RIVER SEE ATTACHED STAGES 5-7
5618 TO 6780	WASATCH SEE ATTACHED STAGES 1-4

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
07/14/2013	07/18/2013	24	→	358.0	221.0	842.0	52.0		FLows FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
26/64	SI 580	1550.0	→	358	221	842	617	POW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
	SI		→						

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #217067 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

29. Disposition of Gas(Sold, used for fuel, vented, etc.)  
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				GREEN RIVER	1406
				MAHOGANY	2122
				DOUGLAS CREEK	4081
				BLACK SHALE	4906
				CASTLE PEAK	5121
				UTELAND BUTTE	5409
				WASATCH	5602
				TD	6942

32. Additional remarks (include plugging procedure):

TOC was calculated by CBL. Conductor cemented with grout. Attached is Treatment data, Logs(CBL will be mailed due to file size) and End of Well Report. First Gas sales were on 7/16/2013; first oil sales 7/18/2013.

33. Circle enclosed attachments:

- 1. Electrical/Mechanical Logs (1 full set req'd)
- 2. Geologic Report
- 3. DST Report
- 4. Directional Survey
- 5. Sundry Notice for plugging and cement verification
- 6. Core Analysis
- 7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #217067 Verified by the BLM Well Information System.  
For BILL BARRETT CORP, sent to the Vernal**

Name (please print) CHRISTINA HIRTLER Title ADMINISTRATIVE ASSISTANT

Signature (Electronic Submission) Date 08/14/2013

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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 representations as to any matter within its jurisdiction.

**\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\***

RECEIVED: Aug. 14, 2013

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

29. Disposition of Gas(Sold, used for fuel, vented, etc.)  
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				GREEN RIVER	1406
				MAHOGANY	2122
				DOUGLAS CREEK	4081
				BLACK SHALE	4906
				CASTLE PEAK	5121
				UTELAND BUTTE	5409
				WASATCH	5602
				TD	6942

32. Additional remarks (include plugging procedure):

TOC was calculated by CBL. Conductor cemented with grout. Attached is Treatment data, Logs(CBL will be mailed due to file size) and End of Well Report. First Gas sales were on 7/16/2013; first oil sales 7/18/2013.

33. Circle enclosed attachments:

- 1. Electrical/Mechanical Logs (1 full set req'd)
- 2. Geologic Report
- 3. DST Report
- 4. Directional Survey
- 5. Sundry Notice for plugging and cement verification
- 6. Core Analysis
- 7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #216862 Verified by the BLM Well Information System.  
For ELK PRODUCTION UINTAH, LLC, sent to the Vernal**

Name (please print) CHRISTINA HIRTLER Title ADMINISTRATIVE ASSISTANT

Signature (Electronic Submission) Date 08/13/2013

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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 representations as to any matter within its jurisdiction.

**\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\***

RECEIVED: Aug. 14, 2013

**8-16D-46 BTR Completion Report Continued\***

<b>44. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. (cont.)</b>				
<b>AMOUNT AND TYPE OF MATERIAL</b>				
<b><i>Stage</i></b>	<b><i>BBLs Slurry</i></b>	<b><i>lbs 100 Common Mesh</i></b>	<b><i>lbs 20/40 White Sand</i></b>	<b><i>gal 15% HCl Acid</i></b>
1	2915			3868
2	3070			3957
3	3052		149700	3846
4	3222		160400	3980
5	3442	14400	160100	3933
6	3248	13600	150100	4011
7	3263	13420	149620	3866

\*Depth intervals for frac information same as perforation record intervals.

**HALLIBURTON**

Duchesne County, UT (NAD 1927)

**Design Report for 8-16D-46 BTR - Sperry Final Surveys**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00
187.00	0.78	199.960	186.99	-1.20	-0.43	1.25	0.42
<b>First Sperry MWD Survey @ 187.00' MD</b>							
249.00	0.98	203.170	248.99	-2.08	-0.79	2.18	0.33
311.00	1.42	202.410	310.97	-3.28	-1.29	3.44	0.71
373.00	1.52	202.390	372.95	-4.75	-1.89	4.98	0.16
435.00	1.45	210.710	434.93	-6.18	-2.61	6.51	0.37
496.00	1.42	205.020	495.91	-7.53	-3.32	7.95	0.24
588.00	1.34	210.120	587.89	-9.50	-4.34	10.04	0.16
680.00	1.21	220.010	679.86	-11.17	-5.51	11.88	0.28
773.00	0.80	233.960	772.85	-12.30	-6.66	13.17	0.51
864.00	0.57	223.120	863.84	-13.01	-7.49	13.99	0.29
959.00	0.67	203.160	958.84	-13.86	-8.03	14.92	0.25
1,054.00	1.39	204.010	1,053.82	-15.43	-8.72	16.57	0.76
1,149.00	1.31	218.270	1,148.80	-17.33	-9.86	18.63	0.36
1,283.00	1.69	209.080	1,282.75	-20.26	-11.77	21.81	0.33
1,370.00	2.11	201.880	1,369.70	-22.87	-12.99	24.58	0.55
1,465.00	2.51	201.960	1,464.62	-26.42	-14.42	28.30	0.42
1,560.00	2.60	205.120	1,559.53	-30.30	-16.11	32.40	0.18
1,655.00	4.58	195.610	1,654.34	-35.91	-18.05	38.23	2.17
1,750.00	6.90	197.380	1,748.86	-45.01	-20.77	47.64	2.45
1,844.00	8.42	198.860	1,842.01	-56.91	-24.68	60.00	1.63
1,939.00	10.46	195.510	1,935.72	-71.80	-29.24	75.41	2.22
2,034.00	11.96	195.000	2,028.91	-89.62	-34.09	93.76	1.58
2,129.00	11.38	194.070	2,121.94	-108.22	-38.92	112.87	0.64
2,224.00	11.04	195.320	2,215.13	-126.08	-43.60	131.24	0.44
2,319.00	10.54	191.290	2,308.45	-143.38	-47.70	148.96	0.95
2,412.00	11.08	184.880	2,399.81	-160.62	-50.13	166.37	1.42
2,507.00	11.41	184.870	2,492.98	-179.08	-51.70	184.86	0.35
2,601.00	11.11	185.160	2,585.17	-197.37	-53.31	203.17	0.32
2,695.00	10.84	186.860	2,677.45	-215.16	-55.18	221.05	0.45
2,790.00	10.31	187.040	2,770.84	-232.47	-57.29	238.47	0.56
2,885.00	11.21	183.860	2,864.17	-250.12	-58.95	256.17	1.13
2,980.00	10.88	186.260	2,957.41	-268.24	-60.55	274.33	0.60
3,075.00	10.57	184.500	3,050.75	-285.84	-62.21	291.98	0.47
3,170.00	10.06	184.840	3,144.22	-302.80	-63.59	308.94	0.54
3,265.00	9.74	184.860	3,237.80	-319.07	-64.98	325.24	0.34
3,360.00	9.37	185.050	3,331.48	-334.78	-66.34	340.97	0.39
3,455.00	9.11	185.210	3,425.25	-349.98	-67.70	356.20	0.28
3,550.00	7.65	186.510	3,519.23	-363.75	-69.10	370.02	1.55
3,645.00	7.45	186.730	3,613.41	-376.15	-70.54	382.50	0.21
3,740.00	7.18	185.750	3,707.64	-388.17	-71.86	394.58	0.31
3,835.00	6.21	185.110	3,801.99	-399.20	-72.91	405.64	1.02
3,930.00	6.10	187.140	3,896.44	-409.32	-73.99	415.81	0.26
4,025.00	5.27	197.180	3,990.97	-418.50	-75.91	425.17	1.36
4,119.00	3.59	205.270	4,084.69	-425.29	-78.44	432.27	1.90
4,214.00	2.49	193.690	4,179.56	-429.98	-80.20	437.17	1.32
4,309.00	1.59	221.590	4,274.50	-432.97	-81.56	440.34	1.38
4,404.00	0.83	265.040	4,369.48	-434.02	-83.12	441.61	1.20
4,499.00	1.10	234.000	4,464.46	-434.61	-84.55	442.41	0.61



**Design Report for 8-16D-46 BTR - Sperry Final Surveys**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
4,594.00	0.67	242.910	4,559.45	-435.40	-85.78	443.38	0.47
4,688.00	1.05	227.480	4,653.44	-436.23	-86.90	444.37	0.47
4,783.00	1.26	310.440	4,748.43	-436.14	-88.34	444.50	1.62
4,879.00	1.33	268.990	4,844.41	-435.48	-90.26	444.14	0.96
4,974.00	1.11	258.360	4,939.38	-435.68	-92.26	444.64	0.33
5,068.00	1.05	19.460	5,033.38	-435.06	-92.87	444.11	2.00
5,163.00	0.37	133.590	5,128.37	-434.45	-92.35	443.43	1.31
5,258.00	0.88	187.350	5,223.37	-435.38	-92.22	444.34	0.76
5,353.00	1.46	183.340	5,318.35	-437.31	-92.39	446.27	0.62
5,448.00	1.35	197.900	5,413.32	-439.59	-92.80	448.58	0.39
5,543.00	0.76	231.140	5,508.30	-441.05	-93.64	450.15	0.87
5,638.00	0.75	216.880	5,603.29	-441.94	-94.50	451.17	0.20
5,732.00	1.20	213.760	5,697.28	-443.25	-95.42	452.60	0.48
5,827.00	1.32	216.340	5,792.26	-444.96	-96.62	454.47	0.14
5,922.00	1.53	202.260	5,887.23	-447.01	-97.75	456.67	0.43
6,017.00	0.67	293.630	5,982.21	-447.96	-98.74	457.76	1.77
6,112.00	0.79	276.010	6,077.21	-447.67	-99.90	457.65	0.27
6,207.00	1.02	248.590	6,172.20	-447.91	-101.34	458.11	0.51
6,301.00	1.26	233.100	6,266.18	-448.84	-102.94	459.27	0.41
6,396.00	1.64	220.450	6,361.15	-450.50	-104.66	461.17	0.52
6,491.00	0.36	240.930	6,456.13	-451.68	-105.80	462.51	1.38
6,586.00	0.49	240.300	6,551.13	-452.03	-106.41	462.94	0.14
6,681.00	0.83	219.210	6,646.12	-452.76	-107.20	463.79	0.43
6,776.00	0.88	216.510	6,741.11	-453.88	-108.07	465.03	0.07
6,860.00	1.17	204.980	6,825.10	-455.18	-108.82	466.42	0.42
<b>Last Sperry MWD Survey @ 6860.00' MD</b>							
6,920.00	1.17	204.980	6,885.08	-456.29	-109.33	467.60	0.00
<b>Straight Line Projection to TD @ 6920.00' MD</b>							

**Design Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
187.00	186.99	-1.20	-0.43	First Sperry MWD Survey @ 187.00' MD
6,860.00	6,825.10	-455.18	-108.82	Last Sperry MWD Survey @ 6860.00' MD
6,920.00	6,885.08	-456.29	-109.33	Straight Line Projection to TD @ 6920.00' MD

**Vertical Section Information**

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/-S (ft)	Origin +E/-W (ft)	Start TVD (ft)
Target	8-16D-46 BTR_BHL Tgt	188.735	Slot	0.00	0.00	0.00

**Survey tool program**

From (ft)	To (ft)	Survey/Plan	Survey Tool
187.00	6,920.00	Sperry MWD Surveys	MWD

**Design Report for 8-16D-46 BTR - Sperry Final Surveys****Targets**

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
UTE TRIBAL 1-16B2_§ - actual wellpath misses target center by 651.77ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	641.00	-118.00	658,587.42	2,262,568.00	40° 8' 15.783 N	110° 33' 39.020 W
8-16D-46 BTR_ZONE - actual wellpath misses target center by 21.04ft at 4437.19ft MD (4402.66 TVD, -434.12 N, -83.61 E) - Rectangle (sides W200.00 H200.00 D2,430.00)	0.00	0.00	4,403.00	-424.02	-65.15	657,523.11	2,262,632.03	40° 8' 5.258 N	110° 33' 38.340 W
8-16D-46 BTR_BHL Tζ - actual wellpath misses target center by 54.22ft at 6860.00ft MD (6825.10 TVD, -455.18 N, -108.82 E) - Point	0.00	0.00	6,833.00	-424.02	-65.15	657,523.11	2,262,632.03	40° 8' 5.258 N	110° 33' 38.340 W
8-16D-46 BTR_SHL - actual wellpath hits target center - Point	0.00	0.00	0.00	0.00	0.00	657,947.75	2,262,692.72	40° 8' 9.449 N	110° 33' 37.501 W

**North Reference Sheet for Sec. 16-T4S-R6W - 8-16D-46 BTR - Plan A**

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.

Vertical Depths are relative to RKB 22' @ 6264.00ft (Nabors M22). Northing and Easting are relative to 8-16D-46 BTR

Coordinate System is US State Plane 1927 (Exact solution), Utah Central 4302 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866

Projection method is Lambert Conformal Conic (2 parallel)

Central Meridian is 111° 30' 0.000 W°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:40° 39' 0.000 N°

False Easting: 2,000,000.00ft, False Northing: 0.00ft, Scale Reduction: 0.99991259

Grid Coordinates of Well: 657,947.75 ft N, 2,262,692.72 ft E

Geographical Coordinates of Well: 40° 08' 09.45" N, 110° 33' 37.50" W

Grid Convergence at Surface is: 0.60°

Based upon Minimum Curvature type calculations, at a Measured Depth of 6,920.00ft

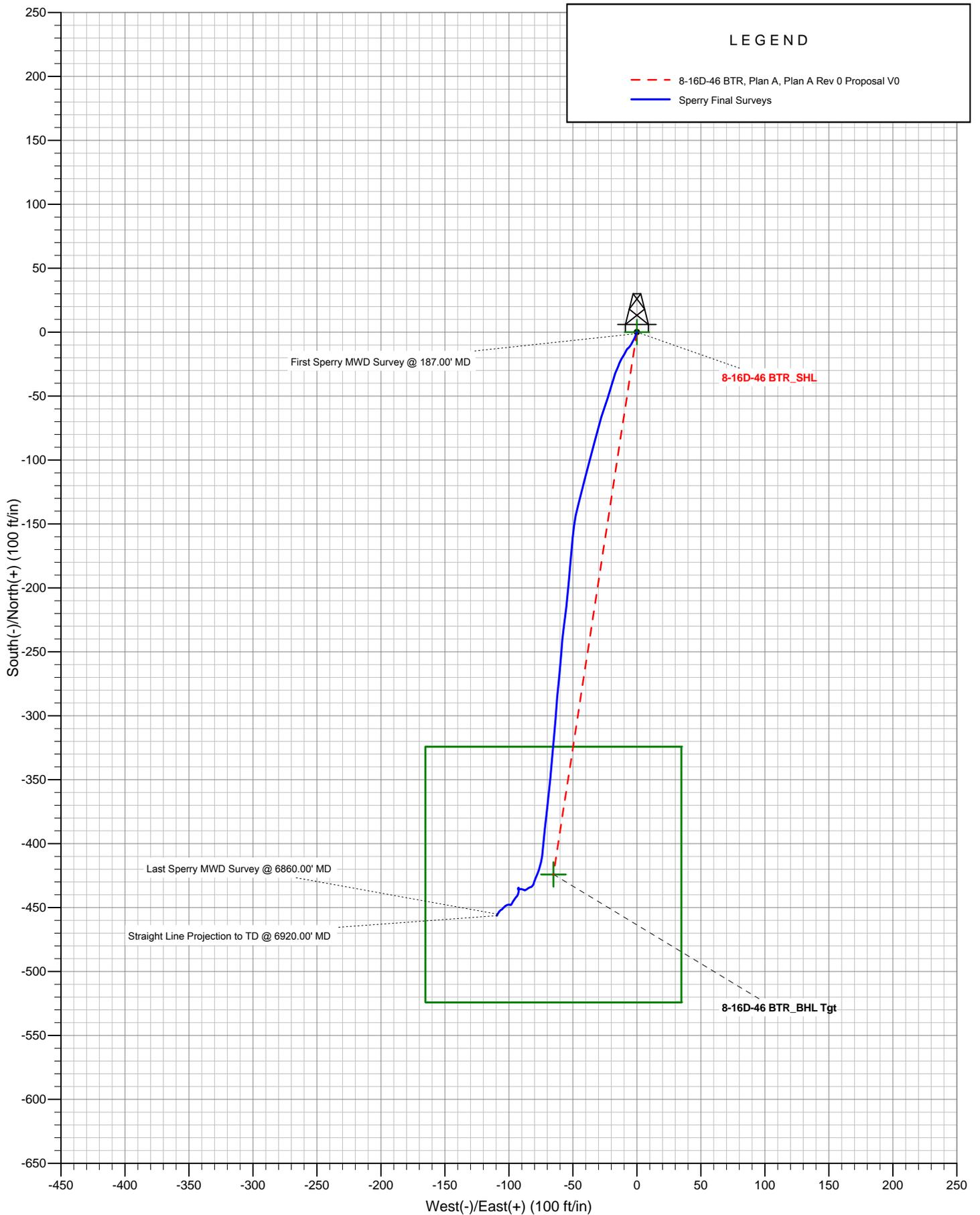
the Bottom Hole Displacement is 469.20ft in the Direction of 193.48° (True).

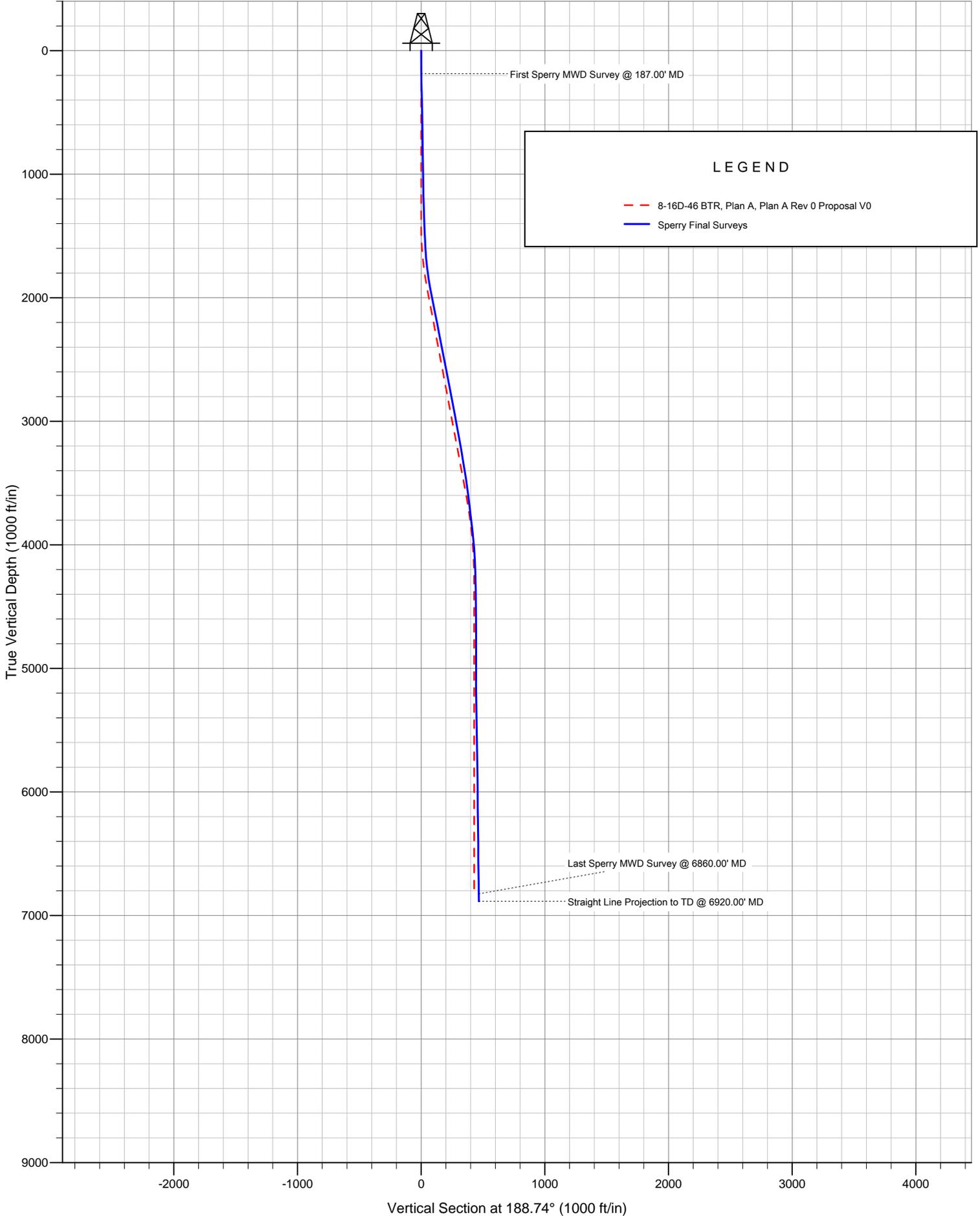
Magnetic Convergence at surface is: -10.75° (15 June 2013, , BGGM2013)

Magnetic Model: BGGM2013  
 Date: 15-Jun-13  
 Declination: 11.35°  
 Inclination/Dip: 65.71°  
 Field Strength: 51964

Grid North is 0.60° East of True North (Grid Convergence)  
 Magnetic North is 11.35° East of True North (Magnetic Declination)  
 Magnetic North is 10.75° East of Grid North (Magnetic Convergence)

To convert a True Direction to a Grid Direction, Subtract 0.60°  
 To convert a Magnetic Direction to a True Direction, Add 11.35° East  
 To convert a Magnetic Direction to a Grid Direction, Add 10.75°





**8-16D-46 BTR 6/14/2013 06:00 - 6/15/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	13.50	19:30	1	RIGUP & TEARDOWN	RIGGING DOWN WITH CREWS - BREAK DOWN MUD TANKS - R/D FLOOR - SCOPE DERRICK - PULL PRAGMA & BOP WRANGLER PREP TO LOWER SUB & LOWER SUB - PREP TO LOWER DERRICK & LOWERE DERRICK - R/D ALL ELECTRICAL - R/D FLOWLINE, MUD LINE, FLARE LINES - HAUL PIPE, 400 BBLs UPRIGHTS, CEMENT SILOS, PRAGMA AND MUD PRODUCTS TO NEW LOCATION RIG IS 90% RIGGED DOWN & 5% MOVED
19:30	10.50	06:00	1	RIGUP & TEARDOWN	WAIT ON DAYLIGHT

**8-16D-46 BTR 6/15/2013 06:00 - 6/16/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.50	06:30	1	RIGUP & TEARDOWN	WAIT ON DAYLIGHT
06:30	12.50	19:00	1	RIGUP & TEARDOWN	PREP DERRICK - UNPIN DERRICK & LOAD OUT, SPLIT SUBS, MOVE MUD TANKS, MUD PUMPS, MOTORS, VFD, DOG HOUSE, CHOKE HOUSE, GAS BUSTER, & MISC LOADS - SET MATTING BOARDS - RIG IS 100% RIGGED DOWN 5% RIGGED UP & 80% MOVED
19:00	11.00	06:00	1	RIGUP & TEARDOWN	WAIT ON DAYLIGHT

**8-16D-46 BTR 6/16/2013 06:00 - 6/17/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.50	06:30	1	RIGUP & TEARDOWN	WAIT ON DAYLIGHT
06:30	12.50	19:00	1	RIGUP & TEARDOWN	SET MUD TANKS, PUMPS, VFD, GEN SETS, SHAKERS, CHOKE HOUSE, R/U GAS BUSTER - SET SUBS, PIN CENTER SECTION, PIN STARTER LEGS - PREP DERRICK & PIN DERRICK TO STARTER LEGS, PIN DERRICK BOARD - PREP DERRICK, RAISE DERRICK - R/U ELECTRICAL - MOVE & SET CAMPS - RIG IS 95% MOVED & 50% RIGGED UP
19:00	11.00	06:00	1	RIGUP & TEARDOWN	WAIT ON DAYLIGHT

**8-16D-46 BTR 6/17/2013 06:00 - 6/18/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	1	RIGUP & TEARDOWN	PREP SUB TO RAISE - RAISE SUB, SET BOP WRANGLER, STAIRS, & PRAGMA, FINISH MOVING TUBULARS TRUCKS RELEASED @ 12:00 - PREP TO SCOPE DERRICK, SCOPE DERRICK, R/U MUD LINE, KELLY HOSE, FLARE LINES, FILL MUD TANKS, DRESS OUT SHAKERS, TEST MUD PUMPS, R/U RIG FLOOR - R/U TOP DRIVE - NIPPLE UP DIVERTER (PER NABORS) HANDS BENT HCR VALVE STEM WAITING FOR NEW HCR VALVE - R/U FLOW LINE

**8-16D-46 BTR 6/18/2013 06:00 - 6/19/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	6.00	12:00	1	RIGUP & TEARDOWN	WAIT ON HCR VALVE - CHANGE OUT HCR VALVE - R/U CHOKE LINE - (RIG BACK ON DAYWORK @ 1200 HRS 6/18/13)
12:00	3.00	15:00	21	OPEN	LOAD PIPE RACKS & STRAP BHA
15:00	2.00	17:00	20	DIRECTIONAL WORK	P/U MUD MOTOR - M/U BIT, SHOCK SUB, REAMER & NMDC
17:00	1.00	18:00	21	OPEN	M/U KELLY STAND - INSTALL ROT HEAD
18:00	0.50	18:30	7	LUBRICATE RIG	RIG SERVICE
18:30	0.50	19:00	2	DRILL ACTUAL	W/418 GPM, 25 RPM, 12K WT ON BIT, 300-450 DIFF PRESS, 2K TQ
19:00	1.50	20:30	20	DIRECTIONAL WORK	P/U ANTANA SUB & GAP SUB - LOAD MWD TOOL & OREINT SAME - P/U NMDC, & REAMER
20:30	8.50	05:00	2	DRILL ACTUAL	W/758 GPM, 50 RPM, 18K WT ON BIT, 300-550 DIFF PRESS, 5K TQ
05:00	1.00	06:00	5	COND MUD & CIRC	CIRC TWO B/U

**8-16D-46 BTR 6/19/2013 06:00 - 6/20/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	2.00	08:00	6	TRIPS	WIPER TRIP F/1353' T/180'	
08:00	1.00	09:00	5	COND MUD & CIRC	CIRC PUMP HIGH VIS SWEEP	
09:00	2.50	11:30	6	TRIPS	T.O.O.H.	
11:30	1.50	13:00	20	DIRECTIONAL WORK	L/D DIR TOOLS - PULL MWD TOOL - BREAK BIT - L/D MUD MOTOR	
13:00	4.00	17:00	12	RUN CASING & CEMENT	S/M - R/U CSG CREW & RUN 31 JOINTS 9 5/8 36# J-55 CSG WITH 8 CENTRALIZERS - CSG SET @ 1323'	
17:00	1.00	18:00	5	COND MUD & CIRC	CIRC & COND MUD	
18:00	1.50	19:30	12	RUN CASING & CEMENT	S/M - R/U CEMENTERS - TEST LINES @ 2000 PSI - PUMP 10 BBLS WATER, 40 BBLS SUPER FLUSH, 10 BBLS WATER, 90 BBLS 160 SKS 11 PPG 3.16 YIELD LEAD CEMENT MIXED @ 19.48 GAL/SK, 58.3 BBLS 245 SKS 14.8 PPG 1.33 YIELD TAIL CEMENT MIXED @ 6.31 GAL/SK, SHUT DOWN DROP PLUG & DISPLACE WITH 100.1 BBLS FRESH WATER - FINAL LIFT PRESSURE=480 PSI BUMP PLUG AND PRESSURE UPTO 930 PSI - RELEASE PRESSURE FLOATS HELD - FULL RETURNS DURING JOB - 60 BBLS CEMENT TO SURFACE - CSG GOT STUCK 23' OFF BOTTOM WHILE WORKING PIPE DURING CEMENT JOB (CSG SET @ 1323')	
19:30	1.50	21:00	13	WAIT ON CEMENT	WOC	
21:00	0.50	21:30	12	RUN CASING & CEMENT	RUN 100' 1" PIPE - PUMP 21 BBLS 100 SKS 15.8 PPG 1.17 YIELD TOP OUT CEMENT MIXED @ 5.02 GAL/SK	
21:30	1.50	23:00	13	WAIT ON CEMENT	WOC	
23:00	1.00	00:00	21	OPEN	CUT OFF CSG	
00:00	1.00	01:00	14	NIPPLE DOWN B.O.P	NIPPLE DOWN DIVERTER	
01:00	2.50	03:30	21	OPEN	WELD ON WELL HEAD	
03:30	2.50	06:00	14	NIPPLE UP B.O.P	NIPPLE UP BOP - CHANGE OUT PIPE RAMS	

**8-16D-46 BTR 6/20/2013 06:00 - 6/21/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	1.00	07:00	14	NIPPLE UP B.O.P	NIPPLE UP BOP	
07:00	4.00	11:00	15	TEST B.O.P	R/U TESTER & TEST BOP (PIPE RAMS, BLIND RAMS, CHOKE LINE, CHOKE VALVES, KILL LINE, FOSV, INSIDE BOP, UPPER KELLY, LOWER KELLY, CHOKE MANIFOLD, HCR AND MANUAL VALVES ALL @ 10MIN 5000 PSI HIGH 5MIN 250 PSI LOW, ANNULAR @ 10 MIN 2500 PSI HIGH 5MIN 250 PSI LOW, CSG @ 30MIN 1500 PSI - R/D TESTER	
11:00	0.50	11:30	21	OPEN	SET WEAR BUSHING	
11:30	1.50	13:00	20	DIRECTIONAL WORK	P/U MUD MOTOR - M/U BIT - LOAD MWD TOOL & ORIENT SAME	
13:00	1.50	14:30	6	TRIPS	T.I.H.	
14:30	1.00	15:30	2	DRILL ACTUAL	DRLG CEMENT FLOAT COLLAR & SHOE W/340 GPM, 25 RPM, 8-12K WT ON BIT	
15:30	0.50	16:00	2	DRILL ACTUAL	W/340 GPM, 25 RPM, 8K WT ON BIT	
16:00	0.50	16:30	21	OPEN	EMW TEST W/8.8 PPG MUD WT - PRESSURE UP TO 121 PSI - PRESSURE HELD	
16:30	1.00	17:30	2	DRILL ACTUAL	W/ 630 GPM, 50 RPM, 18K WT ON BIT, 400-650 DIFF PRESS, 4K TQ	
17:30	0.50	18:00	7	LUBRICATE RIG	RIG SERVICE	
18:00	1.50	19:30	2	DRILL ACTUAL	W/630 GPM, 45 RPM, 18K WT ON BIT, 300-650 DIFF PRESS, 4K TQ	
19:30	1.50	21:00	8	REPAIR RIG	ENGINES OVERHEATING DUE TO ELECTRIC FANS SHUTTING OFF - REPAIR RADIATOR FAN SWITCH	
21:00	8.50	05:30	2	DRILL ACTUAL	W/630 GPM, 50 RPM, 20K WT ON BIT, 350-650 DIFF PRESS, 6K TQ	
05:30	0.50	06:00	7	LUBRICATE RIG	RIG SERVICE	

**8-16D-46 BTR 6/21/2013 06:00 - 6/22/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	11.50	17:30	2	DRILL ACTUAL	W/630 GPM, 55 RPM, 22K WTO N BIT, 300-600 DIFF PRESS, 8K TQ	
17:30	0.50	18:00	7	LUBRICATE RIG	RIG SERVICE	
18:00	10.50	04:30	2	DRILL ACTUAL	W/630 GPM, 60 RPM, 24-28K WT ON BIT, 350-800 DIFF PRESS, 11K TQ	



Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
04:30	0.50	05:00	7	LUBRICATE RIG	RIG SERVICE	
05:00	0.50	05:30	2	DRILL ACTUAL	W/630 GPM, 60 RPM, 28K WT ON BIT, 350-750 DIFF PRESS, 11K TQ	
05:30	0.50	06:00	5	COND MUD & CIRC	CIRC - PUMP HIGH VIS SWEEP	

**8-16D-46 BTR 6/22/2013 06:00 - 6/23/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	0.50	06:30	5	COND MUD & CIRC	CIRC	
06:30	5.50	12:00	6	TRIPS	WIPER TRIP F/6920' T/1300'	
12:00	0.50	12:30	5	COND MUD & CIRC	CIRC PUMP HIGH VIS SWEEP	
12:30	5.00	17:30	6	TRIPS	T.O.O.H. F/6920' T/0'	
17:30	1.50	19:00	20	DIRECTIONAL WORK	L/D DIR TOOLS - BREAK BIT & L/D MUD MOTOR	
19:00	5.00	00:00	11	WIRELINE LOGS	R/U LOGGERS & LOG - LOGGERS DEPTH=6917' - R/D LOGGERS	
00:00	4.00	04:00	6	TRIPS	T.I.H. F/0' T/6920'	
04:00	1.00	05:00	5	COND MUD & CIRC	CIRC PUMP HIGH VIS SWEEP	
05:00	1.00	06:00	6	TRIPS	L/D DRILL PIPE F/6920' T/5500'	

**8-16D-46 BTR 6/23/2013 06:00 - 6/24/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	4.50	10:30	6	TRIPS	Finish LDDP.	
10:30	0.50	11:00	21	OPEN	Pull wear bushing.	
11:00	7.50	18:30	12	RUN CASING & CEMENT	Run 5 1/2", 17#, P-110, LT&C csg as follows. Float shoe, 2 jts csg, Float collar, 154 jts csg (156 total), MJ's @ 6264', 5579', 3415'. Ran centralizers on bottom jt, top of jt 3 & 4, every other jt to 4838', every third jt to surf csg.	
18:30	4.00	22:30	5	COND MUD & CIRC	C&C mud f/cmt. PV - 14, YP - 9, FL - 12. Circ extra 2 hrs waiting on proper cmt head f/Halliburton. HSM. RU Halliburton.	
22:30	4.00	02:30	12	RUN CASING & CEMENT	Cement prod csg as follows: Press test lines to 5000 psi. Pump 10 bbl fresh water spacer. Pump 40 bbls (39 sx) Tuned Spacer @ 10.7 ppg, 5.76 yld, 38.24 gps H2O. Mix and pump 200 bbls (485 sx) Lead Tuned Lite cmt @ 11 ppg, 2.32 yld, 10.61 gps H2O. Tail in w/163 bbls (630 sx) Econocem cmt @ 13.5 ppg, 1.45 yld, 6.85 gps H2O. Shutdown, wash lines to pit, drop pump. Displace w/158 bbls H2O w/Cla-web & Aldacide. Full returns, max press 1890 psi, bump plug to 2485 psi. Bled back 2 bbls, floats held. 8 bbls cmt to surface. RD Halliburton.	
02:30	3.50	06:00	21	OPEN	NDBOP, set slips w/145k, cut csg off, installed nightcap. Clean pits, rig released @ 06:00.	

**8-16D-46 BTR 6/28/2013 06:00 - 6/29/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	5.00	11:00	LOCL	Lock Wellhead & Secure	WSI And Secured. Construction Crew Working On Facilities.	
11:00	3.00	14:00	IWHD	Install Wellhead	Safety Meeting With Cameron, Check Surface Casing & 5.5" For Pressure, 0 Psi On Both Sides. N/D 11" Night Cap, Cleaned And Dressed Up 5.5" Csg Top, Set And N/U 11" x 7 1/16" 5k Tbg. Head With 2 1/16" x 5k Gate Valves. Tested Hanger Seals To 7100 Psi, Good Test. Secured Well Head With 7" 5K Night Cap.	
14:00	16.00	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured. Construction Crew Working On Facilities.	

**8-16D-46 BTR 6/30/2013 06:00 - 7/1/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	2.00	08:00	LOCL	Lock Wellhead & Secure	WSI Shut In And Secured.	
08:00	2.00	10:00	SRIG	Rig Up/Down	MIRU SLB W/L Crew And Equipment. Hold Safety Meeting. Rig Up Gauge Ring And Logging Tool.	



Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
10:00	5.00	15:00	LOGG	Logging	P/U Junk Basket/Gauge Ring. RIH, Tagged Up At 6,800', Drilling Report Shows FC At 6,814', 14' Of Fill. POOH, P/U CBL Tool, Rih To PBTD, 6,800', Correlating To HES Spectral Density/ Dual Spaced Neutron Dated 06-22-2013. Run Repeat Section From 6,800 - 6,565', Log Up Hole. Showed Bad Bond From TD To 3,700, 3,700 - 2,800' Bad, 2,800 - 2,700 Fair, 2,700 - 1,930 Fair/Bad. TOC 1,930'. Found Short Joints At 6,253 - 6,27, 5,568 - 5,590" And 3,412 - 3,432'. Ran With Pressure. Pooh, RD Equipment, MOL.	
15:00	15.00	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured	

**8-16D-46 BTR 7/9/2013 06:00 - 7/10/2013 06:00**

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013509530000	UT	Duchesne	Black Tail Ridge	PRODUCING	6,920.0	Drilling & Completion

Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	24.00	06:00	GOP	General Operations	NU Frac Mandrel, Test. NU Frac Tree, Test Casing. Plumb In FlowBack And SandTrap, Test. Finish Filling Frac Line. Heat KCL. HES Set Mover And Manifold. Prep For Frac.	

**8-16D-46 BTR 7/10/2013 06:00 - 7/11/2013 06:00**

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013509530000	UT	Duchesne	Black Tail Ridge	PRODUCING	6,920.0	Drilling & Completion

Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	2.00	08:00	LOCL	Lock Wellhead & Secure	WSI And Secured. 0 Psi. On Well.	
08:00	2.00	10:00	SRIG	Rig Up/Down	SLB WireLine Arrive On Location, Hold Safety Meeting. Rig Up Equipment, Arm Gun, Rig Up To Well.	
10:00	1.00	11:00	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 23 Gms., .44 Dia. Holes. Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013. Found And Correlated To Short Joint At 6,253 - 6,275'. Drop Down To Depth, Perforate Stage 1 CR-5/CR-4A/CR-4 Zone, 6,505 - 6,780'. 51 Holes. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.	
11:00	3.00	14:00	SRIG	Rig Up/Down	HES On Location At 12:00 Hrs. Rig Up Equipment	
14:00	16.00	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured. SDFD.	

**8-16D-46 BTR 7/11/2013 06:00 - 7/12/2013 06:00**

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013509530000	UT	Duchesne	Black Tail Ridge	PRODUCING	6,920.0	Drilling & Completion

Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	0.00	06:00	LOCL	Lock Wellhead & Secure	HES Crew On Location At 0400 Hrs., Prime Chemical And Fluid Pumps, Pressure Test To 9000 Psi., Ran QC On Fluid, Looks Good.	
06:00	0.00	06:00	SMTG	Safety Meeting	Safety Meeting. Talk About Smoking Area, PPE, Escape And Mustering Areas, Communication, And Red Zone.	



## Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.00	06:00	FRAC	Frac. Job	<p>Frac Stage 1. Fluid System: Hybor G 16            Open Well, 56 Psi. ICP. BrokeDown At 10.0 Bpm And 2,571 Psi..            Pump 3900 Gals. 15% HCL And 102 Bio Balls, Attempt BallOut. Let Balls Fall.            Get Stabilized Injection Of 75.4 Bpm And 3,434 Psi., Get ISIP, 1,835 Psi.. 0.71 Psi./Ft.            F.G.. 40/51 Holes.            Con't With SlickWater Pad, 45,161 Gals..            Stage Into Hybor Pad, 74.7 Bpm At 3,190 Psi..            On Perfs, 74.7 Bpm At 3,454 Psi., 11,371 Gals.            Stage Into 2.0# 20/40 White Prop, 74.6 Bpm At 3,443 Psi..            On Perfs, 74.7 Bpm At 3,092 Psi., 8,104 Gals.            Stage Into 3.0# 20/40 White Prop, 74.7 Bpm At 3,046 Psi..            On Perfs, 74.7 Bpm At 2,816 Psi., 22,155 Gals.            Stage Into 3.5# 20/40 White Prop, 74.8 Bpm At 2,748 Psi..            On Perfs, 74.8 Bpm At 2,637 Psi., 8,395 Gals.            Stage Into 4.0# 20/40 White Prop, 74.7 Bpm At 2,631 Psi..            On Perfs, 74.8 Bpm At 2,570 Psi., 8,874 Gals.            Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..            Get ISDP, 1,919 Psi.. 0.73 Psi./Ft. F.G.. WSI And Secured.            Total 20/40 White Prop - 140,400#            Total Clean - 122,444 Gals.. 2,915 Bbls..            Produced Water - 61,607 Gals..            2% KCL - 58,899 Gals..            BWTR - 3,072 Bbls.            Max. Rate - 74.9 Bpm            Avg. Rate - 74.7 Bpm            Max. Psi. - 3,459 Psi.            Avg. Psi. - 3,012 Psi.</p>
06:00	0.25	06:15	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.
06:15	1.09	07:20	PFRT	Perforating	<p>RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 23 Gms., .44 Dia. Holes. Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013. Found And Correlated To Short Joint At 6,253 - 6,275'.            Drop Down To Depth, Set CBP At 6,500'. 1,700 Psi..            Perforate Stage 2 CR-4/CR-3 Zone, 6,192 - 6,780'. 45 Holes. 1,700 Psi..            POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.</p>
07:20	0.08	07:25	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.
07:25	1.00	08:25	FRAC	Frac. Job	<p>Frac Stage 2. Fluid System: Hybor G 16            Open Well, 1,618 Psi. ICP. BrokeDown At 10.0 Bpm And 2,092 Psi..            Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall.            Get Stabilized Injection Of 74.1 Bpm And 3,075 Psi., Get ISIP, 1,811 Psi.. 0.72 Psi./Ft.            F.G.. 45/45 Holes.            Con't With SlickWater Pad, 48,419 Gals..            Stage Into Hybor Pad, 74.9 Bpm At 3,106 Psi..            On Perfs, 74.7 Bpm At 3,367 Psi., 12,190 Gals.            Stage Into 2.0# 20/40 White Prop, 74.7 Bpm At 3,340 Psi..            On Perfs, 74.6 Bpm At 3,006 Psi., 7,114 Gals.            Stage Into 3.0# 20/40 White Prop, 74.8 Bpm At 2,967 Psi..            On Perfs, 74.8 Bpm At 2,757 Psi., 26,420 Gals.            Stage Into 3.5# 20/40 White Prop, 74.8 Bpm At 2,707 Psi..            On Perfs, 74.7 Bpm At 2,641 Psi., 8,155 Gals.            Stage Into 4.0# 20/40 White Prop, 74.8 Bpm At 2,638 Psi..            On Perfs, 74.8 Bpm At 2,593 Psi., 8,737 Gals.            Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..            Get ISDP, 1,917 Psi.. 0.74 Psi./Ft. F.G.. WSI And Secured.            Total 20/40 White Prop - 150,100#            Total Clean - 128,943 Gals.. 3,070 Bbls..            Produced Water - 64,346 Gals..            2% KCL - 62,616 Gals..            BWTR - 3,240 Bbls.            Max. Rate - 75.0 Bpm            Avg. Rate - 74.8 Bpm            Max. Psi. - 3,367 Psi.            Avg. Psi. - 2,955 Psi.</p>
08:25	0.17	08:35	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.



Time Log					
Start Time	Dur (hr)	End Time	Code	Category	Com
08:35	1.08	09:40	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 23 Gms., .44 Dia. Holes. Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013. Found And Correlated To Short Joint At 5,568 - 5,590'. Drop Down To Depth, Set CBP At 6,187'. 1,800 Psi.. Perforate Stage 3 CR-3/CR-2 Zone, 5,936 - 6,169'. 45 Holes. 1,750 Psi.. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.
09:40	0.08	09:45	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.
09:45	1.00	10:45	FRAC	Frac. Job	Frac Stage 3. Fluid System: Hybor G 16 Open Well, 1,635 Psi. ICP. BrokeDown At 11.4 Bpm And 2,539 Psi.. Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall. Get Stabilized Injection Of 74.1 Bpm And 3,525 Psi., Get ISIP, 1,818 Psi.. 0.74 Psi./Ft. F.G.. 36/45 Holes. Con't With SlickWater Pad, 48,418 Gals.. Stage Into Hybor Pad, 75.0 Bpm At 3,172 Psi.. On Perfs, 75.0 Bpm At 3,445 Psi., 12,249 Gals. Stage Into 2.0# 20/40 White Prop, 75.0 Bpm At 3,455 Psi.. On Perfs, 74.9 Bpm At 3,108 Psi., 6,912 Gals. Stage Into 3.0# 20/40 White Prop, 74.9 Bpm At 3,095 Psi.. On Perfs, 74.9 Bpm At 2,864 Psi., 27,198 Gals. Stage Into 3.5# 20/40 White Prop, 75.1 Bpm At 2,790 Psi.. On Perfs, 75.0 Bpm At 2,767 Psi., 7,906 Gals. Stage Into 4.0# 20/40 White Prop, 75.0 Bpm At 2,779 Psi.. On Perfs, 75.0 Bpm At 2,773 Psi., 8,230 Gals. Stage Into Flush, Flush 15 Bbls. Over Bottom Perf.. Get ISDP, 2,028 Psi.. 0.77 Psi./Ft. F.G.. WSI And Secured. Total 20/40 White Prop - 149,700# Total Clean - 128,187 Gals.. 3,052 Bbls.. Produced Water - 63,768 Gals.. 2% KCL - 62,495 Gals.. BWTR - 3,221 Bbls. Max. Rate - 75.2 Bpm Avg. Rate - 74.9 Bpm Max. Psi. - 3,458 Psi. Avg. Psi. - 3,036 Psi.
10:45	0.34	11:05	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.
11:05	0.92	12:00	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 23 Gms., .44 Dia. Holes. Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013. Found And Correlated To Short Joint At 5,568 - 5,590'. Drop Down To Depth, Set CBP At 5,916'. 1,800 Psi.. Perforate Stage 4 CR-2/Wasatch Zone, 5,618 - 5,896'. 45 Holes. 1,200 Psi.. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.
12:00	0.08	12:05	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.



## Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
12:05	1.08	13:10	FRAC	Frac. Job	<p>Frac Stage 4. Fluid System: Hybor G 16            Open Well, 510 Psi. ICP. BrokeDown At 10.0 Bpm And 2,732 Psi..            Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall.            Get Stabilized Injection Of 75.3 Bpm And 3,961 Psi., Get ISIP, 1,432 Psi.. 0.69 Psi./Ft.            F.G.. 31/45 Holes.            Con't With SlickWater Pad, 51,605 Gals..            Stage Into Hybor Pad, 75.5 Bpm At 2,862 Psi..            On Perfs, 75.3 Bpm At 3,132 Psi., 13,053 Gals.            Stage Into 2.0# 20/40 White Prop, 75.3 Bpm At 3,163 Psi..            On Perfs, 75.2 Bpm At 2,877 Psi., 6,722 Gals.            Stage Into 3.0# 20/40 White Prop, 75.2 Bpm At 2,843 Psi..            On Perfs, 75.5 Bpm At 2,518 Psi., 31,635 Gals.            Stage Into 3.5# 20/40 White Prop, 75.4 Bpm At 2,553 Psi..            On Perfs, 75.3 Bpm At 2,547 Psi., 7,507 Gals.            Stage Into 4.0# 20/40 White Prop, 75.4 Bpm At 2,559 Psi..            On Perfs, 75.4 Bpm At 2,520 Psi., 8,116 Gals.            Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..            Get ISDP, 1,701 Psi.. 0.73 Psi./Ft. F.G.. WSI And Secured.            Total 20/40 White Prop - 160,400#            Total Clean - 135,335 Gals.. 3,222 Bbls..            Produced Water - 66,314 Gals..            2% KCL - 67,033 Gals..            BWTR - 3,400 Bbls.            Max. Rate - 75.6 Bpm            Avg. Rate - 75.3 Bpm            Max. Psi. - 3,263 Psi.            Avg. Psi. - 2,819 Psi.</p>
13:10	0.08	13:15	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.
13:15	0.92	14:10	PFRT	Perforating	<p>RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 23 Gms., .44 Dia. Holes. Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013. Found And Correlated To Short Joint At 3,412 - 3,432'.            Drop Down To Depth, Set CBP At 5,611'. 1,550 Psi..            Perforate Stage 5 Wasatch/CR-1 Zone, 5,389 - 5,591'. 45 Holes. 1,450 Psi..            POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.</p>
14:10	0.08	14:15	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.
14:15	1.17	15:25	FRAC	Frac. Job	<p>Frac Stage 5. Fluid System: Hybor G 16            Open Well, 1,301 Psi. ICP. BrokeDown At 9.9 Bpm And 2,359 Psi..            Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall.            Get Stabilized Injection Of 74.6 Bpm And 2,940 Psi., Get ISIP, 1,432 Psi.. 0.69 Psi./Ft.            F.G.. 31/45 Holes.            Con't With SlickWater Pad, 51,675 Gals..            Stage Into .75# 100 Mesh Pad, 75.5 Bpm At 2,808 Psi..            On Perfs, 75.7 Bpm At 2,982 Psi., 19,127 Gals.            Stage Into 1.0# 20/40 White Prop, 75.6 Bpm At 3,003 Psi..            On Perfs, 75.5 Bpm At 2,866 Psi., 6,284 Gals.            Stage Into 2.0# 20/40 White Prop, 75.5 Bpm At 2,855 Psi..            On Perfs, 75.6 Bpm At 2,702 Psi., 6,308 Gals.            Stage Into 3.0# 20/40 White Prop, 75.6 Bpm At 2,682 Psi..            On Perfs, 75.5 Bpm At 2,574 Psi., 30,291 Gals.            Stage Into 3.5# 20/40 White Prop, 75.5 Bpm At 2,642 Psi..            On Perfs, 75.5 Bpm At 2,642 Psi., 7,306 Gals.            Stage Into 4.0# 20/40 White Prop, 75.4 Bpm At 2,640 Psi..            On Perfs, 75.4 Bpm At 2,619 Psi., 7,482 Gals.            Stage Into Flush, Flush 15 Bbls. Over Bottom Perf..            Get ISDP, 1,790 Psi.. 0.76 Psi./Ft. F.G.. WSI And Secured.            100 Mesh - 14,400#            Total 20/40 White Prop - 160,100#            Total Clean - 144,572 Gals.. 3,442 Bbls..            Produced Water - 65,806 Gals..            2% KCL - 76,798 Gals..            BWTR - 3,632 Bbls.            Max. Rate - 76.1 Bpm            Avg. Rate - 74.7 Bpm            Max. Psi. - 3,007 Psi.            Avg. Psi. - 2,756 Psi.</p>
15:25	0.08	15:30	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.



Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
15:30	1.00	16:30	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 23 Gms., .44 Dia. Holes. Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013. Found And Correlated To Short Joint At 3,412 - 3,432'. Drop Down To Depth, Set CBP At 5,378'. 1,400 Psi.. Perforate Stage 6 Castle Peak Zone, 5,168 - 5,358'. 45 Holes. 1,200 Psi.. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.	
16:30	13.50	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured. SDFD.	

**8-16D-46 BTR 7/12/2013 06:00 - 7/13/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	0.33	06:19	LOCL	Lock Wellhead & Secure	HES Crew On Location At 0400 Hrs., Prime Chemical And Fluid Pumps, Pressure Test To 9000 Psi., Ran QC On Fluid, Looks Good.	
06:19	0.26	06:35	SMTG	Safety Meeting	Safety Meeting. Talk About Smoking Area, PPE, Escape And Mustering Areas, Communication, And Red Zone.	
06:35	1.08	07:40	FRAC	Frac. Job	Frac Stage 6. Fluid System: Hybor G 16 Open Well, 1,024 Psi. ICP. BrokeDown At 9.9 Bpm And 2,255 Psi.. Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall. Get Stabilized Injection Of 75.7 Bpm And 3,183 Psi., Get ISIP, 1,382 Psi.. 0.70 Psi./Ft. F.G.. 35/45 Holes. Con't With SlickWater Pad, 48,468 Gals.. Stage Into .75# 100 Mesh Pad, 75.6 Bpm At 2,655 Psi.. On Perfs, 76.0 Bpm At 2,864 Psi., 18,041 Gals. Stage Into 1.0# 20/40 White Prop, 76.0 Bpm At 2,863 Psi.. On Perfs, 76.0 Bpm At 2,737 Psi., 6,128 Gals. Stage Into 2.0# 20/40 White Prop, 76.0 Bpm At 2,719 Psi.. On Perfs, 76.0 Bpm At 2,581 Psi., 6,075 Gals. Stage Into 3.0# 20/40 White Prop, 76.0 Bpm At 2,560 Psi.. On Perfs, 76.0 Bpm At 2,446 Psi., 27,687 Gals. Stage Into 3.5# 20/40 White Prop, 76.0 Bpm At 2,539 Psi.. On Perfs, 76.0 Bpm At 2,584 Psi., 7,100 Gals. Stage Into 4.0# 20/40 White Prop, 76.0 Bpm At 2,623 Psi.. On Perfs, 75.8 Bpm At 2,780 Psi., 7,541 Gals. Stage Into Flush, Flush 15 Bbls. Over Bottom Perf.. Get ISDP, 1,659 Psi.. 0.75 Psi./Ft. F.G.. WSI And Secured. 100 Mesh - 13,600# Total 20/40 White Prop - 150,100# Total Clean - 136,212 Gals.. 3,243 Bbls.. Produced Water - 61,633 Gals.. 2% KCL - 72,572 Gals.. BWTR - 3,409 Bbls. Max. Rate - 76.2 Bpm Avg. Rate - 75.7 Bpm Max. Psi. - 2,886 Psi. Avg. Psi. - 2,658 Psi.	
07:40	0.17	07:50	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up Gun String And CBP Plug Assembly. Equalize To Well Pressure.	
07:50	0.92	08:45	PFRT	Perforating	RIH With 3 1/8" PJ Omega 3104 Perf. Gun Configured At 120 Degree Phasing, 3 Spf, .36" Penetration Charges, 23 Gms., .44 Dia. Holes. Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013. Found And Correlated To Short Joint At 3,412 - 3,432'. Drop Down To Depth, Set CBP At 5,145'. 1,400 Psi.. Perforate Stage 7 Castle Peak/Black Shale/3PT MKR Zone, 4,831 - 5,125'. 45 Holes. 1,200 Psi.. POOH. LayDown Gun, Verify All Shots Fired, WSI And Secured.	
08:45	0.08	08:50	GOP	General Operations	Well Turned Over To HES. Pressure Test To 8500#. Equalize, Open To Well.	



Time Log					
Start Time	Dur (hr)	End Time	Code	Category	Com
08:50	1.08	09:55	FRAC	Frac. Job	Frac Stage 7. Fluid System: Hybor G 16 Open Well, 1,197 Psi. ICP. BrokeDown At 10.0 Bpm And 1,483 Psi.. Pump 3900 Gals. 15% HCL And 90 Bio Balls, Attempt BallOut. Let Balls Fall. Get Stabilized Injection Of 75.8 Bpm And 2,643 Psi., Get ISIP, 1,409 Psi.. 0.72 Psi./Ft. F.G.. 45/45 Holes. Con't With SlickWater Pad, 48,333 Gals.. Stage Into .75# 100 Mesh Pad, 76.0 Bpm At 2,587 Psi.. On Perfs, 49.6 Bpm At 1,900 Psi., 17,967 Gals. Stage Into 1.0# 20/40 White Prop, 76.6 Bpm At 2,756 Psi.. On Perfs, 74.7 Bpm At 2,622 Psi., 5,798 Gals. Stage Into 2.0# 20/40 White Prop, 74.7 Bpm At 2,621 Psi.. On Perfs, 74.5 Bpm At 2,516 Psi., 5,778 Gals. Stage Into 3.0# 20/40 White Prop, 74.5 Bpm At 2,497 Psi.. On Perfs, 74.5 Bpm At 2,352 Psi., 28,764 Gals. Stage Into 3.5# 20/40 White Prop, 74.8 Bpm At 2,330 Psi.. On Perfs, 74.8 Bpm At 2,284 Psi., 6,767 Gals. Stage Into 4.0# 20/40 White Prop, 74.8 Bpm At 2,281 Psi.. On Perfs, 74.8 Bpm At 2,230 Psi., 8,526 Gals. Stage Into Flush, Flush 15 Bbls. Over Bottom Perf.. Get ISDP, 1,574 Psi.. 0.75 Psi./Ft. F.G.. WSI And Secured. 100 Mesh - 13,420# Total 20/40 White Prop - 149,620# Total Clean - 137,045 Gals.. 3,263 Bbls.. Produced Water - 61,507 Gals.. 2% KCL - 73,600 Gals.. BWTR - 3,456 Bbls. Max. Rate - 76.0 Bpm Avg. Rate - 73.5 Bpm Max. Psi. - 2,767 Psi. Avg. Psi. - 2,456 Psi.
09:55	0.33	10:15	CTUW	W/L Operation	Well Turned Over To WireLine. Pick Up CBP Plug Assembly. Equalize To Well Pressure.
10:15	0.75	11:00	PFRT	Perforating	RIH With 3 1/8" CCL/Sinker Bar And CBP Plug Assemblt. Correlating To HES Spectral Density/Dual Spaced Neutron Dated 06/22/2013 And SLB CBL/CCL Dated 06/30/2013. Found And Correlated To Short Joint At 3,412 - 3,432'. Drop Down To Depth, Set CBP At 4,800'. 1,400 Psi.. Bleed Pressure Off Well. POOH. LayDown Tools, WSI And Secured.
11:00	3.00	14:00	SRIG	Rig Up/Down	RigDown WireLine And Frac Crews, MOL. RDSU FROM 9-5D-35. ROAD RIG TOWARDS LOCATION.
14:00	16.00	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured. Batch Water. Move Frac Tanks.

**8-16D-46 BTR 7/13/2013 06:00 - 7/14/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Time Log					
Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL.
07:00	2.00	09:00	SRIG	Rig Up/Down	HSM. ROAD RIG TO LOCATION. ND FRAC VALVES. NU 7" 5K BOP AND HYDRIL. RUSU. RU FLOOR. SPOT CATWALK AND PIPE RACKS
09:00	1.00	10:00	GOP	General Operations	UNLOAD AND PREP TBG.
10:00	3.00	13:00	RUTB	Run Tubing	MU 4-3/4" BIT, POBS, 1-JT, AND 2.31 XN NIPPLE. RIH AS PU TBG TO TAG KILL PLUG AT 4800'.
13:00	1.00	14:00	PTST	Pressure Test	RU PWR SWIVEL. FILL TBG. PRES TEST BOP AND LINES TO 2500 PSI. GOOD.
14:00	3.00	17:00	DOPG	Drill Out Plugs	EST CIRC AND D/O PLUGS  #1 AT 4800'. C/O 0' SAND. D/O IN 8 MIN. FCP 700 PSI ON 30/64". RIH #2 AT 5145'. C/O 20' SAND. D/O IN 10 MIN. FCP 800 PSI ON 28/64". RIH #3 AT 5378'. C/O 20' SAND. D/O IN 9 MIN. FCP 800 PSI ON 34/ 64". RIH #4 AT 5611'. C/O 19' SAND. D/O IN 7 MIN. FCP 750 PSI ON 34/64" .  CIRC CLEAN.
17:00	1.00	18:00	FBCK	Flowback Well	LINE OUT GOING TO PRODUCTION W/ FBC.
18:00	12.00	06:00	FBCK	Flowback Well	CREW TRAVEL. WELL FLOWING TO PRODUCTION W/ FBC.



**8-16D-46 BTR 7/14/2013 06:00 - 7/15/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL.	
07:00	4.50	11:30	DOPG	Drill Out Plugs	WELL FLOW 960 BBLS ON 26/64 AND 600 PSI IN 12 HRS. OPEN TO FBT AND CONT RIH.  #5 AT 5916'. C/O 194' SAND. D/O IN 10 MIN. FCP 700 PSI ON 32/64". RIH #6 AT 6187'. C/O 20' SAND. D/O IN 8 MIN. FCP 750 PSI ON 32/64". RIH #7 AT 6500'. C/O 21' SAND. D/O IN 11 MIN. FCP 750 PSI ON 32/64". RIH C/O 49' SAND TO FB AT 6814'. D/O FC AND 56' CMT TO PBDT AT 6870' W/ 218-JTS IN.  CIRC CLEAN. RD PWR SWIVEL	
11:30	1.50	13:00	PULT	Pull Tubing	POOH AS LD 68-JTS 2-7/8" L-80 TBG. LUBE IN AND LAND HANGER W/ EOT AT 4742.26'.  TBG DETAIL KB 22.00 7" 5K HANGER .80 149-JTS 2-7/8" L-80 TBG 4648.07 2.31 XN 1.15 1-JT 2-7/8" L-80 31.43 POBS .81 EOT 4742.26	
13:00	2.00	15:00	GOP	General Operations	RD FLOOR. ND BOP. NU WH. POBS AT 2200 PSI. PLUMB IN FLOW LINES. SICP 800. FTP 650. TURN OVER TO FBC AND SALES. RDSU. MOVE OFF LOCATION.	
15:00	15.00	06:00	FBCK	Flowback Well	CREW TRAVEL. WELL ON PRODUCTION.	

**8-16D-46 BTR 8/6/2013 06:00 - 8/7/2013 06:00**

API/UWI 43013509530000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 6,920.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL	
07:00	0.50	07:30	SMTG	Safety Meeting	HSM AND PRE TRIP INSPECT.	
07:30	2.50	10:00	RMOV	Rig Move	ROAD RIG FROM RU TO LOCATION.	
10:00	1.50	11:30	SRIG	Rig Up/Down	RUSU. FINISH KILLING WELL WITH H.O.T. ND WH. NU BOP.	
11:30	1.00	12:30	RUTB	Run Tubing	LD HANGER. PU 67-JTS TO TAG FILL AT 6830'. PBDT 6870' (51' RATHOLE).	
12:30	2.00	14:30	PULT	Pull Tubing	POOH W/ 217-JTS TBG. LD POBS.	
14:30	2.00	16:30	RUTB	Run Tubing	MU PROD BHA AND RIH W/ TBG.  TBG DETAIL KB 22.00 HANGER .80 STRETCH 2.35 208-JTS 2-7/8" TBG 6487.52 5-1/2" 1/4 SET TAC 2.75 AT 6512.67 2 JTS 2-7/8" L-80 TBG 62.38 PSN 1.10 AT 6577.80 4' TBG SUB 4.10 3-1/2" OD DESANDER 19.20 5-JTS 2-7/8" L-80 TBG 155.95 BULL PLUG .80 AT 6758.95	
16:30	1.50	18:00	GOP	General Operations	RD FLOOR. ND BOP. SET TAC IN 20K TEN. LAND HANGER. NU WH. X-O FOR RODS. SDFN	
18:00	12.00	06:00	LOCL	Lock Wellhead & Secure	CREW TRAVEL. WELL SECURE FOR NIGHT.	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9	
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 14 20 H62 6518	
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE	
<b>1. TYPE OF WELL</b> Oil Well		<b>7. UNIT or CA AGREEMENT NAME:</b>	
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>8. WELL NAME and NUMBER:</b> 8-16D-46 BTR	
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>9. API NUMBER:</b> 43013509530000	
<b>PHONE NUMBER:</b> 303 312-8134 Ext		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT	
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1555 FNL 0739 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 16 Township: 04.0S Range: 06.0W Meridian: U		<b>COUNTY:</b> DUCHESNE	
		<b>STATE:</b> UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text" value="earned lease"/>
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 4/15/2015			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.			
The Tribal lease has been earned for this well. The new lease number is 14 20 H62 6518			
<b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY April 15, 2015</b>			
<b>NAME (PLEASE PRINT)</b> Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	<b>TITLE</b> Permit Analyst	
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/15/2015		

Division of Oil, Gas and Mining  
 Operator Change/Name Change Worksheet-for State use only

Effective Date: 11/1/2016

<b>FORMER OPERATOR:</b>	<b>NEW OPERATOR:</b>
Bill Barrett Corporation 1099 18th Street, Suite 2300 Denver, CO 80202	Rig II, LLC 1582 West 2600 South Woods Cross, UT 84087
CA Number(s):	Unit(s):

**WELL INFORMATION:**

Well Name	Sec	TWN	RNG	API	Entity	Mineral	Surface	Type	Status
See Attached List									

**OPERATOR CHANGES DOCUMENTATION:**

- Sundry or legal documentation was received from the **FORMER** operator on: 10/21/2016
- Sundry or legal documentation was received from the **NEW** operator on: 10/21/2016
- New operator Division of Corporations Business Number: 8256968-0160

**REVIEW:**

- Surface Agreement Sundry from **NEW** operator on Fee Surface wells received on: N/A
- Receipt of Acceptance of Drilling Procedures for APD on: 10/21/2016
- Reports current for Production/Disposition & Sundries: 11/2/2016
- OPS/SI/TA well(s) reviewed for full cost bonding: 11/3/2016
- UIC5 on all disposal/injection/storage well(s) approved on: 11/3/2016
- Surface Facility(s) included in operator change: None
- Inspections of PA state/fee well sites complete on (only upon operators request): 11/3/2016

**NEW OPERATOR BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: UTB000712
- Indian well(s) covered by Bond Number: LPM 922467
- State/fee well(s) covered by Bond Number(s): 9219529

**DATA ENTRY:**

- Well(s) update in the **OGIS** on: 11/7/2016
- Entity Number(s) updated in **OGIS** on: 11/7/2016
- Unit(s) operator number update in **OGIS** on: N/A
- Surface Facilities update in **OGIS** on: N/A
- State/Fee well(s) attached to bond(s) in **RBDMS** on: 11/7/2016
- Surface Facilities update in **RBDMS** on: N/A

**COMMENTS:**

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From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

Well Name	Sec	TWN	RNG	API Number	Entity	Mineral	Surface	Type	Status
SWD 9-36 BTR	9	030S	060W	4301350646	18077	Indian	Fee	WD	A
16-6D-46 BTR SWD	6	040S	060W	4301350781	18327	Indian	Fee	WD	A
6-32-36 BTR SWD	32	030S	060W	4301350921	18329	Indian	Fee	WD	A
LC TRIBAL 8-26D-47	26	040S	070W	4301334024		Indian	Indian	OW	APD
16-21D-37 BTR	21	030S	070W	4301350758		Indian	Fee	OW	APD
14-11D-37 BTR	11	030S	070W	4301350862		Indian	Fee	OW	APD
7-17D-46 BTR	17	040S	060W	4301350883		Indian	Indian	OW	APD
14-12D-37 BTR	12	030S	070W	4301350894		Indian	Fee	OW	APD
1-18D-36 BTR	18	030S	060W	4301350922		Indian	Fee	OW	APD
13-2D-45 BTR	2	040S	050W	4301350931		Indian	Indian	OW	APD
5H-16-46 BTR	16	040S	060W	4301350992		Indian	Indian	OW	APD
9H-17-45 BTR	17	040S	050W	4301351098		Indian	Indian	OW	APD
13H-8-46 BTR UB	8	040S	060W	4301351124		Indian	Indian	OW	APD
8H-9-46 BTR	9	040S	060W	4301351140		Indian	Indian	OW	APD
LC TRIBAL 7-31D-37	31	030S	070W	4301351147		Indian	Fee	OW	APD
14-16D-45 BTR	16	040S	050W	4301351178		Indian	Indian	OW	APD
16-19D-37 BTR	19	030S	070W	4301351179		Indian	Fee	OW	APD
6-2D-45 BTR	2	040S	050W	4301351234		Indian	Indian	OW	APD
2-2D-45 BTR	2	040S	050W	4301351235		Indian	Indian	OW	APD
10-26-35 BTR	26	030S	050W	4301351248		Indian	Fee	OW	APD
LC TRIBAL 1H-33-46	33	040S	060W	4301351257		Indian	Fee	OW	APD
LC TRIBAL 9-25D-46	25	040S	060W	4301351276		Indian	Indian	OW	APD
LC TRIBAL 8H-30-45	30	040S	050W	4301351277		Indian	Indian	OW	APD
LC TRIBAL 16H-30-45	30	040S	050W	4301351279		Indian	Indian	OW	APD
LC TRIBAL 13-30D-45	30	040S	050W	4301351282		Indian	Indian	OW	APD
LC TRIBAL 16H-36-46	36	040S	060W	4301351291		Indian	Indian	OW	APD
LC TRIBAL 13H-30-46	30	040S	060W	4301351321		Indian	Indian	OW	APD
LC TRIBAL 13H-31-46	31	040S	060W	4301351326		Indian	Indian	OW	APD
LC TRIBAL 16-31D-46	31	040S	060W	4301351328		Indian	Indian	OW	APD
LC TRIBAL 5H-26-47	26	040S	070W	4301351337		Indian	Indian	OW	APD
LC TRIBAL 5H-19-45	20	040S	050W	4301351349		Indian	Indian	OW	APD
LC TRIBAL 16-36D-47	36	040S	070W	4301351363		Indian	Indian	OW	APD
15-4D-47 BTR	4	040S	070W	4301351377		Indian	Fee	OW	APD
16-23D-46 LC TRIBAL	23	040S	060W	4301351396		Indian	Fee	OW	APD
15-2D-36 BTR	2	030S	060W	4301351419		Indian	Fee	OW	APD
16-23D-37 BTR	23	030S	070W	4301351420		Indian	Fee	OW	APD
11-9D-47 BTR	9	040S	070W	4301351422		Indian	Fee	OW	APD
15-13D-47 BTR	13	040S	070W	4301351424		Indian	Indian	OW	APD
LC TRIBAL 15-19D-46	19	040S	060W	4301351426		Indian	Indian	OW	APD
16-13D-45 BTR	13	040S	050W	4301351428		Indian	Indian	OW	APD

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

14-12D-45 BTR	12	040S	050W	4301351444		Indian	Indian	OW	APD
16-14D-45 BTR	14	040S	050W	4301351445		Indian	Indian	OW	APD
5-13D-45 BTR	13	040S	050W	4301351446		Indian	Indian	OW	APD
LC TRIBAL 16-26D-46	26	040S	060W	4301351450		Indian	State	OW	APD
LC TRIBAL 16-34D-46	34	040S	060W	4301351451		Indian	State	OW	APD
16-12D-45 BTR	12	040S	050W	4301351452		Indian	Indian	OW	APD
8-12D-45 BTR	12	040S	050W	4301351453		Indian	Indian	OW	APD
LC TRIBAL 1-35D-46	35	040S	060W	4301351454		Indian	Fee	OW	APD
16-25D-37 BTR	25	030S	070W	4301351455		Indian	Fee	OW	APD
LC TRIBAL 13H-29-46	28	040S	060W	4301351462		Indian	Fee	OW	APD
LC TRIBAL 14-30D-37	30	030S	070W	4301351494		Indian	Fee	OW	APD
7-13D-45 BTR	13	040S	050W	4301351497		Indian	Indian	OW	APD
LC TRIBAL 4H-35-46	35	040S	060W	4301351515		Indian	Fee	OW	APD
LC TRIBAL 13H-19-46	19	040S	060W	4301351543		Indian	Indian	OW	APD
16-26D-37 BTR	26	030S	070W	4301351598		Indian	Fee	OW	APD
LC TRIBAL 16-31D-37	31	030S	070W	4301351610		Indian	Fee	OW	APD
5-4-35 BTR	4	030S	050W	4301351613		Indian	Fee	OW	APD
LC TRIBAL 16-31D-47	31	040S	070W	4301351616		Indian	Indian	OW	APD
LC TRIBAL 13H-31-47	31	040S	070W	4301351617		Indian	Indian	OW	APD
LC TRIBAL 13-32D-47	32	040S	070W	4301351619		Indian	Indian	OW	APD
LC TRIBAL 16H-32-47	32	040S	070W	4301351620		Indian	Indian	OW	APD
LC TRIBAL 1-32D-47	32	040S	070W	4301351624		Indian	Indian	OW	APD
LC TRIBAL 4H-32-47	32	040S	070W	4301351625		Indian	Indian	OW	APD
LC TRIBAL 13-28D-47	28	040S	070W	4301351627		Indian	Indian	OW	APD
LC TRIBAL 13H-29-47	28	040S	070W	4301351628		Indian	Indian	OW	APD
LC TRIBAL 16H-28-47	28	040S	070W	4301351629		Indian	Indian	OW	APD
LC TRIBAL 1-28D-47	28	040S	070W	4301351639		Indian	Indian	OW	APD
LC TRIBAL 1H-27-47	28	040S	070W	4301351640		Indian	Indian	OW	APD
LC TRIBAL 4H-28-47	28	040S	070W	4301351641		Indian	Indian	OW	APD
LC TRIBAL 7-25D-58	25	050S	080W	4301351643		Indian	Indian	OW	APD
LC TRIBAL 6-25D-58	25	050S	080W	4301351644		Indian	Indian	OW	APD
LC TRIBAL 13H-24-58	24	050S	080W	4301351645		Indian	Indian	OW	APD
LC TRIBAL 16-24D-58	24	050S	080W	4301351646		Indian	Indian	OW	APD
LC Tribal 8-23D-46	23	040S	060W	4301351654		Indian	Fee	OW	APD
LC Tribal 16-35D-45	35	040S	050W	4301351656		Indian	Fee	OW	APD
LC Tribal 13H-35-45	35	040S	050W	4301351657		Indian	Fee	OW	APD
LC Tribal 16-36D-45	36	040S	050W	4301351658		Indian	Fee	OW	APD
LC Tribal 13H-36-45	36	040S	050W	4301351659		Indian	Fee	OW	APD
LC Tribal 5-36D-45	36	040S	050W	4301351661		Indian	Fee	OW	APD
LC Tribal 8-26D-46	26	040S	060W	4301351663		Indian	Fee	OW	APD
3-29D-36 BTR	29	030S	060W	4301351665		Indian	Fee	OW	APD

From: Bill Barrett Corporation

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LC Tribal 5-35D-45	35	040S	050W	4301351666	Indian	Fee	OW	APD
LC Tribal 5-24D-46	24	040S	060W	4301351668	Indian	Indian	OW	APD
LC TRIBAL 6-12D-58	12	050S	080W	4301351696	Indian	Indian	OW	APD
LC TRIBAL 8-12D-58	12	050S	080W	4301351697	Indian	Indian	OW	APD
LC TRIBAL 16H-22-47	21	040S	070W	4301351700	Indian	Indian	OW	APD
5-25D-37 BTR	25	030S	070W	4301351803	Indian	Fee	OW	APD
8-3D-36 BTR	3	030S	060W	4301351804	Indian	Fee	OW	APD
14-26D-37 BTR	26	030S	070W	4301351805	Indian	Fee	OW	APD
9-4-35 BTR	4	030S	050W	4301351806	Indian	Fee	OW	APD
11-4D-35 BTR	4	030S	050W	4301351807	Indian	Fee	OW	APD
16-27D-37 BTR	27	030S	070W	4301351808	Indian	Fee	OW	APD
14-27D-37 BTR	27	030S	070W	4301351809	Indian	Fee	OW	APD
14-16D-46 BTR	16	040S	060W	4301351812	Indian	Indian	OW	APD
LC Tribal 16-35D-48	35	040S	080W	4301351847	Indian	Indian	OW	APD
LC Tribal 13H-35-48	35	040S	080W	4301351848	Indian	Indian	OW	APD
LC Tribal 13-2D-58	11	050S	080W	4301351850	Indian	Indian	OW	APD
5-13D-36 BTR	13	030S	060W	4301351862	Indian	Fee	OW	APD
5-8D-36 BTR	8	030S	060W	4301351871	Indian	Fee	OW	APD
16-1D-36 BTR	1	030S	060W	4301351872	Indian	Fee	OW	APD
8-18D-46 BTR	18	040S	060W	4301351897	Indian	Fee	OW	APD
LC Tribal 5-36D-46	36	040S	060W	4301351905	Indian	Indian	OW	APD
LC Tribal 5-26D-45	26	040S	050W	4301351907	Indian	Indian	OW	APD
14-13D-45 BTR	13	040S	050W	4301351974	Indian	Indian	OW	APD
14-34D-46 DLB	34	040S	060W	4301351975	Indian	Fee	OW	APD
LC Tribal 5-21D-45	21	040S	050W	4301352001	Indian	Indian	OW	APD
LC Tribal 8-22D-45	22	040S	050W	4301352002	Indian	Indian	OW	APD
LC Tribal 8-25D-45	25	040S	050W	4301352007	Indian	Indian	OW	APD
LC Tribal 16-25D-45	25	040S	050W	4301352008	Indian	Indian	OW	APD
LC Tribal 16-22D-45	22	040S	050W	4301352009	Indian	Indian	OW	APD
LC Tribal 16-26D-45	26	040S	050W	4301352010	Indian	Indian	OW	APD
LC Tribal 14-31D-37	31	030S	070W	4301352016	Indian	Fee	OW	APD
5-12D-45 BTR	12	040S	050W	4301352030	Indian	Indian	OW	APD
LC Tribal 9-20D-45	20	040S	050W	4301352031	Indian	Indian	OW	APD
LC Tribal 13-35D-47	35	040S	070W	4301352055	Indian	Indian	OW	APD
LC Tribal 1-23D-47	23	040S	070W	4301352057	Indian	Indian	OW	APD
9-17D-46 BTR	17	040S	060W	4301352059	Indian	Indian	OW	APD
11-18D-46 BTR	18	040S	060W	4301352060	Indian	Indian	OW	APD
9-10D-47 BTR	10	040S	070W	4301352092	Indian	Fee	OW	APD
LC Tribal 1-17D-47	17	040S	070W	4301352096	Indian	Fee	OW	APD
7-35D-37 BTR	35	030S	070W	4301352115	Indian	Fee	OW	APD
14-25D-37 BTR	25	030S	070W	4301352116	Indian	Fee	OW	APD

From: Bill Barrett Corporation

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LC Tribal 5-25-46	25	040S	060W	4301352126	Indian	Indian	OW	APD
8-33D-35 BTR	33	030S	050W	4301352161	Indian	Fee	OW	APD
5-4D-36 BTR	4	030S	060W	4301352175	Indian	Fee	OW	APD
7-4D-36 BTR	4	030S	060W	4301352176	Indian	Fee	OW	APD
LC Tribal 4-36D-47	36	040S	070W	4301352186	Indian	Indian	OW	APD
LC Tribal 4-22D-46	22	040S	060W	4301352944	Indian	Indian	OW	APD
LC Tribal 16-22D-46	22	040S	060W	4301352945	Indian	Indian	OW	APD
LC Tribal 11-19D-46	19	040S	060W	4301352946	Indian	Indian	OW	APD
LC Tribal 7-20D-45	20	040S	050W	4301352947	Indian	Indian	OW	APD
15-11D-35 BTR	11	030S	050W	4301353056	Indian	Fee	OW	APD
13-11D-35 BTR	11	030S	050W	4301353057	Indian	Fee	OW	APD
BTR 16-36D-37	36	030S	070W	4301353059	Indian	Fee	OW	APD
4-29D-35 BTR	30	030S	050W	4301353060	Indian	Fee	OW	APD
1-30D-35 BTR	30	030S	050W	4301353061	Fee	Fee	OW	APD
LC TRIBAL 3-23D-46	23	040S	060W	4301353066	Indian	State	OW	APD
LC Tribal 14-23D-46	23	040S	060W	4301353067	Indian	State	OW	APD
LC Tribal 13-25D-46	25	040S	060W	4301353068	Indian	Indian	OW	APD
LC Tribal 14-26D-46	26	040S	060W	4301353069	Indian	State	OW	APD
LC Tribal 5-26D-46	26	040S	060W	4301353070	Indian	State	OW	APD
LC Tribal 11-35D-45	35	040S	050W	4301353071	Indian	State	OW	APD
LC Tribal 7-35D-45	35	040S	050W	4301353072	Indian	State	OW	APD
LC Tribal 3-35D-45	35	040S	050W	4301353075	Indian	State	OW	APD
LC Tribal 14-36D-45	36	040S	050W	4301353076	Indian	State	OW	APD
LC Tribal 13-36D-45	36	040S	050W	4301353077	Indian	State	OW	APD
LC Tribal 10-36D-45	36	040S	050W	4301353078	Indian	State	OW	APD
LC Tribal 8-36D-45	36	040S	050W	4301353079	Indian	State	OW	APD
LC Tribal 6-36D-45	36	040S	050W	4301353080	Indian	State	OW	APD
LC Tribal 1-34D-46	34	040S	060W	4301353081	Indian	State	OW	APD
LC Tribal 9-27D-46	27	040S	060W	4301353082	Indian	State	OW	APD
LC Tribal 13-35D-45	35	040S	050W	4301353083	Indian	State	OW	APD
LC Tribal 8-35D-45	35	040S	050W	4301353084	Indian	State	OW	APD
LC Tribal 15-35D-45	35	040S	050W	4301353085	Indian	State	OW	APD
LC Tribal 12-25D-45	25	040S	050W	4301353122	Indian	Indian	OW	APD
LC Tribal 14-25D-45	25	040S	050W	4301353123	Indian	Indian	OW	APD
LC Tribal 10-25D-45	25	040S	050W	4301353124	Indian	Indian	OW	APD
LC Tribal 11-26-45	26	040S	050W	4301353125	Indian	Indian	OW	APD
LC Tribal 13-26D-45	26	040S	050W	4301353126	Indian	Indian	OW	APD
LC Tribal 7-31D-46	31	040S	060W	4301353127	Indian	Indian	OW	APD
LC Tribal 7-19D-45	19	040S	050W	4301353128	Indian	Indian	OW	APD
LC Tribal 5-19D-45	19	040S	050W	4301353130	Indian	Indian	OW	APD
LC Tribal 7-25D-46	25	040S	060W	4301353132	Indian	Indian	OW	APD

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LC Tribal 7-24D-46	24	040S	060W	4301353134		Indian	Indian	OW	APD
LC Tribal 14-31D-46	31	040S	060W	4301353135		Indian	Indian	OW	APD
LC Tribal 14-30D-46	30	040S	060W	4301353136		Indian	Indian	OW	APD
13-4-35 BTR SWD	4	030S	050W	4301353293		Fee	Fee	OW	APD
LC FEE 14-26D-47	26	040S	070W	4301353294		Fee	Indian	OW	APD
LC Fee 5-25D-47	25	040S	070W	4301353295		Fee	Indian	OW	APD
7-35-46 LC SWD	35	040S	060W	4301353296		Fee	Fee	OW	APD
LC Fee 1H-33-47	32	040S	070W	4301353309		Fee	Indian	OW	APD
LC FEE 14-2D-58	2	050S	080W	4301353312		Fee	Indian	OW	APD
LC FEE 13H-21-47	21	040S	070W	4301353313		Fee	Indian	OW	APD
LC Fee 16-21D-47	21	040S	070W	4301353326		Fee	Indian	OW	APD
16-7D-46 BTR	7	040S	060W	4301353328		Fee	Indian	OW	APD
LC Fee 15-26D-47	26	040S	070W	4301353331		Fee	Indian	OW	APD
LC Fee 4-24D-47	23	040S	070W	4301353332		Fee	Indian	OW	APD
LC Fee 5-34D-47	34	040S	070W	4301353333		Fee	Indian	OW	APD
LC Fee 5-35D-47	35	040S	070W	4301353334		Fee	Indian	OW	APD
13-34D-47 LC Fee	34	040S	070W	4301353337		Fee	Indian	OW	APD
14-35D-35 BTR	35	030S	050W	4301352120		Fee	Fee	OW	DRL
6-17D-46 BTR	17	040S	060W	4301351078		Indian	Indian	OW	OPS
5-34D-35 BTR	34	030S	050W	4301351187		Indian	Fee	OW	OPS
5-10D-45 BTR	10	040S	050W	4301351221		Indian	Indian	OW	OPS
5-3D-45 BTR	3	040S	050W	4301351810		Indian	Indian	OW	OPS
9-34D-35 BTR	34	030S	050W	4301352117		Fee	Fee	OW	OPS
5-35D-35 BTR	35	030S	050W	4301352118		Fee	Fee	OW	OPS
1-2D-46 BTR	2	040S	060W	4301353086		Indian	Fee	OW	OPS
7-21-46 DLB	21	040S	060W	4301333567	16526	Indian	Indian	OW	P
LC TRIBAL 1H-27-46	27	040S	060W	4301333568	18175	Indian	Fee	GW	P
7-29-46 DLB	29	040S	060W	4301333584	17603	Indian	Fee	GW	P
LC TRIBAL 12H-28-46	28	040S	060W	4301333631	18132	Indian	Indian	GW	P
LC TRIBAL 13H-21-46	21	040S	060W	4301333632	18107	Indian	Indian	GW	P
12-36-36 BTR	36	030S	060W	4301333638	16336	Indian	Fee	GW	P
5-5-46 BTR	5	040S	060W	4301333639	16542	Indian	Fee	OW	P
5-23-36 BTR	23	030S	060W	4301333642	16675	Indian	Fee	GW	P
14-29-36 BTR	29	030S	060W	4301333643	16725	Indian	Fee	OW	P
14-30-36 BTR	30	030S	060W	4301333644	16701	Indian	Fee	GW	P
7-20-46 DLB	20	040S	060W	4301333657	16584	Indian	Indian	OW	P
LC TRIBAL 5-21D-46	21	040S	060W	4301333658	18887	Indian	Indian	OW	P
5-20-46 DLB	20	040S	060W	4301333659	18750	Indian	Indian	GW	P
LC TRIBAL 13H-20-46	20	040S	060W	4301333678	17979	Indian	Indian	GW	P
14-7-46 BTR	7	040S	060W	4301333806	16890	Indian	Indian	GW	P
7-8-45 BTR	8	040S	050W	4301333820	16974	Indian	Indian	OW	P

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1-5-45 BTR	5	040S	050W	4301333868	16931	Indian	Indian	OW	P
5-16-36 BTR	16	030S	060W	4301333970	17195	Indian	Fee	OW	P
5-29-36 BTR	29	030S	060W	4301333972	17557	Indian	Fee	OW	P
4-30-36 BTR	30	030S	060W	4301333973	17249	Indian	Fee	OW	P
7-19-46 DLB	19	040S	060W	4301334004	19018	Indian	Indian	OW	P
5-25-36 BTR	25	030S	060W	4301334021	17126	Fee	Fee	OW	P
5-4-45 BTR	4	040S	050W	4301334089	17507	Indian	Indian	OW	P
13-2-46 BTR	2	040S	060W	4301334090	18618	Indian	Indian	OW	P
2-3-45 BTR	3	040S	050W	4301334099	17932	Indian	Indian	OW	P
7-6-45 BTR	6	040S	050W	4301334100	17653	Indian	Indian	OW	P
1-9-45 BTR	9	040S	050W	4301334101	17910	Indian	Indian	OW	P
8-10-45 BTR	10	040S	050W	4301334102	17530	Indian	Indian	OW	P
7-17-45 BTR	17	040S	050W	4301334104	17933	Indian	Indian	OW	P
16-7-45 BTR	7	040S	050W	4301334111	17665	Indian	Indian	OW	P
15-18-45 BTR	18	040S	050W	4301334112	17832	Indian	Indian	OW	P
6-12-46 BTR	12	040S	060W	4301334114	17964	Indian	Indian	OW	P
5-13-46 BTR	13	040S	060W	4301334115	17833	Indian	Indian	OW	P
16-26-36 BTR	26	030S	060W	4301334132	18028	Indian	Fee	OW	P
1-23-36 BTR	23	030S	060W	4301334136	17722	Indian	Fee	OW	P
15-10-36 BTR	10	030S	060W	4301334277	17419	Indian	Fee	OW	P
14-5-46 BTR	5	040S	060W	4301350307	17624	Fee	Fee	OW	P
14X-22-46 DLB	22	040S	060W	4301350351	17604	Indian	Indian	OW	P
16-13-36 BTR	13	030S	060W	4301350372	17853	Indian	Fee	OW	P
5-33-46 DLB	33	040S	060W	4301350397	17765	Indian	Fee	OW	P
5-34-46 DLB	34	040S	060W	4301350415	17801	Indian	State	GW	P
LC FEE 12H-32-46	32	040S	060W	4301350431	18003	Fee	Fee	OW	P
1-13D-47 BTR	13	040S	070W	4301350445	18205	Indian	Fee	OW	P
16-8D-45 BTR	8	040S	050W	4301350466	18799	Indian	Indian	OW	P
7-13D-46 BTR	13	040S	060W	4301350470	18076	Indian	Indian	OW	P
14-8D-45 BTR	8	040S	050W	4301350567	18207	Indian	Indian	OW	P
14-5D-45 BTR	5	040S	050W	4301350568	18108	Indian	Indian	OW	P
16-31D-36 BTR	31	030S	060W	4301350573	18004	Indian	Fee	OW	P
5-7D-46 BTR	7	040S	060W	4301350574	18176	Indian	Indian	OW	P
LC TRIBAL 13H-33-46	34	040S	060W	4301350575	18223	Indian	State	OW	P
5-8-45 BTR	8	040S	050W	4301350607	18279	Indian	Indian	OW	P
16-6D-45 BTR	6	040S	050W	4301350610	18177	Indian	Indian	OW	P
5-18D-45 BTR	18	040S	050W	4301350611	18300	Indian	Indian	OW	P
7-26-37 BTR	26	030S	070W	4301350641	18131	Indian	Fee	OW	P
3-11D-36 BTR	11	030S	060W	4301350642	18299	Indian	Fee	OW	P
16-1D-46 BTR	1	040S	060W	4301350675	18525	Indian	Indian	OW	P
14-3-45 BTR	3	040S	050W	4301350676	18363	Indian	Indian	OW	P

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4-17D-45 BTR	17	040S	050W	4301350687	18517	Indian	Indian	OW	P
5-6D-45 BTR	6	040S	050W	4301350688	18726	Indian	Indian	OW	P
7-7D-45 BTR	7	040S	050W	4301350689	18380	Indian	Indian	OW	P
14-10D-45 BTR	10	040S	050W	4301350754	18447	Indian	Indian	OW	P
14-9D-45 BTR	9	040S	050W	4301350755	18379	Indian	Indian	OW	P
13-16D-36 BTR	16	030S	060W	4301350757	18206	Indian	State	OW	P
5-9D-36 BTR	9	030S	060W	4301350843	18381	Indian	Fee	OW	P
16-5D-46 BTR	5	040S	060W	4301350844	18280	Fee	Fee	OW	P
5-27D-37 BTR	27	030S	070W	4301350847	18526	Indian	Fee	OW	P
7-4D-45 BTR	4	040S	050W	4301350884	18562	Indian	Indian	OW	P
2-16D-45 BTR	16	040S	050W	4301350899	18619	Indian	Indian	OW	P
16-10D-45 BTR	10	040S	050W	4301350902	18725	Indian	Indian	OW	P
5-2D-36 BTR	2	030S	060W	4301350913	18886	Indian	Fee	OW	P
13H-27-36 BTR	27	030S	060W	4301350918	18445	Indian	State	OW	P
8-16D-46 BTR	16	040S	060W	4301350953	19027	Indian	Indian	OW	P
16-16D-46 BTR	16	040S	060W	4301350956	19028	Indian	Indian	OW	P
16-9D-45 BTR	9	040S	050W	4301350962	18662	Indian	Indian	OW	P
14-31D-36 BTR	31	030S	060W	4301350973	18524	Indian	Fee	OW	P
5-10D-36 BTR	10	030S	060W	4301350978	18989	Indian	Fee	OW	P
1-32D-36 BTR	32	030S	060W	4301350979	18648	Indian	Fee	OW	P
16-12D-36 BTR	12	030S	060W	4301350980	18748	Indian	Fee	OW	P
2-18D-45 BTR	18	040S	050W	4301350991	18776	Indian	Indian	OW	P
3-1-46 BTR	1	040S	060W	4301351017	18777	Indian	Fee	OW	P
10-5-45 BTR	5	040S	050W	4301351062	18724	Indian	Indian	OW	P
12-4D-45 BTR	4	040S	050W	4301351063	18813	Indian	Indian	OW	P
1-10D-45 BTR	10	040S	050W	4301351064	18966	Indian	Indian	OW	P
16-2D-46 BTR	2	040S	060W	4301351079	18830	Indian	Indian	OW	P
9H-4-45 BTR	4	040S	050W	4301351092	18814	Indian	Indian	OW	P
12-17-45 BTR	17	040S	050W	4301351097	18984	Indian	Indian	OW	P
5-9D-46 BTR	9	040S	060W	4301351109	19313	Indian	Fee	OW	P
14-9D-36 BTR	9	030S	060W	4301351144	19004	Indian	Fee	OW	P
5-31D-36 BTR	31	030S	060W	4301351146	18691	Indian	Fee	OW	P
4-9D-45 BTR	9	040S	050W	4301351157	18883	Indian	Indian	OW	P
8-12D-46 BTR	12	040S	060W	4301351159	18911	Indian	Indian	OW	P
LC TRIBAL 16-23D-47	23	040S	070W	4301351180	18617	Indian	Indian	OW	P
14-7D-45 BTR	7	040S	050W	4301351222	18949	Indian	Indian	OW	P
5-16D-45 BTR	16	040S	050W	4301351223	18987	Indian	Indian	OW	P
4-5D-45 BTR	5	040S	050W	4301351242	18882	Indian	Indian	OW	P
LC TRIBAL 16H-19-45	19	040S	050W	4301351278	18627	Indian	Indian	OW	P
LC TRIBAL 13-19D-45	19	040S	050W	4301351280	18628	Indian	Indian	OW	P
LC TRIBAL 5-30D-45	30	040S	050W	4301351281	19448	Indian	Indian	OW	P

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LC TRIBAL 15-24D-46	24	040S	060W	4301351283	18626	Indian	Indian	OW	P
LC TRIBAL 13H-24-46	19	040S	050W	4301351289	18629	Indian	Indian	OW	P
7-16-47 BTR	16	040S	070W	4301351296	18950	Indian	Fee	OW	P
14-18D-45 BTR	18	040S	050W	4301351313	19005	Indian	Indian	OW	P
LC TRIBAL 16-30D-46	30	040S	060W	4301351320	19006	Indian	Indian	OW	P
LC TRIBAL 5-20D-45	20	040S	050W	4301351331	19449	Indian	Indian	OW	P
11-8D-46 BTR	8	040S	060W	4301351336	19314	Indian	Indian	OW	P
5-7D-45 BTR	7	040S	050W	4301351350	18951	Indian	Indian	OW	P
7-5-35 BTR	5	030S	050W	4301351599	19078	Indian	Fee	OW	P
13-5D-35 BTR	5	030S	050W	4301351600	18996	Indian	Fee	OW	P
11-5D-35 BTR	5	030S	050W	4301351601	19061	Fee	Fee	OW	P
15-5D-35 BTR	5	030S	050W	4301351602	19062	Fee	Fee	OW	P
9-5D-35 BTR	5	030S	050W	4301351609	19029	Indian	Fee	OW	P
3-5D-35 BTR	5	030S	050W	4301351638	19079	Indian	Fee	OW	P
7-8-46 BTR	8	040S	060W	4301351702	19315	Indian	Indian	OW	P
7-30-46 DLB	30	040S	060W	4301351703	18997	Fee	Indian	OW	P
3-13D-46 BTR	13	040S	060W	4301351718	18881	Indian	Indian	OW	P
2-13D-46 BTR	13	040S	060W	4301351719	18885	Indian	Indian	OW	P
12-12D-46 BTR	12	040S	060W	4301351720	18867	Indian	Indian	OW	P
10-12D-46 BTR	12	040S	060W	4301351721	18856	Indian	Indian	OW	P
11-11D-47 BTR	11	040S	070W	4301352091	19633	Fee	Fee	OW	P
7-12D-47 BTR	12	040S	070W	4301352094	19600	Indian	Fee	OW	P
5-12D-47 BTR	12	040S	070W	4301352095	19634	Indian	Fee	OW	P
14-33D-35 BTR	33	030S	050W	4301352162	19450	Indian	Fee	OW	P
16-33D-35 BTR	33	030S	050W	4301352163	19451	Indian	Fee	OW	P
14-22-46 DLB	22	040S	060W	4301333660	17604	Indian	Indian	D	PA
13H-31-36 BTR	31	030S	060W	4301350465	18485	Indian	Fee	OW	PA
16X-23D-36 BTR	23	030S	060W	4301350623	18007	Indian	State	OW	PA
8-6-45 BTR	6	040S	050W	4301350900	18561	Indian	Indian	OW	PA
13-13-36 BTR	13	030S	060W	4301350919	18364	Indian	Fee	OW	PA
7-28-46 DLB	28	040S	060W	4301333569	16460	Indian	Indian	OW	S
5-21-36 BTR	21	030S	060W	4301333641	16674	Indian	Fee	GW	S
13-26-36 BTR	26	030S	060W	4301333980	17569	Indian	Fee	OW	S
14-1-46 BTR	1	040S	060W	4301334113	18516	Indian	Indian	OW	S
16-21-36 BTR	21	030S	060W	4301334130	17721	Indian	Fee	OW	S
14-21-36 BTR	21	030S	060W	4301334131	18006	Indian	Fee	OW	S
7-16-36 BTR	16	030S	060W	4301334133	17834	Indian	Fee	OW	S
1-30-36 BTR	30	030S	060W	4301334134	17905	Indian	Fee	OW	S
16-30-36 BTR	30	030S	060W	4301334135	18005	Indian	Fee	OW	S
3-23-36 BTR	23	030S	060W	4301334137	17860	Indian	Fee	OW	S
16-16-36 BTR	16	030S	060W	4301334138	17666	Indian	Fee	OW	S

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

4-26-36 BTR	26	030S	060W	4301334139	17620	Fee	Fee	OW	S
9-11-36 BTR	11	030S	060W	4301334276	17451	Indian	Fee	OW	S
3-36-36 BTR	36	030S	060W	4301350398	17955	Indian	Fee	OW	S
7-10-36 BTR	10	030S	060W	4301350437	18052	Indian	Fee	OW	S
16-12D-46 BTR	12	040S	060W	4301350467	18051	Indian	Indian	OW	S
13H-13-46 BTR	13	040S	060W	4301350468	18208	Indian	Indian	OW	S
13-12-46 BTR	12	040S	060W	4301350469	18233	Indian	Indian	OW	S
14-8D-36 BTR	8	030S	060W	4301350612	18163	Indian	Fee	OW	S
14-7D-36 BTR	7	030S	060W	4301350613	18330	Indian	Fee	OW	S
16-9-36 BTR	9	030S	060W	4301350645	18078	Indian	Fee	OW	S
7-27-37 BTR	27	030S	070W	4301350647	18090	Indian	Fee	OW	S
16-12D-37 BTR	12	030S	070W	4301350785	18446	Indian	Fee	OW	S
14-21D-37 BTR	21	030S	070W	4301350859	18548	Indian	Fee	OW	S
10-18D-36 BTR	18	030S	060W	4301350915	18884	Indian	Fee	OW	S
5-27D-36	27	030S	060W	4301350917	18482	Indian	State	OW	S
10-36D-36 BTR	36	030S	060W	4301351005	18523	Indian	Fee	OW	S
14-6D-45 BTR	6	040S	050W	4301351158	18967	Indian	Indian	OW	S
5H-1-46 BTR UTELAND BUTTE	6	040S	050W	4301351215	18728	Indian	Indian	OW	S
5H-1-46 BTR WASATCH	6	040S	050W	4301351216	18727	Indian	Indian	OW	S
1-25D-36 BTR	25	030S	060W	4301351294	18798	Indian	Fee	OW	S
5-5D-35 BTR	5	030S	050W	4301351605	19055	Indian	Fee	OW	S
16-23-36 BTR	23	030S	060W	4301333971	17182	Indian	Fee	OW	TA
LC TRIBAL 14-23D-47	23	040S	070W	4301334022	18616	Indian	Indian	OW	TA
5-32D-36 BTR	32	030S	060W	4301350756	18328	Indian	Fee	OW	TA



October 20, 2016

Re: Bill Barrett Corporation Transfer to New Operator

Dear Ms. Medina:

Attached please find the change of operation Form 9, Form 5's and Request to Transfer APD form changing the operator from Bill Barrett Corporation to RIG II, LLC, effective 11/1/2016. Badlands Energy – Utah, LLC will be a sub-operator.

**New Operator Contact information:**

RIG II, LLC  
1582 West 2600 South  
Woods Cross, Utah 84087-0298  
Telephone:(801) 683-4245  
Fax:(801) 298-9889

Upon reviewing the attached, please contact myself with any questions at 303-312-8115.

Sincerely,

Bill Barrett Corporation

A handwritten signature in cursive script that reads "Brady Riley".

Brady Riley  
Permit Analyst

**RECEIVED**  
OCT 21 2016  
DIV. OF OIL, GAS & MINING

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

<b>1. TYPE OF WELL</b> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> (see attached well list)
<b>2. NAME OF OPERATOR:</b> RIG II, LLC <u>N14055</u>		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> N/A
<b>3. ADDRESS OF OPERATOR:</b> 1582 West 2600 South CITY Wood Cross STATE UT ZIP 84087		<b>7. UNIT or CA AGREEMENT NAME:</b>
PHONE NUMBER: (801) 683-4245		<b>8. WELL NAME and NUMBER:</b> (see attached well list)
<b>4. LOCATION OF WELL</b> FOOTAGES AT SURFACE: (see attached well list) COUNTY:		<b>9. API NUMBER:</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: STATE: UTAH		<b>10. FIELD AND POOL, OR WILDCAT:</b>

**11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> (Submit In Duplicate) Approximate date work will start: <u>11/1/2016</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

**12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.**

RIG II, LLC IS SUBMITTING THIS SUNDRY AS NOTIFICATION THAT THE WELLS LISTED ON THE ATTACHED LIST HAVE BEEN SOLD TO RIG II, LLC BY BILL BARRETT CORPORATION EFFECTIVE 11/1/2016. PLEASE REFER ALL FUTURE CORRESPONDENCE TO THE ADDRESS BELOW.

RIG II, LLC  
1582 West 2600 South  
Woods Cross, Utah 84087-0298  
801-683-4245  
(STATE/FEE BOND # 9219529/ BLM BOND # UTB000712/ BIA BOND # LPM9224670)

BILL BARRETT CORPORATION N21165  
Duana Zavala NAME (PLEASE PRINT)  
Duana Zavala SIGNATURE  
Senior Vice President -  
EH&S, Government and Regulatory Affairs

RIG II, LLC  
Jesse McSwain NAME (PLEASE PRINT)  
Jesse McSwain SIGNATURE  
Manager

NAME (PLEASE PRINT) Jesse McSwain TITLE Manager  
SIGNATURE Jesse McSwain DATE 10/20/16

(This space for State use only)

**APPROVED**

NOV 07 2016

DIV. OIL GAS & MINING  
BY: Rachael Medina

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**Request to Transfer Application or Permit to Drill**

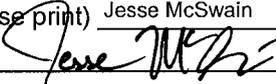
(This form should accompany a Sundry Notice, Form 9, requesting APD transfer)

<b>Well name:</b>	(See attached list)
<b>API number:</b>	
<b>Location:</b>	Qtr-Qtr:                      Section:                      Township:                      Range:
<b>Company that filed original application:</b>	Bill Barrett Corporation
<b>Date original permit was issued:</b>	
<b>Company that permit was issued to:</b>	Bill Barrett Corporation

Check one	Desired Action:
	<b>Transfer pending (unapproved) Application for Permit to Drill to new operator</b>
	The undersigned as owner with legal rights to drill on the property, hereby verifies that the information as submitted in the pending Application for Permit to Drill, remains valid and does not require revision. The new owner of the application accepts and agrees to the information and procedures as stated in the application.
<input checked="" type="checkbox"/>	<b>Transfer approved Application for Permit to Drill to new operator</b>
	The undersigned as owner with legal rights to drill on the property as permitted, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.	Yes	No
If located on private land, has the ownership changed?	<input checked="" type="checkbox"/>	
If so, has the surface agreement been updated?		<input checked="" type="checkbox"/>
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?		<input checked="" type="checkbox"/>
Have there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?		<input checked="" type="checkbox"/>
Have there been any changes to the access route including ownership or right-of-way, which could affect the proposed location?		<input checked="" type="checkbox"/>
Has the approved source of water for drilling changed?		<input checked="" type="checkbox"/>
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?		<input checked="" type="checkbox"/>
Is bonding still in place, which covers this proposed well? Bond No. <small>9219529-UDOGM / UTB000712-BLM / LPM9224670-BIA</small>	<input checked="" type="checkbox"/>	

Any desired or necessary changes to either a pending or approved Application for Permit to Drill that is being transferred, should be filed on a Sundry Notice, Form 9, or amended Application for Permit to Drill, Form 3, as appropriate, with necessary supporting information as required.

Name (please print) Jesse McSwain                      Title Manager  
Signature                       Date 10/20/16  
Representing (company name) RIG II, LLC

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator on the Application for Permit to Drill.

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

UIC FORM 5

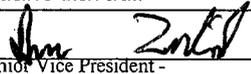
TRANSFER OF AUTHORITY TO INJECT

Well Name and Number 6-32-36 BTR SWD	API Number 4301350921
Location of Well Footage : 1628 FNL 1553 FWL County : DUCHENSE QQ, Section, Township, Range: SENW 32 3S 6W State : UTAH	Field or Unit Name CEDAR RIM Lease Designation and Number 2OG0005608

EFFECTIVE DATE OF TRANSFER: 11/1/2016

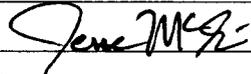
CURRENT OPERATOR

Company: BILL BARRETT CORPORATION  
Address: 1099 18th Street Ste 2300  
city DENVER state CO zip 80202  
Phone: (303) 293-9100  
Comments:

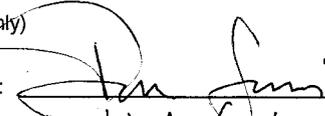
Name: Duane Zavadil  
Signature:   
Senior Vice President -  
Title: EH&S, Government and Regulatory Affairs  
Date: 10/20/16

NEW OPERATOR

Company: RIG II, LLC  
Address: 1582 West 2600 South  
city Wood Cross state UT zip 84087  
Phone: (801) 683-4245  
Comments:

Name: Jesse McSwain  
Signature:   
Title: Manager  
Date: 10/20/16

(This space for State use only)

Transfer approved by:   
Title: VIC Geologist

Approval Date: 11/3/16

Comments:

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

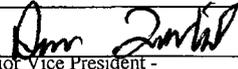
UIC FORM 5

TRANSFER OF AUTHORITY TO INJECT

Well Name and Number 16-6D-46 BTR SWD	API Number 4301350781
Location of Well Footage : 0200 FSL 0099 FEL County : DUCHESNE QQ, Section, Township, Range: SESE 6 4S 6W State : UTAH	Field or Unit Name ALTAMONT Lease Designation and Number 2OG0005608

EFFECTIVE DATE OF TRANSFER: 11/1/2016

**CURRENT OPERATOR**

Company: BILL BARRETT CORPORATION	Name: Duane Zavadil
Address: 1099 18th Street Ste 2300	Signature: 
city DENVER state CO zip 80202	Title: Senior Vice President - EH&S, Government and Regulatory Affairs
Phone: (303) 293-9100	Date: 10/20/16
Comments:	

**NEW OPERATOR**

Company: RIG II, LLC	Name: Jesse McSwain
Address: 1582 West 2600 South	Signature: 
city Wood Cross state UT zip 84087	Title: Manager
Phone: (801) 683-4245	Date: 10/20/16
Comments:	

(This space for State use only)

Transfer approved by:   
Title: VIC

Approval Date: 11/3/16

Comments:

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

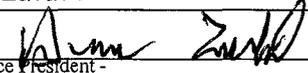
UIC FORM 5

**TRANSFER OF AUTHORITY TO INJECT**

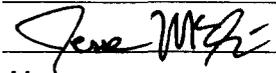
Well Name and Number SWD 9-36 BTR	API Number 4301350646
Location of Well Footage : 0539 FSL 0704 FEL County : DUCHESNE	Field or Unit Name CEDAR RIM
QQ, Section, Township, Range: SESE 9 3S 6W State : UTAH	Lease Designation and Number 2OG0005608

EFFECTIVE DATE OF TRANSFER: 11/1/2016

**CURRENT OPERATOR**

Company: <u>BILL BARRETT CORPORATION</u>	Name: <u>Duane Zavadil</u>
Address: <u>1099 18th Street Ste 2300</u>	Signature: 
city <u>DENVER</u> state <u>CO</u> zip <u>80202</u>	Title: <u>Senior Vice President - EH&amp;S, Government and Regulatory Affairs</u>
Phone: <u>(303) 293-9100</u>	Date: <u>10/20/16</u>
Comments:	

**NEW OPERATOR**

Company: <u>RIG II, LLC</u>	Name: <u>Jesse McSwain</u>
Address: <u>1582 West 2600 South</u>	Signature: 
city <u>Wood Cross</u> state <u>UT</u> zip <u>84087</u>	Title: <u>Manager</u>
Phone: <u>(801) 683-4245</u>	Date: <u>10/20/16</u>
Comments:	

(This space for State use only)

Transfer approved by: \_\_\_\_\_ Approval Date: \_\_\_\_\_

Title: \_\_\_\_\_

Comments:

This well was approved by USEPA.  
EPA approval will be required.