

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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.**

5. Lease Serial No.
COC062046

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

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Williams Production RMT Company

3a. Address
1515 Arapahoe Street, Tower 3, Suite 1000
Denver, Colorado 80202

3b. Phone No. (include area code)
(303) 606-4342

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SHL: 788' FNL, 607' FWL; NENE of Sec. 1, T2S-R97W 6th P.M.
BHL: 1170' FNL, 679' FWL; NWNW of Sec. 1, T2S-R98W 6th P.M.

7. If Unit of CA/Agreement, Name and/or No.
Federal Ryan Gulch Unit COC068239X

8. Well Name and No.
Federal RGU 411-6-297

9. API Well No.
05-103-11438-00

10. Field and Pool or Exploratory Area
Sulphur Creek

11. Country or Parish, State
Rio Blanco, Colorado

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Change</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Bottom Hole</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	<u>Location</u>

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 recompleate 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 must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Request authorization to change Bottom Hole Location.

Change of Bottom Hole footage FROM: 870' FNL, 605' FWL
Change of Bottom Hole footage TO: 1170' FNL, 679' FWL

The Directional Plan has been modified accordingly.

Please reference attached documents:

- 1) Revised Final Plat
- 2) Directional Page Plot
- 3) Directional Plan

14. I hereby certify that the foregoing is true and correct.
Name (Printed/Typed)

Matt Barber

Title Sr. Regulatory Specialist

Signature

Matt Barber

Date 08/27/2010

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 to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GLO B.C.
1939

S 87°47'54" E 2544.59'

GLO B.C.
1939

S 87°56'19" E 2540.20'
(1270.10')

GLO B.C.
1938

R 98 W

N



SCALE 1" = 1000'

T 2 S

FEDERAL RGU

411-6-297

UNGRADED ELEVATION:
6575.8' (NGVD 29)

N 04°44'04" V 2365.52'

N 04°44'04" V 2347.25'

GLO B.C.
1939

N 88°15'58" W 2679.59'

GLO B.C.
1939

N 68°27'38" W 1845.46'

GLO B.C.
1938

S 03°17'33" V 2640.96'
Q 320.48'
S 03°10'15" E 2633.62'

1000 500 0 1000 2000

SCALE FEET

LATITUDE (NAD 83)
NORTH 39.910299 DEG.
LONGITUDE (NAD 83)
WEST 108.334924 DEG.
NORTHING (NAD 83)
1768869.58
EASTING (NAD 83)
2204821.59

BASIS OF ELEVATION: NORTH 1/4
CORNER SECTION 1, T 2 S, R 98 W.
ELEVATION = 6816.23'

LEGEND

- ◆ WELL LOCATION
- ▲ PREVIOUSLY FOUND MONUMENT
- L DENOTES 90° TIE
- CALCULATED CORNER
- APPROXIMATE BHL

BASIS OF BEARING/DATUM

ALL BEARINGS ARE GRID BEARINGS OF THE SPCS CO, NORTH ZONE, NAD 27. THE BASIS OF GRID BEARING IS THE NORTH LINE OF THE NE 1/4 OF SEC. 1, BEING MONUMENTED WITH GLO BC'S. THAT BEARING BEING S 87°56'19" E

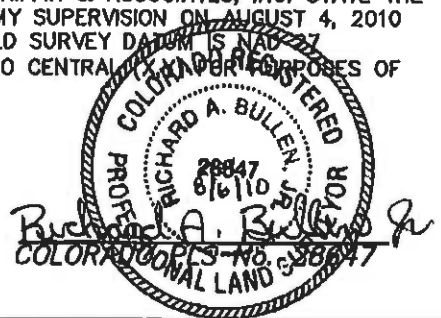
SURVEYOR'S STATEMENT

I, RICHARD A. BULLEN JR., AN EMPLOYEE AND AGENT ON BEHALF OF D.R. GRIFFIN & ASSOCIATES, INC. STATE THE PLAT HEREON IS A CORRECT REPRESENTATION OF A SURVEY MADE UNDER MY SUPERVISION ON AUGUST 4, 2010 OF THE SHOWN FEDERAL RGU 411-6-297 AS STAKED ON THE GROUND. FIELD SURVEY DATUM IS NAD 27 COLORADO CENTRAL. VALUES HAVE BEEN CONVERTED TO NAD 83 COLORADO CENTRAL FOR PURPOSES OF THIS PLAT.

NOTES

GPS OPERATOR JOHN RICHARDSON OBSERVED A PDOP OF 3.3.
ALL GPS OBSERVATIONS ARE IN ALL GPS OBSERVATIONS ARE IN COMPLIANCE WITH COGCC RULE NO. 215.
LAND USE: HIGH PLATEAU DESERT
NO IMPROVEMENTS WITHIN 400' RADIUS OF WELL SITE.

FEDERAL RGU 41-1-298 PAD



GRIFFIN & ASSOCIATES, INC.
1414 ELK ST., ROCK SPRINGS, WY 82901

(307) 362-6026

DRAWN: 8/14/08

SCALE: 1" = 1000'

REVISED: 8/3/10 - SJC

DRG JOB No. 14550

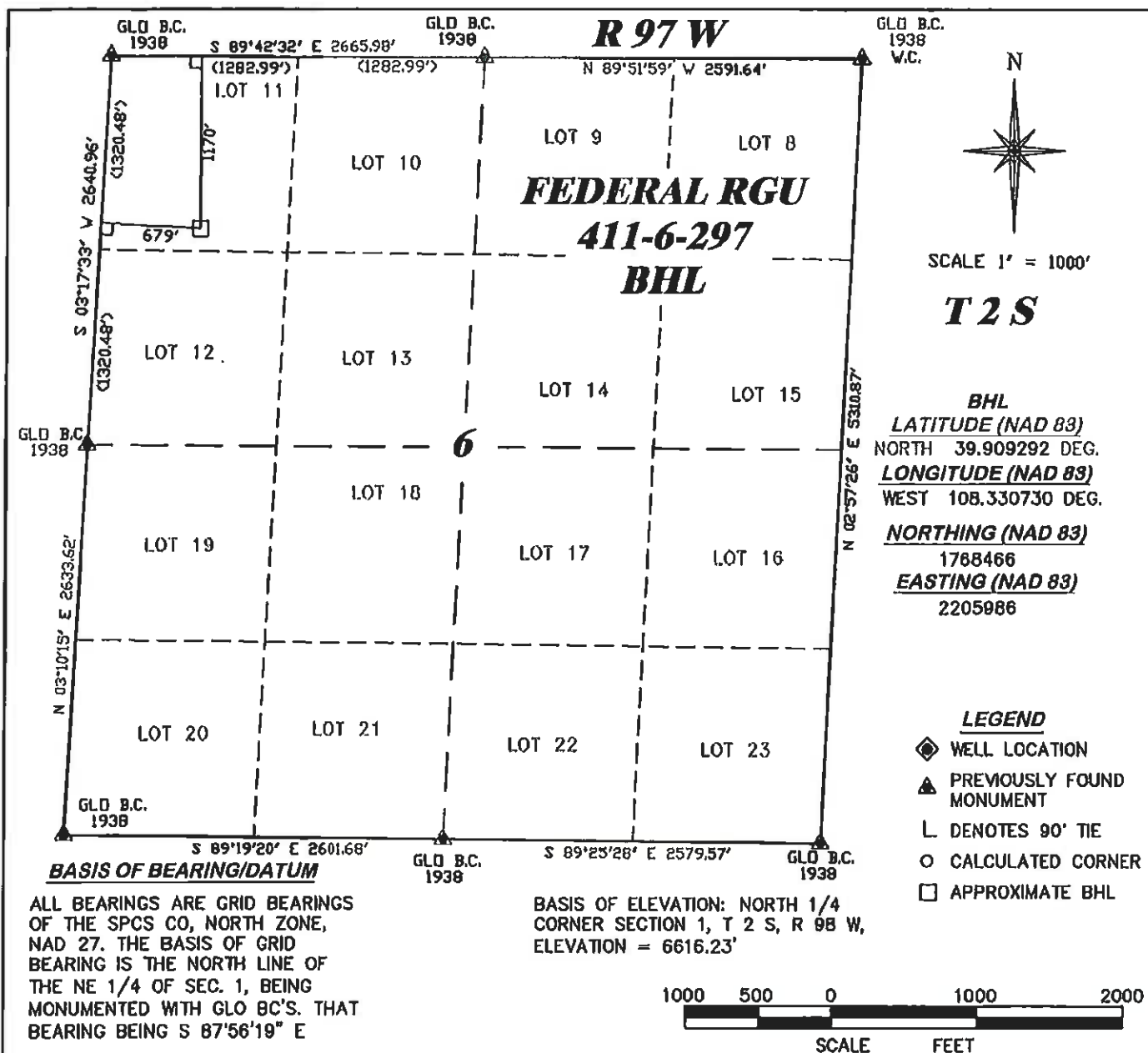
NEW COORDINATES

EXHIBIT 1

**PLAT OF DRILLING LOCATION
FOR**

WILLIAMS PRODUCTION RMT COMPANY

788' F/NL & 507' F/EL, NENE, SECTION 1,
T 2 S, R 98 W, 6th P.M.
RIO BLANCO COUNTY, COLORADO



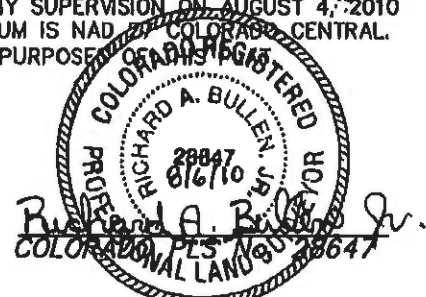
SURVEYOR'S STATEMENT

I, RICHARD A. BULLEN JR., AN EMPLOYEE AND AGENT ON BEHALF OF D.R. GRIFFIN & ASSOCIATES, INC. STATE THE PLAT HEREON IS A CORRECT REPRESENTATION OF A SURVEY MADE UNDER MY SUPERVISION ON AUGUST 4, 2010 OF THE SHOWN FEDERAL RGU 411-6-297 BOTTOM HOLE. FIELD SURVEY DATUM IS NAD 83 COLORADO CENTRAL. VALUES HAVE BEEN CONVERTED TO NAD 83 COLORADO CENTRAL (X,Y) FOR PURPOSES OF THIS PLAT.

NOTES

GPS OPERATOR JOHN RICHARDSON OBSERVED A PDOP OF 3.3. ALL GPS OBSERVATIONS ARE IN ALL GPS OBSERVATIONS ARE IN COMPLIANCE WITH COGCC RULE NO. 215. LAND USE: HIGH PLATEAU DESERT NO IMPROVEMENTS WITHIN 400' RADIUS OF WELL SITE.

FEDERAL RGU 41-1-298 PAD



DRG RIFFIN & ASSOCIATES, INC. (307) 362-5028 1414 ELK ST., ROCK SPRINGS, WY 82801	
DRAWN: 9/14/08	SCALE: 1" = 1000'
REVISED: 8/3/10 - SJC	DRG JOB No. 14550
NEW COORDINATES	EXHIBIT 1

**PLAT OF BOTTOM HOLE LOCATION
FOR
WILLIAMS PRODUCTION RMT COMPANY**

1170' F/NL & 679' F/WL, NWNW, SECTION 6,
T 2 S, R 97 W, 6th P.M.
RIO BLANCO COUNTY, COLORADO



Well Name: Federal RGU 411-6-297
 Surface Location: RGU 41-1-298 Pad
 North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
 Ground Elevation: 6573.0
 Northing 1768869.60 Easting 2204821.60 Latitude 39° 54' 37.077 N Longitude 108° 20' 5.726 W
 KELLY BUSHING @ 6594.0usft

+N/-S
0.0

+E/-W
0.0

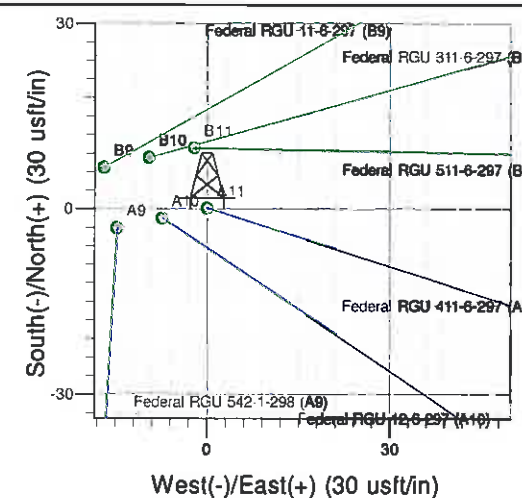
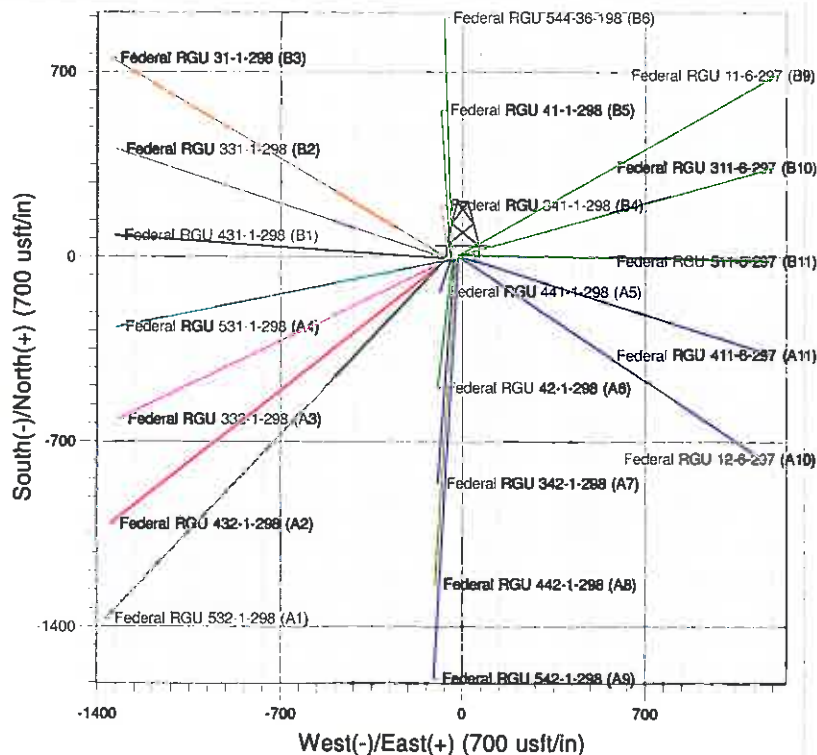
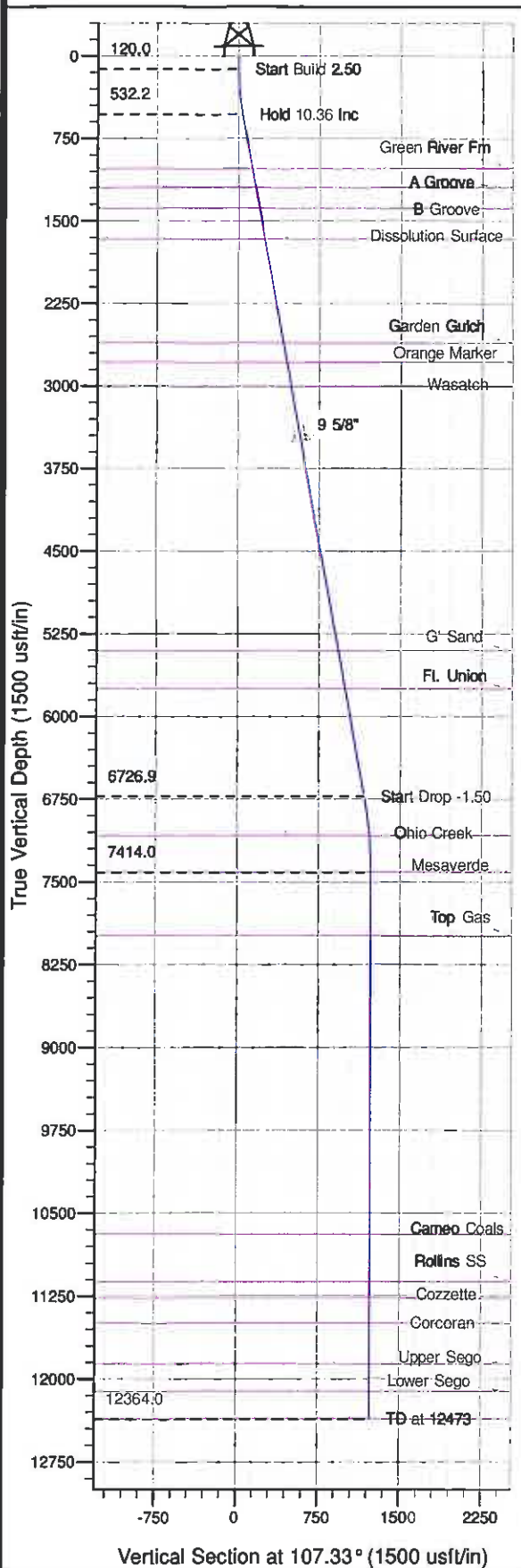
Northing
1768869.60

Easting
2204821.60

Latitude
39° 54' 37.077 N

Longitude
108° 20' 5.726 W

Slot
A11



Project: RG 01-02S-098W
 Site: RGU 41-1-298 Pad
 Well: Federal RGU 411-6-297
 Plan #2 30Mar10 kjs

M Azimuths to True North
 Magnetic North: 10.55°
 Magnetic Field
 Strength: 52417.3snT
 Dip Angle: 66.01°
 Date: 7/15/2011
 Model: IGRF2010

SECTION DETAILS										
Sec	MD	Inc	Azi	TVL	+N/-S	+E/-W	Dleg	TFace	VSecl	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.000	0.0	
2	120.0	0.00	0.00	120.0	0.0	0.0	0.00	0.000	0.0	
3	534.5	10.36	107.33	532.2	-11.1	35.7	2.50	107.328	37.4	
4	6831.9	10.36	107.33	6726.9	-348.5	1117.0	0.00	0.000	1170.1	
5	7522.7	0.00	0.00	7414.0	-387.1	1176.5	1.50	180.000	1232.4	Mesaverde (25' Radius) Federal RGU 411-6-297
6	12472.7	0.00	0.00	12364.0	-387.1	1176.5	0.00	0.000	1232.4	

ANNOTATIONS										
TVL	MD	Inc	Azi	+N/-S	+E/-W	VSecl	Departure	Annotation		
120.0	120.0	0.00	0.00	0.0	0.0	0.0	0.0	Start Build 2.50		
532.2	534.5	10.36	107.33	-11.1	35.7	37.4	37.4	Hold 10.36 Inc		
6726.9	6831.9	10.36	107.33	-348.5	1117.0	1170.1	1170.1	Start Drop -1.50		
7414.0	7522.7	0.00	0.00	-387.1	1176.5	1232.4	1232.4	Vertical		
12364.0	12472.7	0.00	0.00	-387.1	1176.5	1232.4	1232.4	TD at 12473		

PICEANCE HL NAD 83

RG 01-02S-098W

RGU 41-1-298 Pad

Federal RGU 411-6-297 - Slot A11

Federal RGU 411-6-297

Plan: Plan #2 30Mar10 kjs

Standard Planning Report - Geographic

26 August, 2010

Williams
Planning Report - Geographic

Database:	Compass R5000 WIN AUTH	Local Co-ordinate Reference:	Well Federal RGU 411-6-297 (A11) - Slot A11
Company:	PICEANCE HL NAD 83	TVD Reference:	KELLY BUSHING @ 6594.0usft
Project:	RG 01-02S-098W	MD Reference:	KELLY BUSHING @ 6594.0usft
Site:	RGU 41-1-298 Pad	North Reference:	True
Well:	Federal RGU 411-6-297	Survey Calculation Method:	Minimum Curvature
Wellbore:	Federal RGU 411-6-297		
Design:	Plan #2 30Mar10 kjs		

Project	RG 01-02S-098W, Rio Blanco County, CO, RG 01-02S-098W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		Using geodetic scale factor

Site		RGU 41-1-298 Pad			
Site Position:		Northing:	1,768,871.26 usft	Latitude:	39° 54' 37.079 N
From:	Map	Easting:	2,204,775.51 usft	Longitude:	108° 20' 6.318 W
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in	Grid Convergence:	-1.788 °

Well	Federal RGU 411-6-297 - Slot A11					
Well Position	+N-S	0.0 usft	Northing:	1,768,869.60 usft	Latitude:	39° 54' 37.077 N
	+E-W	0.0 usft	Easting:	2,204,821.60 usft	Longitude:	108° 20' 5.726 W
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level:	6,573.0 usft	

Wellbore	Federal RGU 411-6-297				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/15/2011	10.548	66.015	52,417

Design	Plan #2 30Mar10 kjs			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	107.33

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.000	
120.0	0.00	0.00	120.0	0.0	0.0	0.00	0.00	0.00	0.000	
534.5	10.36	107.33	532.2	-11.1	35.7	2.50	2.50	0.00	107.328	
6,831.9	10.36	107.33	6,726.9	-348.5	1,117.0	0.00	0.00	0.00	0.000	
7,522.7	0.00	0.00	7,414.0	-367.1	1,176.5	1.50	-1.50	0.00	180.000	Mesaverde (25' Radiu
12,472.7	0.00	0.00	12,364.0	-367.1	1,176.5	0.00	0.00	0.00	0.000	

Williams
Planning Report - Geographic

Database: Compass R5000 WIN AUTH
Company: PICEANCE HL NAD 83
Project: RG 01-02S-098W
Site: RGU 41-1-298 Pad
Well: Federal RGU 411-6-297
Wellbore: Federal RGU 411-6-297
Design: Plan #2 30Mar10 kjs

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well Federal RGU 411-6-297 (A11) - Slot A11
KELLY BUSHING @ 6594.0usft
KELLY BUSHING @ 6594.0usft
True
Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (")	Azimuth (")	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	1,768,869.60	2,204,821.60	39° 54' 37.077 N	108° 20' 5.726 W
120.0	0.00	0.00	120.0	0.0	0.0	1,768,869.60	2,204,821.60	39° 54' 37.077 N	108° 20' 5.726 W
534.5	10.36	107.33	532.2	-11.1	35.7	1,768,857.36	2,204,856.92	39° 54' 36.967 N	108° 20' 5.268 W
6,831.9	10.36	107.33	6,726.9	-348.5	1,117.0	1,768,486.40	2,205,927.23	39° 54' 33.633 N	108° 19' 51.392 W
7,522.7	0.00	0.00	7,414.0	-367.1	1,176.5	1,768,466.00	2,205,986.10	39° 54' 33.449 N	108° 19' 50.629 W
12,472.7	0.00	0.00	12,364.0	-367.1	1,176.5	1,768,466.00	2,205,986.10	39° 54' 33.449 N	108° 19' 50.629 W

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (")	Dip Dir. (")	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Mesaverde (50' Radius) - plan hits target center - Circle (radius 50.0)	0.00	0.00	7,414.0	-367.1	1,176.5	1,768,466.00	2,205,986.10	39° 54' 33.449 N	108° 19' 50.629 W
Mesaverde (25' Radius) - plan hits target center - Circle (radius 25.0)	0.00	0.00	7,414.0	-367.1	1,176.5	1,768,466.00	2,205,986.10	39° 54' 33.449 N	108° 19' 50.629 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
3,552.0	3,500.5	9 5/8"	9.625	13.500

Williams

Planning Report - Geographic

Database: Compass R5000 WIN AUTH
 Company: PICEANCE HL NAD 83
 Project: RG 01-02S-098W
 Site: RGU 41-1-298 Pad
 Well: Federal RGU 411-6-297
 Wellbore: Federal RGU 411-6-297
 Design: Plan #2 30Mar10 kjs

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Well Federal RGU 411-6-297 (A11) - Slot A11
 KELLY BUSHING @ 6594.0usft
 KELLY BUSHING @ 6594.0usft
 True
 Minimum Curvature

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,034.4	1,024.0	Green River Fm			
1,207.2	1,194.0	A Groove			
1,400.4	1,384.0	B Groove			
1,685.0	1,664.0	Dissolution Surface			
2,645.7	2,609.0	Garden Gulch			
2,823.6	2,784.0	Orange Marker			
3,052.3	3,009.0	Wasatch			
5,487.0	5,404.0	G' Sand			
5,842.8	5,754.0	Fl. Union			
7,192.3	7,084.0	Ohio Creek			
7,522.7	7,414.0	Mesaverde			
8,102.7	7,994.0	Top Gas			
10,802.7	10,694.0	Cameo Coals			
11,232.7	11,124.0	Rollins SS			
11,382.7	11,274.0	Cozzette			
11,607.7	11,499.0	Corcoran			
11,977.7	11,869.0	Upper Sego			
12,222.7	12,114.0	Lower Sego			
12,472.7	12,364.0	TD		0.000	

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
120.0	120.0	0.0	0.0	Start Build 2.50
534.5	532.2	-11.1	35.7	Hold 10.36 Inc
6,831.9	6,726.9	-348.5	1,117.0	Start Drop -1.50
7,522.7	7,414.0	-367.1	1,176.5	Vertical
12,472.7	12,364.0	-367.1	1,176.5	TD at 12473