Form 3160-3
(August 2007)

CONFIDENTIAL

COPY

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
UTU-73670

6. If Indian, Allotee or Tribe Name
N/A

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
Prickly Pear / UTU-79487

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other ☐ Single Zone ☑ Multiple Zone

8. Lease Name and Well No.
Prickly Pear Unit Federal 4-28D-12-15 Deep

2. Name of Operator Bill Barrett Corporation

9. API Well No.
pending 43-007-31397

3a. Address 1099 18th Street, Suite 2300
Denver, CO 80202

3b. Phone No. *(include area code)*
303-312-8134

10. Field and Pool, or Exploratory
~~Undesignated~~/See Drlg Plan Nine Mile 35

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface SWSE, 382' FSL, 2371' FEL
At proposed prod. zone NWNW, 916' FNL, 633' FWL, Sec. 28

11. Sec., T. R. M. or Blk. and Survey or Area
Sec. 21, T12S-R15E

14. Distance in miles and direction from nearest town or post office*
approximately 48 miles from Myton, Utah

12. County or Parish
Carbon County

13. State
UT

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) 2371' SH / 633' BH

16. No. of acres in lease
1440

17. Spacing Unit dedicated to this well
640 acres

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 21' SH / 1354' BH

19. Proposed Depth
16,200' MD

20. BLM/BIA Bond No. on file
Nationwide Bond #WYB000040

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
7530' ungraded ground

22. Approximate date work will start*
05/15/2008

23. Estimated duration
90 days

24. Attachments

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

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

25. Signature Tracey Fallang
Name *(Printed/Typed)* Tracey Fallang
Date 04/08/2008

Title Environmental/Regulatory Analyst

Approved by *(Signature)* Bradley G. Hill
Name *(Printed/Typed)* BRADLEY G. HILL
Date 04-15-08

Title ENVIRONMENTAL MANAGER
Office

Application approval does not warrant or certify that 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.

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.

(Continued on page 2)

*(Instructions on page 2)

Federal Approval of this Action is Necessary

Surf
565096X
44004154
39.753043
-110.240145

BHL
564411X
44000104
39.749455
-110.248184

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APR 14 2008
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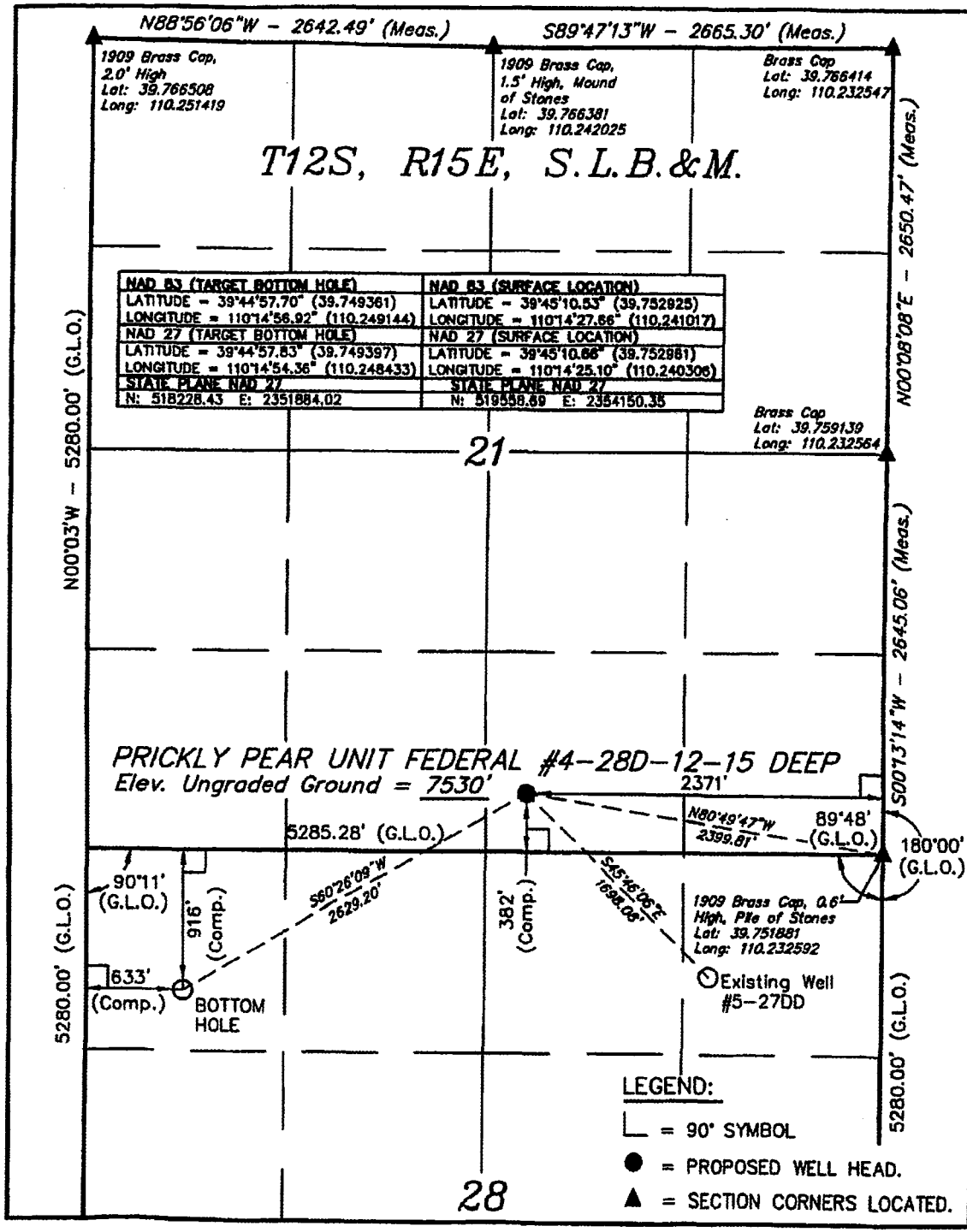


BILL BARRETT CORPORATION

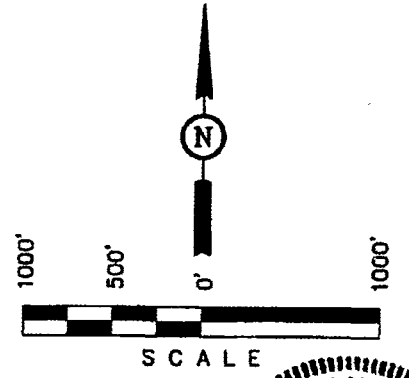
Well location, PRICKLY PEAR UNIT FEDERAL #4-28D-12-15 DEEP, located as shown in the SW 1/4 SE 1/4 of Section 21, T12S, R15E, S.L.B.&M. Carbon County, Utah.

BASIS OF ELEVATION

COTTON TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 31, T12S, R16E, S.L.B.&M. TAKEN FROM THE TWIN HOLLOW QUADRANGLE, UTAH, CARBON COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7386 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.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 95319
STATE OF UTAH

REVISED: 03-27-08 P.M.
Revised: 3-21-08

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

SCALE 1" = 1000'	DATE SURVEYED: 2-8-08	DATE DRAWN: 2-12-08
PARTY D.R. A.W. C.P.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE BILL BARRETT CORPORATION	

Bill Barrett Corporation

April 10, 2008

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

RE: Directional Drilling R649-3-11
Prickly Pear Unit Federal #4-28D-12-15
SHL: 382' FSL & 2371' FEL, SWSE 21-T12S-R15E
BHL: 916' FNL & 633' FWL, NWNW 28-T12S-R15E
Carbon County, Utah

Dear Ms. Mason:

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

- The above-mentioned proposed location is within the Prickly Pear Unit Area;
- BBC is permitting this well as a directional well in order to minimize surface disturbance. By locating the well at the surface location and directionally drilling from this location, BBC will be able to utilize the existing road and pipelines in the area;
- BBC hereby certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Based on the information provided, BBC requests that the permit be granted pursuant to R649-3-11. If you should have any questions or need further information, please contact me at 303-312-8129.

Sincerely,

Doug Gundry-White by Tracy Fallang

Doug Gundry-White
Senior Landman

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DIV. OF OIL, GAS & MINING

1099 18TH STREET
SUITE 2300
DENVER, CO 80202
P 303.293.9100
F 303.291.0420

DRILLING PROGRAM

BILL BARRETT CORPORATION
Prickly Pear Unit Federal 4-28D-12-15 Deep
SWSE, 382' FSL, 2371' FEL, Sec. 21, T12S-R15E (surface hole)
NWNW, 916' FNL, 633' FWL, Sec. 28, T12S-R15E (bottom hole)
Carbon County, Utah

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

Formation	Depth - MD	Depth - TVD
Green River	Surface	Surface
Wasatch	2913'	2912'
North Horn	4888'	4851'
Dark Canyon	6650'	6573'
Price River	6853'	6772'
Bluecastle	7928'	7823'
Neslen	8256'	8144'
Castlegate	8656'	8535'
Blackhawk	8891'	8764'
Kenilworth	9186'	9053'
Aberdeen	9352'	9215'
Mancos	9582'	9440'
Juana Lopez	13,586'	13,355'
Dakota Silt	13,788'	13,552'
*Dakota	13,907'	13,668'
Cedar Mountain	14,020'	13,779'
Morrison	14,145'	13,901'
Curtis	14,963'	14,700'
*Entrada	15,131'	14,865'
Carmel	15,404'	15,135'
*Navajo	15,682'	15,413'
Kayenta	15,911'	15,641'
Wingate	15,993'	15,724'
TD	16,200'	16,000'

PROSPECTIVE PAY
*The Navajo, Entrada and Dakota are primary objectives for oil/gas, while the Wingate and Mancos are secondary objectives.

3. BOP and Pressure Containment Data

Depth Intervals	BOP Equipment
0 – 3000'	No pressure control required
3000' – TD	11" or 13 3/8" 10,000# Ram Type BOP 11" or 13 3/8" 5,000# Annular BOP
- Drilling spool to accommodate choke and kill lines;	
- Ancillary equipment and choke manifold rated at 10,000#. All BOP and BOPE tests will be in accordance with the requirements of onshore Order No. 2;	
- The BLM and 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

Hole Size	SETTING DEPTH (FROM)	(TO)	Casing Size	Casing Weight	Casing Grade	Thread	Condition
12 ¼"	surface	3,000'	9 5/8"	40#	HCP-110	LT&C	New
7 7/8" & 8 3/4"	surface	16,200'	5 ½"	20#	P-110	LT&C	New
Note: Any substitute casing string shall have equivalent or greater collapse, tension and burst properties. Note: 7 7/8" hole size will begin below the Mancos.							

5. Cementing Program

9 5/8" Surface Casing	Lead with approximately 770 sx Halliburton Light Premium with additives mixed at 12.7 ppg (yield = 1.85 ft^3/sx), tail with approximately 270 sx Premium cement with additives mixed at 15.8 ppg (yield = 1.15 ft^3/sx) and top out, if needed, with 200 sx Premium plus cement with additives mixed at 15.6 ppg (yield = 1.18 ft^3/sx). The cement volume is 80% excess of drilled hole size.
5 ½" Production Casing	Marker cement will be approximately 100 sx Premium Cement with additives mixed at 15.8 ppg (yield = 1.15 ft^3/sx) followed by 1325 sx Halliburton Light Premium cement with additives mixed at 12.7 ppg (yield 1.89 ft^3/sx) and follow with 760 sx 50/50 Poz Premium cement with additives mixed at 14.3 ppg (yield = 1.47 ft^3/sx). Top of cement to be determined by log and sample evaluation, estimated TOC 3,000'.
Note: Actual volumes to be calculated from caliper log.	

6. Mud Program

Interval	Weight	Viscosity	Fluid Loss (API filtrate)	Remarks
0 – 3000'	8.3 – 9.0	26 – 36	--	Freshwater/Aquagel/EZ-Mud
3,000 – TD	8.6 – 12.5	42 – 52	15 cc or less	Freshwater/DAP Polymer

Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. If deviation problems and increased torque and drag occur, #2 diesel oil with ENVIRO-TORQ / EZ-GLIDE may be added for reduction and increased ROP.

Note: In the event air drilling should occur:

- Fresh water would be used to suppress the dust coming out. The blooie line, approximately 37' long and 6" diameter, would run from the pit to the wellhead. There is no ignition system as burnable gas should not be encountered.
- Capacity of compressor: 1250SCFM with an 1170 SCFM on standby, which would be located very near the wellbore. The compressor has switches to shut off should any problems be encountered.
- The rig has mud pumps capable of pumping the kill fluid (fresh water), of which there is 500 bbls on location at all times.

7. Testing, Logging and Core Programs

Cores	None anticipated;
Testing	None anticipated;
Sampling	30' to 50' samples; surface casing to TD. Preserve samples all show intervals;
Surveys	Measurement while drilling (MWD) from surface casing to TD at 30 – 90' intervals;
Logging	DIL-GR-SP, FDC-CNL-GR-CAL-Pe-Microlog, Sonic-GR, all TD to surface.

8. Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 10,400 psi* and maximum anticipated surface pressure equals approximately 6880 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)

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9. Auxiliary Equipment

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

10. Drilling Schedule

Location Construction:	May 15, 2008
Spud:	May 22, 2008
Duration:	60 days drilling time
	30 days completion time

PRESSURE CONTROL EQUIPMENT – Schematic Attached

A. Type: Thirteen and Three-eighths Inch (13 3/8") or Eleven (11) Inch Double Gate Hydraulic BOP with Thirteen and Three-eighths Inch (13 3/8") or Eleven (11) Inch Annular Preventer. The blow out preventer will be equipped as follows:

1. One (1) blind ram (above).
2. Two (2) pipe rams (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) maunual and hydraulic choke line valves (3-inch minimum).
6. Remote kill line (2-inch minimum).
7. Three (3) chokes with one 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. Wear ring in casing head.
13. Pressure gauge on choke manifold.
14. Fill-up line above the uppermost preventer.

B. Pressure Rating: 10,000 psi

C. Testing Procedure:

Annular Preventer (5000 psi)

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).

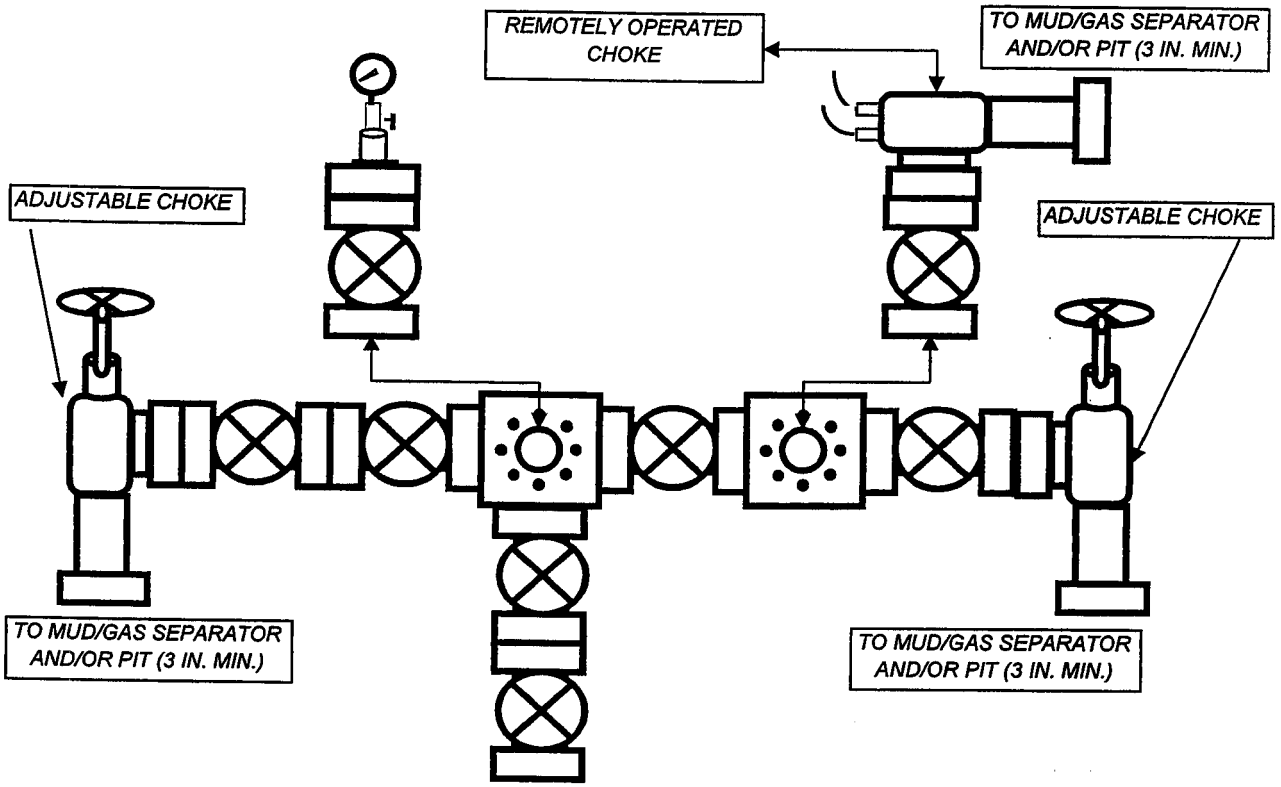
F. Miscellaneous Information:

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 choke manifold will be located outside the rig sub-structure. The hydraulic BOP closing unit will be located at least twenty-five (25) feet from the well head but readily accessible to the driller. Exact locations and configurations of the hydraulic BOP closing unit will depend upon the particular rig contracted to drill this hole.

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

BILL BARRETT CORPORATION

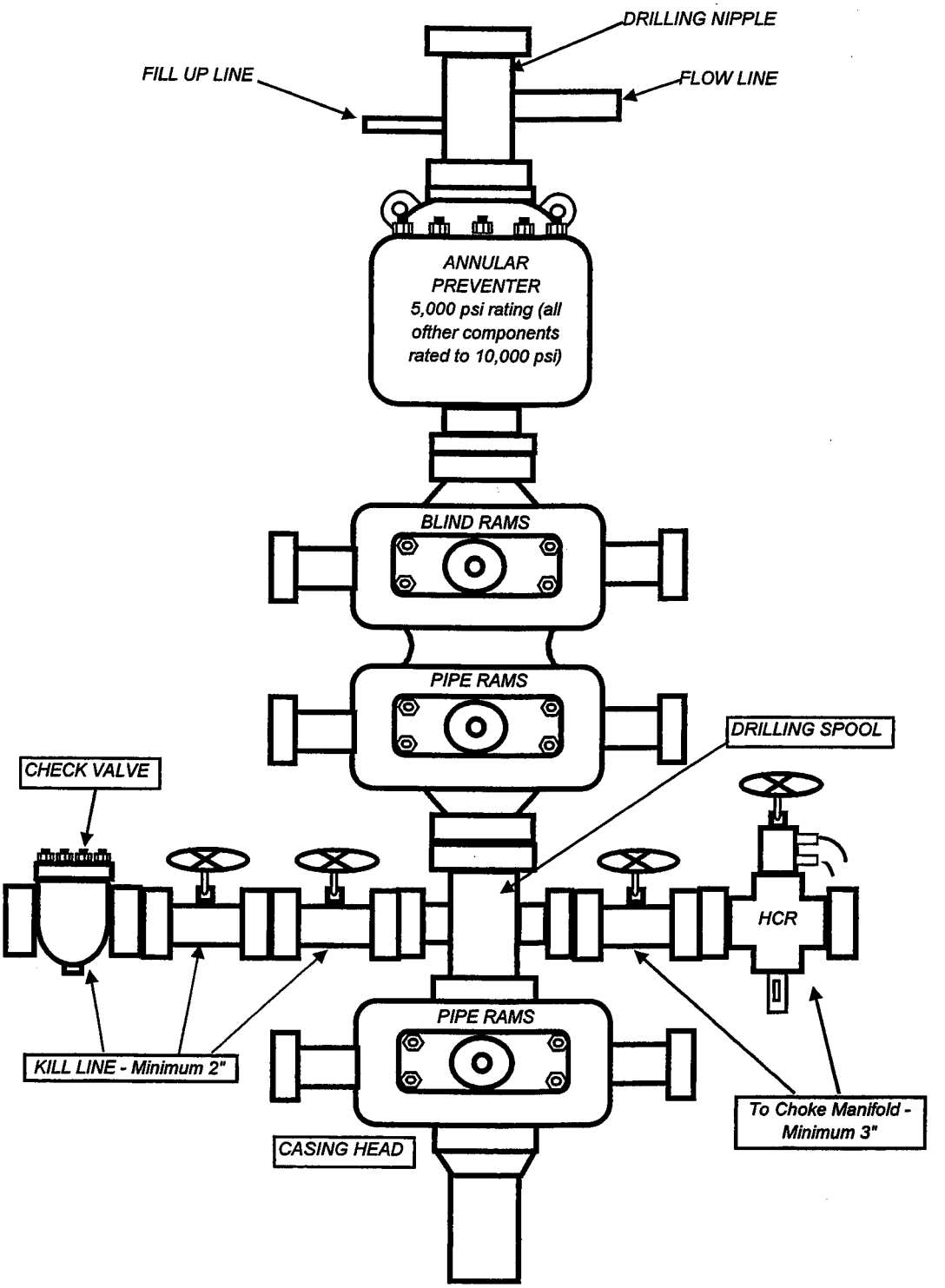
TYPICAL 10,000 p.s.i. CHOKE MANIFOLD



ALL EQUIPMENT IS 3" (MINIMUM).

BILL BARRETT CORPORATION

TYPICAL 10,000 p.s.i. BLOWOUT PREVENTER



Well name:	**Prickly Pear 4-28D-12-15 Deep**
Operator:	**Bill Barrett Corporation**
String type:	Surface
Location:	SENW Section 28, T12S-R15E

Design parameters:

Collapse

Mud weight: 8.80 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 2,145 psi

Internal gradient: 0.22 psi/ft

Calculated BHP 2,805 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

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

Tension is based on buoyed weight.

Neutral point: 2,607 ft

Environment:

H2S considered?	No
Surface temperature:	70.00 °F
Bottom hole temperature:	102 °F
Temperature gradient:	1.08 °F/100ft
Minimum section length:	1,500 ft

Cement top: Surface

Non-directional string.

Re subsequent strings:

Next setting depth:	15,800 ft
Next mud weight:	12.500 ppg
Next setting BHP:	10,260 psi
Fracture mud wt:	18.000 ppg
Fracture depth:	3,000 ft
Injection pressure	2,805 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	3000	9.625	40.00	HCP-110	LT&C	3000	3000	8.75	238.6

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	1371	4230	3.084	2805	7900	2.82	104	988	9.47 J

Prepared by: Dominic Spencer, Bill Barrett
Phone: (303) 312-8164
FAX: (303) 291-0420

Date: March 17,2008
Denver, Colorado

Remarks:

Collapse is based on a vertical depth of 3000 ft, a mud weight of 8.8 ppg The casing is considered to be evacuated for collapse purposes.

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

Well name:	**Prickly Pear 4-28D-12-15 Deep**
Operator:	**Bill Barrett Corporation**
String type:	Production
Location:	SENW Section 28, T12S-R15E

Design parameters:

Collapse

Mud weight: 12.50 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 6,774 psi

Internal gradient: 0.22 psi/ft

Calculated BHP 10,245 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

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

Tension is based on buoyed weight.

Neutral point: 12,977 ft

Environment:

H2S considered?	No
Surface temperature:	70.00 °F
Bottom hole temperature:	240 °F
Temperature gradient:	1.08 °F/100ft
Minimum section length:	1,500 ft
Cement top:	3,276 ft

Directional well information:

Kick-off point	3060 ft
Departure at shoe:	2299 ft
Maximum dogleg:	2 °/100ft
Inclination at shoe:	0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	16000	5.5	20.00	P-110	LT&C	15778	16000	4.653	647.6

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	10245	11100	1.083	10245	12630	1.23	256	548	2.14 J

Prepared by: Dominic Spencer
Bill Barrett

Phone: (303) 312-8164
FAX: (303) 291-0420

Date: April 8,2008
Denver, Colorado

Remarks:

Collapse is based on a vertical depth of 15778 ft, a mud weight of 12.5 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a tensile load which is added to the axial load.

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

HALLIBURTON

Job Information

Surface Casing

Prickly Pear	4-28-12-15 Deep
Surface Casing	0 - 3000 ft (MD)
Outer Diameter	9.625 in
Inner Diameter	8.835 in
Linear Weight	40 lbm/ft
Casing Grade	HCP110
Job Excess	80 %
Surface Hole	0 - 3000 ft (MD)
Inner Diameter	12.250 in
Mud Type	Water Based Mud
Mud Weight	9.50 lbm/gal
BHST	100 degF

Fluid Instructions

Fluid 1: Water Based Spacer

Fresh Water with Gel

25 lbm/bbl Poly-E-Flake (Lost Circulation Additive)

10 lbm/bbl Bentonite (Viscosifier)

Fluid Density:	8.50 lbm/gal
Fluid Volume:	20 bbl

Fluid 2: Lead Cement – (2500 – 0')

Halliburton Light Premium

1 % Calcium Chloride (Accelerator)

0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive)

Fluid Weight	12.70 lbm/gal
Slurry Yield:	1.85 ft^3/sk
Total Mixing Fluid:	9.90 Gal/sk
Top of Fluid:	0 ft
Calculated Fill:	2500 ft
Volume:	251.01 bbl
Calculated Sacks:	761.81 sks
Proposed Sacks:	**770 sks**

Fluid 3: Tail Cement – (3000 – 2500')

Premium Cement

94 lbm/sk Premium Cement (Cement)

2 % Calcium Chloride (Accelerator)

0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive)

Fluid Weight	15.80 lbm/gal
Slurry Yield:	1.15 ft^3/sk
Total Mixing Fluid:	4.97 Gal/sk
Top of Fluid:	2500 ft
Calculated Fill:	500 ft
Volume:	53.54 bbl
Calculated Sacks:	261.39 sks
Proposed Sacks:	**270 sks**

Fluid 4: Top Out Cement – (If Needed)

Premium Plus Cement

94 lbm/sk Premium Plus Cement (Cement)

2 % Calcium Chloride (Accelerator)

Fluid Weight	15.60 lbm/gal
Slurry Yield:	1.18 ft^3/sk
Total Mixing Fluid:	5.20 Gal/sk
Proposed Sacks:	**200 sks**

Note: The cement volume is 80% excess of drilled hole size.

HALLIBURTON

Job Information — Production Casing Cementing

Prickly Pear	4-28-12-15 Deep
Production Casing	0 - 15994 ft (MD)
Outer Diameter	5.500 in
Inner Diameter	4.778 in
Linear Weight	20 lbm/ft
Casing Grade	P-110
Production Hole	3000 - 15994 ft (MD)
Inner Diameter	8.750 in
Job Excess	10 %
Surface Casing	0 - 3000 ft (MD)
Outer Diameter	9.625 in
Inner Diameter	8.835 in
Linear Weight	40 lbm/ft
Casing Grade	HCP110
Mud Type	Water Based Mud
Mud Weight	12.50 lbm/gal
BHST	240 degF

Fluid Instructions

Fluid 1: Water Spacer
Fresh Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	10 bbl

Fluid 2: Reactive Spacer
Super Flush

Fluid Density:	9.10 lbm/gal
Fluid Volume:	40 bbl

Fluid 3: Water Spacer
Fresh Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	10 bbl

Fluid 4: Lead Cement
Premium Cement

94 lbm/sk Premium Cement (Cement)
0.3 % Halad(R)-344 (Low Fluid Loss Control)
0.4 % CFR-3 (Dispersant)
0.5 % HR-5 (Retarder)

Fluid Weight	15.80 lbm/gal
Slurry Yield:	1.15 ft^3/sk
Total Mixing Fluid:	4.93 Gal/sk
Top of Fluid:	2559 ft
Calculated Fill:	441 ft
Volume:	20.48 bbl
Calculated Sacks:	100 sks
Proposed Sacks:	100 sks

Fluid 5: Lead Cement
Halliburton Light Premium

4 lbm/sk Silicalite Compacted (Light Weight Additive)
5 lbm/sk Gilsonite (Lost Circulation Additive)
0.6 % HR-601 (Retarder)
0.1 % Halad(R)-344 (Low Fluid Loss Control)

Fluid Weight	12.70 lbm/gal
Slurry Yield:	1.89 ft^3/sk
Total Mixing Fluid:	9.53 Gal/sk
Top of Fluid:	3000 ft
Calculated Fill:	9000 ft
Volume:	445.39 bbl
Calculated Sacks:	1323.12 sks
Proposed Sacks:	1325 sks

Fluid 6: Primary Cement
50/50 Poz Premium

2 % Bentonite (Light Weight Additive)
20 % SSA-1 (Additive Material)
0.3 % Super CBL (Expander)
0.3 % Halad(R)-344 (Low Fluid Loss Control)
0.3 % Halad(R)-413 (Low Fluid Loss Control)
0.4 % HR-5 (Retarder)
0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive)
3 lbm/sk Silicalite Compacted (Light Weight Additive)

Fluid Weight	14.30 lbm/gal
Slurry Yield:	1.47 ft^3/sk
Total Mixing Fluid:	6.37 Gal/sk
Top of Fluid:	12000 ft
Calculated Fill:	3994 ft
Volume:	198.63 bbl
Calculated Sacks:	758.66 sks
Proposed Sacks:	760 sks

Database:	Compass	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Company:	BILL BARRETT CORP	**TVD Reference:**	KB @ 7554.50ft
Project:	CARBON COUNTY, UT (NAD 27)	**MD Reference:**	KB @ 7554.50ft
Site:	SECTION 21 T12S R15E	**North Reference:**	True
Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PR PR #4-28-12-15 DEEP		
Design:	Design #2		

Project CARBON COUNTY, UT (NAD 27)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Utah Central 4302		Using geodetic scale factor

Site SECTION 21 T12S R15E, SECTION 21

Site Position:		**Northing:**	519,558.877 ft	**Latitude:**	39° 45' 10.660 N
From:	Lat/Long	**Easting:**	2,354,150.355 ft	**Longitude:**	110° 14' 25.1000 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	"	**Grid Convergence:**	0.81 °

Well PR PR #4-28-12-15 DEEP

Well Position	**+N/-S**	-0.01 ft	**Northing:**	519,558.868 ft	**Latitude:**	39° 45' 10.660 N
	+E/-W	0.00 ft	**Easting:**	2,354,150.355 ft	**Longitude:**	110° 14' 25.1000 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	7,530.50 ft

Wellbore PR PR #4-28-12-15 DEEP

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	BGGM2007	2/20/2008	11.78	65.60	52,388

Design Design #2

Audit Notes:

Version:	**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:

Depth From (TVD) (ft)	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
0.00	0.00	0.00	240.40

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
350.00	2.00	150.00	349.98	-1.51	0.87	2.00	2.00	0.00	150.00	
1,000.00	2.00	150.00	999.58	-21.16	12.21	0.00	0.00	0.00	0.00	
1,158.97	2.00	241.01	1,158.46	-25.96	10.88	2.00	0.00	57.25	90.00	
3,001.64	2.00	241.01	3,000.00	-57.13	-45.37	0.00	0.00	0.00	0.00	
3,509.12	12.15	241.01	3,502.96	-87.38	-99.97	2.00	2.00	0.00	0.01	
15,075.28	12.15	241.01	14,810.06	-1,267.00	-2,229.34	0.00	0.00	0.00	0.00	
15,682.77	0.00	0.00	15,413.00	-1,298.09	-2,285.47	2.00	-2.00	0.00	180.00	
16,069.77	0.00	0.00	15,800.00	-1,298.09	-2,285.47	0.00	0.00	0.00	0.00	PBHL_PR PR #4-28-

Database:	Compass	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Company:	BILL BARRETT CORP	**TVD Reference:**	KB @ 7554.50ft
Project:	CARBON COUNTY, UT (NAD 27)	**MD Reference:**	KB @ 7554.50ft
Site:	SECTION 21 T12S R15E	**North Reference:**	True
Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PR PR #4-28-12-15 DEEP		
Design:	Design #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
300.00	1.00	150.00	300.00	-0.38	0.22	0.00	2.00	2.00	0.00
350.00	2.00	150.00	349.98	-1.51	0.87	-0.01	2.00	2.00	0.00
Start 650.00 hold at 350.00 MD									
400.00	2.00	150.00	399.95	-3.02	1.75	-0.02	0.00	0.00	0.00
500.00	2.00	150.00	499.89	-6.04	3.49	-0.05	0.00	0.00	0.00
600.00	2.00	150.00	599.83	-9.07	5.24	-0.07	0.00	0.00	0.00
700.00	2.00	150.00	699.77	-12.09	6.98	-0.10	0.00	0.00	0.00
800.00	2.00	150.00	799.71	-15.11	8.72	-0.12	0.00	0.00	0.00
900.00	2.00	150.00	899.64	-18.13	10.47	-0.15	0.00	0.00	0.00
1,000.00	2.00	150.00	999.58	-21.16	12.21	-0.17	0.00	0.00	0.00
Start Turn 57.25									
1,000.42	2.29	154.07	1,000.00	-21.17	12.22	-0.17	77.88	68.82	977.38
9 5/8"									
1,100.00	2.00	207.25	1,099.52	-24.50	12.30	1.41	1.94	-0.29	53.40
1,158.97	2.00	241.01	1,158.46	-25.96	10.88	3.36	1.97	0.00	57.25
Start 1842.67 hold at 1158.97 MD									
1,200.00	2.00	241.01	1,199.46	-26.65	9.63	4.79	0.00	0.00	0.00
1,300.00	2.00	241.01	1,299.40	-28.34	6.58	8.28	0.00	0.00	0.00
1,400.00	2.00	241.01	1,399.34	-30.04	3.53	11.77	0.00	0.00	0.00
1,500.00	2.00	241.01	1,499.28	-31.73	0.47	15.26	0.00	0.00	0.00
1,600.00	2.00	241.01	1,599.22	-33.42	-2.58	18.75	0.00	0.00	0.00
1,700.00	2.00	241.01	1,699.16	-35.11	-5.63	22.24	0.00	0.00	0.00
1,800.00	2.00	241.01	1,799.10	-36.80	-8.69	25.73	0.00	0.00	0.00
1,900.00	2.00	241.01	1,899.04	-38.49	-11.74	29.22	0.00	0.00	0.00
1,967.01	2.00	241.01	1,966.00	-39.63	-13.78	31.56	0.00	0.00	0.00
BLACK SHALE MARKER									
2,000.00	2.00	241.01	1,998.97	-40.18	-14.79	32.71	0.00	0.00	0.00
2,100.00	2.00	241.01	2,098.91	-41.88	-17.84	36.20	0.00	0.00	0.00
2,200.00	2.00	241.01	2,198.85	-43.57	-20.90	39.69	0.00	0.00	0.00
2,300.00	2.00	241.01	2,298.79	-45.26	-23.95	43.18	0.00	0.00	0.00
2,400.00	2.00	241.01	2,398.73	-46.95	-27.00	46.67	0.00	0.00	0.00
2,500.00	2.00	241.01	2,498.67	-48.64	-30.05	50.16	0.00	0.00	0.00
2,600.00	2.00	241.01	2,598.61	-50.33	-33.11	53.65	0.00	0.00	0.00
2,700.00	2.00	241.01	2,698.55	-52.02	-36.16	57.14	0.00	0.00	0.00
2,800.00	2.00	241.01	2,798.49	-53.72	-39.21	60.63	0.00	0.00	0.00
2,900.00	2.00	241.01	2,898.43	-55.41	-42.27	64.11	0.00	0.00	0.00
2,913.58	2.00	241.01	2,912.00	-55.64	-42.68	64.59	0.00	0.00	0.00
WASATCH									
3,000.00	2.00	241.01	2,998.37	-57.10	-45.32	67.60	0.00	0.00	0.00
3,001.64	2.00	241.01	3,000.00	-57.13	-45.37	67.66	0.00	0.00	0.00
Start DLS 2.00 TFO 0.01									
3,100.00	3.97	241.01	3,098.23	-59.61	-49.85	72.78	2.00	2.00	0.00
3,200.00	5.97	241.01	3,197.85	-63.80	-57.42	81.44	2.00	2.00	0.00
3,300.00	7.97	241.01	3,297.10	-69.68	-68.03	93.57	2.00	2.00	0.00
3,400.00	9.97	241.01	3,395.87	-77.23	-81.66	109.15	2.00	2.00	0.00
3,500.00	11.97	241.01	3,494.04	-86.45	-98.30	128.18	2.00	2.00	0.00
3,509.12	12.15	241.01	3,502.96	-87.38	-99.97	130.08	2.00	2.00	0.00
Start 11566.17 hold at 3509.12 MD									
3,600.00	12.15	241.01	3,591.81	-96.64	-116.70	149.21	0.00	0.00	0.00
3,700.00	12.15	241.01	3,689.57	-106.84	-135.11	170.25	0.00	0.00	0.00
3,800.00	12.15	241.01	3,787.33	-117.04	-153.52	191.30	0.00	0.00	0.00

Database:	Compass	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Company:	BILL BARRETT CORP	**TVD Reference:**	KB @ 7554.50ft
Project:	CARBON COUNTY, UT (NAD 27)	**MD Reference:**	KB @ 7554.50ft
Site:	SECTION 21 T12S R15E	**North Reference:**	True
Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PR PR #4-28-12-15 DEEP		
Design:	Design #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,900.00	12.15	241.01	3,885.09	-127.24	-171.93	212.34	0.00	0.00	0.00
4,000.00	12.15	241.01	3,982.85	-137.44	-190.34	233.39	0.00	0.00	0.00
4,100.00	12.15	241.01	4,080.61	-147.64	-208.75	254.43	0.00	0.00	0.00
4,200.00	12.15	241.01	4,178.37	-157.84	-227.16	275.48	0.00	0.00	0.00
4,300.00	12.15	241.01	4,276.13	-168.04	-245.57	296.52	0.00	0.00	0.00
4,400.00	12.15	241.01	4,373.89	-178.24	-263.99	317.57	0.00	0.00	0.00
4,500.00	12.15	241.01	4,471.65	-188.43	-282.40	338.62	0.00	0.00	0.00
4,600.00	12.15	241.01	4,569.41	-198.63	-300.81	359.66	0.00	0.00	0.00
4,700.00	12.15	241.01	4,667.17	-208.83	-319.22	380.71	0.00	0.00	0.00
4,800.00	12.15	241.01	4,764.93	-219.03	-337.63	401.75	0.00	0.00	0.00
4,888.04	12.15	241.01	4,851.00	-228.01	-353.84	420.28	0.00	0.00	0.00
NORTH HORN									
4,900.00	12.15	241.01	4,862.69	-229.23	-356.04	422.80	0.00	0.00	0.00
5,000.00	12.15	241.01	4,960.45	-239.43	-374.45	443.84	0.00	0.00	0.00
5,100.00	12.15	241.01	5,058.21	-249.63	-392.86	464.89	0.00	0.00	0.00
5,200.00	12.15	241.01	5,155.97	-259.83	-411.27	485.93	0.00	0.00	0.00
5,300.00	12.15	241.01	5,253.73	-270.03	-429.68	506.98	0.00	0.00	0.00
5,400.00	12.15	241.01	5,351.49	-280.22	-448.09	528.02	0.00	0.00	0.00
5,500.00	12.15	241.01	5,449.25	-290.42	-466.50	549.07	0.00	0.00	0.00
5,600.00	12.15	241.01	5,547.01	-300.62	-484.91	570.11	0.00	0.00	0.00
5,700.00	12.15	241.01	5,644.77	-310.82	-503.32	591.16	0.00	0.00	0.00
5,800.00	12.15	241.01	5,742.53	-321.02	-521.73	612.20	0.00	0.00	0.00
5,900.00	12.15	241.01	5,840.29	-331.22	-540.14	633.25	0.00	0.00	0.00
6,000.00	12.15	241.01	5,938.05	-341.42	-558.55	654.30	0.00	0.00	0.00
6,100.00	12.15	241.01	6,035.81	-351.62	-576.96	675.34	0.00	0.00	0.00
6,200.00	12.15	241.01	6,133.57	-361.82	-595.37	696.39	0.00	0.00	0.00
6,300.00	12.15	241.01	6,231.33	-372.01	-613.78	717.43	0.00	0.00	0.00
6,400.00	12.15	241.01	6,329.09	-382.21	-632.19	738.48	0.00	0.00	0.00
6,500.00	12.15	241.01	6,426.85	-392.41	-650.60	759.52	0.00	0.00	0.00
6,600.00	12.15	241.01	6,524.61	-402.61	-669.01	780.57	0.00	0.00	0.00
6,649.50	12.15	241.01	6,573.00	-407.66	-678.13	790.98	0.00	0.00	0.00
DARK CANYON									
6,700.00	12.15	241.01	6,622.37	-412.81	-687.42	801.61	0.00	0.00	0.00
6,800.00	12.15	241.01	6,720.13	-423.01	-705.83	822.66	0.00	0.00	0.00
6,853.06	12.15	241.01	6,772.00	-428.42	-715.60	833.82	0.00	0.00	0.00
PRICE RIVER									
6,900.00	12.15	241.01	6,817.89	-433.21	-724.24	843.70	0.00	0.00	0.00
7,000.00	12.15	241.01	6,915.65	-443.41	-742.65	864.75	0.00	0.00	0.00
7,100.00	12.15	241.01	7,013.41	-453.61	-761.06	885.79	0.00	0.00	0.00
7,200.00	12.15	241.01	7,111.17	-463.80	-779.47	906.84	0.00	0.00	0.00
7,217.21	12.15	241.01	7,128.00	-465.56	-782.64	910.46	0.00	0.00	0.00
PRICE RIVER 6840 SAND									
7,243.81	12.15	241.01	7,154.00	-468.27	-787.54	916.06	0.00	0.00	0.00
PRICE RIVER 6840 BASE									
7,300.00	12.15	241.01	7,208.93	-474.00	-797.88	927.89	0.00	0.00	0.00
7,400.00	12.15	241.01	7,306.69	-484.20	-816.29	948.93	0.00	0.00	0.00
7,500.00	12.15	241.01	7,404.45	-494.40	-834.71	969.98	0.00	0.00	0.00
7,600.00	12.15	241.01	7,502.21	-504.60	-853.12	991.02	0.00	0.00	0.00
7,700.00	12.15	241.01	7,599.97	-514.80	-871.53	1,012.07	0.00	0.00	0.00
7,800.00	12.15	241.01	7,697.73	-525.00	-889.94	1,033.11	0.00	0.00	0.00
7,900.00	12.15	241.01	7,795.49	-535.20	-908.35	1,054.16	0.00	0.00	0.00
7,928.14	12.15	241.01	7,823.00	-538.07	-913.53	1,060.08	0.00	0.00	0.00
BLUECASTLE									

Database:	Compass	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Company:	BILL BARRETT CORP	**TVD Reference:**	KB @ 7554.50ft
Project:	CARBON COUNTY, UT (NAD 27)	**MD Reference:**	KB @ 7554.50ft
Site:	SECTION 21 T12S R15E	**North Reference:**	True
Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PR PR #4-28-12-15 DEEP		
Design:	Design #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,000.00	12.15	241.01	7,893.25	-545.40	-926.76	1,075.20	0.00	0.00	0.00
8,100.00	12.15	241.01	7,991.01	-555.59	-945.17	1,096.25	0.00	0.00	0.00
8,200.00	12.15	241.01	8,088.77	-565.79	-963.58	1,117.29	0.00	0.00	0.00
8,256.49	12.15	241.01	8,144.00	-571.55	-973.98	1,129.18	0.00	0.00	0.00
NELSEN									
8,300.00	12.15	241.01	8,186.53	-575.99	-981.99	1,138.34	0.00	0.00	0.00
8,400.00	12.15	241.01	8,284.29	-586.19	-1,000.40	1,159.38	0.00	0.00	0.00
8,500.00	12.15	241.01	8,382.05	-596.39	-1,018.81	1,180.43	0.00	0.00	0.00
8,600.00	12.15	241.01	8,479.81	-606.59	-1,037.22	1,201.47	0.00	0.00	0.00
8,656.45	12.15	241.01	8,535.00	-612.35	-1,047.61	1,213.36	0.00	0.00	0.00
CASTLEGATE									
8,700.00	12.15	241.01	8,577.57	-616.79	-1,055.63	1,222.52	0.00	0.00	0.00
8,800.00	12.15	241.01	8,675.33	-626.99	-1,074.04	1,243.57	0.00	0.00	0.00
8,890.70	12.15	241.01	8,764.00	-636.24	-1,090.74	1,262.65	0.00	0.00	0.00
BLACKHAWK									
8,900.00	12.15	241.01	8,773.09	-637.19	-1,092.45	1,264.61	0.00	0.00	0.00
9,000.00	12.15	241.01	8,870.85	-647.38	-1,110.86	1,285.66	0.00	0.00	0.00
9,100.00	12.15	241.01	8,968.61	-657.58	-1,129.27	1,306.70	0.00	0.00	0.00
9,186.32	12.15	241.01	9,053.00	-666.39	-1,145.16	1,324.87	0.00	0.00	0.00
KENILWORTH									
9,200.00	12.15	241.01	9,066.37	-667.78	-1,147.68	1,327.75	0.00	0.00	0.00
9,300.00	12.15	241.01	9,164.13	-677.98	-1,166.09	1,348.79	0.00	0.00	0.00
9,352.03	12.15	241.01	9,215.00	-683.29	-1,175.67	1,359.74	0.00	0.00	0.00
ABERDEEEN									
9,400.00	12.15	241.01	9,261.89	-688.18	-1,184.50	1,369.84	0.00	0.00	0.00
9,500.00	12.15	241.01	9,359.65	-698.38	-1,202.91	1,390.88	0.00	0.00	0.00
9,582.19	12.15	241.01	9,440.00	-706.76	-1,218.04	1,408.18	0.00	0.00	0.00
MANCOS									
9,600.00	12.15	241.01	9,457.41	-708.58	-1,221.32	1,411.93	0.00	0.00	0.00
9,645.61	12.15	241.01	9,502.00	-713.23	-1,229.72	1,421.53	0.00	0.00	0.00
MANCOS B									
9,700.00	12.15	241.01	9,555.17	-718.78	-1,239.73	1,432.97	0.00	0.00	0.00
9,800.00	12.15	241.01	9,652.93	-728.98	-1,258.14	1,454.02	0.00	0.00	0.00
9,900.00	12.15	241.01	9,750.69	-739.17	-1,276.55	1,475.06	0.00	0.00	0.00
10,000.00	12.15	241.01	9,848.45	-749.37	-1,294.96	1,496.11	0.00	0.00	0.00
10,100.00	12.15	241.01	9,946.22	-759.57	-1,313.37	1,517.15	0.00	0.00	0.00
10,200.00	12.15	241.01	10,043.98	-769.77	-1,331.78	1,538.20	0.00	0.00	0.00
10,300.00	12.15	241.01	10,141.74	-779.97	-1,350.19	1,559.25	0.00	0.00	0.00
10,400.00	12.15	241.01	10,239.50	-790.17	-1,368.60	1,580.29	0.00	0.00	0.00
10,500.00	12.15	241.01	10,337.26	-800.37	-1,387.01	1,601.34	0.00	0.00	0.00
10,600.00	12.15	241.01	10,435.02	-810.57	-1,405.43	1,622.38	0.00	0.00	0.00
10,700.00	12.15	241.01	10,532.78	-820.77	-1,423.84	1,643.43	0.00	0.00	0.00
10,800.00	12.15	241.01	10,630.54	-830.96	-1,442.25	1,664.47	0.00	0.00	0.00
10,900.00	12.15	241.01	10,728.30	-841.16	-1,460.66	1,685.52	0.00	0.00	0.00
11,000.00	12.15	241.01	10,826.06	-851.36	-1,479.07	1,706.56	0.00	0.00	0.00
11,100.00	12.15	241.01	10,923.82	-861.56	-1,497.48	1,727.61	0.00	0.00	0.00
11,200.00	12.15	241.01	11,021.58	-871.76	-1,515.89	1,748.65	0.00	0.00	0.00
11,300.00	12.15	241.01	11,119.34	-881.96	-1,534.30	1,769.70	0.00	0.00	0.00
11,400.00	12.15	241.01	11,217.10	-892.16	-1,552.71	1,790.74	0.00	0.00	0.00
11,500.00	12.15	241.01	11,314.86	-902.36	-1,571.12	1,811.79	0.00	0.00	0.00
11,600.00	12.15	241.01	11,412.62	-912.56	-1,589.53	1,832.84	0.00	0.00	0.00
11,700.00	12.15	241.01	11,510.38	-922.75	-1,607.94	1,853.88	0.00	0.00	0.00
11,800.00	12.15	241.01	11,608.14	-932.95	-1,626.35	1,874.93	0.00	0.00	0.00

Database:	Compass	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Company:	BILL BARRETT CORP	**TVD Reference:**	KB @ 7554.50ft
Project:	CARBON COUNTY, UT (NAD 27)	**MD Reference:**	KB @ 7554.50ft
Site:	SECTION 21 T12S R15E	**North Reference:**	True
Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PR PR #4-28-12-15 DEEP		
Design:	Design #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
11,900.00	12.15	241.01	11,705.90	-943.15	-1,644.76	1,895.97	0.00	0.00	0.00
12,000.00	12.15	241.01	11,803.66	-953.35	-1,663.17	1,917.02	0.00	0.00	0.00
12,100.00	12.15	241.01	11,901.42	-963.55	-1,681.58	1,938.06	0.00	0.00	0.00
12,200.00	12.15	241.01	11,999.18	-973.75	-1,699.99	1,959.11	0.00	0.00	0.00
12,300.00	12.15	241.01	12,096.94	-983.95	-1,718.40	1,980.15	0.00	0.00	0.00
12,400.00	12.15	241.01	12,194.70	-994.15	-1,736.81	2,001.20	0.00	0.00	0.00
12,500.00	12.15	241.01	12,292.46	-1,004.34	-1,755.22	2,022.24	0.00	0.00	0.00
12,600.00	12.15	241.01	12,390.22	-1,014.54	-1,773.63	2,043.29	0.00	0.00	0.00
12,700.00	12.15	241.01	12,487.98	-1,024.74	-1,792.04	2,064.33	0.00	0.00	0.00
12,800.00	12.15	241.01	12,585.74	-1,034.94	-1,810.45	2,085.38	0.00	0.00	0.00
12,900.00	12.15	241.01	12,683.50	-1,045.14	-1,828.86	2,106.42	0.00	0.00	0.00
13,000.00	12.15	241.01	12,781.26	-1,055.34	-1,847.27	2,127.47	0.00	0.00	0.00
13,100.00	12.15	241.01	12,879.02	-1,065.54	-1,865.68	2,148.52	0.00	0.00	0.00
13,200.00	12.15	241.01	12,976.78	-1,075.74	-1,884.09	2,169.56	0.00	0.00	0.00
13,300.00	12.15	241.01	13,074.54	-1,085.94	-1,902.50	2,190.61	0.00	0.00	0.00
13,400.00	12.15	241.01	13,172.30	-1,096.13	-1,920.91	2,211.65	0.00	0.00	0.00
13,500.00	12.15	241.01	13,270.06	-1,106.33	-1,939.32	2,232.70	0.00	0.00	0.00
13,586.89	12.15	241.01	13,355.00	-1,115.20	-1,955.32	2,250.98	0.00	0.00	0.00
JUANA LOPEZ									
13,600.00	12.15	241.01	13,367.82	-1,116.53	-1,957.73	2,253.74	0.00	0.00	0.00
13,700.00	12.15	241.01	13,465.58	-1,126.73	-1,976.14	2,274.79	0.00	0.00	0.00
13,788.40	12.15	241.01	13,552.00	-1,135.75	-1,992.42	2,293.39	0.00	0.00	0.00
DAKOTA SILT									
13,800.00	12.15	241.01	13,563.34	-1,136.93	-1,994.56	2,295.83	0.00	0.00	0.00
13,900.00	12.15	241.01	13,661.10	-1,147.13	-2,012.97	2,316.88	0.00	0.00	0.00
13,907.06	12.15	241.01	13,668.00	-1,147.85	-2,014.27	2,318.36	0.00	0.00	0.00
DAKOTA									
14,000.00	12.15	241.01	13,758.86	-1,157.33	-2,031.38	2,337.92	0.00	0.00	0.00
14,020.60	12.15	241.01	13,779.00	-1,159.43	-2,035.17	2,342.26	0.00	0.00	0.00
CEDAR MTN									
14,100.00	12.15	241.01	13,856.62	-1,167.53	-2,049.79	2,358.97	0.00	0.00	0.00
14,145.40	12.15	241.01	13,901.00	-1,172.16	-2,058.14	2,368.52	0.00	0.00	0.00
MORRISON									
14,200.00	12.15	241.01	13,954.38	-1,177.73	-2,068.20	2,380.01	0.00	0.00	0.00
14,300.00	12.15	241.01	14,052.14	-1,187.92	-2,086.61	2,401.06	0.00	0.00	0.00
14,400.00	12.15	241.01	14,149.90	-1,198.12	-2,105.02	2,422.11	0.00	0.00	0.00
14,500.00	12.15	241.01	14,247.66	-1,208.32	-2,123.43	2,443.15	0.00	0.00	0.00
14,600.00	12.15	241.01	14,345.42	-1,218.52	-2,141.84	2,464.20	0.00	0.00	0.00
14,700.00	12.15	241.01	14,443.18	-1,228.72	-2,160.25	2,485.24	0.00	0.00	0.00
14,800.00	12.15	241.01	14,540.94	-1,238.92	-2,178.66	2,506.29	0.00	0.00	0.00
14,900.00	12.15	241.01	14,638.70	-1,249.12	-2,197.07	2,527.33	0.00	0.00	0.00
14,962.70	12.15	241.01	14,700.00	-1,255.51	-2,208.61	2,540.53	0.00	0.00	0.00
CURTIS									
15,000.00	12.15	241.01	14,736.46	-1,259.32	-2,215.48	2,548.38	0.00	0.00	0.00
15,075.28	12.15	241.01	14,810.06	-1,267.00	-2,229.34	2,564.22	0.00	0.00	0.00
Start Drop -2.00									
15,100.00	11.66	241.01	14,834.24	-1,269.47	-2,233.80	2,569.32	2.00	-2.00	0.00
15,131.37	11.03	241.01	14,865.00	-1,272.45	-2,239.19	2,575.49	2.00	-2.00	0.00
ENTRADA									
15,200.00	9.66	241.01	14,932.51	-1,278.42	-2,249.97	2,587.81	2.00	-2.00	0.00
15,300.00	7.66	241.01	15,031.37	-1,285.72	-2,263.13	2,602.85	2.00	-2.00	0.00
15,400.00	5.66	241.01	15,130.69	-1,291.33	-2,273.27	2,614.44	2.00	-2.00	0.00
15,404.33	5.57	241.01	15,135.00	-1,291.54	-2,273.64	2,614.87	2.00	-2.00	0.00

Database:	Compass	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Company:	BILL BARRETT CORP	**TVD Reference:**	KB @ 7554.50ft
Project:	CARBON COUNTY, UT (NAD 27)	**MD Reference:**	KB @ 7554.50ft
Site:	SECTION 21 T12S R15E	**North Reference:**	True
Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PR PR #4-28-12-15 DEEP		
Design:	Design #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
CARMEL									
15,500.00	3.66	241.01	15,230.36	-1,295.27	-2,280.37	2,622.56	2.00	-2.00	0.00
15,600.00	1.66	241.01	15,330.24	-1,297.51	-2,284.42	2,627.19	2.00	-2.00	0.00
15,682.77	0.00	0.00	15,413.00	-1,298.09	-2,285.47	2,628.39	2.00	-2.00	0.00
Start 387.00 hold at 15682.77 MD - NAVAJO									
15,700.00	0.00	0.00	15,430.23	-1,298.09	-2,285.47	2,628.39	0.00	0.00	0.00
15,800.00	0.00	0.00	15,530.23	-1,298.09	-2,285.47	2,628.39	0.00	0.00	0.00
15,900.00	0.00	0.00	15,630.23	-1,298.09	-2,285.47	2,628.39	0.00	0.00	0.00
15,910.77	0.00	0.00	15,641.00	-1,298.09	-2,285.47	2,628.39	0.00	0.00	0.00
KAYENTA									
15,993.77	0.00	0.00	15,724.00	-1,298.09	-2,285.47	2,628.39	0.00	0.00	0.00
WINGATE									
16,000.00	0.00	0.00	15,730.23	-1,298.09	-2,285.47	2,628.39	0.00	0.00	0.00
16,069.77	0.00	0.00	15,800.00	-1,298.09	-2,285.47	2,628.39	0.00	0.00	0.00
TD at 16069.77									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
1,000.42	1,000.00	9 5/8"	9-5/8	12-1/4

Database:	Compass	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Company:	BILL BARRETT CORP	**TVD Reference:**	KB @ 7554.50ft
Project:	CARBON COUNTY, UT (NAD 27)	**MD Reference:**	KB @ 7554.50ft
Site:	SECTION 21 T12S R15E	**North Reference:**	True
Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PR PR #4-28-12-15 DEEP		
Design:	Design #2		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,967.01	1,966.00	BLACK SHALE MARKER		0.00	
2,913.58	2,912.00	WASATCH		0.00	
4,888.04	4,851.00	NORTH HORN		0.00	
6,649.50	6,573.00	DARK CANYON		0.00	
6,853.06	6,772.00	PRICE RIVER		0.00	
7,217.21	7,128.00	PRICE RIVER 6840 SAND		0.00	
7,243.81	7,154.00	PRICE RIVER 6840 BASE		0.00	
7,928.14	7,823.00	BLUECASTLE		0.00	
8,256.49	8,144.00	NELSEN		0.00	
8,656.45	8,535.00	CASTLEGATE		0.00	
8,890.70	8,764.00	BLACKHAWK		0.00	
9,186.32	9,053.00	KENILWORTH		0.00	
9,352.03	9,215.00	ABERDEEEN		0.00	
9,582.19	9,440.00	MANCOS		0.00	
9,645.61	9,502.00	MANCOS B		0.00	
13,586.89	13,355.00	JUANA LOPEZ		0.00	
13,788.40	13,552.00	DAKOTA SILT		0.00	
13,907.06	13,668.00	DAKOTA		0.00	
14,020.60	13,779.00	CEDAR MTN		0.00	
14,145.40	13,901.00	MORRISON		0.00	
14,962.70	14,700.00	CURTIS		0.00	
15,131.37	14,865.00	ENTRADA		0.00	
15,404.33	15,135.00	CARMEL		0.00	
15,682.77	15,413.00	NAVAJO		0.00	
15,910.77	15,641.00	KAYENTA		0.00	
15,993.77	15,724.00	WINGATE		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
250.00	250.00	0.00	0.00	Start Build 2.00
350.00	349.98	-1.51	0.87	Start 650.00 hold at 350.00 MD
1,000.00	999.58	-21.16	12.21	Start Turn 57.25
1,158.97	1,158.46	-25.96	10.88	Start 1842.67 hold at 1158.97 MD
3,001.64	3,000.00	-57.13	-45.37	Start DLS 2.00 TFO 0.01
3,509.12	3,502.96	-87.38	-99.97	Start 11566.17 hold at 3509.12 MD
15,075.28	14,810.06	-1,267.00	-2,229.34	Start Drop -2.00
15,682.77	15,413.00	-1,298.09	-2,285.47	Start 387.00 hold at 15682.77 MD
16,069.77	15,800.00	-1,298.09	-2,285.47	TD at 16069.77

Bill Barrett Corporation

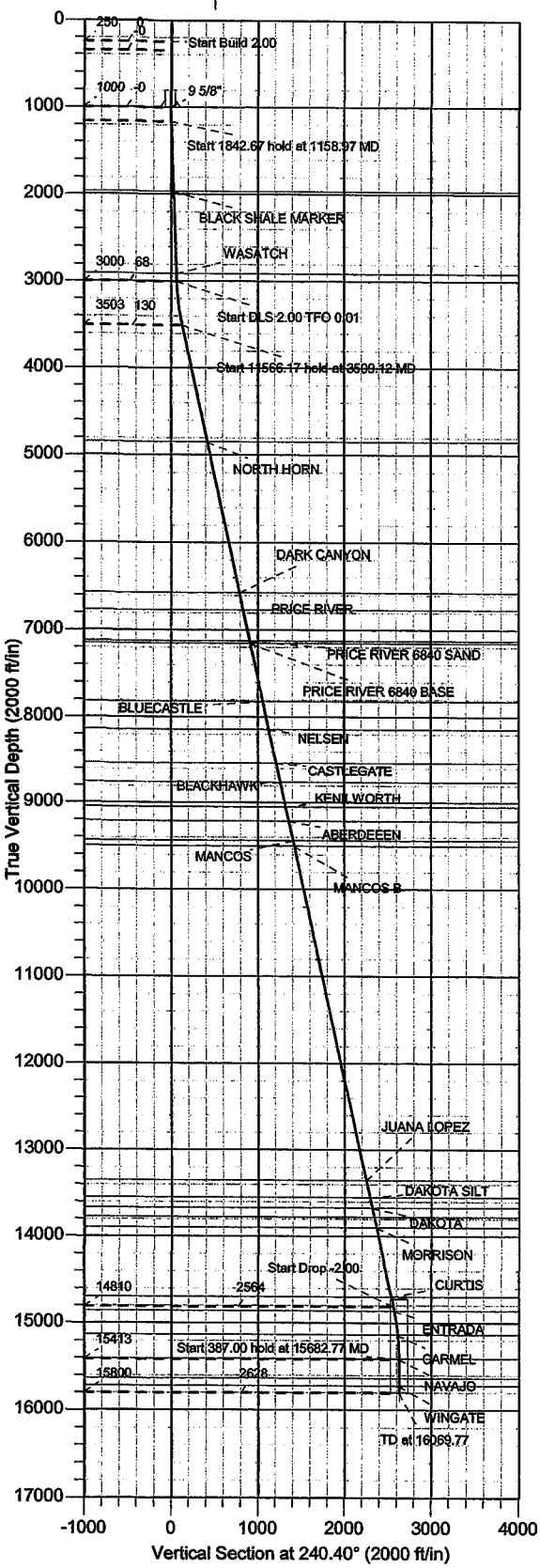
PR PR #4-28-12-15 DEEP
SECTION 21-T12S-R15E
382' FSL, 2371' FEL
CARBON COUNTY, UTAH
LAT: 39° 45' 10.660 N
LONG: 110° 14' 25.1000 W

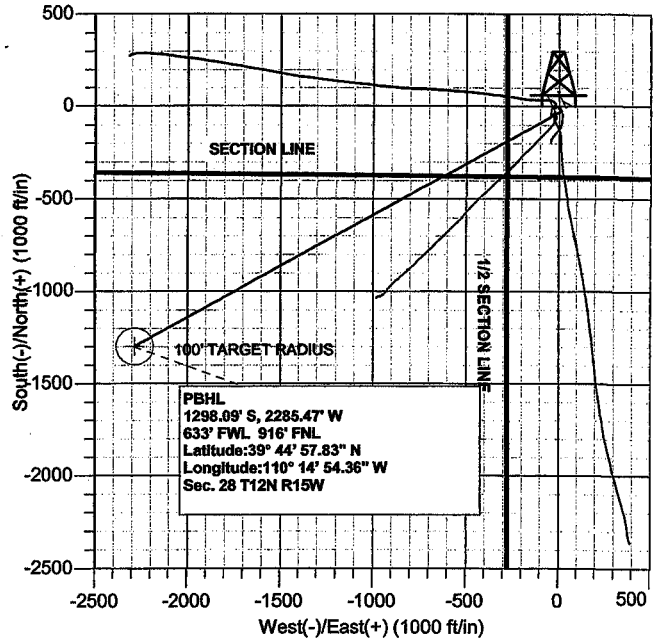
T M

Azimuths to True North
Magnetic North: 11.78°

Magnetic Field
Strength: 52388.0snT
Dip Angle: 65.60°
Date: 2/20/2008
Model: BGGM2007

KB ELEVATION KB @ 7554.50ft
GROUND ELEVATION 7530.50





SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	
3	350.00	2.00	150.00	349.98	-1.51	0.87	2.00	150.00	-0.01	
4	1000.00	2.00	150.00	999.58	-21.16	12.21	0.00	0.00	-0.17	
5	1158.97	2.00	241.01	1158.46	-25.96	10.88	2.00	90.00	3.36	
6	3001.64	2.00	241.01	3000.00	-57.13	-45.37	0.00	0.00	67.66	
7	3509.12	12.15	241.01	3502.96	-87.38	-99.97	2.00	0.01	130.08	
8	15075.28	12.15	241.01	14810.06	-1267.00	-2229.34	0.00	0.00	2564.22	
9	15682.77	0.00	0.00	15413.00	-1298.09	-2285.47	2.00	180.00	2628.39	
10	16069.77	0.00	0.00	15800.00	-1298.09	-2285.47	0.00	0.00	2628.39	PBHL_PR PR #4-28-12-15 DEEP

CASING DETAILS

TVD	MD	Name	Size
1000.00	1000.42	9 5/8"	9-5/8

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1966.00	1967.01	BLACK SHALE MARKER
2912.00	2913.58	WASATCH
4851.00	4888.04	NORTH HORN
6573.00	6649.50	DARK CANYON
6772.00	6853.06	PRICE RIVER
7128.00	7217.21	PRICE RIVER 6840 SAND
7154.00	7243.81	PRICE RIVER 6840 BASE
7823.00	7928.14	BLUECASTLE
8144.00	8256.49	NELSEN
8535.00	8656.45	CASTLEGATE
8764.00	8890.70	BLACKHAWK
9053.00	9186.32	KENILWORTH
9215.00	9352.03	ABERDEEEN
9440.00	9582.19	MANCOS
9502.00	9645.61	MANCOS B
13355.00	13586.89	JUANA LOPEZ
13552.00	13788.40	DAKOTA SILT
13668.00	13907.06	DAKOTA
13779.00	14020.60	CEDAR MTN
13901.00	14145.40	MORRISON
14700.00	14962.70	CURTIS
14865.00	15131.37	ENTRADA
15135.00	15404.33	CARMEL
15413.00	15682.77	NAVAJO
15641.00	15910.77	KAYENTA
15724.00	15993.77	WINGATE

Plan: Design #2 (PR PR #4-28-12-15 DEEP/PR PR #4-28-12-15 DEEP)

Created By: ROBERT H. SCOTT Date: 16:43, April 02 2008

Bill Barrett Corporation

BILL BARRETT CORP

CARBON COUNTY, UT (NAD 27)
SECTION 21 T12S R15E
PR PR #4-28-12-15 DEEP

PR PR #4-28-12-15 DEEP
Design #2

Anticollision Report

02 April, 2008

Bill Barrett Corporation

BILL BARRETT CORPORATION

Anticollision Report

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Reference	Design #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.00ft	**Error Model:**	ISCWSA
Depth Range:	0.00 to 20,000.00ft	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 4/2/2008

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	16,069.77	Design #2 (PR PR #4-28-12-15 DEEP)	MWD	MWD - Standard

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
SECTION 21 T12S R15E						
PR PR #13-21D-12-15 - 4008664 - 4008664	267.20	267.29	20.04	19.16	22.996	CC, ES
PR PR #13-21D-12-15 - 4008664 - 4008664	700.00	698.75	34.64	31.92	12.744	SF
PR PR #15-21-12-15 - 1 - 1	360.88	361.10	19.71	18.49	16.113	CC
PR PR #15-21-12-15 - 1 - 1	1,700.00	1,700.10	20.93	13.93	2.991	ES, SF
PR PR #3-28D-12-15 - PR PR #3-28D-12-15 - PR PR #3	1,671.99	1,670.89	20.42	15.09	3.832	CC, ES
PR PR #3-28D-12-15 - PR PR #3-28D-12-15 - PR PR #3	1,700.00	1,698.74	20.55	15.11	3.776	SF
PR PR #7-28D-12-15 - 1 - 1	0.00	0.00	47.04			
PR PR #7-28D-12-15 - 1 - 1	1,200.00	1,195.36	77.52	72.58	15.694	SF

Offset Design SECTION 21 T12S R15E - PR PR #13-21D-12-15 - 4008664 - 4008664

Offset Site Error: 0.00 ft

Survey Program: 120-MWD **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-74.12	5.66	-19.90	20.69				
100.00	100.00	100.05	100.05	0.09	0.09	-73.75	5.75	-19.74	20.57	20.39	0.18	117.290	
200.00	200.00	200.07	200.07	0.31	0.27	-72.85	5.98	-19.38	20.29	19.70	0.58	34.866	
250.00	250.00	250.09	250.09	0.42	0.38	-72.06	6.18	-19.10	20.07	19.28	0.80	25.120	
267.20	267.20	267.29	267.29	0.46	0.41	138.35	6.26	-18.99	20.04	19.16	0.87	22.996	CC, ES
300.00	300.00	300.09	300.08	0.52	0.49	139.72	6.43	-18.78	20.18	19.17	1.01	20.000	
350.00	349.98	350.06	350.05	0.62	0.60	143.08	6.73	-18.46	21.01	19.80	1.22	17.289	
400.00	399.95	400.00	399.99	0.72	0.71	147.10	7.15	-18.11	22.31	20.88	1.43	15.650	
500.00	499.89	499.85	499.83	0.93	0.92	154.59	8.37	-17.40	25.38	23.53	1.85	13.723	
600.00	599.83	599.50	599.47	1.15	1.13	160.71	10.06	-16.98	29.31	27.04	2.28	12.868	
700.00	699.77	698.75	698.68	1.38	1.35	165.76	12.72	-17.17	34.64	31.92	2.72	12.744	SF
800.00	799.71	797.67	797.50	1.61	1.57	169.02	16.76	-18.94	42.27	39.11	3.16	13.390	
900.00	899.64	896.49	896.14	1.84	1.79	169.80	21.26	-22.78	51.67	48.08	3.59	14.397	
1,000.00	999.58	994.90	994.24	2.07	2.02	168.61	25.79	-29.10	62.76	58.73	4.03	15.584	
1,100.00	1,099.52	1,094.22	1,093.13	2.29	2.25	110.23	29.89	-37.27	73.86	69.43	4.44	16.643	
1,158.97	1,158.46	1,152.97	1,151.60	2.40	2.39	75.95	31.74	-42.69	79.03	74.38	4.65	16.987	
1,200.00	1,199.46	1,193.85	1,192.28	2.48	2.49	75.38	32.82	-46.72	82.24	77.43	4.82	17.075	
1,300.00	1,299.40	1,293.30	1,291.11	2.69	2.75	73.40	34.79	-57.50	90.34	85.11	5.23	17.284	
1,400.00	1,399.34	1,393.11	1,390.21	2.89	3.01	70.83	35.59	-69.36	98.50	92.86	5.64	17.472	
1,500.00	1,499.28	1,492.70	1,489.04	3.11	3.28	68.11	35.49	-81.69	106.64	100.60	6.05	17.638	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Bill Barrett Corporation

BILL BARRETT CORPORATION

Anticollision Report

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #13-21D-12-15 - 4008664 - 4008664 — **Offset Site Error:** 0.00 ft

Survey Program: 120-MWD — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
1,600.00	1,599.22	1,591.02	1,586.46	3.32	3.56	65.33	34.96	-94.88	115.58	109.12	6.46	17.905	
1,700.00	1,699.16	1,686.16	1,680.39	3.54	3.87	62.42	34.43	-109.96	126.78	119.92	6.86	18.480	
1,800.00	1,799.10	1,779.00	1,771.30	3.76	4.21	59.24	34.17	-128.80	142.26	135.01	7.25	19.622	
1,900.00	1,899.04	1,870.69	1,860.23	3.98	4.59	56.40	34.96	-151.03	162.19	154.55	7.63	21.244	
2,000.00	1,998.97	1,960.25	1,946.25	4.21	5.01	54.27	37.47	-175.84	186.41	178.40	8.01	23.274	
2,100.00	2,098.91	2,049.27	2,030.80	4.43	5.50	52.61	41.28	-203.44	214.47	206.13	8.35	25.696	
2,200.00	2,198.85	2,137.52	2,113.70	4.66	6.03	51.27	45.88	-233.32	245.71	237.04	8.67	28.334	
2,300.00	2,298.79	2,223.56	2,193.59	4.89	6.61	50.14	50.91	-264.86	279.92	270.99	8.92	31.372	
2,400.00	2,398.73	2,308.79	2,271.80	5.11	7.24	49.06	55.69	-298.39	316.69	307.56	9.14	34.662	
2,500.00	2,498.67	2,395.67	2,350.77	5.34	7.92	48.01	60.23	-334.32	355.40	346.13	9.26	38.378	
2,600.00	2,598.61	2,473.43	2,420.53	5.57	8.59	47.12	64.16	-368.43	396.57	387.17	9.40	42.203	
2,700.00	2,698.55	2,561.68	2,498.90	5.80	9.39	46.23	68.75	-408.76	439.63	430.20	9.43	46.606	
2,800.00	2,798.49	2,657.01	2,583.58	6.03	10.20	45.39	73.29	-452.28	482.64	473.30	9.33	51.707	
2,900.00	2,898.43	2,761.15	2,677.03	6.26	11.02	44.60	77.44	-498.06	523.85	514.88	8.96	58.441	
3,000.00	2,998.37	2,856.02	2,762.80	6.49	11.76	44.01	80.99	-538.46	563.70	554.89	8.81	64.010	
3,001.64	3,000.00	2,857.80	2,764.40	6.50	11.77	44.00	81.06	-539.21	564.34	555.55	8.79	64.192	
3,100.00	3,098.23	2,936.92	2,835.94	6.73	12.44	43.08	83.85	-572.91	602.47	594.04	8.43	71.448	
3,200.00	3,197.85	3,021.73	2,911.59	6.98	13.20	42.38	87.13	-611.10	641.32	633.96	7.36	87.154	
3,300.00	3,297.10	3,106.76	2,987.14	7.25	13.98	41.83	89.57	-650.04	678.36	663.53	14.82	45.759	
3,400.00	3,395.87	3,200.81	3,070.39	7.55	14.86	41.45	91.57	-693.74	713.49	698.10	15.39	46.366	
3,500.00	3,494.04	3,301.13	3,159.26	7.87	15.77	41.27	93.29	-740.25	745.98	730.00	15.98	46.680	
3,509.12	3,502.96	3,311.39	3,168.38	7.90	15.86	41.27	93.45	-744.95	748.76	732.73	16.04	46.686	
3,600.00	3,591.81	3,402.96	3,250.05	8.21	16.65	41.61	94.80	-786.33	775.78	759.18	16.60	46.731	
3,700.00	3,689.57	3,484.69	3,322.75	8.56	17.40	41.96	97.04	-823.61	806.32	789.14	17.18	46.946	
3,800.00	3,787.33	3,574.51	3,402.32	8.92	18.23	42.35	100.17	-865.16	837.76	819.97	17.79	47.090	
3,900.00	3,885.09	3,671.48	3,488.02	9.30	19.13	42.81	104.53	-910.32	869.83	851.39	18.44	47.179	
4,000.00	3,982.85	3,767.59	3,573.26	9.68	20.02	43.21	108.51	-954.54	901.24	882.16	19.08	47.227	
4,100.00	4,080.61	3,855.77	3,651.29	10.06	20.85	43.60	112.88	-995.37	933.25	913.52	19.72	47.316	
4,200.00	4,178.37	3,947.16	3,731.98	10.46	21.74	43.98	117.61	-1,038.02	965.73	945.36	20.37	47.419	
4,300.00	4,276.13	4,042.63	3,816.11	10.86	22.66	44.34	122.42	-1,082.91	998.55	977.52	21.04	47.465	
4,400.00	4,373.89	4,133.38	3,896.19	11.26	23.54	44.64	126.55	-1,125.40	1,031.08	1,009.38	21.70	47.505	
4,500.00	4,471.65	4,230.71	3,981.92	11.67	24.48	44.98	131.85	-1,171.16	1,064.10	1,041.70	22.40	47.505	
4,600.00	4,569.41	4,327.21	4,067.22	12.09	25.40	45.32	137.38	-1,215.94	1,096.62	1,073.47	23.14	47.388	
4,700.00	4,667.17	4,424.21	4,153.14	12.50	26.31	45.73	144.40	-1,260.41	1,129.09	1,105.23	23.86	47.329	
4,800.00	4,764.93	4,535.90	4,252.44	12.92	27.36	46.15	151.75	-1,311.00	1,160.85	1,136.24	24.61	47.179	
4,900.00	4,862.69	4,651.03	4,355.62	13.35	28.39	46.52	157.88	-1,361.72	1,190.96	1,165.60	25.36	46.967	
5,000.00	4,960.45	4,756.00	4,450.30	13.77	29.31	46.86	163.73	-1,406.67	1,219.95	1,193.79	26.15	46.643	
5,100.00	5,058.21	4,848.32	4,533.82	14.20	30.10	47.24	170.42	-1,445.42	1,248.73	1,221.77	26.96	46.319	
5,200.00	5,155.97	4,949.39	4,625.35	14.63	30.97	47.71	179.40	-1,487.33	1,277.65	1,249.91	27.74	46.059	
5,300.00	5,253.73	5,054.13	4,720.51	15.06	31.86	48.16	188.04	-1,530.23	1,305.90	1,277.41	28.48	45.846	
5,400.00	5,351.49	5,165.78	4,822.31	15.50	32.79	48.60	196.62	-1,575.25	1,333.38	1,304.10	29.28	45.541	
5,500.00	5,449.25	5,281.84	4,928.91	15.93	33.71	49.02	204.63	-1,620.45	1,359.20	1,329.13	30.07	45.203	
5,600.00	5,547.01	5,358.04	4,998.82	16.37	34.33	49.29	209.83	-1,650.32	1,385.37	1,354.65	30.72	45.093	
5,700.00	5,644.77	5,430.04	5,064.34	16.81	34.94	49.51	214.74	-1,679.76	1,413.20	1,381.86	31.34	45.094	
5,800.00	5,742.53	5,518.00	5,143.93	17.25	35.71	49.77	221.11	-1,716.68	1,442.27	1,410.16	32.10	44.924	
5,900.00	5,840.29	5,603.50	5,221.08	17.69	36.47	50.02	227.60	-1,752.95	1,471.94	1,439.13	32.81	44.867	
6,000.00	5,938.05	5,721.28	5,327.69	18.14	37.49	50.35	236.24	-1,802.25	1,501.01	1,467.34	33.67	44.586	
6,100.00	6,035.81	5,816.98	5,414.62	18.58	38.30	50.61	243.19	-1,841.66	1,529.42	1,495.01	34.41	44.449	
6,200.00	6,133.57	5,916.53	5,504.90	19.03	39.16	50.83	249.41	-1,883.14	1,557.93	1,522.86	35.08	44.413	
6,300.00	6,231.33	6,053.52	5,629.96	19.47	40.29	51.12	257.19	-1,938.51	1,585.07	1,549.02	36.05	43.970	
6,400.00	6,329.09	6,142.86	5,712.09	19.92	41.01	51.32	262.17	-1,973.31	1,610.75	1,574.02	36.73	43.852	
6,500.00	6,426.85	6,245.39	5,806.02	20.37	41.84	51.52	267.57	-2,014.05	1,637.07	1,599.53	37.53	43.615	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

BILL BARRETT CORPORATION

Anticollision Report

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #13-21D-12-15 - 4008664 - 4008664

Survey Program: 120-MWD

Offset Site Error: 0.00 ft

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,600.00	6,524.61	6,350.64	5,902.85	20.82	42.68	51.75	273.39	-2,054.90	1,662.60	1,624.25	38.35	43.354	
6,700.00	6,622.37	6,542.16	6,081.47	21.27	44.06	52.17	282.15	-2,123.36	1,684.48	1,645.00	39.47	42.673	
6,800.00	6,720.13	6,758.72	6,287.77	21.72	45.36	52.71	289.33	-2,188.68	1,700.94	1,660.40	40.53	41.966	
6,900.00	6,817.89	7,059.01	6,580.95	22.17	46.63	53.60	291.52	-2,252.74	1,708.12	1,666.50	41.63	41.032	
7,000.00	6,915.65	7,201.37	6,721.79	22.62	47.05	54.09	290.75	-2,273.41	1,708.73	1,666.36	42.37	40.324	
7,100.00	7,013.41	7,383.81	6,903.10	23.07	47.47	54.76	287.51	-2,293.29	1,705.62	1,662.92	42.70	39.942	
7,200.00	7,111.17	7,546.02	7,064.98	23.52	47.71	55.46	283.86	-2,302.67	1,697.43	1,653.87	43.56	38.970	
7,300.00	7,208.93	7,648.19	7,167.08	23.97	47.83	55.98	282.56	-2,306.23	1,687.97	1,643.77	44.20	38.191	
7,400.00	7,306.69	7,749.98	7,268.80	24.43	47.95	56.49	281.17	-2,309.66	1,678.50	1,633.71	44.79	37.478	
7,500.00	7,404.45	7,849.22	7,367.97	24.88	48.06	56.99	279.54	-2,312.96	1,669.00	1,623.54	45.45	36.718	
7,600.00	7,502.21	7,946.42	7,465.11	25.33	48.14	57.49	277.94	-2,316.20	1,659.62	1,613.46	46.16	35.953	
7,700.00	7,599.97	7,946.42	7,465.11	25.79	48.14	57.49	277.94	-2,316.20	1,653.39	1,606.95	46.44	35.606	
7,753.28	7,652.06	7,946.42	7,465.11	26.03	48.14	57.49	277.94	-2,316.20	1,652.53	1,605.95	46.58	35.475	
7,800.00	7,697.73	7,946.42	7,465.11	26.24	48.14	57.49	277.94	-2,316.20	1,653.19	1,606.48	46.71	35.391	
7,900.00	7,795.49	7,946.42	7,465.11	26.70	48.14	57.49	277.94	-2,316.20	1,659.03	1,612.04	46.99	35.308	
8,000.00	7,893.25	7,946.42	7,465.11	27.15	48.14	57.49	277.94	-2,316.20	1,670.85	1,623.58	47.26	35.352	
8,100.00	7,991.01	7,946.42	7,465.11	27.61	48.14	57.49	277.94	-2,316.20	1,688.51	1,640.97	47.54	35.518	
8,200.00	8,088.77	7,946.42	7,465.11	28.07	48.14	57.49	277.94	-2,316.20	1,711.85	1,664.03	47.82	35.801	
8,300.00	8,186.53	7,946.42	7,465.11	28.52	48.14	57.49	277.94	-2,316.20	1,740.62	1,692.53	48.09	36.193	
8,400.00	8,284.29	7,946.42	7,465.11	28.98	48.14	57.49	277.94	-2,316.20	1,774.57	1,726.20	48.37	36.689	
8,500.00	8,382.05	7,946.42	7,465.11	29.44	48.14	57.49	277.94	-2,316.20	1,813.41	1,764.76	48.65	37.278	
8,600.00	8,479.81	7,946.42	7,465.11	29.89	48.14	57.49	277.94	-2,316.20	1,856.82	1,807.90	48.92	37.955	
8,700.00	8,577.57	7,946.42	7,465.11	30.35	48.14	57.49	277.94	-2,316.20	1,904.51	1,855.31	49.20	38.711	
8,800.00	8,675.33	7,946.42	7,465.11	30.81	48.14	57.49	277.94	-2,316.20	1,956.14	1,906.67	49.48	39.538	
8,900.00	8,773.09	7,946.42	7,465.11	31.27	48.14	57.49	277.94	-2,316.20	2,011.43	1,961.67	49.75	40.429	
9,000.00	8,870.85	7,946.42	7,465.11	31.72	48.14	57.49	277.94	-2,316.20	2,070.07	2,020.04	50.03	41.377	
9,100.00	8,968.61	7,946.42	7,465.11	32.18	48.14	57.49	277.94	-2,316.20	2,131.79	2,081.48	50.31	42.376	
9,200.00	9,066.37	7,946.42	7,465.11	32.64	48.14	57.49	277.94	-2,316.20	2,196.33	2,145.75	50.58	43.420	
9,300.00	9,164.13	7,946.42	7,465.11	33.10	48.14	57.49	277.94	-2,316.20	2,263.45	2,212.59	50.86	44.503	
9,400.00	9,261.89	7,946.42	7,465.11	33.56	48.14	57.49	277.94	-2,316.20	2,332.93	2,281.79	51.14	45.620	
9,500.00	9,359.65	7,946.42	7,465.11	34.02	48.14	57.49	277.94	-2,316.20	2,404.56	2,353.14	51.42	46.767	
9,600.00	9,457.41	7,946.42	7,465.11	34.48	48.14	57.49	277.94	-2,316.20	2,478.15	2,426.46	51.69	47.940	
9,700.00	9,555.17	7,946.42	7,465.11	34.94	48.14	57.49	277.94	-2,316.20	2,553.54	2,501.57	51.97	49.134	
9,800.00	9,652.93	7,946.42	7,465.11	35.40	48.14	57.49	277.94	-2,316.20	2,630.58	2,578.33	52.25	50.347	
9,900.00	9,750.69	7,946.42	7,465.11	35.86	48.14	57.49	277.94	-2,316.20	2,709.11	2,656.58	52.53	51.576	
10,000.00	9,848.45	7,946.42	7,465.11	36.32	48.14	57.49	277.94	-2,316.20	2,789.02	2,736.21	52.80	52.818	
10,100.00	9,946.22	7,946.42	7,465.11	36.78	48.14	57.49	277.94	-2,316.20	2,870.19	2,817.10	53.08	54.071	
10,200.00	10,043.98	7,946.42	7,465.11	37.24	48.14	57.49	277.94	-2,316.20	2,952.51	2,899.15	53.36	55.332	
10,300.00	10,141.74	7,946.42	7,465.11	37.70	48.14	57.49	277.94	-2,316.20	3,035.89	2,982.26	53.64	56.600	
10,400.00	10,239.50	7,946.42	7,465.11	38.16	48.14	57.49	277.94	-2,316.20	3,120.26	3,066.34	53.92	57.873	
10,500.00	10,337.26	7,946.42	7,465.11	38.62	48.14	57.49	277.94	-2,316.20	3,205.52	3,151.32	54.19	59.149	
10,600.00	10,435.02	7,946.42	7,465.11	39.08	48.14	57.49	277.94	-2,316.20	3,291.61	3,237.14	54.47	60.428	
10,700.00	10,532.78	7,946.42	7,465.11	39.54	48.14	57.49	277.94	-2,316.20	3,378.47	3,323.72	54.75	61.707	
10,800.00	10,630.54	7,946.42	7,465.11	40.00	48.14	57.49	277.94	-2,316.20	3,466.03	3,411.00	55.03	62.987	
10,900.00	10,728.30	7,946.42	7,465.11	40.46	48.14	57.49	277.94	-2,316.20	3,554.25	3,498.95	55.31	64.265	
11,000.00	10,826.06	7,946.42	7,465.11	40.92	48.14	57.49	277.94	-2,316.20	3,643.09	3,587.50	55.58	65.541	
11,100.00	10,923.82	7,946.42	7,465.11	41.38	48.14	57.49	277.94	-2,316.20	3,732.48	3,676.62	55.86	66.815	
11,200.00	11,021.58	7,946.42	7,465.11	41.84	48.14	57.49	277.94	-2,316.20	3,822.40	3,766.26	56.14	68.085	
11,300.00	11,119.34	7,946.42	7,465.11	42.30	48.14	57.49	277.94	-2,316.20	3,912.81	3,856.39	56.42	69.352	
11,400.00	11,217.10	7,946.42	7,465.11	42.76	48.14	57.49	277.94	-2,316.20	4,003.68	3,946.98	56.70	70.614	
11,500.00	11,314.86	7,946.42	7,465.11	43.23	48.14	57.49	277.94	-2,316.20	4,094.97	4,038.00	56.98	71.871	
11,600.00	11,412.62	7,946.42	7,465.11	43.69	48.14	57.49	277.94	-2,316.20	4,186.66	4,129.41	57.26	73.123	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #13-21D-12-15 - 4008664 - 4008664

Survey Program: 120-MWD

Offset Site Error: 0.00 ft

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
11,700.00	11,510.38	7,946.42	7,465.11	44.15	48.14	57.49	277.94	-2,316.20	4,278.72	4,221.19	57.53	74.369	
11,800.00	11,608.14	7,946.42	7,465.11	44.61	48.14	57.49	277.94	-2,316.20	4,371.14	4,313.32	57.81	75.609	
11,900.00	11,705.90	7,946.42	7,465.11	45.07	48.14	57.49	277.94	-2,316.20	4,463.87	4,405.78	58.09	76.843	
12,000.00	11,803.66	7,946.42	7,465.11	45.53	48.14	57.49	277.94	-2,316.20	4,556.92	4,498.55	58.37	78.070	
12,100.00	11,901.42	7,946.42	7,465.11	46.00	48.14	57.49	277.94	-2,316.20	4,650.25	4,591.61	58.65	79.290	
12,200.00	11,999.18	7,946.42	7,465.11	46.46	48.14	57.49	277.94	-2,316.20	4,743.86	4,684.93	58.93	80.504	
12,300.00	12,096.94	7,946.42	7,465.11	46.92	48.14	57.49	277.94	-2,316.20	4,837.72	4,778.52	59.21	81.710	
12,400.00	12,194.70	7,946.42	7,465.11	47.38	48.14	57.49	277.94	-2,316.20	4,931.82	4,872.34	59.48	82.909	
12,500.00	12,292.46	7,946.42	7,465.11	47.84	48.14	57.49	277.94	-2,316.20	5,026.16	4,966.39	59.76	84.100	
12,600.00	12,390.22	7,946.42	7,465.11	48.31	48.14	57.49	277.94	-2,316.20	5,120.70	5,060.66	60.04	85.284	
12,700.00	12,487.98	7,946.42	7,465.11	48.77	48.14	57.49	277.94	-2,316.20	5,215.45	5,155.13	60.32	86.461	
12,800.00	12,585.74	7,946.42	7,465.11	49.23	48.14	57.49	277.94	-2,316.20	5,310.39	5,249.79	60.60	87.629	
12,900.00	12,683.50	7,946.42	7,465.11	49.69	48.14	57.49	277.94	-2,316.20	5,405.52	5,344.64	60.88	88.790	
13,000.00	12,781.26	7,946.42	7,465.11	50.15	48.14	57.49	277.94	-2,316.20	5,500.81	5,439.66	61.16	89.944	
13,100.00	12,879.02	7,946.42	7,465.11	50.62	48.14	57.49	277.94	-2,316.20	5,596.28	5,534.84	61.44	91.089	
13,200.00	12,976.78	7,946.42	7,465.11	51.08	48.14	57.49	277.94	-2,316.20	5,691.89	5,630.18	61.72	92.226	
13,300.00	13,074.54	7,946.42	7,465.11	51.54	48.14	57.49	277.94	-2,316.20	5,787.66	5,725.66	62.00	93.356	
13,400.00	13,172.30	7,946.42	7,465.11	52.00	48.14	57.49	277.94	-2,316.20	5,883.57	5,821.29	62.27	94.478	
13,500.00	13,270.06	7,946.42	7,465.11	52.47	48.14	57.49	277.94	-2,316.20	5,979.61	5,917.05	62.55	95.591	
13,600.00	13,367.82	7,946.42	7,465.11	52.93	48.14	57.49	277.94	-2,316.20	6,075.77	6,012.94	62.83	96.697	
13,700.00	13,465.58	7,946.42	7,465.11	53.39	48.14	57.49	277.94	-2,316.20	6,172.06	6,108.95	63.11	97.795	
13,800.00	13,563.34	7,946.42	7,465.11	53.85	48.14	57.49	277.94	-2,316.20	6,268.47	6,205.08	63.39	98.885	
13,900.00	13,661.10	7,946.42	7,465.11	54.32	48.14	57.49	277.94	-2,316.20	6,364.99	6,301.32	63.67	99.968	
14,000.00	13,758.86	7,946.42	7,465.11	54.78	48.14	57.49	277.94	-2,316.20	6,461.61	6,397.66	63.95	101.042	
14,100.00	13,856.62	7,946.42	7,465.11	55.24	48.14	57.49	277.94	-2,316.20	6,558.33	6,494.11	64.23	102.109	
14,200.00	13,954.38	7,946.42	7,465.11	55.71	48.14	57.49	277.94	-2,316.20	6,655.16	6,590.65	64.51	103.168	
14,300.00	14,052.14	7,946.42	7,465.11	56.17	48.14	57.49	277.94	-2,316.20	6,752.07	6,687.28	64.79	104.219	
14,400.00	14,149.90	7,946.42	7,465.11	56.63	48.14	57.49	277.94	-2,316.20	6,849.07	6,784.01	65.07	105.262	
14,500.00	14,247.66	7,946.42	7,465.11	57.09	48.14	57.49	277.94	-2,316.20	6,946.16	6,880.81	65.35	106.298	
14,600.00	14,345.42	7,946.42	7,465.11	57.56	48.14	57.49	277.94	-2,316.20	7,043.33	6,977.70	65.63	107.326	
14,700.00	14,443.18	7,946.42	7,465.11	58.02	48.14	57.49	277.94	-2,316.20	7,140.58	7,074.67	65.90	108.347	
14,800.00	14,540.94	7,946.42	7,465.11	58.48	48.14	57.49	277.94	-2,316.20	7,237.90	7,171.71	66.18	109.360	
14,900.00	14,638.70	7,946.42	7,465.11	58.95	48.14	57.49	277.94	-2,316.20	7,335.29	7,268.83	66.46	110.366	
15,000.00	14,736.46	7,946.42	7,465.11	59.41	48.14	57.49	277.94	-2,316.20	7,432.76	7,366.01	66.74	111.364	
15,075.28	14,810.06	7,946.42	7,465.11	59.76	48.14	57.49	277.94	-2,316.20	7,506.17	7,439.22	66.95	112.111	
15,100.00	14,834.24	7,946.42	7,465.11	59.86	48.14	59.37	277.94	-2,316.20	7,530.30	7,461.80	68.50	109.937	
15,200.00	14,932.51	7,946.42	7,465.11	60.16	48.14	67.89	277.94	-2,316.20	7,628.16	7,571.40	56.76	134.402	
15,300.00	15,031.37	7,946.42	7,465.11	60.43	48.14	77.73	277.94	-2,316.20	7,726.33	7,659.00	67.33	114.756	
15,400.00	15,130.69	7,946.42	7,465.11	60.65	48.14	88.52	277.94	-2,316.20	7,824.68	7,749.70	74.98	104.360	
15,500.00	15,230.36	7,946.42	7,465.11	60.84	48.14	99.55	277.94	-2,316.20	7,923.09	7,843.82	79.27	99.951	
15,600.00	15,330.24	7,946.42	7,465.11	60.98	48.14	110.03	277.94	-2,316.20	8,021.43	7,941.28	80.16	100.072	
15,682.77	15,413.00	7,946.42	7,465.11	61.08	48.14	-1.12	277.94	-2,316.20	8,102.70	7,998.36	104.34	77.657	
15,700.00	15,430.23	7,946.42	7,465.11	61.10	48.14	-1.12	277.94	-2,316.20	8,119.61	8,015.25	104.36	77.804	
15,800.00	15,530.23	7,946.42	7,465.11	61.21	48.14	-1.12	277.94	-2,316.20	8,217.73	8,113.25	104.47	78.657	
15,900.00	15,630.23	7,946.42	7,465.11	61.31	48.14	-1.12	277.94	-2,316.20	8,315.89	8,211.30	104.59	79.509	
16,000.00	15,730.23	7,946.42	7,465.11	61.42	48.14	-1.12	277.94	-2,316.20	8,414.10	8,309.39	104.71	80.358	
16,069.77	15,800.00	7,946.42	7,465.11	61.49	48.14	-1.12	277.94	-2,316.20	8,482.64	8,377.85	104.79	80.949	

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #15-21-12-15 - 1 - 1

Survey Program: 150-MWD

Offset Site Error: 0.00 ft

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-116.88	-10.35	-20.42	22.90				
100.00	100.00	100.21	100.21	0.09	0.10	-115.99	-9.83	-20.16	22.43	22.25	0.18	124.306	
200.00	200.00	200.30	200.28	0.31	0.25	-113.37	-8.40	-19.45	21.19	20.63	0.56	38.011	
250.00	250.00	250.29	250.26	0.42	0.35	-111.85	-7.64	-19.06	20.54	19.77	0.77	26.535	
300.00	300.00	300.27	300.24	0.52	0.46	100.96	-6.90	-18.67	19.99	19.01	0.98	20.395	
350.00	349.98	350.23	350.20	0.62	0.56	106.34	-6.17	-18.28	19.72	18.54	1.18	16.731	
360.88	360.86	361.10	361.07	0.64	0.59	107.78	-6.02	-18.20	19.71	18.49	1.22	16.113	CC
400.00	399.95	400.18	400.14	0.72	0.67	112.94	-5.46	-17.90	19.79	18.41	1.38	14.298	
500.00	499.89	500.08	500.03	0.93	0.88	125.45	-4.08	-17.12	20.70	18.89	1.81	11.450	
600.00	599.83	600.01	599.94	1.15	1.10	136.12	-2.84	-16.29	22.40	20.16	2.24	9.986	
700.00	699.77	699.96	699.88	1.38	1.31	144.68	-1.81	-15.38	24.61	21.93	2.68	9.181	
800.00	799.71	799.92	799.84	1.61	1.53	151.44	-0.97	-14.39	27.10	23.98	3.12	8.691	
900.00	899.64	899.90	899.81	1.84	1.75	156.79	-0.33	-13.33	29.72	26.17	3.56	8.357	
1,000.00	999.58	999.94	999.85	2.07	1.97	161.04	0.09	-12.19	32.36	28.37	3.99	8.106	
1,100.00	1,099.52	1,100.14	1,100.03	2.29	2.19	109.28	-0.14	-10.81	33.59	29.16	4.42	7.591	
1,158.97	1,158.46	1,159.21	1,159.09	2.40	2.32	79.67	-0.65	-9.87	32.73	28.07	4.67	7.013	
1,200.00	1,199.46	1,200.30	1,200.17	2.48	2.41	82.62	-1.18	-9.16	31.66	26.82	4.84	6.542	
1,300.00	1,299.40	1,300.43	1,300.26	2.69	2.64	90.44	-3.04	-7.22	28.83	23.56	5.27	5.471	
1,400.00	1,399.34	1,400.52	1,400.29	2.89	2.86	99.72	-5.72	-5.01	25.79	20.08	5.70	4.521	
1,500.00	1,499.28	1,500.43	1,500.12	3.11	3.08	111.42	-9.05	-2.56	22.90	16.77	6.13	3.734	
1,600.00	1,599.22	1,600.26	1,599.87	3.32	3.30	125.77	-12.42	-0.09	21.16	14.59	6.56	3.224	
1,664.31	1,663.49	1,664.47	1,664.01	3.46	3.43	135.88	-14.58	1.50	20.82	13.98	6.84	3.043	
1,700.00	1,699.16	1,700.10	1,699.61	3.54	3.51	141.53	-15.79	2.38	20.93	13.93	7.00	2.991	ES, SF
1,800.00	1,799.10	1,799.93	1,799.35	3.76	3.73	156.51	-19.14	4.87	22.27	14.83	7.44	2.994	
1,900.00	1,899.04	1,899.75	1,899.09	3.98	3.95	169.05	-22.49	7.37	24.93	17.05	7.88	3.164	
2,000.00	1,998.97	1,999.58	1,998.83	4.21	4.16	178.81	-25.84	9.89	28.54	20.23	8.32	3.432	
2,100.00	2,098.91	2,099.55	2,098.72	4.43	4.37	-173.85	-29.22	12.19	32.59	23.84	8.75	3.724	
2,200.00	2,198.85	2,199.57	2,198.65	4.66	4.58	-168.27	-32.70	14.06	36.61	27.43	9.18	3.988	
2,300.00	2,298.79	2,299.61	2,298.63	4.89	4.79	-163.83	-36.27	15.51	40.47	30.86	9.61	4.212	
2,400.00	2,398.73	2,399.69	2,398.64	5.11	4.99	-160.17	-39.92	16.54	44.10	34.06	10.04	4.394	
2,500.00	2,498.67	2,499.81	2,498.68	5.34	5.20	-157.02	-43.67	17.14	47.45	36.99	10.46	4.535	
2,600.00	2,598.61	2,599.88	2,598.67	5.57	5.41	-154.22	-47.50	17.33	50.52	39.62	10.89	4.637	
2,700.00	2,698.55	2,699.85	2,698.57	5.80	5.63	-151.63	-51.43	17.38	53.54	42.21	11.34	4.723	
2,800.00	2,798.49	2,799.82	2,798.46	6.03	5.85	-149.21	-55.48	17.35	56.59	44.81	11.78	4.803	
2,900.00	2,898.43	2,899.79	2,898.34	6.26	6.07	-146.92	-59.64	17.23	59.65	47.42	12.23	4.879	
3,000.00	2,998.37	2,999.76	2,998.22	6.49	6.29	-144.75	-63.91	17.03	62.72	50.05	12.67	4.951	
3,001.64	3,000.00	3,001.39	2,999.85	6.50	6.29	-144.72	-63.98	17.03	62.77	50.10	12.68	4.952	
3,100.00	3,098.23	3,099.69	3,098.05	6.73	6.51	-143.51	-68.30	16.75	67.17	54.06	13.10	5.126	
3,200.00	3,197.85	3,199.47	3,197.73	6.98	6.73	-143.92	-72.79	16.39	74.36	60.83	13.53	5.496	
3,300.00	3,297.10	3,299.00	3,297.15	7.25	6.95	-145.52	-77.38	15.95	84.33	70.39	13.95	6.047	
3,400.00	3,395.87	3,398.15	3,396.19	7.55	7.17	-147.79	-82.06	15.43	97.22	82.87	14.35	6.776	
3,500.00	3,494.04	3,496.83	3,494.76	7.87	7.38	-150.32	-86.83	14.83	113.14	98.41	14.73	7.682	
3,509.12	3,502.96	3,505.80	3,503.72	7.90	7.40	-150.55	-87.27	14.78	114.75	99.99	14.76	7.774	
3,600.00	3,591.81	3,595.21	3,593.01	8.21	7.60	-152.71	-91.70	14.16	130.96	115.81	15.15	8.644	
3,700.00	3,689.57	3,693.79	3,691.47	8.56	7.82	-154.55	-96.54	13.34	148.82	133.26	15.56	9.563	
3,800.00	3,787.33	3,792.44	3,790.01	8.92	8.03	-156.08	-101.18	12.29	166.59	150.63	15.96	10.438	
3,900.00	3,885.09	3,891.15	3,888.60	9.30	8.25	-157.39	-105.62	11.02	184.26	167.92	16.34	11.275	
4,000.00	3,982.85	3,989.90	3,987.26	9.68	8.46	-158.53	-109.85	9.52	201.81	185.11	16.71	12.080	
4,100.00	4,080.61	4,088.71	4,085.97	10.06	8.68	-159.56	-113.88	7.81	219.24	202.19	17.05	12.857	
4,200.00	4,178.37	4,187.57	4,184.73	10.46	8.90	-160.49	-117.71	5.86	236.54	219.16	17.38	13.611	
4,300.00	4,276.13	4,286.47	4,283.55	10.86	9.12	-161.35	-121.33	3.69	253.71	236.03	17.69	14.345	
4,400.00	4,373.89	4,385.42	4,382.41	11.26	9.33	-162.15	-124.75	1.30	270.76	252.78	17.98	15.060	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #15-21-12-15 - 1 - 1

Survey Program: 150-MWD

Offset Site Error: 0.00 ft

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,500.00	4,471.65	4,484.08	4,480.98	11.67	9.55	-162.91	-127.97	-1.28	287.69	269.41	18.28	15.738	
4,600.00	4,569.41	4,582.32	4,579.14	12.09	9.75	-163.59	-131.06	-3.84	304.72	286.11	18.60	16.379	
4,700.00	4,667.17	4,680.52	4,677.26	12.50	9.95	-164.22	-134.07	-6.32	321.86	302.93	18.92	17.008	
4,800.00	4,764.93	4,778.69	4,775.36	12.92	10.16	-164.80	-136.98	-8.75	339.12	319.88	19.24	17.625	
4,900.00	4,862.69	4,876.83	4,873.43	13.35	10.36	-165.33	-139.81	-11.12	356.49	336.93	19.55	18.231	
5,000.00	4,960.45	4,974.94	4,971.47	13.77	10.56	-165.82	-142.54	-13.42	373.97	354.10	19.86	18.828	
5,100.00	5,058.21	5,073.01	5,069.48	14.20	10.77	-166.28	-145.19	-15.66	391.55	371.39	20.17	19.415	
5,200.00	5,155.97	5,171.05	5,167.46	14.63	10.97	-166.71	-147.75	-17.83	409.25	388.78	20.47	19.993	
5,300.00	5,253.73	5,269.05	5,265.41	15.06	11.18	-167.11	-150.22	-19.94	427.05	406.28	20.77	20.565	
5,400.00	5,351.49	5,367.02	5,363.33	15.50	11.38	-167.49	-152.60	-22.00	444.95	423.89	21.06	21.130	
5,500.00	5,449.25	5,464.95	5,461.21	15.93	11.58	-167.84	-154.89	-23.98	462.96	441.61	21.35	21.689	
5,600.00	5,547.01	5,562.85	5,559.07	16.37	11.79	-168.18	-157.10	-25.91	481.07	459.44	21.63	22.243	
5,700.00	5,644.77	5,660.71	5,656.89	16.81	11.99	-168.50	-159.21	-27.77	499.27	477.37	21.90	22.793	
5,800.00	5,742.53	5,758.46	5,754.60	17.25	12.20	-168.81	-161.26	-29.56	517.59	495.35	22.24	23.272	
5,900.00	5,840.29	5,856.14	5,852.24	17.69	12.40	-169.09	-163.28	-31.24	536.02	513.40	22.62	23.699	
6,000.00	5,938.05	5,953.77	5,949.84	18.14	12.61	-169.35	-165.30	-32.81	554.58	531.56	23.02	24.096	
6,100.00	6,035.81	6,051.37	6,047.41	18.58	12.81	-169.59	-167.31	-34.27	573.25	549.81	23.44	24.461	
6,200.00	6,133.57	6,148.93	6,144.94	19.03	13.02	-169.81	-169.31	-35.62	592.04	568.16	23.88	24.793	
6,300.00	6,231.33	6,246.44	6,242.43	19.47	13.22	-170.02	-171.29	-36.86	610.94	586.59	24.35	25.088	
6,400.00	6,329.09	6,343.92	6,339.88	19.92	13.43	-170.21	-173.27	-37.99	629.96	605.10	24.85	25.347	
6,500.00	6,426.85	6,441.36	6,437.29	20.37	13.63	-170.39	-175.24	-39.01	649.09	623.70	25.39	25.567	
6,600.00	6,524.61	6,538.76	6,534.66	20.82	13.84	-170.55	-177.19	-39.92	668.33	642.38	25.95	25.750	
6,700.00	6,622.37	6,636.11	6,632.00	21.27	14.04	-170.70	-179.14	-40.73	687.69	661.13	26.56	25.896	
6,800.00	6,720.13	6,733.43	6,729.29	21.72	14.25	-170.85	-181.07	-41.42	707.15	679.96	27.19	26.009	
6,900.00	6,817.89	6,830.70	6,826.54	22.17	14.45	-170.98	-183.00	-42.00	726.73	698.87	27.85	26.092	
7,000.00	6,915.65	6,927.94	6,923.76	22.62	14.66	-171.10	-184.91	-42.48	746.41	717.87	28.54	26.150	
7,100.00	7,013.41	7,025.13	7,020.93	23.07	14.86	-171.22	-186.82	-42.84	766.21	736.95	29.26	26.190	
7,200.00	7,111.17	7,122.28	7,118.06	23.52	15.07	-171.32	-188.71	-43.10	786.11	756.13	29.98	26.217	
7,300.00	7,208.93	7,219.39	7,215.15	23.97	15.27	-171.42	-190.60	-43.25	806.12	775.40	30.72	26.239	
7,400.00	7,306.69	7,316.45	7,312.20	24.43	15.48	-171.52	-192.47	-43.29	826.24	794.78	31.46	26.263	
7,500.00	7,404.45	7,413.48	7,409.21	24.88	15.68	-171.60	-194.33	-43.22	846.47	814.28	32.19	26.294	
7,600.00	7,502.21	7,464.00	7,459.72	25.33	15.79	-171.64	-195.30	-43.14	868.06	835.38	32.68	26.559	
7,700.00	7,599.97	7,464.00	7,459.72	25.79	15.79	-171.64	-195.30	-43.14	898.87	865.94	32.93	27.298	
7,800.00	7,697.73	7,464.00	7,459.72	26.24	15.79	-171.64	-195.30	-43.14	939.37	906.19	33.17	28.318	
7,900.00	7,795.49	7,464.00	7,459.72	26.70	15.79	-171.64	-195.30	-43.14	988.36	954.94	33.42	29.577	
8,000.00	7,893.25	7,464.00	7,459.72	27.15	15.79	-171.64	-195.30	-43.14	1,044.65	1,010.99	33.66	31.035	
8,100.00	7,991.01	7,464.00	7,459.72	27.61	15.79	-171.64	-195.30	-43.14	1,107.13	1,073.22	33.90	32.654	
8,200.00	8,088.77	7,464.00	7,459.72	28.07	15.79	-171.64	-195.30	-43.14	1,174.81	1,140.66	34.15	34.402	
8,300.00	8,186.53	7,464.00	7,459.72	28.52	15.79	-171.64	-195.30	-43.14	1,246.84	1,212.45	34.39	36.252	
8,400.00	8,284.29	7,464.00	7,459.72	28.98	15.79	-171.64	-195.30	-43.14	1,322.52	1,287.88	34.64	38.181	
8,500.00	8,382.05	7,464.00	7,459.72	29.44	15.79	-171.64	-195.30	-43.14	1,401.25	1,366.37	34.88	40.170	
8,600.00	8,479.81	7,464.00	7,459.72	29.89	15.79	-171.64	-195.30	-43.14	1,482.54	1,447.42	35.13	42.205	
8,700.00	8,577.57	7,464.00	7,459.72	30.35	15.79	-171.64	-195.30	-43.14	1,566.01	1,530.64	35.37	44.272	
8,800.00	8,675.33	7,464.00	7,459.72	30.81	15.79	-171.64	-195.30	-43.14	1,651.31	1,615.69	35.62	46.363	
8,900.00	8,773.09	7,464.00	7,459.72	31.27	15.79	-171.64	-195.30	-43.14	1,738.18	1,702.32	35.86	48.469	
9,000.00	8,870.85	7,464.00	7,459.72	31.72	15.79	-171.64	-195.30	-43.14	1,826.39	1,790.28	36.11	50.584	
9,100.00	8,968.61	7,464.00	7,459.72	32.18	15.79	-171.64	-195.30	-43.14	1,915.76	1,879.41	36.35	52.701	
9,200.00	9,066.37	7,464.00	7,459.72	32.64	15.79	-171.64	-195.30	-43.14	2,006.14	1,969.54	36.60	54.818	
9,300.00	9,164.13	7,464.00	7,459.72	33.10	15.79	-171.64	-195.30	-43.14	2,097.39	2,060.54	36.84	56.930	
9,400.00	9,261.89	7,464.00	7,459.72	33.56	15.79	-171.64	-195.30	-43.14	2,189.40	2,152.31	37.09	59.035	
9,500.00	9,359.65	7,464.00	7,459.72	34.02	15.79	-171.64	-195.30	-43.14	2,282.08	2,244.75	37.33	61.130	
9,600.00	9,457.41	7,464.00	7,459.72	34.48	15.79	-171.64	-195.30	-43.14	2,375.36	2,337.79	37.58	63.214	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #15-21-12-15 - 1 - 1

Survey Program: 150-MWD

Offset Site Error: 0.00 ft

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
9,700.00	9,555.17	7,464.00	7,459.72	34.94	15.79	-171.64	-195.30	-43.14	2,469.17	2,431.35	37.82	65.284	
9,800.00	9,652.93	7,464.00	7,459.72	35.40	15.79	-171.64	-195.30	-43.14	2,563.44	2,525.37	38.07	67.340	
9,900.00	9,750.69	7,464.00	7,459.72	35.86	15.79	-171.64	-195.30	-43.14	2,658.13	2,619.82	38.31	69.381	
10,000.00	9,848.45	7,464.00	7,459.72	36.32	15.79	-171.64	-195.30	-43.14	2,753.20	2,714.64	38.56	71.405	
10,100.00	9,946.22	7,464.00	7,459.72	36.78	15.79	-171.64	-195.30	-43.14	2,848.61	2,809.80	38.80	73.412	
10,200.00	10,043.98	7,464.00	7,459.72	37.24	15.79	-171.64	-195.30	-43.14	2,944.32	2,905.27	39.05	75.402	
10,300.00	10,141.74	7,464.00	7,459.72	37.70	15.79	-171.64	-195.30	-43.14	3,040.30	3,001.01	39.29	77.374	
10,400.00	10,239.50	7,464.00	7,459.72	38.16	15.79	-171.64	-195.30	-43.14	3,136.54	3,097.00	39.54	79.328	
10,500.00	10,337.26	7,464.00	7,459.72	38.62	15.79	-171.64	-195.30	-43.14	3,233.00	3,193.22	39.78	81.263	
10,600.00	10,435.02	7,464.00	7,459.72	39.08	15.79	-171.64	-195.30	-43.14	3,329.68	3,289.65	40.03	83.180	
10,700.00	10,532.78	7,464.00	7,459.72	39.54	15.79	-171.64	-195.30	-43.14	3,426.54	3,386.27	40.28	85.077	
10,800.00	10,630.54	7,464.00	7,459.72	40.00	15.79	-171.64	-195.30	-43.14	3,523.58	3,483.06	40.52	86.957	
10,900.00	10,728.30	7,464.00	7,459.72	40.46	15.79	-171.64	-195.30	-43.14	3,620.78	3,580.02	40.77	88.817	
11,000.00	10,826.06	7,464.00	7,459.72	40.92	15.79	-171.64	-195.30	-43.14	3,718.13	3,677.12	41.01	90.659	
11,100.00	10,923.82	7,464.00	7,459.72	41.38	15.79	-171.64	-195.30	-43.14	3,815.62	3,774.36	41.26	92.482	
11,200.00	11,021.58	7,464.00	7,459.72	41.84	15.79	-171.64	-195.30	-43.14	3,913.23	3,871.73	41.50	94.286	
11,300.00	11,119.34	7,464.00	7,459.72	42.30	15.79	-171.64	-195.30	-43.14	4,010.97	3,969.22	41.75	96.072	
11,400.00	11,217.10	7,464.00	7,459.72	42.76	15.79	-171.64	-195.30	-43.14	4,108.81	4,066.81	42.00	97.840	
11,500.00	11,314.86	7,464.00	7,459.72	43.23	15.79	-171.64	-195.30	-43.14	4,206.75	4,164.51	42.24	99.589	
11,600.00	11,412.62	7,464.00	7,459.72	43.69	15.79	-171.64	-195.30	-43.14	4,304.78	4,262.30	42.49	101.321	
11,700.00	11,510.38	7,464.00	7,459.72	44.15	15.79	-171.64	-195.30	-43.14	4,402.91	4,360.18	42.73	103.034	
11,800.00	11,608.14	7,464.00	7,459.72	44.61	15.79	-171.64	-195.30	-43.14	4,501.12	4,458.14	42.98	104.730	
11,900.00	11,705.90	7,464.00	7,459.72	45.07	15.79	-171.64	-195.30	-43.14	4,599.40	4,556.18	43.22	106.408	
12,000.00	11,803.66	7,464.00	7,459.72	45.53	15.79	-171.64	-195.30	-43.14	4,697.76	4,654.29	43.47	108.069	
12,100.00	11,901.42	7,464.00	7,459.72	46.00	15.79	-171.64	-195.30	-43.14	4,796.18	4,752.47	43.72	109.712	
12,200.00	11,999.18	7,464.00	7,459.72	46.46	15.79	-171.64	-195.30	-43.14	4,894.67	4,850.71	43.96	111.339	
12,300.00	12,096.94	7,464.00	7,459.72	46.92	15.79	-171.64	-195.30	-43.14	4,993.22	4,949.01	44.21	112.949	
12,400.00	12,194.70	7,464.00	7,459.72	47.38	15.79	-171.64	-195.30	-43.14	5,091.83	5,047.37	44.45	114.542	
12,500.00	12,292.46	7,464.00	7,459.72	47.84	15.79	-171.64	-195.30	-43.14	5,190.49	5,145.79	44.70	116.119	
12,600.00	12,390.22	7,464.00	7,459.72	48.31	15.79	-171.64	-195.30	-43.14	5,289.19	5,244.25	44.95	117.679	
12,700.00	12,487.98	7,464.00	7,459.72	48.77	15.79	-171.64	-195.30	-43.14	5,387.95	5,342.76	45.19	119.224	
12,800.00	12,585.74	7,464.00	7,459.72	49.23	15.79	-171.64	-195.30	-43.14	5,486.75	5,441.32	45.44	120.753	
12,900.00	12,683.50	7,464.00	7,459.72	49.69	15.79	-171.64	-195.30	-43.14	5,585.60	5,539.91	45.68	122.266	
13,000.00	12,781.26	7,464.00	7,459.72	50.15	15.79	-171.64	-195.30	-43.14	5,684.48	5,638.55	45.93	123.764	
13,100.00	12,879.02	7,464.00	7,459.72	50.62	15.79	-171.64	-195.30	-43.14	5,783.41	5,737.23	46.18	125.247	
13,200.00	12,976.78	7,464.00	7,459.72	51.08	15.79	-171.64	-195.30	-43.14	5,882.37	5,835.94	46.42	126.715	
13,300.00	13,074.54	7,464.00	7,459.72	51.54	15.79	-171.64	-195.30	-43.14	5,981.36	5,934.69	46.67	128.168	
13,400.00	13,172.30	7,464.00	7,459.72	52.00	15.79	-171.64	-195.30	-43.14	6,080.39	6,033.47	46.91	129.606	
13,500.00	13,270.06	7,464.00	7,459.72	52.47	15.79	-171.64	-195.30	-43.14	6,179.45	6,132.29	47.16	131.030	
13,600.00	13,367.82	7,464.00	7,459.72	52.93	15.79	-171.64	-195.30	-43.14	6,278.53	6,231.13	47.41	132.440	
13,700.00	13,465.58	7,464.00	7,459.72	53.39	15.79	-171.64	-195.30	-43.14	6,377.65	6,330.00	47.65	133.836	
13,800.00	13,563.34	7,464.00	7,459.72	53.85	15.79	-171.64	-195.30	-43.14	6,476.80	6,428.90	47.90	135.218	
13,900.00	13,661.10	7,464.00	7,459.72	54.32	15.79	-171.64	-195.30	-43.14	6,575.96	6,527.82	48.15	136.586	
14,000.00	13,758.86	7,464.00	7,459.72	54.78	15.79	-171.64	-195.30	-43.14	6,675.16	6,626.77	48.39	137.941	
14,100.00	13,856.62	7,464.00	7,459.72	55.24	15.79	-171.64	-195.30	-43.14	6,774.38	6,725.74	48.64	139.282	
14,200.00	13,954.38	7,464.00	7,459.72	55.71	15.79	-171.64	-195.30	-43.14	6,873.62	6,824.74	48.88	140.611	
14,300.00	14,052.14	7,464.00	7,459.72	56.17	15.79	-171.64	-195.30	-43.14	6,972.88	6,923.75	49.13	141.927	
14,400.00	14,149.90	7,464.00	7,459.72	56.63	15.79	-171.64	-195.30	-43.14	7,072.17	7,022.79	49.38	143.229	
14,500.00	14,247.66	7,464.00	7,459.72	57.09	15.79	-171.64	-195.30	-43.14	7,171.47	7,121.85	49.62	144.520	
14,600.00	14,345.42	7,464.00	7,459.72	57.56	15.79	-171.64	-195.30	-43.14	7,270.79	7,220.92	49.87	145.798	
14,700.00	14,443.18	7,464.00	7,459.72	58.02	15.79	-171.64	-195.30	-43.14	7,370.13	7,320.02	50.12	147.063	
14,800.00	14,540.94	7,464.00	7,459.72	58.48	15.79	-171.64	-195.30	-43.14	7,469.49	7,419.13	50.36	148.317	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #15-21-12-15 - 1 - 1

Survey Program: 150-MWD

Offset Site Error: 0.00 ft
Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
14,900.00	14,638.70	7,464.00	7,459.72	58.95	15.79	-171.64	-195.30	-43.14	7,568.87	7,518.26	50.61	149.559	
15,000.00	14,736.46	7,464.00	7,459.72	59.41	15.79	-171.64	-195.30	-43.14	7,668.26	7,617.40	50.85	150.789	
15,075.28	14,810.06	7,464.00	7,459.72	59.76	15.79	-171.64	-195.30	-43.14	7,743.09	7,692.05	51.04	151.707	
15,100.00	14,834.24	7,464.00	7,459.72	59.86	15.79	-172.26	-195.30	-43.14	7,767.65	7,716.64	51.01	152.276	
15,200.00	14,932.51	7,464.00	7,459.72	60.16	15.79	-174.04	-195.30	-43.14	7,866.76	7,815.76	51.00	154.249	
15,300.00	15,031.37	7,464.00	7,459.72	60.43	15.79	-175.16	-195.30	-43.14	7,965.38	7,914.29	51.09	155.911	
15,400.00	15,130.69	7,464.00	7,459.72	60.65	15.79	-175.93	-195.30	-43.14	8,063.41	8,012.21	51.20	157.474	
15,500.00	15,230.36	7,464.00	7,459.72	60.84	15.79	-176.49	-195.30	-43.14	8,160.76	8,109.44	51.32	159.022	
15,600.00	15,330.24	7,464.00	7,459.72	60.98	15.79	-176.92	-195.30	-43.14	8,257.32	8,205.91	51.42	160.592	
15,682.77	15,413.00	7,464.00	7,459.72	61.08	15.79	63.81	-195.30	-43.14	8,336.60	8,281.80	54.80	152.124	
15,700.00	15,430.23	7,464.00	7,459.72	61.10	15.79	63.81	-195.30	-43.14	8,353.04	8,298.21	54.83	152.343	
15,800.00	15,530.23	7,464.00	7,459.72	61.21	15.79	63.81	-195.30	-43.14	8,448.51	8,393.52	54.99	153.642	
15,900.00	15,630.23	7,464.00	7,459.72	61.31	15.79	63.81	-195.30	-43.14	8,544.09	8,488.94	55.15	154.933	
16,000.00	15,730.23	7,464.00	7,459.72	61.42	15.79	63.81	-195.30	-43.14	8,639.77	8,584.46	55.31	156.218	
16,069.77	15,800.00	7,464.00	7,459.72	61.49	15.79	63.81	-195.30	-43.14	8,706.58	8,651.16	55.42	157.109	

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #3-28D-12-15 - PR PR #3-28D-12-15 - PR PR #3-28D-12-15

Survey Program: 1655-MWD

Offset Site Error: 0.00 ft

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-141.60	-26.20	-20.76	33.43				
100.00	100.00	99.96	99.96	0.09	0.11	-141.74	-26.29	-20.74	33.49	33.29	0.20	166.654	
200.00	200.00	199.92	199.92	0.31	0.23	-142.14	-26.58	-20.66	33.67	33.12	0.54	62.206	
250.00	250.00	249.90	249.90	0.42	0.29	-142.44	-26.79	-20.61	33.80	33.09	0.71	47.520	
300.00	300.00	299.88	299.88	0.52	0.35	67.88	-27.06	-20.54	33.80	32.95	0.86	39.447	
350.00	349.98	349.85	349.84	0.62	0.40	69.52	-27.37	-20.45	33.52	32.51	1.01	33.286	
400.00	399.95	399.81	399.80	0.72	0.46	71.82	-27.73	-20.36	33.15	31.99	1.16	28.500	
500.00	499.89	499.74	499.73	0.93	0.58	76.34	-28.59	-20.13	32.65	31.17	1.49	21.965	
600.00	599.83	599.68	599.67	1.15	0.69	80.64	-29.64	-19.86	32.45	30.63	1.82	17.844	
629.13	628.94	628.79	628.78	1.22	0.73	81.84	-29.99	-19.77	32.44	30.52	1.92	16.927	
700.00	699.77	699.63	699.61	1.38	0.81	84.65	-30.89	-19.53	32.50	30.34	2.15	15.082	
800.00	799.71	799.59	799.55	1.61	0.93	88.30	-32.32	-19.15	32.76	30.27	2.49	13.138	
900.00	899.64	899.55	899.50	1.84	1.04	91.54	-33.95	-18.72	33.20	30.37	2.83	11.717	
1,000.00	999.58	999.52	999.46	2.07	1.16	94.35	-35.77	-18.24	33.78	30.61	3.17	10.641	
1,100.00	1,099.52	1,099.50	1,099.41	2.29	1.27	38.89	-37.78	-17.71	32.82	29.28	3.53	9.283	
1,158.97	1,158.46	1,158.43	1,158.33	2.40	1.34	4.12	-39.06	-17.38	31.15	27.41	3.74	8.340	
1,200.00	1,199.46	1,199.43	1,199.32	2.48	1.39	2.51	-39.99	-17.13	29.90	26.04	3.86	7.745	
1,300.00	1,299.40	1,299.35	1,299.20	2.69	1.50	-2.32	-42.38	-16.50	27.01	22.84	4.17	6.472	
1,400.00	1,399.34	1,399.26	1,399.08	2.89	1.62	-8.67	-44.96	-15.82	24.44	19.95	4.49	5.449	
1,500.00	1,499.28	1,499.16	1,498.94	3.11	1.73	-16.83	-47.74	-15.09	22.33	17.54	4.79	4.660	
1,600.00	1,599.22	1,599.05	1,598.78	3.32	1.85	-26.85	-50.71	-14.31	20.90	15.80	5.10	4.101	
1,671.99	1,671.17	1,670.89	1,670.58	3.48	1.95	-34.97	-52.98	-13.73	20.42	15.09	5.33	3.832	CC, ES
1,700.00	1,699.16	1,698.74	1,698.41	3.54	2.02	-38.14	-54.03	-13.60	20.55	15.11	5.44	3.776	SF
1,800.00	1,799.10	1,797.66	1,797.16	3.76	2.26	-46.69	-59.73	-14.50	23.73	17.89	5.84	4.065	
1,900.00	1,899.04	1,896.10	1,895.04	3.98	2.51	-48.95	-69.42	-18.25	31.85	25.60	6.25	5.093	
2,000.00	1,998.97	1,994.40	1,992.31	4.21	2.80	-47.89	-82.14	-24.40	43.55	36.90	6.66	6.543	
2,100.00	2,098.91	2,091.84	2,088.23	4.43	3.10	-45.02	-96.72	-33.30	57.98	50.94	7.03	8.243	
2,200.00	2,198.85	2,188.76	2,182.99	4.66	3.44	-41.03	-112.84	-45.72	75.27	67.89	7.39	10.193	
2,300.00	2,298.79	2,284.45	2,275.92	4.89	3.81	-37.16	-129.85	-60.84	95.08	87.37	7.71	12.336	
2,400.00	2,398.73	2,378.14	2,366.07	5.11	4.23	-33.59	-148.04	-78.77	118.18	110.18	7.99	14.787	
2,500.00	2,498.67	2,471.00	2,454.52	5.34	4.71	-30.75	-167.94	-98.80	144.59	136.36	8.23	17.565	
2,600.00	2,598.61	2,564.00	2,542.34	5.57	5.24	-28.61	-189.61	-120.42	173.75	165.33	8.42	20.637	
2,700.00	2,698.55	2,660.06	2,632.89	5.80	5.75	-27.07	-212.46	-142.93	203.59	195.06	8.53	23.858	
2,800.00	2,798.49	2,759.52	2,727.15	6.03	6.22	-25.93	-234.97	-165.26	232.01	223.44	8.57	27.072	
2,900.00	2,898.43	2,852.00	2,814.81	6.26	6.72	-25.06	-255.77	-186.14	260.46	251.85	8.60	30.272	
3,000.00	2,998.37	2,945.97	2,903.60	6.49	7.29	-24.37	-277.68	-207.73	289.85	281.25	8.61	33.684	
3,001.64	3,000.00	2,947.52	2,905.07	6.50	7.29	-24.36	-278.05	-208.09	290.34	281.74	8.60	33.742	
3,100.00	3,098.23	3,041.34	2,993.64	6.73	7.85	-23.82	-300.52	-229.35	318.11	309.54	8.57	37.116	
3,200.00	3,197.85	3,134.61	3,081.49	6.98	8.41	-23.55	-323.24	-250.95	343.95	335.67	8.27	41.568	
3,300.00	3,297.10	3,233.42	3,174.44	7.25	9.00	-23.49	-347.32	-274.25	366.95	359.45	7.50	48.896	
3,400.00	3,395.87	3,335.23	3,270.43	7.55	9.56	-23.52	-370.94	-298.58	386.07	372.90	13.17	29.314	
3,500.00	3,494.04	3,435.58	3,365.24	7.87	10.12	-23.69	-393.39	-322.61	401.39	387.78	13.61	29.494	
3,509.12	3,502.96	3,444.68	3,373.85	7.90	10.17	-23.72	-395.41	-324.78	402.61	388.96	13.65	29.498	
3,600.00	3,591.81	3,534.79	3,459.06	8.21	10.69	-24.09	-415.51	-346.10	414.63	400.55	14.08	29.456	
3,700.00	3,689.57	3,632.71	3,551.61	8.56	11.29	-24.49	-437.53	-369.28	428.05	413.49	14.55	29.418	
3,800.00	3,787.33	3,731.16	3,644.61	8.92	11.90	-24.88	-459.93	-392.56	441.68	426.64	15.04	29.375	
3,900.00	3,885.09	3,827.64	3,735.67	9.30	12.50	-25.28	-482.22	-415.36	455.62	440.10	15.52	29.361	
4,000.00	3,982.85	3,927.31	3,829.64	9.68	13.12	-25.69	-505.66	-438.88	469.92	453.91	16.01	29.346	
4,100.00	4,080.61	4,028.14	3,924.87	10.06	13.75	-26.16	-529.44	-461.97	483.89	467.37	16.52	29.294	
4,200.00	4,178.37	4,129.12	4,020.40	10.46	14.36	-26.67	-553.29	-484.38	497.49	480.47	17.02	29.225	
4,300.00	4,276.13	4,228.95	4,114.96	10.86	14.94	-27.17	-576.72	-506.19	510.80	493.29	17.51	29.167	
4,400.00	4,373.89	4,330.84	4,211.55	11.26	15.52	-27.65	-600.37	-528.41	523.90	505.89	18.01	29.089	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #3-28D-12-15 - PR PR #3-28D-12-15 - PR PR #3-28D-12-15

Survey Program: 1655-MWD

Offset Site Error: 0.00 ft

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,500.00	4,471.65	4,435.40	4,310.93	11.67	16.11	-28.13	-624.03	-550.65	536.22	517.70	18.52	28.954	
4,600.00	4,569.41	4,528.78	4,399.71	12.09	16.65	-28.52	-645.04	-570.60	548.51	529.52	18.99	28.882	
4,700.00	4,667.17	4,631.24	4,496.97	12.50	17.25	-28.90	-668.17	-593.02	561.18	541.69	19.49	28.787	
4,800.00	4,764.93	4,730.14	4,590.96	12.92	17.82	-29.24	-690.24	-614.47	573.54	553.53	20.00	28.672	
4,900.00	4,862.69	4,828.80	4,684.70	13.35	18.40	-29.57	-712.25	-635.95	585.96	565.46	20.50	28.585	
5,000.00	4,960.45	4,926.27	4,777.21	13.77	18.98	-29.85	-734.10	-657.49	598.66	577.66	21.00	28.510	
5,100.00	5,058.21	5,028.74	4,874.53	14.20	19.58	-30.14	-756.92	-680.08	611.21	589.70	21.51	28.412	
5,200.00	5,155.97	5,130.78	4,971.62	14.63	20.16	-30.40	-779.03	-702.37	623.13	601.12	22.01	28.307	
5,300.00	5,253.73	5,231.37	5,067.32	15.06	20.74	-30.63	-800.68	-724.47	635.02	612.50	22.52	28.199	
5,400.00	5,351.49	5,335.69	5,166.82	15.50	21.33	-30.87	-822.55	-746.97	646.18	623.15	23.03	28.054	
5,500.00	5,449.25	5,437.87	5,264.41	15.93	21.89	-31.08	-843.47	-768.84	656.83	633.29	23.54	27.900	
5,600.00	5,547.01	5,539.33	5,361.44	16.37	22.45	-31.30	-863.95	-790.30	667.12	643.07	24.04	27.748	
5,700.00	5,644.77	5,644.50	5,462.11	16.81	23.02	-31.48	-884.57	-812.68	676.94	652.42	24.52	27.604	
5,800.00	5,742.53	5,754.85	5,568.11	17.25	23.60	-31.66	-904.98	-835.59	685.52	660.47	25.05	27.362	
5,900.00	5,840.29	5,860.77	5,670.20	17.69	24.14	-31.84	-923.54	-856.83	692.87	667.33	25.54	27.124	
6,000.00	5,938.05	5,977.35	5,783.07	18.14	24.70	-32.12	-942.99	-878.57	698.80	672.63	26.17	26.706	
6,100.00	6,035.81	6,106.14	5,908.95	18.58	25.26	-32.64	-961.87	-898.08	701.16	674.25	26.90	26.061	
6,200.00	6,133.57	6,219.39	6,020.31	19.03	25.69	-33.27	-976.91	-912.17	701.09	673.48	27.61	25.397	
6,300.00	6,231.33	6,342.67	6,142.24	19.47	26.09	-34.12	-990.80	-923.84	697.83	669.26	28.57	24.422	
6,400.00	6,329.09	6,477.41	6,276.22	19.92	26.44	-35.23	-1,001.97	-932.56	690.73	661.75	28.98	23.831	
6,500.00	6,426.85	6,579.36	6,377.86	20.37	26.65	-36.08	-1,007.66	-937.87	680.77	651.25	29.52	23.060	
6,600.00	6,524.61	6,677.48	6,475.70	20.82	26.86	-36.92	-1,013.07	-943.12	670.96	640.90	30.07	22.317	
6,700.00	6,622.37	6,775.23	6,573.14	21.27	27.07	-37.76	-1,018.49	-948.61	661.43	630.90	30.53	21.664	
6,800.00	6,720.13	6,875.19	6,672.68	21.72	27.29	-38.47	-1,023.65	-956.10	652.42	621.58	30.84	21.156	
6,900.00	6,817.89	7,003.76	6,800.95	22.17	27.53	-39.46	-1,027.22	-964.07	640.83	620.23	20.60	31.112	
7,000.00	6,915.65	7,109.85	6,906.99	22.62	27.68	-40.54	-1,027.81	-967.05	626.07	601.91	24.16	25.916	
7,100.00	7,013.41	7,206.55	7,003.65	23.07	27.81	-41.58	-1,028.38	-969.65	611.53	588.40	23.13	26.438	
7,200.00	7,111.17	7,302.84	7,099.90	23.52	27.94	-42.67	-1,029.19	-972.34	597.48	577.44	20.04	29.819	
7,300.00	7,208.93	7,399.33	7,196.35	23.97	28.08	-43.83	-1,030.43	-974.90	584.04	549.59	34.45	16.954	
7,400.00	7,306.69	7,496.70	7,293.68	24.43	28.22	-45.07	-1,031.90	-977.47	571.06	535.81	35.26	16.198	
7,500.00	7,404.45	7,594.11	7,391.04	24.88	28.36	-46.36	-1,033.53	-980.06	558.54	540.34	18.21	30.674	
7,579.34	7,482.02	7,605.00	7,401.92	25.24	28.38	-46.51	-1,033.73	-980.35	552.99	534.37	18.62	29.701	
7,600.00	7,502.21	7,605.00	7,401.92	25.33	28.38	-46.51	-1,033.73	-980.35	553.37	534.71	18.66	29.651	
7,700.00	7,599.97	7,605.00	7,401.92	25.79	28.38	-46.51	-1,033.73	-980.35	566.00	547.12	18.88	29.980	
7,800.00	7,697.73	7,605.00	7,401.92	26.24	28.38	-46.51	-1,033.73	-980.35	595.39	576.29	19.10	31.180	
7,900.00	7,795.49	7,605.00	7,401.92	26.70	28.38	-46.51	-1,033.73	-980.35	639.23	619.92	19.31	33.101	
8,000.00	7,893.25	7,605.00	7,401.92	27.15	28.38	-46.51	-1,033.73	-980.35	694.80	675.27	19.53	35.581	
8,100.00	7,991.01	7,605.00	7,401.92	27.61	28.38	-46.51	-1,033.73	-980.35	759.53	739.78	19.74	38.469	
8,200.00	8,088.77	7,605.00	7,401.92	28.07	28.38	-46.51	-1,033.73	-980.35	831.27	811.31	19.96	41.647	
8,300.00	8,186.53	7,605.00	7,401.92	28.52	28.38	-46.51	-1,033.73	-980.35	908.37	888.20	20.18	45.022	
8,400.00	8,284.29	7,605.00	7,401.92	28.98	28.38	-46.51	-1,033.73	-980.35	989.58	969.19	20.39	48.527	
8,500.00	8,382.05	7,605.00	7,401.92	29.44	28.38	-46.51	-1,033.73	-980.35	1,073.97	1,053.36	20.61	52.112	
8,600.00	8,479.81	7,605.00	7,401.92	29.89	28.38	-46.51	-1,033.73	-980.35	1,160.83	1,140.01	20.83	55.741	
8,700.00	8,577.57	7,605.00	7,401.92	30.35	28.38	-46.51	-1,033.73	-980.35	1,249.67	1,228.63	21.04	59.389	
8,800.00	8,675.33	7,605.00	7,401.92	30.81	28.38	-46.51	-1,033.73	-980.35	1,340.07	1,318.82	21.26	63.037	
8,900.00	8,773.09	7,605.00	7,401.92	31.27	28.38	-46.51	-1,033.73	-980.35	1,431.76	1,410.28	21.48	66.671	
9,000.00	8,870.85	7,605.00	7,401.92	31.72	28.38	-46.51	-1,033.73	-980.35	1,524.49	1,502.80	21.69	70.280	
9,100.00	8,968.61	7,605.00	7,401.92	32.18	28.38	-46.51	-1,033.73	-980.35	1,618.08	1,596.17	21.91	73.857	
9,200.00	9,066.37	7,605.00	7,401.92	32.64	28.38	-46.51	-1,033.73	-980.35	1,712.40	1,690.28	22.13	77.396	
9,300.00	9,164.13	7,605.00	7,401.92	33.10	28.38	-46.51	-1,033.73	-980.35	1,807.33	1,784.99	22.34	80.895	
9,400.00	9,261.89	7,605.00	7,401.92	33.56	28.38	-46.51	-1,033.73	-980.35	1,902.78	1,880.23	22.56	84.348	
9,500.00	9,359.65	7,605.00	7,401.92	34.02	28.38	-46.51	-1,033.73	-980.35	1,998.68	1,975.90	22.78	87.756	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #3-28D-12-15 - PR PR #3-28D-12-15 - PR PR #3-28D-12-15

Survey Program: 1655-MWD

Offset Site Error: 0.00 ft

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
9,600.00	9,457.41	7,605.00	7,401.92	34.48	28.38	-46.51	-1,033.73	-980.35	2,094.96	2,071.97	22.99	91.116	
9,700.00	9,555.17	7,605.00	7,401.92	34.94	28.38	-46.51	-1,033.73	-980.35	2,191.57	2,168.36	23.21	94.427	
9,800.00	9,652.93	7,605.00	7,401.92	35.40	28.38	-46.51	-1,033.73	-980.35	2,288.47	2,265.05	23.43	97.689	
9,900.00	9,750.69	7,605.00	7,401.92	35.86	28.38	-46.51	-1,033.73	-980.35	2,385.63	2,361.99	23.64	100.902	
10,000.00	9,848.45	7,605.00	7,401.92	36.32	28.38	-46.51	-1,033.73	-980.35	2,483.02	2,459.16	23.86	104.066	
10,100.00	9,946.22	7,605.00	7,401.92	36.78	28.38	-46.51	-1,033.73	-980.35	2,580.60	2,556.53	24.08	107.181	
10,200.00	10,043.98	7,605.00	7,401.92	37.24	28.38	-46.51	-1,033.73	-980.35	2,678.36	2,654.07	24.29	110.248	
10,300.00	10,141.74	7,605.00	7,401.92	37.70	28.38	-46.51	-1,033.73	-980.35	2,776.29	2,751.78	24.51	113.266	
10,400.00	10,239.50	7,605.00	7,401.92	38.16	28.38	-46.51	-1,033.73	-980.35	2,874.35	2,849.62	24.73	116.238	
10,500.00	10,337.26	7,605.00	7,401.92	38.62	28.38	-46.51	-1,033.73	-980.35	2,972.55	2,947.60	24.95	119.162	
10,600.00	10,435.02	7,605.00	7,401.92	39.08	28.38	-46.51	-1,033.73	-980.35	3,070.86	3,045.69	25.16	122.041	
10,700.00	10,532.78	7,605.00	7,401.92	39.54	28.38	-46.51	-1,033.73	-980.35	3,169.27	3,143.89	25.38	124.875	
10,800.00	10,630.54	7,605.00	7,401.92	40.00	28.38	-46.51	-1,033.73	-980.35	3,267.79	3,242.19	25.60	127.664	
10,900.00	10,728.30	7,605.00	7,401.92	40.46	28.38	-46.51	-1,033.73	-980.35	3,366.39	3,340.57	25.81	130.409	
11,000.00	10,826.06	7,605.00	7,401.92	40.92	28.38	-46.51	-1,033.73	-980.35	3,465.07	3,439.04	26.03	133.112	
11,100.00	10,923.82	7,605.00	7,401.92	41.38	28.38	-46.51	-1,033.73	-980.35	3,563.82	3,537.57	26.25	135.772	
11,200.00	11,021.58	7,605.00	7,401.92	41.84	28.38	-46.51	-1,033.73	-980.35	3,662.64	3,636.18	26.47	138.391	
11,300.00	11,119.34	7,605.00	7,401.92	42.30	28.38	-46.51	-1,033.73	-980.35	3,761.53	3,734.84	26.68	140.970	
11,400.00	11,217.10	7,605.00	7,401.92	42.76	28.38	-46.51	-1,033.73	-980.35	3,860.47	3,833.57	26.90	143.510	
11,500.00	11,314.86	7,605.00	7,401.92	43.23	28.38	-46.51	-1,033.73	-980.35	3,959.46	3,932.35	27.12	146.010	
11,600.00	11,412.62	7,605.00	7,401.92	43.69	28.38	-46.51	-1,033.73	-980.35	4,058.51	4,031.17	27.34	148.472	
11,700.00	11,510.38	7,605.00	7,401.92	44.15	28.38	-46.51	-1,033.73	-980.35	4,157.60	4,130.04	27.55	150.897	
11,800.00	11,608.14	7,605.00	7,401.92	44.61	28.38	-46.51	-1,033.73	-980.35	4,256.73	4,228.96	27.77	153.286	
11,900.00	11,705.90	7,605.00	7,401.92	45.07	28.38	-46.51	-1,033.73	-980.35	4,355.90	4,327.91	27.99	155.639	
12,000.00	11,803.66	7,605.00	7,401.92	45.53	28.38	-46.51	-1,033.73	-980.35	4,455.11	4,426.91	28.20	157.956	
12,100.00	11,901.42	7,605.00	7,401.92	46.00	28.38	-46.51	-1,033.73	-980.35	4,554.35	4,525.93	28.42	160.240	
12,200.00	11,999.18	7,605.00	7,401.92	46.46	28.38	-46.51	-1,033.73	-980.35	4,653.63	4,624.99	28.64	162.489	
12,300.00	12,096.94	7,605.00	7,401.92	46.92	28.38	-46.51	-1,033.73	-980.35	4,752.94	4,724.08	28.86	164.706	
12,400.00	12,194.70	7,605.00	7,401.92	47.38	28.38	-46.51	-1,033.73	-980.35	4,852.27	4,823.20	29.07	166.891	
12,500.00	12,292.46	7,605.00	7,401.92	47.84	28.38	-46.51	-1,033.73	-980.35	4,951.63	4,922.34	29.29	169.043	
12,600.00	12,390.22	7,605.00	7,401.92	48.31	28.38	-46.51	-1,033.73	-980.35	5,051.02	5,021.51	29.51	171.165	
12,700.00	12,487.98	7,605.00	7,401.92	48.77	28.38	-46.51	-1,033.73	-980.35	5,150.43	5,120.70	29.73	173.257	
12,800.00	12,585.74	7,605.00	7,401.92	49.23	28.38	-46.51	-1,033.73	-980.35	5,249.86	5,219.92	29.94	175.319	
12,900.00	12,683.50	7,605.00	7,401.92	49.69	28.38	-46.51	-1,033.73	-980.35	5,349.32	5,319.15	30.16	177.351	
13,000.00	12,781.26	7,605.00	7,401.92	50.15	28.38	-46.51	-1,033.73	-980.35	5,448.79	5,418.41	30.38	179.356	
13,100.00	12,879.02	7,605.00	7,401.92	50.62	28.38	-46.51	-1,033.73	-980.35	5,548.28	5,517.69	30.60	181.332	
13,200.00	12,976.78	7,605.00	7,401.92	51.08	28.38	-46.51	-1,033.73	-980.35	5,647.79	5,616.98	30.81	183.281	
13,300.00	13,074.54	7,605.00	7,401.92	51.54	28.38	-46.51	-1,033.73	-980.35	5,747.32	5,716.29	31.03	185.203	
13,400.00	13,172.30	7,605.00	7,401.92	52.00	28.38	-46.51	-1,033.73	-980.35	5,846.87	5,815.62	31.25	187.098	
13,500.00	13,270.06	7,605.00	7,401.92	52.47	28.38	-46.51	-1,033.73	-980.35	5,946.43	5,914.96	31.47	188.968	
13,600.00	13,367.82	7,605.00	7,401.92	52.93	28.38	-46.51	-1,033.73	-980.35	6,046.00	6,014.31	31.69	190.813	
13,700.00	13,465.58	7,605.00	7,401.92	53.39	28.38	-46.51	-1,033.73	-980.35	6,145.59	6,113.68	31.90	192.633	
13,800.00	13,563.34	7,605.00	7,401.92	53.85	28.38	-46.51	-1,033.73	-980.35	6,245.19	6,213.07	32.12	194.428	
13,900.00	13,661.10	7,605.00	7,401.92	54.32	28.38	-46.51	-1,033.73	-980.35	6,344.80	6,312.46	32.34	196.200	
14,000.00	13,758.86	7,605.00	7,401.92	54.78	28.38	-46.51	-1,033.73	-980.35	6,444.43	6,411.87	32.56	197.948	
14,100.00	13,856.62	7,605.00	7,401.92	55.24	28.38	-46.51	-1,033.73	-980.35	6,544.06	6,511.29	32.77	199.673	
14,200.00	13,954.38	7,605.00	7,401.92	55.71	28.38	-46.51	-1,033.73	-980.35	6,643.71	6,610.72	32.99	201.376	
14,300.00	14,052.14	7,605.00	7,401.92	56.17	28.38	-46.51	-1,033.73	-980.35	6,743.37	6,710.16	33.21	203.056	
14,400.00	14,149.90	7,605.00	7,401.92	56.63	28.38	-46.51	-1,033.73	-980.35	6,843.04	6,809.61	33.43	204.716	
14,500.00	14,247.66	7,605.00	7,401.92	57.09	28.38	-46.51	-1,033.73	-980.35	6,942.71	6,909.07	33.64	206.353	
14,600.00	14,345.42	7,605.00	7,401.92	57.56	28.38	-46.51	-1,033.73	-980.35	7,042.40	7,008.54	33.86	207.970	
14,700.00	14,443.18	7,605.00	7,401.92	58.02	28.38	-46.51	-1,033.73	-980.35	7,142.10	7,108.02	34.08	209.567	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #3-28D-12-15 - PR PR #3-28D-12-15 - PR PR #3-28D-12-15

Survey Program: 1655-MWD

Offset Site Error: 0.00 ft
Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
14,800.00	14,540.94	7,605.00	7,401.92	58.48	28.38	-46.51	-1,033.73	-980.35	7,241.80	7,207.50	34.30	211.143	
14,900.00	14,638.70	7,605.00	7,401.92	58.95	28.38	-46.51	-1,033.73	-980.35	7,341.51	7,307.00	34.52	212.700	
15,000.00	14,736.46	7,605.00	7,401.92	59.41	28.38	-46.51	-1,033.73	-980.35	7,441.23	7,406.50	34.73	214.237	
15,075.28	14,810.06	7,605.00	7,401.92	59.76	28.38	-46.51	-1,033.73	-980.35	7,516.31	7,481.41	34.90	215.382	
15,100.00	14,834.24	7,605.00	7,401.92	59.86	28.38	-51.79	-1,033.73	-980.35	7,540.96	7,498.75	42.21	178.648	
15,200.00	14,932.51	7,605.00	7,401.92	60.16	28.38	-82.72	-1,033.73	-980.35	7,640.79	7,577.61	63.18	120.943	
15,300.00	15,031.37	7,605.00	7,401.92	60.43	28.38	-118.38	-1,033.73	-980.35	7,740.64	7,679.87	60.77	127.370	
15,400.00	15,130.69	7,605.00	7,401.92	60.65	28.38	-140.58	-1,033.73	-980.35	7,840.40	7,794.56	45.85	171.018	
15,500.00	15,230.36	7,605.00	7,401.92	60.84	28.38	-152.24	-1,033.73	-980.35	7,939.96	7,905.71	34.25	231.849	
15,600.00	15,330.24	7,605.00	7,401.92	60.98	28.38	-158.89	-1,033.73	-980.35	8,039.19	8,012.83	26.36	304.998	
15,682.77	15,413.00	7,605.00	7,401.92	61.08	28.38	78.55	-1,033.73	-980.35	8,121.00	8,057.88	63.12	128.658	
15,700.00	15,430.23	7,605.00	7,401.92	61.10	28.38	78.55	-1,033.73	-980.35	8,138.00	8,074.85	63.15	128.872	
15,800.00	15,530.23	7,605.00	7,401.92	61.21	28.38	78.55	-1,033.73	-980.35	8,236.67	8,173.37	63.29	130.134	
15,900.00	15,630.23	7,605.00	7,401.92	61.31	28.38	78.55	-1,033.73	-980.35	8,335.37	8,271.93	63.44	131.389	
16,000.00	15,730.23	7,605.00	7,401.92	61.42	28.38	78.55	-1,033.73	-980.35	8,434.10	8,370.51	63.59	132.637	
16,069.77	15,800.00	7,605.00	7,401.92	61.49	28.38	78.55	-1,033.73	-980.35	8,503.00	8,439.31	63.69	133.504	

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #7-28D-12-15 - 1 - 1 — **Offset Site Error:** 0.00 ft

Survey Program: 115-MWD — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-153.13	-41.96	-21.26	47.04				
100.00	100.00	99.55	99.55	0.09	0.09	-153.08	-42.36	-21.51	47.51	47.33	0.18	269.456	
200.00	200.00	199.43	199.42	0.31	0.29	-152.95	-43.31	-22.12	48.63	48.03	0.60	80.569	
250.00	250.00	249.15	249.14	0.42	0.41	-152.96	-43.95	-22.44	49.36	48.53	0.83	59.693	
300.00	300.00	298.85	298.82	0.52	0.52	57.22	-44.96	-22.73	50.15	49.12	1.03	48.479	
350.00	349.98	348.79	348.75	0.62	0.63	58.18	-46.13	-23.06	50.64	49.41	1.24	40.967	
400.00	399.95	398.75	398.69	0.72	0.74	59.64	-47.30	-23.48	50.97	49.53	1.44	35.339	
500.00	499.89	498.65	498.56	0.93	0.94	62.38	-49.69	-24.22	51.72	49.86	1.85	27.891	
600.00	599.83	598.25	598.12	1.15	1.16	64.67	-52.60	-24.92	52.98	50.70	2.29	23.167	
700.00	699.77	697.54	697.30	1.38	1.39	65.48	-57.07	-25.17	55.34	52.62	2.72	20.332	
800.00	799.71	796.91	796.46	1.61	1.64	64.54	-63.47	-24.67	58.86	55.70	3.16	18.641	
900.00	899.64	896.49	895.70	1.84	1.89	61.89	-71.64	-22.94	63.20	59.61	3.59	17.614	
1,000.00	999.58	996.16	994.87	2.07	2.15	58.07	-81.03	-19.85	68.08	64.07	4.01	16.963	
1,100.00	1,099.52	1,095.84	1,093.95	2.29	2.41	-4.50	-91.07	-15.60	72.40	67.89	4.50	16.081	
1,158.97	1,158.46	1,154.70	1,152.45	2.40	2.56	-42.43	-97.02	-12.88	75.17	70.39	4.78	15.732	
1,200.00	1,199.46	1,195.36	1,192.86	2.48	2.66	-45.41	-101.08	-11.00	77.52	72.58	4.94	15.694 SF	
1,300.00	1,299.40	1,294.30	1,291.15	2.69	2.94	-52.06	-111.36	-6.29	84.41	79.06	5.36	15.757	
1,400.00	1,399.34	1,393.25	1,389.42	2.89	3.24	-57.63	-122.05	-1.64	92.69	86.91	5.78	16.023	
1,500.00	1,499.28	1,492.23	1,487.67	3.11	3.53	-62.22	-133.05	2.95	102.02	95.80	6.22	16.405	
1,600.00	1,599.22	1,587.45	1,582.01	3.32	3.84	-65.44	-145.39	6.62	113.66	107.04	6.62	17.161	
1,700.00	1,699.16	1,681.85	1,675.04	3.54	4.17	-67.05	-161.30	8.47	129.24	122.23	7.01	18.428	
1,800.00	1,799.10	1,775.57	1,766.78	3.76	4.53	-67.48	-180.39	8.63	148.20	140.78	7.42	19.985	
1,900.00	1,899.04	1,865.61	1,854.18	3.98	4.94	-67.61	-202.01	8.60	170.77	162.92	7.85	21.761	
2,000.00	1,998.97	1,952.36	1,937.17	4.21	5.38	-67.81	-227.23	9.48	198.48	190.19	8.29	23.938	
2,100.00	2,098.91	2,040.50	2,020.51	4.43	5.88	-68.19	-255.84	11.64	229.77	221.03	8.74	26.282	
2,200.00	2,198.85	2,128.68	2,102.90	4.66	6.42	-68.60	-287.09	14.65	264.15	254.96	9.18	28.759	
2,300.00	2,298.79	2,219.40	2,187.19	4.89	6.99	-68.91	-320.49	17.83	299.92	290.33	9.59	31.266	
2,400.00	2,398.73	2,307.40	2,268.69	5.11	7.59	-69.17	-353.53	21.16	336.48	326.43	10.05	33.471	
2,500.00	2,498.67	2,393.41	2,347.70	5.34	8.20	-69.55	-387.19	25.73	374.86	364.32	10.54	35.566	
2,600.00	2,598.61	2,477.53	2,424.37	5.57	8.83	-69.97	-421.37	31.08	414.91	403.93	10.97	37.807	
2,700.00	2,698.55	2,563.34	2,502.00	5.80	9.50	-70.33	-457.49	36.83	456.47	445.03	11.44	39.906	
2,800.00	2,798.49	2,650.14	2,580.18	6.03	10.19	-70.72	-494.60	43.44	498.87	486.94	11.93	41.805	
2,900.00	2,898.43	2,738.18	2,659.24	6.26	10.87	-71.14	-532.62	50.94	541.87	529.48	12.40	43.708	
3,000.00	2,998.37	2,827.76	2,739.59	6.49	11.55	-71.50	-571.49	58.51	585.10	572.24	12.86	45.508	
3,001.64	3,000.00	2,829.23	2,740.91	6.50	11.56	-71.50	-572.12	58.64	585.81	572.94	12.87	45.535	
3,100.00	3,098.23	2,915.73	2,818.46	6.73	12.22	-71.11	-609.66	66.36	627.96	614.59	13.37	46.968	
3,200.00	3,197.85	3,000.88	2,894.54	6.98	12.91	-71.00	-646.97	74.71	670.48	656.59	13.88	48.291	
3,300.00	3,297.10	3,084.36	2,968.85	7.25	13.62	-71.05	-684.12	82.92	712.79	698.44	14.35	49.664	
3,400.00	3,395.87	3,163.34	3,038.67	7.55	14.30	-71.15	-720.27	90.42	755.45	740.65	14.81	51.016	
3,500.00	3,494.04	3,249.50	3,114.47	7.87	15.06	-71.45	-760.44	98.40	798.14	782.80	15.35	52.008	
3,509.12	3,502.96	3,258.01	3,121.95	7.90	15.13	-71.49	-764.42	99.19	802.01	786.61	15.40	52.073	
3,600.00	3,591.81	3,346.26	3,199.72	8.21	15.84	-72.73	-805.28	107.52	840.34	824.33	16.01	52.504	
3,700.00	3,689.57	3,449.27	3,291.11	8.56	16.58	-74.08	-851.76	117.46	881.74	865.07	16.67	52.909	
3,800.00	3,787.33	3,539.43	3,371.49	8.92	17.26	-75.14	-891.77	125.70	922.54	905.42	17.12	53.884	
3,900.00	3,885.09	3,629.16	3,451.32	9.30	17.95	-76.03	-932.08	132.95	963.78	946.10	17.68	54.500	
4,000.00	3,982.85	3,730.60	3,541.78	9.68	18.70	-76.96	-977.26	141.04	1,004.81	986.45	18.37	54.713	
4,100.00	4,080.61	3,826.33	3,627.61	10.06	19.41	-77.77	-1,019.01	148.45	1,045.03	1,026.13	18.91	55.278	
4,200.00	4,178.37	3,909.52	3,702.12	10.46	20.07	-78.37	-1,055.62	153.86	1,085.36	1,066.03	19.33	56.143	
4,300.00	4,276.13	3,984.31	3,768.54	10.86	20.70	-78.82	-1,089.68	158.44	1,127.07	1,107.17	19.90	56.628	
4,400.00	4,373.89	4,073.61	3,847.59	11.26	21.46	-79.33	-1,130.85	164.03	1,169.47	1,148.83	20.63	56.682	
4,500.00	4,471.65	4,174.77	3,937.32	11.67	22.27	-79.87	-1,177.13	170.29	1,211.59	1,190.29	21.30	56.870	
4,600.00	4,569.41	4,285.00	4,035.84	12.09	23.10	-80.43	-1,226.14	176.84	1,252.44	1,230.41	22.03	56.853	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #7-28D-12-15 - 1 - 1

Survey Program: 115-MWD

Offset Site Error: 0.00 ft

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,700.00	4,667.17	4,377.11	4,118.50	12.50	23.80	-80.86	-1,266.44	181.98	1,292.58	1,270.06	22.53	57.384	
4,800.00	4,764.93	4,460.52	4,193.02	12.92	24.47	-81.17	-1,303.72	185.66	1,333.21	1,310.35	22.86	58.320	
4,900.00	4,862.69	4,547.80	4,270.82	13.35	25.20	-81.46	-1,343.14	189.16	1,374.17	1,350.57	23.60	58.224	
5,000.00	4,960.45	4,629.71	4,343.71	13.77	25.88	-81.73	-1,380.32	193.06	1,415.65	1,391.05	24.60	57.552	
5,100.00	5,058.21	4,728.89	4,432.01	14.20	26.69	-82.05	-1,425.21	197.77	1,457.04	1,431.92	25.12	57.996	
5,200.00	5,155.97	4,801.30	4,496.37	14.63	27.28	-82.27	-1,458.19	201.48	1,498.86	1,472.72	26.15	57.321	
5,300.00	5,253.73	4,920.17	4,602.31	15.06	28.25	-82.66	-1,511.66	208.39	1,540.50	1,513.43	27.07	56.902	
5,400.00	5,351.49	4,997.77	4,671.71	15.50	28.88	-82.92	-1,546.04	213.14	1,581.65	1,553.69	27.96	56.562	
5,500.00	5,449.25	5,089.38	4,753.41	15.93	29.62	-83.23	-1,587.03	219.32	1,623.50	1,594.71	28.79	56.398	
5,600.00	5,547.01	5,176.97	4,831.76	16.37	30.32	-83.50	-1,625.77	224.86	1,664.75	1,635.26	29.48	56.464	
5,700.00	5,644.77	5,261.82	4,907.34	16.81	31.02	-83.75	-1,663.91	230.69	1,706.87	1,676.44	30.43	56.095	
5,800.00	5,742.53	5,425.80	5,055.48	17.25	32.25	-84.26	-1,733.42	241.05	1,746.07	1,714.80	31.27	55.836	
5,900.00	5,840.29	5,544.02	5,163.62	17.69	33.10	-84.66	-1,780.55	248.78	1,783.50	1,750.72	32.78	54.409	
6,000.00	5,938.05	5,648.50	5,259.80	18.14	33.84	-85.07	-1,820.45	257.31	1,820.22	1,786.17	34.05	53.461	
6,100.00	6,035.81	5,769.19	5,371.51	18.58	34.67	-85.55	-1,865.06	267.28	1,855.95	1,820.80	35.15	52.804	
6,200.00	6,133.57	5,852.39	5,448.72	19.03	35.24	-85.89	-1,895.19	274.54	1,891.30	1,855.23	36.07	52.436	
6,300.00	6,231.33	5,965.73	5,554.11	19.47	36.01	-86.35	-1,935.67	284.51	1,926.28	1,889.42	36.86	52.258	
6,400.00	6,329.09	6,052.19	5,634.54	19.92	36.59	-86.66	-1,966.64	291.44	1,961.10	1,923.70	37.39	52.445	
6,500.00	6,426.85	6,130.00	5,706.74	20.37	37.13	-86.95	-1,994.82	298.22	1,996.63	1,957.94	38.69	51.607	
6,600.00	6,524.61	6,226.04	5,795.85	20.82	37.79	-87.31	-2,029.41	307.53	2,032.54	1,992.82	39.72	51.172	
6,700.00	6,622.37	6,356.26	5,917.32	21.27	38.65	-87.81	-2,074.66	319.90	2,067.26	2,026.60	40.66	50.840	
6,800.00	6,720.13	6,486.86	6,039.85	21.72	39.48	-88.31	-2,118.18	332.11	2,100.88	2,059.17	41.72	50.358	
6,900.00	6,817.89	6,658.61	6,202.82	22.17	40.48	-88.99	-2,170.20	347.16	2,131.51	2,088.51	43.00	49.567	
7,000.00	6,915.65	6,812.89	6,350.66	22.62	41.31	-89.59	-2,212.67	359.05	2,159.46	2,115.93	43.53	49.614	
7,100.00	7,013.41	7,089.48	6,619.70	23.07	42.55	-90.59	-2,275.40	370.82	2,180.62	2,137.59	43.03	50.680	
7,200.00	7,111.17	7,228.88	6,756.65	23.52	43.07	-91.10	-2,301.19	374.27	2,198.37	2,154.34	44.03	49.933	
7,300.00	7,208.93	7,385.63	6,911.33	23.97	43.59	-91.72	-2,326.16	378.43	2,214.21	2,168.24	45.97	48.162	
7,400.00	7,306.69	7,524.73	7,049.16	24.43	44.00	-92.33	-2,344.44	382.64	2,228.06	2,180.35	47.71	46.703	
7,500.00	7,404.45	7,963.00	7,486.55	24.88	44.50	-94.69	-2,354.80	388.84	2,228.21	2,176.62	51.58	43.198	
7,544.74	7,448.19	7,963.00	7,486.55	25.08	44.50	-94.69	-2,354.80	388.84	2,227.76	2,175.97	51.78	43.020	
7,600.00	7,502.21	7,963.00	7,486.55	25.33	44.50	-94.69	-2,354.80	388.84	2,228.44	2,176.41	52.04	42.826	
7,700.00	7,599.97	7,963.00	7,486.55	25.79	44.50	-94.69	-2,354.80	388.84	2,233.16	2,180.67	52.49	42.545	
7,800.00	7,697.73	7,963.00	7,486.55	26.24	44.50	-94.69	-2,354.80	388.84	2,242.33	2,189.39	52.94	42.353	
7,900.00	7,795.49	7,963.00	7,486.55	26.70	44.50	-94.69	-2,354.80	388.84	2,255.91	2,202.51	53.40	42.247	
8,000.00	7,893.25	7,963.00	7,486.55	27.15	44.50	-94.69	-2,354.80	388.84	2,273.80	2,219.95	53.85	42.222	
8,100.00	7,991.01	7,963.00	7,486.55	27.61	44.50	-94.69	-2,354.80	388.84	2,295.91	2,241.60	54.31	42.275	
8,200.00	8,088.77	7,963.00	7,486.55	28.07	44.50	-94.69	-2,354.80	388.84	2,322.13	2,267.36	54.76	42.402	
8,300.00	8,186.53	7,963.00	7,486.55	28.52	44.50	-94.69	-2,354.80	388.84	2,352.30	2,297.08	55.22	42.599	
8,400.00	8,284.29	7,963.00	7,486.55	28.98	44.50	-94.69	-2,354.80	388.84	2,386.29	2,330.61	55.68	42.860	
8,500.00	8,382.05	7,963.00	7,486.55	29.44	44.50	-94.69	-2,354.80	388.84	2,423.93	2,367.79	56.13	43.182	
8,600.00	8,479.81	7,963.00	7,486.55	29.89	44.50	-94.69	-2,354.80	388.84	2,465.05	2,408.46	56.59	43.560	
8,700.00	8,577.57	7,963.00	7,486.55	30.35	44.50	-94.69	-2,354.80	388.84	2,509.49	2,452.44	57.05	43.990	
8,800.00	8,675.33	7,963.00	7,486.55	30.81	44.50	-94.69	-2,354.80	388.84	2,557.06	2,499.56	57.50	44.468	
8,900.00	8,773.09	7,963.00	7,486.55	31.27	44.50	-94.69	-2,354.80	388.84	2,607.61	2,549.65	57.96	44.989	
9,000.00	8,870.85	7,963.00	7,486.55	31.72	44.50	-94.69	-2,354.80	388.84	2,660.96	2,602.54	58.42	45.550	
9,100.00	8,968.61	7,963.00	7,486.55	32.18	44.50	-94.69	-2,354.80	388.84	2,716.94	2,658.06	58.88	46.147	
9,200.00	9,066.37	7,963.00	7,486.55	32.64	44.50	-94.69	-2,354.80	388.84	2,775.39	2,716.06	59.33	46.776	
9,300.00	9,164.13	7,963.00	7,486.55	33.10	44.50	-94.69	-2,354.80	388.84	2,836.17	2,776.37	59.79	47.434	
9,400.00	9,261.89	7,963.00	7,486.55	33.56	44.50	-94.69	-2,354.80	388.84	2,899.12	2,838.87	60.25	48.118	
9,500.00	9,359.65	7,963.00	7,486.55	34.02	44.50	-94.69	-2,354.80	388.84	2,964.11	2,903.40	60.71	48.825	
9,600.00	9,457.41	7,963.00	7,486.55	34.48	44.50	-94.69	-2,354.80	388.84	3,031.01	2,969.84	61.17	49.552	
9,700.00	9,555.17	7,963.00	7,486.55	34.94	44.50	-94.69	-2,354.80	388.84	3,099.69	3,038.06	61.63	50.298	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #7-28D-12-15 - 1 - 1

Survey Program: 115-MWD

Offset Site Error: 0.00 ft

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
9,800.00	9,652.93	7,963.00	7,486.55	35.40	44.50	-94.69	-2,354.80	388.84	3,170.03	3,107.95	62.09	51.059	
9,900.00	9,750.69	7,963.00	7,486.55	35.86	44.50	-94.69	-2,354.80	388.84	3,241.94	3,179.39	62.54	51.834	
10,000.00	9,848.45	7,963.00	7,486.55	36.32	44.50	-94.69	-2,354.80	388.84	3,315.30	3,252.30	63.00	52.621	
10,100.00	9,946.22	7,963.00	7,486.55	36.78	44.50	-94.69	-2,354.80	388.84	3,390.02	3,326.56	63.46	53.417	
10,200.00	10,043.98	7,963.00	7,486.55	37.24	44.50	-94.69	-2,354.80	388.84	3,466.02	3,402.10	63.92	54.222	
10,300.00	10,141.74	7,963.00	7,486.55	37.70	44.50	-94.69	-2,354.80	388.84	3,543.21	3,478.83	64.38	55.034	
10,400.00	10,239.50	7,963.00	7,486.55	38.16	44.50	-94.69	-2,354.80	388.84	3,621.52	3,556.68	64.84	55.851	
10,500.00	10,337.26	7,963.00	7,486.55	38.62	44.50	-94.69	-2,354.80	388.84	3,700.87	3,635.57	65.30	56.673	
10,600.00	10,435.02	7,963.00	7,486.55	39.08	44.50	-94.69	-2,354.80	388.84	3,781.21	3,715.45	65.76	57.499	
10,700.00	10,532.78	7,963.00	7,486.55	39.54	44.50	-94.69	-2,354.80	388.84	3,862.46	3,796.24	66.22	58.326	
10,800.00	10,630.54	7,963.00	7,486.55	40.00	44.50	-94.69	-2,354.80	388.84	3,944.57	3,877.89	66.68	59.155	
10,900.00	10,728.30	7,963.00	7,486.55	40.46	44.50	-94.69	-2,354.80	388.84	4,027.49	3,960.35	67.14	59.984	
11,000.00	10,826.06	7,963.00	7,486.55	40.92	44.50	-94.69	-2,354.80	388.84	4,111.17	4,043.57	67.60	60.814	
11,100.00	10,923.82	7,963.00	7,486.55	41.38	44.50	-94.69	-2,354.80	388.84	4,195.57	4,127.50	68.06	61.642	
11,200.00	11,021.58	7,963.00	7,486.55	41.84	44.50	-94.69	-2,354.80	388.84	4,280.64	4,212.11	68.52	62.469	
11,300.00	11,119.34	7,963.00	7,486.55	42.30	44.50	-94.69	-2,354.80	388.84	4,366.34	4,297.35	68.98	63.295	
11,400.00	11,217.10	7,963.00	7,486.55	42.76	44.50	-94.69	-2,354.80	388.84	4,452.63	4,383.19	69.45	64.117	
11,500.00	11,314.86	7,963.00	7,486.55	43.23	44.50	-94.69	-2,354.80	388.84	4,539.49	4,469.59	69.91	64.937	
11,600.00	11,412.62	7,963.00	7,486.55	43.69	44.50	-94.69	-2,354.80	388.84	4,626.88	4,556.52	70.37	65.754	
11,700.00	11,510.38	7,963.00	7,486.55	44.15	44.50	-94.69	-2,354.80	388.84	4,714.77	4,643.95	70.83	66.567	
11,800.00	11,608.14	7,963.00	7,486.55	44.61	44.50	-94.69	-2,354.80	388.84	4,803.14	4,731.85	71.29	67.376	
11,900.00	11,705.90	7,963.00	7,486.55	45.07	44.50	-94.69	-2,354.80	388.84	4,891.95	4,820.20	71.75	68.181	
12,000.00	11,803.66	7,963.00	7,486.55	45.53	44.50	-94.69	-2,354.80	388.84	4,981.19	4,908.98	72.21	68.981	
12,100.00	11,901.42	7,963.00	7,486.55	46.00	44.50	-94.69	-2,354.80	388.84	5,070.83	4,998.16	72.67	69.777	
12,200.00	11,999.18	7,963.00	7,486.55	46.46	44.50	-94.69	-2,354.80	388.84	5,160.85	5,087.72	73.13	70.568	
12,300.00	12,096.94	7,963.00	7,486.55	46.92	44.50	-94.69	-2,354.80	388.84	5,251.23	5,177.64	73.59	71.353	
12,400.00	12,194.70	7,963.00	7,486.55	47.38	44.50	-94.69	-2,354.80	388.84	5,341.95	5,267.90	74.06	72.134	
12,500.00	12,292.46	7,963.00	7,486.55	47.84	44.50	-94.69	-2,354.80	388.84	5,433.00	5,358.49	74.52	72.909	
12,600.00	12,390.22	7,963.00	7,486.55	48.31	44.50	-94.69	-2,354.80	388.84	5,524.36	5,449.38	74.98	73.679	
12,700.00	12,487.98	7,963.00	7,486.55	48.77	44.50	-94.69	-2,354.80	388.84	5,616.02	5,540.57	75.44	74.443	
12,800.00	12,585.74	7,963.00	7,486.55	49.23	44.50	-94.69	-2,354.80	388.84	5,707.95	5,632.05	75.90	75.201	
12,900.00	12,683.50	7,963.00	7,486.55	49.69	44.50	-94.69	-2,354.80	388.84	5,800.15	5,723.79	76.36	75.954	
13,000.00	12,781.26	7,963.00	7,486.55	50.15	44.50	-94.69	-2,354.80	388.84	5,892.60	5,815.78	76.83	76.701	
13,100.00	12,879.02	7,963.00	7,486.55	50.62	44.50	-94.69	-2,354.80	388.84	5,985.30	5,908.01	77.29	77.442	
13,200.00	12,976.78	7,963.00	7,486.55	51.08	44.50	-94.69	-2,354.80	388.84	6,078.23	6,000.48	77.75	78.177	
13,300.00	13,074.54	7,963.00	7,486.55	51.54	44.50	-94.69	-2,354.80	388.84	6,171.38	6,093.17	78.21	78.906	
13,400.00	13,172.30	7,963.00	7,486.55	52.00	44.50	-94.69	-2,354.80	388.84	6,264.74	6,186.07	78.67	79.630	
13,500.00	13,270.06	7,963.00	7,486.55	52.47	44.50	-94.69	-2,354.80	388.84	6,358.31	6,279.17	79.14	80.347	
13,600.00	13,367.82	7,963.00	7,486.55	52.93	44.50	-94.69	-2,354.80	388.84	6,452.06	6,372.46	79.60	81.059	
13,700.00	13,465.58	7,963.00	7,486.55	53.39	44.50	-94.69	-2,354.80	388.84	6,546.00	6,465.94	80.06	81.764	
13,800.00	13,563.34	7,963.00	7,486.55	53.85	44.50	-94.69	-2,354.80	388.84	6,640.12	6,559.60	80.52	82.464	
13,900.00	13,661.10	7,963.00	7,486.55	54.32	44.50	-94.69	-2,354.80	388.84	6,734.41	6,653.42	80.98	83.158	
14,000.00	13,758.86	7,963.00	7,486.55	54.78	44.50	-94.69	-2,354.80	388.84	6,828.86	6,747.41	81.45	83.845	
14,100.00	13,856.62	7,963.00	7,486.55	55.24	44.50	-94.69	-2,354.80	388.84	6,923.46	6,841.56	81.91	84.527	
14,200.00	13,954.38	7,963.00	7,486.55	55.71	44.50	-94.69	-2,354.80	388.84	7,018.22	6,935.85	82.37	85.203	
14,300.00	14,052.14	7,963.00	7,486.55	56.17	44.50	-94.69	-2,354.80	388.84	7,113.12	7,030.29	82.83	85.873	
14,400.00	14,149.90	7,963.00	7,486.55	56.63	44.50	-94.69	-2,354.80	388.84	7,208.16	7,124.86	83.30	86.538	
14,500.00	14,247.66	7,963.00	7,486.55	57.09	44.50	-94.69	-2,354.80	388.84	7,303.33	7,219.57	83.76	87.196	
14,600.00	14,345.42	7,963.00	7,486.55	57.56	44.50	-94.69	-2,354.80	388.84	7,398.62	7,314.40	84.22	87.849	
14,700.00	14,443.18	7,963.00	7,486.55	58.02	44.50	-94.69	-2,354.80	388.84	7,494.04	7,409.36	84.68	88.496	
14,800.00	14,540.94	7,963.00	7,486.55	58.48	44.50	-94.69	-2,354.80	388.84	7,589.58	7,504.44	85.14	89.137	
14,900.00	14,638.70	7,963.00	7,486.55	58.95	44.50	-94.69	-2,354.80	388.84	7,685.23	7,599.62	85.61	89.773	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design SECTION 21 T12S R15E - PR PR #7-28D-12-15 - 1 - 1

Survey Program: 115-MWD

Offset Site Error: 0.00 ft
Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,000.00	14,736.46	7,963.00	7,486.55	59.41	44.50	-94.69	-2,354.80	388.84	7,780.99	7,694.92	86.07	90.403	
15,075.28	14,810.06	7,963.00	7,486.55	59.76	44.50	-94.69	-2,354.80	388.84	7,853.15	7,766.74	86.42	90.874	
15,100.00	14,834.24	7,963.00	7,486.55	59.86	44.50	-96.36	-2,354.80	388.84	7,876.85	7,789.84	87.02	90.520	
15,200.00	14,932.51	7,963.00	7,486.55	60.16	44.50	-103.00	-2,354.80	388.84	7,972.73	7,883.52	89.21	89.372	
15,300.00	15,031.37	7,963.00	7,486.55	60.43	44.50	-109.37	-2,354.80	388.84	8,068.47	7,977.49	90.99	88.676	
15,400.00	15,130.69	7,963.00	7,486.55	60.65	44.50	-115.34	-2,354.80	388.84	8,163.99	8,071.73	92.27	88.483	
15,500.00	15,230.36	7,963.00	7,486.55	60.84	44.50	-120.81	-2,354.80	388.84	8,259.17	8,166.12	93.05	88.764	
15,600.00	15,330.24	7,963.00	7,486.55	60.98	44.50	-125.76	-2,354.80	388.84	8,353.91	8,260.52	93.39	89.448	
15,682.77	15,413.00	7,963.00	7,486.55	61.08	44.50	111.56	-2,354.80	388.84	8,431.92	8,362.28	69.64	121.075	
15,700.00	15,430.23	7,963.00	7,486.55	61.10	44.50	111.56	-2,354.80	388.84	8,448.12	8,378.45	69.66	121.268	
15,800.00	15,530.23	7,963.00	7,486.55	61.21	44.50	111.56	-2,354.80	388.84	8,542.22	8,472.43	69.79	122.403	
15,900.00	15,630.23	7,963.00	7,486.55	61.31	44.50	111.56	-2,354.80	388.84	8,636.45	8,566.54	69.91	123.535	
16,000.00	15,730.23	7,963.00	7,486.55	61.42	44.50	111.56	-2,354.80	388.84	8,730.80	8,660.77	70.03	124.664	
16,069.77	15,800.00	7,963.00	7,486.55	61.49	44.50	111.56	-2,354.80	388.84	8,796.71	8,726.59	70.12	125.449	

Bill Barrett Corporation

BILL BARRETT CORPORATION

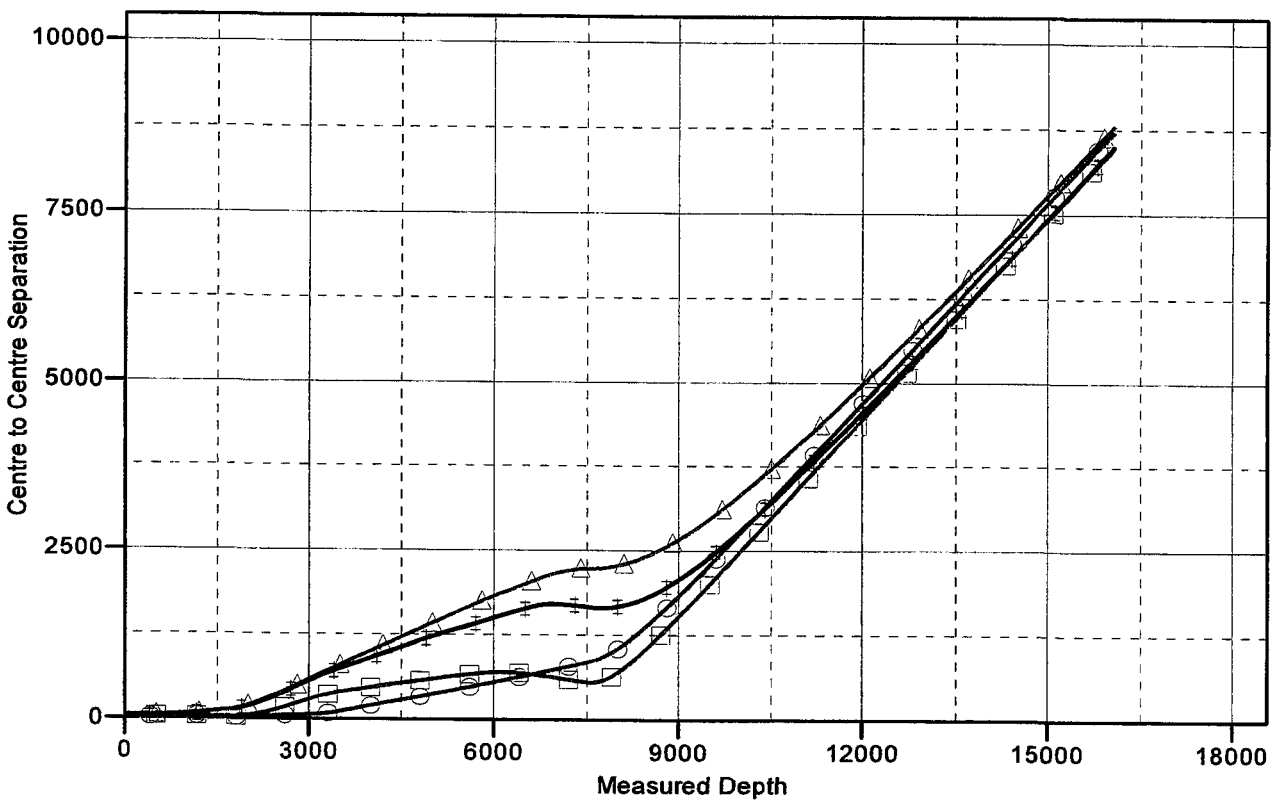
Anticollision Report

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB @ 7554.50ft
Offset Depths are relative to Offset Datum
Central Meridian is 111° 30' 0.0000 W °

Coordinates are relative to: PR PR #4-28-12-15 DEEP
Coordinate System is US State Plane 1927 (Exact solution), Utah Central 4302
Grid Convergence at Surface is: 0.81°

Ladder Plot



LEGEND

8664, 4008664 V1
PR #3-28D-12-15, PR PR #3-28D-12-15
PR PR #15-21-12-15, 1, 1 V0
PR PR #7-28D-12-15, 1, 1 V0

Bill Barrett Corporation

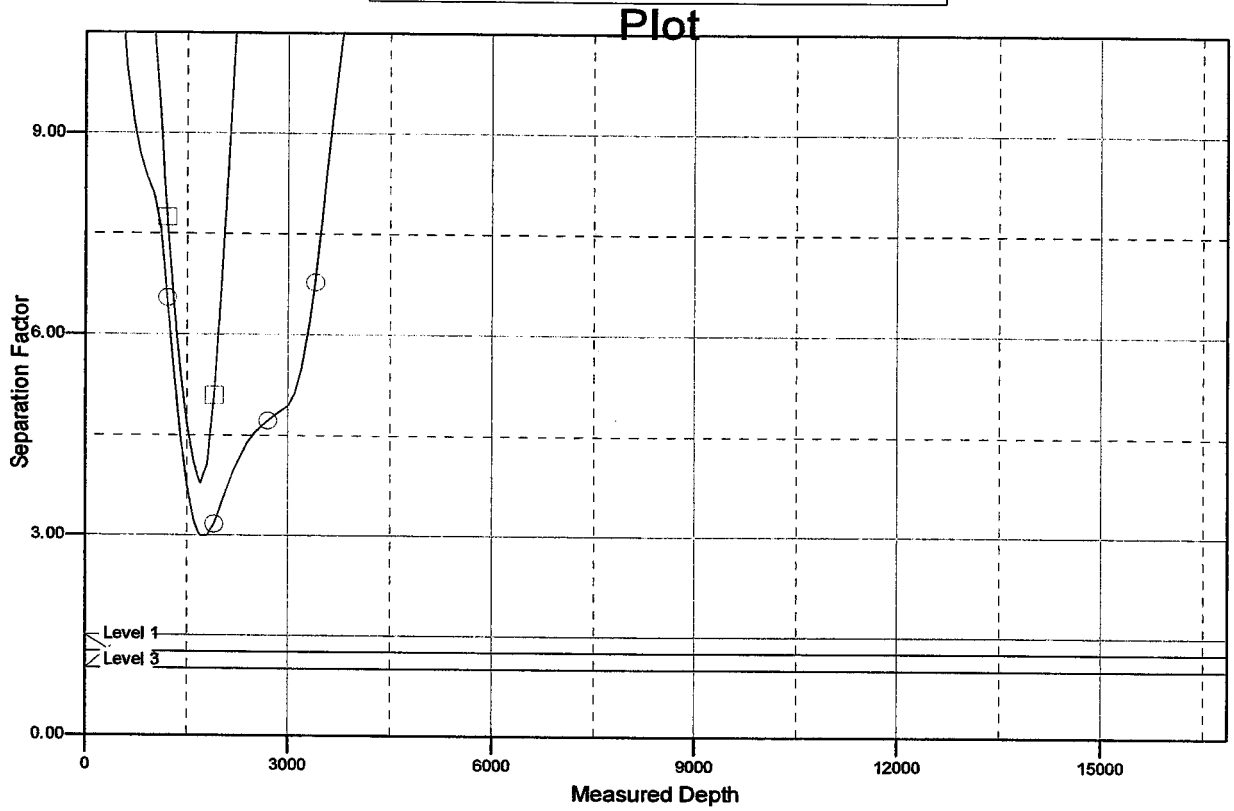
BILL BARRETT CORPORATION

Anticollision Report

Company:	BILL BARRETT CORP	**Local Co-ordinate Reference:**	Well PR PR #4-28-12-15 DEEP
Project:	CARBON COUNTY, UT (NAD 27)	**TVD Reference:**	KB @ 7554.50ft
Reference Site:	SECTION 21 T12S R15E	**MD Reference:**	KB @ 7554.50ft
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PR PR #4-28-12-15 DEEP	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PR PR #4-28-12-15 DEEP	**Database:**	Compass
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB @ 7554.50ft
Offset Depths are relative to Offset Datum
Central Meridian is 111° 30' 0.0000 W °

Coordinates are relative to: PR PR #4-28-12-15 DEEP
Coordinate System is US State Plane 1927 (Exact solution), Utah Central 4302
Grid Convergence at Surface is: 0.81°



LEGEND

8664, 4008664 V1
PR #3-28D-12-15, PR PR #3-28D-12-15
PR PR #15-21-12-15, 1, 1 V0
PR PR #7-28D-12-15, 1, 1 V0

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

SURFACE USE PLAN

BILL BARRETT CORPORATION

Prickly Pear Unit Federal 4-28D-12-15 Deep

SWSE, 382' FSL, 2371' FEL, Sec. 21, T12S-R15E (surface hole)
NWNW, 916' FNL, 633' FWL, Sec. 28, T12S-R15E (bottom hole)
Carbon County, Utah

The onsite for this additional deep well is scheduled for April 11, 2008. This is an existing pad with one vertical and three directional wells (the 15-21-12-15, 13-21D, 3-28D, 7-28D). Minimal additional disturbance is required.

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 existing well pad is located approximately 48 miles from Myton, Utah. Maps reflecting directions to the proposed well pad are included (see Topographic Maps A and B).

   b. An access road, approximately 5943 feet in length exists to this pad. Total road disturbance requested for this access is 50-feet (actual current disturbance of 35-feet).

   c. Surface disturbance and vehicular travel would be limited to the approved existing access road. Adequate signs would be posted, as necessary, to warn the public of project related traffic.

   d. BBC would be responsible for all maintenance of the access road including drainage structures.

   e. The use of roads under State and County Road Department maintenance is necessary to access the Prickly Pear Unit. However, an encroachment permit is not anticipated since there are no upgrades to the State or County road systems are proposed at this time.

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

   g. Vehicle operators would obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.

2. Planned Access Road:

   a. See 1. b. under Existing Roads.

3. Location of Existing Wells (see Topographic Map C):

   a. Following is a list of wells with surface hole locations within a one-mile radius of the proposed well:

i.	water wells	none
ii.	injection wells	none
iii.	disposal wells	none
iv.	drilling wells	none
v.	temp shut-in wells	none
vi.	producing wells	thirteen
vii.	abandoned wells	none

4. Location of Production Facilities (see enclosed "Proposed Facility Layout"):

a. All facilities for this pad would be located adjacent to the existing facilities for the Prickly Pear 15-21 pad as noted on the enclosed diagram (some permanent structures/facilities may be shared). This well would have its own meter run and separator and two (2) additional 400-bbl tanks would be installed as necessary.

b. All permanent above-ground structures would be painted a flat, non-reflective Olive Black 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.

d. Site security guidelines identified in 43 CFR 3162.7-5 and Onshore Oil and Gas Order No. 3 would be adhered to.

e. A gas meter run would be constructed and located on lease within 500 feet of the wellhead. The meter run would be housed and/or fenced. 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. **Use of an electronic flow meter (EFM) for gas measurement purposes is requested with this application as well as use of a flow conditioner (versus a straightening vane).**

f. A tank battery exists on this lease and would be modified as per the proposed facility layout to include additional equipment. All loading lines and valves would be placed inside the berm surrounding the tank battery or would have a secondary containment vessel. 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. BBC requests permission to install the necessary production/operation facilities with this application.

g. Any necessary pits would be properly fenced to prevent any wildlife and livestock entry.

h. All access roads would be maintained as necessary to prevent erosion and accommodate year-round traffic as practicable. The roads would be maintained in a safe, useable condition.

i. 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.

j. An 8-inch surface-laid gas pipeline, approximately 5943' feet in length, exists to this location.

5. Location and Type of Water Supply:

   a. Bill Barrett Corporation would use water consistent with approvals granted by the Utah State Engineer's Office under Application Number 90-1853 (T76109) which expires April 3, 2009 or an existing water well in Sec. 13, T12S-R14E granted by the Utah State Engineer's Office under Application Number 90-1849 (T75896) which expires September 13, 2008.

   b. Water use for this location would most likely be diverted from Nine Mile Creek, the N¼ of Section 3, T12S-R14E. Bobtail trucks would haul the water, traveling Prickly Pear road to Harmon Canyon, traveling north to this point of diversion.

6. Source of Construction Material:

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

   b. No construction materials would be taken off-lease.

   c. If any additional gravel is required, it would be obtained from SITLA materials permits or from federal BBC locations within the Prickly Pear unit.

7. Methods of Handling Waste Disposal:

   a. All wastes associated with this application would be contained and disposed of utilizing approved facilities.

   b. Drill cuttings would be contained and buried on site.

   c. The reserve pit, which was closed subsequent to completion activities ending on the 15-21 pad, would be re-used for this additional well.

   d. The reserve pit would be constructed so as not to leak, break or allow any discharge.

   e. If necessary, the reserve pit would be lined with 12 mil minimum thickness polyethylene nylon reinforced liner material. The liner would overlay straw, soil and/or bentonite if rock is encountered during excavation. The pit liner would overlap the pit walls and be anchored with soil and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner would be disposed of in the pit. Pit walls would be sloped no greater than 2:1 and the depth of the reserve pit would be approximately 8-feet with a minimum of 2 foot freeboard.

   f. The reserve pit has been located in cut material. Three sides of the reserve pit would be fenced before drilling starts. The fourth side would be fenced as soon as drilling is completed and shall remain until the pit is dry. After the reserve pit has dried, all areas not needed for production would be rehabilitated as per the plans for reclamation of surface (10. below).

   g. 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) in quantities over 10,000 pounds that may be used, produced, stored, transported or disposed of annually in association with the drilling, testing or completion of the well include diesel fuel, hydrochloric acid and silica sand. This material would be consumed in the drilling and completion process. No extremely hazardous substances, as defined in 40 CFR 355,

in threshold planning quantities would be used, produced, stored, transported or disposed of in association with the drilling, testing or completion of the well.

h. Trash would be contained in a trash cage or roll-off container and hauled away to an approved disposal site as necessary but no later than at the completion of drilling operations. The contents of the trash container would be hauled off periodically to the approved Carbon or Uintah County Landfill.

i. Produced fluids from the well other than water would be produced into a test tank until such time as construction of production facilities is completed. Any spills of oil, gas, salt water or other produced fluids would be cleaned up and removed.

j. After initial clean-up and based on volumes, BBC would install a tank (maximum size 400 barrel capacity) to contain produced waste water. After first production, produced wastewater would be confined to a lined pit or storage tank for a period not to exceed ninety (90) days. Thereafter, produced water would be used in further drilling and completion activities, evaporated in the pit, or hauled to a State approved disposal facility.

k. 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.

l. Sanitary facilities would be on site at all times during operations. Sewage would be placed in a portable chemical toilet and the toilet replaced periodically utilizing a licensed contractor to transport by truck the portable chemical toilet so that its contents can be delivered to the Price or Vernal Wastewater Treatment Facility in accordance with state and county regulations.

m. Any liquid hydrocarbons produced during completion work would be contained in test tanks on the well location. The tanks would be removed from the location at a later date.

A flare pit may be constructed a minimum of 110' from the wellhead and may be used during completion work. In the event a flare pit proves to be unworkable in this situation, a flare stack would be installed. BBC would flow back as much fluid and gas as possible into vessels, separating the fluid from the gas. The fluid would then be either returned to the reserve pit or placed into a tank. Gas would be then directed into the flare pit or the flare stack with a constant source of ignition. Natural gas would be directed to the pipeline as soon as pipeline gas quality standards are met.

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

8. <u>Ancillary Facilities:</u>

a. Garbage containers and portable toilets are the only ancillary facilities proposed in this application

9. Well Site Layout:

a. The well would be properly identified in accordance with 43 CFR 3162.6.

b. The rig layout and cross section diagrams are enclosed (see Location Layout and Cross Section Plats).

c. The pad and road designs are consistent with BLM specifications.

d. The additional disturbance to the existing Prickly Pear 15-21 pad to accommodate the additional well being added is approximately 0.07 acres. The pad dimensions are 360' x 250' with a reserve pit of 200' x 100'.

e. 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.

f. All cut and fill slopes would be such that stability can be maintained for the life of the activity.

g. Diversion ditches would be constructed, if necessary, around the well pad to prevent surface waters from entering the area.

h. The stockpiled topsoil (first 6 inches or maximum available) would be stored in a windrow on the uphill side of the location to prevent any possible contamination. All topsoil would be stockpiled for reclamation in such a way as to prevent soil loss and contamination.

i. Pits would remain fenced until site cleanup.

j. If air drilling occurs, the blooie line would be located at least 100 feet from the individual well head and would run from the wellhead directly to the pit.

k. Water application may be implemented if necessary to minimize the amount of fugitive dust.

10. Plan for Restoration of the Surface:

Producing Wells

a. The rat and mouse hole would be filled and compacted from bottom to top immediately upon release of the drilling rig from location.

b. The reserve pit would be closed as soon as reasonably practical, but no later than 90 days from completion of the last well on the pad, provided favorable weather conditions and that there are no plans to re-use the pit within one year. An extension may be given at the discretion of the BLM Authorized Officer. The following are requirements for pit closures:

- Squeezing of pit fluids and cuttings is prohibited;
- Pits must be dry of fluids or they must be removed via vac-truck or other environmentally acceptable method prior to backfilling, re-contouring and replacement of topsoil;

- Mud and cuttings left in the pit must be buried at least 3-feet below re-contoured grade;
- If a liner was used, the polyethylene nylon reinforced liner shall be torn and perforated before backfilling;
- The operator would be responsible for re-contouring any subsidence areas that develop from closing a pit before it is sufficiently dry.
- The operator shall contact the BLM Authorized Officer at least 48-hours prior to the filling and reclamation of pits and the start of any reclamation such as recontouring and reseeding.

c. Reclamation requirements would be dependant upon plans for subsequent drilling activity on the pad. The operator shall contact the BLM Authorized Officer within 90 days of completion of the last well on the pad and provide plans for subsequent pad use.

- In the event that the operator plans to re-occupy the pad within three years, the operator shall seed the unused portions of the pad with a cover crop as approved for this use by the BLM. If necessary, this cover crop would be replanted each year that the pad remains in an un-reclaimed state. Unless otherwise specifically authorized, no pad shall remain in an un-reclaimed state for more than three years.
    - Cover crops would be seeded by broadcasting seed over all unused portions of the pad. Seed would be covered with soil to the appropriate depth by raking or other methods.
- In the event there are no plans to re-occupy the pad within three years, interim reclamation activities would begin within 90 days. The operator would use the BLM approved seed mix and would seed during the first suitable seeding season.
    - Interim reclamation drill seeding would be conducted on the contour to a depth of 0.5 inch, followed by cultipaction to compact the seedbed, preventing soil and seed losses. To maintain quality and purity, the current years tested, certified seed with a minimum germination rate of 80% and a minimum purity of 90% would be used.
- 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 BLM prescribed seed mixture and covered with mulch for protection from wind and water erosion and to discourage the invasion of weeds.

d. The operator would control noxious weeds along access road use authorizations, pipeline route authorizations, well sites or other applicable facilities by spraying or mechanical removal. A list of noxious weeds may be obtained from the BLM or the appropriate county extension office. On BLM administered land it is required that a Pesticide Use Proposal be submitted and approved prior to the application of herbicides, pesticides or possibly hazardous chemicals.

Dry Hole

a. All disturbed lands associated with this project, including the pipelines, access roads, water management facilities, etc. would be expediently reclaimed and reseeded in accordance with the reclamation plan and any pertinent site-specific COAs.

11. Surface and Mineral Ownership:

a. Surface ownership – Federal under the management of the Bureau of Land Management – Price Field Office, 125 South 600 West, Price Utah 84078; (435) 636-3600.

b. Mineral ownership – Federal under the management of the Bureau of Land Management – Price Field Office, 125 South 600 West, Price Utah 84078; (435) 636-3600.

12. Other Information:

a. Montgomery Archaeological Consultants conducted a Class III archeological survey. A copy of the report was submitted under separate cover to the appropriate agencies by Montgomery as MOAC Report No. 05-431 dated October 10, 2005.

b. Areas in the proposed drilling program where fluids escaping the wellbore and exiting onto a hillside might occur will be identified. In those cases, cement and/ or fluid loss compounds (types of lost circulation fluids) would be utilized to heal up vags and cracks. Upon individual evaluation of the proposed well sites, air drilling the hole to surface casing depth may occur.

c. A combustor may be installed at this location for control of associated condensate tank emissions. A combustor ranges from 24" to 48" wide and is approximately 10' tall. Combustor placement would be on existing disturbance and would not be closer than 100' to any tank or wellhead.

Facility Layout

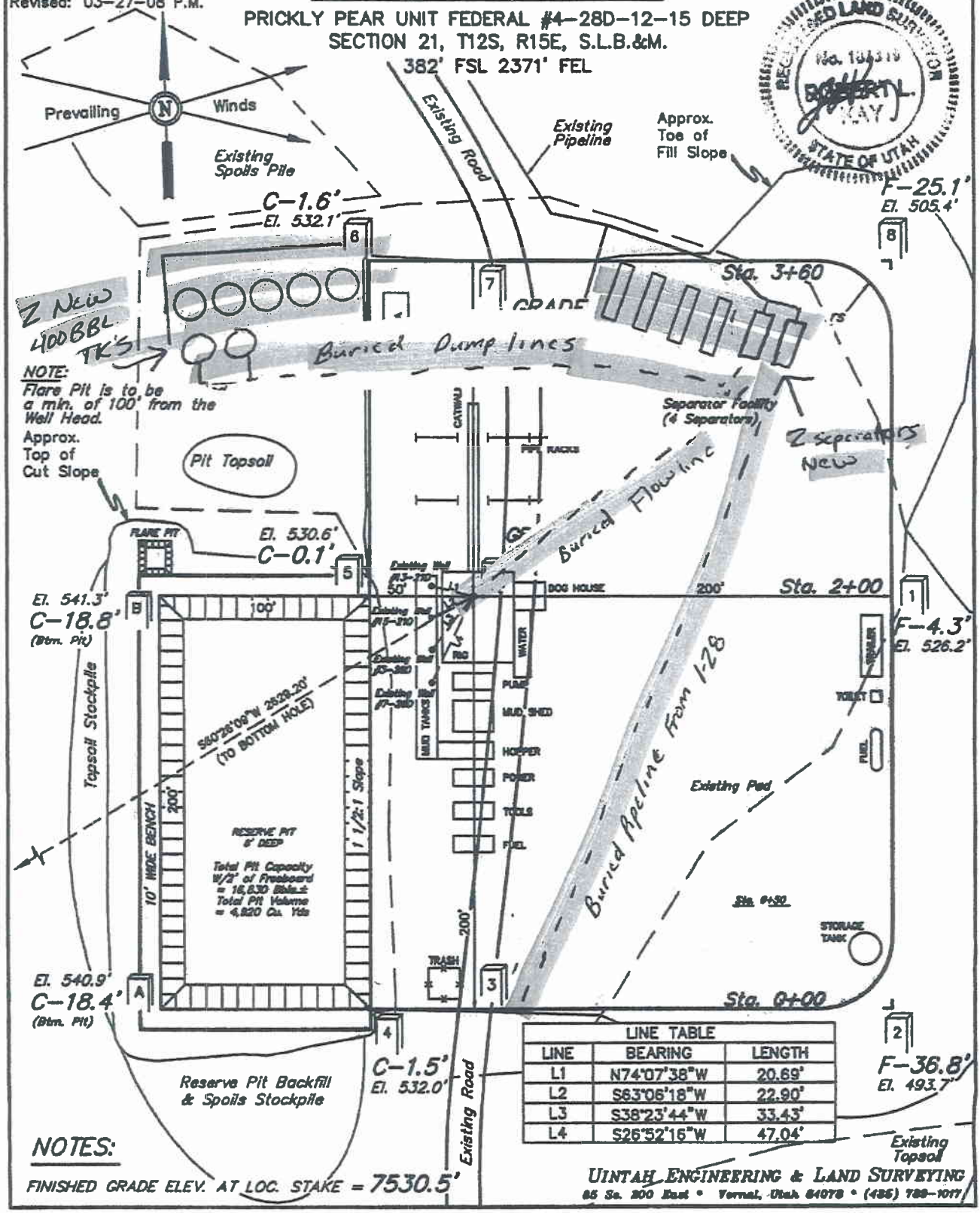
SCALE: 1" = 60'
DATE: 2-12-08
DRAWN BY: C.P.
Revised: 03-27-08 P.M.

BILL BARRETT CORPORATION

LOCATION LAYOUT FOR

PRICKLY PEAR UNIT FEDERAL #4-28D-12-15 DEEP
SECTION 21, T12S, R15E, S.L.B.&M.
382' FSL 2371' FEL

FIGURE #1



LINE TABLE		
LINE	BEARING	LENGTH
L1	N74°07'38"W	20.69'
L2	S63°06'18"W	22.90'
L3	S38°23'44"W	33.43'
L4	S26°52'16"W	47.04'

NOTES:

FINISHED GRADE ELEV. AT LOC. STAKE = 7530.5'

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

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. These statements are subject to the provisions of 18 U.S.C. 1001 for the filings of false statements.

Executed this 10th day of April 2008

Name:	Tracey Fallang
Position Title:	Regulatory Analyst
Address:	1099 18th Street, Suite 2300, Denver, CO 80202
Telephone:	303-312-8134
Field Representative	Fred Goodrich
Address:	1820 W. Hwy 40, Roosevelt, UT 84066
Telephone:	435-725-3515
E-mail:	

Tracey Fallang

Tracey Fallang, Environmental/Regulatory Analyst

BILL BARRETT CORPORATION

PRICKLY PEAR UNIT FEDERAL #4-28D-12-15 DEEP

LOCATED IN CARBON COUNTY, UTAH
SECTION 21, T12S, R15E, S.L.B.&M.

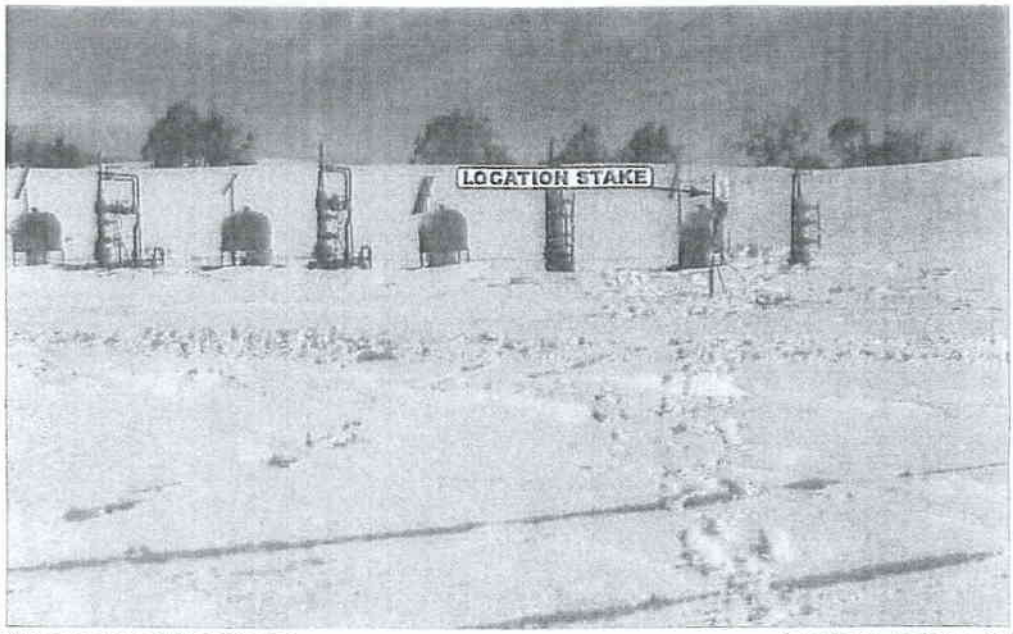


PHOTO: VIEW OF LOCATION STAKE — CAMERA ANGLE: WESTERLY

PHOTO: VIEW OF EXISTING ACCESS — CAMERA ANGLE: SOUTHERLY

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com
- Since 1964 -

LOCATION PHOTOS	02 MONTH	13 DAY	08 YEAR	PHOTO
TAKEN BY: D.R.	DRAWN BY: C.P.	REVISED: 03-21-08		

SCALE: 1" = 60'
DATE: 2-12-08
DRAWN BY: C.P.
Revised: 03-27-08 P.M.

BILL BARRETT CORPORATION

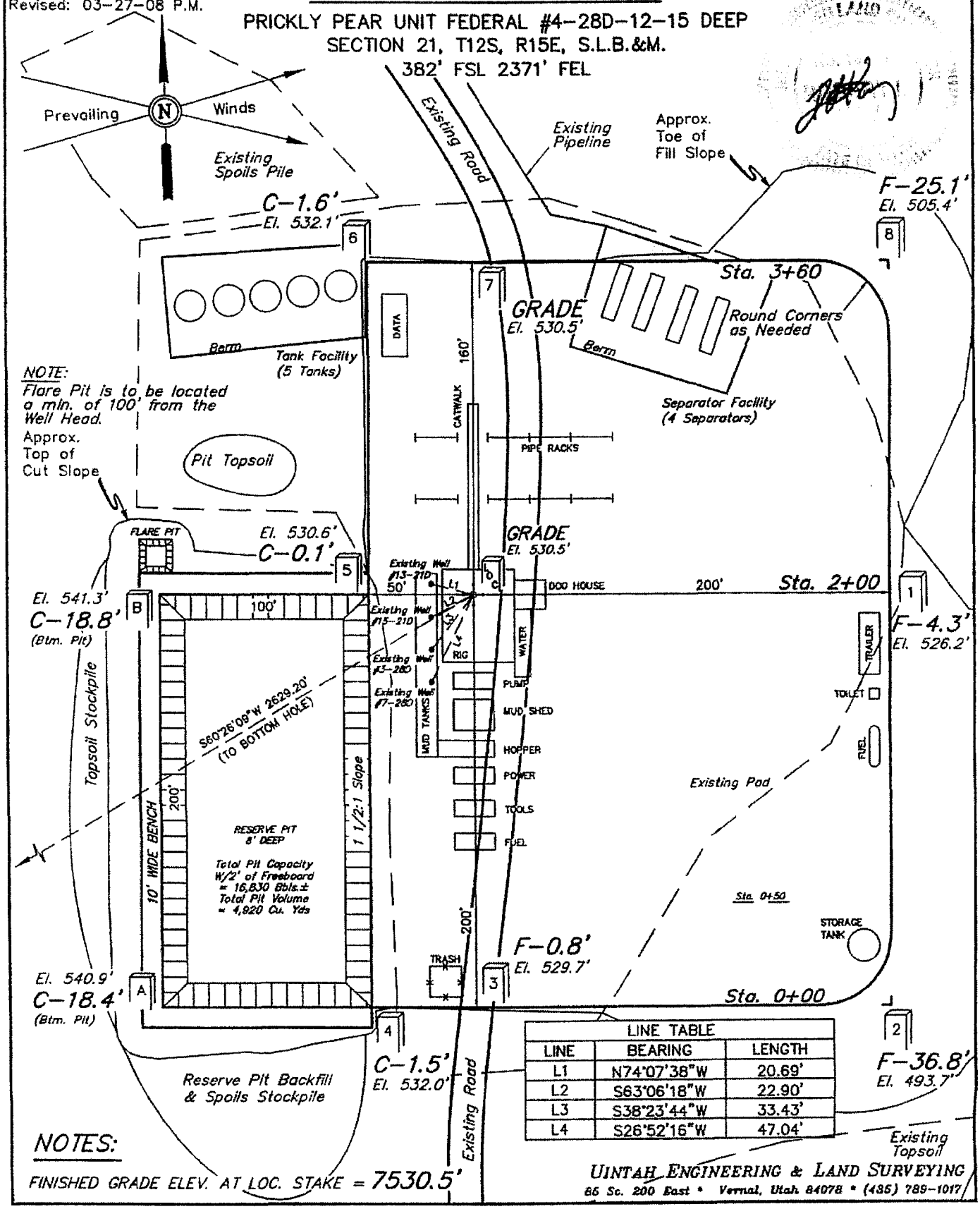
FIGURE #1

LOCATION LAYOUT FOR

PRICKLY PEAR UNIT FEDERAL #4-28D-12-15 DEEP

SECTION 21, T12S, R15E, S.L.B.&M.

382' FSL 2371' FEL



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NOTES:

FINISHED GRADE ELEV. AT LOC. STAKE = 7530.5'

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

BILL BARRETT CORPORATION

TYPICAL CROSS SECTIONS FOR

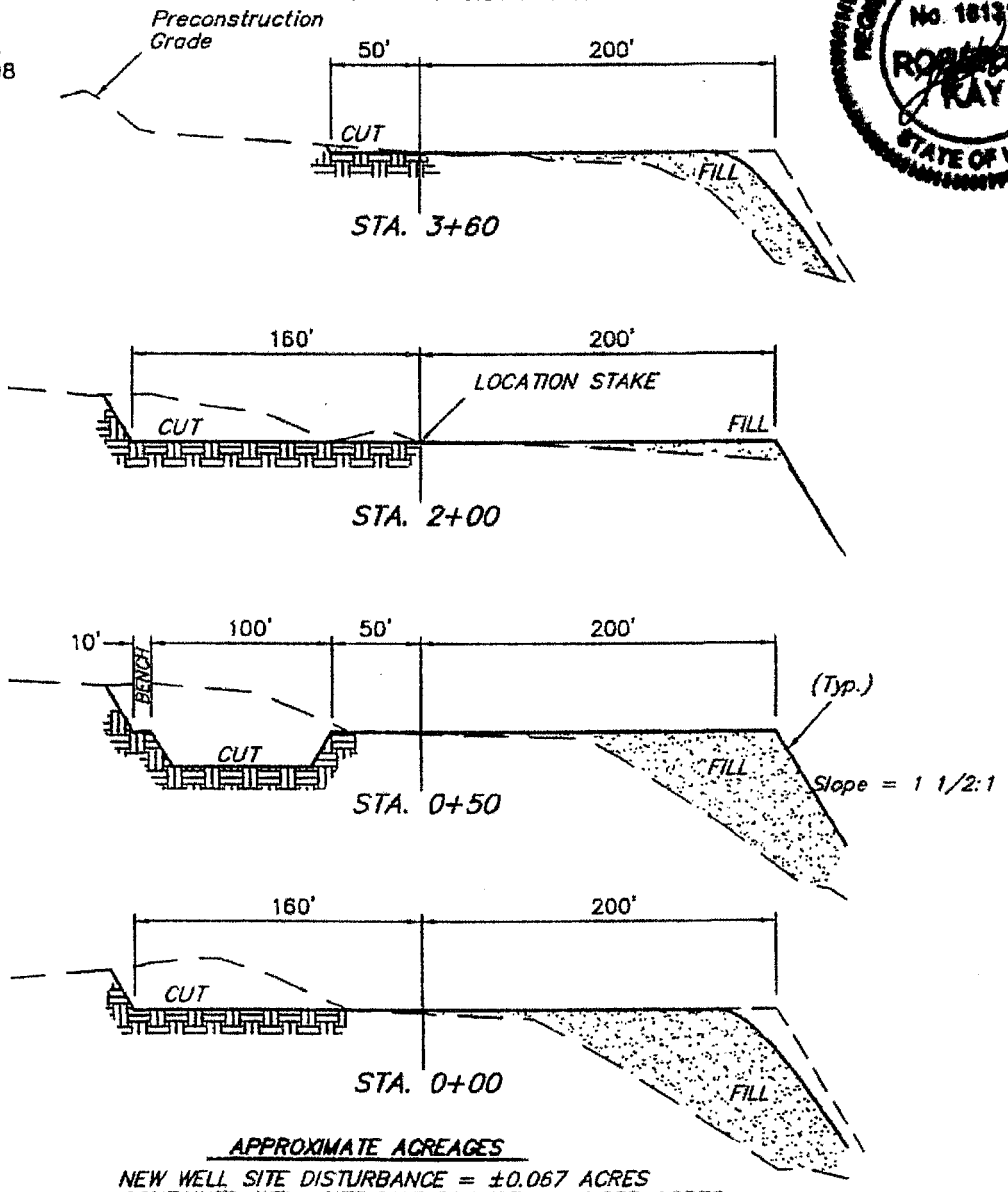
PRICKLY PEAR UNIT FEDERAL #4-28D-12-15 DEEP
SECTION 21, T12S, R15E, S.L.B.&M.
382' FSL 2371' FEL

FIGURE #2

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

DATE: 2-12-08
DRAWN BY: C.P.
Revised: 3-21-08

REGISTERED LAND SURVEYOR No. 161319 ROBERT L. KAY STATE OF UTAH



APPROXIMATE ACREAGES

NEW WELL SITE DISTURBANCE = ±0.067 ACRES
CONTAINED WELL SITE DISTURBANCE = ±1.985 ACRES

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

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT

(6") Topsoil Stripping	=	1,360	Cu. Yds.
Remaining Location	=	13,600	Cu. Yds.
TOTAL CUT	=	14,960	CU.YDS.
FILL	=	21,860	CU.YDS.

DEFICIT MATERIAL	=	<6,900>	Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	3,820	Cu. Yds.
DEFICIT UNBALANCE (After Interim Rehabilitation)	=	<10,720>	Cu. Yds.

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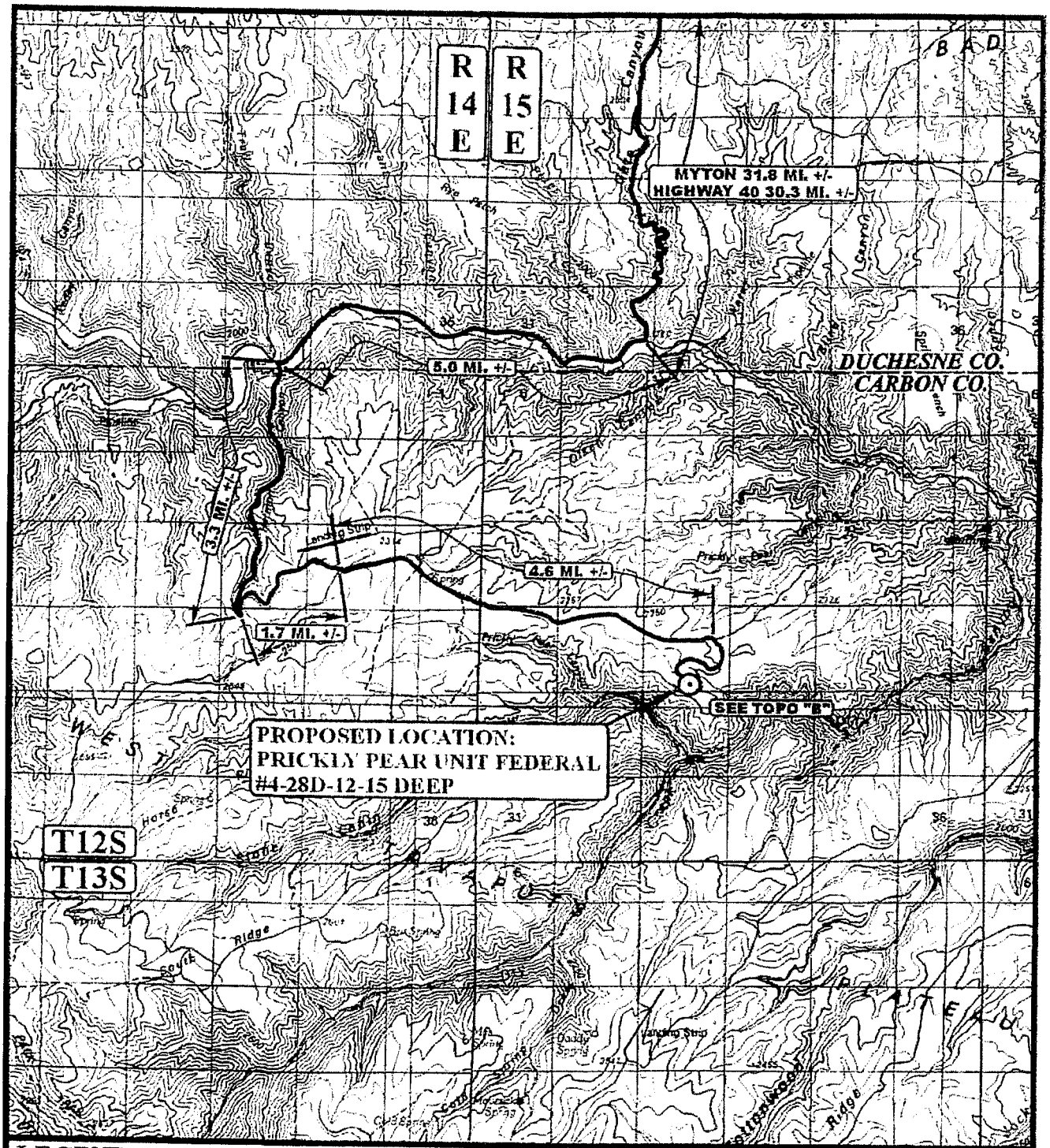


LEGEND:

⊙ PROPOSED LOCATION

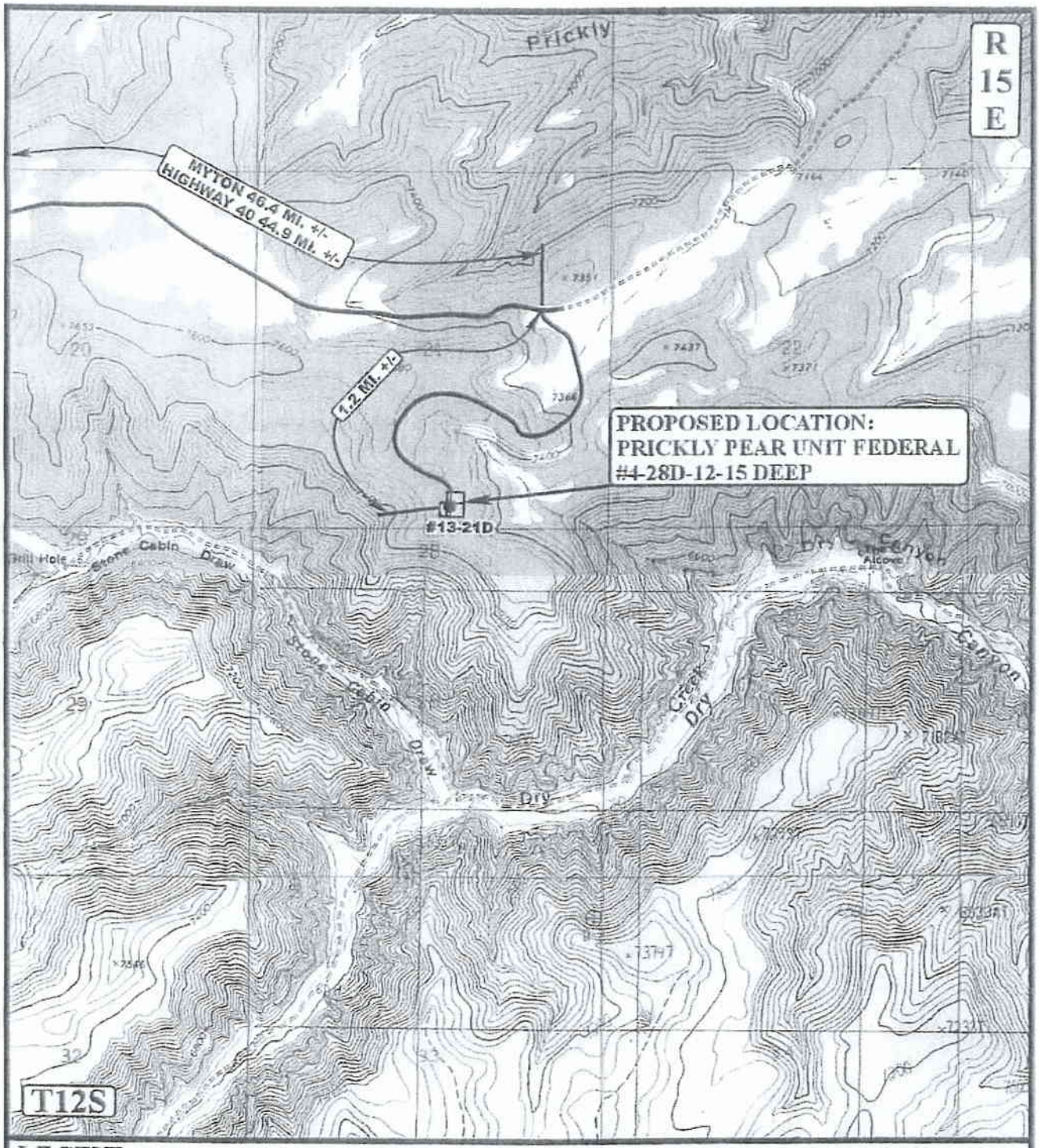
N

BILL BARRETT CORPORATION

PRICKLY PEAR UNIT FEDERAL #4-28D-12-15 DEEP
SECTION 21, T12S, R15E, S.L.B.&M.
382' FSL 2371' FEL

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

TOPOGRAPHIC MAP	02 MONTH	13 DAY	08 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: C.P.	REVISED: 03-21-08		



LEGEND:

EXISTING ROAD

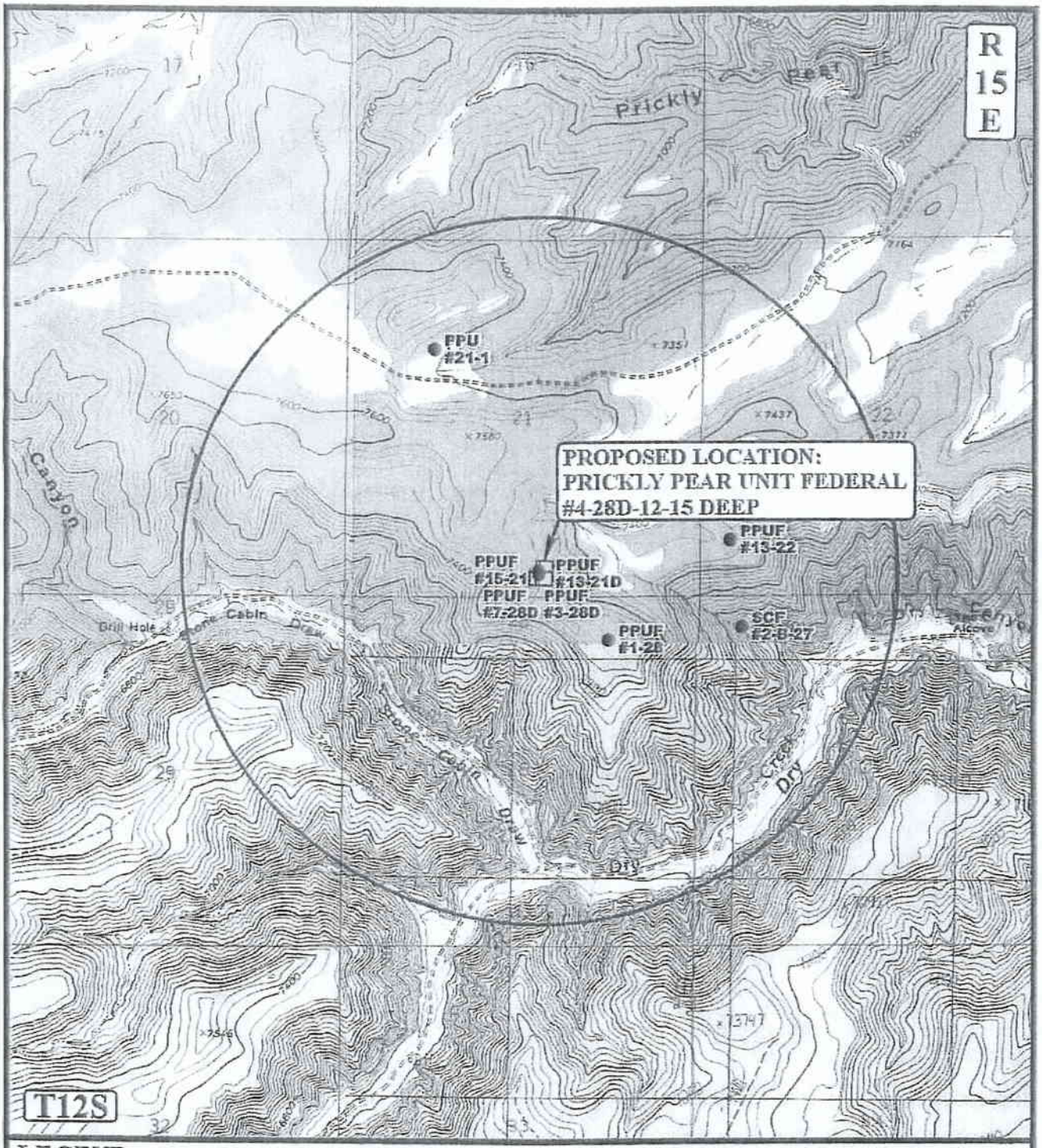
N

BILL BARRETT CORPORATION

PRICKLY PEAR UNIT FEDERAL #4-28D-12-15 DEEP
SECTION 21, T12S, R15E, S.L.B.&M.
382' FSL 2371' FEL

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

TOPOGRAPHIC MAP	02 MONTH	13 DAY	08 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 03-21-08		



LEGEND:

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

N

BILL BARRETT CORPORATION

PRICKLY PEAR UNIT FEDERAL #4-28D-12-15 DEEP
SECTION 21, T12S, R15E, S.L.B.&M.
382' FSL 2371' FEL

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

TOPOGRAPHIC MAP	02 MONTH	13 DAY	08 YEAR	C TOPO
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 03-21-08		

WORKSHEET

APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 04/14/2008

API NO. ASSIGNED: 43-007-31397

WELL NAME: PPU FED 4-28D-12-15 DEEP

OPERATOR: BILL BARRETT CORP (N2165)

PHONE NUMBER: 303-312-8134

CONTACT: TRACEY FALLANG

PROPOSED LOCATION:

SWSE 21 120S 150E

SURFACE: 0382 FSL 2371 FEL

NWNW BOTTOM: 0916 FNL 0633 FWL Sec 28

COUNTY: CARBON

LATITUDE: 39.75304 LONGITUDE: -110.2402

UTM SURF EASTINGS: 565096 NORTHINGS: 4400415

FIELD NAME: NINE MILE CANYON (35)

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-73670

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: WINGT

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

✓ Plat

✓ Bond: Fed[1] Ind[] Sta[] Fee[]
(No. WYB000040)

N Potash (Y/N)

N Oil Shale 190-5 (B) or 190-3 or 190-13

✓ Water Permit
(No. 90-1853)

N RDCC Review (Y/N)
(Date:)

NA Fee Surf Agreement (Y/N)

NA Intent to Commingle (Y/N)

LOCATION AND SITING:

R649-2-3.

Unit: PRICKLY PEAR OK

R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells

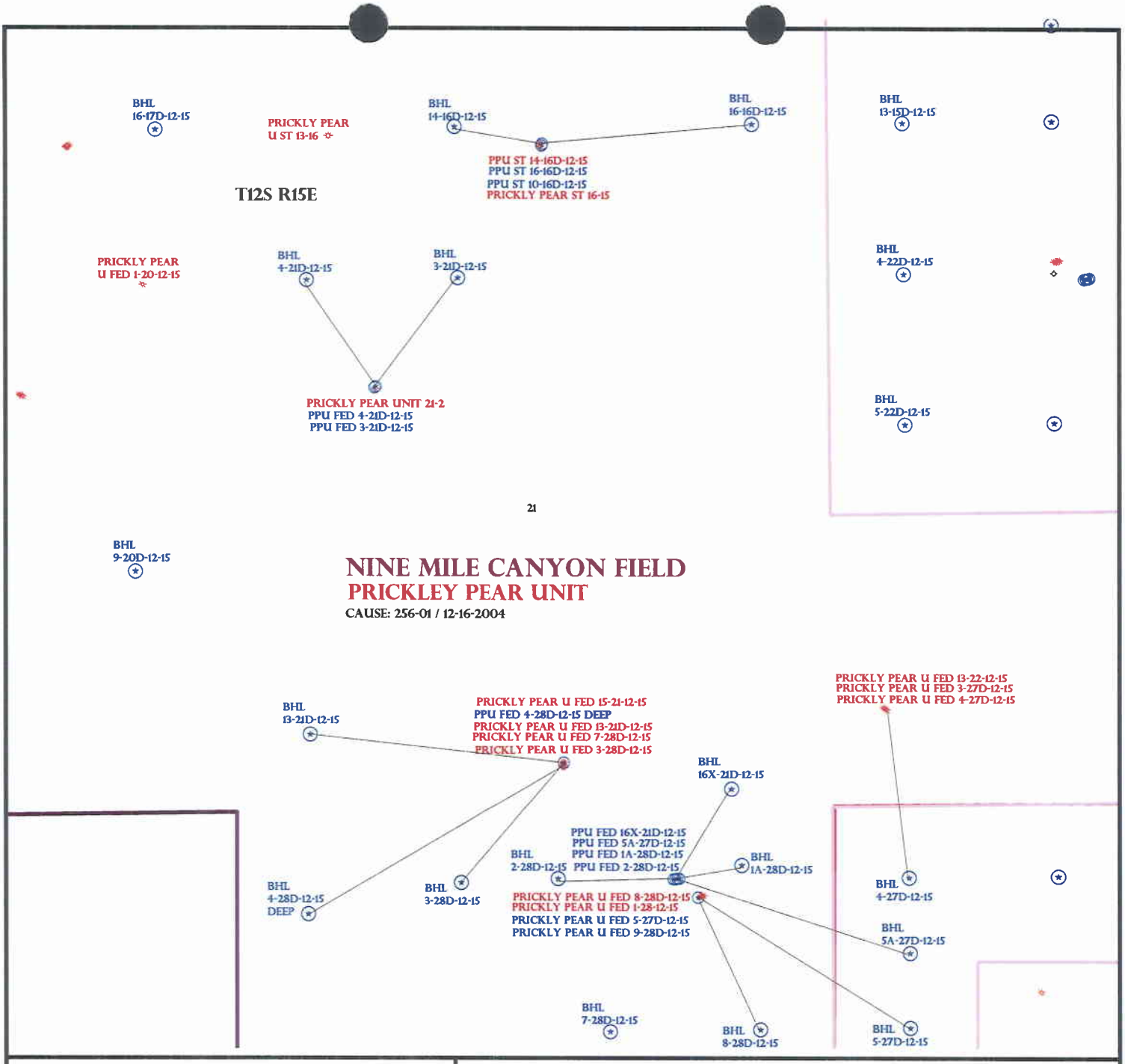
R649-3-3. Exception

✓ Drilling Unit
Board Cause No: 256-1
Eff Date: 12-14-2004
Siting: 460' fr u&dry & uncomm. Tracts

✓ R649-3-11. Directional Drill

COMMENTS:

STIPULATIONS: 1- Federal Approval



OPERATOR: BILL BARRETT CORP (N2165)

SEC: 21 T.12S R. 15E

FIELD: NINE MILE CANYON (35)

COUNTY: CARBON

CAUSE: 256-01 / 12-16-2004

Field Status
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

Unit Status
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Wells Status
- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING

UTAH DNR
OIL, GAS & MINING

N
W E
S

PREPARED BY: DIANA MASON
DATE: 15-APRIL-2008

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

April 15, 2008

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

Re: Prickly Pear Unit Federal 4-28D-12-15 Deep Well, Surface Location 382' FSL, 2371' FEL, SW SE, Sec. 21, T. 12 South, R. 15 East, Bottom Location 916' FNL, 633' FWL, NW NW, Sec. 28, T. 12 South, R. 15 East, Carbon County, Utah

Gentlemen:

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

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-007-31397.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: Carbon County Assessor
Bureau of Land Management, Moab Office

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR OIL, GAS & MINING

Operator: Bill Barrett Corporation

Well Name & Number Prickly Pear Unit Federal 4-28D-12-15 Deep

API Number: 43-007-31397

Lease: UTU-73670

Surface Location:	SW SE	**Sec.** 21	**T.** 12 South	**R.** 15 East
Bottom Location:	NW NW	**Sec.** 28	**T.** 12 South	**R.** 15 East

Conditions of Approval

1. **General**

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

2. **Notification Requirements**

   Notify the Division within 24 hours of spudding the well.

   - Contact Carol Daniels at (801) 538-5284

   Notify the Division prior to commencing operations to plug and abandon the well.

   - Contact Dustin Doucet at (801) 538-5281 (801) 733-0983 home

3. **Reporting Requirements**

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

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

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

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

CONFIDENTIAL

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 73670

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: n/a

7. UNIT or CA AGREEMENT NAME: Prickly Pear / UTU-79487

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: Prickly Pear Unit Federal 4-28D-12-15 Deep

2. NAME OF OPERATOR: BILL BARRETT CORPORATION

9. API NUMBER: 4300731397

3. ADDRESS OF OPERATOR: 1099 18th Street, Suite 2300 CITY Denver STATE CO ZIP 80202

PHONE NUMBER: (303) 312-8134

10. FIELD AND POOL, OR WILDCAT: Nine Mile

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 382' FSL, 2371' FEL

COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 21 12S 15E

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Permit Extension
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

This sundry is being submitted to request an extension on the APD which expires on 4/15/08.

Approved by the Utah Division of Oil, Gas and Mining

Date: 04-20-09

By:

COPY SENT TO OPERATOR

Date: 4.22.2009

Initials: KS

NAME (PLEASE PRINT) Tracey Fallang TITLE Regulatory Analyst

SIGNATURE Tracey Fallang DATE 4/2/2009

(This space for State use only)

RECEIVED
APR 15 2009
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

RESET

Application for Permit to Drill
Request for Permit Extension
Validation

(this form should accompany the Sundry Notice requesting permit extension)

API: 4300731397
Well Name: Peter's Point Unit Federal 4-28D-12-15 Deep
Location: SWSE, Sec. 21, T12S-R15E
Company Permit Issued to: Bill Barrett Corporation
Date Original Permit Issued: 4/15/2007 8

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 right-of-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 ☐

Tracey Fallang
Signature

4/2/2009
Date

Title: Environmental/Regulatory Analyst

Representing: Bill Barrett Corporation

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APR 15 2009
DIV. OF OIL, GAS & MINING

GARY R. HERBERT
Governor

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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

June 15, 2010

Bill Barrett Corporation
1099 18th Street, Suite 2300
Denver, Colorado 80202

Re: APD Rescinded – Prickly Pear U Fed 4-28D-12-15, Sec. 21, T.12S, R.15E, Carbon County, Utah API No. 43-007-31397

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on April 15, 2008. On April 20, 2009 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective June 15, 2010.

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

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

Sincerely,

Diana Mason
Environmental Scientist

cc: Well File
Bureau of Land Management, Moab