

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

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>						<b>1. WELL NAME and NUMBER</b> Aurora Federal 8-26-7-20					
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						<b>3. FIELD OR WILDCAT</b> WILDCAT					
<b>4. TYPE OF WELL</b> Oil Well <input type="checkbox"/> Coalbed Methane Well: NO <input type="checkbox"/>						<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b> AURORA (DEEP)					
<b>6. NAME OF OPERATOR</b> BILL BARRETT CORP						<b>7. OPERATOR PHONE</b> 303 312-8164					
<b>8. ADDRESS OF OPERATOR</b> 1099 18th Street Ste 2300, Denver, CO, 80202						<b>9. OPERATOR E-MAIL</b> BHilgers@billbarrettcorp.com					
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> UTU80689			<b>11. MINERAL OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			<b>12. SURFACE OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>					
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>					
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>					
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>			<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input checked="" type="checkbox"/> (Submit Commingling Application) NO <input type="checkbox"/>			<b>19. SLANT</b> VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>					
<b>20. LOCATION OF WELL</b>		<b>FOOTAGES</b>		<b>QTR-QTR</b>	<b>SECTION</b>	<b>TOWNSHIP</b>	<b>RANGE</b>	<b>MERIDIAN</b>			
LOCATION AT SURFACE		1980 FNL 800 FEL		SENE	26	7.0 S	20.0 E	S			
Top of Uppermost Producing Zone		1980 FNL 800 FEL		SENE	26	7.0 S	20.0 E	S			
At Total Depth		1980 FNL 800 FEL		SENE	26	7.0 S	20.0 E	S			
<b>21. COUNTY</b> UINTAH			<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 800			<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 840					
<b>27. ELEVATION - GROUND LEVEL</b> 4840			<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 1803			<b>26. PROPOSED DEPTH</b> MD: 8318 TVD: 8318					
<b>28. BOND NUMBER</b> WYB000040			<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> 49-2336								
<b>Hole, Casing, and Cement Information</b>											
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement		Sacks	Yield	Weight
COND	26	16	0 - 80	65.0	Unknown	8.8	No Used		0	0.0	0.0
SURF	12.25	9.625	0 - 1500	36.0	J-55 ST&C	8.8	Halliburton Light , Type Unknown		190	3.16	11.0
							Halliburton Premium , Type Unknown		210	1.36	14.8
PROD	8.75	5.5	0 - 8318	17.0	P-110 LT&C	9.6	Unknown		570	2.31	11.0
							Unknown		430	1.42	13.5
<b>ATTACHMENTS</b>											
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>											
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN						
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER						
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP						
<b>NAME</b> Brady Riley			<b>TITLE</b> Permit Analyst			<b>PHONE</b> 303 312-8115					
<b>SIGNATURE</b>			<b>DATE</b> 01/23/2013			<b>EMAIL</b> briley@billbarrettcorp.com					
<b>API NUMBER ASSIGNED</b> 43047535440000			<b>APPROVAL</b>			 Permit Manager					

**BILL BARRETT CORPORATION**  
**DRILLING PLAN REVISED**

***Aurora Federal 8-26-7-20***

SENE, 1980' FNL and 800' FEL, Section 26, T7S-R20E, SLB & M (surface hole)

SENE, 1980' FNL and 800' FEL, Section 26, T7S-R20E, SLB & M (bottom hole)

Uintah County, Utah

**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/TVD</b>
Green River*	3483'
Mahogany	4593'
TGR3	5628'
Black Shale	6508'
Wasatch*	7423'
TD	8318'

\*PROSPECTIVE PAY

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

Base of Useable Water = 363'

**3. BOP and Pressure Containment Data**

<b>Depth Intervals</b>	<b>BOP Equipment</b>
0 – 1500'	No pressure control required
1500' – TD	11" 5000# Ram Type BOP 11" 5000# Annular BOP
- Drilling spool to accommodate choke and kill lines;	
- Ancillary equipment and choke manifold rated at 5,000 psi. All BOP and BOPE tests will be in accordance with the requirements of onshore Order No. 2;	
- The BLM and the State of Utah Division of Oil, Gas and Mining will be notified 24 hours in advance of all BOP pressure tests.	
- BOP hand wheels may be underneath the sub-structure of the rig if the drilling rig used is set up To operate most efficiently in this manner.	

**4. Casing Program**

<b>Hole Size</b>	<b>SETTING DEPTH</b>		<b>Casing Size</b>	<b>Casing Weight</b>	<b>Casing Grade</b>	<b>Thread</b>	<b>Condition</b>
	<b>(FROM)</b>	<b>(TO)</b>					
26"	Surface	80'	16"	65#			
12 1/4"	Surface	1500'	9 5/8"	36#	J or K 55	ST&C	New
7 7/8"	Surface	TD	5 1/2"	17#	P-110	LT&C	New

\*The casing program is based on recent wells drilled by Axia in the immediate area.

**9-5/8" casing may be preset with a spudder rig. If this occurs, the following equipment shall be in place and operational during air/gas drilling:**

- Properly lubricated and maintained rotating head
- Spark arresters on engines or water cooled exhaust

Bill Barrett Corporation  
 Drilling Program  
 Aurora Federal 8-26-7-20  
 Uintah County, Utah

- Blooie line discharge 100 feet from well bore and securely anchored
- Straight run on blooie line unless otherwise approved
- Deduster equipment
- All cuttings and circulating medium shall be directed into a reserve or blooie pit
- Float valve above bit
- Automatic igniter or continuous pilot light on the blooie line
- Compressors located in the opposite direction from the blooie line a minimum of 100 feet from the well bore
- Mud circulating equipment, water, and mud materials (does not have to be premixed) sufficient to maintain the capacity of the hole and circulating tanks or pits

#### 5. Cementing Program

16" Conductor Casing	Grout
9 5/8" Surface Casing	Lead: 190 sx Halliburton Light Premium with additives mixed at 11.0 ppg (yield = 3.16 ft <sup>3</sup> /sx) circulated to surface with 75% excess. TOC @ Surface Tail: 210 sx Halliburton Premium Plus cement with additives mixed at 14.8 ppg (yield = 1.36 ft <sup>3</sup> /sx), calculated hole volume with 75% excess. TOC @ 1,000'
5 1/2" Production Casing	Lead: 570 sx Tuned Light cement with additives mixed at 11.0 ppg (yield = 2.31 ft <sup>3</sup> /sx). TOC @ 1,000' Tail: 430 sx Halliburton Econocem cement with additives mixed at 13.5 ppg (yield = 1.42 ft <sup>3</sup> /sx). Top of cement to be determined by log and sample evaluation; estimated TOC @ 6008'

#### 6. Mud Program

<u>Interval</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss (API filtrate)</u>	<u>Remarks</u>
0' – 80'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
80' – 1500'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
1500' – TD	8.6 – 9.6	42 – 52	20 cc or less	DAP Polymer Fluid System
Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce torque and drag.				

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

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

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Drilling Program  
Aurora Federal 8-26-7-20  
Uintah County, Utah

**8. Anticipated Abnormal Pressures or Temperatures**

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 4110 psi\* and maximum anticipated surface pressure equals approximately 2280 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
- Mud monitoring will be visually observed

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

Water for the drilling and completion will be trucked from the Green River located in Sec. 33, T8S-R20E.

**11. Drilling Schedule**

Location Construction: December 2013  
Spud: December 2013  
Duration: 15 days drilling time  
45 days completion time

**PRESSURE CONTROL EQUIPMENT – Schematic Attached**

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

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

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

**C. Testing Procedure:**

Annular Preventer

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

At a minimum the above pressure test will be performed:

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

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

Blow-Out Preventer

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

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

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

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

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

**D. Choke Manifold Equipment:**

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

**E. Accumulator:**

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

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

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

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

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

**F. Miscellaneous Information:**

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

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

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# Bill Barrett Corporation

## AURORA CEMENT VOLUMES

**Well Name:** Aurora Federal 8-26-7-20

### Surface Hole Data:

Total Depth:	1,500'
Top of Cement:	0'
OD of Hole:	12.250"
OD of Casing:	9.625"

### Calculated Data:

Lead Volume:	548.1	ft <sup>3</sup>
Lead Fill:	1,000'	
Tail Volume:	274.0	ft <sup>3</sup>
Tail Fill:	500'	

### Cement Data:

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

### Calculated # of Sacks:

# SK's Lead:	190
--------------	-----

Tail Yield:	1.36	ft <sup>3</sup> /sk
% Excess:	75%	
Top of Tail:	1,000'	

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

Total Depth:	8,318'
Top of Cement:	1,000'
Top of Tail:	6,008'
OD of Hole:	7.875"
OD of Casing:	5.500"

### Calculated Data:

Lead Volume:	1301.5	ft <sup>3</sup>
Lead Fill:	5,008'	
Tail Volume:	600.4	ft <sup>3</sup>
Tail Fill:	2,310'	

### Cement Data:

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

### Calculated # of Sacks:

# SK's Lead:	570
# SK's Tail:	430

<b>Aurora Federal 8-26-7-20 Proposed Cementing Program</b>
--

<u>Job Recommendation</u>	<u>Surface Casing</u>
<b>Lead Cement - (1000' - 0')</b>	
Halliburton Light Premium	Fluid Weight: 11.0 lbm/gal
5.0 lbm/sk Silicalite Compacted	Slurry Yield: 3.16 ft <sup>3</sup> /sk
0.25 lbm/sk Kwik Seal	Total Mixing Fluid: 19.48 Gal/sk
0.125 lbm/sk Poly-E-Flake	Top of Fluid: 0'
2.0% Bentonite	Calculated Fill: 1,000'
	Volume: 97.61 bbl
	<b>Proposed Sacks: 190 sks</b>
<b>Tail Cement - (TD - 1000')</b>	
Premium Cement	Fluid Weight: 14.8 lbm/gal
2.0% Calcium Chloride	Slurry Yield: 1.36 ft <sup>3</sup> /sk
	Total Mixing Fluid: 6.37 Gal/sk
	Top of Fluid: 1,000'
	Calculated Fill: 500'
	Volume: 48.80 bbl
	<b>Proposed Sacks: 210 sks</b>

<u>Job Recommendation</u>	<u>Production Casing</u>
<b>Lead Cement - (6008' - 1000')</b>	
Tuned Light™ System	Fluid Weight: 11.0 lbm/gal
	Slurry Yield: 2.31 ft <sup>3</sup> /sk
	Total Mixing Fluid: 10.65 Gal/sk
	Top of Fluid: 1,000'
	Calculated Fill: 5,008'
	Volume: 231.79 bbl
	<b>Proposed Sacks: 570 sks</b>
<b>Tail Cement - (8318' - 6008')</b>	
Econocem™ System	Fluid Weight: 13.5 lbm/gal
0.125 lbm/sk Poly-E-Flake	Slurry Yield: 1.42 ft <sup>3</sup> /sk
1.0 lbm/sk Granulite TR 1/4	Total Mixing Fluid: 6.61 Gal/sk
	Top of Fluid: 6,008'
	Calculated Fill: 2,310'
	Volume: 106.92 bbl
	<b>Proposed Sacks: 430 sks</b>

**T7S, R20E, S.L.B.&M.**

**BILL BARRETT CORPORATION**

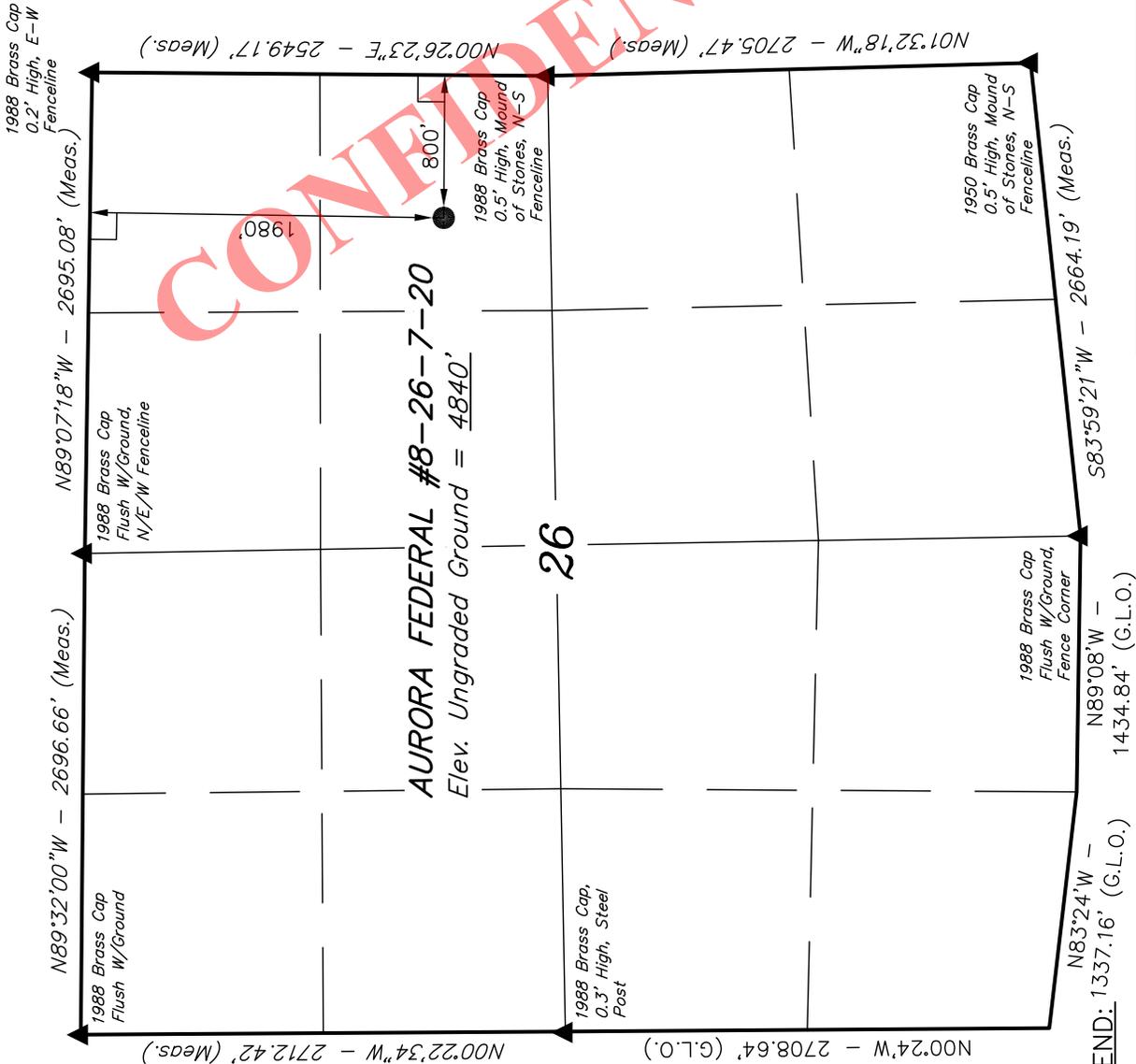
Well location, AURORA FEDERAL #8-26-7-20, located as shown in the SE 1/4 NE 1/4 of Section 26, T7S, R20E, S.L.B.&M, Uintah County, Utah.

**BASIS OF ELEVATION**

BENCH MARK (38EAM) LOCATED IN THE SW 1/4 OF SECTION 9, T7S, R20E, S.L.B.&M., TAKEN FROM THE PELICAN LAKE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4942 FEET.

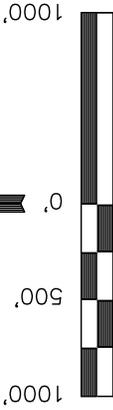
**BASIS OF BEARINGS**

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



<b>NAD 83 (SURFACE LOCATION)</b>	
LATITUDE =	40°10'59.82" (40.183283)
LONGITUDE =	109°37'45.20" (109.629222)
<b>NAD 27 (SURFACE LOCATION)</b>	
LATITUDE =	40°10'59.95" (40.183319)
LONGITUDE =	109°37'42.70" (109.628528)

**LEGEND:**  
 = 90° SYMBOL  
 = PROPOSED WELL HEAD.  
 = SECTION CORNERS LOCATED.



S C A L E

C E R T I F I C A T E

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

**WILL BARRETT**  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 161319  
 STATE OF UTAH

REVISED: 03-26-12 R.L.

**UINTAH ENGINEERING & LAND SURVEYING**

85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (435) 789-1017

SCALE	1" = 1000'	DATE SURVEYED:	01-12-12	DATE DRAWN:	01-26-12
PARTY	C.R. S.R. R.L.	REFERENCES	G.L.O. PLAT		
WEATHER	COLD	FILE			
					BILL BARRETT CORPORATION

**BILL BARRETT CORPORATION**  
**AURORA FEDERAL #8-26-7-20**  
LOCATED IN UINTAH COUNTY, UTAH  
SECTION 26, T7S, R20E, S.L.B.&M.



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF EXISTING 2-TRACK

CAMERA ANGLE: EASTERLY



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

<b>LOCATION PHOTOS</b>			<b>01</b>	<b>23</b>	<b>12</b>	<b>PHOTO</b>
			MONTH	DAY	YEAR	
TAKEN BY: C.R.	DRAWN BY: C.I.	REVISED: 12-07-12				

**T7S, R20E, S.L.B.&M.**

**BILL BARRETT CORPORATION**

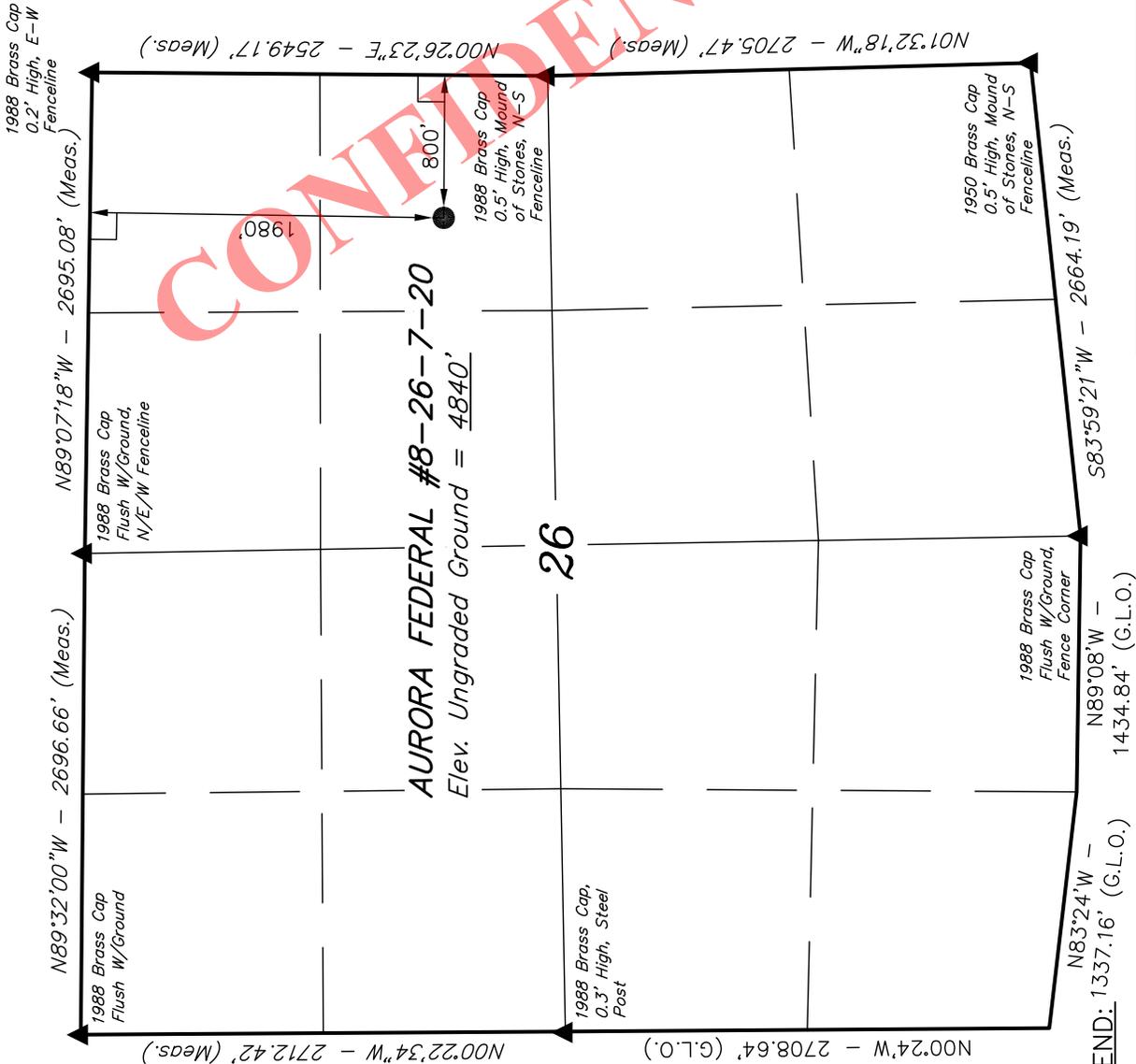
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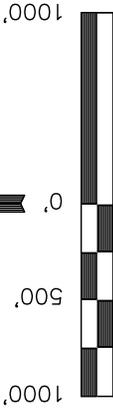
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**LEGEND:**  
 = 90° SYMBOL  
 ● = PROPOSED WELL HEAD.  
 ▲ = SECTION CORNERS LOCATED.



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C E R T I F I C A T E

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

REVISED: 03-26-12 R.L.

<b>UINTAH ENGINEERING &amp; LAND SURVEYING</b>	
85 SOUTH 200 EAST - VERNAL, UTAH 84078 (435) 789-1017	
SCALE 1" = 1000'	DATE SURVEYED: 01-12-12
PARTY C.R. S.R. R.L.	DATE DRAWN: 01-26-12
WEATHER COLD	REFERENCES G.L.O. PLAT
	FILE BILL BARRETT CORPORATION

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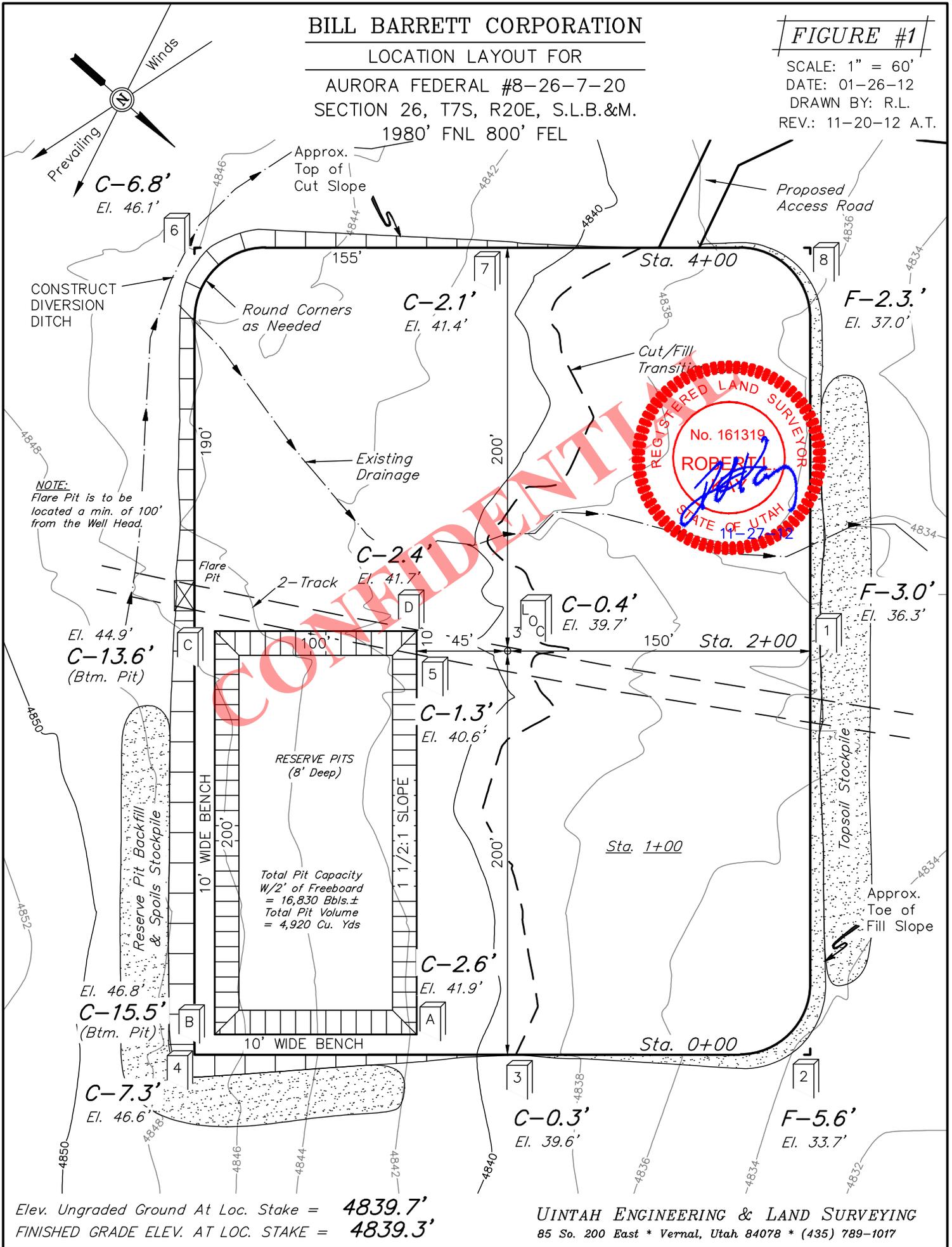
**BILL BARRETT CORPORATION**

LOCATION LAYOUT FOR

AURORA FEDERAL #8-26-7-20  
SECTION 26, T7S, R20E, S.L.B.&M.  
1980' FNL 800' FEL

**FIGURE #1**

SCALE: 1" = 60'  
DATE: 01-26-12  
DRAWN BY: R.L.  
REV.: 11-20-12 A.T.



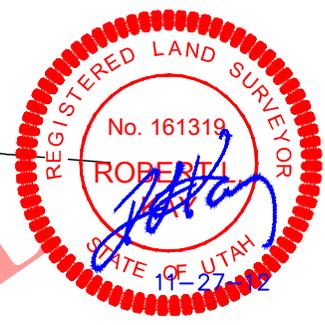
**BILL BARRETT CORPORATION**

**FIGURE #2**

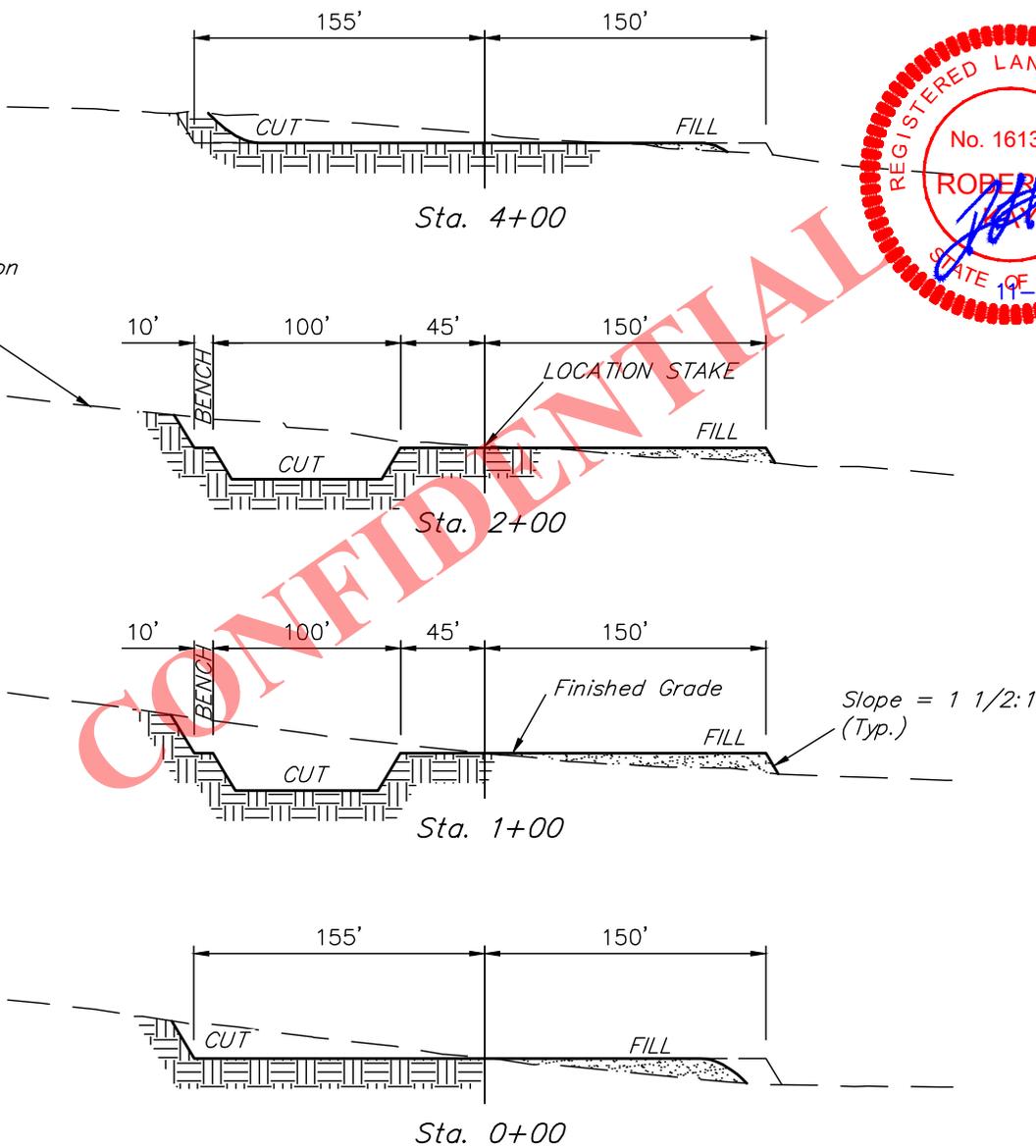
X-Section Scale  
1" = 100'

TYPICAL CROSS SECTIONS FOR  
AURORA FEDERAL #8-26-7-20  
SECTION 26, T7S, R20E, S.L.B.&M.  
1980' FNL 800' FEL

DATE: 01-26-12  
DRAWN BY: R.L.  
REV.: 11-20-12 A.T.



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**NOTE:**

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

APPROXIMATE ACREAGES

WELL SITE DISTURBANCE	= ± 2.996 ACRES
ACCESS ROAD DISTURBANCE	= ± 2.030 ACRES
PIPELINE DISTURBANCE	= ± 2.016 ACRES
<b>TOTAL</b>	<b>= ± 7.042 ACRES</b>

\* NOTE:  
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

(6") Topsoil Stripping	= 2,470 Cu. Yds.
Remaining Location	= 10,980 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 13,450 CU.YDS.</b>
<b>FILL</b>	<b>= 6,950 CU.YDS.</b>

EXCESS MATERIAL	= 6,500 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 4,930 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 1,570 Cu. Yds.

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85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

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TYPICAL RIG LAYOUT FOR

AURORA FEDERAL #8-26-7-20  
SECTION 26, T7S, R20E, S.L.B.&M.  
1980' FNL 800' FEL

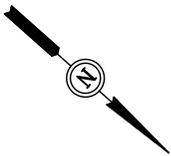
**FIGURE #3**

SCALE: 1" = 60'

DATE: 01-26-12

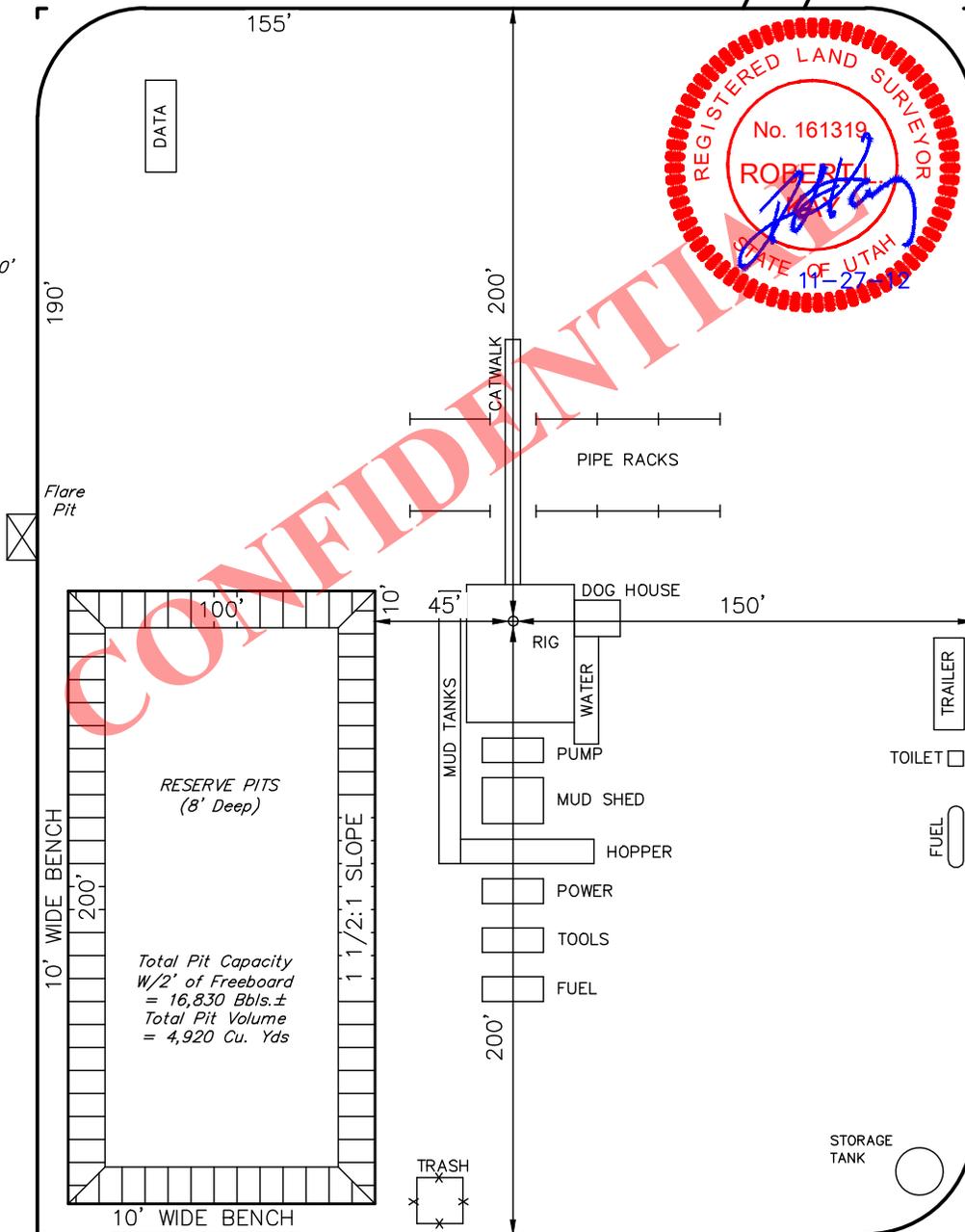
DRAWN BY: R.L.

REV.: 11-20-12 A.T.



Proposed Access Road

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

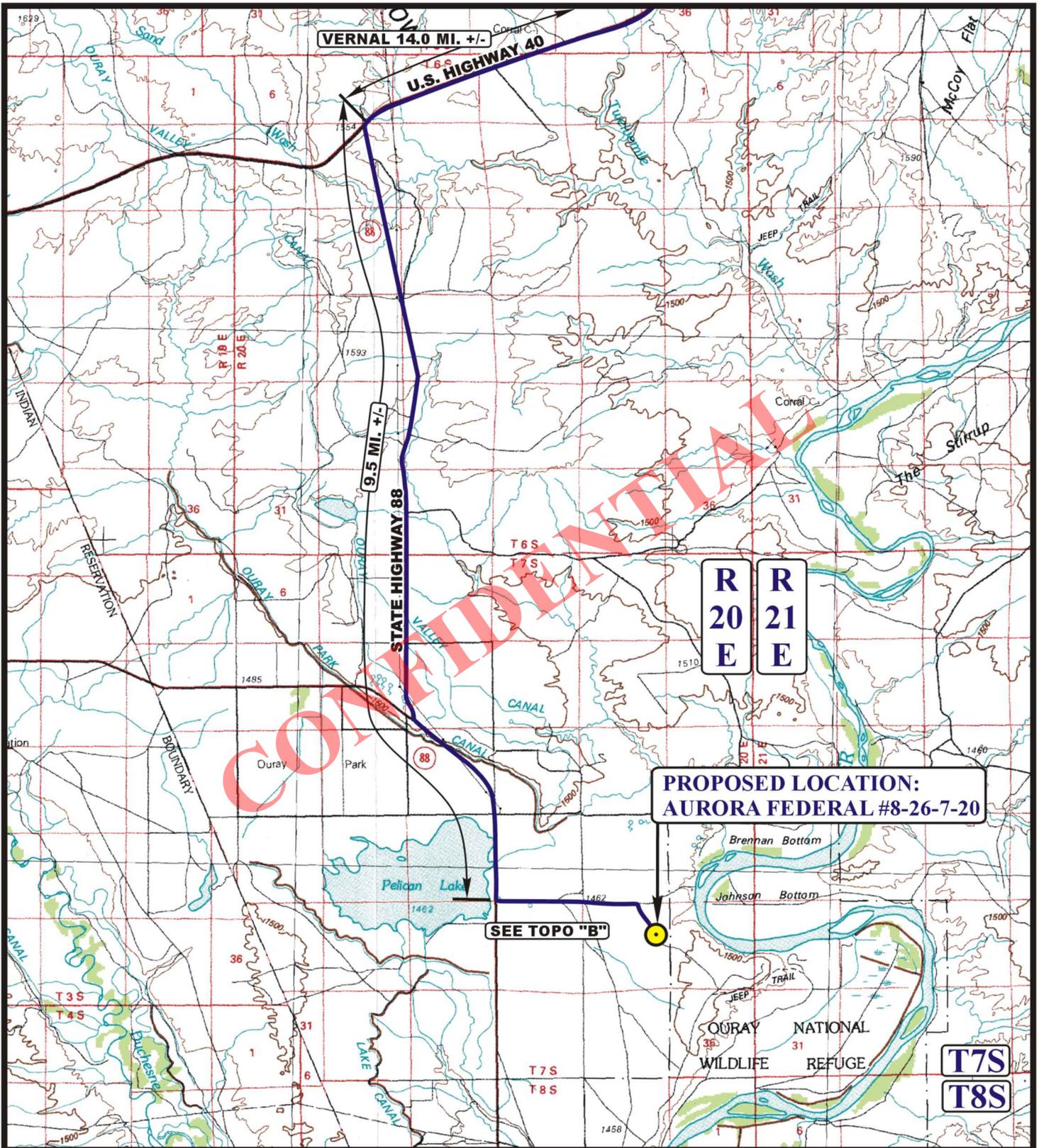


**BILL BARRETT CORPORATION**  
**AURORA FEDERAL #8-26-7-20**  
**SECTION 26, T7S, R20E, S.L.B.&M.**

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 9.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 1.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING 2-TRACK TO THE EAST; FOLLOW 2-TRACK IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 2,335' TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTH; FOLLOW ROAD FLAGS IN A SOUTHERLY, THEN EASTERLY DIRECTION APPROXIMATELY 612' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 25.6 MILES.

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**PROPOSED LOCATION:  
AURORA FEDERAL #8-26-7-20**

SEE TOPO "B"

**LEGEND:**

 **PROPOSED LOCATION**

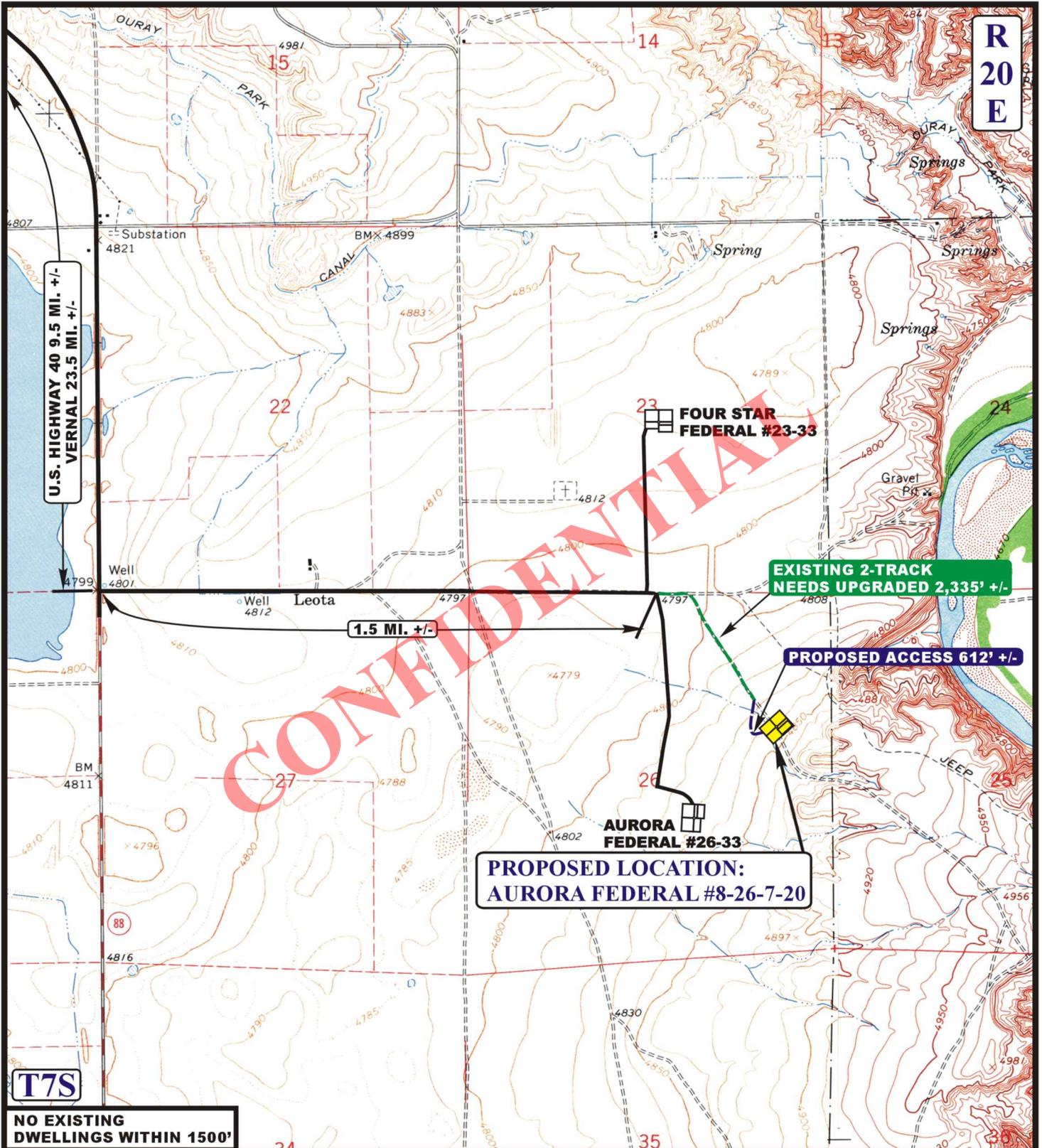
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**AURORA FEDERAL #8-26-7-20  
SECTION 26, T7S, R20E, S.L.B.&M.  
1980' FNL 800' FEL**

**U&L S** **Utah Engineering & Land Surveying**  
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<b>ACCESS ROAD MAP</b>	<b>01 23 12</b> MONTH DAY YEAR	<b>A TOPO</b>
SCALE: 1:100,000	DRAWN BY: C.I. REVISED: 11-19-12	



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**LEGEND:**

- EXISTING ROAD
- PROPOSED ACCESS ROAD
- EXISTING 2-TRACK NEEDS UPGRADED (AVERAGE WIDTH 10' +/-)

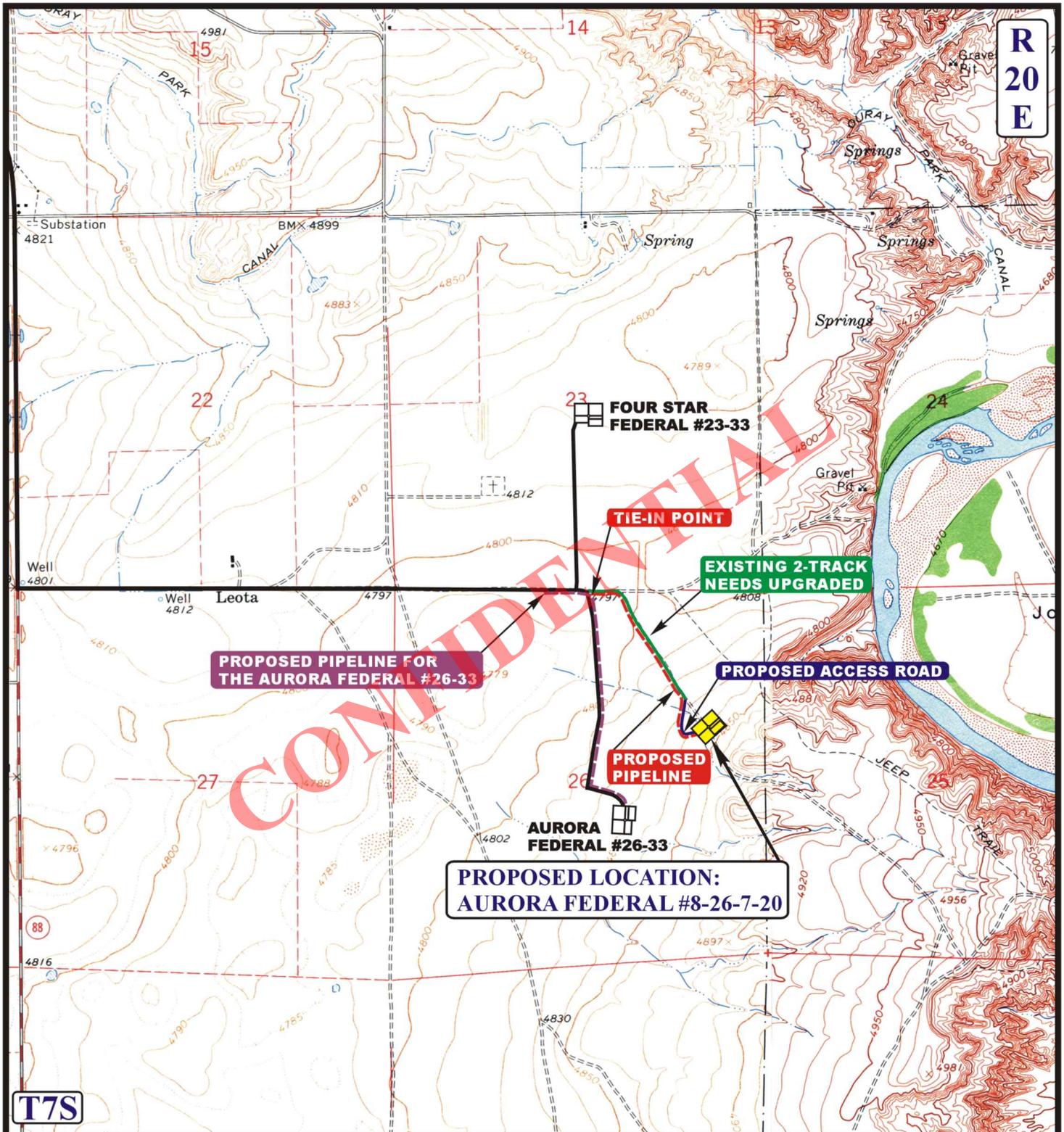
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**SECTION 26, T7S, R20E, S.L.B.&M.**  
**1980' FNL 800' FEL**

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<b>ACCESS ROAD</b>	<b>01 23 12</b>	<b>B</b> TOPO
<b>M A P</b>	MONTH DAY YEAR	
SCALE: 1" = 2000'	DRAWN BY: C.I.	REVISED: 12-07-12





**APPROXIMATE TOTAL PIPELINE DISTANCE = 2,927' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- - - - PROPOSED PIPELINE
- EXISTING 2-TRACK NEEDS UPGRADED

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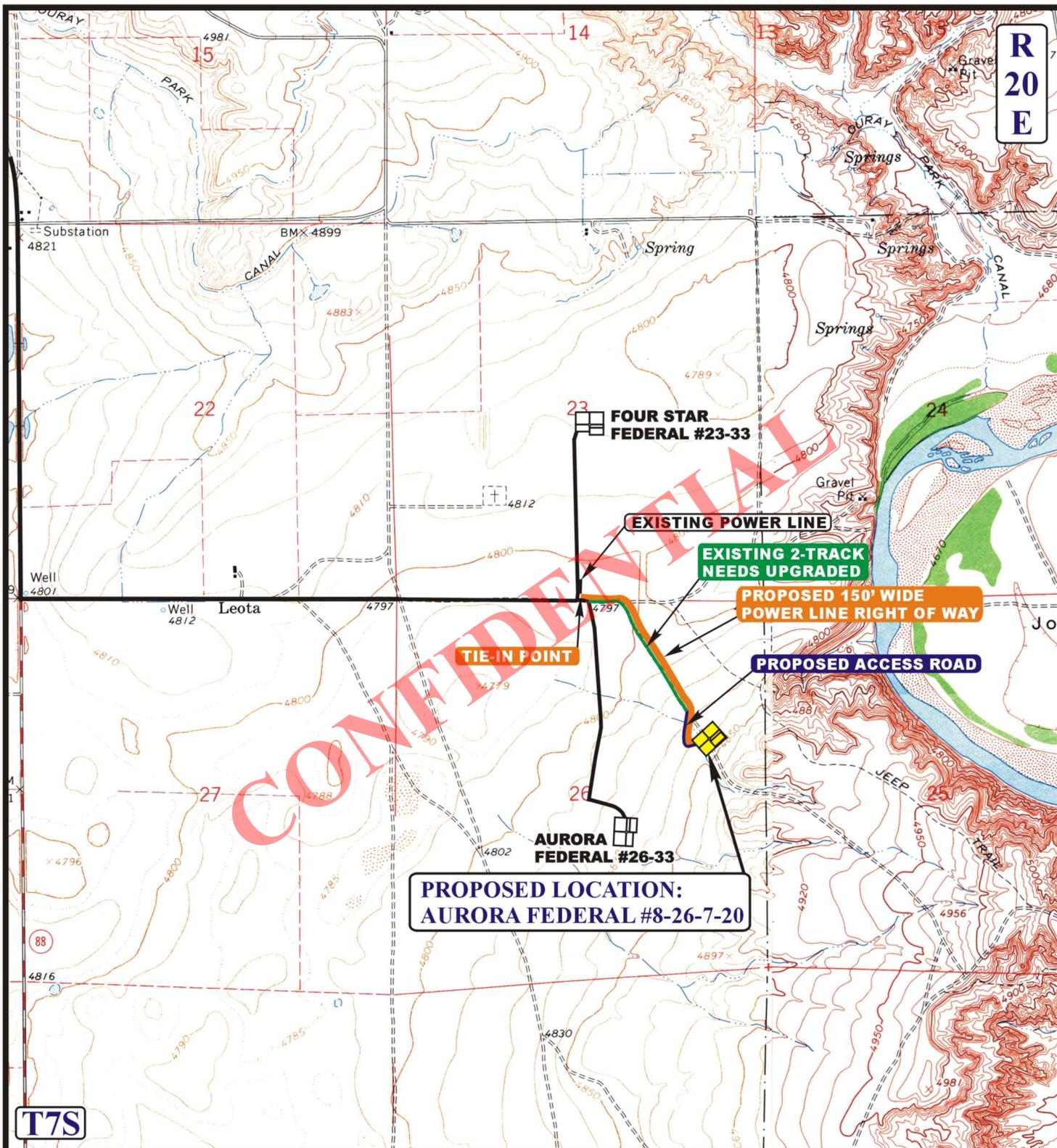
**AURORA FEDERAL #8-26-7-20**  
**SECTION 26, T7S, R20E, S.L.B.&M.**  
**1980' FNL 800' FEL**

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**TOPOGRAPHIC MAP** **01 23 12**  
 MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: C.I. REVISED: 12-07-12





APPROXIMATE TOTAL POWERLINE DISTANCE = 2,876' +/-

**LEGEND:**

- PROPOSED ACCESS ROAD
- PROPOSED POWER LINE
- - - - - EXISTING POWER LINE
- EXISTING 2-TRACK NEEDS UPGRADED



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**SECTION 26, T7S, R20E, S.L.B.&M.**  
**1980' FNL 800' FEL**



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**TOPOGRAPHIC MAP**  
 01 23 12  
 MONTH DAY YEAR  
 SCALE: 1" = 1000' DRAWN BY: C.L. REVISED: 12-07-12



**SURFACE USE PLAN**

BILL BARRETT CORPORATION

**Aurora Federal #8-26-7-20**

SENE, 1980' FNL and 800' FEL, Section 26, T7S-R20E, SLB&M (surface hole)

SENE, 1980' FNL and 800' FEL, Section 26, T7S-R20E, SLB&M (bottom hole)

Uintah County, Utah

---

The onsite inspection for this pad occurred on 11/15/12. Site specific conditions or changes as a result of that onsite are indicated below. Plat changes requested at the onsite are reflected within this APD.

- a) Access road, pipeline and power routes were changed to following existing 2-track and new surveys have been conducted on this new route;
- b) Production facilities to be located at corner 6 area to maximize interim reclamation;
- c) Relocate access entrance to corner 7 area

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

1. Existing Roads:

- a. The proposed well site is located approximately 25.6 miles southwest of Vernal, Utah. Maps and directions reflecting the route to the proposed well site are included (see Topographic maps A and B).
- b. Coming off of US Hwy 40, head south down the UDOT maintained SR-88 for 9.5 miles trending south to the existing road that will be utilized for 1.5 miles trending east to the junction in which an existing two-track will be used/upgraded as the access road to the pad.
- c. Project roads would require routine year-round maintenance to provide year-round access. Maintenance would include inspections, reduction of ruts and holes, maintenance to keep water off the road, replacement of surfacing materials, and clearing of sediment blocking ditches and culverts. Should snow removal become necessary, roads would be cleared with a motor grader and snow would be stored along the down gradient side to prohibit runoff onto the road. Aggregate would be used as necessary to maintain a solid running surface and minimize dust generation.
- d. Vehicle operators would obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions. Travel would be limited to the existing access roads and proposed access road.
- e. The use of roads under State and Uintah County Road Department maintenance are necessary to access the project area with no improvements proposed. A Uintah County Encroachment Permit has been obtained.

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

2. Planned Access Road:

- a. Approximately 2947 feet of access road to be constructed is proposed (see Topographic Map B). Approximately 2335 feet of access road is an existing 2-track that will be upgraded. The access road is entirely on BLM surface.
- b. The planned access road would be constructed to a 30-foot ROW width with an 18-foot travel surface. See section 12.d. below for disturbance estimates as a portion of the road already exists, changing the total disturbance calculations.
- c. New road construction and improvements of existing roads would typically require the use of motor graders, crawler tractors, 10-yard end dump trucks, and water trucks. The standard methodology for building new roads involves the use of a crawler tractor or track hoe to windrow the vegetation to one side of the road corridor, remove topsoil to the opposing side of the corridor, and rough-in the roadway. This is followed by a grader or bulldozer to establish barrow ditches and crown the road surface. Where culverts are required, a track hoe or backhoe would trench the road and install the culverts. Some hand labor would be required when installing and armoring culverts. Road base or gravel in some instances would be necessary and would be hauled in and a grader used to smooth the running surface.
- d. The proposed road would be constructed to facilitate drainage, control erosion and minimize visual impacts by following natural contours where practical. No unnecessary side-casting of material would occur on steep slopes.
- e. A maximum grade of 10% would be maintained throughout the project with minimum cuts and fills, as necessary, to access the well.
- f. Excess rock from construction of the pad may be used for surfacing of the access road if necessary. Any additional aggregate necessary would be obtained from private or State of Utah lands in conformance with applicable regulations. Aggregate would be of sufficient size, type, and amount to allow all weather access and alleviate dust.
- g. Where topsoil removal is necessary, it would be windrowed (i.e. stockpiled/accumulated along the edge of the ROW and in a low row/pile parallel with the ROW) and re-spread over the disturbed area after construction and backfilling are completed. Vegetation removed from the disturbed area would also be re-spread to provide protection, nutrient recycling, and a seed source for reclamation.
- h. Turnouts are not proposed.

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

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

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

4. Location of Production Facilities

- a. Surface facilities would consist of a wellhead, separator, gas meter, combustor, (1) 500 gal methanol tank, (1) 500 glycol tank, (2) 500 bbl oil tanks, (1) 500 bbl water tank, (1) 400 bbl vent tank, (1) 1000 gal propane tank, a pumping unit or Roto-flex unit or ESP or gas lift unit, electrical or with a natural gas or diesel fired motor, solar panels, solar chemical and methanol pumps and one trace pump, and if necessary power lines. See attached proposed facility diagram. Additional equipment may be added when more than one well is drilled on each pad. See attached proposed facility diagram.
- b. Most wells would be fitted with a pump jack or Roto-flex unit or ESP or gas lift to assist liquid production. The prime mover for pump jacks or Roto-flex units would be small (100 horsepower or less), electric motor or natural gas or diesel fired internal combustion engines. If a gas lift is installed, it would be set on a 10 ft x 25 ft pad and the prime mover would be a natural gas-fired internal

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combustion engine rated at 200 horsepower or less or an electric compressor of similar horsepower powered by electricity.

- c. The tank battery would be surrounded by a secondary containment berm of sufficient capacity to contain 1.1 times the entire capacity of the largest single tank and sufficient freeboard to contain precipitation. All loading lines and valves would be placed inside the berm surrounding the tank battery or would utilize catchment basins to contain spills. All liquid hydrocarbon production and measurement shall conform to the provisions of 43 CFR 3162.7-2 and Onshore Oil and Gas Order No. 4 for the measurement of oil.
- d. Gas meter run(s) would be constructed and located on lease within 500 feet of the wellheads. Meter runs would be housed and/or fenced. As practicably feasible, meters would be equipped with remote telemetry monitoring systems. All gas production and measurement shall comply with the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.
- e. A combustor may be installed at this location for control of associated condensate tank emissions. A combustor ranges from 24 inches to 48 inches wide and is approximately 27 ft tall. Combustor placement would be on existing disturbance.
- f. Approximately 2927 feet of pipeline corridor (see Topographic Map C) containing up to three lines (one gas pipeline up to 12 inch in diameter, one water line up to 8 inch in diameter and one residue line up to 4 inch in diameter) is proposed trending east to a proposed pipeline corridor. Pipelines would be constructed of steel, polyethylene or fiberglass and would connect to the proposed pipeline servicing nearby BBC wells. The pipeline crosses entirely BLM surface.
- g. The new segment of gas pipeline would be buried within a 30 foot wide pipeline corridor adjacent to the proposed access road. See 12.d below for disturbance estimates.
- h. Pipeline construction methods and practices would be planned and conducted by BBC with the objective of enhancing reclamation and fostering the re-establishment of the native plant community.
- i. All permanent above-ground structures would be painted a flat, non-reflective color, such as Covert Green, to match the standard environmental colors. All facilities would be painted the designated color at the time of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.
- j. Site security guidelines identified in 43 CFR 3162.7-5 and Onshore Oil and Gas Order No. 3 would be adhered to. Any modifications to proposed facilities would be reflected in the site security diagram submitted.

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- k. The site would require periodic maintenance to ensure that drainages are kept open and free of debris, and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.

5. Location and Type of Water Supply:

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

Water Right No. and Application or Change No.	Applicant	Allocation	Date	Point of Diversion	Source
43-2505, Appln t37379	McKinnon Ranch Properties, LC	1.3 cfs	4/28/2011	Pumped from Sec, 17, T4SR6W	Water Canyon Lake
43-11787	Neil Moon	14.29 ac-ft	4/2/12	Sec. 27, T3S, R2W	Gravel Pit Pond
43-12345 (F78949 )	Dale Anderson	10.- ac-ft	1/5/2011	Sec. 14, T3S, R1E	Pit Pond
43-10664 (A38472)	W. E. Gene Brown	4.712 ac-ft	9/18/12	Sec. 32, T6S, R20E	Unnamed Spring Area
49-1645 (A35800)	RN Industries, Inc.	50 ac-ft	4/10/2011	Sec 9, T8S- R20E	Underground Well
49-2336 (t78808)	RN Industries, Inc.	20 ac-ft	4/7/2011	Sec 33, T8S- R20E	Green River
43-8496 (A53617)	A-1 Tank Rental	0.015 cfs	8/17/1979	Sec 32, T4S- R3E	Underground Well
43-10288 (A65273)	Nile Chapman (RNI)	0.45 ac-ft	4/4/1991	Sec 9, T2S- R2W	Underground Well
49-2247 (F76893)	Magnum Water Service	20 ac-ft	9/20/12	Sec. 33, T8S- R20E	Underground Well

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

6. Source of Construction Material:

- a. The use of materials would conform to 43 CFR 3610.2-3.

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- b. No construction materials would be removed from the lease or EDA area.
- c. If any additional gravel is required, it would be obtained from a local supplier having a permitted source of materials within the general area.

7. Methods of Handling Waste Disposal:

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

Disposal Facilities
1. LaPoint Recycle & Storage – Sec. 12, T5S-R19E
2. Dalbo, Inc. Ace Disposal, Sec. 35, T5S-R20W & Sec. 2, T6S-R20W

- g. Any salts and/or chemicals, which are an integral part of the drilling system, would be disposed of in the same manner as the drilling fluid.
- h. Any spills of oil, condensate, produced or frac water, drilling fluids, or other potentially deleterious substances would be recovered and either returned to its origin or disposed of at an approved disposal site, most likely in Duchesne, Utah.
- i. Chemicals on the EPA's Consolidated List of Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act of 1986

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(SARA) may be used or stored in quantities over reportable quantities. In the course of drilling, BBC could potentially store and use diesel fuel, sand (silica), hydrochloric acid, and CO<sub>2</sub> gas, all described as hazardous substances in 40 CFR Part 302, Section 302.4, in quantities exceeding 10,000 pounds. In addition, natural gas condensate and crude oil and methanol may be stored or used in reportable quantities. Small quantities of retail products (paint/spray paints, solvents {e.g., WD-40}, and lubrication oil) containing non-reportable volumes of hazardous substances may be stored and used on site at any time. No extremely hazardous substances, as defined in 40 CFR 355, would be used, produced, stored, transported or disposed of in association with the drilling, testing or completion of the wells.

- j. Portable toilets and trash containers would be located onsite during drilling and completion operations. A commercial supplier would install and maintain portable toilets and equipment and would be responsible for removing sanitary waste. Sanitary waste facilities (i.e. toilet holding tanks) would be regularly pumped and their contents disposed of at approved sewage disposal facilities in Duchesne, and/or Uintah Counties, in accordance with applicable rules and regulations regarding sewage treatment and disposal. Accumulated trash and nonflammable waste materials would be hauled to an approved landfill once a week or as often as necessary. All debris and waste materials not contained in the trash containers would be cleaned up, removed from the construction ROW, well pad, or worker housing location, and disposed of at an approved landfill. Trash would be cleaned up everyday.
- k. Sanitary waste equipment and trash bins would be removed from the Project Area upon completion of access road or pipeline construction; following drilling and completion operations at an individual well pad; when worker housing is no longer needed; or as required.
- l. A flare pit may be constructed a minimum of 110' from the wellhead(s) and may be used during completion work. In the event a flare pit proves to be unworkable, a temporary flare stack or open top tank would be installed. BBC would flow back as much fluid and gas as possible into pressurized vessels, separating the fluids from the gas. In some instances, due to the completion fluids utilized within the Project Area, it is not feasible to direct the flow stream from the wellbore through pressurized vessels. In such instances BBC proposes to direct the flow to the open top tanks until flow through the pressurized vessels is feasible. At which point the fluid would either be returned to the reserve pit or placed into a tank(s). The gas would be directed to the flare pit, flare stack (each with a constant source of ignition), or may be directed into the sales pipeline.
- m. Hydrocarbons would be removed from the reserve pit would as soon as practical. In the event immediate removal is not practical, the reserve pit would be flagged overhead or covered with wire or plastic mesh to protect migrating birds.

8. Ancillary Facilities:

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- a. Garbage containers and portable toilets would be located on the well pad.
- b. On well pads where active drilling and completion is occurring, temporary housing would be provided on location for the well pad supervisor, geologist, tool pusher, and others that are required to be on location at all times. The well pad could include up to five single wide mobile homes or fifth wheel campers/trailers.
- c. A surface powerline corridor is proposed for installation by a third-party installer. All necessary permits will be obtained by the contractor.

9. Well Site Layout:

- a. The well would be properly identified in accordance with 43 CFR 3162.6.
- b. The pad layout, cross section diagrams and rig layout are enclosed (see Figures 1 and 2).
- c. The pad and road designs are consistent with industry specifications.
- d. The pad has been staked at its maximum size of 400 feet x 305 feet with an inboard reserve pit size of 100 feet x 200 feet x 10 feet deep. See section 12.d below for disturbance estimates.
- e. Within the approved well pad location, a crawler tractor would strip whatever topsoil is present and stockpile it along the edge of the well pad for use during reclamation. Vegetation would be distributed along the sides of the well pad.
- f. Fill from pit excavation would be stockpiled along the edge of the pit and the adjacent edge of the well pad.
- g. Use of erosion control measures, including proper grading to minimize slopes, diversion terraces and ditches, mulching, terracing, riprap, fiber matting, temporary sediment traps, and broad-based drainage dips or low water crossings would be employed by BBC as necessary and appropriate to minimize erosion and surface runoff during well pad construction and operation. Cut and fill slopes would be constructed such that stability would be maintained for the life of the activity.
- h. All cut and fill slopes would be such that stability can be maintained for the life of the activity.
- i. Diversion ditches would be constructed, if necessary, around the well site to prevent surface waters from entering the well site area.
- j. Water application may be implemented if necessary to minimize the amount of fugitive dust.

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- k. All surface disturbing activities would be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.

10. Plan for Restoration of the Surface:

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

11. Surface and Mineral Ownership:

- a. Surface ownership – Federal under the management of the BLM – Vernal Field Office.

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- b. Mineral ownership – Federal under the management of the BLM – Vernal Field Office.

12. Other Information:

- a. Montgomery Archeological Consultants has conducted a Class III archeological survey. A copy of the report has been submitted under separate cover to the appropriate agencies by Montgomery as report MOAC 12-067 dated 3/21/12 and MOAC 12-368 dated 12/28/12.
- b. BBC would require that their personnel, contractors, and subcontractors to comply with Federal regulations intended to protect archeological and cultural resources.
- c. Project personnel and contractors would be educated on and subject to the following requirements:
  - No dogs or firearms within the Project Area.
  - No littering within the Project Area.
  - Smoking within the Project Area would only be allowed in off-operator active locations or in specifically designated smoking areas. All cigarette butts would be placed in appropriate containers and not thrown on the ground or out windows of vehicles; personnel and contractors would abide by all fire restriction orders.
  - Campfires or uncontained fires of any kind would be prohibited.
  - Portable generators used in the Project Area would have spark arrestors.
- d. Disturbance estimates:

**Approximate Acreage Disturbances**

Well Pad		2.996	acres
Existing Access Road to be upgraded	2335* feet	1.072	acres
New Access Road	612 feet	.421	acres
Pipeline	2927 feet	2.016	acres
Powerline	2876 feet	3.301	acres
	<b>Total</b>	<b>9.806</b>	<b>acres</b>

\*The proposed disturbance associated with the 2335 ft of existing road to be upgraded was calculated at 20-ft for disturbance purposes as 10 ft of the road is existing

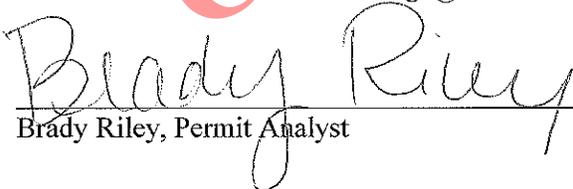
Bill Barrett Corporation  
Surface Use Plan  
Aurora Federal #8-26-7-20  
Uintah County, UT

OPERATOR CERTIFICATION

Certification:

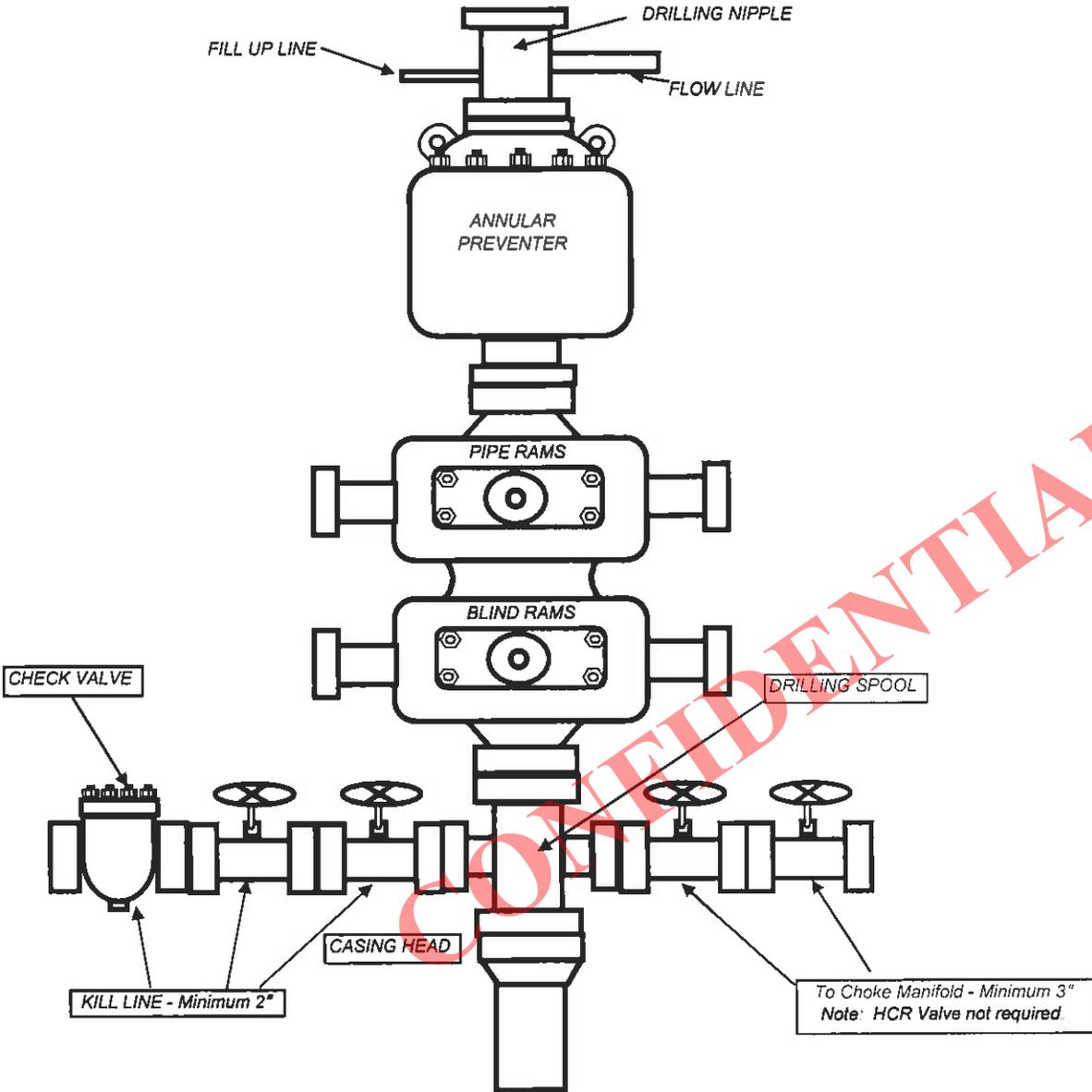
I hereby certify that I, or someone under my direction supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made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

Executed this 22 day of Jan 2013  
Name: Brady Riley  
Position Title: Permit Analyst  
Address: 1099 18<sup>th</sup> Street, Suite 2300, Denver, CO 80202  
Telephone: 303-312-8115  
E-mail: briley@billbarrettcorp.com  
Field Representative: Kary Eldredge / Bill Barrett Corporation  
Address: 1820 W. Highway 40, Roosevelt, UT 84066  
Telephone: 435-725-3515 (office); 435-724-6789 (mobile)  
E-mail: keldredge@billbarrettcorp.com

  
\_\_\_\_\_  
Brady Riley, Permit Analyst

# BILL BARRETT CORPORATION

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





**Bill Barrett Corporation**

October 31, 2012

Utah Division of Oil, Gas and Mining  
Attention: Dustin Doucet  
1594 West North Temple, Suite 1120  
Salt Lake City, Utah

RE: Commingling Application  
Aurora Deep Unit  
Aurora Federal 8-26-7-20  
SENE Section 26 T7S-R20E  
Uintah County, UT

Dear Mr. Doucet,

Bill Barrett Corporation has submitted an application to commingle production from the Wasatch and Green River formations in the subject well located in the Aurora Deep Unit. In compliance with Utah OGM regulation R649-3-22, BBC has enclosed copies of the completed application.

Should you require additional information in this regards, please feel free to contact me at 303-299-9935. Your earliest attention to this matter is appreciated.

BILL BARRETT CORPORATION

*Brady Riley for*

Thomas J. Abell  
Landman

Enclosures

**CONFIDENTIAL**



AFFIDAVIT OF NOTICE

My name is Thomas J. Abell. I am a Landman with Bill Barrett Corporation (BBC). BBC has submitted Sundry Notices to commingle production from the Wasatch and Green River formations in the following well within the Aurora Deep Unit:

Aurora Federal 8-26-7-20 Well          SENE          26 T7S-R20E

In compliance with the Utah OGM regulation R649-3-22, I have provided a copy of the Sundry Notices, by certified mail, to the owners as listed below of all contiguous oil and gas Leases or drilling units overlying the pool.

Lessors

EnCana Oil and Gas (USA)  
Forest Oil Corporation

Date: March 6, 2013

Affiant

BILL BARRETT CORPORATION

A handwritten signature in blue ink that reads 'Brady Riley' with a small flourish at the end.

Thomas J. Abell  
Landman



October 31, 2012

Forest Oil Corporation  
Attn: Ken Mcphee  
707 17th St # 3600  
Denver, CO 80202

RE: Commingling Application  
Aurora 8-26-7-20  
Uintah County, UT

Dear Mr. Mcphee,

Bill Barrett Corporation has submitted an application to commingle production from the Wasatch and Green River formations in the subject well. We enclosed herewith copies of the application together with a plat showing the leases and wells in the area and affidavit confirming notice pursuant to the Utah OGM regulations.

Should you require additional information in this regards, please feel free to contact me at 303-299-9935. Your earliest attention to this matter is appreciated.

BILL BARRETT CORPORATION

*Brady Foley*

Thomas J. Abell *for*  
Landman

**CONFIDENTIAL**

Enclosures



October 31, 2012

EnCana Oil & Gas (USA), Inc.  
Attn: Judy Tatham  
370 17<sup>th</sup> Street, Suite 1700  
Denver, CO 80202

RE: Commingling Application  
Aurora 8-26-7-20  
Uintah County, UT

Dear Ms. Tatham,

Bill Barrett Corporation has submitted an application to commingle production from the Wasatch and Green River formations in the subject well. We enclosed herewith copies of the application together with a plat showing the leases and wells in the area and affidavit confirming notice pursuant to the Utah OGM regulations.

Should you require additional information in this regards, please feel free to contact me at 303-299-9935. Your earliest attention to this matter is appreciated.

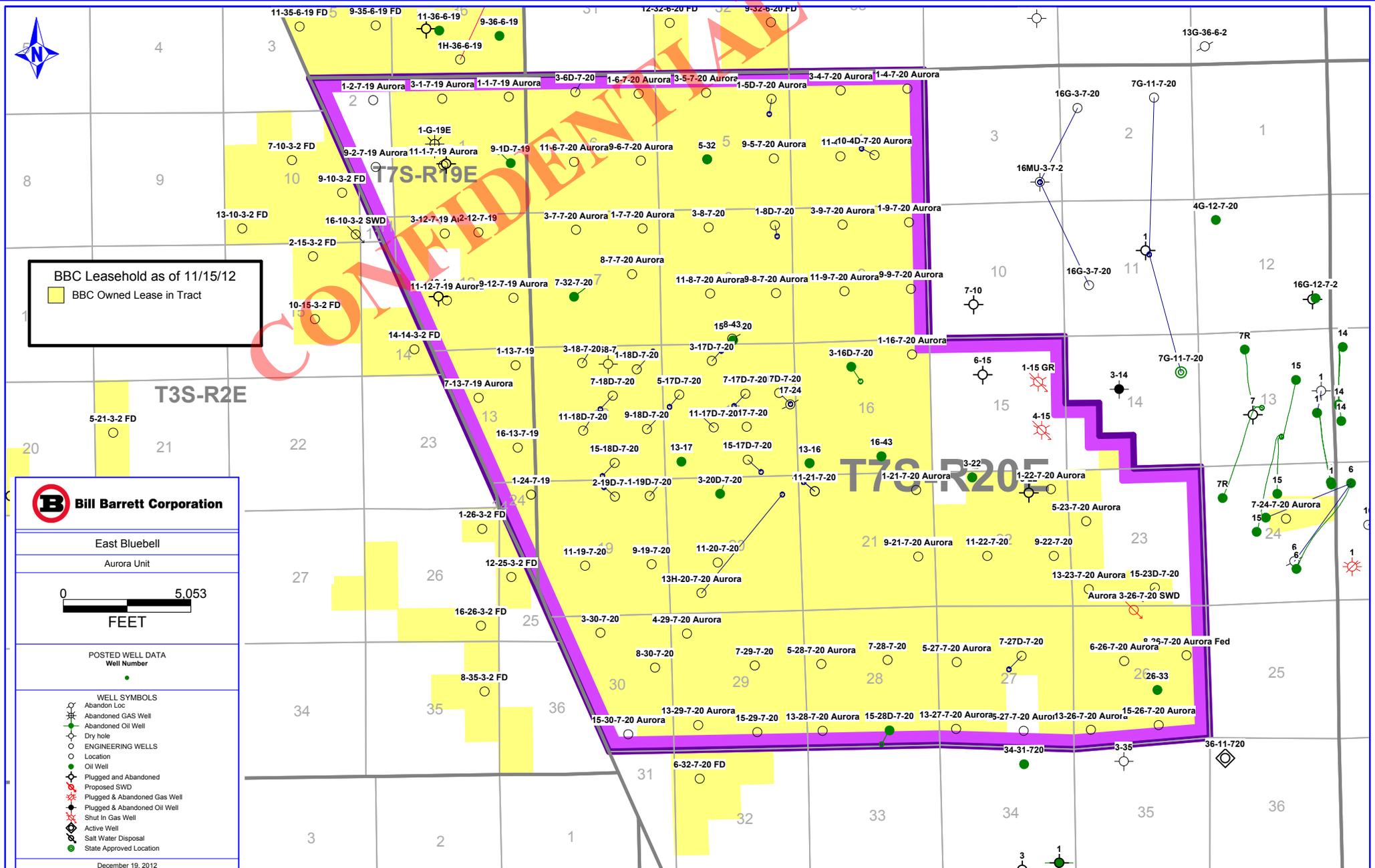
BILL BARRETT CORPORATION

*Bradley Riley*  
*for*

Thomas J. Abell  
Landman

**CONFIDENTIAL**

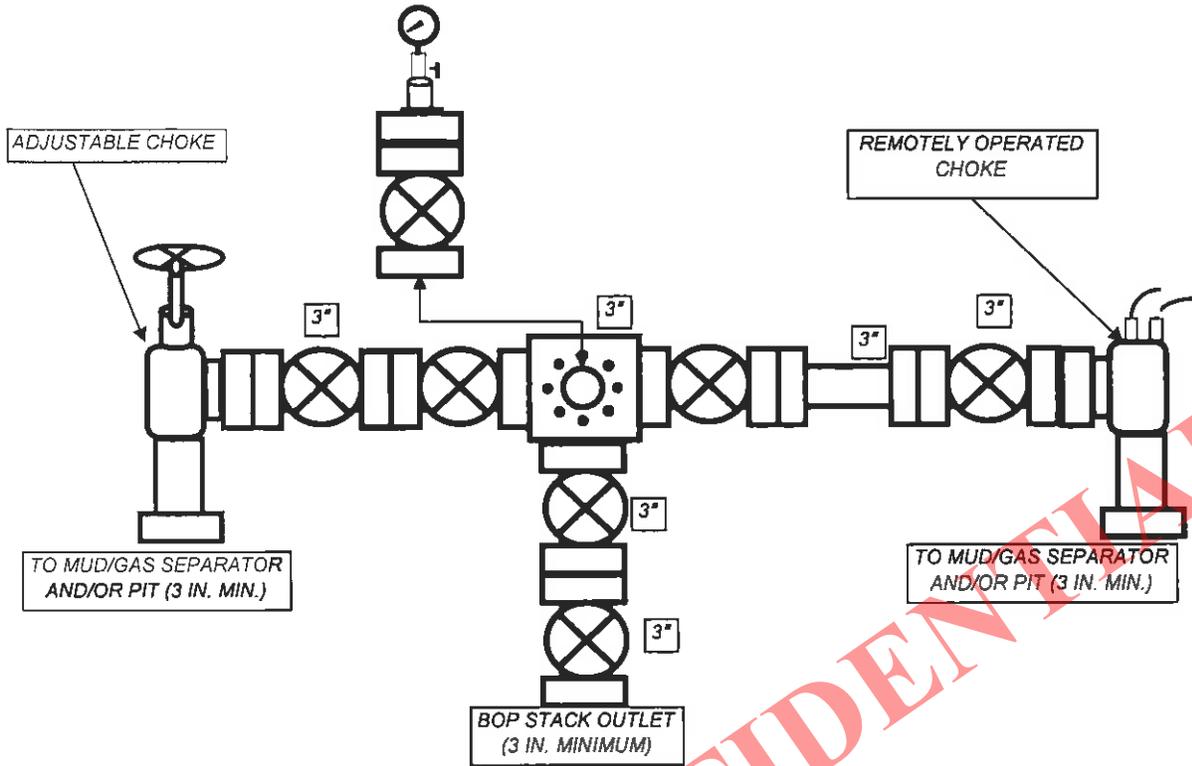
Enclosures

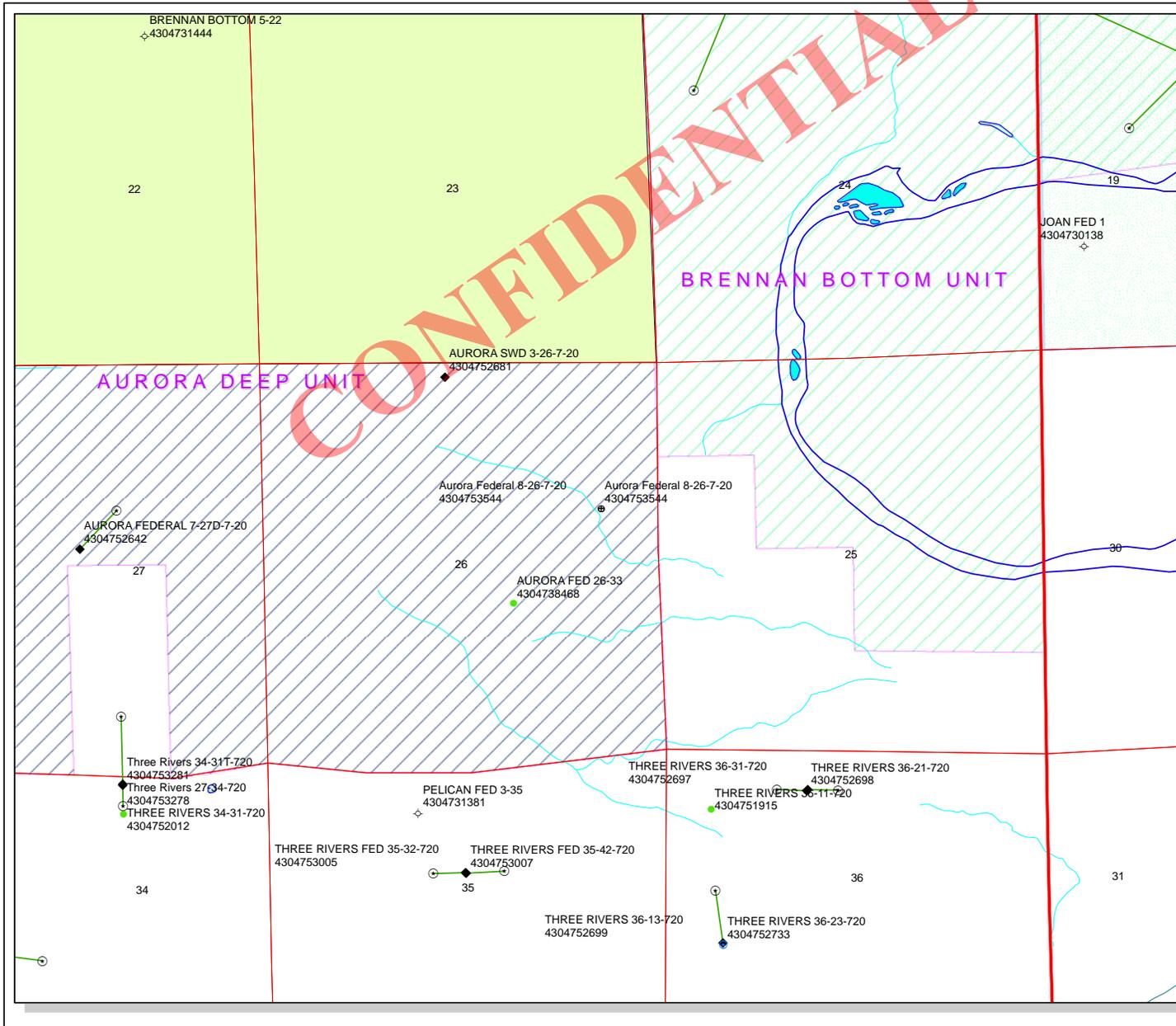


PETRA 12/19/2012 9:26:55 AM

# BILL BARRETT CORPORATION

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

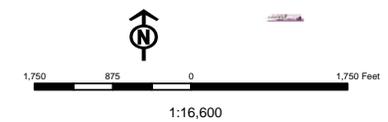




**API Number: 4304753544**  
**Well Name: Aurora Federal 8-26-7-20**  
**Township T07.0S Range R20.0E Section 26**  
**Meridian: SLBM**  
**Operator: BILL BARRETT CORP**

Map Prepared:  
 Map Produced by Diana Mason

Units	Wells Query Status
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spudded (Drilling Commenced)
GAS STORAGE	GIW - Gas Injection
NF PP OIL	GS - Gas Storage
NF SECONDARY	LOC - New Location
P1 OIL	OPS - Operation Suspended
PP GAS	PA - Plugged Abandoned
PP GEOTHERM.	PGW - Producing Gas Well
PP OIL	POW - Producing Oil Well
SECONDARY	SGW - Shut-in Gas Well
TERMINATED	SOW - Shut-in Oil Well
Unknown	TA - Temp. Abandoned
ABANDONED	TW - Test Well
ACTIVE	WDW - Water Disposal
COMBINED	WW - Water Injection Well
INACTIVE	WSW - Water Supply Well
STORAGE	Bottom Hole Location - Oil/Gas/Dls
TERMINATED	



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:  
3160  
(UT-922)

February 25, 2013

Memorandum

To: Assistant Field Office Manager Minerals,  
Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2013 Plan of Development Aurora (Deep) Unit,  
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following well is planned for calendar year 2013 within the Aurora (Deep) Unit, Uintah County, Utah.

API #	LOCATION	WELL NAME
Proposed PZ	GREEN RIVER-WASATCH)	
43-047-53544	Aurora Federal	8-26-7-20 Sec 26 T07S R20E 1980 FNL 0800 FEL

This office has no objection to permitting the well at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard  
DN: cn=Michael L. Coulthard, o=Bureau of Land Management,  
ou=Branch of Minerals, email=Michael\_Coulthard@blm.gov, c=US  
Date: 2013.02.25 10:20:40 -0700

bcc: File - Aurora Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:2-25-13

RECEIVED: February 26, 2013

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 1/23/2013

API NO. ASSIGNED: 43047535440000

WELL NAME: Aurora Federal 8-26-7-20

OPERATOR: BILL BARRETT CORP (N2165)

PHONE NUMBER: 303 312-8115

CONTACT: Brady Riley

PROPOSED LOCATION: SENE 26 070S 200E

Permit Tech Review: 

SURFACE: 1980 FNL 0800 FEL

Engineering Review: 

BOTTOM: 1980 FNL 0800 FEL

Geology Review: 

COUNTY: UINTAH

LATITUDE: 40.18330

LONGITUDE: -109.62912

UTM SURF EASTINGS: 616707.00

NORTHINGS: 4449003.00

FIELD NAME: WILDCAT

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU80689

PROPOSED PRODUCING FORMATION(S): WASATCH

SURFACE OWNER: 1 - Federal

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: FEDERAL - WYB000040
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: 49-2336
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingling Approved

## LOCATION AND SITING:

- R649-2-3.
- Unit: AURORA (DEEP)
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: R649-3-2
- Effective Date:
- Siting:
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 3 - Commingling - ddoucet  
4 - Federal Approval - dmason  
23 - Spacing - dmason



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

## Permit To Drill

\*\*\*\*\*

**Well Name:** Aurora Federal 8-26-7-20  
**API Well Number:** 43047535440000  
**Lease Number:** UTU80689  
**Surface Owner:** FEDERAL  
**Approval Date:** 4/1/2013

### Issued to:

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

### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-2. The expected producing formation or pool is the WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

### Duration:

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

### Commingle:

Administrative approval for commingling the production from the Wasatch formation and the Green River formation in this well is hereby granted. Appropriate information has been submitted to DOGM in accordance with R649-3-22. No written objections from owners were received by DOGM.

### General:

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

### Conditions of Approval:

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

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon

as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

**Notification Requirements:**

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

- Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at <http://oilgas.ogm.utah.gov>

**Reporting Requirements:**

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

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

**Approved By:**



For John Rogers  
Associate Director, Oil & Gas

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  5. LEASE DESIGNATION AND SERIAL NUMBER: UTU80689
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  7. UNIT or CA AGREEMENT NAME: AURORA (DEEP)
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: Aurora Federal 8-26-7-20
2. NAME OF OPERATOR: BILL BARRETT CORP	9. API NUMBER: 43047535440000
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300 , Denver, CO, 80202	PHONE NUMBER: 303 312-8164 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1980 FNL 0800 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENE Section: 26 Township: 07.0S Range: 20.0E Meridian: S	9. FIELD and POOL or WILDCAT: WILDCAT  COUNTY: UINTAH  STATE: 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: 5/1/2013  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text" value="REVISED PL route"/>

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

BBC is submitting this sundry to update the pipeline route. The revised pipeline route has been updated to tie into the approved Aurora 3-26-7-20 SWD pipeline. Please update your records with this revised pipeline route.

**Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
 FOR RECORD ONLY  
 May 02, 2013**

<b>NAME (PLEASE PRINT)</b> Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	<b>TITLE</b> Permit Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 4/30/2013

**BILL BARRETT CORPORATION**  
**AURORA FEDERAL #8-26-7-20**  
LOCATED IN UINTAH COUNTY, UTAH  
SECTION 26, T7S, R20E, S.L.B.&M.

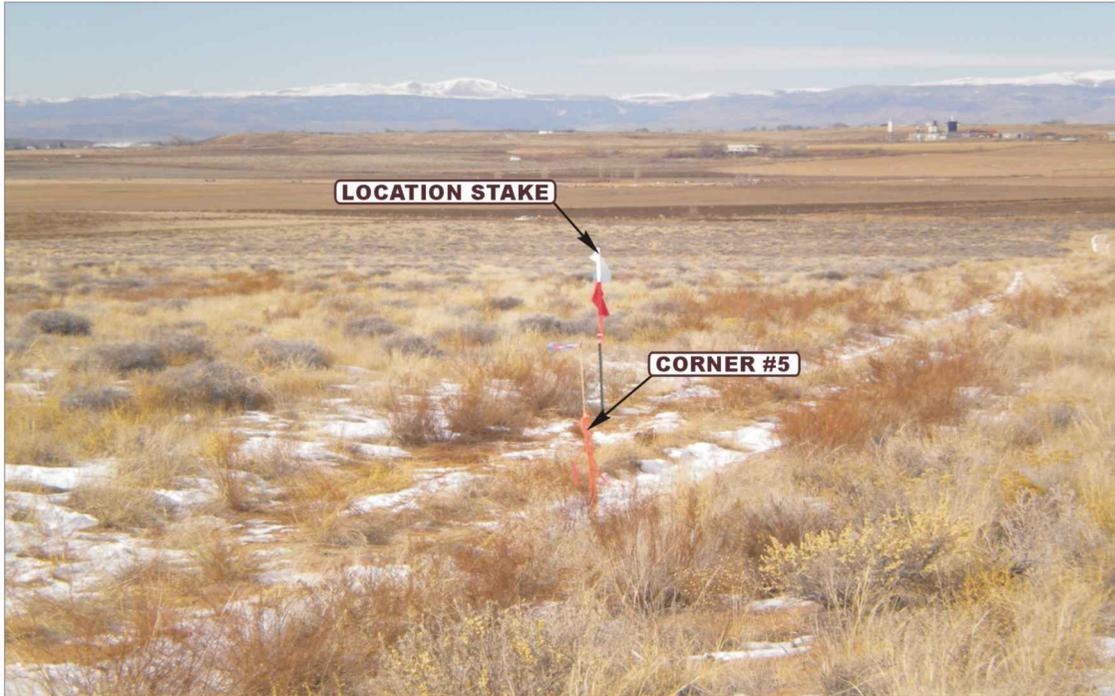


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF EXISTING 2-TRACK

CAMERA ANGLE: EASTERLY



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

<b>LOCATION PHOTOS</b>	<b>01</b>	<b>23</b>	<b>12</b>	<b>PHOTO</b>
	MONTH	DAY	YEAR	
TAKEN BY: C.R.	DRAWN BY: C.I.		REVISED: 12-07-12	

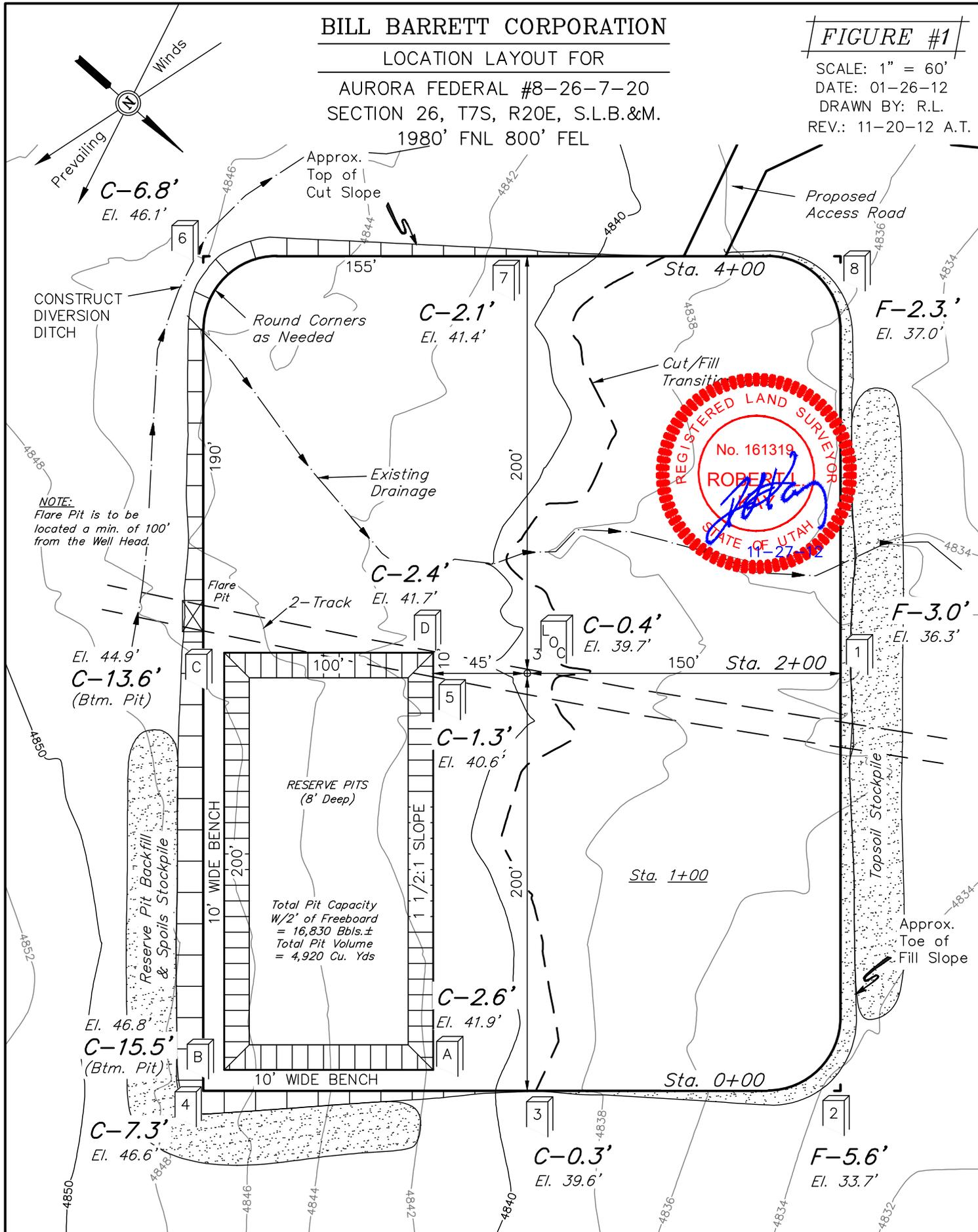
**BILL BARRETT CORPORATION**

LOCATION LAYOUT FOR

AURORA FEDERAL #8-26-7-20  
SECTION 26, T7S, R20E, S.L.B.&M.  
1980' FNL 800' FEL

**FIGURE #1**

SCALE: 1" = 60'  
DATE: 01-26-12  
DRAWN BY: R.L.  
REV.: 11-20-12 A.T.



Elev. Ungraded Ground At Loc. Stake = **4839.7'**  
FINISHED GRADE ELEV. AT LOC. STAKE = **4839.3'**

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

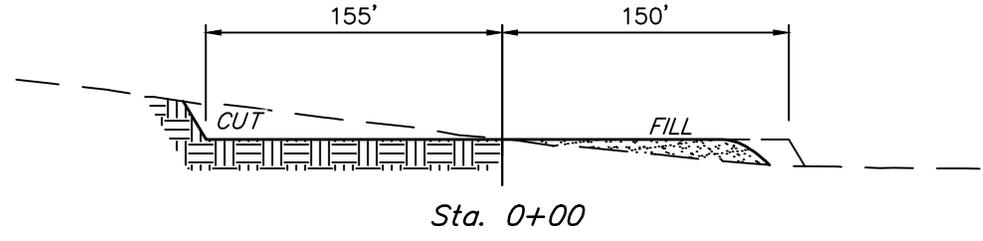
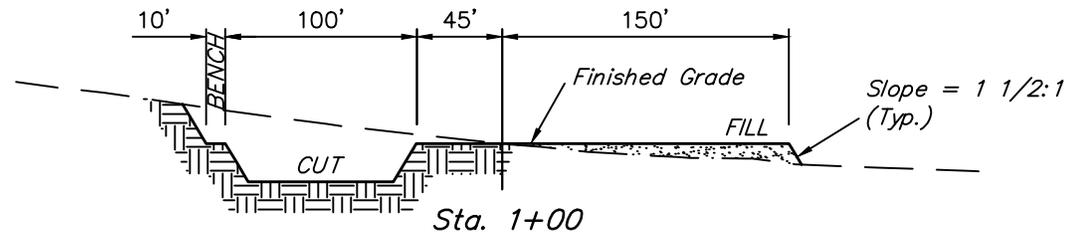
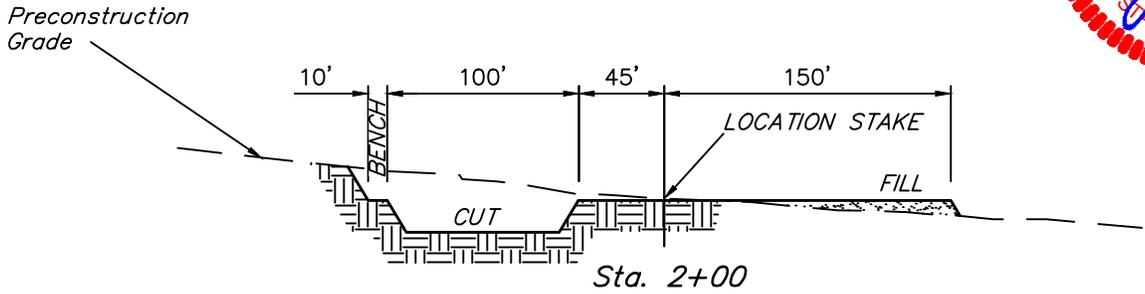
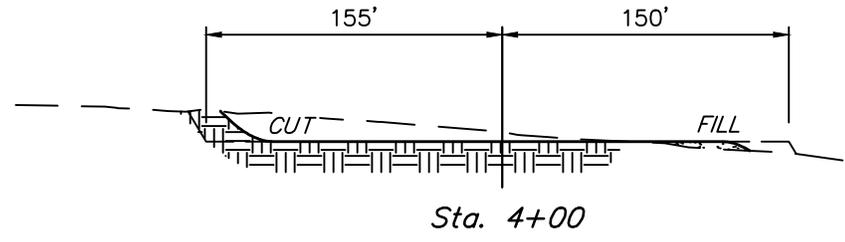
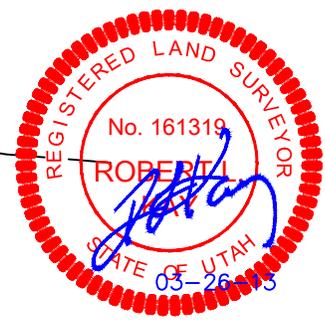
**BILL BARRETT CORPORATION**

**FIGURE #2**

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

TYPICAL CROSS SECTIONS FOR  
AURORA FEDERAL #8-26-7-20  
SECTION 26, T7S, R20E, S.L.B.&M.  
1980' FNL 800' FEL

DATE: 01-26-12  
DRAWN BY: R.L.  
REV.: 11-20-12 A.T.  
REV.: 02-26-13 B.D.H.



**NOTE:**

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

APPROXIMATE ACREAGES

WELL SITE DISTURBANCE	= ± 2.996 ACRES
ACCESS ROAD DISTURBANCE	= ± 2.030 ACRES
PIPELINE DISTURBANCE	= ± 2.486 ACRES
<b>TOTAL</b>	<b>= ± 7.512 ACRES</b>

\* NOTE: FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

(6") Topsoil Stripping	= 2,470 Cu. Yds.
Remaining Location	= 10,980 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 13,450 CU.YDS.</b>
<b>FILL</b>	<b>= 6,950 CU.YDS.</b>

EXCESS MATERIAL	= 6,500 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 4,930 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 1,570 Cu. Yds.

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

# BILL BARRETT CORPORATION

## TYPICAL RIG LAYOUT FOR

AURORA FEDERAL #8-26-7-20  
SECTION 26, T7S, R20E, S.L.B.&M.  
1980' FNL 800' FEL

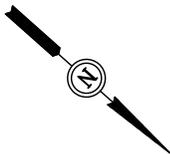
FIGURE #3

SCALE: 1" = 60'

DATE: 01-26-12

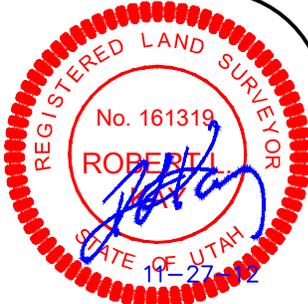
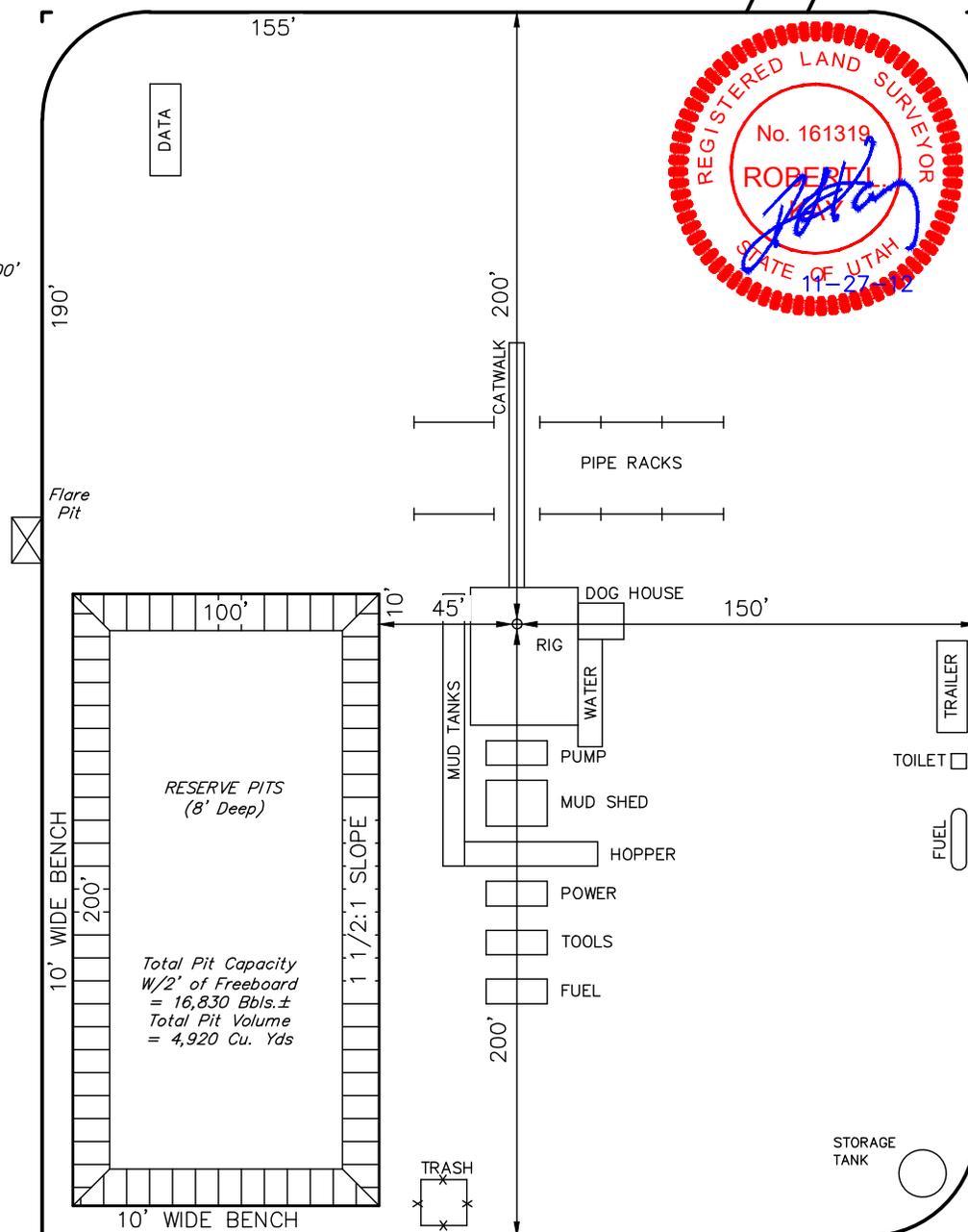
DRAWN BY: R.L.

REV.: 11-20-12 A.T.



Proposed Access Road

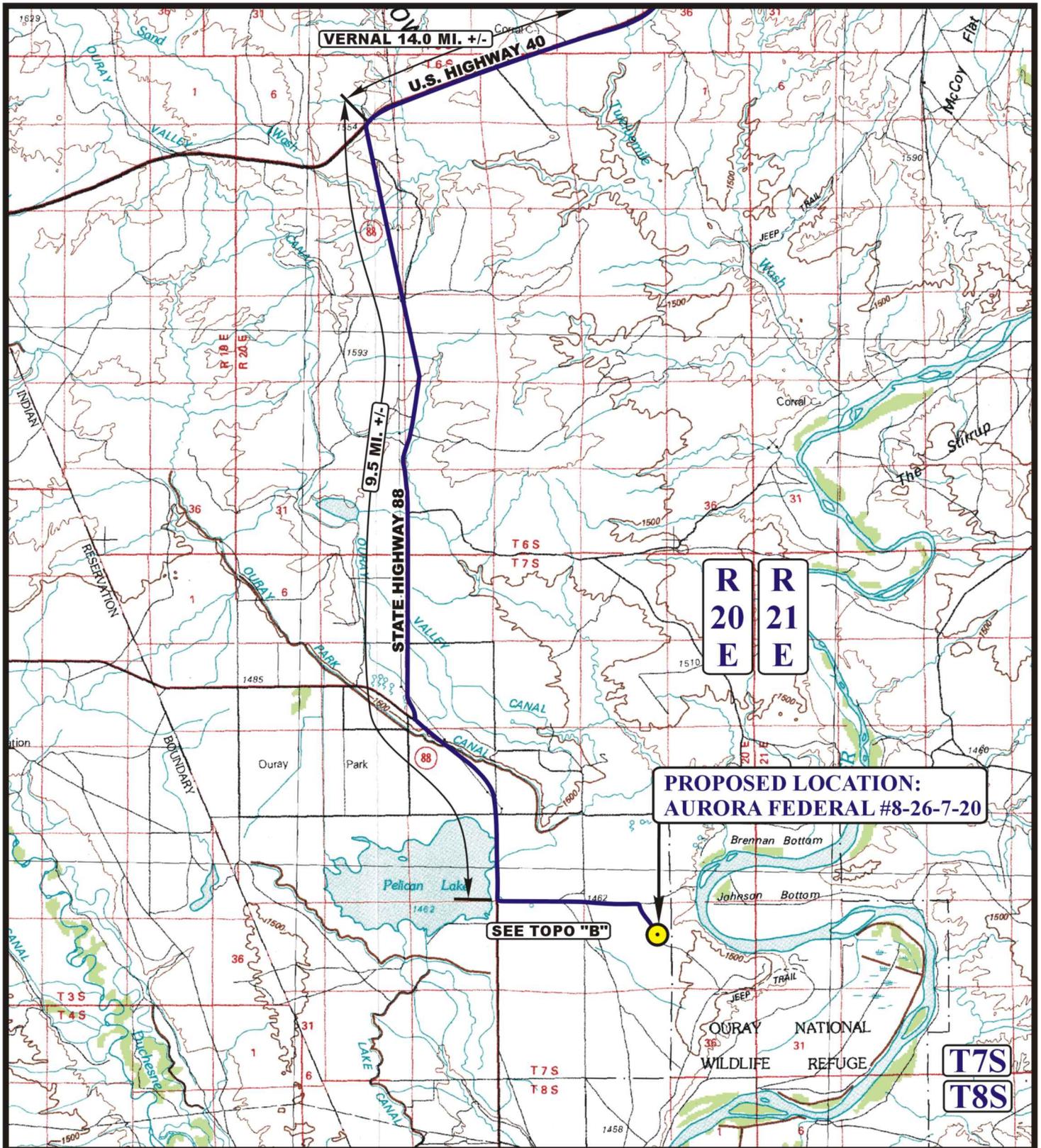
**NOTE:**  
Flare Pit is to be located a min. of 100' from the Well Head.



**BILL BARRETT CORPORATION**  
**AURORA FEDERAL #8-26-7-20**  
**SECTION 26, T7S, R20E, S.L.B.&M.**

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 9.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 1.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING 2-TRACK TO THE EAST; FOLLOW 2-TRACK IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 2,335' TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTH; FOLLOW ROAD FLAGS IN A SOUTHERLY, THEN EASTERLY DIRECTION APPROXIMATELY 612' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 25.6 MILES.



**LEGEND:**

 **PROPOSED LOCATION**

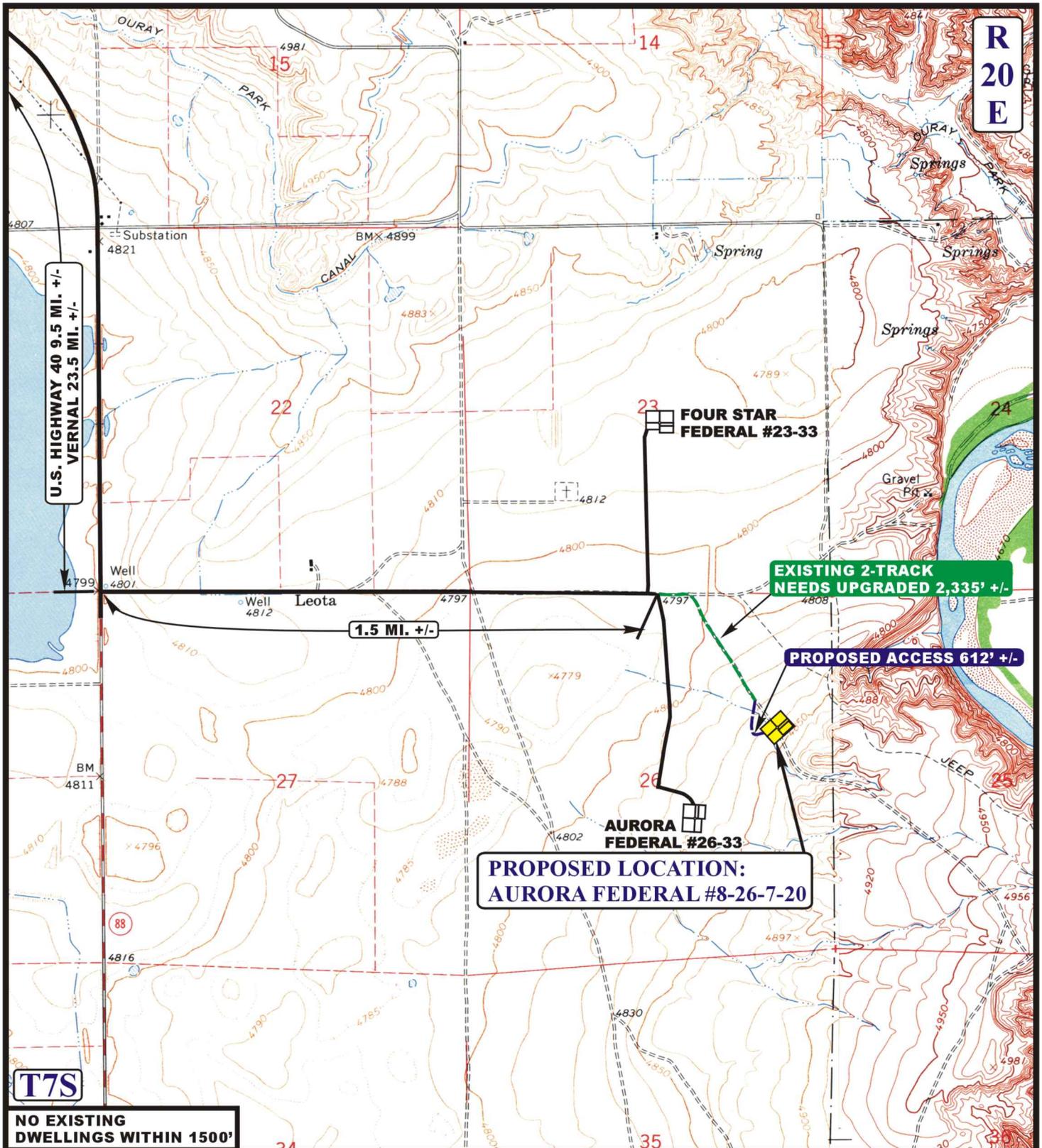


**BILL BARRETT CORPORATION**

**AURORA FEDERAL #8-26-7-20**  
**SECTION 26, T7S, R20E, S.L.B.&M.**  
**1980' FNL 800' FEL**

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

**ACCESS ROAD** **01 23 12**  
**M A P** **MONTH DAY YEAR**  
 SCALE: 1:100,000 DRAWN BY: C.I. REVISED: 11-19-12 **A**  
**TOPO**



**T7S**

**NO EXISTING DWELLINGS WITHIN 1500'**

**LEGEND:**

- EXISTING ROAD
- PROPOSED ACCESS ROAD
- EXISTING 2-TRACK NEEDS UPGRADED (AVERAGE WIDTH 10' +/-)



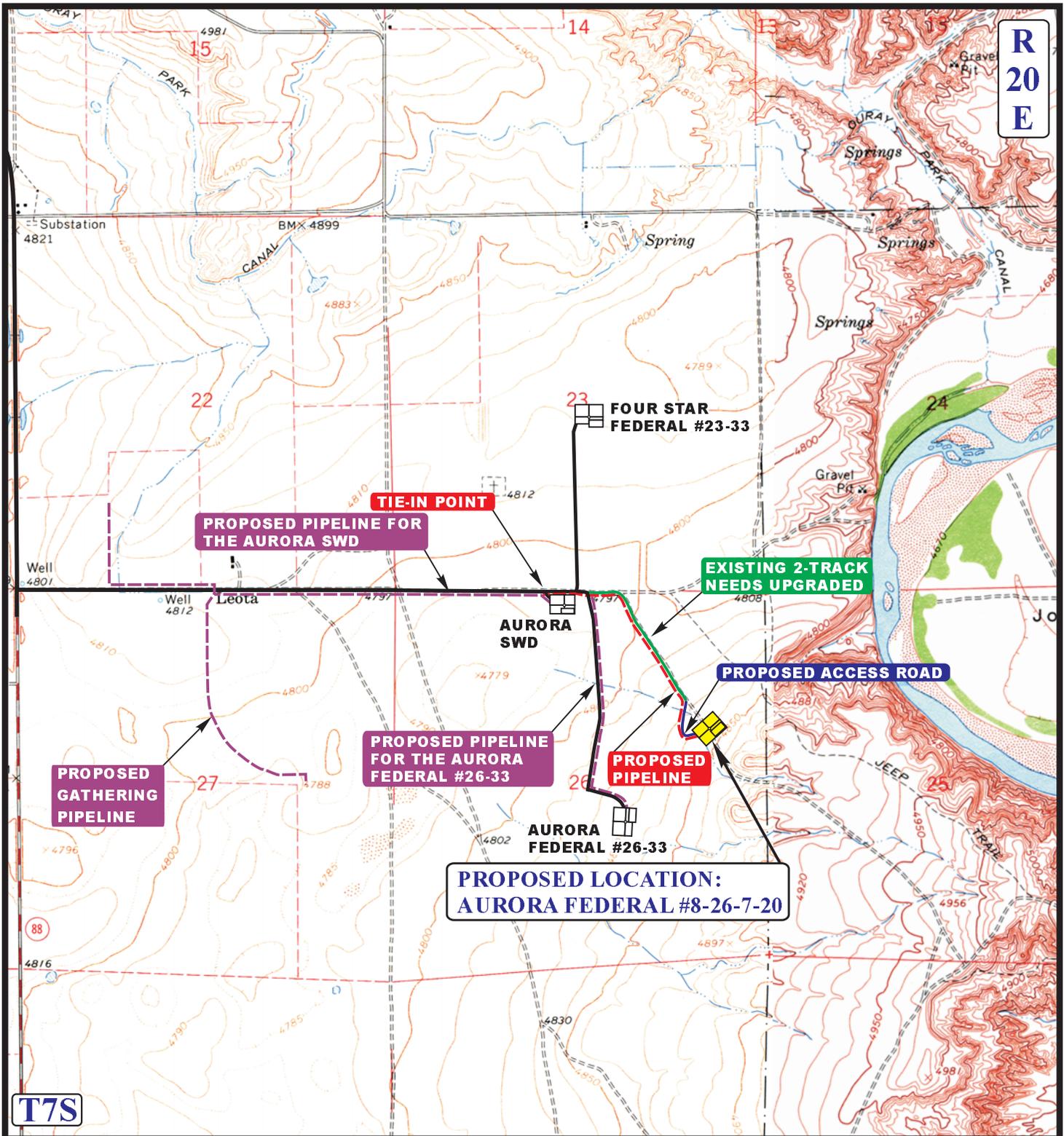
**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



**BILL BARRETT CORPORATION**

**AURORA FEDERAL #8-26-7-20**  
**SECTION 26, T7S, R20E, S.L.B.&M.**  
**1980' FNL 800' FEL**

<b>ACCESS ROAD MAP</b>	<b>01</b>	<b>23</b>	<b>12</b>	<b>B TOPO</b>
	MONTH	DAY	YEAR	
SCALE: 1" = 2000'	DRAWN BY: C.I.		REVISED: 12-07-12	



**APPROXIMATE TOTAL PIPELINE DISTANCE = 3,609' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE
- EXISTING 2-TRACK NEEDS UPGRADED



**BILL BARRETT CORPORATION**

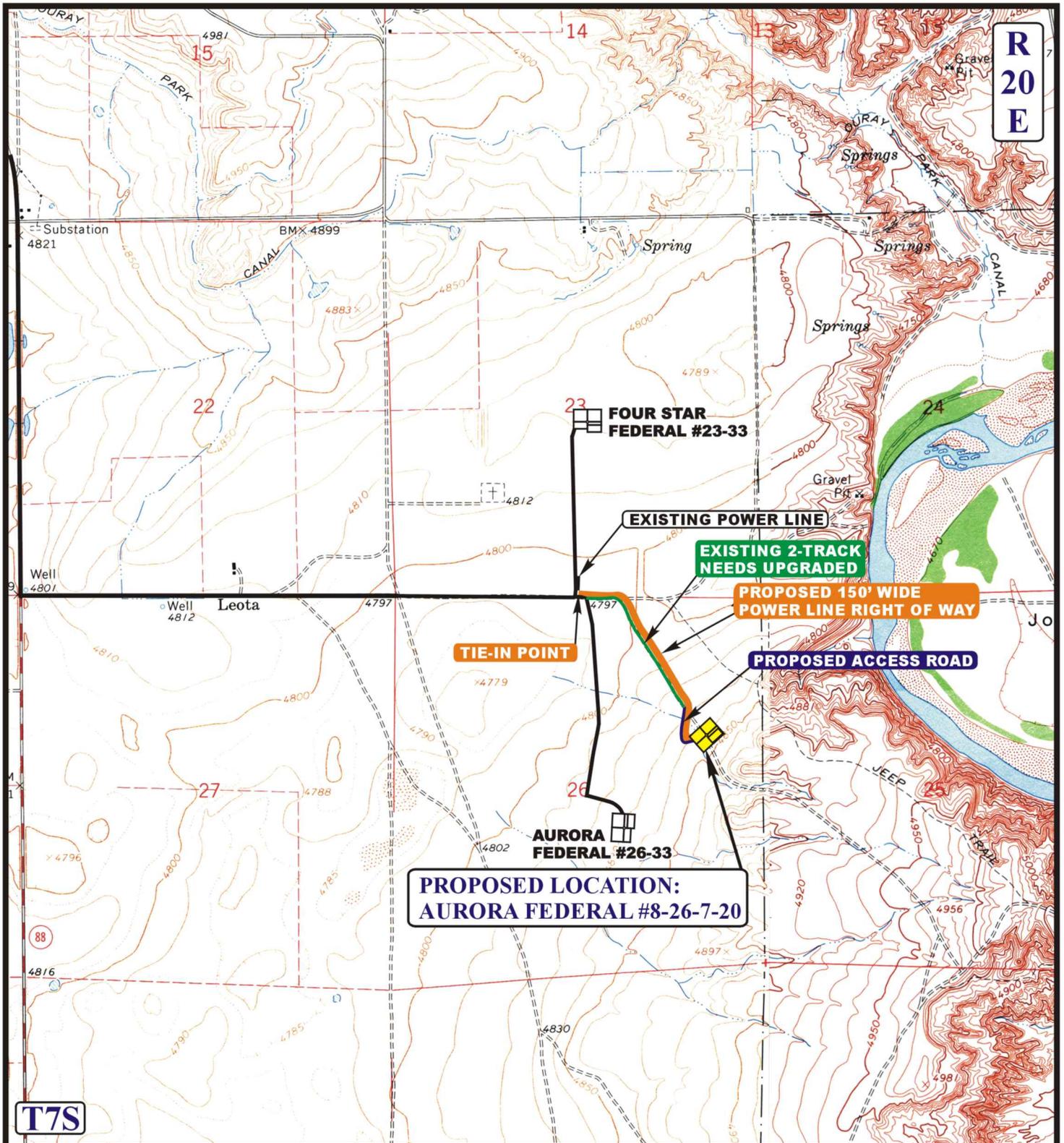
**AURORA FEDERAL #8-26-7-20  
SECTION 26, T7S, R20E, S.L.B.&M.  
1980' FNL 800' FEL**



**Uintah Engineering & Land Surveying**  
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**TOPOGRAPHIC MAP** 01 23 12  
MONTH DAY YEAR  
SCALE: 1" = 2000' DRAWN BY: C.I. REV: 02-26-13 B.D.H.





APPROXIMATE TOTAL POWERLINE DISTANCE = 2,876' +/-

**LEGEND:**

- PROPOSED ACCESS ROAD
- PROPOSED POWER LINE
- - - - - EXISTING POWER LINE
- EXISTING 2-TRACK NEEDS UPGRADED



**BILL BARRETT CORPORATION**

**AURORA FEDERAL #8-26-7-20**  
**SECTION 26, T7S, R20E, S.L.B.&M.**  
**1980' FNL 800' FEL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
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**TOPOGRAPHIC MAP**  
 01 23 12  
 MONTH DAY YEAR  
 SCALE: 1" = 1000' DRAWN BY: C.L. REVISED: 12-07-12



<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> UTU80689
<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> AURORA (DEEP)
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> Aurora Federal 8-26-7-20
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP	<b>9. API NUMBER:</b> 43047535440000
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202	<b>PHONE NUMBER:</b> 303 312-8134 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1980 FNL 0800 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 26 Township: 07.0S Range: 20.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> WILDCAT  <b>COUNTY:</b> UINTAH  <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: <b>6/13/2013</b>  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b> <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

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

Attached is the revised drilling and cement plans, changing the production casing size from 8.75 to 7.875. TD and casing size remains the same.

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

**Date:** June 13, 2013

**By:** David K. Quist

<b>NAME (PLEASE PRINT)</b> Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	<b>TITLE</b> Permit Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 6/13/2013	

**BILL BARRETT CORPORATION**  
**DRILLING PLAN REVISED**

***Aurora Federal 8-26-7-20***

SENE, 1980' FNL and 800' FEL, Section 26, T7S-R20E, SLB & M (surface hole)

SENE, 1980' FNL and 800' FEL, Section 26, T7S-R20E, SLB & M (bottom hole)

Uintah County, Utah

**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/TVD</b>
Green River*	3483'
Mahogany	4593'
TGR3	5628'
Black Shale	6508'
Wasatch*	7423'
TD	8318'

\*PROSPECTIVE PAY

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

Base of Useable Water = 363'

**3. BOP and Pressure Containment Data**

<b>Depth Intervals</b>	<b>BOP Equipment</b>
0 – 1500'	No pressure control required
1500' – TD	11" 5000# Ram Type BOP 11" 5000# Annular BOP
- Drilling spool to accommodate choke and kill lines;	
- Ancillary equipment and choke manifold rated at 5,000 psi. All BOP and BOPE tests will be in accordance with the requirements of onshore Order No. 2;	
- The BLM and the State of Utah Division of Oil, Gas and Mining will be notified 24 hours in advance of all BOP pressure tests.	
- BOP hand wheels may be underneath the sub-structure of the rig if the drilling rig used is set up To operate most efficiently in this manner.	

**4. Casing Program**

<b>Hole Size</b>	<b>SETTING DEPTH</b>		<b>Casing Size</b>	<b>Casing Weight</b>	<b>Casing Grade</b>	<b>Thread</b>	<b>Condition</b>
	<b>(FROM)</b>	<b>(TO)</b>					
26"	Surface	80'	16"	65#			
12 1/4"	Surface	1500'	9 5/8"	36#	J or K 55	ST&C	New
7 7/8"	Surface	TD	5 1/2"	17#	P-110	LT&C	New

\*The casing program is based on recent wells drilled by Axia in the immediate area.

**9-5/8" casing may be preset with a spudder rig. If this occurs, the following equipment shall be in place and operational during air/gas drilling:**

- Properly lubricated and maintained rotating head
- Spark arresters on engines or water cooled exhaust

Bill Barrett Corporation  
 Drilling Program  
 Aurora Federal 8-26-7-20  
 Uintah County, Utah

- Blooie line discharge 100 feet from well bore and securely anchored
- Straight run on blooie line unless otherwise approved
- Deduster equipment
- All cuttings and circulating medium shall be directed into a reserve or blooie pit
- Float valve above bit
- Automatic igniter or continuous pilot light on the blooie line
- Compressors located in the opposite direction from the blooie line a minimum of 100 feet from the well bore
- Mud circulating equipment, water, and mud materials (does not have to be premixed) sufficient to maintain the capacity of the hole and circulating tanks or pits

#### 5. Cementing Program

16" Conductor Casing	Grout
9 5/8" Surface Casing	Lead: 190 sx Halliburton Light Premium with additives mixed at 11.0 ppg (yield = 3.16 ft <sup>3</sup> /sx) circulated to surface with 75% excess. TOC @ Surface Tail: 210 sx Halliburton Premium Plus cement with additives mixed at 14.8 ppg (yield = 1.36 ft <sup>3</sup> /sx), calculated hole volume with 75% excess. TOC @ 1,000'
5 1/2" Production Casing	Lead: 570 sx Tuned Light cement with additives mixed at 11.0 ppg (yield = 2.31 ft <sup>3</sup> /sx). TOC @ 1,000' Tail: 430 sx Halliburton Econocem cement with additives mixed at 13.5 ppg (yield = 1.42 ft <sup>3</sup> /sx). Top of cement to be determined by log and sample evaluation; estimated TOC @ 6008'

#### 6. Mud Program

<u>Interval</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss (API filtrate)</u>	<u>Remarks</u>
0' – 80'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
80' – 1500'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
1500' – TD	8.6 – 9.6	42 – 52	20 cc or less	DAP Polymer Fluid System
Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce torque and drag.				

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

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

Bill Barrett Corporation  
Drilling Program  
Aurora Federal 8-26-7-20  
Uintah County, Utah

**8. Anticipated Abnormal Pressures or Temperatures**

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 4110 psi\* and maximum anticipated surface pressure equals approximately 2280 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
- Mud monitoring will be visually observed

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

Water for the drilling and completion will be trucked from the Green River located in Sec. 33, T8S-R20E.

**11. Drilling Schedule**

Location Construction: December 2013  
Spud: December 2013  
Duration: 15 days drilling time  
45 days completion time

**PRESSURE CONTROL EQUIPMENT** – Schematic Attached

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

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

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

**C. Testing Procedure:**

Annular Preventer

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

At a minimum the above pressure test will be performed:

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

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

Blow-Out Preventer

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

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

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

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

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

**D. Choke Manifold Equipment:**

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

**E. Accumulator:**

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

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

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

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

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

**F. Miscellaneous Information:**

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

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



# Bill Barrett Corporation

## AURORA CEMENT VOLUMES

**Well Name:** Aurora Federal 8-26-7-20

### Surface Hole Data:

Total Depth:	1,500'
Top of Cement:	0'
OD of Hole:	12.250"
OD of Casing:	9.625"

### Calculated Data:

Lead Volume:	548.1	ft <sup>3</sup>
Lead Fill:	1,000'	
Tail Volume:	274.0	ft <sup>3</sup>
Tail Fill:	500'	

### Cement Data:

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

### Calculated # of Sacks:

# SK's Lead:	190
--------------	-----

Tail Yield:	1.36	ft <sup>3</sup> /sk
% Excess:	75%	
Top of Tail:	1,000'	

# SK's Tail:	210
--------------	-----

### Production Hole Data:

Total Depth:	8,318'
Top of Cement:	1,000'
Top of Tail:	6,008'
OD of Hole:	7.875"
OD of Casing:	5.500"

### Calculated Data:

Lead Volume:	1301.5	ft <sup>3</sup>
Lead Fill:	5,008'	
Tail Volume:	600.4	ft <sup>3</sup>
Tail Fill:	2,310'	

### Cement Data:

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

### Calculated # of Sacks:

# SK's Lead:	570
# SK's Tail:	430

<b>Aurora Federal 8-26-7-20 Proposed Cementing Program</b>
--

<u>Job Recommendation</u>	<u>Surface Casing</u>
<b>Lead Cement - (1000' - 0')</b>	
Halliburton Light Premium	Fluid Weight: 11.0 lbm/gal
5.0 lbm/sk Silicalite Compacted	Slurry Yield: 3.16 ft <sup>3</sup> /sk
0.25 lbm/sk Kwik Seal	Total Mixing Fluid: 19.48 Gal/sk
0.125 lbm/sk Poly-E-Flake	Top of Fluid: 0'
2.0% Bentonite	Calculated Fill: 1,000'
	Volume: 97.61 bbl
	<b>Proposed Sacks: 190 sks</b>
<b>Tail Cement - (TD - 1000')</b>	
Premium Cement	Fluid Weight: 14.8 lbm/gal
2.0% Calcium Chloride	Slurry Yield: 1.36 ft <sup>3</sup> /sk
	Total Mixing Fluid: 6.37 Gal/sk
	Top of Fluid: 1,000'
	Calculated Fill: 500'
	Volume: 48.80 bbl
	<b>Proposed Sacks: 210 sks</b>

<u>Job Recommendation</u>	<u>Production Casing</u>
<b>Lead Cement - (6008' - 1000')</b>	
Tuned Light™ System	Fluid Weight: 11.0 lbm/gal
	Slurry Yield: 2.31 ft <sup>3</sup> /sk
	Total Mixing Fluid: 10.65 Gal/sk
	Top of Fluid: 1,000'
	Calculated Fill: 5,008'
	Volume: 231.79 bbl
	<b>Proposed Sacks: 570 sks</b>
<b>Tail Cement - (8318' - 6008')</b>	
Econocem™ System	Fluid Weight: 13.5 lbm/gal
0.125 lbm/sk Poly-E-Flake	Slurry Yield: 1.42 ft <sup>3</sup> /sk
1.0 lbm/sk Granulite TR 1/4	Total Mixing Fluid: 6.61 Gal/sk
	Top of Fluid: 6,008'
	Calculated Fill: 2,310'
	Volume: 106.92 bbl
	<b>Proposed Sacks: 430 sks</b>

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	
<b>1. TYPE OF WELL</b> Oil Well	<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU80689
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202	<b>7. UNIT or CA AGREEMENT NAME:</b> AURORA (DEEP)
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1980 FNL 0800 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 26 Township: 07.0S Range: 20.0E Meridian: S	<b>8. WELL NAME and NUMBER:</b> Aurora Federal 8-26-7-20
<b>PHONE NUMBER:</b> 303 312-8134 Ext	<b>9. API NUMBER:</b> 43047535440000
<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM	<b>COUNTY:</b> UINTAH
	<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: 4/1/2015	<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.

BBC hereby requests a one year extension for APD.

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

**Date:** March 25, 2014

**By:** 

<b>NAME (PLEASE PRINT)</b> Christina Hirtler	<b>PHONE NUMBER</b> 303 312-8597	<b>TITLE</b> Administrative Assistant
<b>SIGNATURE</b> N/A	<b>DATE</b> 3/24/2014	



**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 43047535440000**

API: 43047535440000

Well Name: Aurora Federal 8-26-7-20

Location: 1980 FNL 0800 FEL QTR SENE SEC 26 TWNP 070S RNG 200E MER S

Company Permit Issued to: BILL BARRETT CORP

Date Original Permit Issued: 4/1/2013

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

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

Signature: Christina Hirtler

Date: 3/24/2014

Title: Administrative Assistant Representing: BILL BARRETT CORP

<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> UTU80689
<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> AURORA (DEEP)
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> Aurora Federal 8-26-7-20
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP	<b>9. API NUMBER:</b> 43047535440000
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202	<b>PHONE NUMBER:</b> 303 312-8134 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1980 FNL 0800 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 26 Township: 07.0S Range: 20.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM  <b>COUNTY:</b> UINTAH  <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: <b>5/1/2014</b>  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b> <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

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

Bill Barrett Corporation is requesting permission to revise the surface casing set depth for this well from 1500' to 1200'. Hole size will remain the same. Surface casing size will change from 9-5/8" to 8-5/8". Revised cement amounts will change to 170sx (lead) and 270sx (tail) and the production cement amount will change to 600sx (lead); Tail remains the same. See attached revised drilling plan for additional information.

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

**Date:** May 01, 2014

**By:** David K. Quist

<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> 5/1/2014	

**BILL BARRETT CORPORATION**  
**DRILLING PLAN REVISED**

**Aurora Federal 8-26-7-20**

SENE, 1980' FNL and 800' FEL, Section 26, T7S-R20E, SLB & M (surface hole)

SENE, 1980' FNL and 800' FEL, Section 26, T7S-R20E, SLB & M (bottom hole)

Uintah County, Utah

**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/TVD</b>
Green River*	3483'
Mahogany	4593'
TGR3	5628'
Black Shale	6508'
Wasatch*	7423'
TD	8318'

\*PROSPECTIVE PAY

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

Base of Useable Water = 363'

**3. BOP and Pressure Containment Data**

<b>Depth Intervals</b>	<b>BOP Equipment</b>
0 – 1200'	No pressure control required
1200' – TD	11" 5000# Ram Type BOP 11" 5000# Annular BOP
- Drilling spool to accommodate choke and kill lines;	
- Ancillary equipment and choke manifold rated at 5,000 psi. All BOP and BOPE tests will be in accordance with the requirements of onshore Order No. 2;	
- The BLM and the State of Utah Division of Oil, Gas and Mining will be notified 24 hours in advance of all BOP pressure tests.	
- BOP hand wheels may be underneath the sub-structure of the rig if the drilling rig used is set up To operate most efficiently in this manner.	

**4. Casing Program**

<b>Hole Size</b>	<b>SETTING DEPTH</b>		<b>Casing Size</b>	<b>Casing Weight</b>	<b>Casing Grade</b>	<b>Thread</b>	<b>Condition</b>
	<b>(FROM)</b>	<b>(TO)</b>					
26"	Surface	80'	16"	65#			
12 1/4"	Surface	1200'	8 5/8"	24#	J or K 55	ST&C	New
7 7/8"	Surface	TD	5 1/2"	17#	P-110	LT&C	New

\*The casing program is based on recent wells drilled by Axia in the immediate area.

**9-5/8" casing may be preset with a spudder rig. If this occurs, the following equipment shall be in place and operational during air/gas drilling:**

- Properly lubricated and maintained rotating head
- Spark arresters on engines or water cooled exhaust

Bill Barrett Corporation  
 Drilling Program  
 Aurora Federal 8-26-7-20  
 Uintah County, Utah

- Blooie line discharge 100 feet from well bore and securely anchored
- Straight run on blooie line unless otherwise approved
- Deduster equipment
- All cuttings and circulating medium shall be directed into a reserve or blooie pit
- Float valve above bit
- Automatic igniter or continuous pilot light on the blooie line
- Compressors located in the opposite direction from the blooie line a minimum of 100 feet from the well bore
- Mud circulating equipment, water, and mud materials (does not have to be premixed) sufficient to maintain the capacity of the hole and circulating tanks or pits

#### 5. Cementing Program

16" Conductor Casing	Grout
8 5/8" Surface Casing	Lead: 170 sx Halliburton Light Premium with additives mixed at 11.0 ppg (yield = 3.16 ft <sup>3</sup> /sx) circulated to surface with 75% excess. TOC @ Surface Tail: 270 sx Halliburton Premium Plus cement with additives mixed at 14.8 ppg (yield = 1.36 ft <sup>3</sup> /sx), calculated hole volume with 75% excess. TOC @ 500'
5 1/2" Production Casing	Lead: 600 sx Tuned Light cement with additives mixed at 11.0 ppg (yield = 2.31 ft <sup>3</sup> /sx). TOC @ 700' Tail: 430 sx Halliburton Econocem cement with additives mixed at 13.5 ppg (yield = 1.42 ft <sup>3</sup> /sx). Top of cement to be determined by log and sample evaluation; estimated TOC @ 6008'

#### 6. Mud Program

<u>Interval</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss (API filtrate)</u>	<u>Remarks</u>
0' – 80'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
80' – 1200'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
1200' – TD	8.6 – 9.6	42 – 52	20 cc or less	DAP Polymer Fluid System
Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce torque and drag.				

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

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

Bill Barrett Corporation  
Drilling Program  
Aurora Federal 8-26-7-20  
Uintah County, Utah

**8. Anticipated Abnormal Pressures or Temperatures**

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 4110 psi\* and maximum anticipated surface pressure equals approximately 2280 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
- Mud monitoring will be visually observed

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

Water for the drilling and completion will be trucked from the Green River located in Sec. 33, T8S-R20E.

**11. Drilling Schedule**

Location Construction: May 2014  
Spud: May 2014  
Duration: 5 days drilling time  
6 days completion time



# Bill Barrett Corporation

## AURORA CEMENT VOLUMES

**Well Name:** Aurora Federal 8-26-7-20 REVISED

### Surface Hole Data:

Total Depth:	1,200'
Top of Cement:	0'
OD of Hole:	12.250"
OD of Casing:	8.625"

### Calculated Data:

Lead Volume:	505.6	ft <sup>3</sup>
Lead Fill:	700'	
Tail Volume:	361.1	ft <sup>3</sup>
Tail Fill:	500'	

### Cement Data:

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

### Calculated # of Sacks:

# SK's Lead:	170
--------------	-----

Tail Yield:	1.36	ft <sup>3</sup> /sk
% Excess:	75%	
Top of Tail:	700'	

# SK's Tail:	270
--------------	-----

### Production Hole Data:

Total Depth:	8,318'
Top of Cement:	700'
Top of Tail:	6,008'
OD of Hole:	7.875"
OD of Casing:	5.500"

### Calculated Data:

Lead Volume:	1379.4	ft <sup>3</sup>
Lead Fill:	5,308'	
Tail Volume:	600.4	ft <sup>3</sup>
Tail Fill:	2,310'	

### Cement Data:

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

### Calculated # of Sacks:

# SK's Lead:	600
# SK's Tail:	430

<b>Aurora Federal 8-26-7-20 REVISED Proposed Cementing Program</b>
--

<u>Job Recommendation</u>	<u>Surface Casing</u>
<b>Lead Cement - (700' - 0')</b>	
Halliburton Light Premium	Fluid Weight: 11.0 lbm/gal
5.0 lbm/sk Silicalite Compacted	Slurry Yield: 3.16 ft <sup>3</sup> /sk
0.25 lbm/sk Kwik Seal	Total Mixing Fluid: 19.48 Gal/sk
0.125 lbm/sk Poly-E-Flake	Top of Fluid: 0'
2.0% Bentonite	Calculated Fill: 700'
	Volume: 90.04 bbl
	<b>Proposed Sacks: 170 sks</b>
<b>Tail Cement - (TD - 700')</b>	
Premium Cement	Fluid Weight: 14.8 lbm/gal
2.0% Calcium Chloride	Slurry Yield: 1.36 ft <sup>3</sup> /sk
	Total Mixing Fluid: 6.37 Gal/sk
	Top of Fluid: 700'
	Calculated Fill: 500'
	Volume: 64.32 bbl
	<b>Proposed Sacks: 270 sks</b>

<u>Job Recommendation</u>	<u>Production Casing</u>
<b>Lead Cement - (6008' - 700')</b>	
Tuned Light™ System	Fluid Weight: 11.0 lbm/gal
	Slurry Yield: 2.31 ft <sup>3</sup> /sk
	Total Mixing Fluid: 10.65 Gal/sk
	Top of Fluid: 700'
	Calculated Fill: 5,308'
	Volume: 245.67 bbl
	<b>Proposed Sacks: 600 sks</b>
<b>Tail Cement - (8318' - 6008')</b>	
Econocem™ System	Fluid Weight: 13.5 lbm/gal
0.125 lbm/sk Poly-E-Flake	Slurry Yield: 1.42 ft <sup>3</sup> /sk
1.0 lbm/sk Granulite TR 1/4	Total Mixing Fluid: 6.61 Gal/sk
	Top of Fluid: 6,008'
	Calculated Fill: 2,310'
	Volume: 106.92 bbl
	<b>Proposed Sacks: 430 sks</b>

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9  5. LEASE DESIGNATION AND SERIAL NUMBER: UTU80689
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  7. UNIT or CA AGREEMENT NAME: AURORA (DEEP)
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: Aurora Federal 8-26-7-20
2. NAME OF OPERATOR: BILL BARRETT CORP	9. API NUMBER: 43047535440000
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300 , Denver, CO, 80202	PHONE NUMBER: 303 312-8134 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1980 FNL 0800 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENE Section: 26 Township: 07.0S Range: 20.0E Meridian: S	9. FIELD and POOL or WILDCAT: BRENNAN BOTTOM  COUNTY: UINTAH  STATE: 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: 6/5/2014  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE  <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>

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

Bill Barrett Corporation is requesting permission to revise the production casing grade from P-110 to I-80. Production casing and hole size along with cement totals will remain the same as previously approved.

**Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
 June 05, 2014**

Date: \_\_\_\_\_

By: Dark Quif

NAME (PLEASE PRINT) Brady Riley	PHONE NUMBER 303 312-8115	TITLE Permit Analyst
SIGNATURE N/A		DATE 6/5/2014

# RECEIVED

Form 3160-3  
(August 2007)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

JAN 28 2013

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

## BLM Vernal UT

### APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU80689
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator BILL BARRETT CORPORATION Contact: BRADY RILEY E-Mail: briley@billbarrettcorp.com		7. If Unit or CA Agreement, Name and No. UTU82456X
3a. Address 1099 18TH STREET SUITE 2300 DENVER, CO 80202		8. Lease Name and Well No. AURORA FEDERAL 8-26-7-20
3b. Phone No. (include area code) Ph: 303-312-8115		9. API Well No. 43047 33544
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SENE 1980FNL 800FEL At proposed prod. zone SENE 1980FNL 800FEL		10. Field and Pool, or Exploratory UNDESIGNATED
14. Distance in miles and direction from nearest town or post office* 25.6 MILES FROM VERNAL, UT		11. Sec., T., R., M., or Blk. and Survey or Area Sec 26 T7S R20E Mer SLB
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 800' LEASE AND UNIT LINE	16. No. of Acres in Lease 840.00	12. County or Parish UINTAH
17. Spacing Unit dedicated to this well 80.00	13. State UT	18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1803 FEET
19. Proposed Depth 8318 MD 8318 TVD	20. BLM/BIA Bond No. on file WYB000040	21. Elevations (Show whether DF, KB, RT, GL, etc.) 4840 GL
22. Approximate date work will start 08/01/2013	23. Estimated duration 60 D&C	

#### 24. Attachments

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

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

25. Signature (Electronic Submission)	Name (Printed/Typed) BRADY RILEY Ph: 303-312-8115	Date 01/23/2013
Title PERMIT ANALYST		
Approved by (Signature) 	Name (Printed/Typed) Jerry Kenczka	Date JUN 12 2014
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

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

### CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

### RECEIVED

#### Additional Operator Remarks (see next page)

JUN 18 2014

Electronic Submission #188706 verified by the BLM Well Information System  
For BILL BARRETT CORPORATION, sent to the Vernal  
Committed to AFMSS for processing by ROBIN R. HANSEN on 01/31/2013 OF OIL, GAS & MINING

### NOTICE OF APPROVAL

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

**Additional Operator Remarks:**

APD fees will be submitted within 3 days.

T7S, R20E, S.L.B.&M.

BILL BARRETT CORPORATION

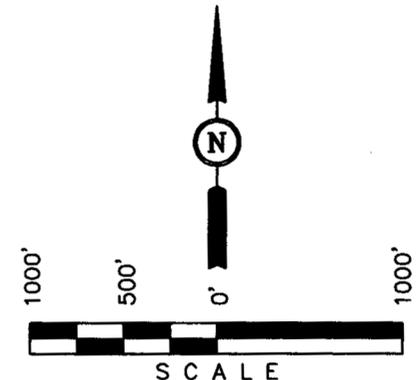
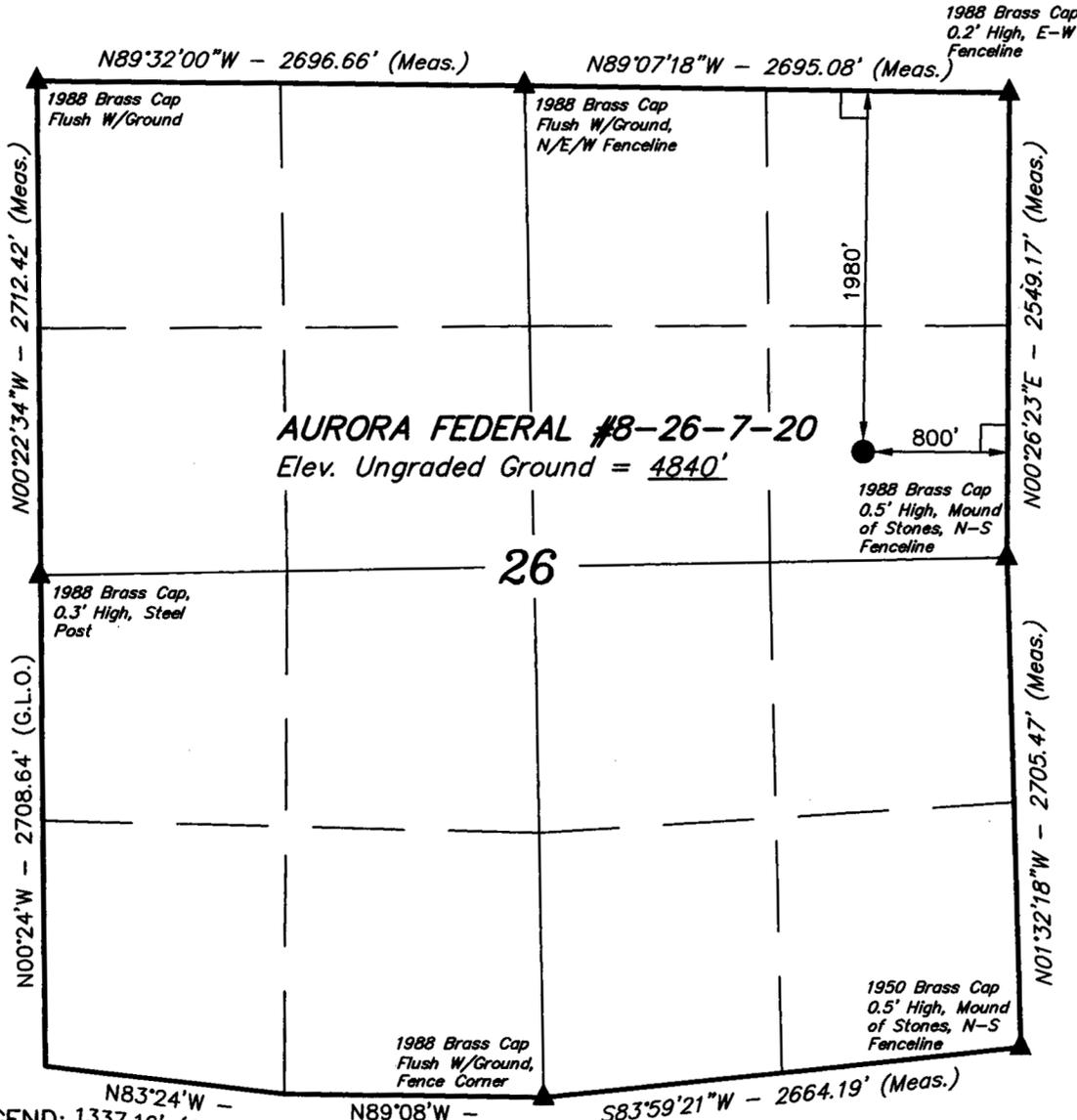
Well location, AURORA FEDERAL #8-26-7-20, located as shown in the SE 1/4 NE 1/4 of Section 26, T7S, R20E, S.L.B.&M, Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK (38EAM) LOCATED IN THE SW 1/4 OF SECTION 9, T7S, R20E, S.L.B.&M., TAKEN FROM THE PELICAN LAKE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4942 FEET.

BASIS OF BEARINGS

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



CERTIFICATE

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

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

REVISED: 03-26-12 R.L.

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

LEGEND: 1337.16' (G.L.O.) N83°24'W -  
1434.84' (G.L.O.) N89°08'W -

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

NAD 83 (SURFACE LOCATION)	
LATITUDE	= 40°10'59.82" (40.183283)
LONGITUDE	= 109°37'45.20" (109.629222)
NAD 27 (SURFACE LOCATION)	
LATITUDE	= 40°10'59.95" (40.183319)
LONGITUDE	= 109°37'42.70" (109.628528)

SCALE 1" = 1000'	DATE SURVEYED: 01-12-12	DATE DRAWN: 01-26-12
PARTY C.R. S.R. R.L.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE BILL BARRETT CORPORATION	

**BILL BARRETT CORPORATION**  
**DRILLING PLAN**

**Aurora Federal 8-26-7-20**

SENE, 1980' FNL and 800' FEL, Section 26, T7S-R20E, SLB & M (surface hole)  
SENE, 1980' FNL and 800' FEL, Section 26, T7S-R20E, SLB & M (bottom hole)  
Uintah County, Utah

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	<b>(FROM)</b>	<b>(TO)</b>					
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12 1/4"	Surface	1500'	9 5/8"	36#	J or K 55	ST&C	New
8 3/4"	Surface	TD	5 1/2"	17#	P-110	LT&C	New

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Bill Barrett Corporation  
 Drilling Program  
 Aurora Federal 8-26-7-20  
 Uintah County, Utah

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16" Conductor Casing	Grout
9 5/8" Surface Casing	Lead: 190 sx Halliburton Light Premium with additives mixed at 11.0 ppg (yield = 3.16 ft <sup>3</sup> /sx) circulated to surface with 75% excess. TOC @ Surface Tail: 210 sx Halliburton Premium Plus cement with additives mixed at 14.8 ppg (yield = 1.36 ft <sup>3</sup> /sx), calculated hole volume with 75% excess. TOC @ 1,000'
5 1/2" Production Casing	Lead: 830 sx Tuned Light cement with additives mixed at 11.0 ppg (yield = 2.31 ft <sup>3</sup> /sx). TOC @ 1,000' Tail: 630 sx Halliburton Econocem cement with additives mixed at 13.5 ppg (yield = 1.42 ft <sup>3</sup> /sx). Top of cement to be determined by log and sample evaluation; estimated TOC @ 6008'

6. **Mud Program**

<u>Interval</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss (API filtrate)</u>	<u>Remarks</u>
0' – 80'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
80' – 1500'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
1500' – TD	8.6 – 9.6	42 – 52	20 cc or less	DAP Polymer Fluid System
Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce torque and drag.				

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

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

Bill Barrett Corporation  
Drilling Program  
Aurora Federal 8-26-7-20  
Uintah County, Utah

8. **Anticipated Abnormal Pressures or Temperatures**

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 4110 psi\* and maximum anticipated surface pressure equals approximately 2280 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
- Mud monitoring will be visually observed

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

Water for the drilling and completion will be trucked from the Green River located in Sec. 33, T8S-R20E.

11. **Drilling Schedule**

Location Construction: December 2013  
Spud: December 2013  
Duration: 15 days drilling time  
45 days completion time



# Bill Barrett Corporation

## AURORA CEMENT VOLUMES

**Well Name:** Aurora Federal 8-26-7-20

### Surface Hole Data:

Total Depth:	1,500'
Top of Cement:	0'
OD of Hole:	12.250"
OD of Casing:	9.625"

### Calculated Data:

Lead Volume:	548.1	ft <sup>3</sup>
Lead Fill:	1,000'	
Tail Volume:	274.0	ft <sup>3</sup>
Tail Fill:	500'	

### Cement Data:

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

### Calculated # of Sacks:

# SK's Lead:	190
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Tail Yield:	1.36	ft <sup>3</sup> /sk
% Excess:	75%	
Top of Tail:	1,000'	

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

Total Depth:	8,318'
Top of Cement:	1,000'
Top of Tail:	6,008'
OD of Hole:	8.750"
OD of Casing:	5.500"

### Calculated Data:

Lead Volume:	1897.5	ft <sup>3</sup>
Lead Fill:	5,008'	
Tail Volume:	875.3	ft <sup>3</sup>
Tail Fill:	2,310'	

### Cement Data:

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

### Calculated # of Sacks:

# SK's Lead:	830
# SK's Tail:	630

**Aurora Federal 8-26-7-20 Proposed Cementing Program**

<u>Job Recommendation</u>	<u>Surface Casing</u>
<b>Lead Cement - (1000' - 0')</b>	
Halliburton Light Premium	Fluid Weight: 11.0 lbm/gal
5.0 lbm/sk Silicalite Compacted	Slurry Yield: 3.16 ft <sup>3</sup> /sk
0.25 lbm/sk Kwik Seal	Total Mixing Fluid: 19.48 Gal/sk
0.125 lbm/sk Poly-E-Flake	Top of Fluid: 0'
2.0% Bentonite	Calculated Fill: 1,000'
	Volume: 97.61 bbl
	<b>Proposed Sacks: 190 sks</b>
<b>Tail Cement - (TD - 1000')</b>	
Premium Cement	Fluid Weight: 14.8 lbm/gal
2.0% Calcium Chloride	Slurry Yield: 1.36 ft <sup>3</sup> /sk
	Total Mixing Fluid: 6.37 Gal/sk
	Top of Fluid: 1,000'
	Calculated Fill: 500'
	Volume: 48.80 bbl
	<b>Proposed Sacks: 210 sks</b>

<u>Job Recommendation</u>	<u>Production Casing</u>
<b>Lead Cement - (6008' - 1000')</b>	
Tuned Light™ System	Fluid Weight: 11.0 lbm/gal
	Slurry Yield: 2.31 ft <sup>3</sup> /sk
	Total Mixing Fluid: 10.65 Gal/sk
	Top of Fluid: 1,000'
	Calculated Fill: 5,008'
	Volume: 337.93 bbl
	<b>Proposed Sacks: 830 sks</b>
<b>Tail Cement - (8318' - 6008')</b>	
Econocem™ System	Fluid Weight: 13.5 lbm/gal
0.125 lbm/sk Poly-E-Flake	Slurry Yield: 1.42 ft <sup>3</sup> /sk
1.0 lbm/sk Granulite TR 1/4	Total Mixing Fluid: 6.61 Gal/sk
	Top of Fluid: 6,008'
	Calculated Fill: 2,310'
	Volume: 155.89 bbl
	<b>Proposed Sacks: 630 sks</b>

## PRESSURE CONTROL EQUIPMENT – Schematic Attached

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

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

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

C. **Testing Procedure:**

### Annular Preventer

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

At a minimum the above pressure test will be performed:

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

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

### Blow-Out Preventer

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

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

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

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

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

#### **D. Choke Manifold Equipment:**

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

#### **E. Accumulator:**

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

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

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

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

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

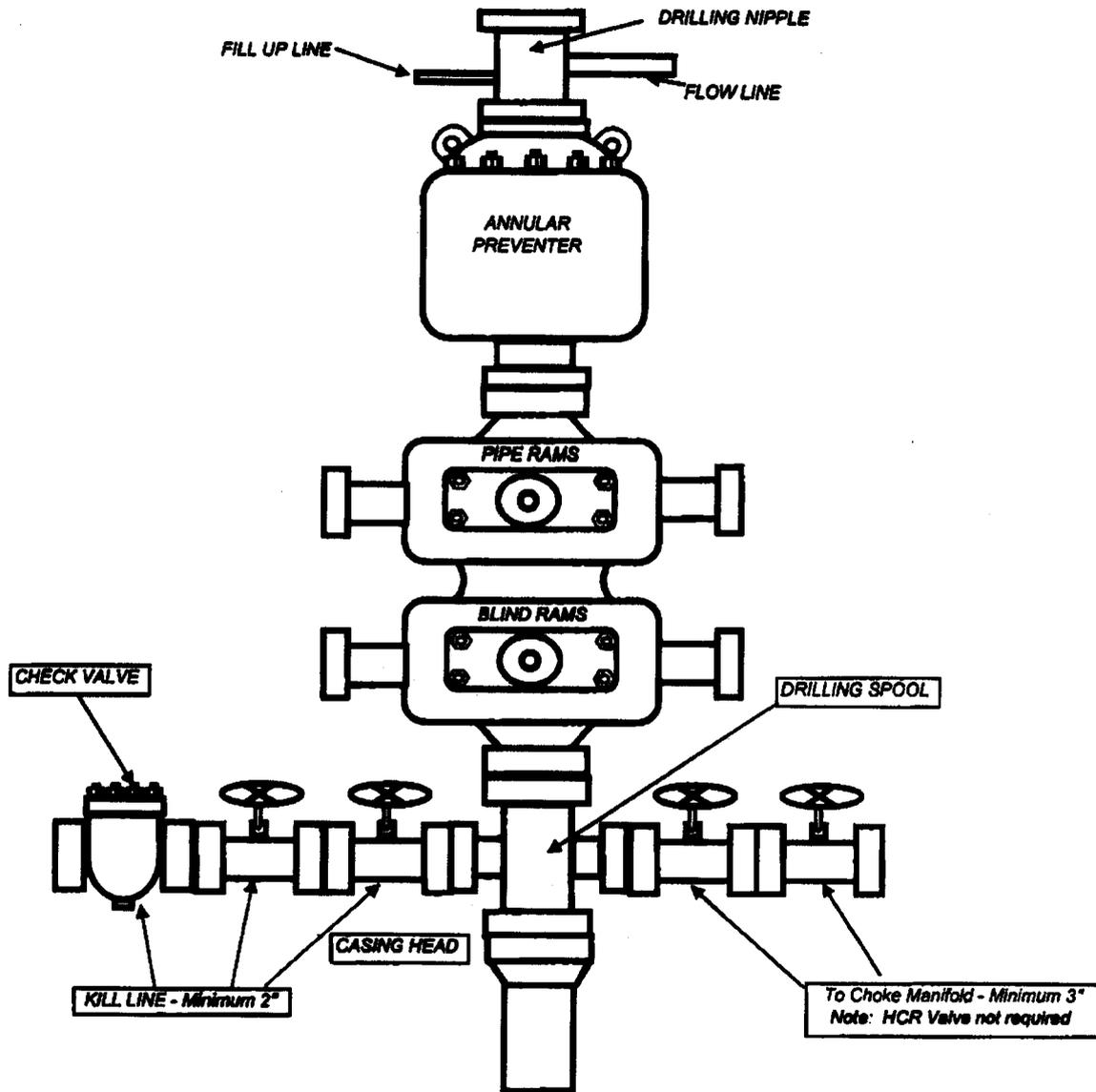
**F. Miscellaneous Information:**

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

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



**BILL BARRETT CORPORATION**  
**TYPICAL 5,000 p.s.i. BLOWOUT PREVENTER**



## SURFACE USE PLAN

BILL BARRETT CORPORATION

### Aurora Federal #8-26-7-20

SENE, 1980' FNL and 800' FEL, Section 26, T7S-R20E, SLB&M (surface hole)

SENE, 1980' FNL and 800' FEL, Section 26, T7S-R20E, SLB&M (bottom hole)

Uintah County, Utah

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The onsite inspection for this pad occurred on 11/15/12. Site specific conditions or changes as a result of that onsite are indicated below. Plat changes requested at the onsite are reflected within this APD.

- a) Access road, pipeline and power routes were changed to following existing 2-track and new surveys have been conducted on this new route;
- b) Production facilities to be located at corner 6 area to maximize interim reclamation;
- c) Relocate access entrance to corner 7 area

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

1. Existing Roads:

- a. The proposed well site is located approximately 25.6 miles southwest of Vernal, Utah. Maps and directions reflecting the route to the proposed well site are included (see Topographic maps A and B).
- b. Coming off of US Hwy 40, head south down the UDOT maintained SR-88 for 9.5 miles trending south to the existing road that will be utilized for 1.5 miles trending east to the junction in which an existing two-track will be used/upgraded as the access road to the pad.
- c. Project roads would require routine year-round maintenance to provide year-round access. Maintenance would include inspections, reduction of ruts and holes, maintenance to keep water off the road, replacement of surfacing materials, and clearing of sediment blocking ditches and culverts. Should snow removal become necessary, roads would be cleared with a motor grader and snow would be stored along the down gradient side to prohibit runoff onto the road. Aggregate would be used as necessary to maintain a solid running surface and minimize dust generation.
- d. Vehicle operators would obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions. Travel would be limited to the existing access roads and proposed access road.
- e. The use of roads under State and Uintah County Road Department maintenance are necessary to access the project area with no improvements proposed. A Uintah County Encroachment Permit has been obtained.

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

2. Planned Access Road:

- a. Approximately 2947 feet of access road to be constructed is proposed (see Topographic Map B). Approximately 2335 feet of access road is an existing 2-track that will be upgraded. The access road is entirely on BLM surface.
- b. The planned access road would be constructed to a 30-foot ROW width with an 18-foot travel surface. See section 12.d. below for disturbance estimates as a portion of the road already exists, changing the total disturbance calculations.
- c. New road construction and improvements of existing roads would typically require the use of motor graders, crawler tractors, 10-yard end dump trucks, and water trucks. The standard methodology for building new roads involves the use of a crawler tractor or track hoe to windrow the vegetation to one side of the road corridor, remove topsoil to the opposing side of the corridor, and rough-in the roadway. This is followed by a grader or bulldozer to establish barrow ditches and crown the road surface. Where culverts are required, a track hoe or backhoe would trench the road and install the culverts. Some hand labor would be required when installing and armoring culverts. Road base or gravel in some instances would be necessary and would be hauled in and a grader used to smooth the running surface.
- d. The proposed road would be constructed to facilitate drainage, control erosion and minimize visual impacts by following natural contours where practical. No unnecessary side-casting of material would occur on steep slopes.
- e. A maximum grade of 10% would be maintained throughout the project with minimum cuts and fills, as necessary, to access the well.
- f. Excess rock from construction of the pad may be used for surfacing of the access road if necessary. Any additional aggregate necessary would be obtained from private or State of Utah lands in conformance with applicable regulations. Aggregate would be of sufficient size, type, and amount to allow all weather access and alleviate dust.
- g. Where topsoil removal is necessary, it would be windrowed (i.e. stockpiled/accumulated along the edge of the ROW and in a low row/pile parallel with the ROW) and re-spread over the disturbed area after construction and backfilling are completed. Vegetation removed from the disturbed area would also be re-spread to provide protection, nutrient recycling, and a seed source for reclamation.
- h. Turnouts are not proposed.

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

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

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

4. Location of Production Facilities

- a. Surface facilities would consist of a wellhead, separator, gas meter, combustor, (1) 500 gal methanol tank, (1) 500 glycol tank, (2) 500 bbl oil tanks, (1) 500 bbl water tank, (1) 400 bbl vent tank, (1) 1000 gal propane tank, a pumping unit or Roto-flex unit or ESP or gas lift unit, electrical or with a natural gas or diesel fired motor, solar panels, solar chemical and methanol pumps and one trace pump, and if necessary power lines. See attached proposed facility diagram. Additional equipment may be added when more than one well is drilled on each pad. See attached proposed facility diagram.
- b. Most wells would be fitted with a pump jack or Roto-flex unit or ESP or gas lift to assist liquid production. The prime mover for pump jacks or Roto-flex units would be small (100 horsepower or less), electric motor or natural gas or diesel fired internal combustion engines. If a gas lift is installed, it would be set on a 10 ft x 25 ft pad and the prime mover would be a natural gas-fired internal

combustion engine rated at 200 horsepower or less or an electric compressor of similar horsepower powered by electricity.

- c. The tank battery would be surrounded by a secondary containment berm of sufficient capacity to contain 1.1 times the entire capacity of the largest single tank and sufficient freeboard to contain precipitation. All loading lines and valves would be placed inside the berm surrounding the tank battery or would utilize catchment basins to contain spills. All liquid hydrocarbon production and measurement shall conform to the provisions of 43 CFR 3162.7-2 and Onshore Oil and Gas Order No. 4 for the measurement of oil.
- d. Gas meter run(s) would be constructed and located on lease within 500 feet of the wellheads. Meter runs would be housed and/or fenced. As practicably feasible, meters would be equipped with remote telemetry monitoring systems. All gas production and measurement shall comply with the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.
- e. A combustor may be installed at this location for control of associated condensate tank emissions. A combustor ranges from 24 inches to 48 inches wide and is approximately 27 ft tall. Combustor placement would be on existing disturbance.
- f. Approximately 2927 feet of pipeline corridor (see Topographic Map C) containing up to three lines (one gas pipeline up to 12 inch in diameter, one water line up to 8 inch in diameter and one residue line up to 4 inch in diameter) is proposed trending east to a proposed pipeline corridor. Pipelines would be constructed of steel, polyethylene or fiberglass and would connect to the proposed pipeline servicing nearby BBC wells. The pipeline crosses entirely BLM surface.
- g. The new segment of gas pipeline would be buried within a 30 foot wide pipeline corridor adjacent to the proposed access road. See 12.d below for disturbance estimates.
- h. Pipeline construction methods and practices would be planned and conducted by BBC with the objective of enhancing reclamation and fostering the re-establishment of the native plant community.
- i. All permanent above-ground structures would be painted a flat, non-reflective color, such as Covert Green, to match the standard environmental colors. All facilities would be painted the designated color at the time of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.
- j. Site security guidelines identified in 43 CFR 3162.7-5 and Onshore Oil and Gas Order No. 3 would be adhered to. Any modifications to proposed facilities would be reflected in the site security diagram submitted.

- k. The site would require periodic maintenance to ensure that drainages are kept open and free of debris, and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.

5. Location and Type of Water Supply:

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

Water Right No. and Application or Change No.	Applicant	Allocation	Date	Point of Diversion	Source
43-2505, Appln t37379	McKinnon Ranch Properties, LC	1.3 cfs	4/28/2011	Pumped from Sec, 17, T4SR6W	Water Canyon Lake
43-11787	Neil Moon	14.29 ac-ft	4/2/12	Sec. 27, T3S, R2W	Gravel Pit Pond
43-12345 (F78949 )	Dale Anderson	10.- ac-ft	1/5/2011	Sec. 14, T3S, R1E	Pit Pond
43-10664 (A38472)	W. E. Gene Brown	4.712 ac-ft	9/18/12	Sec. 32, T6S, R20E	Unnamed Spring Area
49-1645 (A35800)	RN Industries, Inc.	50 ac-ft	4/10/2011	Sec 9, T8S- R20E	Underground Well
49-2336 (t78808)	RN Industries, Inc.	20 ac-ft	4/7/2011	Sec 33, T8S- R20E	Green River
43-8496 (A53617)	A-1 Tank Rental	0.015 cfs	8/17/1979	Sec 32, T4S- R3E	Underground Well
43-10288 (A65273)	Nile Chapman (RNI)	0.45 ac-ft	4/4/1991	Sec 9, T2S- R2W	Underground Well
49-2247 (F76893)	Magnum Water Service	20 ac-ft	9/20/12	Sec. 33, T8S- R20E	Underground Well

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

6. Source of Construction Material:

- a. The use of materials would conform to 43 CFR 3610.2-3.

- b. No construction materials would be removed from the lease or EDA area.
- c. If any additional gravel is required, it would be obtained from a local supplier having a permitted source of materials within the general area.

7. Methods of Handling Waste Disposal:

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

Disposal Facilities
1. LaPoint Recycle & Storage – Sec. 12, T5S-R19E
2. Dalbo, Inc. Ace Disposal, Sec. 35, T5S-R20W & Sec. 2, T6S-R20W

- g. Any salts and/or chemicals, which are an integral part of the drilling system, would be disposed of in the same manner as the drilling fluid.
- h. Any spills of oil, condensate, produced or frac water, drilling fluids, or other potentially deleterious substances would be recovered and either returned to its origin or disposed of at an approved disposal site, most likely in Duchesne, Utah.
- i. Chemicals on the EPA's Consolidated List of Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act of 1986

(SARA) may be used or stored in quantities over reportable quantities. In the course of drilling, BBC could potentially store and use diesel fuel, sand (silica), hydrochloric acid, and CO<sub>2</sub> gas, all described as hazardous substances in 40 CFR Part 302, Section 302.4, in quantities exceeding 10,000 pounds. In addition, natural gas condensate and crude oil and methanol may be stored or used in reportable quantities. Small quantities of retail products (paint/spray paints, solvents {e.g., WD-40}, and lubrication oil) containing non-reportable volumes of hazardous substances may be stored and used on site at any time. No extremely hazardous substances, as defined in 40 CFR 355, would be used, produced, stored, transported or disposed of in association with the drilling, testing or completion of the wells.

- j. Portable toilets and trash containers would be located onsite during drilling and completion operations. A commercial supplier would install and maintain portable toilets and equipment and would be responsible for removing sanitary waste. Sanitary waste facilities (i.e. toilet holding tanks) would be regularly pumped and their contents disposed of at approved sewage disposal facilities in Duchesne, and/or Uintah Counties, in accordance with applicable rules and regulations regarding sewage treatment and disposal. Accumulated trash and nonflammable waste materials would be hauled to an approved landfill once a week or as often as necessary. All debris and waste materials not contained in the trash containers would be cleaned up, removed from the construction ROW, well pad, or worker housing location, and disposed of at an approved landfill. Trash would be cleaned up everyday.
  - k. Sanitary waste equipment and trash bins would be removed from the Project Area upon completion of access road or pipeline construction; following drilling and completion operations at an individual well pad; when worker housing is no longer needed; or as required.
  - l. A flare pit may be constructed a minimum of 110' from the wellhead(s) and may be used during completion work. In the event a flare pit proves to be unworkable, a temporary flare stack or open top tank would be installed. BBC would flow back as much fluid and gas as possible into pressurized vessels, separating the fluids from the gas. In some instances, due to the completion fluids utilized within the Project Area, it is not feasible to direct the flow stream from the wellbore through pressurized vessels. In such instances BBC proposes to direct the flow to the open top tanks until flow through the pressurized vessels is feasible. At which point the fluid would either be returned to the reserve pit or placed into a tank(s). The gas would be directed to the flare pit, flare stack (each with a constant source of ignition), or may be directed into the sales pipeline.
  - m. Hydrocarbons would be removed from the reserve pit would as soon as practical. In the event immediate removal is not practical, the reserve pit would be flagged overhead or covered with wire or plastic mesh to protect migrating birds.
8. Ancillary Facilities:

- a. Garbage containers and portable toilets would be located on the well pad.
- b. On well pads where active drilling and completion is occurring, temporary housing would be provided on location for the well pad supervisor, geologist, tool pusher, and others that are required to be on location at all times. The well pad could include up to five single wide mobile homes or fifth wheel campers/trailers.
- c. A surface powerline corridor is proposed for installation by a third-party installer. All necessary permits will be obtained by the contractor.

9. Well Site Layout:

- a. The well would be properly identified in accordance with 43 CFR 3162.6.
- b. The pad layout, cross section diagrams and rig layout are enclosed (see Figures 1 and 2).
- c. The pad and road designs are consistent with industry specifications.
- d. The pad has been staked at its maximum size of 400 feet x 305 feet with an inboard reserve pit size of 100 feet x 200 feet x 10 feet deep. See section 12.d below for disturbance estimates.
- e. Within the approved well pad location, a crawler tractor would strip whatever topsoil is present and stockpile it along the edge of the well pad for use during reclamation. Vegetation would be distributed along the sides of the well pad.
- f. Fill from pit excavation would be stockpiled along the edge of the pit and the adjacent edge of the well pad.
- g. Use of erosion control measures, including proper grading to minimize slopes, diversion terraces and ditches, mulching, terracing, riprap, fiber matting, temporary sediment traps, and broad-based drainage dips or low water crossings would be employed by BBC as necessary and appropriate to minimize erosion and surface runoff during well pad construction and operation. Cut and fill slopes would be constructed such that stability would be maintained for the life of the activity.
- h. All cut and fill slopes would be such that stability can be maintained for the life of the activity.
- i. Diversion ditches would be constructed, if necessary, around the well site to prevent surface waters from entering the well site area.
- j. Water application may be implemented if necessary to minimize the amount of fugitive dust.

- k. All surface disturbing activities would be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.

10. Plan for Restoration of the Surface:

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

11. Surface and Mineral Ownership:

- a. Surface ownership – Federal under the management of the BLM – Vernal Field Office.

- b. Mineral ownership – Federal under the management of the BLM – Vernal Field Office.

12. Other Information:

- a. Montgomery Archeological Consultants has conducted a Class III archeological survey. A copy of the report has been submitted under separate cover to the appropriate agencies by Montgomery as report MOAC 12-067 dated 3/21/12 and MOAC 12-368 dated 12/28/12.
- b. BBC would require that their personnel, contractors, and subcontractors to comply with Federal regulations intended to protect archeological and cultural resources.
- c. Project personnel and contractors would be educated on and subject to the following requirements:
  - No dogs or firearms within the Project Area.
  - No littering within the Project Area.
  - Smoking within the Project Area would only be allowed in off-operator active locations or in specifically designated smoking areas. All cigarette butts would be placed in appropriate containers and not thrown on the ground or out windows of vehicles; personnel and contractors would abide by all fire restriction orders.
  - Campfires or uncontained fires of any kind would be prohibited.
  - Portable generators used in the Project Area would have spark arrestors.
- d. Disturbance estimates:

<b>Approximate Acreage Disturbances</b>			
Well Pad		2.996	acres
Existing Access Road to be upgraded	2335* feet	1.072	acres
New Access Road	612 feet	.421	acres
Pipeline	2927 feet	2.016	acres
Powerline	2876 feet	3.301	acres
<b>Total</b>		<b>9.806</b>	<b>acres</b>

\*The proposed disturbance associated with the 2335 ft of existing road to be upgraded was calculated at 20-ft for disturbance purposes as 10 ft of the road is existing

Bill Barrett Corporation  
Surface Use Plan  
Aurora Federal #8-26-7-20  
Uintah County, UT

OPERATOR CERTIFICATION

Certification:

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

Executed this 22 day of Jan 2013  
Name: Brady Riley  
Position Title: Permit Analyst  
Address: 1099 18<sup>th</sup> Street, Suite 2300, Denver, CO 80202  
Telephone: 303-312-8115  
E-mail: briley@billbarrettcorp.com  
Field Representative Kary Eldredge / Bill Barrett Corporation  
Address: 1820 W. Highway 40, Roosevelt, UT 84066  
Telephone: 435-725-3515 (office); 435-724-6789 (mobile)  
E-mail: keldredge@billbarrettcorp.com

Brady Riley  
Brady Riley, Permit Analyst

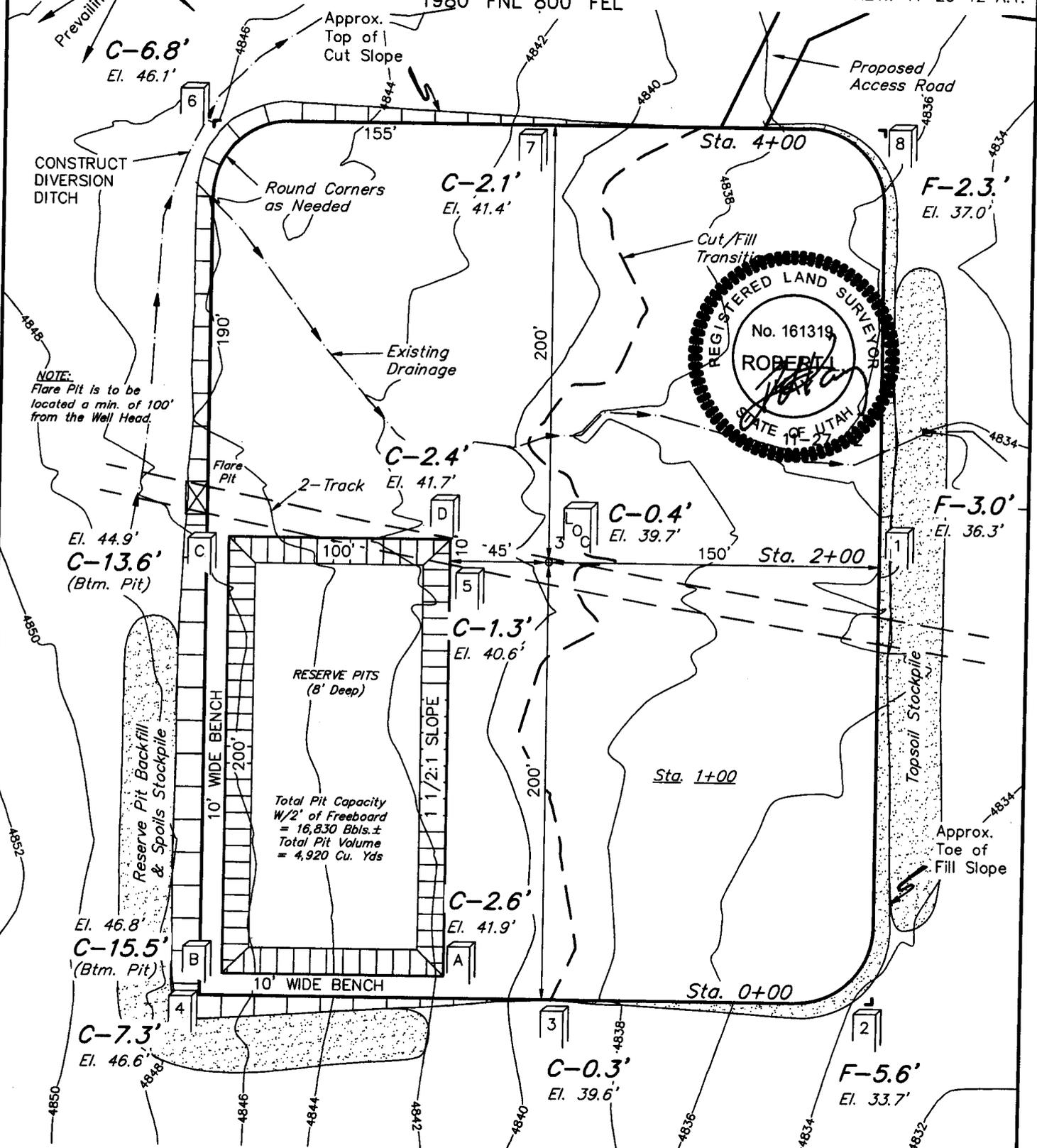
**BILL BARRETT CORPORATION**

LOCATION LAYOUT FOR

AURORA FEDERAL #8-26-7-20  
SECTION 26, T7S, R20E, S.L.B.&M.  
1980' FNL 800' FEL

**FIGURE #1**

SCALE: 1" = 60'  
DATE: 01-26-12  
DRAWN BY: R.L.  
REV.: 11-20-12 A.T.



Elev. Ungraded Ground At Loc. Stake = **4839.7'**  
FINISHED GRADE ELEV. AT LOC. STAKE = **4839.3'**

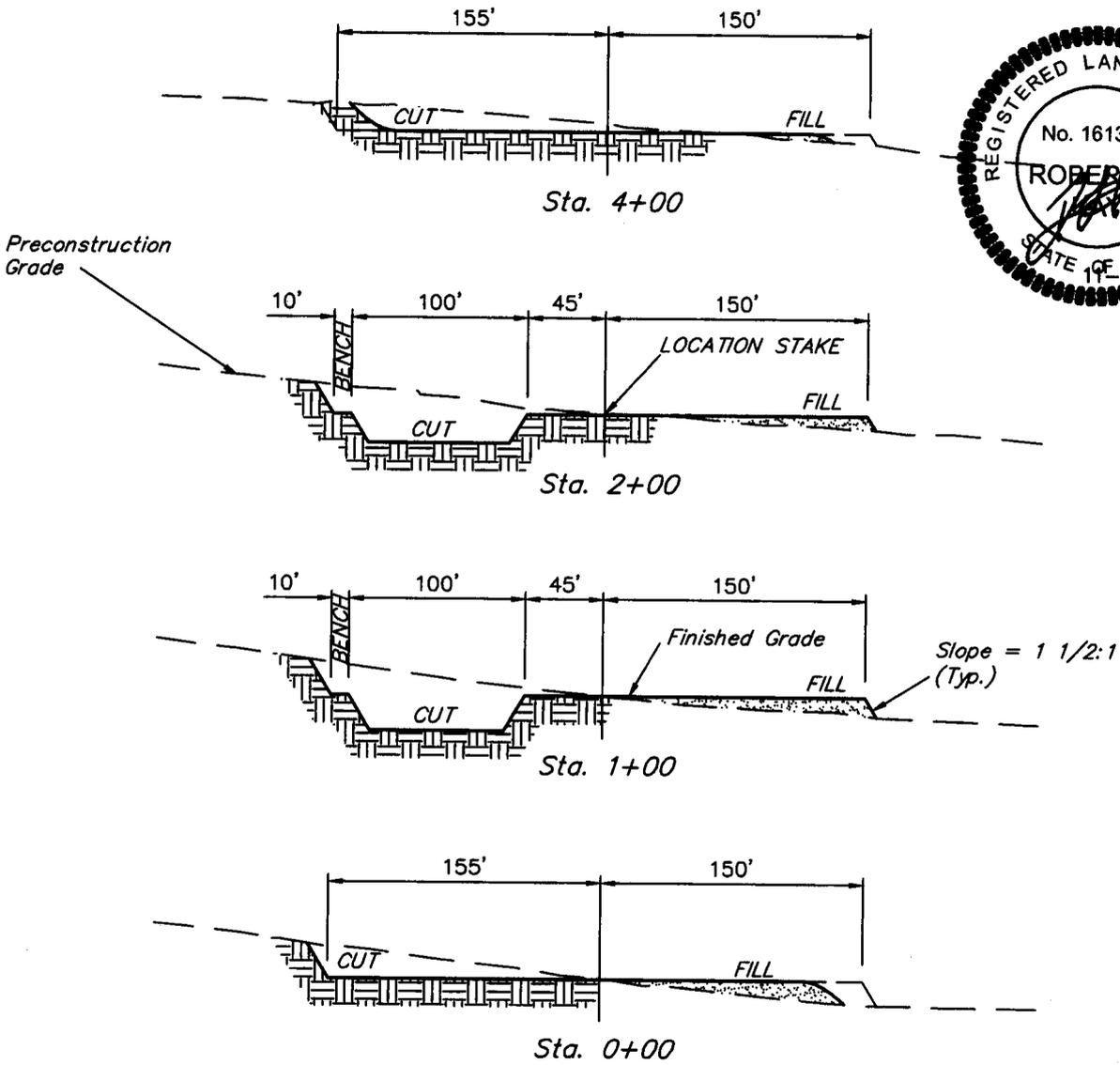
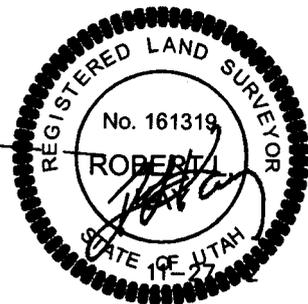
**UINTAH ENGINEERING & LAND SURVEYING**  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

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

**BILL BARRETT CORPORATION**  
 TYPICAL CROSS SECTIONS FOR  
 AURORA FEDERAL #8-26-7-20  
 SECTION 26, T7S, R20E, S.L.B.&M.  
 1980' FNL 800' FEL

**FIGURE #2**

DATE: 01-26-12  
 DRAWN BY: R.L.  
 REV.: 11-20-12 A.T.



**NOTE:**  
 Topsoil should not be Stripped Below Finished Grade on Substructure Area.

**APPROXIMATE ACREAGES**  
 WELL SITE DISTURBANCE = ± 2.996 ACRES  
 ACCESS ROAD DISTURBANCE = ± 2.030 ACRES  
 PIPELINE DISTURBANCE = ± 2.016 ACRES  
**TOTAL = ± 7.042 ACRES**

**\* NOTE:**  
 FILL QUANTITY INCLUDES 5% FOR COMPACTION

**APPROXIMATE YARDAGES**

(6") Topsoil Stripping	=	2,470 Cu. Yds.
Remaining Location	=	10,980 Cu. Yds.
<b>TOTAL CUT</b>	<b>=</b>	<b>13,450 CU.YDS.</b>
<b>FILL</b>	<b>=</b>	<b>6,950 CU.YDS.</b>

EXCESS MATERIAL	=	6,500 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	4,930 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	=	1,570 Cu. Yds.

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

**BILL BARRETT CORPORATION**

TYPICAL RIG LAYOUT FOR

AURORA FEDERAL #8-26-7-20  
SECTION 26, T7S, R20E, S.L.B.&M.  
1980' FNL 800' FEL

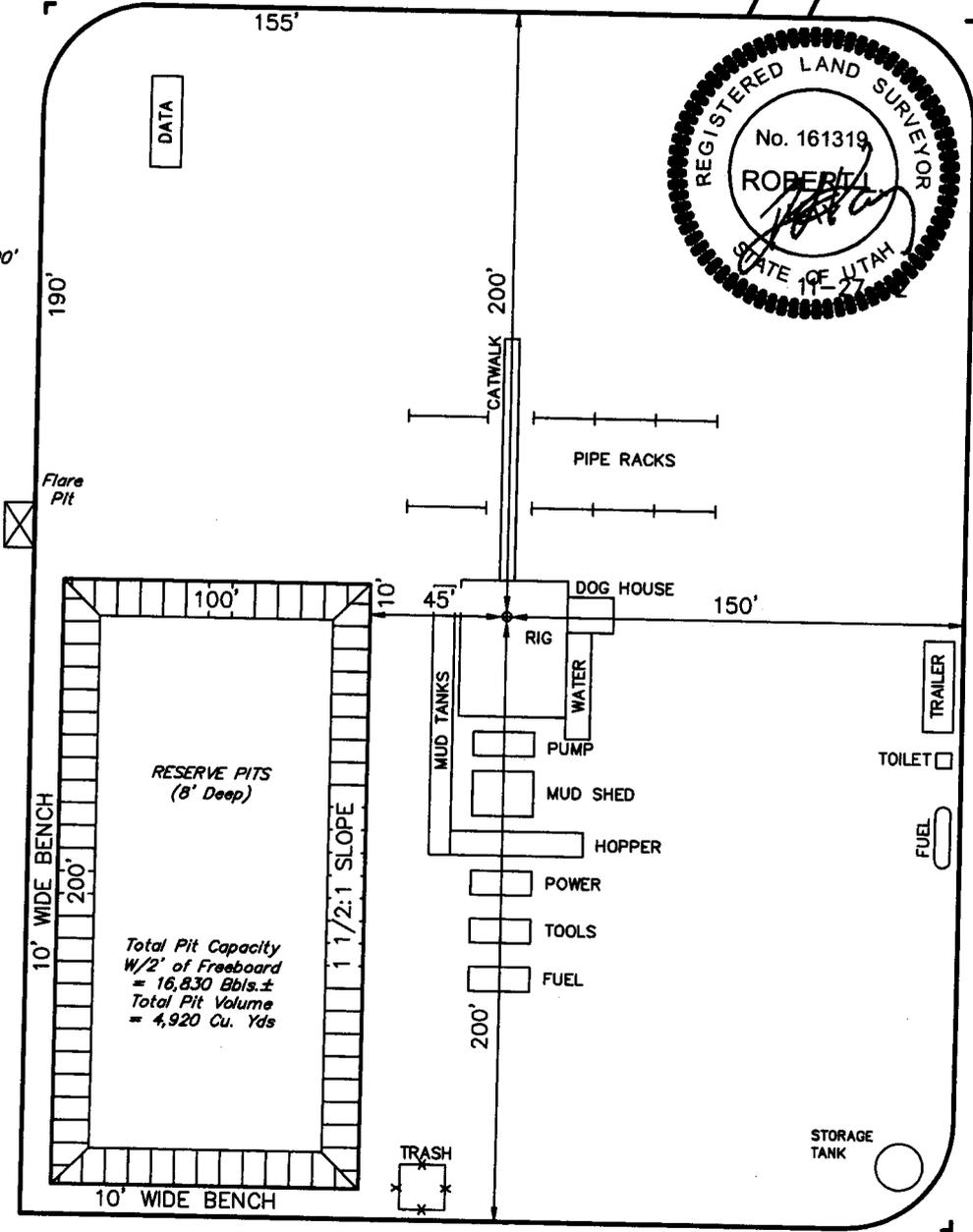
**FIGURE #3**

SCALE: 1" = 60'  
DATE: 01-26-12  
DRAWN BY: R.L.  
REV.: 11-20-12 A.T.



Proposed  
Access Road

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



Total Pit Capacity  
w/2' of Freeboard  
= 16,830 Bbls.±  
Total Pit Volume  
= 4,920 Cu. Yds

**BILL BARRETT CORPORATION**  
**AURORA FEDERAL #8-26-7-20**  
**SECTION 26, T7S, R20E, S.L.B.&M.**

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 9.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 1.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING 2-TRACK TO THE EAST; FOLLOW 2-TRACK IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 2,335' TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTH; FOLLOW ROAD FLAGS IN A SOUTHERLY, THEN EASTERLY DIRECTION APPROXIMATELY 612' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 25.6 MILES.

# BILL BARRETT CORPORATION

## AURORA FEDERAL #8-26-7-20

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 26, T7S, R20E, S.L.B.&M.

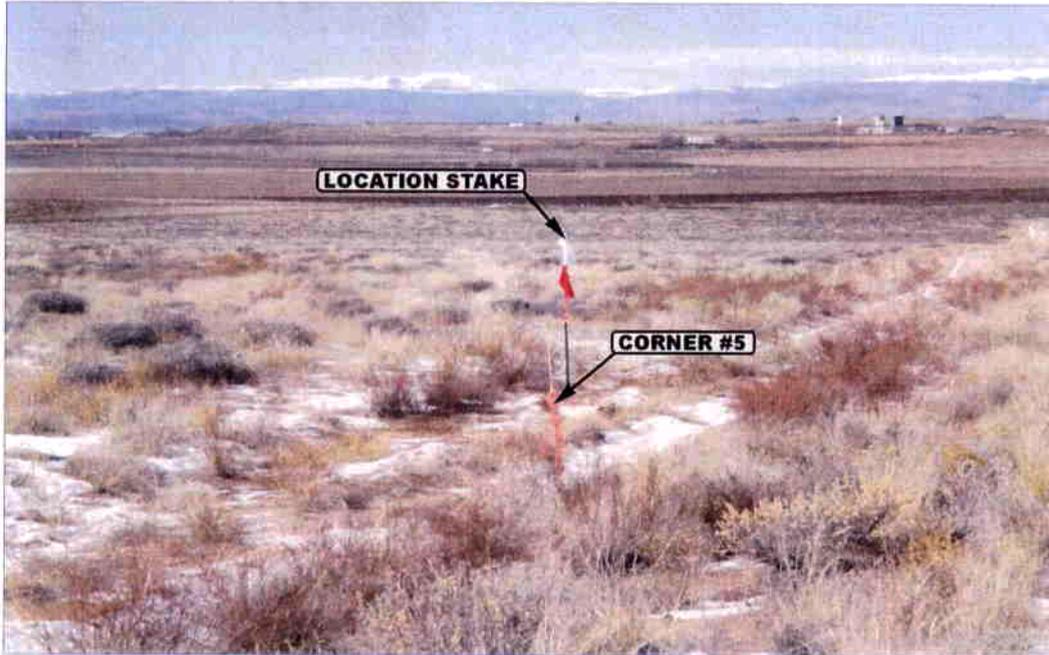


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF EXISTING 2-TRACK

CAMERA ANGLE: EASTERLY



- Since 1964 -

UELS

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

LOCATION PHOTOS

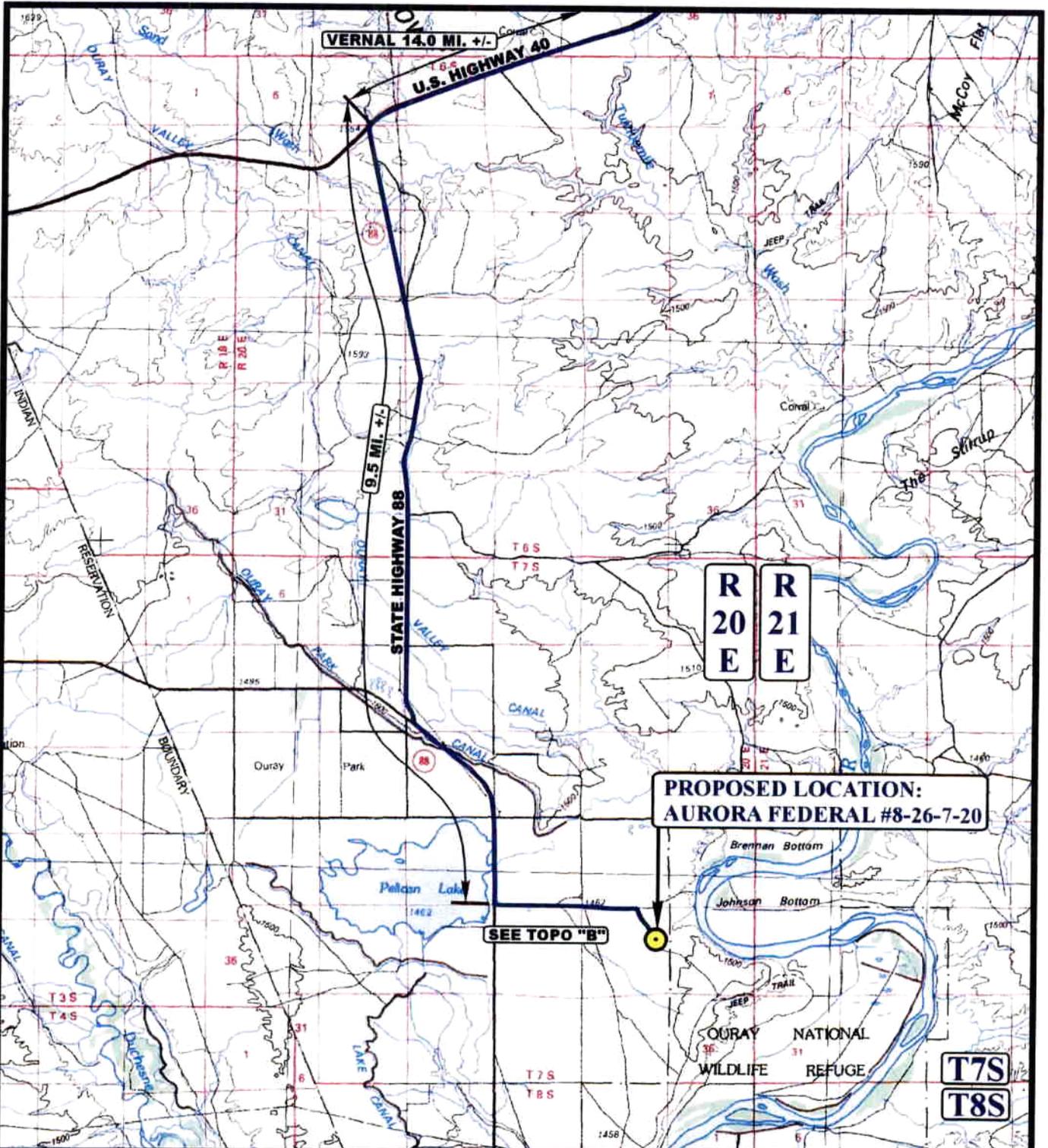
01 23 12  
MONTH DAY YEAR

PHOTO

TAKEN BY: C.R.

DRAWN BY: C.L.

REVISED: 12-07-12



**R 20 E**  
**R 21 E**

**PROPOSED LOCATION:  
AURORA FEDERAL #8-26-7-20**

**SEE TOPO "B"**

**T7S**  
**T8S**

**LEGEND:**  
**PROPOSED LOCATION**

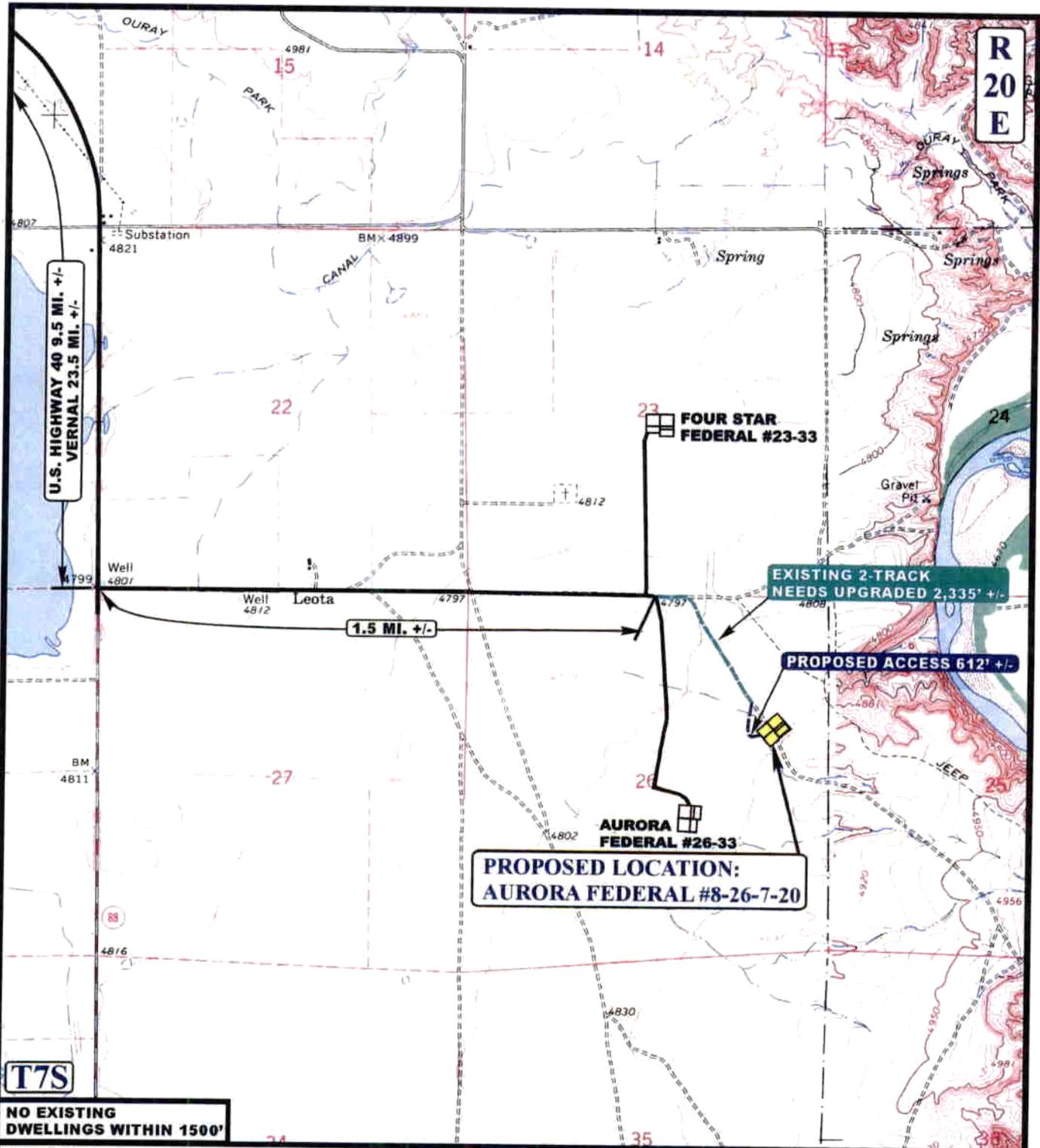
**BILL BARRETT CORPORATION**  
**AURORA FEDERAL #8-26-7-20**  
**SECTION 26, T7S, R20E, S.L.B.&M.**  
**1980' FNL 800' FEL**

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



**ACCESS ROAD**  
**M A P**  
**01 23 12**  
 MONTH DAY YEAR  
**SCALE: 1:100,000** **DRAWN BY: C.I.** **REVISED: 11-19-12** **A**  
**TOPO**

R  
20  
E



T7S

NO EXISTING DWELLINGS WITHIN 1500'

**LEGEND:**

	EXISTING ROAD
	PROPOSED ACCESS ROAD
	EXISTING 2-TRACK NEEDS UPGRADED (AVERAGE WIDTH 10' +/-)



**BILL BARRETT CORPORATION**

**AURORA FEDERAL #8-26-7-20**  
**SECTION 26, T7S, R20E, S.L.B.&M.**  
**1980' FNL 800' FEL**

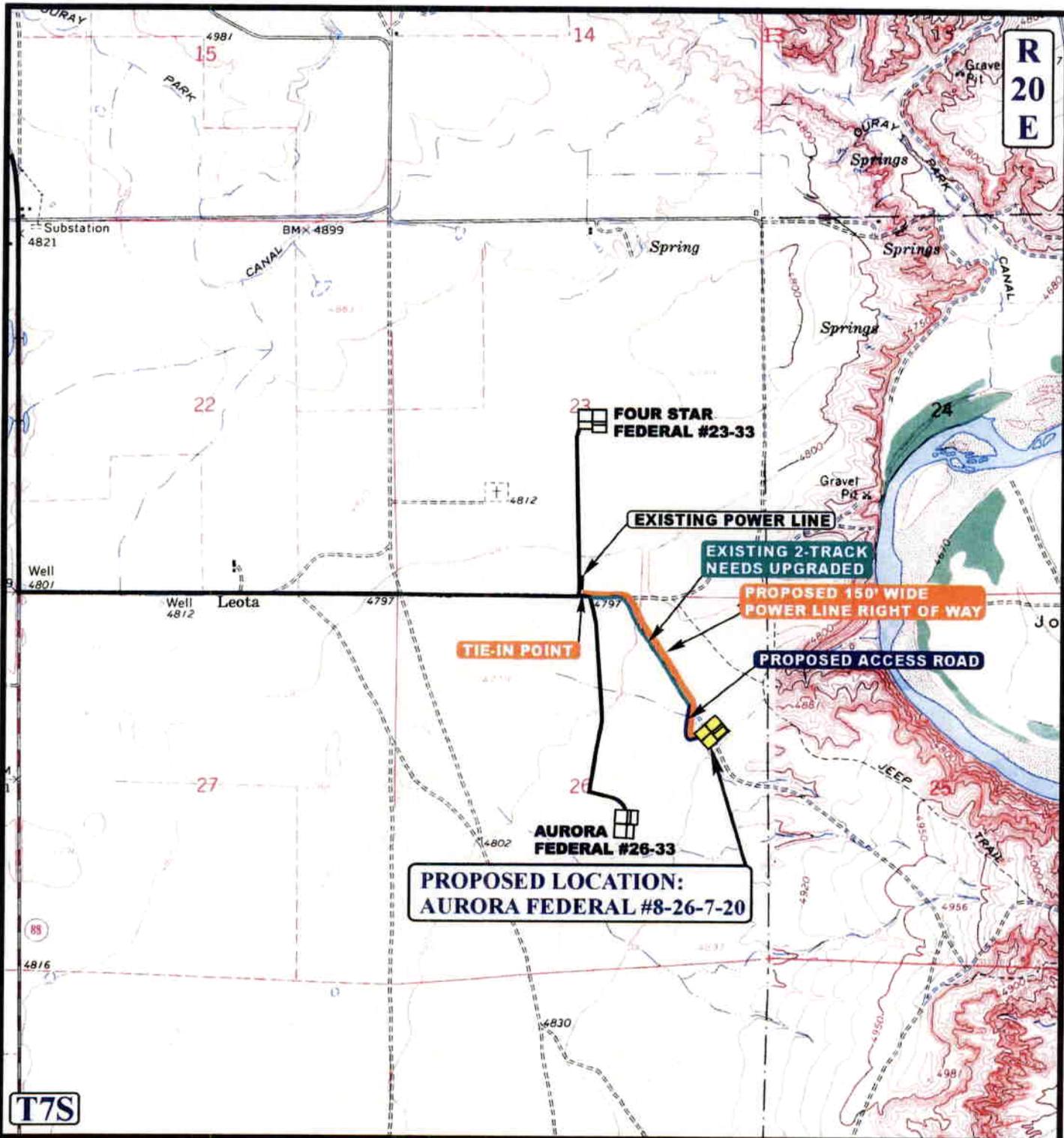
**U&LS**  
**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**ACCESS ROAD**  
**M A P**  
 SCALE: 1" = 2000' DRAWN BY: C.I. REVISED: 12-07-12

**01 23 12**  
 MONTH DAY YEAR

**B**  
**TOPO**





APPROXIMATE TOTAL POWERLINE DISTANCE = 2,876' +/-

**LEGEND:**

- PROPOSED ACCESS ROAD
- PROPOSED POWER LINE
- EXISTING POWER LINE
- EXISTING 2-TRACK NEEDS UPGRADED



**BILL BARRETT CORPORATION**

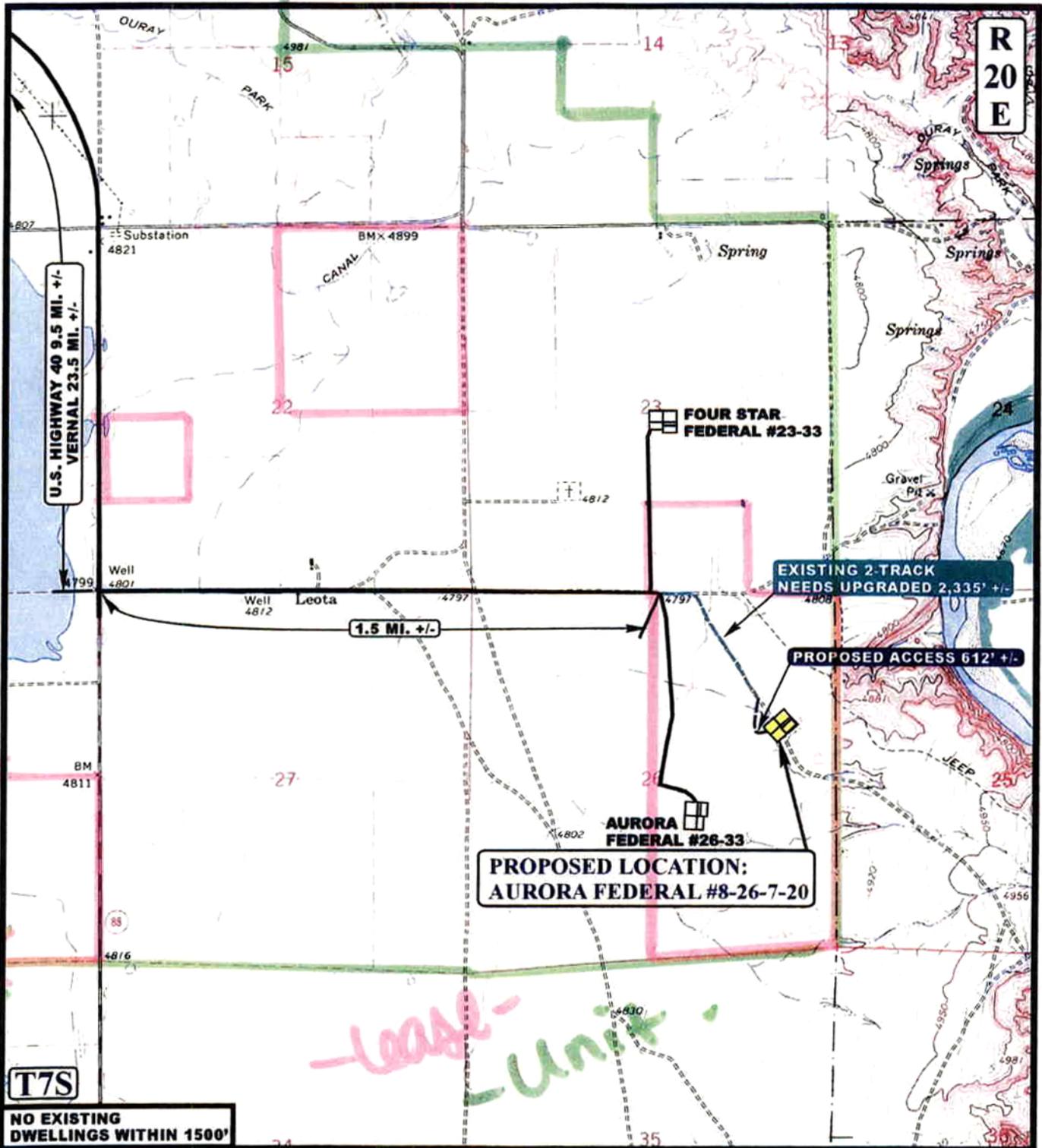
**AURORA FEDERAL #8-26-7-20**  
**SECTION 26, T7S, R20E, S.L.B.&M.**  
**1980' FNL 800' FEL**



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

<b>TOPOGRAPHIC</b> MAP	<b>01</b>	<b>23</b>	<b>12</b>	<b>D</b> TOPO
	MONTH	DAY	YEAR	
SCALE: 1" = 1000'	DRAWN BY: C.L.		REVISED: 12-07-12	

R  
20  
E



U.S. HIGHWAY 40 9.5 MI. +/-  
VERNAL 23.5 MI. +/-

1.5 MI. +/-

EXISTING 2-TRACK  
NEEDS UPGRADED 2,335' +/-

PROPOSED ACCESS 612' +/-

PROPOSED LOCATION:  
AURORA FEDERAL #8-26-7-20

LEASE UNIT

T7S

NO EXISTING DWELLINGS WITHIN 1500'

**LEGEND:**

- EXISTING ROAD
- - - - - PROPOSED ACCESS ROAD
- - - - - EXISTING 2-TRACK NEEDS UPGRADED (AVERAGE WIDTH 10' +/-)

**BILL BARRETT CORPORATION**

AURORA FEDERAL #8-26-7-20  
SECTION 26, T7S, R20E, S.L.B.&M.  
1980' FNL 800' FEL



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



ACCESS ROAD  
MAP  
SCALE: 1" = 2000' DRAWN BY: C.L

01 23 12  
MONTH DAY YEAR  
REVISED: 12-07-12

B  
TOPO

7S/20E

22

23

24

27

26

25

AURORA FEDERAL 8-26-7-



26-33



3-35



36-11-720



25

26

 Barrett Corporation

**One Mile Radius Map**

Aurora Fed 8-26-7-20 Pad  
SENE, Section 26, T7S, R20E  
Uintah County, Utah

**Legend**

-  SWD- 1 Total
-  Dry- 1 Total
-  Oil- 1 Total
-  Surface Hole Location



Bill Barrett Corporation

Lease Boundary Map

Aurora Federal 8-26-7-20 Pad  
SENE, Section 26, T7S, R20E  
Uintah County, Utah

Legend

- Surface Hole Locations
- Pipeline
- - - Power line
- - - Access Rd
- - - Pad Location
- ▭ Pit Location
- ▭ Federal Lease Bou

ndary

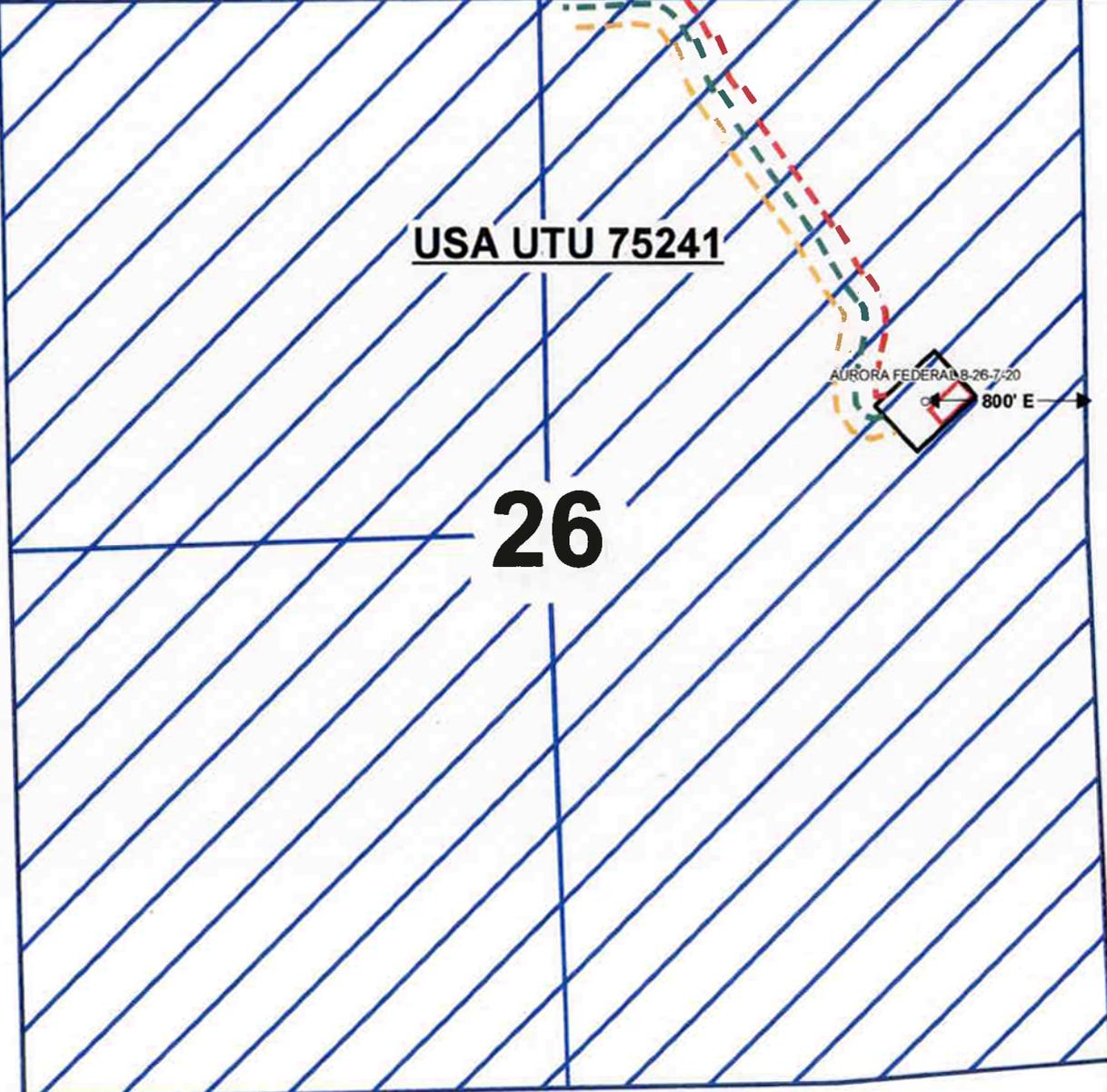
7S/20E

USA UTU 75241

26

AURORA FEDERAL 8-26-7-20

800' E



**CULTURAL RESOURCE INVENTORY OF  
BILL BARRETT CORPORATION'S PROPOSED  
AURORA FED. 10-4D-7-20 AND AURORA FED. 8-26-7-20  
ACCESS, PIPELINE AND POWERLINE ROUTES  
UINTAH COUNTY, UTAH**

**By:**

**Keith R. Montgomery**

**Prepared For:**

**Bureau of Land Management  
Vernal Field Office**

**Prepared Under Contract With:**

**Bill Barrett Corporation, Inc.  
1099 18<sup>th</sup> Street, Suite 2300  
Denver, CO 80202**

**Prepared By:**

**Montgomery Archaeological Consultants, Inc.  
P.O. Box 219  
Moab, Utah 84532**

**MOAC Report No. 12-368**

**December 28, 2012**

**United States Department of Interior (FLPMA)  
Permit No. 12-UT-60122**

**State of Utah Antiquities Project (Survey)  
Permit No. U-12-MQ-1109bp**

**CULTURAL RESOURCE INVENTORY OF  
BILL BARRETT CORPORATION'S PROPOSED  
AURORA FEDERAL 8-26-7-20 WELL LOCATION  
(T7S, R20E, SECTIONS 23 AND 26)  
UINTAH COUNTY, UTAH**

**By:**

**Stephanie A. O'Brien**

**Prepared For:**

**Bureau of Land Management  
Vernal Field Office**

**Prepared Under Contract With:**

**Bill Barrett Corporation  
1099 18<sup>th</sup> Street, Suite 2300  
Denver, Colorado 80202**

**Prepared By:**

**Montgomery Archaeological Consultants, Inc.  
P.O. Box 219  
Moab, Utah 84532**

**MOAC Report No. 12-067**

**March 21, 2012**

**United States Department of Interior (FLPMA)  
Permit No. 12-UT-60122**

**State of Utah Antiquities Project (Survey)  
Permit No. U-12-MQ-0164b,p**

**United States Department of the Interior****BUREAU OF LAND MANAGEMENT**

Utah State Office

P.O. Box 45155

Salt Lake City, UT 84145-0155

U-80689

IN REPLY REFER TO

3000  
(UT-932)**NOTICE TO LESSEE**

Provisions of the Mineral Leasing Act (MLA) of 1920, as amended by the Federal Coal Leasing Amendments Act of 1976, affect an entity's qualifications to obtain an oil and gas lease. Section 2(a)(2)(A) of the MLA, 30 U.S.C. 201(a)(2)(A), requires that any entity that holds and has held a Federal coal lease for 10 years beginning on or after August 4, 1976, and which is not producing coal in commercial quantities from each such lease, cannot qualify for the issuance of any other lease granted under the MLA. Compliance by coal leasees with Section 2(a)(2)(A) is explained in 43 CFR 3472.

In accordance with the terms of this oil and gas lease with respect to compliance by the initial lessee with qualifications concerning Federal coal lease holdings, all assignees and transferees are hereby notified that this oil and gas lease is subject to cancellation if: (1) the initial lessee as assignor or as transferor has falsely certified compliance with Section 2(a)(2)(A) or (2) because of a denial or disapproval by a State Office of a pending coal action, i.e., arms-length assignment, relinquishment, or logical mining unit, the initial lessee as assignor or as transferor is no longer in compliance with Section 2(a)(2)(A). The assignee or transferee does not qualify as a bona fide purchaser and, thus, has no rights to bona fide purchaser protection in the event of cancellation of this lease due to noncompliance with Section 2(a)(2)(A).

Information regarding assignor or transferor compliance with Section 2(a)(2)(A) is contained in the lease case file as well as in other Bureau of Land Management records available through the State Office issuing this lease.

**Threatened and Endangered Species Act Stipulation**

The lease area may now or hereafter contain plants, animals or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that would contribute to a need to list such species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. 1531 et seq. including completion of any required procedure for conference or consultation.

**Oil and Gas  
UTU-80689**

## **STIPULATION**

### **TIMING LIMITATION STIPULATION CRITICAL DEER AND ELK WINTER RANGE**

No surface use is allowed within crucial deer and elk winter range during the following time period. This stipulation does not apply to operation and maintenance of production facilities or if animals are not present.

From December 1 through April 30.

On the lands described below:

T. 7 S., R. 20 E., SLM, Utah

Sec. 23, SWSE;

Sec. 26, E2.

For the purpose of:

Preventing adverse impacts that would cause significant displacements of deer or elk herds or loss of habitat as described in the Diamond Mountain Resource Management Plan and EIS. Waivers, exceptions, or modifications to this limitation may be specifically approved in writing by the authorized officer of the Bureau of Land Management if either the resource values change or the lessee/operator demonstrates that adverse impacts can be mitigated. Any changes to this stipulation will be made in accordance with the land use plan and/or regulatory provisions for such changes. (For guidance on the use of this stipulation see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

**Oil and Gas  
UTU-80689**

## **NOTICES**

### **BALD EAGLE HABITAT**

The lessee/operator is given notice that the NWSW Sec. 22; N2SE Sec. 28, T. 7 S., R. 20 E., SLM, Utah, have been identified as containing Bald Eagle Habitat. Modifications to the Surface Use Plan of Operations may be required in order to protect the Bald Eagle and/or habitat from surface disturbing activities in accordance with Section 6 of the lease terms, Endangered Species Act, and 43 CFR 3101.1-2.

### **SPECIAL STATUS PLANTS**

The lessee/operator is given notice that the lands in this lease have been identified as having potential habitat for the candidate species, *Sclerocactus glaucus*, a threatened plant species. Modifications to the Surface Use Plan of Operations may be required in order to protect the special status plants and/or habitat from surface disturbing activities in accordance with Section 6 of the lease terms, Endangered Species Act, and 43 CFR 3101.1-2.

### **SPECIAL STATUS SPECIES**

The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that would contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity until it completes its obligations under applicable requirement of the Endangered Species Act as amended, 16 U.S.C. 1531 et seq. including completion of any required procedure for conference or consultation.

**SURFACE MANAGEMENT AGENCY**

- ( ) **City Field Office, Bureau of Land Management  
170 East D. L. Sargent Drive, Cedar City, Utah 84720**
- ( ) **Fillmore Field Office, Bureau of Land Management  
35 East 200 North, Fillmore, Utah 84631**
- ( ) **Kanab Field Office, Bureau of Land Management  
318 North First East, Kanab, Utah 84741**
- ( ) **Mesq Field Office, Bureau of Land Management  
82 East Dagwood, Suite M, Mesq, Utah 84741**
- ( ) **Monticello Field Office, Bureau of Land Management  
435 North Main Street, Monticello, Utah 84301**
- ( ) **Price Field Office, Bureau of Land Management  
125 South 600 West Price, Utah 84301**
- ( ) **Richfield Field Office, Bureau of Land Management  
150 East 900 North, Richfield, Utah 84701**
- ( ) **Salt Lake Field Office, Bureau of Land Management  
2370 South 2300 West, Salt Lake City, Utah 84119**
- ( ) **St. George Field Office, Bureau of Land Management  
345 East Riverside Drive, St. George, Utah 84790**
- ( ✓ ) **Vernal Field Office, Bureau of Land Management  
170 South 500 East, Vernal, Utah 84078**
- ( ) **Forest Supervisor, Ashley National Forest  
355 North Vernal Avenue, Vernal, Utah 84078**
- ( ) **Forest Supervisor, Dixie National Forest, 1789 N. Weigwood Lane  
Cedar City, Utah 84720-7769**
- ( ) **Forest Supervisor, Fishlake National Forest  
115 East 900 North, Richfield, Utah 84701**
- ( ) **Forest Supervisor, Uinta National Forest  
88 West 100 North, P. O. Box 1426, Provo, Utah 84601**
- ( ) **Forest Supervisor, Manti-LaSal National Forest  
599 West Fites River Drive, Price, Utah 84501**
- ( ) **Forest Supervisor, Wasatch-Cache National Forest  
8236 Federal Bldg, 125 South State Street  
Salt Lake City, Utah 84138**
- ( ) **Provo Project Office, Bureau of Reclamation  
302 East 1800 South, Provo, Utah 84605-7317**
- ( ) **Regional Director, Bureau of Reclamation  
Boulder City, Nevada 89005**
- ( ) **Superintendent, Utah & Curry Agency  
Bureau of Indian Affairs, Fort Duchowne, Utah 84025**
- ( ) **Navajo Area Office, Bureau of Indian Affairs  
P. O. Box 128, Window Rock, Arizona 86515**
- ( ) **Superintendent, Glen Canyon Recreation Area  
National Park Service, P. O. Box 1507, Page, Arizona, 86040**

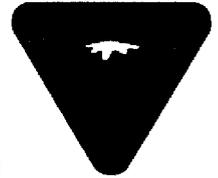


UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



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

Company: BILL BARRETT CORPORATION  
Well No: AURORA FEDERAL 8-26-7-20  
API No: 43-047-53544

Location: SENE, Sec. 26, T7S, R20E  
Lease No: UTU-80689  
Agreement:

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

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

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

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

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	- Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	- Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: <a href="mailto:blm_ut_vn_opreport@blm.gov">blm ut vn opreport@blm.gov</a>
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

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

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontological material before construction can continue.

**ATTACHMENT 1 – STIPULATIONS / CONDITIONS OF APPROVAL**

*Company/Operator:* Bill Barrett Corporation  
*Well Name & Number:* Aurora Federal 8-26-7-20  
*Surface Ownership:* BLM  
*Lease Number:* UTU-80689  
*Location:* SE/NE of Sec.26 T7S R20E SL B&M

**CONDITIONS OF APPROVAL:**

***Air Quality***

- Members of the construction crew will be encouraged to car pool to and from the surrounding cities and towns as practicable to minimize vehicle-related emissions.
- No open burning of garbage or refuse at wells site or other facilities will be allowed.
- During hot, dry and/or windy conditions, water or other approved dust suppressants will be used at construction sites and along roads, as determined appropriate by the Authorized Officer.
- Open burning of garbage or refuse will not occur at well sites or other facilities.
- Drill rigs will be equipped with Tier II or better diesel engines.
- Phase II water lines will be installed and buried to reduce incidents of freezing and to reduce the number of water-hauling trucks that could contribute to fugitive dust conditions.
- Where practicably feasible, well site telemetry will be installed to remotely monitor and control production.
- Power lines will be installed where possible, except where topographic features preclude installation of power lines. In addition, the ability to utilize electric power also requires that sufficient power capacity and infrastructure is readily available in the immediate area, including appropriate ROWs. Low bleed pneumatics will be installed on separator dump valves and other controllers.
- During completion, venting and flaring will be limited as much as possible. Production equipment and gathering lines will be installed as soon as possible.
- When feasible, two (2) or more rigs (including drilling and completion rigs) will not be run simultaneously within 200 meters of each other. If two (2) or more rigs must be run simultaneously within 200 meters of each other, then effective public health buffer zones out to 200 meters from the nearest emission source will be implemented. Examples of an effective public health protection buffer zone includes the demarcation of a public access exclusion zone by signage at intervals of

every 250 feet that is visible from a distance of 125 feet during daylight hours, and a physical buffer such as active surveillance to ensure the property is not accessible by the public during drilling operations. Alternatively, BBC may demonstrate compliance with the 1-hour NO<sub>2</sub> NAAQS with appropriate and accepted near-field modeling. As part of this, BBC may propose alternative mitigation that could include but is not limited to natural gas-fire drill rigs, installation of NO<sub>x</sub> controls, time/use restriction, and/or drill rig spacing.

- All internal combustion equipment will be kept in good working order.
- All new and replacement spark-ignition natural gas-fired internal combustion engines will comply with the applicable emission limits found in Subpart JJJJ of the New Source Performance standards (40 CFR 60 subpart JJJJ).
- Green completions will be used for all well completion activities where technically feasible.
- Enhanced volatile organic compounds (VOCs) emission controls with 95 percent control efficiency will be employed on storage tanks having a potential to emit greater than five (5) tons per year (tpy) of VOC uncontrolled.
- Per the terms set out in the Consent Decree (Civil Action No. 2:09-CV-330 TS), approved by the EPA on November 13, 2009, BBC will commit to the following air quality protective measures listed below:
  - Dehydrator emissions from new oil and/or gas production facilities that exceed 20 tpy of VOCs will be controlled to achieve a 95 percent by weight or greater reduction of VOC or total hazardous air pollutant emissions.
  - All internal combustion equipment and emission capture, collection and pollution abatement equipment, including vent lines, connections, fittings, valves, relief valves, hatches and other appurtenances required will be maintained in good working order following manufacturer recommendations or best practices.
  - BBC will implement a fugitive inspection and repair program.
  - BBC will employ tank best management practices such as requiring thief and other tank hatches are to be closed after gauging and unloading activities, installing low emission hatches and maintaining valves in a leak-free condition.

### ***Cultural Resources***

- If cultural resources are uncovered during excavation activities, BBC will suspend operations at the site and immediately contact the BLM. Work will cease until a mitigation plan is in place.
- Prior to construction activity, BBC will inform employees, contractors and subcontractors about relevant Tribal and Federal regulations intended to protect Native American, archaeological, and cultural resources. This orientation will include training on cultural resource management and Federal laws. All personnel will be informed that collecting artifacts is a violation of Federal law and that employees engaged in this activity will be subject to disciplinary action. If cultural resource law violations are discovered, the offending employee will be subject to disciplinary action by BBC and the violations will be reported to the BLM, State Historic Preservation Office and, if appropriate the Ute Tribe's Historic Preservation Office and the Ute Tribal Business Council, for possible further action, including prosecution.

### ***Paleontological Resources***

- If paleontological resources are uncovered during excavation activities, BBC will suspend all operations and will immediately contact the BLM. Work will cease until a mitigation plan is put in place.

### ***Threatened, Endangered and Candidate Plant Species***

- Reinitiation of section 7 consultation with the USFWS will be sought immediately if any loss of plants or occupied habitat for Uinta Basin hookless cactus is anticipated as a result of project activities.

### ***Water Resources, Including Waters of the United States***

- If springs are encountered and impacted during construction, the spring(s) will be protected, fenced, and repaired to pre-existing conditions at the direction of the BLM.
- If any work associated with construction of a proposed pipeline will require the placement of dredged or fill material in an existing wetland or will have the potential to alter the nature of existing water ways, the U.S. Army Corps of Engineers (USACE) will be notified by BBC in order to obtain the necessary permits or jurisdictional determinations pursuant to Section 404 of the Clean Water Act.
- Surface disturbance and placement of staging areas, fueling and maintenance areas, will be avoided within 330 feet from centerline of U.S. Geological Survey (USGS)-named drainages unless no other practical alternative exists.
- No excess material (e.g., soil, overburden, etc.) will be stored within mapped 100-year floodplains of USGS-named drainages; all excess material will be relocated to appropriate locations outside of 100-year floodplains within the project area.
- Construction activities at perennial or USGS-named drainage crossings (e.g., burying pipelines, installing culverts) will be timed to avoid high flow conditions. Construction that disturbs any flowing stream will utilize either a piped stream diversion or a cofferdam and pump to divert flow around the disturbed area.
- Culverts at drainage crossings will be designed and installed to pass a 25-year or greater storm event. On perennial and USGS-named intermittent streams, culverts will be designed to allow for passage of aquatic biota. The minimum culvert diameter in any installation for a drainage crossing or road drainage will be 24-inches. Due to the likelihood for flash flooding in the project area's drainages and anticipated culvert maintenance, drainage crossings will be designed for the 100-year storm event.
- Pipelines installed beneath USGS-named drainages will be buried at a minimum depth of four (4) feet below the channel substrate to avoid exposure by channel scour and degradation. Following burial, the channel grade and substrate composition will be returned to pre-construction conditions.

### ***Protection from Erosion***

- New and existing roads will be constructed, updated, and maintained in accordance with the "Gold Book" (BLM-USFS 2007, as revised).
- No installation activity will be performed during periods when the soil is too wet to adequately support installation equipment. If such equipment creates ruts in excess of three (3) inches deep in straight line travel routes, the soil will be deemed too wet to adequately support the equipment, and installation activities will cease until drier or frozen conditions are encountered.
- After testing of the pipeline, stabilization barriers, water bars, silt fences, or other erosion control devices will be installed in the disturbed area. In areas where steep slopes occur, spoils will be bermed and water will be directed to rock armored turnouts to prevent down-slope erosion. Erosion blankets and hand seeding will also be used in these areas.

- Minimize placement of well pads on ridgelines or steep slopes that will result in excessive fill areas. If a well pad must be placed in such sites, site specific best management practices will be constructed and maintained to minimize erosion of the fill areas and increased sedimentation from such sites.
- All storage tanks containing produced water, or other fluids which may constitute a hazard to public health or safety, will be surrounded by a secondary means of containment for the entire contents of the tank, plus freeboard for precipitation, or to contain 110 percent of the capacity of the largest tank.
- Production facilities that have the potential to leak produced water, or other fluids which may constitute a hazard to public health or safety, will be placed within appropriate containment and/or diversionary structures to prevent spilled or leaking fluid from reaching ground or surface waters.
- Notice of any reportable spill or leakage will be reported per agency guidelines. Oral notice will be given as soon as possible, but within no more than 24 hours, and those oral notices will be confirmed in writing within 72 hours of any such occurrence.
- No oil, lubricant, or toxic substance will be intentionally drained onto the ground surface.
- Topsoil will be salvaged and stockpiled for later use. Topsoil stockpiles will be designed to maximize surface area in order to reduce impacts to soil microorganisms.
- Areas used for spoil storage will be stripped of topsoil before soil placement.
- Erosion protection and silt retention will be provided by the installation and maintenance of silt catchment dams, where needed as feasible. At all well pad locations, soil berms will be constructed to divert water runoff away from the drilling location.
- Reroute existing upslope drainages around proposed well pad locations and all topsoil and subsoil material stockpiles. Restore natural drainage routes as part of interim reclamation actions, if appropriate.
- Construct erosion control devices (i.e., riprap, weed-free straw bales, plant woody vegetation, etc.) at culvert outlets or as directed by the surface land owner. All such devices will be completed to retain natural water flows.

### ***Existing Facilities and Rights-of-Way***

- If the proposed access roads and/or pipeline corridors cross existing fences, all fences will be braced before being cut and a temporary gate will be installed. All fences will be restored to functional condition immediately after project completion.
- BBC will repair or replace any fences, cattle guards, gates, drift fences and natural barriers that are damaged as a result of implementation of the proposed project. Cattle guards will be the preferred method of livestock control on most road corridors where fences are crossed, unless otherwise directed by the surface landowner.

### ***Fish and Wildlife, Including Special Status Animal Species***

#### **Burrowing Owl**

- If construction and drilling activities are scheduled to occur between March 1<sup>st</sup> and August 31<sup>st</sup>, a burrowing owl survey would be required to be conducted by BLM qualified wildlife biologists and the results of the survey submitted to the BLM Authorized Officer (AO). If burrowing owls are present in the Project Area, additional mitigation may be required before an exception to the timing stipulation will be granted by the AO.

#### **Migratory Birds**

- Screens or other devices will be installed on the stacks and on other openings of heater-treaters or fired-vessels as directed by the BLM.

- BBC will remove any visible accumulation of other than *de minimis* oil from the drilling or workover pit immediately upon release of the drilling rig to reduce the potential of entrapping or poisoning migratory birds.

### ***Vegetation, Including Federally-listed Plant Species and Noxious and Invasive Species***

- Reclamation actions outlined above will be implemented, or as directed by the BLM.
- BBC will aggressively identify, treat and control noxious and invasive plant species within the project area whose presence relates directly to oil and gas activities within the project area.
- BBC will implement their current Pesticide Use Proposal (PUP), on file with the BLM.

### ***Human Health and Safety***

- To protect and minimize the possibility of fires during construction, all equipment, including welding trucks, will be equipped with fire extinguishers and spark arresters.
- Where alignment of pipelines will cross or parallel roads, highways or waterways, BBC will provide warning signs to inform the public of the presence of the line.
- Vehicle users associated with the oil field will be instructed to travel at low speed and remain on existing roads and well pads at all times.
- Storage facilities may be fenced as determined necessary by the BLM during the onsite process.

### ***Protection from Hazardous Materials Spills***

- Collection pipelines will be designed to minimize potential for spills and leaks, including the following, where appropriate:
  - Stream banks will be stabilized with large, angular rock or wire-enclosed riprap.
  - Substrate layers should be replaced in the same order that they are removed.
  - Pipeline crossings of streams and any riparian areas will be at right angles to minimize the area of disturbance
  - Pipelines crossing live streams will be protected by automatic shutoff valves.
- Construction methods will provide for eliminating or minimize discharges of turbidity, sediment, organic matter or toxic chemicals. Settling basins or cofferdams may be utilized for this purpose.
- BBC will inform their employees, contractors and subcontractors of the potential impacts that can result from accidental spills as well as the appropriate actions to take if a spill occurs.
- No produced water will be discharged into surface water drainages or allowed to flow onto the ground surface.
- Notice of any reportable spill or leakage will be immediately reported by BBC, or their contractors/subcontractors as required by regulation. Oral notice will be given as soon as possible, but within no more than 24 hours. Oral notices will be confirmed in writing within 72 hours of any such occurrence.

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

**SITE SPECIFIC DOWNHOLE COAs:**

- A formation integrity test shall be performed at the surface casing shoe.
- Gamma Ray log shall be run from Total Depth to Surface.
- To effectively protect useable water, cement for the long string is required to be brought 200 feet above the surface casing shoe.
- A bowl diverter system, which is connected and discharges to a panic or choke blooie line, shall be installed while drilling of the surface hole section.

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

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

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

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well by CD (compact disc). This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## OPERATING REQUIREMENT REMINDERS:

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

and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

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

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU80689
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>7. UNIT or CA AGREEMENT NAME:</b> AURORA (DEEP)
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> Aurora Federal 8-26-7-20
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1980 FNL 0800 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 26 Township: 07.0S Range: 20.0E Meridian: S		<b>9. API NUMBER:</b> 43047535440000
<b>PHONE NUMBER:</b> 303 312-8134 Ext		<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 8/28/2014	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. This well was spud on 8/28/2014 at 8:00 am by Triple A Drilling; Rig #TA 4037, Type Soilmec SR/30. Continuous drilling is planned to commence on 9/20/2014.		
<b>Accepted by the          Utah Division of          Oil, Gas and Mining          FOR RECORD ONLY          August 29, 2014</b>		
<b>NAME (PLEASE PRINT)</b> Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	<b>TITLE</b> Permit Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/29/2014	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU80689
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
		<b>7. UNIT or CA AGREEMENT NAME:</b> AURORA (DEEP)
<b>1. TYPE OF WELL</b> Oil Well		<b>8. WELL NAME and NUMBER:</b> Aurora Federal 8-26-7-20
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>9. API NUMBER:</b> 43047535440000
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1980 FNL 0800 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 26 Township: 07.0S Range: 20.0E Meridian: S		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 8/31/2014	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. No monthly drilling to report, well spud on 8/28/2014		
<b>Accepted by the          Utah Division of          Oil, Gas and Mining          FOR RECORD ONLY          September 03, 2014</b>		
<b>NAME (PLEASE PRINT)</b> Christina Hirtler	<b>PHONE NUMBER</b> 303 312-8597	<b>TITLE</b> Administrative Assistant
<b>SIGNATURE</b> N/A		<b>DATE</b> 9/3/2014

CONFIDENTIAL

BLM - Vernal Field Office - Notification Form

Operator Bill Barrett Corp Rig Name/# CAPSTAR 328  
Submitted By Jody South Phone Number 303-353-5425  
Well Name/Number AURORA FEDERAL 8-26-7-20  
Qtr/Qtr SENE Section 26 Township 7S Range 20E  
Lease Serial Number UTU80689  
API Number 43047535440000

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

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

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

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

Date/Time 9/4/2014 6:00 AM  PM

BOPE

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

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

Remarks RUN 8 5/8" SURFACE CASING AND CEMENT

\_\_\_\_\_

CONFIDENTIAL

BLM - Vernal Field Office - Notification Form

Operator Bill Barrett Corp Rig Name/# CAPSTAR 328  
Submitted By Jody South Phone Number 303-353-5425  
Well Name/Number AURORA FEDERAL 8-26-7-20  
Qtr/Qtr SENE Section 26 Township 7S Range 20E  
Lease Serial Number UTU80689  
API Number 43047535440000

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

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

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

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

Date/Time 9/10/2014 11:00 AM  PM

BOPE

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

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

Remarks RUN 5 1/2" PROD. CASING AND CEMENT

\_\_\_\_\_

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU80689
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> AURORA (DEEP)
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> Aurora Federal 8-26-7-20	
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP	<b>9. API NUMBER:</b> 43047535440000	
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202	<b>PHONE NUMBER:</b> 303 312-8134 Ext	<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1980 FNL 0800 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 26 Township: 07.0S Range: 20.0E Meridian: S		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 9/30/2014	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER
		<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
Attached is the September 2014 Drilling Activity for this well.		
		<b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY October 03, 2014</b>
<b>NAME (PLEASE PRINT)</b> Christina Hirtler	<b>PHONE NUMBER</b> 303 312-8597	<b>TITLE</b> Administrative Assistant
<b>SIGNATURE</b> N/A	<b>DATE</b> 10/2/2014	

**Aurora Federal 08-26-7-20 9/1/2014 13:00 - 9/2/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status COMPLETION	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
13:00	17.00	06:00	14	NIPPLE UP B.O.P	RIG DOWN

**Aurora Federal 08-26-7-20 9/2/2014 06:00 - 9/3/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status COMPLETION	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	1	RIGUP & TEARDOWN	MOVE RIG, RIG UP, COULD NOT MOVE OVERSIZE LOADS UNTIL TODAY DUE TO UTAH LAW CONCERNING HOLIDAY'S

**Aurora Federal 08-26-7-20 9/3/2014 06:00 - 9/4/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status COMPLETION	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	3.00	09:00	14	NIPPLE UP B.O.P	NIPPLE UP
09:00	3.00	12:00	21	OPEN	FINISHING UP RIG MOVE WHICH INCLUDED HOUSES, SEWER AND WATER TANKS, AND GENERATOR
12:00	3.00	15:00	20	DIRECTIONAL WORK	WAIT ON DIRECTIONAL TOOLS TO BE POWERED UP AND CALIBRATED, COULD NOT POWER UP UNTIL HOUSE WAS SET AND HOOKED UP TO POWER.
15:00	1.50	16:30	20	DIRECTIONAL WORK	PICK UP 8" DIRECTIONAL TOOLS
16:30	12.50	05:00	2	DRILL ACTUAL	DRILL ACTUAL F/80' - T/1231' = TD
05:00	5.00	10:00	5	COND MUD & CIRC	PUMP HIGH VIS SWEEP, CIRCULATE

**Aurora Federal 08-26-7-20 9/4/2014 06:00 - 9/5/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status COMPLETION	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	6	TRIPS	WIPER TRIP TO HWDP
07:00	0.50	07:30	6	TRIPS	TIH
07:30	1.00	08:30	5	COND MUD & CIRC	SEND SWEEP, CIRCULATE
08:30	1.50	10:00	6	TRIPS	TOOH/LDDP FOR CASING
10:00	1.00	11:00	20	DIRECTIONAL WORK	LAY DOWN DIR. TOOLS
11:00	4.00	15:00	12	RUN CASING & CEMENT	RUN 28 JTS. 1221' 8 5/8" 24# J55 ST&C CASING WITH 7 CENTRALIZERS
15:00	4.00	19:00	12	RUN CASING & CEMENT	Held pre job safety meeting w/Halliburton. RU cmt head & test lines t/3200 psig. Pump 20 bbl fresh water spacer, 40 bbl Super flush @10.0 ppg, 20 bbl fresh water spacer, 160 sx Lead cmt, 90 bbls @ 11 ppg, 280 sx Tail cmt, 68 bbls @ 14.8 ppg. Drop wiping plug, displace w/74.68 bbls fresh water. Got 35 bbls cement to surface, Bumped Plug at 370psi plus 500psi over final circ. pressure, Floats held got 6bbl back, Wait 2hrs. Pumped 10.24 bbls of 15.8ppg Top Out Cement, Got Cement to surface. R/D Cementers.
19:00	2.00	21:00	13	WAIT ON CEMENT	WAIT ON CEMENT
21:00	4.50	01:30	21	OPEN	CUT OFF CASING, WELD ON WELLHEAD
01:30	4.00	05:30	14	NIPPLE UP B.O.P	NIPPLE UP B.O.P.
05:30	0.50	06:00	15	TEST B.O.P	TEST B.O.P.

**Aurora Federal 08-26-7-20 9/5/2014 06:00 - 9/6/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status COMPLETION	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.50	07:30	15	TEST B.O.P	Test lower Kelly, Upper Kelly, safety valve, Inside BOP, pipe rams, inside valves, blind rams, kill line, HCR, manifold valves t/5000 psig f/10 minutes. Test annular t/1500 psig, test surface casing t/2000 psig f/30 minutes. Chokes tested t/500 psig. RD tester.
07:30	2.50	10:00	20	DIRECTIONAL WORK	PICK UP BIT, MOTOR, AND DIR. TOOLS
10:00	0.50	10:30	7	LUBRICATE RIG	RIG SERVICE
10:30	1.00	11:30	6	TRIPS	TIH



Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
11:30	1.00	12:30	2	DRILL ACTUAL	DRILL FLOAT AND SHOE, THEN DRILL 20' OF NEW HOLE	
12:30	0.50	13:00	21	OPEN	SEND LCM SWEEP, PULL INTO CASING, CONDUCT EMW TEST @ 147 PSI FOR 5 MIN. WITH 0 PRESSURE LOST	
13:00	17.00	06:00	2	DRILL ACTUAL	DRILL ACTUAL F/1241' - T/3438' - 2197' @ 129.2'/HR. WOB=16K, RPM=52, 580GPM, 1435 PSI	

**Aurora Federal 08-26-7-20 9/6/2014 06:00 - 9/7/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status COMPLETION	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	10.50	16:30	2	DRILL ACTUAL	DRILL ACTUAL F/3438' - T/4197' - 759' @ 72.3'/HR. WOB=20K, RPM=60, 570 GPM, 1745 PSI	
16:30	0.50	17:00	7	LUBRICATE RIG	RIG SERVICE	
17:00	13.00	06:00	2	DRILL ACTUAL	DRILL ACTUAL F/4197' - T/4914' - 717' @ 55.2'/HR. WOB=23K, RPM=50, 580 GPM, 2365PSI	

**Aurora Federal 08-26-7-20 9/7/2014 06:00 - 9/8/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status COMPLETION	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	10.50	16:30	2	DRILL ACTUAL	DRILL ACTUAL F/4914' - T/5462' - 548' @ 52.2' FT./HR. WOB=23K, RPM=60, 545GPM, 2030PSI	
16:30	0.50	17:00	7	LUBRICATE RIG	RIG SERVICE	
17:00	9.00	02:00	2	DRILL ACTUAL	DRILL ACTUAL F/5462' - T/5935' - 473' @ 52.6'/HR. WOB=23K, RPM=50, 535GPM, 2290PSI	
02:00	1.50	03:30	5		PUMP SWEEP, CIRCULATE, PULL 5 JTS, FLOW CHECK, WELL FLOWING 15 GPM	
03:30	2.00	05:30	5	COND MUD & CIRC	RAISE MUD WEIGHT TO 9.1, FLOW CHECK, STILL FLOWING	
05:30	0.50	06:00	6	TRIPS	TRIP BACK TO BOTTOM	

**Aurora Federal 08-26-7-20 9/8/2014 06:00 - 9/9/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status COMPLETION	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	3.00	09:00	5	COND MUD & CIRC	CIRCULATE, RAISE MUD WEIGHT TO 9.4PPG, FLOW CHECK, NO FLOW, PUMP DRY JOB	
09:00	4.00	13:00	6	TRIPS	TOOH FOR MM CHANGE	
13:00	1.50	14:30	20	DIRECTIONAL WORK	PICK UP NEW MUD MOTOR & NEW BIT	
14:30	4.50	19:00	6	TRIPS	TIH, WASH LAST 40' TO BOTTOM, - TIGHT SPOT AT 4100'	
19:00	11.00	06:00	2	DRILL ACTUAL	DRILL ACTUAL F/5935' - T/6628' - 693' @ 63'/HR. WOB=15K, RPM=65, 485GPM, 2015PSI	

**Aurora Federal 08-26-7-20 9/9/2014 06:00 - 9/10/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status COMPLETION	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	10.50	16:30	2	DRILL ACTUAL	DRILL ACTUAL F/6628' - T/7050' - 422' @ 40.2'/HR. WOB=15K, RPM=55, 480 GPM, 2120 PSI	
16:30	0.50	17:00	7	LUBRICATE RIG	RIG SERVICE	
17:00	13.00	06:00	2	DRILL ACTUAL	DRILL ACTUAL F/7050' - T/7345' - 295' @ 22.7'/HR. WOB=20K, RPM=55, 440GPM, 1950 PSI	

**Aurora Federal 08-26-7-20 9/10/2014 06:00 - 9/11/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status COMPLETION	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	4.75	10:45	2	DRILL ACTUAL	Dri f/7345' t/ CP/TD @ 7514'.	
10:45	2.50	13:15	5	COND MUD & CIRC	Send tw High visc sweeps, shakers clean, BGG 85 units. Flow check , 1/2 bpm. Suspect ballooning from shallow gas/oil @ 4100'.	

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
13:15	6.00	19:15	6	TRIPS	Wiper trip t/4000' w/no hole issues, gained 40 bbls, tih t/4700', place pumps on hole, circ btms up 4000 units trip gas coming from 4100', trace of black oil. Tih t/btm, no fill.
19:15	2.75	22:00	5	COND MUD & CIRC	Increase MW t/trip margin of 9.6 ppg, BGG 70 units, 10% LCM, flow check f/30 minutes, no flow. Pump dry job.
22:00	8.00	06:00	6	TRIPS	LDDP, HWDP & BHA.

**Aurora Federal 08-26-7-20 9/11/2014 06:00 - 9/12/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status COMPLETION	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	15.00	21:00	12	RUN CASING & CEMENT	PU FS, 2 shoe jts, FC, fill 15 jts in, brk circ every 1000', btms up 1/4, 1/2 & 3/4 way in hole, long stroke casing on btm, install casing mandrel. C&C f/cmt job, YP 9
21:00	3.00	00:00	12	RUN CASING & CEMENT	Held pre job safety meeting w/Halliburton. Pump 40 bbls Tuned spacer, 10 bbl fresh water spacer, 30 bbls Super Flush, 10bbl fresh water spacer. Mix & pump 385 sx lead cmt, 160 bbls @ 11ppg, 745 sx tail cmt, 192 bbls slurry @ 13.5 ppg. Drop plug, displace w/171.6 bbls fresh water w/biocide & Claweb. Bump plug @1300 psi increase t/1800 . Ck floats, floats held. RD Halliburton, 50 bbls cmt t/surface lost returns w/40 bbls displacement left. Halliburton caught lead samples in returns.
00:00	2.00	02:00	21	OPEN	Flush cmt fr/stack, lay down landing jt, install pack off. ND Bope. Clean steel pits
02:00	4.00	06:00	1	RIGUP & TEARDOWN	RDRT'S release t/FD 6-22-6-19.

**Aurora Federal 08-26-7-20 9/14/2014 06:00 - 9/15/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status COMPLETION	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	HSM. CHECK PRESSURE. ND 11" NIGHT CAP. CLEAN HANGER MANDREL. NU 7" 5K TBG HEAD. PRES TEST VOID AND SEALS. GOOD. NU 7" NIGHT CAP. WELL SECURE.

**Aurora Federal 08-26-7-20 9/15/2014 06:00 - 9/16/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status COMPLETION	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	9.00	15:00	LOGG	Logging	HSM MIRU HES LOGGING. RIH W/ GR/JB TO TAG FILL AT 7350'. DRLG SHOWS FC AT 7398' (48' FILL). RUN RMT/CBL-M LOG. SHOWS GOOD CMT TD TO 2950'. FAIR CMT 2950'-1750' TOC EST AT 1750'. SHORT JOINTS AT 6238'-6262' & 5599'-5622' CBL NOT RUN UNDER PRESSURE.
15:00	1.00	16:00	SRIG	Rig Up/Down	RDMO OUT HES
16:00	14.00	06:00	LOCL	Lock Wellhead & Secure	LOCK & SECURE WELL

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU80689
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</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>7. UNIT or CA AGREEMENT NAME:</b> AURORA (DEEP)
<b>1. TYPE OF WELL</b> Oil Well		<b>8. WELL NAME and NUMBER:</b> Aurora Federal 8-26-7-20
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>9. API NUMBER:</b> 43047535440000
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202	<b>PHONE NUMBER:</b> 303 312-8134 Ext	<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1980 FNL 0800 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 26 Township: 07.0S Range: 20.0E Meridian: S		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 10/12/2014  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER <input type="checkbox"/> APD EXTENSION	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
THIS WELL HAD FIRST PRODUCTION 10/12/2014		
<b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY October 16, 2014</b>		
<b>NAME (PLEASE PRINT)</b> Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	<b>TITLE</b> Permit Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 10/16/2014

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU80689
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>7. UNIT or CA AGREEMENT NAME:</b> AURORA (DEEP)
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> Aurora Federal 8-26-7-20
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1980 FNL 0800 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 26 Township: 07.0S Range: 20.0E Meridian: S		<b>9. API NUMBER:</b> 43047535440000
<b>PHONE NUMBER:</b> 303 312-8134 Ext		<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 10/31/2014	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CHANGE WELL NAME	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <p style="text-align: center;">October 2014 monthly drilling activity report is attached</p> <div style="text-align: right; margin-top: 20px;"> <p><b>Accepted by the Utah Division of Oil, Gas and Mining</b></p> <p><b>FOR RECORD ONLY</b></p> <p>November 04, 2014</p> </div>		
<b>NAME (PLEASE PRINT)</b> Christina Hirtler	<b>PHONE NUMBER</b> 303 312-8597	<b>TITLE</b> Administrative Assistant
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/4/2014	


**Aurora Federal 08-26-7-20 10/1/2014 06:00 - 10/2/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status PRODUCING	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	SRIG	Rig Up/Down	All frac tanks are filled with fresh water. No psi on well. ND night cap. Prep hanger profile. NU Cameron frac mandrel. NU frac tree (BBC #2), and goat head (BBC #3). Torque turn all NU bolts. Finish RU choke lines to frac tree. Psi test casing. Test was done with surface casing valve open. Bleed down. Fill flowback lines, manifold, and sand trap. Test low psi lines to 5 minute 500# low, and 10 minute 2500# high. Psi test all valves on choke manifold individually to 5 minute 500# low, and 10 minute 4000# high. Fixed a few leaks, but tested fine in end. Bleed off. RD Canary.

**Aurora Federal 08-26-7-20 10/8/2014 06:00 - 10/9/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status PRODUCING	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	MIRU WILLIES HOT OIL TRUCKS HEATED FRAC LINE TO 70 DEGREES.

**Aurora Federal 08-26-7-20 10/10/2014 06:00 - 10/11/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status PRODUCING	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL. HSM.
07:00	2.00	09:00	SRIG	Rig Up/Down	MIRU CUTTERS WITH 5" 10K LUBE AND EQUIP. MIRU HES FRAC FLEET.
09:00	0.25	09:15	SMTG	Safety Meeting	AOL 07:00. FINISH RIG UP. PRIME UP CHEMS AND PUMPS. QC FLUIDS. PRESSURE TEST. HSM- SMOKING, RED ZONE, PPE, PERF GUNS, MUSTER AREA, OVER HEAD LOADS, PICKING UP LAYING DOWN GUNS.
09:15	1.25	10:30	WLWK	Wireline	PU PERF GUNS FOR STG 1. OPEN WITH 60 PSI. RIH AND CORRELATE TO SJ AT 5599'-5622' & 6238'-6262'. RUN DOWN AND PERF UTELAND BUTTE FORM 6703'-7126' WITH 54 HOLES IN 18' NET. POOH AND VERIFY ALL GUNS SHOT. SHUT IN AND SECURE WELL. TURN WELL OVER TO HES
10:30	2.42	12:55	FRAC	Frac. Job	FRAC STG 1 PRESSURE TEST LINES TO 7300 PSI. OPEN WELL W/ 25 PSI AT 10:40 AM BREAK DOWN 3187 PSI AT 10 BPM. PMP 3900 GAL 15% HCL ACID W/ 108 BIO BALLS FOR DIVERSION. 10.1 BPM AT 1225 PSI. FLUSH W/ 6545 GAL. 29.8 BPM AT 2310 PSI. BALL OUT, SHUT DOWN PMP. SURGE WELL 3X. BRING RATE UP TO 35 BPM LET RATE AND PSI LINE OUT MAKE 4 DROPS IN RATE TO 0. WATCH WELL PSI FOR 45 MINS.  STAGE FR PAD. STABLE RATE OF 34.8 BPM AT 1543 PSI. ISDP 925 . FG .57. PERFS OPEN 39/57  ISIP 1222 , FG .61, MR 72.2 BPM, AR 70.4 BPM, MP 2482 PSI, AP 2132 PSI 20/40 WHITE 150,000 lbs 2.0, 3.5, 4.0,ppg SLK WTR 1275 BBL, 20# HYBOR G (16) 1496 BBL, BTR 2876 BBLS.  STAGE SCORE 10  SHUT IN AND TURN OVER TO CUTTERS
12:55	1.08	14:00	PFRT	Perforating	PERF STG #2- PU HES 5-1/2" 10K CBP AND GUNS FOR STAGE 2 INTO LUBE AND EQUALIZE 950 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 5599'-5622' & 6238'-6262'. RUN DOWN AND SET 5-1/2" CBP AT 6660' WITH 1025 PSI. PULL UP AND PERF CASTLE PEAK/BSF/3PT FORM 6308'-6640' WITH 45 HOLES IN 15' NET. POOH AND VERIFY ALL GUNS SHOT. SHUT IN WITH 110 PSI.  TURN WELL OVER TO HES.



Time Log					
Start Time	Dur (hr)	End Time	Code	Category	Com
14:00	2.00	16:00	FRAC	Frac. Job	<p>FRAC STG 2            PRESSURE TEST LINES TO 7000 PSI.            OPEN WELL W/ 140 PSI AT 14:05            BREAK DOWN 2396 PSI AT 9.9 BPM.            PMP 3400 GAL 15% HCL ACID W/ 90 BIO BALLS FOR DIVERSION. 10.3 BPM AT 1070 PSI.            FLUSH W/ 6159 GAL. 30 BPM AT 1870 PSI. BALL OUT.            SHUT DOWN PMP. SURGE 3X. BRING RATE UP TO 35 BPM LET RATE AND PSI LINE OUT MAKE 4 DROPS IN RATE TO 0. WATCH WELL PSI FOR 45 MINS.</p> <p>STAGE FR PAD. STABLE RATE OF 35 BPM AT 1886 PSI. ISDP 1114 . FG .60.            PERFS OPEN 27/45</p> <p>ISIP 1443 , FG .66, MR 70.6 BPM, AR 70.2 BPM, MP 2504 PSI, AP 2227 PSI            20/40 WHITE 150,000 lbs2.0, 3.0, 3.5 &amp; 4.0PPG            SLK WTR 1242 BBL, 20# HYBOR G (16) 1477 BBL, BTR 2813 BBLs.</p> <p>STAGE SCORE 10.</p> <p>TURN WELL OVER TO CUTTERS</p> <p>SHUT IN AND TURN OVER TO CUTTERS.</p>
16:00	1.25	17:15	PFRT	Perforating	<p>PERF STG #3- PU HES 5-1/2" 10K CBP AND GUNS FOR STAGE 3 INTO LUBE AND EQUALIZE 1350 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 5599'-5622'.            RUN DOWN AND SET 5-1/2" CBP AT 6279' WITH 1350 PSI. PULL UP AND PERF DOUGLAS CREEK FORM 5932'-6259' WITH 45 HOLES IN 15' NET.            POOH AND VERIFY ALL GUNS SHOT. SHUT IN WITH 1000 PSI. TURN WELL OVER TO HES.</p>
17:15	12.75	06:00	LOCL	Lock Wellhead & Secure	CREW TRAVEL. WELL SHUT IN AND SECURE FOR NIGHT.

**Aurora Federal 08-26-7-20 10/11/2014 06:00 - 10/12/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status PRODUCING	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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Time Log					
Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.84	06:50	SMTG	Safety Meeting	AOL 05:00. PRIME UP CHEMS AND PUMPS. QC FLUIDS. PRESSURE TEST. HSM-SMOKING, RED ZONE, PPE, PERF GUNS, MUSTER AREA, OVER HEAD LOADS, PICKING UP LAYING DOWN GUNS.
06:50	2.00	08:50	FRAC	Frac. Job	<p>FRAC STG 3            PRESSURE TEST LINES TO 7200 PSI.            OPEN WELL W/ 950 PSI AT 6:50 AM            BREAK DOWN 2480 PSI AT 10.1 BPM.            PMP 3900 GAL 15% HCL ACID W/ 90 BIO BALLS FOR DIVERSION. 10.2 BPM AT 1680 PSI.            FLUSH W/ 5792 GAL. 29.4 BPM AT 2150 PSI. BALL OUT, SHUT DOWN PMP.            SURGE WELL 3X. BRING RATE UP TO 35 BPM LET RATE AND PSI LINE OUT MAKE 4 DROPS IN RATE TO 0. WATCH WELL PSI FOR 45 MINS.</p> <p>STAGE FR PAD. STABLE RATE OF 37 BPM AT 2536 PSI. ISDP 1647 . FG .70.            PERFS OPEN 27/45</p> <p>ISIP 2193 , FG .79, MR 71.6 BPM, AR 70.7 BPM, MP 3201 PSI, AP 2979 PSI            20/40 WHITE 150,000 lbs 2.0, 3.5, 4.0,ppg            SLK WTR 1177 BBL, 20# HYBOR G (16) 1645 BBL, BTR 2926 BBLs.</p> <p>STAGE SCORE 10.</p> <p>SHUT IN AND TURN OVER TO CUTTERS</p>
08:50	2.25	11:05	PFRT	Perforating	<p>PERF STG #4- PU HES 5-1/2" 10K CBP AND GUNS FOR STAGE 4 INTO LUBE AND EQUALIZE 1750 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 5599'-5622'.            RUN DOWN AND SET 5-1/2" CBP AT 5879' WITH 1450 PSI. PULL UP AND PERF TGR3/DOUGLAS CREEK FORM 5627'-5859' WITH 45 HOLES IN 15' NET.            POOH AND VERIFY ALL GUNS SHOT. SHUT IN WITH 650 PSI.</p> <p>(MISRUN POOH FOUND PINCHED WIRE ON NEG BETWEEN GUN 9 &amp; 10.            REWIRED RIH FINISH PERFINING TO DESIGN)</p> <p>TURN WELL OVER TO HES.</p>

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
11:05	2.00	13:05	FRAC	Frac. Job	FRAC STG 4 PRESSURE TEST LINES TO 7300 PSI. OPEN WELL W/ 640 PSI AT 11:10 AM BREAK DOWN 1058 PSI AT 9.8 BPM. PMP 3400 GAL 15% HCL ACID W/ 90 BIO BALLS FOR DIVERSION. 10 BPM AT 890 PSI. FLUSH W/ 5494 GAL. 29.8 BPM AT 1490 PSI. BALL OUT. SHUT DOWN PMP. SURGE 3X. BRING RATE UP TO 35 BPM LET RATE AND PSI LINE OUT MAKE 4 DROPS IN RATE TO 0. WATCH WELL PSI FOR 45 MINS.  STAGE FR PAD. STABLE RATE OF 35 BPM AT 1813 PSI. ISDP 1061 . FG .62. PERFS OPEN /45  ISIP 1538 , FG .70, MR 74.4 BPM, AR 73.1 BPM, MP 2869 PSI, AP 2308 PSI 20/40 WHITE 150,160 lbs2.0, 3.0, 3.5 & 4.0PPG SLK WTR 1186 BBL, 20# HYBOR G (16) 1522 BBL, BTR 2789 BBLs.  STAGE SCORE 10.  SHUT IN AND TURN OVER TO CUTTERS.
13:05	1.25	14:20	PFRT	Perforating	KILL PLUG- PU 5-1/2" HES PLUG AND SETTING TOOLS INTO LUBE. EQUALIZE 1475 PSI. RIH AND CORRELATE TO SHORT JT 5599'-5622'. SET KILL PLUG AT 5570' WITH 1400 PSI. BLEED OFF AS POOH.
14:20	2.00	16:20	SRIG	Rig Up/Down	RDMO CUTTER & HES
16:20	13.66	06:00	LOCL	Lock Wellhead & Secure	CREW TRAVEL. WELL SHUT IN AND SECURE FOR NIGHT.

**Aurora Federal 08-26-7-20 10/12/2014 06:00 - 10/13/2014 06:00**

API	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43-047-53544	UT	Uintah	Aurora	PRODUCING	1,231.0	Drilling & Completion

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL. HSM.
07:00	1.00	08:00	SRIG	Rig Up/Down	ROAD RIG TO LOCATION. RUSU.
08:00	1.50	09:30	BOPI	Install BOP's	CHECK PRESSURE. ND FRAC VALVES. NU 7" 5K BOP AND ANNULAR. RU FLOOR.
09:30	2.00	11:30	GOP	General Operations	SPOT CATWALK AND PIPE RACKS. UNLOAD 239-JTS 2-7/8" L-80 TBG.
11:30	3.50	15:00	RUTB	Run Tubing	MU 4-3/4" BIT, BIT SUB (W/ FLOATS), 1-JT TBG, DRAIN SUB (W/ PLUGS). RIH W/ 174-JTS TBG. RU DRLG EQUIP
15:00	0.50	15:30	PTST	Pressure Test	FILL TBG. PRESSURE TEST LINES, PIPE RAMS, AND HYDRIL TO 2000 PSI.
15:30	2.00	17:30	DOPG	Drill Out Plugs	EST CIRC AND D/O PLUGS. PUMP 2 BPM, RET 2 BPM, 19/64 HOLDING 400 PSI BACK PRESSURE.  CBP #1 AT 5570'. 0' FILL. D/O IN 10 MIN. FCP 600 PSI ON 19/64". RIH. (PUMP 1 BPM, RET 2 BPM) CBP #2 AT 5879. 20' FILL. D/O IN 10 MIN. FCP 600 PSI ON 17/64". RIH W/ 1-JT, HAVE 186-JTS IN, EOT AT 5919'.  CIRC CLEAN. HANG PWR SWIVEL. TURN OVER TO FBC AND TREATER FOR NIGHT.
17:30	12.50	06:00	FBCK	Flowback Well	CREW TRAVEL. WELL FLOWING TO TREATER FOR NIGHT.

**Aurora Federal 08-26-7-20 10/13/2014 06:00 - 10/14/2014 06:00**

API	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43-047-53544	UT	Uintah	Aurora	PRODUCING	1,231.0	Drilling & Completion

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL. HSM. WELL FLOWING TO TREATER. 140 PSI ON 20/64" CHOKE. NO OIL. OPEN TO FB TANK.



Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
07:00	5.00	12:00	DOPG	Drill Out Plugs	RIH TO TAG. PU PWR SWIVEL AND EST CIRC. D/O PLUGS. PUMP 1 BPM. RET 2 BPM.  CBP #3 AT 6279'. 15' FILL. D/O IN 10 MIN. FCP 200 PSI ON 26/64". RIH CBP #4 AT 6660'. 40' FILL. D/O IN 13 MIN. FCP 200 PSI ON 36/64". RIH FC AT 7397'. C/O 2' SAND TO FC. D/O FC AND 48' CMT TO PBDT AT 7445' (319' RATHOLE).  CIRC CLEAN. RD PWR SWIVEL.	
12:00	1.00	13:00	PULT	Pull Tubing	POOH AS LD 60-JTS TBG. LAND HABGER.  KB 13.00 HANGER .85 172-JTS 2-7/8" L-80 5465.54 DRAIN SUB 1.10 1-JT 2-7/8" L-80 31.86 BIT SUB (FLOATS IN) 2.10 4-3/4" BIT .40  EOT AT 5514.85'.	
13:00	1.00	14:00	BOPR	Remove BOP's	RD FLOOR. ND BOP. NU WH. PLUMB IN WH. DROP BAR TO SHEAR DRAIN SUB. SITP 250 PSI. TURN WELL OVER TO FB CREW AND PRODUCTION.	
14:00	2.00	16:00	SRIG	Rig Up/Down	RDSU. MOVE OFF. (ROAD RIG TO GUSHER). WELL TURNED TO FB CREW AND PRODUCTION.	
16:00	14.00	06:00	FBCK	Flowback Well	WELL FLOWING TO PRODUCTION.	

**Aurora Federal 08-26-7-20 10/16/2014 06:00 - 10/17/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status PRODUCING	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	6.00	12:00	GOP	General Operations	Well is slightly flowing to production.	
12:00	0.50	12:30	RMOV	Rig Move	Move rig 14 miles to location.	
12:30	1.00	13:30	SRIG	Rig Up/Down	Spot in, and rig up derrick.	
13:30	1.50	15:00	BOPI	Install BOP's	ND production wellhead. NU BOPE stack. Rig up work floor. RU tubing equipment.	
15:00	0.50	15:30	PUMP	Pump Test	Finish killing well w/ 200 bbls. Casing is still flowing slightly.	
15:30	1.00	16:30	RUTB	Run Tubing	Pick-up, and single in with 61 jts of 2-7/8 tubing. Tag @ 7445'. No fill. LD 5 jts.	
16:30	1.50	18:00	PULT	Pull Tubing	Started to TOOH with tubing. Casing kicked off flowing. Install Washington head rubber. TOOH with 35 stands. EOT is above perforations. Secure well. SDFN.	
18:00	1.50	19:30	CTRL	Crew Travel	Crew travel to yard.	
19:30	10.50	06:00	LOCL	Lock Wellhead & Secure	Operations SDFN.	

**Aurora Federal 08-26-7-20 10/17/2014 06:00 - 10/18/2014 06:00**

API 43-047-53544	State/Province UT	County Uintah	Field Name Aurora	Well Status PRODUCING	Total Depth (ftKB) 1,231.0	Primary Job Type Drilling & Completion
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	1.00	07:00	CTRL	Crew Travel	Crew travel to location. Service, and start equipment. Safety meeting, and fill-out JSA.	
07:00	2.00	09:00	PULT	Pull Tubing	Well was dead by 07:00. TOOH with drill-out string. Break-out BHA.	
09:00	2.00	11:00	RUTB	Run Tubing	Make-up production BHA, and TIH. Kill well. Production string is as follows: Bull plug- .60' 3 jts 2-7/8 tubing- 95.37' 3-1/2" desander- 18.20' 4' pup- 4.15' PSN- 1.1' 3 jts 2-7/8" tubing- 95.34' 8rd 5-1/2" TAC- 2.75' 223 jts 2-7/8 tubing- 7084.71' Stretch- 2.61' Hanger- .85' K.B.- 13' TAC @ 7101.17' PSN @ 7196.51' EOT @ 7315.93'	

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
11:00	2.50	13:30	SRIG	Rig Up/Down	RD tubing equipment, and work floor. ND BOPE. Set TAC, and land tubing. NU production head. Prep to run rods.
13:30	3.50	17:00	RURP	Run Rods & Pump	Test pump. Single in hole with pump, and rods. Rod design as follows: 2.5-1.75-RH BC-20-5-21-24' pump Sheer coupling 28- 1" scraped rods w/ 4 per rod 156- 3/4" scraped rods w/ 4 per rod 103- 7/8" scraped rods w/ 4 per rod 6', and 2' ponies, 30' polish rod.
17:00	1.00	18:00	PUMP	Pump Test	Seat pump, and space -out for 139" stroke. Stroke pump, and psi test. Hang well on horse's head.
18:00	1.00	19:00	SRIG	Rig Up/Down	RD rig, and package. SDFN. Put well on pump.
19:00	1.50	20:30	CTRL	Crew Travel	Crew travel to yard.
20:30	9.50	06:00	GOP	General Operations	Crew is off for weekend. Well is on production.

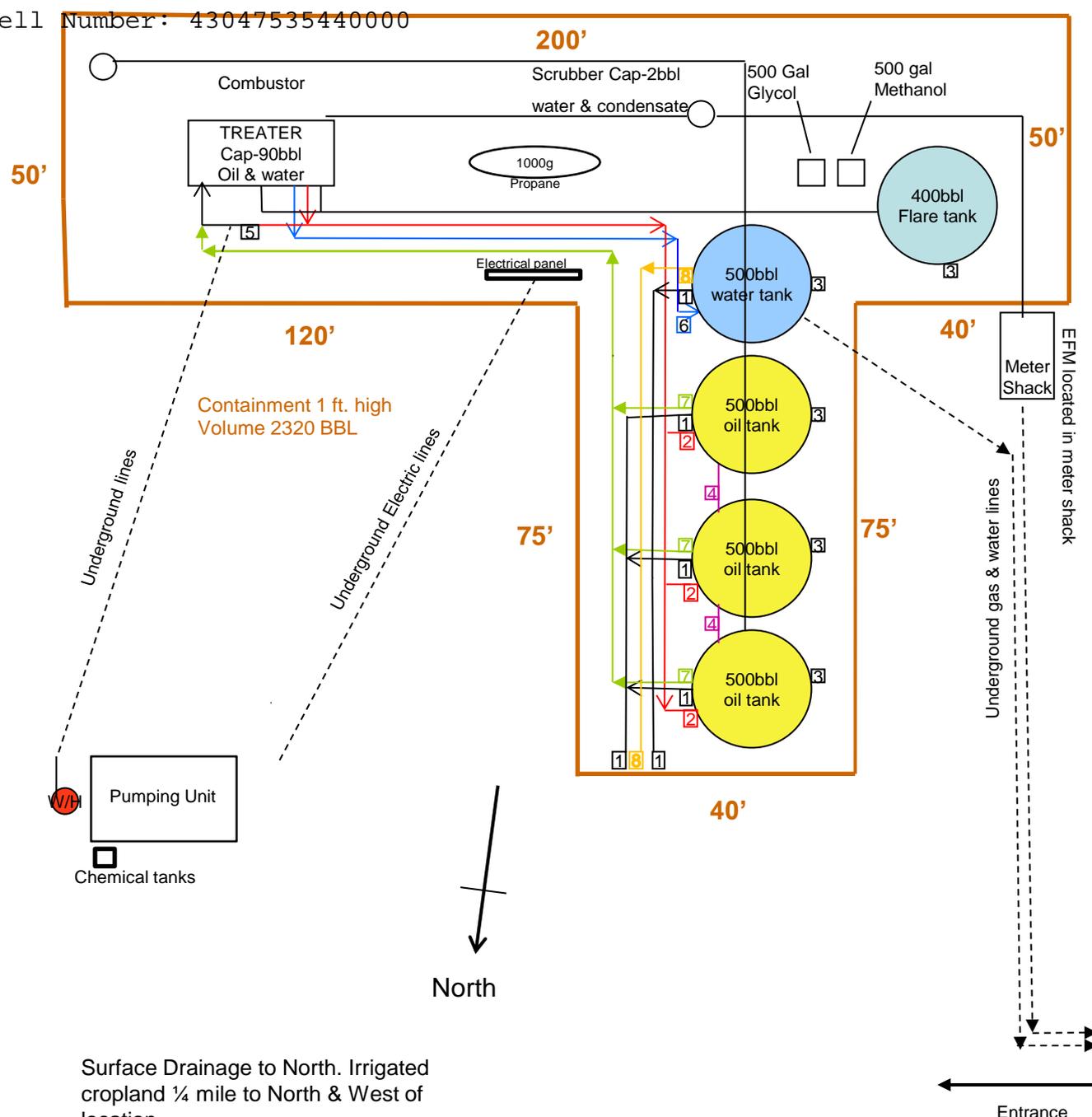
<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU80689
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
		<b>7. UNIT or CA AGREEMENT NAME:</b> AURORA (DEEP)
<b>1. TYPE OF WELL</b> Oil Well		<b>8. WELL NAME and NUMBER:</b> Aurora Federal 8-26-7-20
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>9. API NUMBER:</b> 43047535440000
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1980 FNL 0800 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 26 Township: 07.0S Range: 20.0E Meridian: S		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 11/6/2014	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input checked="" type="checkbox"/> OTHER	
	OTHER: <input style="width: 100px;" type="text" value="SSD"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. ATTACHED PLEASE FIND THE SITE FACILITY DIAGRAM/SITE SECURITY.		
<b>Accepted by the          Utah Division of          Oil, Gas and Mining          FOR RECORD ONLY          November 12, 2014</b>		
<b>NAME (PLEASE PRINT)</b> Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	<b>TITLE</b> Permit Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 11/6/2014

Sundry Number: 57573 API Well Number: 43047535440000

**BILL BARRETT CORPORATION**

Aurora Federal 8-26-7-20  
 SE¼ NE¼, SEC.26,T7S,R20E,  
 Lease # UTU 80689  
 API # 43-047-53544  
 Uintah Co. Utah

Site Security Plan Located at  
 Bill Barrett Corporation  
 Roosevelt Office  
 ROUTE 3 BOX 3110  
 1820 W HIGHWAY 40  
 ROOSEVELT, UT 84066



- 1 - 4" LOAD LINE
- Production Phase – sealed closed
- Sales Phase- open to load Production bought
- 2 – 3" OIL LINES
- Production Phase – open
- Sales Phase – sealed close
- 3 – 4" DRAIN
- Production Phase – sealed closed
- Sales Phase – sealed closed
- Drain water – open
- 4 – 4" UPPER EQUALIZER
- Production Phase – open
- Sales Phase – sealed close
- 5 – BYPASS
- 6 – 3" WATER LINES
- Production Phase – open
- No Sales Phase
- 7- 2" RECYCLE
- Production – open
- Sales – sealed closed
- 8- 2" WATER TANK SKIM
- Not sealed

Surface Drainage to North. Irrigated cropland ¼ mile to North & West of location.

- PRV, RUPTURE DISC & FLARE LINES- tie in to flare tank for emergency pressure relief of treator

Form 3160-4  
(August 2007)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

5. Lease Serial No.  
UTU80689

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

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

2. Name of Operator **BILL BARRETT CORPORATION** Contact: **CHRISTINA HIRTLER**  
E-Mail: **chrtler@billbarrettcorp.com**

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

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*  
At surface **Sec 26 T7S R20E Mer SLB SENE 1980FNL 800FEL**  
At top prod interval reported below **SENE 1956FNL 814FEL**  
At total depth **SENE 2005FNL 796FEL**

6. If Indian, Allottee or Tribe Name \_\_\_\_\_

7. Unit or CA Agreement Name and No. \_\_\_\_\_

8. Lease Name and Well No. **AURORA FEDERAL 8-26-7-20**

9. API Well No. **43-047-53544**

10. Field and Pool, or Exploratory **BRENNAN BOTTOM**

11. Sec., T., R., M., or Block and Survey or Area **Sec 26 T7S R20E Mer SLB**

12. County or Parish **UINTAH** 13. State **UT**

14. Date Spudded **08/28/2014** 15. Date T.D. Reached **09/12/2014** 16. Date Completed **10/12/2014**  
 D & A  Ready to Prod.

17. Elevations (DF, KB, RT, GL)\* **4840 GL**

18. Total Depth: MD **7514** TVD **7512** 19. Plug Back T.D.: MD **7398** TVD **7396** 20. Depth Bridge Plug Set: MD **MD** TVD **TVD**

21. Type Electric & Other Mechanical Logs Run (Submit copy of each) **MUD,CBL,TRIPLE COMBO**

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

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

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
24.000	16.000 COND	65.0		80	80				
12.250	8.625 J-55	24.0		1231	1221	490	168		
7.875	5.500 N-80	17.0		7490	7490	1130	352	2100	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	7316							

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) GREEN RIVER	5627	7126	5627 TO 7126	0.380	189	OPEN
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
5627 TO 7126	GREEN RIVER SEE STAGES 1-4

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
10/12/2014	10/24/2014	24	→	201.0	2.0	273.0	30.0		FLOWS FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
48/64	SI 400	130.0	→	201	2	273	10	POW	

28a. Production - Interval B

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

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

ELECTRONIC SUBMISSION #277834 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

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

28b. Production - Interval C

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

28c. Production - Interval D

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

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

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				GREEN RIVER	3514
				MAHOGANY	4652
				TGR3	5627
				DOUGLAS CREEK	5763
				BLACK SHALE FACIES	6235
				CASTLE PEAK	6603
				UTELAND BUTTE	6839
				WASATCH	7464

32. Additional remarks (include plugging procedure):

TOC was calculated by CBL, Conductor was cemented with grout. Attaches is the treatment data and logs. First gas was on 10/18/2014, first oil sales 10/29/2014.

33. Circle enclosed attachments:

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

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

**Electronic Submission #277834 Verified by the BLM Well Information System.  
For BILL BARRETT CORPORATION, sent to the Vernal**

Name (please print) CHRISTINA HIRTLER Title PERMIT ANALYST

Signature (Electronic Submission) Date 11/10/2014

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

RECEIVED: Nov. 10, 2014

**8-26-7-20 Aurora Fed Report Continued\***

<b>44. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. (cont.)</b>			
<b>AMOUNT AND TYPE OF MATERIAL</b>			
<b><u>Stage</u></b>	<b><u>bbls Slurry</u></b>	<b><u>lbs 20/40 Premium White</u></b>	<b><u>gal 15% HCl Acid</u></b>
1	2876	150,000	4,400
2	2823	150,000	3,900
3	2926	150,000	3,900
4	2789	150,160	3,400

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



**Payzone Directional**  
End of Well Report



<b>Company:</b>	Bill Barrett Corporation	<b>Local Co-ordinate Reference:</b>	Well Aurora Federal 8-26-7-20
<b>Project:</b>	Fort Duchesne	<b>TVD Reference:</b>	Aurora Federal 8-26-7-20 @ 4853.0usft (CAPSTAR 328)
<b>Site:</b>	SECTION 26 T7S, R20E	<b>MD Reference:</b>	Aurora Federal 8-26-7-20 @ 4853.0usft (CAPSTAR 328)
<b>Well:</b>	Aurora Federal 8-26-7-20	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Actual	<b>Database:</b>	EDM 5000.1 Single User Db

<b>Project</b>	Fort Duchesne		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Southern Zone		

<b>Site</b>	SECTION 26 T7S, R20E		
<b>Site Position:</b>		<b>Northing:</b>	11,128,660.81 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,163,536.88 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	40° 10' 59.820 N
		<b>Longitude:</b>	109° 37' 45.200 W
		<b>Grid Convergence:</b>	1.15 °

<b>Well</b>	Aurora Federal 8-26-7-20, SHL: 40° 10' 59.820 -109° 37' 45.200		
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b> 11,128,660.80 usft
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b> 2,163,536.88 usft
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b> 4,853.0 usft
			<b>Latitude:</b> 40° 10' 59.820 N
			<b>Longitude:</b> 109° 37' 45.200 W
			<b>Ground Level:</b> 4,840.0 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	8/27/2014	10.74	65.91	52,094

<b>Design</b>	Actual			
<b>Audit Notes:</b>				
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b> 0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	170.51

<b>Survey Program</b>	Date 9/11/2014			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
268.0	7,514.0	Survey #1 (Wellbore #1)	MWD	MWD v3:standard declination



## Payzone Directional

End of Well Report



<b>Company:</b>	Bill Barrett Corporation	<b>Local Co-ordinate Reference:</b>	Well Aurora Federal 8-26-7-20
<b>Project:</b>	Fort Duchesne	<b>TVD Reference:</b>	Aurora Federal 8-26-7-20 @ 4853.0usft (CAPSTAR 328
<b>Site:</b>	SECTION 26 T7S, R20E	<b>MD Reference:</b>	Aurora Federal 8-26-7-20 @ 4853.0usft (CAPSTAR 328
<b>Well:</b>	Aurora Federal 8-26-7-20	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Actual	<b>Database:</b>	EDM 5000.1 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
268.0	0.13	197.73	268.0	0.3	-0.3	-0.1	0.05	0.05	0.00	
328.0	0.44	178.48	328.0	0.6	-0.6	-0.1	0.53	0.52	-32.08	
390.0	0.48	193.60	390.0	1.0	-1.1	-0.2	0.21	0.06	24.39	
451.0	0.48	193.60	451.0	1.5	-1.6	-0.3	0.00	0.00	0.00	
512.0	0.41	198.42	512.0	1.9	-2.0	-0.4	0.13	-0.11	7.90	
574.0	0.22	160.99	574.0	2.2	-2.4	-0.4	0.44	-0.31	-60.37	
646.0	0.40	129.17	646.0	2.6	-2.6	-0.2	0.34	0.25	-44.19	
730.0	0.40	132.91	730.0	3.0	-3.0	0.2	0.03	0.00	4.45	
814.0	0.31	138.00	814.0	3.4	-3.4	0.6	0.11	-0.11	6.06	
899.0	0.19	152.82	899.0	3.8	-3.7	0.8	0.16	-0.14	17.44	
983.0	0.26	117.70	983.0	4.0	-3.9	1.1	0.18	0.08	-41.81	
1,067.0	0.48	167.32	1,067.0	4.5	-4.3	1.3	0.44	0.26	59.07	
1,151.0	0.79	153.91	1,151.0	5.4	-5.2	1.6	0.41	0.37	-15.96	
1,235.0	0.88	147.04	1,235.0	6.5	-6.3	2.2	0.16	0.11	-8.18	
1,320.0	1.41	147.66	1,320.0	8.1	-7.7	3.2	0.62	0.62	0.73	
1,404.0	1.50	82.83	1,403.9	9.1	-8.4	4.8	1.86	0.11	-77.18	
1,488.0	1.68	45.95	1,487.9	8.4	-7.4	6.8	1.21	0.21	-43.90	
1,572.0	1.28	40.44	1,571.9	7.1	-5.9	8.3	0.50	-0.48	-6.56	
1,657.0	1.68	37.84	1,656.8	5.7	-4.2	9.6	0.48	0.47	-3.06	
1,741.0	1.99	9.76	1,740.8	3.5	-1.7	10.7	1.12	0.37	-33.43	
1,825.0	1.59	358.26	1,824.8	0.9	0.9	10.9	0.64	-0.48	-13.69	
1,910.0	2.52	333.36	1,909.7	-2.0	3.7	10.0	1.49	1.09	-29.29	
1,994.0	2.21	334.02	1,993.6	-5.3	6.8	8.5	0.37	-0.37	0.79	
2,079.0	2.21	354.25	2,078.6	-8.5	9.9	7.6	0.91	0.00	23.80	
2,163.0	1.81	354.82	2,162.5	-11.5	12.8	7.3	0.48	-0.48	0.68	
2,247.0	1.10	350.46	2,246.5	-13.6	15.0	7.0	0.85	-0.85	-5.19	



## Payzone Directional

End of Well Report



<b>Company:</b>	Bill Barrett Corporation	<b>Local Co-ordinate Reference:</b>	Well Aurora Federal 8-26-7-20
<b>Project:</b>	Fort Duchesne	<b>TVD Reference:</b>	Aurora Federal 8-26-7-20 @ 4853.0usft (CAPSTAR 328
<b>Site:</b>	SECTION 26 T7S, R20E	<b>MD Reference:</b>	Aurora Federal 8-26-7-20 @ 4853.0usft (CAPSTAR 328
<b>Well:</b>	Aurora Federal 8-26-7-20	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Actual	<b>Database:</b>	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)		
2,332.0	1.28	354.42	2,331.5	-15.4	16.7	6.8	0.23	0.21	4.66		
2,416.0	1.99	0.02	2,415.4	-17.7	19.1	6.7	0.87	0.85	6.67		
2,500.0	2.30	332.12	2,499.4	-20.8	22.1	5.9	1.28	0.37	-33.21		
2,585.0	1.99	331.95	2,584.3	-23.8	24.9	4.4	0.36	-0.36	-0.20		
2,669.0	1.99	338.43	2,668.3	-26.6	27.5	3.2	0.27	0.00	7.71		
2,753.0	1.19	334.24	2,752.2	-28.9	29.7	2.3	0.96	-0.95	-4.99		
2,838.0	1.28	338.25	2,837.2	-30.6	31.3	1.6	0.15	0.11	4.72		
2,922.0	1.59	345.52	2,921.2	-32.7	33.3	0.9	0.43	0.37	8.65		
3,006.0	1.59	16.34	3,005.2	-34.9	35.6	1.0	1.01	0.00	36.69		
3,090.0	1.28	18.85	3,089.1	-36.8	37.6	1.6	0.38	-0.37	2.99		
3,175.0	1.10	359.93	3,174.1	-38.4	39.3	1.9	0.51	-0.21	-22.26		
3,259.0	0.88	352.13	3,258.1	-39.9	40.7	1.8	0.31	-0.26	-9.29		
3,344.0	1.10	338.82	3,343.1	-41.3	42.1	1.4	0.37	0.26	-15.66		
3,428.0	1.10	0.02	3,427.1	-42.9	43.7	1.1	0.48	0.00	25.24		
3,512.0	1.10	349.53	3,511.1	-44.5	45.3	1.0	0.24	0.00	-12.49		
3,596.0	0.88	350.24	3,595.1	-46.0	46.7	0.7	0.26	-0.26	0.85		
3,681.0	0.88	337.54	3,680.0	-47.3	48.0	0.4	0.23	0.00	-14.94		
3,765.0	0.80	326.66	3,764.0	-48.4	49.1	-0.2	0.21	-0.10	-12.95		
3,849.0	0.80	307.23	3,848.0	-49.4	49.9	-1.0	0.32	0.00	-23.13		
3,934.0	0.88	242.45	3,933.0	-49.6	50.0	-2.0	1.06	0.09	-76.21		
4,018.0	1.10	272.54	4,017.0	-49.6	49.7	-3.4	0.66	0.26	35.82		
4,103.0	1.28	303.26	4,102.0	-50.4	50.3	-5.0	0.77	0.21	36.14		
4,187.0	1.10	276.64	4,186.0	-51.3	50.9	-6.6	0.68	-0.21	-31.69		
4,271.0	1.02	265.23	4,270.0	-51.5	50.9	-8.2	0.27	-0.10	-13.58		
4,356.0	1.28	234.65	4,354.9	-51.2	50.3	-9.7	0.77	0.31	-35.98		
4,440.0	1.50	209.75	4,438.9	-49.9	48.8	-11.0	0.76	0.26	-29.64		
4,524.0	1.10	206.13	4,522.9	-48.4	47.1	-11.9	0.49	-0.48	-4.31		



## Payzone Directional

End of Well Report



<b>Company:</b>	Bill Barrett Corporation	<b>Local Co-ordinate Reference:</b>	Well Aurora Federal 8-26-7-20
<b>Project:</b>	Fort Duchesne	<b>TVD Reference:</b>	Aurora Federal 8-26-7-20 @ 4853.0usft (CAPSTAR 328)
<b>Site:</b>	SECTION 26 T7S, R20E	<b>MD Reference:</b>	Aurora Federal 8-26-7-20 @ 4853.0usft (CAPSTAR 328)
<b>Well:</b>	Aurora Federal 8-26-7-20	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Actual	<b>Database:</b>	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)		
4,608.0	1.41	197.94	4,606.9	-46.9	45.4	-12.6	0.43	0.37	-9.75		
4,693.0	0.88	182.34	4,691.9	-45.3	43.8	-12.9	0.72	-0.62	-18.35		
4,777.0	1.10	185.95	4,775.8	-43.9	42.3	-13.0	0.27	0.26	4.30		
4,862.0	1.41	185.56	4,860.8	-42.1	40.5	-13.2	0.36	0.36	-0.46		
4,946.0	1.28	182.74	4,944.8	-40.2	38.5	-13.4	0.17	-0.15	-3.36		
5,030.0	0.88	175.42	5,028.8	-38.6	36.9	-13.4	0.50	-0.48	-8.71		
5,115.0	1.68	187.54	5,113.8	-36.8	35.0	-13.5	0.99	0.94	14.26		
5,199.0	1.50	180.84	5,197.7	-34.5	32.7	-13.6	0.31	-0.21	-7.98		
5,283.0	0.88	176.12	5,281.7	-32.8	31.0	-13.6	0.75	-0.74	-5.62		
5,367.0	1.59	181.55	5,365.7	-31.0	29.2	-13.6	0.86	0.85	6.46		
5,452.0	1.68	193.36	5,450.7	-28.7	26.8	-13.9	0.41	0.11	13.89		
5,536.0	0.88	196.92	5,534.6	-27.0	24.9	-14.4	0.96	-0.95	4.24		
5,620.0	0.88	149.64	5,618.6	-25.8	23.8	-14.3	0.84	0.00	-56.29		
5,705.0	1.28	170.92	5,703.6	-24.2	22.3	-13.8	0.66	0.47	25.04		
5,789.0	1.50	163.74	5,787.6	-22.2	20.3	-13.3	0.33	0.26	-8.55		
5,874.0	2.12	175.16	5,872.5	-19.5	17.7	-12.9	0.84	0.73	13.44		
5,951.0	1.50	162.95	5,949.5	-17.1	15.3	-12.5	0.94	-0.81	-15.86		
6,035.0	1.10	139.15	6,033.5	-15.3	13.6	-11.6	0.79	-0.48	-28.33		
6,120.0	1.41	155.15	6,118.5	-13.6	12.0	-10.6	0.55	0.36	18.82		
6,204.0	1.59	152.95	6,202.4	-11.5	10.1	-9.7	0.22	0.21	-2.62		
6,288.0	1.50	151.05	6,286.4	-9.4	8.1	-8.6	0.12	-0.11	-2.26		
6,373.0	1.90	147.83	6,371.4	-7.0	5.9	-7.3	0.48	0.47	-3.79		
6,457.0	0.62	208.96	6,455.3	-5.4	4.3	-6.8	2.01	-1.52	72.77		
6,541.0	1.19	178.46	6,539.3	-4.2	3.1	-7.0	0.87	0.68	-36.31		
6,626.0	1.41	182.96	6,624.3	-2.3	1.1	-7.0	0.29	0.26	5.29		
6,710.0	1.81	174.32	6,708.3	0.1	-1.2	-6.9	0.56	0.48	-10.29		
6,794.0	1.90	170.22	6,792.2	2.8	-3.9	-6.6	0.19	0.11	-4.88		



**Payzone Directional**  
End of Well Report



<b>Company:</b>	Bill Barrett Corporation	<b>Local Co-ordinate Reference:</b>	Well Aurora Federal 8-26-7-20
<b>Project:</b>	Fort Duchesne	<b>TVD Reference:</b>	Aurora Federal 8-26-7-20 @ 4853.0usft (CAPSTAR 328
<b>Site:</b>	SECTION 26 T7S, R20E	<b>MD Reference:</b>	Aurora Federal 8-26-7-20 @ 4853.0usft (CAPSTAR 328
<b>Well:</b>	Aurora Federal 8-26-7-20	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Actual	<b>Database:</b>	EDM 5000.1 Single User Db

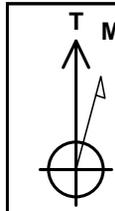
Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	
6,879.0	1.68	156.96	6,877.2	5.4	-6.4	-5.9	0.55	-0.26	-15.60	
6,963.0	1.50	156.65	6,961.2	7.7	-8.6	-4.9	0.21	-0.21	-0.37	
7,047.0	1.99	157.84	7,045.1	10.1	-10.9	-4.0	0.58	0.58	1.42	
7,132.0	2.21	152.02	7,130.1	13.1	-13.8	-2.6	0.36	0.26	-6.85	
7,216.0	2.21	140.65	7,214.0	16.1	-16.4	-0.8	0.52	0.00	-13.54	
7,300.0	1.81	151.76	7,298.0	18.7	-18.9	0.8	0.66	-0.48	13.23	
7,385.0	1.99	152.86	7,382.9	21.4	-21.4	2.1	0.22	0.21	1.29	
7,469.0	1.90	150.52	7,466.9	24.1	-23.9	3.5	0.14	-0.11	-2.79	
7,514.0	1.90	150.52	7,511.8	25.5	-25.2	4.2	0.00	0.00	0.00	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

Sundry Number: 57701 API Well Number: 43047535440000

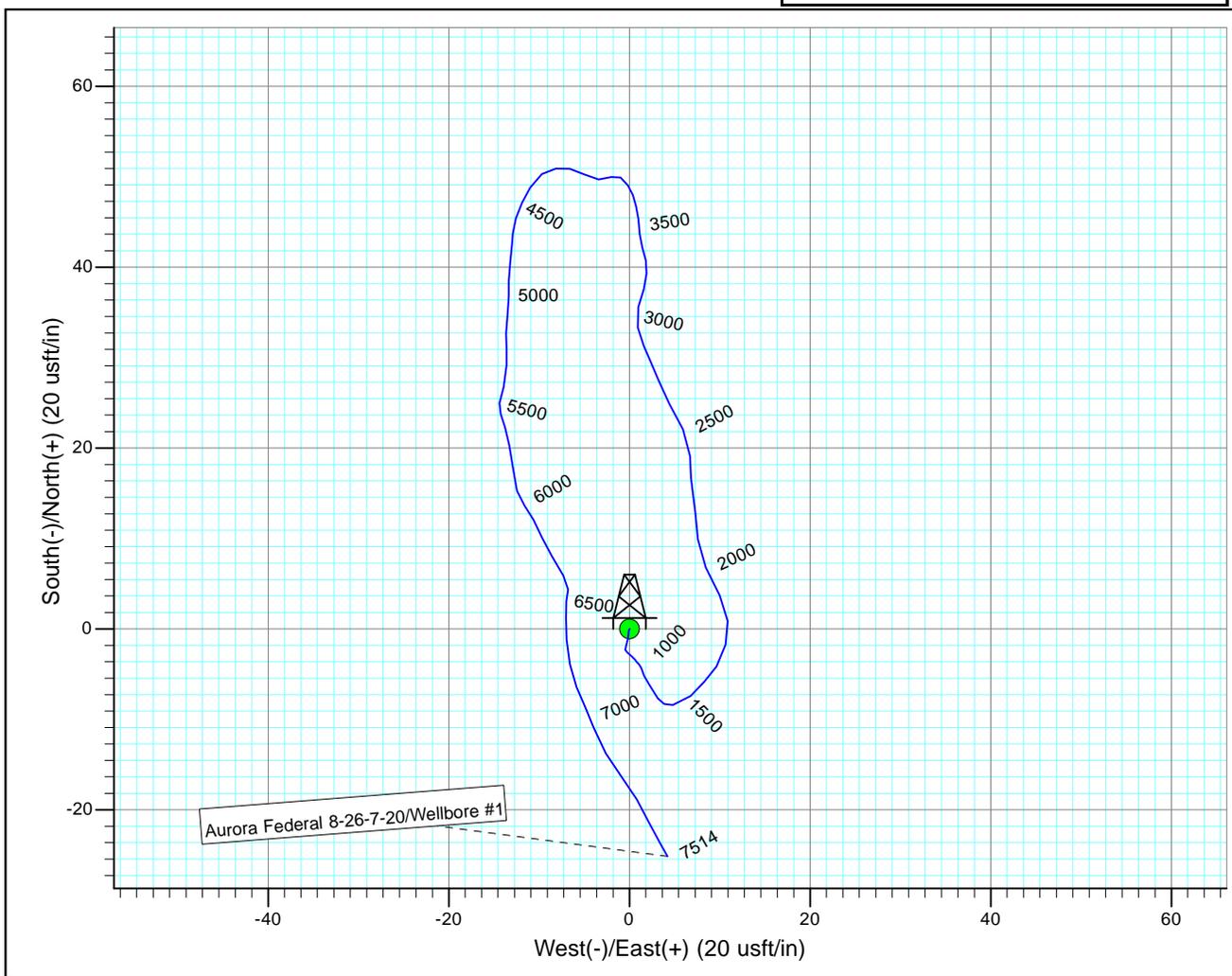
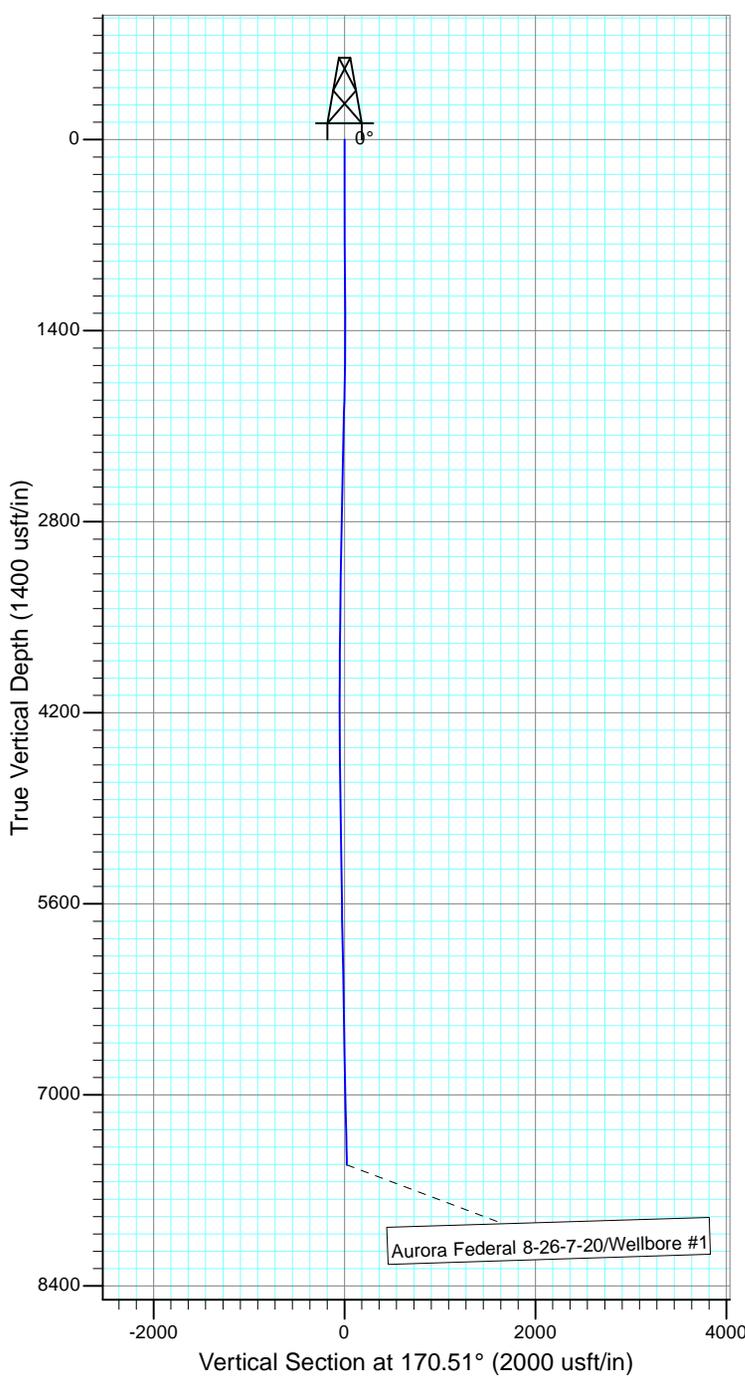


Project: Fort Duchesne  
Site: SECTION 26 T7S, R20E  
Well: Aurora Federal 8-26-7-20  
Wellbore: Wellbore #1  
Design: Actual



Azimuths to True North  
Magnetic North: 10.74°

Magnetic Field  
Strength: 52093.6snT  
Dip Angle: 65.91°  
Date: 8/27/2014  
Model: IGRF2010



Design: Actual (Aurora Federal 8-26-7-20/Wellbore #1)

Created By: *Matthew Linton* Date: 14:50, September 11 2014

THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA