

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

**CONFIDENTIAL**

FORM 3

AMENDED REPORT   
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>				5. MINERAL LEASE NO: ML-49797	6. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>				7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>				8. UNIT or CA AGREEMENT NAME: N/A	
2. NAME OF OPERATOR: BILL BARRETT CORPORATION				9. WELL NAME and NUMBER: State 8H-32-15-12	
3. ADDRESS OF OPERATOR: 1099 18th St, Suite 230C CITY Denver STATE CO ZIP 80202			PHONE NUMBER: (303) 312-8134	10. FIELD AND POOL, OR WILDCAT: Wildcat	
4. LOCATION OF WELL (FOOTAGES) 535332X 4369782Y 39.478787 -110.589203 AT SURFACE: 1988' FNL, 207' FEL 533984X 4369779Y 39.478814 AT PROPOSED PRODUCING ZONE: SWNW, 1980' FNL, 660' FWL -110.604867				11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENE 32 15S 12E	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: Approximately 24 miles southeast of Price, UT				12. COUNTY: Carbon	13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 207' SHL / 660' BHL		16. NUMBER OF ACRES IN LEASE: 640 acres		17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 640 acres	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) 1235' BHL		19. PROPOSED DEPTH: 11,746		20. BOND DESCRIPTION: LPM4138147	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5506'		22. APPROXIMATE DATE WORK WILL START: 1/1/2010		23. ESTIMATED DURATION: 45 days	

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT		
12 1/4"	9 5/8" J-55 36#	1,000	Hal Lt Prem	110 sx	2.93 ft3/sk 11.5 ppg
			Premium	180 sx	1.8 ft3/sk 13.5 ppg
8 3/4"	7" N-80 23# & 26#	7,800	50/50 Poz	1040 sx	1.47 ft3/sk 13.0 ppg
6 1/8"	4 1/2" P-110 15.1#	11,746	50/50 Poz	1320 sx	1.31 ft3/sk 13.5 ppg

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Tracey Fallang TITLE Regulatory Analyst

SIGNATURE *Tracey Fallang* DATE 5/1/2009

(This space for State use only)

API NUMBER ASSIGNED: 43007-31511 APPROVAL: \_\_\_\_\_

**RECEIVED**  
**MAY 04 2009**  
DIV. OF OIL, GAS & MINING



State 8H-32-15-12 Casing-Cementing Options

No. 24 Continued:

	Size of Hole	Size of Casing	Grade Weight/ft	Setting Depth (MD)	Cement Type	Sx Cement	Yield	Slurry Weight
<b>Option A - Uncemented Production Casing (swell packers)</b>								
Conductor	26"	16"	65#	80'	grout			
Surface	12 1/4"	9 5/8"	J-55, 36#	1000'	Hal Lt Prem	110	2.93 ft <sup>3</sup> /sk	11.5 ppg
					Prem	180	1.8 ft <sup>3</sup> /sk	13.5 ppg
Intermediate	8 3/4"	7"	N-80, 26# & 23#	7,775'	50/50 Poz	1040	1.47 ft <sup>3</sup> /sk	13.0 ppg
Production	6 1/8"	4 1/2"	P-110, 15.1#	11,768'	N/A	N/A	N/A	N/A

**Option B - Cemented Production Casing**

Conductor	26"	16"	65#	80'	grout			
Surface	12 1/4"	9 5/8"	J-55, 36#	1000'	Hal Lt Prem	110	2.93 ft <sup>3</sup> /sk	11.5 ppg
					Prem	180	1.8 ft <sup>3</sup> /sk	13.5 ppg
Intermediate	8 3/4"	7"	N-80, 26# & 23#	7,775'	50/50 Poz	1040	1.47 ft <sup>3</sup> /sk	13.0 ppg
Production	6 1/8"	4 1/2"	P-110, 15.1#	11,768'	50/50 Poz	1320	1.31 ft <sup>3</sup> /sk	13.5 ppg

BBC will provide cement coverage to surface on either option, for each string cemented. If the cement drops out of eyesight BBC will run a temperature log.

Top of Producing Interval: 1988' FNL, 672' FEL, Sec. 32

## DRILLING PROGRAM

BILL BARRETT CORPORATION

State 8H-32-15-12

SENE, 1988' FNL, 207' FEL, Sec. 32, T15S-R12E, S.L.B.&M. (Surface Hole)  
SWNE, 1980' FNL, 660' FWL, Sec. 32, T15S-R12E, S.L.B.&M. (Bottom Hole)  
Carbon County, Utah

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

<b>Formation</b>	<b>Depth – MD</b>	<b>Depth – TVD</b>
Morrison	1118'	1118'
Curtis	1737'	1737'
Entrada	1945'	1945'
Carmel	2280'	2280'
Navajo	2567'	2567'
Kayenta	2949'	2949'
Wingate	3057'	3057'
Chinle	3461'	3461'
Moenkopi	3784'	3784'
Sinbad	4276'	4276'
Kaibab	4701'	4701'
Coconino	4888'	4888'
Pennsylvanian	5708'	5708'
Manning Canyon*	7279'	7268'
TD	11,768'	7845'

**PROSPECTIVE PAY**

\*The Manning Canyon formation is the primary objective for oil/gas.

3. BOP and Pressure Containment Data

<b>Depth Intervals</b>	<b>BOP Equipment</b>
0 – 1000'	No pressure control required
1000' – TD	11" 3000# Ram Type BOP 11" 3000# Annular BOP
- Drilling spool to accommodate choke and kill lines;	
- Ancillary equipment and choke manifold rated at 3,000#. All well control equipment will be in accordance with the requirements of R649-3-7.	
- 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**

SEE ATTACHED SPREADSHEET AND BACKUP

5. **Cementing Program**

SEE ATTACHED SPREADSHEET AND BACKUP

6. **Mud Program**

<u>Interval</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss (API filtrate)</u>	<u>Remarks</u>
0 – 1000'	8.5 – 8.9	26 – 36	---	Freshwater Spud Mud
1000' – 7,775'	8.4 – 9.4	32 – 48	10c or less	LSND System - Areated
7,775' – 11,768'	8.9 – 10.5	36 – 65	24 cc or less	OBM
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;
Sampling	30' samples from surface to TD
Surveys	Horizontal Leg: MWD surveys every 90'
Logging	Vertical Section: GR, DEN, NEU, DIL, SFL, FMI and Sonic Scanner over certain intervals Horizontal Leg: MWD GR

8. **Anticipated Abnormal Pressures or Temperatures**

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 4283 psi\* and maximum anticipated surface pressure equals approximately 2557 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. Drilling Schedule**

Location Construction: January 1, 2010  
Spud: January 10, 2010  
Duration: 35 days drilling time  
10 days completion time with intermittent testing up to 60 days

**11. Water Source**

BBC intends on using a diversion point along the Price River through a direct purchase agreement with Janice Hamilton under water right No. 91-4122 (A43613). The diversion will be along the Price River within the SE/4 NE/4, Section 12, T16S, R11E, SLB&M. on existing disturbance. A temporary change of use and diversion of water has been approved by the State of Utah –Water Rights Office (t35266).

Should additional water sources be pursued they will be properly permitted through the State of Utah – Division of Water Rights. Additionally, DOGM will be notified of any changes in water supply.

**12. Archaeology**

Montgomery Archaeological Consultants conducted a Class III archaeology survey under MOAC report no. 08-312 dated November 11, 2008. No cultural resources were documented.

**13. Paleontology**

Intermountain Paleo-Consulting conducted two paleontological surveys of the area under IPC 08-321 dated November 11, 2008 and IPC 09-54 dated March 12, 2009. This site was classified as a Class 3a (moderate potential) under the new Potential Fossil Yield Classification System (October 2007).

**14. Additional Information For Oil Base Mud**

- A. A reserve pit will be constructed for this location. This pit will be constructed so that a minimum of two vertical feet of freeboard exists above the top of the pit at all times and at least one-half of the holding capacity will be below ground level. The pit will be lined with a synthetic reinforced liner, 30 millimeters thick, with sufficient bedding used to cover any rocks prior to putting any fluids into the pit. The pad will be designed so that runoff from adjacent slopes does not flow into the reserve pit. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. At the beginning of drilling operations this reserve pit will have an open-ended dike placed in the pit that allows the fluids to migrate from one side of the pit to the other during the drilling of the surface and intermediate hole using water based mud. At the time that operations begin to drill the production hole with oil based mud, this dike will be extended, dividing the pit into two distinct, isolated halves allowing no migration of fluids from one side to the other. At that time all fluids will be removed from the end of the pit to be used as a cuttings pit. This cuttings pit will be used for oil based cuttings generated during drilling of the production hole.
- B. Oil-based mud will be mixed in the closed circulating system and transferred to four 500-bbl tanks on location for storage prior to and after drilling operations. Drip pans will be installed below the rotary beams on the substructure and can be viewed on site from the cellar area. As

the production section of the hole is drilled, the cuttings transported to the surface with the drilling fluid will be mechanically separated from the drilling fluid as waste by two shale-shakers and then cleaned/dried via a mud cleaner and/or centrifuge. These separated cuttings will be collected in a steel catch tank once they leave the closed circulating system and transported and placed into the cuttings half of the reserve pit.

- C. Plastic material will underlay the rig, oil base mud/diesel storage tanks and mud pits. All tanks on location will be placed inside of berms. Any oily waste fluids and sediments generated at the work site during drilling operations or when cleaning the fluid containment system after drilling will also be placed into the cuttings half of the pit.
- D. All rig ditches will be lined and directed to a lined sump for fluid recovery. A drip pan will be installed on the BOP stack, a mud bucket will be utilized as needed on connections and a vacuum system will be used on the rig floor for fluid recovery in those areas.

Once all waste has been placed in the cuttings portion of the pit and all necessary approvals obtained, the oilfield waste management consultant Soli-Bond or a similar company will mobilize equipment and personnel to the site to perform the cement based solidification/stabilization process in-situ for encapsulation. Soil will be backfilled over the processed material used on the cuttings side of the pit and that portion of the pit area will be returned to the existing grade bordering the pit. The half of the reserve pit containing water based materials will be left to evaporate and will be closed and reclaimed at the time that portion of the pit is dry.



# Bill Barrett Corporation

## YELLOW JACKET CEMENT VOLUMES

**Well Name:** State 8H-32-15-12

### Surface Hole Data:

Total Depth:	1,000'
Top of Cement:	0'
OD of Hole:	12.250"
OD of Casing:	9.625"

### Calculated Data:

Lead Volume:	156.6	ft <sup>3</sup>
Lead Fill:	500'	
Tail Volume:	156.6	ft <sup>3</sup>
Tail Fill:	500'	

### Cement Data:

Lead Yield:	2.99	ft <sup>3</sup> /sk
Tail Yield:	1.80	ft <sup>3</sup> /sk
% Excess:	100%	

### Calculated # of Sacks:

# SK's Lead:	110
# SK's Tail:	180

### Intermediate Hole Data: Option A

Total Depth:	7,800'
Top of Cement:	0'
OD of Hole:	8.750"
OD of Casing:	7.000"

### Calculated Data:

Lead Volume:	1172.6	ft <sup>3</sup>
Lead Fill:	7,800'	

### Cement Data:

Lead Yield:	1.47	ft <sup>3</sup> /sk
% Excess:	30%	

### Calculated # of Sacks:

# SK's Lead:	1040
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### Production Hole Data: Option B

Total Depth:	11746
Top of Cement:	0
OD of Hole:	6.125
OD of Casing:	4.5

### Calculated Data:

Lead Volume:	1319.2	ft <sup>3</sup>
Lead Fill:	11746	

### Cement Data:

Lead Yield:	1.306	ft <sup>3</sup> /sk
% Excess:	30%	

### Calculated # of Sacks:

# SK's Lead:	1320
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**State 8H-32-15-12 Proposed Cementing Program**

<u>Job Recommendation</u>	<u>Surface Casing</u>
<b>Lead Cement - (500' - 0')</b>	
Halliburton Light Premium	Fluid Weight: 11.5 lbm/gal
2.0% Calcium Chloride	Slurry Yield: 2.93 ft <sup>3</sup> /sk
0.25 lbm/sk Ploy-E-Flake	Total Mixing Fluid: 17.829 Gal/sk
	Top of Fluid: 0'
	Calculated Fill: 500'
	Volume: 55.78 bbl
	<b>Proposed Sacks: 110 sks</b>
<b>Tail Cement - (1000' - 500')</b>	
Premium Cement	Fluid Weight: 13.5 lbm/gal
94 lbm/sk Premium Cement	Slurry Yield: 1.80 ft <sup>3</sup> /sk
1.0% Calcium Chloride	Total Mixing Fluid: 9.341 Gal/sk
0.25 lbm/sk Ploy-E-Flake	Top of Fluid: 500'
	Calculated Fill: 500'
	Volume: 59.05 bbl
	<b>Proposed Sacks: 180 sks</b>

<u>Job Recommendation</u>	<u>Intermediate Casing</u>
<b>Lead Cement - (7800' - 0')</b>	
50/50 Poz Premium	Fluid Weight: 13 lbm/gal
3.0 % Bentonite Total	Slurry Yield: 1.47 ft <sup>3</sup> /sk
5.0 lbm/sk Gilsonite	Total Mixing Fluid: 6.39 Gal/sk
0.6% Halad®-9	Top of Fluid: 0'
0.3% CFR-3	Calculated Fill: 7,800'
0.125 lbm/sk Flocele	Volume: 271.48 bbl
	<b>Proposed Sacks: 1040 sks</b>

<u>Job Recommendation</u>	<u>Production Casing</u>
<b>Lead Cement - (11746' - 0')</b>	
50/50 Poz Premium	Fluid Weight: 13.5 lbm/gal
	Slurry Yield: 1.31 ft <sup>3</sup> /sk
0.5% Halad®-344	Total Mixing Fluid: 5.691 Gal/sk
0.4% Halad 413	Top of Fluid: 0'
0.3% Econolite	Calculated Fill: 11,746'
0.2% Versaset	
0.4% HR-5 (Retarder)	
0.3% Super CBL (Expander)	Volume: 541.78 bbl
	<b>Proposed Sacks: 1320 sks</b>

Well name:	<b>State 8H-32-15-12</b>
Operator:	<b>Bill Barrett Corporation</b>
String type:	Surface
Location:	Section 32, T15S-R12E Carbon County, UT

**Design parameters:**

**Collapse**

Mud weight: 8.90 ppg

Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 70.00 °F  
 Bottom hole temperature: 78 °F  
 Temperature gradient: 0.76 °F/100ft  
 Minimum section length: 1,000 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 403 psi  
 Internal gradient: 0.22 psi/ft  
 Calculated BHP 623 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.50 (B)

Tension is based on buoyed weight.  
 Neutral point: 868 ft

Non-directional string.

**Re subsequent strings:**

Next setting depth: 7752 ft  
 Next mud weight: 9.200 ppg  
 Next setting BHP: 3,714 psi  
 Fracture mud wt: 12.000 ppg  
 Fracture depth: 1,000 ft  
 Injection pressure 623 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	1000	9.625	36.00	J-55	ST&C	1000	1000	8.796	71.2

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	462	2020	4.370	623	3520	5.65	31	394	12.61 J

Prepared Jim Davidson  
 by: Bill Barrett

Phone: (303) 312-8115  
 FAX: (303) 291-0420

Date: 8-Apr-09  
 Denver, Colorado

Remarks:

Collapse is based on a vertical depth of 1000 ft, a mud weight of 8.9 ppg. The casing is considered to be evacuated for collapse purposes.  
 Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:

**State 8H-32-15-12**

Operator: **Bill Barrett Corporation**

String type: Intermediate

Location: Section 32, T15S-R12E Carbon County, UT

**Design parameters:**

**Collapse**

Mud weight: 9.20 ppg

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Environment:**

H2S considered? No  
Surface temperature: 70.00 °F

Design is based on evacuated pipe.

Bottom hole temperature 129 °F  
Temperature gradient: 0.76 °F/100ft  
Minimum section length: 1,000 ft

**Burst:**

Design factor 1.00

Cement top: 800 ft

**Burst**

Max anticipated surface pressure: 2,044 psi  
Internal gradient: 0.22 psi/ft  
Calculated BHP 3,753 psi

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

**Directional Info - Build & Hold**

Kick-off point 7,039 ft  
Departure at shoe: 433 ft  
Maximum dogleg: 12 °/100ft  
Inclination at shoe: 85.58 °

No backup mud specified.

Tension is based on buoyed weight.  
Neutral point: 6,770 ft

**Re subsequent strings:**

Next setting depth: 7,752 ft  
Next mud weight: 9.200 ppg  
Next setting BHP: 3,787 psi  
Fracture mud wt: 14.000 ppg  
Fracture depth: 7,771 ft  
Injection pressure 5,652 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
2	7000	7	23.00	N-80	LT&C	7000	7000	6.25	323.5
1	800	7	26.00	N-80	LT&C	7519	7800	6.151	53.7

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
2	3345	3830	1.145	3584	6340	1.77	156	442	2.83 J
1	3714	4954	1.334	3753	7240	1.93	-5	519	99.99 J

Prepared Jim Davidson  
by: Bill Barrett

Phone: (303) 312-8115  
FAX: (303) 291-0420

Date: 8-Apr-08  
Denver, Colorado

Remarks:

Collapse is based on a vertical depth of 7515 ft, a mud weight of 9.2 ppg. The casing is considered to be evacuated for collapse purposes.  
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a tensile load which is added to the axial load.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:

**State 8H-32-15-12**

Operator: **Bill Barrett Corporation**

String type: Production: Frac

Location: Section 32, T15S-R12E Carbon County, UT

**Design parameters:**

**Collapse**

Mud weight: 9.20 ppg

Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 70.00 °F  
 Bottom hole temperature: 130 °F  
 Temperature gradient: 0.76 °F/100ft  
 Minimum section length: 1,500 ft

**Burst**

Max anticipated surface pressure: 6,028 psi  
 Internal gradient: 0.22 psi/ft  
 Calculated BHP 7,771 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.50 (B)

Tension is based on buoyed weight.  
 Neutral point: 6,818 ft

**Directional Info - Build & Hold**

Kick-off point 7039 ft  
 Departure at shoe: 4422 ft  
 Maximum dogleg: 12 °/100ft  
 Inclination at shoe: 85.58 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	11746	4.5	15.10	P-110	LT&C	7823	11746	3.701	362

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	3787	14350	3.789	7771	14420	1.86	103	406	3.94 J

Prepared Jim Davidson  
 by: Bill Barrett

Phone: (303) 312-8115  
 FAX: (303) 291-0420

Date: April 8, 2009  
 Denver, Colorado

Remarks:

Collapse is based on a vertical depth of 7823 ft, a mud weight of 9.2 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a tensile load which is added to the axial load.

*Engineering responsibility for use of this design will be that of the purchaser.*



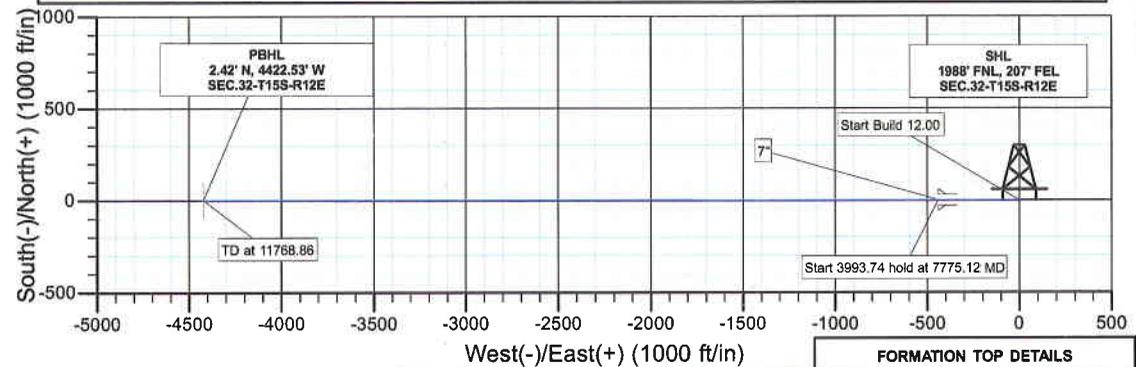
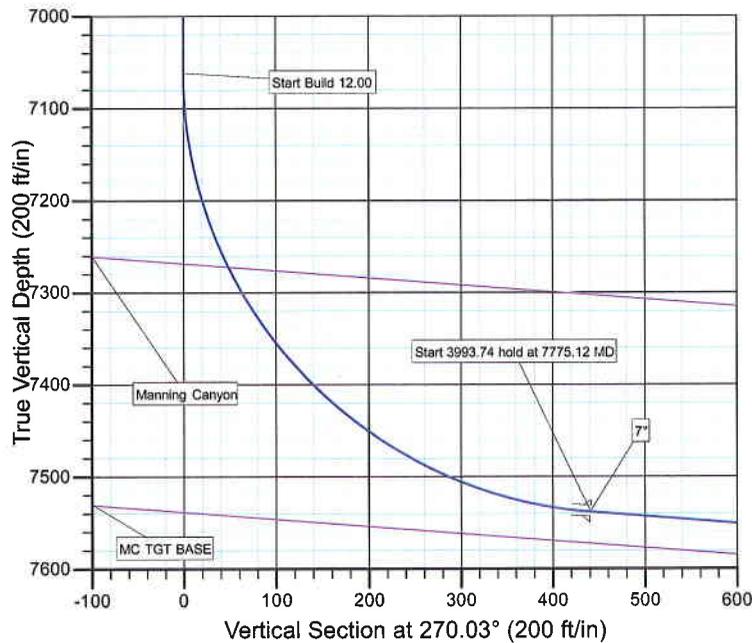
Company: BILL BARRETT CORP  
 Project: CARBON COUNTY, UT (NAD 27)  
 Site: STATE #8H-32-15-12  
 Well: STATE #8H-32-15-12  
 Wellbore: STATE #8H-32-15-12  
 Design: Design #2  
 Lat: 39° 28' 43.840 N  
 Long: 110° 35' 21.130 W  
 GL: 5505.00  
 KB: WELL @ 5522.00ft (Original Well Elev)



SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7061.95	0.00	0.00	7061.95	0.00	0.00	0.00	0.00	0.00	Start Build 12.00
7775.12	85.58	270.03	7538.00	0.24	-440.67	12.00	270.03	440.67	Start 3993.74 hold at 7775.12 MD
11768.86	85.58	270.03	7845.78	2.42	-4422.53	0.00	0.00	4422.53	TD at 11768.86

WELL DETAILS: STATE #8H-32-15-12						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	418534.75	2257082.10	39° 28' 43.840 N	110° 35' 21.130 W	

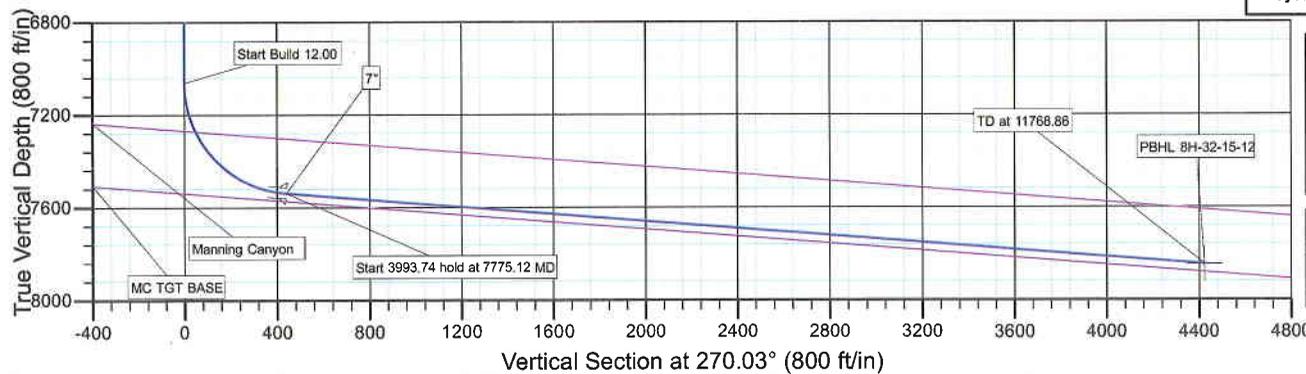
WELLBORE TARGET DETAILS (LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape Point
PBHL 8H-32-15-12	7845.78	2.42	-4422.53	39° 28' 43.860 N	110° 36' 17.530 W	



**PROJECT DETAILS: CARBON COUNTY, UT (NAD 27)**  
 Geodetic System: US State Plane 1927 (Exact solution)  
 Datum: NAD 1927 (NADCON CONUS)  
 Ellipsoid: Clarke 1866  
 Zone: Utah Central 4302  
 System Datum: Mean Sea Level

FORMATION TOP DETAILS			
TVDPATH	MDPATH	Formation	MC TGT BASE
1118.00	1118.00	Morrison	
1737.00	1737.00	Curtis	
1945.00	1945.00	Entrada	
2280.00	2280.00	Carmel	
2567.00	2567.00	Navajo	
2949.00	2949.00	Kayenta	
3057.00	3057.00	Wingate	
3461.00	3461.00	Chinle	
3784.00	3784.00	Moenkopi	
4276.00	4276.00	Sinbad	
4701.00	4701.00	Kaibab	
4888.00	4888.00	Coconino	
5576.00	5576.00	Coconino Base	
5708.00	5708.00	Pennsylvanian	
7271.75	7279.17	Manning Canyon	

**Compass Rose:** T M, A  
 Azimuths to True North  
 Magnetic North: 11.69°  
 Magnetic Field Strength: 52059.1snT  
 Dip Angle: 65.29°  
 Date: 9/9/2009  
 Model: BGM2009



CASING DETAILS			
TVD	MD	Name	Size
7538.00	7775.12	7"	7"

Plan: Design #2 (STATE #8H-32-15-12/STATE #8H-32-15-12)  
 Created By: TRACY WILLIAMS Date: 14:45, September 09 2009



**Bill Barrett Corporation**

## **BILL BARRETT CORP**

**CARBON COUNTY, UT (NAD 27)**

**STATE SECTION 32, T15S, R12E**

**STATE #8H-32-15-12**

**STATE #8H-32-15-12**

**Plan: Design #1**

## **Standard Planning Report**

**20 April, 2009**



**Weatherford®**



**Database:** EDM 2003.21 Single User Db  
**Company:** BILL BARRETT CORP  
**Project:** CARBON COUNTY, UT (NAD 27)  
**Site:** STATE #8H-32-15-12  
**Well:** STATE #8H-32-15-12  
**Wellbore:** STATE #8H-32-15-12  
**Design:** Design #2

**Local Co-ordinate Reference:** Well STATE #8H-32-15-12  
**TVD Reference:** WELL @ 5522.00ft (Original Well Elev)  
**MD Reference:** WELL @ 5522.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

<b>Project</b>	CARBON COUNTY, UT (NAD 27)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Utah Central 4302		Using geodetic scale factor

<b>Site</b>	STATE #8H-32-15-12		
<b>Site Position:</b>		<b>Northing:</b>	418,534.76 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,257,082.10 ft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	39° 28' 43.840 N
		<b>Longitude:</b>	110° 35' 21.130 W
		<b>Grid Convergence:</b>	0.58 °

<b>Well</b>	STATE #8H-32-15-12		
<b>Well Position</b>	<b>+N/-S</b>	-0.01 ft	<b>Northing:</b> 418,534.75 ft
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b> 2,257,082.10 ft
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b> ft
			<b>Latitude:</b> 39° 28' 43.840 N
			<b>Longitude:</b> 110° 35' 21.130 W
			<b>Ground Level:</b> 5,505.00 ft

<b>Wellbore</b>	STATE #8H-32-15-12				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2009	9/9/2009	11.69	65.29	52,058

<b>Design</b>	Design #2			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	270.03

Plan Sections										
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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7,061.95	0.00	0.00	7,061.95	0.00	0.00	0.00	0.00	0.00	0.00	
7,775.12	85.58	270.03	7,538.00	0.24	-440.67	12.00	12.00	0.00	270.03	PBHL 8H-32-15-12
11,768.86	85.58	270.03	7,845.78	2.42	-4,422.53	0.00	0.00	0.00	0.00	PBHL 8H-32-15-12



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**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

**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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Morrison</b>									
1,118.00	0.00	0.00	1,118.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Curtis</b>									
1,737.00	0.00	0.00	1,737.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Entrada</b>									
1,945.00	0.00	0.00	1,945.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Carmel</b>									
2,280.00	0.00	0.00	2,280.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Navajo</b>									
2,567.00	0.00	0.00	2,567.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Kayenta</b>									
2,949.00	0.00	0.00	2,949.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Wingate</b>									
3,057.00	0.00	0.00	3,057.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Chinle</b>									
3,461.00	0.00	0.00	3,461.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00

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**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)
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Moenkopi</b>									
3,784.00	0.00	0.00	3,784.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Sinbad</b>									
4,276.00	0.00	0.00	4,276.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Kaibab</b>									
4,701.00	0.00	0.00	4,701.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Coconino</b>									
4,888.00	0.00	0.00	4,888.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Coconino Base</b>									
5,576.00	0.00	0.00	5,576.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Pennsylvanian</b>									
5,708.00	0.00	0.00	5,708.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 12.00</b>									
7,061.95	0.00	0.00	7,061.95	0.00	0.00	0.00	0.00	0.00	0.00
7,075.00	1.57	270.03	7,075.00	0.00	-0.18	0.18	12.00	12.00	0.00
7,100.00	4.57	270.03	7,099.96	0.00	-1.52	1.52	12.00	12.00	0.00
7,125.00	7.57	270.03	7,124.82	0.00	-4.16	4.16	12.00	12.00	0.00
7,150.00	10.57	270.03	7,149.50	0.00	-8.10	8.10	12.00	12.00	0.00
7,175.00	13.57	270.03	7,173.95	0.00	-13.32	13.32	12.00	12.00	0.00

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**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)
7,200.00	16.57	270.03	7,198.08	0.01	-19.82	19.82	12.00	12.00	0.00
7,225.00	19.57	270.03	7,221.85	0.01	-27.57	27.57	12.00	12.00	0.00
7,250.00	22.57	270.03	7,245.18	0.02	-36.56	36.56	12.00	12.00	0.00
7,275.00	25.57	270.03	7,268.00	0.02	-46.75	46.75	12.00	12.00	0.00
<b>Manning Canyon</b>									
7,279.17	26.07	270.03	7,271.75	0.02	-48.56	48.56	12.00	12.00	0.00
7,300.00	28.57	270.03	7,290.26	0.03	-58.12	58.12	12.00	12.00	0.00
7,325.00	31.57	270.03	7,311.89	0.03	-70.65	70.65	12.00	12.00	0.00
7,350.00	34.57	270.03	7,332.84	0.04	-84.29	84.29	12.00	12.00	0.00
7,375.00	37.57	270.03	7,353.05	0.05	-99.00	99.00	12.00	12.00	0.00
7,400.00	40.57	270.03	7,372.46	0.06	-114.75	114.75	12.00	12.00	0.00
7,425.00	43.57	270.03	7,391.01	0.07	-131.50	131.50	12.00	12.00	0.00
7,450.00	46.57	270.03	7,408.67	0.08	-149.20	149.20	12.00	12.00	0.00
7,475.00	49.57	270.03	7,425.37	0.09	-167.79	167.79	12.00	12.00	0.00
7,500.00	52.57	270.03	7,441.08	0.10	-187.24	187.24	12.00	12.00	0.00
7,525.00	55.57	270.03	7,455.75	0.11	-207.48	207.48	12.00	12.00	0.00
7,550.00	58.57	270.03	7,469.34	0.12	-228.46	228.46	12.00	12.00	0.00
7,575.00	61.57	270.03	7,481.82	0.13	-250.12	250.12	12.00	12.00	0.00
7,600.00	64.57	270.03	7,493.14	0.14	-272.41	272.41	12.00	12.00	0.00
7,625.00	67.57	270.03	7,503.28	0.16	-295.25	295.25	12.00	12.00	0.00
7,650.00	70.57	270.03	7,512.21	0.17	-318.60	318.60	12.00	12.00	0.00
7,675.00	73.57	270.03	7,519.91	0.18	-342.38	342.38	12.00	12.00	0.00
7,700.00	76.57	270.03	7,526.35	0.20	-366.54	366.54	12.00	12.00	0.00
7,725.00	79.57	270.03	7,531.52	0.21	-390.99	390.99	12.00	12.00	0.00
7,750.00	82.57	270.03	7,535.40	0.22	-415.69	415.69	12.00	12.00	0.00
<b>Start 3993.74 hold at 7775.12 MD - 7"</b>									
7,775.12	85.58	270.03	7,538.00	0.24	-440.67	440.67	12.00	12.00	0.00
<b>LANDING POINT_STATE #8H-32-15-12</b>									
7,781.15	85.58	270.03	7,538.46	0.24	-446.68	446.68	0.00	0.00	0.00
7,800.00	85.58	270.03	7,539.91	0.25	-465.48	465.48	0.00	0.00	0.00
7,900.00	85.58	270.03	7,547.62	0.30	-565.18	565.18	0.00	0.00	0.00
8,000.00	85.58	270.03	7,555.33	0.36	-664.88	664.88	0.00	0.00	0.00
8,100.00	85.58	270.03	7,563.03	0.41	-764.58	764.58	0.00	0.00	0.00
8,200.00	85.58	270.03	7,570.74	0.47	-864.29	864.29	0.00	0.00	0.00
8,300.00	85.58	270.03	7,578.45	0.52	-963.99	963.99	0.00	0.00	0.00
8,400.00	85.58	270.03	7,586.15	0.58	-1,063.69	1,063.69	0.00	0.00	0.00
8,500.00	85.58	270.03	7,593.86	0.63	-1,163.39	1,163.39	0.00	0.00	0.00
8,600.00	85.58	270.03	7,601.57	0.69	-1,263.10	1,263.10	0.00	0.00	0.00
8,700.00	85.58	270.03	7,609.27	0.74	-1,362.80	1,362.80	0.00	0.00	0.00
8,800.00	85.58	270.03	7,616.98	0.80	-1,462.50	1,462.50	0.00	0.00	0.00
8,900.00	85.58	270.03	7,624.69	0.85	-1,562.21	1,562.21	0.00	0.00	0.00
9,000.00	85.58	270.03	7,632.39	0.90	-1,661.91	1,661.91	0.00	0.00	0.00
9,100.00	85.58	270.03	7,640.10	0.96	-1,761.61	1,761.61	0.00	0.00	0.00
9,200.00	85.58	270.03	7,647.81	1.01	-1,861.31	1,861.31	0.00	0.00	0.00
9,300.00	85.58	270.03	7,655.51	1.07	-1,961.02	1,961.02	0.00	0.00	0.00
9,400.00	85.58	270.03	7,663.22	1.12	-2,060.72	2,060.72	0.00	0.00	0.00
9,500.00	85.58	270.03	7,670.93	1.18	-2,160.42	2,160.42	0.00	0.00	0.00
9,600.00	85.58	270.03	7,678.63	1.23	-2,260.12	2,260.12	0.00	0.00	0.00
9,700.00	85.58	270.03	7,686.34	1.29	-2,359.83	2,359.83	0.00	0.00	0.00
9,800.00	85.58	270.03	7,694.05	1.34	-2,459.53	2,459.53	0.00	0.00	0.00
9,900.00	85.58	270.03	7,701.75	1.40	-2,559.23	2,559.23	0.00	0.00	0.00
10,000.00	85.58	270.03	7,709.46	1.45	-2,658.93	2,658.93	0.00	0.00	0.00
10,100.00	85.58	270.03	7,717.17	1.50	-2,758.64	2,758.64	0.00	0.00	0.00

**Database:** EDM 2003.21 Single User Db  
**Company:** BILL BARRETT CORP  
**Project:** CARBON COUNTY, UT (NAD 27)  
**Site:** STATE #8H-32-15-12  
**Well:** STATE #8H-32-15-12  
**Wellbore:** STATE #8H-32-15-12  
**Design:** Design #2

**Local Co-ordinate Reference:** Well STATE #8H-32-15-12  
**TVD Reference:** WELL @ 5522.00ft (Original Well Elev)  
**MD Reference:** WELL @ 5522.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

**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)
10,200.00	85.58	270.03	7,724.87	1.56	-2,858.34	2,858.34	0.00	0.00	0.00
10,300.00	85.58	270.03	7,732.58	1.61	-2,958.04	2,958.04	0.00	0.00	0.00
10,400.00	85.58	270.03	7,740.29	1.67	-3,057.74	3,057.74	0.00	0.00	0.00
10,500.00	85.58	270.03	7,747.99	1.72	-3,157.45	3,157.45	0.00	0.00	0.00
10,600.00	85.58	270.03	7,755.70	1.78	-3,257.15	3,257.15	0.00	0.00	0.00
10,700.00	85.58	270.03	7,763.41	1.83	-3,356.85	3,356.85	0.00	0.00	0.00
10,800.00	85.58	270.03	7,771.11	1.89	-3,456.55	3,456.55	0.00	0.00	0.00
10,900.00	85.58	270.03	7,778.82	1.94	-3,556.26	3,556.26	0.00	0.00	0.00
11,000.00	85.58	270.03	7,786.53	2.00	-3,655.96	3,655.96	0.00	0.00	0.00
11,100.00	85.58	270.03	7,794.23	2.05	-3,755.66	3,755.66	0.00	0.00	0.00
11,200.00	85.58	270.03	7,801.94	2.11	-3,855.36	3,855.36	0.00	0.00	0.00
11,300.00	85.58	270.03	7,809.65	2.16	-3,955.07	3,955.07	0.00	0.00	0.00
11,400.00	85.58	270.03	7,817.35	2.21	-4,054.77	4,054.77	0.00	0.00	0.00
11,500.00	85.58	270.03	7,825.06	2.27	-4,154.47	4,154.47	0.00	0.00	0.00
11,600.00	85.58	270.03	7,832.77	2.32	-4,254.17	4,254.18	0.00	0.00	0.00
11,700.00	85.58	270.03	7,840.47	2.38	-4,353.88	4,353.88	0.00	0.00	0.00
<b>TD at 11768.86 - PBHL 8H-32-15-12</b>									
11,768.86	85.58	270.03	7,845.78	2.42	-4,422.53	4,422.53	0.00	0.00	0.00

**Wellbore Targets**

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target - Shape PBHL 8H-32-15-12 - plan hits target center - Point	0.00	0.00	7,845.78	2.42	-4,422.53	418,492.14	2,252,660.15	39° 28' 43.860 N	110° 36' 17.530 W

**Casing Points**

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,775.12	7,538.00	7"	7	7-1/2

**Database:** EDM 2003.21 Single User Db  
**Company:** BILL BARRETT CORP  
**Project:** CARBON COUNTY, UT (NAD 27)  
**Site:** STATE #8H-32-15-12  
**Well:** STATE #8H-32-15-12  
**Wellbore:** STATE #8H-32-15-12  
**Design:** Design #2

**Local Co-ordinate Reference:** Well STATE #8H-32-15-12  
**TVD Reference:** WELL @ 5522.00ft (Original Well Elev)  
**MD Reference:** WELL @ 5522.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

**Formations**

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,118.00	1,118.00	Morrison		4.42	270.03
1,737.00	1,737.00	Curtis		4.42	270.03
1,945.00	1,945.00	Entrada		4.42	270.03
2,280.00	2,280.00	Carmel		4.42	270.03
2,567.00	2,567.00	Navajo		4.42	270.03
2,949.00	2,949.00	Kayenta		4.42	270.03
3,057.00	3,057.00	Wingate		4.42	270.03
3,461.00	3,461.00	Chinle		4.42	270.03
3,784.00	3,784.00	Moenkopi		4.42	270.03
4,276.00	4,276.00	Sinbad		4.42	270.03
4,701.00	4,701.00	Kaibab		4.42	270.03
4,888.00	4,888.00	Coconino		4.42	270.03
5,576.00	5,576.00	Coconino Base		4.42	270.03
5,708.00	5,708.00	Pennsylvanian		4.42	270.03
7,279.17	7,268.00	Manning Canyon		4.42	270.03
	7,538.00	MC TGT BASE		4.42	270.03

**Plan Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
7,061.95	7,061.95	0.00	0.00	Start Build 12.00
7,775.12	7,538.00	0.24	-440.67	Start 3993.74 hold at 7775.12 MD
11,768.86	7,845.78	2.42	-4,422.53	TD at 11768.86

## 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.
8. Two (2) kill line valves, one of which shall be a check valve (2-inch minimum).
9. Upper kelly cock valve with handles available.
10. Safety valve(s) & subs to fit all drill string connections in use.
11. Pressure gauge on choke manifold.
12. Fill-up line above the uppermost preventer.

**B. Pressure Rating:** 3,000 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 LADC 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).

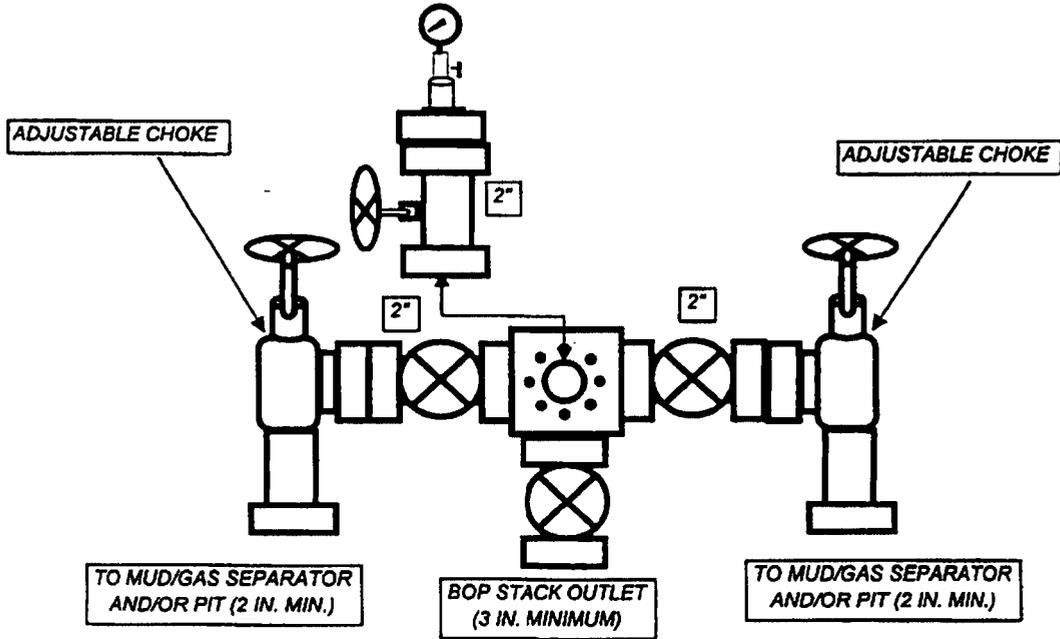
**F. Miscellaneous Information:**

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 choke manifold will be located outside the rig sub-structure. 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.

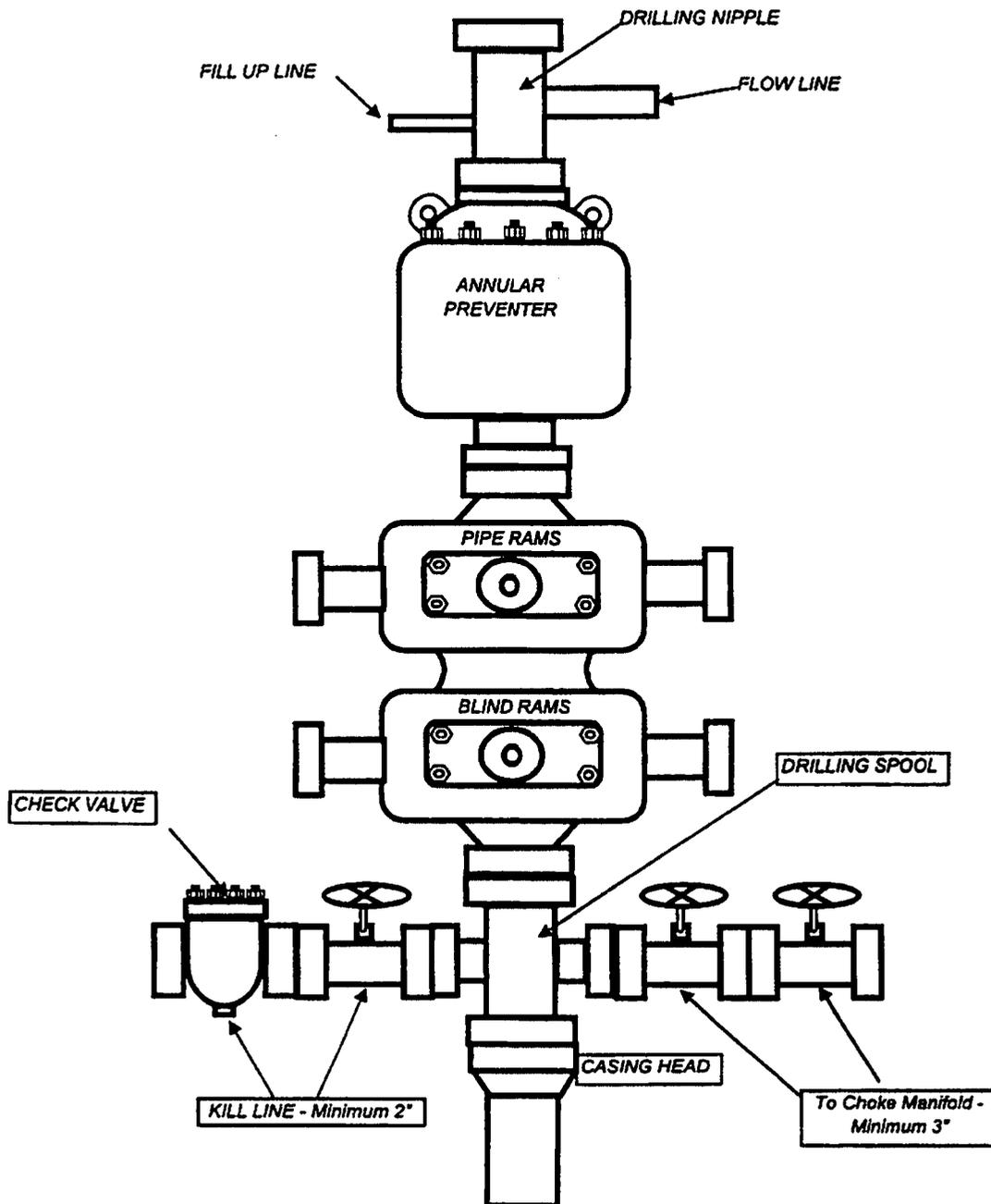
A flare line will be installed after the choke manifold, extending 125 feet (minimum) from the center of the drill hole to a separate flare pit.

# BILL BARRETT CORPORATION

## TYPICAL 3,000 p.s.i. CHOKE MANIFOLD



BILL BARRETT CORPORATION  
TYPICAL 3,000 p.s.i. BLOWOUT PREVENTER



State 8H-32-15-12 Casing-Cementing Options

No. 24 Continued:

	Size of Hole	Size of Casing	Grade Weight/ft	Setting Depth (MD)	Cement Type	Sx Cement	Yield	Slurry Weight
<b>Option A - Uncemented Production Casing (swell packers)</b>								
Conductor	26"	16"	65#	80'	grout			
Surface	12 1/4"	9 5/8"	J-55, 36#	1000'	Hal Lt Prem	110	2.93 ft <sup>3</sup> /sk	11.5 ppg
					Prem	180	1.8 ft <sup>3</sup> /sk	13.5 ppg
Intermediate	8 3/4"	7"	N-80, 26# & 23#	7,800'	50/50 Poz	1040	1.47 ft <sup>3</sup> /sk	13.0 ppg
Production	6 1/8"	4 1/2"	P-110, 15.1#	11,746'	N/A	N/A	N/A	N/A

**Option B - Cemented Production Casing**

Conductor	26"	16"	65#	80'	grout			
Surface	12 1/4"	9 5/8"	J-55, 36#	1000'	Hal Lt Prem	110	2.93 ft <sup>3</sup> /sk	11.5 ppg
					Prem	180	1.8 ft <sup>3</sup> /sk	13.5 ppg
Intermediate	8 3/4"	7"	N-80, 26# & 23#	7,800'	50/50 Poz	1040	1.47 ft <sup>3</sup> /sk	13.0 ppg
Production	6 1/8"	4 1/2"	P-110, 15.1#	11,746'	50/50 Poz	1320	1.31 ft <sup>3</sup> /sk	13.5 ppg

BBC will provide cement coverage to surface on either option, for each string cemented. If the cement drops out of eyesight BBC will run a temperature log.

Top of Producing Interval: 1988' FNL, 695' FEL, Sec. 32

# BILL BARRETT CORPORATION

STATE #8H-32-15-12 & FEDERAL #8E-32-15-12  
SECTION 32, T15S, R12E, S.L.B.&M.

PROCEED IN A SOUTHEASTERLY DIRECTION FROM PRICE, UTAH ALONG HIGHWAY 191 APPROXIMATELY 4.0 MILES TO WELLINGTON, UTAH; PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION ALONG HIGHWAY 191 APPROXIMATELY 8.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 6.1 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE EXISTING #15-32 AND THE BEGINNING OF THE PROPOSED ACCESS FOR THE #9H-32 TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM PRICE, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 24.2 MILES.

**BILL BARRETT CORPORATION**  
**STATE #8H-32-15-12 & FEDERAL #8E-32-15-12**  
 LOCATED IN CARBON COUNTY, UTAH  
 SECTION 32, T15S, R12E, S.L.B.&M.

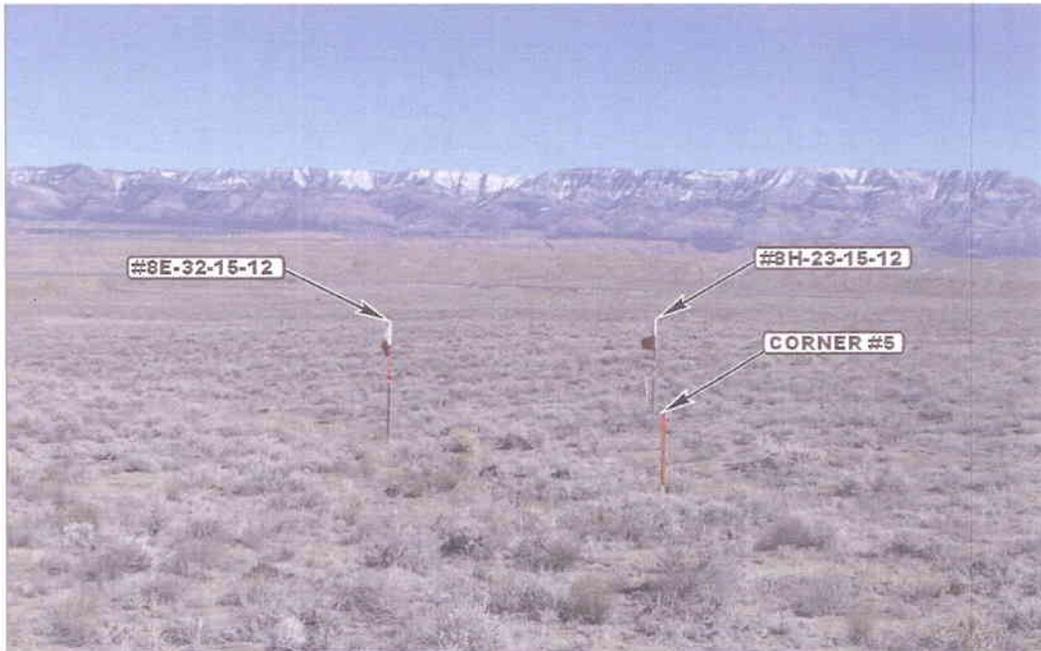


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHEASTERLY



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

- Since 1964 -

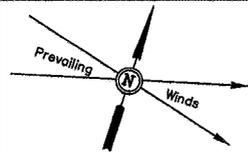
<b>LOCATION PHOTOS</b>	<b>11</b>	<b>05</b>	<b>08</b>	<b>PHOTO</b>
	MONTH	DAY	YEAR	
TAKEN BY: MA.	DRAWN BY: Z.L.	REVISED: 02-25-09		

**BILL BARRETT CORPORATION**

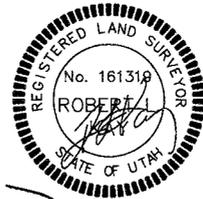
LOCATION LAYOUT FOR

STATE #8H-32-15-12 & FEDERAL #8E-32-15-12  
SECTION 32, T15S, R12E, S.L.B.&M.  
SE 1/4 NE 1/4

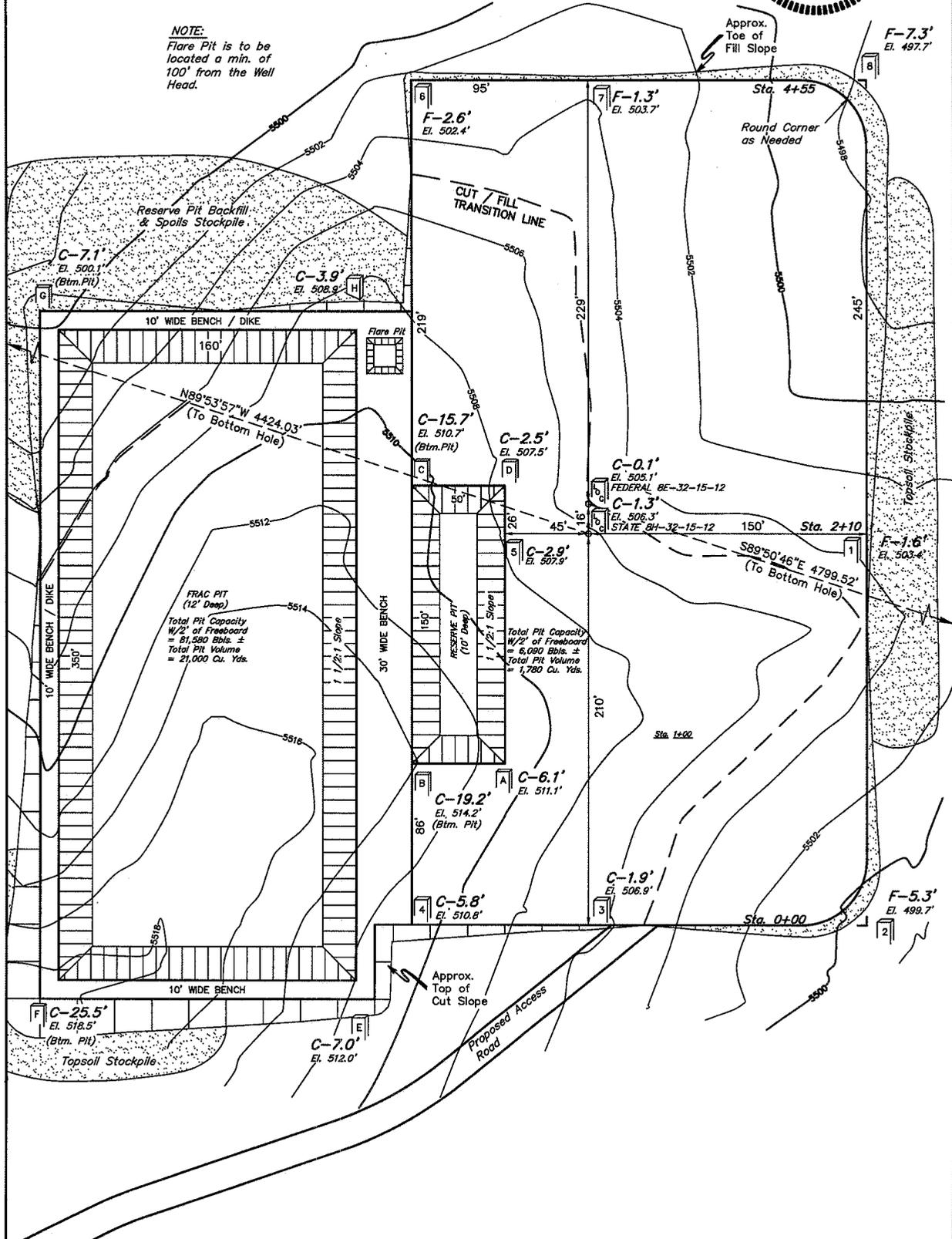
FIGURE #1



SCALE: 1" = 50'  
DATE: 02-25-09  
Drawn By: K.E.



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



**NOTES:**

Elev. Ungraded Ground At Loc. Stake = 5506.3'  
FINISHED GRADE ELEV. AT LOC. STAKE = 5505.0'

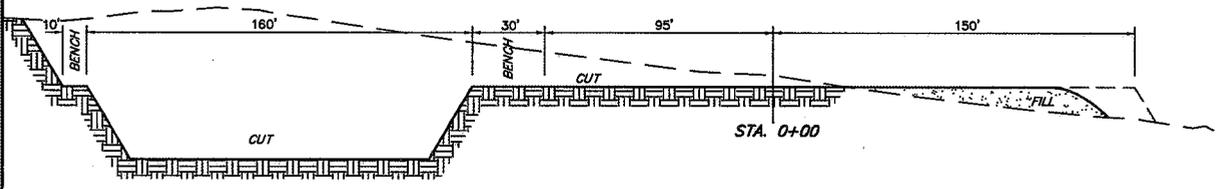
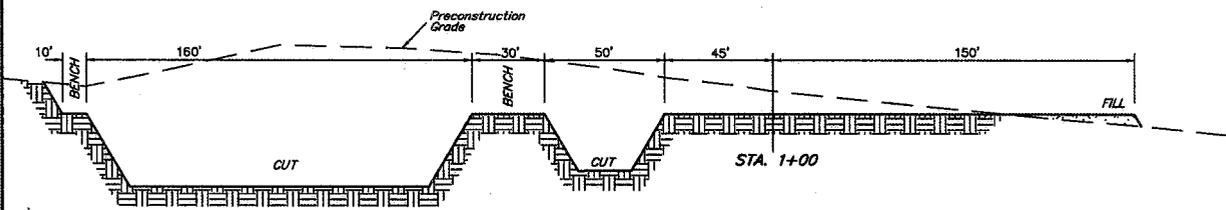
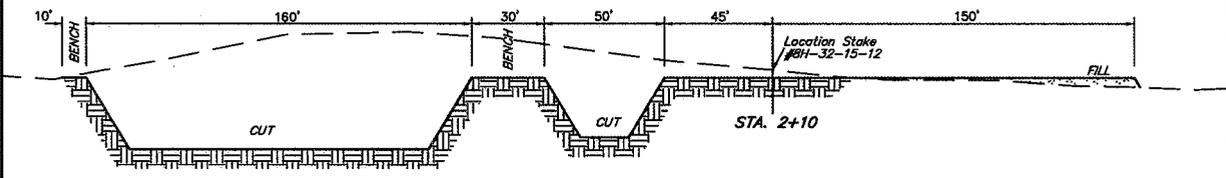
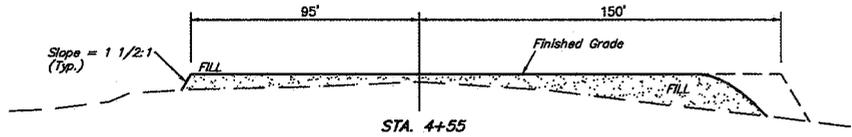
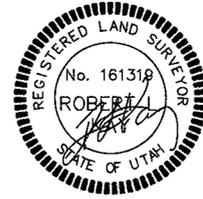
**BILL BARRETT CORPORATION**

**TYPICAL CROSS SECTIONS FOR**

STATE #8H-32-15-12 & FEDERAL #8E-32-15-12  
SECTION 32, T15S, R12E, S.L.B.&M.  
SE 1/4 NE 1/4

**FIGURE #2**

X-Section  
Scale  
1" = 50'  
DATE: 02-25-09  
Drawn By: K.E.



APPROXIMATE ACREAGES  
WELL SITE DISTURBANCE = ±5.372 ACRES  
ACCESS ROAD DISTURBANCE = ±1.048 ACRES  
TOTAL = ±6.420 ACRES

\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT  
(6") Topsoil Stripping = 3,790 Cu. Yds.  
Remaining Location = 46,210 Cu. Yds.  
TOTAL CUT = 50,000 CU.YDS.  
FILL = 7,680 CU.YDS.

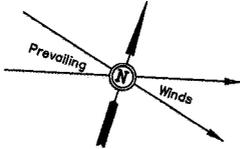
EXCESS MATERIAL = 42,320 Cu. Yds.  
Topsoil & Pit Backfill (1/2 Pit Vol.) = 15,180 Cu. Yds.  
EXCESS UNBALANCE (After Rehabilitation) = 27,140 Cu. Yds.

**BILL BARRETT CORPORATION**

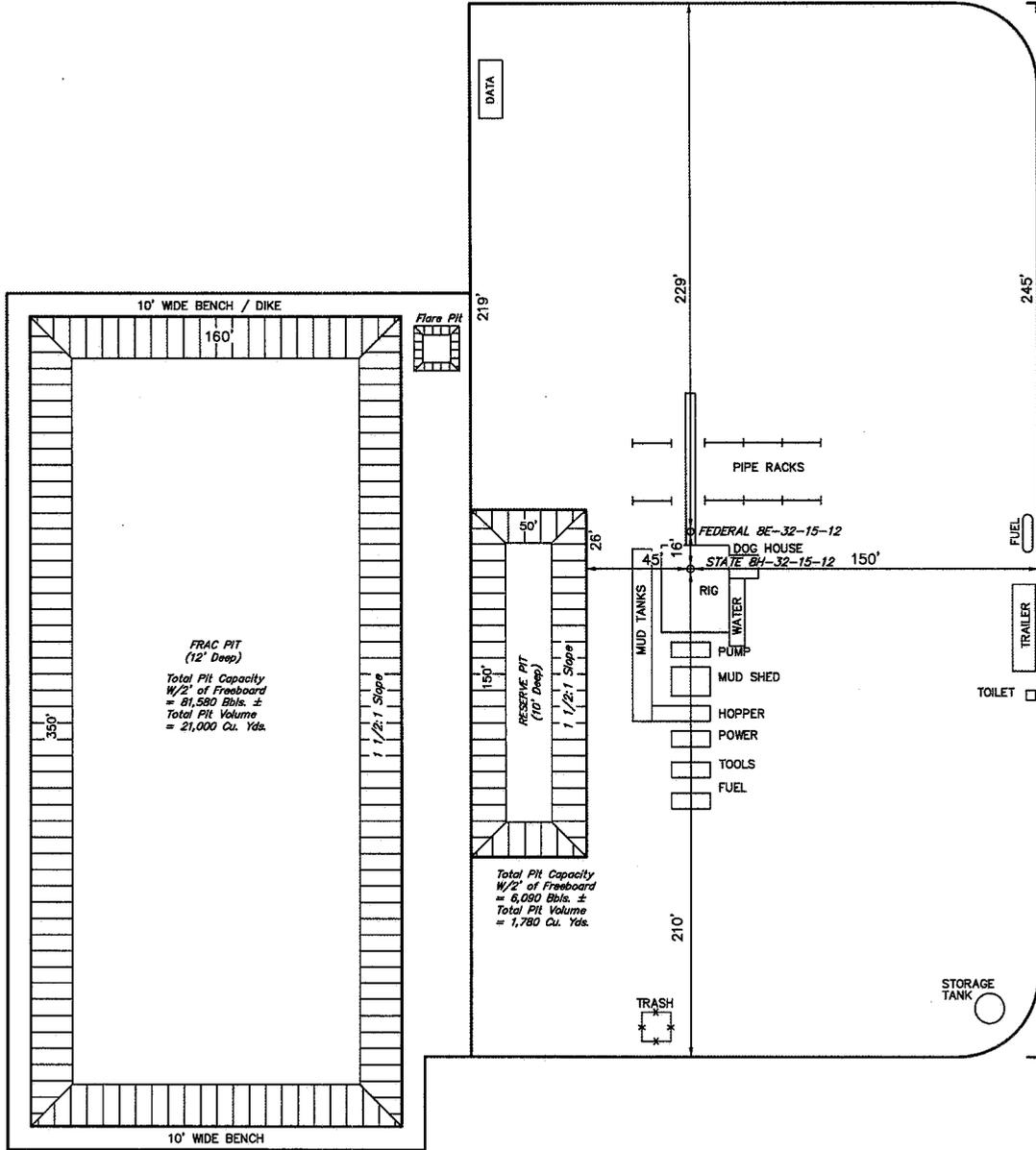
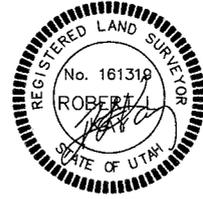
TYPICAL RIG LAYOUT FOR

STATE #8H-32-15-12 & FEDERAL #8E-32-15-12  
SECTION 32, T15S, R12E, S.L.B.&M.  
SE 1/4 NE 1/4

**FIGURE #3**



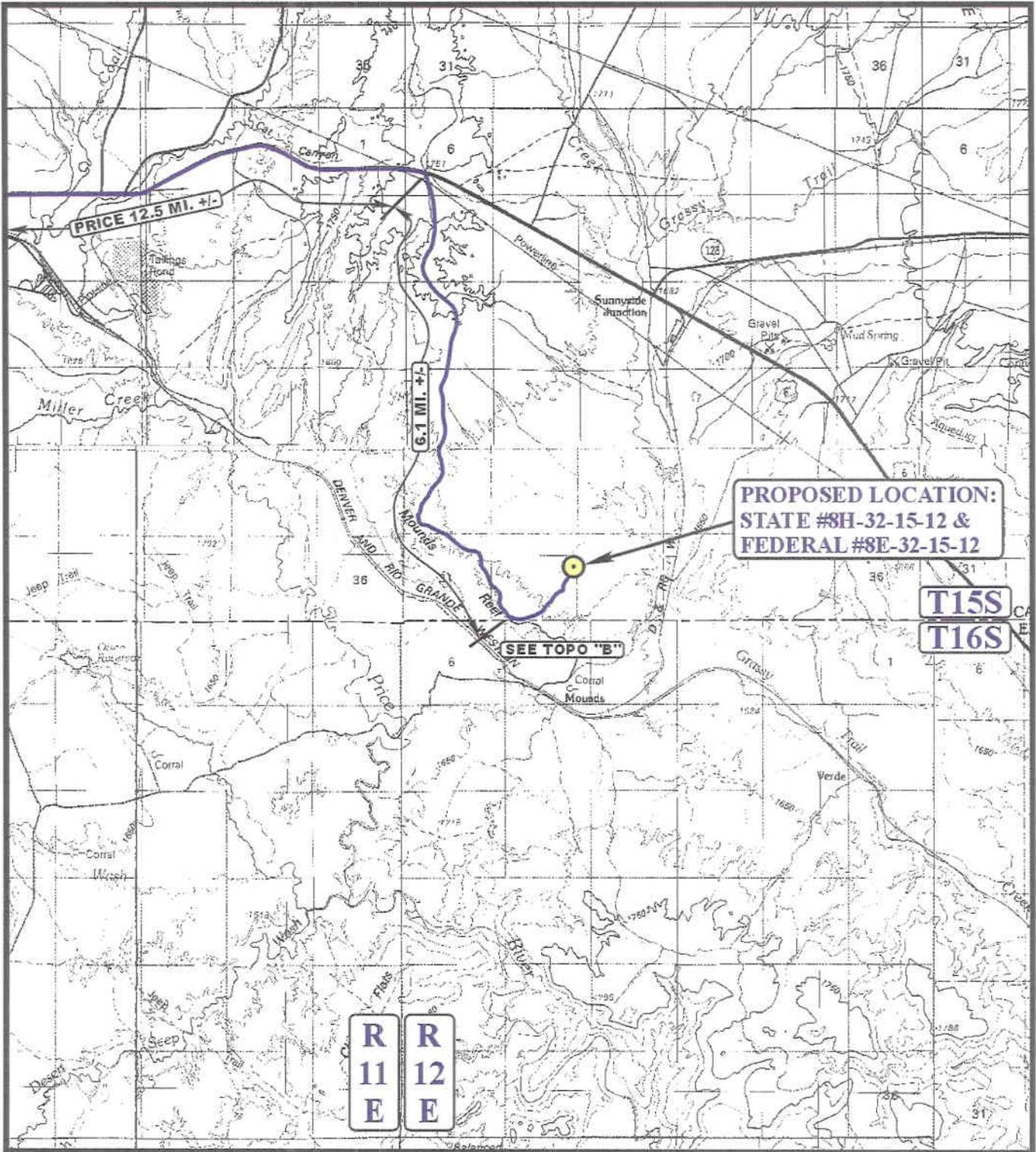
SCALE: 1" = 50'  
DATE: 02-25-09  
Drawn By: K.E.



**FRAC PIT**  
(12' Deep)  
Total Pit Capacity  
W/2' of Freeboard  
= 21,580 Bbls. ±  
Total Pit Volume  
= 21,000 Cu. Yds.

Total Pit Capacity  
W/2' of Freeboard  
= 6,090 Bbls. ±  
Total Pit Volume  
= 1,780 Cu. Yds.

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



**PROPOSED LOCATION:  
STATE #8H-32-15-12 &  
FEDERAL #8E-32-15-12**

**T15S  
T16S**

**SEE TOPO "B"**

**R  
11  
E**   **R  
12  
E**

**LEGEND:**

 PROPOSED LOCATION

**BILL BARRETT CORPORATION**

**STATE #8H-32-15-12 & FEDERAL #8E-32-15-12  
SECTION 32, T15S, R12E, S.L.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**

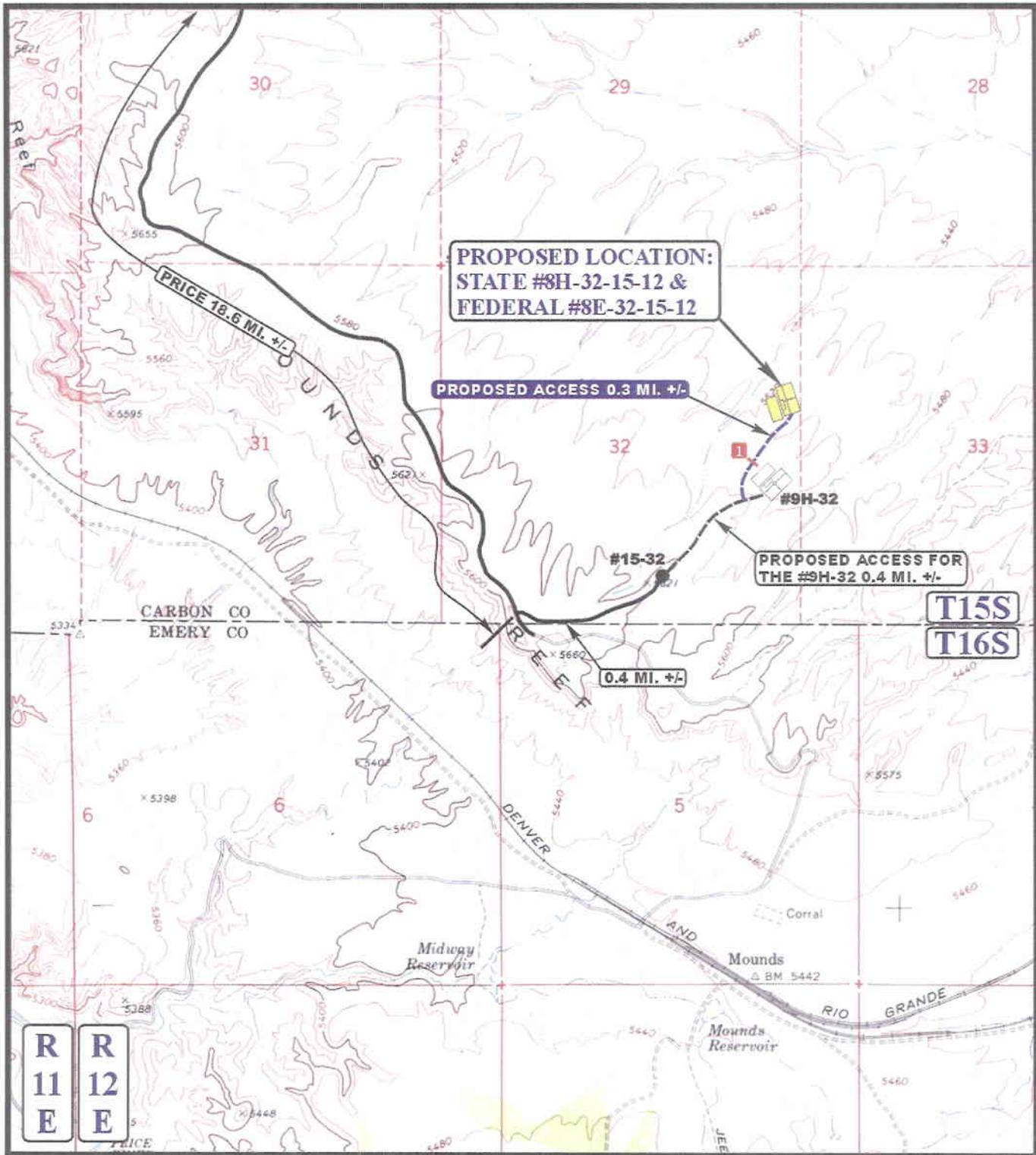


**TOPOGRAPHIC 11 05 08  
MAP**

MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: Z.L. REVISED: 00-00-00





**PROPOSED LOCATION:  
STATE #8H-32-15-12 &  
FEDERAL #8E-32-15-12**

**PROPOSED ACCESS 0.3 MI. +/-**

**PROPOSED ACCESS FOR  
THE #9H-32 0.4 MI. +/-**

**0.4 MI. +/-**

**T15S  
T16S**

**R  
11  
E**   **R  
12  
E**

**LEGEND:**

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

**BILL BARRETT CORPORATION**

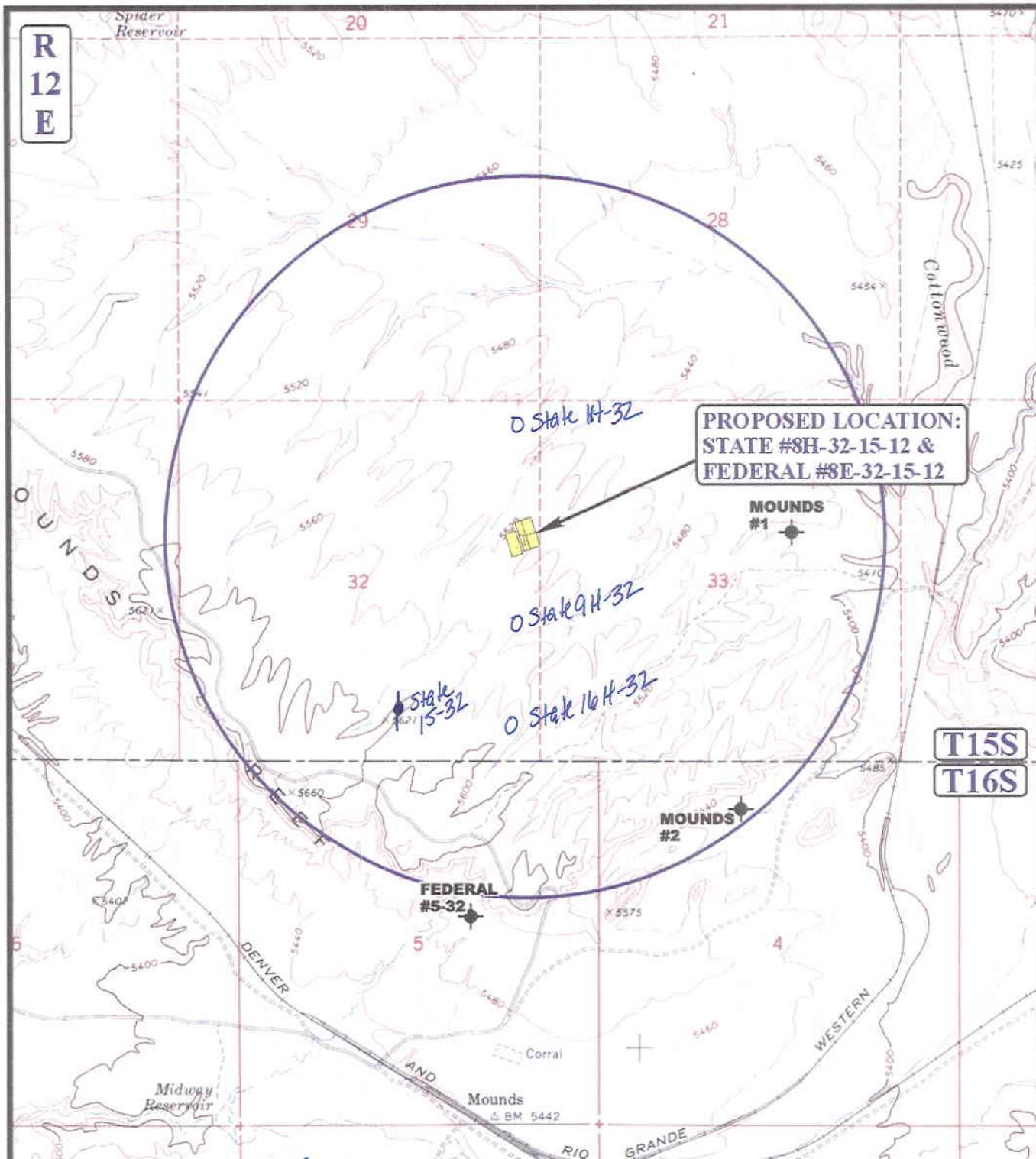
**STATE #8H-32-15-12 & FEDERAL #8E-32-15-12  
SECTION 32, T15S, R12E, S.L.B.&M.  
SE 1/4 NE 1/4**

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



**TOPOGRAPHIC** 11 05 08  
**MAP** MONTH DAY YEAR  
SCALE: 1" = 2000' DRAWN BY: Z.L. REVISED: 02-25-09

**B  
TOPO**



**LEGEND:**

- ⊕ DISPOSAL WELLS
- PRODUCING WELLS
- ⊖ SHUT IN WELLS
- ⊕ WATER WELLS
- ⊖ ABANDONED WELLS
- ⊖ TEMPORARILY ABANDONED

*Proposed*

**BILL BARRETT CORPORATION**

**STATE #8H-32-15-12 & FEDERAL #8E-32-15-12**  
**SECTION 32, T15S, R12E, S.L.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** 11 05 08  
 MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: Z.L. REVISED: 02-25-09



**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 05/04/2009

API NO. ASSIGNED: 43-007-31511

WELL NAME: STATE 8H-32-15-12  
 OPERATOR: BILL BARRETT CORP ( N2165 )  
 CONTACT: TRACEY FALLANG

PHONE NUMBER: 303-312-8134

PROPOSED LOCATION:  
 SENE 32 150S 120E  
 SURFACE: 1988 FNL 0207 FEL  
 BOTTOM: 1980 FNL 0660 FWL  
 COUNTY: CARBON  
 LATITUDE: 39.47879 LONGITUDE: -110.58920  
 UTM SURF EASTINGS: 535332 NORTHINGS: 4369782  
 FIELD NAME: WILDCAT ( 1 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering	Dren	6/22/09
Geology		
Surface		

LEASE TYPE: 3 - State  
 LEASE NUMBER: ML-49797  
 SURFACE OWNER: 3 - State

PROPOSED FORMATION: MNCYN  
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

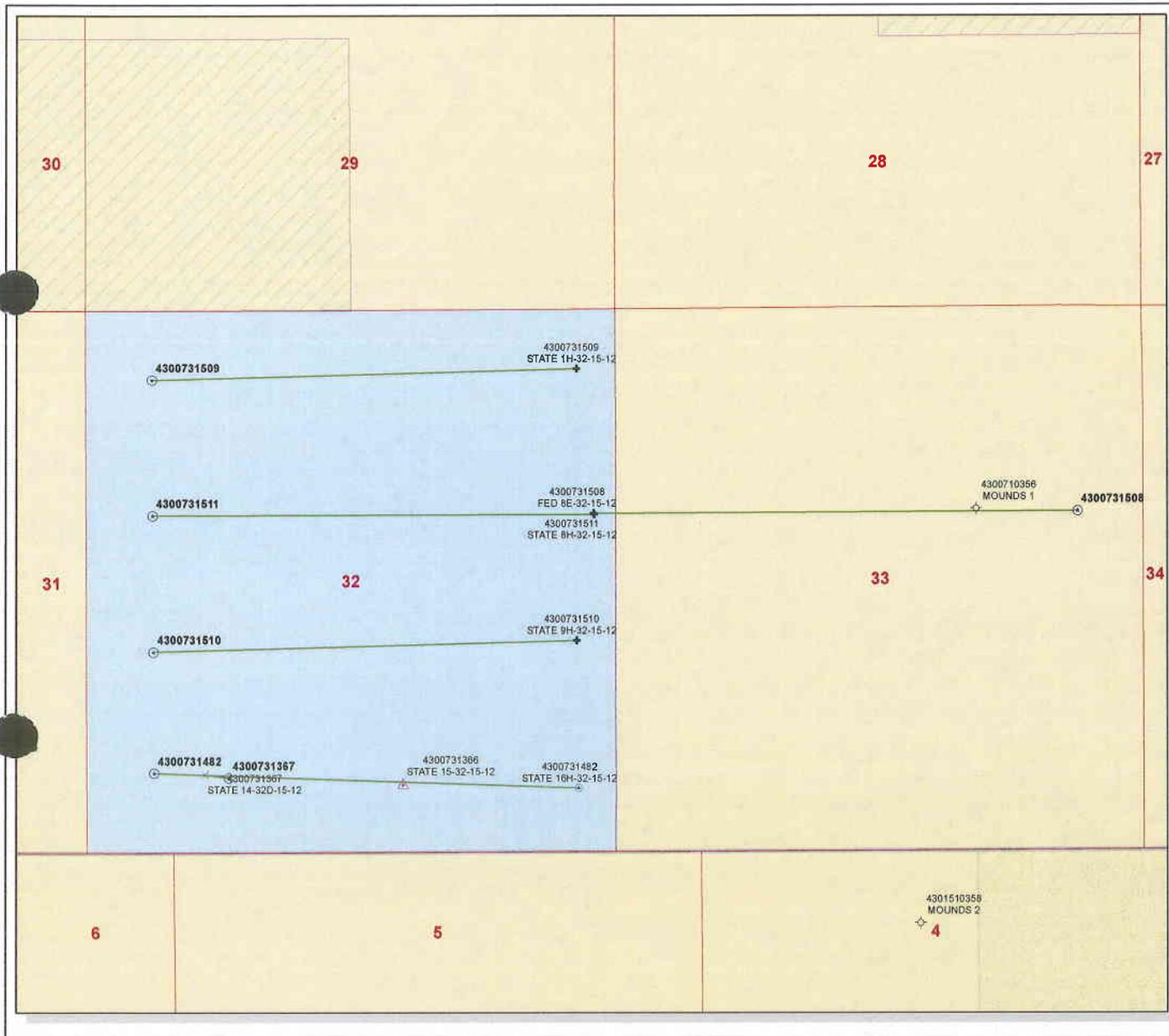
- Plat
- Bond: Fed[] Ind[] Sta[] Fee[]  
(No. Lpm 4138148 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. 91-4122 )
- RDCC Review (Y/N)  
(Date: 05/21/2009 )
- Fee Surf Agreement (Y/N)
- Intent to Commingle (Y/N)

LOCATION AND SITING:

- R649-2-3. \* Horizontal
- Unit: \_\_\_\_\_
- R649-3-2. General
- Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit
  - Board Cause No: 267-001
  - Eff Date: 8-17-2009
  - Siting: See Order
- R649-3-11. Directional Drill

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_ Needs Permit (05-14-09) \_\_\_\_\_  
 \_\_\_\_\_

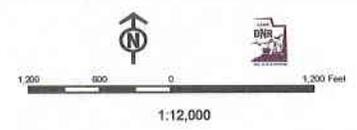
STIPULATIONS: \_\_\_\_\_  
 \_\_\_\_\_ \* STATEMENT OF BASIS \_\_\_\_\_  
 \_\_\_\_\_



**API Number: 4300731511**  
**Well Name: STATE 8H-32-15-12**  
**Township 15.0 S Range 12.0 E Section 32**  
**Meridian: SLBM**  
 Operator: BILL BARRETT CORP

Map Prepared:  
 Map Produced by Diana Mason

- |               |                           |
|---------------|---------------------------|
| <b>Units</b>  | <b>Wells Query Events</b> |
| STATUS        | ✕ all other values        |
| ACTIVE        | ■ HNP                     |
| EXPLORATORY   | ◆ APD                     |
| GAS STORAGE   | ○ DRL                     |
| NF PP OIL     | ○ GI                      |
| PP OIL        | ★ GS                      |
| PP GAS        | ✓ LA                      |
| PP GEOTHERM   | ✚ NEW                     |
| PP OIL        | ✚ OPS                     |
| SECONDARY     | ◆ PK                      |
| TERMINATED    | ✚ POW                     |
| <b>Fields</b> | ● POW                     |
| STATUS        | ○ RET                     |
| ACTIVE        | ✚ SOW                     |
| COMBINED      | ○ TA                      |
| Sectors       | ○ TW                      |
|               | ○ WD                      |
|               | ○ W                       |
|               | ● VS                      |



# Application for Permit to Drill

## Statement of Basis

Utah Division of Oil, Gas and Mining

6/4/2009

Page 1

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
1505	43-007-31511-00-00		GW	S	No
<b>Operator</b>	BILL BARRETT CORP	<b>Surface Owner-APD</b>			
<b>Well Name</b>	STATE 8H-32-15-12	<b>Unit</b>			
<b>Field</b>	UNDESIGNATED	<b>Type of Work</b>			
<b>Location</b>	SENE 32 15S 12E S 1988 FNL 207 FEL GPS Coord (UTM) 535332E 4369782N				

### Geologic Statement of Basis

Significant volumes of high quality ground water are unlikely to be encountered at this location. A poorly to moderately permeable soil is likely to be developed on the Upper Part of the Blue Gate Member of the Mancos Shale. The Operator proposes to use a KCl mud system to drill the Jurassic and subjacent strata. Experience in similar/related geologic settings has demonstrated that ground water quality rapidly deteriorates with depth and distance away from San Rafael Swell outcrops. It is unlikely that the KCl mud will significantly impair the quality of the relevant ground water resources. The proposed casing and cementing program should adequately isolate any zones of fresh water that may be penetrated. There are no underground water rights filed within a mile of the proposed well site.

Chris Kierst  
APD Evaluator

5/26/2009  
Date / Time

### Surface Statement of Basis

Attending: Mark Jones (UDOGM), Fred Goodrich, Brian Getchell, Roger Mitchell (BBC), Mel Coonrod (EIS), Don Bennett (Nielson Const.), Jim Davis (SITLA).

Invited, but electing not to attend: Carbon County and DWR.

DWR list proposed project site as year long pronghorn antelope range. During severe winters the rims of the reef surrounding proposed project are considered particularly important to antelope as they blow/melt free of snow.

DOGM noted the rim and areas adjacent to it are likely spots for fossils.

DOGM will handle the frac pit under the same guidelines, requirements and rules as a reserve pit.

Mark Jones  
Onsite Evaluator

5/14/2009  
Date / Time

### Conditions of Approval / Application for Permit to Drill

Category	Condition
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

**Operator** BILL BARRETT CORP  
**Well Name** STATE 8H-32-15-12  
**API Number** 43-007-31511-0      **APD No** 1505      **Field/Unit** UNDESIGNATED  
**Location:** 1/4,1/4 SENE      **Sec** 32      **Tw** 15S      **Rng** 12E      1988 FNL 207 FEL  
**GPS Coord (UTM)** 535334      4369782      **Surface Owner**

### Participants

Mark Jones (UDOGM), Fred Goodrich, Brian Getchell, Roger Mitchell (BBC), Mel Coonrod (EIS), Don Bennett (Nielson Const.), Jim Davis (SITLA).

### Regional/Local Setting & Topography

Proposed project area is located ~8 miles southeast of Wellington City, in Carbon County Utah. The proposed project site sits near the top of a small reef rising to the south towards the San Rafeal Swell. Drainage flows into Grassy Trails Creek within three miles and eventually to the Price River 10 miles away. Project site is located in a 8-10" precept zone at the northern extent of the San Rafeal Swell. Regionally agriculture lands are located along the valley floor 5 miles to the west. Regionally, the climate is arid rangelands dominated by Salt Scrub shrub lands. Soils in the region are generally poorly developed, and moderate too highly erosive.

### Surface Use Plan

#### **Current Surface Use**

Grazing  
Wildlife Habitat

#### **New Road**

Miles	Well Pad	Src Const Material	Surface Formation
0.3	Width 245	Length 439	Onsite

**Ancillary Facilities** N

### Waste Management Plan Adequate?

### Environmental Parameters

**Affected Floodplains and/or Wetland** N

#### **Flora / Fauna**

Flora  
Grass: Indian rice grass, curely galleta  
Forbs: Desert parsely, funnel lily  
Shrubs: bud sage, black sage, gray horse brush, shadescale, broom snakeweed, Nuttles saltbrush.  
Trees: none  
Other: prickly pear spp.

Fauna: Host of small mammals and reptiles possible. DWR listes as year long prong horn antelope range. Durring sever winter conditions antelope congregate along melted/blown off portions along reef. Use by coyote and bobcat likely.

#### **Soil Type and Characteristics**

mancos clay

**Erosion Issues** Y

Soils are erosive upon disturbance. No mitigation recommended.

**Sedimentation Issues** N

**Site Stability Issues** N

**Drainage Diversion Required** Y

Divert drainages around and away from pad. Use culverts where needed crossing drainages.

**Berm Required?** N

**Erosion Sedimentation Control Required?** N

**Paleo Survey Run?** Y

**Paleo Potential Observed?** Y

**Cultural Survey Run?** Y

**Cultural Resources?** N

**Reserve Pit**

**Site-Specific Factors**

**Site Ranking**

<b>Distance to Groundwater (feet)</b>	>200	0
<b>Distance to Surface Water (feet)</b>	>1000	0
<b>Dist. Nearest Municipal Well (ft)</b>	>5280	0
<b>Distance to Other Wells (feet)</b>	>1320	0
<b>Native Soil Type</b>	Low permeability	0
<b>Fluid Type</b>	TDS>5000 and <10000	10
<b>Drill Cuttings</b>	Normal Rock	0
<b>Annual Precipitation (inches)</b>	<10	0
<b>Affected Populations</b>	<10	0
<b>Presence Nearby Utility Conduits</b>	Not Present	0

**Final Score** 10 3 **Sensitivity Level**

**Characteristics / Requirements**

A dugout earthen reserve pit will be used (50' x 150' x 10').

A frac pit is also being requested. It will be constructed alongside the location on the west side, (160' x 350' x 12').

**Closed Loop Mud Required?** N

**Liner Required?** N

**Liner Thickness**

**Pit Underlayment Required?** N

**Other Observations / Comments**

A second well (Federal 8E-32-15-12) will also be drilled from this pad.

Mark Jones  
**Evaluator**

5/14/2009  
**Date / Time**

utah gov

Online Services

Agency List

Business

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# Utah Division of Water Rights



**There are no features in the query area.**

**Click on the back button to try again**

Please direct questions and comments regarding the map server to: [leeschler@utah.gov](mailto:leeschler@utah.gov).

back

close

Utah Division of Water Rights | 1594 West North Temple Suite 220, P.O. Box 146300, Salt Lake City, Utah 84114-6300 | 801-538-7240  
[Natural Resources](#) | [Contact](#) | [Disclaimer](#) | [Privacy Policy](#) | [Accessibility Policy](#)

**STATE ACTIONS**  
**Resource Development Coordinating Committee**  
**Public Lands Policy Coordination Office**  
**5110 State Office Building**  
**SLC, UT 84114**  
**Phone No. 537-9230**

<b>1. State Agency</b> Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801	<b>2. Approximate date project will start:</b>  Upon Approval or May 20, 2009
<b>3. Title of proposed action:</b> Application for Permit to Drill	
<b>4. Description of Project:</b>  Bill Barrett Corporation proposes to drill the State 8H-32-15-12 well (wildcat) on State lease ML-49797, Carbon County, Utah. This action is being presented to the RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.	
<b>5. Location and detailed map of land affected (site location map required, electronic GIS map preferred)</b> (include UTM coordinates where possible) <b>(indicate county)</b> 1988' FNL 207' FEL, SE/4 NE/4, Section 32, Township 15 South, Range 12 East, Carbon County, Utah	
<b>6. Possible significant impacts likely to occur:</b> Surface impacts include up to five acres of surface disturbance during the drilling and completion phase (estimated for five weeks duration). If oil and gas in commercial quantities is discovered, the location will be reclaimed back to a net disturbance of between one and two acres – not including road, pipeline, or utility infrastructure. If no oil or gas is discovered, the location will be completely reclaimed.	
<b>7. Identify local government affected</b> a. Has the government been contacted? No. b. When? c. What was the response? d. If no response, how is the local government(s) likely to be impacted?	
<b>8. For acquisitions of land or interests in land by DWR or State Parks please identify state representative and state senator for the project area. Name and phone number of state representative, state senator near project site, if applicable:</b> a. Has the representative and senator been contacted? N/A	
<b>9. Areawide clearinghouse(s) receiving state action:</b> (to be sent out by agency in block 1) Southeastern Utah Association of Government	
<b>10. For further information, contact:</b>   <b>Diana Mason</b> <b>Phone:</b> (801) 538-5312	<b>11. Signature and title of authorized officer</b>   Gil Hunt, Associate Director <b>Date:</b> May 6, 2009

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

**CONFIDENTIAL**

FORM 3

AMENDED REPORT   
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>			5. MINERAL LEASE NO: ML-49797	6. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>			7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			8. UNIT or CA AGREEMENT NAME: N/A	
2. NAME OF OPERATOR: BILL BARRETT CORPORATION			9. WELL NAME and NUMBER: State 8H-32-15-12	
3. ADDRESS OF OPERATOR: 1099 18th St, Suite 230C Denver CITY STATE CO ZIP 80202			PHONE NUMBER: (303) 312-8134	10. FIELD AND POOL, OR WILDCAT: Wildcat
4. LOCATION OF WELL (FOOTAGES) 535332X 4369782Y 39.478787 -110.589203 AT SURFACE: 1988' FNL, 207' FEL 533984X 4369779Y 39.478814 AT PROPOSED PRODUCING ZONE: SWNW, 1980' FNL, 660' FWL -110.604867			11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENE 32 15S 12E	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: Approximately 24 miles southeast of Price, UT			12. COUNTY: Carbon	13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 207' SHL / 660' BHL	16. NUMBER OF ACRES IN LEASE: 640 acres	17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 640 acres		
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) 1235' BHL	19. PROPOSED DEPTH: 11,746	20. BOND DESCRIPTION: LPM4138147		
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5506'	22. APPROXIMATE DATE WORK WILL START: 1/1/2010	23. ESTIMATED DURATION: 45 days		

**PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT		
12 1/4"	9 5/8" J-55 36#	1,000	Hal Lt Prem	110 sx	2.93 ft3/sk 11.5 ppg
			Premium	180 sx	1.8 ft3/sk 13.5 ppg
8 3/4"	7" N-80 23# & 26#	7,800	50/50 Poz	1040 sx	1.47 ft3/sk 13.0 ppg
6 1/8"	4 1/2" P-110 15.1#	11,746	50/50 Poz	1320 sx	1.31 ft3/sk 13.5 ppg

**ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER     | <input checked="" type="checkbox"/> COMPLETE DRILLING PLAN                                   |
| <input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER | <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER |

NAME (PLEASE PRINT) Tracey Fallang TITLE Regulatory Analyst  
SIGNATURE *Tracey Fallang* DATE 5/1/2009

(This space for State use only)

API NUMBER ASSIGNED: 43007-31511

APPROVAL:

**RECEIVED**

**MAY 04 2009**

DIV. OF OIL, GAS & MINING

# T15S, R12E, S.L.B.&M.

## BILL BARRETT CORPORATION

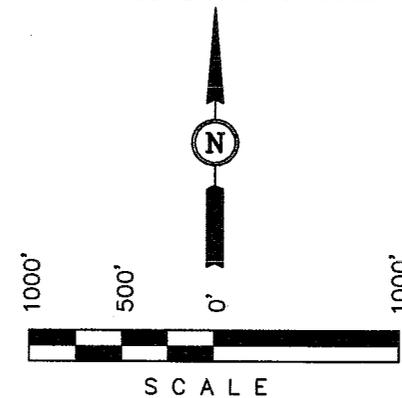
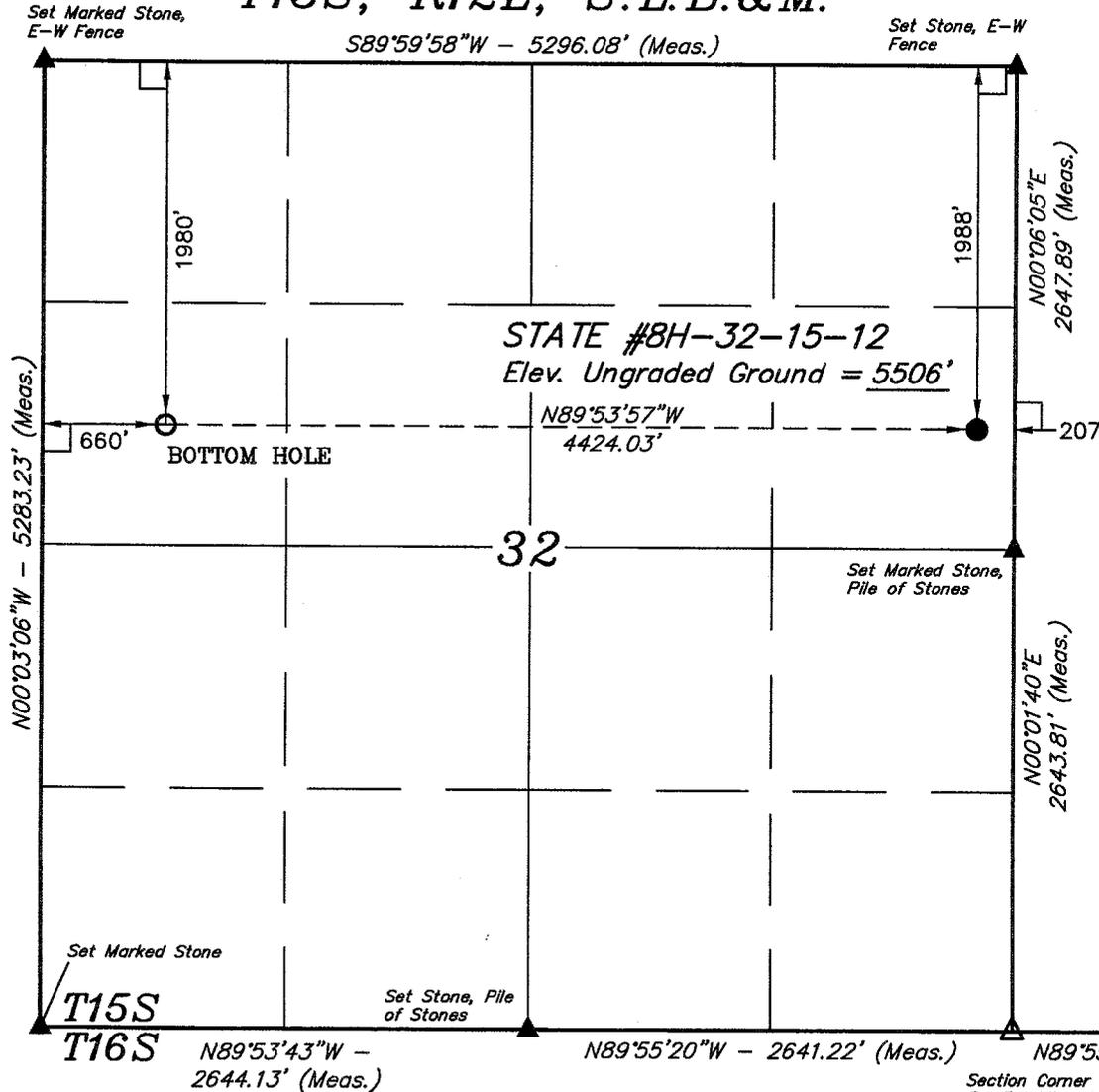
Well location, STATE #8H-32-15-12, located as shown in the SE 1/4 NE 1/4 of Section 32, T15S, R12E, S.L.B.&M., Carbon County, Utah.

### BASIS OF ELEVATION

SPOT ELEVATION AT THE NORTHWEST CORNER OF SECTION 32, T14S, R13E, S.L.B.&M., TAKEN FROM THE SUNNYSIDE QUADRANGLE, UTAH, CARBON COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5940 FEET.

### BASIS OF BEARINGS

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

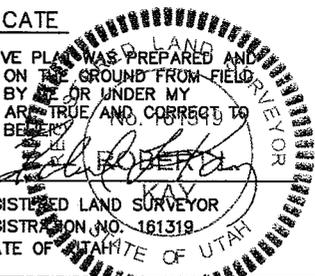


### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED AND LOCATION AS SHOWN WAS STAKED ON THE GROUND 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.

S 1/4 Cor. Sec. 34,  
Set Marked Stone,  
Pile of Stones

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH



Section Corner  
Re-Established by  
Single Proportion  
Method (Not Set  
on Ground)

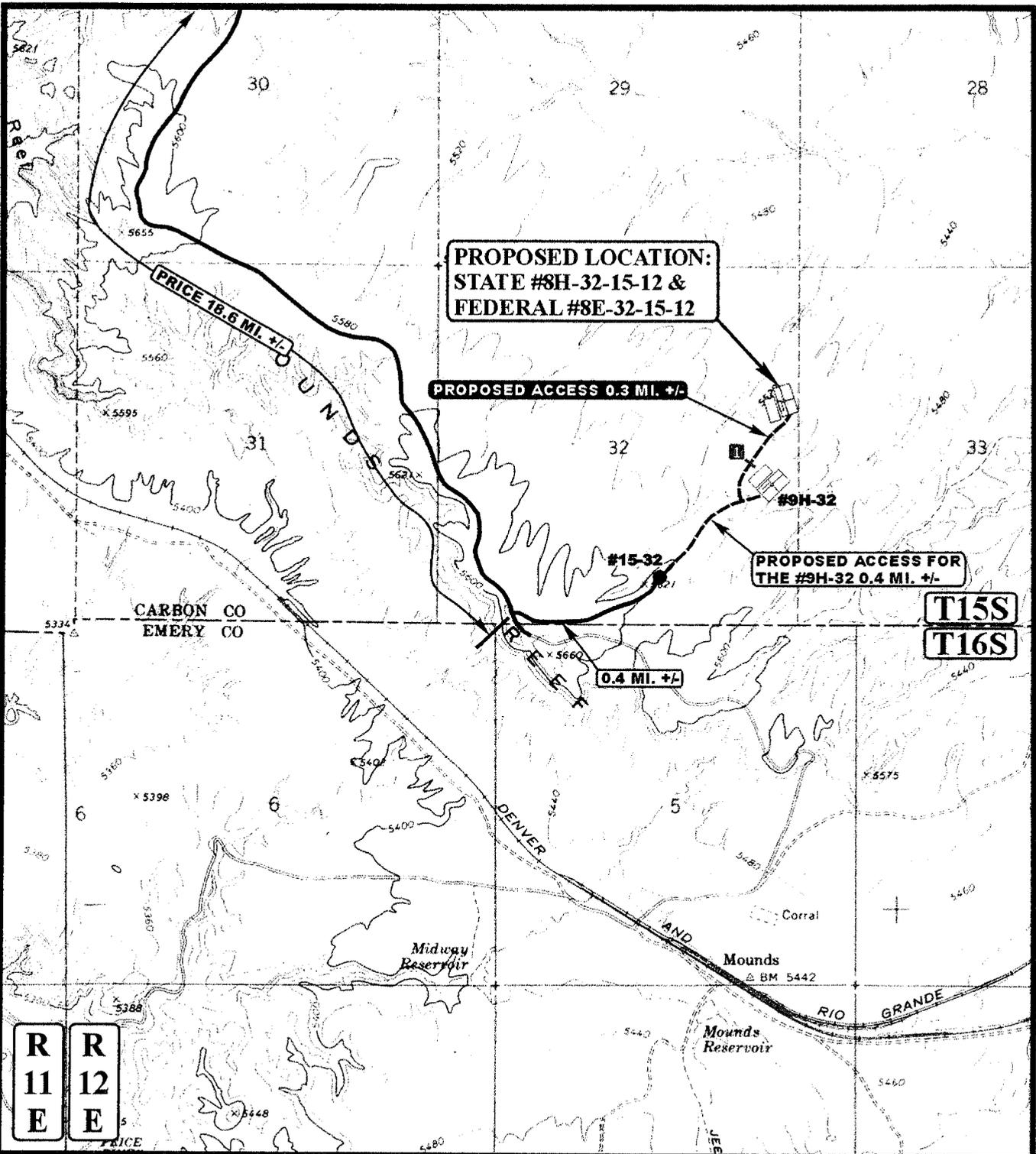
### LEGEND:

- └┘ = 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 = 39°28'43.74" (39.478817)	LATITUDE = 39°28'43.72" (39.478811)
LONGITUDE = 110°36'20.09" (110.605581)	LONGITUDE = 110°35'23.69" (110.589914)
NAD 27 (TARGET BOTTOM HOLE)	NAD 27 (SURFACE LOCATION)
LATITUDE = 39°28'43.86" (39.478850)	LATITUDE = 39°28'43.84" (39.478844)
LONGITUDE = 110°36'17.53" (110.604869)	LONGITUDE = 110°35'21.13" (110.589203)

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

SCALE 1" = 1000'	DATE SURVEYED: 10-27-08	DATE DRAWN: 11-06-08
PARTY M.A. N.F. C.H.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE BILL BARRETT CORPORATION	



**LEGEND:**

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

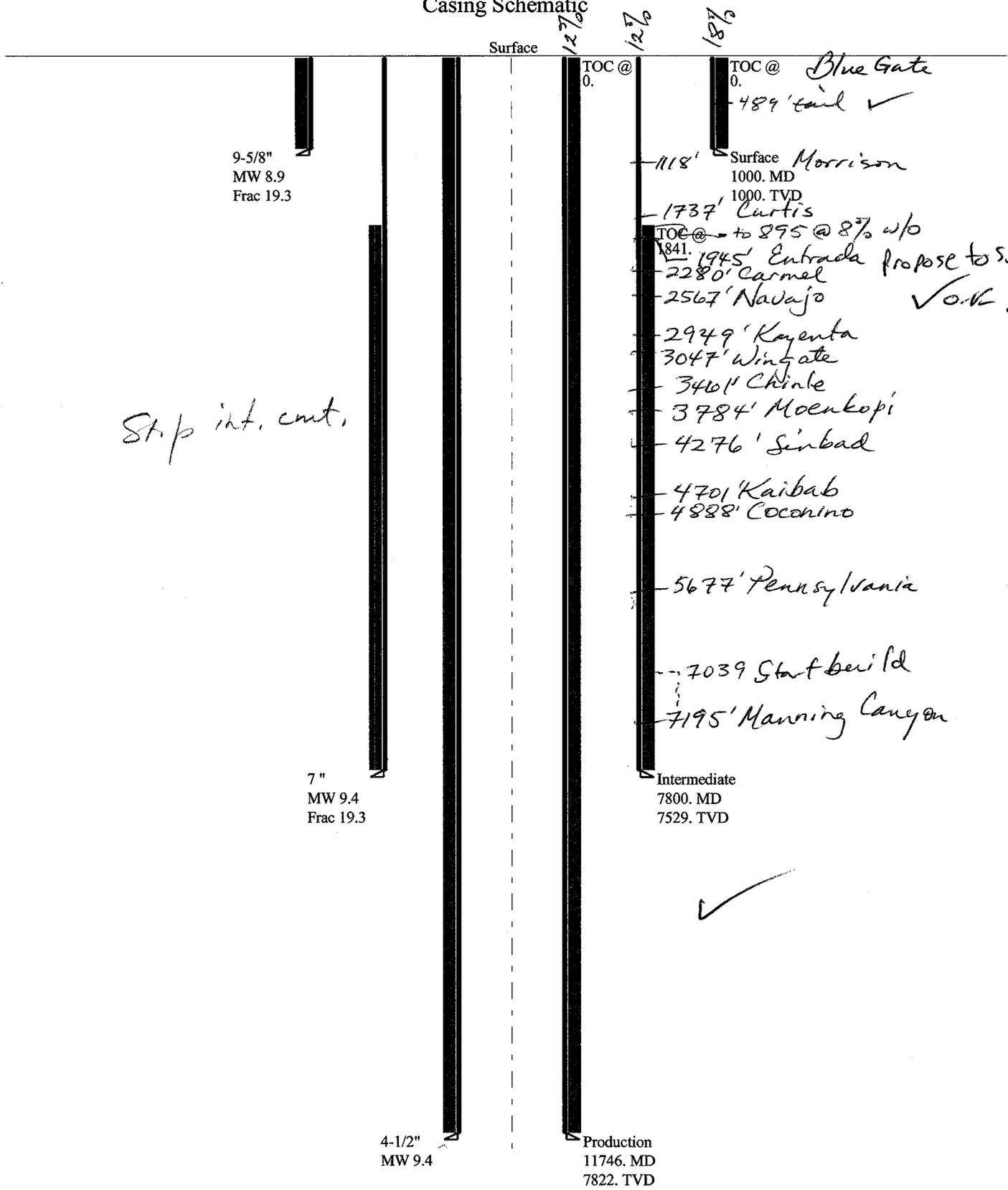


**BILL BARRETT CORPORATION**  
 STATE #8H-32-15-12 & FEDERAL #8E-32-15-12  
 SECTION 32, T15S, R12E, S.L.B.&M.  
 SE 1/4 NE 1/4

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

**TOPOGRAPHIC** 11 05 08  
 MAP MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: Z.L. REVISED: 02-25-09 **B**  
 TOPO

Casing Schematic



Well name:	<b>43007315110000 State 8H-32-15-12</b>		
Operator:	<b>Bill Barrett Corporation</b>		
String type:	<b>Surface</b>	Project ID:	<b>43-007-31511-0000</b>
Location:	<b>Carbon County</b>		

**Design parameters:**

**Collapse**

Mud weight: 8.900 ppg  
 Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 880 psi  
 Internal gradient: 0.120 psi/ft  
 Calculated BHP: 1,000 psi  
  
 No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor: 1.125

**Burst:**

Design factor: 1.00

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.50 (B)

Tension is based on air weight.  
 Neutral point: 868 ft

**Environment:**

H2S considered? No  
 Surface temperature: 65 °F  
 Bottom hole temperature: 79 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 185 ft

Cement top: Surface

**Non-directional string.**

**Re subsequent strings:**

Next setting depth: 7,529 ft  
 Next mud weight: 9.400 ppg  
 Next setting BHP: 3,676 psi  
 Fracture mud wt: 19.250 ppg  
 Fracture depth: 1,000 ft  
 Injection pressure: 1,000 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	1000	9.625	36.00	J-55	ST&C	1000	1000	8.796	434
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	462	2020	4.370	1000	3520	3.52	36	394	10.95 J

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Mining

Phone: 831-538-5357  
 FAX: 801-359-3940

Date: June 16, 2009  
 Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE  
 Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
 Collapse is based on a vertical depth of 1000 ft, a mud weight of 8.9 ppg. The casing is considered to be evacuated for collapse purposes.  
 Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:	<b>43007315110000 State 8H-32-15-12</b>		
Operator:	<b>Bill Barrett Corporation</b>		
String type:	Intermediate	Project ID:	43-007-31511-0000
Location:	Carbon County		

**Design parameters:**

**Collapse**

Mud weight: 9.400 ppg  
 Internal fluid density: 1.000 ppg

**Burst**

Max anticipated surface pressure: 2,099 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP: 3,755 psi

No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor: 1.125

**Burst:**

Design factor: 1.00

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.50 (B)

Tension is based on air weight.  
 Neutral point: 6,511 ft

**Environment:**

H2S considered? No  
 Surface temperature: 65 °F  
 Bottom hole temperature: 170 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 1,500 ft

Cement top: 1,841 ft

**Directional Info - Build & Hold**

Kick-off point: 7050 ft  
 Departure at shoe: 477 ft  
 Maximum dogleg: 12 °/100ft  
 Inclination at shoe: 85.74 °

**Re subsequent strings:**

Next setting depth: 7,822 ft  
 Next mud weight: 9.400 ppg  
 Next setting BHP: 3,820 psi  
 Fracture mud wt: 19.250 ppg  
 Fracture depth: 7,529 ft  
 Injection pressure: 7,529 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
2	7000	7	23.00	N-80	LT&C	7000	7000	6.25	1547.2
1	800	7	26.00	N-80	LT&C	7529	7800	6.151	171.9

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
2	3055	3804	1.245	3639	6340	1.74	175	442	2.53 J
1	3285	5410	1.647	3755	7240	1.93	14	519	37.75 J

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Mining

Phone: 831-538-5357  
 FAX: 801-359-3940

Date: June 16, 2009  
 Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
 Collapse is based on a vertical depth of 7529 ft, a mud weight of 9.4 ppg. An internal gradient of .052 psi/ft was used for collapse from TD to Burst strength is not adjusted for tension.  
 Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:	43007315110000 State 8H-32-15-12		
Operator:	Bill Barrett Corporation		
String type:	Production	Project ID:	43-007-31511-0000
Location:	Carbon County		

**Design parameters:**

**Collapse**

Mud weight: 9.400 ppg  
 Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 2,099 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP: 3,820 psi

No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor: 1.125

**Burst:**

Design factor: 1.00

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.50 (B)

Tension is based on air weight.  
 Neutral point: 6,707 ft

**Environment:**

H2S considered? No  
 Surface temperature: 65 °F  
 Bottom hole temperature: 175 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 368 ft

Cement top: Surface

**Directional Info - Build & Hold**

Kick-off point: 7050 ft  
 Departure at shoe: 4412 ft  
 Maximum dogleg: 12 °/100ft  
 Inclination at shoe: 85.74 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	11746	4.5	15.10	P-110	LT&C	7822	11746	3.701	937.8
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	3820	14350	3.757	3820	14420	3.78	118	406	3.44 J

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Mining

Phone: 831-538-5357  
 FAX: 801-359-3940

Date: June 16, 2009  
 Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
 Collapse is based on a vertical depth of 7822 ft, a mud weight of 9.4 ppg. The casing is considered to be evacuated for collapse purposes.  
 Burst strength is not adjusted for tension.  
 Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

*Engineering responsibility for use of this design will be that of the purchaser.*

**BOPE REVIEW**

**Bill Barrett State 8H-32-15-12 API 43-007-31511-0000**

Well Name	Bill Barrett State 8H-32-15-12 API 43-007-31511-0000		
Casing Size (")	String 1	String 2	String 3
Setting Depth (TVD)	9 5/8	7	4 1/2
Previous Shoe Setting Depth (TVD)	1000	7519	7823
Max Mud Weight (ppg)	80	1000	7519
BOPE Proposed (psi)	8.9	9.4	9.4
Casing Internal Yield (psi)	0	3000	3000
Operators Max Anticipated Pressure (psi)	3520	6340	14420
	3823		9.4 ppg

<b>Calculations</b>	<b>String 1</b>		<b>9 5/8 "</b>
Max BHP [psi]	.052*Setting Depth*MW =		463
	BOPE Adequate For Drilling And Setting Casing at Depth?		
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =		343 NO
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =		243 NO <i>Reasonable Depth</i>
	*Can Full Expected Pressure Be Held At Previous Shoe?		
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =		260 NO
Required Casing/BOPE Test Pressure			1000 psi
*Max Pressure Allowed @ Previous Casing Shoe =			80 psi
	*Assumes 1psi/ft frac gradient		

<b>Calculations</b>	<b>String 2</b>		<b>7 "</b>
Max BHP [psi]	.052*Setting Depth*MW =		3675
	BOPE Adequate For Drilling And Setting Casing at Depth?		
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =		2773 YES
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =		2021 YES ✓
	*Can Full Expected Pressure Be Held At Previous Shoe?		
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =		2241 NO <i>Reasonable</i>
Required Casing/BOPE Test Pressure			3000 psi
*Max Pressure Allowed @ Previous Casing Shoe =			1000 psi
	*Assumes 1psi/ft frac gradient		

<b>Calculations</b>	<b>String 3</b>		<b>4 1/2 "</b>
Max BHP [psi]	.052*Setting Depth*MW =		3824
	BOPE Adequate For Drilling And Setting Casing at Depth?		
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =		2885 YES
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =		2103 YES ✓
	*Can Full Expected Pressure Be Held At Previous Shoe?		
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =		3757 YES ✓
Required Casing/BOPE Test Pressure			3000 psi
*Max Pressure Allowed @ Previous Casing Shoe =			6340 psi
	*Assumes 1psi/ft frac gradient		

**From:** Derek Jones  
**To:** Mason, Diana  
**Date:** 5/12/2009 2:40 PM  
**Subject:** Re: comments to DOG&M

The following comments are in response to RDCC short turn-around items RDCC #10467, 10468, 10469, 10470, and 10472.

**RDCC #10467, Comments begin:**

The Bill Barrett Corporation proposal to drill the State 9H-32-15-12 wildcat well in Carbon County may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to R307-401: Permit: Notice of Intent and Approval Order, of the Utah Air Quality Rules. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm) .

The proposed project in Carbon County is also subject to R307-205-5: Fugitive Dust, of the Utah Air Quality Rules, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm) . **Comments end.**

**RDCC #10468, Comments begin:**

The Bill Barrett Corporation proposal to drill the Federal 8E-32-15-12 wildcat well in Carbon County may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to R307-401: Permit: Notice of Intent and Approval Order, of the Utah Air Quality Rules. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm) .

The proposed project in Carbon County is also subject to R307-205-5: Fugitive Dust, of the Utah Air Quality Rules, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm) . **Comments end.**

**RDCC #10469, Comments begin:**

The Bill Barrett Corporation proposal to drill the State 1H-32-15-12 wildcat well in Carbon County may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to R307-401: Permit: Notice of Intent and Approval Order, of the Utah Air Quality Rules. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm) .

The proposed project in Carbon County is also subject to R307-205-5: Fugitive Dust, of the Utah Air Quality Rules, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm) . **Comments end.**

**RDCC #10470, Comments begin:**

The Bill Barrett Corporation proposal to drill the State 8H-32-15-12 wildcat well in Carbon County may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to R307-401: Permit: Notice of Intent and Approval Order, of the Utah Air Quality Rules. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm) .

The proposed project in Carbon County is also subject to R307-205-5: Fugitive Dust, of the Utah Air Quality Rules, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm) . **Comments end.**

**RDCC #10472, Comments begin:**

The proposed project in Emery County is subject to Utah Air Quality Rule R307-205-7: Mining Activities, since fugitive dust emissions will be generated during mining activities. A permit, known as an Approval Order, is not required solely for the control of fugitive dust, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. If any on-site crushing of stone occurs with this project a permit application, known as a Notice of Intent, should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116, according to R307-401: Permits, Notice of Intent and Approval Order, of the Utah Air Quality Rules. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm) .

**Comments end.**

Derek Jones  
Division of Air Quality  
801-536-4423

>>> Diana Mason 5/12/2009 2:33 PM  
>>>  
Yes

>>> Derek Jones 5/12/2009 2:32 PM >>>  
Can I send them directly to you then?

>>> Diana Mason 5/12/2009 2:31 PM >>>  
Yes, the comments are for the short-time turn around and you can send the comments in to DOGM. I hope I answered your question. If not, let me know and I'll try to help you a little bit better.

>>> Derek Jones 5/12/2009 2:28 PM >>>  
This is Derek over here at the Division of Air Quality with a quick question.  
Bob had mentioned to me that air quality comments made to the Division of Oil Gas and Mining were short-time turn around items. Do I need to send comments on the wildcat wells or the Humate mining directly to that division or will what I have sent to you be sufficient?



## State of Utah

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

## Office of the Governor PUBLIC LANDS POLICY COORDINATION

JOHN HARJA  
*Director*

May 26, 2009

Gil Hunt, Associate Director  
Utah Department of Natural Resources  
Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

Subject: Proposed State 8H-32-15-12 Well on State Lease ML-49797, Carbon County, Utah  
RDCC Project No. 09-10470

Dear Mr. Hunt:

The State of Utah, Resource Development Coordinating Committee (RDCC) has reviewed this project. The RDCC is a clearinghouse for information on activities affecting state and public lands throughout Utah. The RDCC includes representatives from the state agencies that are generally involved or impacted by public lands management. Utah Code (63J-4-501 *et seq.*) instructs the RDCC to coordinate the review of technical and policy actions that may affect the physical resources of the state and facilitate the exchange of information on those actions among federal, state, and local government agencies. The Utah Division of Air Quality provides the following comments:

### Utah Division of Air Quality

The Bill Barrett Corporation proposal to drill the State 8H-32-15-12 wildcat well in Carbon County may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to R307-401: Permit: Notice of Intent and Approval Order, of the Utah Air Quality Rules. A copy of the rules is found at:

[www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm) .

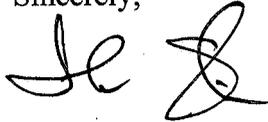
The proposed project in Carbon County is also subject to R307-205-5: Fugitive Dust, of the Utah Air Quality Rules, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction

activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at:

[www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm)

The Committee appreciates the opportunity to review this proposal and we look forward to working with you on future projects. Please direct any other written questions regarding this correspondence to the Resource Development Coordinating Committee at the address below, or call Kelly Beck at (801) 537-9046.

Sincerely,

A handwritten signature in black ink, appearing to be 'J Harja', written in a cursive style.

John Harja  
Director

cc: Derek Jones, Utah Division of Air Quality

**From:** Jim Davis  
**To:** Bonner, Ed; Mason, Diana  
**Date:** 8/27/2009 7:54 AM  
**Subject:** Well approvals- 3 for Barrett.

**CC:** Garrison, LaVonne; tfallang@billbarrettcorp.com  
The following wells have been approved by SITLA including arch and paleo clearance.  
State 1H-32-15-12 (4300731509), State 8H-32-15-12 (4300731511), State 9H-32-15-12 (4300731510).

-Jim

Jim Davis  
Utah Trust Lands Administration  
jimdavis1@utah.gov  
Phone: (801) 538-5156

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

FORM 3

AMENDED REPORT   
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>			5. MINERAL LEASE NO: ML-49797	6. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>			7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			8. UNIT or CA AGREEMENT NAME: N/A	
2. NAME OF OPERATOR: BILL BARRETT CORPORATION			9. WELL NAME and NUMBER: State 8H-32-15-12	
3. ADDRESS OF OPERATOR: 1099 18th St, Suite 230C CITY Denver STATE CO ZIP 80202		PHONE NUMBER: (303) 312-8134	10. FIELD AND POOL, OR WILDCAT: Wildcat	
4. LOCATION OF WELL (FOOTAGES) 535332X4369782Y39.478787 -110.589203 AT SURFACE: 1988' FNL, 207' FEL 533984X4369779Y39.478814 -110.604867 AT PROPOSED PRODUCING ZONE: SWNW, 1980' FNL, 660' FWL			11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENE 32 15S 12E	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: Approximately 24 miles southeast of Price, UT			12. COUNTY: Carbon	13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 207' SHL / 660' BHL	16. NUMBER OF ACRES IN LEASE: 640 acres	17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 320 acres		
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) 1235' BHL	19. PROPOSED DEPTH: 11,768	20. BOND DESCRIPTION: LPM4138147		
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5506'	22. APPROXIMATE DATE WORK WILL START: 1/1/2010	23. ESTIMATED DURATION: 45 days		

**PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT		
12 1/4"	9 5/8" J-55 36#	1,000	Hal Lt Prem	110 sx	2.93 ft3/sk 11.5 ppg
			Premium	180 sx	1.8 ft3/sk 13.5 ppg
8 3/4"	7" N-80 23# & 26#	7,775	50/50 Poz	1040 sx	1.47 ft3/sk 13.0 ppg
6 1/8"	4 1/2" P-110 15.1#	11,768	50/50 Poz	1320 sx	1.31 ft3/sk 13.5 ppg

**ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER     | <input checked="" type="checkbox"/> COMPLETE DRILLING PLAN                                   |
| <input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER | <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER |

NAME (PLEASE PRINT) Tracey Fallang TITLE Regulatory Analyst  
SIGNATURE *Tracey Fallang* DATE 5/1/2009 (revised pages 10/2/09)

(This space for State use only)

API NUMBER ASSIGNED: 43-007-31511

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

APPROVAL:

Date: 10-21-09  
(See Instructions on Reverse Side)  
By: *[Signature]*

**RECEIVED**  
**OCT 19 2009**  
**DIV. OF OIL, GAS & MINING**



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
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

October 21, 2009

Bill Barrett Corporation  
1099 18th St., #2300  
Denver, CO 80202

Re: State 8H-32-15-12 Well, 1988' FNL, 207' FEL, SE NE, Sec. 32, T. 15 South, R. 12 East,  
Bottom Location 1980' FNL, 660' FWL, SW NW, Sec. 32, T. 15 South, R. 12 East,  
Carbon County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

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. The API identification number assigned to this well is 43-007-31511.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Carbon County Assessor  
SITLA



**Operator:** Bill Barrett Corporation  
**Well Name & Number** State 8H-32-15-12  
**API Number:** 43-007-31511  
**Lease:** ML-49797

**Location:** SE NE **Sec.** 32 **T.** 15 South **R.** 12 East  
**Bottom Location:** SW NW **Sec.** 32 **T.** 15 South **R.** 12 East

### Conditions of Approval

#### 1. 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.

#### 2. Notification Requirements

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

- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
- 24 hours prior to spudding the well – contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program – contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well – contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well – contact Dustin Doucet
- Any changes to the approved drilling plan – contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at: (801) 538-5338 office (801) 942-0871 home
- Carol Daniels at: (801) 538-5284 office
- Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
6. 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.
7. The Application for Permit to Drill has been forwarded to the Resource Development Coordinating Committee for review of this action. The operator will be required to comply with any applicable recommendations resulting from this review.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-49797
<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>  <b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> STATE 8H-32-15-12
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP	<b>9. API NUMBER:</b> 43007315110000
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202	<b>PHONE NUMBER:</b> 303 312-8164 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1988 FNL 0207 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 32 Township: 15.0S Range: 12.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> WILDCAT  <b>COUNTY:</b> CARBON  <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: 8/1/2011	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> 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"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<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 checked="" 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.

This sundry is being submitted to request an extension to this APD that expires 10/21/10.

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

**Date:** October 11, 2010

**By:** 

<b>NAME (PLEASE PRINT)</b> Tracey Fallang	<b>PHONE NUMBER</b> 303 312-8134	<b>TITLE</b> Regulatory Manager
<b>SIGNATURE</b> N/A	<b>DATE</b> 10/8/2010	



**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 43007315110000**

**API:** 43007315110000

**Well Name:** STATE 8H-32-15-12

**Location:** 1988 FNL 0207 FEL QTR SENE SEC 32 TWNP 150S RNG 120E MER S

**Company Permit Issued to:** BILL BARRETT CORP

**Date Original Permit Issued:** 10/21/2009

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

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

**Signature:** Tracey Fallang

**Date:** 10/8/2010

**Title:** Regulatory Analyst **Representing:** BILL BARRETT CORP

**Date:** October 11, 2010

**By:** 

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-49797
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<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> STATE 8H-32-15-12
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<b>4. LOCATION OF WELL FOOTAGES AT SURFACE:</b> 1988 FNL 0207 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 32 Township: 15.0S Range: 12.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> WILDCAT  <b>COUNTY:</b> CARBON  <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: 10/21/2011	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
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	<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 checked="" type="checkbox"/> <b>APD EXTENSION</b>
	<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.

This sundry is being submitted to request an extension to this APD that expires 10/21/11. BBC plans on drilling this well in 2012.

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

**Date:** 10/12/2011

**By:**

<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> 10/3/2011	



**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 43007315110000**

**API:** 43007315110000

**Well Name:** STATE 8H-32-15-12

**Location:** 1988 FNL 0207 FEL QTR SENE SEC 32 TWNP 150S RNG 120E MER S

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- 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:** Brady Riley

**Date:** 10/3/2011

**Title:** Permit Analyst **Representing:** BILL BARRETT CORP



GARY R. HERBERT  
Governor

GREG 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*

October 25, 2012

Bill Barrett Corp.  
1099 18<sup>th</sup> Street Ste. 2300  
Denver, CO 80202

Re: APD Rescinded – State 8H-32-15-12, Sec. 32, T. 15S, R. 12E  
Carbon County, Utah API No. 43-007-31511

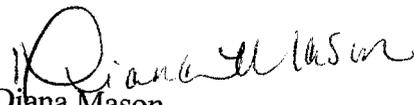
Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on October 21, 2009. On October 11, 2010 and October 13, 2011, the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective October 25, 2012.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

  
Diana Mason  
Environmental Scientist

cc: Well File  
SITLA, Ed Bonner

