

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109

SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b.)

1. OGCC Operator Number: 96850 4. Contact Name: Howard Harris
2. Name of Operator: Williams Production RMT Company LLC
3. Address: 1001 17th St., Suite 1200 City: Denver State: CO Zip: 80202
5. API Number: 05-045-19528-00 OGCC Facility ID Number
6. Well/Facility Name: Federal 7. Well/Facility Number: PA 312-29
8. Location (QtrQtr, Sec, Twp, Rng, Meridian): SESW (Lot 12)Sec 29 T6S-R95W 6PM
9. County: Garfield 10. Field Name: Parachute
11. Federal, Indian or State Lease Number: COC62162

Complete the Attachment Checklist
OP OGCC
Survey Plat X
Directional Survey X
Surface Eqmpt Diagram
Technical Info Page X
Other

General Notice

CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)
Change of Surface Footage from Exterior Section Lines: 610 FSL 2245 FWL
Change of Surface Footage to Exterior Section Lines: 622 FSL 2208 FWL
Change of Bottomhole Footage from Exterior Section Lines: 1936 FNL 386 FWL
Change of Bottomhole Footage to Exterior Section Lines: 1748 FNL 262 FWL attach directional survey
Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer: SWNW (Lot 5) Sec 29 T6S R95W 6PM
Latitude: 39.489957 Distance to nearest property line: 2513 Distance to nearest bldg, public rd, utility or RR: 5577
Longitude: 108.023271 Distance to nearest lease line: 262 Is location in a High Density Area (rule 603b)? Yes/No: NO
Ground Elevation: 5675 Distance to nearest well same formation: 290 Surface owner consultation date:
GPS DATA: Date of Measurement: 11/18/11 PDOP Reading: 2.37 Instrument Operator's Name: J. Kirkpatrick
CHANGE SPACING UNIT
CHANGE OF OPERATOR (prior to drilling):
CHANGE WELL NAME:
ABANDONED LOCATION:
NOTICE OF CONTINUED SHUT IN STATUS:
SPUD DATE:
REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)
SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK
RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.

Technical Engineering/Environmental Notice

Notice of Intent Report of Work Done
Approximate Start Date: 1/1/12 Date Work Completed:
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)
Intent to Recomplete (submit form 2) Request to Vent or Flare E&P Waste Disposal
Change Drilling Plans Repair Well Beneficial Reuse of E&P Waste
Gross Interval Changed? Rule 502 variance requested Status Update/Change of Remediation Plans
Casing/Cementing Program Change Other: Change BHL & SHL for Spills and Releases

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: Howard Harris Date: 12/9/11 Email: Howard.Harris@Williams.com
Print Name: Howard Harris Title: Sr. Regulatory Specialist

COGCC Approved: [Signature] Title: NWA Engineer Date: 1/23/2012

CONDITIONS OF APPROVAL, IF ANY:

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

RECEIVED  
DEC 14 2011  
COGCC

|  |  |                       |                 |
|--|--|-----------------------|-----------------|
| 1. OGCC Operator Number:                       | 96850  | API Number:           | 05-045-19528-00 |
| 2. Name of Operator:                           | Williams Production RMT Company LLC OGCC Facility ID # |                       |                 |
| 3. Well/Facility Name:                         | Federal  | Well/Facility Number: | PA 312-29       |
| 4. Location (QtrQtr, Sec, Twp, Rng, Meridian): | SESW (Lot 12)Sec 29 T6S-R95W                           |                       |                 |

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

**DESCRIBE PROPOSED OR COMPLETED OPERATIONS**

Due to an FMI log being ran on a prior well drilled on this pad, the surface hole location and bottomhole location will need to be moved within accordance to that shown on the front page. The surface casing depth will be changed to 2618', Cmt w/666 SX. TMD will change to 8782'. 4 1/2" production casing will be set at 8782' with 656 sx cmt.

See attached directional plan, prog and location plat

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COGCC

### Federal PA 312-29

T. 6 S.

N02°43'14"E  
198.00'

N89°46'52"W  
2477.09'

N88°20'47"W  
2682.03'

N01°14'44"E  
2546.28'

N01°14'44"E  
2640.00'

N02°43'14"E  
2407.61'

N03°10'43"E  
2591.09'

R. 95 W.

LOT 4

S89°34'17"W  
200.95'

LOT 2

LOT 1

**BOTTOM HOLE LOCATION**  
1748 FNL, 262 FWL  
Lat.: 39.497541°  
Long.: -108.030226°  
N.: 1616050.7 (COSP)  
E.: 2286077.1 (COSP)

PROPOSED PAD ELEV.: 5675.9  
EXISTING GROUND ELEV.: 5674.8

# 29

**SURFACE HOLE LOCATION**  
622 FSL, 2208 FWL  
Lat.: 39.489957°  
Long.: -108.023271°  
N.: 1613235.0 (COSP)  
E.: 2287962.3 (COSP)

LOT 5

LOT 6

LOT 7

LOT 8

LOT 10

LOT 9

LOT 11

LOT 12

1921 GLO  
Brass Cap  
Witness Corner

1921 GLO  
Brass Cap

1921 GLO  
Brass Cap

N89°58'49"W  
462.00'

N 89°58'49" W

S 88°02'36" E  
(BASIS OF BEARING)

THERE ARE NO VISIBLE  
IMPROVEMENTS WITHIN 400'  
OF THIS LOCATION



### - LEGEND -

FIELD LOCATED SECTION  
MONUMENTS AS DESCRIBED

FIELD SURVEYED  
WELL LOCATION

CALCULATED BOTTOM  
HOLE LOCATION

CALCULATED SECTION  
CORNER LOCATION

### SURVEYORS STATEMENT

I, MICHAEL J. LANGHORNE, A REGISTERED LAND SURVEYOR IN THE STATE OF COLORADO DO HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON WAS PREPARED UNDER MY DIRECT SUPERVISION AND HAS BEEN STAKED ON THE GROUND AS SHOWN ON THE PLAT AND CHECKING THAT THIS MAP IS A TRUE REPRESENTATION THEREOF.

*Michael J. Langhorne*

MICHAEL J. LANGHORNE, COLORADO REGISTRATION NO. 36572  
FOR AND ON BEHALF OF  
BOOKCLIFF SURVEY SERVICES, INC.

### REFERENCES

- 1) DEPENDENT RESURVEY T. 6 S., R. 95 W., 6th P.M. (GLO PLAT)
- 2) U.S.G.S. QUAD: PARACHUTE, CO

### NOTES

- 1) ELEVATIONS BASED ON N.A.V.D. 1988 PUBLISHED COORDINATES.
- 2) LATITUDES AND LONGITUDES ARE BASE ON NAD 83, PUBLISHED COORDINATES
- 3) STATE PLANE COORDINATES ARE BASED ON COLORADO CENTRAL ZONE, U.S. SURVEY FEET.
- 4) ELEVATION MASK SET TO 15"
- 5) OPS OPERATOR J. KIRKPATRICK, OBSERVED A PDOP 2.37 ON SURVEY POINT NUMBER 92925.
- 6) SURFACE AND BOTTOM HOLE LOCATIONS ARE MEASURED 90° FROM SECTION LINES.

### WELL LOCATION PLAT Prepared for:

**Williams** Williams Production, RMT

SE1/4 SW1/4, SECTION 29  
T. 6 S., R. 95 W. of the 6th P.M.  
GARFIELD COUNTY, COLORADO

|              |                 |
|--------------|-----------------|
| SURVEY DATE: | 11/18/08        |
| MAP DATE:    | 9/21/11         |
| SCALE:       | 1" = 1000'      |
| PLAT:        | 1 of 9          |
| PROJECT:     | Williams Valley |

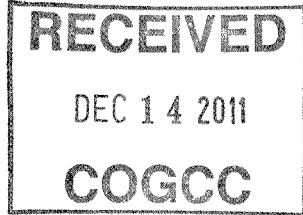
100 West Broad Street  
P.O. Box 1000  
PA 19106  
Fax: (610) 435-0772



**BOOKCLIFF**  
Survey Services, Inc.

**GEOLOGIC & DRILLING PROGNOSIS**

Prepared: 26-Mar-10 KSR  
Updated SHL & BHL footages & csg pt 4-Oct-11 sda



**WELL NAME:** PA 312-29  
Directional from the DOE 3-W-29 pad

**STATE:** Colorado  
**COUNTY:** Garfield  
**LOCATION:** Sec. 29 T 6 S R 95 W: 10 ACRE FED  
**TYPE OF UNIT:** Unspaced Section  
**SURFACE HOLE:** 622' FSL, 2208' FWL  
**BOTTOM HOLE:** 1748' FNL, 262' FWL  
**FEDERAL EA:** Within scope of 2002 WW GAP EA  
**WASATCH CEMENT:** Yes

**ELEVATION (ft):** PAD: 5676  
GROUND: 5675  
KELLY BUSHING: 5702

**RIG INFORMATION:**

**RIG NAME:** Nabors 577  
**KB HEIGHT (ft):** 26

**ESTIMATE TOPS:**

| Formation        | TVD  | MD      | Comments   |
|------------------|------|---------|--|
| Wasatch Surface  |      | Surface |  |
| Top of "G" Sand  | 1987 | 2393    |  |
| Base of "G" Sand | 2087 | 2532    |  |
| Mesaverde        | 4087 | 5226    |  |
| Approx. Top Gas  | 5437 | 6632    | (Water zones may be encountered within the upper portion of the Mesaverde) |
| Cameo Coals      | 6882 | 8077    |  |
| Rollins SS       | 7437 | 8632    |  |
| TD               | 7587 | 8782    |  |

If pay encountered within 150' of Rollins, drill 150' rathole below base last pay.  
If no pay is encountered within 150' of the Rollins, TD well at 8657 ft (md)

**MUD LOGGING (md):** 5026 to TD. (One man or computer unit with at least total gas and drill rate.)

**LOGGING PROGRAM:** Type of Log: Cased-hole Pulsed Neutron log (e.g. RMTE or RPM)

Interval (md): GR from TD to surface  
Pulsed Neutron from TD to 200ft above the Mesaverde top (md)

Strap drill pipe by latest trip prior to TD

**CSG & CEMENT PROGRAM: SHOE TEST REQUIRED**

| Conductor:           | csg size (in) | depth set at (ftvd) | depth set at (md) | hole size (in) | Approximate Cmt (ft3) Tail  | Tail Yield ft <sup>3</sup> /Sx | Approx. Sx Tail          | Approximate Cmt (ft3) Lead | Lead Yield ft <sup>3</sup> /Sx | Approx. Sx Lead | WOC (hrs) |
|----------------------|---------------|---------------------|-------------------|----------------|-----------------------------|--------------------------------|--------------------------|----------------------------|--------------------------------|-----------------|-----------|
| Surface:             | 9 5/8"        | 2187                | 2617.9            | 13 1/2"        | 352                         | 2.11                           | 167                      | 1183                       | 2.37                           | 499             | 8         |
| Intermediate:        |               |                     |                   |                |                             |                                |                          |                            |                                |                 |           |
| Liner or Production: | 4 1/2"        | 7587                | 8782              | 7 7/8"         | 614                         | 1.33                           | 462                      | 352                        | 1.81                           | 195             |           |
|                      |               |                     |                   |                | <b>Surface (Sacks):</b> 666 |                                | <b>Prod (Sacks):</b> 656 |                            |                                |                 |           |

Surface cement volumes are calculated w/ 20% excess in gauge hole,  
Production cement: tail is calculated to be 300 ft above geologists pick of top of gas, lead TOC is calculated 300 ft above top of MVRD. 10% Excess added.

**ANTICIPATED PRESSURES**

| MASP  | Prod Csg Test Pressure | Anticipated BHP | Pressure (psi) |
|-------|------------------------|-----------------|----------------|
| 2,150 | 7,000                  | 4,932           |                |

**MUD PROGRAM:** (Do not deviate from mud engineer's recommendation without prior consent from Parachute office)

| FROM (md) | TO (md) | TYPE MUD | #/GAL    | VIS   | WL   | CHEMICALS     |
|-----------|---------|----------|----------|-------|------|---------------|
| 0         | 2618    | Spud     | 9.0-9.5  | 45-50 |      |               |
| 2618      | 8781.7  | LSND     | 9.0-12.5 | 40-50 | 8-10 | Visease & 507 |

(Write mud added to system on tour sheets and report all mud mixed and daily cost in morning report)

**LOST CIRCULATION:** Report depth and bbls of mud lost on morning report and tour sheet - Any severe lost circulation problems should be reported immediately to well supervisor.

**SURVEYS:** Run every 100' on surface hole and trips unless otherwise instructed.

(note: if there are questions concerning TD or logging, please call Geologist1)

| Williams Geologists:            | Office       | Cell         | Home         |
|---------------------------------|--------------|--------------|--------------|
| Susan Anderson (PA/SP wells)    | 303-606-4069 | 303-385-7529 | 303-751-6019 |
| Kim Roberts (PA/SP Wells)       | 303-629-8438 | 303-646-7411 | 303-979-2709 |
| Marsha Satorius-Fox (RWF wells) | 303-629-8421 | 303-507-9828 |              |
| Ryan Kowalski (GM/SG Wells)     | 303-606-4051 | 303-319-4329 | 303-888-2113 |
| Trevor Gates (KP Wells)         | 303-629-8431 | 720-254-4913 |              |
| Scott Meade                     |              | 970-260-8131 |              |



# **PICEANCE VLY NAD 83**

**PA 29-06S-095W**

**DOE 3-W-29 Pad**

**PA 312-29 - Slot B10**

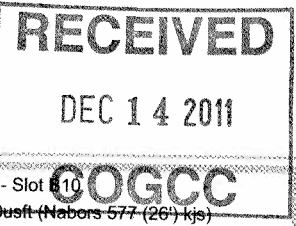
**Wellbore #1**

**Plan: Plan #2 31Aug11 kjs**

## **Standard Planning Report - Geographic**

**30 September, 2011**

**Williams**  
Planning Report - Geographic



|                  |                     |                                     |  |
|------------------|---------------------|-------------------------------------|--|
| <b>Database:</b> | COMPASS-PICEANCE    | <b>Local Co-ordinate Reference:</b> | Well PA 312-29 - Slot B10                |
| <b>Company:</b>  | PICEANCE VLY NAD 83 | <b>TVD Reference:</b>               | WELL @ 5702.0usft (Nabors 577 (26') kjs) |
| <b>Project:</b>  | PA 29-06S-095W      | <b>MD Reference:</b>                | WELL @ 5702.0usft (Nabors 577 (26') kjs) |
| <b>Site:</b>     | DOE 3-W-29 Pad      | <b>North Reference:</b>             | True                                     |
| <b>Well:</b>     | PA 312-29           | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Wellbore:</b> | Wellbore #1         |                                     |  |
| <b>Design:</b>   | Plan #2 31Aug11 kjs |                                     |  |

|                    |                                     |                      |                             |
|--------------------|-------------------------------------|----------------------|-----------------------------|
| <b>Project</b>     | PA 29-06S-095W, Garfield County, CO |                      |                             |
| <b>Map System:</b> | US State Plane 1983                 | <b>System Datum:</b> | Mean Sea Level              |
| <b>Geo Datum:</b>  | North American Datum 1983           |                      |                             |
| <b>Map Zone:</b>   | Colorado Central Zone               |                      | Using geodetic scale factor |

|                              |                |                     |                   |                          |                  |
|------------------------------|----------------|---------------------|-------------------|--------------------------|------------------|
| <b>Site</b>                  | DOE 3-W-29 Pad |                     |                   |                          |                  |
| <b>Site Position:</b>        |                | <b>Northing:</b>    | 1,613,247.00 usft | <b>Latitude:</b>         | 39° 29' 23.965 N |
| <b>From:</b>                 | Map            | <b>Easting:</b>     | 2,287,962.20 usft | <b>Longitude:</b>        | 108° 1' 23.779 W |
| <b>Position Uncertainty:</b> | 0.0 usft       | <b>Slot Radius:</b> | 13.200 in         | <b>Grid Convergence:</b> | -1.591 °         |

|                             |                      |          |                            |                   |                      |                  |
|-----------------------------|----------------------|----------|----------------------------|-------------------|----------------------|------------------|
| <b>Well</b>                 | PA 312-29 - Slot B10 |          |                            |                   |                      |                  |
| <b>Well Position</b>        | <b>+N/-S</b>         | 0.0 usft | <b>Northing:</b>           | 1,613,234.52 usft | <b>Latitude:</b>     | 39° 29' 23.842 N |
|                             | <b>+E/-W</b>         | 0.0 usft | <b>Easting:</b>            | 2,287,962.30 usft | <b>Longitude:</b>    | 108° 1' 23.774 W |
| <b>Position Uncertainty</b> |                      | 0.0 usft | <b>Wellhead Elevation:</b> |                   | <b>Ground Level:</b> | 5,676.0 usft     |

|                  |                   |                    |                    |                  |                       |
|------------------|-------------------|--------------------|--------------------|------------------|-----------------------|
| <b>Wellbore</b>  | Wellbore #1       |                    |                    |                  |                       |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination</b> | <b>Dip Angle</b> | <b>Field Strength</b> |
|                  | IGRF2010          | 2/3/2009           | (°)<br>10.666      | (°)<br>65.794    | (nT)<br>52,486        |

|                          |                         |              |                      |                  |
|--------------------------|-------------------------|--------------|----------------------|------------------|
| <b>Design</b>            | Plan #2 31Aug11 kjs     |              |                      |                  |
| <b>Audit Notes:</b>      |                         |              |                      |                  |
| <b>Version:</b>          | <b>Phase:</b>           | PLAN         | <b>Tie On Depth:</b> | 0.0              |
| <b>Vertical Section:</b> | <b>Depth From (TVD)</b> | <b>+N/-S</b> | <b>+E/-W</b>         | <b>Direction</b> |
|                          | (usft)                  | (usft)       | (usft)               | (°)              |
|                          | 0.0                     | 0.0          | 0.0                  | 324.61           |

| <b>Plan Sections</b>  |                 |             |                       |              |              |                         |                        |                       |         |                      |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|----------------------|--|
| 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   |                      |  |
| 130.0                 | 0.00            | 0.00        | 130.0                 | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.000   |                      |  |
| 1,395.1               | 44.28           | 324.61      | 1,272.9               | 379.1        | -269.3       | 3.50                    | 3.50                   | 0.00                  | 324.609 |                      |  |
| 4,417.7               | 44.28           | 324.61      | 3,436.9               | 2,099.4      | -1,491.5     | 0.00                    | 0.00                   | 0.00                  | 0.000   |                      |  |
| 6,631.7               | 0.00            | 0.00        | 5,437.0               | 2,762.8      | -1,962.8     | 2.00                    | -2.00                  | 0.00                  | 180.000 | Top Gas (25' Radius) |  |
| 8,781.7               | 0.00            | 0.00        | 7,587.0               | 2,762.8      | -1,962.8     | 0.00                    | 0.00                   | 0.00                  | 0.000   |                      |  |

**Williams**  
Planning Report - Geographic

|                  |                     |                                     |  |
|------------------|---------------------|-------------------------------------|--|
| <b>Database:</b> | COMPASS-PICEANCE    | <b>Local Co-ordinate Reference:</b> | Well PA 312-29 - Slot B10                |
| <b>Company:</b>  | PICEANCE VLY NAD 83 | <b>TVD Reference:</b>               | WELL @ 5702.0usft (Nabors 577 (26') kjs) |
| <b>Project:</b>  | PA 29-06S-095W      | <b>MD Reference:</b>                | WELL @ 5702.0usft (Nabors 577 (26') kjs) |
| <b>Site:</b>     | DOE 3-W-29 Pad      | <b>North Reference:</b>             | True                                     |
| <b>Well:</b>     | PA 312-29           | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Wellbore:</b> | Wellbore #1         |                                     |  |
| <b>Design:</b>   | Plan #2 31Aug11 kjs |                                     |  |

| 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          | 1,613,234.52        | 2,287,962.30       | 39° 29' 23.842 N | 108° 1' 23.774 W |  |
| 130.0   | 0.00            | 0.00        | 130.0                 | 0.0          | 0.0          | 1,613,234.52        | 2,287,962.30       | 39° 29' 23.842 N | 108° 1' 23.774 W |  |
| <b>Start Build 3.50</b>   |                 |             |                       |              |              |                     |                    |                  |                  |  |
| 1,395.1   | 44.28           | 324.61      | 1,272.9               | 379.1        | -269.3       | 1,613,620.93        | 2,287,703.63       | 39° 29' 27.588 N | 108° 1' 27.209 W |  |
| <b>Hold 44.28 Inclination</b>                                     |                 |             |                       |              |              |                     |                    |                  |                  |  |
| 2,392.6   | 44.28           | 324.61      | 1,987.0               | 946.8        | -672.6       | 1,614,199.58        | 2,287,316.27       | 39° 29' 33.199 N | 108° 1' 32.353 W |  |
| <b>Top of "G" Sand</b>  |                 |             |                       |              |              |                     |                    |                  |                  |  |
| 2,532.2   | 44.28           | 324.61      | 2,087.0               | 1,026.3      | -729.1       | 1,614,280.61        | 2,287,262.03       | 39° 29' 33.985 N | 108° 1' 33.074 W |  |
| <b>Base of "G" Sand</b>   |                 |             |                       |              |              |                     |                    |                  |                  |  |
| 2,671.9   | 44.28           | 324.61      | 2,187.0               | 1,105.8      | -785.6       | 1,614,361.65        | 2,287,207.78       | 39° 29' 34.770 N | 108° 1' 33.794 W |  |
| <b>9 5/8"</b>   |                 |             |                       |              |              |                     |                    |                  |                  |  |
| 4,417.7   | 44.28           | 324.61      | 3,436.9               | 2,099.4      | -1,491.5     | 1,615,374.48        | 2,286,529.77       | 39° 29' 44.591 N | 108° 1' 42.799 W |  |
| <b>Start Drop -2.00</b>   |                 |             |                       |              |              |                     |                    |                  |                  |  |
| 5,226.0   | 28.11           | 324.61      | 4,087.0               | 2,487.3      | -1,767.0     | 1,615,769.81        | 2,286,265.13       | 39° 29' 48.424 N | 108° 1' 46.314 W |  |
| <b>Mesaverde</b>  |                 |             |                       |              |              |                     |                    |                  |                  |  |
| 6,631.7   | 0.00            | 0.00        | 5,437.0               | 2,762.8      | -1,962.8     | 1,616,050.70        | 2,286,077.10       | 39° 29' 51.147 N | 108° 1' 48.812 W |  |
| <b>Top Gas - Approx. Top Gas - Top Gas (25' Radius) PA 312-29</b> |                 |             |                       |              |              |                     |                    |                  |                  |  |
| 8,076.7   | 0.00            | 0.00        | 6,882.0               | 2,762.8      | -1,962.8     | 1,616,050.70        | 2,286,077.10       | 39° 29' 51.147 N | 108° 1' 48.812 W |  |
| <b>Cameo Coals</b>  |                 |             |                       |              |              |                     |                    |                  |                  |  |
| 8,631.7   | 0.00            | 0.00        | 7,437.0               | 2,762.8      | -1,962.8     | 1,616,050.70        | 2,286,077.10       | 39° 29' 51.147 N | 108° 1' 48.812 W |  |
| <b>Rollins SS</b>   |                 |             |                       |              |              |                     |                    |                  |                  |  |
| 8,781.7   | 0.00            | 0.00        | 7,587.0               | 2,762.8      | -1,962.8     | 1,616,050.70        | 2,286,077.10       | 39° 29' 51.147 N | 108° 1' 48.812 W |  |
| <b>TD at 8781.7 - TD - TD / PBHL PA 312-29</b>                    |                 |             |                       |              |              |                     |                    |                  |                  |  |

| Design Targets   |               |              |            |              |              |                 |                |                  |                  |
|--|---------------|--------------|------------|--------------|--------------|-----------------|----------------|------------------|------------------|
| Target Name  | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude         | Longitude        |
| Top Gas (25' Radius) P/<br>- plan hits target center<br>- Circle (radius 25.0) | 0.00          | 0.00         | 5,437.0    | 2,762.8      | -1,962.8     | 1,616,050.70    | 2,286,077.10   | 39° 29' 51.147 N | 108° 1' 48.812 W |
| TD / PBHL PA 312-29<br>- plan hits target center<br>- Point                    | 0.00          | 0.00         | 7,587.0    | 2,762.8      | -1,962.8     | 1,616,050.70    | 2,286,077.10   | 39° 29' 51.147 N | 108° 1' 48.812 W |

| Casing Points         |                       |        |                      |                    |  |
|-----------------------|-----------------------|--------|----------------------|--------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name   | Casing Diameter (in) | Hole Diameter (in) |  |
| 2,671.9               | 2,187.0               | 9 5/8" | 9.625                | 12.250             |  |

**Williams**  
Planning Report - Geographic

|                  |                     |                                     |  |
|------------------|---------------------|-------------------------------------|--|
| <b>Database:</b> | COMPASS-PICEANCE    | <b>Local Co-ordinate Reference:</b> | Well PA 312-29 - Slot B10                |
| <b>Company:</b>  | PICEANCE VLY NAD 83 | <b>TVD Reference:</b>               | WELL @ 5702.0usft (Nabors 577 (26') kjs) |
| <b>Project:</b>  | PA 29-06S-095W      | <b>MD Reference:</b>                | WELL @ 5702.0usft (Nabors 577 (26') kjs) |
| <b>Site:</b>     | DOE 3-W-29 Pad      | <b>North Reference:</b>             | True                                     |
| <b>Well:</b>     | PA 312-29           | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Wellbore:</b> | Wellbore #1         |                                     |  |
| <b>Design:</b>   | Plan #2 31Aug11 kjs |                                     |  |

**Formations**

| Measured Depth (usft) | Vertical Depth (usft) | Name             | Lithology | Dip (°) | Dip Direction (°) |
|-----------------------|-----------------------|------------------|-----------|---------|-------------------|
| 2,392.6               | 1,987.0               | Top of "G" Sand  |           |         |                   |
| 2,532.2               | 2,087.0               | Base of "G" Sand |           |         |                   |
| 5,226.0               | 4,087.0               | Mesaverde        |           |         |                   |
| 6,631.7               | 5,437.0               | Approx. Top Gas  |           |         |                   |
| 8,076.7               | 6,882.0               | Cameo Coals      |           |         |                   |
| 8,631.7               | 7,437.0               | Rollins SS       |           |         |                   |
| 8,781.7               | 7,587.0               | TD               |           |         |                   |

**Plan Annotations**

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              | Comment                |
|-----------------------|-----------------------|-------------------|--------------|------------------------|
|                       |                       | +N/-S (usft)      | +E/-W (usft) |                        |
| 130.0                 | 130.0                 | 0.0               | 0.0          | Start Build 3.50       |
| 1,395.1               | 1,272.9               | 379.1             | -269.3       | Hold 44.28 Inclination |
| 4,417.7               | 3,436.9               | 2,099.4           | -1,491.5     | Start Drop -2.00       |
| 6,631.7               | 5,437.0               | 2,762.8           | -1,962.8     | Top Gas                |
| 8,781.7               | 7,587.0               | 2,762.8           | -1,962.8     | TD at 8781.7           |

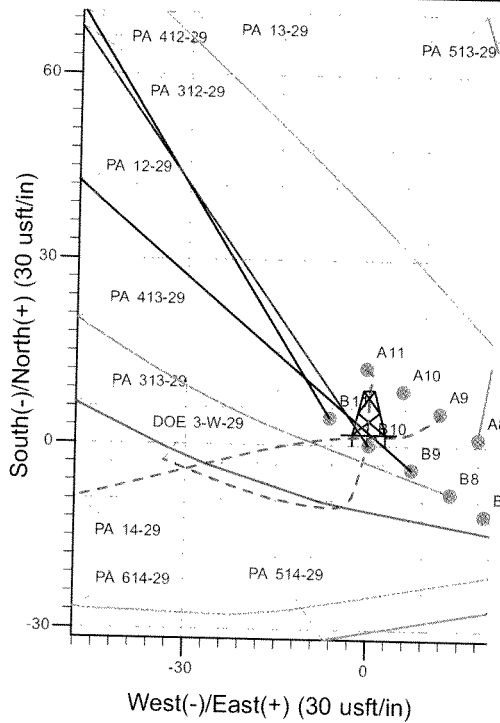
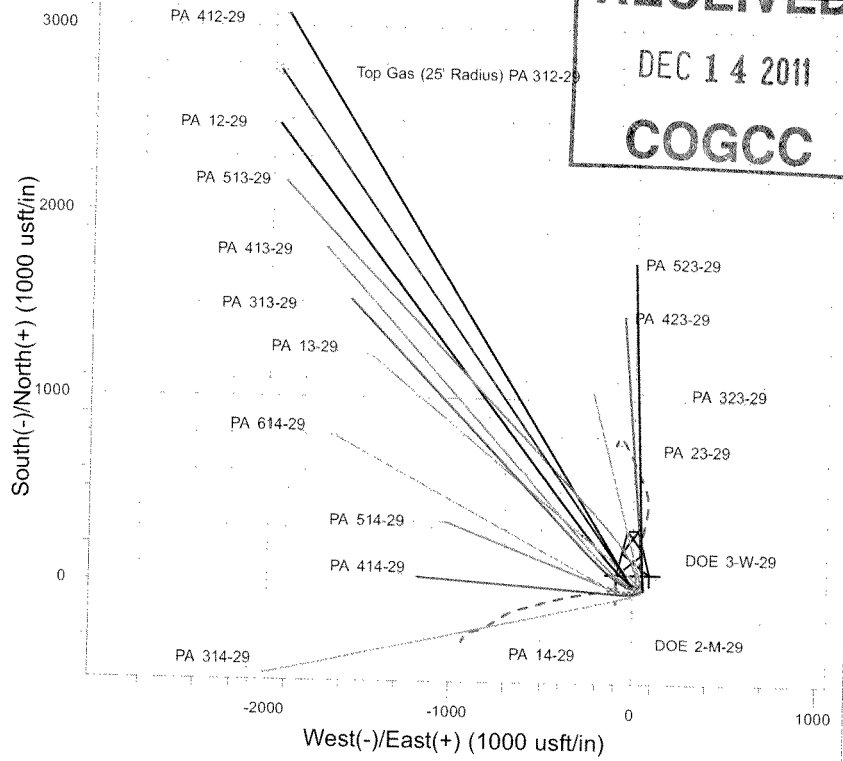
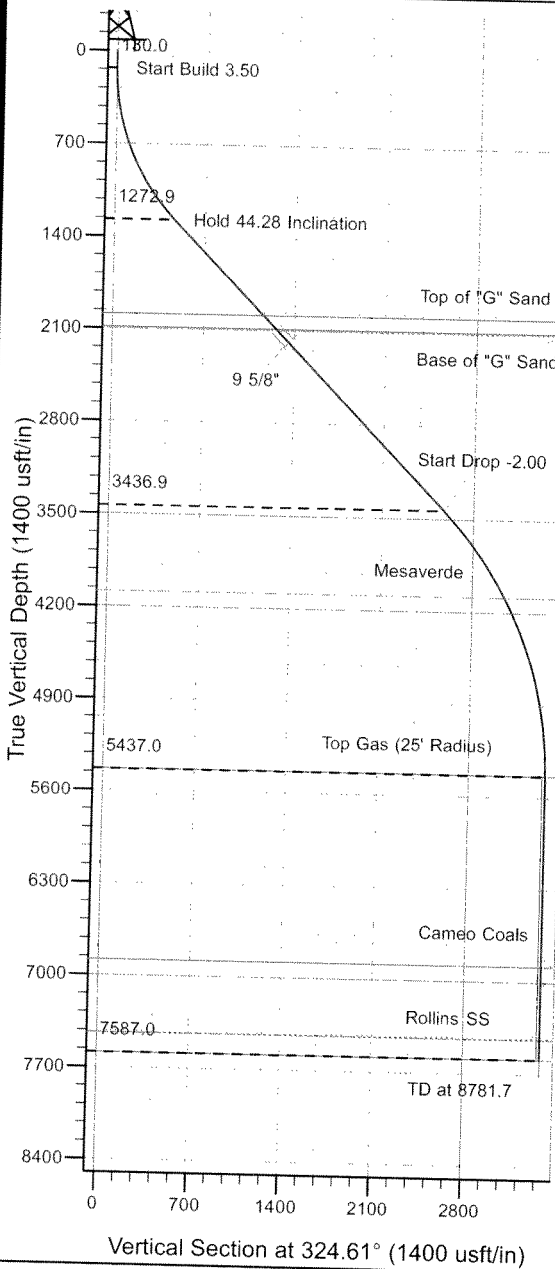


Well Name: PA 312-29  
 Surface Location: DOE 3-W-29 Pad  
 North American Datum 1983, US State Plane 1983, Colorado Central Zone  
 Ground Elevation: 5676.0

+N/-S 0.0 +E/-W 0.0 Northing 1613234.53 Easting 2287962.30 Latitude 39° 29' 23.842 N Longitude 108° 1' 23.774 W Slot B10

WELL @ 5702.0usft (Nabors 577 (26') kjs)

**RECEIVED**  
 DEC 14 2011  
 COGCC



Project: PA 29-06S-095W  
 Site: DOE 3-W-29 Pad  
 Well: PA 312-29  
 Plan #2 31Aug11 kjs

**T M**  
 Azimuths to True North  
 Magnetic North: 10.67°  
 Magnetic Field  
 Strength: 52485.7snT  
 Dip Angle: 65.79°  
 Date: 2/3/2009  
 Model: IGRF2010

ANNOTATIONS

| TVD    | MD     | Inc   | Azi    | +N/-S  | +E/-W   | VSec   | Departure | Annotation             |
|--------|--------|-------|--------|--------|---------|--------|-----------|------------------------|
| 130.0  | 130.0  | 0.00  | 0.00   | 0.0    | 0.0     | 0.0    | 0.0       | Start Build 3.50       |
| 1272.9 | 1395.1 | 44.28 | 324.61 | 379.1  | -269.3  | 465.0  | 465.0     | Hold 44.28 Inclination |
| 3436.9 | 4417.7 | 44.28 | 324.61 | 2099.4 | -1491.5 | 2575.3 | 2575.3    | Start Drop -2.00       |
| 5437.0 | 6631.7 | 0.00  | 0.00   | 2762.8 | -1962.8 | 3389.1 | 3389.1    | Top Gas                |
| 7587.0 | 8781.7 | 0.00  | 0.00   | 2762.8 | -1962.8 | 3389.1 | 3389.1    | TD at 8781.7           |