FORM 3160-3
(December 1990)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires December 31, 1991

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.: **UTU-73665**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

7. UNIT AGREEMENT NAME: **Prickly Pear**

1b. TYPE OF WELL
OIL WELL [ ] GAS WELL [X] OTHER [ ] SINGLE ZONE [ ] MULTIPLE ZONE [X]

8. FARM OR LEASE NAME: **Prickly Pear**

2. NAME OF OPERATOR: **Wasatch Oil & Gas, LLC**

CONFIDENTIAL

9. WELL NO.: **#10-4**

3. ADDRESS OF OPERATOR: **P.O. Box 699, Farmington, UT. 84025-0699** Phone # **(801)451-9200**

10. FIELD AND POOL OR WILDCAT: ~~Prickly Pear~~ Stone Cabin

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At Surface: **75' fsl & 271' fel (SE/4 SE/4)** 4403393 N 557821 E
At proposed Prod. Zone: **same**

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: **Sec.10-T12S-R14E**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: **38 miles southwest of Myton, Utah**

12. COUNTY OR PARISH: **Carbon** 13. STATE: **UT.**

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.(Also to nearest drlg. unit line, if any): **75 feet north of lease line**

16. NO. OF ACRES IN LEASE: **960**

17. NO. OF ACRES ASSIGNED TO THIS WELL: **160**

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT.: **n/a**

19. PROPOSED DEPTH: **7,828'**

20. ROTARY OR CABLE TOOLS: **Rotary**

21. ELEVATIONS (Show whether DF, RT, GR, etc.): **7,728' GR**

22. APPROX. DATE WORK WILL START*:

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT/FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8- 5/8"	32#	780'	350 sxs "G" & "Lite"
7-7/8"	4-1/2"	11.6#	7828'	550 sxs 50/50 Poz

Amended 4-4-02 fc

RECEIVED
JAN 14 2002
DIVISION OF
OIL, GAS AND MINING

Operations hereunder will be conducted pursuant to a statewide bond filed with the Utah State Office of BLM, under UT-1128, Surety Bond No. B7998

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM : If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
SIGNED R. Hegi Wilson TITLE **Agent** DATE **1/7/02**

(This space for Federal or State office use)

PERMIT NO. 43-007-30823 APPROVAL DATE

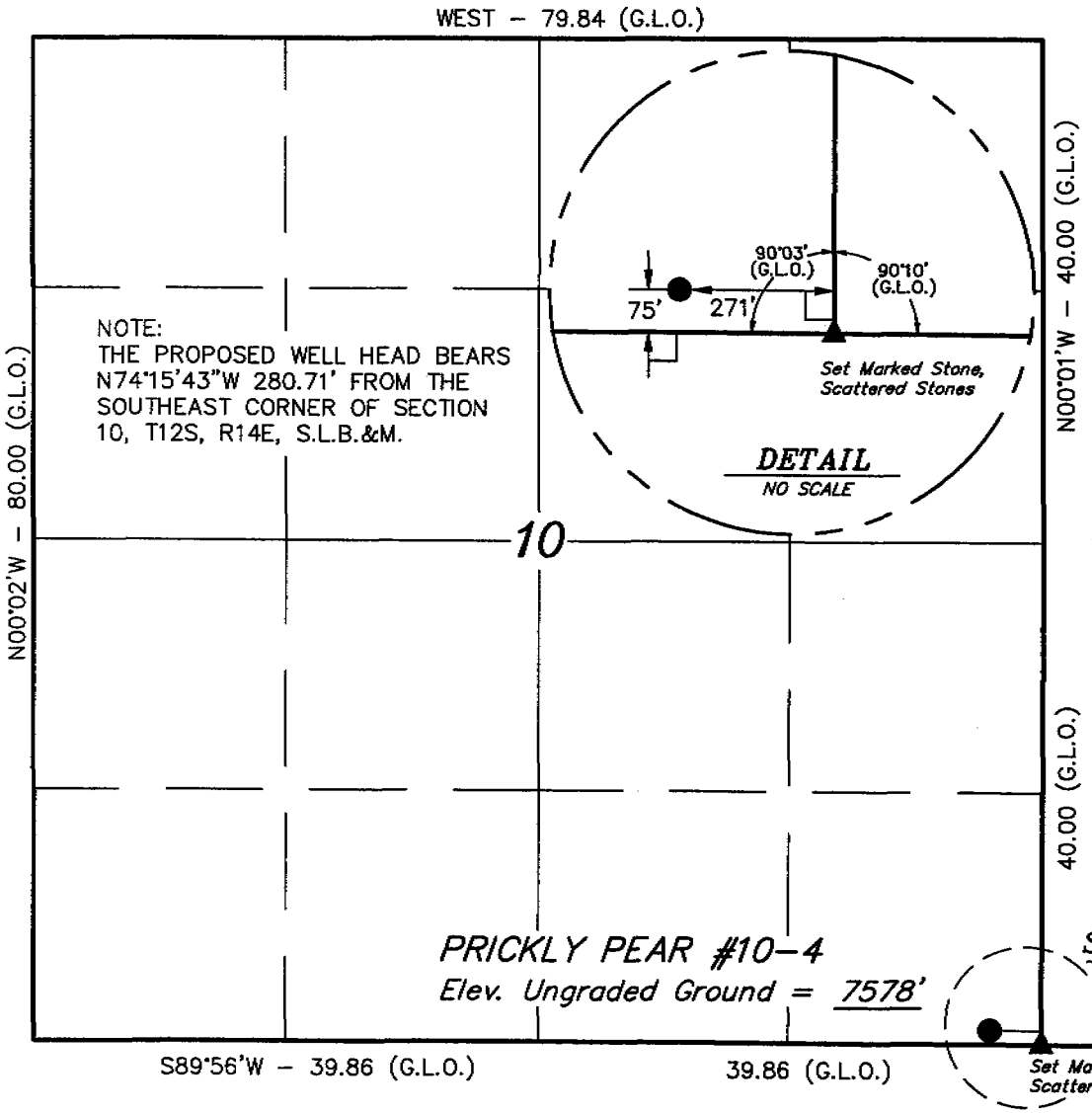
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY TITLE DATE

***See Instructions On Reverse Side**

Title 18 U.S.C. Section 1001, makes 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 mater within its jurisdiction.

T12S, R14E, S.L.B.&M.

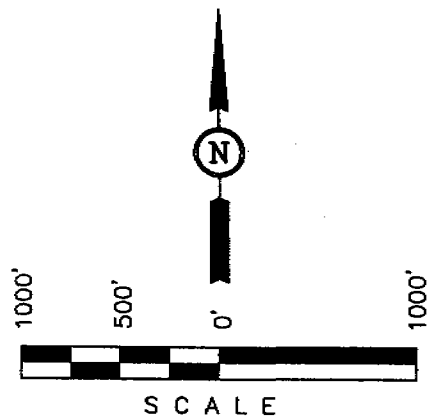


WASATCH OIL & GAS LLC.

Well location, PRICKLY PEAR #10–4, located as shown in the SE 1/4 SE 1/4 of Section 10, T12S, R14E, S.L.B.&M., Carbon County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 7, T12S, R15E, S.L.B.&M. TAKEN FROM THE COWBOY BENCH, QUADRANGLE, UTAH, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7563 FEET.



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. 161319
STATE OF UTAH

LEGEND:

└ = 90° SYMBOL
● = PROPOSED WELL HEAD.
▲ = SECTION CORNERS LOCATED.

BASIS OF BEARINGS

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

LATITUDE = 39°46'50"
LONGITUDE = 110°19'30"

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

SCALE: 1" = 1000'	DATE SURVEYED: 10–25–01	DATE DRAWN: 11–05–01
PARTY: B.B. W.L. D.R.B.	REFERENCES: G.L.O. PLAT	
WEATHER: COOL	FILE: WASATCH OIL & GAS LLC.	

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

008

AMENDED

APD RECEIVED: 01/14/2002 API NO. ASSIGNED: 43-007-30823

WELL NAME: PRICKLY PEAR U FED 10-4

OPERATOR: BILL BARRETT CORP (N2165)

CONTACT: HEGGIE WILSON, AGENT PHONE NUMBER: 801-451-9200

PROPOSED LOCATION:

SESE 10 120S 140E

SURFACE: 0075 FSL 0271 FEL

BOTTOM: 0075 FSL 0271 FEL

CARBON

STONE CABIN (45)

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-73665

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: MNCS

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LATITUDE: 39.78040

LONGITUDE: -110.3248

RECEIVED AND/OR REVIEWED:

✓ Plat

✓ Bond: Fed[1] Ind[] Sta[] Fee[]
(No. 1262)

N Potash (Y/N)

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

✓ Water Permit
(No. 90-1811)

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

NA Fee Surf Agreement (Y/N)

LOCATION AND SITING:

___ R649-2-3.

Unit PRICKLY PEAR ✓

___ R649-2-2. General

Siting: 460 From Qtr/Qtr & 920' Between Wells

✓ R649-3-3. [redacted]

___ Drilling Unit

Board Cause No:

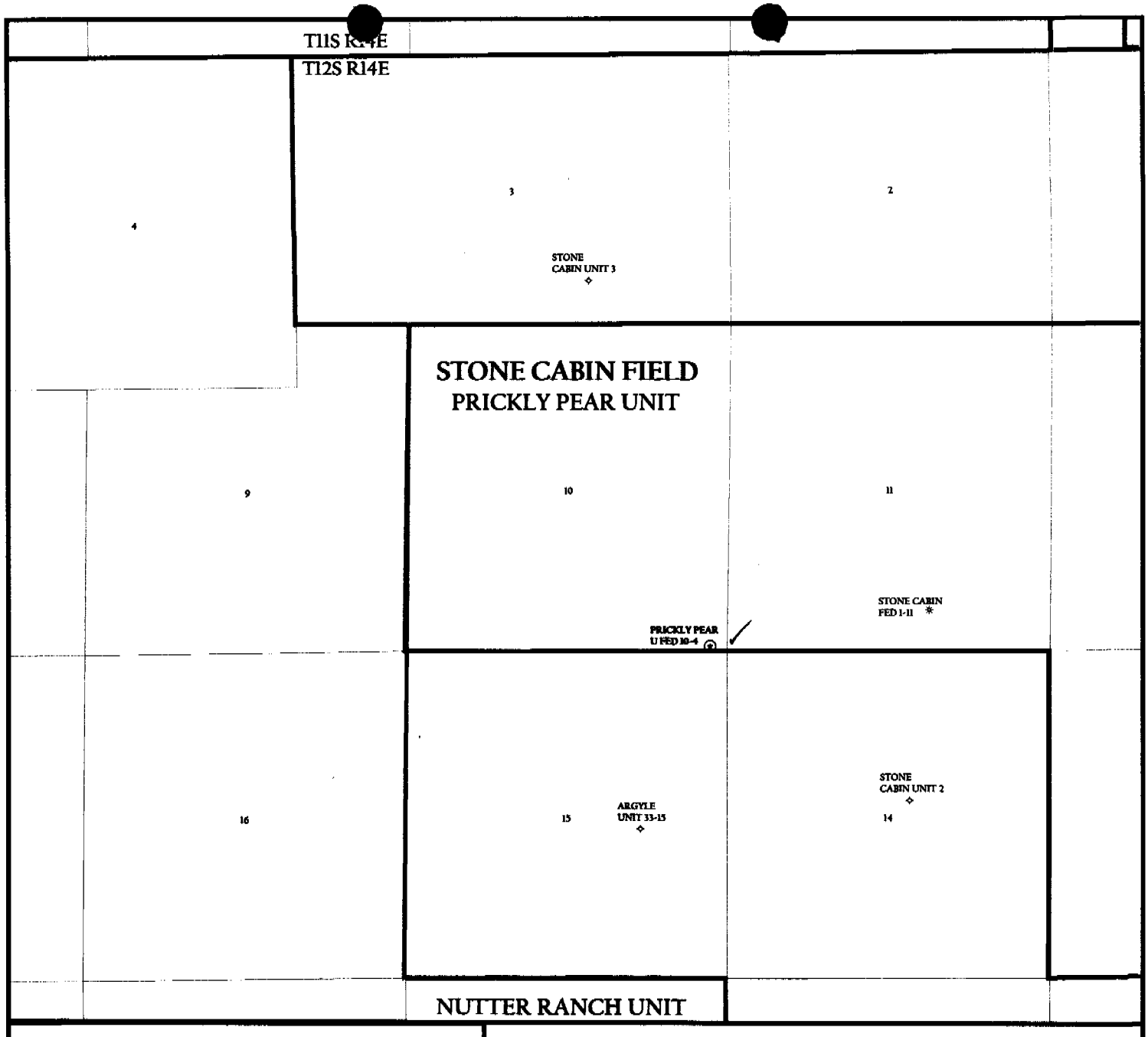
Eff Date:

Siting:

___ R649-3-11. Directional Drill

COMMENTS:

STIPULATIONS: 1- Federal approval
2- Spacing Slip



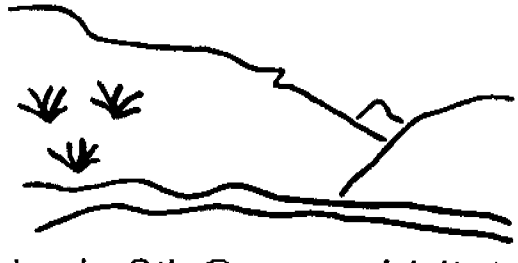
OPERATOR: BILL BARRETT CORP (N2165)

SEC. 10 T.12S, R.14E

FIELD: STONE CABIN (45)

COUNTY: CARBON

SPACING: R649-3-3 / EXCEPTION LOCATION



Utah Oil Gas and Mining

Wells
- 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

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

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

PREPARED BY: DIANA MASON
DATE: 3-JULY-2003

002

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 01/14/2002

API NO. ASSIGNED: 43-007-30823

WELL NAME: PRICKLY PEAR 10-4

OPERATOR: WASATCH OIL & GAS LLC (N2095)

CONTACT: HEGGIE WILSON, AGENT

PHONE NUMBER: 801-451-9200

PROPOSED LOCATION:

SESE 10 120S 140E

SURFACE: 0075 FSL 0271 FEL

C-SE BOTTOM: ~~0075 FSL 0271 FEL~~ 1320 FSL 1320 FEL

CARBON

STONE CABIN (45)

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-73665

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: MVRD

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

RECEIVED AND/OR REVIEWED:

✓ Plat

✓ Bond: Fed[1] Ind[] Sta[] Fee[]
(No. B7998)

N Potash (Y/N)

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

✓ Water Permit
(No. 90-1811)

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

N/A Fee Surf Agreement (Y/N)

LOCATION AND SITING: R649-3-2 Gen. 1-28-02

___ R649-2-3. Unit Prickly Pear

___ R649-3-2. General

✓ Siting: 460 From Qtr/Qtr & 920' Between Wells

[redacted]

___ Drilling Unit
Board Cause No:
Eff Date:
Siting:

✓ R649-3-11. [redacted]

COMMENTS:

STIPULATIONS: 1- Fed. Approval
2- Dir/Dril Stip.
3- Spacing Stip.

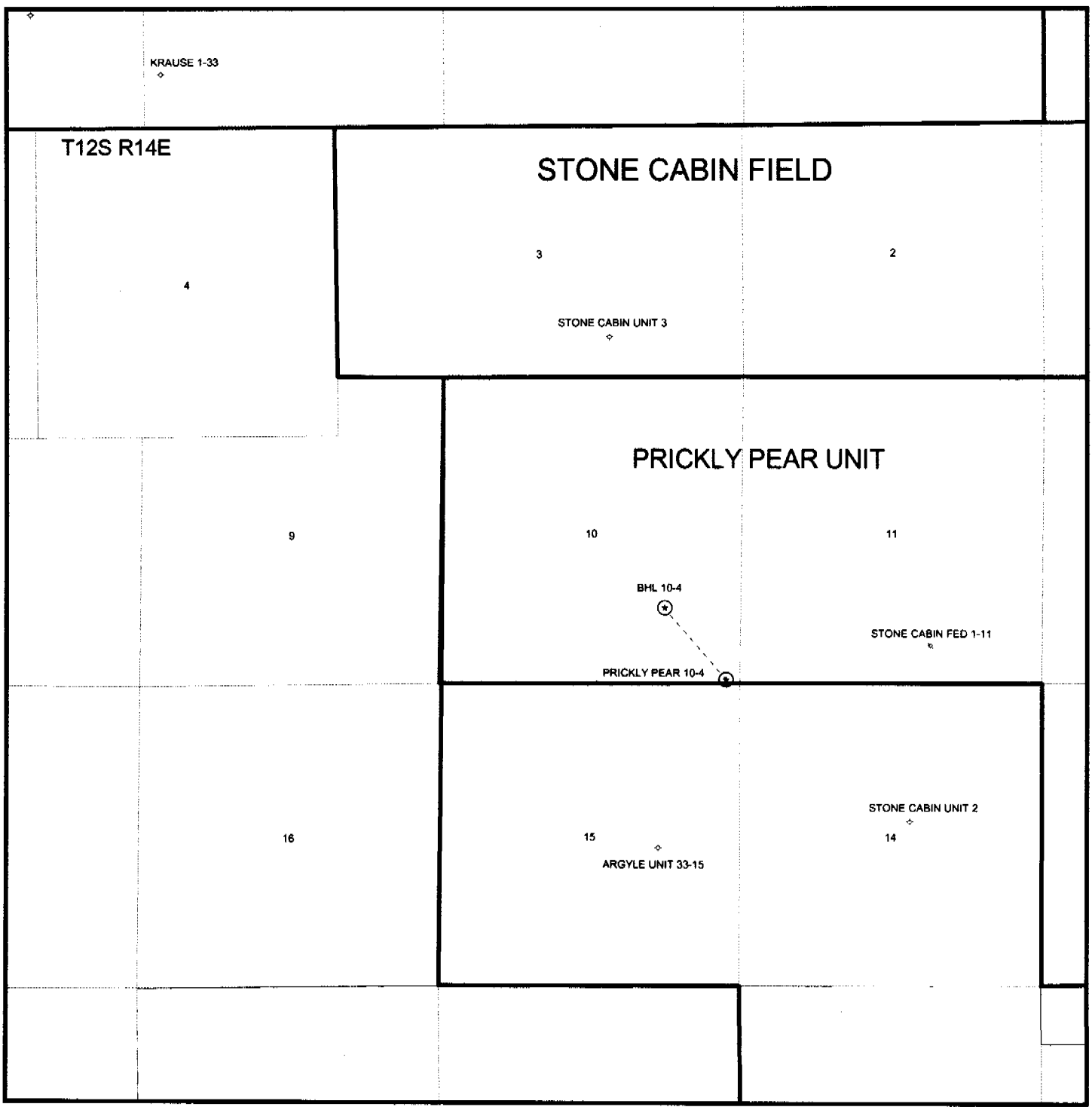
Utah Oil Gas and Mining

OPERATOR: WASATCH O&G LLC (N2095)

SEC. 10, T12S, R14E

FIELD: STONE CABIN (045)

COUNTY: CARBON SPACING:R649-3-11/DIR DRL



PREPARED BY: LCORDOVA
DATE: 8-APRIL-2002

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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

IN REPLY REFER TO:
3160
(UT-922)

February 1, 2002

Memorandum

To: Assistant District Manager Minerals, Moab District

From: Michael Coulthard, Petroleum Engineer

Subject: 2002 Plan of Development Prickly Pear Unit
Carbon County, Utah.

Pursuant to email between Lisha Cordova, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management. The following well is planned for calendar year 2002 within the Prickly Pear Unit, Carbon County, Utah.

API #	WELL NAME	LOCATION
43-007-30824	Prickly Pear 1215-11-2	Sec 11, T12S, R15E 1424 FNL 2083 FWL
43-007-30823	Prickly Pear 10-4	Sec 10, T12S, R14E 0075 FSL 0271 FEL
43-007-30825	Prickly Pear 13-4	Sec 13, T12S, R14E 1320 FSL 1347 FEL
43-007-30828	Prickly Pear 21-2	Sec 21, T12S, R15E 1620 FNL 1247 FWL
43-007-30829	Prickly Pear 27-3	Sec 27, T12S, R15E 1685 FSL 0691 FWL

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

/s/ Michael L. Coulthard

bcc: File - Prickly Pear Unit
Division of Oil Gas and Mining
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:2-1-02

Wasatch Oil & Gas, LLC
Lease # U-73665
Prickly Pear Unit #10-4
SE/4SE/4, Section 10-T12S-R14E
Carbon County, Utah

Surface Use & Operations Plan

1. EXISTING ROADS – Refer to Exhibit Topo Maps "A" and "B".

   A. The proposed wellsite has been surveyed to memorialize the existing well pad (see Location Layout Plat)

   B. From Duchesne, Utah; proceed at mile marker 104.8 on US Highway 40 south on County Rd. 5550 West 1.6 miles, turn right (southwest) on County Rd. 9450 So. and proceed towards Nine Mile Canyon via Gate Canyon 29.7 miles. From the junction of Gate and Nine Mile Canyon proceed West on County maintained Nine Mile Canyon road 5 miles to the junction of Harmon Canyon and Nine Mile Canyon. At mouth of Harmon Canyon, turn right (south) up Harmon Canyon and proceed 4.4 miles up Harmon Canyon and East across the Stone Cabin bench to location access road. Turn left (south) on existing road going to the "Interplanetary Airport" and travel northwesterly to proposed access road beginning on the west side of airstrip.

   C. Access roads refer to Exhibit Topo Maps "A" and "B".

   D. Access roads within a one (1) mile radius, none – refer to Exhibit Topo Maps "A" and "B".

   E. The existing roads will be maintained in the same or better condition as existed prior to the commencement of operation and said maintenance will continue until final abandonment and reclamation of said well location.

2. PLANNED ACCESS ROADS – Refer to Map Exhibits "A" and "B"

   Access to the Prickly Pear Unit # 10-4 will be on existing roads, 400 feet of road construction is anticipated.

   A. Width – The current approximate width is an eighteen (18) foot running surface. This road is current adequate for the proposed operations.

   B. Construction Standard – Any road improvements will be conducted in accordance with roading guidelines established for oil & gas exploration and development activities as referenced in the joint BLM/USFS publication: *Surface Operating Standards for Oil and Gas Exploration and Development,* Third Edition and/or BLM Manual Section 9113 concerning road construction activities on public domain lands.

C. Turnouts – Several turnouts exist on the existing road and no new turnouts are anticipated.

D. Drainage design – The existing road shall be maintained to provide proper drainage along the road.

E. Culverts and low water crossings – No Culverts are anticipated.

F. Surface material – It is anticipated that no additional surface material will be required for drilling and production operations. Should spot graveling be required during drilling operations, gravel would be obtained from the nearest commercial site.

G. Gates, cattleguards or fence cuts: No Fence cuts or cattleguards will be required along the proposed existing route. All gates will be maintained during operations.

H. Road maintenance – During both the drilling and production phase of operations, the road surface will be kept in a safe and useable condition and will be maintained in accordance with the original construction standards. All drainage ditches and culverts will be kept clear and free-flowing, and will also be maintained in accordance with the original construction standards. The access road will be kept free and clear of trash during all operations. The Harmon Canyon road is considered to be an R.S. 2477 road adapted under a Memorandum of Understanding dated December 15, 1980.

3. LOCATION OF EXISTING WELL WITHIN A ONE-MILE RADIUS

A.	Water wells	none
B.	Abandoned wells	Argyle #33-15, Se.c 15,T12S-R14E
C.	Temporarily abandoned wells	none
D.	Disposal wells	none
E.	Proposed wells	none
F.	Shut-in wells	none
G.	Producing	Fed. #1-11 T12S, R14E; Sec. 11: SWSE

4. LOCATION OF PROPOSED FACILITIES

A. All production facilities will be located on the disturbed portion of the well pad and at a minimum from of twenty-five (25) feet from the toe of the back slope or top of the fill slope.

B. Production facilities will be located on the drillsite location. A diagram showing the proposed production facility layout will be submitted to the Authorized Officer via Sundry Notice (Form #3160-5) will be submitted upon completion and installation of facilities. All site security guidelines identified in 43CFR 3162.7-5 and *Onshore Oil And Gas Order No. 3* shall be followed.

C. An existing pipeline for gas gathering is in place (ROW Grant U-69317) and is utilized by existing wells in the area. If the subject well is deemed commercial, approximately 4,300 feet of new gathering line will be constructed to connect with the existing facility and laid adjacent to existing travel corridors.

D. All permanent (in place for six months or longer) structures constructed or installed (including oil well pump jacks) will be painted a flat, non-reflective color to match the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation. Facilities required by OSHA may be excluded. Colors will be painted desert brown (Munsell standard color #10 YR 6/3).

E. If a gas meter run is constructed, it will be located within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and will be buried downstream until it leaves the pad. The meter run will be housed. The gas meter shall be calibrated prior to first sales and shall be calibrated quarterly thereafter. All gas production and measurement shall comply with the provisions of 43 CFR 3162. 7-3, *Onshore Oil and Gas Order No. 5*, and the American Gas Association (AGA) Report No. 3.

F. If a tank battery is constructed on the lease, it will be surrounded by a berm of sufficient capacity to contain 11/2 times the storage capacity of the largest tank. All loading lines and valves will be placed inside the berm surrounding the tank battery. All oil production and measurements shall conform to provisions of 43 CFR 3162. 7-3 and *Onshore Oil and* Gas Order No. 4.

G. Production facilities on location may include a lined or unlined water pit as specified in *Onshore Oil and Gas Order No.7*. If water is produced from the well, an application in conformance with Order No. 7 must be submitted. Any pit will be fenced with barbwire held in place by metal side post and wooden corner "H" braces in order to protect livestock and wildlife.

H. During drilling and subsequent operations, all equipment and vehicles will be confined to the access road, drill pad and any additional area specified in the approved Application for Permit to Drill (APD).

I. Reclamation of disturbed areas no longer needed for operations will be accomplished by grading, leveling and seeding as recommended by the BLM.

5. LOCATION AND TYPE OF WATER SUPPLY

A. Wasatch Oil & Gas will utilize an existing water well located on BLM lands in the SW/4SE/4 Section 13: Township 12 South, Range 14 East. Wasatch has been granted this authorization by the State of Utah under a Temporary Application Number 90-1811. Wasatch will place a temporary storage tank(s) adjacent to the water well in order to store water and to avoid interference with stock watering needs.

B. No water well will be drilled.

6. SOURCE OF CONSTRUCTION MATERIALS

A. It is not anticipated that any construction materials (gravel) will be required during construction or operations. If required, a private contractor (or surface owner) having a previously approved source within the general area will be used.

B. No construction material will be taken from Federal lands. The use of materials under BLM jurisdiction will conform with 43 CFR 3610.2-3.

7. METHODS OF HANDLING WASTE MATERIALS

A. Cuttings - The drill cuttings will be deposited in the reserve pit.

B. Drilling fluids – All fluids including chemicals will be contained in the reserve pit. The reserve pit will be designed to prevent the collection of surface runoff and will constructed with a minimum of one-half (1/2) total depth below the original ground level and at the lowest point within the pit. Prior to backfilling the reserve pit liquids will be disposed in an approved facility and the contents will be allowed to dry. The disturbed portion of the pad will be reclaimed. A 9-mil synthetic pit liner is proposed.

C. Produced fluids – Liquid hydrocarbons that may be produced during completion operations will be placed in test tanks on the location. Produced water will be placed in the reserve pit for a period not to exceed ninety days after initial production.

During this ninety (90) day period, in accordance with *Onshore Oil and Gas Order Number 7*, an application for approval of a permanent disposal method and location, along with required water analysis, shall be submitted to the Authorized Officer for approval.

Any spills of oil, gas, salt water or any other potentially hazardous substances will be cleaned up and immediately removed to an approved disposal site.

D. Sewage – Portable, self-contained chemical toilets will be provided for human waste disposal. Upon completion of operations, or as required, these toilets will be removed and the contents thereof disposed of in an approved sewage disposal facility.

E. Garbage and other waste material – All garbage and non-flammable waste materials will be contained in a dumpster or trash cage. Upon completion of operations, or as needed, the accumulated trash will be hauled off-site to an approved sanitary landfill. No trash will be placed in the reserve pit during any operations pertaining to this well.

F. Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash cage will be cleaned up and removed from the well location. No potentially adverse materials or substances will be left on location.

G. Any open pits will be fenced during the drilling operation and said fencing will be maintained until such time as the pits have been backfilled.

8. ANCILLARY FACILITIES

None anticipated.

9. WELLSITE LAYOUT

A. Attached hereto as figure # 1 is a diagram showing the proposed location layout. No permanent living facilities are planned. There will be approximately three (3) trailers on location during drilling operations: one each for the wellsite supervisor, geologist and toolpusher.

B. Topsoil will be stock piled on the West and East of the drillpad. Brush and trees will also be stock piled on the Northwest corner of pad and will be used in the site reclamation process. Erosion ditches will be created along the side of the drill pad to control runoff from the drill pad. (see figure #1)

C. A diagram showing the proposed production facility layout will be submitted to the Authorized Officer via *Sundry Notice* (form #3160-5) for approval (see # 4B).

D. Prior to commencement of drilling operations, the reserve pit will be fenced on three (3) sides with four strand barbed wire held in place by metal side post and wooden corner "H" braces in order to protect livestock and wildlife.

1. Corner post shall be braced in such a manner to keep the fence tight at all times.

2. Standard steel, wood or pipe post shall be used between the corner braces. The maximum distance between any two (2) posts shall be no greater than sixteen (16) feet.

3. All wire shall be stretched, by using a stretching devise, before it is attached to the corner posts.

4. The fourth (4^{th}) side of the reserve pit will be fenced immediately upon removal of the drilling rig and the fencing will be maintained until the pit is backfilled.

E. Any Hydrocarbons on the pit will be removed immediately.

F. Flare pit will be a minimum of 100 feet from the wellhead and 30 feet from the reserve pit when applicable. The flare pit will be on laydown side of pad or on the down wind side.

10. PLANS FOR RECLAMATION OF THE SURFACE

Producing

A. Any rat and mouse holes will be backfilled and compacted from to top immediately upon release of the completion rig from the location. The location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash, and junk not required for production.

B. Any oil located on the pits will be removed immediately in accordance with 43 CFR 3162.7-1.

C. Backfilling, leveling and re-contouring are planned as soon as possible after cessation of drilling and completion operations. Waste and spoil materials will be disposed of immediately upon cessation of drilling and completion activities.

Fluids from the reserve pit shall be removed. The liner shall be torn and perorated before backfilling of the reserve pit.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within six (6) months from the date of well completion. Before any dirt work takes place, the reserve pit will be completely dry and all cans, barrels, pipe, etc., shall be removed.

The BLM surface management agency will be contacted for required seed mixture.

Dry Hole/Abandoned Location

1. At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the BLM will attach the appropriate surface rehabilitation conditions of approval.

11. SURFACE OWNERSHIP

Bureau of Land Management
Price Field Office
125 South 600 West
Price, UT 84501
(435) 636-3600

12. OTHER INFORMATION

A. Proximity of Water, Occupied Dwellings, Archaeologist, Historical or Cultural Sites:

1. There are no known, occupied dwellings within one (1) mile of the location.

2. There are no known water wells within one (1) mile of location.

3. An archaeological survey will performed over the proposed location and newly planned access road. This report will be submitted to the BLM and the State Historical Office

Wasatch Oil & Gas, LLC will be responsible for informing all persons in the area who are associated with the project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites or for collecting artifacts. If historic or archaeological materials are uncovered, Wasatch will suspend all operations that might further disturb such materials and immediately contact the Authorized Officer (AO). Operations are not to resume until written authorization to proceed is issued by the AO. Within five (5) working days the AO will inform the operator as to:

A. whether the materials appear eligible for the National Register of Historic Places;

B. the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and

C. a time frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Reservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

D. The operator will, control noxious weeds along right-of-way for roads, pipelines, wellsites or other applicable facilities. On BLM administered land it is required that a Pesticide Use Proposal shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals.

E. Drilling rigs and/or equipment used during drilling operations on this wellsite will not be stacked or stored on Federal Lands after the conclusion of drilling operations or at any other time without BLM authorization. However, if BLM authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

13. LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION

Wasatch Oil & Gas
P.O. Box 699
Farmington, UT 84025-0699
(801) 451-9200
Fax 451-9204
Attention: Todd Cusick

Stonegate Resources, LLC
4994 E. Meadows Dr.
Park City, UT 84098
(435) 647-9712
fax 647-9713
Attention: R. Heggie Wilson

Prepared by:

R. Heggie Wilson

R. Heggie Wilson – Stonegate Resources, LLC.
Agent for Wasatch Oil & Gas

Date:

1/7/02

Certification

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, *Onshore Oil & Gas Orders,* the approved plan of operations, and any applicable *Notice to Lessees.*

Wasatch Oil & Gas will be fully responsible for the actions of their subcontractors. A copy of these conditions will be furnished along with a fully approved APD along with any additional BLM conditions of approval will be furnish to the field representative(s) to ensure compliance.
The dirt contractor will be provided with a copy of the Surface Use Plan from the approved Application for Permit to Drill (APD).

I hereby certify that I, or persons under my direst supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan, are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Wasatch Oil & Gas their contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision 18 U.S.C. 1001 for filing a false statement.

1/7/02
Date

R. Heggie Wilson
Agent, Wasatch Oil & Gas

WASATCH OIL & GAS LLC

PRICKLY PEAR #10-4

LOCATED IN CARBON COUNTY, UTAH
SECTION 10, T12S, R14E, S.L.B.&M.

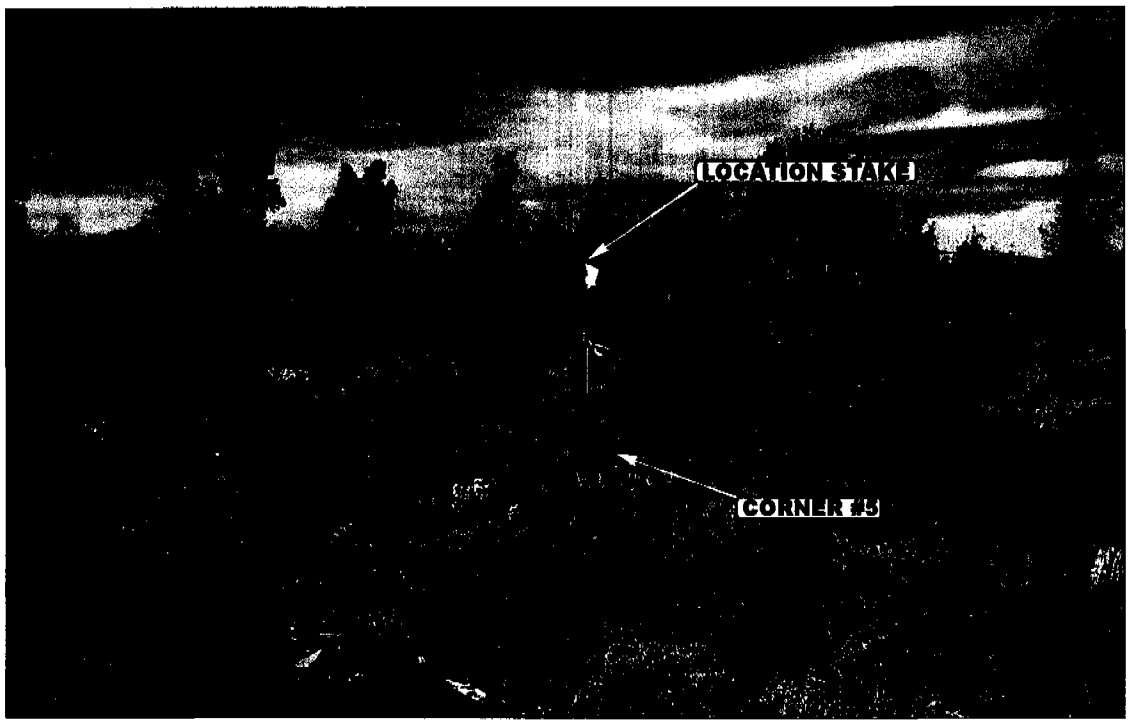


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE **CAMERA ANGLE: NORTHWESTERLY**

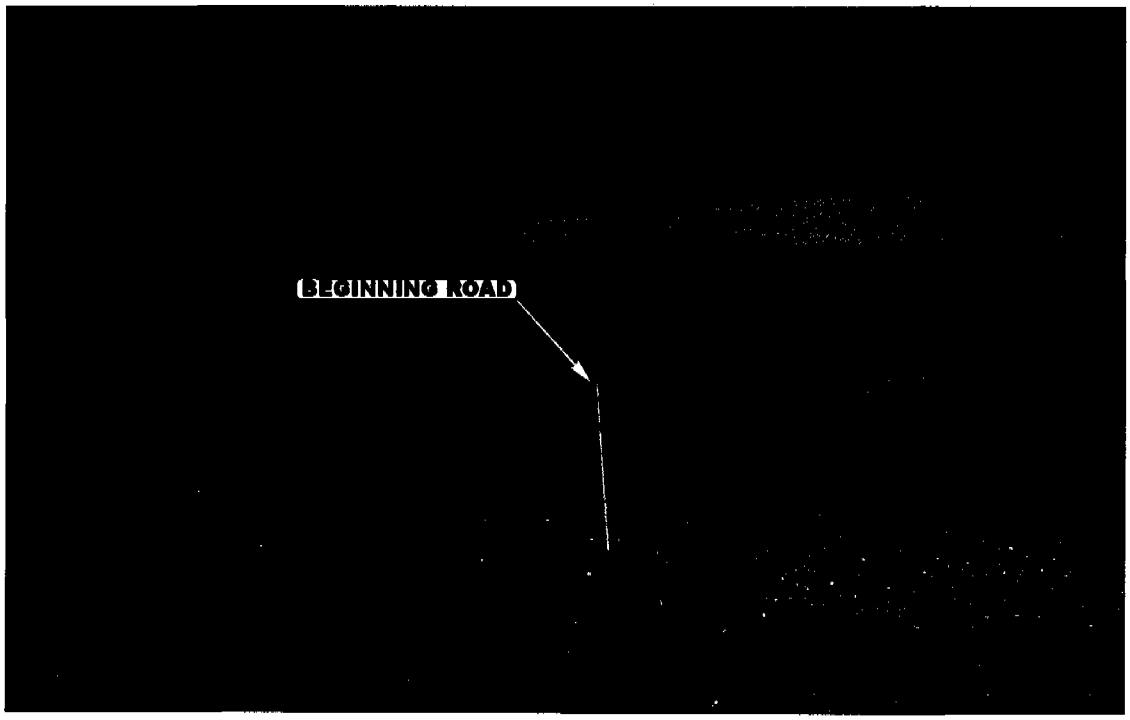


PHOTO: VIEW FROM BEGINNING OF PROPOSED ROAD **CAMERA ANGLE: NORTHWESTERLY**

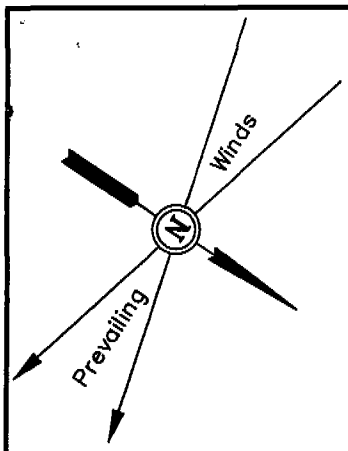
- Since 1964 -
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS	10 MONTH	30 DAY	01 YEAR	PHOTO
TAKEN BY: B.B.	DRAWN BY: J.L.G.	REVISED: 00-00-00		

WASATCH OIL & GAS LLC.

LOCATION LAYOUT FOR

PRICKLY PEAR #10-4
SECTION 10, T12S, R14E, S.L.B.&M.
75' FSL 271' FEL



SCALE: 1" = 50'
DATE: 11-05-01
Drawn By: D.R.B.

Proposed Access Road

C-2.4'
El. 80.0'

C-1.5'
El. 79.1'

F-0.5'
El. 77.1'

Sta. 3+00

Approx. Top of Cut Slope

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

Approx. Toe of Fill Slope

CATWALK

PIPE RACKS

Pit T.S.

FLARE PIT

C-1.4'
El. 79.0'

C-0.6'
El. 78.2'

El. 82.1'
C-14.5'
(btm. pit)

RIG

DOG HOUSE

35'

110'

Sta. 1+50

60'

10' WIDE BENCH

100'

RESERVE PITS
(10' Deep)

SLOPE 1 1/2 : 1

MUD TANKS

WATER

PUMP

MUD SHED

HOPPER

POWER

TOOLS

FUEL

TRAILER

TOILET

FUEL

Topsoil Stockpile

F-1.4'
El. 76.2'

Pit Capacity With 2' of Freeboard is ±4,980 Bbls.

Sta. 0+65

Section Line

El. 81.4'
C-13.8'
(btm. pit)

El. 79.4'
C-1.8'

Reserve Pit Backfill & Spoils Stockpile

TRASH

50'

150'

STORAGE TANK

Round Corners as Needed

Sta. 0+00

Topsoil Stockpile

C-2.2'
El. 79.8'

F-0.9'
El. 76.7'

F-7.7'
El. 69.9'

Section Line

NOTES:

Elev. Ungraded Ground At Loc. Stake = 7578.2'

FINISHED GRADE ELEV. AT LOC. STAKE = 7577.6'

FIGURE #1

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

WASATCH OIL & GAS LLC.

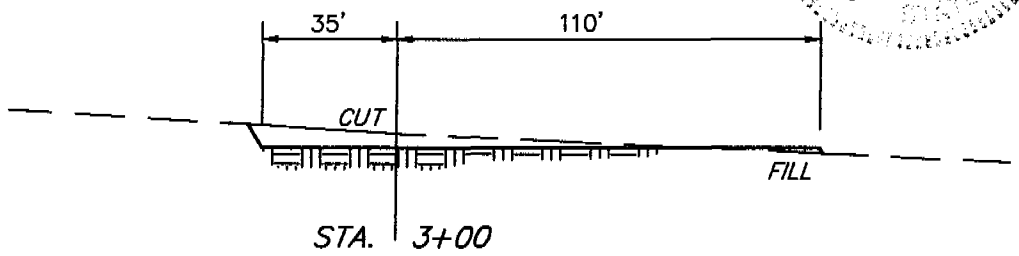
TYPICAL CROSS SECTIONS FOR

PRICKLY PEAR #10-4
SECTION 10, T12S, R14E, S.L.B.&M.
75' FSL 271' FEL

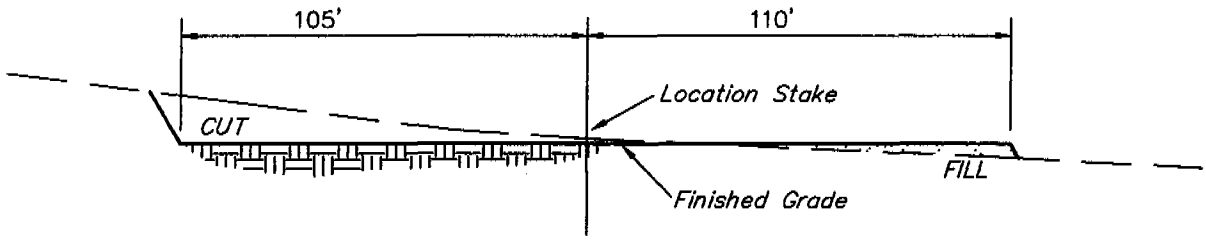
FIGURE #2

1" = 20' X-Section Scale
1" = 50'

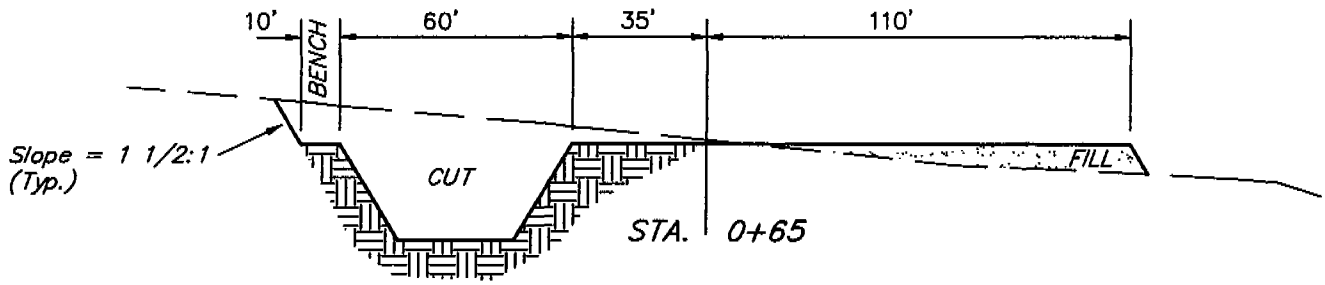
DATE: 11-05-01
Drawn By: D.R.B.



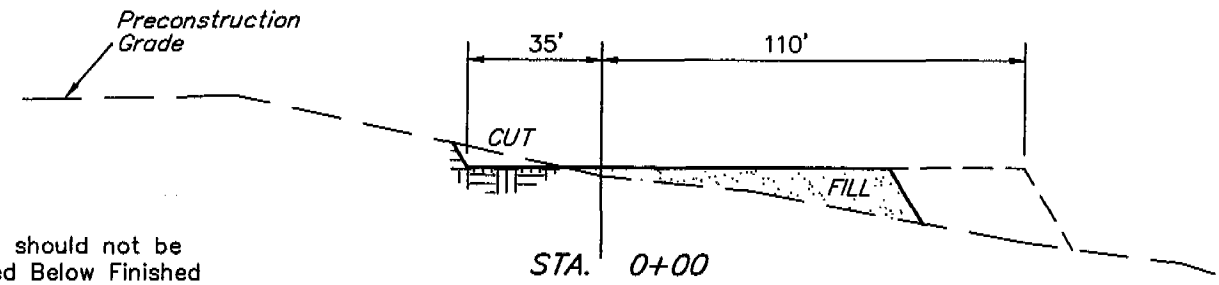
STA. 3+00



STA. 1+50



STA. 0+65



STA. 0+00

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

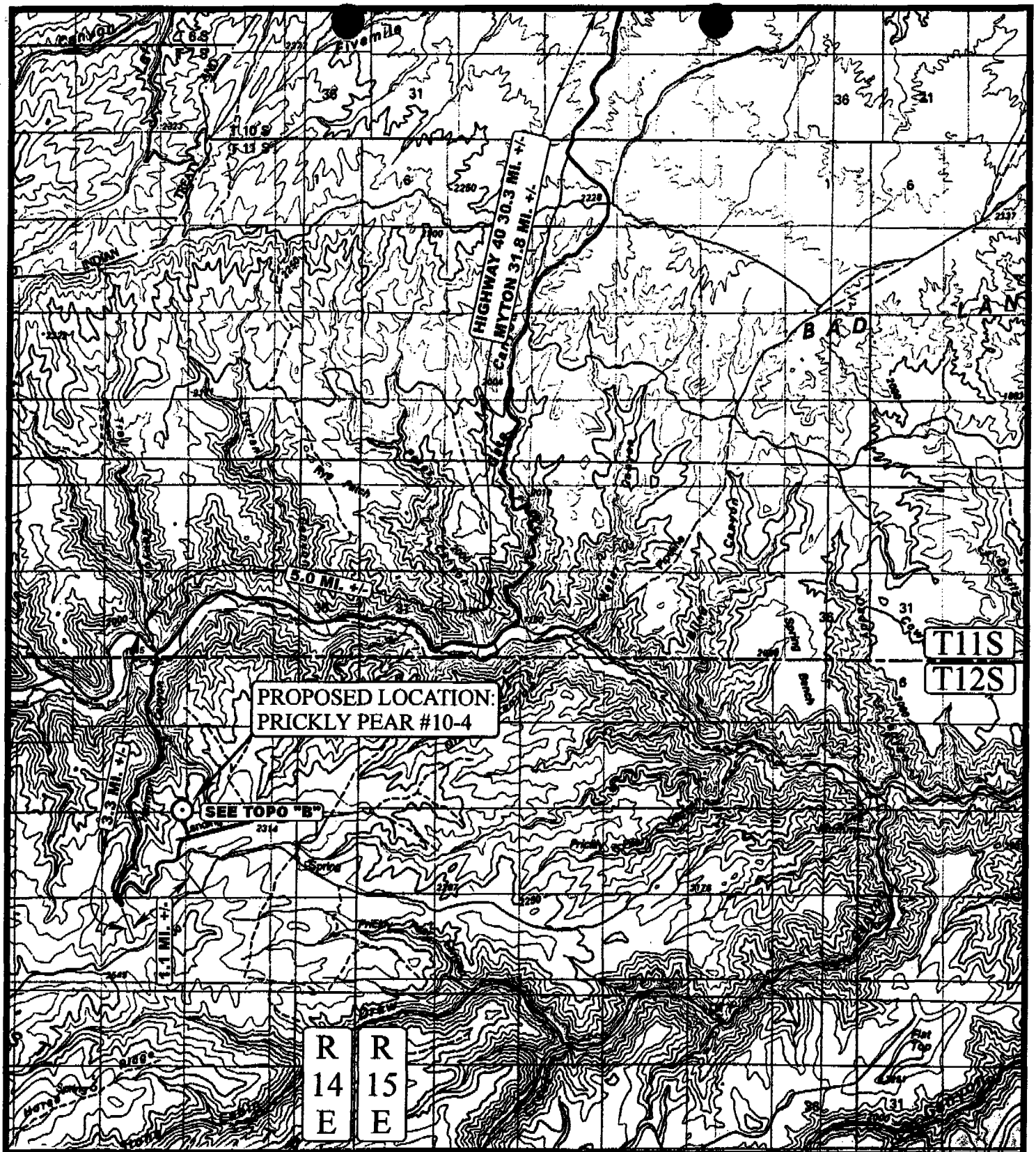
APPROXIMATE YARDAGES

CUT

(6") Topsoil Stripping	= 960	Cu. Yds.
Remaining Location	= 2,700	Cu. Yds.
TOTAL CUT	= 3,660	CU.YDS.
FILL	= 1,880	CU.YDS.

EXCESS MATERIAL AFTER 5% COMPACTION	= 1,680	Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 1,680	Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	= 0	Cu. Yds.

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



LEGEND:

⊙ PROPOSED LOCATION

N

WASATCH OIL & GAS LLC

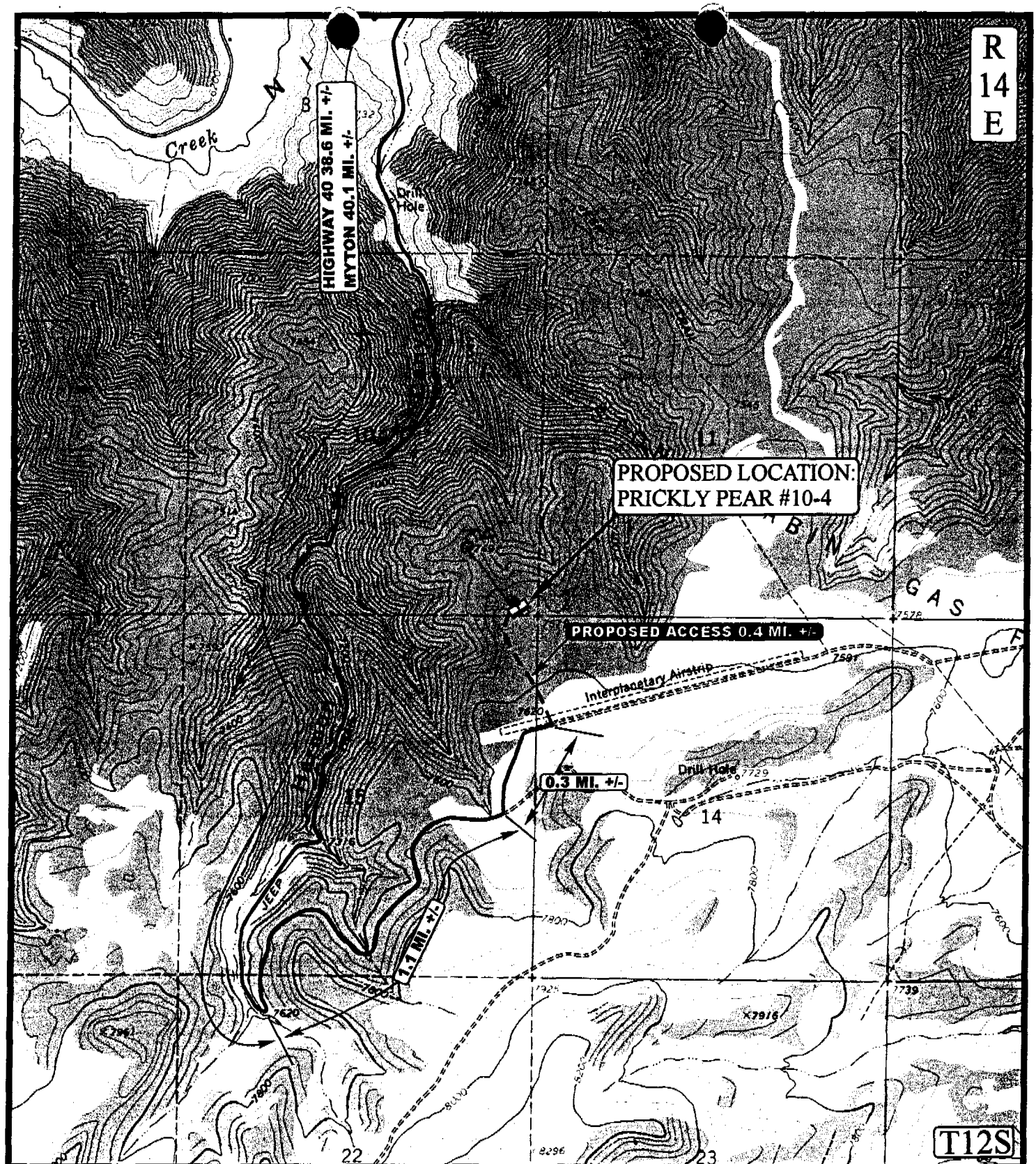
PRICKLY PEAR #10-4

SECTION 10, T12S, R14E, S.L.B.&M.

75' FSL 271' FEL

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

TOPOGRAPHIC MAP	10 MONTH	30 DAY	01 YEAR
SCALE: 1 : 100,000	DRAWN BY: J.L.G.	REVISED: 00-00-00	A TOPO



LEGEND:

PROPOSED ACCESS ROAD

EXISTING ROAD

N

WASATCH OIL & GAS LLC

PRICKLY PEAR #10-4

SECTION 10, T12S, R14E, S.L.B.&M.

75' FSL 271' FEL

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078

(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	10 MONTH	30 DAY	01 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: J.L.G.	REVISED: 00-00-00		

Wasatch Oil & Gas LLC
Drilling Prognosis
Prickly Pear Unit #10-4
SESE Sec. 10–T12S–R14E
Carbon County, Utah

February 25, 2002

General

NOTE: This well is to be drilled as a tight hole. Unauthorized personnel are not to be allowed on rig floor. All information is to be kept confidential.

Surface Location: 75' FSL and 271' FEL
SESE Sec. 10-T12S-R14E
Carbon County, Utah

Bottomhole Location: 1,320' FSL and 1320' FEL
C SE ¼ Sec. 10-T12S-R14E
Carbon County, Utah

Proposed Total Depth: 7,828' TVD 8,040' MD

Elevation: 7,728' (Ground Level)

Drilling Contractor: Yet to be determined

Drilling Procedure

Location

1) Build location, dig and line reserve pit as per pad layout specifications.
2) Move in rathole driller. Drill 20" hole to 40'. Run 40' of 16" conductor casing and cement w/ ready mix to surface.
3) Drill rat hole and mouse hole.

Surface Hole

1) Move in and rig up drilling rig.
2) Drill a 12-1/4" surface hole to 780' Notify Price BLM as to surface casing / BOP pressure test.
3) Circulate and condition as required. Trip out of hole.
4) Run and cement 780' of 8-5/8", 32#, K-55, ST&C, 8rd casing as per cement recommendation. If cement returns to surface are not obtained, run 1" pipe in casing/hole annulus and top out w/ neat cement. Wait 8 hrs on cement.
5) Weld on 11" X 5,000 PSI flanged casing head.
6) Nipple up and pressure test BOPE and 8-5/8" casing.

Production Hole

1) Trip in hole w/ 7-7/8" bit. Drill out float collar and guide shoe.
2) Drill 7-7/8" production hole from base of surface casing to T.D.
3) Drillstem tests may be run in the Wasatch and Mesaverde (contingent on shows and/or drilling breaks)
4) Drilling samples will be caught every 20' from surface to 1,700'. Mudloggers will be on location and rigged up by 1,700'. 10' samples will be caught from 1,700' to T.D. or as directed by wellsite geologist.

5) Well will be directionally drilled to a depth of 8,040' MD
6) At T.D., condition hole for running openhole logs as per mud program.
7) Run openhole logs as per logging program.

Decision Point: Producible/Dryhole

Producible

1) Trip in hole w/ bit and drill string. Condition hole for running pipe. Trip out of hole laying down drill-pipe and collars.
2) Run and cement 4-1/2" production casing according to cement recommendation.

Dryhole

1) Notify BLM in Price and receive plugging orders. Trip in hole open ended and plug well as per BLM orders.
2) Release drilling rig. Reclaim location.

Estimated Tops of Geological Markers

(From Ungraded GL)

Formation	Top	Sub Surface
Green River	Surface	+7,578'
Wasatch	2,828' TVD	+4,750'
North Horn	4,778' TVD	+2,800'
Mesaverde	6,768' TVD	+810'

Estimated Depths of Anticipated Water, Oil , Gas or Mineral Formations

(From Ungraded GL)

Formation	Top	Possible Formation Content
North Horn	4,778'-6,768' TVD	gas
Mesaverde	6,768'-7,728' TVD	gas

Pressure Control Equipment

1) Type: 11" X 5,000 psi WP, double-gate BOP and 11" X 5,000 psi WP annular BOP with hydraulic closing unit.

The blowout preventer will be equipped as follows:

1) One set of blind rams
2) One set of pipe rams
3) Drilling spool with two side outlet (choke side: 3" minimum and kill side 2" minimum)
4) Kill line: Two-inch minimum
5) Two kill line valves, one of which will be a check valve (2" minimum)
6) Choke line: Three-inch minimum.

7) Two choke line valves: Three-inch minimum.
8) One manually operated choke: Three-inch minimum.
9) Pressure gauge on choke manifold.
10) Upper kelly cock with handle readily available.
11) Full opening internal blowout preventer or drill pipe safety valve able to fit all connections.
12) Fill-up line to be located above uppermost preventer.

2) PRESSURE RATING: 5,000 PSI

3) TESTING PROCEDURE

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the approved BOP stack. (if isolated from the surface casing by means of a test plug) or 70% of the internal yield strength of the surface casing (if not isolated from the surface casing by means of a test plug). Pressure will be maintained for a period of at least ten minutes or until requirements of the test are met, whichever is longer.

At a minimum, this pressure test will be performed:
1) When the BOP is initially installed
2) Whenever any seal subject to test is broken.
3) Following related repairs.
4) At thirty day intervals.

In addition to the above, the pipe rams will be activated daily, and the blind rams will be activated on each trip (but not more frequently than once each day). All BOP tests and drills will be recorded in the IADC Driller's Log (tour sheet)

5) CHOKE MANIFOLD EQUIPMENT:

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

6) ACCUMULATOR:

The accumulator will have sufficient capacity to close all rams (plus the annular preventer, if applicable) and maintain a minimum of 200 psi above the precharge pressure without the use of the closing-unit pumps. The fluid reservoir capacity will be double the accumulator capacity and the fluid level will be maintain at the manufacturer's recommendation. The BOP system will have two independent power sources to close preventers. Nitrogen bottles (three minimum) will be considered one of these 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 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 as specified in *Onshore Oil and Gas Order Number 2.*

7) MISCELLANEAUS INFORMATION:

The blowout preventer and related pressure-control equipment will be installed, tested, and maintained in compliance with the specifications in and requirements of *Onshore Oil and Gas Order Number2.* The choke manifold and BOP extension rods will be located outside the rig sub-structure.

The hydraulic BOP closing unit will be located at least twenty-five feet from the wellhead, but will be readily accessible to the driller. Exact location and configuration of the hydraulic BOP closing unit will depend upon the particular drilling rig contracted to drill this hole.

Casing and Cementing Programs

1) PROPOSED CASING DESIGN

Size	Interval	Length	Description	SFt	SFc	SFb
16" Conductor	0'-40'	40'	0.25" WT			
8-5/8"	0' – 780'	780'	32#, K-55, STC			
4-1/2"	0' – 8,040'	8,040'	11.6#, N-80, LTC			

A regular guide shoe and insert float will be run on the bottom and top of the first joint on casing. The guide shoe and float collar will be made up with A.P.I. thread locking compound. On 4-1/2" casing, a stop ring and centralizer will be run in the middle of the shoe joint. Centralizers will be ran 1 joint above float and across all potential pay zones.

NOTE: Casing strings will be pressure tested to 0.22 psi/ft of casing string depth, or 1,500 psi, whichever is greater (not to exceed 70 % of the internal yield strength of the casing) after cementing and prior to drilling out from under the casing shoe.

2) PROPOSED CEMENTING PROGRAM

Casing / Hole Size	Cement Slurry	SX	PPG	Yield
8-5/8" / 12-1/4"	Lead: B.J. Premuim Light w/ 2% $CaCl_2$ & 0.25 PPS Flocele	200	12.0	2.27
	Tail: Class "G" w/ 2% $CaCl_2$ & 0.25 PPS Flocele (100% excess)	150	15.8	1.17

Casing Equipment: 1 – Regular Guide Shoe
1 – Insert float collar

NOTE: Precede cement w/ 50 bbls of fresh water. Have 100 sx "neat" cement on location and 1" line pipe to pump a cement top job if cement is not circulated to surface and/or cement falls back. All waiting-on – cement times will be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

Casing / Hole Size	Cement Slurry	SX	PPG	Yield
4-1/2" / 7-7/8"	50/50 poz cement w/ 0.25 PPS Flocele (30% excess)	550	14.1	1.26

NOTE: A two stage cement job may be required if sands in the Wasatch are considered commercial.

Casing Equipment: 1 – Regular guide shoe
1 – Differential-fill float collar
10 – Centralizers (Casing will be centralized on shoe jt and across all potential pay zones)

NOTE: Precede cement with 50 bbls of fresh water. Run compatibility test on proposed cement with actual make-up water. Cement design and volumes may be altered depending on results of caliper log and presence of lost circulation zones.

Drilling Fluids Program

SURFACE HOLE: 0' – 780' HOLE SIZE: 12-1/4" 8-5/8" CASING

Spud well and drill to 780' with fresh water using additions of a flocculant and gel / lime / polymer sweeps as necessary for solids settling and good hole cleaning.

Recommend Fluid Properties: Weight 8.4 – 9.0 PPG
Viscosity 30-40 SEC / QT
Water Loss N.C.

PRODUCTION HOLE: 780' – 8,040' HOLE SIZE: 7-7/8" 4-1/2" CASING

Drill out surface casing cement with water discarding contaminated fluid into reserve pit. Mud up with low-solids, non-dispersed mud system. Keep trip speeds down to reduce surge/swab pressure. Keep hole full at all times. Monitor pit levels to detect loss circulation and gas kicks. Sweep hole as dictated by hole conditions and prior to running production casing. Keep drill string moving at all times. Have 100-200 PPM nitrates in mud system prior to drilling any potential pay zones that may be DST'd.

Recommended Fluid Properties: Weight 8.6 – 9.2 PPG
Viscosity 32-36 SEC / QT
Water Loss 10 – 15 CCS

Evaluation Program

OPENHOLE LOGGING: CNLD-GR, DIL-GR, DSI-GR, Microlog

DRILLSTEM TESTING: Potential test of any significant shows. Unless otherwise indicated, recommended DST times will be as follows: IF (15 min) ISI (60 min) FF (60 – 90 min, depending on blow at surface) and FSI (2 x FF). Keep length of anchor to a minimum while testing. Test string should include dual packers, top and bottom pressure recorders, jars, safety joint, sample camber, and reverse circulating sub (pressure and bar activated).

CORING: None anticipated.

STIMULATION: All prospective zones will be perforated, flow tested and evaluated to determined if acidizing and/or fracturing is required. The drill site will be of sufficient size to accommodate all completion operations.

The proposed Evaluation Program may change at the discretion of the well site drilling supervisor and geologist with the approval from the Authorizing Officer, Price BLM.

Two copies of all logs, core descriptions, core analyses, DST test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during drilling, workover, and/or completion operations will be filed on form #3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the District Manager, Price BLM.

Abnormal Conditions

No abnormal temperature or pressures are anticipated in the drilling of the Prickly Pear Unit #10-4

Anticipated Starting Date and Miscellaneous

1) ANTICIPATED STARTING DATE:

Location Construction	May 1, 2002
Spud Date	May 3, 2002
Drilling Days	18 days
Completion Days	10 days

3) MISCELLANEOUS

There will be no deviation from the proposed drilling and/or workover program as approved. Safe drilling and operating practices will be observed.

All wells, whether drilling, producing, suspended or abandoned will be identified in accordance with 43 CFR 3162.6. There will be a sign or marker with the name of the operator, lease serial number, well name and number and survey description of the well.

Any changes in operation must have prior approval from the Authorized Officer (AO), Price Office, Bureau of Land Management. Pressure test will be preformed before drilling out from under of all casing strings set and cemented in place. Blowout preventers controls will remain in use until the well is either completed or abandoned. Preventers will be inspected and operated at least daily to insure good mechanical working order, and inspection will be recorded on the daily drilling report. All BOP test will be recorded on the daily drilling report.

The spud date will be orally reported to the Price BLM Office forty-eight (48) hours after spudding. If spudding occurs on a weekend or holiday, this report will be called in on the next regular work day following spudding of the well.

In accordance with *Onshore Oil & Gas Order Number1,* this well will be reported on MMS Form #3160-6, *Monthly Report of Operations and Production,* starting with the month in which operation commence and continue each month until the well is physically plugged and abandon. This report will be filed directly with the Royalty Management Program, Minerals Management Service, P.O. Box 17110, Denver, CO. 80217.

All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL-3A will be reported to the Price District Office. Major events will be reported verbally within twenty-four (24) hours and will be followed with a written report within fifteen (15) days, "Other than major events" will be reported in writing within fifteen days. "Minor events" will be reported on the *Monthly Report of Operations and Production* (Form #3160-6).

No well abandonment operations will be commenced without the prior approval of the Authorized Officer. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the District Petroleum Engineer. A *Notice of Intention to Abandon* (Form #3160-5) will be filed with the Authorized Officer within fifteen (15) days following the granting of oral approval to plug and abandon.

Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The following information will be permanently placed on the marker with a plate, cap, or beaded-on with a welder: Company Name and Number, Location by Quarter/Quarter, Section, Township, Range and Federal Lease Number.

A *Subsequent Report of Abandonment* (Form #3160-5) will be submitted within thirty (30) days following the actual plugging of the well bore. This report will indicate where plugs were placed and the current status of surface restoration operations. If surface restoration has not been completed at that time, a follow-up report on Form #3160-5 will be filed when all surface restoration work has been completed and the location is considered ready for final inspection.

Pursuant to NTL-4A, lessees and operators are authorized to vent/flare gas during initial well evaluation tests, not exceeding a period of thirty (30) days or the production of fifty (50) MMCF of gas, whichever occurs first. An application must be filed with the Authorized Officer, and approval received, for any venting /flaring of gas beyond the initial thirty (30) day or otherwise authorized test period.

Not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production fort more than ninety (90) days, the operator shall notify the Authorized Officer by letter or "*Sundry Notice*" of the date on which such production has begun or resumed. The notification shall provide as a minimum, the following information:

A. Operator name, address, and telephone number.
B. Well name and number.
C. Well location " ¼, ¼, Section, Township, Range, P.M."
D. Date well was placed on production.
E. The nature of the well's production, i.e.: crude oil, casing gas, or natural gas and entrained liquid hydrocarbons.
F. The OCS, Federal or Indian lease prefix and number on which the well is located. Otherwise, the non-federal or non-Indian land category. i.e.: state or private.

Within sixty (60) days following construction of a new tank battery, a site facility diagram of the battery showing actual conditions and piping must be submitted to the Authorized Officer. Facility diagrams shall be filed within sixty (60) days after existing facilities are modified. For complete information as to what is required on these diagrams, please refer to 43 CFR 3162.7-4 (d).

Pursuant to *Onshore Oil & Gas Order Number1,* lessees and operators have the responsibility to see that their exploration, development, production, and construction operations are conducted in such a manner which conforms with applicable Federal laws and regulations and with State and Local laws and regulations to the extent that such State and local laws are applicable to operations on Federal and Indian lands.

Date:

April 2, 2002

Prepared by:

Eric Noblitt

Eric Noblitt, Agent
Wasatch Oil & Gas LLC

Wasatch Oil & Gas

April 3, 2002

RECEIVED
APR 04 2002
DIVISION OF
OIL, GAS AND MINING

Ms. Lisha Cordova
State of Utah
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-5801

Re: R649-3-3 and R649-3-11
Prickly Pear Unit Well # 10-4
API 43-007-30823
Carbon County, Utah

Dear Ms. Cordova:

Enclosed herewith, please find the following:

1) In triplicate, a revised APD cover sheet and drilling plan for the Prickly Pear Unit Well # 10-4.

2) A letter dated April 3, 2002 addressed to Mr. Baza requesting approval of the #10-4 well pursuant to R649-3-3 and R649-3-11. Attached to the letter are location and land maps.

Please do not hesitate to contact me at ~~(435) 647-9713~~ fax # if you should have any questions regarding this matter.

Sincerely,

R. Heggie Wilson
Agent

PO Box 699 • Farmington, UT 84025-0699 • Tel (801) 451-9200 • Fax (801) 451-9204

Wasatch Oil & Gas

RECEIVED

APR 04 2002

DIVISION OF
OIL, GAS AND MINING

April 3, 2002

Mr. John Baza
State of Utah - Department of Natural Resources
Div. of Oil, Gas & Mining
P.O. Box 145801
Salt Lake City, UT 84114-5801

Re: R649-3-3 and R649-3-11
Prickly Pear Unit Well #10-4
Sec. 10: T12S-R14E
Carbon County, Utah

Gentlemen:

On January 11, 2002, Wasatch Oil & Gas filed with DOGM an application for permit to drill the above referenced well. Pursuant to Genral Rules R649-3-3 and R649-3-11, Wasatch Oil & Gas is requesting approval that this well be drilled from a surface location 75' FSL & 271' FEL in Section 10 and completed at measured depth of 8,040 feet (7,828 feet true vertical depth) 1,320' FSL & 1,320' FEL (center of southeast quarter).

1) R649-3-3: Wasatch Oil & Gas's #10-4 is located within the approved Prickly Pear Unit Area. The surface location was determined after consultation with the Division of Wildlife Resources, Bureau of Land Management and the United States Fish and Wildlife as a way to mitigate away from suitable habitat for the Mexican Spotted Owl.

Wasatch Oil & Gas has determined that the reservoir drainage from the Lower Wasatch, North Horn and Meseverde Formation in this immediate area ranges from 80 to 160 acres. Wasatch Oil & Gas in Cause No. 157-03 evidenced this in front of the Board on April 25, 2001. In anticipation that this well will eventually be placed in a participation area ranging from 100 to 160 acres, Wasatch elected to place the well in the approximate center of the quarter section.

At the proposed total depth (TD), Wasatch will be the sole working interest owner within a 460-foot radius. Furthermore, Wasatch is the sole working interest owner within the quarter section.

2) R649-3-11: Similar to paragraph numbered one above, the Prickly Pear Unit well #10-4 has a surface location that was determined to minimize potential conflict with suitable habitat of the Mexican Spotted Owl. A location in accordance with R-649-3-2 would be in steep cliff terrain.

PO Box 699 • Farmington, UT 84025-0699 • Tel (801) 451-9200 • Fax (801) 451-9204

3) Wasatch is the sole working interest owner Federal lease UTU-73665 that covers the entire southeast quarter of section 10. From the surface location, 76 feet to the south, EOG Resources and Pannonian Energy, Inc. are lessees of Federal lease UTU-74386.

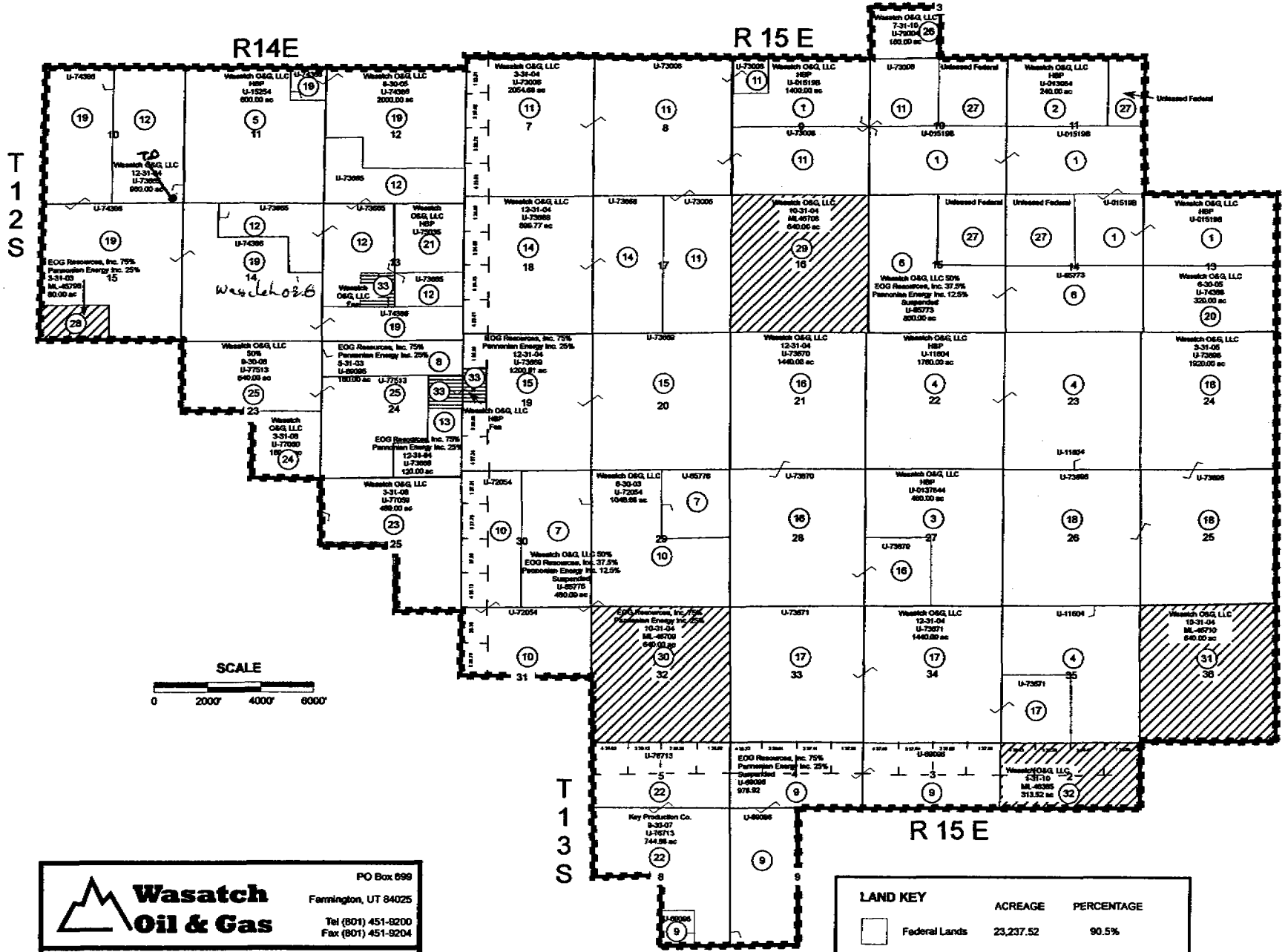
4) A surface and total depth map are attached along with a land plat.

Pursuant to the above, Wasatch Oil & Gas request that the Prickly Pear Unit # 10-4 Application for Permit to Drill be considered under Rules R649-3-3 and R649-3-11.

Sincerely,

R. Heggie Wilson
Agent

c.c. EOG Resources
Pannonian Energy, Inc.



Wasatch Oil & Gas

PO Box 699
Farmington, UT 84025
Tel (801) 451-9200
Fax (801) 451-9204

PRICKLY PEAR EXPLORATORY UNIT

Carbon County, Utah

EXHIBIT A

Mary L. McPherson 7-23-01

LAND KEY	ACREAGE	PERCENTAGE
Federal Lands	23,237.52	90.5%
State Lands	2,313.52	9.1%
Fee Lands	106.63	0.4%
TOTAL	25,657.67	100.00 %

Unit Outline

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

April 8, 2002

Memorandum

To: Assistant District Manager Minerals, Moab District

From: Michael Coulthard, Petroleum Engineer

Subject: 2002 Plan of Development Prickly Pear Unit Carbon County, Utah.

Pursuant to email between Lisha Cordova, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management. The following well is now proposed to be directionally drilled. The well is the second obligation well for the Prickly Pear Unit.

API #	WELL NAME	LOCATION
43-007-30823	Prickly Pear 10-4	Sec. 10, T12S, R14E 0075 FSL 0271 FEL Proposed BHL 1320 FSL 1320 FEL

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

/s/ Michael L. Coulthard

bcc: File - Prickly Pear Unit
Division of Oil Gas and Mining
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:4-8-2

eog resources

EOG Resources, Inc.
600 Seventeenth Street
Suite 1100N
Denver, CO 80202
(303) 572-9000
Fax: (303) 824-5400

April 16, 2002

VIA FACSIMILE and REGULAR MAIL
801-359-3940

Ms. Lisha Cordova
State of Utah
Division of Oil, Gas and Mining
P. O. Box 145801
Salt Lake City, UT 84114-5801

RE: Consent to Exception Location
Prickly Pear Unit Well #10-4
T12S-R14E, SLB&M
Section 10: SE4
Carbon County, Utah

Ladies and Gentlemen:

This letter will evidence EOG Resources' written consent to Wasatch Oil and Gas' plans to directionally drill the captioned well from a surface location 75' FSL and 271' FEL of T12S-R14E, Section 10 to a bottomhole location 1,320' FSL and 1,320' FEL of said Section.

If we may be of any further assistance, in this regard, please feel free to call the undersigned at 303-824-5428.

Sincerely,

EOG RESOURCES, INC.

R. G. Davis, CPL
Project Landman

02002.rgd

cc: Heggie Wilson - 435-647-9713

RECEIVED
APR 18 2002
DIVISION OF
OIL, GAS AND MINING

GASCO Energy

RECEIVED
APR 29 2002
DIVISION OF
OIL, GAS AND MINING

April 24, 2002

VIA FACSIMILE and REGULAR MAIL
801-359-3940

Ms. Lisha Cordova
State of Utah
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, Utah 84114-5801

RE: Consent to Exception Location
Prickly Pear Unit Well #10-4
T12S, R14E, SLB&M
Section 10: SE4
Carbon County, Utah

Ladies and Gentlemen:

This letter will evidence Gasco Energy Inc.'s written consent to Wasatch Oil and Gas plans to directionally drill the captioned well from a surface location 75' FSL and 271' FEL of T12S, R14E, Section 10 to the bottom hole location 1,320' FSL and 1,320' FEL of said Section.

If we may be of any further assistance, in this regard, please feel free to call the undersigned at 303-824-5428.

Sincerely,

[redacted]

Mike Decker
Chief Operating Officer

GASCO Energy, Inc.
14 Inverness Drive East, Suite H-236
Englewood, CO 80112-5625
Tel: (303) 483-0044
Fax: (303) 483-0011
Email: invest@gascoenergy.com
Website: www.gascoenergy.com
OTCBB: GASE

001

FORM 3160-3
(December 1990)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires December 31, 1991

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.: UTU-73665

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

1b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER [ ] SINGLE ZONE [ ] MULTIPLE ZONE [X]

7. UNIT AGREEMENT NAME: Prickly Pear

8. FARM OR LEASE NAME: Prickly Pear

CONFIDENTIAL

2. NAME OF OPERATOR: Wasatch Oil & Gas, LLC

9. WELL NO.: #10-4

3. ADDRESS OF OPERATOR: P.O. Box 699, Farmington, UT. 84025-0699 Phone # (801)451-9200

10. FIELD AND POOL OR WILDCAT: ~~Prickly Pear~~ Stone Cabin

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At Surface: 75' fsl & 271' fel (SE/4 SE/4) 4403396 y 557812 x
At proposed Prod. Zone: 1,320' fsl & 1,320' fel (C SE/4) 4403796 y 557492 x

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec.10-T12S-R14E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 38 miles southwest of Myton, Utah

12. COUNTY OR PARISH: Carbon

13. STATE: UT.

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 75 feet north of lease line

16. NO. OF ACRES IN LEASE: 960

17. NO. OF ACRES ASSIGNED TO THIS WELL: 160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT.: n/a

19. PROPOSED DEPTH: 7,828' TVD 8,040' MD

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 7,728' GR

22. APPROX. DATE WORK WILL START*:

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT/FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8- 5/8"	32#	780'	350 sxs "G" & "Lite"
7-7/8"	4-1/2"	11.6#	7828' TVD 8,040' MD	550 sxs 50/50 Poz

This well will be directionally drill to the center of the SE/4 Sec.10-T12S-R14E. The well will drill to a t true vertical depth of 7,828' and measured depth of 8,040'.

RECEIVED
APR 04 2002
DIVISION OF
OIL, GAS AND MINING

Operations hereunder will be conducted pursuant to a statewide bond filed with the Utah State Office of BLM, under UT-1128, Surety Bond No. B7998

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM : If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED: R. Hall TITLE: Agent DATE: 4/2/02

(This space for Federal or State office use)

PERMIT NO. 43-007-30823 APPROVAL DATE

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.

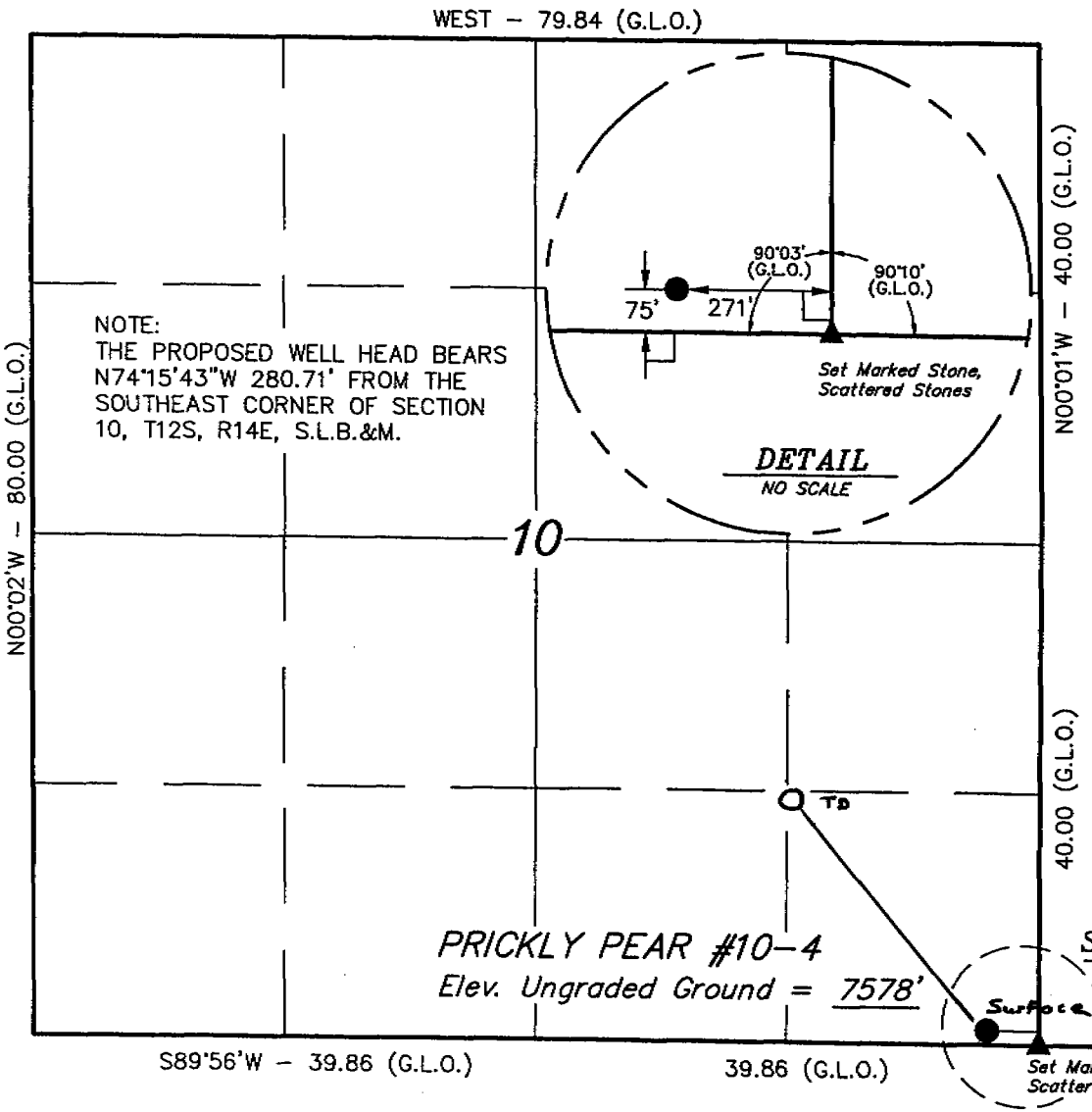
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY: BRADLEY G. HILL TITLE: RECLAMATION SPECIALIST III DATE: 05-02-02

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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 mater within its jurisdiction.

T12S, R14E, S.L.B.&M.

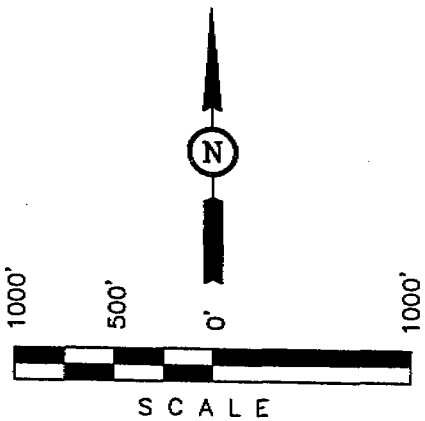


WASATCH OIL & GAS LLC.

Well location, PRICKLY PEAR #10–4, located as shown in the SE 1/4 SE 1/4 of Section 10, T12S, R14E, S.L.B.&M., Carbon County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 7, T12S, R15E, S.L.B.&M. TAKEN FROM THE COWBOY BENCH, QUADRANGLE, UTAH, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7563 FEET.



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. 161319
STATE OF UTAH
ROBERT L. KAY

BASIS OF BEARINGS

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

LATITUDE = 39°46'50"
LONGITUDE = 110°19'30"

LEGEND:

└ = 90° SYMBOL
● = PROPOSED WELL HEAD.
▲ = SECTION CORNERS LOCATED.

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

SCALE	DATE SURVEYED:	DATE DRAWN:
1" = 1000'	10–25–01	11–05–01
PARTY: B.B. W.L. D.R.B.	REFERENCES: G.L.O. PLAT	
WEATHER: COOL	FILE: WASATCH OIL & GAS LLC.	

003

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

May 2, 2002

Wasatch Oil & Gas, LLC
P O Box 699
Farmington, UT 84025-0699

Re: Prickly Pear #10-4 Well, Surface Location 75' FSL, 271' FEL, SESE, Sec. 10, T. 12 South, R. 14 East, Bottom Location 1320' FSL, 1320' FEL, C SE, Sec. 10, T. 12 South, R. 14 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 43-007-30823.

Sincerely,

John R. Baza
Associate Director

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

Operator: Wasatch Oil & Gas, LLC

Well Name & Number Prickly Pear #10-4

API Number: 43-007-30823

Lease: UTU-73665

Surface Location: SESE **Sec.** 10 **T.** 12 South **R.** 14 East

Bottom Location: C SE **Sec.** 10 **T.** 12 South **R.** 14 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 Dan Jarvis at (801) 538-5338

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. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

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

Form 3160-5
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires: January 31, 2004

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
U-01519-B

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
Prickly Pear 10-4

2. Name of
Bill Barrett Corporation

9. API Well No.
43-007-30823

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

3b. Phone No. *(include area code)*
303 293-9100

10. Field and Pool, or Exploratory Area
Stone Cabin

4. Location of Well *(Footage, Sec., T, R., M., or Survey Description)*
75' FSL and 271' FEL; SE¼SE¼, Section 10: T. 12 S., R. 14 E.

11. County or Parish, State
Carbon / Utah

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change of Operator
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

3. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Please be advised that Bill Barrett Corporation has succeeded Wasatch Oil & Gas Corporation as Operator of the above described well effective April 1, 2002

Wasatch Oil & Gas Corporation

Todd Cusick, President April 30, 2002

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)* Dominc Bazile — Title Vice President of Operations

Signature — Date April 30, 2002

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by *(Signature)* — Name *(Printed/Typed)* — Title

Conditions of approval, if any, are attached. Approval of this notice 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. — Office — Date

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 next page)

BILL BARRETT CORPORATION

May 15, 2002

Mr. Jim Thompson
Utah Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114-5801

RE: Annual Waste Management Plan, Response Form, 2002 Report

Dear Jim,

Enclosed you will find ***Call for Annual Waste Management Plans for Calendar Year 2002 – Response Form.***

Annual Waste Management Plan - 2002
Listed below are the facilities from which water will be hauled to the water disposal operation of RNI Disposal in Roosevelt. We anticipate disposing of all produced water with RNI from these facilities and any others. RNI is permitted and in good standing with the division.

Bill Barrett Corporation estimates that approximately 3,000 barrels of water will be produced from these facilities during 2002. This number may vary depending on rework and new drilling activities.

Wells	Legal Description Located in Carbon County, Utah:
Government Pickrell	T12S, R15E, Section 11: SE/4NW/4
Stone Cabin #2-B-27	T12S, R15E, Section 27: SE/4NW/4
Peters Point #3A	T13S, R17E, Section 8: SW/SE/4
Hunt Ranch #3-4	T12S, R15E, Section 3: SE/4SE/4
	Compressor Stations
Main Compressor	T11S, R15E, Section 23
Airport Compressor	T12S, R16E, Section 27

Please contact the undersigned if you have any questions.

Sincerely,

Dominic J. Bazile, II
Vice President, Operations
Enclosure

1099 18th Street · Suite 2300 · Denver, Colorado 80202 · *Main Phone:* (303) 293-9100 · *Fax:* (303) 291-0420

Call for Annual Waste Management Plans for Calendar Year 2002 – Response Form

In accordance with Rule R649-9-2.4 of the Utah Oil and Gas Conservation General Rules, the Utah Division of Oil, Gas and Mining requests that all oil and gas operators, who are active in Utah, inform the Division of their waste management plans for their Utah operations by returning this Response Form and, if a waste stream is anticipated during calendar year 2002, attaching an Annual Waste Management Plan.

Operator Name: Bill Barrett Corporation
Name and Title of Company Representative: Dominic J. Bazile II, Vice President, Operations
Date: May 15, 2002 Phone Number: 303-293-9100

Three waste stream outcomes are defined below. Please select the one that fits your operational circumstances by placing an "X" on the underlined spaces in front of the selection:

1. _____ No Exploration and Production (E&P) wastes of any kind are anticipated and an amended Waste Management Plan will be filed when and if E&P wastes are generated.

2. _____ An E&P waste stream is probable but it is unlikely to include any produced water. We will file an amended Waste Management Plan when and if our operations generate any produced water. Attached please find our Annual Waste Management Plan (providing the information specified in Rule R649-9-2.4).

3. __X__ Our E&P waste stream is likely to include produced water. We will probably dispose of our produced water in the approximate percentage(s) specified, using the disposition strategy(ies) selected, below:

   100 % by Permitted Class II Water Disposal well(s).

   _____% by Permitted Class II Injection well(s) in a waterflood project.

   _____% by Permitted Commercial Evaporative Pit(s).

   _____% by Permitted Private, Non-commercial Evaporative Pit(s).

   _____% by Onsite (Surface) Pit(s).

   _____% by operations utilizing produced water for drilling, completion and workover activities.

   _____% by Permitted UPDES surface discharge

   _____% by Out of State Transfer to (specify in Annual Waste Management Plan).

   _____% by Other Means (specify in Annual Waste Management Plan).

   100 % Total

and have attached the Annual Waste Management Plan to provide the information specified in Rule R649-9-2.4.

Wasatch Oil & Gas

May 23, 2002

RECEIVED

MAY 24 2002

DIVISION OF
OIL, GAS AND MINING

Mr. Jim Thompson
State of Utah
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-5801

Re: Transfer Title to Wasatch Oil & Gas, LLC.

Dear Mr. Thompson:

Pursuant to my April 24, 2002 letter and our recent conversation regarding the wells formally owned by Wasatch Oil & Gas LLC, please allow this letter to clarify that all the interest in the wells and well permits located in Carbon and Duchesne Counties previously owned by either Wasatch Oil & Gas Corporation or Wasatch Oil & Gas, LLC have been transferred to Bill Barrett Corporation effective April 1, 2002.

Effective July 1, 2000, Wasatch Oil & Gas Corporation attempted to transfer all their leasehold interest in State, Federal and Fee lands to Wasatch Oil & Gas, LLC. However, there was some apparent oversight in transferring the wells and units at the same time. Recently we made these transfers close to the same time Bill Barrett Corporation acquired the referenced wells.

Regardless of whether or not Wasatch Corp. or Wasatch LLC was shown as the operator of the wells on April 1, 2002, it is the intent that Bill Barrett Corporation is being transferred ownership.

Please do not hesitate to contact me if you have any further questions regarding this matter.

Sincerely,

R. Heggie Wilson

PO Box 699 • Farmington, UT 84025-0699 • Tel (801) 451-9200 • Fax (801) 451-9204

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

IN REPLY REFER TO
UT-922

May 24, 2002

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

Re: Prickly Pear Unit
Carbon County, Utah

Gentlemen:

On May 9, 2002, we received an indenture dated April 1, 2002, whereby Wasatch Oil & Gas, LLC resigned as Unit Operator and Bill Barrett Corporation was designated as Successor Unit Operator for the Prickly Pear Unit, Carbon County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective May 24, 2002. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Prickly Pear Unit Agreement.

Your statewide (Utah) oil and gas bond No. 1262 will be used to cover all operations within the Prickly Pear Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks
Chief, Branch of Fluid Minerals

Enclosure
bcc: Field Manager - Moab (w/enclosure)
Division of Oil, Gas & Mining
SITLA
Minerals Adjudication Group U-932
File - Prickly Pear Unit (w/enclosure)
Agr. Sec. Chron
Fluid Chron
UT922:TAThompson:tt:5/24/02

Division of Oil, Gas and Mining

ROUTING

1. GLH
2. CDW ✓
3. FILE

OPERATOR CHANGE WORKSHEET

DOA

X Change of Operator (Well Sold) Designation of Agent

Operator Name Change Merger

The operator of the well(s) listed below has changed, effective: **04-01-2002**

FROM: (Old Operator):	**TO:** (New Operator):
WASATCH OIL & GAS LLC	BILL BARRETT CORPORATION
Address: P O BOX 699	Address: 1099 18TH STREET STE 2300
FARMINGTON, UT 84025-0699	DENVER, CO 80202
Phone: 1-(801)-451-9200	Phone: 1-(303)-293-9100
Account No. N2095	Account No. N2165

CA No. **Unit:** **PRICKLY PEAR**

WELL(S)

NAME	SEC TWN RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
PRICKLY PEAR 10-4	10-12S-14E	43-007-30823	99999	FEDERAL	GW	APD
PRICKLY PEAR 13-4	13-12S-14E	43-007-30825	99999	FEDERAL	GW	APD
PRICKLY PEAR 1215-11-2	11-12S-15E	43-007-30824	99999	FEDERAL	GW	APD
PRICKLY PEAR 21-2	21-12S-15E	43-007-30828	99999	FEDERAL	GW	APD
PRICKLY PEAR 27-3	27-12S-15E	43-007-30829	99999	FEDERAL	GW	APD

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 05/24/2002
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 05/06/2002
3. The new company has been checked through the **Department of Commerce, Division of Corporations Database on:** 05/28/2002
4. Is the new operator registered in the State of Utah: YES Business Number: 5113947-0143
5. If **NO**, the operator was contacted contacted on: N/A

6. (R649-9-2)Waste Management Plan has been received on: 05/21/2002

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: N/A

8. **Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: 05/24/2002

9. **Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: N/A

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: N/A

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 05/29/2002
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 05/29/2002
3. Bond information entered in RBDMS on: N/A
4. Fee wells attached to bond in RBDMS on: N/A

STATE WELL(S) BOND VERIFICATION:

1. State well(s) covered by Bond Number: N/A

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: 1262

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: N/A

FEE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number N/A
2. The **FORMER** operator has requested a release of liability from their bond on: N/A
   The Division sent response by letter on: N/A

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

COMMENTS:

CONFIDENTIAL

005

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NUMBER:	UTU-73665
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	n/a
7. UNIT or CA AGREEMENT NAME:	Prickly Pear Unit
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER	8. WELL NAME and NUMBER: Prickly Pear Unit Federal #10-4
2. NAME OF OPERATOR: BILL BARRETT CORPORATION	9. API NUMBER: 007-30823
3. ADDRESS OF OPERATOR: 1099 18th St. Ste 2300 CITY Denver STATE CO ZIP 80202 / PHONE NUMBER: (303) 312-8120	10. FIELD AND POOL, OR WILDCAT: Stone Cabin

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL x 271' FEL — COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E — 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: Renew APD
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

The name for this well has been changed

From: Prickly Pear #10-4
To: Prickly Pear Unit Federal #10-4

We understand the approval with UDOGM for this location expires May 2, 2003. Bill Barrett Corporation (BBC) respectfully requests an extension for this well for the maximum time possible.

All other information in the original APD remains the same.

RECEIVED
MAR 19 2003
DIV. OF OIL, GAS & MINING

COPY SENT TO OPERATOR
Date: 03-24-03
Initials: CHD

Approved by the
Utah Division of
Oil, Gas and Mining
Date: 03-20-03
By:

NAME (PLEASE PRINT) Debra K. Stanberry — TITLE Permit Specialist

SIGNATURE — DATE 3/17/2003

(This space for State use only)

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

006

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5. LEASE DESIGNATION AND SERIAL NUMBER:	UTU-73665
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	n/a
7. UNIT or CA AGREEMENT NAME:	Prickly Pear Unit
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER CONFIDENTIAL	8. WELL NAME and NUMBER: Prickly Pear Unit Federal 10-4
2. NAME OF OPERATOR: BILL BARRETT CORPORATION	9. API NUMBER: 4300730823
3. ADDRESS OF OPERATOR: 1099 18th St Ste 2300 CITY Denver STATE CO ZIP 80202 / PHONE NUMBER: (303) 312-8120	10. FIELD AND POOL, OR WILDCAT: Nine Mile Canyon

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL x 271' FEL — COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E — 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
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☐ 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: _____
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

BILL BARRETT CORPORATION REQUESTS APPROVAL TO MAKE THE FOLLOWING CHANGE REGARDING THIS PROPOSED WELL. THE ORIGINAL APD FOR THIS WELL SUBMITTED BY WASATCH OIL & GAS, LLC SPECIFIES A 5000# BOP SYSTEM. BBC REQUESTS THAT A 3000 PSI BOP BE USED IN A 3000 PSI CONFIGURATION BASED ON THE FOLLOWING CALCULATIONS USING A MAXIMUM 10,000' TOTAL DEPTH:
(TOTAL DEPTH 10,000')
BHP ESTIMATE: 10,000 * .33 PSI/FT = 3300 PSI AT BH DEPTH
MASP ESTIMATE: REDUCE BHP BY PARTIALLY EVACUATED PIPE
3300 - (.22 PSI/FT * 10,000) = 1100 PSI

A 3000# BOP SCHEMATIC IS ATTACHED

COPY SENT TO OPERATOR
Date: 05-23-03
Initials: CHD

RECEIVED
MAY 16 2003
DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) Debra K. Stanberry — TITLE Permit Specialist

SIGNATURE _____ — DATE 5/14/2003

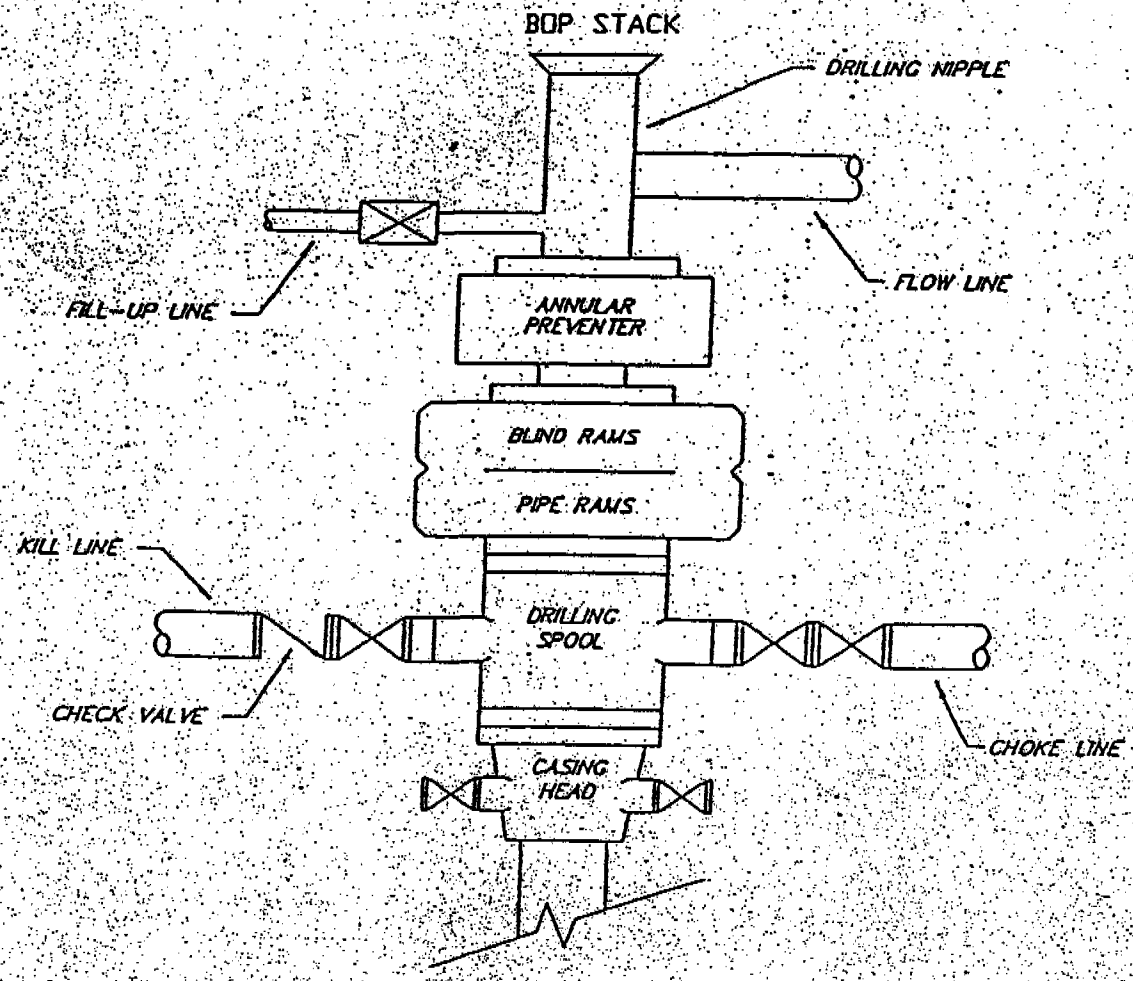
(This space for State use only)

Accepted by the Utah Division of Oil, Gas and Mining
Date: 5/23/03
By: _____

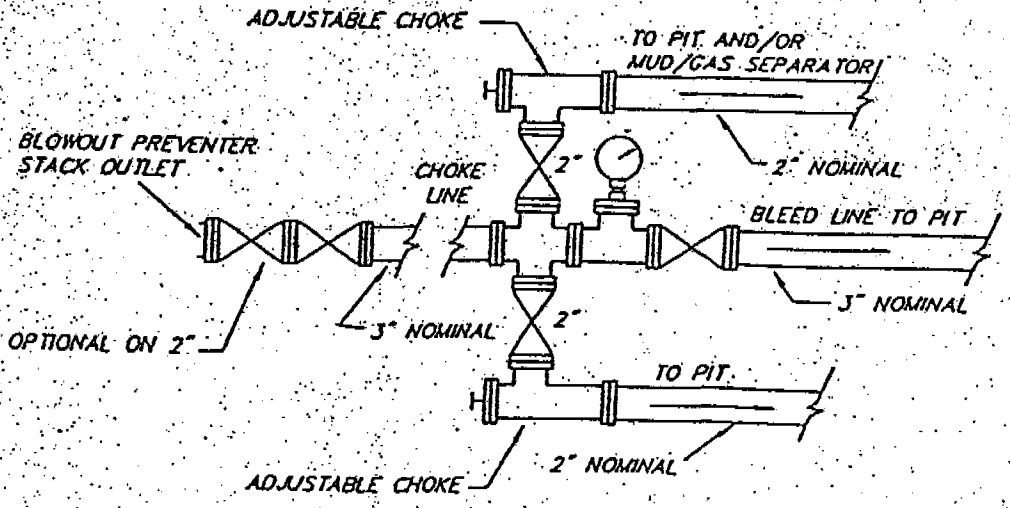
Federal Approval Of This Action Is Necessary

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

TYPICAL 3,000 p.s.i.
BLOWOUT PREVENTER SCHEMATIC



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



AMENDED

007

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-73665

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME: Prickly Pear Unit

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

8. WELL NAME and NUMBER: Prickly Pear Unit Federal #10-4

2. NAME OF OPERATOR: Bill Barrett Corporation

9. API NUMBER: 4300730823

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

PHONE NUMBER: (303) 312-8120

10. FIELD AND POOL, OR WILDCAT: Nine Mile Canyon

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL x 271' FEL

COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E

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
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Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER:
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

BILL BARRETT CORPORATION REQUESTS APPROVAL TO: 1) CHANGE THIS WELL FROM A DIRECTIONAL WELL TO A VERTICAL WELL BOTH SHL AND BHL BEING 75' FSL x 271' FEL. A LOCATION EXCEPTION LETTER WILL BE SUBMITTED TO YOUR OFFICE UNDER SEPARATE COVER. 2) INCREASE PAD SIZE: ORIGINALLY 140' WIDE PLUS 60' FOR RESERVE PIT x 300' LONG TO 150' WIDE PLUS 75' RESERVE PIT x 325' LONG. 3) DEEPEN THIS WELL IN ORDER TO TEST THE MANCOS FORMATION. DUE TO THE INCREASED TOTAL DEPTH, CASING AND CEMENTING CHANGES ARE SET OUT BELOW:

INCREASE TOTAL DEPTH FROM 7,828' TVD, 8040 TMD TO 10,000' TMD.

REVISE CASING PROGRAM AND ASSOCIATED CEMENT VOLUMES TO:

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12-1/4"	9-5/8"	36#	1,000'	420 sx
7-7/8"	5-1/2"	17#	10,000'	1095 sx

RECEIVED
JUN 26 2003
DIV. OF OIL, GAS & MINING

PLEASE SEE ATTACHED CASING DESIGN SHEETS AND CEMENTING PROGRAM.

NAME (PLEASE PRINT) Debra K. Stanberry TITLE Permit Specialist

SIGNATURE [signature] DATE June 23, 2003

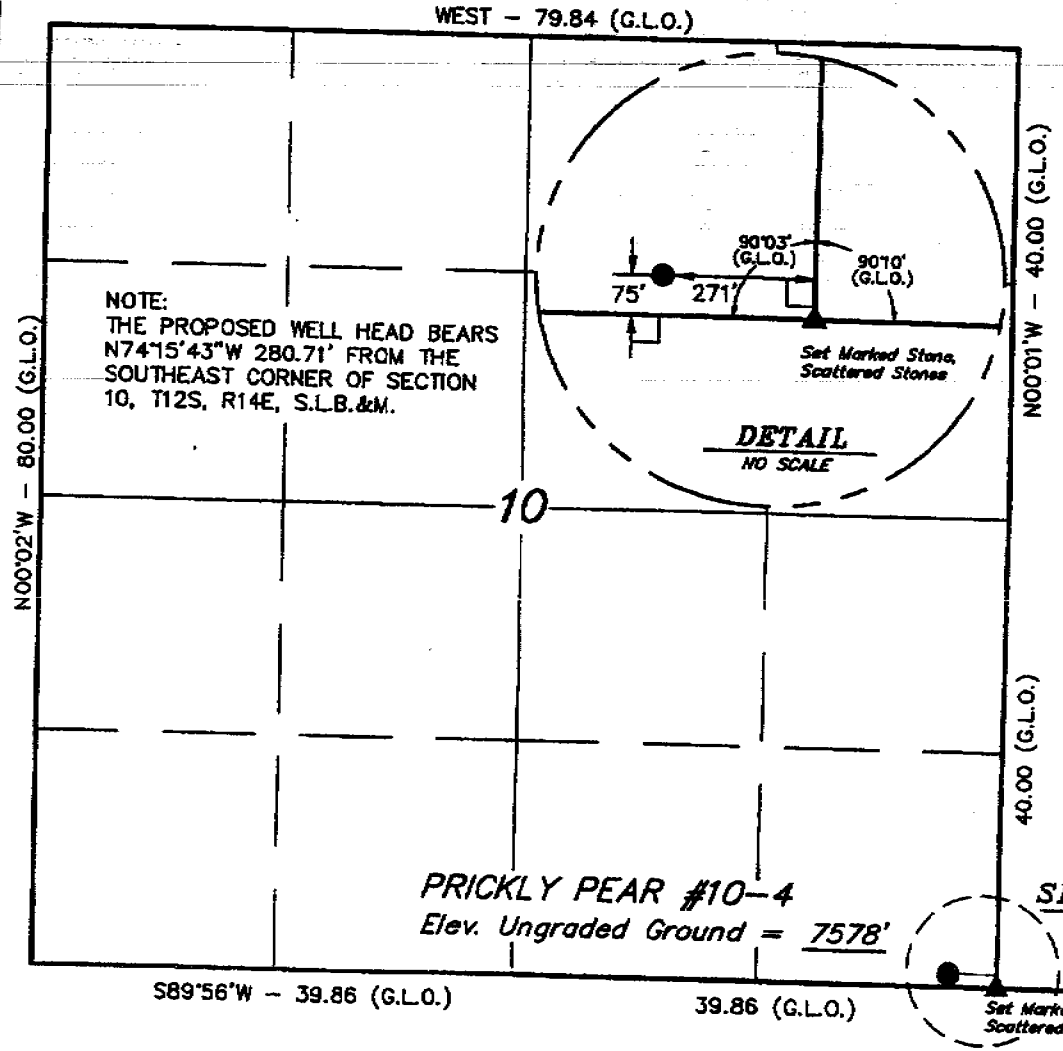
(This space for State use only)

Federal Approval of this Action is Necessary

Approved by the Utah Division of Oil, Gas and Mining
Date: 07-07-03
By: [signature]

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

T12S, R14E, S.L.B.&M.

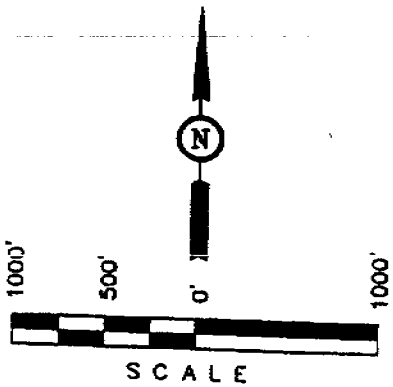


WASATCH OIL & GAS LLC.

Well location, PRICKLY PEAR #10-4, located as shown in the SE 1/4 SE 1/4 of Section 10, T12S, R14E, S.L.B.&M., Carbon County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 7, T12S, R15E, S.L.B.&M. TAKEN FROM THE COWBOY BENCH, QUADRANGLE, UTAH, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7563 FEET.



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. 161319
STATE OF UTAH
ROBERT L. KAY

LEGEND:

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

BASIS OF BEARINGS

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

LATITUDE = 39°46'50"
LONGITUDE = 110°19'30"

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

SCALE: 1" = 1000'	DATE SURVEYED: 10-25-01	DATE DRAWN: 11-05-01
PARTY: B.B. W.L. D.R.B.	REFERENCES: G.L.O. PLAT	
WEATHER: COOL	FILE: WASATCH OIL & GAS LLC.	

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

Nine Mile Canyon Cementing

Carbon County, Utah
United States of America

Surface and Production Casing Cementing Proposal

March 25, 2003
Version: 1

Submitted by:
Pat Kundert
Halliburton Energy Services
Denver 410 17th Co Us
410 Seventeenth St
Denver, Colorado 80202
303.899.4700

HALLIBURTON

HALLIBURTON

Job Recommendation — Surface Casing

Fluid Instructions

Fluid 1: Water Spacer

Water Spacer w/Gel

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

Fluid 2: Lead Cement – (700 – 0')

Halliburton Light Premium, 6% gel standard

2 % Calcium Chloride (Accelerator)

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

Fluid Weight	12.7 lbm/gal
Slurry Yield:	1.85 ft^3/sk
Total Mixing Fluid:	9.90 Gal/sk
Top of Fluid:	0 ft
Calculated Fill:	700 ft
Volume:	78.09 bbl
Calculated Sacks:	237.01 sks
Proposed Sacks:	**240 sks**

Fluid 3: Primary Cement – (TD – 700')

Premium Cement

94 lbm/sk Premium Cement (Cement-api)

2 % Calcium Chloride (Accelerator)

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

Fluid Weight	15.8 lbm/gal
Slurry Yield:	1.16 ft^3/sk
Total Mixing Fluid:	4.97 Gal/sk
Top of Fluid:	700 ft
Calculated Fill:	300 ft
Volume:	36.56 bbl
Calculated Sacks:	176.81 sks
Proposed Sacks:	**180 sks**

Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Water Spacer w/Gel	8.5	5.0	20 bbl
2	Cement	Halliburton Light Cement	12.7	5.0	240 sks
3	Cement	Premium Cement	15.8	5.0	180 sks

HALLIBURTON

Job Recommendation — Production Casing

Fluid Instructions

Fluid 1: Water Spacer

Water Spacer

Fluid Density:	8.40 lbm/gal
Fluid Volume:	5 bbl

Fluid 2: Reactive Spacer

SUPER FLUSH 101

Fluid Density:	10 lbm/gal
Fluid Volume:	20 bbl

Fluid 3: Water Spacer

Water Spacer

Fluid Density:	8.40 lbm/gal
Fluid Volume:	5 bbl

Fluid 4: Primary Cement – (TD – 2500')

50/50 Poz Premium, 2% gel standard

3 %	KCL (Additive Material)	Fluid Weight	13.40 lbm/gal
0.75 %	Halad(R)-322 (Low Fluid Loss Control)	Slurry Yield:	1.49 ft^3/sk
3 lbm/sk	Silicalite Compacted (Light Weight Additive)	Total Mixing Fluid:	7.06 Gal/sk
0.2 %	FWCA (Free Water Control)	Top of Fluid:	2500 ft
0.125 lbm/sk	Poly-E-Flake (Lost Circulation Additive)	Calculated Fill:	7500 ft
1 lbm/sk	Granulite TR 1/4 (Lost Circulation Additive)	Volume:	290.22 bbl
		Calculated Sacks:	1093.61 sks
		Proposed Sacks:	**1095 sks**

Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Water Spacer	8.4	5.0	5 bbl
2	Spacer	SUPER FLUSH 101	10.0	5.0	20 bbl
3	Spacer	Water Spacer	8.4	5.0	5 bbl
4	Cement	50/50 Pozmix, 2% gel Cement	13.4	5.0	1095 sks

Well name:	**Utah Nine Mile**
Operator:	**Bill Barrett Corporation**
String type:	Production: Frac
Location:	Uintah County

Design parameters:

Collapse
Mud weight: 9.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 6,000 psi
Internal gradient: 0.023 psi/ft
Calculated BHP 6,234 psi

Annular backup: 9.50 ppg

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.20

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: 8,559 ft

Environment:
H2S considered? No
Surface temperature: 60 °F
Bottom hole temperature: 200 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 0,000 ft
Minimum Drift: 4.750 in
Cement top: 2,375 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (USD)
1	10000	5.5	17.00	N-80	LT&C	10000	10000	4.767	0

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	4935	6290	1.275	6000	8758	1.46	146	348	2.39 J

Prepared by: Troy Schindler
Bill Barrett
Phone: (303) 312-8156
FAX: (303) 312-8195
Date: March 25,2003
Denver, Colorado

Remarks:
Collapse is based on a vertical depth of 10000 ft, a mud weight of 9.5 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.

In addition, burst strength is biaxially adjusted for tension.

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

Well name:	**Utah Nine Mile**
Operator:	**Bill Barrett Corporation**
String type:	Surface
Location:	Uintah County

Design parameters:

Collapse
Mud weight: 9.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,735 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 2,955 psi

Annular backup: 9.50 ppg

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

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

Tension is based on buoyed weight.
Neutral point: 859 ft

Environment:
H2S considered? No
Surface temperature: 60 °F
Bottom hole temperature: 74 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft
Minimum Drift: 8.750 in
Cement top: Surface

Non-directional string.

Re subsequent strings:
Next setting depth: 10,000 ft
Next mud weight: 9.500 ppg
Next setting BHP: 4,935 psi
Fracture mud wt: 10.000 ppg
Fracture depth: 10,000 ft
Injection pressure 5,195 psi

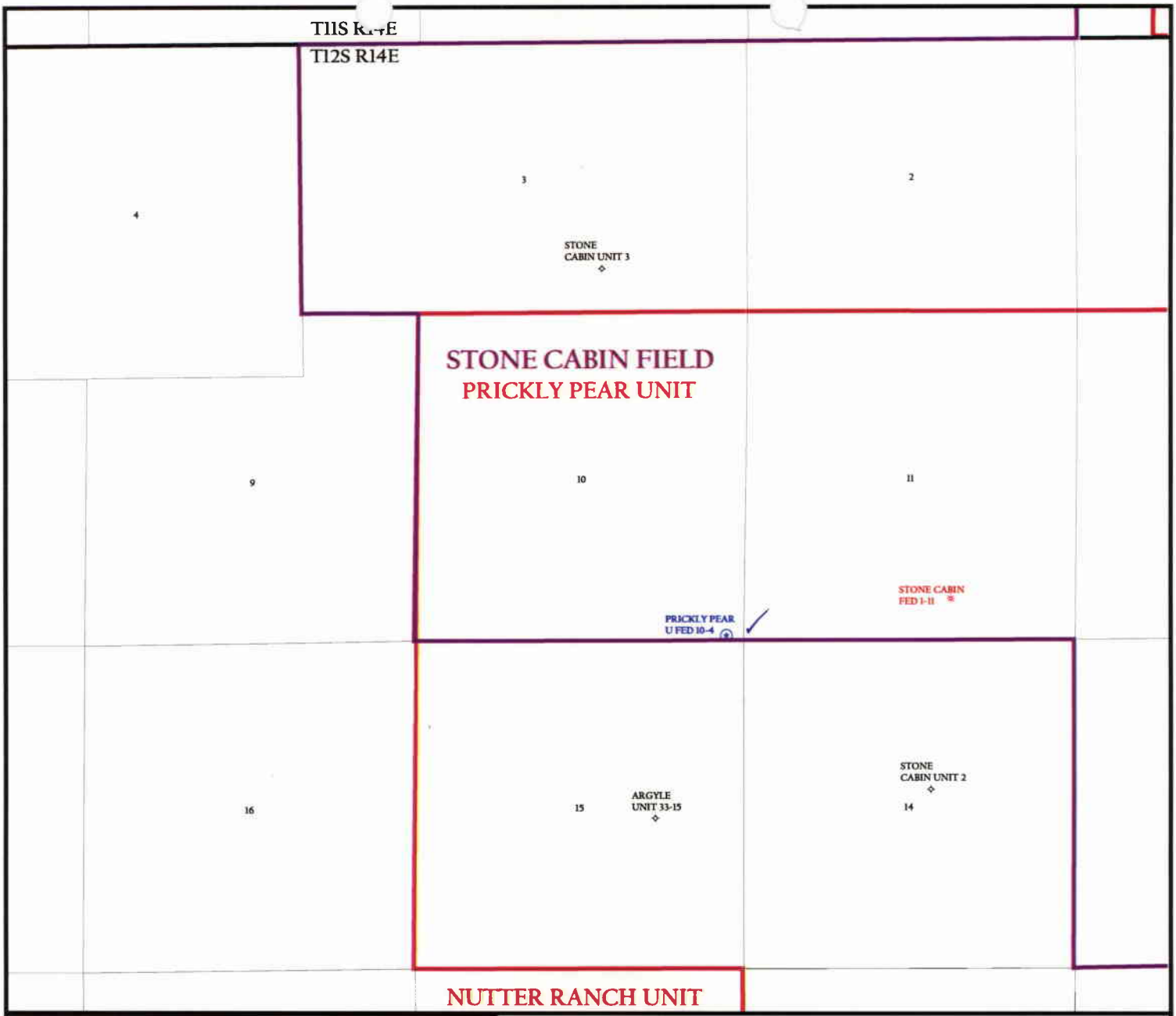
Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (USD)
1	1000	9.625	36.00	J-55	LT&C	1000	1000	8.796	0

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	493	2020	4.094	2735	3613	1.32	31	453	14.64 J

Prepared by: Troy Schindler / Bill Barrett
Phone: (303) 312-8156
FAX: (303) 312-8195
Date: March 25,2003
Denver, Colorado

Remarks:
Collapse is based on a vertical depth of 1000 ft, a mud weight of 9.5 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.

In addition, burst strength is biaxially adjusted for tension.



OPERATOR: BILL BARRETT CORP (N2165)

SEC. 10 T.12S, R.14E

FIELD: STONE CABIN (45)

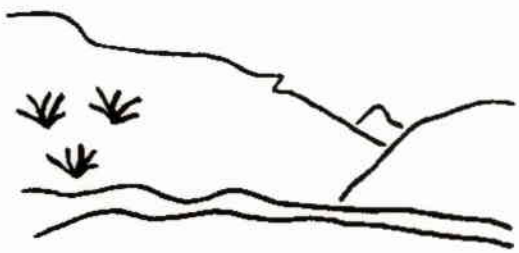
COUNTY: CARBON

SPACING: R649-3-3 / EXCEPTION LOCATION

Wells
- 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

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

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



Utah Oil Gas and Mining

PREPARED BY: DIANA MASON
DATE: 3-JULY-2003

Bill Barrett Corporation

July 2, 2003

Ms. Diana Mason
Utah Division of Oil, Gas & Mining
1594 W North Temple, Suite 1210
Salt Lake City, Utah 84114-5801

Via Fax 801-359-3940

Re: Prickly Pear #10-4
Section 10-T12S-R14E
Carbon County, Utah

Gentlemen:

Bill Barrett Corporation (BBC) has an Application for Permit to Drill for the captioned well and has filed a Sundry Notice, dated June 23, 2003, requesting, among other changes, approval to change the well from a directional well to a vertical well with both the SHL and BHL being 75' FSL & 271' FEL. The subject location requires an exception location. In compliance with R649-3-3 Exception to General Location and Siting of Wells, BBC submits the following required information in its request for administrative approval for the exception:

1. BBC is the only owner within 460 foot radius of the proposed well location.
2. BBC is the only owner of all of the directly and diagonally offsetting drilling units.
3. BBC is requesting the exception location because the SHL was determined after consultation with the Division of Wildlife Resources, BLM and US Fish and Wildlife as a way to mitigate away from suitable habitat for the Mexican Spotted Owl.
4. BBC has provided a plat with the APD package indicating the requested SHL & BHL being 75' FSL & 271' FEL.

BBC appreciated your prompt attention to this matter. Should you require any additional information, please contact the undersigned at 303-892-5635 or by e-mail at bgriffith12@hotmail.com.

Sincerely

William W. Griffith
Landman

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

FORM 9

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

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-73665

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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.

7. UNIT or CA AGREEMENT NAME: Prickly Pear Unit

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

8. WELL NAME and NUMBER: Prickly Pear Unit Federal #10-4

2. NAME OF OPERATOR: Bill Barrett Corporation

9. API NUMBER: 4300730823

3. ADDRESS OF OPERATOR: 1099 18th St, Ste 2300 CITY Denver STATE CO ZIP 80202 PHONE NUMBER: (303) 312-8120

10. FIELD AND POOL, OR WILDCAT: Nine Mile Canyon

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL x 271' FEL COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E 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:
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

BILL BARRETT CORPORATION REQUESTS APPROVAL TO: 1) CHANGE THIS WELL FROM A DIRECTIONAL WELL TO A VERTICAL WELL BOTH SHL AND BHL BEING 75' FSL x 271' FEL. A LOCATION EXCEPTION LETTER WILL BE SUBMITTED TO YOUR OFFICE UNDER SEPARATE COVER. 2) INCREASE PAD SIZE: ORIGINALLY 140' WIDE PLUS 60' FOR RESERVE PIT x 300' LONG TO 150' WIDE PLUS 75' RESERVE PIT x 325' LONG. 3) DEEPEN THIS WELL IN ORDER TO TEST THE MANCOS FORMATION. DUE TO THE INCREASED TOTAL DEPTH, CASING AND CEMENTING CHANGES ARE SET OUT BELOW:

RECEIVED
JUL 07 2003
DIV. OF OIL, GAS & MINING

INCREASE TOTAL DEPTH FROM 7,828' TVD, 8040 TMD TO 10,000' TMD.

REVISE CASING PROGRAM AND ASSOCIATED CEMENT VOLUMES TO:

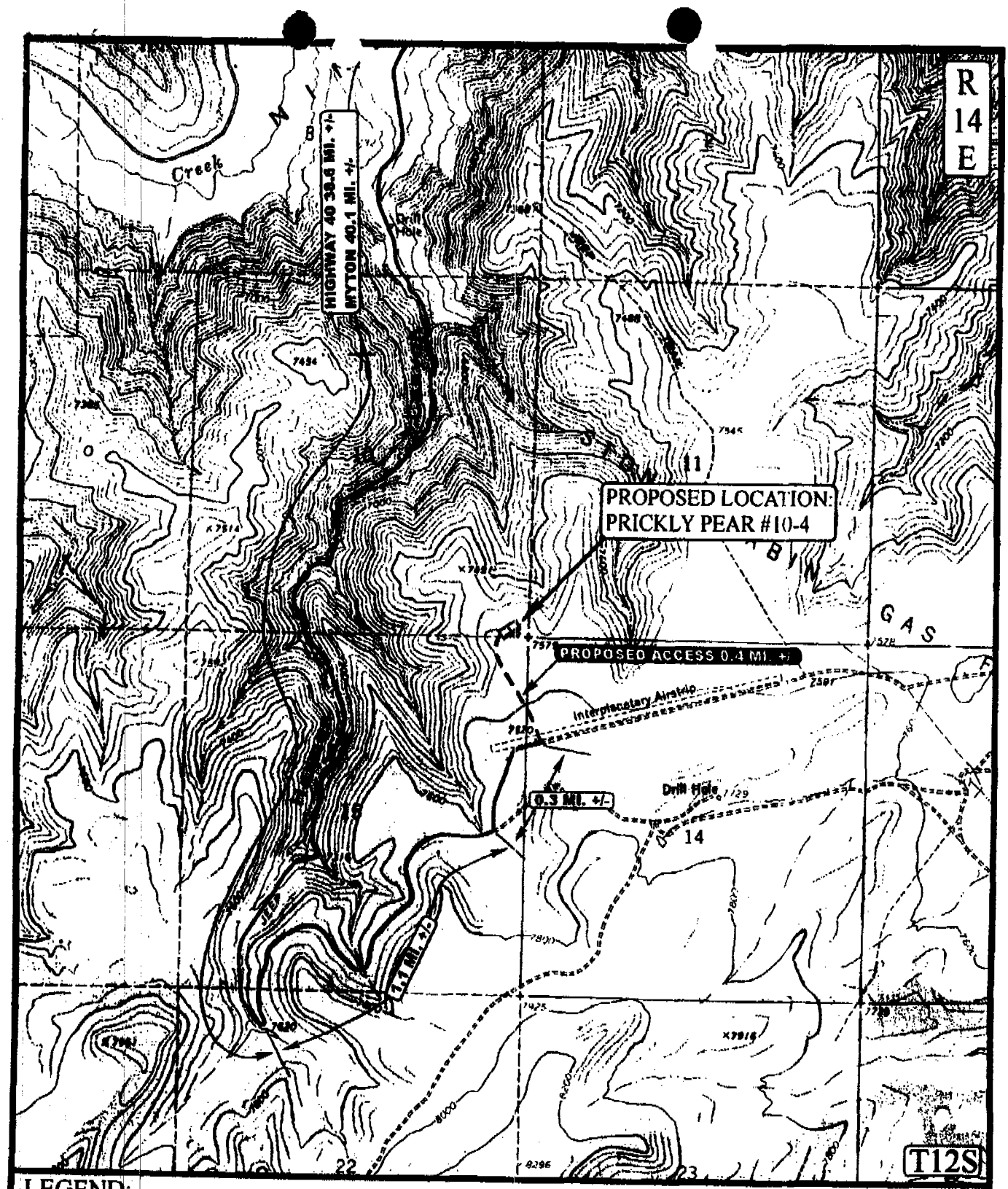
Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12-1/4"	9-5/8"	36#	1,000'	420 sx
7-7/8"	5-1/2"	17#	10,000'	1095 sx

PLEASE SEE ATTACHED CASING DESIGN SHEETS AND CEMENTING PROGRAM.

NAME (PLEASE PRINT) Debra K. Stanberry TITLE Permit Specialist

SIGNATURE DATE June 23, 2003

(This space for State use only)



LEGEND:

PROPOSED ACCESS ROAD
EXISTING ROAD

N

WASATCH OIL & GAS LLC
PRICKLY PEAR #10-4
SECTION 10, T12S, R14E, S.L.B.&M.
75' FSL 271' FEL

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

TOPOGRAPHIC MAP	10 MONTH	30 DAY	01 YEAR	B
SCALE: 1" = 2000'	DRAWN BY: J.L.G.	REVISED: 00-00-00		

009

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

May 2, 2002
AMENDED
July 7, 2003

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

Re: Prickly Pear Unit Federal #10-4 Well, 75' FSL, 271' FEL, SE SE, Sec. 10, T. 12 South, R. 14 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.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby 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 43-007-30823.

Sincerely,

John R. Baza
Associate Director

pab
Enclosures

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

Operator: Bill Barrett Corporation

Well Name & Number Prickly Pear Unit Federal #10-4

API Number: 43-007-30823

Lease: UTU-73665

Location: SE SE **Sec.** 10 **T.** 12 South **R.** 14 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 Dan Jarvis at (801) 538-5338

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. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

FORM 9

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

010

5. LEASE DESIGNATION AND SERIAL NUMBER:	UTU-73665
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
7. UNIT or CA AGREEMENT NAME:	Prickly Pear Unit
8. WELL NAME and NUMBER:	Prickly Pear Unit Federal #10-4
9. API NUMBER:	4300730823
10. FIELD AND POOL, OR WILDCAT:	Nine Mile Canyon

SUNDRY NOTICES AND REPORTS ON WELLS

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

2. NAME OF OPERATOR: Bill Barrett Corporation

3. ADDRESS OF OPERATOR: 1099 18th St, Ste 2300 CITY Denver STATE CO ZIP 80202 PHONE NUMBER: (303) 312-8120

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 75' FSL x 271' FEL COUNTY: Carbon
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E 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
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Date of work completion: _____	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER: _____
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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PLEASE SEE ATTACHED CASING DESIGN SHEETS AND CEMENTING PROGRAM.

NAME (PLEASE PRINT) Debra K. Stanberry TITLE Permit Specialist

SIGNATURE _____ DATE June 23, 2003

(This space for State use only)

RECEIVED
JUL 09 2003
DIV. OF OIL, GAS & MINING

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

011

Bill Barrett Corporation

July 2, 2003

Ms. Diana Mason
Utah Division of Oil, Gas & Mining
1594 W North Temple, Suite 1210
Salt Lake City, Utah 84114-5801

Via Fax 801-359-3940

Re: Prickly Pear #10-4
Section 10-T12S-R14E
Carbon County, Utah

Gentlemen:

Bill Barrett Corporation (BBC) has an Application for Permit to Drill for the captioned well and has filed a Sundry Notice, dated June 23, 2003, requesting, among other changes, approval to change the well from a directional well to a vertical well with both the SHL and BHL being 75' FSL & 271' FEL. The subject location requires an exception location. In compliance with R649-3-3 Exception to General Location and Siting of Wells, BBC submits the following required information in its request for administrative approval for the exception:

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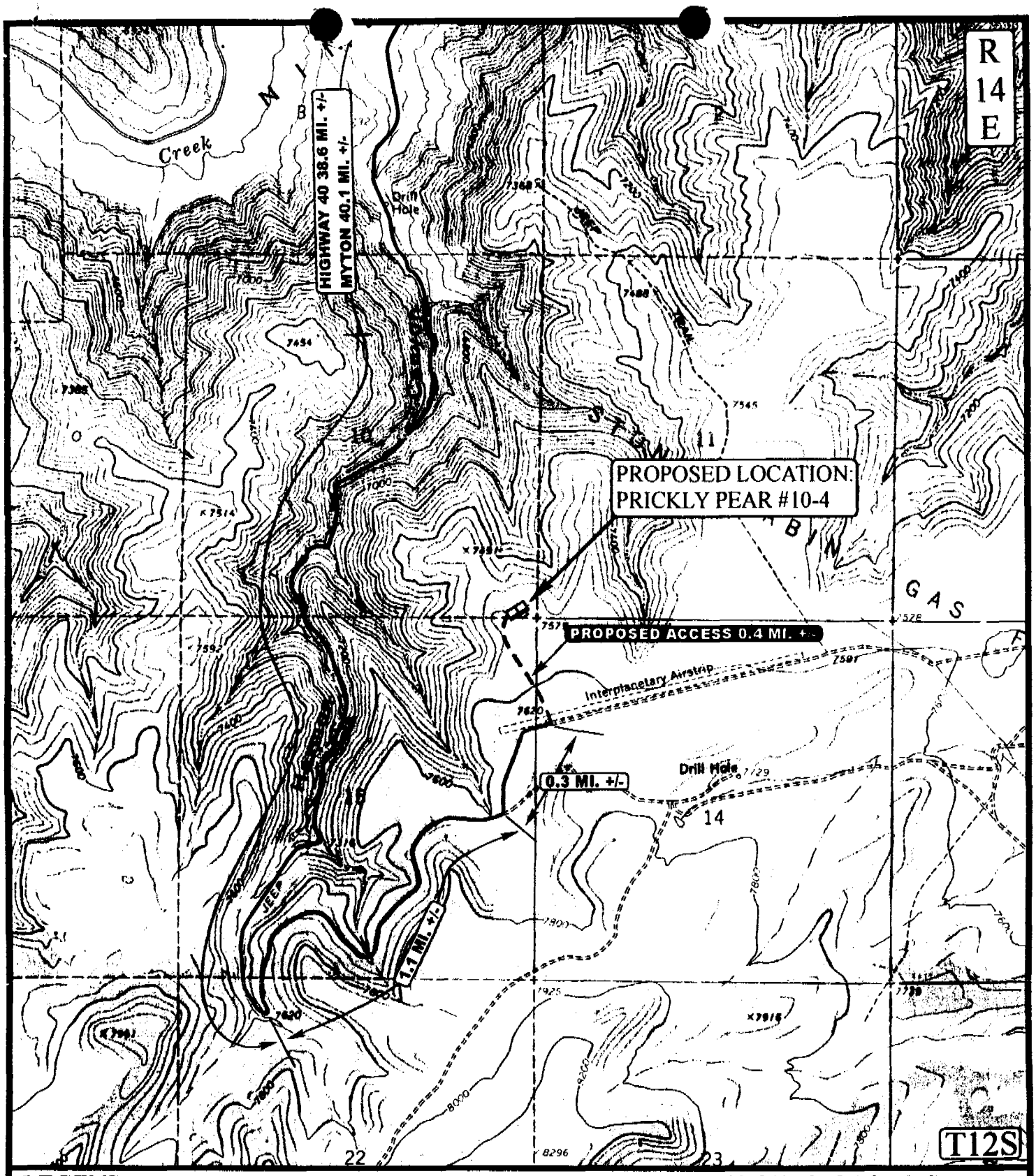
Sincerely

William W. Griffith
Landman

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



LEGEND:

- - - - - - - - - - PROPOSED ACCESS ROAD

———— EXISTING ROAD

N

WASATCH OIL & GAS LLC

PRICKLY PEAR #10-4

SECTION 10, T12S, R14E, S.L.B.&M.

75' FSL 271' FEL

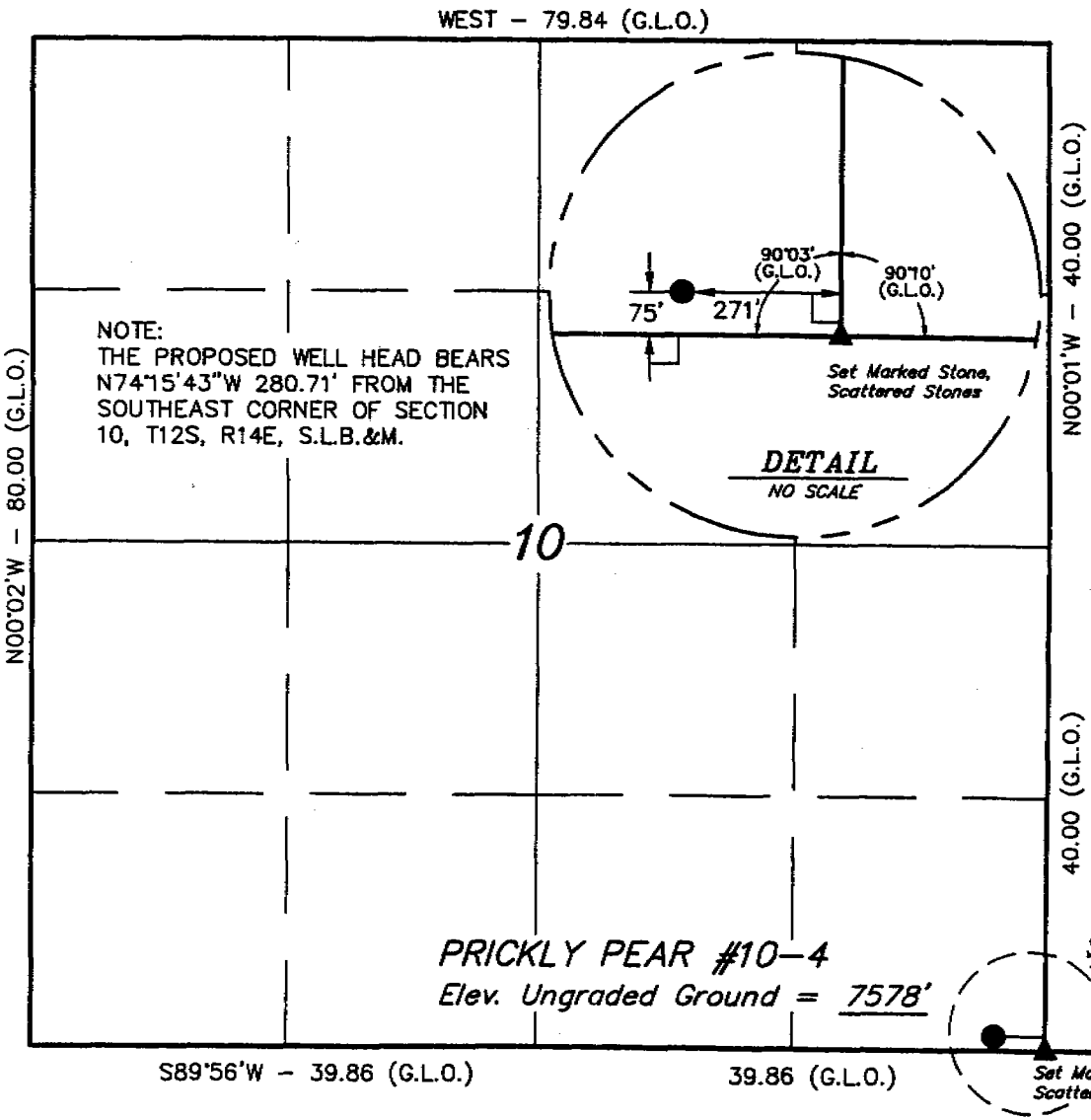
Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078

(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	10 MONTH	30 DAY	01 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: J.L.G.	REVISED: 00-00-00		

T12S, R14E, S.L.B.&M.

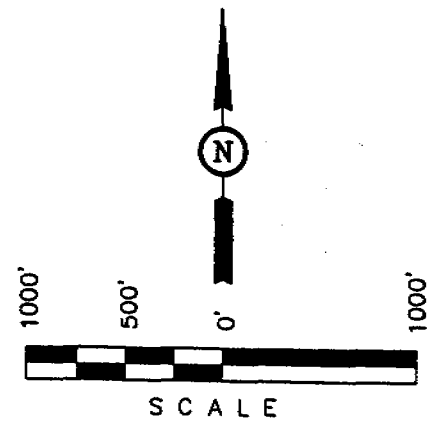


WASATCH OIL & GAS LLC.

Well location, PRICKLY PEAR #10-4, located as shown in the SE 1/4 SE 1/4 of Section 10, T12S, R14E, S.L.B.&M., Carbon County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 7, T12S, R15E, S.L.B.&M. TAKEN FROM THE COWBOY BENCH, QUADRANGLE, UTAH, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7563 FEET.



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. 161319
STATE OF UTAH
ROBERT L. KAY

LEGEND:

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

BASIS OF BEARINGS

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

LATITUDE = 39°46'50"
LONGITUDE = 110°19'30"

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

SCALE: 1" = 1000'	DATE SURVEYED: 10-25-01	DATE DRAWN: 11-05-01
PARTY: B.B. W.L. D.R.B.	REFERENCES: G.L.O. PLAT	
WEATHER: COOL	FILE: WASATCH OIL & GAS LLC.	

012

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NUMBER:	UTU-73665
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	n/a
7. UNIT or CA AGREEMENT NAME:	Prickly Pear Unit
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER CONFIDENTIAL	8. WELL NAME and NUMBER: Prickly Pear Unit Federal #10-4
2. NAME OF OPERATOR: BILL BARRETT CORPORATION	9. API NUMBER: 4300730823
3. ADDRESS OF OPERATOR: 1099 18th St Ste 2300 CITY Denver STATE CO ZIP 80202 / PHONE NUMBER: (303) 312-8120	10. FIELD AND POOL, OR WILDCAT: Prickly Pear Unit/Mancos

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL x 271' FEL — COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E — 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
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☐ 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: request for one-year renewal of APD
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

BILL BARRETT CORPORATION REQUESTS THAT THE APPROVED APPLICATION TO DRILL THIS WELL BE EXTENDED FOR ONE (1) YEAR.

Approved by the
Utah Division of
Oil, Gas and Mining
Date: 04-01-04
By:

COPY SENT TO OPERATOR
Date: 4-2-04
Initials: CHD

NAME (PLEASE PRINT) Debra K. Stanberry TITLE Permit Specialist

SIGNATURE DATE 3/25/2004

(This space for State use only)

RECEIVED
MAR 29 2004
DIV. OF OIL, GAS & MINING

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

[redacted]

Application for Permit to Drill
Request for Permit Extension
Validation
(this form should accompany the Sundry Notice requesting permit extension)

API: 43-007-30823
Well Name: PRICKLY PEAR UNIT FEDERAL #10-4
Location: SESE SEC 10-T12S-R14E, CARBON COUNTY, UT
Company Permit Issued to: BILL BARRETT CORPORATION
Date Original Permit Issued: 5/2/2002

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☐ N/A

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☐

Signature 3/25/2004 Date

Title: Permit Specialist

Representing: Bill Barrett Corporation

RECEIVED
MAR 2 9 2004
DIV. OF OIL, GAS & MINING

2002-00

FORM 3160-3
(December 1990).

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires December 31, 1991

013

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: UTU-73665

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

7. UNIT AGREEMENT NAME: Prickly Pear

1b. TYPE OF WELL
OIL WELL [ ] GAS WELL [X] OTHER [ ] SINGLE ZONE [ ] MULTIPLE ZONE [X]

8. FARM OR LEASE NAME: Prickly Pear

2. NAME OF OPERATOR: ~~Wasatch Oil & Gas, LLC~~ Bill Barrett Corporation

9. WELL NO.: #10-4

3. ADDRESS OF OPERATOR: 1099 18th Street, Suite 2300, Denver, CO 80202
~~P.O. Box 688, Farmington, UT. 84025-0699~~ Phone # ~~(801)451-9200~~ 303-312-8120

10. FIELD AND POOL OR WILDCAT: Prickly Pear

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At Surface: 75' fsl & 271' fel (SE/4 SE/4)
At proposed Prod. Zone: same
43.007.30823

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec.10-T12S-R14E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 38 miles southwest of Myton, Utah

12. COUNTY OR PARISH: Carbon

13. STATE: UT.

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.(Also to nearest drlg. unit line, if any): 75 feet north of lease line

16. NO. OF ACRES IN LEASE: 960

17. NO. OF ACRES ASSIGNED TO THIS WELL: 160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT.: n/a

19. PROPOSED DEPTH: 7,828'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 7,728' GR

22. APPROX. DATE WORK WILL START*:

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT/FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8- 5/8"	32#	780'	350 sxs "G" & "Lite"
7-~~7/8~~"	4-1/2"	11.6#	7828'	550 sxs 50/50 Poz

RECEIVED
2002 JAN 14 P 1:32
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE

RECEIVED
AUG 05 2004
DIV. OF OIL, GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM : If proposal is to deepen or plug back. give data on present productive zone and proposed new productive zone.
If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
SIGNED B. Hess Hill TITLE Agent DATE 1/7/02

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
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:

APPROVED BY /s/ Eric C. Jones TITLE Acting Assistant Field Manager, Division of Resources DATE 8/2/04

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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 mater within its jurisdiction.

CONDITIONS OF APPROVAL ATTACHED

Bill Barrett Corporation
Prickly Pear Unit Federal 10-4
Lease UTU-73665
Prickly Pear Unit
SE/SE Sec. 10, T12S, R15E
Carbon County, Utah

A COMPLETE COPY OF THIS PERMIT SHALL BE KEPT ON LOCATION from the beginning of site construction through well completion, and shall be available to contractors to ensure compliance.

CONDITIONS OF APPROVAL

Approval of this application 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.

Be advised that Bill Barrett Corporation is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by UT1262 (Principal – Bill Barrett Corporation) via surety consent as provided for in 43 CFR 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

This permit will be valid for a period of one year from the date of approval. After permit termination, a new application must be filed for approval.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors.

A. DRILLING PROGRAM

1. The proposed 3M BOP system (revised from the original proposal) is adequate for anticipated conditions. Installation, testing and operation of the system shall be in conformance with Onshore Oil and Gas Order No. 2.

2. Concurrent approval from the State of Utah, Division of Oil, Gas & Mining (DOGM) is required before conducting any surface disturbing activities.

3. This well is in close proximity to Harmon Canyon. In order to isolate the wellbore from the canyon wall, the surface casing shall be set to a depth of not less than 1300 feet. This will place the surface casing shoe below the lowest elevation within one mile of the well.

4. In order to isolate and protect known hydrocarbon resources, production casing shall be cemented into place such that the top-of-cement is:

   1) not less than 300 feet above the top of the Wasatch Formation, and

   2) not less than 100 feet above the top of the highest hydrocarbon bearing zone that is not already isolated behind the surface casing.

5. Locally, the Green River Formation is known to contain oil, gas, oil shale and tar sand deposits. However, the lateral occurrence, distribution and grade of the oil shale and tar sand deposits are not well defined. The operator shall pay particular attention to this section, and shall attempt to identify and describe any of these resources that may be penetrated. The operator shall note the presence of these resources in the drilling reports. All oil, gas, oil shale and tar sand resources shall be isolated behind cement. This may necessitate cementing in addition to the minimum requirements identified in COA No. 4 above.

6. A cement bond log (CBL) or other appropriate tool for determining top-of-cement, shall be run on the production casing string.

7. If the CBL reveals that the cementing objectives were not met, remedial cementing will be required.

B. SURFACE USE

1. The following appendices are attached for your reference. They are to be followed as conditions of approval:

   SM-A, Seed Mixture for Berms, Topsoil Piles, Pad Margins
   SM-B, Seed Mixture for Final Reclamation (buried pipelines, abandoned pads, roads, etc.)
   TMC1, Browse Hand Planting Tubeling Mixtures
   Lease Stipulations, see attached Table 2.3 from EA for West Tavaputs Plateau Drilling Program.
   Applicant-committed environmental protection measures, see attached Appendix B

2. The mud pit shall be lined with an impermeable liner. Fill from the pit shall be stockpiled within a drainage control berm along the edge of the pit and adjacent edge of the well pad.

3. Within six months of installation, surface structures shall be painted in the following flat, earth tone color: Olive Black (5WA20-6). This Fuller O'Brien color is for reference only. Any brand of paint may be used provided the colors match. Any facilities that must be painted to comply with OSHA standards are exempt.

4. In areas where the soil surface shows evidence of biological soil crusts, the top uppermost (1/4-inch) of undisturbed biological soils from adjacent an undisturbed area shall be randomly collected from small areas (approximately 12-inch squares) and cast over the reclaimed site immediately following final reclamation to the facilitate re-establishment of soil crusts. Such actions would mitigate impacts to soil crusts in the long-term, although short-term impacts would remain.

5. BBC shall provide the authorized officer with an annual report of water consumed for the entire field for drilling, completion, and dust-suppression activities. This report shall detail the amounts used and the source of the water.

6. Feather edges of disturbed area by creating a vertical transition from taller to shorter vegetation along disturbed edges. Vary width of disturbance and preserve some plant masses to create a more naturally appearing edge and thereby avoid straight, sweeping, and converging lines in the landscape.

7. Reduce overall wi[redacted] of surface disturbance by workin[redacted]ith equipment on the road, and taking advantage of the access already provided by the roadway.

8. BBC shall implement an effective revegetation plan, including installation of shrubs and tubelings, thus establishing larger plants early.

9. Use rocks and downed vegetation to "break up" new textures created by disturbance and exposure of soils, and to provide "planting pockets" for the establishment of new plant materials.

10. At stream crossings keep all equipment away from edge of escarpments and stream banks thereby minimizing impacts to escarpment edge, and stabilize these edges pre-construction using vegetative or mechanical methods.

11. Refer to TMC1, Browse Hand Planting Tubeling Mixtures to easily establish fast-growing shrubs in seed mix and as tubelings.

12. To minimize the chance of undesirable plant species (especially seeds) from being carried into the WTPPA, equipment would be power-washed before being brought in.

13. Heavy equipment would not mobilize or demobilize through Nine Mile Canyon on weekends or holidays.

14. Recontour all disturbed surfaces to more natural-appearing landform, similar in topography to pre-disturbance and surrounding landscape. Prepare the soils for proper revegetation and implement best management practices for revegetation and erosion control.

15. No construction/drilling activities shall occur during the time of the year November 1 through May 15 for sage-grouse winter habitat.

16. Mule deer on critical winter ranges shall be protected by seasonal restrictions on construction from November 1 through May 15 where federal permits are required.

17. Elk on high priority and critical winter ranges would be protected by seasonal restrictions on construction from November 1 through May 15.

18. The Mexican Spotted Owl Conservation Measures to avoid impacts:
    a. Conduct annual surveys for nesting roosting habitat in areas proposed for construction activity within .5 miles of identified canyon habitat, based on the USFWS 2000, MSO habitat model.

b. Upon discovery of individuals or sightings of this species, halt construction/drilling activities and notify the authorized official.

19. The Operator shall contact the authorized BLM official for an onsite prior to the placement of long-term structures occupying the pad longer than 6 months and higher than 14 feet above the original natural grade.

GENERAL CONSTRUCTION

20. Operator shall contact the Price BLM Office at least forty-eight hours prior to the anticipated start of construction and/or any surface disturbing activities. The BLM may require and schedule a preconstruction conference with the operator prior to the operator commencing construction and/or surface disturbing activities. The operator and the operator's contractor, or agents involved with construction and/or any surface disturbing activities associated with the project, shall attend this conference to review the Conditions of Approval and plan of development. The operator's inspector will be designated at the pre-drill conference, and is to be given an approved copy of all maps, permits and conditions of approval before the start of construction. The BLM will also designate a representative for the project at the preconstruction conference.

21. The operator shall designate a representative(s) who shall have the authority to act upon and to implement instructions from the BLM. The operator's representative shall be available for communication with the BLM within a reasonable time when construction or other surface disturbing activities are underway.

22. Any archaeology/cultural resource discovered by the operator, or any person working on his behalf, on public land are to be immediately reported to the Price BLM Office. The operator will suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Price BLM Office. An evaluation of the discovery will be made by the BLM to determine appropriate actions to prevent the loss of significant cultural or scientific values. The operator is responsible for the cost of evaluation of any site found during construction. The BLM will determine what mitigation is necessary.

Any paleontological resource discovered by the operator, or any person working on his behalf, on public land is to be immediately reported to the Price BLM Office. The operator will suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Price BLM Office. An evaluation of the discovery will be made by the BLM to determine appropriate

actions to prevent the loss of significant cultural or scientific values. The operator is responsible for the cost of evaluation of any site found during construction. The BLM will determine what mitigation is necessary

23. During project construction, surface disturbance and vehicle travel shall be limited to the approved location and access routes. Any additional area needed must be approved by the Price BLM Office prior to use.

24. The operator must provide a trash cage for the collection and containment of all trash. The trash shall be disposed in an authorized landfill. The location and access roads shall be kept litter free.

25. Vegetation removal necessitated by construction shall be confined to the limits of actual construction. Removed vegetation will be stockpiled for use in reclamation or removed from the construction site at the direction of the BLM.

26. Prior to surface disturbance, topsoil is to be separately removed and segregated from other material. Topsoil depth will be decided onsite by BLM. If the topsoil is less than 6 inches, a 6-inch layer that includes the A horizon and the unconsolidated material immediately below the A horizon shall be removed and the mixture segregated and redistributed as the surface soil layer.

    Generally topsoil shall be stored within the pad site or adjacent to access roads. The company in consultation with BLM shall determine stockpile locations and dimensions at the onsite. If the topsoil stockpiles will not be redistributed for a period in excess of one (1) year, the stockpiles are to be seeded with seed mixture SM-A (attached).

ROAD and PIPELINE CONSTRUCTION

27. Operator shall provide an inspector under the direction of a registered professional engineer (PE) at all times during road construction. A PE shall certify (statement with PE stamp) that the road was constructed to the required Bureau of Land Management (BLM) road standards.

28. Road construction or routine maintenance activities are to be performed during periods when the soil can adequately support construction equipment. If such equipment creates ruts more than 6 inches deep, the soil is deemed too wet to adequately support construction equipment. Whenever dust plumes exceed 200 feet the company shall water the road to abate the dust

29. The operator is responsible for maintenance of all roads authorized through the lease or a right-of-way. Construction and maintenance shall comply with Class ll or lll Road Standards as described in BLM Manual Section 9113 and the Moab District Road Standards, except as modified by BLM. Maintenance may include but is not limited to grading, applying gravel, snow removal, ditch cleaning, headcut restoration/prevention.

30. Topsoil from access roads and pipelines are to be wind rowed along the uphill side of the road or stored in an approved manner. When the road and pipeline is rehabilitated, this soil will then be used as a top coating for the seed bed.

31. Erosion-control structures such as water bars, diversion channels, and terraces will be constructed to divert water and reduce soil erosion on the disturbed area. Road ditch turnouts shall be equipped with energy dissipaters as needed to avoid erosion. Where roads interrupt overland sheet-flow and convert this runoff to channel flow, ditch turnouts shall be designed to reconvert channel flow to sheet flow. Rock energy dissipaters and gravel dispersion fans may be used or any other design which would accomplish the desired reconversion of flow regime. As necessary cut banks, road drainages, and road crossings shall be armored or otherwise engineered to prevent headcutting.

PAD CONSTRUCTION

32. During the construction of the drill pad, suitable topsoil material is to be stripped and conserved in a stockpile on the pad. If stockpiles are to remain for more than a year, they shall be seeded with the seed mixture in appendix SM-A, attached.

33. Generally, drill pads are to be designed to prevent overland flow of water from entering or leaving the site. The pad is to be sloped to drain spills and water into the reserve pit. The drill pad shall be designed to disperse diverted overland flow and to regulate flow velocity so as to prevent or minimize erosion. Well pad diversion outlets shall be equipped with rock energy dissipators and gravel-bedded dispersion fans.

34. In the event construction can't be completed prior to winter closures, measures to prevent erosion from upcoming spring snowmelt shall be taken as follows:

    a. Loose earth and debris will be removed from drainages, and flood plains.

b. Earth and debris shall not be stockpiled on drainage banks.
c. Road drainages shall be checked to ensure there are none with uncontrolled outlets.
    1. Be sure all ditch drainages have an outlet to prevent ponding.
    2. If necessary, build temporary sediment ponds to capture runoff from unreclaimed areas.
    3. Re-route ditches as needed to avoid channeling water through loosened soil.

35. Excess material from road blading must not be plowed into drainages. Remove excess material and deposit at approved locations.

REHABILITATION PROCEDURES

Site Preparation

36. The entire roadbed should be obliterated and brought back to the approximate original contour. Drainage control is to be reestablished as necessary. All areas affected by road construction are to be recontoured to blend in with the existing topography. All berms are to be removed unless determined to be beneficial by BLM. In recontouring the disturbed areas, care should be taken to not disturb additional vegetation.

Seedbed Preparation

37. An adequate seedbed should be prepared for all sites to be seeded. Areas to be revegetated should be chiseled or disked to a depth of at least 12 inches unless restrained by bedrock.

38. Ripping of fill materials should be completed by a bulldozer equipped with single or a twin set of ripper shanks. Ripping should be done on 4-foot centers to a depth of 12 inches. The process should be repeated until the compacted area is loose and friable, and then shall be followed by final grading. Seedbed preparation will be considered complete when the soil surface is completely roughened and the number of rocks (if present) on the site is sufficient to cause the site to match the surrounding terrain.

39. After final grading, the stockpiled topsoil shall be spread evenly across the disturbed area.

Fertilization

40. Commercial fertilizer with a formula of 16-16-8 is to be applied at a rate of 200 pounds per acre to the site. The rate may be adjusted depending on soil.

41. Fertilizer is to be applied not more than 48 hours before seeding, and shall be cultivated into the upper 3 inches of soil.

42. Fertilizer is to be broadcast over the soil using hand-operated "cyclone-type" seeders or rotary broadcast equipment attached to construction or revegetation machinery as appropriate to slope. All equipment should be equipped with a metering device. Fertilizer application is to take place before the final seeding preparation treatment. Fertilizer broadcasting operations should not be conducted when wind velocities would interfere with even distribution of the material.

Mulching

43. When it is time to reclaim this location, the Price BLM Office will determine whether it will be necessary to use mulch in the reclamation process. The type of mulch should meet the following requirements: Wood cellulose fiber shall be natural or cooked, shall disperse readily in water, and shall be nontoxic. Mulch shall be thermally produced and air dried. The homogeneous slurry or mixture shall be capable of application with power spray equipment. A colored dye that is noninjurious to plant growth may be used when specified. Wood cellulose fiber is to be packaged in new, labeled containers. A minimum application of 1500 pounds per acre shall be applied. A suitable tackifier shall be applied with the mulch at a rate of 60 to 80 pounds per acre.

An alternative method of mulching on small sites would be the application of straw or hay mulch at a rate of 2000 pounds per acre. Hay or straw shall be certified weed free. Following the application of straw or hay, crimping shall occur to ensure retention.

Reseeding

44. All disturbed areas are to be seeded with the seed mixture required by the BLM. The seed mixture(s) shall be planted in the fall of the year (Sept-Nov), in the amounts specified in pounds of pure live seed (PLS)/acre. If fall seeding is not feasible, the seed mixture(s) shall be planted April 30-May 31. There shall

be no noxious weed seed in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within 12 months prior to planting. Commercial seed will be either certified or registered seed. The seed mixture container shall be tagged in accordance with State law(s) and available for inspection by the BLM. Seed is to be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area. (Smaller/heavier seeds tend to drop to the bottom of the drill and are planted first. Appropriate measures should be taken to ensure this does not occur.) Where drilling is not possible, seed is to be broadcast and the area raked or chained to cover the seed. Woody species with seeds that are too large for the drill will be broadcast. When broadcasting the seed, the pounds per acre noted below are to be increased by 50 percent.

Reseeding may be required if a satisfactory stand is not established to the surface rights owner's specifications. Evaluation of the seeding's success will not be made before completion of the second growing season after the vegetation becomes established. The Price BLM Office is to be notified a minimum of seven days before seeding a project.

45. The disturbed areas for the road and pipeline must be seeded in the fall of the year, immediately after the topsoil is replaced. The prescribed seed mixture is attached as appendix SM-B.

General

46. Prior to the use of insecticides, herbicides, fungicides, rodenticides and other similar substances, the operator must obtain from BLM, approval of a written plan. The plan must describe the type and quantity of material to be used, the pest to be controlled, the method of application, the location for storage and disposal of containers, and other information that BLM may require. A pesticide may be used only in accordance with its registered uses and within other agency limitations. Pesticides must not be permanently stored on public lands.

Seed Mix A[1]
Temporary Disturbance
(for berms, topsoil piles, pad margins)

Forbes Lbs

Yellow Sweetclover	2.0 lbs/acre
Ladak Alfalfa	2.0 lbs/acre
Cicer Milkvetch	1.0 lbs/acre
Palmer Penstemon	0.5 lbs/acre

Grasses Lbs

Crested Wheatgrass	2.0 lbs/acre
Great Basin Wildrye	2.0 lbs/acre
Intermediate Wheatgrass	2.0 lbs/acre

Total 11.5 lbs/acre

[1] Seed mix A is designed for rapid establishment, soil holding ability, and nitrogen fixing capability.

Seed Mix B
Final Reclamation
(for buried pipe lines, abandoned pads, road, etc.)

Forbes Lbs

Palmer Penstemon	0.5 lbs/acre
Golden Cryptantha	0.25 lbs/acre
Utah Sweetvetch	0.5 lbs/acre
Yellow Sweetclover[1]	2.0 lbs/acre
Lewis Flax	1.0 lbs/acre

Grasses Lbs

Indian Ricegrass	1.0 lbs/acre
Needle & Thread Grass	1.0 lbs/acre
Intermediate Wheatgrass	2.0 lbs/acre
Blue Grama	0.5 lbs/acre
Galletta	0.5 lbs/acre
Great Basin Wildrye	2.0 lbs/acre

Woody Plants Lbs

Fourwing Saltbush	2.0 lbs/acre
Winterfat	0.5 lbs/acre
Wyoming Big Sage brush	0.25 lbs/acre
Utah Serviceberry	1.0 lbs/acre
Blue Elderberry (Raw Seeds)	1.0 lbs/acre

Total 16.0 lbs/acre

[1] Yellow Sweetclover is planted as a nurse crop to provide solar protection, soil binding and nitrogen

fixing. It will normally be crowded out in 2 to 3 years.

TMC 1: Browse Hand Planting
Tubeling Mixtures

One of the two browse species lists (checked below) are to be hand planted at the prescribed application rate and according to the following prescribed methods on areas that are undergoing long term reclamation. The would include all pipeline corridors, berm around edge of drill pads, miscellaneous disturbed areas associated with construction such as staging areas for equipment, sidecast on road cuts, along side upgraded or new roads up to and including borrow ditch and in the termination of redundant access roads being closed. This planting shall be completed in the first planting window following completion of construction and on all other disturbed areas upon final reclamation.

Planting Methods:

Planting shall be accomplished using a labor force with specific experience in landscape restoration, hand planting methods and handling and care of browse tubling and or bareroot stock plants.

Browse plants to be utilized can be bareroot stock or tubling stock plants of 1 year old age class or greater.

Browse seedling protectors will be used to provide protection from browsing ungulates for two years. Seedling protectors will be of an open mesh rigid design that will break down when exposed to sunlight and that measures a minimum of 12 inches in length and 4 inches in diameter.

Planting shall be completed in the spring (March 1-April 1) and or fall (November 1-December 1) planting windows.

Browse plants shall be stored and handled in such a manner as to maintain viability, according to the type of browse stock being used.

Planting Species and Application Rate:

	[ ] **Sagebrush-Grass**	[ ] **Pinyon-Juniper**
	Plants Per Acre	
Species		
Wyoming Sagebrush (Gordon Creek)	100	50
Fourwing Saltbush (Utah seed source collected at or above 5,000 feet elevation)	100	50
True Mountain Mahogany (Utah seed source)	0	50
Antelope Bitterbrush (Utah seed source)	0	50
Total	**200**	**200**
Suitable Substitutions:		
Utah Serviceberry	no	50
Winterfat	100	no

C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, attached.

Building Location- Contact the BLM Price Field Office, Natural Resource Protection Specialist at least 48-hours prior to commencing construction of location.

Spud- The spud date will be reported to BLM 24-hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the Moab Field Office within 24-hours after spudding, regardless of whether spud was made with a dry hole digger or big rig.

Daily Drilling Reports- Daily drilling reports shall detail the progress and status of the well and shall be submitted to the Moab Field Office on a weekly basis.

Monthly Reports of Operations- In accordance with Onshore Oil and Gas Order No. 1, this well shall be reported on Minerals Management Service (MMS) Form 3160, "Monthly Report of Operations," starting the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with MMS.

Sundry Notices- There will be no deviation from the proposed drilling and/or workover program without prior approval. "Sundry Notices and Reports on Wells" (Form 3160-5) will be filed with the Moab Field Office for approval of all changes of plans and subsequent operations in accordance with 43 CFR 3162.3-2. Safe drilling and operating practices must be observed.

Drilling Suspensions- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Moab Field Office. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

Undesirable Events- Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to the BLM in accordance with requirements of NTL-3A.

Cultural Resources- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and the Price Field Office is to be notified.

First Production- Should the well be successfully completed for production, the Moab Field Office will be notified when the well is placed in producing status. Such notification may be made by phone, but must be followed by a sundry notice or letter not later than five business days following the date on which the well is placed into production.

A first production conference will be scheduled as soon as the productivity of the well is apparent. This conference should be coordinated through the Moab Field Office. The Moab Field Office shall be notified prior to the first sale.

Well Completion Report- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the Moab Field Office not later than thirty-days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. When requested, samples (cuttings and/or samples) will be submitted to the Moab Field Office.

Venting/Flaring of Gas- Gas produced from this well may not be vented/flared beyond an initial, authorized test period of 30 days or 50 MMcf, whichever first occurs, without the prior, written approval of the Moab Field Office. Should gas be vented or flared without approval beyond the authorized test period, the well may be ordered shut-in until the gas can be captured or approval to continue the venting/flaring as uneconomic is granted. In such case, compensation to the lessor (BLM) shall be required for that portion of the gas that is vented/flared without approval and which is determined to have been avoidably lost.

Produced Water- An application for approval of a permanent disposal method and location will be submitted to the Moab Field Office for approval pursuant to Onshore Oil and Gas Order No.7.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the Moab Field Office for off-lease measurement, off-lease storage and/or commingling (either down-hole or at the surface).

Plugging and Abandonment- If the well is completed as a dry hole, plugging instructions must be obtained from the Moab Field Office prior to initiating plugging operations.

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the Moab Field Office within thirty-days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Price Field Office or the appropriate surface managing agency.

TABLE 1

NOTIFICATIONS

Notify Don Stephens (435-636-3608) of the BLM Price Field Office for the following:

2 days prior to commencement of dirt work, construction and reclamation;

1 day prior to spudding;

50 feet prior to reaching the surface casing setting depth;

3 hours prior to testing BOP equipment.

If the person at the above number cannot be reached, notify the Moab Field Office at 435-259-2100. If unsuccessful, contact the person listed below.

Well abandonment operations require 24 hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained by calling the Moab Field Office at 435-259-2100. If approval is needed after work hours, you may contact the following:

Eric Jones, Petroleum Engineer	Office: 435-259-2117 Home: 435-259-2214

APPENDIX B:

APPLICANT-COMMITTED ENVIRONMENTAL PROTECTION MEASURES

1.0 INTRODUCTION

Appendix B is part of BBC's Proposed Action for the WTPDP as described in Chapter 2.0, and BBC will comply with the standards, procedures, and requirements contained in Appendix B when implementing the Alternatives unless otherwise provided for by the BLM Authorized Officer (AO). Appendix B describes standard practices utilized to mitigate adverse effects caused by surface-disturbing activities.

2.0 STANDARD PRACTICES

The following BMPs/Applicant-Committed Protection Measures (ACEPM) will be applied to all federal lands within the WTPPA by BBC to minimize impacts to the environment. Exception, modification, or waiver of a mitigation requirement may be granted if a thorough analysis by BLM determines that the resource(s) for which the measure was developed will not be impacted by the project activity. Further site-specific mitigation measures may be identified during the application for permit to drill (APD) and/or right-of-way (ROW) application review processes.

2.1 PRECONSTRUCTION PLANNING AND DESIGN MEASURES

1. BBC and/or their contractors and subcontractors will conduct all phases of project implementation, including well location, road and pipeline construction, drilling and completion operations, maintenance, reclamation, and abandonment in full compliance with all applicable federal, state, and local laws and regulations and within the guidelines specified in approved APDs and ROW permits. BBC will be held fully accountable for their contractor's and subcontractor's compliance with the requirements of the approved permit and/or plan.

2. Implementation of site-specific activities/actions will be contingent on BLM determining that the activity/action complies with the following plans:
   - Surface Use Plan and/or Plan of Development; and
   - Site-specific APD plans/reports (e.g., road and wellpad design plans, cultural clearance, special status plant species clearance, etc.).

   The above plans may be prepared by the Companies for the project area or submitted incrementally with each APD, ROW application, or Sundry Notice (SN).

2.2 ROADS

1. BBC will construct roads on private surface in a safe and prudent manner to the specifications of landowners.

2. Roads on federal surface will be constructed as described in BLM Manual 9113. Where necessary, running surfaces of the roads will be graveled if the base does not already contain sufficient aggregate.

3. Existing roads will be used when the alignment is acceptable for the proposed use. Generally, roads will be required to follow natural contours; provide visual screening by constructing curves, etc.; and be reclaimed to BLM standards.

4. To control or reduce sediment from roads, guidance involving proper road placement and buffer strips to stream channels, graveling, proper drainage, seasonal closure, and in some cases, redesign or closure of old roads will be developed when necessary. Construction may also be prohibited during periods when soil material is saturated, frozen, or when watershed damage is likely to occur.

5. Available topsoil will be stripped from all road corridors prior to commencement of construction activities and will be redistributed and reseeded on backslope areas of the borrow ditch after completion of road construction activities. Borrow ditches will be reseeded in the first appropriate season after initial disturbance.

6. On newly constructed roads and permanent roads, the placement of topsoil, seeding, and stabilization will be required on all cut and fill slopes unless conditions prohibit this (e.g., rock). No unnecessary side-casting of material (e.g., maintenance) on steep slopes will be allowed.

7. Reclamation of abandoned roads will include requirements for reshaping, recontouring, resurfacing with topsoil, installation of water bars, and seeding on the contour. Road beds, wellpads, and other compacted areas will be ripped to a depth of 1.0 foot on 1.5 feet centers to reduce compaction prior to spreading the topsoil across the disturbed area. Stripped vegetation will be spread over the disturbance for nutrient recycling, where practical. Fertilization or fencing of these disturbances will not normally be required. Additional erosion control measures (e.g., fiber matting) and road barriers to discourage travel may be required. Graveled roads, wellpads, and other sites will be stripped of usable gravel and hauled to new construction sites prior to ripping as deemed necessary by the AO. The removal of structures such as bridges, culverts, cattleguards, and signs will usually be required.

8. Main artery roads, regardless of the primary user, will be crowned, ditched, drained, and, if deemed appropriate by the AO, surfaced with gravel.

9. Unnecessary topographic alterations will be mitigated by avoiding, where possible, steep slopes, rugged topography, and perennial and ephemeral/intermittent drainages, and by minimizing the area disturbed.

10. Upon completion of construction and/or production activities, the Companies will restore, to the extent practicable, the topography to near pre-existing contours at well sites, access roads, pipelines, and other facility sites.

11. Existing roads will be used to the maximum extent possible and upgraded as necessary.

12. BBC will comply with existing federal, state, and county requirements and restrictions to protect road networks and the traveling public.

13. Special arrangements will be made with the Utah Department of Transportation to transport oversize loads to the project area. Otherwise, load limits will be observed at all times to prevent damage to existing road surfaces.

14. All development activities along approved ROWs will be restricted to areas authorized in the approved ROW.

15. Roads and pipelines will be located adjacent to existing linear facilities wherever practical.

16. BBC and/or their contractors will post appropriate warning signs and require project vehicles to adhere to appropriate speed limits on project-required roads, as deemed necessary by the AO.

16. BBC will be responsible for necessary preventative and corrective road maintenance for the duration of the project. Maintenance responsibilities may include, but are not limited to, blading, gravel surfacing, cleaning ditches and drainage facilities, dust abatement, noxious weed control, or other requirements as directed by the AO.

2.3 WELLPADS AND FACILITIES

1. In conformance with Onshore Oil and Gas Order No. 1, BBC will prepare and submit individual comprehensive drill site design plans for BLM approval. These plans will show the drill location layout over the existing topography; dimensions of the location; volumes and cross sections of cut and fill; location and dimensions of reserve pits; existing drainage patterns; and access road egress and ingress. Plans will be submitted and approved prior to initiation of construction.

2. No surface disturbance is recommended on slopes in excess of 25% unless erosion controls can be ensured and adequate revegetation is expected. Engineering proposals and revegetation and restoration plans will be required in these areas.

3. Reserve pits will be constructed to ensure protection of surface and ground water. The review to determine the need for installation of lining material will be done on a case-by-case basis and consider soil permeability, water quality, and depth to ground water.

4. Reserve pit liners will have a mullen burst strength that is equal to or exceeds 300 pounds, a puncture strength that is equal to or exceeds 160 pounds, and grab tensile strengths that are equal to or exceed 150 pounds. There will be verified test results conducted according to ASTM test standards. The liner will be totally resistant to deterioration by hydrocarbons.

5. Produced water from oil and gas operations will be disposed of in accordance with the requirements of Onshore Oil and Gas Order #7.

6. Pits will be fenced as specified in individual authorizations. Any pit containing harmful fluids will be maintained in a manner that will prevent migratory bird mortality.

7. Disturbances will be managed/reclaimed for zero runoff from the wellpad or other facility until the area is stabilized. All excavations and pits will be closed by backfilling and contouring to conform to surrounding terrain. On wellpads and other facilities, the surface use plan will include objectives for successful reclamation including soil stabilization, plant community composition, and desired vegetation density and diversity.

8. On producing wells, BBC will reduce slopes to original contours (not to exceed 3:1 slopes). Areas not used for production purposes will be backfilled and blended into the surrounding terrain, reseeded, and erosion control measures installed. Erosion control measures will be required after slope reduction. Mulching, erosion control measures, and fertilization may be required to achieve acceptable stabilization.

9. Abandoned sites will be satisfactorily rehabilitated in accordance with the approved APD.

2.4 PIPELINES

1. Pipeline construction methods and practices will be completed in such a manner so as to obtain good reclamation and the re-establishment of the native plant community.

2. On ditches exceeding 24 inches in width, 6 to 12 inches of surface soil will be salvaged on the entire right-of-way, where practicable. When pipelines are buried, there will be at least 30 inches of backfill on top of the pipe. Backfill will not extend above the original ground level after the fill has settled. Guides for construction and water bar placement found in "Surface Operating Standards for Oil and

Gas Exploration and Development" (BLM and USFS 1989) will be followed. Bladed surface materials will be re-spread upon the cleared route once construction is completed. Disturbed areas that have been reclaimed will be fenced when the route is near livestock watering areas at the discretion of the AO.

3. Pipeline ROWs will be located to minimize soil disturbance to the greatest extent practicable. Mitigation will include locating pipeline ROWs adjacent to access roads to minimize ROW disturbance widths, or routing pipeline ROWs directly to minimize disturbance lengths.

4. Existing crowned and ditched roads will be used for access where possible to minimize surface disturbances. Clearing of pipeline ROWs will be accomplished with the least degree of disturbance to topsoil. Where topsoil removal is necessary, it will be stockpiled (windrowed) and re-spread over the disturbed area after construction and backfilling are completed. Vegetation removed from the ROW will also be re-spread to provide protection, nutrient recycling, and a seed source.

5. Temporary disturbances which do not require major excavation (e.g., small pipelines) may be stripped of vegetation to ground level using mechanical treatment, leaving topsoil intact and root masses relatively undisturbed.

6. To promote soil stability, backfill over the trench will be compacted so as not to extend above the original ground level after the fill has settled. Wheel or other methods of compacting the pipeline trench backfill will occur at two levels to reduce trench settling and water channeling--once after 3 feet of fill has been replaced and once within 6-12 inches of the surface. Water bars, mulching, and terracing will be installed, as needed, to minimize erosion. Instream protection structures (e.g., drop structures) in drainages crossed by a pipeline will be installed at the discretion of the AO to prevent erosion.

7. BBC will adhere to the following procedures regarding the installation of pipelines during periods when the earth is frozen.
   - The BLM Price Field Office will be contacted at least 10 days prior to anticipated start of project. The project will not proceed until such time as authorization from BLM has been received by the Companies.
   - A BLM representative will be on the ground at the beginning of construction.
   - Snow, if present, will be removed utilizing a motor grader.
   - Vegetation will be scalped and windrowed to one side of the right-of-way.
   - A wheel trencher will be used to remove approximately 6-8 inches of topsoil from the top of the pipeline ditch and windrow it to one side.
   - A trench approximately 4 feet deep will be dug using a wheel trencher and the soil will be stockpiled to one side, making sure the top soil or spoil do not get mixed together.
   - The pipeline will be installed, the trench backfilled, and the spoil compacted in the trench.
   - Stockpiled topsoil will be placed in the trench and compacted.
   - Scalped vegetation back will be placed back on right-of-way using a motor grader.
   - The entire right-of-way will be reseeded as normal in the spring after the thaw.

   These procedures will be incorporated in every Plan of Development where construction in frozen earth is anticipated.

2.5 AIR QUALITY

1. BBC will comply with all applicable local, state, and federal air quality laws, statutes, regulations, standards, and implementation plans.

2. BBC will obtain all necessary air quality permits from UDAQ to construct, test, and operate facilities.

3. All internal combustion equipment will be kept in good working order.

4. The Companies will use water at construction sites, as necessary, to abate fugitive dust.

5. The Companies will not allow any open burning of garbage or refuse at well sites or other facilities.

2.6 VEGETATION

1. Removal and disturbance of vegetation will be kept to a minimum through construction site management (e.g., using previously disturbed areas and existing easements, limiting equipment/materials storage yard and staging area size, etc.).

2. Wellpads and associated roads and pipelines will be located to avoid or minimize impacts in areas of high value (e.g., sensitive species habitats, wetland/riparian areas).

2.7 SOILS

1. Surface-disturbing activities will be examined on a site-specific basis, evaluating the potential for soil loss and the compatibility of soil properties with project design. Stipulations and mitigating measures will be developed on a case-by-case basis to ensure soil conservation and practical management.

2. BBC will restrict construction activities during periods when soils are saturated and excessive rutting (>4 inches with multiple passes) would occur.

3. Salvage and subsequent replacement of topsoil will occur for surface-disturbing activities wherever specified by the AO.

4. Before a surface-disturbing activity is undertaken, topsoil depth will be determined and the amount of topsoil to be removed, along with topsoil placement areas, will be specified in the authorization. The uniform distribution of topsoil over the area to be reclaimed will occur unless conditions warrant a varying depth. On large surface-disturbing projects topsoil will be stockpiled and seeded to reduce erosion. Where feasible, topsoil stockpiles will be designed to maximize surface area to reduce impacts to soil microorganisms. Areas used for spoil storage will be stripped of topsoil before spoil placement, and the replacement of topsoil after spoil removal will be required.

5. BBC will avoid adverse impacts to soils by:
   - minimizing the area of disturbance;
   - avoiding construction with frozen soil materials to the extent practicable;
   - avoiding areas with high erosion potential (e.g., unstable soil, dunal areas, slopes greater than 25%, floodplains), where practicable;
   - salvaging and selectively handling topsoil from disturbed areas;
   - adequately protecting stockpiled topsoil and replacing it on the surface during reclamation;
   - leaving the soil intact (scalping only) during pipeline construction, where practicable;

- using appropriate erosion and sedimentation control techniques including, but not limited to, diversion terraces, riprap, and matting;
- promptly revegetating disturbed areas using adapted species;
- applying temporary erosion control measures such as temporary vegetation cover, application of mulch, netting, or soil stabilizers; and/or
- constructing barriers, as appropriate, to minimize wind and water erosion and sedimentation prior to vegetation establishment.

6. Appropriate erosion control and revegetation measures will be employed. Grading and landscaping will be used to minimize slopes, and water bars will be installed on disturbed slopes in areas with unstable soils where seeding alone may not adequately control erosion. Erosion control efforts will be monitored by the Companies and necessary modifications made to control erosion.

7. Sufficient topsoil or other suitable material to facilitate revegetation will be segregated from subsoils during all construction operations requiring excavation and will be returned to the surface upon completion of operations. Soils compacted during construction will be ripped and tilled as necessary prior to reseeding. Cut and fill sections on all roads and along pipelines will be revegetated with native species.

8. Any accidental soil contamination by spills of petroleum products or other hazardous materials will be cleaned up by the Companies and the soil disposed of or rehabilitated according to applicable rules.

9. BBC will restrict off-road vehicle (ORV) activity by employees and contract workers to the immediate area of authorized activity or existing roads and trails.

2.8 RECLAMATION

1. BBC's reclamation goals will emphasize: 1) protection of existing native vegetation; 2) minimal disturbance of the existing environment; 3) soil stabilization through establishment of ground cover; and 4) establishment of native vegetation consistent with land use planning.

2. All reclamation will be accomplished as soon as possible after the disturbance occurs with efforts continuing until a satisfactory revegetation cover is established.

3. Seed mixtures for reclaimed areas will be site-specific, composed of native species, and will include species promoting soil stability. A pre-disturbance species composition list will be developed if the site includes several different plant communities. Livestock palatability and wildlife habitat needs will be given consideration during seed mix formulation. BLM Manual 1745, *Introduction, Transplant, Augmentation, and Reestablishment of Fish, Wildlife, and Plants*, and Executive Order No. 11987, *Exotic Organisms*, will be used as guidance.
4. Interseeding, secondary seeding, or staggered seeding may be used to accomplish revegetation objectives. During rehabilitation of areas in important wildlife habitat, provision will be made for the establishment of native browse and forb species. Follow-up seeding or corrective erosion control measures will occur on areas where initial reclamation efforts are unsuccessful.

5. Any mulch used by BBC will be weed free and free from mold, fungi, or noxious weed seeds. Mulch may include native hay, small grain straw, wood fiber, live mulch, cotton, jute, synthetic netting, and rock. Straw mulch will contain fibers long enough to facilitate crimping and provide the greatest cover.

6. BBC will be responsible for the control of all noxious weed infestations on disturbed surfaces. Aerial application of chemicals will be prohibited within 0.25 mile of special status plant locations, and hand application will be prohibited within 500 feet. Herbicide application will be monitored by the AO.

7. Recontouring and seedbed preparation will occur immediately prior to reseeding on the unused portion of wellpads, road ROWs, and entire pipeline ROWs outside of road ROWs. In the event of uneconomical wells, BBC will initiate reclamation of the entire wellpads, access road, and adjacent disturbed habitat as soon as possible. BBC assumes the responsibility to see that their exploration, development, production, and construction operations are conducted in a manner which results in the proper reclamation of disturbed lands. BBC will monitor reclamation to determine and ensure successful establishment of vegetation. No consent to termination of any bond will be given by the AO until all the terms and conditions of the approved permit(s) have been met.

8. Proper erosion and sediment control structures and techniques will be incorporated by the Companies into the design of wellpads, roads, pipelines, and other facilities. Revegetation using a BLM-approved, locally adapted seed mixture containing native grasses, forbs, and shrubs will begin in the first appropriate season following disturbance. Vegetation removed will be replaced with plants of equal forage value and growth form using procedures that include:
   - fall reseeding (September 15 to freeze-up), where feasible;
   - spring reseeding (April 30 - May 31) if fall seeding is not feasible;
   - deep ripping of compacted soils prior to reseeding;
   - surface pitting/roughening prior to reseeding;
   - utilization of native cool season grasses, forbs, and shrubs in the seed mix;
   - interseeding shrubs into an established stand of grasses and forbs at least one year after seeding;
   - appropriate, approved weed control techniques;
   - broadcast or drill seeding, depending on site conditions; and
   - fencing of certain sensitive reclamation sites (e.g., riparian areas, steep slopes, and areas within 0.5 mile of livestock watering facilities) as determined necessary through monitoring.

9. BBC will monitor noxious weed occurrence on the project area and implement a noxious weed control program in cooperation with BLM. Weed-free certification by county extension agents will be required for grain or straw used for mulching revegetated areas.

2.9 CANDIDATE PLANTS/SPECIAL STATUS PLANTS

1. Herbicide applications will be kept at least 500 feet from known special status plant species populations or other distances deemed safe by the AO.

2. Wellpads and associated roads and pipelines will be located to avoid or minimize impacts to areas of high value (e.g., special status plant species habitats, wetland/riparian areas).

2.10 WATERSHEDS

1. Crossings of ephemeral, intermittent, and perennial streams associated with road and utility line construction will generally be restricted until normal flows are established after spring runoff.

2.11 GEOLOGICAL/PALEONTOLOGICAL RESOURCES

1. Wells, pipelines, and ancillary facilities will be designed and constructed such that they will not be damaged by moderate earthquakes. Any facilities defined as critical according to the Uniform Building Code will be constructed in accordance with applicable Uniform Building Code Standards for Seismic Risk Zone 2B.

2. If paleontological resources are uncovered during surface-disturbing activities, BBC will suspend operations at the site that will further disturb such materials and immediately contact the AO, who will arrange for a determination of significance, and, if necessary, recommend a recovery or avoidance plan.

2.12 CULTURAL/HISTORICAL RESOURCES

1. BBC will follow the cultural resources and recovery plan for the project.

2. If cultural resources are located within frozen soils or sediments that preclude the possibility of adequately recording or evaluating the find, construction work will cease and the site will be protected for the duration of frozen soil conditions. Recordation, evaluation and recommendations concerning further management will be made to the AO following natural thaw. The AO will consult with the affected parties and construction work will resume once management of the threatened site has been finalized and the Notice to Proceed has been issued.

3. BBC will inform their employees, contractors and subcontractors about relevant federal regulations intended to protect archaeological and cultural resources. All personnel will be informed that collecting artifacts, including arrowheads, is a violation of federal law and that employees engaged in this activity may be subject to disciplinary action.

2.13 WATER RESOURCES

1. BBC will maintain a complete copy of the SPCC Plan at each facility if the facility is normally attended at least 8 hours per day, or at the nearest field office if the facility is not so attended (40 CFR 112.3(e)).

2. BBC will implement and adhere to SPCC Plans in a manner such that any spill or accidental discharge of oil will be remediated. An orientation will be conducted by the Companies to ensure that project personnel are aware of the potential impacts that can result from accidental spills, as well as the appropriate recourse if a spill does occur. Where applicable and/or required by law, streams at pipeline crossings will be protected from contamination by pipeline shutoff valves or other systems capable of minimizing accidental discharge.

3. If reserve pit leakage is detected, operations at the site will be curtailed, as directed by the BLM, until the leakage is corrected.

4. BBC will case and cement all gas wells to protect subsurface mineral and freshwater zones. Unproductive wells and wells that have completed their intended purpose will be properly abandoned and plugged using procedures identified by BLM (federal mineral estate) and/or WOGCC (state and fee mineral estate).

5. All water used in association with this project will be obtained from sources previously approved by the Utah State Engineer's Office.

6. Erosion-prone or high salinity areas will be avoided where practicable. Necessary construction in these areas will be timed to avoid periods of greatest runoff.

7. BBC will incorporate proper containment of condensate and produced water in tanks and drilling fluids in reserve pits, and will locate staging areas for storage of equipment away from drainages to prevent contaminants from entering surface waters.

8. Prudent use of erosion control measures, including diversion terraces, riprap, matting, temporary sediment traps, and water bars will be employed by the Companies as necessary. These erosion control measures will be used as appropriate to control surface runoff generated at wellpads. The type and location of sediment control structures, including construction methods, will be described in APD and ROW plans. If necessary, BBC may treat diverted water in detention ponds prior to release to meet applicable state or federal standards.

9. BBC will construct channel crossings by pipelines so that the pipe is buried at least 3 feet below the channel bottom.

10. Streams/channels crossed by roads will have culverts installed at all appropriate locations as specified in the BLM Manual 9112-*Bridges and Major Culverts* and Manual 9113-*Roads*. Streams will be crossed perpendicular to flow, where possible, and all stream crossing structures will be designed to carry the 25-year discharge event or other capacities as directed by the AO.

11. BBC will reshape disturbed channel beds to their approximate original configuration.

12. The disposal of all hydrostatic test water will be done in conformance with BLM Onshore Oil and Gas Order No. 7. BBC will comply with state and federal regulations for water discharged into an established drainage channel. The rate of discharge will not exceed the capacity of the channel to convey the increased flow. Waters that do not meet applicable state or federal standards will be evaporated, treated, or disposed of at an approved disposal facility.

13. BBC will prepare Storm Water Pollution Prevention Plans (SWPPPs) as required by WDEQ National Pollution Discharge Elimination System (NPDES) permit requirements on individual disturbances that exceed 5 acres in size or as required by future changes in regulations.

14. Any disturbances to wetlands and/or waters of the U.S. will be coordinated with the COE, and 404 permits will be secured as necessary prior to disturbance.

15. Where disturbance of wetlands, riparian areas, streams, or ephemeral/intermittent stream channels cannot be avoided, COE Section 404 permits will be obtained by BBC as required, and, in addition to applicable above-listed measures, the following measures will be applied where appropriate:
    - wetland areas will be crossed during dry conditions (i.e., late summer, fall, or dry winters);
    - streams, wetlands, and riparian areas disturbed during project construction will be restored to as near re-project conditions as practical and, if impermeable soils contributed to wetland formation, soils will be compacted to reestablish impermeability;
    - wetland topsoil will be selectively handled;
    - disturbed areas will be recontoured and BLM-approved species will be used for reclamation; and

- reclamation activities will begin on disturbed wetlands immediately after completion of project activities.

2.14 NOISE

1. All engines required for project activities will be properly muffled and maintained in accordance with state and federal laws.

2.15 WILDLIFE, FISHERIES, AND THREATENED AND ENDANGERED (T&E) SPECIES

1. To minimize wildlife mortality due to vehicle collisions, BBC will advise project personnel regarding appropriate speed limits in the project area. Roads no longer required for operations will be reclaimed as soon as possible. Potential increases in poaching will be minimized through employee and contractor education regarding wildlife laws. If wildlife law violations are discovered, the offending employee will be subject to disciplinary action by BBC.
2. BBC will protect (e.g., fence or net) reserve, workover, and production pits potentially hazardous to prohibit wildlife access as directed by BLM.
3. BBC will utilize wildlife-proof fencing on reclaimed areas in accordance with standards specified in BLM Handbook 1741-1, *Fencing*, if it is determined that wildlife are interfering with successful reestablishment of vegetation.
4. Consultation and coordination with USFWS and UDWR will be conducted for all mitigation activities relating to raptors and T&E species and their habitats, and all permits required for movement, removal, and/or establishment of raptor nests will be obtained.
5. BBC will adhere to all survey, mitigation, and monitoring requirements identified in the Biological Assessment prepared for this project.

2.16 LIVESTOCK/GRAZING MANAGEMENT

1. BBC will reclaim nonessential areas disturbed during construction activities in the first appropriate season after well completion.
2. Nonessential areas include portions of the wellpads not needed for production operations, the borrow ditch and outslope portions of new road ROWs, entire pipeline ROWs outside of road ROWs, and all roads and associated disturbed areas at nonproductive wells.
3. BBC will repair or replace fences, cattleguards, gates, drift fences, and natural barriers to current BLM standards. Cattleguards will be used instead of gates for livestock control on most road ROWs. Livestock will be protected from pipeline trenches, and livestock access to existing water sources will be maintained.
4. BBC will review livestock impacts from roads or disturbance from construction and drilling activities at least annually with livestock permittees and BLM. Appropriate measures will be taken to correct any adverse impacts, should they occur.

2.17 RECREATION

1. BBC will instruct employees, contractors, and subcontractors that camp sites on federal lands or at federal recreation sites must not be occupied for more than 14 consecutive days.

2. BBC will require that employees, contractors, and subcontractors abide by all state and federal laws and regulations regarding hunting.

2.18 VISUAL RESOURCES

1. Pipeline ROWs will be located within existing ROWs whenever possible, and aboveground facilities not requiring safety coloration will be painted with appropriate nonreflective standard environmental colors (Carlsbad Canyon or Desert Brown, or other specified standard environmental colors) as determined by the AO. Topographic screening, vegetation manipulation, project scheduling, and traffic control procedures may all be employed, as practicable, to further reduce visual impacts.

2. Within VRM Class II areas, BBC will utilize existing topography to screen roads, pipeline corridors, drill rigs, wells, and production facilities from view where practicable. The Companies will paint all aboveground production facilities with appropriate colors (e.g., Carlsbad Canyon or Desert Brown) to blend with adjacent terrain, except for structures that require safety coloration in accordance with OSHA requirements.

2.19 HEALTH AND SAFETY/HAZARDOUS MATERIALS

1. BBC will utilize BLM-approved portable sanitation facilities at drill sites; place warning signs near hazardous areas and along roadways; place dumpsters at each construction site to collect and store garbage and refuse; ensure that all refuse and garbage is transported to a State-approved sanitary landfill for disposal; and institute a Hazard Communication Program for its employees and require subcontractor programs in accordance with OSHA (29 CFR 1910.1200).

2. In accordance with 29 CFR 1910.1200, a Material Safety Data Sheet for every chemical or hazardous material brought on-site will be kept on file BBC's field offices.

3. Chemicals and hazardous materials will be inventoried and reported by BBC in accordance with the SARA Title III (40 CFR 335). If quantities exceeding 10,000 pounds or the threshold planning quantity are to be produced or stored, BBC will submit appropriate Section 311 and 312 forms at the required times to the State and County Emergency Management Coordinators and the local fire departments.

4. BBC will transport and/or dispose of any hazardous wastes, as defined by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, in accordance with all applicable federal, state, and local regulations.

5. BBC commits to the following practices regarding hazardous material containment.

    - All storage tank batteries that contain any oil, glycol, produced water, or other fluid which may constitute a hazard to public health or safety will be surrounded by a secondary means of containment for the entire contents of the largest single tank in use plus freeboard for precipitation, or to contain 110% of the capacity of the largest vessel. The appropriate containment and/or diversionary structures or equipment, including walls and floor, will contain

any oil, glycol or produced water and shall be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not drain, infiltrate, or otherwise escape to ground or surface waters before cleanup is completed.

- Treaters, dehydrators and other production facilities that have the potential to leak or spill oil, glycol, produced water, or other fluid which may constitute a hazard to public health or safety, shall be placed on or within appropriate containment and/or diversionary structure to prevent spilled or leaking fluid from reaching ground or surface waters. The appropriate containment and/or diversionary structure will be sufficiently impervious to oil, glycol, produced water, or other fluid and will be installed so that any spill or leakage will not drain, infiltrate, or otherwise escape to ground or surface waters prior to completion of cleanup.

- Notice of any spill or leakage, as defined in BLM NTL 3A, will be immediately reported to the AO by the Companies as well as to such other federal and state officials as required by law. Oral notice will be given as soon as possible, but within no more than 24 hours, and those oral notices will be confirmed in writing within 72 hours of any such occurrence.

Table 2.3 Lease Numbers, Oil and Gas Units, Federal ROW Requirements, and Lease Stipulations for the 12 Vertical Federal Wells Proposed by BBC.

Well Number/Location	Federal Lease Number and Stipulations	Unit Name	Federal ROW Needs
Federal Wells			
7-25	UTU-59970	Prickly Pear Unit	Lower Flat Iron Road
16-34	UTU-73671	Prickly Pear Unit	Lower Flat Iron Road
27-3	UTU-73670 [1,2,3]	Prickly Pear Unit	None
21-2	UTU-73670 [1,2,3]	Prickly Pear Unit	None
13-4	UTU-74385	Prickly Pear Unit	None
5-13	UTU-73665	Prickly Pear Unit	None
24-12	UTU-77513 [1,2,3]	Prickly Pear Unit	None
10-4	UTU-74386 [1,2,3,4]	Prickly Pear Unit	None
15-19	UTU-66801 [1,2,3]	Jack Canyon Unit	None
Existing Pads			
UT-10	UTU-66801 [1,2,3]	Peters Point Unit	None
PPH-8	UTU-66801 [1,2,3]	Peters Point Unit	None
PP-11	UTU-66801 [1,2,3]	Peters Point Unit	None
State Wells			
Section 2, T13 S, R15E	NA	Prickly Pear Unit	Lower Flat Iron Road
Section 36, T12S, R15E	NA	Prickly Pear Unit	Lower Flat Iron Road
Section 32, T12S, R16E	NA	Prickly Pear Unit	Lower Flat Iron Road
Section 2, T13S, R16E	NA	None	Peters Point Road Extension

1 No occupancy or other surface disturbance will be allowed within 330 feet of the centerline or within the 100 year recurrence interval floodplain, whichever is greater, of the perennial streams, or within 660 feet of springs, whether flowing or not. This distance may be modified when specifically approved in writing by the authorized officer of the Bureau of Land Management.

2 In order to minimize watershed damage, exploration drilling and other development activity will be allowed only during the period from May 1 to October 31. This limitation does not apply to maintenance and operation of producing wells. Exceptions to this limitation in any year may be specifically approved in writing by the authorized officer of the Bureau of Land Management.

3 Construction of access roads and drill pads on slopes in excess of 30 percent will require special design standards to minimize watershed damage. Drilling operations and any associated construction activities on slopes in excess of 50 percent may require directional drilling to prevent damage to the watershed. Exceptions to the limitations may be specifically approved in writing by the authorized officer of the Bureau of Land Management.

4 Raptor surveys will be required whenever surface disturbance and/or occupancy proposed in association with oil/gas exploration occur within a known nesting complex for raptors located in the NWNW Sec. 10. T12S, R14E. Field surveys will be conducted by the lessee/operator as determined by the authorized officer of the BLM. When surveys are required of the lessee/operator, the consultant hired must be found acceptable to the authorized officer prior to the field survey being conducted. Based on the result of the field survey, the authorized officer will determine appropriate buffer zones.

014

CONFIDENTIAL

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: **BILL BARRETT CORP**

Well Name: **PRICKLY PEAR U FED 10-4**

Api No: **43-007-30823** Lease Type: **FEDERAL**

Section **10** Township **12S** Range **14E** County **CARBON**

Drilling Contractor **PETE MARTIN** RIG # **BUCKET**

SPUDDED:

Date **08/07/04**

Time

How **DRY**

Drilling will commence: ***8/13/04***

Reported by **CHARLY HICKS**

Telephone # **1-435-790-5342**

Date **08/13/2004** **Signed** **CHD**

015

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

FORM 6

ENTITY ACTION FORM

Operator: BILL BARRETT CORPORATION

Operator Account Number: N 2165

Address: 1099 18th Street, Suite 2300

city Denver

state CO zip 80202

Phone Number: (303) 312-8120

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4300730823	PRICKLY PEAR UNIT FEDERAL #10-4		SESE	10	12S	14E	CARBON
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
A B	99999	13605	8/7/2004			8/18/04	K

Comments: MNCS CONFIDENTIAL

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	

Comments:

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	

Comments:

RECEIVED
AUG 17 2004
DIV. OF OIL, GAS & MINING

ACTION CODES:

- **A** - Establish new entity for new well (single well only)
- **B** - Add new well to existing entity (group or unit well)
- **C** - Re-assign well from one existing entity to another existing entity
- **D** - Re-assign well from one existing entity to a new entity
- **E** - Other (Explain in 'comments' section)

Debra K. Stanberry
Name (Please Print)

Signature

Permit Specialist
Title

8/13/04
Date

(5/2000)

016

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NUMBER:	UTU-73665
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	n/a
7. UNIT or CA AGREEMENT NAME:	Prickly Pear Unit
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER	8. WELL NAME and NUMBER: Prickly Pear Unit Federal 10-4
2. NAME OF OPERATOR: BILL BARRETT CORPORATION CONFIDENTIAL	9. API NUMBER: 007-30823
3. ADDRESS OF OPERATOR: 1099 18TH St. Ste2300 CITY Denver STATE CO ZIP 80202	PHONE NUMBER: (303) 312-8120
	10. FIELD AND POOL, OR WILDCAT: Prickly Pear Unit/Mesa Verde

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL & 271' FEL — COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E — 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: Weekly Chronological Reports
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

Weekly chronological report covering August 11, 2004 through August 20, 2004.

NAME (PLEASE PRINT) Tracey Fallang TITLE Permit Analyst

SIGNATURE Tracey Fallang DATE 8/20/04

(This space for State use only)

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DIV. OF OIL, GAS & MINING

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

REGULATORY DRILLING SUMMARY

CONFIDENTIAL

Bill Barrett Corporation

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/20/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 10

Spud Date : 8/13/2004 Days From Spud : 7 Depth At 06:00 : 2166

Morning Operations : PULLING OUT OF HOLE FOR BIT Estimated Total Depth : 2286

Time To	Description
1:30:00 PM	DRILLING FROM 6595 TO 6835
2:00:00 PM	LUBRICATE DRILLING APPARATUS
1:30:00 AM	DRILLING FROM 6835 TO 7107
6:00:00 AM	TRIP FOR BIT

Remarks :

DAILY SAFETY MEETING DRAWTOOL BRAKES DAYS SINCE LOST TIME ACCIDENT 456 RECIEVED 173 JOINTS & ONE MARKER JOINT OF 5.5" #17 N-80 LTC PRODUCTION CASING FROM RENALDS TRUCKING. SENT TWO JOINTS TO VERNAL, STEWARTS MACHINE WELDING FOR FUTURE MARKER JOINTS

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/19/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 9

Spud Date : 8/13/2004 Days From Spud : 6 Depth At 06:00 : 2010

Morning Operations : DRILLING AHEAD Estimated Total Depth : 2286

Time To	Description

Remarks :

CALL HALLIBUTON CEMENTERS TM CASERS WELLHEAD INC. 09:00 FOR HEADS UP ON UPCOMING 5.5 CASING JOB DAYS SINCE LOST TIME ACCIDENT 455 SAFETY MEETING GREASE CROWN

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/18/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 8

Spud Date : 8/13/2004 Days From Spud : 5 Depth At 06:00 : 1673

Morning Operations : DRILLING AHEAD Estimated Total Depth : 2286

Time To	Description

Remarks :

CALL RENALDS TRUCKING & ORDER 7700 FEET OF 5.5 N80 17# LTC 200 FEET STRIPING ,ONE MARKER JOINT ,CALL K BAR A TO MAKE ARANGMENTS FOR PIT LINNER AND H-TWENTY TO FILL PIT ON UPCOMING PETTERS POINT WELL CALL BIG FOUR FOR PRICKLELY PEAR WATER WELL PLUG POSSIBLY ON SUNDAY DAYS SINCE LOST TIME ACCIDENT 454 DAILY SAFETY MEETING P.P.E.

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/17/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 7

Spud Date : 8/13/2004 Days From Spud : 4 Depth At 06:00 : 1161

Morning Operations : DRILLING AHEAD Estimated Total Depth : 2286

Time To	Description

Remarks :

HAD PHONE CONVERSATION WITH ERIC JONES,B.L.M 11:00 8/16/04 . DENNIS INGRAM STATE OF UTAH STOPPED BY RIG 13:00 BOTH REGARDING STATUS OF WELL. WILDCAT AUTODRILLER INSTALLED, AND WORKING GOOD. NUMBER OF DAYS SINCE LOST TIME ACCIDENT 453. SAFETY MEETING PAINTING

REGULATORY DRILLING SUMMARY

CONFIDENTIAL

Bill Barrett Corporation

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/16/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 6

Spud Date : 8/13/2004 Days From Spud : 3 Depth At 06:00 : 624

Morning Operations : DRILLING AHEAD Estimated Total Depth : 2286

Time To	Description

Remarks :
ANNULAR 11" 5000# HYDRILL
4.5"SHAFFER TYPE E DOUBBLE GATE 11" 5K
BLINDS SHAFFER 11" 5000# TWO
JOY N-60 2.0625 CHOKES 80
GALLON VALVON 4 STATION CLOSING UNIT
GRANT ROTATING HEAD

PRESSURE TEST ANNULAR PIPE BLIND CHOKES
MANNUAL&HCR CHOKES DART VALVE
INSIDE&OUTSIDE MANNUAL VALVES CHECK VALVE
CASING TO REQUIRED PESSURE

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/15/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 5

Spud Date : 8/13/2004 Days From Spud : 2 Depth At 06:00 : 400

Morning Operations : NIPPLE UP BLOW OUT PREVENTERS Estimated Total Depth : 2286

Time To	Description

Remarks :
ATTEMPT TO NOTIFY CAROL, STATE OIL & GAS ERIC,BLM . LEAVE MESSAGE AT OFFICE & HOME
RUN 30 JOINTS 9.625 CSG,J-55,36#,STC TOTAL LENGTH 1303. RUN OPEN SHOE&POSSITIVE FLOAT COLLAR SHOE DEPTH 1303 FLOAT COLLAR DEPTH 1251 CEMENT AS FOLLOWS LEAD H.L.C. 340 SX . TAIL PREMAG300 190SX DISPLACEMENT 100 BBLS WATER BUMP PLUG 47BBLS CEMENT TO SURFACE FLOAT DID NOT HOLD DAYS 451. SAFETY MEETING CEMENT JOB SAFETY HAZZARDS& PRECAUTIONS

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/14/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 4

Spud Date : 8/13/2004 Days From Spud : 1 Depth At 06:00 : 224

Morning Operations : DRILLING 12.25 SURFACE HOLE Estimated Total Depth : 2286

Time To	Description

Remarks :
8" MUD MOTOR = 2 STAGE - 7/8 LOBE - .13 GPR
#DAYS SINCE LTA = 450
DAILY SAFETY MEETING - FORKLIFT USE

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/13/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 3

Spud Date : 8/13/2004 Days From Spud : 0 Depth At 06:00 : 12

Morning Operations : FINISH RIG UP PICK UP ROTARY TOOLS AND PREPARE FOR SPUD Estimated Total Depth : 2286

Time To	Description

Remarks :
RIG ON DAYWORK AT 03:00 ON 8/13/04
SPUD AT 05:00 ON 8/13/04

CONFIDENTIAL

REGULATORY DRILLING SUMMARY

Bill Barrett Corporation

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/12/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 2

Spud Date : 8/13/2004 Days From Spud : 0 Depth At 06:00 : 0

Morning Operations : WAIT ON TRUCKS, BEGIN RIG UP THIS MORING Estimated Total Depth : 2286

Time To Description

Remarks :
CALL & INFORM CAROL W/ UTAH O&G ABOUT SPUD.
CALL & INFORM BLM REP "ERICK" AT 9:00 AM ON 8/12/04 W/ 24 HR SPUD NOTICE.

RIG ON DAYWORK AT 3:00 AM
SPUD AT 5:00 AM.

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/11/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 1

Spud Date : 8/13/2004 Days From Spud : 0 Depth At 06:00 : 0

Morning Operations : WAIT ON PATTERSON EQUIPT. REPAIR AND RIG UP TRUCKS 3 HAUL TF Estimated Total Depth : 2286

Time To Description

Remarks :
BEGIN MOVE ON 7/8/04 - MUD PUMP BEING REPAIRED AT CATTAPILLER-TUBULARS BEING INSPECTED IN VERNAL.

7/9/04 WAIT ON TRUCKS AND PATTERSON EQUIPMENT. HAUL WATER TO PIT AT NIGHT.

7/10/04 WAIT ON PATTERSON EQUIPMENT,HAUL 3 LOADS TUBULARS-WAIT ON RIG UP TRUCKS

FORM 9

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

017

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-73665

SUNDRY NOTICES AND REPORTS ON WELLS

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

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.

7. UNIT or CA AGREEMENT NAME: Prickly Pear Unit

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

8. WELL NAME and NUMBER: Prickly Pear Unit Federal 10-4

2. NAME OF OPERATOR: BILL BARRETT CORPORATION

CONFIDENTIAL

9. API NUMBER: 43-007-30823

3. ADDRESS OF OPERATOR: 1099 18TH St. Ste2300 CITY Denver STATE CO ZIP 80202

PHONE NUMBER: (303) 312-8120

10. FIELD AND POOL, OR WILDCAT: Prickly Pear Unit/Mesa Verde

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL & 271' FEL

COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E

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: Weekly Chronological Reports
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

Weekly drilling activity report covering August 21, 2004 through August 25, 2004. Currently WOC.

RECEIVED
AUG 30 2004
DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) Tracey Fallang TITLE Permit Analyst

SIGNATURE Tracey Fallang DATE 8/27/2004

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CONFIDENTIAL

REGULATORY DRILLING SUMMARY

Bill Barrett Corporation

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/23/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 13

Spud Date : 8/13/2004 Days From Spud : 10 Depth At 06:00 : 7755

Morning Operations : FINISH FIRST LOG RUN Estimated Total Depth : 7500

Time To Description

Remarks :

DAYS SINCE LOST TIME ACCIDENT 459 DAILY SAFETY MEETING KELLY SET BACK J.S.A.#35 CALL B.L.M. REPRESENITIVE DON STEVENS TO UPDATE ON PROGRESS . MUD LOGGERS RELEASED B.O.P. DRILL WHILE ON BANK PERSONAL AT STATIONS WELL SECURE 2MIN. 25 SEC. "FUNCTION BLIND RAMS"

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/22/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 12

Spud Date : 8/13/2004 Days From Spud : 9 Depth At 06:00 : 7575

Morning Operations : DRILLING AHEAD Estimated Total Depth : 7500

Time To Description

Remarks :

NOTIFY B.L.M; REPRESENTIVE DON STEVENS OF UPCOMING PRODUCTION 5.5 CASSING JOB NOTIFY STATE REPRESENITIVE CAROL OF UPCOMING RATHOLE SPUD MONDAY ON NEXT LOCATION CALL LOGERS, CASERS ,CEMENTERS,WELLHEAD INC. FOR 24HOUR HEADS UP ON 5.5 PRODUCTION CASING CALL BBC GEOLIGIST GREG HINDS FOR T.D. INFORMATION DAYS SINCE LOST TIME ACCEDENT 458 DAILY SAFETY MEETING BUGS IN EAR

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/21/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 11

Spud Date : 8/13/2004 Days From Spud : 8 Depth At 06:00 : 7190

Morning Operations : DRILLING AHEAD Estimated Total Depth : 7500

Time To Description

Remarks :

B.L.M. REPRESENATIVE DON STEVENS STOPPED BY RIG INSPECTED RIG &DOCUMENTS LET ME KNOW OF NESSARY CORRECTIONS .TOOK ACCTIONS TO RECTIFY SITUATIONS,TO SATISFY B.L.M. DAYS SINCE LOST TIME ACCIDENT 457 DAILY SAFETY MEETING TRIPING

CONFIDENTIAL

REGULATORY DRILLING SUMMARY

Bill Barrett Corporation

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/25/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 15

Spud Date : 8/13/2004 Days From Spud : 12 Depth At 06:00 : 7746

Morning Operations : RIG DOWN - RIG RELEASED F/ DAYWORK Estimated Total Depth : 7500

Time To	Description
9:00:00 AM	LAY DOWN DRILL STRING - PULL WEAR RING
3:00:00 PM	SAFETY MEETING - RUN 5.5" CSG.
4:30:00 PM	CIRC CSG ON BOTTOM
7:00:00 PM	CMT CSG W/ HCS.
1:00:00 AM	ND BOP - CLEAN PITS.
6:00:00 AM	RELEASE RIG F/ DAYWORK - RIG DOWN

Remarks :

RUN 169 JTS 5.5" CSG + 3 MARKER JTS. N-80, LT&C, 17#, RUN SUPER-SEAL SHOE & FLOAT COLLAR, 25 CENTRALIZERS F/ 7725' TO 5525'.
SHOE DEPTH = 7746'
FLOAT COLLAR DEPTH = 7699.94'
1st MARKER DEPTH = 6666'
2nd MARKER DEPTH = 5963'
3rd MARKER DEPTH = 3499'
CEMENT = 1145 SK OF 50-50 POZ, 13.4#, 1.49 YIELD, 7.06 MIX WATER. DISPLACE W/ 3% CLAY-FIX WATER - BUMP PLUG, FLOAT HELD.
CALCULATED TOP OF CMT F/ CALIPER LOG = 2500' + 10%

#DAYS SINCE LTA = 461

*RIG RELEASED F/ DAYWORK AT 01:00 8/25/04. RIG ON STAND-BY, W/O LOC. CONSTRUTION STOPPED DUE TO SEISMIC ACTIVITY.

Well : **Prickly Pear Unit Federal 10-4** API # : 43-007-30823 Operations Date : 8/24/2004

Surface Location : SESE-10-12S-14 E 26th PM Area : Nine Mile Canyon Report # : 14

Spud Date : 8/13/2004 Days From Spud : 11 Depth At 06:00 : 7755

Morning Operations : LAY DOWN DRILL STRING Estimated Total Depth : 7500

Time To	Description

Remarks :

CALCULATE CMT VOL F/ CALIPER LOGS, CALL HCS & CONFIRM CALCS, ORDER CMT,
CALL CAROL W/ UTAH O & G & LEFT MESSAGE ABOUT SPUD CONDUCTOR ON PRICKELY PEAR 12-24.
DAYS SINCE LTA = 460
DAILY SAFETY MEETING = WORKING W/ LAY DOWN MACHINE.

SUPERVISOR: C. HICKS

018

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-73665

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

7. UNIT or CA AGREEMENT NAME: Prickly Pear Unit

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

CONFIDENTIAL

8. WELL NAME and NUMBER: Prickly Pear Unit Federal 10-4

2. NAME OF OPERATOR: BILL BARRETT CORPORATION

9. API NUMBER: 43-007-30823

3. ADDRESS OF OPERATOR: 1099 18TH St. Ste2300 CITY Denver STATE CO ZIP 80202

PHONE NUMBER: (303) 312-8120

10. FIELD AND POOL, OR WILDCAT: Prickly Pear Unit/Mesa Verde

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL & 271' FEL

COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E

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: Weekly Chronological Reports
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

No new activity. WOC.

RECEIVED
SEP 0 7 2004
DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) Tracey Fallang TITLE Permit Analyst

SIGNATURE Tracey Fallang DATE 9/3/2004

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

FORM 9

019

SUNDRY NOTICES AND REPORTS ON WELLS

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5. LEASE DESIGNATION AND SERIAL NUMBER:	UTU-73665
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	n/a
7. UNIT or CA AGREEMENT NAME:	Prickly Pear Unit
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER	8. WELL NAME and NUMBER: Prickly Pear Unit Federal 10-4
2. NAME OF OPERATOR: BILL BARRETT CORPORATION	9. API NUMBER: 43-007-30823
3. ADDRESS OF OPERATOR: 1099 18TH St. Ste2300 CITY Denver STATE CO ZIP 80202	PHONE NUMBER: (303) 312-8120
10. FIELD AND POOL, OR WILDCAT: Prickly Pear Unit/Mesa Verde	

CONFIDENTIAL

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL & 271' FEL — COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E — STATE: UTAH

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

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☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
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No new activity. WOC.

NAME (PLEASE PRINT) Tracey Fallang — TITLE Permit Analyst

SIGNATURE Tracey Fallang — DATE 9/9/2004

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RECEIVED
SEP 14 2004
DIV. OF OIL, GAS & MINING

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

020

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NUMBER:	UTU-73665
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	n/a
7. UNIT or CA AGREEMENT NAME:	Prickly Pear Unit
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER CONFIDENTIAL	8. WELL NAME and NUMBER: Prickly Pear Unit Federal 10-4
2. NAME OF OPERATOR: BILL BARRETT CORPORATION	9. API NUMBER: 43-007-30823
3. ADDRESS OF OPERATOR: 1099 18TH St. Ste2300 CITY Denver STATE CO ZIP 80202	PHONE NUMBER: (303) 312-8120
	10. FIELD AND POOL, OR WILDCAT: Prickly Pear Unit/Mesa Verde

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL & 271' FEL — COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E — STATE: UTAH

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

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

Weekly completion activity report from September 14, 2004 (1st date of completion activity) through September 16, 2004.

NAME (PLEASE PRINT) Tracey Fallang — TITLE Permit Analyst

SIGNATURE Tracey Fallang — DATE 9/17/2004

(This space for State use only)

RECEIVED
SEP 20 2004
DIV. OF OIL, GAS & MINING

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

REGULATORY COMPLETION SUMMARY

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 9/16/2004 Report # : 2

Summary : MIRU Mesa Wire Line Perf Price River @ 7550-7560, MIRU HES Frac, Frac Price River, Wire line frac plug set@ 7250, perf Price River @ 7180-7190, Frac couldnt break formation to frac, flow back over night

End Time	Description
10:00:00 AM	MIRU Mesa Wire Line, pickup 3 1/8 perf gun RIH correlate to short joint run to perf depth check depth to casing coller perforate Price River @ 7550-7560 3SPF, 120 phasing, 23 grams 0.410 holes 30 holes set back wire line equipment .
1:30:00 PM	MIRU. HES Frac equipment, rig up equipment and pressure test lines. Safety Meeting
2:21:00 PM	Frac stage #1, 30# Purgel 3 LT 70Q CO2 base fluid 40 bbl/gal, Avg Foam Rate : 29 BPM, Avg. CO2 Rate: 17 BPM, Avg. Pressure: 4,360 psi, Max. Foam Rate: 31 BPM, Max. CO2 Rate: 20.3 BPM, Max Pressure 4,799 psi, Break: 4990 psi, 2 BPM, Totel Fluid Pumped: 16,855 gal. Totel Sand in Formation: 70,000 LB, ISIP: 3910 psi, Frac Gradient: 0.96 psi/ft, pumped 118 tons CO2 downhole: 15 tons cooldown totel of 133 tons. flush with 50Q CO2 foam with 500 gal cap. the job was flushed successfully.

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 9/15/2004 Report # : 1

Summary : MI two 500 bbl frac tanks, fill with 2% KCL fluid, set sand master off load sand

End Time	Description
4:30:00 PM	Rig Mesa Wire line pickup 5.5" CFP 10ft. perf gun. RIH correlate to short jt. run to setting depth check depth to casing coller, set Frac plug @ 7250, pickup to perf depth check depth to casing coller perforate Price river @ 7180-7190 3 SPF. 120 phasing, 23 gram shot, .410 hole, all shots fired sand in perf guns.
7:00:00 PM	Rig frac equipment to well. Frac stage #2 Price River, start Pad seen no Break in Formation pressured up to max. pressure shut down slow bleedoff, blow down pressure pump to try break pressured up to max shut down held pressure on perfs. no break tryed 4 times flowing and pressuring up no break to formation. SDFN to flow sand off perfs.
11:59:00 PM	Flow back Stage 1. 3200 psi 18/64 choke 401 bbl to recover

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 9/14/2004 Report # :

Summary : Set Frac head and test, set 5= 50 ton CO2 Vessels and start filling

CONFIDENTIAL FORM 9

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

021

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-73665
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	n/a
7. UNIT or CA AGREEMENT NAME:	Prickly Pear Unit
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER	8. WELL NAME and NUMBER: Prickly Pear Unit Federal 10-4
2. NAME OF OPERATOR: BILL BARRETT CORPORATION	9. API NUMBER: 43-007-30823
3. ADDRESS OF OPERATOR: 1099 18TH St. Ste2300 CITY Denver STATE CO ZIP 80202	PHONE NUMBER: (303) 312-8120
	10. FIELD AND POOL, OR WILDCAT: Prickly Pear Unit/Mesaverde

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL & 271' FEL COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E 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: Weekly Chronological Reports
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

Weekly completion activity report from September 17,2004 through September 23, 2004.

NAME (PLEASE PRINT) Tracey Fallang TITLE Permit Analyst

SIGNATURE Tracey Fallang DATE 9/24/2004

(This space for State use only)

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SEP 27 2004
DIV. OF OIL, GAS & MINING

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

REGULATORY COMPLETION SUMMARY

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 9/23/2004 Report # : 9

Summary : Flow back stages 1-7, well to production @ 4PM

End Time	Description
7:00:00 AM	Flow back stages 1-7, FCP 50 psi, 48/64 ck, recovered 105 bbl in 24 hours, avg. 4.37 BPH, CO2 0%, 1767 bbl left to recover.
2:00:00 PM	Flow back stages 1-7, 48/64 ck. FCP 75 psi. recover 30 bbl 7hours flowing,1737 bbl left to recover avg. 5 BPH.
4:00:00 PM	Shut in to build pressure to pressure test pipe line

---

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 9/22/2004 Report # : 8

Summary : Flow Back Stages 1-7, Pig and purge 4" and 10" pipe lines

End Time	Description
7:00:00 AM	Flow Back stages 1-7, FCP 100 psi, 48/64 ck. Recovered 100 bbl, flow time 24 hours, avg. 5.8 BPH, Co2 test 0%, 1872 bbl left to recover. (flow report)
11:59:00 PM	Flow back stages 1-7, 1872 bbl left to recover.

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 9/21/2004 Report # : 7

Summary : Flow back stages 1-7

End Time	Description
7:00:00 AM	Flow back stages 1-7, 24 hours flowing, FCP 175, 36/64 ck. recovered 180 bbls, avg. 7.5 BPH, CO2 test 20%, 2012 BBL left to recover.
11:59:00 PM	Flow back stages 1-7 2012 bbl left to recover

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 9/20/2004 Report # : 6

Summary : flow back stages 1-7

End Time	Description
7:00:00 AM	Flow Back stages 1-7, FCP 550, 32 ck. Avg. 10 BPH, recovered 130 bbls, 2192 bbl left to recover. (see flow report)
11:59:00 PM	flow back stages 1-7, 32/64 ck. FCP 550 psi, 2192 bbl to recover.

REGULATORY COMPLETION SUMMARY

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 9/19/2004 Report # : 5

Summary : Flow back stages 1-5,set frac plug& perf stage #6,HES frac #6, Wire line Frac plug and perf Stage #7 , HES Frac stage #7 Flow back stages 1-7

End Time	Description
7:00:00 AM	Flow back stages 1-5, 1906 bbl in well to recover, FCP 550, 32/64 ck recovered 155 bbls 16 hours flow time, 1751 bbl left to recover. CO2 40%(see flow report)
8:30:00 AM	Rig Mesa Wire line, pickup 5K frac plug 5ft perf gun and 4ft. gun RIH correlate to sort joint RIH to plug setting depth check depth to casing coller, set frac plug @ 5145 pull to perf depth perforate North Horn @ 5090 to 5095 3SPF 120 phas, 23gram shot, .410 hole, pick up to M.Wasatch Perforate @ 4964-4968 3SPF 120 phasing .410 hole 23 gram shot. POOH all shots fired.
9:45:00 AM	Wait on halliburtion. 8-9:30 am HES CO2 Foam Frac =middle Wasatch and North.Horn.Spearhead 300 gal 7.5% HCL ahead of Pad. Fluid system: 30# Purgel III LT 70Q CO2. Break 5,266 psi 35.8 BPM, Avg. Foam Rate: 36.6 BPM, Avg. CO2 Rate: 21.4 BPM, Avg. Pressure: 3,536 psi, Max. Foam Rate: 40.2 BPM, Max. Co2 Rate: 26.4 BPM, Max Pressure: 5,325 psi, Totel Fluid pumped: 15,358 gal. Totel CO2 Pumped: 110 tons + cooldown (5 tons) totel =115 tons, Totel Sand Pumped: 82,000 LB (20/40 white sand) ISIP: 2,600 PSI, Frac Gradient: 0.95 psi/ft, flushed with 50Q CO2 Foam with 500 gal fluid cap. flushed successfully.
10:45:00 AM	Rig Mesa Wire, Pickup 5K Frac plug and 9ft perf gun, RIH Correlate to short joint run to plug setting depth check depth to casing coller, set 5K frac plug @ 4830, pull to perf depth perforate Middle Wasatch @ 4772-4781 3 SPF,120 Phasing, 23 gram shot, .410 hole. POOH, all shots fired .
12:00:00 PM	Wait on CO2
1:00:00 PM	Frac M. Wasatch 4772-4781. CO2 Foam Frac, Fluid system: 30# Purgel III LT 70Q CO2, Break pressure @ 5300, Avg. Foam Rate: 19.5 BPM, Avg. CO2 Rate: 11.6 BPM, Avg. Pressure: 3,116 PSI, Max. Foam Rate: 21.9 BPM, Max. CO2 Rate: 19.3 BPM, Max, Pressure: 6,277 psi, Totel Fluid Pumped: 12,434 gal, Totel CO2 pumped: 68 tons with cooldown=totel 86 tons, Totel Sand in Formation: 45,600 LB (20/40 White sand) ISIP: 2,220 psi, Frac Gradient: 0.90 psi/ft. Flushed with 70Q CO2 foam with a 500 gal clean cap. job was pumped successfully. (hard to break formation + sand on perfs had to flow sand up hole before break and frac)
6:00:00 PM	RD HES Move out
11:59:00 PM	Flow back stages 1-7, 18/64 choke 1900 psi. 721 bbls pumped for day, 2322 BBLS to recover in well.

REGULATORY COMPLETION SUMMARY

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 9/18/2004 Report # : 4

Summary : Flow back stages 1-3. Wire line CFP & Perf Stage 4, Frac U. Price River 6700ft. set frac plug and perf North Horn stage #5 HES Frac Stage #5, Flow back stages 1-5

End Time	Description
7:00:00 AM	Flow back stages 1-3, FCP 400, 32/64 ck, recovered 255 bbls, 759 bbl left to recover, heavy mist no sand,
10:30:00 AM	SIW, Mesa Wire line pickup tools RIH with CFP & 10 ft. perf gun, correlate to short joint, run to setting depth to set composite frac plug tool shorted out couldn't set plug, POOH, firing head on setting tool wouldn't transfer.repair RIH. correlate to short joint run to setting depth check depth to casing coller set 5K frac plug @ 6760. pull to perf depth perforate U. Price River @ 6700-6710 3 SPF 120 phas. 23 gram shot. .410 hole. POOH
12:20:00 PM	Frac U.Price River. Fluid system: 30# Purgel III LT 70Q CO2, Spearheaded 300 gal 71/2 % HCL acid ahead of pad and 250 ahead of flush. Avg. Foam Rate; 40.7 BPM, Avg. CO2 Rate: 22 BPM, Avg. Pressure: 4,775 psi, Max. Foam rate: 42.4 BPM, Max. CO2 Rate: 27.2 BPM, Max. Pressure: 5,140 psi, Totel fluid pumped: 28,800 gal, totel CO2 pumped: 194 tons + (10 tons cooldown) totel 204 tons, Totel Sand Pumped: 150,000 LB (20/40 White sand) ISIP 4,120 PSI, Frac Gradient: 1.05 si/ft, flushed with 50Q foam with 500 gal clean fluid cap. job was flushed successfully.
2:00:00 PM	Mesa Wire Pickup 5.5K CFP. with 10 ft perf gun, RIH correlate to short joint run to plug setting depth check depth to casing coller, set frac plug @ 5555 ft. pull to perf depth check depth to casing coller, perforate North Horn @ 5502-5507, pull to perf depth perforate North Horn. @ 5450-5454, 3SPF 120 phasing 23 gram, shot .410 hole POOH. all shots fired.
3:00:00 PM	HES Frac North Horn stage #5: Fluid System: 30# Pergel III LT 70Q CO2, Break Formation @ 6150, Avg. Foam Rate: 29.3 BPM, Avg.CO2 Rate: 17.6 BPM, Avg. Pressure: 4,764 psi, Max. CO2 Rate: 20.6 BPM, Max. Pressure: 6220 psi, Totel fluid pumped: 10,203 gal, Totel CO2 pumped: 85 tons + (10 tons cooldown) totel 95 tons. Totel Sand Pumped in formation: 65,000 LB (20/40 White sand) ISIP: 3,030 psi, Frac Gradient: 0.99 psi/ft, flushed with 70Q CO2 foam with 500 gal fluid cap. jod was flushed successfully.
11:59:00 PM	Start flow back 3PM 18/64 ck, 2750 psi, pumped 1147 BBL for day totel BLs in Well to Recover: 1906 BBL,

REGULATORY COMPLETION SUMMARY

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 9/17/2004 Report # : 3

Summary : Flow back stage #1. Rig to Frac stage #2.(no Frac) checkfor fill. clean reperf stage 2,try to break pumping 1/2# sand high pressure shut down. stage #3 set frac plug and perf, Frac U.Price River, Flow back stages 1-3

End Time	Description
7:00:00 AM	Flow Back Stage #1, 28/64 CK. 250 PSi recovered 24 bbl 12 hours flow time. 377 bbl left to recover.
8:30:00 AM	HES. Rig to frac stage 2 after flowing well over night. satety meeting.
10:00:00 AM	Frac stage #2 Price River. perfs 7180-7190, fill hole with 50Q co2 & water looking for formation break. pressure climbed to 5740 13 BPM fluid 27.5 BPM C O2 pumped 500 gal cap shut down.
12:00:00 PM	Rig wire line pickup 10 ft gun run in hole check perfs for sand fill clean to frac plug 7240. pull up hole correlate to short joint run in nto perf depth check depth to casing coller reperf Price River @ 7180-7190 3 spf 120 phas. .23 gram, .410 hole , POOH all shots fired.
1:00:00 PM	rig frac equipment on well ,17 BPM 4220 psi.no break formation pressure climbing shut down , start 1/2# sand with 50Q CO2. Avg. Foam Rate: 32 BPM. Avg. CO2 Rate: 20 BPM, Avg. Pressure: 4,360 PSI, max. Foam Rate: 36 BPM, Max. CO2 Rate: 24 BPM, Max Pressure 5230 PSI, Totel Fluid Pumped: 15,927 gal. Totel Sand Pumped: 2000#,(20/40 White sand) ISIP3910 psi. frac Gradient: 0.98 psi/ft totel CO2 pumped 118 tons 15 tons cooldown totel 133 tons couldn't break down formation.(call to move to stage #3)
3:30:00 PM	Rig Mesa, pickup CFP and 31/8" perf gun RIH correlate to short joint RIH to plug setting depth check depth to casing coller set CFP @ 6940. pull to perf depth check dept to casing coller perforate U. Price River @ 6890 TO 6900 3 spf 120 phas. 23 gram shot. .410 hole. totel 30 holes.
5:00:00 PM	CO2 Foam Frac U. Price River. Fluid System: 30# PurGel III LT 70Q CO2 Break: 4,144 psi @11.9 BPM, Avg. Foam Rate: 38 BPM. Avg, CO2 Rate: 26 BPM. Avg. Pressure: 4800 PSI, Max. Foam Rate: 39 BPM, Max. CO2 Rate: 28 BPM, Max. Pressure: 5,200 PSI, Totel Fluid Pumped: 23,767 Gal. Totel Sand Pumped: 119,000 LB (20/40 White sand) ISIP:4100 psi, Frac Gradient: 1.o4 psi/ft. Totel CO2 Pumped 179 tons + 10 tons cooldown.totel 189 tons. Flush 50Q co2 FOAM WITH 500 Gal. cap. job was flushed successfully. 566 bbls fluid
11:59:00 PM	Start flow back 18/64 ck. 3260 psi. 1,014 BBLs totel to recover

FORM 9

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

022

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-73665
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	n/a
7. UNIT or CA AGREEMENT NAME:	Prickly Pear Unit
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER	8. WELL NAME and NUMBER: Prickly Pear Unit Federal 10-4
2. NAME OF OPERATOR: BILL BARRETT CORPORATION (CONFIDENTIAL)	9. API NUMBER: 43-007-30823
3. ADDRESS OF OPERATOR: 1099 18TH St. Ste2300 CITY Denver STATE CO ZIP 80202	PHONE NUMBER: (303) 312-8120
	10. FIELD AND POOL, OR WILDCAT: Prickly Pear Unit/Mesaverde

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL & 271' FEL — COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E — 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: _____
	☐ 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 AS NOTIFICATION OF ~~WELL SPUD~~ PRODUCTION ON SEPTEMBER 26, 2004.

RECEIVED
SEP 30 2004
DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) Tracey Fallang — TITLE Permit Analyst

SIGNATURE Tracey Fallang — DATE 9/28/2004

(This space for State use only)

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

023

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-73665

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

7. UNIT or CA AGREEMENT NAME: Prickly Pear Unit

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

8. WELL NAME and NUMBER: Prickly Pear Unit Federal 10-4

2. NAME OF OPERATOR: BILL BARRETT CORPORATION CONFIDENTIAL

9. API NUMBER: 43-007-30823

3. ADDRESS OF OPERATOR: 1099 18TH St. Ste2300 CITY Denver STATE CO ZIP 80202

PHONE NUMBER: (303) 312-8120

10. FIELD AND POOL, OR WILDCAT: Prickly Pear Unit/Mesaverde

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL & 271' FEL

COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E

STATE: UTAH

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

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Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Weekly Activity Reports
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

Weekly completion activity report from September 24,2004 through September 29, 2004. Further completion activity to be done.

NAME (PLEASE PRINT) Tracey Fallang TITLE Permit Analyst

SIGNATURE Tracey Fallang DATE 10/1/2004

(This space for State use only)

RECEIVED
OCT 04 2004
DIV. OF OIL, GAS & MINING

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

CONFIDENTIAL

REGULATORY COMPLETION SUMMARY

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 9/29/2004 Report # : 15

Summary : RD MO Leed well Service.

End Time	Description
8:00:00 AM	Rid down well service unit.
9:00:00 AM	Road rig off loc

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 9/28/2004 Report # : 14

Summary : Production, SI, rig down well service unit MO..

End Time	Description
9:30:00 AM	RD Well service unit MO...

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 9/25/2004 Report # : 11

Summary : Make up Bit & pumpoff sub tally IH. tage plug rig swivel , foam air drill kill plug. Frac Plug's #6#5#4 no pressure changes on surface

End Time	Description
1:30:00 PM	SICP=0, hook up flow back manifold, make up 43/4 smith cone bit, weatherford pumpoff bit sub, 1jt XN nipple, one joint X nipple tally in hole 149 jts. tage kill plug @ 4700 ft. rig power swivel.
2:00:00 PM	rig up Weatherford Foam unit break circ, with foam air.
3:00:00 PM	drill top kill plug plug @ 4700 ft. 725 psi flowing pressure on 44/64 ck, RIH tage frac plug #6 @ 4830 no fill on plug drill frac pug no pressure change on surface flow, RIH tage frac plug # 5@ 5145 no fill on plug , drill plug no pressure change on surface flow,RIH Tage frac plug #4 @ 5555 no fill on plug, drill plug no pressure change at surface. pump 10 bbl in tbg for night. SI. rig down swivel to run 38 joints to frac plug #3 @ 6760
7:00:00 PM	Flow well to pit on 30/64 ck over night, 250 psi.

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 9/24/2004 Report # : 10

Summary : Unload 23/8 N-80 tbg, MIRU Leed Well Service, MI Mesa Wire line set kill plug. ND Frac head NU BOPs, MI Weatherford Foam unit and swivel

End Time	Description
12:00:00 PM	K BAR A Roustabouts. Unload 23/8 N-80 Tbg. 247 joints.
3:00:00 PM	MI Leed Well Service pulling Unit. rig powered out pulling on Harmond MTN. JD Oil Field truck pulled up MTN. rig up pulling
4:30:00 PM	MIRU Mesa wire line, pickup 5K bridge plug run in hole correlate to casing set kill plug at 4700 ft. POOH rig down MO (725 PSI on csg.) MI Weatherford Foam Unit & power swivel
6:30:00 PM	blow down casing 725 psi, ND Frac head NU BOPs spool stripper head. rig work floor
6:30:00 PM	SIFN.

CONFIDENTIAL

FORM 9

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

024

SUNDRY NOTICES AND REPORTS ON WELLS

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5. LEASE DESIGNATION AND SERIAL NUMBER:	UTU 73665
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	N/A
7. UNIT or CA AGREEMENT NAME:	Prickly Pear Unit
8. WELL NAME and NUMBER:	Prickly Pear Unit Federal 10-4
9. API NUMBER:	4300730823
10. FIELD AND POOL, OR WILDCAT:	Prickly Pear Unit/Mesaverde

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

2. NAME OF OPERATOR: Bill Barrett Corporation

3. ADDRESS OF OPERATOR: 1099 18th Street, Suite 2300 CITY Denver STATE CO ZIP 80202 PHONE NUMBER: (303) 312-8168

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 75' FSL & 271' FEL COUNTY: Carbon
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E STATE: UTAH

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

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	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
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☐ 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:
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

Attached to this sundry is a copy of the completion procedure and wellbore diagram for the Prickly Pear Unit Federal 10-4. Upon approval, it is Bill Barrett Corporation's intention to commingle production from the Wasatch, Middle Wasatch, North Horn (part of the lower Wasatch) and Mesaverde formations (gross interval 4772' to 7560').

Gas composition is similar across all formations. The pressure profile across the formations is normal and BBC does not anticipate any cross flow.

Production is considered to be from one pool. In the event that allocation by zone or interval is required, BBC would use representative sampling obtained from production logs and allocate on a percentage basis by zone or interval.

A letter and affidavit of notice is being submitted under separate cover.

COPY SENT TO OPERATOR
Date: 10-26-04
Initials: CHD

~~1 - CHD~~
~~2 - SCAN~~
3 - PIC

NAME (PLEASE PRINT) Tracey Fallang TITLE Permit Analyst

SIGNATURE Tracey Fallang DATE 10/1/2004

(This space for State use only)

Accepted by the Utah Division of Oil, Gas and Mining
Date: 10/22/04
By: (See Instructions on Reverse Side)

Federal Approval Of This Action Is Necessary

RECEIVED
OCT 05 2004
DIV. OF OIL, GAS & MINING

(5/2000)

CONFIDENTIAL

Prickly Pear Unit Federal # 10-4
SESE (75'FSL & 271' FEL) Sec 10-T12S-R14E
Carbon Co., UT

Completion Procedure

Current Well Status: New completion

Objective: Rigless completion. Perf and frac various sands in seven separate frac stages between 4,772-7,560' gross interval.

Procedure:

1) Install wellhead isolation tool. Test casing to 3500 psi for 10" and low test to 250 psi for 10".
2) MIRU Mesa Wireline electric line unit. RIH with 4" casing gun, perforate Price River from 7,550-7,560' with 3 jspf, 120 deg phasing. POOH.
3) MIRU Halliburton frac equipment. Test all frac lines to 5000 psi. Frac **Stage 1** per frac rec.

4) RIH with 5-1/2" flow through composite frac plug and 4" casing gun. Set plug # 1 at (to be determined). Perforate Price River from 7,180-7,190' with 3 jspf, 120 deg phasing. POOH.
5) Test all frac lines to 5000 psi. Frac **Stage 2** per rec.

6) RIH with 5-1/2" flow through composite frac plug and 4"casing gun. Set plug # 2 at (to be determined). Perforate U. Price River from 6,890-6,900' with 3 jspf, 120 deg phasing. POOH.
7) Test all frac lines to 5000 psi. Frac **Stage 3** per rec.
8) Flow back frac Stages 1 through 3 24-48 hrs to cleanup.

9) RIH with 5-1/2" flow through composite frac plug and 4"casing gun. Set plug # 3 at (to be determined). Perforate U. Price River from 6,700-6,710' with 3 jspf, 120 deg phasing. POOH.
10) Test all frac lines to 5000 psi. Frac **Stage 4** per rec.

11) RIH with 5-1/2" flow through composite frac plug and 4"casing gun. Set plug # 4 at (to be determined). Perforate North Horn from 5,450-5,454' and 5,502-5,507' with 3 jspf, 120 deg phasing. POOH.
12) Test all frac lines to 5000 psi. Frac **Stage 5** per rec.

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Prickly Pear Unit Federal # 10-4
SESE (75'FSL & 271' FEL) Sec 10-T12S-R14E
Carbon Co., UT

Completion Procedure (continued)

13) RIH with 5-1/2" flow through composite frac plug and 4"casing gun. Set plug # 5 at (to be determined). Perforate North Horn from 5,090-5,095' and M. Wasatch from 4,964-4,968' with 3 jspf, 120 deg phasing. POOH.
14) Test all frac lines to 5000 psi. Frac **Stage 6** per rec.
15) Flow back frac Stages 1 through 6 24-48 hrs to cleanup.

16) RIH with 5-1/2" flow through composite frac plug and 4"casing gun. Set plug # 6 at (to be determined). Perforate M. Wasatch from 4,772-4,781' with 3 jspf 120 deg phasing. POOH.
17) Test all frac lines to 5000 psi. Frac **Stage 7** per rec.
18) Flow back frac stages 1 through 7 to clean up.

19) RU service unit. RU Mesa Wireline e-line and RIH with 5-1/2" composite bridge plug (plug # 7) and set at ~4,500'. Remove well head isolation tool. NU BOP's. Pressure test BOP's to 3000 psi, test hydril to 1500 psi. Run 4-3/4" drag bit with pump off bit sub with dart valve, 1 jt 2-3/8" tubing, 2-3/8" "XN" and "X" profile nipple, rest of 2-3/8" tubing. Drill out plugs # 7 through # 1. Utilize foam unit if necessary to obtain sufficient returns. EOT depth to be determined.
20) Strip BOP's off and NU wellhead.
21) Drop ball, pump off bit and sub. Swab well in and place on production.
22) RDMO service unit. Turn well to sales.

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Bill Barrett Corporation

Prickly Pear Unit Federal # 10-4
75' FSL & 271' FEL
SESE Sec 10-T12S-R14E
Carbon Co., UT

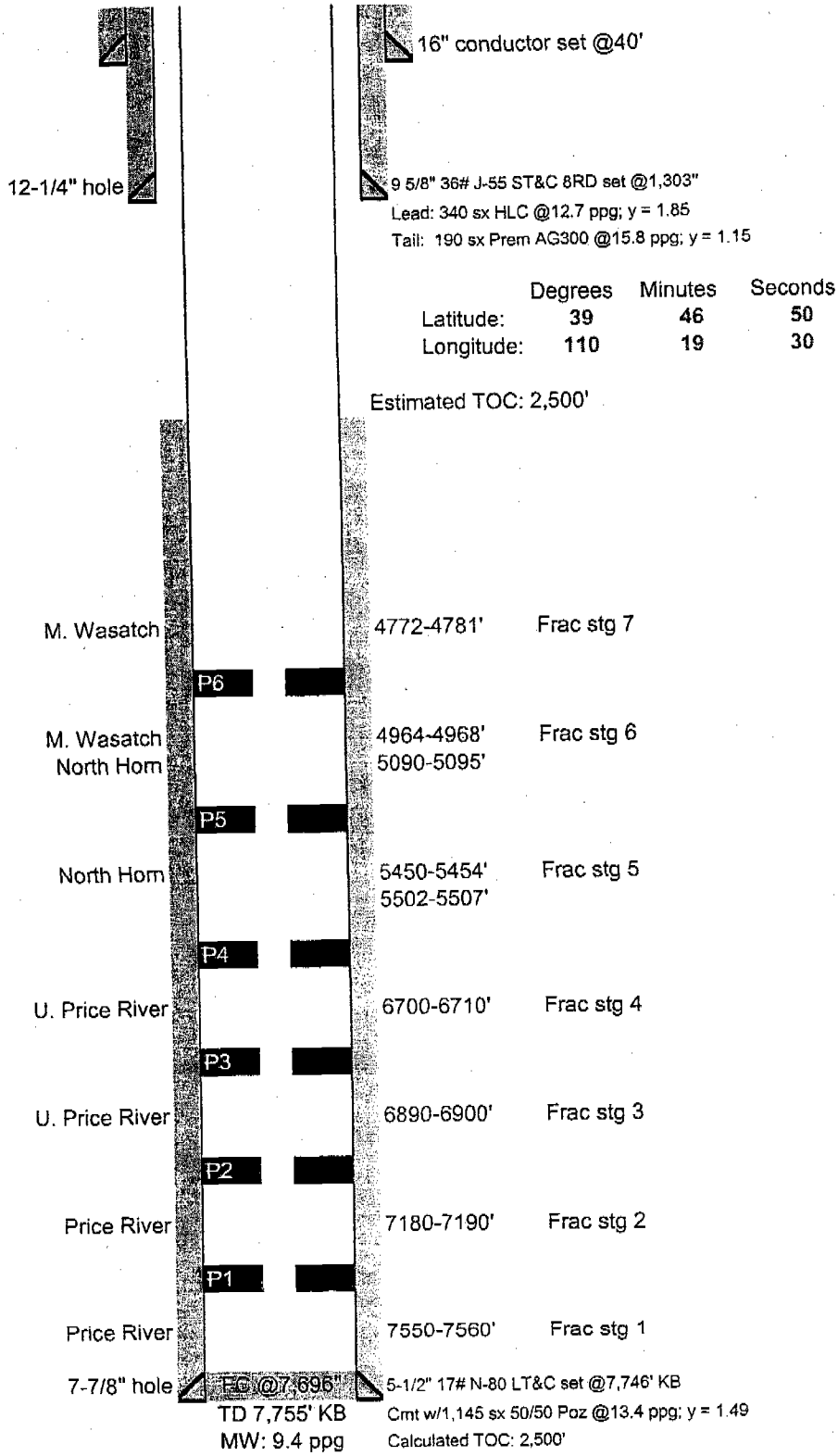
AFE #: **10090D**
API: 43-007-308230000
WI: 1.000000
NRI: 0.8250006

Last mod: 8/31/2004 JMM
Status: **Waiting on completion**

CURRENT WELLBOERE SCHEMATIC

GL:	7,578'
RKB:	7,591'
Rig:	Patterson #77
Spud:	8/13/2004
TD:	8/22/2004
RR:	8/25/2004
E-Logs:	GR/BCS/DSN/SDL/HRI
Completed:	Wait on completion
First Sales:	Wait on completion

5-1/2" 17# N-80 LT&C specs:
ID-4.892"
Drift-4.767'
Burst-7740 psi
Collapse-6280 psi



rparham

10/1/2004

025

43-007-30823
CONFIDENTIAL

Bill Barrett Corporation

October 4, 2004

Federal Express

Utah Division of Oil, Gas & Mining
1594 W. North Temple, Suite 1210
Salt Lake City, Utah 84114-5801
Attention: Mr. Dustin Doucet

RE: Sundry Notices
Prickly Pear Unit Federal 10-4
SESE Section 10, Township 12 South, Range 14 East
Prickly Pear Unit Federal 12-24
SWSW Section 24, Township 12 South, Range 14 East
Carbon County, Utah

Dear Mr. Doucet:

In accordance with our recent telephone conversations, Bill Barrett Corporation has submitted Sundry Notices to commingle production from the Wasatch, Middle Wasatch, North Horn and Mesaverde Formations in the captioned wells. We have enclosed herewith copies of the Sundry Notices together with a plat showing the leases and wells in the area, a description of the recompletion procedures and an affidavit confirming notice pursuant to the Utah OGM regulations.

Should you require additional information in this regard, please contact the undersigned at 303-312-8184 or by email at dgundry-white@billbarrettcorp.com. Your earliest attention to this matter is most appreciated.

Sincerely
Bill Barrett Corporation

Doug Gundry-White
Consulting Landman

RECEIVED
OCT 0 5 2004
DIV. OF OIL, GAS & MINING

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

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AFFIDAVIT

Affiant on oath swears that the following statements are true:

My name is Douglas W. G. Gundry-White. I am a Petroleum Landman working for Bill Barrett Corporation (BBC). BBC has submitted Sundry Notices to commingle production from the Wasatch, Middle Wasatch, North Horn and Mesaverde Formations in the Prickly Pear Unit Federal 10-4 well, which is located in the SESE of Section 10, Township 12 South, Range 14 East, and the Prickly Pear Unit Federal 12-24 well, which is located in the SWSW of Section 24, Township 12 South, Range 14 East, Carbon County Utah. In compliance with the Utah OGM regulation R649-3-22, I have provided a copy of the Sundry Notices, by certified mail, to the owners (see listed below) of all contiguous oil and gas leases or drilling units overlying the pool.

EOG Resources, Inc.
600 17th Street, Suite 1100N
Denver, CO 80202
Attention: Mr. Bob Davis

Dominion Exploration & Production, Inc.
14000 Quail Springs Parkway, Suite 600
Oklahoma City, Oklahoma 73134-2600
Attention: Mr. Rusty Waters

Gasco Energy, Inc.(formerly Pannonian Energy).
14 Inverness Drive East, Suite H-236
Englewood, CO 80112
Attention: Mr. Marc Choury

Date: 10/4/04

Affiant

Douglas W. G. Gundry-White

From: <Russell_R_Waters@dom.com>
To: <dustindoucet@utah.gov>
Date: 10/13/2004 11:54:13 AM

CONFIDENTIAL

Dustin, Dominion Exploration & Production has no objection to Bill Barretts comingling application.

Russell R. Waters
Senior Staff Landman
Onshore/Western U.S.-OKC
(405) 749-5282
(405) 749-6662 fax
86705282 tie line

CC: <dgundry-white@billbarrettcorp.com>

CONFIDENTIAL

From: <Bob_Davis@eogresources.com>
To: <dustindoucet@utah.gov>
Date: 10/11/2004 9:36:22 AM
Subject: Commingling Proposal

Dustin: Please allow this e-mail to serve as EOG Resources, Inc. notice of approval of Bill Barrett's application to commingle production from the Wasatch, Middle Wasatch, North Horn and Mesaverde Formations in the Prickly Pear Unit Federal 10-4 and 12-24 Wells. We hereby waive the 15-day response period. Should you require any additional information, in this regard, please do not hesitate to give me a call. RG

Bob Davis, CPL
EOG Resources, Inc.
600 17th Street, Suite 1100N
Denver, CO 80202
303-824-5428
303-824-5401 (fax)
303-638-2526 (cell)

CC: <dgundry-white@billbarrettcorp.com>, <Russell_R_Waters@dom.com>, <Roger_Falk@eogresources.com>, <Dan_Frederick@eogresources.com>

From: "Robin Dean" <rdean@gascoenergy.com>
To: <dustindoucet@utah.gov>
Date: 10/8/2004 8:52:15 AM
Subject: Bill Barrett Corporation Production Commingling

CONFIDENTIAL

Mr. Doucet:

Please be advised that Gasco Energy, Inc has no objection to Bill Barrett Corporation commingling production at its Prickly Pear Unit Federal 10-4 well and its Prickly Pear Unit Federal 12-24 well.

Thank you

Robin Dean
Senior Geologist
Gasco Energy, Inc.

026

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NUMBER:	UTU-73665
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	n/a
7. UNIT or CA AGREEMENT NAME:	Prickly Pear Unit
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER	8. WELL NAME and NUMBER: Prickly Pear Unit Federal 10-4
2. NAME OF OPERATOR: BILL BARRETT CORPORATION	9. API NUMBER: 43-007-30823
3. ADDRESS OF OPERATOR: 1099 18TH St. Ste2300 CITY Denver STATE CO ZIP 80202	PHONE NUMBER: (303) 312-8168
	10. FIELD AND POOL, OR WILDCAT: Prickly Pear Unit/Mesaverde

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4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL & 271' FEL COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E 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: Weekly Activity Reports
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

Weekly completion activity report from October 2, 2004 through October 8, 2004.

NAME (PLEASE PRINT) Tracey Fallang TITLE Permit Analyst

SIGNATURE Tracey Fallang DATE 10/8/2004

(This space for State use only)

RECEIVED
OCT 12 2004
DIV. OF OIL, GAS & MINING

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

REGULATORY COMPLETION SUMMARY

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/8/2004 Report # : 24

Summary : Flow back stages 1-7

End Time	Description
7:00:00 AM	Flow back stages 1-7 FTP 90 psi, SICP 350 32/64 ck recovered 100 bbl in24 hours avg. 4.16 bph
11:59:00 PM	flow back stages 1-7 change chioke to 28/64

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/7/2004 Report # : 23

Summary : Flow back stages 1-7

End Time	Description
7:00:00 AM	Flow back stages 1-7 FTP 90psi SICP 390 recovered 100 bbls in 24 hours avg. 4.16 BPH

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/6/2004 Report # : 22

Summary : flow back stages 1-7

End Time	Description
7:00:00 AM	flow back stages 1-7 FTP 100 psi, SICP 410, recovered 100 bbls 24 hours, avg. 4.16 BPH,
11:59:00 PM	flow back

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/5/2004 Report # : 21

Summary : flow back stages 1-7, 300 bbl recovered on production.

End Time	Description
7:00:00 AM	flow back stages 1-7 FTP 90 psi, SICP 460 psi, flowing on 48/64 ck. recovered 210 bbl in 24 hours, avg. of 8.72 BPH, 602 bbl left to recover
9:00:00 AM	RD Leed Well service road to Prickly Pear 7-16
11:59:00 PM	Flow back stages 1-7

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/4/2004 Report # : 19

Summary : flow back 1-7 to reserve pi. 48/64 ck SICP 550, FTP 95 psi.

End Time	Description
7:00:00 AM	flow back stages 1-7, 48/64 choke veary heavy mist. recovered 150 bbl in 12 hours avg. of 12.5 BPH. FTP 95 psi, SICP 550 psi.
11:59:00 PM	flow back stages 1-7, heavy mist, try to choke well flow back to 32/64 ck well tryed to die put back on 48/64. 4pm try to choke back well started to die, change back to 48/64. (rig down weatherford foam unit and release).

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REGULATORY COMPLETION SUMMARY

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/3/2004 Report # : 18

Summary : wait on rig crew-no show, call out air foam unit.blow well around, flow to pit.

End Time	Description
1:00:00 PM	wait on rig crew to show up to swab in tubing, (NO CREW SHOW)
4:00:00 PM	call for air foaming unit from Weatherford.
4:00:00 PM	rig foam unit to blow casing around up tubing to pit. 850 SICP, open tbg 0psi.
7:00:00 PM	foam casing , start tubing flowing to reserve pit.1000 psi on casing shut in. tbg flowing 75 psi on 48/64 ck. used 20 bbl 2% kcl fluid, to foam well
11:59:00 PM	flow back.

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/2/2004 Report # : 17

Summary : Delsco set tbg plug in XN nip. MIRU WSU. ND/NU BOP, Pickup 64 joints land @ 6686.

End Time	Description
3:00:00 PM	Delsco Northwest set blanking plug in XN nipple.
5:00:00 PM	MI Leed well service pulling unit rig up.
6:00:00 PM	ND/NU Bops. Rig work floor, strip tbg hanger out.
7:30:00 PM	pickup 64 jonts 23/8 n-80 tbg. land on tbg hanger @ 6686 214 joints.212 joints X nipple, 1 jt XN nipple 1jt, bit 1/2 bit sub for re-entry guide. (see final well report)
9:00:00 PM	land tbg on hanger. ND Bop, NU Tree
10:00:00 PM	Delsco North West pull blanking plug from XN Nipple
11:59:00 PM	open tbg to pit wait for well to start flowing.no flow

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FORM 9

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

027

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-73665
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	n/a
7. UNIT or CA AGREEMENT NAME:	Prickly Pear Unit
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER	8. WELL NAME and NUMBER: Prickly Pear Unit Federal 10-4
2. NAME OF OPERATOR: BILL BARRETT CORPORATION	9. API NUMBER: 43-007-30823
3. ADDRESS OF OPERATOR: 1099 18TH St. Ste2300 CITY Denver STATE CO ZIP 80202	PHONE NUMBER: (303) 312-8168
	10. FIELD AND POOL, OR WILDCAT: Prickly Pear Unit/Mesaverde

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 75' FSL & 271' FEL — COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 10 12S 14E — 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: Weekly Activity Reports
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

Weekly completion activity report from October 9, 2004 through October 15, 2004.

NAME (PLEASE PRINT) Tracey Fallang TITLE Permit Analyst

SIGNATURE Tracey Fallang DATE 10/15/2004

(This space for State use only)

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OCT 18 2004
DIV. OF OIL, GAS & MINING

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

REGULATORY COMPLETION SUMMARY

CONFIDENTIAL

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/15/2004 Report # : 31

Summary : production, MIRU Leed well service. top kill ND/NU Bops POOH 5000 ft.RIH W/5.5" RTTS pkr.

End Time	Description
12:00:00 PM	MI Leed And Equipment
2:00:00 PM	rig up Leed well service unit
2:30:00 PM	Pumpp 5 bbl top kil lon tubing
4:30:00 PM	Nipple down tree, nipple up BOPs rig work floor to POOH
7:00:00 PM	Strip tbg hanger POOH 160 joints. kill tbg as needed
6:30:00 PM	Shut in tubing for night. produce casing

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/14/2004 Report # : 30

Summary : production

End Time	Description
	Enter the description here

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/13/2004 Report # : 29

Summary : production

End Time	Description
	Enter the description here

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/12/2004 Report # : 28

Summary : Flow back stages 1-7

End Time	Description
11:00:00 AM	Flow back stages 1-7, FTP125, SICP 390, Recovered 250 bbl 48 hours avg. of 5.20 BPH 28/64 ck. 162 bbl left to recover

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Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/11/2004 Report # : 27

Summary : Flow back

End Time	Description
	Enter the description here

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/10/2004 Report # : 26

Summary : Flow back

End Time	Description
	Enter the description here

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/9/2004 Report # : 25

Summary : Flow back stages 1-7

End Time	Description
7:00:00 AM	flow back stages 1-7,FTP 140psi, SICP 400 psi, 28/64 ck. recovered 100 bbls last 24 hours. avg 4.16 BPH.
11:59:00 PM	

Form 3160- 5
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004- 0135
Expires: January 31,2004

SUNDRY NOTICES AND REPORTS ON WELLS

028

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

5. Lease Serial No.: **UTU 73665**

6. If Indian, Allottee, or Tribe Name: **n/a**

7. If Unit or CA. Agreement Designation: **Prickly Pear Unit**

1. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other

CONFIDENTIAL

8. Well Name and No.: **Prickly Pear Unit Fed 10-4**

2. Name of Operator: **BILL BARRETT CORPORATION**

9. API Well No.: **43-007-30823**

3a. Address: **1099 18TH STREET, STE 2300, DENVER, CO 80202**

3b. Phone No. *(include area code)*: **(303) 312-8168**

10. Field and Pool, or Exploratory Area: **Prickly Pear Unit/Mesaverde**

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
75' FSL & 271' FEL
SESE 10-T12S-R14E

11. County or Parish, State: **Carbon County, UT**

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/ Resume)	☐ Water Shut-off
	☐ Altering Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☒ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other **Weekly Activity Report**
	☐ Change Plans	☐ Plug and abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of pertinent markers and sands. Attach the Bond under which the work will performed or provide the Bond No. on file with the BLM/ BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notice shall be filed only after all requirements, including reclamantion, have been completed, and the operator has determined that the site is ready for final inspection.)

WEEKLY COMPLETION ACTIVITY REPORT FOR OCTOBER 16, 2004 THROUGH OCTOBER 20, 2004.
WAITING ON WEATHER TO CLEAR FOR FURTHER OPERATIONS.

RECEIVED
OCT 26 2004
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct.

Name *(Printed/ Typed)*: Tracey Fallang — Title: Permit Analyst

Signature: Tracey Fallang — Date: 22-Oct-04

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by — Title — Date

Conditions of approval, if any are attached. Approval of this notice 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. — Office

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 any department or agency of the United States any false, fictitiousor fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

REGULATORY COMPLETION SUMMARY

CONFIDENTIAL

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/20/2004 Report # : 36

Summary : production, flow testing.

End Time	Description
7:00:00 AM	On production. FTP 100 psi, 201.80 MCFD. recovered 25 bbls in 10 hours avg. 2.5 BPH. well logged off after putting to sales.
12:00:00 PM	flow testing ,on production, recovered 19.99 bbls 5 hours,3.99 BPH. 142 mcfd. 100 psi FTP
4:00:00 PM	Flow well to flat tank ty to flow more water with no back pressure. 4 hours flow time recovered 16.8 bbls. avg. of 4.2 bph 25psi. FTP
	flow to flat tank. put well on production.

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/19/2004 Report # : 35

Summary : production flowed 125 bbls two days on production, Top kill tbg. ND/NU Bops add 4 jts lower packer blow Northhorn perfs @5095.set PKR landed on tbg hanger, ND/NU Tree.

End Time	Description
2:00:00 PM	On tubing on sales, recovered 60 bbls 18 hours flow time Avg. 3.33 bph.
3:00:00 PM	Top kill tubing 5 bbls, ND/NU BOPs,
4:00:00 PM	strip tbg hager, release HES.packer. RIH with 4 joints 23/8 tbg. 130 ft. putting packer @5130 tubing end @ 6813, 218 totel joints in well. well flowing pump 5 bbls top kill.
4:30:00 PM	ND/ NU tree and flow lines.
5:00:00 PM	rig to swab in well. fluid level @4800 ft. made 7 swab runs well started flowing. heavy mist, slugging fluid. flow to flat tank to 9 PM recovered 15 bbls
9:00:00 PM	Put tubing to sales.

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/18/2004 Report # : 34

Summary : Production

End Time	Description
	production

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/17/2004 Report # : 33

Summary : flow back,production

End Time	Description
	production

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REGULATORY COMPLETION SUMMARY

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/16/2004 Report # : 32

Summary : Pump casing kill run champ pkr.RIH land on hanger, ND/NU tree. Swab in well

End Time	Description
10:00:00 AM	Top kill casing. pickup champ PKR. RIH 80 stands set packer and land on tubbing hanger. packer 5006 ft. tubing end @ 6688.
11:30:00 AM	ND BOPS NU Tree and flow lines.
4:30:00 PM	Rig up to swab.first swab run fluid level @5000 ft.pulled from 6200ft. made 6 runs recovered 20 bbls, gas cutt fluid, run #7 fluid level @ 4500 ft. pulled from 6600 ft. libht blow after each swab run, run # 11@ 4:30 pm well started to flow. recovered totel of 33 bbls 11 swab runs.
7:00:00 PM	flow 25 psi no choke mid. mist. 31 Inch. in flat tank @ 4:30 pm22 bbls 2 1/2 hours totel recovered 55 bbl. (drain flat tank 7" in tank 16 bbl)
11:59:00 PM	Flow back to flat tank no choke 25 psi on 2" line.

Form 3160-4
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: March 31, 2007

029

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. **UTU-73665**

1a. Type of Well ☐ Oil Well ☑ Gas Well ☐ Dry ☐ Other
b. Type of Completion: ☑ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr,.
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. **Prickly Pear Unit**

2. Name of Operator **BILL BARRETT CORPORATION**

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8. Lease Name and Well No. **Prickly Pear Unit Fed 10-4**

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

3a. Phone No. *(include area code)* **303-312-8168**

9. AFI Well No. **43-007-30823**

4. Location of Well *(Report location clearly and in accordance with Federal requirements)**

At surface **SESE, 75' FSL & 271' FEL**

At top prod. interval reported below **same**

At total depth **same**

10. Field and Pool, or Exploratory **Prickly Pear**

11. Sec., T., R., M., on Block and Survey or Area **10-T12S-R14E**

12. County or Parish **Carbon**

13. State **UT**

14. Date Spudded **08/13/2004**

15. Date T.D. Reached **08/22/2004**

16. Date Completed **09/26/2004** ☐ D & A ☑ Ready to Prod.

17. Elevations (DF, RKB, RT, GL)* **7578'**

18. Total Depth: MD **7746'** TVD **7746'**

19. Plug Back T.D.: MD **7654'** TVD **7654'**

20. Depth Bridge Plug Set: MD **N/A** TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)

TRPL COMBO (GR/DSN/SDL AND HRI), DIPOLE SONIC & CBL/GR/CCL

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

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

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12-1/4"	95/8 J-55	36	0	1303		340 HLC	73	Surf (CIR)	None
						190 Premag			
7-7/8"	51/2 N80	17	0	7746		1145 Poz	263	2020 (CBL)	None

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2 3/8"	6880'							

25. Producing Intervals / 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Mesaverde	6700'	7560'	7550' - 7560'	0.41"	30	Open
B) North Horn	5090'	5507'	7180' - 7190'	0.41"	30	Open
C) Middle Wasatch	4772'	4968'	6890' - 6900'	0.41"	30	Open
D)			6700' - 6710'	0.41"	30	Open

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

Depth Interval	Amount and Type of Material
7550' - 7560'	30# Purgel III LT 70Q CO2 foam frac: 118 tons of CO2, 70,000# 20/40 White Sand, 263 bbls
7180' - 7190'	30# Purgel III LT 70Q CO2 foam frac: 97 tons of CO2, 2,000# 20/40 White Sand, 375 bbls
6890' - 6900'	30# Purgel III LT 70Q CO2 foam frac: 179 tons of CO2, 119,000# 20/40 White Sand, 444 bbls
6700' - 6710'	30# Purgel III LT 70Q CO2 foam frac: 194 tons of CO2, 150,000# 20/40 White Sand, 488 bbls

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
09/26/2004	10/14/2004	24		0	269	12			Flowing

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
32/64	SI 110	365		0	269	12		Open

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status

(See instructions and spaces for additional data on page 2)

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28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status

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

Sold

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
				Base Resisti	**2176'**
				Wasatch	**2842'**
				Base Eocene	**3883'**
				North Horn	**5009'**
				Price River	**6941'**
				Base UPR	**7205'**

32. Additional remarks (include plugging procedure):

Copies of logs already submitted.

33. Indicate which itmes have been attached by placing a check in the appropriate boxes:

☐ Electrical/Mechanical Logs (1 full set req'd.) ☐ Geologic Report ☐ DST Report ☐ Directional Survey
☐ Sundry Notice for plugging and cement verification ☐ Core Analysis ☐ Other:

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

Name *(please print)* **Tracey Fallang** Title **Permit Analyst**

Signature Tracey Fallang Date **10/26/2004**

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.

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27. PERFORATION RECORD (cont.)				
INTERVAL (Top/Bot-MD)		SIZE	NO. HOLES	PERFORATION STATUS
5502	5507	0.41"	15	Open
5450	5454	0.41"	12	Open
5090	5095	0.41"	15	Open
4964	4968	0.41"	12	Open
4772	4781	0.41"	27	Open

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. (cont.)	
DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
5450-5507	30# Purgel III LT 70Q CO2 foam frac: 85 tons of CO2, 65,000# 20/40 White Sand, 188 bbls
4964-5095	30# Purgel III LT 70Q CO2 foam frac: 110 tons of CO2, 82,000# 20/40 White Sand, 271 bbls
4772-4781	30# Purgel III LT 70Q CO2 foam frac: 60 tons of CO2, 45,600# 20/40 White Sand,193 bbls

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

030

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
UTU 73665

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

7. If Unit or CA/Agreement, Name and/or No.
PRICKLY PEAR

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

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8. Well Name and No.
PRICKLY PEAR UNIT FEDEAL 10-4-12-14

2. Name of Operator
BILL BARRETT CORPORATION

Contact: TRACEY FALLANG
E-Mail: TFALLANG@BILLBARRETTCORP.COM

9. API Well No.
43-007-30823

3a. Address
1099 18TH STREET, SUITE 2300
DENVER, CO 80202

3b. Phone No. (include area code)
Ph: 303.312.8168

10. Field and Pool, or Exploratory
PRICKLY PEAR UNIT

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 10 T12S R14E SESE 75FSL 271FEL

11. County or Parish, and State
CARBON COUNTY, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

WEEKLY COMPLETION ACTIVITY REPORT FROM 10/21/04-10/25/04.

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DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #50543 verified by the BLM Well Information System
For BILL BARRETT CORPORATION, sent to the Moab
Committed to AFMSS for processing by MARIE MCGANN on 11/01/2004 ()

Name *(Printed/Typed)* TRACEY FALLANG — Title PERMIT ANALYST

Signature (Electronic Submission) — Date 10/29/2004

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ACCEPTED — Title Division of Resources — Date NOV - 1

Conditions of approval, if any, are attached. Approval of this notice 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.

Office Moab Field Office

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.

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

REGULATORY COMPLETION SUMMARY

CONFIDENTIAL

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/25/2004 Report # : 41

Summary : Production, RDMO WSU, equipment

End Time	Description
7:00:00 AM	Production, 271.19 mcfd. FTP 90, SICP 480, recovered 84 bbls 36 hours avg. 2.33bph, 10'3"n 400 bbl.
9:30:00 AM	Rig down Well service Unit, and equipment.chain up to move out rain and light snow. pull rig with Cat.

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/24/2004 Report # : 40

Summary : Production. Move up hole above U.Price River PKR @ 6840 tale pipe 6880. perfs 6890-7560, ND/NU Swab in.RDMO

End Time	Description
7:00:00 AM	flow testing Price River7550-60 & 7180-90. 13 hours flow time. FTP 50 psi. SICP 760 psi. 30 CK. 2.15 MCFD. recovered 1.66 bbls in 13 hours TBG dead..
9:00:00 AM	nipple down tree nipple up BOPs, rig work floor, strip tbg hanger. tbg. flowing pump top kill 14 bbls was told to pump 5 bbls. POOH lay down 9 joints 280 ft. Strip tbg hanger in set packer 7000LBs COMP. @ 6840, tale pipe @ 6880 10 ft above U. Price River. Testing perfs 6890-6900,7180-90, 7550-60.(see Downhole
10:30:00 AM	Rig down work floor Nipple down BOPs, Nipple up tree and flow lines.
11:15:00 AM	rig swab fluid level @ 4300 pulled one run tbg flowing unload 4 bbls died
4:30:00 PM	swab made 8 runs fluid level stayed around 4500 ft. no flow after runs. recovered 16 bbls
6:30:00 PM	ND Tree/ NU BOPs release HES Champ packer tbg flowing pump 6 bbl top kill, land tbg on hanger packer hanging free. ND BOPs NU Tree and flow lines.
6:30:00 PM	RIH with swab fluid level 4200 ft, pulled one swab run well started flowing, recovered kill fluid, gain of 3 bbl .
7:00:00 PM	FTP 300, SICP 780. 30 choke

REGULATORY COMPLETION SUMMARY

CONFIDENTIAL

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/23/2004 Report # : 39

Summary : flow test Price River @ 7550-60. swab testing.ND/NU Move PKR up hole to 7120+tale pipe.@ 7160'. ND/NU tree . Swab test both lowerPrice River Zones together.

End Time	Description
8:00:00 AM	testing Price River @ 7550-60, 11 hours flowing, FTP100 psi, SICP 650 psi, made 3.32 bbls, in 11 hours flow time, 111.21 MCFD. production tank 5ft 9in.
8:30:00 AM	open well to flat tank. blow down no flow. RIH with swab fluid level 4300 ft. pulled from 7000 ft. 10 min blow after run.
10:30:00 AM	run #2 fluid level 4800 pulled from 7400 ft. 5min blow after swab run. run #3 f. 5000 ft. 3min flow after pulling swab. same on runs 4& five fluid livel staying 5200 to 4300. run 6 no fjulid level gas cutt fluid in tbg. pulled from7400 ft. mist above swab cups. run #7 no fluid level pulled from 7400 ft. dry very little gas blow after pulling swab. totel bbls nrecovered 12 bbls 7 runs
12:00:00 PM	nipple down tree/ nipple BOPs. strip tbg hanger.Release HES, Champ PKR,
1:30:00 PM	POOH lay down 12 joints 23/8 tbg. Strip tbg hanger in, set HES 5.5 PKR @7120 with tale pipe @ 7160.60. test stage 2 with sages. (see Downhole Schematic with Final well report)
1:00:00 PM	Nipple down BOPs nipple up tree and flow lines
6:00:00 PM	rig swab ,fl 4600 ft. pulled from 6600 recovered 4.8 bbls strong flow after swab pulled. flowed 5 mins then died Run #2 FL 5400 pulled from 6600 ft. recovered 2.4 bbl light blow after swab pulled., run#3 FL 5500 pulled from 6600 ft. recovered 2. bbls . run #4 FL 5600. pulled from 6600 ft. recovered 1.2 bbls. run #5 FL. 5500 gas cut. recover 1.2 bbls. run # 6 fl.5600 pulled from 6600 recovered 1.2 bbls light blow after swab pulled. run #7 fluid level 5300 gas cutt. pulled from 6600 ft. recovered 1/2 bbl light blow after swab was pulled. Totel bbls recovered. 13.3 bbls.
11:59:00 PM	put tbg to sales 0 psi slow to pressure up for sales. 5ft 11" in production tank

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/22/2004 Report # : 38

Summary : Production, .26 MCFD no flow 50psi .top kill ND/NU, POOH W/PKR. change pkr to bottom of tbg. RIH Pickup tbg off ground set &land PKR. test Price River 7550-60, ND/NU, Swab.

End Time	Description
7:00:00 AM	production, no flow . recovered 1.66 bbls fluid in 13 hours made .26 MCFD.
9:00:00 AM	top kill tbg nipple down tree nipple up BOPs. rig floor to pull tbg. and packer out of hole.
12:00:00 PM	top kill as needed. pumped 67 bbl to POOH
2:00:00 PM	change over to RIH, pickup 1 joint tale pipe 51/2" halliburtion Champ PKR. 1 jt Xn nipple1 jt. X nipple 228 joints pickup 10 joints off ground set and land packer @ 7491 pkr top, tale pipe @ 7531 testing Price River @7550-60. (see final well report) strip tubing hanger set packer with 7000# comp. lock in hanger.
4:30:00 PM	rig down work floor, nipple down BOPs. nipple up tree and flow lines.
6:30:00 PM	rig swab. fluid level @5400 puled from 7000 ft. well flowing after swab pulled for 10 min. run swab fluid level @4000 ft. gas cutt pulled from 7400 ft. swabbed and flowed 12 bbls
8:00:00 PM	open to flat tank 2" line wait for flow, ON Production

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REGULATORY COMPLETION SUMMARY

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/21/2004 Report # : 37

Summary : production, move PKR down hole to 5530.32, 177 jts. + 52 jts tale pipe. landed @ 7220 below Price River

End Time	Description
8:00:00 AM	Production, FTP 100 psi. recovered 84.66 bbls in 11 hours. avg 7.6 BPH.
11:00:00 AM	Top Kill TBg. 5 bbls. ND tree NU BOPS. strip tbg hanger, Release 5.5" PKR. Tally pickup 11 joints 23/8 tbg. lower packer to 5530. tale pipe landed @ 7221.56 (See Final Well Report)
12:00:00 PM	Land tbg on hanger, ND BOPs NU tree,and flow lines,
3:00:00 PM	Rig swab . Fluid level @ 4800 ft. made 3 runs well started flowing. recovered 12 bbls.
5:00:00 PM	Flow to flat tank 2 hours, recovered 15 bbls well started dropping pressure and flow.
6:00:00 PM	run swab fluid level @ 4500 made 3 swab runs, recovered 9 bbls totel bbls swabbed and flowed 36, well flowing light mist
11:59:00 PM	put tbg. to sales for night

Form 3160- 5
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004- 0135
Expires: January 31,2004

SUNDRY NOTICES AND REPORTS ON WELLS

031

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

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5. Lease Serial No.: UTU 73665
6. If Indian, Allottee, or Tribe Name: n/a
7. If Unit or CA. Agreement Designation: Prickly Pear Unit
8. Well Name and No.: Prickly Pear Unit Fed 10-4
9. API Well No.: 43-007-30823
10. Field and Pool, or Exploratory Area: Prickly Pear Unit/Mesaverde
11. County or Parish, State: Carbon County, UT

1. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other
2. Name of Operator: BILL BARRETT CORPORATION
3a. Address: 1099 18TH STREET, STE 2300, DENVER, CO 80202
3b. Phone No. *(include area code)*: (303) 312-8168
4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*: 75' FSL & 271' FEL SESE 10-T12S-R14E

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/ Resume)	☐ Water Shut-off
	☐ Altering Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☒ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Weekly Activity Report
	☐ Change Plans	☐ Plug and abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths or pertinent markers and sands. Attach the Bond under which the work will performed or provide the Bond No. on file with the BLM/ BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notice shall be filed only after all requirements, including reclamantion, have been completed, and the operator has determined that the site is ready for final inspection.)

WEEKLY COMPLETION ACTIVITY REPORT FROM OCTOBER 26, 2004 THROUGH NOVEMBER 5, 2004.

RECEIVED
NOV 0 8 2004
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct.
Name *(Printed/ Typed)*: Tracey Fallang
Title: Permit Analyst
Signature: Tracey Fallang
Date: 5-Nov-04

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by
Title
Date
Conditions of approval, if any are attached. Approval of this notice 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.
Office

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 any department or agency of the United States any false, fictitiousor fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

REGULATORY COMPLETION SUMMARY

CONFIDENTIAL
Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 11/5/2004 Report # : 45

Summary : FCP 50psi. pump 20 bbl top kill. POOH 37 stds. w/PKR.RIH wire line set CIBP @6000 ft. POOH RDMO Mesa Wire. RIH W/PKR&set @ 5400 tale pipe @5448 swab test.3 runs dry light blow5#s. move up to 4923 w/PKR test stages 5&6

End Time	Description
7:00:00 AM	FCP 50 PSI. sales line
9:00:00 AM	pumped 20 bbl top kill. POOH with 37 joints and HES packer
11:00:00 AM	rig up Mesa wire line. pickup 5.5 7500psi cast Iron bridge plug RIH correlate to short joint set CIBP @ 6000 ft. POOH RDMO Mesa Wire line.
1:00:00 PM	RIH with 1 jt. 5.5 HES Champ packer 130 joints , stopped change over pull out of hole lay down 40 joints. RIH 40 joints from derrick set 5 1/2 HES Champ packer @ 5408 with one joint tale pipe @ 5448. totel of 174 joints
4:00:00 PM	Rig up swab, RIH fluid level @ 4600 ft. pulled from 5300 ft. recovered 1.5 bbls. dry blow after swab run. second run fluid level 4100 ft gas cutt no solid fluid. pull from 5300 ft. recovered no fluid, dry blow after run 5 psi 2 in. line. run #3 gas pockets 3300 ft. run in to 5300 POOH recovered no fluid. light dry blow after swab totel BBLs Recovered stage #5 1.5 bbls.
4:30:00 PM	Release Packer pull up hole 15 joints set packer @ 4920 158 joints tale pipe @ 4964 Test stages 5 and 6 together perf top @4964 bottom perf @ 5507. testing M.Wasatch to lower North Horn
5:30:00 PM	rig swab, RIH Fluid level @4100 pulled from 4850, recovered 3 bbls. RIH fluid level @ 4400 ft pulled from 4850 recovered 1.5 bbls totelo bbls 4.5 flowing light mist and gas.
5:45:00 PM	hook up tbg. to sales line.open to sales @ 5:45 PM 32 choke.

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 11/4/2004 Report # : 44

Summary : SITP 500, SICP 750. open to tank 32/64 ck. 30 min flow died. swab. POOH

End Time	Description
7:00:00 AM	SITP 500 psi 13.5 hours, SICP 750.
7:30:00 AM	open tbg. on 32/64 ck. flow dry gas 30 min. died light dry blow
2:00:00 PM	RIH with swab. fluid level @2700 pulled from 6500 ft. recovered 30 bbls. avg. 3 bbl per run. dry flow after swab pulled flow 1 min. died gas cutt fluid.
3:00:00 PM	Nipple down tree nipple up BOPs.
6:00:00 PM	strip tbg hanger, release 5.5 packer POOH 70 stands kill as needed 30 stds left in hole with packer.
6:00:00 PM	shut in tubing. casing to sales for night.

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 11/3/2004 Report # : 43

Summary : ND BOPs.NU Tree, Swab and flow. Shut in.

End Time	Description
7:00:00 AM	FTP o.
8:00:00 AM	Rig down floor. nipple down BOPs nipple up tree
5:30:00 PM	rig up swab, fluid level 2100 feet. made 5 runs well started flowing flow for 30 min. died. recovered 1 bbl. made swab run fluid level 5200 ft. pulled from 6500 ft. gas cutt fluid. recovered 39 bbls fluid level stayed around 5200 ft. gas blow for 1 min. after swab run. died down to light blow, dry gas
5:30:00 PM	shut in well for night for pressure build up.

REGULATORY COMPLETION SUMMARY

CONFIDENTIAL

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 11/2/2004 Report # : 42

Summary : MIRU Leed Well service and equip. top kill tbg ND/NU BOPS strip tbg hanger POOH lay down 6 jts. Set Pkr. landed on hanger. rig swab well started flowing.

End Time	Description
3:00:00 PM	Road wellservice unit to Loc.
4:30:00 PM	rig up pulling unit and equipment
5:30:00 PM	Top kill tbg 12 bbls strip tbg hanger. POOH lay down 6 joints 23/8 tbg. set packer and land on tbg hanger @ 6650 tale pipe @ 6691 above the U.Price River@ 6700 ft. lock down tbg hanger (see Final and Downhole Schematic)
6:00:00 PM	rig up swab well started flowing, recovered kill fluid, open to pit
6:30:00 PM	turn well to production @6:30pm

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 10/26/2004 Report # : 41

Summary : Production, RDMO WSU, equipment

End Time	Description
7:00:00 AM	Production, 271.19 mcfd. FTP 90, SICP 480, recovered 84 bbls 36 hours avg. 2.33bph, 10'3"n 400 bbl.
9:30:00 AM	Rig down Well service Unit, and equipment.chain up to move out rain and light snow. pull rig with Cat.

CONFIDENTIAL

Form 3160-4
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: March 31, 2007

032

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. **UTU-73665**

1a. Type of Well ☐ Oil Well ☑ Gas Well ☐ Dry ☐ Other
b. Type of Completion: ☑ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr,.
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. **Prickly Pear Unit**

2. Name of Operator **BILL BARRETT CORPORATION** Revised 11/10/04

8. Lease Name and Well No. **Prickly Pear Unit Fed 10-4**

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

3a. Phone No. *(include area code)* **303-312-8168**

9. API Well No. **43-007-30823**

4. Location of Well *(Report location clearly and in accordance with Federal requirements)**

At surface **SESE, 75' FSL & 271' FEL**

At top prod. interval reported below **same**

At total depth **same**

10. Field and Pool, or Exploratory **Prickly Pear**

11. Sec., T., R., M., on Block and Survey or Area **10-T12S-R14E**

12. County or Parish **Carbon**

13. State **UT**

14. Date Spudded **08/13/2004**

15. Date T.D. Reached **08/22/2004**

16. Date Completed **09/26/2004** ☐ D & A ☑ Ready to Prod.

17. Elevations (DF, RKB, RT, GL)* **7578'**

18. Total Depth: MD **7746'** TVD **7746'**

19. Plug Back T.D.: MD **7654'** TVD **7654'**

20. Depth Bridge Plug Set: MD **CIBP 6000'** TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
~~TRPL COMBO (GR/DSN/SDL AND HRI), DIPOLE SONIC & CBL/GR/CCL~~ Rec'd 12-16-04

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

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

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12-1/4"	95/8 J-55	36	0	1303		340 HLC	73	Surf (CIR)	None
						190 Premag			
7-7/8"	51/2 N80	17	0	7746		1145 Poz	263	2020 (CBL)	None

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2 3/8"	4980'							

25. Producing Intervals ~~Wasatch~~ - Per BGH

Formation	Top	Bottom
A) North Horn	5090'	5507'
B) Middle Wasatch	4772'	4968'
C)		
D)		

26. Perforation Record

Perforated Interval	Size	No. Holes	Perf. Status
7550' - 7560'	0.41"	30	Closed
7180' - 7190'	0.41"	30	Closed
6890' - 6900'	0.41"	30	Closed
6700' - 6710'	0.41"	30	Closed

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

Depth Interval	Amount and Type of Material
7550' - 7560'	30# Purgel III LT 70Q CO2 foam frac: 118 tons of CO2, 70,000# 20/40 White Sand, 263 bbls
7180' - 7190'	30# Purgel III LT 70Q CO2 foam frac: 97 tons of CO2, 2,000# 20/40 White Sand, 375 bbls
6890' - 6900'	30# Purgel III LT 70Q CO2 foam frac: 179 tons of CO2, 119,000# 20/40 White Sand, 444 bbls
6700' - 6710'	30# Purgel III LT 70Q CO2 foam frac: 194 tons of CO2, 150,000# 20/40 White Sand, 488 bbls

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
09/26/2004	10/14/2004	24		0	269	12			Flowing
Choke Size	**Tbg. Press. Flwg.**	**Csg. Press.**	**24 Hr. Rate →**	**Oil BBL**	**Gas MCF**	**Water BBL**	**Gas/Oil Ratio**	**Well Status**	
32/64	SI 110	365		0	269	12		Open	

28a. Production - Interval B

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

(See instructions and spaces for additional data on page 2)

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NOV 12 2004
DIV. OF OIL, GAS & MINING

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28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status

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

Sold

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
				Base Resisti	**2176'**
				Wasatch	**2842'**
				Base Eocene	**3883'**
				North Horn	**5009'**
				Price River	**6941'**
				Base UPR	**7205'**

32. Additional remarks (include plugging procedure):

Copies of logs already submitted.

33. Indicate which itmes have been attached by placing a check in the appropriate boxes:

☐ Electrical/Mechanical Logs (1 full set req'd.) ☐ Geologic Report ☐ DST Report ☐ Directional Survey
☐ Sundry Notice for plugging and cement verification ☐ Core Analysis ☐ Other:

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

Name *(please print)* **Tracey Fallang** Title **Permit Analyst**

Signature **Tracey Fallang** Digitally signed by Tracey Fallang DN: CN = Tracey Fallang, C = US, O = BRC Date: 2004.11.10 14:59:34 -07'00' Date **11/10/2004**

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.

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27. PERFORATION RECORD (cont.)				
INTERVAL (Top/Bot-MD)		SIZE	NO. HOLES	PERFORATION STATUS
5502	5507	0.41"	15	Open
5450	5454	0.41"	12	Open
5090	5095	0.41"	15	Open
4964	4968	0.41"	12	Open
4772	4781	0.41"	27	Open

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. (cont.)	
DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
5450-5507	30# Purgel III LT 70Q CO2 foam frac: 85 tons of CO2, 65,000# 20/40 White Sand, 188 bbls
4964-5095	30# Purgel III LT 70Q CO2 foam frac: 110 tons of CO2, 82,000# 20/40 White Sand, 271 bbls
4772-4781	30# Purgel III LT 70Q CO2 foam frac: 60 tons of CO2, 45,600# 20/40 White Sand,193 bbls

Form 3160- 5
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

COPY

FORM APPROVED
OMB No. 1004- 0135
Expires: January 31,2004

033

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

DEN

2. Name of Operator
BILL BARRETT CORPORATION

3a. Address
1099 18TH STREET, STE 2300, DENVER, CO 80202

3b. Phone No. *(include area code)*
(303) 312-8168

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
75' FSL & 271' FEL
SESE 10-T12S-R14E

5. Lease Serial No.
UTU 73665

6. If Indian, Allottee, or Tribe Name
n/a

7. If Unit or CA. Agreement Designation
Prickly Pear Unit

8. Well Name and No.
Prickly Pear Unit Fed 10-4

9. API Well No.
43-007-30823

10. Field and Pool, or Exploratory Area
Prickly Pear Unit/Mesaverde

11. County or Parish, State
Carbon County, UT

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/ Resume)	☐ Water Shut-off
	☐ Altering Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☒ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other **Weekly Activity Report**
	☐ Change Plans	☐ Plug and abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths or pertinent markers and sands. Attach the Bond under which the work will performed or provide the Bond No. on file with the BLM/ BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notice shall be filed only after all requirements, including reclamantion, have been completed, and the operator has determined that the site is ready for final inspection.)

WEEKLY COMPLETION ACTIVITY REPORT FROM NOVEMBER 6, 2004 THROUGH NOVEMBER 10, 2004.
FINAL REPORT.

RECEIVED
NOV 15 2004
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct.
Name *(Printed/ Typed)*
Tracey Fallang

Title Permit Analyst

Signature Tracey Fallang

Date 12-Nov-04

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any are attached. Approval of this notice 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.

Office

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 any department or agency of the United States any false, fictitiousor fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

REGULATORY COMPLETION SUMMARY

CONFIDENTIAL

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 11/10/2004 Report # : 50 End Time Description

Summary : production Enter the description here

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 11/9/2004 Report # : 49

Summary : Production, POOH Lay down packer, TIH ck. for fill. lay down tbg land on hanger, ND/NP tree , swab in tbg. on production, RDMO well service equip.

End Time	Description
7:00:00 AM	Production FTP 60 psi 32 ck. SICP 110 flowing159.24 mcfd. recovered 8.3 bls 62 flowing hours.
9:00:00 AM	Blow down tubing and casing, POOH with HES packer and tubing lay down HES 5.5 Champ packer and tale joint
12:00:00 PM	Trip in hlole with 23/8 notched tbg. coller 1 jt 23/8 tbg XN nipple 1 jt. 23/8 X nipple 154 joints from derrick. pick up 32 joints off ground check for sand fill. clean no fill 12:pm
1:30:00 PM	change over POOH lay down 34 joints on seals. land tubing on tbg. hanger 158 joints in X&XN nipples.notched coller on bottom.(see Final Well Report & Downhole Schematic)
2:00:00 PM	Nipple down BOPs nipple up well head and flow lines. no fluid pumped in well.
3:30:00 PM	Rig swab RIH no fluid level , recovered 20 gal. gas cutt fluid. put tubing to production
6:00:00 PM	rig down well service unit and equipment. move off loc Cat pulling Well service unit.

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 11/8/2004 Report # : 48 End Time Description

Summary : Production 11:59:00 PM production

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 11/7/2004 Report # : 47 End Time Description

Summary : Producion 11:59:00 PM Production

CONFIDENTIAL

REGULATORY COMPLETION SUMMARY

Bill Barrett Corporation

Well Name : **Prickly Pear Unit Fed #10-4-12-14** API : 43-007-30823 Area : Nine Mile Canyon

Ops Date : 11/6/2004 Report # : 46

Summary : flow stages 5&6. swab test, release packer flow stages 5,6&7 to sales flow 183. 67 in.

End Time	Description
7:00:00 AM	flow stages 5&6 to sales, 87.76 mcfd, 32 ck. FTP 45 psi, SICP 425
9:00:00 AM	pour swab rope scoket
12:00:00 PM	RIH with swab fluid level @ 4300 gas pocket POOH recovered 1.5 bbls second run no fluid level pulled from 4850 recovered 1.5 bbls. dry blow after swab pulled 5 psi 2" line. run #3 no fluid level recovered 3/4 bbl totel swabbed 3 3/4 bbls pulled from nipple. dry blow after swab pulled. run #4 no level no fluid recovered. run #5 no level no fluid recovered.
1:00:00 PM	Release HES Packer, flow casing with stages 5and 6.. stages 5.6 &7 flowing together. SICP 425 dropped to 110 PSi
1:30:00 PM	put tubing to sales line to meter flow. 183.67
5:00:00 PM	sicp 125 psi. flowing tbg. 50 psi. try to run swab, flow stopped swab from going in well. put back to sales.

034

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

FORM 6

ENTITY ACTION FORM

Operator: Bill Barrett Corp

Operator Account Number: N 2165

Address: 1099 18th St Suite 2300

city Denver

state CO zip 80202

Phone Number: (303) 312-8168

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4300730522	Prickly Pear State 16-15		SWSE	16	12S	15E	Carbon
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
D	13605	14461				12/22/2004	

Comments: Correction by DOGM as no unit participating area established. wstc = 14461 Please amend reports to begining of production.

CONFIDENTIAL

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4300730823	Prickly Pear U Fed 10-4		SESE	10	12S	14E	Carbon
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
D	13605	14462				12/22/2004	

Comments: Correction by DOGM as no unit participating area established. mncs = 14462 Please amend reports to begining of production.

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Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4300730828	Prickly Pear U 21-2		SWNW	21	12S	15E	Carbon
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
D	13605	14463				12/22/2004	

Comments: Correction by DOGM as no unit participating area established. wstc = 14463 Please amend reports to begining of production.

CONFIDENTIAL

ACTION CODES:

- **A** - Establish new entity for new well (single well only)
- **B** - Add new well to existing entity (group or unit well)
- **C** - Re-assign well from one existing entity to another existing entity
- **D** - Re-assign well from one existing entity to a new entity
- **E** - Other (Explain in 'comments' section)

Earlene Russell For DOGM

Name (Please Print)

Earlene Russell

Signature

Engineering Tech

Title

12/22/2004

Date

(5/2000)

Sundry Number: 24751 API Well Number: 43007308230000

FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-73665

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.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: PRICKLY PEAR

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: PRICKLY PEAR U FED 10-4

2. NAME OF OPERATOR: BILL BARRETT CORP

9. API NUMBER: 43007308230000

3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300 , Denver, CO, 80202

PHONE NUMBER: 303 312-8164 Ext

9. FIELD and POOL or WILDCAT: STONE CABIN

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0075 FSL 0271 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 10 Township: 12.0S Range: 14.0E Meridian: S

COUNTY: CARBON

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 4/16/2012	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Swab Test Procedures

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

See attached Swab Test procedures for the Prickly Pear UF 10-4 well.
Please contact Brady Riley at 303-312-8115 with questions.

Accepted by the Utah Division of Oil, Gas and Mining

Date: April 24, 2012

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Brady Riley	303 312-8115	Permit Analyst
SIGNATURE N/A		**DATE** 4/11/2012

RECEIVED: Apr. 11, 2012

Bill Barrett Corporation

Prickly Pear Unit Federal 10-4 Swab Test Procedures

1. PU CIBP, TIH and set CIBP at 4,400'. Dump bail 50' of cement on top of CIBP allow to set.

2. Test casing by pressuring up to 4,000 psi and hold for 30 minutes. Record pressure test on Barton chart recorder for 30 minutes after stabilizing. Send chart to Denver to Heidi Reger.

3. Perforate the following zones (3 spf, 120 degree phasing, .35 EHD).

Top	Bottom	Interval
3,265'	3,275'	10'
3,335'	3,355'	20'
3,480'	3,520'	40'
3,630'	3,660'	30'
3,674'	3,700'	26'
3,730'	3,750'	20'
3,776'	3,786'	10'
3,990'	4,000'	10'
4,090'	4,100'	10'
4,132'	4,145'	13'

4. TIH with 2-3/8" workstring with PKR. Set PKR @ 3,240'. Swab to obtain a representative water sample from the perforated formation.

1099 18TH STREET SUITE 2300 DENVER, CO 80202 USA
T 303.293.9100 F 303.291.0420 www.BILLBARRETTCORP.com

RECEIVED: Apr. 11, 2012

GARY R. HERBERT
Governor
GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

February 4, 2013

Ground Water Program Director
U. S. Environmental Protection Agency
MS 8P-W-GW
1595 Wynkoop St
Denver, Colorado 80202-1129

43 007 30823

Subject: Aquifer Exemption Request for One-Half Mile radius around the Prickly Pear Unit Federal 10-4 Well, located SE1/4 SE1/4 of Section 10, T12S, R14E, Carbon County, Utah, Cause No. UIC-384.1

Dear Sir:

Bill Barrett Corporation (BBC) petitioned the Board of Oil, Gas and Mining (Board) for an Underground Injection Control (UIC) permit to dispose of water into the Prickly Pear Unit Fed 10-4 Well located in Section 10, T12S, R14E, Carbon County, Utah and to exempt the Wasatch and Middle Wasatch Formations, also known as "Mesaverde Aquifer" within one-half mile radius of the well. Proper public notice was given and a public hearing was held before the Board on December 5, 2012.

However, before the hearing, the Price Field Office of the BLM (PBLM) expressed concerns based on its historic water sampling in the general area that the baseline water quality of the proposed injection zones had a total dissolved solid (TDS) levels less than 10,000 mg/L and requested that water samples be taken.

On June 26, 2012, water samples were taken from the injection zones and split between BBC and the PBLM. BBC's contracted laboratory analysis reflected a TDS of 11,000 mg/L, while the PBLM's laboratory reflected a 9216 mg/L. The BBC's laboratory also reflected high Barium levels, and PBLM's analysis reflected Arsenic and Lead levels in excess of EPA primary drinking standards.

The only objections were those by the PBLM. No other objections were received by mail or at the hearing in response to this matter. At that hearing the Board unanimously approved the application, but with an aquifer exception. PBLM expressed that it had no objection to the Board granting an aquifer exemption.

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

In accordance with 40 CFR Part 144.7, the Division requests your approval of a UIC program revision for this aquifer exemption.

Enclosed is a copy of the Board Order, public notices, and certificate of service submitted in support of this request. If you would like to discuss this requested exemption or need more information, please call me at 801-538-5334 or John Rogers at 801-538-5349.

Sincerely,

John R. Baza
Director

JRB/JR/js

Enclosure

cc: John Rogers
Board File
Well File

N:\O&G Permits\Injection Permits\Bill Barrett Corp\Prickly Pear Unit Federal 10-4

GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

February 20, 2013

Bruce Suchomel
Environmental Protection Agency –UIC Program
USEPA Region 8 (P-W-UIC)
1595 Wynkoop St
Denver, Colorado 80202-1129

43 007 30823

Subject: Aquifer Exemption Request for One-Half Mile radius around the Prickly Pear Unit Federal 10-4 Well, located SE1/4 SE1/4 of Section 10, T12S, R14E, Carbon County, Utah, Cause No. UIC-384.1

Dear Bruce:

I have included the additional information you requested concerning the aquifer exemption noted above per our conversation on February 14th, 2013.

- **Map showing area of to be exempted** – see attachment A
- **Name of the formation or aquifer to be exempted** ---- Wasatch and Middle Wasatch, also known as " Mesaverde Aquifer"
- **Subsurface depth of formation to be exempted** -----injection intervals between 3265 and 4145 feet below ground level in the subject well.
- **Vertical confinement from other USDWs** ---- The literature discussing aquifers in this particular area is limited. U.S. Geological Survey, Water-Resources Investigations Report 92-4161 *does* indicate however, in the Uinta Basin, north of Carbon County, the Douglas Creek-Renegade aquifer occurs above the Wasatch-Green River confining unit. The Wasatch-Green River confining unit lies below the Green River and above the North Horn (Glover, 1996). In addition, there are many sand-shale sequences throughout the Wasatch that would serve as more than adequate seals to upward movement of higher TDS injected water. State of Utah, Department of Natural Resources, Technical publication No. 92, (Howells, et al. 1987) indicates that the moderately saline groundwater interface occurs approximately +4500' subsea, in this area, which would equate to a total vertical depth of 3093', which occurs in the upper portion of the Wasatch formation. A study that BBC had conducted on the topic of 10,000 TDS interface or

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

moderately saline interface, and through the use of Pickett plots, in concert with actual laboratory water analysis, concluded the 10,000 TDS interface occurred somewhere above the Uteland Butte of the Green River Formation approximately 2400' TVD and 5193' subsea. In either case, it would stand to reason the Wasatch formation in the West Tavaputs Plateau area, with its interbedded shales, and mudstones, would protect any drinking water sources or aquifers of water of less than 10,000 TDS from contamination of higher TDS water, injected in deeper formations. In the area of the proposed injection well, the highest injection perf occurs 4328 ft above sea level or 3265 ft below ground level in the Prickly Pear Unit Federal 10-4.

- **Thickness of formation or aquifer to be exempted** ----- 850 feet
- **Area of exemption** ---- 502.40 acres
- **A water quality analysis of the formation or aquifer to be exempted** – see attachment B

I have included as attachments:

(1) Request for Agency Action (RAA)
(2) Petitioner's Exhibits
(3) Findings of Facts

This should provide you with any additional information that you may require. If you would like to discuss this requested exemption or need more information, please call me at 801-538-5349.

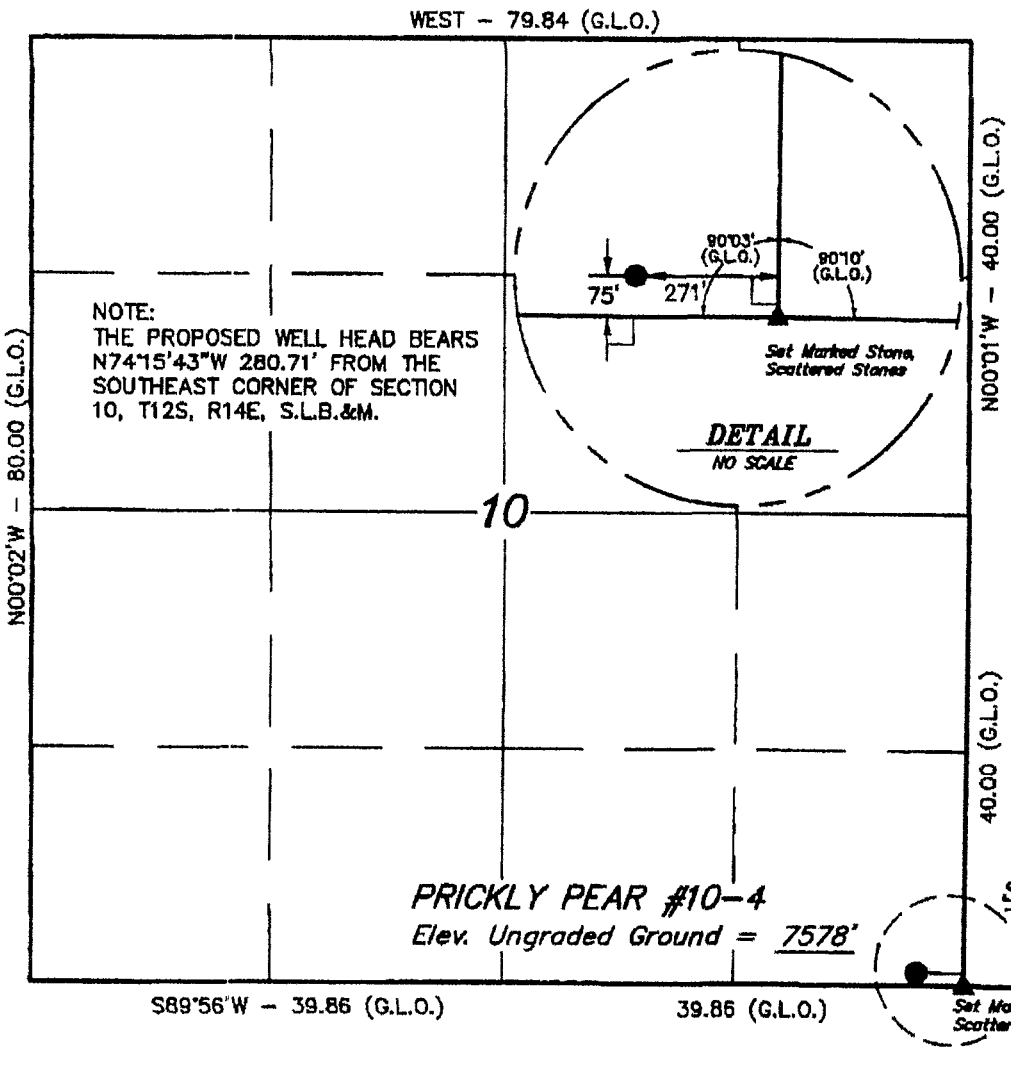
Sincerely,

John Rogers
Associate Director – Oil & Gas

JCR/js
Enclosures

Attachment A

T12S, R14E, S.L.B.&M.

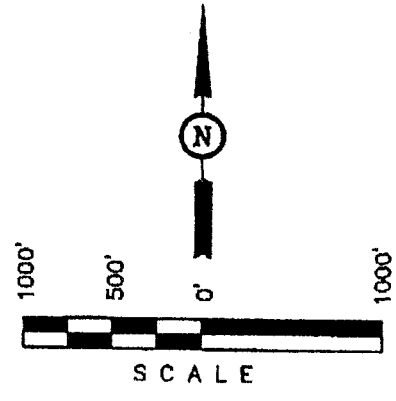


WASATCH OIL & GAS LLC.

Well location, PRICKLY PEAR #10-4, located as shown in the SE 1/4 SE 1/4 of Section 10, T12S, R14E, S.L.B.&M., Carbon County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 7, T12S, R15E, S.L.B.&M. TAKEN FROM THE COWBOY BENCH, QUADRANGLE, UTAH, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7563 FEET.



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. 161319
STATE OF UTAH

LEGEND:

└ = 90° SYMBOL
● = PROPOSED WELL HEAD.
▲ = SECTION CORNERS LOCATED.

BASIS OF BEARINGS

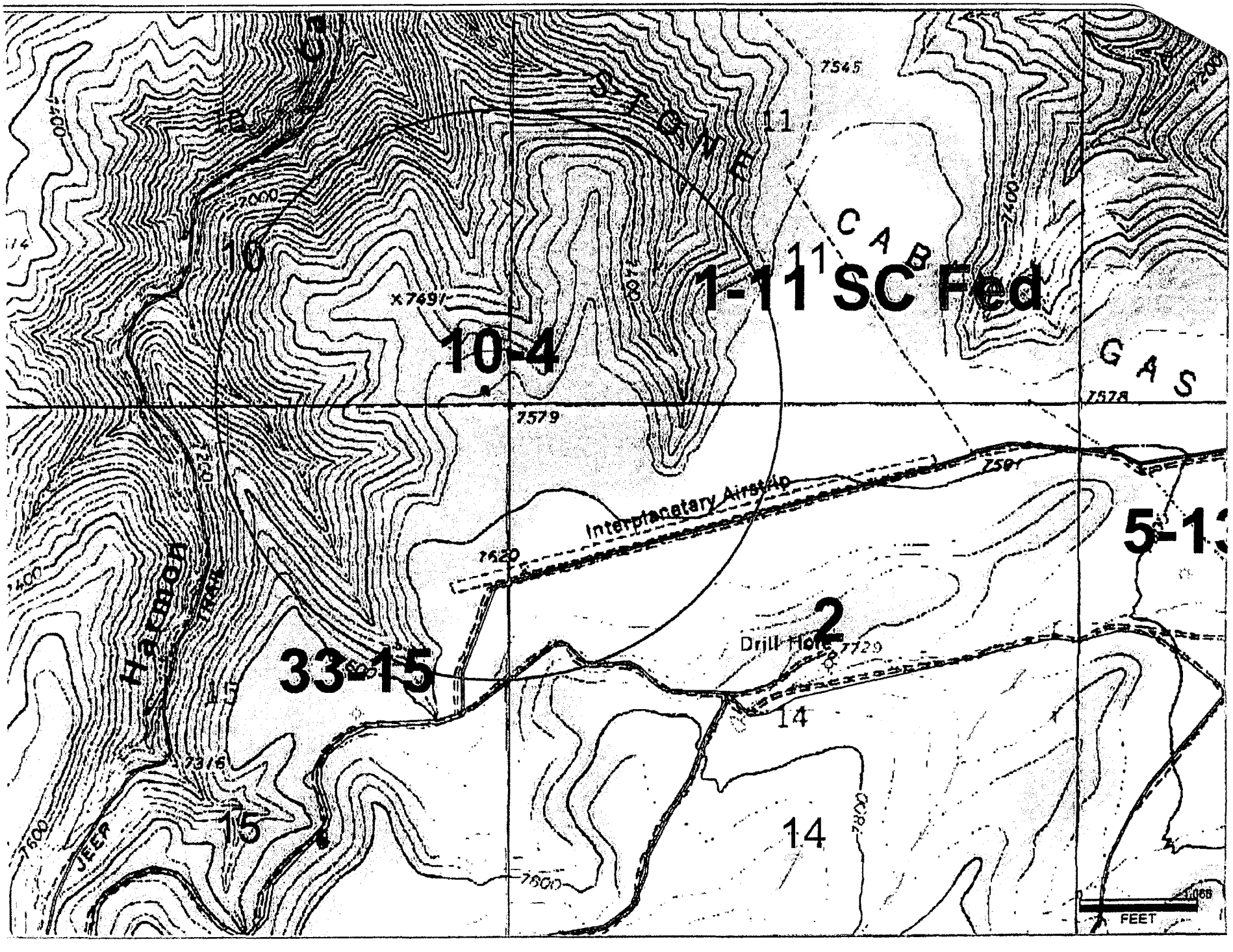
BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

LATITUDE = 39°46'50"
LONGITUDE = 110°19'30"

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

SCALE: 1" = 1000'	DATE SURVEYED: 10-25-01	DATE DRAWN: 11-05-01
PARTY: B.B. W.L. D.R.B.	REFERENCES: G.L.O. PLAT	
WEATHER: COOL	FILE: WASATCH OIL & GAS LLC.	

SE¼ SE¼ of Section 10, T 12 South Range 14 East, SLM, Carbon County, UTAH



Attachment B

R649-5

2.7

Standard laboratory analyses of:

2.7.1. The fluid to be injected,

Below is a summary of the results from water analysis included in this section.

Prickly Pear Produced Water Analysis Results

Well Name	Test Date	TDS (ppm)
PrPr 7-16	4/5/2004	53,522
PrPr 5-16	7/14/2004	60,747
PrPr 16-15	7/14/2004	74,301
PrPr 13-16	7/14/2004	33,553

These are examples of the wells in Prickly Pear that will be disposed of in this SWD.

Water Analysis Report

09-Aug-04

Date Sampled : 14-Jul-04
Date Received : 15-Jul-04
Date Reported : 22-Jul-04

Bill Barrett Corporation
Point

UT

Attention : Fred Goodrich
cc1 :

cc2 :
cc3 :
Allen

Comments :

Field : Nine Mile/Peters

Lease : Prickley Pear

Location : Prickley Pear 16-15

Sample Point : water tank

Salesman : Larry Curtis

Analyst : Karen Hawkins

CATIONS

Calcium :	4,320	mg/l
Magnesium :	413	mg/l
Barium :		mg/l
Strontium :		mg/l
Iron :	28.0	mg/l
Manganese :		mg/l
Sodium :	23402	mg/l

ANIONS

Chloride :	43,000	mg/l
Carbonate :	0	mg/l
Bicarbonate :	2,440	mg/l
Sulfate :	696	mg/l

mg/l m

pH (field) :	6.91	
Temperature :	65	degrees F
Ionic Strength :	1.27	
Resistivity :		ohm/meters
Ammonia :		ppm

Specific Gravity :	1.040	grams/ml
Total Dissolved Solids :	74,301	ppm
CO2 In Water :	300	mg/l
CO2 in Gas :	0.03	mole %
H2S in Water :		mg/l
Dissolved Oxygen :		ppm

SI calculations based on Tomson-Oddo parameters

Calcite (CaCO3) SI :	0.72	Calcite PTB :	722.6
Calcite (CaCO3) SI @ 100 F :	0.87	Calcite PTB @ 100 F :	821.1
Calcite (CaCO3) SI @ 120 F :	1.08	Calcite PTB @ 120 F :	936.1
Calcite (CaCO3) SI @ 140 F :	1.30	Calcite PTB @ 140 F :	1034.6
Calcite (CaCO3) SI @ 160 F :	1.52	Calcite PTB @ 160 F :	1111.3
Calcite (CaCO3) SI @ 180 F :	1.76	Calcite PTB @ 180 F :	1179.7
Calcite (CaCO3) SI @ 200 F :	1.99	Calcite PTB @ 200 F :	1229.0
Gypsum (CaSO4) SI :	-0.54	Gypsum PTB :	N/A
Barite (BaSO4) SI :	N/A	Barite PTB :	N/A
Celestite (SrSO4) SI :	N/A	Celestite PTB :	N/A

Water Analysis Report

09-Aug-04

Date Sampled : 14-Jul-04
Date Received : 15-Jul-04
Date Reported : 22-Jul-04

Bill Barrett Corporation
Point

UT
16

Attention : Fred Goodrich
cc1 :
cc2 :
cc3 :
Allen
Comments :

Field : Nine Mile/Peters
Lease : Prickley Pear
Location : Prickley Pear 13-
Sample Point : water tank
Salesman : Larry Curtis
Analyst : Karen Hawkins

CATIONS

Calcium :	1,320	mg/l
Magnesium :	194	mg/l
Barium :		mg/l
Strontium :		mg/l
Iron :	3.0	mg/l
Manganese :		mg/l
Sodium :	10912	mg/l

ANIONS

Chloride :	17,400	mg/l
Carbonate :	0	mg/l
Bicarbonate :	2,684	mg/l
Sulfate :	1,040	mg/l

mg/l m

pH (field) :	6.92		**Specific Gravity :**	1.035	grams/ml
Temperature :	85	degrees F	**Total Dissolved Solids :**	33,553	ppm
Ionic Strength :	0.56		**CO2 in Water :**	300	mg/l
Resistivity :		ohm/meters	**CO2 in Gas :**	0.03	mole %
			H2S in Water :		mg/l
Ammonia :		ppm	**Dissolved Oxygen :**		ppm

SI calculations based on Tomson-Oddo parameters

Calcite (CaCO3) SI :	0.61	Calcite PTB :	514.0
Calcite (CaCO3) SI @ 100 F :	0.76	Calcite PTB @ 100 F :	608.7
Calcite (CaCO3) SI @ 120 F :	0.97	Calcite PTB @ 120 F :	721.4
Calcite (CaCO3) SI @ 140 F :	1.19	Calcite PTB @ 140 F :	816.1
Calcite (CaCO3) SI @ 160 F :	1.41	Calcite PTB @ 160 F :	897.2
Calcite (CaCO3) SI @ 180 F :	1.65	Calcite PTB @ 180 F :	967.1
Calcite (CaCO3) SI @ 200 F :	1.88	Calcite PTB @ 200 F :	1021.2
Gypsum (CaSO4) SI :	-0.68	Gypsum PTB :	N/A
Barite (BaSO4) SI :	N/A	Barite PTB :	N/A
Celestite (SrSO4) SI :	N/A	Celestite PTB :	N/A

Water Analysis Report

24-Jun-04

Date Sampled : 05-Apr-04
Date Received : 07-Apr-04
Date Reported : 12-Apr-04

Bill Barrett Corporation

UT

Attention : Fred Goodrich
cc1 :
cc2 :
cc3 :
Comments :

Field : Nine Mile/Peters Point
Lease : Prickley Pear
Location : Prickley Pear 07-16
Sample Point : wellhead
Salesman : Larry Curtis
Analyst : Karen Hawkins Allen

CATIONS

Calcium :	4,600	mg/l
Magnesium :	194	mg/l
Barium :		mg/l
Strontium :		mg/l
mg/l		mg/l
Iron :	75.0	mg/l
Sodium :	15552	mg/l

ANIONS

Chloride :	31,800	mg/l
Carbonate :	0	mg/l
Bicarbonate :	488	mg/l
Sulfate :	813	mg/l

pH (field) :	6.34		**Specific Gravity :**	1.055	
grams/ml					
Temperature :	85	degrees F	**Total Dissolved Solids :**	53,522	ppm
Ionic Strength :	0.92		**CO2 in Water :**	352	mg/l
			CO2 in Gas :	0.03	mole %
Resistivity :		ohm/meters			
			H2S in Water :	7.0	mg/l
Ammonia :		ppm	**Dissolved Oxygen :**		ppm

SI calculations based on Tomson-Oddo parameters

Calcite (CaCO3) SI :	-0.63	Calcite PTB :	N/A
Calcite (CaCO3) SI @ 100 F :	-0.48	Calcite PTB @ 100 F :	N/A
Calcite (CaCO3) SI @ 120 F :	-0.26	Calcite PTB @ 120 F :	N/A
Calcite (CaCO3) SI @ 140 F :	-0.05	Calcite PTB @ 140 F :	N/A
Calcite (CaCO3) SI @ 160 F :	0.18	Calcite PTB @ 160 F :	50.4
Calcite (CaCO3) SI @ 180 F :	0.41	Calcite PTB @ 180 F :	102.9
Calcite (CaCO3) SI @ 200 F :	0.65	Calcite PTB @ 200 F :	144.5
Gypsum (CaSO4) SI :	-0.40	Gypsum PTB :	N/A
Barite (BaSO4) SI :	N/A	Barite PTB :	N/A
Celestite (SrSO4) SI :	N/A	Celestite PTB :	N/A

Water Analysis Report

09-Aug-04

Date Sampled : 14-Jul-04
Date Received : 15-Jul-04
Date Reported : 22-Jul-04

Bill Barrett Corporation
Point

UT
16

Attention : Fred Goodrich
cc1 :
cc2 :
cc3 :
Allen
Comments :

Field : Nine Mile/Peters
Lease : Prickley Pear
Location : Prickley Pear 05-
Sample Point : water tank
Salesman : Larry Curtis
Analyst : Karen Hawkins

CATIONS

Calcium :	3,200	mg/l
Magnesium :	49	mg/l
Barium :		mg/l
Strontium :		mg/l
Iron :	3.0	mg/l
Manganese :		mg/l
Sodium :	19697	mg/l

ANIONS

Chloride :	33,800	mg/l
Carbonate :	0	mg/l
Bicarbonate :	3,660	mg/l
Sulfate :	338	mg/l

mg/l m

pH (field) :	6.91	
Temperature :	85	degrees F
Ionic Strength :	1.02	
Resistivity :		ohm/meters
Ammonia :		ppm

Specific Gravity :	1.050	grams/ml
Total Dissolved Solids :	60,747	ppm
CO2 in Water :	300	mg/l
CO2 in Gas :	0.03	mole %
H2S in Water :		mg/l
Dissolved Oxygen :		ppm

SI calculations based on Tomson-Oddo parameters

Calcite (CaCO3) SI :	1.00	Calcite PTB :	1218.7
Calcite (CaCO3) SI @ 100 F :	1.15	Calcite PTB @ 100 F :	1328.0
Calcite (CaCO3) SI @ 120 F :	1.36	Calcite PTB @ 120 F :	1464.7
Calcite (CaCO3) SI @ 140 F :	1.58	Calcite PTB @ 140 F :	1584.9
Calcite (CaCO3) SI @ 160 F :	1.80	Calcite PTB @ 160 F :	1683.3
Calcite (CaCO3) SI @ 180 F :	2.04	Calcite PTB @ 180 F :	1770.7
Calcite (CaCO3) SI @ 200 F :	2.27	Calcite PTB @ 200 F :	1839.0
Gypsum (CaSO4) SI :	-0.92	Gypsum PTB :	N/A
Barite (BaSO4) SI :	N/A	Barite PTB :	N/A
Celestite (SrSO4) SI :	N/A	Celestite PTB :	N/A

R649-5

2.7.2

The fluid in the formation into which the fluid is being injected:

Fluid samples from the formation to be injected in will be taken at the time of completion. Compatibility tests will also be run at that time.

R649-5

2.7.3

The compatibility of the fluids:

Fluid samples from the formation to be injected in will be taken at the time of completion. Compatibility tests will also be run at that time.

Nalco Laboratory
1465 East 1650 South Vernal UT 84078
Phone (435) 789-2069 Email globallimssupport@nalco.com

NALCO An Ecolab Company ECOLAB

Final - Report Number: 645630
BILL BARRETT CORP
NINE MILE FIELD
ROOSEVELT UT 84066 USA
Sold To: 0500043402 **Ship To:** 0500043402
Representative: Martin L Olson

Sample Number	ACW001822
Date Sampled	26-Jun-2012 08:54
Date Received	28-Jun-2012
Date Completed	28-Jun-2012
Date Authorized	28-Jun-2012

Water Analysis

This sample was analyzed as received, the results being as follows:

Sampling point: 10-4-12-14 #2

Water

Alkalinity	**Test Method**	**Total**
Bicarbonate (CaCO3)		1000 mg/L
Bicarbonate (HCO3)		1200 mg/L

Physical	**Test Method**	**Total**
Conductivity at 25°C		18000 µS/cm
Resistivity		0.5682 Ohms-M
Total Cations		3088 mg/L
Total Anions		8599.1 mg/L
pH @ 25°C		7.0 pH
Dissolved Solids (calculated)		11000 mg/L

Metals	**Test Method**	**Total**
Aluminum (Al)		<1.5 mg/L
Antimony (Sb)		<5 mg/L
Barium (Ba)		3.6 mg/L
Boron (B)		2.9 mg/L
Calcium (Ca)		520 mg/L
Calcium (CaCO3)		1300 mg/L
Chromium (Cr)		<0.8 mg/L
Cobalt (Co)		<0.5 mg/L
Copper (Cu)		<1.5 mg/L
Iron (Fe)		150 mg/L
Lead (Pb)		<5.0 mg/L
Lithium (Li)		<0.3 mg/L
Magnesium (Mg)		91 mg/L
Magnesium (CaCO3)		380 mg/L
Manganese (Mn)		1.4 mg/L
Molybdenum (Mo)		<2.0 mg/L
Nickel (Ni)		<0.5 mg/L
Phosphorus (P)		18 mg/L
Potassium (K)		150 mg/L
Silicon (Si)		18 mg/L
Silica (SiO2)		38 mg/L
Sodium (Na)		2200 mg/L
Sodium (CaCO3)		4700 mg/L

Tasia Hamann

Authorized by Tasia D Hamann

Nalco Laboratory
1465 East 1650 South Vernal UT 84078
Phone (435) 789-2069 Email globallimssupport@nalco.com

NALCO An Ecolab Company ECOLAB

Final - Report Number: 645630
BILL BARRETT CORP
NINE MILE FIELD
ROOSEVELT UT 84066 USA
Sold To: 0500043402 **Ship To:** 0500043402
Representative: Martin L Olson

Sample Number	ACW001822
Date Sampled	26-Jun-2012 08:54
Date Received	28-Jun-2012
Date Completed	28-Jun-2012
Date Authorized	28-Jun-2012

Water Analysis

This sample was analyzed as received, the results being as follows:

Sampling point: 10-4-12-14 #2

Strontium (Sr)		8.4 mg/L
Titanium (Ti)		<0.5 mg/L
Vanadium (V)		<0.5 mg/L
Zinc (Zn)		<0.5 mg/L

Field Analysis	**Test Method**	**Total**
120 BBLS PERFS 3265'-4145'		

Inorganic Constituents	**Test Method**	**Total**
Chloride (Cl)		3000 mg/L
Sulfate (SO4)		4600 mg/L

Tasia Hamann

Authorized by Tasia D Hamann

Attachment 2

UTAH STATE DEPARTMENT OF HEALTH
DIVISION OF LABORATORY SERVICES
Environmental Chemistry Analysis Report

BUREAU OF LAND MANAGEMENT - PRICE
CHRIS CONRAD
125 S 600 W
PRICE UT 84501 435-636-3667

Lab Number: 201203557 Sample Type: 04 Cost Code: 900B
Description: BBC PRICKLY PEAR 10-4
Collector: CPC

Site ID: Source No: 00
Sample Date: 06/26/2012 Time: 12:00

Organic Review:
Inorganic Review: 07/30/2012
Radiochemistry Review:
Microbiology Review:

TEST RESULTS:

Manual pH	7.19	T-Arsenic	143.0 ug/l
T-Barium	0.232 mg/l	T-Cadmium	<0.1 ug/l
T-Chromium	32.1 ug/l	T-Lead	147.0 ug/l
T-Mercury	<0.2 ug/l	T-Selenium	21.8 ug/l
T-Silver	<0.5 ug/l	TDS @ 180C *	9216 mg/l

QUALIFYING COMMENTS (*) on test results:

TDS @ 180C Holding time was exceeded before analysis was completed.

TDS @ 180C Sample received with insufficient holding-time remaining for analysis.

For Drinking Water Regulatory Compliance Information please call:
Division Of Drinking Water/Compliance (801)536-4200

Trace levels up to 0.2 ppb metals may be present in bottles

END OF REPORT

Jean Sweet <jsweet@utah.gov>

Prickly Pear 10-4 aquifer exemption request

1 message

John Rogers <johnrogers@utah.gov> Mon, Mar 4, 2013 at 10:25 AM
To: "Suchomel, Bruce" <Suchomel.Bruce@epa.gov>
Cc: Brad Hill <bradhill@utah.gov>, Jean Sweet <jsweet@utah.gov>

Bruce,

12S 14E 10

The following is a statement for the Utah Division of Oil, Gas and Mining for its reasoning for requesting an aquifer exemption for the Prickly Pear Federal 10-4 well (4300730823).

The reasoning supporting the aquifer exemption is that the aquifer under analysis does not serve as a source of drinking water and it cannot now and will not in the future serve as source of drinking water in the future for the following reasons:

1. 1. Samples from the Subject Well indicated TDS's from the proposed injection zones range from 9,216 mg/L (BLM sample) to 11,000 mg/L (BBC sample). The issue was raised that the holding time for the BLM sample was exceeded, thereby questioning the analysis. In addition, arsenic and lead levels from the BLM's own samples from the subject well significantly exceed EPA drilling water standards.

2. 2. Samples taken from other wells in this area in the proposed injection zones range from 12,213 to 45,000 mg/L TDS.

3. 3. Approved injection into these same zones is occurring approximately two miles to the southeast. Specifically, the 12-24-12-14 well, located in the SW1/4 SW1/4 of Section 24 of the same township. It was approved as a Class II injection well on November 12, 2008, with injection intervals between 3,482 feet and 4,518 feet, structurally at the same elevation as the proposed injection zones, among other zones. Initial water samples taken from those zones prior to injection reflected 45,000 mg/L TDS.

4. 4. Economic hydrocarbon production is found in the Northeastern flank of the anticline in these zones. The Subject Well is located on the Southwestern flank across the axis of the anticline. Gas and oil shows are seen in correlative zones in wells in the area of the Subject Well.

5. 5. The economics of drilling a water well to the proposed injection zone depth (3,265 feet to 4,145 feet) are prohibitive. Estimated to be $350,000 which would economically and technologically impractical at such a high cost.

6. 6. There is a 290' confining zone above the disposal intervals that is mainly comprised of tight mudstones. Any practical fresh or potable water source would be located well above this confining zone (the top of the injection interval is 3,265 feet below ground surface).

7. 7. The Price BLM expressed that it had no objection to the Division of Oil, Gas and Mining granting an aquifer exemption during the Board hearing. Contact at the BLM is Mike Mckinley 801-539-4046 mmckinle@blm.gov.

I will follow up with the additional information that your requested on 3/4/2013. Thank you for your assistance in this matter.

Prickly Pear Unit
Federal 10-4

Jean Sweet <jsweet@utah.gov>

43-007-30823
12S 14E 10

RE: Aquifer Exemption Prickly Pear Unit # 10-4

1 message

Suchomel, Bruce <Suchomel.Bruce@epa.gov> Fri, Mar 8, 2013 at 9:23 AM
To: John Rogers <johnrogers@utah.gov>
Cc: Brad Hill <bradhill@utah.gov>, Jean Sweet <jsweet@utah.gov>

Hello John,

I believe I have all of the information required. I've completed my research and concurred with the AE. I forwarded your letter for signature.

I searched the Division of Water Rights site, too, but wanted to be sure about the result. Mr. Anderson was very helpful – as were you.

I did research the KCL acronym and realized immediately what it represented, but what I was really looking for was whether a water treatment process would be used, and whether the KCL would be included, to treat the produced water prior to injection. The answer is "no" to both. Bill Barrett will simply truck and pipe the produced water to this well for injection.

Thanks again, and let me know if there is anything else that you need.

Bruce Suchomel
UIC Program - Environmental Engineer/Program Manager
USEPA Region 8 (P-W-UIC)
1595 Wynkoop St.
Denver, CO 80202-1129
303-312-6001

From: John Rogers [mailto:johnrogers@utah.gov]
Sent: Thursday, March 07, 2013 3:50 PM
To: Suchomel, Bruce
Cc: Brad Hill; Jean Sweet
Subject: Re: Aquifer Exemption Prickly Pear Unit # 10-4

Bruce,

I talked with Jason Anderson of BBC concerning the questions you addressed with me. He indicated that you talked with him and about your concerns in the previous e-mail. Is the information he supplied meet what you need or should I pursue additional information. I talked with the Drinking Water Division and Water Quality Division at the Department of Environmental Quality (DEQ) in Utah and they were not aware of any USDW within the area of the area of the requested exemption. I also searched the the Division of Water Rights and found no existing water wells.

Let me know what else I can do to help. Thank you for your assistance in this matter.

John Rogers

On Wed, Mar 6, 2013 at 3:38 PM, Suchomel, Bruce <Suchomel.Bruce@epa.gov> wrote:

John,

1. Is BBC comingling the injection water with any fresh water, or are they simply injecting the produced water straight into the proposed injection well?

2. I need to be sure about any Underground Sources of Drinking Water in the area. Do the local folks have drinking water wells? If so, what is the name of the shallow USDW . Also, BBC mentions a deeper USDW north of Carbon County, and they mention accessing limited information in this area of the well. I'll need additional USDW information, and may try to discuss this with one of the BBC reps.

Thanks for your assistance.

Bruce Suchomel
UIC Program - Environmental Engineer/Program Manager
USEPA Region 8 (P-W-UIC)
1595 Wynkoop St.
Denver, CO 80202-1129
303-312-6001

From: John Rogers [mailto:johnrogers@utah.gov]
Sent: Wednesday, March 06, 2013 2:17 PM
To: Suchomel, Bruce
Cc: Brad Hill; Jean Sweet
Subject: Fwd: Aquifer Exemption Prickly Pear Unit # 10-4

The clarification to the questions that you had follow:

1. The injected water will be in the range of 33,000 to 74,000 PPM. Please see attachment (lab) for detail analysis. The "KCL" is a potassium chloride brine solution that is used in the well completion process. It reduces the swelling of clays. It should only be in the 2% to 3% range and will only be for the one time use as the operator completes the well.

2. The injection interval is 3265' to 4125' MD. The formation above the injection zone is the Wasatch Formation. Below the injection zone, the formation is the Middle Wasatch.

A. Prickly Pear # 10-4 (see attached Exhibit – well bore)

i. Top of Wasatch -2796'

ii. Top of Middle Wasatch -3860

iii. Top of North Horn -4958'

3. The upper confining zones are 2910' to 3244' (Wasatch). The lower confining zone 4160' to 4438'(Middle Wasatch). (see attached exhibit – well log)

On Mon, Mar 4, 2013 at 9:11 AM, Suchomel, Bruce <Suchomel.Bruce@epa.gov> wrote:

Hi John,

In order to complete the AE, I'll need clarification on the following:

a. What will be the injectate TDS, or TDS range? What does "KCL" represent. Bill Barrett mentions the injectate will be a KCL brine solution.

b. UDSW depths and names above and below the injection zone.

c. Depth and names of confining zones above and below the injection zone.

Thanks.

Bruce Suchomel
UIC Program - Environmental Engineer/Program Manager
USEPA Region 8 (P-W-UIC)
1595 Wynkoop St.
Denver, CO 80202-1129
303-312-6001

From: John Rogers [mailto:johnrogers@utah.gov]

Sent: Friday, March 01, 2013 12:14 PM
To: Suchomel, Bruce
Subject: Re: Aquifer Exemption Prickly Pear Unit # 10-4

The starting point for BLM information on Prickley Pear 10-4 would be Mike McKinley, with the Utah State office at 801-539-4046, mmckinle@blm.gov.

John

On Tue, Feb 26, 2013 at 9:48 AM, Suchomel, Bruce <Suchomel.Bruce@epa.gov> wrote:

John,

There are just a few more items that I'll need. Thanks for forwarding the information below, as well as the hard-copy package that I just received. For future reference your cover letter should include a summary of your analysis along with your recommendation. At this point we can simply converse or exchange messages to cover what's needed.

1. The rationale for your AE request. Example: It does not serve as a source of drinking water and it cannot now and will not in the future serve as a source of drinking water because . . . . . .(see aquifer exemption evaluation forms sent earlier)

2. In the future provide a ¾ mile radius around the well. (We add a ¼ mile buffer around the ½ exemption.) No need to do this at this point, as I plan to check this.

3. Was the volume limit of 11-million barrels established as a permit condition by UDOGM?

Thank you.

Bruce Suchomel
UIC Program - Environmental Engineer/Program Manager
USEPA Region 8 (P-W-UIC)
1595 Wynkoop St.
Denver, CO 80202-1129
303-312-6001

From: John Rogers [mailto:johnrogers@utah.gov]
Sent: Thursday, February 21, 2013 8:40 AM
To: Suchomel, Bruce
Cc: Brad Hill
Subject: Aquifer Exemption Prickly Pear Unit # 10-4

Bruce,

Attached is the document DOGM, a transmittal letter for the information requested. Also I have included three other attachments:

RAA - Request for Agency Action , this is the document that Bill Barrett Corporation (BBC) provided asking for a formal hearing.

Exhibits - These are the formal documents that Bill Barrett Corporation provided during the formal Board hearing.

Findings of Fact - This is the Boards decision from the hearing.

These documents, especially the Exhibits should provide you with any other requested information. I will follow up with a hard copy of all information.

John Rogers

R649-5

2.7

Standard laboratory analyses of:

2.7.1. The fluid to be injected,

Below is a summary of the results from water analysis included in this section.

Prickly Pear Produced Water Analysis Results

Well Name	Test Date	TDS (ppm)
PrPr 7-16	4/5/2004	53,522
PrPr 5-16	7/14/2004	60,747
PrPr 16-15	7/14/2004	74,301
PrPr 13-16	7/14/2004	33,553

These are examples of the wells in Prickly Pear that will be disposed of in this SWD.

Prickly Pear # 10-4

API: 43-007-3082300000

SESE Sec 10-T12S-R14E

Carbon Co., UT

Proposed Changes in Red

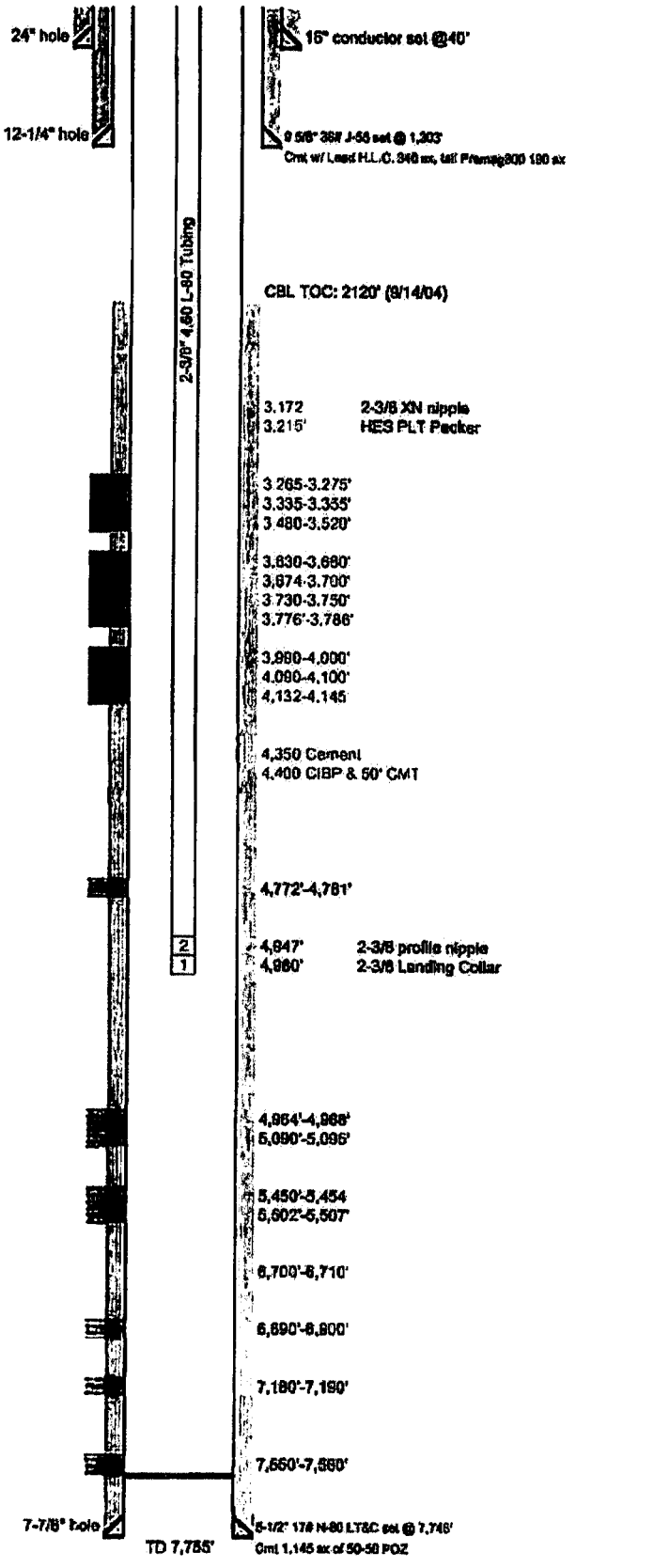
CURRENT WELLBOERE SCHEMATIC

Spud: 8/15/2004

Rig Release: 8/26/2004

Completed: 9/16/2004

1st Sales: 9/30/2004



Formation Tops

TGR/TW 2660' Sand Base - 2,983'

Wasatch - 2,796'

M. Wasatch - 3,860'

North Horn - 4,958'

Dark Canyon - 6,940'

Price River - 7,203'

PR 6840 Sand- 7,550'

5-1/2" 17# N-80 LT&C specs:
ID-4.892"
Drift-4.767"
Burst-7740 psi
Collapse-6280 psi

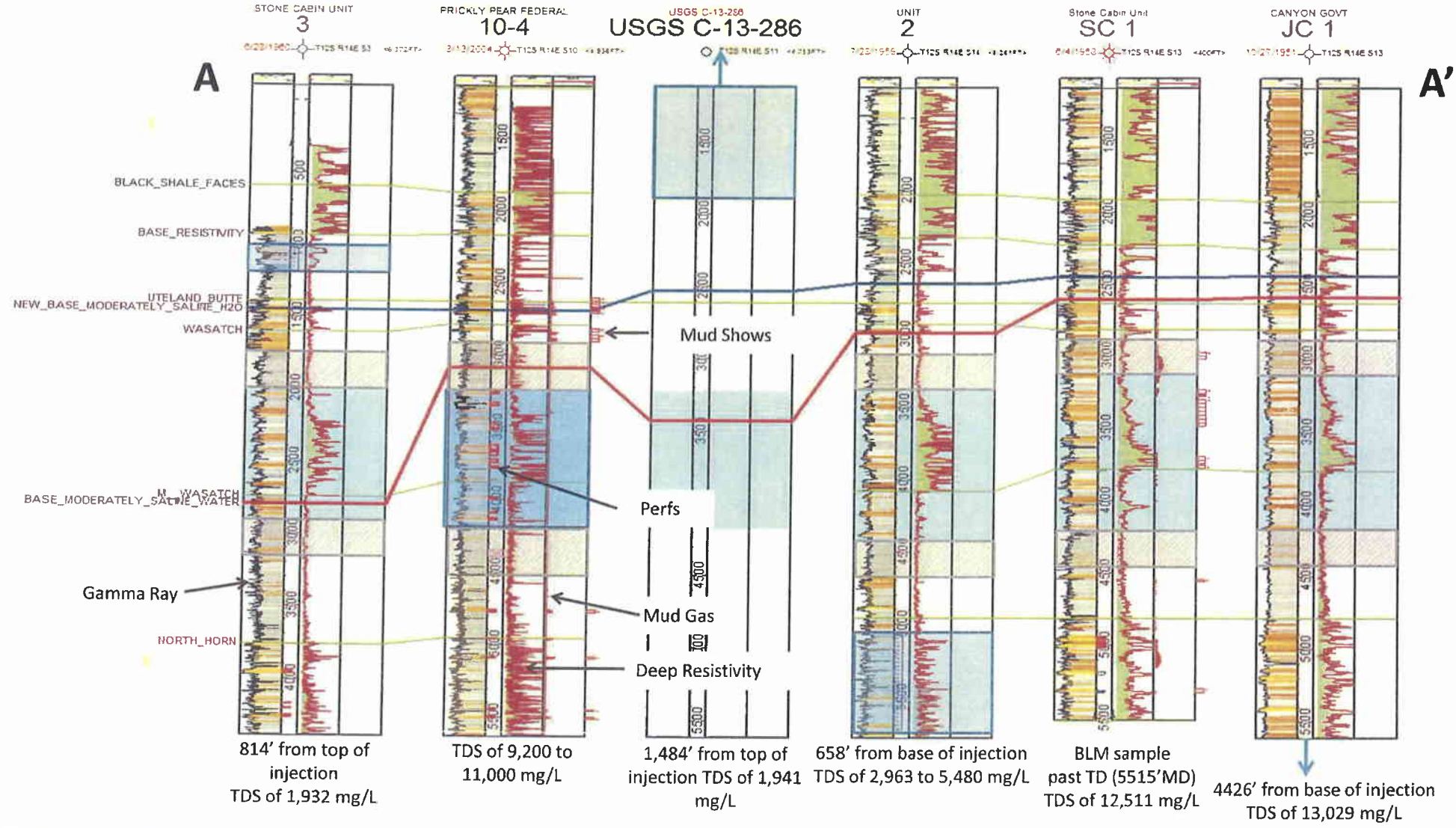

STONE CABIN UNIT 3
PRICKLY PEAR FEDERAL 10-4
USGS C-13-286
USGS C-13-286
UNIT 2
Stone Cabin Unit SC 1
CANYON GOVT JC 1
A
A'
BLACK_SHALE_FACES
BASE_RESISTIVITY
UTELAND_BUTTE
NEW_BASE_MODERATELY_SALINE_H2O
WASATCH
M_WASATCH
BASE_MODERATELY_SALINE_WATER
NORTH_HORN
Gamma Ray
Mud Shows
Perfs
Mud Gas
Deep Resistivity
814' from top of injection TDS of 1,932 mg/L
TDS of 9,200 to 11,000 mg/L
1,484' from top of injection TDS of 1,941 mg/L
658' from base of injection TDS of 2,963 to 5,480 mg/L
BLM sample past TD (5515'MD) TDS of 12,511 mg/L
4426' from base of injection TDS of 13,029 mg/L
Interval of Water Sample
Injection Interval
Confining Interval

EXHIBIT F

GARY R. HERBERT
Governor
GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

UNDERGROUND INJECTION CONTROL PERMIT
Cause No. UIC-384.1

Operator: Bill Barrett Corporation

Well: Prickly Pear Unit Federal 10-4

Location: Section 10, Township 12 South, Range 14 East, SLM

County: Carbon

API No.: 43-007-30823

Well Type: Saltwater Disposal Well

Stipulations of Permit Approval

1. Approval for conversion to Injection Well issued on April 11, 2012.
2. Maximum Allowable Injection Pressure: 1,200 psig
3. Maximum Allowable Injection Rate: (restricted by pressure limitation)
4. Injection Interval: Upper and Middle Wasatch (3,265' – 4,145')
5. A Monthly Injection Report shall be filed as required by R649-8-20.

Approved by: _____ 03-19-13
John Rogers, Associate Director — Date

JR/AM/js
cc: Bruce Suchomel, Environmental Protection Agency
Carbon County
BLM - Price
Well File
N:\O&G Permits\Injection Permits\Bill Barrett Corp

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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
http://www.epa.gov/region08

MAR 13 2013

Ref: 8P-W-UIC

Mr. John R. Baza, Director
Division of Oil, Gas and Mining
Utah Department of Natural Resources
1594 West North Temple
Salt Lake City, Utah 84114-5801

RE: Aquifer Exemption Concurrence:
Wasatch and Middle Wasatch Formations
Bill Barrett Corporation
Prickly Pear Unit Federal 10-4 Salt Water
Disposal well, Carbon County, Utah
API # 43-007-30823

Dear Mr. Baza:

The U.S. Environmental Protection Agency Region 8 (EPA) Underground Injection Control (UIC) staff has reviewed your request on behalf of Bill Barrett Corporation (BBC) regarding an aquifer exemption in the Stone Cabin Field located in Carbon County, Utah, for the Prickly Pear Federal 10-4 well. Based on the review of the supporting information provided by the Utah Division of Oil, Gas and Mining (UDOGM), and pursuant to 40 CFR § 144.7(b)(3) and the EPA Ground Water Protection Branch (GWPB), Guidance #34, the EPA offers concurrence with the aquifer exemption. The aquifer exemption was requested in conjunction with an UDOGM permit action.

Bill Barrett Corporation is the operator of the Prickly Pear Federal Exploratory Unit, inclusive of the lands upon which the Prickly Pear Unit Federal 10-4 well is located (SE ¼ SE ¼ of Section 10, Township 12 South, Range 14 East, SLM, Carbon County, Utah). This request is connected to BBC's request to the UDOGM for a permit approving the conversion of the Prickly Pear Unit Federal 10-4 gas-producing well to a salt water injection well.

CONCURRENCE WITH PROPOSED AQUIFER EXEMPTION: Based on EPA's review of the supporting information provided by the UDOGM, and pursuant to the Code of Federal Regulations at 40 CFR 144.7(b)(3) and the EPA's Groundwater Protection Branch Guidance #34, the EPA hereby approves a non-substantial program revision to include exemption of the Wasatch and Middle Wasatch Formations within one-half (½) mile of the Prickly Pear Unit Federal 10-4 well, located at SESE Section 10, Township 12 South, Range 14 East, SLM, between the approximate depths of 3,265 – 4,145 feet, in Carbon County, Utah.

This approval is based in part on the information provided by the UDOGM showing that the Wasatch

and Middle Wasatch Formations in the vicinity of the Prickly Pear Unit Federal 10-4 well are not presently used as sources of drinking water. Also, the Formations contain more than 3,000 milligrams per liter (mg/l) total dissolved solids (TDS) and, due to their depth and location, are not reasonably expected to supply a public water system or be a source of drinking water. This is due primarily to the higher costs of well construction and water treatment (technically impracticable), given the availability of higher quality shallow aquifers three to four miles north of the well area. The economics of drilling a water well to the proposed injection zone depth (3,265 feet to 4,145 feet) are prohibitive, as they are estimated to be $350,000, which would be economically impractical. The specific exemption criteria that apply are listed at 40 CFR parts 146.4(a), 146.4(b)(2)), and 146.4(c). This approval applies to the location and the injection activities described herein. Additional approvals may be required for additional injection activities.

OVERVIEW: The BBC proposes water injection into the Prickly Pear Unit Federal 10-4 well into the Wasatch and Middle Wasatch Formations for disposal of water produced from nearby oil and natural gas production wells which produce from wells in the Stone Cabin Field. As mentioned above, the Prickly Pear Unit Federal 10-4 well is a Wasatch Formation natural gas well which is currently under review to be converted to a Salt Water Disposal (SWD) injection well. The Wasatch and Middle Wasatch Formations are confining formations that both overlie and underlie the injection zone.

The surface casing of this well was set at 1,303 feet and cemented to the surface. The top of cement outside the longstring casing is at a depth of 2,120 feet in this well. The BBC proposes to inject through perforations into the Wasatch Formation between the depths of 3,265 to 4,145 feet.

The upper confining zone, the Wasatch Formation, is approximately 1,064 feet thick and is found at depths between approximately 2,796 to 3,860 feet below the ground surface at this well. The Middle Wasatch Formation, the lower confining zone, is approximately 1,098 feet thick and is found at depths between approximately 3,860 to 4,958 feet. A water sample was taken from this well in the injection zone and the water quality of the Wasatch Formation was tested to be 9,216 mg/l TDS by the Price Bureau of Land Management (PBLM) laboratory. Therefore, having the TDS between 3,000 and 10,000 mg/l, the Wasatch Formation may be considered to be an underground source of drinking water (USDW) in this area.

The fluid to be injected will be production water from a number of nearby oil and gas production wells. Therefore, the water quality of the injectate will likely be variable, and can be anywhere between 33,000 and 74,000 mg/l TDS, as shown from water samples taken from these nearby wells.

There are no known drinking water supply wells withdrawing from the Wasatch Formation in the vicinity of the Prickly Pear Unit Federal 10-4 well. There are no domestic water wells of record within three-quarter (¾) miles of the well according to the UDOGM. There are no water wells in the immediate area. The only wells in the general area lie a few miles away along Nine-Mile Creek, and draw water from alluvial creek sources. These alluvial sources currently provide an adequate supply of drinking water to residents in the general area and are expected to provide an adequate supply of drinking water to residents in the general area in the future based on the current population of Carbon County, approximately 21,318 residents. The population has shown a slight decline from 2010 to 2011 of 0.4%.

The upper confining layer includes approximately 334 feet of the Wasatch Formation shale which isolates the injection zone from any possible shallower aquifers. The only known shallower aquifer, the Douglas Creek – Renegade aquifer, is three to four miles away. The lower confining layer includes 278 feet of shale which isolates the injection zone from any possible deeper aquifers. No known deeper

aquifers lie beneath the lower confining layer.

The UDOGM held a public comment period on the proposed UIC permit and aquifer exemption. No public comments were received by the UDOGM during the public comment period.

Should you have questions or concerns, please contact Bruce Suchomel of my staff at (303) 312-6001.

Sincerely,

Derrith R. Watchman-Moore
Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

cc: Brad Hill, UDOGM

GARY R. HERBERT
Governor
GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

February 4, 2013

Ground Water Program Director
U. S. Environmental Protection Agency
MS 8P-W-GW
1595 Wynkoop St
Denver, Colorado 80202-1129

Subject: Aquifer Exemption Request for One-Half Mile radius around the Prickly Pear Unit Federal 10-4 Well, located SE1/4 SE1/4 of Section 10, T12S, R14E, Carbon County, Utah, Cause No. UIC-384.1

Dear Sir:

Bill Barrett Corporation (BBC) petitioned the Board of Oil, Gas and Mining (Board) for an Underground Injection Control (UIC) permit to dispose of water into the Prickly Pear Unit Fed 10-4 Well located in Section 10, T12S, R14E, Carbon County, Utah and to exempt the Wasatch and Middle Wasatch Formations, also known as "Mesaverde Aquifer" within one-half mile radius of the well. Proper public notice was given and a public hearing was held before the Board on December 5, 2012.

However, before the hearing, the Price Field Office of the BLM (PBLM) expressed concerns based on its historic water sampling in the general area that the baseline water quality of the proposed injection zones had a total dissolved solid (TDS) levels less than 10,000 mg/L and requested that water samples be taken.

On June 26, 2012, water samples were taken from the injection zones and split between BBC and the PBLM. BBC's contracted laboratory analysis reflected a TDS of 11,000 mg/L, while the PBLM's laboratory reflected a 9216 mg/L. The BBC's laboratory also reflected high Barium levels, and PBLM's analysis reflected Arsenic and Lead levels in excess of EPA primary drinking standards.

The only objections were those by the PBLM. No other objections were received by mail or at the hearing in response to this matter. At that hearing the Board unanimously approved the application, but with an aquifer exception. PBLM expressed that it had no objection to the Board granting an aquifer exemption.

In accordance with 40 CFR Part 144.7, the Division requests your approval of a UIC program revision for this aquifer exemption.

Enclosed is a copy of the Board Order, public notices, and certificate of service submitted in support of this request. If you would like to discuss this requested exemption or need more information, please call me at 801-538-5334 or John Rogers at 801-538-5349.

Sincerely,

John R. Baza
Director

JRB/JR/js

Enclosure

cc: John Rogers
Board File
Well File

N:\O&G Permits\Injection Permits\Bill Barrett Corp\Prickly Pear Unit Federal 10-4

BEFORE THE BOARD OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH

IN THE MATTER OF THE REQUEST FOR AGENCY ACTION OF BILL BARRETT CORPORATION FOR AN ORDER APPROVING THE PRICKLY PEAR UNIT FEDERAL 10-4 WELL, LOCATED IN THE SE¼SE¼ OF SECTION 10, TOWNSHIP 12 SOUTH, RANGE 14 EAST, SLM, CARBON COUNTY, UTAH, AS A CLASS II INJECTION WELL AND, IF AND AS NEEDED, GRANTING AN AQUIFER EXEMPTION FOR WASATCH AND MIDDLE WASATCH FORMATIONS	**PETITIONER'S EXHIBITS** Docket No. 2012-041 Cause No. UIC-384.1

Pursuant to Utah Admin. Code Rule R641-105-500, Petitioner Bill Barrett Corporation ("BBC"), by and through its counsel of record, MacDonald & Miller Mineral Legal Services, PLLC, hereby respectfully submits the following exhibits intended to be offered into evidence in support of its Request for Agency Action ("RAA") at the December 5, 2012 hearing on this cause:

EXHIBIT "A" – BBC's potential witnesses' resumes (collectively 8 pages):

- Scot A. Donato – Manager, Governmental Affairs
- Jason G. Anderson – Asset Development Geologist
- Daniel Pritchard – Operations Geologist
- Brian Hilgers – Petroleum Engineer

EXHIBIT "B" – 10-4 Well UIC Application (previously submitted as Exhibit "1" to the RAA).

EXHIBIT "C" – BLM Objection Letter dated September 26, 2012 (previously submitted as Exhibit "2" to the RAA).

EXHIBIT "D" – 10-4 Well Step Rate Test Results (previously submitted as Exhibit "3" to the RAA).

EXHIBIT "E" – Wasatch Formation Subsea Structure and Cross-Section Reference Map (1 page)

EXHIBIT "F" – Geologic Cross-Section A-A', additionally reflecting relationship between intervals of water samples and proposed injection interval (1 page).

EXHIBIT "G" – Geologic Cross-Section B-B', reflecting hydrocarbon shows (1 page).

EXHIBIT "H" – Geologic Cross-section C-C', additionally reflecting TDS values (1 page).

EXHIBIT "I" – Injection Volume Calculations (1 page).

EXHIBIT "J" – 10-4 Well Base Water Sample Comparison (1 page).

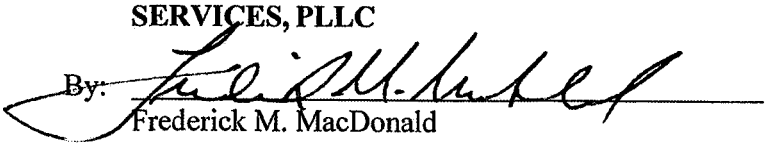
EXHIBIT "K" – Injection Water Samples (1 page).

EXHIBIT "L" – Estimated Water Well Economics for Proposed Injection Zone (1 page).

EXHIBIT "M" – True and correct copies of return receipts, confirming receipt of a copy of the RAA by all parties having a "legally protected interest" in this Cause (1 page).

Respectfully submitted this 5th day of November, 2012.

MACDONALD & MILLER MINERAL LEGAL SERVICES, PLLC

By: 
Frederick M. MacDonald

7090 Union Park Ave., Suite 420
Salt Lake City, UT 84047
Telephone: (801) 676-0050
Facsimile: (801) 676-0051
E-Mail: Fred@macmillerlegal.com
Attorneys for Petitioner Bill Barrett Corporation

1000.05

SCOT A. DONATO, P.G. *BILL BARRETT CORPORATION*
MANAGER, GOVERNMENTAL AFFAIRS

ACADEMIC BACKGROUND

Masters of Environmental Policy & Management, University of Denver, Denver, CO, 1997
Bachelor of Arts - Geology, Western State College, Gunnison, CO, 1981

REGISTRATIONS / CERTIFICATIONS

Wyoming Registered Professional Geologist (P.G. No. 1291)
Utah Registered Professional Geologist (P.G. No. 2250)
Texas Registered Professional Geoscientist (P.G. No. 3211)
American Institute of Professional Geologists (C.P.G No. 8353)
Nevada Certified Environmental Manager (E.M. No. 1673)
Colo. Dept. of Transportation Erosion Control Supervisor
Certified 40-Hour OSHA Hazardous Waste Worker/Supervisor

EXPERTISE

Professional experience includes over 30 years in the environmental and oil & gas industries working on a variety of environmental and regulatory challenges. Industry experience emphasizes environmental regulatory negotiations with State and Federal agencies related to oil & gas industry issues, spill response and remediation of soil and ground water, aquifer characterization, produced water discharge permit preparation, wetland delineation and permitting, In-depth NEPA analysis & support, and management of large, multi-disciplinary, RCRA and Solid Waste remediation projects. Expertise also includes litigation support regarding landowner damage claims; hydrogeologic investigations; air emissions permit preparation & management; endangered species investigations and implementation & management of OSHA safety standards and training. Other areas of expertise include SPCC and spill response training, subsurface geologic and hydrogeologic contaminant characterization investigations and remedial action programs.

EXPERIENCE

Manager, Governmental Affairs: Bill Barrett Corporation, 2009 - Present

Manager, Environmental Health & Safety: Bill Barrett Corporation, 2003 - 2009

Environmental Health & Safety Manager: HS Resources Inc./Kerr McGee Rocky Mountain Corp, 1999 - 2003

Senior Project Manager: Maxxim Environmental, Inc./Terracon, 1996 - 1999

Environmental Health & Safety Coordinator: Basin Exploration, Inc., 1994 - 1996

Senior Project Geologist/Project Manager: Industrial Compliance (IC), 1986 - 1994

Independent Consultant – Petroleum Geologist: Self-Employed, 1981 - 1986

EXHIBIT A

PUBLICATIONS / PRESENTATIONS

Presenter, "Energy Investments in Wildlife Conservation", Utah State University-Restoring the West Conf., 2012,

Presenter, "Energy Development & Wildlife Conservation", Safari Club Intl.-Annual Conference, 2011;

Co-Author with B. Sterrett, B. Hanna, "A Critical Analysis of Groundwater Quality Trends in the Center of Natural Gas Development In Garfield County, Colorado", Colorado Oil & Gas Conservation Commission (COGCC) Hearing, and American Institute of Professional Geologists (AIPG) Hydraulic Fracturing Conference, 2009

Presenter, "Environmental Health & Safety Implications for a Shale Gas Play, Paradox Basin, Colorado", Colorado Oil & Gas Conservation Commission (COGCC), 2009,

Presenter, "Adapting to High Density Population in High Density Drilling Areas", AAPG, 2004;

Author, "Environmental Compliance Handbooks for Colorado, New Mexico, Montana, North Dakota, South Dakota, and Wyoming", U.S. Department of Energy (DOE) and Independent Petroleum Association of Mountain States (IPAMS), 1997

Presenter, "SPCC Plan Requirements", IPAMS-Society of Petroleum Engineers (SPE), 1996

Instructor, "Oil & Gas Exploration & Production Waste-Hazardous and Solid Waste", University of Denver, 1995

Instructor, "Site Assessment and Soil/Ground-Water Remediation", Colorado School of Mines, 1990-1994

Author, "Site Assessment of Oil & Gas Facilities-Spill Assessment", IPAMS Environmental Green Paper, 1994

Presenter, "RCRA Compliance - Underground Storage Tanks: Technical Compliance", RCRA Institute, 1993

Instructor, "Underground Storage Tanks - Technical Requirements and Compliance", University of Denver, Environmental Law I, 1991-1992

Presenter, "Low-Tech Bioremediation of Petroleum-Affected Soils", IPAMS - Environmental Series, 1991

PROFESSIONAL AFFILIATIONS

Co-Chairperson, Environmental Committee; Colorado Oil & Gas Association (COGA), 1995-2010

Industry Environmental Advisory Team and Environmental Rulemaking Committee; Colorado Oil & Gas Conservation Commission, 1996-2000 and Colorado Dept. of Public Health and Environment, 1999-2000

JASON G. ANDERSON
6289 Union Ave.
Firestone, CO 80504
(970) 217-3714 Cell
(720) 340-4133 Home
janderson@billbarrettcorp.com

Five years of professional experience in the oil and gas industry, environmental remediation and project oversight, and geotechnical work. Experience interpreting well logs, core and seismic. Proficient at geologic software, such as, Petra, Global Mapper, PowerBench and Kingdom.

Work Experience

Bill Barrett Corporation

Asset Development Geologist (4/11 – Present)
- Responsible for geologic evaluation in the Blacktail Ridge, Lake Canyon and East Bluebell assets.
- Job tasks include overall geology, well placements, supervising multiple drilling rigs, geo-steering horizontals, petrophysics, supervising core acquisitions, evaluating and interpreting core data.
- Developed and implemented the Uteland Butte horizontal program that has been successful.

Associate Geologist (3/09 – 4/11)
- Provided geological support for West Tavaputs Plateau, Blacktail Ridge and Lake Canyon.
- Job tasks include supporting development geologists, data entry and management, geologic mapping and well log interpretation.
- Prepared geologic exhibits in support of increased well density for the Blacktail Ridge asset.

Assistant Geologist (5/08-3/09)
- Responsible for geotechnical support for West Tavaputs Plateau, Blacktail Ridge and Lake Canyon.
- Job tasks include supporting development team, data entry and management, and geologic mapping.

SECOR International Inc./Stantec

Staff Geologist (3/07 – 5/08)
- Responsible for remedial system operation and maintenance, project oversight, site monitoring and drilling.
- Provided oversight for remediation system maintenance, proper handling, packaging, characterization, and storage of EPA listed hazardous wastes by subcontractors.
- Collected groundwater and process samples for remediation system NPDES discharge permitting requirements.

Northern Colorado Geotech

Engineering Technician (8/06 – 3/07)
- Conducted soil density and moisture content and laboratory work. Laboratory work includes: moisture content, Atterberg Limits, sieve analysis, compressive strength tests of concrete, and other various laboratory work.
- Provided quality control oversight to ensure proper engineering specifications were achieved.

Education

Bachelor of Science in Geology, 2006, University of Northern Colorado

Professional Certifications and Awards

AAPG, Member ID: 10043870
DWLS Member
RMAG Member
Achieved Rank of Eagle Scout in 2001

Previous Expert Qualification

Qualified and recognized as an expert in Geology by the Utah Board of Oil, Gas and Mining in Cause No. 139-87 (October, 2011), Cause No. 139-88 (March, 2012), Cause No. 139-89 (March, 2012) and Cause No. 139-91 (May, 2012)

Daniel Pritchard
Bill Barrett Corproation
1099 18th St, Suite 2300
Denver, CO 80202
(303) 877-2733
dpritchard@billbarrettcorp.com

Summary

- BS Geology, Summa Cum Laude
- Six years oil and gas experience
- Proficient with Petra, Wellview, Windows, Adobe and MS Office Suite

2012(Sep) – Operations Geologist, Bill Barrett Corporation

- Job tasks include overall geology, well placements, supervising multiple drilling rigs, geo-steering horizontals, petrophysics, supervising core acquisitions, evaluating and interpreting core data, log interpretation.
- Primary responsibility for geologic operations in Blacktail Ridge, Lake Canyon, and East Bluebell assets.

2011(May) – Geology Technician, Bill Barrett Corporation

- Maintain geologic database for Piceance, DJ, and Uinta basins.
- Create geology prognosis for new pads and wells.
- Upload, correlate and interpret (pick tops) new open and cased-hole logs.
- Generate cross sections and maps for geology, reservoir engineering, completions, land, regulatory and other groups.
- Spot wells and check for collision boundary avoidance issues with drilling engineers.
- Mine data from state and various industry web sites.
- Import directional surveys, logs, digital logs, raster logs, completions and production data.
- Support and work with Geologists, Engineers, Regulatory, Land and other team members in identifying targets, making completion recommendations and planning operational drilling schedules.
- Primary software used: Petra, Wellview, Blue Marble, Aries, Global Mapper.

2007 – 2011 Data Analyst-Well Test Engineer, Weatherford Laboratories

- Summarize core data including TOC, P&P, SRA, rock mechanics, gas compositions, isotopic results and various other data sets into comprehensive final reservoir characterization reports.
- Obtain data to characterize unconventional natural gas reservoirs content, collect and analyze core samples at well sites to analyze gas composition and isotope determination.
- Detailed core lithology and thin section descriptions.
- Experience in tight Oil, CBM and Shale gas basins.
- Primary role in research and development of new products and services.
- Responsible for core lithological descriptions, photographs, and processing.
- Responsible for submitting final field reports, invoices, early sample data and core lithology reports.

2006- 2006 Laboratory Assistant, University of Northern Colorado

- Assist in research of Late Devonian Meteor impact.
- Prepared thin sections of rock samples and prepared samples for X-ray diffraction.
- Provided assistance in analyzing samples using XRD, petrography, and lithology under the supervision of Dr. Jared Morrow.

Education

2006 BS Geology, University of Northern Colorado
2005 BS Earth Sciences, University of Northern Colorado

Relevant Experience

- Six years in the energy industry including extensive well-site operational experience.
- Primary software used: Petra, Wellview, Blue Marble, Aries, Global Mapper.
- Continuing education at Colorado School of Mines in graduate level geology courses.
- Strong computer fundamentals and advanced ability in PETRA, excel, word, and power point.
- Familiar with Utah, Colorado, and Wyoming state geologic data sites.
- Field operations experience; Italy, United Kingdom, Germany, Australia, India, and North America.
- Analyzed Front Range geology through mapping formation contacts, strike and dip of formations and faults, fault movement and orientation, rock analysis, and grain analysis. Mapping assignments completed in Grand Canyon, Needle Mountains, and New Mexico.
- Studied compositional make-up of rocks using petrographic microscopes and X-ray diffraction.
- Experience using logs, rate of penetration, and cuttings to determine formations.

Certifications and Organizations

American Association of Petroleum Geologists, ID 10023765
Rocky Mountain Association of Geologists
Basic Well Log Analyses 5 day certificate course
Denver Well Logging Society
Petra for Geologists' 3 day Certificate Course completed May 2011
CPR and First Aid Training
H2S Safety
Weatherford Bit Hydraulics
Weatherford Slickline Training
Weatherford Reservoir Engineering Primer

Brian Hilgers

BHilgers@billbarrettcorp.com

2546 South Adams St. Denver, CO 80210 303-319-6173

OBJECTIVE: Seeking a position as a petroleum engineer.

ENGINEERING WORK EXPERIENCE

11/2010 - present **Bill Barrett Corporation** **Denver, CO**

Petroleum Engineer

- Uinta Oil – Black Tail Ridge/Lake Canyon (BTR/LC) – Production Engineer 1yr
  - Responsible for organic oil production growth in East Bluebell & South Altamont
  - Gross oil production of 3,500Bopd
  - 3-5 drilling rigs in asset
  - Challenging rod pump and lift systems (depth & volume)

- West Tavaputs Plateau (WTP) – Team Lead & Production Engineer 2yrs
  - Gross production growth from 68MMcfd to 150MMcfd
  - 2 drilling rigs, 1 full time frac crew, 2 workover rigs (200 new wells)
  - Managed 5 consultants and worked directly with 2 foreman to coordinate operations
  - Completion engineer during continuous frac operations (CO_2 linear gel)
  - Ran team meetings, drafted annual budget proposals, and managed support groups
  - Capital budget of $200MM, LOE budget of $35MM
  - Implemented gas lift on 23 wells across 8 pads
  - 2 new SWDs, H_2S equipment, compression projects
  - CO_2 take or pay contract renegotiation ($7.2MM contract)
  - Participated in lease sales

05/2006 – 11/2012 **Noble Energy, Inc** **Denver, CO**

Petroleum Engineer

- Rocky Mountain Business Unit (RMBU) – Bowdoin Area Engineer 3yrs
  - Gross production of 20MMcfd
  - $20MM capital budget with 250 projects per year
  - 50 new drills, 100 PU installs, 50 recompletes, 50 tubing installs
  - 6.5%/yr gross production increase with capital budget projects

  Key Bowdoin Projects:

  Cored with invert fluid for analysis
  Completed stimulation design & completions optimization
  Pioneered first artificial lift pilot program and full field implementation (ROR > 50%)
  Upgraded system GH compressor, wrote proposal for system CD
  Permitted and built two evaporation ponds with full telemetry
  Identified new zone for recompletions (spaced, implemented, ROR > 90%)
  Increased density evaluation
  Supported an ongoing environmental assessment & environmental impact survey
  Assumed regulatory and land responsibilities
  Ongoing engineering support for mediation and litigation on gas gathering dispute
  Mentored young engineer during asset handoff and help transition new team

- RMBU – San Juan Area Engineer 2yrs
  - Gross production of 20MMcfd
  - 2008 activity included 8 new drills, 10 workovers, 20 compressor projects
  - Compressor looping project, central compression upgrade 15 wells

- RMBU – Emerging Shale Gas/Oil Plays Area Engineer 3yrs
  - Responsible for the development of three new plays in the Rockies

Montana
- Cody/Niobrara shale oil and shale gas
- 200M net acres, vertical well pilot program, oil and gas window
- Building relations with local community that is new to development
- Full cycle economics, scoping costs, D&C AFEs, water logistics

Wyoming
- Mowry/Niobrara horizontal wells
- Joint venture with Orion Energy Partners
- One horizontal well completed, evaluating play and uphole potential

Wyoming/Colorado
- Horizontal Niobrara resource play 360M net acres (750M total in play)
- Pilot program with monitor wells and significant science (3 vertical, 3 horizontal wells)
- Acquiring 130 sq-miles of 3D seismic in 2010 (300 sq-miles total in play)
- Coordinate efforts with our Wattenberg group
- 4000' laterals with 16-20 stage completions

- RMBU – Wind River Basin, Iron Horse 1yr
  - Field wide drilling, completion, and log analysis

<u>Iron Horse Pad Drilling & Facilities Design</u>
- Complete design of multi-well pads (22 wells)
- Designed pad, selected equipment, and complete facilities layout
- Selection of wellhead, separators, measurement, tanks, and custody transfer points
- Successful BLM approval to commingle oil via Coriolis measurement and allocation
- Successful approval of year round pad drilling in unprecedented time (BLM & State)

<u>Artificial lift</u>
- Lead engineer on gas lift pilot program on multi-well pads
- Test GLCC separator concepts and apply to pad design if successful

<u>Other distinguishing notes:</u>
- Heavily involved in BLM planning meetings, relationship improvement, and required approval processes in Wyoming and Montana.
- Lead engineer on a litigation which included mediation and ongoing settlement discussions.
- Primary engineer for data rooms for assets that fall within the Northern Rockies area.
- Trial user for our Spotfire and Crystal Ball software evaluations.
- Worked extensively with our financial analysts on budget, post-econ evaluations, and financial accruals.

08/2004 - 04/2006 **Burlington Resources** **Farmington, NM**

<u>Production Engineering</u>
- Base Asset Engineering
  - Well work – fundamental research, data collection, recommendations
  - AFE packages – cost estimates, procedures, rig support
  - FOM Operational Best Practices - team lead (for field equipment)
- Pumping Unit Specialty
  - Pumping Unit FIT Team - lead engineer
  - Design, analysis, implementation, and optimization (BHA to setting unit)
  - Oil study, preventative maintenance, inventories, purchasing, cost savings
- Obligatory Wells (150+ wells)
  - Restore NMOCD & BLM regulated wells to compliance

05/2003 – 08/2003 **Summer Internship with Occidental Oil & Gas** **Bakersfield, CA**

Reservoir Engineering

Complete business plan investigation for developmental exploitation on the Western Shallow Oil Zone Reservoir Management Team.

Title: Sub-Mulinia Improved Oil Recovery/Enhanced Oil Recovery Investigation

Project: Included reservoir characterization, IOR/EOR screening process, and development plan. Delivered final presentations and project recommendations.

ENGINEERING EXPERIENCE

Computing *Programs:* Microsoft Office 2003 & 2007 (Access, Word, Excel, PowerPoint, Project, Visio), AutoCad R14, C++, MINITAB, Internet Explorer, Complete Macromedia Package, ALGOR, Solid Edge, MathCAD, DIMS, SROD, Cbal, PI Dwights, PowerTools, Peep, Cygnet, Echometer TWM, ARIES, Peloton WellVIEW, Peloton SiteVIEW, RodStar.

EDUCATION

Colorado School of Mines, Golden, Colorado
B.S. Engineering – Mechanical Specialty
Graduated: May 2004
3.21/4.0 GPA

Honors/Activities

Active SPE, ASME, and AADE Member
CSM 4-Year President's Scholarship
CSM College Republicans
CSM Tactical Shooting Club President

CONTINUING EDUCATION

October 2004 - Lufkin's Combating Gas Interference
October 2004 - Burlington Resources Liquid Loading Conference
February 2005 - Denver Gas Well Deliquification Conference
March 2005 - John Stermole's Economic Evaluation and Investment Decision Methods
June 2005 - AMA Leadership Development
August 2005 - PetroSkills Petroleum Engineering Practices
July 2006 - Landmark Aries Course
January 2007 - Weatherford Plunger School
February 2007 - SPE Stimulation & Fracturing Conference
March 2007 - Denver Gas Well Deliquification Conference
February 2008 - Denver Gas Well Deliquification Conference
April 2008 - GPA Dehydration Class
May 2008 - Pioneer's Expanding Shale Gas Plays
June 2008 - World Oil & Gas Show (Calgary)
July 2008 - Rocky Mountain Energy Epicenter COGA Conference
November 2008 – Denver Prospect Fair & TechnoFest
February 2009 - Deliquification Conference
April 2009 - Decision Frameworks Appraisal Excellence Team Training Workshop
May 2009 - FAST training
June 2009 - Feket Piper training
February 2010 – Birkman Assessment
February 2010 – 12 Week Dale Carnegie Effective Communication and Human Relations
March 2010 – Leading a monthly forum for technical presentations – "PI - Presenting Information"
April 2010 – NBL Technical Conference Speaker, "Artificial Lift in the Wind River Basin"
March 2011 – Denver Gas Well Deliquification Conference

EXHIBIT "B" IS THE SAME AS EXHIBIT "1" ATTACHED TO THE RAA

Prickly Pear Unit Federal #10-4

EXHIBIT 1

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

UIC FORM 1

APPLICATION FOR INJECTION WELL

Name of Operator: Bill Barrett Corporation	Utah Account Number: N	Well Name and Number: Prickly Pear Unit Federal 10-4
Address of Operator: 1099 18th Street, 2300 CITY Denver STATE CO ZIP 80202	Phone Number: (303) 312-8134	API Number: 4300730823
Location of Well Footage: 75' FSL, 271' FEL County: Carbon QQ, Section, Township, Range: SESE 10 12S 14E State: UTAH		Field or Unit Name: Prickly Pear Lease Designation and Number: UTU-73665

Is this application for expansion of an existing project?		Yes ☑	No ☐
Will the proposed well be used for:	Enhanced Recovery?	Yes ☐	No ☑
	Disposal?	Yes ☑	No ☐
	Storage?	Yes ☐	No ☑
Is this application for a new well to be drilled?		Yes ☐	No ☑
If this application is for an existing well, has a casing test been performed?		Yes ☐	No ☑

Date of test: _____

Proposed injection interval: from 3,265 to 4,145

Proposed maximum injection: rate 4,000 bpd pressure 2,961 psig

Proposed injection zone contains oil ☐, gas ☑, and / or fresh water ☐ within ½ mile of the well.

List of attachments: Attachments as required by R649-5-2. As per 2.4 under R649-5.2, logs on file with the Division are as follows: Sonic, CBL, Neutron Density, and Resistivity.

ATTACH ADDITIONAL INFORMATION AS REQUIRED BY CURRENT UTAH OIL AND GAS CONSERVATION GENERAL RULES

I hereby certify that this report is true and complete to the best of my knowledge.

Name (Please Print) Brady Riley Title Permit Analyst

Signature Brady Riley Date 1/16/2012

(5/2002)

R649-5-2. Requirements for Class II Injection Wells Including Water Disposal, Storage and Enhanced Recovery Wells

2. The application for an injection well shall include a properly completed UIC Form 1 **(Enclosed)** and the following:

2.1. A plat showing the location of the injection well, all abandoned or active wells within a one-half mile radius of the proposed well, and the surface owner and the operator of any lands or producing leases, respectively, within a one-half mile radius of the proposed injection well. **(Enclosed)**

2.2. Copies of electrical or radioactive logs, including gamma ray logs, for the proposed well run prior to the installation of casing and indicating resistivity, spontaneous potential, caliper, and porosity. **(Copies previously submitted to UDOGM)**

2.3. A copy of a cement bond or comparable log run for the proposed injection well after casing was set and cemented. **(Copies previously submitted to UDOGM)**

2.4. Copies of logs already on file with the division should be referenced, but need not be refiled. **(Copies previously submitted to UDOGM)**

2.5. A description of the casing or proposed casing program of the injection well and of the proposed method for testing the casing before use of the well. **(Enclosed)**

2.6. A statement as to the type of fluid to be used for injection, its source and estimated amounts to be injected daily. **(Enclosed)**

2.7. Standard laboratory analyses of:

2.7.1. The fluid to be injected, **(Enclosed)**

2.7.2. The fluid in the formation into which the fluid is being injected, and **(Enclosed)**

2.7.3. The compatibility of the fluids. **(Enclosed)**

2.8. The proposed average and maximum injection pressures. **(Enclosed)**

2.9. Evidence and data to support a finding that the proposed injection well will not initiate fractures through the overlying strata or a confining interval that could enable the injected fluid or formation fluid to enter any fresh water strata. **(Enclosed)**

2.10. Appropriate geological data on the injection interval with confining beds clearly labeled,

2.10.1. Nearby Underground Sources of Drinking Water, including the geologic formation name, **(Enclosed)**

2.10.2. Lithologic descriptions, thicknesses, depths, water quality, and lateral extent; **(Enclosed)**

2.10.3. Information relative to geologic structure near the proposed well that may effect the conveyance and/or storage of the injected fluids. **(Enclosed)**

2.11. A review of the mechanical condition of each well within a one-half mile radius of the proposed injection well to assure that no cond0uit exists that could enable fluids to migrate up or down the wellbore and enter improper intervals. **(Enclosed)**

2.12. An affidavit certifying that a copy of the application has been provided to all operators, owners, and surface owners within a one-half mile radius of the proposed injection well. **(Enclosed)**

Statement in support of Water Disposal application in opposition to Water Injection application

Disposal Evaluation Request

It is the request of Bill Barrett Corporation that the submitted application for water disposal in the Prickly Pear field be evaluated based on water disposal and not water injection. Our reasoning behind this request is based the proposed disposal intervals in the proposed water disposal wells, and the discontinuous nature of those proposed disposal intervals and the distance between the proposed disposal wells and the nearest economic gas production, which doesn't exist within any reasonable distance one might expect any effect on the productive wells.

Structural Position

Based on the supplied structure map and well log analysis it is evident that the proposed disposal well, Prickly Pear Federal 10-4-12-14 is slightly up dip from economic production to the east. Nearest, but likely uneconomic gas production from the proposed disposal intervals lies more than 2 miles from the proposed disposal well. In addition, the other Prickly Pear 12-24-12-14 SWD lies 2.1 miles roughly southeast.

From the shallowest proposed disposal interval in the Wasatch, structural positions indicate the disposal zones are slightly higher in the #10-4 than the correlative zones to the east. However, at the middle Wasatch top, the correlative zones to the east are slightly higher structurally. At the North Horn formation the top in the #10-4 is about 100' lower structurally than the North Horn top in the Prickly Pear #4-18.

Sand Discontinuity

The proposed disposal intervals, in the Wasatch and the Middle Wasatch are generally comprised of discontinuous sand bodies. A field study of well logs in the Peters Point area, which is just to the east of the Prickly Pear area, has indicated that producing sand bodies can be shown to be discontinuous even within spacing distances of less than 1,000 ft.

Another study conducted with logs in the Wasatch and Middle Wasatch, indicated fewer than half the sands in one well could be found in adjacent wells on 20-acre spacing.

Proposed Interval Fill-up

A common tool to evaluate the potential for waterflooding success is to calculate the required amount of water before reservoir pressurization could begin to occur. It is usual for this calculation to assume radial displacement and to consider, interval by interval, the porosity corrected vertical thickness (phi*h) for the assumed allocation of injected water.

The following tables summarize for each of the proposed disposal wells, sand interval reservoir properties and resulting fill-up for a ½ mile radius:

Formation	Perf top	Perf base	Reservoir Thickness (ft)	Porosity	Porosity Feet (Phi*h)	Water Saturation	Pore Vol (Phi*h*(1-Sw)	1/2 Mile Radius Volume (bbls)
Wasatch	3265	3275	16	11%	1.76	0.9	0.176	686,341
Wasatch	3335	3355	25	12%	3	0.9	0.3	1,169,900
Wasatch	3480	3520	50	12%	6	0.9	0.6	2,339,800
Wasatch	3630	3660	40	15%	6	0.9	0.6	2,339,800
Wasatch	3674	3700	26	14%	3.64	0.9	0.364	1,419,478
Wasatch	3730	3750	25	15%	3.75	0.9	0.375	1,462,375
Wasatch	3776	3786	10	12%	1.2	0.9	0.12	467,960
Wasatch	3860	3865	10	6%	0.6	0.9	0.06	233,980
M. Wasatch	3990	4000	15	7%	1.05	0.9	0.105	409,465
M. Wasatch	4090	4100	10	6%	0.6	0.9	0.06	233,980
M. Wasatch	4132	4145	15	8%	1.2	0.9	0.12	467,960
			242		28.8		2.88	11,231,038

Based on the above calculations over 11 million barrels of water would have to be disposed into the Prickly Pear Federal 10-4 before any reservoir effect would be seen at ½ mile from the wellbore. If one considers the discontinuous nature and limited size of the sands in these formations, one would have to determine that the sands would not be perfect ½ mile radius blanket sands and would likely take quite a bit less than 11 million barrels before pressuring up. Again, any productive wells are about 2 miles from the proposed SWD #10-4.

Summary

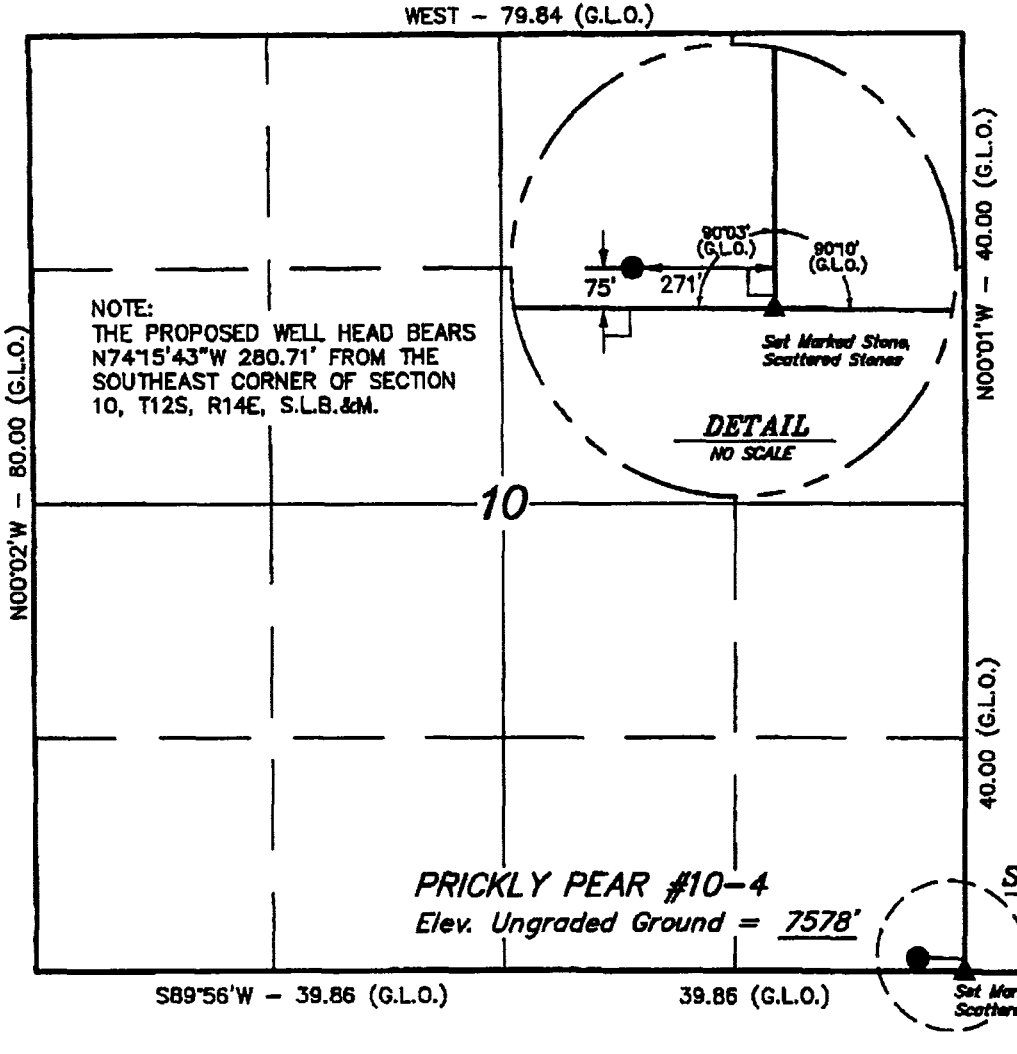
As a result of the above arguments and calculations, Bill Barrett Corporation feels justified to request that the submitted application for water disposal into the Pear Federal #10-4-12-14 be evaluated as such and not on water injection criteria.

Permit Application Fact Sheet

Prickly Pear #10-4-12-14

1. The proposed disposal well Prickly Pear #10-4-12-14 was drilled in August 2004 and completed in September of 2004. It was completed from the bottom of the Middle Wasatch down to the Price River, with a total perforated interval from 4772'-7560' md. It produced a total of 69.27 mmcf and logged off in August of 2007.
2. There are no other wells within a ½ mile radius.
3. The injection zone is situated in the Wasatch and Middle Wasatch. The injection zone is from 3265' to 4145' and while drilling gave almost no gas shows through the section, the one show observed was very thin, brief and small.
4. The confining zones are interspersed between injection zones as well as ample impermeable rock above and below the gross proposed perforated interval to insure the safety of the fresh water table, as well as the moderately saline zone. There is in excess of 300' of zero porosity shale and mudstone immediately above the top injection perforation.
5. No water samples have been taken from these zones at this point. The equivalent zones in the Prickly Pear #12-24-12-14 SWD yielded TDS levels around 45,000.
6. We do not believe that corrective action is required on the wellbore. This well was drilled in August of 2004. A review of the cement bond logs shows 80% or better bong on both wells throughout the injection zone.
7. Notice was provided on January 5th, 2012 to all surface and mineral owners within ¼ mile of the well. We have received neither inquires nor protests.
8. The MAIP will be determined when the Step Rate Test is performed.

T12S, R14E, S.L.B.&M.

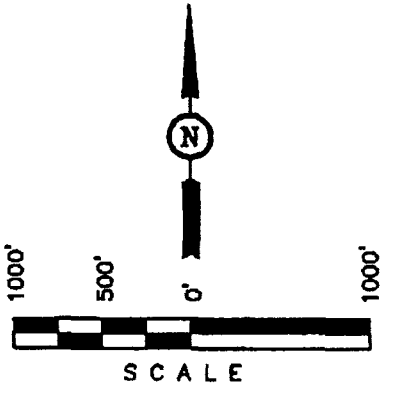


WASATCH OIL & GAS LLC.

Well location, PRICKLY PEAR #10-4, located as shown in the SE 1/4 SE 1/4 of Section 10, T12S, R14E, S.L.B.&M., Carbon County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 7, T12S, R15E, S.L.B.&M. TAKEN FROM THE COWBOY BENCH, QUADRANGLE, UTAH, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7563 FEET.



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. 161319
STATE OF UTAH

BASIS OF BEARINGS

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

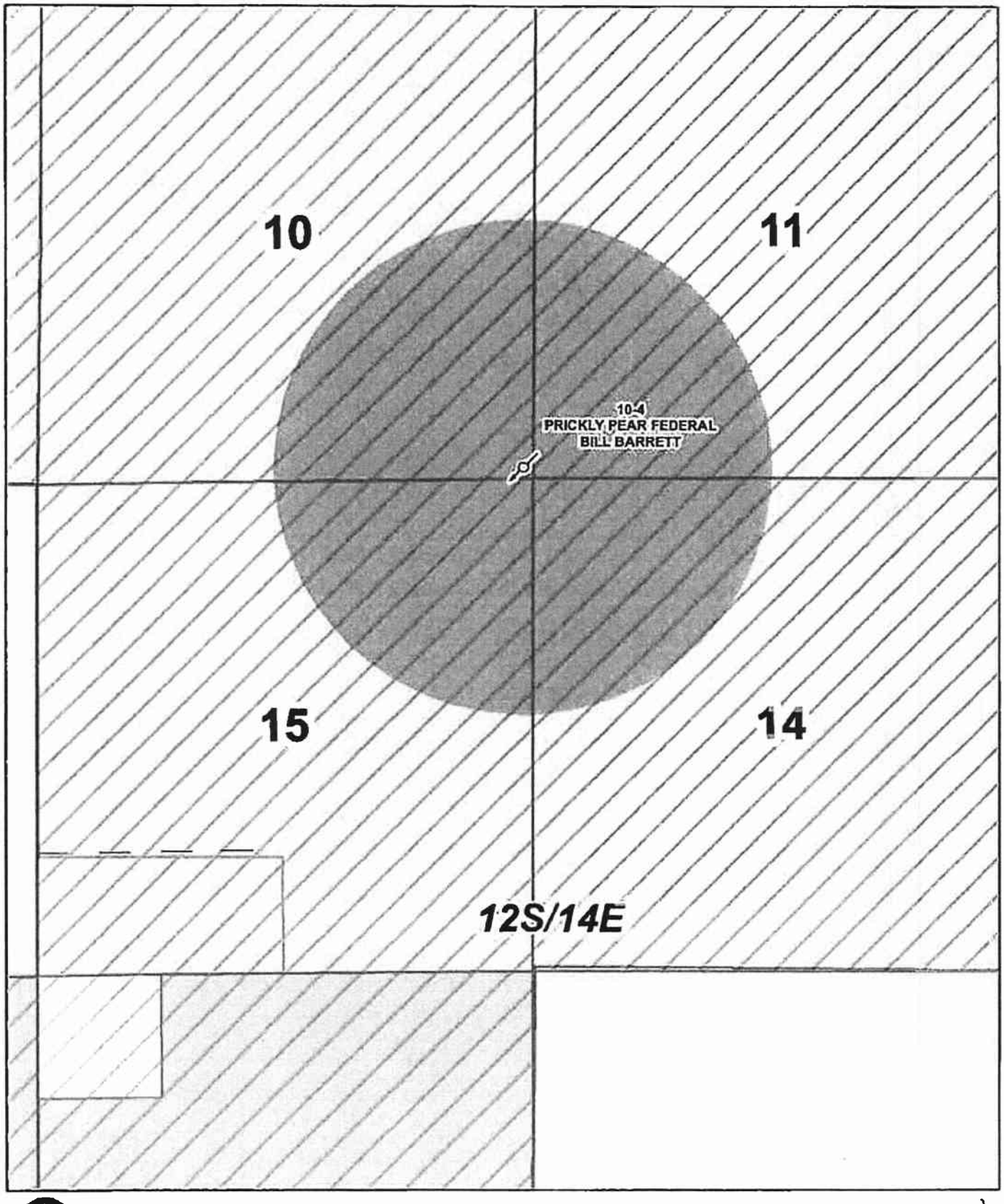
LATITUDE = 39°46'50"
LONGITUDE = 110°19'30"

LEGEND:

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

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

SCALE: 1" = 1000'		DATE SURVEYED: 10-25-01	DATE DRAWN: 11-05-01
PARTY: B.B. W.L. D.R.B.		REFERENCES: G.L.O. PLAT	
WEATHER: COOL		FILE: WASATCH OIL & GAS LLC.	



Bill Barrett Corporation

PROPOSED INJECTION WELL
Well Location,Prickly Pear Federal #10-4
Located as shown in the SESE 1/4
of Section 10, T12S-R14E Carbon County, Utah

10-4 Proposed Injection Well

1/2 Mile Well Buffer

Surface

FEDERAL SURFACE
STATE SURFACE
FEE SURFACE

Leased

BILL BARRETT CORP.
QEP

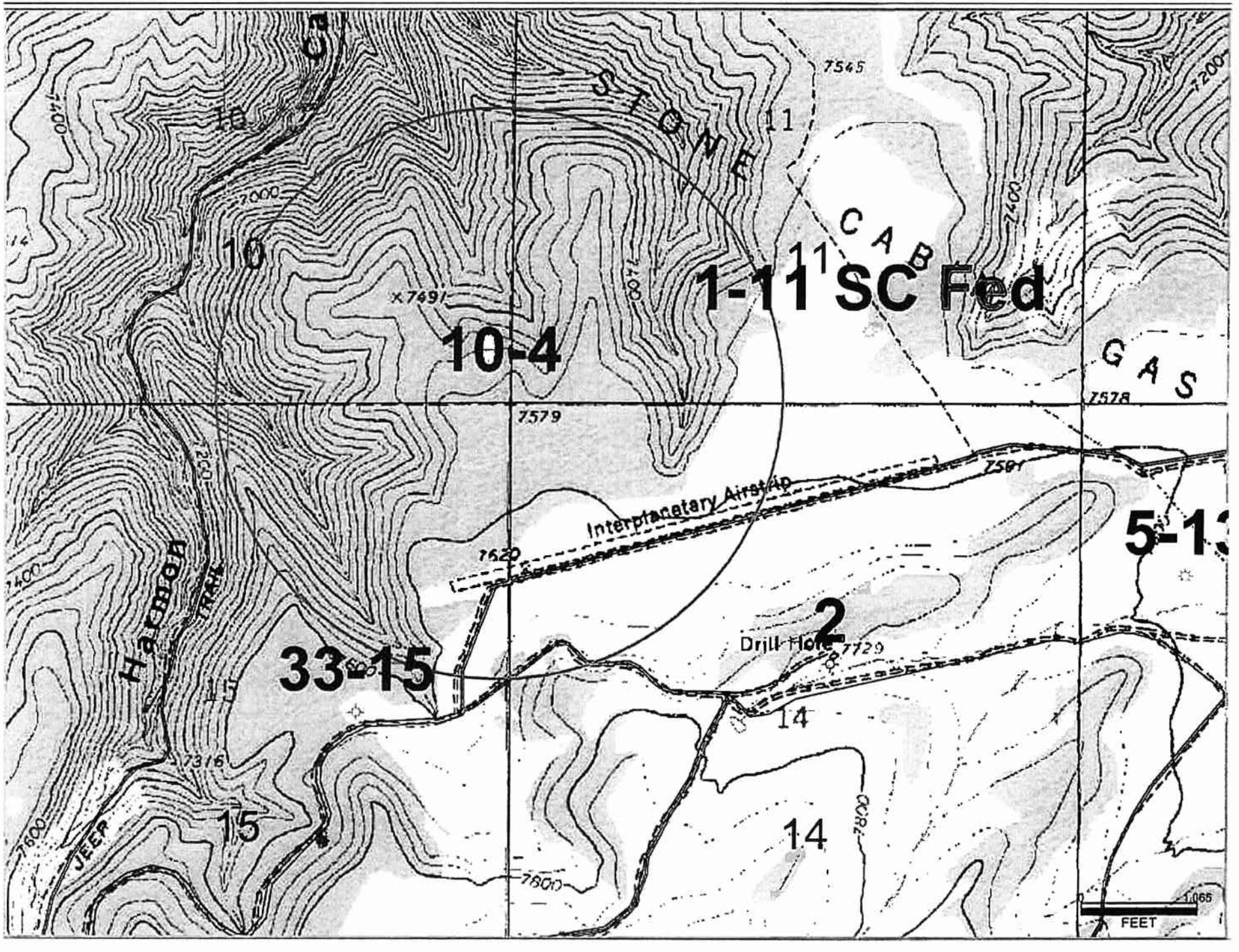
N

R649-5

2.2

Copies of electrical or radioactive logs, including gamma ray logs, for the proposed well run prior to the installation of casing and indicating resistivity, spontaneous potential, caliper, and porosity.

All logs are already on file with the division for reference.


1-11 SC Fed
10-4
33-15
2
5-13
Interplacetary Airstrip
Drill Hole
Harmon Trail
JEEP
STONE
CABIN
GAS
7545
7579
7578
7620
7729
7316
7600
7400
7200
7491
1065
FEET

R649-5

2.3

A copy of a cement bond or comparable log run for the proposed injection well after casing was set and cemented.

The CBL is already on file with the division.

R649-5

2.4

Copies of logs already on file with the division should be referenced, but need not be refiled

The CBL, Neutron Density, Resistivity, and Sonic logs are already on file with the division

Bill Barrett Corporation

Prickly Pear Fed. #10-4-12-14

Section 10, T12S-R14E
Carbon County, UT
API #: 43-007-30823
AFE #:

Recomplete SWD Well

1. Note: Water in the context of this procedure will be either clean produced water or 3% KCl water. Any water will require biocide as a precaution.

2. MIRU workover rig. Set tanks and fill with water. Using rig pump kill backside & tubing with water. ND WH & NU BOPE

3. TOOH w/tubing & PKR.

4. Rig up wireline, RIH GR to PBTD and record in wellview.

5. PU CIBP, TIH and set CIBP at 4,400'. Dump bail 50' of cement on top of CIBP allow to set.

6. Test casing by pressuring up to 4,000 psi and hold for 30 minutes. Record pressure test on Barton chart recorder for 30 minutes after stabilizing. Send chart to Denver to Heidi Reger.

7. Perforate the following zones (3 spf, 120 degree phasing, .35 EHD).

Top	Bottom	Interval
3,265'	3,275'	10'
3,335'	3,355'	20'
3,480'	3,520'	40'
3,630'	3,660'	30'
3,674'	3,700'	26'
3,730'	3,750'	20'
3,776'	3,786'	10'
3,990'	4,000'	10'
4,090'	4,100'	10'
4,132'	4,145'	13'

8. PU RBP and PKR. TIH and set RBP at +/-4,155' PU and set PKR at +/-3,980'.

9. MIRU Halliburton. Pressure test surface lines to 4,000 psig. Pump into interval and establish rate. Pump 2,500 gal 15% HCL. Displacing with 50 bbl overflush of water.

10. Release PKR and latch on to RBP. Set RBP at +/-3,796'. Set PKR at +/-3,620'.

11. Pump into interval and establish rate. Pump 2500 gal 15% HCL. Displacing with 50 bbl overflush of water.

12. Release PKR and latch on to RBP. Set RBP at +/-3,530'. Set PKR at +/-3,255'.

13. Pump into interval and establish rate. Pump 2500 gal 15% HCL. Displacing with 50 bbl overflush of water.

14. RDMO Halliburton.

15. Release PKR and PU RBP. TOOH w/tubing, PKR & RBP.

16. TIH as follows:

    (1) WL re-entry guide
    (1) Tail Joint
    (1) Packer
    (1) 1.78" XN profile nipple
    (1) on-off tool
    (1) 1.81" X profile nipple
    ~(111) Jts of 2 7/8 tubing to surface

    Set packer at +/- 3,215'.

17. Sting out of on-off tool and circulate annulus w/inhibited water. Sting into on-off tool.

18. Land tubing and ND BOPE & NU WH.

19. Set plug in XN nipple and pressure test tubing to 3,000 psig. Hold pressure for 30 minutes. Record Test.

20. Retrieve profile plug.

21. Pressure test backside annulus to 1000 psig. Record pressure test on Barton chart recorder for 30 minutes after stabilizing. Send chart to Denver to Heidi Reger. Bleed off backside pressure.

22. RDMO workover rig

Total Acid: 7,500 gal 15% HCL

Heidi Reger
10/5/2011

Prickly Pear # 10-4

API: 43-007-3082300000

SESE Sec 10-T12S-R14E

Carbon Co., UT

Proposed Changes in Red

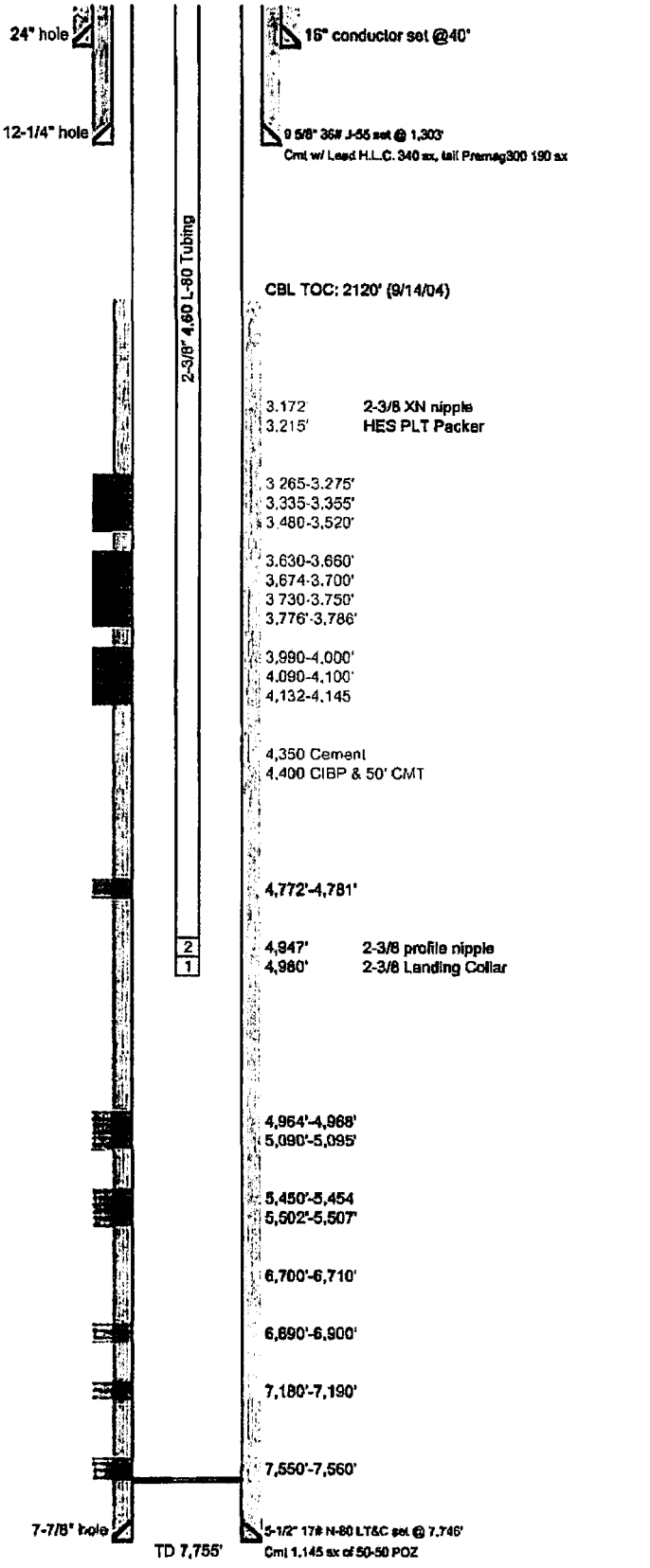
CURRENT WELLBOERE SCHEMATIC

Spud: 8/15/2004

Rig Release: 8/25/2004

Completed: 9/16/2004

1st Sales: 9/30/2004



Formation Tops

TGR/TW 2680' Sand Base - 2,983'

Wasatch - 2,796'

M. Wasatch - 3,860'

North Horn - 4,958'

Dark Canyon - 6,940'

Price River - 7,203'

PR 6840 Sand- 7,550'

5-1/2" 17# N-80 LT&C specs:
ID-4.892"
Drift-4.767"
Burst-7740 psi
Collapse-6280 psi

rparham

1/24/2012

R649-5

2.6

A statement as to the type of fluid to be used for injection, its source and estimated amounts to be injected daily:

The fluid used for inject ion will be a KCL brine solution. The fluid that will be used for injection will include flowback water from wells and produced water from wells in the field. See section 2.7 for an analysis of the water. The estimated amount of daily injection is 4,000 bbls per day. As more water is recycled in the field this number will decrease significantly.

Also, please refer to tab 2.8 for additional information.

R649-5

2.7

Standard laboratory analyses of:

2.7.1. The fluid to be injected,

2.7.2. The fluid in the formation into which the fluid is being injected, and

2.7.3. The compatibility of the fluids.

Information provided in other sections of application. Please refer to sections that follow: 2.7.1, 2.7.2, 2.7.3.

R649-5

2.7

Standard laboratory analyses of:

2.7.1. The fluid to be injected,

Below is a summary of the results from water analysis included in this section.

Prickly Pear Produced Water Analysis Results

Well Name	Test Date	TDS (ppm)
PrPr 7-16	4/5/2004	53,522
PrPr 5-16	7/14/2004	60,747
PrPr 16-15	7/14/2004	74,301
PrPr 13-16	7/14/2004	33,553

These are examples of the wells in Prickly Pear that will be disposed of in this SWD.

Water Analysis Report

09-Aug-04

Date Sampled : 14-Jul-04
Date Received : 15-Jul-04
Date Reported : 22-Jul-04

Bill Barrett Corporation
Point

UT

Attention : Fred Goodrich
cc1 :
cc2 :
cc3 :
Allen
Comments :

Field : Nine Mile/Peters
Lease : Prickley Pear
Location : Prickley Pear 16-15
Sample Point : water tank
Salesman : Larry Curtis
Analyst : Karen Hawkins

CATIONS

Calcium :	4,320	mg/l
Magnesium :	413	mg/l
Barium :		mg/l
Strontium :		mg/l
Iron :	28.0	mg/l
Manganese :		mg/l
Sodium :	23402	mg/l

ANIONS

Chloride :	43,000	mg/l
Carbonate :	0	mg/l
Bicarbonate :	2,440	mg/l
Sulfate :	698	mg/l

mg/l m

pH (field) :	6.91		**Specific Gravity :**	1.040	grams/ml
Temperature :	85	degrees F	**Total Dissolved Solids :**	74,301	ppm
Ionic Strength :	1.27		**CO2 in Water :**	300	mg/l
			CO2 in Gas :	0.03	mole %
Resistivity :		ohm/meters	**H2S in Water :**		mg/l
Ammonia :		ppm	**Dissolved Oxygen :**		ppm

SI calculations based on Tomson-Oddo parameters

Calcite (CaCO3) SI :	0.72	Calcite PTB :	722.6
Calcite (CaCO3) SI @ 100 F :	0.87	Calcite PTB @ 100 F :	821.1
Calcite (CaCO3) SI @ 120 F :	1.08	Calcite PTB @ 120 F :	936.1
Calcite (CaCO3) SI @ 140 F :	1.30	Calcite PTB @ 140 F :	1034.6
Calcite (CaCO3) SI @ 160 F :	1.52	Calcite PTB @ 160 F :	1111.3
Calcite (CaCO3) SI @ 180 F :	1.76	Calcite PTB @ 180 F :	1179.7
Calcite (CaCO3) SI @ 200 F :	1.99	Calcite PTB @ 200 F :	1229.0
Gypsum (CaSO4) SI :	-0.54	Gypsum PTB :	N/A
Barite (BaSO4) SI :	N/A	Barite PTB :	N/A
Celestite (SrSO4) SI :	N/A	Celestite PTB :	N/A

Water Analysis Report

09-Aug-04

Date Sampled : 14-Jul-04
Date Received : 15-Jul-04
Date Reported : 22-Jul-04

Bill Barrett Corporation
Point

UT
16

Attention : Fred Goodrich
cc1 :
cc2 :
cc3 :
Allen
Comments :

Field : Nine Mile/Peters
Lease : Prickley Pear
Location : Prickley Pear 13-
Sample Point : water tank
Salesman : Larry Curtis
Analyst : Karen Hawkins

CATIONS

Calcium :	1,320	mg/l
Magnesium :	194	mg/l
Barium :		mg/l
Strontium :		mg/l
Iron :	3.0	mg/l
Manganese :		mg/l
Sodium :	10912	mg/l

ANIONS

Chloride :	17,400	mg/l
Carbonate :	0	mg/l
Bicarbonate :	2,684	mg/l
Sulfate :	1,040	mg/l

mg/l m

pH (field) :	6.92		**Specific Gravity :**	1.035 grams/ml
Temperature :	85	degrees F	**Total Dissolved Solids :**	33,553 ppm
Ionic Strength :	0.56		**CO2 in Water :**	300 mg/l
			CO2 in Gas :	0.03 mole %
Resistivity :		ohm/meters	**H2S in Water :**	mg/l
Ammonia :		ppm	**Dissolved Oxygen :**	ppm

SI calculations based on Tomson-Oddo parameters

Calcite (CaCO3) SI :	0.61	Calcite PTB :	514.0
Calcite (CaCO3) SI @ 100 F :	0.76	Calcite PTB @ 100 F :	608.7
Calcite (CaCO3) SI @ 120 F :	0.97	Calcite PTB @ 120 F :	721.4
Calcite (CaCO3) SI @ 140 F :	1.19	Calcite PTB @ 140 F :	816.1
Calcite (CaCO3) SI @ 160 F :	1.41	Calcite PTB @ 160 F :	897.2
Calcite (CaCO3) SI @ 180 F :	1.65	Calcite PTB @ 180 F :	967.1
Calcite (CaCO3) SI @ 200 F :	1.88	Calcite PTB @ 200 F :	1021.2
Gypsum (CaSO4) SI :	-0.68	Gypsum PTB :	N/A
Barite (BaSO4) SI :	N/A	Barite PTB :	N/A
Celestite (SrSO4) SI :	N/A	Celestite PTB :	N/A

Water Analysis Report

24-Jun-04

Date Sampled : 05-Apr-04
Date Received : 07-Apr-04
Date Reported : 12-Apr-04

Bill Barrett Corporation

UT

Attention : Fred Goodrich
cc1 :
cc2 :
cc3 :
Comments :

Field : Nine Mile/Peters Point
Lease : Prickley Pear
Location : Prickley Pear 07-16
Sample Point : wellhead
Salesman : Larry Curtis
Analyst : Karen Hawkins Allen

CATIONS

Calcium :	4,600	mg/l
Magnesium :	194	mg/l
Barium :		mg/l
Strontium :		mg/l
mg/l		mg/l
Iron :	75.0	mg/l
Sodium :	15552	mg/l

ANIONS

Chloride :	31,800	mg/l
Carbonate :	0	mg/l
Bicarbonate :	488	mg/l
Sulfate :	813	mg/l

pH (field) :	6.34		**Specific Gravity :**	1.055	
grams/ml					
Temperature :	85	degrees F	**Total Dissolved Solids :**	53,522	ppm
Ionic Strength :	0.92		**CO2 in Water :**	352	mg/l
			CO2 in Gas :	0.03	mole %
Resistivity :		ohm/meters			
			H2S in Water :	7.0	mg/l
Ammonia :		ppm	**Dissolved Oxygen :**		ppm

SI calculations based on Tomson-Oddo parameters

Calcite (CaCO3) SI :	-0.63	Calcite PTB :	N/A
Calcite (CaCO3) SI @ 100 F :	-0.48	Calcite PTB @ 100 F :	N/A
Calcite (CaCO3) SI @ 120 F :	-0.26	Calcite PTB @ 120 F :	N/A
Calcite (CaCO3) SI @ 140 F :	-0.05	Calcite PTB @ 140 F :	N/A
Calcite (CaCO3) SI @ 160 F :	0.18	Calcite PTB @ 160 F :	50.4
Calcite (CaCO3) SI @ 180 F :	0.41	Calcite PTB @ 180 F :	102.9
Calcite (CaCO3) SI @ 200 F :	0.65	Calcite PTB @ 200 F :	144.5
Gypsum (CaSO4) SI :	-0.40	Gypsum PTB :	N/A
Barite (BaSO4) SI :	N/A	Barite PTB :	N/A
Celestite (SrSO4) SI :	N/A	Celestite PTB :	N/A

Champion Technologies, Inc.
Vernal District Technical Services

Water Analysis Report

09-Aug-04

Date Sampled : 14-Jul-04
Date Received : 15-Jul-04
Date Reported : 22-Jul-04

Bill Barrett Corporation
Point

Field : Nine Mile/Peters

Lease : Prickley Pear

UT

Location : Prickley Pear 05-

16

Attention : Fred Goodrich
cc1 :

Sample Point : water tank

Salesman : Larry Curtis

cc2 :
cc3 :

Analyst : Karen Hawkins

Allen

Comments :

CATIONS

Calcium :	3,200	mg/l
Magnesium :	49	mg/l
Barium :		mg/l
Strontium :		mg/l
Iron :	3.0	mg/l
Manganese :		mg/l
Sodium :	19697	mg/l

ANIONS

Chloride :	33,800	mg/l
Carbonate :	0	mg/l
Bicarbonate :	3,660	mg/l
Sulfate :	338	mg/l

mg/l m

pH (field) :	6.91	
Temperature :	85	degrees F
Ionic Strength :	1.02	
Resistivity :		ohm/meters
Ammonia :		ppm

Specific Gravity :	1.050	grams/ml
Total Dissolved Solids :	60,747	ppm
CO2 in Water :	300	mg/l
CO2 in Gas :	0.03	mole %
H2S in Water :		mg/l
Dissolved Oxygen :		ppm

SI calculations based on Tomson-Oddo parameters

Calcite (CaCO3) SI :	1.00	Calcite PTB :	1218.7
Calcite (CaCO3) SI @ 100 F :	1.15	Calcite PTB @ 100 F :	1328.0
Calcite (CaCO3) SI @ 120 F :	1.36	Calcite PTB @ 120 F :	1464.7
Calcite (CaCO3) SI @ 140 F :	1.58	Calcite PTB @ 140 F :	1584.9
Calcite (CaCO3) SI @ 160 F :	1.80	Calcite PTB @ 160 F :	1683.3
Calcite (CaCO3) SI @ 180 F :	2.04	Calcite PTB @ 180 F :	1770.7
Calcite (CaCO3) SI @ 200 F :	2.27	Calcite PTB @ 200 F :	1839.0
Gypsum (CaSO4) SI :	-0.92	Gypsum PTB :	N/A
Barite (BaSO4) SI :	N/A	Barite PTB :	N/A
Celestite (SrSO4) SI :	N/A	Celestite PTB :	N/A

R649-5

2.7.2

The fluid in the formation into which the fluid is being injected:

Fluid samples from the formation to be injected in will be taken at the time of completion. Compatibility tests will also be run at that time.

R649-5

2.7.3

The compatibility of the fluids:

Fluid samples from the formation to be injected in will be taken at the time of completion. Compatibility tests will also be run at that time.

R649-5
2.8
The proposed average and maximum injection pressures:

PrPr 10-4-12-14

Maximum Allowable Surface Pressure Calculations
Based on Observed Fracture Gradients

Water SG = 1.02 Gradient = .4417 psi/ft

Depth (ft)	Observed ISDP (psi)	Calculated Btm Hole (psi)	Resulting Frac Grad (psi)
7,550	3,910	7,245	0.96
7,180	3,910	7,081	0.99
6,890	4,100	7,143	1.04
6,700	4,120	7,079	1.06
5,450	6,220	8,627	1.58
4,964	2,600	4,793	0.97
4,772	2,220	4,328	0.91

Min Injection Depth = 3,265
*Max Surface Pressure = 2,961

Requested Max Surface Pressure
2,369 psi

80% of anticiapted max surface pressure

Anticipated Avg Surface Pressure = 70% * Max Surface Pressure

Requested Max Disposal Rate = 4000 bwpd / well

Anticipated Avg Disposal Rate = 800 bwpd/well

A step rate test will be performed determine max injection rate and pressure.

* Based on final ISIPs

R649-5

2.10.1

Nearby Underground Sources of Drinking Water, including the geologic formation name:

The literature discussing aquifers in this particular area is limited. U.S. Geological Survey, Water-Resources Investigations Report 92-4161 does indicate however, in the Uinta basin, north of Carbon County, the Douglas Creek-Renegade aquifer occurs above the Wasatch-Green River confining unit. The Wasatch-Green River confining unit lies below the Green River and above the North Horn (Glover, 1996). In addition, there are many sand-shale sequences throughout the Wasatch that would serve as more than adequate seals to upward movement of higher TDS injected water. State of Utah, Department of Natural Resources, Technical publication No. 92, (Howells, et al. 1987) indicates that the moderately saline groundwater interface occurs approximately +4500' subsea, in this area, which would equate to a total vertical depth of 3093', which occurs in the upper portion of the Wasatch formation. A study we had conducted on the topic of 10,000 TDS interface or moderately saline interface, and through the use of Pickett plots, in concert with actual laboratory water analysis, concluded the 10,000 TDS interface occurred somewhere above the Uteland Butte of the Green River Formation approximately 2400' TVD and 5193' subsea. In either case, it would stand to reason the Wasatch formation in the West Tavaputs Plateau area, with its interbedded shales, and mudstones, would protect any drinking water sources or aquifers of water of less than 10,000 TDS from contamination of higher TDS water, injected in deeper formations.
In the area of the proposed injection well, the highest injection perf occurs 4328ft above sea level or 3265 ft below ground level in the Prickly Pear #10-4-12-14.

R649-5

2.10.2

Lithologic descriptions, thicknesses, depths, water quality, and lateral extent

The Wasatch formation, in the West Tavaputs Plateau area, underlies the Green River formation and is indicated by a transition zone containing a series of transgressive/regressive parasequences of lacustrine origin. In addition, near-shore lacustrine and alluvial deposits occur within the sequence. The Wasatch is Tertiary in age and is marked by a succession of multi-colored shales and interbedded mudstones, siltstones and sandstones. The formation is typically 70-80% silty shale. The shales are silty to very silty, often containing mica or to a lesser extent pyrite. Shales are predominantly tan to reddish brown to brown-and commonly gradational with shaly sands being light brown to brown. Shales usually are blocky and soft, but vary in amounts of calcium carbonate cement.

In the proposed area the Wasatch is about 1000 ft thick and occurs 2796 ft below ground level and 4797 ft. above sea level. The sand bodies within the Wasatch, for the most part, are limited in aerial extent and discontinuous. Only sands found in the upper part of the Wasatch, associated with the lacustrine depositional environment have greater continuity.
The middle Wasatch lies between the Wasatch and the North Horn, and is similar to the discontinuous meandering fluvial depositional environment of the Wasatch. The middle Wasatch can be identified on open-hole logs by the drop in resistivity throughout the formation. The formation is also about 1000 ft thick in the area of study.

The North Horn formation is approximately 1900 ft thick, in the area of study, and its top is 4959 ft below ground level (2634' above sea level). The North Horn is predominately a meandering fluvial depositional environment, with exception of the bottom most beds. These sand bodies are indicative of higher energy fluvial environments and are the transition from the Dark Canyon; a braided fluvial environment to the North Horn formation, a lower energy, meandering fluvial environment, which gradually decreases in energy, moving up section. These deepest beds of the North Horn are generally "cleaner" and have a greater aerial extent than beds higher in the formation.
Similar to the Wasatch, most North Horn lithologies are still redbeds, but have subtle color changes in the silty shales and typically are smoother in texture. In addition, some shales are found in yellow, purple, green, and gray coloration.

The Dark Canyon formation, as indicated earlier, is a high-energy braided stream depositional environment. The sands are larger grained, higher in quarts content, more continuous and aerially most extensive. There are some indications that the lowest most deposits in the formation may be a basal conglomerate in some areas. In most areas in the West Tavaputs Plateau, there is a marked increase in sand content in the Dark Canyon, with the higher sand-content pulses occurring at the top and bottom of the formation. The formation averages about 215 ft in thickness and occurs 6940 ft. below ground level, which equates to about 653 ft. above sea level, in the area of study.

The Price River formation is comprised of sands and shales which seem to be of a more continuous nature, than the Wasatch and North Horn, but more lenticular than the Dark

Canyon. Similarly, it seems that there is a higher percentage of sand content in the Price River formation, than the Wasatch or North Horn, but less than the Dark Canyon. The top of the Price River usually begins with an abrupt increase in gray shale and sands within the Price River contain intergranular shale. Down section carbonaceous shales can be found. The top of the formation occurs roughly 7205 ft. below ground level, 388 ft. above sea level and is about 1000 ft thick.

Water quality data collected from each formation indicate:

Formation	Chlorides (mg/l)	Calculated NaCL (mg/l)	TDS (mg/l)
Wasatch	16418-19453	27070-32074	NA
North Horn	26054-30656	42958-50545	30895-36935
Dark Canyon	27000 -41700	44769-68753	42200 -58900
Price River	22300 - 27600	36887-45491	30000 - 40000
Bluecastle	12300 -15000	NA	23000 - 27000
Castlegate	12500	NA	25000 - 28000

R649-5

2.10.2

Lithologic descriptions, thicknesses, depths, water quality, and lateral extent

Prickly Pear #10-4

Formation	Chlorides (mg/l)	Calculated NaCL (mg/l)	TDS (mg/l)
Wasatch	16418-19453	27070-32074	NA
North Horn	26054-30656	42958-50545	30895-36935
Dark Canyon	27000 -41700	44769-68753	42200 -58900
Price River	22300 - 27600	36887-45491	30000 - 40000
Bluecastle	12300 -15000	NA	23000 - 27000
Castlegate	12500	NA	25000 - 28000

R649-5

2.10.2

Lithologic descriptions, thicknesses, depths, water quality, and lateral extent

#10-4-12-14 Prickly Pear Unit

PERF		
TOP	**BASE**	**LITHOLOGY**
3265	3275	SS: wh-offwh-transl-ltgy-rthy, fm-modhd, vf-f-occ med grnd, and-sbang-sbrnd, mod srtd, mod-v calc, tr carb, trmed grnd gluac, trf-med grnd felds
3335	3355	SS: off wh-wh-opq-ltgy mod hd-hd, f-med grnd, ang-sbang, mod-wsrtd, grn supt mtx, mltigrn clus, mod calc, tr carb flakes
3480	3520	SS: off wh-wh-opq-trnsl, mod hd-hd, vf-f-med grnd, sbang-sbrn-rnd, grn supt, abnt lse grns, mod calc, com carb mat
3630	3660	SS: trnsl-fros-wh-ofwh, fri-hd, f-c gr, sbang-sbrnd, mod p sort, uncon, sl calc, tr carb
3674	3700	SS: trnsl-fros-wh-ofwh, fri-hd, f-c gr, sbang-sbrnd, mod p sort, uncon, sl calc, tr carb
3730	3750	SS: trnsl-fros-wh-ofwh,fri-hd, f-c gr, sbang-sbrnd, mod p sort, uncon, mod calc, tr carb
3776	3786	SS: trnsl-fros-wh-ofwh, fri-hd, f-c gr, sbang, sbrnd, mod p sort, uncon, mod calc, tr carb
3860	3865	SS: wh-offwh, gy-gygrn, sl s&p, fri sft-frm, vf-f gr, sbang-sbrnd, mod w sort, gr & mtx supt, v calc, calc mtx tr carb tr pyr
3990	4000	SS: aa, SH: rd-rdbrn-brn, tan-yel, gy-gygrn, purp, sft-frm, n-sl calc, sbblky-blky, rthy-grty, silty ip grdg to SLTYSH, tr pyr, tr carb
4090	4100	SS: ltgy-gy, rd-rdbrn, wh-offwh, sl s&p, fri, vsft-frm, vf-c gr, sbang-sbrnd, mod w sort, abnt lse grs, gr & mtx supt, v calc, calc & rd clay mtx, silty ip, tr carb
4132	4145	SS: ltgy-gy, rd-rdbrn, wh-offwh, sl s&p, fri, vsft -frm, vf-c gr, sbang-sbrnd, por sort, occ lse grs, gr & mtx supt, v calc, calc & rd clay mtx, silty ip, tr carb, tr pyr, tr glauc

R649-5

2.10.3

Information relative to geologic structure near the proposed well that may effect the conveyance and/or storage of the injected fluids:

Cross-section and ½ mile radius maps for review.

R649-5

2.10.3

Information relative to geologic structure near the proposed well that may effect the conveyance and/or storage of the injected fluids:

The Prickly Pear #10-4 proposed injection zones are nominally structurally higher than the correlative zones productive zones to the east on Prickly Pear. Based on the supplied structure map and well log analysis it is evident that the proposed disposal well, is up-dip from economic production in Prickly Pear, to the east, however the closest well with stratigraphically equivalent zones is 2.13 miles away in the Prickly Pear 4-18-12-15, which has been completed in those zones.

From the disposal intervals in the Wasatch and Middle Wasatch, the structural maps and log tops indicate 81', and an approximately 25' decrease in elevation from the proposed injection well, to the closest economically productive well in Prickly Pear, respectively.

The general consensus, when consulting all the cross-dipole data and a microseismic survey done in the Prickly Pear #1-20-12-15, is the principle horizontal stress is oriented N50W and likewise hydraulic fracturing did create fracture pattern ellipse, with an aspect ratio of 3.5:1, with the long axis oriented N50W, in the Prickly Pear #1-20. That fracture pattern and microseismic events were observed in a 9-stage microseismic survey conducted last year on the aforementioned Prickly Pear well. If this hydraulic conveyance regime is valid, it would possibly transport and store water in an ellipse aligned in such a way as to not be aligned with any productive wells within any conceivable conveyance distance. Nonetheless, as mentioned previously, if one assumed a radial conveyance, the nearest economic well with completed, stratigraphically equivalent zones is 2.13 miles away.

R649-5

2.10.3

Information relative to geologic structure near the proposed well that may effect the conveyance and/or storage of the injected fluids:

For additional reference, please refer to the cross-section and ½ mile radius maps sent with application. PDF versions are also available upon request.

R649-5

2.11

A review of the mechanical condition of each well within a one-half mile radius of the proposed injection well to assure that no conduit exists that could enable fluids to migrate up or down the wellbore and enter improper intervals.

Other Offsets:

There are no wells within ½ mile radius of this well.

Bill Barrett Corporation

AFFIDAVIT OF NOTICE

Prickly Pear Unit Federal 10-4
SESE Sec. 10, T12S, R14E
Carbon County, UT
API #4300730823

I, Vicki L. Wambolt, Landman with Bill Barrett Corporation (BBC) certify that a true and correct copy of UIC Form 1 Application for Injection Well with supplemental ownership information was provided, by certified mail, to the following operators, owners and surface owners located within a one-half (1/2) miles radius exposure of the location pursuant to R649-5-2.12 of the Oil and Gas Conservation, General Rules.

Bureau of Land Management
125 South 600 West
Price, Utah 84501

Affiant

Vicki L. Wambolt, Landman
January 5, 2012

State of Colorado)
)
County of Denver)

Before me, the undersigned, on the date as given above, personally appeared Vicki L. Wambolt known to me to be the person whose name is subscribed to the foregoing instrument for the purpose and consideration therein expressed.

Given my hand seal.

Notary Public

My commission expires: 8-11-2014

MATTHEW MULVERHILL
NOTARY PUBLIC
STATE OF COLORADO
My Commission Expires 08/11/2014

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

EXHIBIT "C" IS THE SAME AS EXHIBIT "2" ATTACHED TO THE RAA

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Green River District, Price Field Office
125 South 600 West
Price, UT 84501
http://www.blm.gov/ut/st/en/fo/price.html

SEP 2 6 2012

IN REPLY REFER TO:
Prickly Pear Unit Federal 10-4-12-14 Disposal Well
3160-4 (UTG021)

CERTIFIED MAIL-RETURN RECEIPT REQUESTED
#7010-1060-0001-1119-2316

Ammon McDonald
Utah Division of Oil, Gas and Mining
Oil and Gas Permitting
P.O. Box 145801
Salt Lake City, Utah 84114-5801

Re: Objection to inject produced water into Prickly Pear Unit Federal 10-4-12-14

Dear Mr. McDonald:

In February of 2012, Bill Barrett Corporation submitted a Sundry Notice to the Bureau of Land Management (BLM) in Price, Utah proposing to convert the Prickly Pear Unit Federal 10-4-12-14 well into a water disposal well. The BLM reviewed the proposal and registered concerns with the Utah Division of Oil, Gas and Mining (UDOGM) about Underground Injection Control (UIC) application, noting there was a possibility of contaminating useable groundwater in the zone proposed. In this case, usable water is defined as having a total dissolved solids (TDS) value of less than 10,000 mg/L. The BLM contacted the UDOGM and requested that groundwater be sampled and tested.

The ground water injection zone that is being proposed is in the upper portion of the Mesaverde Aquifer and is completely within the Wasatch Formation. Regionally, this intermediate aquifer yields fresh to moderately saline water. Locally, the water quality values can dramatically change due to isolated, perched, local aquifers. This data as well as other available water quality data was taken into account during the BLM's Geological and Groundwater Evaluation (attachment 1).

Historic groundwater quality data in the vicinity of the 10-4-12-14 well have much lower TDS values than contemporary groundwater quality reports. The historic data is from the 1950s and 1960s. The following data collection depths will be presented in altitude, above sea level, in order to make it easier to correlate relative depths. The Stone Cabin Unit 3 well has TDS values of 1,932 mg/L at an altitude of 5,056' to 5,226'. USGS well number C13-286 shows TDS of

EXHIBIT 2

1,941 mg/L from 5,810' to 7,530'. The Stone Cabin Unit 2 has three water quality samples that range from 2,023' to 2,679' with TDS values from 2,963 mg/L to 5,480 mg/L. The Stone Cabin Unit 1 and the Canyon Govt 1 wells were each sampled from -1,237' to -1,052' with TDS values of 12,511 mg/L and 13,029 mg/L, respectively.

The most current data in this area is from the last ten years in the Prickly Pear Field. Prickly Pear Unit Federal 5-13-12-14 was sampled from 3,040' to 304' and produced a TDS value of 65,683 mg/L. The Prickly Pear Unit 13-4 well had TDS values of 62,877 mg/L at 2,860' to -873'.

The enclosed map in attachment 1 shows a visual representation of this data, however, the depth data is presented in feet below ground surface (bgs).

This is the information the BLM used to make the decision to request further sampling. There were several groundwater quality samples taken within one mile that had TDS values well below the usable threshold of 10,000 mg/L. The BLM would likely have approved a disposal well had the disposal interval matched the production zone previously perforated.

Water sampling took place on June 26, 2012 and was analyzed by the Utah Department of Health Laboratory, which showed TDS at 9,216 mg/L at a depth of 3,265' to 4,145' below ground surface (BGS) or 3,433' to 4,313' above sea level (attachment 2). Originally, UDOGM requested that the bottom portion of the perforation zone be isolated and a sample taken from that area as well. After some discussion between Bill Barrett Corporation, UDOGM and the BLM, the decision was made that this procedure would not be necessary. The well was packed, isolating the injection zone from the lower production zone, and purged. Three well volumes were extracted and a single sample was withdrawn and split between the BLM and Bill Barrett Corporation.

Since the result of the BLM water quality test was less than the 10,000 mg/L TDS threshold for injection of produced water into a usable water aquifer, the BLM will maintain its objection to approving the disposal well/Underground Injection Control (UIC) application and will consider withdrawing it if the aquifer can be shown to be unusable or UDOGM and the Environmental Protection Agency grants Bill Barrett Corporation an aquifer exemption.

If you would like additional information or wish to discuss this project further with myself or my staff please contact Greg Gochnour (Geologist) or myself at (435)-636-3600.

Sincerely,

Patricia A. Clabaugh

Patricia A. Clabaugh
Field Manager

Attachments

cc: Brady Riley
Bill Barrett Corporation
1099 18th Street
Suite 2300
Denver, Colorado 80202

ATTACHMENT 1

GEOLOGICAL & GROUNDWATER EVALUATION: APPLICATION FOR PERMIT TO DRILL (APD)

Date: 2-24-2012
Lessee: Bill Barrett Corporation
Well Name: Prickly Pear Federal 10-4-12-14; Vertical Water Disposal Well/Injection
Lease number: UTU-73665
Unit Agreement: UTU-
Contact: Brady Riley: 303-312-8115

Location: Surface: SESE 75' FSL; 271' FEL; T12S, R14E, Sec 10
Target: Same SESE 75' FSL; 271' FEL; T12S, R14E, Sec 10
Surface Elevation (SE): 7578'; **Vertical Depth (TVD; bgs)** 4145'
Target: Mesa Verde Group
Drill Type: NA
Mud: NA
Cement/Casing: Entire String; no un-cemented sections.
Sole Source Aquifers (SSAs): None
Drinking Water Source Protection Zones (DWSPZs): None within a 1.0-mile radius. There is a Surface Water Protection Zone 2.2 miles NW and 2.3 miles SE. Water Quality available 0.8 miles NE, 1.77 miles NE, 2 miles N, and 1.5 miles NE.
Groundwater data available does not coincide with BBC supplied data.

Formation	Thickness	Prickly Pear 11-15D-12-15 Formation Tops BGS	Prickly Pear 11-15D-12-15 Elevation-Feet 7191	Proposed BBC Federal 10-4-12-14 BGS	Proposal Elevation 7578	BBC Federal 10-4-12-14 Groundwater TDS BBC supplied data	[redacted]
Colluvium	0-10	0	7191	0-10	7578		
Green River	3200			2901	4677		[redacted]
**Colton (Wasatch)	900-3000	2860	4331	3265 3335 3480 3630 3674 3730 3776 3990 3090 4132	4313 4243 4098 3948 3904 3848 3802 3588 4488 3446	NA	
**Flagstaff	0-30						
**North Horn	100-500	5046	2145	4958		30,895-36,935	[redacted]
**Dark Canyon	0-100 (200 Locally)					42,200-58,900	
**Price river	100-300 U 100-400 L	7271	-80	7203		30,000-40,000	
Castlegate	80-300					25,000-28,000	
Blackhawk (6 coal members)	670-1030						[redacted]
Mancos	3900			9000	-1579		[redacted]
Source	UGS Bulletin 183 p.8 after Hintze, 1993 Sunnyside Area						[redacted]

SPECIAL NOTES:

Operator's Picks: The operator's formation tops and selected peroration zones are reasonable.

Drilling has already been conducted. The well was spud in 2004 and decommissioned in 2008.

Cement was considered 80% complete by BBC.

Subsurface geology: The geologic description from BBC is satisfactory.

Coal: There is no minable coal in the drilled sections.

Abnormal conditions: There have been H_2S shows in the Prickly Pear field.

Groundwater Regional Studies: Alluvial gravels are not present and colluvium is thin, < 10' thick, so the potential for having a usable perched aquifer is limited. The adjoining Mesaverde aquifer, consisting of formations above the Star Point Sandstone through the Colton (Wasatch) Formation, consists of interbedded sandstone, mudstone, siltstone, shale, coal, and limestone. Sediment deposition occurred in fluvial, deltaic, lagoonal, shallow marine and lacustrine environments. Because of the diverse and fluctuating environments of deposition, the lithologic units exhibit complex lateral and vertical gradational and intertonguing relationships particularly near the delta-marginal marine transition. In spite of these fluctuating environments of deposition, many of the individual sandstones are continuous and traceable for tens of miles creating large continuous and possibly interconnected aquifers. The thickness of the aquifer varies but is generally greater than 4,000 feet and contains both intermediate and local ground-water flow systems. The water quality ranges from fresh to slightly saline in quality with total dissolved solid (TDS) concentrations reported from 200 mg/L to over 5,000 mg/L; most readings were around 300 mg/L. Depth to the base of useable water (Mancos Top): ~ 9000' bgs (PFO Calculations; Internal well files and UDGM well logs).

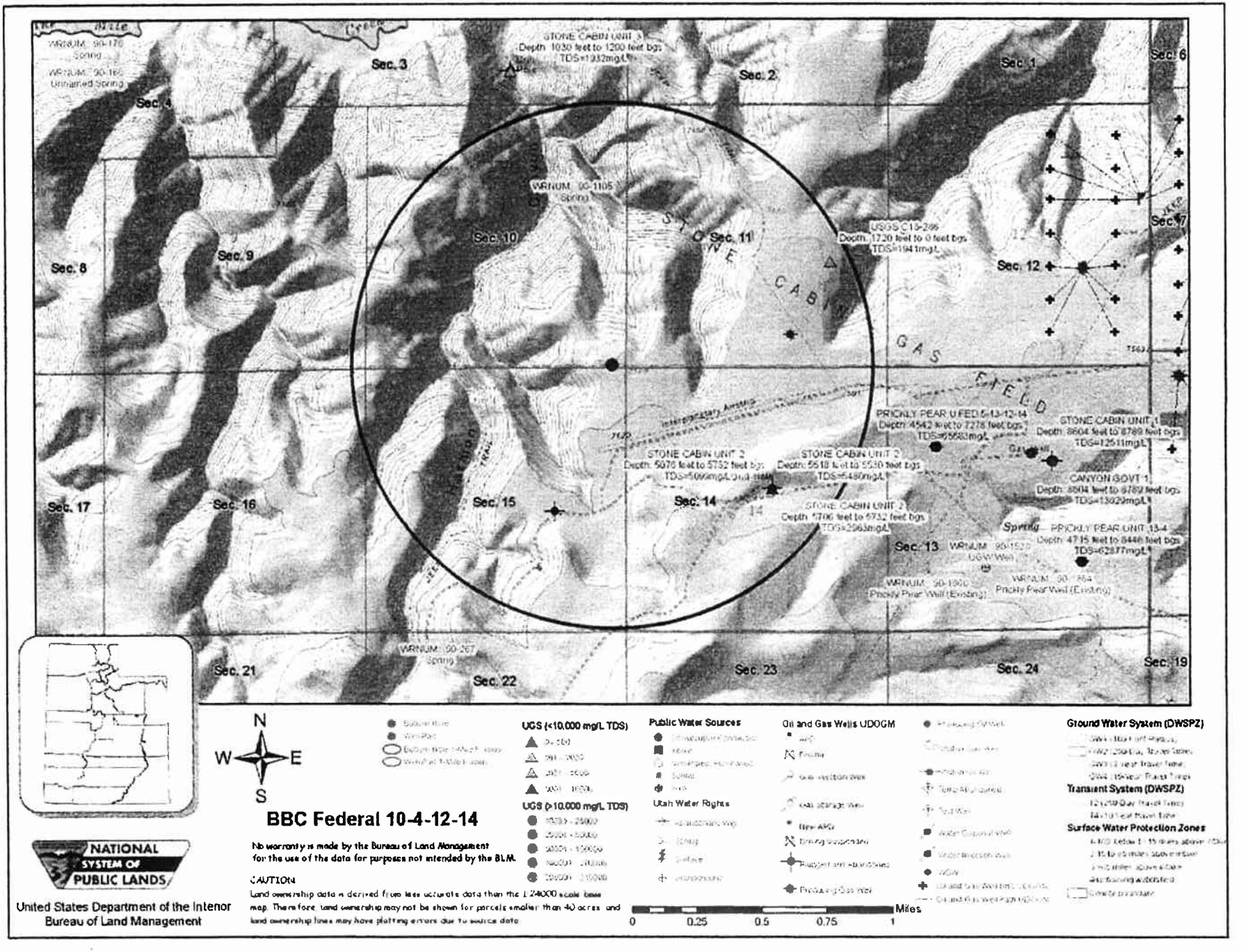
Potential Water Impact Analysis Review Tool: The project is not within a groundwater protection zone or a surface water protection zone. There are no Soul Source Aquifers present within the Prickly Pear field. Data from Stone Cabin Unit 2, located 1/3 mile southeast of the proposed disposal location, indicates TDS concentrations range between 2,963 at 5,732 feet bgs and 5,480 at 5,530 feet bgs. Data from Stone cabin Unit 3, located 0.8 miles north of the proposed disposal well, has 1,932 TDS at 1,200 feet bgs. Canyon Govt 1, located 1.5 miles southeast recorded 13,029 and 23,460 TDS at 8,500 feet bgs; this however, is from samples taken from the Mancos Formation, a deep-water marine deposit, and not typical of the terrestrial Price River and Wasatch Formations.

Groundwater Primacy: The State of Utah has primacy regarding surface and groundwater protection in the state. Conversations with Bark Kettle, Dan Jarvis and Ammon McDonald indicate that the state is looking closely at this proposal. They have made no recommendations at this point in time.

Recommendation: I recommend that BBC consider formations that are deeper and have higher TDS concentrations than that which was proposed. The Stone Cabin data indicates groundwater is useable (less than 10,000 TDS) and should be protected. However, if it can be shown by further analysis that the water quality of the injected fluids is superior to the groundwater present, then it should be approved. I would place a Condition of Approval (COA) stating that BBC will purge the well after perforating and collect a representative sample, with collaborative water samples taken by the State of Utah or BLM, analyzed separately, and compared. If TDS is over 10,000 or if the injected fluid is higher quality than the groundwater present, then the well should be authorized; however, if the TDS is less than 10,000 and if the injected water is inferior to the groundwater present, then the well should not be authorized.

Chris Conrad, PG
Bureau of Land Management
Price Field Office

_____ 2/28/2012



BBC Federal 10-4-12-14

NATIONAL SYSTEM OF PUBLIC LANDS

United States Department of the Interior
Bureau of Land Management

No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the BLM.

CAUTION

Land ownership data is derived from less accurate data than the 1:24000 scale base map. Therefore land ownership may not be shown for parcels smaller than 40 acres and land ownership lines may have plotting errors due to source data.

Attachment 2

UTAH STATE DEPARTMENT OF HEALTH
DIVISION OF LABORATORY SERVICES
Environmental Chemistry Analysis Report

BUREAU OF LAND MANAGEMENT - PRICE
CHRIS CONRAD
125 S 600 W
PRICE UT 84501 435-636-3667

Lab Number: 201203557 Sample Type: 04 Cost Code: 900B
Description: BBC PRICKLY PEAR 10-4
Collector: CPC

Site ID: Source No: 00 | Organic Review:
Sample Date: 06/26/2012 Time: 12:00 | Inorganic Review: 07/30/2012
| Radiochemistry Review:
| Microbiology Review:

TEST RESULTS:

Manual pH	7.19	T-Arsenic	143.0 ug/l
T-Barium	0.232 mg/l	T-Cadmium	<0.1 ug/l
T-Chromium	32.1 ug/l	T-Lead	147.0 ug/l
T-Mercury	<0.2 ug/l	T-Selenium	21.8 ug/l
T-Silver	<0.5 ug/l	TDS @ 180C *	9216 mg/l

QUALIFYING COMMENTS (*) on test results:

TDS @ 180C Holding time was exceeded before analysis was completed.

TDS @ 180C Sample received with insufficient holding-time remaining for analysis.

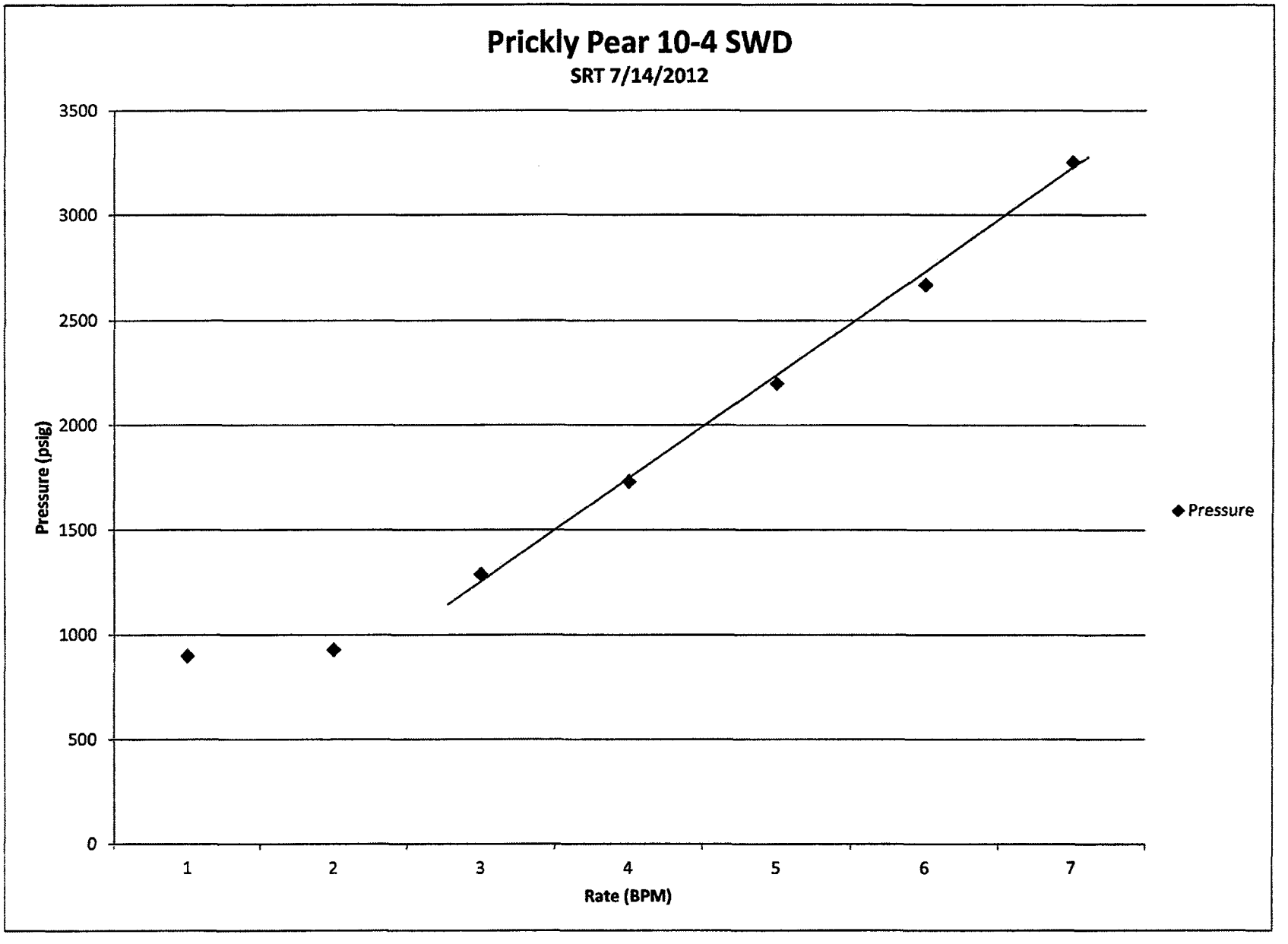
For Drinking Water Regulatory Compliance Information please call:
Division Of Drinking Water/Compliance (801)536-4200

Trace levels up to 0.2 ppb metals may be present in bottles

END OF REPORT

EXHIBIT "D" IS THE SAME AS EXHIBIT "3" ATTACHED TO THE RAA

EXHIBIT 3


Prickly Pear 10-4 SWD
SRT 7/14/2012
Pressure (psig)
3500
3000
2500
2000
1500
1000
500
0
1
2
3
4
5
6
7
Rate (BPM)
Pressure

HALLIBURTON JOB LOG

REGION: NORTH AMERICA	NWA / COUNTRY: ROCKY MOUNTAIN / USA	TICKET #: 9664933	TICKET DATE: July 14, 2012
MBU ID / EMPL #: 0	H.E.S. EMPLOYEE NAME: 0	BDA / STATE: UTAH	COUNTY: UINTAH
LOCATION: VERNAL UT.	COMPANY: BILL BARRETT	PSL DEPARTMENT: PRODUCTION ENHANCMENT	
TICKET AMOUNT: $0.00	WELL TYPE: 00 / WELL CATEGORY: 00	CUSTOMER REP / PHONE: RUSSELL EVANS	
WELL LOCATION: LAND	DEPARTMENT: 5005	API/UWI #: 0	
LEASE: PRICKLY PEAR / WELL #: 14G-8-10-18	SEC / TWP / RNG: 0	JOB PURPOSE CODE: 0	

Chart No.	Time	Rate bpm	Volume bbl	Pmps T	Pmps C	Press.(PSI) Tbg	Press.(PSI) Csg	Job Description / Remarks
	0400							CALLED OUT
	0630							ON LOCATION
	0645							PRE RIG UP SAFETY HUDDLE
	0700							RIG UP
	0715							PRE JOB SAFETY MEETING
	0730							TEST IRON
	0747	4.0						LOAD HOLE
	0749		4					CAUGHT PRESSURE
	0749							START JOB 1 BPM
	0751	1.0	6			630		START INJECTION TEST
	0821		37			900		CHANGE RATE TO 2 BPM
	0823	2.0	41			1,260		START INJECTION TEST
	0853		101			930		CHANGE RATE TO 3 BPM
	0854	3.0	104			1,170		START INJECTION TEST
	0924		194			1,290		CHANGE RATE TO 4 BPM
	0926	4.0	202			1,580		START INJECTION TEST
	0956		322			1,730		CHANGE RATE TO 5 BPM
	0957	5.0	327			2,200		START INJECTION TEST
	1027		477			2,200		CHANGE RATE TO 6 BPM
	1031	6.0	490			2,550		START INJECTION TEST
	1101		680			2,670		CHANGE RATE TO 7 BPM
	1103	7.0	693			3,200		START INJECTION TEST
	1133	7.0	905			3,250		SHUTDOWN
	1134					1,190		ISIP
	1138					837		5 MIN
	1143					653		10 MIN
	1148					543		15 MIN
								SUMMARY
								HHP 0 FG. #VALUE!
								AVG RT. 3.5 BPM MAX RT. 7.0 BPM
								AVG PRESS. 2,000 PSI MAX PRESS. 3,250 PSI
								TOTAL LOAD 38,010 GAL 905.0 BBL

Wasatch Subsea Structure

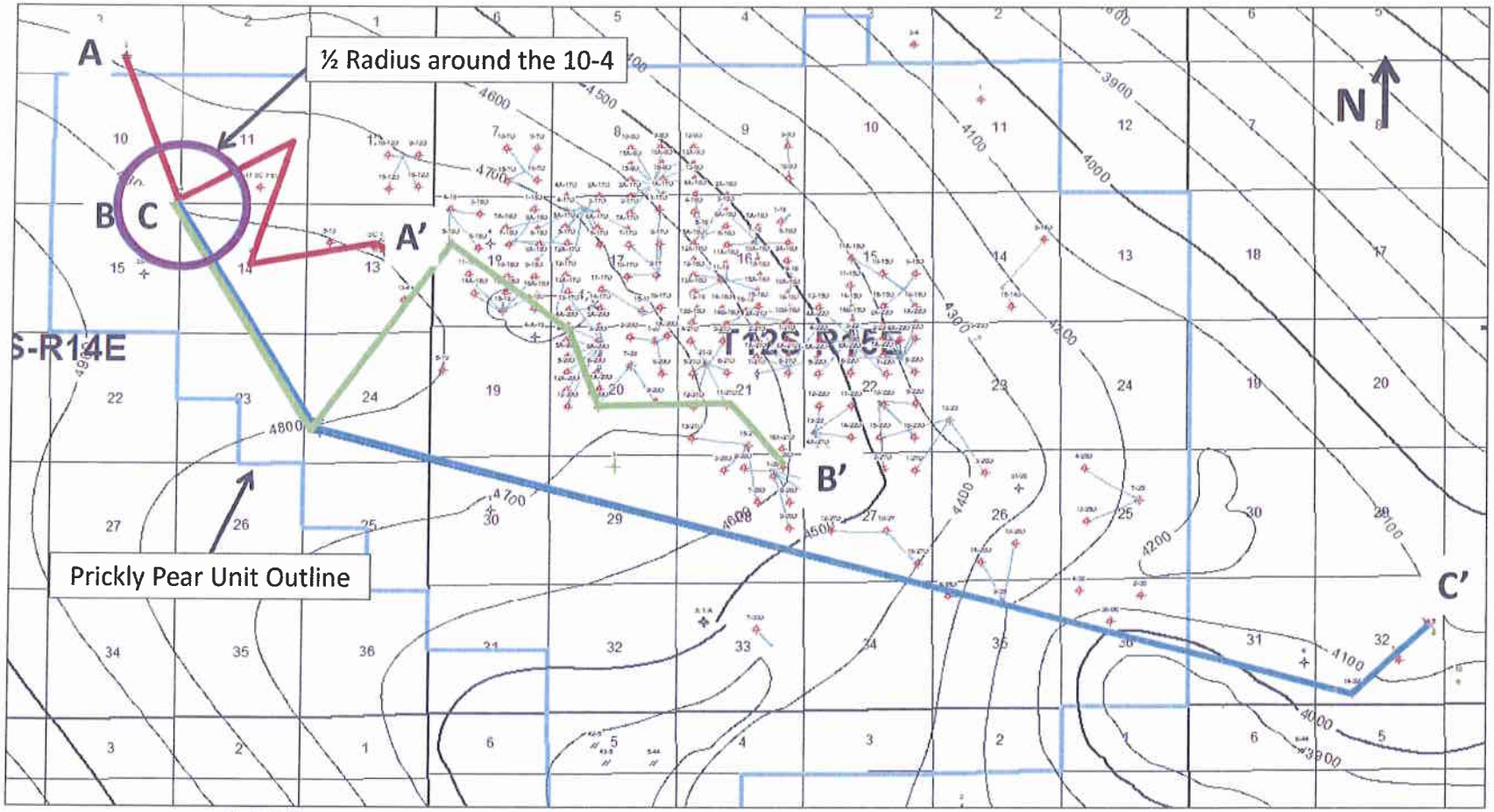


EXHIBIT E

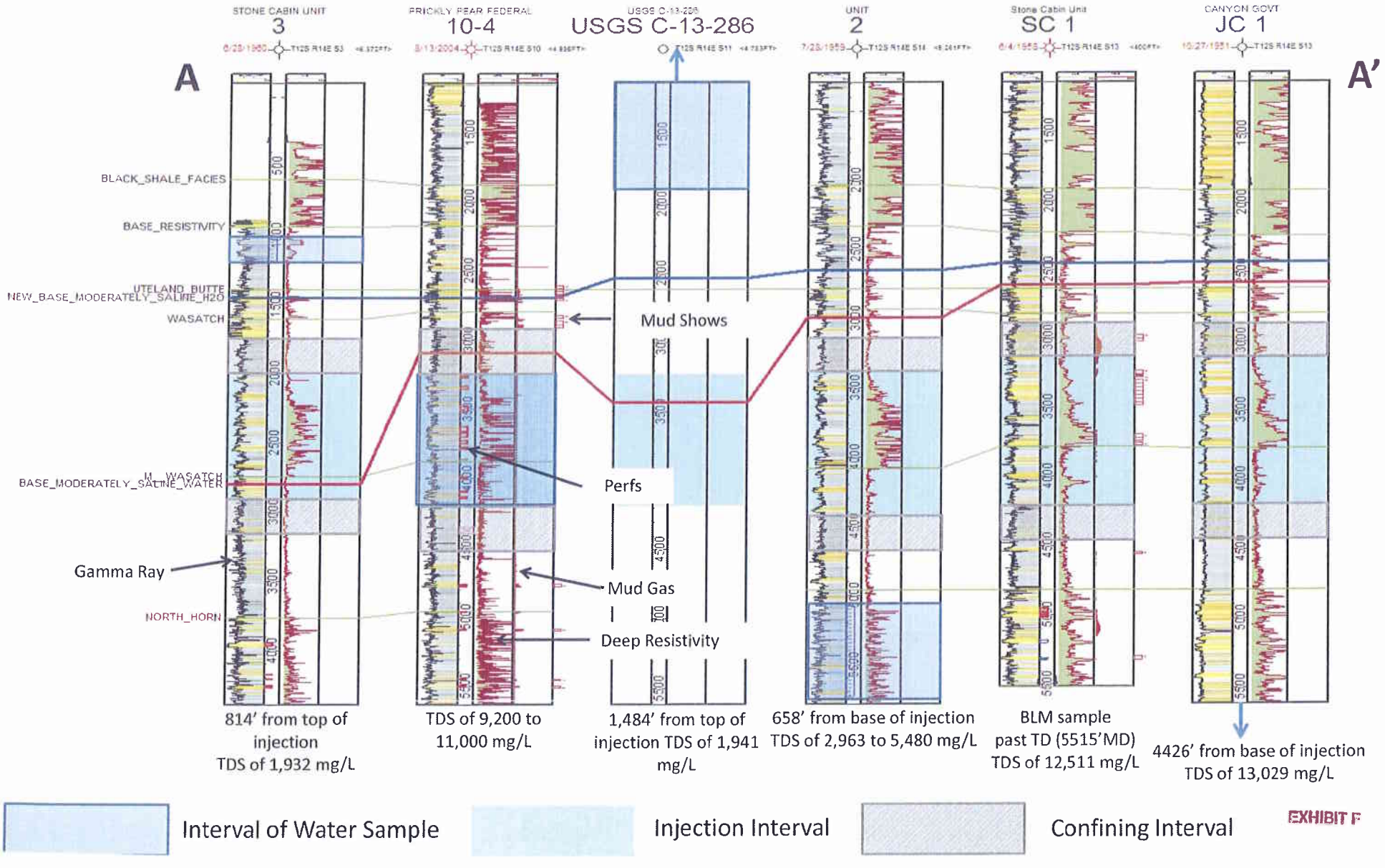
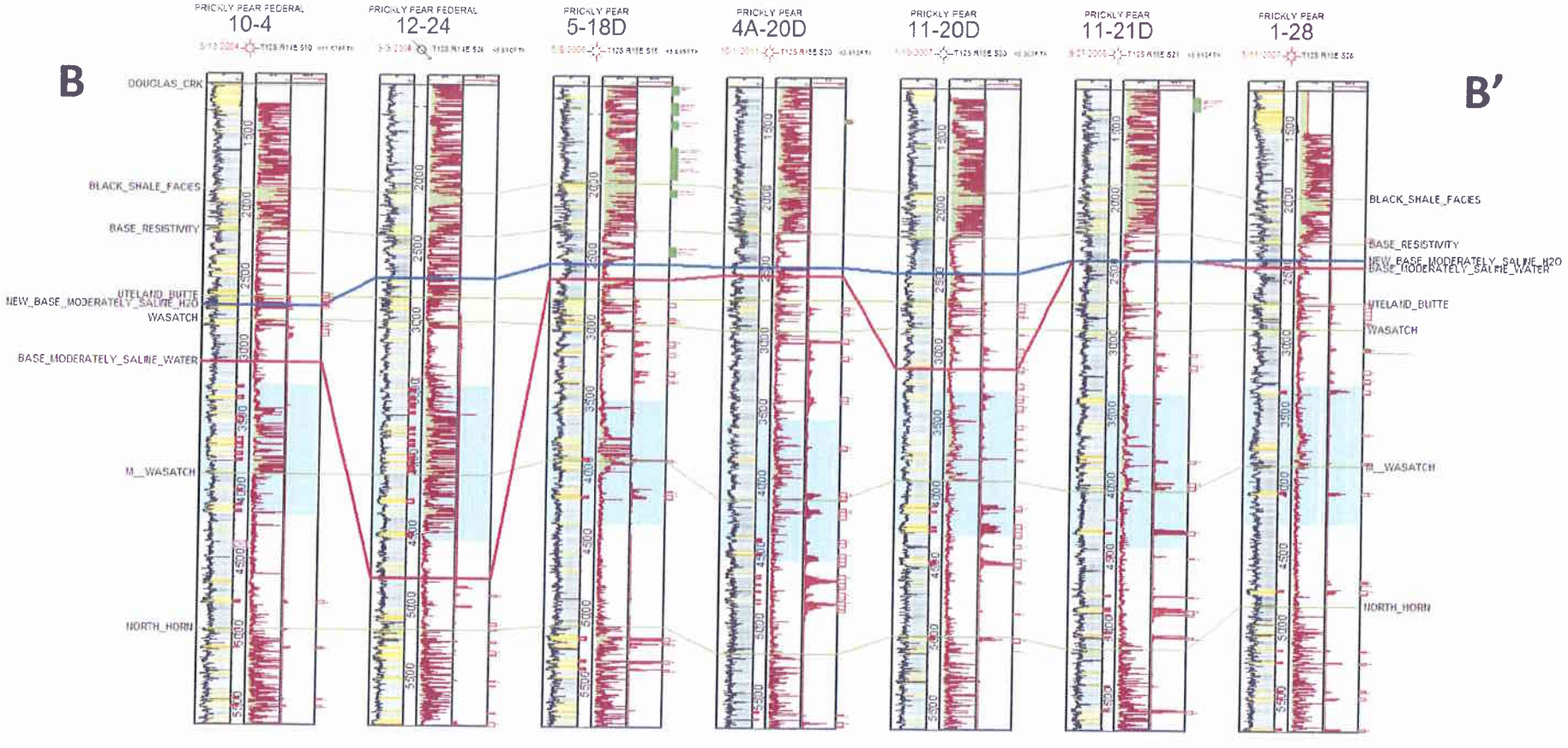

STONE CABIN UNIT
3
PRICKLY PEAR FEDERAL
10-4
USGS C-13-286
UNIT
2
Stone Cabin Unit
SC 1
CANYON GOVT
JC 1
A
A'
BLACK_SHALE_FACIES
BASE_RESISTIVITY
UTELAND_BUTTE
NEW_BASE_MODERATELY_SALINE_H2O
WASATCH
M_WASATCH
BASE_MODERATELY_SALINE_WATER
NORTH_HORN
Gamma Ray
Mud Shows
Perfs
Mud Gas
Deep Resistivity
814' from top of injection TDS of 1,932 mg/L
TDS of 9,200 to 11,000 mg/L
1,484' from top of injection TDS of 1,941 mg/L
658' from base of injection TDS of 2,963 to 5,480 mg/L
BLM sample past TD (5515'MD) TDS of 12,511 mg/L
4426' from base of injection TDS of 13,029 mg/L
Interval of Water Sample
Injection Interval
Confining Interval

EXHIBIT F

Hydrocarbon Shows



Hydrocarbon shows are present below, in and above the injection interval.

EXHIBIT G

SWD Wells in West Tavaputs

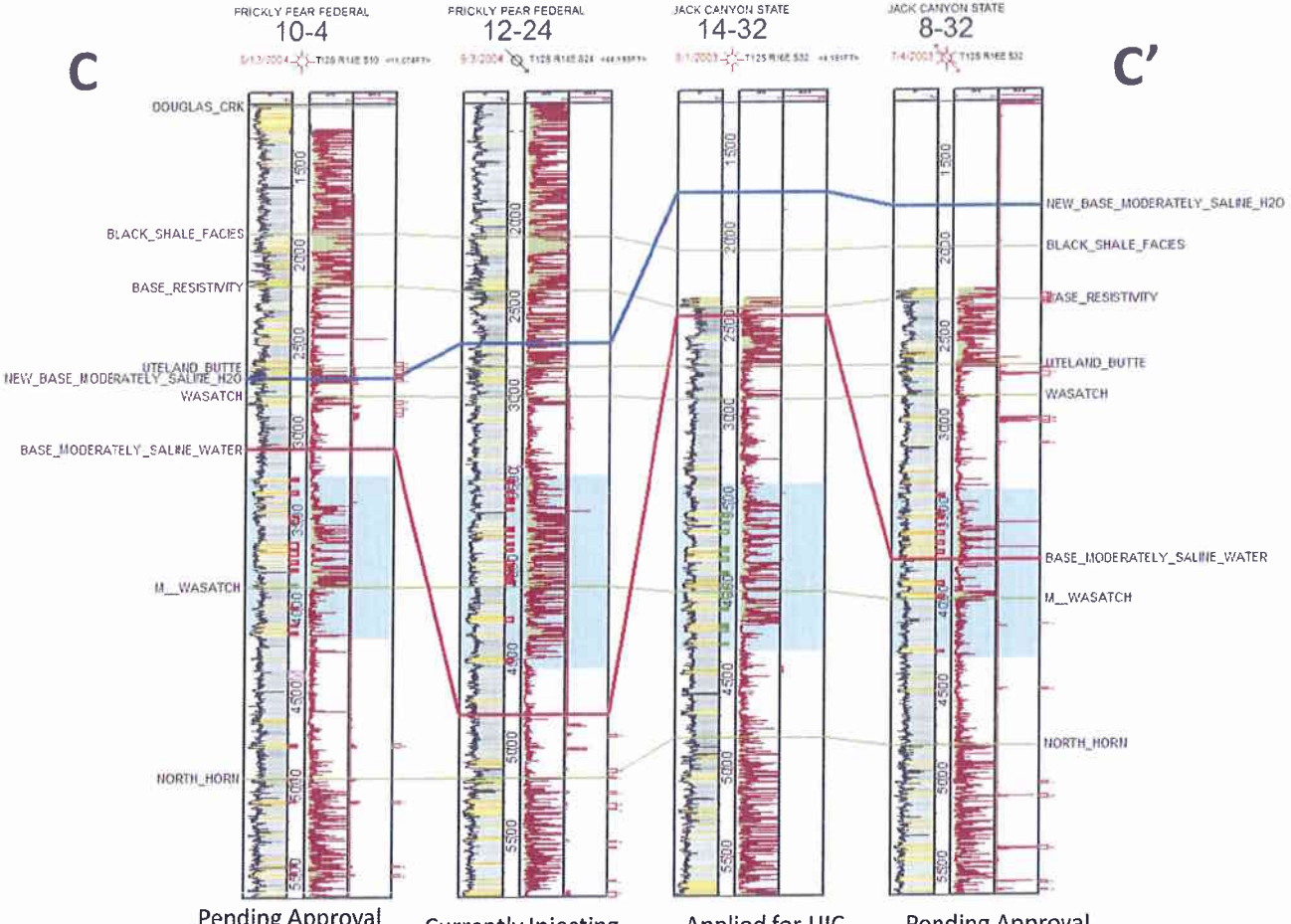


EXHIBIT H

Injection Volume

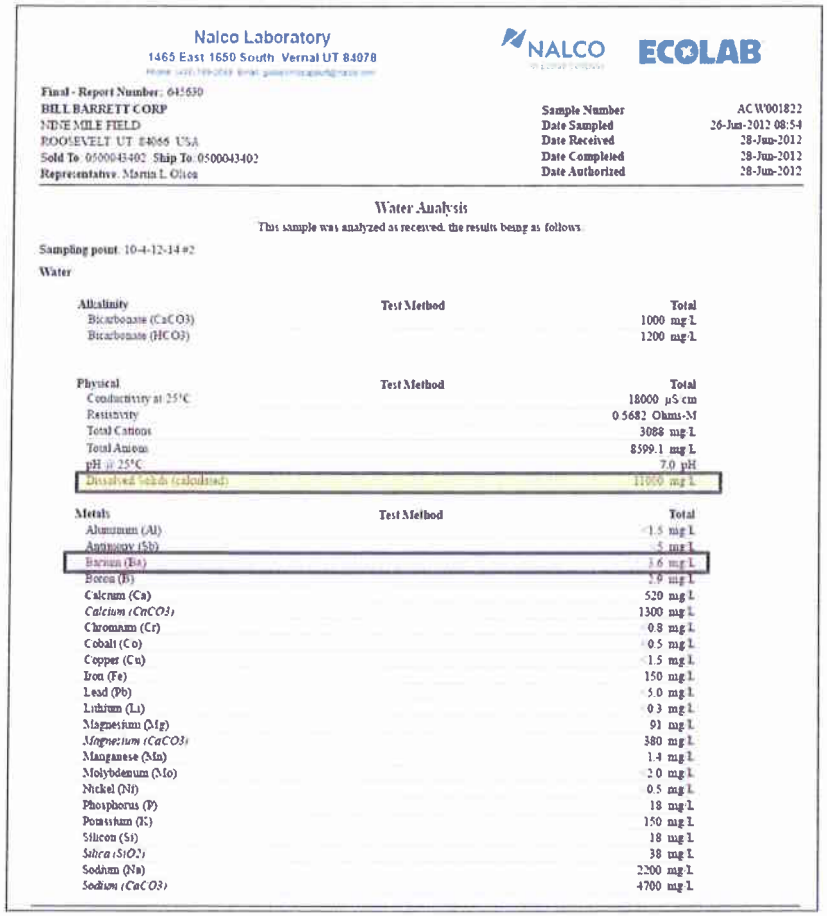
Formation	Perf top	Perf base	Reservoir Thickness (ft)	Porosity	Porosity Feet (Phi*h)	Water Saturation	Pore Vol (Phi*h*(1-Sw)	1/2 Mile Radius Volume (bbls)
Wasatch	3265	3275	16	11%	1.76	0.9	0.176	686,341
Wasatch	3335	3355	25	12%	3	0.9	0.3	1,169,900
Wasatch	3480	3520	50	12%	6	0.9	0.6	2,339,800
Wasatch	3630	3660	40	15%	6	0.9	0.6	2,339,800
Wasatch	3674	3700	26	14%	3.64	0.9	0.364	1,419,478
Wasatch	3730	3750	25	15%	3.75	0.9	0.375	1,462,375
Wasatch	3776	3786	10	12%	1.2	0.9	0.12	467,960
Wasatch	3860	3865	10	6%	0.6	0.9	0.06	233,980
M. Wasatch	3990	4000	15	7%	1.05	0.9	0.105	409,465
M. Wasatch	4090	4100	10	6%	0.6	0.9	0.06	233,980
M. Wasatch	4132	4145	15	8%	1.2	0.9	0.12	467,960
Total			**242**		**28.8**		**2.88**	**11,231,038**

If BBC injects 2,000 bbls of water/day it would take 15 years to reach this volume. This assumes no down time.

EXHIBIT 1

EXHIBIT J

PrPr 10-4 Water Samples



Nalco Laboratory
1465 East 1650 South Vernal UT 84078

NALCO ECOLAB

Final - Report Number: 642630
BILL BARRETT CORP
NINE MILE FIELD
ROOSEVELT UT 84066 USA
Sold To: 0500043402 Ship To: 0500043402
Representative: Maria L Olico

Sample Number	ACW001822
Date Sampled	26-Jun-2012 08:54
Date Received	28-Jun-2012
Date Completed	28-Jun-2012
Date Authorized	28-Jun-2012

Water Analysis

This sample was analyzed as received. the results being as follows

Sampling point: 10-4-12-14 #2

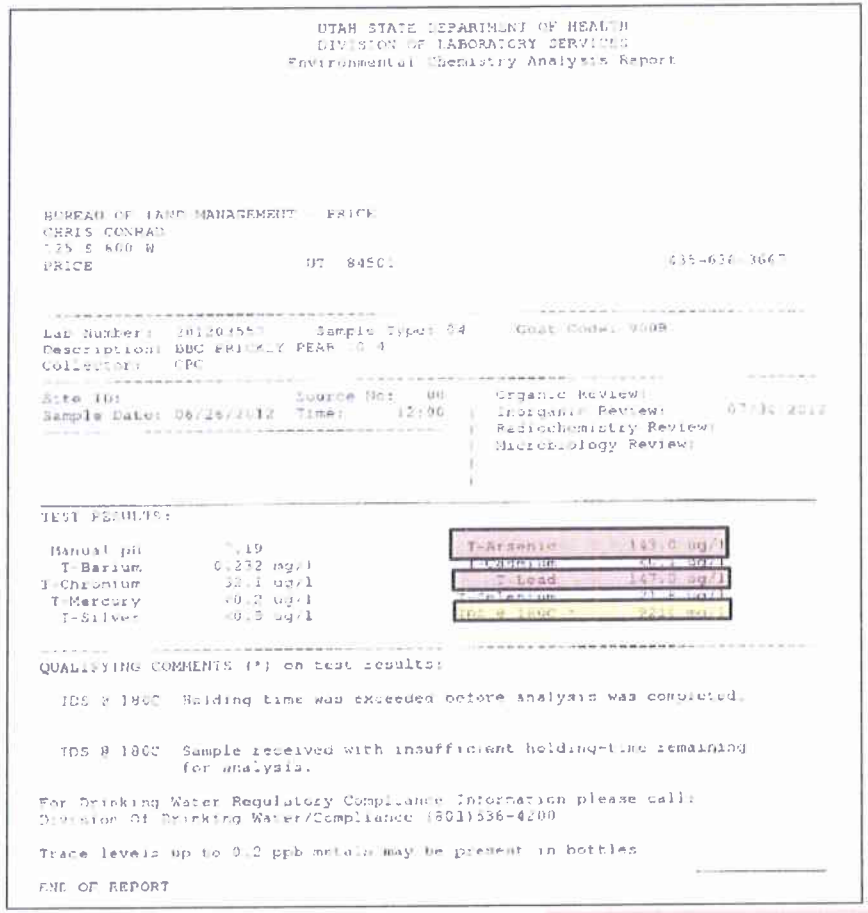
Water

Alkalinity	Test Method	Total
Bicarbonate (CaCO3)		1000 mg/L
Bicarbonate (HCO3)		1200 mg/L

Physical	Test Method	Total
Conductivity at 25°C		18000 µS/cm
Resistivity		0.5682 Ohms-M
Total Cations		3088 mg/L
Total Anions		8599.1 mg/L
pH @ 25°C		7.0 pH
Dissolved Solids (calculated)		11000 mg/L

Metals	Test Method	Total
Aluminum (Al)		<1.5 mg/L
Antimony (Sb)		<.5 mg/L
Barium (Ba)		3.6 mg/L
Boron (B)		2.9 mg/L
Calcium (Ca)		520 mg/L
Calcium (CaCO3)		1300 mg/L
Chromium (Cr)		<0.8 mg/L
Cobalt (Co)		<0.5 mg/L
Copper (Cu)		<1.5 mg/L
Iron (Fe)		150 mg/L
Lead (Pb)		<5.0 mg/L
Lithium (Li)		<0.3 mg/L
Magnesium (Mg)		91 mg/L
Magnesium (CaCO3)		380 mg/L
Manganese (Mn)		1.4 mg/L
Molybdenum (Mo)		<2.0 mg/L
Nickel (Ni)		<0.5 mg/L
Phosphorus (P)		18 mg/L
Potassium (K)		150 mg/L
Silicon (Si)		18 mg/L
Silica (SiO2)		38 mg/L
Sodium (Na)		2200 mg/L
Sodium (CaCO3)		4700 mg/L

BBC



UTAH STATE DEPARTMENT OF HEALTH
DIVISION OF LABORATORY SERVICES
Environmental Chemistry Analysis Report

BUREAU OF LAND MANAGEMENT - PRICE
CHRIS CONRAD
125 S 600 W
PRICE UT 84501 435-636-3667

Lab Number: 20120455 Sample Type: 04 Cost Code: 9008
Description: BBC FRIENDLY PEAK 10-4
Collector: CPC

Site ID: Source No: 00
Sample Date: 06/26/2012 Time: 12:00

Organic Review:
Inorganic Review: 07/3[illegible] 2012
Radiochemistry Review:
Microbiology Review:

TEST RESULTS:

Manual pH	7.19	T-Arsenic	143.0 ug/l
T-Barium	0.232 mg/l	T-Cadmium	5.1 ug/l
T-Chromium	32.1 ug/l	T-Lead	147.0 ug/l
T-Mercury	<0.2 ug/l	T-Selenium	21.5 ug/l
T-Silver	<0.5 ug/l	TDS @ 180C	9220 mg/l

QUALIFYING COMMENTS (*) on test results:

TDS @ 180C Holding time was exceeded before analysis was completed.

TDS @ 180C Sample received with insufficient holding-time remaining for analysis.

For Drinking Water Regulatory Compliance Information please call:
Division Of Drinking Water/Compliance (801)536-4200

Trace levels up to 0.2 ppb metals may be present in bottles

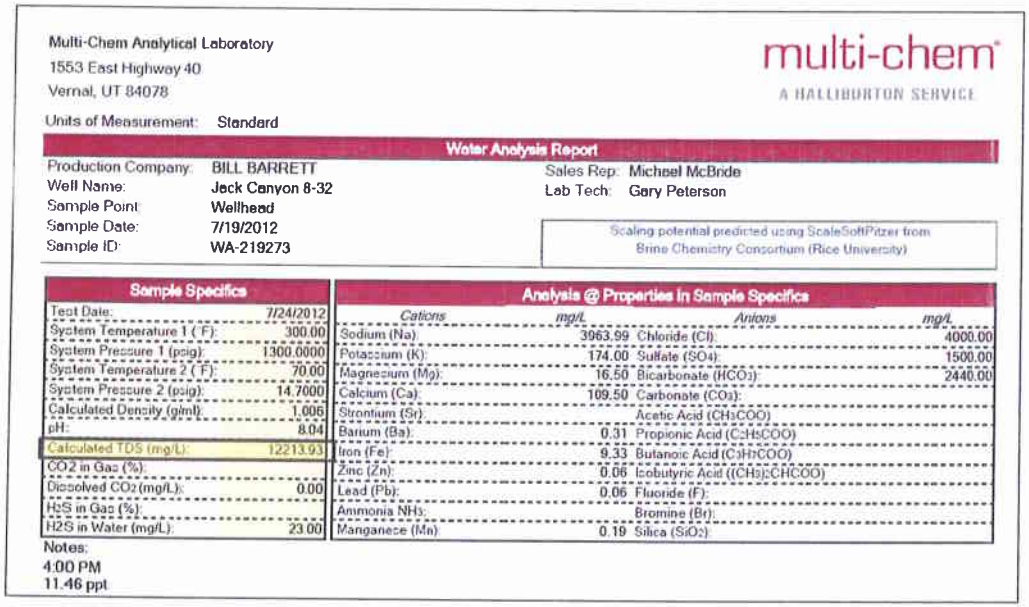
END OF REPORT

State

= EXCEEDS EPA Fed. Drinking Water Stds.

EPA National Primary Drinking Water Regulations
Arsenic= 10 ug/l Lead= 15 ug/l Barium= 2 mg/l

Water Samples



Multi-Chem Analytical Laboratory
1553 East Highway 40
Vernal, UT 84078

multi-chem
A HALLIBURTON SERVICE

Units of Measurement: Standard

Water Analysis Report

Production Company:	BILL BARRETT	Sales Rep:	Michael McBride
Well Name:	Jack Canyon 8-32	Lab Tech:	Gary Peterson
Sample Point:	Wellhead		
Sample Date:	7/19/2012		
Sample ID:	WA-219273		

Scaling potential predicted using ScaleSoftPitzer from Brine Chemistry Consortium (Rice University)

Sample Specifics

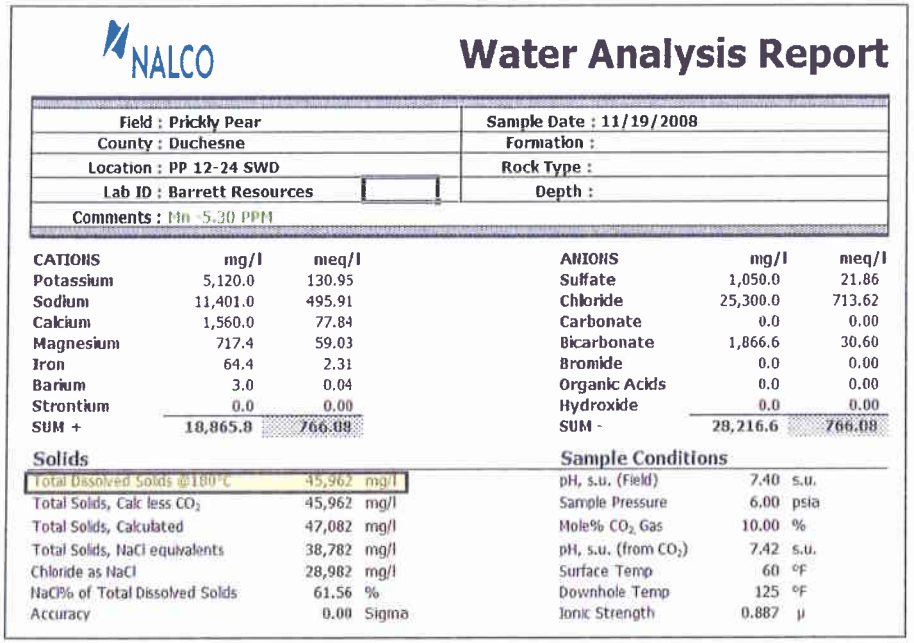
Test Date:	7/24/2012
System Temperature 1 (°F):	300.00
System Pressure 1 (psig):	1300.0000
System Temperature 2 (°F):	70.00
System Pressure 2 (psig):	14.7000
Calculated Density (g/ml):	1.006
pH:	8.04
Calculated TDS (mg/L):	12213.93
CO2 in Gas (%):	
Dissolved CO2 (mg/L):	0.00
H2S in Gas (%):	
H2S in Water (mg/L):	23.00

Analysis @ Properties in Sample Specifics

Cations	mg/L	Anions	mg/L
Sodium (Na):	3963.99	Chloride (Cl):	4000.00
Potassium (K):	174.00	Sulfate (SO4):	1500.00
Magnesium (Mg):	16.50	Bicarbonate (HCO3):	2440.00
Calcium (Ca):	109.50	Carbonate (CO3):	
Strontium (Sr):		Acetic Acid (CH3COO)	
Barium (Ba):	0.31	Propionic Acid (C2H5COO)	
Iron (Fe):	9.33	Butanoic Acid (C3H7COO)	
Zinc (Zn):	0.06	Isobutyric Acid ((CH3)2CHCOO)	
Lead (Pb):	0.06	Fluoride (F):	
Ammonia NH3:		Bromine (Br):	
Manganese (Mn):	0.19	Silica (SiO2):	

Notes:
4:00 PM
11.46 ppt

Jack Canyon 8-32
Water Sample



NALCO

Water Analysis Report

Field : Prickly Pear	Sample Date : 11/19/2008
County : Duchesne	Formation :
Location : PP 12-24 SWD	Rock Type :
Lab ID : Barrett Resources	Depth :
Comments : Mn -5.30 PPM	

CATIONS	mg/l	meq/l	ANIONS	mg/l	meq/l
Potassium	5,120.0	130.95	Sulfate	1,050.0	21.86
Sodium	11,401.0	495.91	Chloride	25,300.0	713.62
Calcium	1,560.0	77.84	Carbonate	0.0	0.00
Magnesium	717.4	59.03	Bicarbonate	1,866.6	30.60
Iron	64.4	2.31	Bromide	0.0	0.00
Barium	3.0	0.04	Organic Acids	0.0	0.00
Strontium	0.0	0.00	Hydroxide	0.0	0.00
SUM +	18,865.8	766.08	SUM -	28,216.6	766.08

Solids

Total Dissolved Solids @180°C	45,962	mg/l
Total Solids, Calc less CO_2	45,962	mg/l
Total Solids, Calculated	47,082	mg/l
Total Solids, NaCl equivalents	38,782	mg/l
Chloride as NaCl	28,982	mg/l
NaCl% of Total Dissolved Solids	61.56	%
Accuracy	0.00	Sigma

Sample Conditions

pH, s.u. (Field)	7.40	s.u.
Sample Pressure	6.00	psia
Mole% CO_2 Gas	10.00	%
pH, s.u. (from CO_2)	7.42	s.u.
Surface Temp	60	°F
Downhole Temp	125	°F
Ionic Strength	0.887	μ

Prickly Pear 12-24
Water Sample

EXHIBIT K

3,500' Water Well Cost

Item	Cost
Rig Mobilization	$50,000
Drilling	$105,000
Casing (7")	$42,000
Tubing to Run Pump	$18,000
Pump (280 volt 110 gpm)	$15,000
Wire	$14,000
Cementing Service	$60,000
Perforating	$50,000
Developing	$4,000
Total	$358,000

*Typical water well costs $10,000 to $20,000.

EXHIBIT 7

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Bureau of Land Management
Utah State Office
Attn: Roger L. Bankert
Chief-Branch of Fluid Minerals
P.O. Box 45155
Salt Lake City, UT 84145-0155

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) Britni Huggins C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

SALT LAKE CITY UT 84101 OCT 17 2012

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7010 1870 0001 6412 9771

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Bureau of Land Management
Price Field Office
Attn: Patricia A. Clabaugh, Field Manager
120 South 600 West
Price, UT 84501

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X M. Rudman ☐ Agent ☐ Addressee

B. Received by (Printed Name) M. Rudman C. Date of Delivery 10/19/12

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No
125 South 600 West

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7010 1870 0001 6412 9788

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

EXHIBIT M

SPECIAL NOTES:

Operator's Picks: The operator's formation tops and selected peroration zones are reasonable.

Drilling has already been conducted. The well was spud in 2004 and decommissioned in 2008.

Cement was considered 80% complete by BBC.

Subsurface geology: The geologic description from BBC is satisfactory.

Coal: There is no minable coal in the drilled sections.

Abnormal conditions: There have been H_2S shows in the Prickly Pear field.

Groundwater Regional Studies: Alluvial gravels are not present and colluvium is thin, < 10' thick, so the potential for having a usable perched aquifer is limited. The adjoining Mesaverde aquifer, consisting of formations above the Star Point Sandstone through the Colton (Wasatch) Formation, consists of interbedded sandstone, mudstone, siltstone, shale, coal, and limestone. Sediment deposition occurred in fluvial, deltaic, lagoonal, shallow marine and lacustrine environments. Because of the diverse and fluctuating environments of deposition, the lithologic units exhibit complex lateral and vertical gradational and intertonguing relationships particularly near the delta-marginal marine transition. In spite of these fluctuating environments of deposition, many of the individual sandstones are continuous and traceable for tens of miles creating large continuous and possibly interconnected aquifers. The thickness of the aquifer varies but is generally greater than 4,000 feet and contains both intermediate and local ground-water flow systems. The water quality ranges from fresh to slightly saline in quality with total dissolved solid (TDS) concentrations reported from 200 mg/L to over 5,000 mg/L; most readings were around 300 mg/L. Depth to the base of useable water (Mancos Top): ~ 9000' **bgs** (PFO Calculations; Internal well files and UDGM well logs).

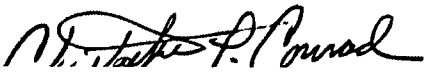
Potential Water Impact Analysis Review Tool: The project is not within a groundwater protection zone or a surface water protection zone. There are no Soul Source Aquifers present within the Prickly Pear field. Data from Stone Cabin Unit 2, located 1/3 mile southeast of the proposed disposal location, indicates TDS concentrations range between 2,963 at 5,732 feet bgs and 5,480 at 5,530 feet bgs. Data from Stone cabin Unit 3, located 0.8 miles north of the proposed disposal well, has 1,932 TDS at 1,200 feet bgs. Canyon Govt 1, located 1.5 miles southeast recorded 13,029 and 23,460 TDS at 8,500 feet bgs; this however, is from samples taken from the Mancos Formation, a deep-water marine deposit, and not typical of the terrestrial Price River and Wasatch Formations.

Groundwater Primacy: The State of Utah has primacy regarding surface and groundwater protection in the state. Conversations with Bark Kettle, Dan Jarvis and Ammon McDonald indicate that the state is looking closely at this proposal. They have made no recommendations at this point in time.

Recommendation: I recommend that BBC consider formations that are deeper and have higher TDS concentrations than that which was proposed. The Stone Cabin data indicates groundwater is useable (less than 10,000 TDS) and should be protected. However, if it can be shown by further analysis that the water quality of the injected fluids is superior to the groundwater present, then it should be approved. I would place a Condition of Approval (COA) stating that BBC will purge the well after perforating and collect a representative sample, with collaborative water samples taken by the State of Utah or BLM, analyzed separately, and compared. If TDS is over 10,000 or if the injected fluid is higher quality than the groundwater present, then the well should be authorized; however, if the TDS is less than 10,000 and if the injected water is inferior to the groundwater present, then the well should not be authorized.

Chris Conrad, PG
Bureau of Land Management
Price Field Office

2/28/2012



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Green River District, Price Field Office
125 South 600 West
Price, UT 84501
http://www.blm.gov/ut/st/en/fo/price.html

SEP 2 6 2012

RECEIVED
SEP 2 7 2012
DIV OF OIL, GAS & MINING

IN REPLY REFER TO:
Prickly Pear Unit Federal 10-4-12-14 Disposal Well
3160-4 (UTG021)

CERTIFIED MAIL-RETURN RECEIPT REQUESTED
#7010-1060-0001-1119-2316

Ammon McDonald
Utah Division of Oil, Gas and Mining
Oil and Gas Permitting
P.O. Box 145801
Salt Lake City, Utah 84114-5801

Re: Objection to inject produced water into Prickly Pear Unit Federal 10-4-12-14

Dear Mr. McDonald:

In February of 2012, Bill Barrett Corporation submitted a Sundry Notice to the Bureau of Land Management (BLM) in Price, Utah proposing to convert the Prickly Pear Unit Federal 10-4-12-14 well into a water disposal well. The BLM reviewed the proposal and registered concerns with the Utah Division of Oil, Gas and Mining (UDOGM) about Underground Injection Control (UIC) application, noting there was a possibility of contaminating useable groundwater in the zone proposed. In this case, usable water is defined as having a total dissolved solids (TDS) value of less than 10,000 mg/L. The BLM contacted the UDOGM and requested that groundwater be sampled and tested.

The ground water injection zone that is being proposed is in the upper portion of the Mesaverde Aquifer and is completely within the Wasatch Formation. Regionally, this intermediate aquifer yields fresh to moderately saline water. Locally, the water quality values can dramatically change due to isolated, perched, local aquifers. This data as well as other available water quality data was taken into account during the BLM's Geological and Groundwater Evaluation (attachment 1).

Historic groundwater quality data in the vicinity of the 10-4-12-14 well have much lower TDS values than contemporary groundwater quality reports. The historic data is from the 1950s and 1960s. The following data collection depths will be presented in altitude, above sea level, in order to make it easier to correlate relative depths. The Stone Cabin Unit 3 well has TDS values of 1,932 mg/L at an altitude of 5,056' to 5,226'. USGS well number C13-286 shows TDS of

1,941 mg/L from 5,810' to 7,530'. The Stone Cabin Unit 2 has three water quality samples that range from 2,023' to 2,679' with TDS values from 2,963 mg/L to 5,480 mg/L. The Stone Cabin Unit 1 and the Canyon Govt 1 wells were each sampled from -1,237' to -1,052' with TDS values of 12,511 mg/L and 13,029 mg/L, respectively.

The most current data in this area is from the last ten years in the Prickly Pear Field. Prickly Pear Unit Federal 5-13-12-14 was sampled from 3,040' to 304' and produced a TDS value of 65,683 mg/L. The Prickly Pear Unit 13-4 well had TDS values of 62,877 mg/L at 2,860' to -873'.

The enclosed map in attachment 1 shows a visual representation of this data, however, the depth data is presented in feet below ground surface (bgs).

This is the information the BLM used to make the decision to request further sampling. There were several groundwater quality samples taken within one mile that had TDS values well below the usable threshold of 10,000 mg/L. The BLM would likely have approved a disposal well had the disposal interval matched the production zone previously perforated.

Water sampling took place on June 26, 2012 and was analyzed by the Utah Department of Health Laboratory, which showed TDS at 9,216 mg/L at a depth of 3,265' to 4,145' below ground surface (BGS) or 3,433' to 4,313' above sea level (attachment 2). Originally, UDOGM requested that the bottom portion of the perforation zone be isolated and a sample taken from that area as well. After some discussion between Bill Barrett Corporation, UDOGM and the BLM, the decision was made that this procedure would not be necessary. The well was packed, isolating the injection zone from the lower production zone, and purged. Three well volumes were extracted and a single sample was withdrawn and split between the BLM and Bill Barrett Corporation.

Since the result of the BLM water quality test was less than the 10,000 mg/L TDS threshold for injection of produced water into a usable water aquifer, the BLM will maintain its objection to approving the disposal well/Underground Injection Control (UIC) application and will consider withdrawing it if the aquifer can be shown to be unusable or UDOGM and the Environmental Protection Agency grants Bill Barrett Corporation an aquifer exemption.

If you would like additional information or wish to discuss this project further with myself or my staff please contact Greg Gochnour (Geologist) or myself at (435)-636-3600.

Sincerely,

Patricia A. Clabaugh

Patricia A. Clabaugh
Field Manager

Attachments

cc: Brady Riley
Bill Barrett Corporation
1099 18th Street
Suite 2300
Denver, Colorado 80202

ATTACHMENT 1

GEOLOGICAL & GROUNDWATER EVALUATION: APPLICATION FOR PERMIT TO DRILL (APD)

Date: 2-24-2012
Lessee: Bill Barrett Corporation
Well Name: Prickly Pear Federal 10-4-12-14; Vertical Water Disposal Well/Injection
Lease number: UTU-73665
Unit Agreement: UTU-
Contact: Brady Riley: 303-312-8115

Location: Surface: SESE 75' FSL; 271' FEL; T12S, R14E, Sec 10
Target: Same SESE 75' FSL; 271' FEL; T12S, R14E, Sec 10
Surface Elevation (SE): 7578'; **Vertical Depth (TVD; bgs)** 4145'
Target: Mesa Verde Group
Drill Type: NA
Mud: NA
Cement/Casing: Entire String; no un-cemented sections.
Sole Source Aquifers (SSAs): None
Drinking Water Source Protection Zones (DWSPZs): None within a 1.0-mile radius. There is a Surface Water Protection Zone 2.2 miles NW and 2.3 miles SE. Water Quality available 0.8 miles NE, 1.77 miles NE, 2 miles N, and 1.5 miles NE.
Groundwater data available does not coincide with BBC supplied data.

Formation	Thickness	Prickly Pear 11-15D-12-15 Formation Tops BGS	Prickly Pear 11-15D-12-15 Elevation-Feet 7191	Proposed BBC Federal 10-4-12-14 BGS	Proposal Elevation 7578	BBC Federal 10-4-12-14 Groundwater TDS BBC supplied data	[redacted]
Colluvium	0-10	0	7191	0-10	7578		
Green River	3200			2901	4677		Stone Cabin #3; 1030-1200 bgs; 1932 TDS
**Colton (Wasatch)	900-3000	2860	4331	3265 3335 3480 3630 3674 3730 3776 3990 3090 4132	4313 4243 4098 3948 3904 3848 3802 3588 4488 3446	NA	
**Flagstaff	0-30						
**North Horn	100-500	5046	2145	4958		30,895-36,935	Stone Cabin #2; 5076-5,732 bgs; 2,963 and 5,480 TDS
**Dark Canyon	0-100 (200 Locally)					42,200-58,900	
**Price river	100-300 U 100-400 L	7271	-80	7203		30,000-40,000	
Castlegate	80-300					25,000-28,000	
Blackhawk (6 coal members)	670-1030						anyon Gov 1; 8,505-8,617 bgs; 13,460 and 13,029TDS
Mancos	3900			9000	-1579		Aquatard
Source	UGS Bulletin 183 p.8 after Hintze, 1993 Sunnyside Area						[redacted]

SPECIAL NOTES:

Operator's Picks: The operator's formation tops and selected peroration zones are reasonable.

Drilling has already been conducted. The well was spud in 2004 and decommissioned in 2008.

Cement was considered 80% complete by BBC.

Subsurface geology: The geologic description from BBC is satisfactory.

Coal: There is no minable coal in the drilled sections.

Abnormal conditions: There have been H_2S shows in the Prickly Pear field.

Groundwater Regional Studies: Alluvial gravels are not present and colluvium is thin, < 10' thick, so the potential for having a usable perched aquifer is limited. The adjoining Mesaverde aquifer, consisting of formations above the Star Point Sandstone through the Colton (Wasatch) Formation, consists of interbedded sandstone, mudstone, siltstone, shale, coal, and limestone. Sediment deposition occurred in fluvial, deltaic, lagoonal, shallow marine and lacustrine environments. Because of the diverse and fluctuating environments of deposition, the lithologic units exhibit complex lateral and vertical gradational and intertonguing relationships particularly near the delta-marginal marine transition. In spite of these fluctuating environments of deposition, many of the individual sandstones are continuous and traceable for tens of miles creating large continuous and possibly interconnected aquifers. The thickness of the aquifer varies but is generally greater than 4,000 feet and contains both intermediate and local ground-water flow systems. The water quality ranges from fresh to slightly saline in quality with total dissolved solid (TDS) concentrations reported from 200 mg/L to over 5,000 mg/L; most readings were around 300 mg/L. Depth to the base of useable water (Mancos Top): ~ 9000' **bgs** (PFO Calculations; Internal well files and UDGM well logs).

Potential Water Impact Analysis Review Tool: The project is not within a groundwater protection zone or a surface water protection zone. There are no Soul Source Aquifers present within the Prickly Pear field. Data from Stone Cabin Unit 2, located 1/3 mile southeast of the proposed disposal location, indicates TDS concentrations range between 2,963 at 5,732 feet bgs and 5,480 at 5,530 feet bgs. Data from Stone cabin Unit 3, located 0.8 miles north of the proposed disposal well, has 1,932 TDS at 1,200 feet bgs. Canyon Govt 1, located 1.5 miles southeast recorded 13,029 and 23,460 TDS at 8,500 feet bgs; this however, is from samples taken from the Mancos Formation, a deep-water marine deposit, and not typical of the terrestrial Price River and Wasatch Formations.

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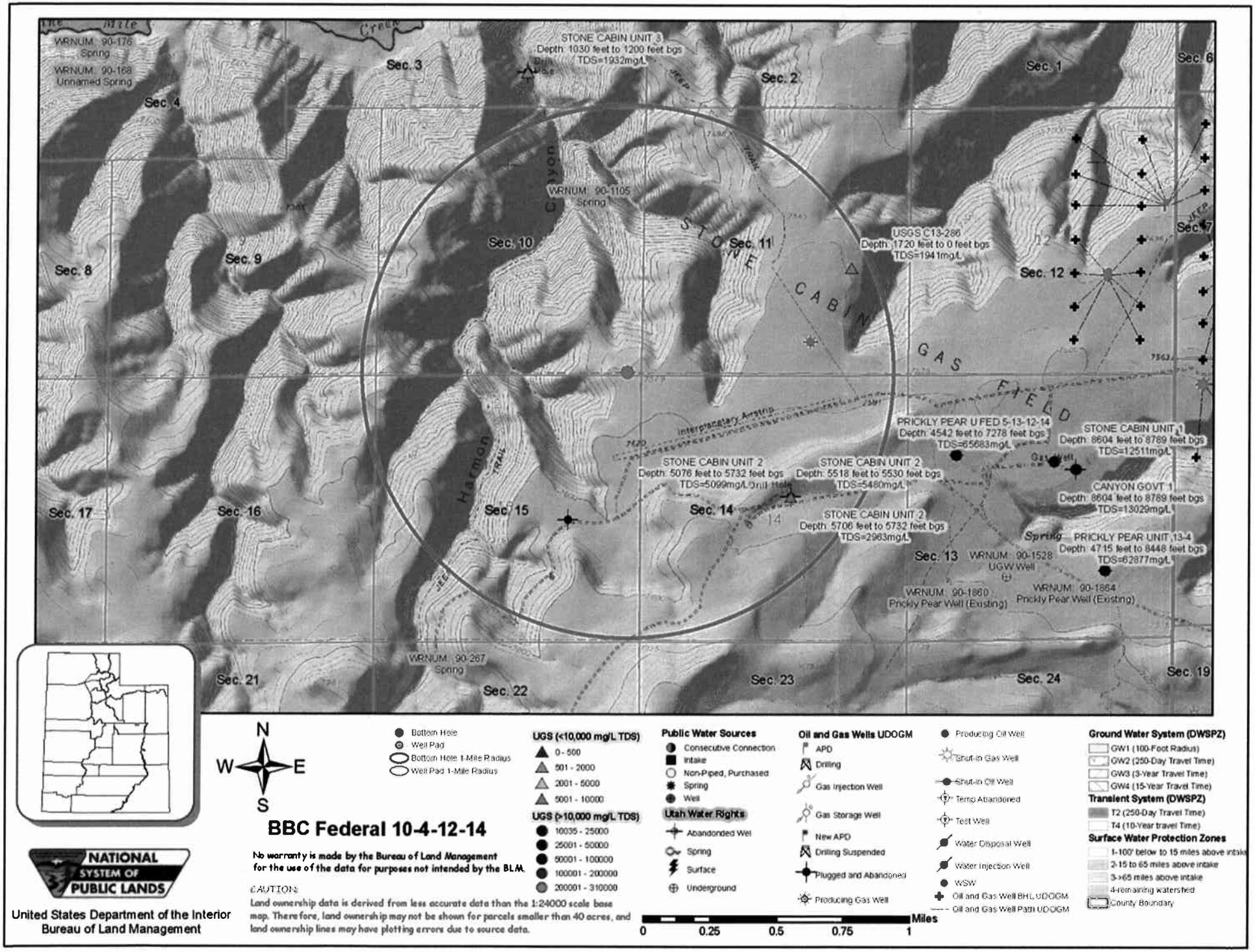
Recommendation: I recommend that BBC consider formations that are deeper and have higher TDS concentrations than that which was proposed. The Stone Cabin data indicates groundwater is useable (less than 10,000 TDS) and should be protected. However, if it can be shown by further analysis that the water quality of the injected fluids is superior to the groundwater present, then it should be approved. I would place a Condition of Approval (COA) stating that BBC will purge the well after perforating and collect a representative sample, with collaborative water samples taken by the State of Utah or BLM, analyzed separately, and compared. If TDS is over 10,000 or if the injected fluid is higher quality than the groundwater present, then the well should be authorized; however, if the TDS is less than 10,000 and if the injected water is inferior to the groundwater present, then the well should not be authorized.

Chris Conrad, PG
Bureau of Land Management
Price Field Office

_____ 2/28/2012



BBC Federal 10-4-12-14

No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the BLM.

CAUTION:
Land ownership data is derived from less accurate data than the 1:24000 scale base map. Therefore, land ownership may not be shown for parcels smaller than 40 acres, and land ownership lines may have plotting errors due to source data.

NATIONAL SYSTEM OF PUBLIC LANDS

United States Department of the Interior
Bureau of Land Management

Attachment 2

UTAH STATE DEPARTMENT OF HEALTH
DIVISION OF LABORATORY SERVICES
Environmental Chemistry Analysis Report

BUREAU OF LAND MANAGEMENT - PRICE
CHRIS CONRAD
125 S 600 W
PRICE UT 84501 435-636-3667

Lab Number: 201203557 Sample Type: 04 Cost Code: 900B
Description: BBC PRICKLY PEAR 10-4
Collector: CPC

Site ID: Source No: 00 | Organic Review:
Sample Date: 06/26/2012 Time: 12:00 | Inorganic Review: 07/30/2012
| Radiochemistry Review:
| Microbiology Review:

TEST RESULTS:

Manual pH	7.19	T-Arsenic	143.0 ug/l
T-Barium	0.232 mg/l	T-Cadmium	<0.1 ug/l
T-Chromium	32.1 ug/l	T-Lead	147.0 ug/l
T-Mercury	<0.2 ug/l	T-Selenium	21.8 ug/l
T-Silver	<0.5 ug/l	TDS @ 180C *	9216 mg/l

QUALIFYING COMMENTS (*) on test results:

TDS @ 180C Holding time was exceeded before analysis was completed.

TDS @ 180C Sample received with insufficient holding-time remaining for analysis.

For Drinking Water Regulatory Compliance Information please call:
Division Of Drinking Water/Compliance (801)536-4200

Trace levels up to 0.2 ppb metals may be present in bottles

END OF REPORT

UNITED STATES
DEPARTMENT OF THE INTERI
BUREAU OF LAND MANAGEMENT
125 SOUTH 600 WEST
PRICE UTAH 84501

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

PLACE STICKER AT TOP OF THE ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

CERTIFIED MAIL™

7010 1060 0001 1119 2316

RETURN RECEIPT REQUESTED

US OFFICIAL MAIL
$300 Penalty
For Private Use

016H26601204
$05.950
08/22/2012
Mailed From 84501
US POSTAGE
Hasler

Ammon McDonald
Utah Division of Oil, Gas and Mining
Oil and Gas Permitting
P.O. Box 145801
Salt Lake City, Utah 84114-5801

84114$5801 B900

UTAH STATE DEPARTMENT OF HEALTH
DIVISION OF LABORATORY SERVICES
Environmental Chemistry Analysis Report

BUREAU OF LAND MANAGEMENT - PRICE
CHRIS CONRAD
125 S 600 W
PRICE UT 84501 435-636-3667

Lab Number: 201203557 Sample Type: 04 Cost Code: 900B
Description: BBC PRICKLY PEAR 10-4
Collector: CPC

Site ID: Source No: 00 | Organic Review:
Sample Date: 06/26/2012 Time: 12:00 | Inorganic Review: 07/30/2012
| Radiochemistry Review:
| Microbiology Review:

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Trace levels up to 0.2 ppb metals may be present in bottles

END OF REPORT

Nalco Laboratory
1465 East 1650 South Vernal UT 84078
Phone: (435) 789-2069 Email: globallimssupport@nalco.com

NALCO An Ecolab Company | ECOLAB

Final - Report Number: 645630
BILL BARRETT CORP
NINE MILE FIELD
ROOSEVELT UT 84066 USA
Sold To: 0500043402 **Ship To:** 0500043402
Representative: Martin L Olson

Sample Number	ACW001822
Date Sampled	26-Jun-2012 08:54
Date Received	28-Jun-2012
Date Completed	28-Jun-2012
Date Authorized	28-Jun-2012

Water Analysis

This sample was analyzed as received, the results being as follows:

Sampling point: 10-4-12-14 #2

Water

Alkalinity	**Test Method**	**Total**
Bicarbonate (CaCO3)		1000 mg/L
Bicarbonate (HCO3)		1200 mg/L

Physical	**Test Method**	**Total**
Conductivity at 25°C		18000 µS/cm
Resistivity		0.5682 Ohms-M
Total Cations		3088 mg/L
Total Anions		8599.1 mg/L
pH @ 25°C		7.0 pH
Dissolved Solids (calculated)		11000 mg/L

Metals	**Test Method**	**Total**
Aluminum (Al)		<1.5 mg/L
Antimony (Sb)		<5 mg/L
Barium (Ba)		3.6 mg/L
Boron (B)		2.9 mg/L
Calcium (Ca)		520 mg/L
Calcium (CaCO3)		1300 mg/L
Chromium (Cr)		<0.8 mg/L
Cobalt (Co)		<0.5 mg/L
Copper (Cu)		<1.5 mg/L
Iron (Fe)		150 mg/L
Lead (Pb)		<5.0 mg/L
Lithium (Li)		<0.3 mg/L
Magnesium (Mg)		91 mg/L
Magnesium (CaCO3)		380 mg/L
Manganese (Mn)		1.4 mg/L
Molybdenum (Mo)		<2.0 mg/L
Nickel (Ni)		<0.5 mg/L
Phosphorus (P)		18 mg/L
Potassium (K)		150 mg/L
Silicon (Si)		18 mg/L
Silica (SiO2)		38 mg/L
Sodium (Na)		2200 mg/L
Sodium (CaCO3)		4700 mg/L

Tasia Hamann

Authorized by Tasia D Hamann

Nalco Laboratory
1465 East 1650 South Vernal UT 84078
Phone: (435) 789-2069 Email: globallimssupport@nalco.com

NALCO An Ecolab Company | ECOLAB

Final - Report Number: 645630

BILL BARRETT CORP	**Sample Number**	ACW001822
NINE MILE FIELD	**Date Sampled**	26-Jun-2012 08:54
ROOSEVELT UT 84066 USA	**Date Received**	28-Jun-2012
Sold To: 0500043402 **Ship To:** 0500043402	**Date Completed**	28-Jun-2012
Representative: Martin L Olson	**Date Authorized**	28-Jun-2012

Water Analysis

This sample was analyzed as received, the results being as follows:

Sampling point: 10-4-12-14 #2

Strontium (Sr)		8.4 mg/L
Titanium (Ti)		<0.5 mg/L
Vanadium (V)		<0.5 mg/L
Zinc (Zn)		<0.5 mg/L

Field Analysis	**Test Method**	**Total**
120 BBLS PERFS 3265'-4145'		

Inorganic Constituents	**Test Method**	**Total**
Chloride (Cl)		3000 mg/L
Sulfate (SO4)		4600 mg/L

Tasia Hamann

Authorized by Tasia D Hamann

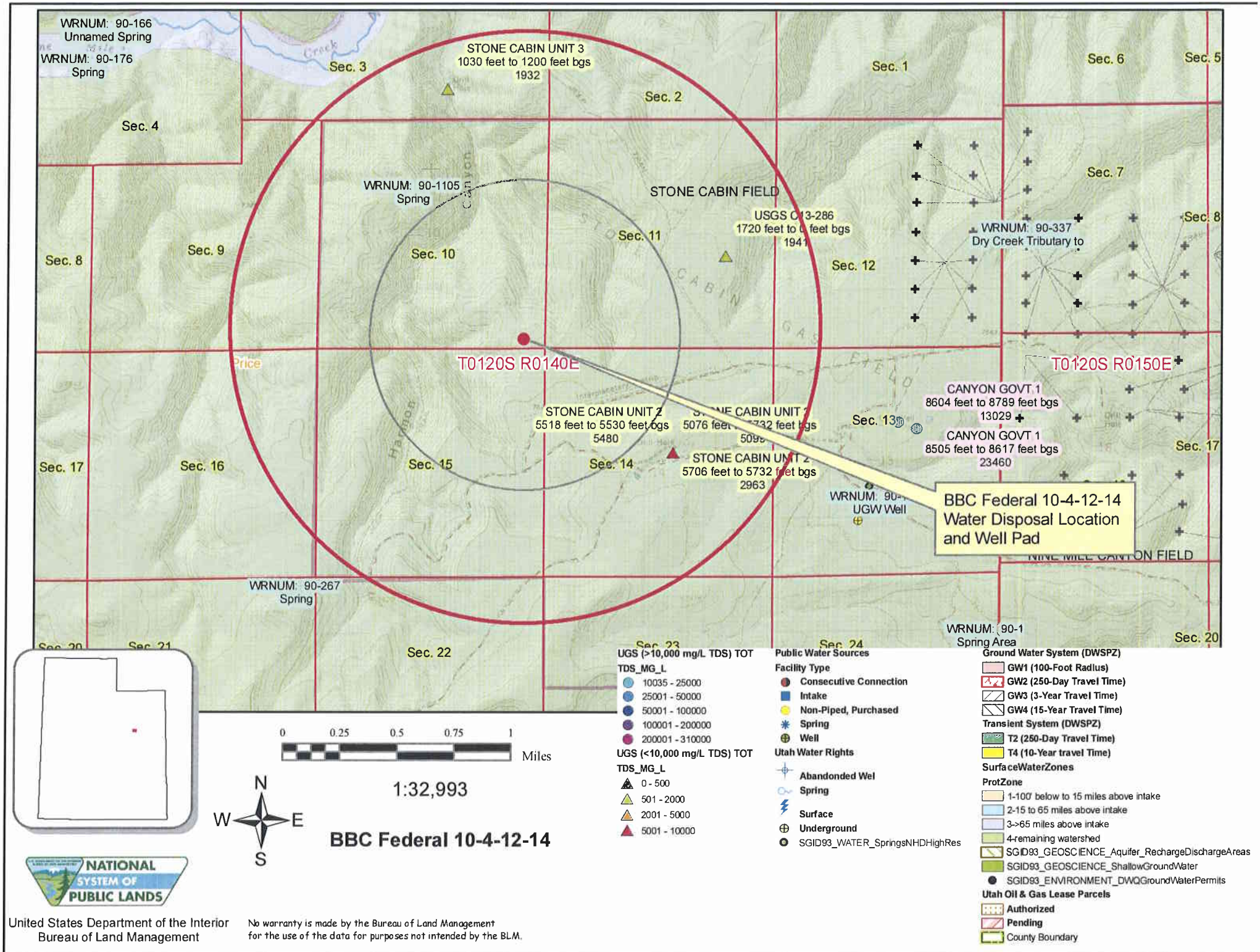
Geological & Groundwater Evaluation: Application for Permit to Drill (APD)

Date: 2-24-2012
Lessee: Bill Barrett Corporation
Well Name: Prickly Pear Federal 10-4-12-14; Vertical Water Disposal Well/Injection
Lease number: UTU-73665
Unit Agreement: UTU-
Contact: Brady Riley: 303-312-8115

Location: Surface: SESE 75' FSL; 271' FEL; T12S, R14E, Sec 10
Target: Same SESE 75' FSL; 271' FEL; T12S, R14E, Sec 10

Surface Elevation (SE): 7578'; **Vertical Depth (TVD; bgs)** 4145'
Target: Mesa Verde Group
Drill Type: NA
Mud: NA
Cement/Casing: Entire String; no un-cemented sections.
Sole Source Aquifers (SSAs): None
Drinking Water Source Protection Zones (DWSPZs): None within a 1.0-mile radius. There is a Surface Water Protection Zone 2.2 miles NW and 2.3 miles SE. Water Quality available 0.8 miles NE, 1.77 miles NE, 2 miles N, and 1.5 miles NE. Groundwater data available does not coincide with BBC supplied data.

Formation	Thickness	Prickly Pear 11-15D-12-15 Formation Tops BGS	Prickly Pear 11-15D-12-15 Elevation-Feet 7191	Proposed BBC Federal 10-4-12-14 BGS	Proposal Elevation 7578	BBC Federal 10-4-12-14 Groundwater TDS BBC supplied data	BLM Groundwater Comments
Colluvium	0-10	0	7191	0-10	7578		
Green River	3200			2901	4677		Stone Cabin #3; 1030-1200 bgs; 1932 TDS
**Colton (Wasatch)	900-3000	2860	4331	3265 3335 3480 3630 3674 3730 3776 3990 3090 4132	4313 4243 4098 3948 3904 3848 3802 3588 4488 3446	NA	
**Flagstaff	0-30						
**North Horn	100-500	5046	2145	4958		30,895-36,935	Stone Cabin #2; 5076-5,732 bgs; 2,963 and 5,480 TDS
**Dark Canyon	0-100 (200 Locally)					42,200-58,900	
**Price river	100-300 U 100-400 L	7271	-80	7203		30,000-40,000	
Castlegate	80-300					25,000-28,000	
Blackhawk (6 coal members)	670-1030						Canyon Govt 1; 8,505-8,617 bgs; 23,460 and 13,029TDS
Mancos	3900			9000	-1579		Aquatard
Source	UGS Bulletin 183 p.8 after Hintze, 1993 Sunnyside Area						BLM Groundwater Tool Database


WRNUM: 90-166
Unnamed Spring
WRNUM: 90-176
Spring
STONE CABIN UNIT 3
1030 feet to 1200 feet bgs
1932
Sec. 3
Sec. 2
Sec. 1
Sec. 6
Sec. 5
Sec. 4
Sec. 7
Sec. 8
WRNUM: 90-1105
Spring
STONE CABIN FIELD
USGS C13-286
1720 feet to feet bgs
1941
WRNUM: 90-337
Dry Creek Tributary to
Sec. 11
Sec. 10
Sec. 9
Sec. 12
T0120S R0140E
T0120S R0150E
CANYON GOVT 1
8604 feet to 8789 feet bgs
13029
STONE CABIN UNIT 2
5518 feet to 5530 feet bgs
5480
Sec. 13
CANYON GOVT 1
8505 feet to 8617 feet bgs
23460
Sec. 17
Sec. 16
Sec. 15
Sec. 14
STONE CABIN UNIT 2
5706 feet to 5732 feet bgs
2963
BBC Federal 10-4-12-14
Water Disposal Location
and Well Pad
UGW Well
NINE MILE CANYON FIELD
WRNUM: 90-267
Spring
WRNUM: 90-1
Spring Area
Sec. 22
Sec. 20
0 0.25 0.5 0.75 1
Miles
1:32,993
N
W E
S
BBC Federal 10-4-12-14
NATIONAL SYSTEM OF PUBLIC LANDS
United States Department of the Interior
Bureau of Land Management
No warranty is made by the Bureau of Land Management
for the use of the data for purposes not intended by the BLM.
UGS (>10,000 mg/L TDS) TOT
TDS_MG_L
10035 - 25000
25001 - 50000
50001 - 100000
100001 - 200000
200001 - 310000
UGS (<10,000 mg/L TDS) TOT
TDS_MG_L
0 - 500
501 - 2000
2001 - 5000
5001 - 10000
Public Water Sources
Facility Type
Consecutive Connection
Intake
Non-Piped, Purchased
Spring
Well
Utah Water Rights
Abandonded Wel
Spring
Surface
Underground
SGID93_WATER_SpringsNHDHighRes
Ground Water System (DWSPZ)
GW1 (100-Foot Radius)
GW2 (250-Day Travel Time)
GW3 (3-Year Travel Time)
GW4 (15-Year Travel Time)
Transient System (DWSPZ)
T2 (250-Day Travel Time)
T4 (10-Year travel Time)
SurfaceWaterZones
ProtZone
1-100' below to 15 miles above intake
2-15 to 65 miles above intake
3->65 miles above intake
4-remaining watershed
SGID93_GEOSCIENCE_Aquifer_RechargeDischargeAreas
SGID93_GEOSCIENCE_ShallowGroundWater
SGID93_ENVIRONMENT_DWQGroundWaterPermits
Utah Oil & Gas Lease Parcels
Authorized
Pending
County Boundary

GARY R. HERBERT
Governor
GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

April 11, 2012

Bill Barrett Corporation
C/O Tracey Fallang
1099 18th Street, Suite 2300
Denver, CO 80202

Subject: Bill Barrett Corp. Well: Prickly Pear Unit Federal 10-4, Section 10, Township 12 South, Range 14 East, SLM, Carbon County, Utah, API Well # 43-007-30823

Dear Ms. Fallang:

Pursuant to Utah Admin. Code R649-5-3-3, the Division of Oil, Gas and Mining (the "Division") issues its administrative approval for conversion of the referenced well to a Class II injection well. Accordingly, the following stipulations shall apply for full compliance with this approval:

1. Compliance with all applicable requirements for the operation, maintenance and reporting for Underground Injection Control ("UIC") Class II injection wells pursuant to Utah Admin. Code R649-1 et seq.

2. Conformance with all conditions and requirements of the complete application submitted by Bill Barrett Corp.

3. A step-rate test and mechanical integrity test shall be conducted prior to commencing injection.

4. Pressure shall be monitored between the surface casing and the production casing on a regular basis. Any pressure changes observed shall be reported to the Division immediately.

A final approval to commence injection will be issued upon satisfactory completion of the listed stipulations. If you have any questions regarding this approval or the necessary requirements, please contact Ammon McDonald at 801-538-5337 or Brad Hill at 801-538-5315.

Sincerely,

John Rogers
Associate Director

JR/AM/js
cc: Bruce Suchomel, Environmental Protection Agency
Carbon County
Well File
N:\O&G Permits\Injection Permits\Bill Barrett Corp

UTAH DNR OIL, GAS & MINING

BEFORE THE DIVISION OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH
NOTICE OF AGENCY ACTION
CAUSE NO. UIC-384

IN THE MATTER OF THE APPLICATION OF BILL BARRETT CORPORATION FOR ADMINISTRATIVE APPROVAL OF THE PRICKLY PEAR UNIT FED 10-4 & JACK CANYON UNIT 8-32 SWD WELL CONVERSIONS LOCATED IN SECTIONS 10 & 32, TOWNSHIP 12S, RANGES 14E &16E, CARBON COUNTY, UTAH, AS CLASS II INJECTION WELLS.

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

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Any person desiring to object to the proposed application or otherwise intervene in the proceeding must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. The Division's Presiding Officer for the proceeding is Brad Hill, Oil & Gas Permitting Manager, at P.O. Box 145801, Salt Lake City, Utah 84114-5801, phone number (801) 538-5340. If such a protest or notice of intervention is received, a hearing will be scheduled in accordance with the aforementioned administrative procedure rule. Protestants and/or interveners should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 7th day of February, 2012

STATE OF UTAH
DIVISION OF OIL, GAS & MINING

Brad Hill
Oil & Gas Permitting Manager

Bill Barrett Corporation
Prickly Pear Unit Fed 10-4 & Jack Canyon Unit 8-32 SWD Conversions
Cause No. UIC-384

Publication Notices were sent to the following:

Bill Barrett Corporation
1099 18th Street, Suite2300
Denver, CO 80202

Sun Advocate
845 East Main
Price, UT 84501
via e-mail legals@sunad.com

Salt Lake Tribune
P O Box 45838
Salt Lake City, UT 84145
via e-mail naclegal@mediaoneutah.com

Price Field Office
Bureau of Land Management
P O Box 7004
Price, UT 84501

Carbon County Planning
120 East Main Street
Price, UT 84501

Bruce Suchomel
US EPA Region VIII
MS 8-P-W-GW
1595 Wynkoop St
Denver, CO 80202-1129

Jean Sweet

Jean Sweet - Re: Notice of Agency Action – PPU Fed 10-4 & Jack Canyon Unit 18-32 SWD Cause No. UIC-384

From: Sun Advocate Legals <legals@sunad.com>
To: Jean Sweet <jsweet@utah.gov>
Date: 2/9/2012 3:08 PM
Subject: Re: Notice of Agency Action – PPU Fed 10-4 & Jack Canyon Unit 18-32 SWD Cause No. UIC-384

Received, notice will appear on February 14, 2012 in the Sun Advocate as requested. As per state law, notice will also publish on the Utah legals website.

--
Kelly Wilkinson
Production Manager
Legal Advertising Manager
Sun Advocate / Emery County Progress
435.637.0732 x32

On 2/8/2012 9:50 AM, Jean Sweet wrote:

> To Whom It May Concern:
>
> Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: jsweet@utah.gov .
>
> Please send proof of publication and billing to:
>
> Division of Oil, Gas and Mining
> Suite 1210
> PO Box 145801
> Salt Lake City, UT 84114-5801
>
> Sincerely,
>
> Jean Sweet, Executive Secretary
> Utah Div. of Oil, Gas & Mining
> 1594 West Temple, Suite 1210
> Salt Lake City, UT
> 801-538-5329
> jsweet@utah.gov

GARY R. HERBERT
Governor
GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

February 7, 2012

SENT VIA E-MAIL legals@sunad.com

Sun Advocate
845 East Main
Price, UT 84501

Subject: Notice of Agency Action – Prickly Pear Unit Fed 10-4 & Jack Canyon Unit 18-32 SWD Conversions Cause No. UIC-384

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: jsweet@utah.gov .

Please send proof of publication and billing to:

Division of Oil, Gas and Mining
Suite 1210
PO Box 145801
Salt Lake City, UT 84114-5801

Sincerely,

Jean Sweet

Jean Sweet
Executive Secretary

Enclosure

The Salt Lake Tribune WWW.SLTRIB.COM | MEDIAOne of Utah A NEWSPAPER AGENCY COMPANY WWW.MEDIAONEUTAH.COM | Deseret News WWW.DESERETNEWS.COM

Remit to: P.O. Box 704005
West Valley City, UT 84170

Order Confirmation for Ad #0000767084-01

Client	DIV OF OIL-GAS & MINING	**Payor Customer**	DIV OF OIL-GAS & MINING
Client Phone	801-538-5340	**Payor Phone**	801-538-5340
Account#	[redacted]	**Payor Account**	[redacted]
Address	1594 W NORTH TEMP #1210,P.O. BOX 145801 SALT LAKE CITY, UT 84114 USA	**Payor Address**	1594 W NORTH TEMP #1210,P.O. BO SALT LAKE CITY, UT 84114
Fax	801-359-3940	**Ordered By**	**Acct. Exec**
EMail	earlenerussell@utah.gov	Jean	ssteedcoop

Total Amount	$[redacted]			
Payment Amt	$0.00			
Amount Due	$[redacted]	**Tear Sheets** 0	**Proofs** 0	**Affidavits** 1

Payment Method
PO Number 20120206
Confirmation Notes:
Text: Jean

Ad Type	Ad Size	Color
Legal Liner	2.0 X 58 Li	<NONE>

Product Deseret News::	**Placement** Legal Liner Notice - 0998	**Position** Public Meeting/Hear-ing Notices
Scheduled Date(s):	2/11/2012	
Product sltrib.com::	**Placement** Legal Liner Notice - 0998	**Position** Public Meeting/Hear-ing Notices
Scheduled Date(s):	2/11/2012	
Product utahlegals.com::	**Placement** utahlegals.com	**Position** utahlegals.com
Scheduled Date(s):	2/11/2012	

Ad Content Proof Actual Size

PUBLIC NOTICE

BEFORE THE DIVISION OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH
NOTICE OF AGENCY ACTION
CAUSE NO. UIC-384

IN THE MATTER OF THE APPLICATION OF BILL BARRETT CORPORATION FOR ADMINISTRATIVE APPROVAL OF THE PRICKLY PEAR UNIT FED 10-4 & JACK CANYON UNIT 8-32 SWD WELL CONVERSIONS LOCATED IN SECTIONS 10 & 32, TOWNSHIP 12S, RANGES 14E &16E, CARBON COUNTY, UTAH, AS CLASS II INJECTION WELLS.

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Dated this 7th day of February, 2012

STATE OF UTAH
DIVISION OF OIL, GAS & MINING
/s/
Brad Hill
Oil & Gas Permitting Manager

767084 UPAXLP

GARY R. HERBERT
Governor
GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

February 7, 2012

SENT VIA E-MAIL naclegal@mediaoneutah.com

Salt Lake Tribune
PO Box 45838
Salt Lake City, UT 84145

Subject: Notice of Agency Action – Prickly Pear Unit Fed 10-4 & Jack Canyon Unit 8-32 SWD Conversions Cause No. UIC-384

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: jsweet@utah.gov .

Please send proof of publication and billing for **account #** 9001402352 to:

Division of Oil, Gas and Mining
Suite 1210
PO Box 145801
Salt Lake City, UT 84114-5801

Sincerely,

Jean Sweet

Jean Sweet
Executive Secretary

Enclosure

4770 S. 5600 W.
P.O. BOX 704005
WEST VALLEY CITY, UTAH 84170
FED.TAX I.D.# 87-0217663

The Salt Lake Tribune | MEDIAOne | Deseret News

PROOF OF PUBLICATION

CUSTOMER'S COPY

CUSTOMER NAME AND ADDRESS	ACCOUNT NUMBER	DATE
DIV OF OIL-GAS & MINING, 1594 W NORTH TEMP #1210 P.O. BOX 145801 SALT LAKE CITY, UT 84114	9001402352	2/13/2012

ACCOUNT NAME	
DIV OF OIL-GAS & MINING,	
TELEPHONE	ADORDER# / INVOICE NUMBER
8015385340	0000767084 /
SCHEDULE	
Start 02/11/2012	End 02/11/2012
CUST. REF. NO.	
20120206	
CAPTION	
PUBLIC NOTICE BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMEI	
SIZE	
58 Lines	2.00 COLUMN
TIMES	RATE
3	
MISC. CHARGES	AD CHARGES
	TOTAL COST
	150.00

PUBLIC NOTICE

BEFORE THE DIVISION OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH
NOTICE OF AGENCY ACTION
CAUSE NO. UIC-384

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Dated this 7th day of February, 2012

STATE OF UTAH
DIVISION OF OIL, GAS & MINING
/s/
Brad Hill
Oil & Gas Permitting Manager

767084 UPAXLP

AFFIDAVIT OF PUBLICATION

AS NEWSPAPER AGENCY COMPANY, LLC dba MEDIAONE OF UTAH LEGAL BOOKER, I CERTIFY THAT THE ATTACHED ADVERTISEMENT OF **PUBLIC NOTICE BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES STATE OF UTAH NOTICE OF AGENCY ACTION CAUSE NO. UIC-384 IN THE MATTE** FOR **DIV OF OIL-GAS & MINING,** WAS PUBLISHED BY THE NEWSPAPER AGENCY COMPANY, LLC dba MEDIAONE OF UTAH, AGENT FOR THE SALT LAKE TRIBUNE AND DESERET NEWS. DAILY NEWSPAPERS PRINTED IN THE ENGLISH LANGUAGE WITH GENERAL CIRCULATION IN UTAH. AND PUBLISHED IN SALT LAKE CITY, SALT LAKE COUNTY IN THE STATE OF UTAH. NOTICE IS ALSO POSTED ON UTAHLEGALS.COM ON THE SAME DAY AS THE FIRST NEWSPAPER PUBLICATION DATE AND REMAINS ON UTAHLEGALS.COM INDEFINATELY.

PUBLISHED ON Start 02/11/2012 End 02/11/2012

SIGNATURE

2/13/2012

VIRGINIA CRAFT
Notary Public, State of Utah
Commission # 581469
My Commission Expires
January 12, 2014

Virginia Craft

THIS IS NOT A STATEMENT BUT A "PROOF OF PUBLICATION"
PLEASE PAY FROM BILLING STATEMENT

AFFIDAVIT OF PUBLICATION

STATE OF UTAH)

ss.

County of Carbon,)

I, Richard Shaw, on oath, say that I am the Publisher of the Sun Advocate, a twice-weekly newspaper of general circulation, published at Price, State of Utah a true copy of which is hereto attached, was published in the full issue of such newspaper for 1 (One) consecutive issues, and on the Utah legals.com website, the first publication was on the 9th day of February, 2012, and that the last publication of such notice was in the issue of such newspaper dated the14th day of February 2012.

Richard Shaw – Publisher

Subscribed and sworn to before me this 14th day of February, 2012.

Notary Public My commission expires January 10, 2015 Residing at Price, Utah

Publication fee, $ 126.00

LINDA THAYN
NOTARY PUBLIC-STATE OF UTAH
COMMISSION# 604351
COMM. EXP. 01-10-2015

BEFORE THE DIVISION OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH
NOTICE OF AGENCY ACTION
CAUSE NO. UIC-384

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Dated this 7th day of February, 2012

STATE OF UTAH
DIVISION OF OIL, GAS & MINING
/s/ Brad Hill
Oil & Gas Permitting Manager

Published in the Sun Advocate February 14, 2012.

RECEIVED
FEB 17 2012
DIV. OF OIL, GAS & MINING

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. TYPE OF WELL Gas Well	**5.LEASE DESIGNATION AND SERIAL NUMBER:** UTU-73665
	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	7.UNIT or CA AGREEMENT NAME: PRICKLY PEAR
	8. WELL NAME and NUMBER: PRICKLY PEAR U FED 10-4
2. NAME OF OPERATOR: BILL BARRETT CORP	**9. API NUMBER:** 43007308230000
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300 , Denver, CO, 80202 **PHONE NUMBER:** 303 312-8164 Ext	**9. FIELD and POOL or WILDCAT:** STONE CABIN
4. LOCATION OF WELL **FOOTAGES AT SURFACE:** 0075 FSL 0271 FEL **QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:** Qtr/Qtr: SESE Section: 10 Township: 12.0S Range: 14.0E Meridian: S	**COUNTY:** CARBON **STATE:** UTAH

11.

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 4/16/2012	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Swab Test Procedures

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

See attached Swab Test procedures for the Prickly Pear UF 10-4 well. Please contact Brady Riley at 303-312-8115 with questions.

NAME (PLEASE PRINT) Brady Riley	**PHONE NUMBER** 303 312-8115	**TITLE** Permit Analyst
SIGNATURE N/A		**DATE** 4/11/2012

RECEIVED: Apr. 11, 2012

Bill Barrett Corporation

Prickly Pear Unit Federal 10-4 Swab Test Procedures

1. PU CIBP, TIH and set CIBP at 4,400'. Dump bail 50' of cement on top of CIBP allow to set.

2. Test casing by pressuring up to 4,000 psi and hold for 30 minutes. Record pressure test on Barton chart recorder for 30 minutes after stabilizing. Send chart to Denver to Heidi Reger.

3. Perforate the following zones (3 spf, 120 degree phasing, .35 EHD).

Top	Bottom	Interval
3,265'	3,275'	10'
3,335'	3,355'	20'
3,480'	3,520'	40'
3,630'	3,660'	30'
3,674'	3,700'	26'
3,730'	3,750'	20'
3,776'	3,786'	10'
3,990'	4,000'	10'
4,090'	4,100'	10'
4,132'	4,145'	13'

4. TIH with 2-3/8" workstring with PKR. Set PKR @ 3,240'. Swab to obtain a representative water sample from the perforated formation.

1099 18TH STREET SUITE 2300 DENVER, CO 80202 USA
T 303.293.9100 F 303.291.0420 www.BILLBARRETTCORP.com

RECEIVED: Apr. 11, 2012

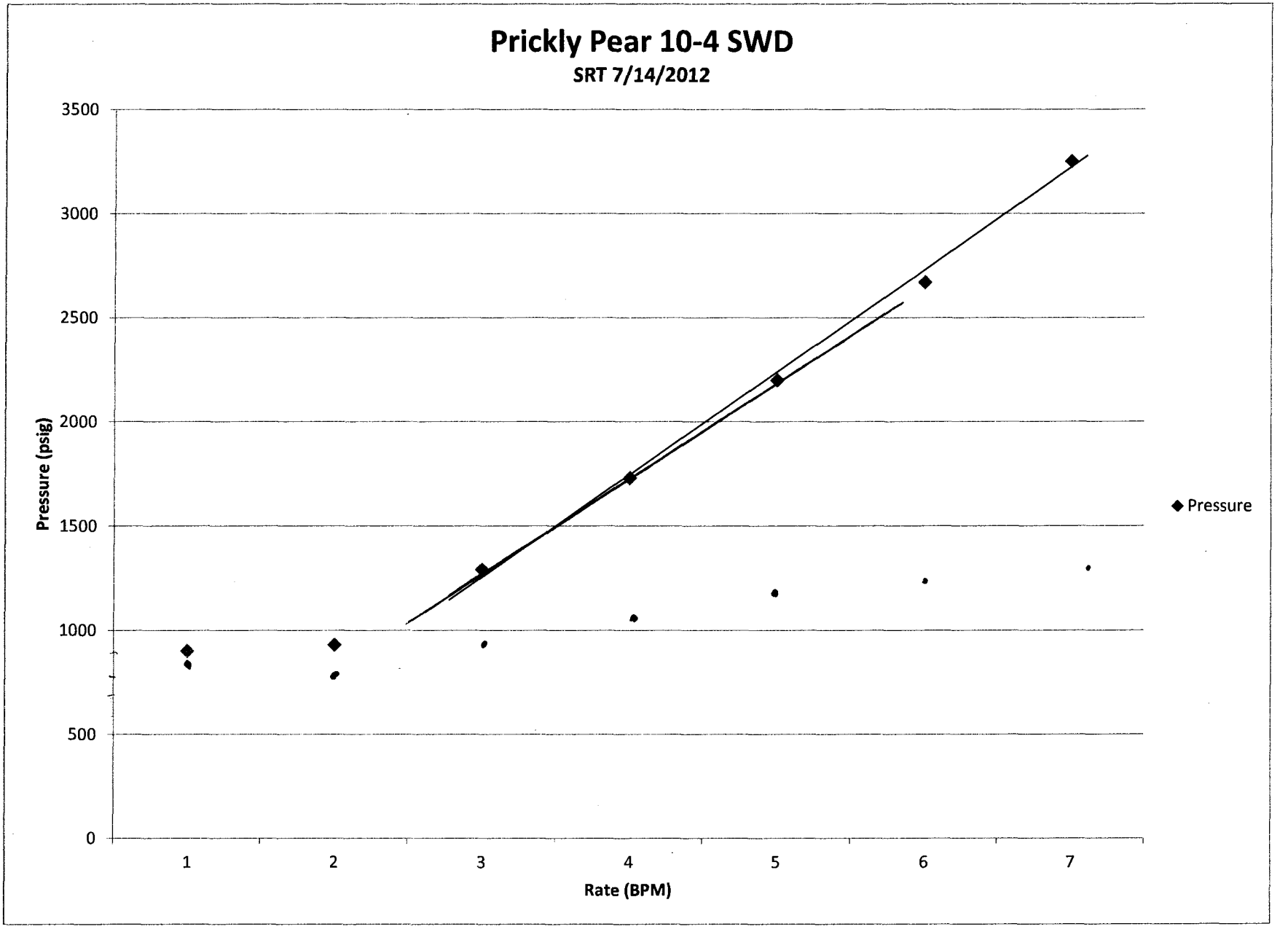
HALLIBURTON JOB LOG

TICKET # 9664933	TICKET DATE July 14, 2012		
REGION NORTH AMERICA	NWA / COUNTRY ROCKY MOUNTAIN / USA	BDA / STATE UTAH	COUNTY UINTAH
MBU ID / EMPL # 0	H.E.S EMPLOYEE NAME 0	PSL DEPARTMENT PRODUCTION ENHANCMENT	
LOCATION VERNAL UT.	COMPANY BILL BARRETT	CUSTOMER REP / PHONE RUSSELL EVANS	
TICKET AMOUNT $0.00	WELL TYPE 00	WELL CATEGORY 00	API/UWI # 0
WELL LOCATION LAND	DEPARTMENT 5005	JOB PURPOSE CODE 0	
LEASE PRICKLY PEAR	WELL # 14G-8-10-18	SEC / TWP / RNG 0	

Chart No.	Time	Rate bpm	Volume bbl	Pmps T	Pmps C	Press.(PSI) Tbg	Press.(PSI) Csg	Job Description / Remarks
	0400							CALLED OUT
	0630							ON LOCATION
	0645							PRE RIG UP SAFETY HUDDLE
	0700							RIG UP
	0715							PRE JOB SAFETY MEETING
	0730							TEST IRON
	0747	4.0						LOAD HOLE
	0749		4					CAUGHT PRESSURE
	0749							START JOB 1 BPM
	0751	1.0	6			630		START INJECTION TEST
	0821		37			900		CHANGE RATE TO 2 BPM
	0823	2.0	41			1,260		START INJECTION TEST
	0853		101			930		CHANGE RATE TO 3 BPM
	0854	3.0	104			1,170		START INJECTION TEST
	0924		194			1,290		CHANGE RATE TO 4 BPM
	0926	4.0	202			1,580		START INJECTION TEST
	0956		322			1,730		CHANGE RATE TO 5 BPM
	0957	5.0	327			2,200		START INJECTION TEST
	1027		477			2,200		CHANGE RATE TO 6 BPM
	1031	6.0	490			2,550		START INJECTION TEST
	1101		680			2,670		CHANGE RATE TO 7 BPM
	1103	7.0	693			3,200		START INJECTION TEST
	1133	7.0	905			3,250		SHUTDOWN
	1134					1,190		ISIP
	1138					837		5 MIN
	1143					653		10 MIN
	1148					543		15 MIN

SUMMARY

HHP	0		FG.	#VALUE!	
AVG RT.	3.5	BPM	MAX RT.	7.0	BPM
AVG PRESS.	2,000	PSI	MAX PRESS.	3,250	PSI
TOTAL LOAD	38,010	GAL		905.0	BBL


Prickly Pear 10-4 SWD
SRT 7/14/2012
3500
3000
2500
2000
1500
1000
500
0
Pressure (psig)
1
2
3
4
5
6
7
Rate (BPM)
Pressure

Bill Barrett Corporation

West Tavaputs Field SWD Well Application

Maximum Allowable Surface Pressure Calculations
Based on Observed Fracture Gradients

Water SG = 1.02 Gradient = 0.4417 psi/ft

Prickly Pear Federal 10-4

Depth (ft)	Observed ISIP (psig)	Calculated Btm Hole (psig)	Resulting Frac Grad (psi/ft)
4772	2220	4327.6	0.907
4964	2600	4792.4	0.965
5450	3030	5437.0	0.998
6700	4120	7079.1	1.057
6890	4100	7143.0	1.037
7180	3910	7081.1	0.986
7550	3910	7244.5	0.960

Requested Max Surface Pressure = 2000 psig

Prickly Pear 12-24-12-14

Depth (ft)	Observed ISIP (psig)	Calculated Btm Hole (psig)	Resulting Frac Grad (psi/ft)	
6295	No Treatment			
6791	3350	6349.3	0.935	
6908	No Treatment			
7620	2900	6265.4	0.822	
8620	2980	6787.1	0.787	Below
9242	4390	8471.8	0.917	Fish @ 7665'

Requested Max Surface Pressure = 2000 psig

ISIP Data collected during initial completion treatments

Calculated Bottom Hole Pressure = ISIP + 0.4417 x Depth
Resulting Frac Gradient = Calculated Btm Hole Pressure / Depth

Requested Max Surface Pressure < 90% x ISIP
Anticipated Avg Surface Pressure = 75% x Max Surface Pressure

Anticipated Avg Disposal Rate = 400 bwpd / well
Requested Maximum Disposal Rate = 2000 bwpd / well

Graphic Controls LLC

CHART NO. MC MP-10000

METER CSG Test

CHART PUT ON 5/23/2012 M

LOCATION Prickly Pear #10-4 M

REMARKS Bill Barrett Wildcat Energy Services #2

TBG Quick Test

TAKEN OFF M

6 AM 7 8 9 10 11 NOON 1 2 3 4 5 6 PM 7 8 9 10 11 MIDNIGHT 1 2 3 4 5

9000 8000 7000 6000 5000 4000 3000 2000 1000

PRINTED IN U.S.A.

From: "Conrad, Christopher P." <cconrad@blm.gov>
To: "ammonmcdonald@utah.gov" <ammonmcdonald@utah.gov>
CC: "Gochnour, Gregory D." <ggochnour@blm.gov>, "McKinley, Michael P" <mmcki...
Date: 7/30/2012 5:18 PM
Subject: Analytical Data for BBC's Prickly Pear 10-4
Attachments: Nalco Analytical for BBC SWD 10-4-12-15.pdf; 1682_001.pdf; 28A-June2012.xls

Ammon,
Regarding the BBC Prickly Pear 10-4 water disposal well sampling:
The Price Field Office received the TDS report back from the Utah Department of Health Laboratory (UDHL). The result was 9,216 ppm. I had UDHL repeat the test and it measured 9,262 ppm. Both tests show TDS is < 10,000 ppm. It's possible that the upper-most groundwater is of much better quality than anticipated, possibly less than 3,000 ppm TDS. It's possible that a fresh upper layer is mixing with water from a deeper, salty section, the fluids mixed in the bore-hole, and the TDS results are mixed. I know you asked BBC to plug off the top zone and test again, but they didn't do it, and now we don't know if the upper-most zone was of any better quality.

BBC sent us their results. They were analyzed by Nalco, a non-certified lab. Their results were 11,000 ppm (calculated). I called them up for clarification and they said it was more precisely: 10,800 ppm. When I asked them about their procedures she said, "we did not filter the sample." I don't know if there was a communication failure or not; TDS should be filtered through a 0.45 micron filter before testing. I asked them for their QA/QC. They said they did not have any, but they did send me an excel worksheet with some statistics which is also attached.

What result did you receive from your split? Regardless of the outcome, your agency is responsible for protecting groundwater and for making any decision regarding it. Judging from your policies, BBC can apply for an aquifer exemption if the TDS is between 3,000 and 10,000 ppm, which I would expect them to do.

As stated in our previous communication with your office, the BLM would have no reservations if BBC were to dispose the water in a deeper zone.

I have tried to call you several times, but you have been out of the office. Please call me when you can.
Thanks very much,
Chris C.

Chris Conrad P.G.
Solid Minerals Geologist
BLM Price Field Office
cconrad@blm.gov<mailto:cconrad@blm.gov>
435.636.3667
435.636.3657 (Fax)

UTAH STATE DEPARTMENT OF HEALTH
DIVISION OF LABORATORY SERVICES
Environmental Chemistry Analysis Report

BUREAU OF LAND MANAGEMENT - PRICE
CHRIS CONRAD
125 S 600 W
PRICE UT 84501 435-636-3667

Lab Number: 201203557 Sample Type: 04 Cost Code: 900B
Description: BBC PRICKLY PEAR 10-4
Collector: CPC

Site ID: Source No: 00 | Organic Review:
Sample Date: 06/26/2012 Time: 12:00 | Inorganic Review: 07/30/2012
| Radiochemistry Review:
| Microbiology Review:
|
|

TEST RESULTS:

Manual pH	7.19	T-Arsenic	143.0 ug/l
T-Barium	0.232 mg/l	T-Cadmium	<0.1 ug/l
T-Chromium	32.1 ug/l	T-Lead	147.0 ug/l
T-Mercury	<0.2 ug/l	T-Selenium	21.8 ug/l
T-Silver	<0.5 ug/l	TDS @ 180C *	9216 mg/l

QUALIFYING COMMENTS (*) on test results:

TDS @ 180C Holding time was exceeded before analysis was completed.

TDS @ 180C Sample received with insufficient holding-time remaining for analysis.

For Drinking Water Regulatory Compliance Information please call:
Division Of Drinking Water/Compliance (801)536-4200

Trace levels up to 0.2 ppb metals may be present in bottles

END OF REPORT

Ammon McDonald - BBC Proposal to convert a gas well into a water disposal well

From: "Conrad, Christopher P." <cconrad@blm.gov>
To: "ammonmcdonald@utah.gov" <ammonmcdonald@utah.gov>
Date: 2/28/2012 3:27 PM
Subject: BBC Proposal to convert a gas well into a water disposal well
CC: "McKinley, Michael P" <mmckinle@blm.gov>, "Peterson, Leslie M" <lmpeters...
Attachments: BBC Federal 10-4-12-14 Water Disposal Well 1 to 33K PWIT.pdf; Bill Barrett Corp Prickly Pear 10-4-12-14 INJECTION.docx

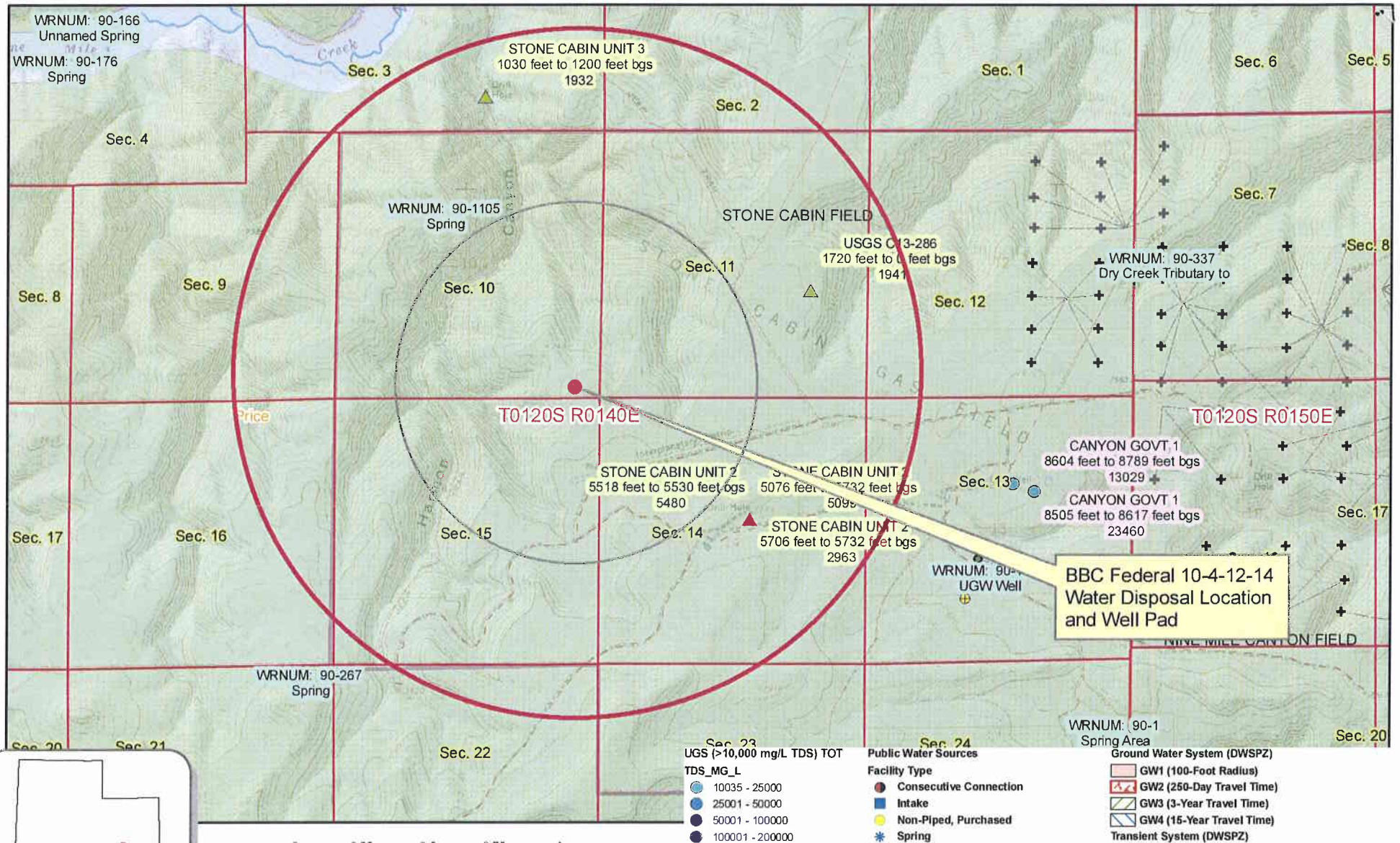
Mr. McDonald
I'm submitting the Bureau of Land Management Price Field Office's concerns regarding the proposed water disposal well (10-4-12-14; API-43-007-30823-00-S1) by Bill Barrett Corporation (BBC). BBC submitted a Sundry delineating their proposal to our office and cites data indicating that they intend to dispose of water in excess of 45,000 TDS, and our data indicates that the formation they intend to utilize has TDS values well below the 10,000 mg/L threshold for useable water.

I have attached a map of the area with the groundwater data we have available and have attached our hydrologic review for their Sundry. We are confident that you will consider all the available data before making a recommendation; and the BLM will defer to your expertise. Please contact both Mike McKinley and myself via e-mail when you have made your decision. If you have any questions please contact me or Mike McKinley at the BLM State Office. Mike is the BLM petroleum-groundwater expert and the creator of the BLM groundwater tool database.

Thank you for considering our concerns.
Respectfully,
Chris Conrad

Chris Conrad P.G.
Professional Geologist
Bureau of Land Management
Price Field Office
125 South 600 West
Price, UT 84501

Office 435-636-3600
Direct 435-636-3667
Fax 435-636-3657



NATIONAL SYSTEM OF PUBLIC LANDS

United States Department of the Interior
Bureau of Land Management

No warranty is made by the Bureau of Land Management
for the use of the data for purposes not intended by the BLM.

Geological & Groundwater Evaluation: Application for Permit to Drill (APD)

Date: 2-24-2012
Lessee: Bill Barrett Corporation
Well Name: Prickly Pear Federal 10-4-12-14; Vertical Water Disposal Well/Injection
Lease number: UTU-73665
Unit Agreement: UTU-
Contact: Brady Riley: 303-312-8115

Location: Surface: SESE 75' FSL; 271' FEL; T12S, R14E, Sec 10
Target: Same SESE 75' FSL; 271' FEL; T12S, R14E, Sec 10

Surface Elevation (SE): 7578'; **Vertical Depth (TVD; bgs)** 4145'
Target: Mesa Verde Group
Drill Type: NA
Mud: NA
Cement/Casing: Entire String; no un-cemented sections.
Sole Source Aquifers (SSAs): None
Drinking Water Source Protection Zones (DWSPZs): None within a 1.0-mile radius. There is a Surface Water Protection Zone 2.2 miles NW and 2.3 miles SE. Water Quality available 0.8 miles NE, 1.77 miles NE, 2 miles N, and 1.5 miles NE.
Groundwater data available does not coincide with BBC supplied data.

Formation	Thickness	Prickly Pear 11-15D-12-15 Formation Tops BGS	Prickly Pear 11-15D-12-15 Elevation-Feet 7191	Proposed BBC Federal 10-4-12-14 BGS	Proposal Elevation 7578	BBC Federal 10-4-12-14 Groundwater TDS BBC supplied data	BLM Groundwater Comments
Colluvium	0-10	0	7191	0-10	7578		
Green River	3200			2901	4677		Stone Cabin #3; 1030-1200 bgs; 1932 TDS
**Colton (Wasatch)	900-3000	2860	4331	3265 3335 3480 3630 3674 3730 3776 3990 3090 4132	4313 4243 4098 3948 3904 3848 3802 3588 4488 3446	NA	
**Flagstaff	0-30						
**North Horn	100-500	5046	2145	4958		30,895-36,935	Stone Cabin #2; 5076-5,732 bgs; 2,963 and 5,480 TDS
**Dark Canyon	0-100 (200 Locally)					42,200-58,900	
**Price river	100-300 U 100-400 L	7271	-80	7203		30,000-40,000	
Castlegate	80-300					25,000-28,000	
Blackhawk (6 coal members)	670-1030						Canyon Govt 1; 8,505-8,617 bgs; 23,460 and 13,029TDS
Mancos	3900			9000	-1579		Aquatard
Source	UGS Bulletin 183 p.8 after Hintze, 1993 Sunnyside Area						BLM Groundwater Tool Database

SPECIAL NOTES:

Operator's Picks: The operator's formation tops and selected peroration zones are reasonable.

Drilling has already been conducted. The well was spud in 2004 and decommissioned in 2008.

Cement was considered 80% complete by BBC.

Subsurface geology: The geologic description from BBC is satisfactory.

Coal: There is no minable coal in the drilled sections.

Abnormal conditions: There have been H_2S shows in the Prickly Pear field.

Groundwater Regional Studies: Alluvial gravels are not present and colluvium is thin, < 10' thick, so the potential for having a usable perched aquifer is limited. The adjoining Mesaverde aquifer, consisting of formations above the Star Point Sandstone through the Colton (Wasatch) Formation, consists of interbedded sandstone, mudstone, siltstone, shale, coal, and limestone. Sediment deposition occurred in fluvial, deltaic, lagoonal, shallow marine and lacustrine environments. Because of the diverse and fluctuating environments of deposition, the lithologic units exhibit complex lateral and vertical gradational and intertonguing relationships particularly near the delta-marginal marine transition. In spite of these fluctuating environments of deposition, many of the individual sandstones are continuous and traceable for tens of miles creating large continuous and possibly interconnected aquifers. The thickness of the aquifer varies but is generally greater than 4,000 feet and contains both intermediate and local ground-water flow systems. The water quality ranges from fresh to slightly saline in quality with total dissolved solid (TDS) concentrations reported from 200 mg/L to over 5,000 mg/L; most readings were around 300 mg/L. Depth to the base of useable water (Mancos Top): ~ 9000' **bgs** (PFO Calculations; Internal well files and UDGM well logs).

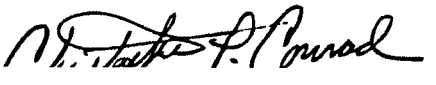
Potential Water Impact Analysis Review Tool: The project is not within a groundwater protection zone or a surface water protection zone. There are no Soul Source Aquifers present within the Prickly Pear field. Data from Stone Cabin Unit 2, located 1/3 mile southeast of the proposed disposal location, indicates TDS concentrations range between 2,963 at 5,732 feet bgs and 5,480 at 5,530 feet bgs. Data from Stone cabin Unit 3, located 0.8 miles north of the proposed disposal well, has 1,932 TDS at 1,200 feet bgs. Canyon Govt 1, located 1.5 miles southeast recorded 13,029 and 23,460 TDS at 8,500 feet bgs; this however, is from samples taken from the Mancos Formation, a deep-water marine deposit, and not typical of the terrestrial Price River and Wasatch Formations.

Groundwater Primacy: The State of Utah has primacy regarding surface and groundwater protection in the state. Conversations with Bark Kettle, Dan Jarvis and Ammon McDonald indicate that the state is looking closely at this proposal. They have made no recommendations at this point in time.

Recommendation: I recommend that BBC consider formations that are deeper and have higher TDS concentrations than that which was proposed. The Stone Cabin data indicates groundwater is useable (less than 10,000 TDS) and should be protected. However, if it can be shown by further analysis that the water quality of the injected fluids is superior to the groundwater present, then it should be approved. I would place a Condition of Approval (COA) stating that BBC will purge the well after perforating and collect a representative sample, with collaborative water samples taken by the State of Utah or BLM, analyzed separately, and compared. If TDS is over 10,000 or if the injected fluid is higher quality than the groundwater present, then the well should be authorized; however, if the TDS is less than 10,000 and if the injected water is inferior to the groundwater present, then the well should not be authorized.

Chris Conrad, PG
Bureau of Land Management
Price Field Office

2/28/2012



Bill Barrett Corporation

Mr. Ammon McDonald
State of Utah
Division of Oil, Gas and Mining
PO Box 145801
Salt Lake City, UT 84114-5801

RE: Prickly Pear Unit Federal 10-4 Application for Disposal

Dear Mr. McDonald:

Bill Barrett Corporation would like to respectfully submit the two enclosed applications for water disposal as per R649-5-2, Requirements for Class II Injections Wells.

These wells are being converted to water disposal wells as they no longer produce gas in commercial quantities.

If you require further information, please call me at 303-312-8115 or e-mail me at briley@billbarrettcorp.com.

Sincerely,

BILL BARRETT CORPORATION

Brady Riley
Permit Analyst

Enclosures

Prickly Pear Unit Federal #10-4

R649-5-2. Requirements for Class II Injection Wells Including Water Disposal, Storage and Enhanced Recovery Wells

2. The application for an injection well shall include a properly completed UIC Form 1 **(Enclosed)** and the following:

2.1. A plat showing the location of the injection well, all abandoned or active wells within a one-half mile radius of the proposed well, and the surface owner and the operator of any lands or producing leases, respectively, within a one-half mile radius of the proposed injection well. **(Enclosed)**

2.2. Copies of electrical or radioactive logs, including gamma ray logs, for the proposed well run prior to the installation of casing and indicating resistivity, spontaneous potential, caliper, and porosity. **(Copies previously submitted to UDOGM)**

2.3. A copy of a cement bond or comparable log run for the proposed injection well after casing was set and cemented. **(Copies previously submitted to UDOGM)**

2.4. Copies of logs already on file with the division should be referenced, but need not be refiled. **(Copies previously submitted to UDOGM)**

2.5. A description of the casing or proposed casing program of the injection well and of the proposed method for testing the casing before use of the well. **(Enclosed)**

2.6. A statement as to the type of fluid to be used for injection, its source and estimated amounts to be injected daily. **(Enclosed)**

2.7. Standard laboratory analyses of:

2.7.1. The fluid to be injected, **(Enclosed)**

2.7.2. The fluid in the formation into which the fluid is being injected, and **(Enclosed)**

2.7.3. The compatibility of the fluids. **(Enclosed)**

2.8. The proposed average and maximum injection pressures. **(Enclosed)**

2.9. Evidence and data to support a finding that the proposed injection well will not initiate fractures through the overlying strata or a confining interval that could enable the injected fluid or formation fluid to enter any fresh water strata. **(Enclosed)**

2.10. Appropriate geological data on the injection interval with confining beds clearly labeled,

2.10.1. Nearby Underground Sources of Drinking Water, including the geologic formation name, **(Enclosed)**

2.10.2. Lithologic descriptions, thicknesses, depths, water quality, and lateral extent; **(Enclosed)**

2.10.3. Information relative to geologic structure near the proposed well that may effect the conveyance and/or storage of the injected fluids. **(Enclosed)**

2.11. A review of the mechanical condition of each well within a one-half mile radius of the proposed injection well to assure that no cond0uit exists that could enable fluids to migrate up or down the wellbore and enter improper intervals. **(Enclosed)**

2.12. An affidavit certifying that a copy of the application has been provided to all operators, owners, and surface owners within a one-half mile radius of the proposed injection well. **(Enclosed)**

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

UIC FORM 1

APPLICATION FOR INJECTION WELL

Name of Operator: Bill Barrett Corporation	Utah Account Number: N	Well Name and Number: Prickly Pear Unit Federal 10-4
Address of Operator: 1099 18th Street, 2300 CITY Denver STATE CO ZIP 80202	Phone Number: (303) 312-8134	API Number: 4300730823
Location of Well Footage : 75' FSL, 271' FEL QQ, Section, Township, Range: SESE 10 12S 14E	County : Carbon State : UTAH	Field or Unit Name: Prickly Pear Lease Designation and Number: UTU-73665

Is this application for expansion of an existing project?		Yes ☑	No ☐
Will the proposed well be used for:	Enhanced Recovery?	Yes ☐	No ☑
	Disposal?	Yes ☑	No ☐
	Storage?	Yes ☐	No ☑
Is this application for a new well to be drilled?		Yes ☐	No ☑
If this application is for an existing well, has a casing test been performed? Date of test: _____		Yes ☐	No ☑

Proposed injection interval: from 3,265 to 4,145

Proposed maximum injection: rate 4,000 bpd pressure 2,961 psig

Proposed injection zone contains oil ☐, gas ☑, and / or fresh water ☐ within ½ mile of the well.

List of attachments: Attachments as required by R649-5-2. As per 2.4 under R649-5.2, logs on file with the Division are as follows: Sonic, CBL, Neutron Density, and Resistivity.

ATTACH ADDITIONAL INFORMATION AS REQUIRED BY CURRENT UTAH OIL AND GAS CONSERVATION GENERAL RULES

I hereby certify that this report is true and complete to the best of my knowledge.

Name (Please Print) Brady Riley Title Permit Analyst

Signature Brady Riley Date 1/16/2012

(5/2002)

Permit Application Fact Sheet

Prickly Pear #10-4-12-14

1. The proposed disposal well Prickly Pear #10-4-12-14 was drilled in August 2004 and completed in September of 2004. It was completed from the bottom of the Middle Wasatch down to the Price River, with a total perforated interval from 4772'-7560' md. It produced a total of 69.27 mmcf and logged off in August of 2007.
2. There are no other wells within a ½ mile radius.
3. The injection zone is situated in the Wasatch and Middle Wasatch. The injection zone is from 3265' to 4145' and while drilling gave almost no gas shows through the section, the one show observed was very thin, brief and small.
4. The confining zones are interspersed between injection zones as well as ample impermeable rock above and below the gross proposed perforated interval to insure the safety of the fresh water table, as well as the moderately saline zone. There is in excess of 300' of zero porosity shale and mudstone immediately above the top injection perforation.
5. No water samples have been taken from these zones at this point. The equivalent zones in the Prickly Pear #12-24-12-14 SWD yielded TDS levels around 45,000.
6. We do not believe that corrective action is required on the wellbore. This well was drilled in August of 2004. A review of the cement bond logs shows 80% or better bong on both wells throughout the injection zone.
7. Notice was provided on January 5th, 2012 to all surface and mineral owners within ¼ mile of the well. We have received neither inquires nor protests.
8. The MAIP will be determined when the Step Rate Test is performed.

Statement in support of Water Disposal application in opposition to Water Injection application

Disposal Evaluation Request

It is the request of Bill Barrett Corporation that the submitted application for water disposal in the Prickly Pear field be evaluated based on water disposal and not water injection. Our reasoning behind this request is based the proposed disposal intervals in the proposed water disposal wells, and the discontinuous nature of those proposed disposal intervals and the distance between the proposed disposal wells and the nearest economic gas production, which doesn't exist within any reasonable distance one might expect any effect on the productive wells.

Structural Position

Based on the supplied structure map and well log analysis it is evident that the proposed disposal well, Prickly Pear Federal 10-4-12-14 is slightly up dip from economic production to the east. Nearest, but likely uneconomic gas production from the proposed disposal intervals lies more than 2 miles from the proposed disposal well. In addition, the other Prickly Pear 12-24-12-14 SWD lies 2.1 miles roughly southeast.

From the shallowest proposed disposal interval in the Wasatch, structural positions indicate the disposal zones are slightly higher in the #10-4 than the correlative zones to the east. However, at the middle Wasatch top, the correlative zones to the east are slightly higher structurally. At the North Horn formation the top in the #10-4 is about 100' lower structurally than the North Horn top in the Prickly Pear #4-18.

Sand Discontinuity

The proposed disposal intervals, in the Wasatch and the Middle Wasatch are generally comprised of discontinuous sand bodies. A field study of well logs in the Peters Point area, which is just to the east of the Prickly Pear area, has indicated that producing sand bodies can be shown to be discontinuous even within spacing distances of less than 1,000 ft.

Another study conducted with logs in the Wasatch and Middle Wasatch, indicated fewer than half the sands in one well could be found in adjacent wells on 20-acre spacing.

Proposed Interval Fill-up

A common tool to evaluate the potential for waterflooding success is to calculate the required amount of water before reservoir pressurization could begin to occur. It is usual for this calculation to assume radial displacement and to consider, interval by interval, the porosity corrected vertical thickness (phi*h) for the assumed allocation of injected water.

The following tables summarize for each of the proposed disposal wells, sand interval reservoir properties and resulting fill-up for a ½ mile radius:

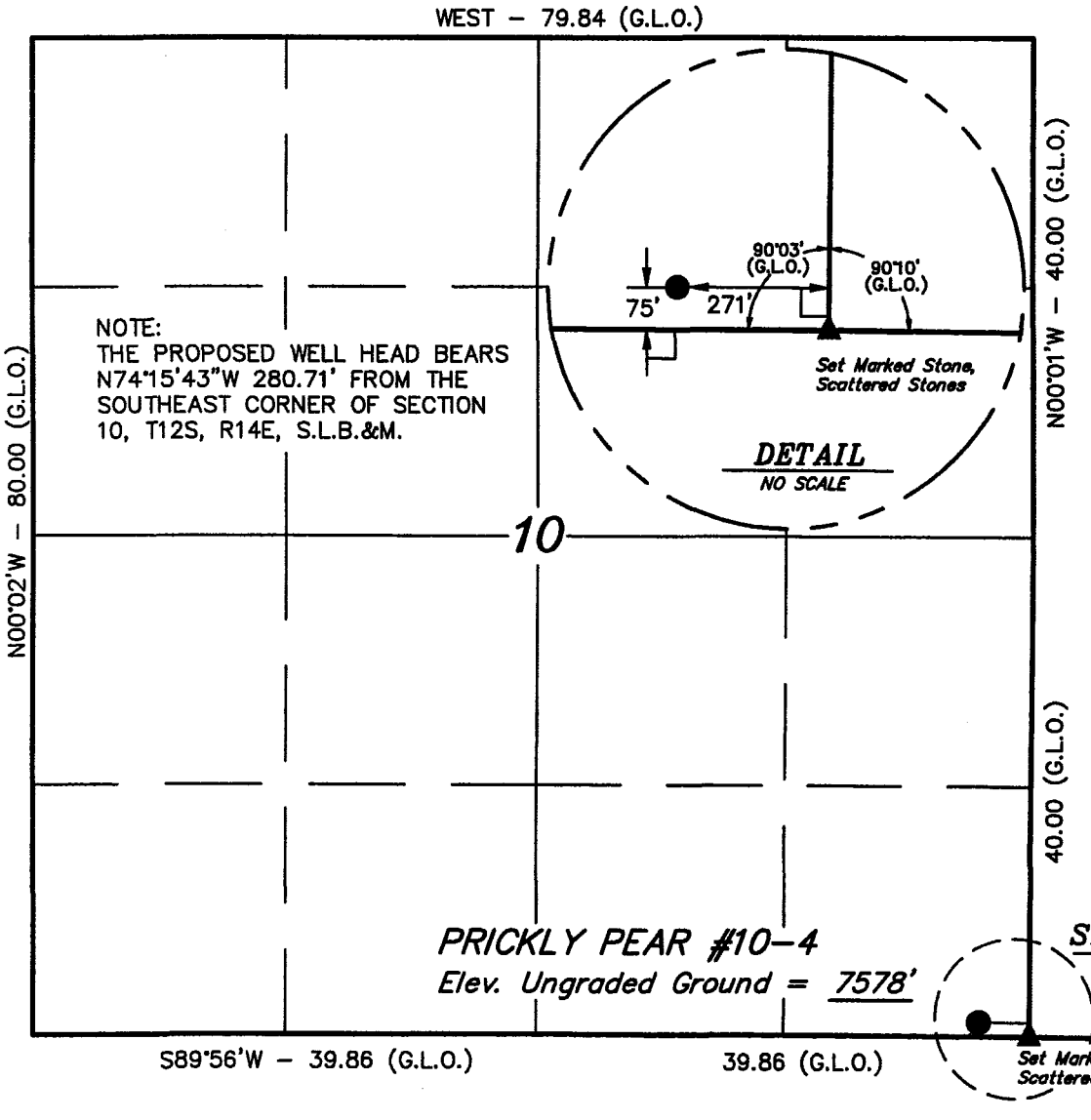
Formation	Perf top	Perf base	Reservoir Thickness (ft)	Porosity	Porosity Feet (Phi*h)	Water Saturation	Pore Vol (Phi*h*(1-Sw)	1/2 Mile Radius Volume (bbls)
Wasatch	3265	3275	16	11%	1.76	0.9	0.176	686,341
Wasatch	3335	3355	25	12%	3	0.9	0.3	1,169,900
Wasatch	3480	3520	50	12%	6	0.9	0.6	2,339,800
Wasatch	3630	3660	40	15%	6	0.9	0.6	2,339,800
Wasatch	3674	3700	26	14%	3.64	0.9	0.364	1,419,478
Wasatch	3730	3750	25	15%	3.75	0.9	0.375	1,462,375
Wasatch	3776	3786	10	12%	1.2	0.9	0.12	467,960
Wasatch	3860	3865	10	6%	0.6	0.9	0.06	233,980
M. Wasatch	3990	4000	15	7%	1.05	0.9	0.105	409,465
M. Wasatch	4090	4100	10	6%	0.6	0.9	0.06	233,980
M. Wasatch	4132	4145	15	8%	1.2	0.9	0.12	467,960
			242		28.8		2.88	11,231,038

Based on the above calculations over 11 million barrels of water would have to be disposed into the Prickly Pear Federal 10-4 before any reservoir effect would be seen at ½ mile from the wellbore. If one considers the discontinuous nature and limited size of the sands in these formations, one would have to determine that the sands would not be perfect ½ mile radius blanket sands and would likely take quite a bit less than 11 million barrels before pressuring up. Again, any productive wells are about 2 miles from the proposed SWD #10-4.

Summary

As a result of the above arguments and calculations, Bill Barrett Corporation feels justified to request that the submitted application for water disposal into the Pear Federal #10-4-12-14 be evaluated as such and not on water injection criteria.

T12S, R14E, S.L.B.&M.

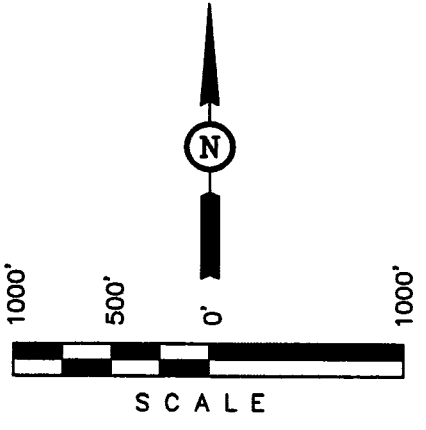


WASATCH OIL & GAS LLC.

Well location, PRICKLY PEAR #10-4, located as shown in the SE 1/4 SE 1/4 of Section 10, T12S, R14E, S.L.B.&M., Carbon County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 7, T12S, R15E, S.L.B.&M. TAKEN FROM THE COWBOY BENCH, QUADRANGLE, UTAH, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7563 FEET.



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. 161319
STATE OF UTAH
ROBERT L. KAY

LEGEND:

└ = 90° SYMBOL
● = PROPOSED WELL HEAD.
▲ = SECTION CORNERS LOCATED.

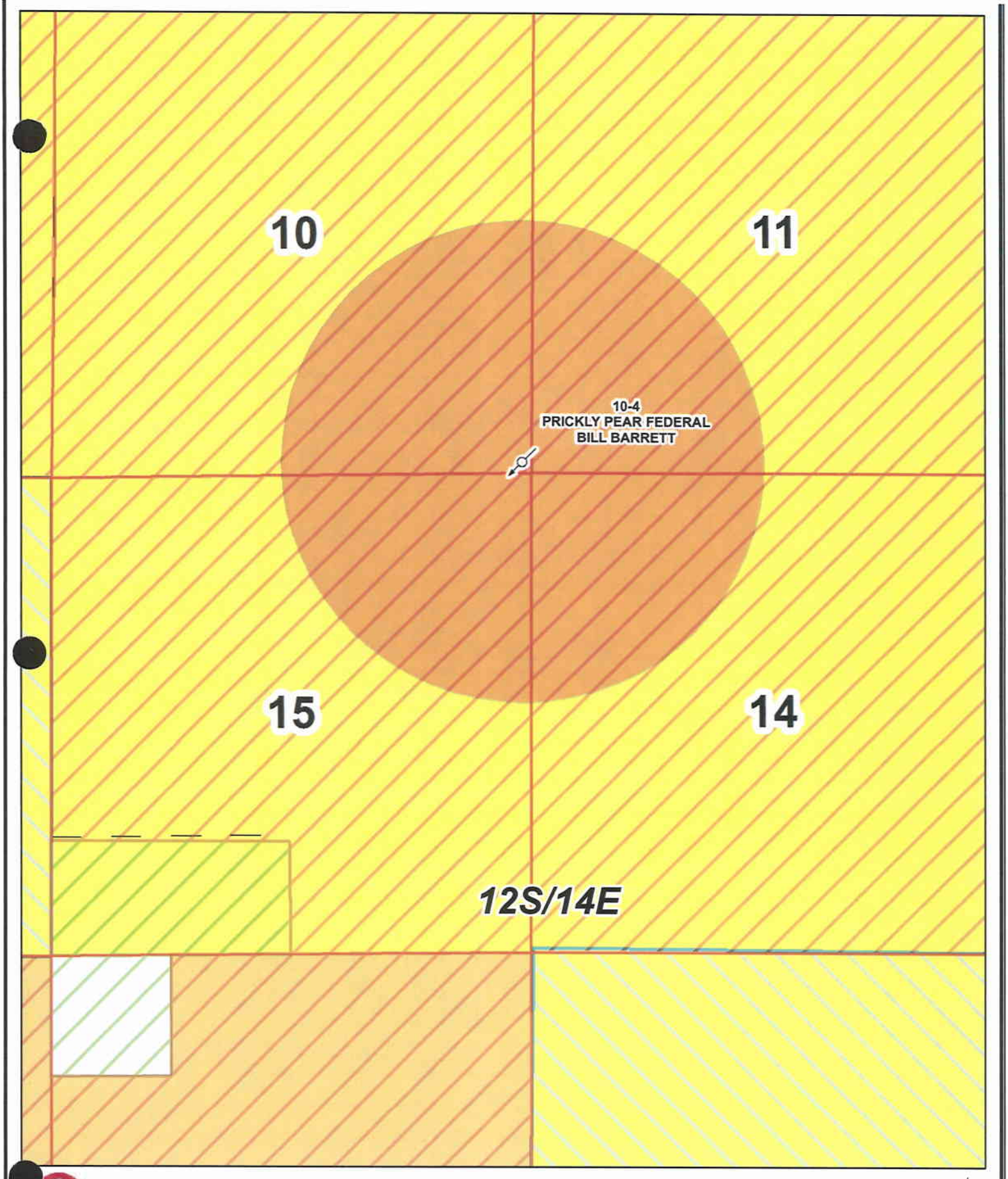
BASIS OF BEARINGS

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

LATITUDE = 39°46'50"
LONGITUDE = 110°19'30"

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

SCALE: 1" = 1000'	DATE SURVEYED: 10-25-01	DATE DRAWN: 11-05-01
PARTY: B.B. W.L. D.R.B.	REFERENCES: G.L.O. PLAT	
WEATHER: COOL	FILE: WASATCH OIL & GAS LLC.	



Bill Barrett Corporation

PROPOSED INJECTION WELL
Well Location,Prickly Pear Federal #10-4
Located as shown in the SESE 1/4
of Section 10, T12S-R14E Carbon County, Utah

10-4 Proposed Injection Well

1/2 Mile Well Buffer

Surface

FEDERAL SURFACE
STATE SURFACE
FEE SURFACE

Leased

BILL BARRETT CORP.
QEP

N

R649-5

2.2

Copies of electrical or radioactive logs, including gamma ray logs, for the proposed well run prior to the installation of casing and indicating resistivity, spontaneous potential, caliper, and porosity.

All logs are already on file with the division for reference.

R649-5

2.3

A copy of a cement bond or comparable log run for the proposed injection well after casing was set and cemented.

The CBL is already on file with the division.

R649-5

2.4

Copies of logs already on file with the division should be referenced, but need not be refiled

The CBL, Neutron Density, Resistivity, and Sonic logs are already on file with the division

Bill Barrett Corporation

Prickly Pear Fed. #10-4-12-14

Section 10, T12S-R14E
Carbon County, UT
API #: 43-007-30823
AFE #:

Recomplete SWD Well

1. Note: Water in the context of this procedure will be either clean produced water or 3% KCl water. Any water will require biocide as a precaution.

2. MIRU workover rig. Set tanks and fill with water. Using rig pump kill backside & tubing with water. ND WH & NU BOPE

3. TOOH w/tubing & PKR.

4. Rig up wireline, RIH GR to PBTD and record in wellview.

5. PU CIBP, TIH and set CIBP at 4,400'. Dump bail 50' of cement on top of CIBP allow to set.

6. Test casing by pressuring up to 4,000 psi and hold for 30 minutes. Record pressure test on Barton chart recorder for 30 minutes after stabilizing. Send chart to Denver to Heidi Reger.

7. Perforate the following zones (3 spf, 120 degree phasing, .35 EHD).

Top	Bottom	Interval
3,265'	3,275'	10'
3,335'	3,355'	20'
3,480'	3,520'	40'
3,630'	3,660'	30'
3,674'	3,700'	26'
3,730'	3,750'	20'
3,776'	3,786'	10'
3,990'	4,000'	10'
4,090'	4,100'	10'
4,132'	4,145'	13'

8. PU RBP and PKR. TIH and set RBP at +/-4,155' PU and set PKR at +/-3,980'.

9. MIRU Halliburton. Pressure test surface lines to 4,000 psig. Pump into interval and establish rate. Pump 2,500 gal 15% HCL. Displacing with 50 bbl overflush of water.

10. Release PKR and latch on to RBP. Set RBP at +/-3,796'. Set PKR at +/-3,620'.

11. Pump into interval and establish rate. Pump 2500 gal 15% HCL. Displacing with 50 bbl overflush of water.

12. Release PKR and latch on to RBP. Set RBP at +/-3,530'. Set PKR at +/-3,255'.

13. Pump into interval and establish rate. Pump 2500 gal 15% HCL. Displacing with 50 bbl overflush of water.

14. RDMO Halliburton.

15. Release PKR and PU RBP. TOOH w/tubing, PKR & RBP.

16. TIH as follows:

    (1) WL re-entry guide
    (1) Tail Joint
    (1) Packer
    (1) 1.78" XN profile nipple
    (1) on-off tool
    (1) 1.81" X profile nipple
    ~(111) Jts of 2 7/8 tubing to surface

    Set packer at +/- 3,215'.

17. Sting out of on-off tool and circulate annulus w/inhibited water. Sting into on-off tool.

18. Land tubing and ND BOPE & NU WH.

19. Set plug in XN nipple and pressure test tubing to 3,000 psig. Hold pressure for 30 minutes. Record Test.

20. Retrieve profile plug.

21. Pressure test backside annulus to 1000 psig. Record pressure test on Barton chart recorder for 30 minutes after stabilizing. Send chart to Denver to Heidi Reger. Bleed off backside pressure.

22. RDMO workover rig

Total Acid: 7,500 gal 15% HCL

Heidi Reger
10/5/2011

Prickly Pear # 10-4

API: 43-007-3082300000

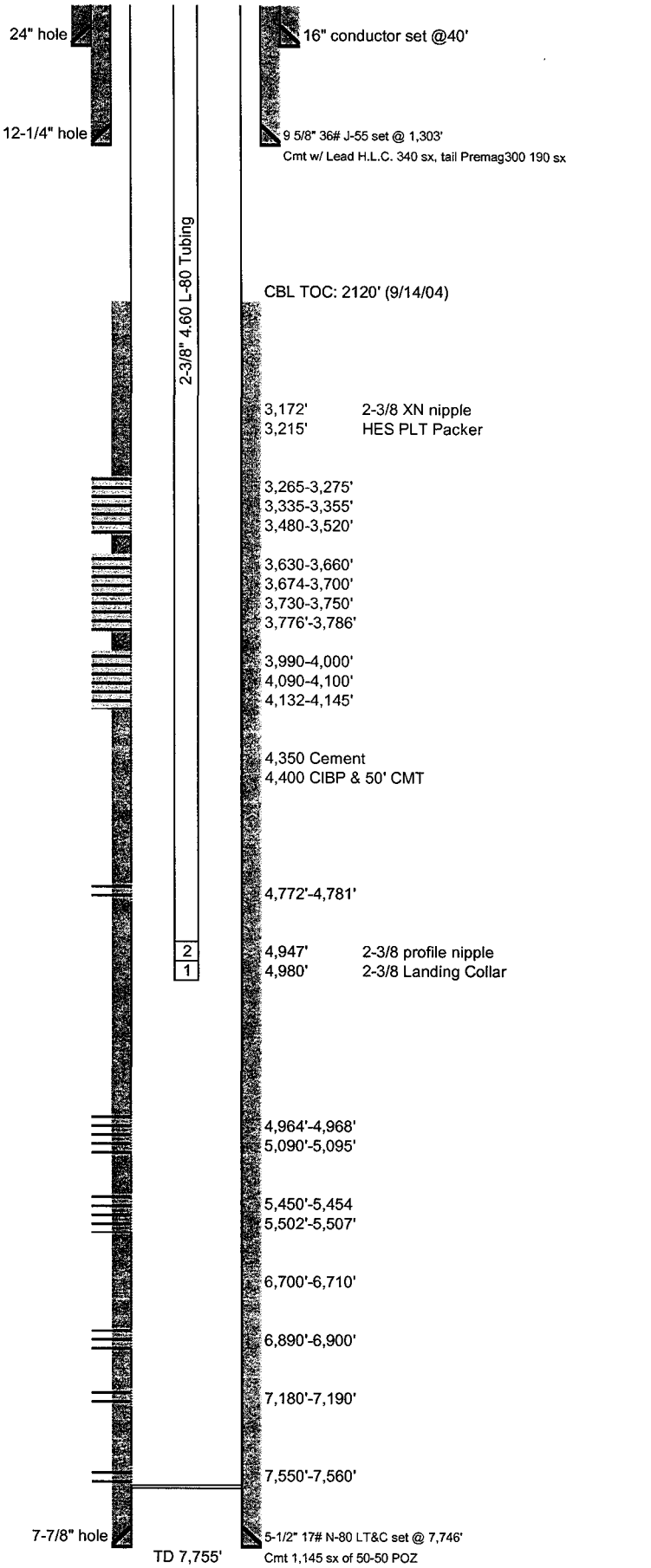
SESE Sec 10-T12S-R14E

Carbon Co., UT

Proposed Changes in Red

CURRENT WELLBOERE SCHEMATIC

Spud: 8/15/2004
Rig Release: 8/25/2004
Completed: 9/16/2004
1st Sales: 9/30/2004



Formation Tops

TGR/TW 2880' Sand Base - 2,983'

Wasatch - 2,796'

M. Wasatch - 3,860'

North Horn - 4,958'

Dark Canyon - 6,940'

Price River - 7,203'

PR 6840 Sand- 7,550'

5-1/2" 17# N-80 LT&C specs:
ID-4.892"
Drift-4.767"
Burst-7740 psi
Collapse-6280 psi

R649-5

2.6

A statement as to the type of fluid to be used for injection, its source and estimated amounts to be injected daily:

The fluid used for inject ion will be a KCL brine solution. The fluid that will be used for injection will include flowback water from wells and produced water from wells in the field. See section 2.7 for an analysis of the water. The estimated amount of daily injection is 4,000 bbls per day. As more water is recycled in the field this number will decrease significantly.

Also, please refer to tab 2.8 for additional information.

R649-5

2.7

Standard laboratory analyses of:

2.7.1. The fluid to be injected,

2.7.2. The fluid in the formation into which the fluid is being injected, and

2.7.3. The compatibility of the fluids.

Information provided in other sections of application. Please refer to sections that follow: 2.7.1, 2.7.2, 2.7.3.

R649-5

2.7

Standard laboratory analyses of:

2.7.1. The fluid to be injected,

Below is a summary of the results from water analysis included in this section.

Prickly Pear Produced Water Analysis Results

Well Name	Test Date	TDS (ppm)
PrPr 7-16	4/5/2004	53,522
PrPr 5-16	7/14/2004	60,747
PrPr 16-15	7/14/2004	74,301
PrPr 13-16	7/14/2004	33,553

These are examples of the wells in Prickly Pear that will be disposed of in this SWD.

Water Analysis Report

24-Jun-04

Date Sampled : 05-Apr-04
Date Received : 07-Apr-04
Date Reported : 12-Apr-04

Bill Barrett Corporation

UT

Attention : Fred Goodrich
cc1 :
cc2 :
cc3 :
Comments :

Field : Nine Mile/Peters Point
Lease : Prickley Pear
Location : Prickley Pear 07-16
Sample Point : wellhead
Salesman : Larry Curtis
Analyst : Karen Hawkins Allen

CATIONS

Calcium :	4,600	mg/l
Magnesium :	194	mg/l
Barium :		mg/l
Strontium :		mg/l
mg/l		mg/l
Iron :	75.0	mg/l
Sodium :	15552	mg/l

ANIONS

Chloride :	31,800	mg/l
Carbonate :	0	mg/l
Bicarbonate :	488	mg/l
Sulfate :	813	mg/l

pH (field) :	6.34	
grams/ml		
Temperature :	85	degrees F
Ionic Strength :	0.92	
Resistivity :		ohm/meters
Ammonia :		ppm

Specific Gravity :	1.055	
Total Dissolved Solids :	53,522	ppm
CO2 in Water :	352	mg/l
CO2 in Gas :	0.03	mole %
H2S in Water :	7.0	mg/l
Dissolved Oxygen :		ppm

SI calculations based on Tomson-Oddo parameters

Calcite (CaCO3) SI :	-0.63	Calcite PTB :	N/A
Calcite (CaCO3) SI @ 100 F :	-0.48	Calcite PTB @ 100 F :	N/A
Calcite (CaCO3) SI @ 120 F :	-0.26	Calcite PTB @ 120 F :	N/A
Calcite (CaCO3) SI @ 140 F :	-0.05	Calcite PTB @ 140 F :	N/A
Calcite (CaCO3) SI @ 160 F :	0.18	Calcite PTB @ 160 F :	50.4
Calcite (CaCO3) SI @ 180 F :	0.41	Calcite PTB @ 180 F :	102.9
Calcite (CaCO3) SI @ 200 F :	0.65	Calcite PTB @ 200 F :	144.5
Gypsum (CaSO4) SI :	-0.40	Gypsum PTB :	N/A
Barite (BaSO4) SI :	N/A	Barite PTB :	N/A
Celestite (SrSO4) SI :	N/A	Celestite PTB :	N/A

Champion Technologies, Inc.
Vernal District Technical Services

Water Analysis Report

09-Aug-04

Date Sampled : 14-Jul-04
Date Received : 15-Jul-04
Date Reported : 22-Jul-04

Bill Barrett Corporation
Point

Field : Nine Mile/Peters

Lease : Prickley Pear

UT

Location : Prickley Pear 05-

16

Attention : Fred Goodrich
cc1 :

Sample Point : water tank

Salesman : Larry Curtis

cc2 :
cc3 :

Analyst : Karen Hawkins

Allen

Comments :

CATIONS

Calcium :	3,200	mg/l
Magnesium :	49	mg/l
Barium :		mg/l
Strontium :		mg/l
Iron :	3.0	mg/l
Manganese :		mg/l
Sodium :	19697	mg/l

ANIONS

Chloride :	33,800	mg/l
Carbonate :	0	mg/l
Bicarbonate :	3,660	mg/l
Sulfate :	338	mg/l

mg/l m

pH (field) :	6.91	
Temperature :	85	degrees F
Ionic Strength :	1.02	
Resistivity :		ohm/meters
Ammonia :		ppm

Specific Gravity :	1.050	grams/ml
Total Dissolved Solids :	60,747	ppm
CO2 in Water :	300	mg/l
CO2 in Gas :	0.03	mole %
H2S in Water :		mg/l
Dissolved Oxygen :		ppm

SI calculations based on Tomson-Oddo parameters

Calcite (CaCO3) SI :	1.00	Calcite PTB :	1218.7
Calcite (CaCO3) SI @ 100 F :	1.15	Calcite PTB @ 100 F :	1328.0
Calcite (CaCO3) SI @ 120 F :	1.36	Calcite PTB @ 120 F :	1464.7
Calcite (CaCO3) SI @ 140 F :	1.58	Calcite PTB @ 140 F :	1584.9
Calcite (CaCO3) SI @ 160 F :	1.80	Calcite PTB @ 160 F :	1683.3
Calcite (CaCO3) SI @ 180 F :	2.04	Calcite PTB @ 180 F :	1770.7
Calcite (CaCO3) SI @ 200 F :	2.27	Calcite PTB @ 200 F :	1839.0
Gypsum (CaSO4) SI :	-0.92	Gypsum PTB :	N/A
Barite (BaSO4) SI :	N/A	Barite PTB :	N/A
Celestite (SrSO4) SI :	N/A	Celestite PTB :	N/A

Water Analysis Report

09-Aug-04

Date Sampled : 14-Jul-04
Date Received : 15-Jul-04
Date Reported : 22-Jul-04

Bill Barrett Corporation
Point

UT

Attention : Fred Goodrich
cc1 :
cc2 :
cc3 :
Allen
Comments :

Field : Nine Mile/Peters
Lease : Prickley Pear
Location : Prickley Pear 16-15
Sample Point : water tank
Salesman : Larry Curtis
Analyst : Karen Hawkins

CATIONS

Calcium :	4,320	mg/l
Magnesium :	413	mg/l
Barium :		mg/l
Strontium :		mg/l
Iron :	28.0	mg/l
Manganese :		mg/l
Sodium :	23402	mg/l

ANIONS

Chloride :	43,000	mg/l
Carbonate :	0	mg/l
Bicarbonate :	2,440	mg/l
Sulfate :	698	mg/l mg/l m

pH (field) :	6.91	
Temperature :	85	degrees F
Ionic Strength :	1.27	
Resistivity :		ohm/meters
Ammonia :		ppm

Specific Gravity :	1.040	grams/ml
Total Dissolved Solids :	74,301	ppm
CO2 in Water :	300	mg/l
CO2 in Gas :	0.03	mole %
H2S in Water :		mg/l
Dissolved Oxygen :		ppm

SI calculations based on Tomson-Oddo parameters

Calcite (CaCO3) SI :	0.72	Calcite PTB :	722.6
Calcite (CaCO3) SI @ 100 F :	0.87	Calcite PTB @ 100 F :	821.1
Calcite (CaCO3) SI @ 120 F :	1.08	Calcite PTB @ 120 F :	936.1
Calcite (CaCO3) SI @ 140 F :	1.30	Calcite PTB @ 140 F :	1034.6
Calcite (CaCO3) SI @ 160 F :	1.52	Calcite PTB @ 160 F :	1111.3
Calcite (CaCO3) SI @ 180 F :	1.76	Calcite PTB @ 180 F :	1179.7
Calcite (CaCO3) SI @ 200 F :	1.99	Calcite PTB @ 200 F :	1229.0
Gypsum (CaSO4) SI :	-0.54	Gypsum PTB :	N/A
Barite (BaSO4) SI :	N/A	Barite PTB :	N/A
Celestite (SrSO4) SI :	N/A	Celestite PTB :	N/A

Water Analysis Report

09-Aug-04

Date Sampled : 14-Jul-04
Date Received : 15-Jul-04
Date Reported : 22-Jul-04

Bill Barrett Corporation
Point

UT

16

Field : Nine Mile/Peters

Lease : Prickley Pear

Location : Prickley Pear 13-

Attention : Fred Goodrich
cc1 :

Sample Point : water tank

Salesman : Larry Curtis

cc2 :
cc3 :

Analyst : Karen Hawkins

Allen

Comments :

CATIONS

Calcium :	1,320	mg/l
Magnesium :	194	mg/l
Barium :		mg/l
Strontium :		mg/l
Iron :	3.0	mg/l
Manganese :		mg/l
Sodium :	10912	mg/l

ANIONS

Chloride :	17,400	mg/l
Carbonate :	0	mg/l
Bicarbonate :	2,684	mg/l
Sulfate :	1,040	mg/l

mg/l m

pH (field) :	6.92	
Temperature :	85	degrees F
Ionic Strength :	0.56	
Resistivity :		ohm/meters
Ammonia :		ppm

Specific Gravity :	1.035	grams/ml
Total Dissolved Solids :	33,553	ppm
CO2 in Water :	300	mg/l
CO2 in Gas :	0.03	mole %
H2S in Water :		mg/l
Dissolved Oxygen :		ppm

SI calculations based on Tomson-Oddo parameters

Calcite (CaCO3) SI :	0.61	Calcite PTB :	514.0
Calcite (CaCO3) SI @ 100 F :	0.76	Calcite PTB @ 100 F :	608.7
Calcite (CaCO3) SI @ 120 F :	0.97	Calcite PTB @ 120 F :	721.4
Calcite (CaCO3) SI @ 140 F :	1.19	Calcite PTB @ 140 F :	816.1
Calcite (CaCO3) SI @ 160 F :	1.41	Calcite PTB @ 160 F :	897.2
Calcite (CaCO3) SI @ 180 F :	1.65	Calcite PTB @ 180 F :	967.1
Calcite (CaCO3) SI @ 200 F :	1.88	Calcite PTB @ 200 F :	1021.2
Gypsum (CaSO4) SI :	-0.68	Gypsum PTB :	N/A
Barite (BaSO4) SI :	N/A	Barite PTB :	N/A
Celestite (SrSO4) SI :	N/A	Celestite PTB :	N/A

R649-5

2.7.2

The fluid in the formation into which the fluid is being injected:

Fluid samples from the formation to be injected in will be taken at the time of completion. Compatibility tests will also be run at that time.

R649-5

2.7.3

The compatibility of the fluids:

Fluid samples from the formation to be injected in will be taken at the time of completion. Compatibility tests will also be run at that time.

R649-5

2.8

The proposed average and maximum injection pressures:

PrPr 10-4-12-14

Maximum Allowable Surface Pressure Calculations
Based on Observed Fracture Gradients

Water SG = 1.02 Gradient = .4417 psi/ft

Depth (ft)	Observed ISDP (psi)	Calculated Btm Hole (psi)	Resulting Frac Grad (psi)
7,550	3,910	7,245	0.96
7,180	3,910	7,081	0.99
6,890	4,100	7,143	1.04
6,700	4,120	7,079	1.06
5,450	6,220	8,627	1.58
4,964	2,600	4,793	0.97
4,772	2,220	4,328	0.91

Min Injection Depth = 3,265
*Max Surface Pressure = 2,961

Requested Max Surface Pressure
2,369 psi

80% of anticiapted max surface pressure

Anticipated Avg Surface Pressure = 70% * Max Surface Pressure

Requested Max Disposal Rate = 4000 bwpd / well

Anticipated Avg Disposal Rate = 800 bwpd/well

A step rate test will be performed determine max injection rate and pressure.

* Based on final ISIPs

R649-5

2.9

Evidence and data to support a finding that the proposed injection well will not initiate fractures through the overlying strata or a confining interval that could enable the injected fluid or formation fluid to enter any fresh water strata:

Please refer to tab 2.8 for this information.

R649-5

2.10.1

Nearby Underground Sources of Drinking Water, including the geologic formation name:

The literature discussing aquifers in this particular area is limited. U.S. Geological Survey, Water-Resources Investigations Report 92-4161 does indicate however, in the Uinta basin, north of Carbon County, the Douglas Creek-Renegade aquifer occurs above the Wasatch-Green River confining unit. The Wasatch-Green River confining unit lies below the Green River and above the North Horn (Glover, 1996). In addition, there are many sand-shale sequences throughout the Wasatch that would serve as more than adequate seals to upward movement of higher TDS injected water. State of Utah, Department of Natural Resources, Technical publication No. 92, (Howells, et al. 1987) indicates that the moderately saline groundwater interface occurs approximately +4500' subsea, in this area, which would equate to a total vertical depth of 3093', which occurs in the upper portion of the Wasatch formation. A study we had conducted on the topic of 10,000 TDS interface or moderately saline interface, concluded through the use of Pickett plots, in concert with actual laboratory water analysis, the 10,000 TDS interface occurred somewhere above the Uteland Butte of the Green River Formation approximately 2400' TVD and 5193' subsea. In either case, it would stand to reason the Wasatch formation in the West Tavaputs Plateau area, with its interbedded shales, and mudstones, would protect any drinking water sources or aquifers of water of less than 10,000 TDS from contamination of higher TDS water, injected in deeper formations.

In the area of the proposed injection well, the highest injection perf occurs 4328ft above sea level or 3265 ft below ground level in the Prickly Pear #10-4-12-14.

R649-5

2.10.2

Lithologic descriptions, thicknesses, depths, water quality, and lateral extent

The Wasatch formation, in the West Tavaputs Plateau area, underlies the Green River formation and is indicated by a transition zone containing a series of transgressive/regressive parasequences of lacustrine origin. In addition, near-shore lacustrine and alluvial deposits occur within the sequence. The Wasatch is Tertiary in age and is marked by a succession of multi-colored shales and interbedded mudstones, siltstones and sandstones. The formation is typically 70-80% silty shale. The shales are silty to very silty, often containing mica or to a lesser extent pyrite. Shales are predominantly tan to reddish brown to brown-and commonly gradational with shaly sands being light brown to brown. Shales usually are blocky and soft, but vary in amounts of calcium carbonate cement.

In the proposed area the Wasatch is about 1000 ft thick and occurs 2796 ft below ground level and 4797 ft. above sea level. The sand bodies within the Wasatch, for the most part, are limited in aerial extent and discontinuous. Only sands found in the upper part of the Wasatch, associated with the lacustrine depositional environment have greater continuity.
The middle Wasatch lies between the Wasatch and the North Horn, and is similar to the discontinuous meandering fluvial depositional environment of the Wasatch. The middle Wasatch can be identified on open-hole logs by the drop in resistivity throughout the formation. The formation is also about 1000 ft thick in the area of study.

The North Horn formation is approximately 1900 ft thick, in the area of study, and its top is 4959 ft below ground level (2634' above sea level). The North Horn is predominately a meandering fluvial depositional environment, with exception of the bottom most beds. These sand bodies are indicative of higher energy fluvial environments and are the transition from the Dark Canyon; a braided fluvial environment to the North Horn formation, a lower energy, meandering fluvial environment, which gradually decreases in energy, moving up section. These deepest beds of the North Horn are generally "cleaner" and have a greater aerial extent than beds higher in the formation.
Similar to the Wasatch, most North Horn lithologies are still redbeds, but have subtle color changes in the silty shales and typically are smoother in texture. In addition, some shales are found in yellow, purple, green, and gray coloration.

The Dark Canyon formation, as indicated earlier, is a high-energy braided stream depositional environment. The sands are larger grained, higher in quarts content, more continuous and aerially most extensive. There are some indications that the lowest most deposits in the formation may be a basal conglomerate in some areas. In most areas in the West Tavaputs Plateau, there is a marked increase in sand content in the Dark Canyon, with the higher sand-content pulses occurring at the top and bottom of the formation. The formation averages about 215 ft in thickness and occurs 6940 ft. below ground level, which equates to about 653 ft. above sea level, in the area of study.

The Price River formation is comprised of sands and shales which seem to be of a more continuous nature, than the Wasatch and North Horn, but more lenticular than the Dark

Canyon. Similarly, it seems that there is a higher percentage of sand content in the Price River formation, than the Wasatch or North Horn, but less than the Dark Canyon. The top of the Price River usually begins with an abrupt increase in gray shale and sands within the Price River contain intergranular shale. Down section carbonaceous shales can be found. The top of the formation occurs roughly 7205 ft. below ground level, 388 ft. above sea level and is about 1000 ft thick.

Water quality data collected from each formation indicate:

Formation	Chlorides (mg/l)	Calculated NaCL (mg/l)	TDS (mg/l)
Wasatch	16418-19453	27070-32074	NA
North Horn	26054-30656	42958-50545	30895-36935
Dark Canyon	27000 -41700	44769-68753	42200 -58900
Price River	22300 - 27600	36887-45491	30000 - 40000
Bluecastle	12300 -15000	NA	23000 - 27000
Castlegate	12500	NA	25000 - 28000

R649-5

2.10.2

Lithologic descriptions, thicknesses, depths, water quality, and lateral extent

Prickly Pear #10-4

Formation	Chlorides (mg/l)	Calculated NaCL (mg/l)	TDS (mg/l)
Wasatch	16418-19453	27070-32074	NA
North Horn	26054-30656	42958-50545	30895-36935
Dark Canyon	27000 -41700	44769-68753	42200 -58900
Price River	22300 - 27600	36887-45491	30000 - 40000
Bluecastle	12300 -15000	NA	23000 - 27000
Castlegate	12500	NA	25000 - 28000

R649-5

2.10.2

Lithologic descriptions, thicknesses, depths, water quality, and lateral extent

#10-4-12-14 Prickly Pear Unit

PERF TOP	PERF BASE	LITHOLOGY
3265	3275	SS: wh-offwh-transl-ltgy-rthy, fm-modhd, vf-f-occ med grnd, and-sbang-sbrnd, mod srtd, mod-v calc, tr carb, trmed grnd gluac, trf-med grnd felds
3335	3355	SS: off wh-wh-opq-ltgy mod hd-hd, f-med grnd, ang-sbang, mod-wsrtd, grn supt mtx, mltigrn clus, mod calc, tr carb flakes
3480	3520	SS: off wh-wh-opq-trnsl, mod hd-hd, vf-f-med grnd, sbang-sbrn-rnd, grn supt, abnt lse grns, mod calc, com carb mat
3630	3660	SS: trnsl-fros-wh-ofwh, fri-hd, f-c gr, sbang-sbrnd, mod p sort, uncon, sl calc, tr carb
3674	3700	SS: trnsl-fros-wh-ofwh, fri-hd, f-c gr, sbang-sbrnd, mod p sort, uncon, sl calc, tr carb
3730	3750	SS: trnsl-fros-wh-ofwh,fri-hd, f-c gr, sbang-sbrnd, mod p sort, uncon, mod calc, tr carb
3776	3786	SS: trnsl-fros-wh-ofwh, fri-hd, f-c gr, sbang, sbrnd, mod p sort, uncon, mod calc, tr carb
3860	3865	SS: wh-offwh, gy-gygrn, sl s&p, fri sft-frm, vf-f gr, sbang-sbrnd, mod w sort, gr & mtx supt, v calc, calc mtx tr carb tr pyr
3990	4000	SS: aa, SH: rd-rdbrn-brn, tan-yel, gy-gygrn, purp, sft-frm, n-sl calc, sbblky-blky, rthy-grty, silty ip grdg to SLTYSH, tr pyr, tr carb
4090	4100	SS: ltgy-gy, rd-rdbrn, wh-offwh, sl s&p, fri, vsft-frm, vf-c gr, sbang-sbrnd, mod w sort, abnt lse grs, gr & mtx supt, v calc, calc & rd clay mtx, silty ip, tr carb
4132	4145	SS: ltgy-gy, rd-rdbrn, wh-offwh, sl s&p, fri, vsft -frm, vf-c gr, sbang-sbrnd, por sort, occ lse grs, gr & mtx supt, v calc, calc & rd clay mtx, silty ip, tr carb, tr pyr, tr glauc

R649-5

2.10.3

Information relative to geologic structure near the proposed well that may effect the conveyance and/or storage of the injected fluids:

The Prickly Pear #10-4 proposed injection zones are nominally structurally higher than the correlative zones productive zones to the east on Prickly Pear. Based on the supplied structure map and well log analysis it is evident that the proposed disposal well, is up-dip from economic production in Prickly Pear, to the east, however the closest well with stratigraphically equivalent zones is 2.13 miles away in the Prickly Pear 4-18-12-15, which has been completed in those zones.

From the disposal intervals in the Wasatch and Middle Wasatch, the structural maps and log tops indicate 81', and an approximately 25' decrease in elevation from the proposed injection well, to the closest economically productive well in Prickly Pear, respectively.

The general consensus, when consulting all the cross-dipole data and a microseismic survey done in the Prickly Pear #1-20-12-15, is the principle horizontal stress is oriented N50W and likewise hydraulic fracturing did create fracture pattern ellipse, with an aspect ratio of 3.5:1, with the long axis oriented N50W, in the Prickly Pear #1-20. That fracture pattern and microseismic events were observed in a 9-stage microseismic survey conducted last year on the aforementioned Prickly Pear well. If this hydraulic conveyance regime is valid, it would possibly transport and store water in an ellipse aligned in such a way as to not be aligned with any productive wells within any conceivable conveyance distance. Nonetheless, as mentioned previously, if one assumed a radial conveyance, the nearest economic well with completed, stratigraphically equivalent zones is 2.13 miles away.

R649-5

2.10.3

Information relative to geologic structure near the proposed well that may effect the conveyance and/or storage of the injected fluids:

For additional reference, please refer to the cross-section and ½ mile radius maps sent with application. PDF versions are also available upon request.

R649-5

2.11

A review of the mechanical condition of each well within a one-half mile radius of the proposed injection well to assure that no conduit exists that could enable fluids to migrate up or down the wellbore and enter improper intervals.

Other Offsets:

There are no wells within ½ mile radius of this well.

Bill Barrett Corporation

AFFIDAVIT OF NOTICE

Prickly Pear Unit Federal 10-4
SESE Sec. 10, T12S, R14E
Carbon County, UT
API #4300730823

I, Vicki L. Wambolt, Landman with Bill Barrett Corporation (BBC) certify that a true and correct copy of UIC Form 1 Application for Injection Well with supplemental ownership information was provided, by certified mail, to the following operators, owners and surface owners located within a one-half (1/2) miles radius exposure of the location pursuant to R649-5-2.12 of the Oil and Gas Conservation, General Rules.

Bureau of Land Management
125 South 600 West
Price, Utah 84501

Affiant

Vicki L. Wambolt, Landman
January 5, 2012

State of Colorado)
)
County of Denver)

Before me, the undersigned, on the date as given above, personally appeared Vicki L. Wambolt known to me to be the person whose name is subscribed to the foregoing instrument for the purpose and consideration therein expressed.

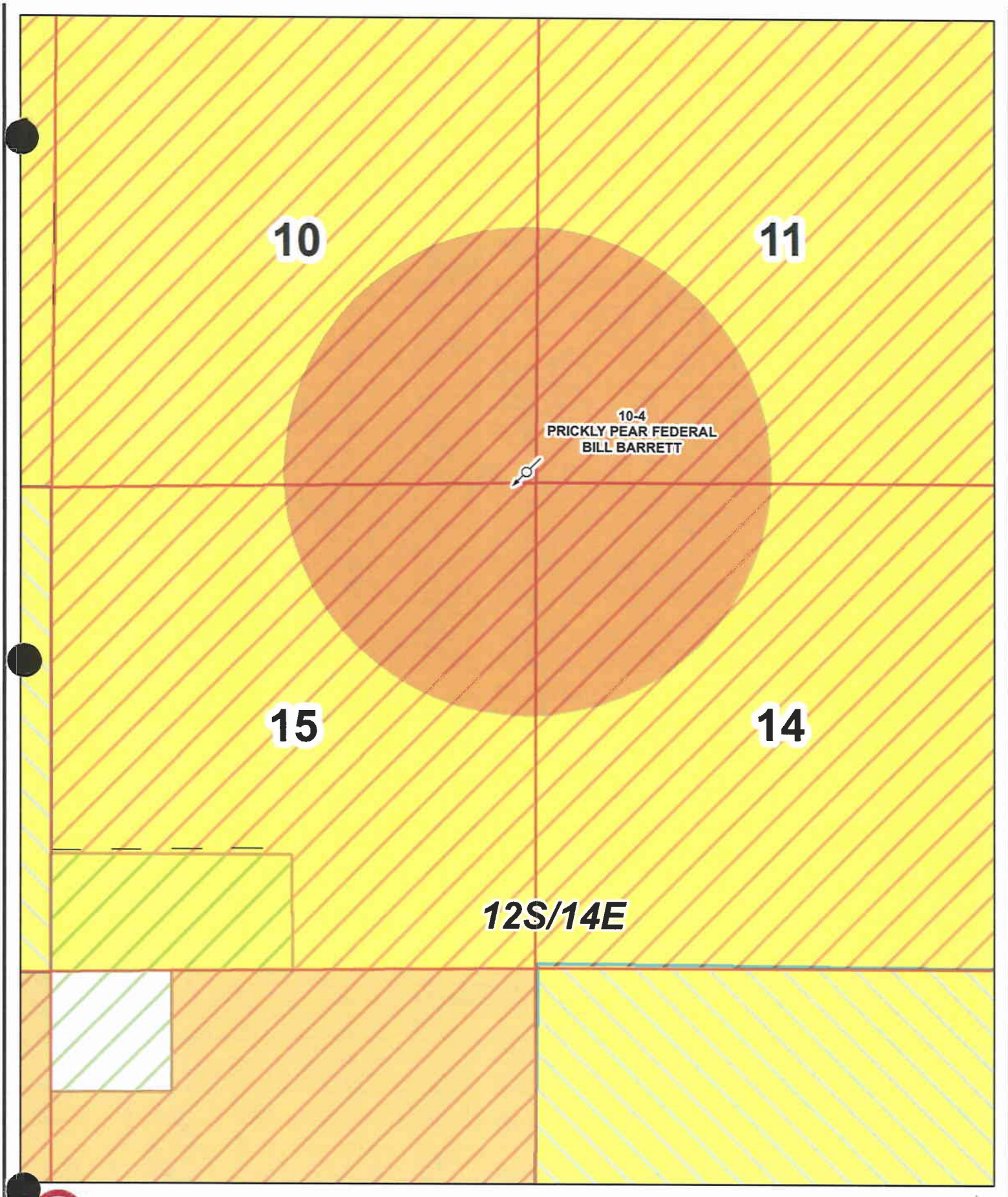
Given my hand seal.

Notary Public

My commission expires: 8-11-2014

MATTHEW MULVERHILL
NOTARY PUBLIC
STATE OF COLORADO
My Commission Expires 08/11/2014

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



Bill Barrett Corporation

PROPOSED INJECTION WELL
Well Location,Prickly Pear Federal #10-4
Located as shown in the SESE 1/4
of Section 10, T12S-R14E Carbon County, Utah

10-4 Proposed Injection Well

1/2 Mile Well Buffer

Surface

FEDERAL SURFACE

STATE SURFACE

FEE SURFACE

Leased

BILL BARRETT CORP.

QEP

N

R649-5

2.10.3

Information relative to geologic structure near the proposed well that may effect the conveyance and/or storage of the injected fluids:

Cross-section and ½ mile radius maps for review.

A

A'

RYE PATCH 24-21
8/18/2007
T11S R14E S24

<2.55MI>

ARGYLE STATE 33-36
3/31/1979
T11S R14E S36

<2.71MI>

PRICKLY PEAR FEDERAL 10-4
8/13/2004 -5.1
T12S R14E S10

<2.10MI>

PRICKLY PEAR FEDERAL 12-24
9/3/2004 3.7
T12S R14E S24

<3.78MI>

PRICKLY PEAR 7-33D
6/17/2005 -8.4
T12S R15E S33

BLACK_SHALE_FACIES [BBC]=4740416

BASE_RESISTIVITY [BBC]=4430485

UTELAND_BUTTE [BBC]=3927711

WASATCH [BBC]=3795485

SPOSAL_CONFINING_1_TOP [JK]=3671479

OSAL_CONFINING_1_BASE [JK]=3221106

M__WASATCH [BBC]=2646172

POSAL_CONFINING_2_TOP [JK]=2243428

OSAL_CONFINING_2_BASE [JK]=1952597

UTELAND_BUTTE [BBC]=4595806

WASATCH [BBC]=4491468

DISPOSAL_CONFINING_1_TOP [JK]=4222468

DISPOSAL_CONFINING_1_BASE [JK]=3973598

WASATCH [BBC]=3353459

DISPOSAL_CONFINING_2_TOP [JK]=2958699

DISPOSAL_CONFINING_2_BASE [JK]=2772143

NORTH_HORN [BBC]=2374154

Confining Interval

Disposal Interval

Confining Interval

A

RYE PATCH
24-21
8/18/2007
T11S R14E S24

<2.55MI>

ARGYLE STATE
33-36
3/31/1979
T11S R14E S36

<2.71MI>

PRICKLY PEAR FEDERAL
10-4
8/13/2004 6.1
T12S R14E S10

<2.10MI>

PRICKLY PEAR FEDERAL
12-24
9/3/2004 3.7
T12S R14E S24

<3.78MI>

PRICKLY PEAR
7-33D
6/17/2005 8.4
T12S R15E S33

A'

BLACK_SHALE_FACIES [BBC]=4740476

BASE_RESISTIVITY [BBC]=4430705

UTELAND_BUTTE [BBC]=4595405

WASATCH [BBC]=4401468

DISPOSAL_CONFINING_1_TOP [JK]=4222668

Confining Interval

UTELAND_BUTTE [BBC]=3927211

WASATCH [BBC]=3795485

SPOSAL_CONFINING_1_TOP [JK]=3671719

DISPOSAL_CONFINING_1_BASE [JK]=3913598

Disposal Interval

OSAL_CONFINING_1_BASE [JK]=3221506

WASATCH [BBC]=3353659

DISPOSAL_CONFINING_2_TOP [JK]=2958799

Confining Interval

M__WASATCH [BBC]=2640712

DISPOSAL_CONFINING_2_BASE [JK]=2772913

POSAL_CONFINING_2_TOP [JK]=2243428

TORNADO_HORN [BBC]=2371654

OSAL_CONFINING_2_BASE [JK]=1952197

PETRA 1/17/2012 3:26:21 PM (PRPR 10-4 SWD NS cross section_1_2012.CSP)

A

RYE PATCH
24-21
8/18/2007
T11S R14E S24

<2.55MI>

ARGYLE STATE
33-36
3/31/1979
T11S R14E S36

<2.71MI>

PRICKLY PEAR FEDERAL
10-4
8/13/2004 5.1
T12S R14E S10

<2.10MI>

PRICKLY PEAR FEDERAL
12-24
9/3/2004 3.7
T12S R14E S24

<3.78MI>

PRICKLY PEAR
7-33D
6/17/2005 8.4
T12S R15E S33

A'

BLACK_SHALE_FACIES [BBC]=4740

BASE_RESISTIVITY [BBC]=4436

UTELAND_BUTTE [BBC]=3927

WASATCH [BBC]=3795

SPOSAL_CONFINING_1_TOP [JK]=3571

OSAL_CONFINING_1_BASE [JK]=3221

M__WASATCH [BBC]=2640

POSAL_CONFINING_2_TOP [JK]=2248

OSAL_CONFINING_2_BASE [JK]=1952

UTELAND_BUTTE [BBC]=4595

WASATCH [BBC]=4401

DISPOSAL_CONFINING_1_TOP [JK]=4222

Confining Interval

DISPOSAL_CONFINING_1_BASE [JK]=3913

M__WASATCH [BBC]=3353

Disposal Interval

DISPOSAL_CONFINING_2_TOP [JK]=2958

Confining Interval

DISPOSAL_CONFINING_2_BASE [JK]=2772

NORTH_HORN [BBC]=2371

PETRA 1/17/2012 3:26:21 PM (PRPR 10-4 SWD NS cross section_1_2012.CSP)

B

B'

PRICKLY PEAR FEDERAL 10-4
8/13/2004 -5.1
T12S R14E S10

<1.25MI>

PRICKLY PEAR FEDERAL 5-13
9/4/2005 -10
T12S R14E S13

<0.96MI>

PRICKLY PEAR 5-18D
5/8/2008 -14
T12S R15E S18

<0.90MI>

PRICKLY PEAR 5-17D
2/4/2008 -10.2
T12S R15E S18

<1.00MI>

PRICKLY PEAR 5A-16D
2/17/2010 -12
T12S R15E S16

<1.24MI>

Prickly Pear 11A-15D
1/17/2011 -5.1
T12S R15E S15

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ATCH [BBC]=4796[illegible]

_1_TOP [JK]=4530[illegible]

1_BASE [JK]=4336[illegible]

BASE RESISTIVITY [BBC]=4804[illegible]

UTE/GRN_RIVER [BBC]=4284[illegible]

WASATCH [BBC]=4034[illegible]

DISPOSAL_CONFINING_1_TOP [JK]=3848[illegible]

Confining Interval

ATCH [BBC]=3717[illegible]

DISPOSAL_CONFINING_1_BASE [JK]=3671[illegible]

_2_TOP [JK]=3445[illegible]

2_BASE [JK]=3153[illegible]

Disposal Interval

_HORN [BBC]=2637[illegible]

WASATCH [BBC]=2635[illegible]

DISPOSAL_CONFINING_2_TOP [JK]=2431[illegible]

Confining Interval

DISPOSAL_CONFINING_2_BASE [JK]=2290[illegible]

PETRA 1/17/2012 3:36:50 PM (PrPr 10-4 SWD EW cross section_1_2012.CSP)

B

PRICKLY PEAR FEDERAL 10-4
8/13/2004 -5.1
T12S R14E S10

<1.25MI>

PRICKLY PEAR FEDERAL 5-13
9/4/2005 -10
T12S R14E S13

<0.96MI>

PRICKLY PEAR 5-18D
5/8/2008 -14
T12S R15E S18

<0.90MI>

PRICKLY PEAR 5-17D
2/4/2008 -10.2
T12S R15E S18

<1.00MI>

PRICKLY PEAR 5A-16D
2/17/2010 -12
T12S R15E S16

<1.24MI>

Prickly Pear 11A-15D
1/17/2011 -5.1
T12S R15E S15

B'

UTTE [BBC]=4956[illegible]

ATCH [BBC]=4790[illegible]

_1_TOP [JK]=4530[illegible]

1_BASE [JK]=4335[illegible]

BASE RESISTIVITY [BBC]=4804[illegible]

UTELAND BUTTE [BBC]=4234[illegible]

WASATCH [BBC]=4034[illegible]

DISPOSAL_CONFINING_1_TOP [JK]=3848[illegible]

Confining Interval

ATCH [BBC]=3717[illegible]

DISPOSAL_CONFINING_1_BASE [JK]=3671[illegible]

_2_TOP [JK]=3445[illegible]

Disposal Interval

2_BASE [JK]=3153[illegible]

_HORN [BBC]=263[illegible]

WASATCH [BBC]=2636

DISPOSAL_CONFINING_2_TOP [JK]=2431[illegible]

Confining Interval

DISPOSAL_CONFINING_2_BASE [JK]=2299[illegible]

B

B'

PRICKLY PEAR FEDERAL 10-4
8/13/2004 -5.1
T12S R14E S10

<1.25MI>

PRICKLY PEAR FEDERAL 5-13
9/4/2005 -10
T12S R14E S13

<0.96MI>

PRICKLY PEAR 5-18D
5/8/2009 -14
T12S R15E S18

<0.90MI>

PRICKLY PEAR 5-17D
2/4/2008 -10.2
T12S R15E S18

<1.00MI>

PRICKLY PEAR 5A-16D
2/17/2010 -12
T12S R15E S16

<1.24MI>

Prickly Pear 11A-15D
1/17/2011 -5.1
T12S R15E S15

UTTE [BBC]=4956[illegible]

ATCH [BBC]=4796[illegible]

_1_TOP [JK]=4580[illegible]

1_BASE [JK]=4336[illegible]

ATCH [BBC]=3717[illegible]

_2_TOP [JK]=3445[illegible]

2_BASE [JK]=3153[illegible]

_HORN [BBC]=2631[illegible]

BASE RESISTIVITY [BBC]=4804[illegible]

UTE/UNO/BUTTE [BBC]=4234[illegible]

WASATCH [BBC]=4034[illegible]

DISPOSAL_CONFINING_1_TOP [JK]=3848[illegible]

Confining Interval

DISPOSAL_CONFINING_1_BASE [JK]=3671[illegible]

Disposal Interval

WASATCH [BBC]=2635

DISPOSAL_CONFINING_2_TOP [JK]=2431[illegible]

Confining Interval

DISPOSAL_CONFINING_2_BASE [JK]=2299[illegible]

T11S-R14E

T11S-R15E

T11S-

T12S-R14E

T12S-R15E

T12S-

Prickly Pear Unit

Proposed SWD Well
Prickly Pear #10-4-12-14

Existing SWD Well
Prickly Pear #12-24-12-14

1/2 Mile Radius

Proposed SWD Well
JCU #8-32-12-16

Existing SWD Well
JCU #14-32-12-16

HARMON CANYON RD.

PRICKLY PEAR RD.

STONE CABIN DRAW RD.

DRY CANYON RD.

FLAT IRON MESA RD.

PETER'S PT RD.

JACK CAN

Proposed State

Bill Barrett Corporation

Uinta Basin

West Tavaputs Project

Prickly Pear 10-4-12-14 SWD

Wasatch Structure

POSTED WELL DATA
Well Number

FMTOPS - WASATCH[BBC] (SS)

WELL SYMBOLS
- Abandoned GAS Well
- Abandoned Oil Well
- Active Drilling Well
- Dry hole
- Gas Well
- Oil Well
- Plugged and Abandoned
- Plugged & Abandoned Gas Well
- Plugged Disposal Well
- Shut In Gas Well
- Salt Water Disposal
- Waiting on Completion
- Water Well

By: JK

January 17, 2012

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T11S-R14E

T11S-R15E

T11S-

T12S-R14E

T12S-R15E

T12S-

Proposed State

Prickly Pear Unit

Proposed SWD Well
Prickly Pear #10-4-12-14

Existing SWD Well
Prickly Pear #12-24-12-14

1/2 Mile Radius

Proposed SWD Well
JCU #8-32-12-16

Existing SWD Well
JCU #14-32-12-16

HARMON CANYON RD.

PRICKLY PEAR RD.

STONE CABIN DRAW RD.

DRY CANYON RD.

FLAT IRON MESA RD.

PETER'S PT RD.

JACK CAN

Bill Barrett Corporation

Uinta Basin

West Tavaputs Project

Prickly Pear 10-4-12-14 SWD

Wasatch Structure

POSTED WELL DATA
Well Number
FMTOPS - WASATCH[BBC] (SS)

WELL SYMBOLS
- Abandoned GAS Well
- Abandoned Oil Well
- Active Drilling Well
- Dry hole
- Gas Well
- Oil Well
- Plugged and Abandoned
- Plugged & Abandoned Gas Well
- Plugged Disposal Well
- Shut In Gas Well
- Salt Water Disposal
- Waiting on Completion
- Water Well

By: JK

January 17, 2012

PETRA 1/17/2012 3:00:13 PM

T11S-R14E

T11S-R15E

T12S-R14E

T12S-R15E

T12S-R16E

Proposed State

Prickly Pear Unit

Proposed SWD Well
Prickly Pear #10-4-12-14

Existing SWD Well
Prickly Pear #12-24-12-14

1/2 Mile Radius

Proposed SWD Well
JCU #8-32-12-16

Existing SWD Well
JCU #14-32-12-16

HARMON CANYON RD.

PRICKLY PEAR RD.

STONE CABIN DRAW RD.

DRY CANYON RD.

FLAT IRON MESA RD.

PETER'S PT RD.

JACK CAN

Bill Barrett Corporation

Uinta Basin

West Tavaputs Project

Prickly Pear 10-4-12-14 SWD

Wasatch Structure

POSTED WELL DATA
Well Number

FMTOPS - WASATCH(BBC) (SS)

WELL SYMBOLS
- Abandoned GAS Well
- Abandoned Oil Well
- Active Drilling Well
- Dry hole
- Gas Well
- Oil Well
- Plugged and Abandoned
- Plugged & Abandoned Gas Well
- Plugged Disposal Well
- Shut In Gas Well
- Salt Water Disposal
- Waiting on Completion
- Water Well

By: JK

January 17, 2012

PETRA 1/17/2012 3:00:13 PM

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
440 West 200 South, Suite 500
Salt Lake City, UT 84101
http://www.blm.gov/ut/st/en.html

IN REPLY REFER TO:
3180 (UTU79487X)
UT-922000

AUG 2 8 2013

Mr. Matt Mulverhill
Bill Barrett Corporation
1099 18th Street, Suite 2300
Denver, Colorado 80202

Re: Automatic Contraction
Prickly Pear Unit
Carbon County, Utah

Dear Mr. Mulverhill:

Your letter of August 2, 2013, describes the lands automatically eliminated effective December 31, 2012, from the Prickly Pear Unit Area, located in Carbon County, Utah, pursuant to Section 2(e) of the unit agreement and requests our concurrence. The lands you have described contain 18,487.90 acres more or less, and constitute all legal subdivisions, no parts of which are included in the Prickly Pear Wasatch Mesaverde Participating Area "A-E" and the Prickly Pear Wasatch Mesaverde Participating Area "F". As a result of the automatic contraction, the unit is reduced to 7,139.77 acres.

The following Federal Leases are entirely eliminated from the unit area:

UTU01519B	UTU73671	UTU89234
UTU013064	UTU74388	
UTU15254	UTU75035	
UTU65776	UTU76713*	
UTU69095	UTU77059	
UTU69096	UTU77060	
UTU72054	UTU77513	
UTU73666	UTU79004	

*Indicates non-committed lease

The following Federal Leases are partially eliminated from the unit area:

UTU0137844	UTU73006	UTU73669	UTU74386
UTU11604	UTU73665	UTU73670	
UTU65773	UTU73668	UTU73896	

You have complied with the requirements of Section 2(e), provided you promptly notify all interested parties. If you have any questions, please contact Judy Nordstrom of this office at (801) 539-4108.

Sincerely,

Roger L. Bankert
Chief, Branch of Minerals

Enclosure

cc: UDOGM
SITLA
ONRR w/Exhibit "B" (Attn: Nancy McCarthy)
BLM FOM – Price (UTG02) w/enclosure

Wells Removed from PPU per BLM 8/28/2013 Letter

API	Well Name	TWP	RNG	SEC	QTR/QTR
4300730823	PRICKLY PEAR U FED 10-4	120S	140E	10	SESE
4300730014	STONE CABIN FED 1-11	120S	140E	11	SWSE
4300716542	STONE CABIN UNIT 1	120S	140E	13	SWNE
4300730825	PRICKLY PEAR UNIT 13-4	120S	140E	13	C-SE
4300731008	PRICKLY PEAR U FED 5-13-12-14	120S	140E	13	SWNW
4300730953	PRICKLY PEAR U FED 12-24	120S	140E	24	SWSW
4300716045	SHARPLES 1 GOVT PICKRELL	120S	150E	11	SENW
4300730860	PRICKLY PEAR U FASSELIN 5-19-12-15	120S	150E	19	SWNW
4300715016	CLAYBANK SPRINGS 33-1A	120S	150E	33	SWNW
4300730985	PRICKLY PEAR U FED 7-33D-12-15	120S	150E	33	SWNE
4300731226	PRICKLY PEAR U ST 2-36-12-15	120S	150E	36	NWNE

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET (for state use only)

ROUTING
CDW

X - Change of Operator (Well Sold) Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective: **1/1/2014**

FROM: (Old Operator):	**TO:** (New Operator):
N2165-Bill Barrett Corporation	N4040-EnerVest Operating, LLC
1099 18th Street, Suite 230	1001 Fannin Street, Suite 800
Denver, CO 80202	Houston, TX 77002
Phone: 1 (303) 312-8134	Phone: 1 (713) 659-3500

CA No. **Unit:** N/A

WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
See Attached List								

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 1/7/2014
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 1/7/2014
3. The new company was checked on the **Department of Commerce, Division of Corporations Database on:** 1/28/2014
4a. Is the new operator registered in the State of Utah: ____ Business Number: 8850806-0161
5a. (R649-9-2)Waste Management Plan has been received on: Not Yet
5b. Inspections of LA PA state/fee well sites complete on: Yes
5c. Reports current for Production/Disposition & Sundries on: 1/24/2014
6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM Not Yet BIA N/A
7. **Federal and Indian Units:**
   The BLM or BIA has approved the successor of unit operator for wells listed on: N/A
8. **Federal and Indian Communization Agreements ("CA"):**
   The BLM or BIA has approved the operator for all wells listed within a CA on: N/A
9. **Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to **Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: Yes

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 1/28/2014
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 1/28/2014
3. Bond information entered in RBDMS on: 1/28/2014
4. Fee/State wells attached to bond in RBDMS on: 1/28/2014
5. Injection Projects to new operator in RBDMS on: 1/28/2014
6. Receipt of Acceptance of Drilling Procedures for APD/New on: 1/7/2014
7. Surface Agreement Sundry from **NEW** operator on Fee Surface wells received on: 1/7/2014

BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: RLB7886
2. Indian well(s) covered by Bond Number: RLB7886
3a. (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number B008371
3b. The **FORMER** operator has requested a release of liability from their bond on: N/A

LEASE INTEREST OWNER NOTIFICATION:

4. (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 1/28/2014

COMMENTS:

Bill Barrett Corporation (N2165) to EnerVest Operating, LLC (N4040)
Effective 1/1/2014

Well Name	Sec	TWN	RNG	API Number	Entity	Mineral Lease	Surface Lease	Well Type	Well Status
JACK CANYON UNIT 8-32	32	120S	160E	4300730460	15167	State	State	WI	A
PRICKLY PEAR U FED 10-4	10	120S	140E	4300730823	14462	Federal	Federal	WI	A
JACK CYN U ST 14-32	32	120S	160E	4300730913	15166	State	State	WD	A
PRICKLY PEAR U FED 12-24	24	120S	140E	4300730953	14467	Federal	Federal	WD	A
HORSE BENCH FED 4-27D-12-16	27	120S	160E	4300750092		Federal	Federal	GW	APD
HORSE BENCH FED 5-27D-12-16	27	120S	160E	4300750093		Federal	Federal	GW	APD
HORSE BENCH FED 4-20D-12-17	19	120S	170E	4300750350		Federal	Federal	GW	APD
Horse Bench Federal 16-18D-12-17	19	120S	170E	4300750351		Federal	Federal	GW	APD
SHARPLES 1 GOVT PICKRELL	11	120S	150E	4300716045	7030	Federal	Federal	GW	P
STONE CABIN UNIT 1	13	120S	140E	4300716542	12052	Federal	Federal	GW	P
STONE CABIN FED 1-11	11	120S	140E	4300730014	6046	Federal	Federal	GW	P
JACK CANYON 101-A	33	120S	160E	4300730049	2455	Federal	Federal	GW	P
PETERS POINT ST 2-2-13-16	2	130S	160E	4300730521	14387	State	State	GW	P
HUNT RANCH 3-4	3	120S	150E	4300730775	13158	State	Fee	GW	P
PRICKLY PEAR UNIT 13-4	13	120S	140E	4300730825	14353	Federal	Federal	GW	P
PETERS POINT ST 4-2-13-16	2	130S	160E	4300730866	14386	State	State	GW	P
PRICKLY PEAR U FED 5-13-12-14	13	120S	140E	4300731008	14897	Federal	Federal	GW	P
PETERS POINT ST 5-2D-13-16 DEEP	2	130S	160E	4300731056	15909	State	State	GW	P
PRICKLY PEAR U ST 2-36-12-15	36	120S	150E	4300731226	15719	State	State	GW	P
PP ST 8-2D-13-16 (DEEP)	2	130S	160E	4300731280	16069	State	State	GW	P
PETERS POINT U FED 14-27D-12-16	27	120S	160E	4300750068	18204	Federal	Federal	GW	P
PRICKLY PEAR U FASSELIN 5-19-12-15	19	120S	150E	4300730860	14853	Fee	Fee	GW	PA
PETERS POINT ST 6-2D-13-16	2	130S	160E	4300731017	14472	State	State	D	PA
PRICKLY PEAR U FED 7-33D-12-15	33	120S	150E	4300730985	14771	Federal	Federal	GW	S
PETERS POINT ST 8-2D-13-16	2	130S	160E	4300731016	14471	State	State	GW	S

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

UIC FORM 5

TRANSFER OF AUTHORITY TO INJECT

Well Name and Number	API Number
Prickly Pear Unit Federal	10-4 43-007-30823
Location of Well	Field or Unit Name
Footage : 75' FSL & 271' FEL County : CARBON	Prickly Pear
QQ, Section, Township, Range: SESE 10 12S 14E State : UTAH	Lease Designation and Number UTU-73665

EFFECTIVE DATE OF TRANSFER: 1/1/2014

CURRENT OPERATOR

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

Name: DUANE ZAVADIL
Signature: [signature]
Title: Senior Vice President - EH&S, Government and Regulatory Affairs
Date: 12/10/2013

NEW OPERATOR

Company: EnerVest Operating, L.L.C.
Address: 1001 Fannin, Suite 800
city Houston state TX zip 77002
Phone: (713) 659-3500
Comments:

Name: RONNIE YOUNG
Signature: [signature]
Title: DIRECTOR - REGULATORY
Date: 12/10/2013

(This space for State use only)

Transfer approved by: [signature]
Title: UIC Manager

Approval Date: 1/22/14

Comments:

RECEIVED
JAN 07 2014
DIV. OF OIL, GAS & MINING

(5/2000)

1

COPY

FORM 9

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

5. LEASE DESIGNATION AND SERIAL NUMBER: (see attached well list)

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

7. UNIT or CA AGREEMENT NAME:

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.

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

8. WELL NAME and NUMBER: (see attached well list)

2. NAME OF OPERATOR: ENERVEST OPERATING, LLC

9. API NUMBER:

3. ADDRESS OF OPERATOR: 1001 FANNIN, ST. STE 800 CITY HOUSTON STATE TX ZIP 77002

PHONE NUMBER: (713) 659-3500

10. FIELD AND POOL, OR WILDCAT:

4. LOCATION OF WELL

FOOTAGES AT SURFACE: (see attached well list)

COUNTY:

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

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: 1/1/2014	☐ 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: _____
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

ENERVEST OPERATING, LLC IS SUBMITTING THIS SUNDRY AS NOTIFICATION THAT THE WELLS LISTED ON THE ATTACHED LIST HAVE BEEN SOLD TO ENERVEST OPERATING, LLC BY BILL BILL BARRETT CORPORATION EFFECTIVE 1/1/2014. PLEASE REFER ALL FUTURE CORRESPONDENCE TO THE ADDRESS BELOW.

EnerVest Operating, L.L.C.
1001 Fannin, Suite 800
Houston, Texas 77002
713-659-3500
(BLM BOND # RLB 7886, STATE/FEE BOND # B008371)

BILL BARRETT CORPORATION

Duane Zavadil NAME (PLEASE PRINT)

SIGNATURE

Senior Vice President -
EH&S, Government and Regulatory Affairs N2165

ENERVEST OPERATING, LLC

Ronnie L Young NAME (PLEASE PRINT)

Ronnie L Young SIGNATURE

DIRECTOR - REGULATORY
N4040

NAME (PLEASE PRINT) RONNIE YOUNG TITLE DIRECTOR - REGULATORY

SIGNATURE Ronnie L Young DATE 12/10/2013

(This space for State use only)

APPROVED

JAN 28 2014

DIV. OIL, GAS & MINING

BY: Rachel Medina

RECEIVED

JAN 07 2014

DIV. OF OIL, GAS & MINING

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

UDOGM CHANGE OF OPERATOR WELL LIST

Well Name	Sec	TWN	RNG	API Number	Entity	Lease	Well Type	Well Status	Unit
JACK CANYON UNIT 8-32	32	120S	160E	4300730460	15167	State	WI	A	
JACK CYN U ST 14-32	32	120S	160E	4300730913	15166	State	WD	A	
PRICKLY PEAR U FED 12-24	24	120S	140E	4300730953	14467	Federal	WD	A	
PPU FED 11-23D-12-15	23	120S	150E	4300731440		Federal	GW	APD	PRICKLY PEAR
PPU FED 4-26D-12-15	23	120S	150E	4300731441		Federal	GW	APD	PRICKLY PEAR
PPU FED 14-23D-12-15	23	120S	150E	4300731442		Federal	GW	APD	PRICKLY PEAR
PPU FED 12-23D-12-15	23	120S	150E	4300731443		Federal	GW	APD	PRICKLY PEAR
PPU FED 11-34D-12-16	34	120S	160E	4300731465		Federal	GW	APD	PETERS POINT
PPU FED 10-34D-12-16	34	120S	160E	4300731469		Federal	GW	APD	PETERS POINT
HORSE BENCH FED 4-27D-12-16	27	120S	160E	4300750092		Federal	GW	APD	
HORSE BENCH FED 5-27D-12-16	27	120S	160E	4300750093		Federal	GW	APD	
PRICKLY PEAR U FED 12-7D-12-15	07	120S	150E	4300750094		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR U FED 11-7D-12-15	07	120S	150E	4300750095		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR U FED 13-7D-12-15	07	120S	150E	4300750096		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR U FED 14-7D-12-15	07	120S	150E	4300750097		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11-8D-12-15	08	120S	150E	4300750124		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12-8D-12-15	08	120S	150E	4300750125		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13-8D-12-15	08	120S	150E	4300750126		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 14-8D-12-15	08	120S	150E	4300750127		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9-21D-12-15	21	120S	150E	4300750128		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-21D-12-15	21	120S	150E	4300750129		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10-21D-12-15	21	120S	150E	4300750130		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10A-21D-12-15	21	120S	150E	4300750131		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-21D-12-15	21	120S	150E	4300750132		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15X-21D-12-15	21	120S	150E	4300750133		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16-21D-12-15	21	120S	150E	4300750134		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-21D-12-15	21	120S	150E	4300750135		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13A-22D-12-15	21	120S	150E	4300750148		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 1A-27D-12-15	22	120S	150E	4300750161		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 2A-27D-12-15	22	120S	150E	4300750162		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3A-27D-12-15	22	120S	150E	4300750163		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-22D-12-15	22	120S	150E	4300750164		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10A-22D-12-15	22	120S	150E	4300750165		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11A-22D-12-15	22	120S	150E	4300750166		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12A-22D-12-15	22	120S	150E	4300750167		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 14A-22D-12-15	22	120S	150E	4300750168		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-22D-12-15	22	120S	150E	4300750169		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-22D-12-15	22	120S	150E	4300750170		Federal	GW	APD	PRICKLY PEAR
PETERS POINT UF 15X-36D-12-16	36	120S	160E	4300750178		Federal	GW	APD	PETERS POINT
PRICKLY PEAR UF 15A-15D-12-15	15	120S	150E	4300750180		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11B-15D-12-15	15	120S	150E	4300750181		Federal	GW	APD	PRICKLY PEAR
PETERS POINT UF 10-1D-13-16	36	120S	160E	4300750182		Federal	GW	APD	PETERS POINT
PETERS POINT UF 9-1D-13-16	36	120S	160E	4300750183		Federal	GW	APD	PETERS POINT
PRICKLY PEAR UF 16A-15D-12-15	15	120S	150E	4300750184		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3A-18D-12-15	07	120S	150E	4300750185		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 4A-18D-12-15	07	120S	150E	4300750186		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11A-7D-12-15	07	120S	150E	4300750187		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 2-18D-12-15	07	120S	150E	4300750188		Federal	GW	APD	PRICKLY PEAR

PRICKLY PEAR UF 12A-7D-12-15	07	120S	150E	4300750189	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13A-7D-12-15	07	120S	150E	4300750190	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 14A-7D-12-15	07	120S	150E	4300750191	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR FEDERAL 1-12D-12-14	12	120S	140E	4300750205	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 2-12D-12-14	12	120S	140E	4300750206	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7-12D-12-14	12	120S	140E	4300750207	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7A-12D-12-14	12	120S	140E	4300750208	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8-12D-12-14	12	120S	140E	4300750209	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 4-7D-12-15	12	120S	140E	4300750210	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5-7D-12-15	12	120S	140E	4300750211	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8A-12D-12-14	12	120S	140E	4300750212	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5A-7D-12-15	12	120S	140E	4300750213	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7-14D-12-15	14	120S	150E	4300750214	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7A-14D-12-15	14	120S	150E	4300750215	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9-14D-12-15	14	120S	150E	4300750217	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-14D-12-15	14	120S	150E	4300750218	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10-14D-12-15	14	120S	150E	4300750219	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10A-14D-12-15	14	120S	150E	4300750220	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-14D-12-15	14	120S	150E	4300750222	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16-14D-12-15	14	120S	150E	4300750223	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-14D-12-15	14	120S	150E	4300750224	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 1A-18D-12-15	07	120S	150E	4300750225	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 2A-18D-12-15	07	120S	150E	4300750226	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-7D-12-15	07	120S	150E	4300750227	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10A-7D-12-15	07	120S	150E	4300750228	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-7D-12-15	07	120S	150E	4300750229	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-7D-12-15	07	120S	150E	4300750230	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-12D-12-14	12	120S	140E	4300750233	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10A-12D-12-14	12	120S	140E	4300750234	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-12D-12-14	12	120S	140E	4300750235	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12A-8D-12-15	08	120S	150E	4300750236	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-12D-12-14	12	120S	140E	4300750237	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11A-8D-12-15	08	120S	150E	4300750238	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13A-8D-12-15	08	120S	150E	4300750239	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 14A-8D-12-15	08	120S	150E	4300750240	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5A-8D-12-15	08	120S	150E	4300750260	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6A-8D-12-15	08	120S	150E	4300750261	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 4-8D-12-15	08	120S	150E	4300750262	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3-8D-12-15	08	120S	150E	4300750263	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 2-8D-12-15	08	120S	150E	4300750264	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7A-8D-12-15	08	120S	150E	4300750265	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7-8D-12-15	08	120S	150E	4300750266	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5-8D-12-15	08	120S	150E	4300750267	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6-8D-12-15	08	120S	150E	4300750268	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10A-8D-12-15	08	120S	150E	4300750269	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-8D-12-15	08	120S	150E	4300750270	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8-8D-12-15	08	120S	150E	4300750271	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 1-8D-12-15	08	120S	150E	4300750272	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8A-8D-12-15	08	120S	150E	4300750273	Federal	GW	APD	PRICKLY PEAR

PRICKLY PEAR UF 5-9D-12-15	09	120S	150E	4300750274	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5A-9D-12-15	09	120S	150E	4300750275	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 4-9D-12-15	09	120S	150E	4300750276	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3-9D-12-15	09	120S	150E	4300750277	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6A-9D-12-15	09	120S	150E	4300750278	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11-9D-12-15	09	120S	150E	4300750279	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12A-9D-12-15	09	120S	150E	4300750280	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6-9D-12-15	09	120S	150E	4300750281	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11A-9D-12-15	09	120S	150E	4300750282	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR US 1X-16D-12-15	10	120S	150E	4300750283	State	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5A-15D-12-15	10	120S	150E	4300750284	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6A-15D-12-15	10	120S	150E	4300750285	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3-15D-13-15	10	120S	150E	4300750286	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-10D-12-15	15	120S	150E	4300750287	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13-10D-12-15	10	120S	150E	4300750288	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15-10D-12-15	15	120S	150E	4300750289	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-10D-12-15	15	120S	150E	4300750290	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9-10D-12-15	15	120S	150E	4300750291	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 14A-10D-12-15	10	120S	150E	4300750292	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10-10D-12-15	15	120S	150E	4300750293	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16-10D-12-15	15	120S	150E	4300750294	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13-11D-12-15	15	120S	150E	4300750295	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13A-11D-12-15	15	120S	150E	4300750296	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12-11D-12-15	15	120S	150E	4300750297	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13A-10D-12-15	10	120S	150E	4300750298	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12-10D-12-15	10	120S	150E	4300750299	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11-10D-12-15	10	120S	150E	4300750300	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3A-15D-12-15	10	120S	150E	4300750301	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12-14D-12-15	14	120S	150E	4300750302	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 4-15D-12-15	10	120S	150E	4300750303	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 4A-15D-12-15	10	120S	150E	4300750304	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 14-10D-12-15	10	120S	150E	4300750305	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-17D-12-15	17	120S	150E	4300750306	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8A-17D-12-15	17	120S	150E	4300750307	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10A-17D-12-15	17	120S	150E	4300750308	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3-7D-12-15	07	120S	150E	4300750309	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-17D-12-15	17	120S	150E	4300750310	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6-7D-12-15	07	120S	150E	4300750311	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-17D-12-15	17	120S	150E	4300750312	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6A-7D-12-15	07	120S	150E	4300750313	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7A-7D-12-15	07	120S	150E	4300750314	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8A-7D-12-15	07	120S	150E	4300750315	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6X-17D-12-15	17	120S	150E	4300750316	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11A-17D-12-15	17	120S	150E	4300750317	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15B-17D-12-15	17	120S	150E	4300750318	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8A-20D-12-15	20	120S	150E	4300750319	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 1-7D-12-15	07	120S	150E	4300750320	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7A-20D-12-15	20	120S	150E	4300750321	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-20D-12-15	20	120S	150E	4300750322	Federal	GW	APD	PRICKLY PEAR

PRICKLY PEAR UF 10A-20D-12-15	20	120S	150E	4300750323		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10-20D-12-15	20	120S	150E	4300750324		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 2-7D-12-15	07	120S	150E	4300750325		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 14A-20D-12-15	20	120S	150E	4300750326		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-20D-12-15	20	120S	150E	4300750327		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-20D-12-15	20	120S	150E	4300750328		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8-7D-12-15	07	120S	150E	4300750329		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15-20D-12-15	20	120S	150E	4300750330		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7-7D-12-15	07	120S	150E	4300750331		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6-10D-12-15	09	120S	150E	4300750332		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5A-10D-12-15	09	120S	150E	4300750333		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11A-10D-12-15	09	120S	150E	4300750334		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6A-10D-12-15	09	120S	150E	4300750335		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5-10D-12-15	09	120S	150E	4300750336		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12A-10D-12-15	09	120S	150E	4300750338		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3-10D-12-15	09	120S	150E	4300750339		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 4-10D-12-15	09	120S	150E	4300750340		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8-9D-12-15	09	120S	150E	4300750341		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8A-9D-12-15	09	120S	150E	4300750342		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7A-9D-12-15	09	120S	150E	4300750343		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7-9D-12-15	09	120S	150E	4300750344		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 1-9D-12-15	09	120S	150E	4300750345		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 2-9D-12-15	09	120S	150E	4300750346		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 1-24D-12-1	24	120S	150E	4300750348		Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9-13D-12-15	13	120S	150E	4300750349		Federal	GW	APD	PRICKLY PEAR
HORSE BENCH FED 4-20D-12-17	19	120S	170E	4300750350		Federal	GW	APD	
Horse Bench Federal 16-18D-12-17	19	120S	170E	4300750351		Federal	GW	APD	
PPU FED 9-34D-12-16	34	120S	160E	4300731430	17225	Federal	GW	OPS	PETERS POINT
PPU FED 15-35D-12-16	35	120S	160E	4300731475	2470	Federal	GW	OPS	PETERS POINT
PETERS POINT U FED 12A-6D-13-17	31	120S	170E	4300750034	2470	Federal	GW	OPS	PETERS POINT
PETERS POINT U FED 11A-31D-12-17	31	120S	170E	4300750036	2470	Federal	GW	OPS	PETERS POINT
PRICKLY PEAR U FED 7-21D-12-15	21	120S	150E	4300750055	14794	Federal	GW	OPS	PRICKLY PEAR
PETERS POINT U FED 9-6D-13-17	06	130S	170E	4300750120	2470	Federal	GW	OPS	PETERS POINT
PETERS POINT U FED 14-6D-13-17	06	130S	170E	4300750121	2470	Federal	GW	OPS	PETERS POINT
PETERS POINT U FED 15-6D-13-17	06	130S	170E	4300750122	2470	Federal	GW	OPS	PETERS POINT
PETERS POINT UF 2-7D-13-17	06	130S	170E	4300750149	2470	Federal	GW	OPS	PETERS POINT
PETERS POINT UF 1-7D-13-17	06	130S	170E	4300750150	2470	Federal	GW	OPS	PETERS POINT
PRICKLY PEAR US 1A-16D-12-15	09	120S	150E	4300750192	14794	State	GW	OPS	PRICKLY PEAR
PRICKLY PEAR US 2A-16D-12-15	09	120S	150E	4300750193	14794	State	GW	OPS	PRICKLY PEAR
PRICKLY PEAR US 2-16D-12-15	09	120S	150E	4300750194	14794	State	GW	OPS	PRICKLY PEAR
PRICKLY PEAR UF 9A-9D-12-15	09	120S	150E	4300750196	14794	Federal	GW	OPS	PRICKLY PEAR
PRICKLY PEAR UF 10-9D-12-15	09	120S	150E	4300750197	14794	Federal	GW	OPS	PRICKLY PEAR
PRICKLY PEAR UF 10A-9D-12-15	09	120S	150E	4300750198	14794	Federal	GW	OPS	PRICKLY PEAR
PRICKLY PEAR UF 14-9D-12-15	09	120S	150E	4300750199	14794	Federal	GW	OPS	PRICKLY PEAR
PRICKLY PEAR UF 14A-9D-12-15	09	120S	150E	4300750200	14794	Federal	GW	OPS	PRICKLY PEAR
PRICKLY PEAR UF 15-9D-12-15	09	120S	150E	4300750201	14794	Federal	GW	OPS	PRICKLY PEAR
PRICKLY PEAR UF 15A-9D-12-15	09	120S	150E	4300750203	14794	Federal	GW	OPS	PRICKLY PEAR
PRICKLY PEAR UF 16A-9D-12-15	09	120S	150E	4300750204	14794	Federal	GW	OPS	PRICKLY PEAR
SHARPLES 1 GOVT PICKRELL	11	120S	150E	4300716045	7030	Federal	GW	P	

STONE CABIN UNIT 1	13	120S	140E	4300716542	12052	Federal	GW	P	
STONE CABIN FED 1-11	11	120S	140E	4300730014	6046	Federal	GW	P	
STONE CABIN FED 2-B-27	27	120S	150E	4300730018	14794	Federal	GW	P	PRICKLY PEAR
JACK CANYON 101-A	33	120S	160E	4300730049	2455	Federal	GW	P	
PETERS POINT ST 2-2-13-16	02	130S	160E	4300730521	14387	State	GW	P	
PRICKLY PEAR ST 16-15	16	120S	150E	4300730522	14794	State	GW	P	PRICKLY PEAR
PETERS POINT U FED 36-2	36	120S	160E	4300730761	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 36-3	36	120S	160E	4300730762	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 36-4	36	120S	160E	4300730763	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 14-25D-12-16	36	120S	160E	4300730764	2470	Federal	GW	P	PETERS POINT
HUNT RANCH 3-4	03	120S	150E	4300730775	13158	State	GW	P	
PETERS POINT U FED 4-31D-12-17	36	120S	160E	4300730810	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 16-26D-12-16	36	120S	160E	4300730812	2470	Federal	GW	P	PETERS POINT
PRICKLY PEAR UNIT 13-4	13	120S	140E	4300730825	14353	Federal	GW	P	
PRICKLY PEAR UNIT 21-2	21	120S	150E	4300730828	14794	Federal	GW	P	PRICKLY PEAR
PETERS POINT U FED 6-7D-13-17	06	130S	170E	4300730859	14692	Federal	GW	P	PETERS POINT
PETERS POINT ST 4-2-13-16	02	130S	160E	4300730866	14386	State	GW	P	
PRICKLY PEAR U ST 13-16	16	120S	150E	4300730933	14794	State	GW	P	PRICKLY PEAR
PRICKLY PEAR U ST 11-16	16	120S	150E	4300730944	14794	State	GW	P	PRICKLY PEAR
PRICKLY PEAR U ST 7-16	16	120S	150E	4300730945	14794	State	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 7-25	25	120S	150E	4300730954	14794	Federal	GW	P	PRICKLY PEAR
PETERS POINT U FED 16-35	35	120S	160E	4300730965	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 11-6-13-17	06	130S	170E	4300730982	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 16-6D-13-17	06	130S	170E	4300731004	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 16-31D-12-17	06	130S	170E	4300731005	2470	Federal	GW	P	PETERS POINT
PRICKLY PEAR U FED 5-13-12-14	13	120S	140E	4300731008	14897	Federal	GW	P	
PETERS POINT U FED 12-31D-12-17	36	120S	160E	4300731009	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 2-36D-12-16	36	120S	160E	4300731010	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 9-36-12-16	36	120S	160E	4300731011	2470	Federal	GW	P	PETERS POINT
PRICKLY PEAR U ST 36-06	36	120S	150E	4300731018	14794	State	GW	P	PRICKLY PEAR
PETERS POINT U FED 8-35D-12-16	36	120S	160E	4300731024	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 4-12D-13-16	02	130S	160E	4300731049	14692	Federal	GW	P	PETERS POINT
PETERS POINT ST 5-2D-13-16 DEEP	02	130S	160E	4300731056	15909	State	GW	P	
PRICKLY PEAR U FED 13-23-12-15	23	120S	150E	4300731073	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 1-27D-12-15	23	120S	150E	4300731074	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 3-26D-12-15	23	120S	150E	4300731075	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 15-22D-12-15	23	120S	150E	4300731076	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 3-28D-12-15	21	120S	150E	4300731121	14794	Federal	GW	P	PRICKLY PEAR
PETERS POINT U FED 2-12D-13-16	06	130S	170E	4300731158	14692	Federal	GW	P	PETERS POINT
PRICKLY PEAR U FED 15-21-12-15	21	120S	150E	4300731164	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 7-28D-12-15	21	120S	150E	4300731165	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 13-21D-12-15	21	120S	150E	4300731166	14794	Federal	GW	P	PRICKLY PEAR
PETERS POINT U FED 10-36D-12-16	36	120S	160E	4300731174	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 12-36D-12-16	36	120S	160E	4300731175	2470	Federal	GW	P	PETERS POINT
PRICKLY PEAR U FED 15-17-12-15	17	120S	150E	4300731183	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 11-17D-12-15	17	120S	150E	4300731184	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 7-22D-12-15	22	120S	150E	4300731186	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 3-22-12-15	22	120S	150E	4300731187	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 5-22D-12-15	22	120S	150E	4300731188	14794	Federal	GW	P	PRICKLY PEAR

PRICKLY PEAR 11-15D-12-15	22	120S	150E	4300731189	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 9-18D-12-15	18	120S	150E	4300731192	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 15-18-12-15	18	120S	150E	4300731193	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 16-27D-12-15	27	120S	150E	4300731194	15569	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 12-27D-12-15	27	120S	150E	4300731195	15568	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 10-27-12-15	27	120S	150E	4300731196	15570	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 9-20D-12-15	20	120S	150E	4300731197	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 7-20-12-15	20	120S	150E	4300731198	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 1-20-12-15	20	120S	150E	4300731206	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U ST 2-36-12-15	36	120S	150E	4300731226	15719	State	GW	P	
PRICKLY PEAR U ST 4-36-12-15	36	120S	150E	4300731227	14794	State	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 4-27D-12-15	22	120S	150E	4300731237	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 13-22-12-15	22	120S	150E	4300731238	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 3-27D-12-15	22	120S	150E	4300731239	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U ST 9-16-12-15	16	120S	150E	4300731240	14794	State	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 9-28D-12-15	28	120S	150E	4300731241	16028	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 5-27D-12-15	28	120S	150E	4300731242	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 1-28-12-15	28	120S	150E	4300731243	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 8-28D-12-15	28	120S	150E	4300731244	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U ST 1-16-12-15	16	120S	150E	4300731245	14794	State	GW	P	PRICKLY PEAR
PPU FED 11-18D-12-15	18	120S	150E	4300731257	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 11-20D-12-15	20	120S	150E	4300731258	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 4-25D-12-15	25	120S	150E	4300731259	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 12-25D-12-15	25	120S	150E	4300731260	16068	Federal	GW	P	PRICKLY PEAR
PPU FED 15-6D-13-17	06	130S	170E	4300731261	16103	Federal	GW	P	PETERS POINT
PP UF 3-36-12-16	36	120S	160E	4300731271	2470	Federal	GW	P	PETERS POINT
PP UF 6-36-12-16	36	120S	160E	4300731272	2470	Federal	GW	P	PETERS POINT
PPU FED 6-35D-12-16	35	120S	160E	4300731275	2470	Federal	GW	P	PETERS POINT
PPU FED 14-26D-12-16	26	120S	160E	4300731277	2470	Federal	GW	P	PETERS POINT
PPU FED 8-34-12-16	34	120S	160E	4300731279	2470	Federal	GW	P	PETERS POINT
PP ST 8-2D-13-16 (DEEP)	02	130S	160E	4300731280	16069	State	GW	P	
PPU FED 6-34D-12-16	34	120S	160E	4300731281	2470	Federal	GW	P	PETERS POINT
PPU FED 14-26D-12-15	35	120S	150E	4300731282	16224	Federal	GW	P	PRICKLY PEAR
PPU FED 2-35-12-15	35	120S	150E	4300731283	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 10-26D-12-15	35	120S	150E	4300731284	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 9-17-12-15	17	120S	150E	4300731287	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 1-17D-12-15	17	120S	150E	4300731288	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 7-17D-12-15	17	120S	150E	4300731289	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 7-1D-13-16 ULTRA DEEP	06	130S	170E	4300731293	14692	Federal	GW	P	PETERS POINT
PPU FED 1-18D-12-15	18	120S	150E	4300731294	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 7-18D-12-15	18	120S	150E	4300731295	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 5-17D-12-15	18	120S	150E	4300731296	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 10-17D-12-15	17	120S	150E	4300731307	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 8-17D-12-15	17	120S	150E	4300731308	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 12-17D-12-15	17	120S	150E	4300731309	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 13-17D-12-15	17	120S	150E	4300731310	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 14-17D-12-15	17	120S	150E	4300731311	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 16-18D-12-15	17	120S	150E	4300731312	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 8-18D-12-15	18	120S	150E	4300731313	14794	Federal	GW	P	PRICKLY PEAR

PPU FED 3-18D-12-15	18	120S	150E	4300731314	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 4-18-12-15	18	120S	150E	4300731315	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 5-18D-12-15	18	120S	150E	4300731316	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 6-18D-12-15	18	120S	150E	4300731317	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 16-27-12-16	27	120S	160E	4300731318	2470 Federal	GW	P	PETERS POINT
PPU FED 10-27D-12-16	27	120S	160E	4300731319	2470 Federal	GW	P	PETERS POINT
PPU FED 2-34D-12-16	34	120S	160E	4300731320	2470 Federal	GW	P	PETERS POINT
PPU FED 16-17D-12-15	17	120S	150E	4300731321	14794 Federal	GW	P	PRICKLY PEAR
PPU ST 15-16D-12-15	16	120S	150E	4300731322	14794 State	GW	P	PRICKLY PEAR
PPU ST 16-16D-12-15	16	120S	150E	4300731323	14794 State	GW	P	PRICKLY PEAR
PPU ST 14-16D-12-15	16	120S	150E	4300731324	14794 State	GW	P	PRICKLY PEAR
PPU FED 2-7D-13-17 DEEP	06	130S	170E	4300731326	14692 Federal	GW	P	PETERS POINT
PPU FED 3-21D-12-15	21	120S	150E	4300731328	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 4-21D-12-15	21	120S	150E	4300731329	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 2-35D-12-16	35	120S	160E	4300731345	2470 Federal	GW	P	PETERS POINT
PPU FED 7-35D-12-16	35	120S	160E	4300731346	2470 Federal	GW	P	PETERS POINT
PPU FED 4-35D-12-16	35	120S	160E	4300731347	2470 Federal	GW	P	PETERS POINT
PPU FED 7-36D-12-16	36	120S	160E	4300731348	2470 Federal	GW	P	PETERS POINT
PPU FED 11-36D-12-16	36	120S	160E	4300731349	2470 Federal	GW	P	PETERS POINT
PPU FED 15-25D-12-16	36	120S	160E	4300731351	2470 Federal	GW	P	PETERS POINT
PPU FED 13-25D-12-16	36	120S	160E	4300731352	2470 Federal	GW	P	PETERS POINT
PPU FED 4-36D-12-16	36	120S	160E	4300731353	2470 Federal	GW	P	PETERS POINT
PPU FED 13-15D-12-15	22	120S	150E	4300731358	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 14-15D-12-15	22	120S	150E	4300731359	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 4-22D-12-15	22	120S	150E	4300731360	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 6-22D-12-15	22	120S	150E	4300731361	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 2-28D-12-15	28	120S	150E	4300731362	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 16X-21D-12-15	28	120S	150E	4300731363	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 5A-27D-12-15	28	120S	150E	4300731364	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 1-35D-12-16	35	120S	160E	4300731365	2470 Federal	GW	P	PETERS POINT
PPU FED 1A-28D-12-15	28	120S	150E	4300731368	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 14A-18D-12-15	18	120S	150E	4300731393	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 10-18D-12-15	18	120S	150E	4300731394	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 15A-18D-12-15	18	120S	150E	4300731395	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 16A-18D-12-15	18	120S	150E	4300731396	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 12-22D-12-15	22	120S	150E	4300731398	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 11-22D-12-15	22	120S	150E	4300731399	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 14-22D-12-15	22	120S	150E	4300731400	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 4A-27D-12-15	22	120S	150E	4300731401	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 13-26D-12-16	26	120S	160E	4300731403	2470 Federal	GW	P	PETERS POINT
PPU FED 15-26D-12-16	26	120S	160E	4300731404	2470 Federal	GW	P	PETERS POINT
PPU FED 3-35D-12-16	26	120S	160E	4300731405	2470 Federal	GW	P	PETERS POINT
PPU FED 10-26D-12-16	26	120S	160E	4300731406	2470 Federal	GW	P	PETERS POINT
PPU FED 11-26D-12-16	26	120S	160E	4300731407	2470 Federal	GW	P	PETERS POINT
PPU FED 12-26D-12-16	26	120S	160E	4300731408	2470 Federal	GW	P	PETERS POINT
PPU FED 11-27D-12-16	27	120S	160E	4300731409	2470 Federal	GW	P	PETERS POINT
PPU FED 15-27D-12-16	27	120S	160E	4300731410	2470 Federal	GW	P	PETERS POINT
PPU FED 9-27D-12-16	27	120S	160E	4300731411	2470 Federal	GW	P	PETERS POINT
PPU FED 11-21D-12-15	21	120S	150E	4300731412	14794 Federal	GW	P	PRICKLY PEAR

PPU FED 6-21D-12-15	21	120S	150E	4300731413	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 12-21D-12-15	21	120S	150E	4300731414	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 8-20D-12-15	20	120S	150E	4300731419	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 1A-20D-12-15	20	120S	150E	4300731420	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 2-20D-12-15	20	120S	150E	4300731421	14794	Federal	GW	P	PRICKLY PEAR
PPU ST 7A-16D-12-15	16	120S	150E	4300731422	14794	State	GW	P	PRICKLY PEAR
PPU ST 6-16D-12-15	16	120S	150E	4300731423	14794	State	GW	P	PRICKLY PEAR
PPU ST 10A-16D-12-15	16	120S	150E	4300731424	14794	State	GW	P	PRICKLY PEAR
PPU ST 3-16D-12-15	16	120S	150E	4300731425	14794	State	GW	P	PRICKLY PEAR
PPU FED 1-34D-12-16	34	120S	160E	4300731427	2470	Federal	GW	P	PETERS POINT
PPU FED 7-34D-12-16	34	120S	160E	4300731428	2470	Federal	GW	P	PETERS POINT
PPU FED 5-35D-12-16	34	120S	160E	4300731429	2470	Federal	GW	P	PETERS POINT
PPU FED 5-21D-12-15	21	120S	150E	4300731451	14794	Federal	GW	P	PRICKLY PEAR
PPU ST 8-16D-12-15	16	120S	150E	4300731455	14794	State	GW	P	PRICKLY PEAR
PPU ST 12-16D-12-15	16	120S	150E	4300731456	14794	State	GW	P	PRICKLY PEAR
PPU ST 12A-16D-12-15	16	120S	150E	4300731457	14794	State	GW	P	PRICKLY PEAR
PPU ST 15A-16D-12-15	16	120S	150E	4300731458	14794	State	GW	P	PRICKLY PEAR
PPU ST 10-16D-12-15	16	120S	150E	4300731459	14794	State	GW	P	PRICKLY PEAR
PPU ST 11A-16D-12-15	16	120S	150E	4300731460	14794	State	GW	P	PRICKLY PEAR
PPU ST 13A-16D-12-15	16	120S	150E	4300731461	14794	State	GW	P	PRICKLY PEAR
PPU FED 3-34D-12-16	34	120S	160E	4300731466	2470	Federal	GW	P	PETERS POINT
PPU FED 5-34D-12-16	34	120S	160E	4300731467	2470	Federal	GW	P	PETERS POINT
PPU FED 4-34D-12-16	34	120S	160E	4300731468	2470	Federal	GW	P	PETERS POINT
PPU FED 10-7D-12-15	07	120S	150E	4300731470	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 15-7D-12-15	07	120S	150E	4300731471	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 9-7D-12-15	07	120S	150E	4300731472	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 16-7D-12-15	07	120S	150E	4300731473	14794	Federal	GW	P	PRICKLY PEAR
PPU FED 10-35D-12-16	35	120S	160E	4300731474	2470	Federal	GW	P	PETERS POINT
PPU FED 9-35D-12-16	35	120S	160E	4300731476	2470	Federal	GW	P	PETERS POINT
PPU ST 6A-16D-12-15	16	120S	150E	4300731477	14794	State	GW	P	PRICKLY PEAR
PPU ST 4-16D-12-15	16	120S	150E	4300731478	14794	State	GW	P	PRICKLY PEAR
PPU ST 4A-16D-12-15	16	120S	150E	4300731479	14794	State	GW	P	PRICKLY PEAR
PPU ST 5A-16D-12-15	16	120S	150E	4300731480	14794	State	GW	P	PRICKLY PEAR
PPU ST 3A-16D-12-15	16	120S	150E	4300731481	14794	State	GW	P	PRICKLY PEAR
PPU ST 16A-16D-12-15	16	120S	150E	4300731484	14794	State	GW	P	PRICKLY PEAR
PPU ST 9A-16D-12-15	16	120S	150E	4300731485	14794	State	GW	P	PRICKLY PEAR
PPU ST 16B-16D-12-15	16	120S	150E	4300731514	14794	State	GW	P	PRICKLY PEAR
PPU ST 14B-16D-12-15	16	120S	150E	4300731515	14794	State	GW	P	PRICKLY PEAR
PPU ST 13B-16D-12-15	16	120S	150E	4300731516	14794	State	GW	P	PRICKLY PEAR
PETERS POINT U FED 9-26D-12-16	25	120S	160E	4300750021	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 11-25D-12-16	25	120S	160E	4300750022	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 10-31D-12-17	31	120S	170E	4300750023	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 11-31D-12-17	31	120S	170E	4300750024	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 13A-31D-12-17	31	120S	170E	4300750025	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 13-31D-12-17	31	120S	170E	4300750026	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 14-31D-12-17	31	120S	170E	4300750027	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 14A-31D-12-17	31	120S	170E	4300750028	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 12-25D-12-16	25	120S	160E	4300750029	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 12-6D-13-17	31	120S	170E	4300750033	2470	Federal	GW	P	PETERS POINT

PETERS POINT U FED 10-25D-12-16	25	120S	160E	4300750035	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 13-36D-12-16	36	120S	160E	4300750037	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 15-36D-12-16	36	120S	160E	4300750038	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 11-1D-13-16	36	120S	160E	4300750039	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 12-1D-13-16	36	120S	160E	4300750040	2470	Federal	GW	P	PETERS POINT
PRICKLY PEAR U FED 9-22D-12-15	22	120S	150E	4300750041	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 10-22D-12-15	22	120S	150E	4300750042	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 16-22D-12-15	22	120S	150E	4300750043	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 2-27D-12-15	22	120S	150E	4300750044	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 16-15D-12-15	15	120S	150E	4300750045	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 15-15D-12-15	15	120S	150E	4300750046	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 10-15D-12-15	15	120S	150E	4300750047	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 9-15D-12-15	15	120S	150E	4300750048	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 11A-15D-12-15	15	120S	150E	4300750049	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 1-21D-12-15	21	120S	150E	4300750050	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 2-21D-12-15	21	120S	150E	4300750051	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 2A-21D-12-15	21	120S	150E	4300750052	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 4A-22D-12-15	21	120S	150E	4300750053	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 5A-22D-12-15	21	120S	150E	4300750054	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 7A-21D-12-15	21	120S	150E	4300750056	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 8-21D-12-15	21	120S	150E	4300750057	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 8A-21D-12-15	21	120S	150E	4300750058	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 16-8D-12-15	08	120S	150E	4300750059	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 15-8D-12-15	08	120S	150E	4300750060	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 2-17D-12-15	08	120S	150E	4300750061	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 1A-17D-12-15	08	120S	150E	4300750062	14794	Federal	GW	P	PRICKLY PEAR
PETERS POINT U FED 3A-34D-12-16	27	120S	160E	4300750063	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 4A-34D-12-16	27	120S	160E	4300750064	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 12-27D-12-16	27	120S	160E	4300750065	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 13-27D-12-16	27	120S	160E	4300750066	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 13A-27D-12-16	27	120S	160E	4300750067	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 14-27D-12-16	27	120S	160E	4300750068	18204	Federal	GW	P	
PETERS POINT U FED 14A-27D-12-16	27	120S	160E	4300750069	2470	Federal	GW	P	PETERS POINT
PRICKLY PEAR U FED 1-22D-12-15	22	120S	150E	4300750076	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 2-22D-12-15	22	120S	150E	4300750077	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 8-22D-12-15	22	120S	150E	4300750078	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 3-17D-12-15	17	120S	150E	4300750079	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 3A-17D-12-15	17	120S	150E	4300750080	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 4-17D-12-15	17	120S	150E	4300750081	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 4A-17D-12-15	17	120S	150E	4300750082	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 5A-17D-12-15	17	120S	150E	4300750083	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 6-17D-12-15	17	120S	150E	4300750084	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 6A-17D-12-15	17	120S	150E	4300750085	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 7A-17D-12-15	17	120S	150E	4300750086	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 12A-17D-12-15	17	120S	150E	4300750087	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 9-12D-12-14	12	120S	140E	4300750088	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 10-12D-12-14	12	120S	140E	4300750089	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 15-12D-12-14	12	120S	140E	4300750090	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 16-12D-12-14	12	120S	140E	4300750091	14794	Federal	GW	P	PRICKLY PEAR

PRICKLY PEAR U FED 3-20D-12-15	20	120S	150E	4300750098	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 3A-20D-12-15	20	120S	150E	4300750099	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 4-20D-12-15	20	120S	150E	4300750100	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 4A-20D-12-15	20	120S	150E	4300750101	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 5-20D-12-15	20	120S	150E	4300750102	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 6-20D-12-15	20	120S	150E	4300750104	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 6A-20D-12-15	20	120S	150E	4300750105	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 11A-20D-12-15	20	120S	150E	4300750106	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 12A-20D-12-15	20	120S	150E	4300750107	14794	Federal	GW	P	PRICKLY PEAR
PETERS POINT U FED 5-31D-12-17	36	120S	160E	4300750109	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 6-31D-12-17	36	120S	160E	4300750116	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 9X-36D-12-16	36	120S	160E	4300750117	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 1-36D-12-16	36	120S	160E	4300750118	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 10-6D-13-17	06	130S	170E	4300750119	2470	Federal	GW	P	PETERS POINT
PETERS POINT U FED 15-31D-12-17	06	130S	170E	4300750123	2470	Federal	GW	P	PETERS POINT
PRICKLY PEAR UF 7A-18D-12-15	17	120S	150E	4300750136	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 8A-18D-12-15	17	120S	150E	4300750137	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 9A-18D-12-15	17	120S	150E	4300750138	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 12-20D-12-15	20	120S	150E	4300750139	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 16A-8D-12-15	08	120S	150E	4300750140	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 15A-8D-12-15	08	120S	150E	4300750141	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 13A-9D-12-15	08	120S	150E	4300750142	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 13-9D-12-15	08	120S	150E	4300750143	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 12-9D-12-15	08	120S	150E	4300750144	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 10-8D-12-15	08	120S	150E	4300750145	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 9-8D-12-15	08	120S	150E	4300750146	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 2A-17D-12-15	08	120S	150E	4300750147	14794	Federal	GW	P	PRICKLY PEAR
PETERS POINT UF 12-5D-13-17	06	130S	170E	4300750151	2470	Federal	GW	P	PETERS POINT
PETERS POINT UF 13-5D-13-17	06	130S	170E	4300750152	2470	Federal	GW	P	PETERS POINT
PETERS POINT UF 13-30D-12-17	30	120S	170E	4300750153	18347	Federal	GW	P	PETERS POINT
PETERS POINT UF 14-30D-12-17	30	120S	170E	4300750154	18350	Federal	GW	P	PETERS POINT
PETERS POINT UF 12-30D-12-17	30	120S	170E	4300750155	18346	Federal	GW	P	PETERS POINT
PETERS POINT UF 11-30D-12-17	30	120S	170E	4300750156	18348	Federal	GW	P	PETERS POINT
PETERS POINT UF 3-31D-12-17	30	120S	170E	4300750157	2470	Federal	GW	P	PETERS POINT
PETERS POINT UF 2-31D-12-17	30	120S	170E	4300750158	18349	Federal	GW	P	PETERS POINT
PETERS POINT UF 16-25D-12-16	30	120S	170E	4300750159	2470	Federal	GW	P	PETERS POINT
PETERS POINT UF 9-25D-12-16	30	120S	170E	4300750160	2470	Federal	GW	P	PETERS POINT
PRICKLY PEAR UF 1A-22D-12-15	22	120S	150E	4300750171	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 6A-22D-12-15	22	120S	150E	4300750173	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 7A-22D-12-15	22	120S	150E	4300750174	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 8A-22D-12-15	22	120S	150E	4300750175	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 14B-15D-12-15	22	120S	150E	4300750176	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 9-9D-12-15	09	120S	150E	4300750195	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 16-9D-12-15	09	120S	150E	4300750202	14794	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 8-14D-12-15	14	120S	150E	4300750216	18289	Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 15-14D-12-15	14	120S	150E	4300750221	18290	Federal	GW	P	PRICKLY PEAR
PETERS POINT UF 7X-36D-12-16	36	120S	160E	4300750231	2470	Federal	GW	P	PETERS POINT
PETERS POINT UF 8-36D-12-16	36	120S	160E	4300750232	2470	Federal	GW	P	PETERS POINT
PETERS POINT ST 6-2D-13-16	02	130S	160E	4300731017	14472	State	D	PA	

PTS 33-36 STATE	36	110S	140E	4301330486	6190	State	GW	PA	ARGYLE
PRICKLY PEAR U FED 10-4	10	120S	140E	4300730823	14462	Federal	GW	S	
PRICKLY PEAR U FASSELIN 5-19-12-15	19	120S	150E	4300730860	14853	Fee	GW	S	
PRICKLY PEAR U ST 5-16	16	120S	150E	4300730943	14794	State	GW	S	PRICKLY PEAR
PRICKLY PEAR U FED 7-33D-12-15	33	120S	150E	4300730985	14771	Federal	GW	S	
PETERS POINT ST 8-2D-13-16	02	130S	160E	4300731016	14471	State	GW	S	
PPU FED 4-35D-12-15	35	120S	150E	4300731285	16223	Federal	GW	S	PRICKLY PEAR
PPU FED 5-36D-12-16	36	120S	160E	4300731350	2470	Federal	GW	S	PETERS POINT
PRICKLY PEAR U FED 5A-20D-12-15	20	120S	150E	4300750103	14794	Federal	GW	S	PRICKLY PEAR
PRICKLY PEAR U FED 13A-17D-12-15	20	120S	150E	4300750108	14794	Federal	GW	S	PRICKLY PEAR
PRICKLY PEAR UF 2A-22D-12-15	22	120S	150E	4300750172	14794	Federal	GW	S	PRICKLY PEAR