

RECEIVED

Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCT 17 2011

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

Farmington Field Office
Bureau of Land Management
Lease Serial No. 4978771

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 page 2.

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Williams Production Company, LLC

3a. Address

PO Box 640 Aztec, NM 87410

3b. Phone No. (include area code)

505-333-1806

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sur 1140' FSL & 1387' FEL, BHL: 1050' FNL & 2300' FEL, sec 14, T31N, R6W

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.
Rosa Unit

8. Well Name and No.
Rosa Unit #212A

9. API Well No.
30-039-27818

10. Field and Pool or Exploratory Area
Basin Fruitland Coal

11. Country or Parish, State
Rio Arriba, NM

12. CHECK THE 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 SHL C-102 _____
	☐ 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 recompleat 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 recompleat 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.)

Williams plans to re enter this existing wellbore and convert this well from a vertical cavitation to a horizontal completion as per attached plat, operation plan and directional plan. In addition, Williams would like to update the existing SHL records for this well. Due to resurveyed data and advancements in technology the SHL from the existing C-102 is inconsistent with the attached. It is our belief that the more accurate C-102 is the most recent of the two and would like provide the attached for record.

Hold C104

for Directional Survey
and "As Drilled" plat

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

14. I hereby certify that the foregoing is true and correct.

Name (Printed/Typed)

Ben Mitchell

Title Regulatory Specialist

RCVD OCT 20 '11

OIL CONC. DIV.

Signature

B Mitchell

Date 10/17/11

DIST. 3

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Troy L. Salvers

Title Petroleum Engineer

Date 10/19/2011

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

FFO

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)

NMOCD A

Hold C104

for Directional Survey
and "As Drilled" plat

District I
1625 N. French Dr., Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED

Submit to Appropriate District Office
OCT 17 2011

Form C-102
Revised October 12, 2005
Instructions on back
State Lease - 4 Copies
Fee Lease - 3 Copies

Farmington Field Office
Bureau of Land Management
AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-27818		*Pool Code 71629		*Pool Name BASIN FRUITLAND COAL	
*Property Code 17033		*Property Name ROSA UNIT			*Well Number 212A
*GRID No. 120782		*Operator Name WILLIAMS PRODUCTION COMPANY			*Elevation 6207'

¹⁰ Surface Location

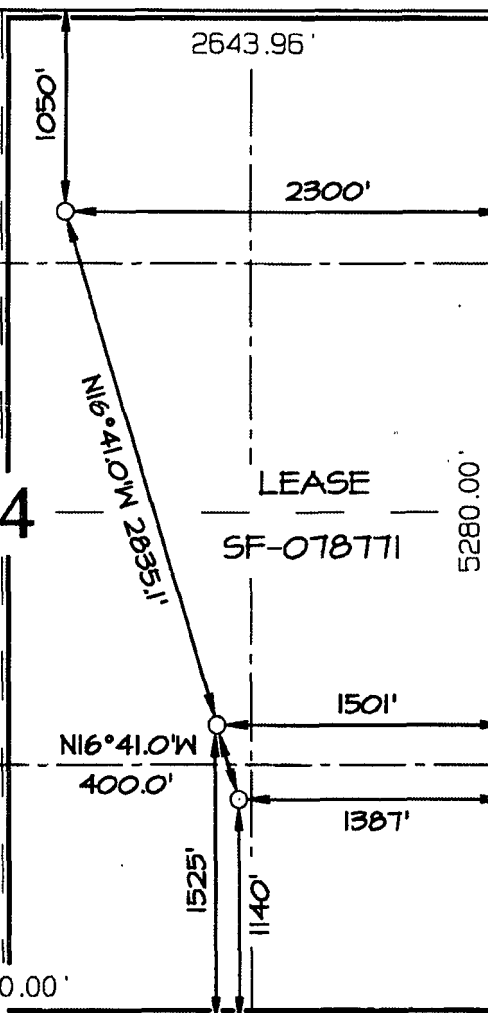
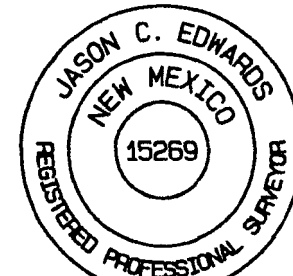
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	14	31N	6W		1140	SOUTH	1387	EAST	RIO ARriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	14	31N	6W		1050	NORTH	2300	EAST	RIO ARriba

¹² Dedicated Acres 320.0 Acres - (E/2)					¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No. SD-201134-0	
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

¹⁶ 2643.96' BOTTOM HOLE LAT: 36.90397°N LONG: 107.43040°W DATUM: NAD1927 LAT: 36.90398°N LONG: 107.43100°W DATUM: NAD1983		¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <u>Ben Mitchell</u> Date: <u>10/17/2011</u> Printed Name: <u>Ben Mitchell</u>	
		¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date Revised: SEPTEMBER 9, 2011 Date of Survey: APRIL 12, 2004 Signature and Seal of Professional Surveyor  JASON C. EDWARDS Certificate Number 15269	
		POINT OF ENTRY LAT: 36.89651°N LONG: 107.42765°W DATUM: NAD1927 LAT: 36.89652°N LONG: 107.42825°W DATUM: NAD1983 SURFACE LOCATION LAT: 36.89545°N LONG: 107.42727°W DATUM: NAD1927 LAT: 36.89546°N LONG: 107.42787°W DATUM: NAD1983	

**RECEIVED****OCT 17 2011**Farmington Field Office
Bureau of Land Management**WILLIAMS PRODUCTION COMPANY****Operations Plan***(Note: This procedure will be adjusted on site based upon actual conditions)*

DATE: 10/13/2011

WELLNAME: Rosa Unit #212A **FIELD:** Basin Fruitland Coal

BH LOCATION: NWNE Sec. 14-T31N-6W **SURFACE:** BLM
Rio Arriba, NM

ELEVATION: 6,207' GR **MINERALS:** BLM

TOTAL DEPTH: 6,045' **LEASE #** SF-078771

API#: 30-039-27818

I. GEOLOGY: Surface formation - San Jose**A. FORMATION TOPS:** (KB)

NAME		TVD	MD
Kirtland		2,389	2,389
Fruitland		2,799	3,817
Top Target Coal		3,031	3,320
Bottom Target Coal		3,041	
Picture Cliffs		3,049	
TD		3,031	6,045

B. LOGGING PROGRAM: None**C. NATURAL GAUGES:** Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.**D. MUD LOGGING PRORAM:** Mud logger will be on location from mill out to TD.**II. PREPARATORY WORK**

- A. MIRU w/ workover rig
- B. POOH/LD rods and pump
- C. POOH/LD production tbg
- D. Set retrievable bridge plug at 2,520' inside 7" casing
- E. Pressure test 7" csg and bridge plug to 1,500 psi for 30 minutes
- F. RDMO

III. DRILLING

- A. **MUD PROGRAM:** LSND mud during mill out and while drilling curve. Treat for lost circulation as necessary. Notify Engineering of any mud losses.

B. DRILLING FLUID: Horizontal section will be drilled with produced water.

C. BOP TESTING: While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The anticipated reservoir is expected to be less than 1300 psi, so the BOPE will be tested to **250 psi (Low) for 5 minutes** and **1500 psi (High) for 10 minutes**. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. The drum brakes will be inspected and tested each tour. **All tests and inspections will be recorded in the tour book as to time and results.**

IV. MATERIALS

A. CASING PROGRAM (as is):

<u>CASING TYPE</u>	<u>HOLE SIZE</u>	<u>DEPTH (MD)</u>	<u>CASING SIZE</u>	<u>WT. & GRADE</u>
Surface	12-1/4"	317'	9-5/8"	36# K-55
Intermediate	8-3/4"	2,874'	7"	23# K-55
Prod. Liner	6-1/4"	2,784' - 3,168'	5-1/2"	17# N-80

B. CASING PROGRAM (after sidetrack):

<u>CASING TYPE</u>	<u>HOLE SIZE</u>	<u>DEPTH (MD)</u>	<u>CASING SIZE</u>	<u>WT. & GRADE</u>
Surface	12-1/4"	317'	9-5/8"	36# K-55
Intermediate	8-3/4"	2,874'	7"	23# K-55
Prod. Liner (motherbore)	6-1/4"	2,784' - 3,168'	5-1/2"	17# N-80
Prod. Liner (sidetrack)	6-1/4"	~2,530' - 6,045'	4-1/2"	11.6# K-55

- Sidetrack production liner is pre-perforated below top of Fruitland formation and will be dropped off with top of liner in open hole 5-10' outside of window.

C. FLOAT EQUIPMENT:

- PRODUCTION LINER (sidetrack): No centralization

D. CEMENTING:

(Note: Volumes may be adjusted onsite due to actual conditions)

- PRODUCTION LINER (sidetrack): Open hole completion. No cement.

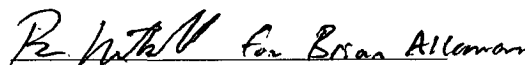
V. COMPLETION

A. STIMULATION

- No stimulation

B. RUNNING TUBING

- Fruitland Coal: Run 2-7/8", 6.5#, J-55, EUE tubing with a SN on top of bottom joint. Land tubing at approximately 3,074' MD inside of motherbore.


 Brian Alleman
 Drilling Engineer II



Williams Energy

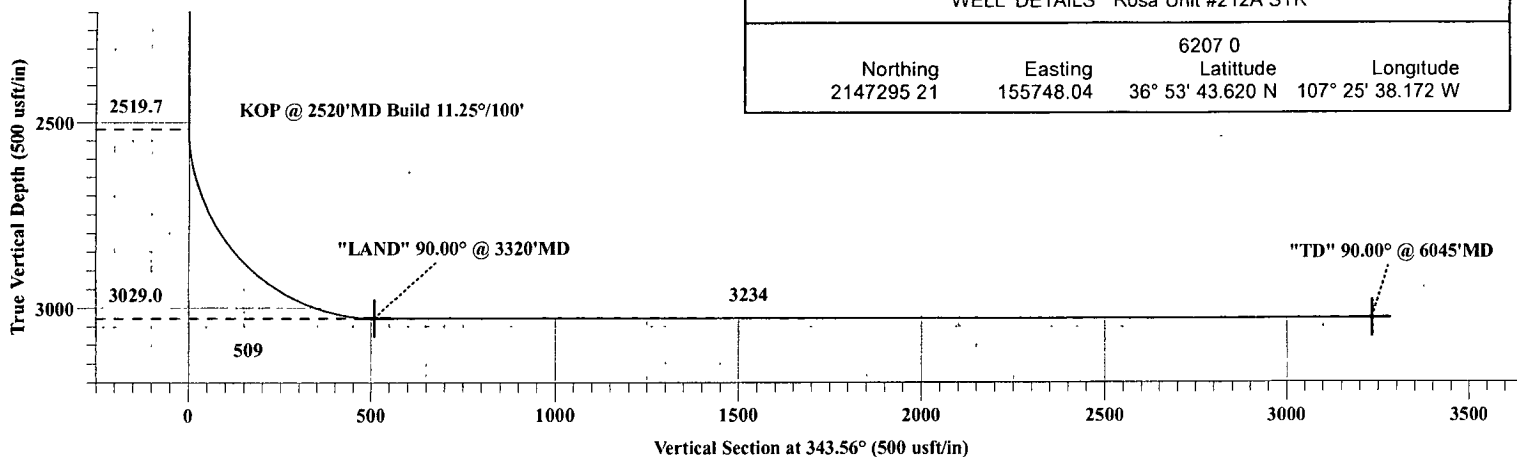
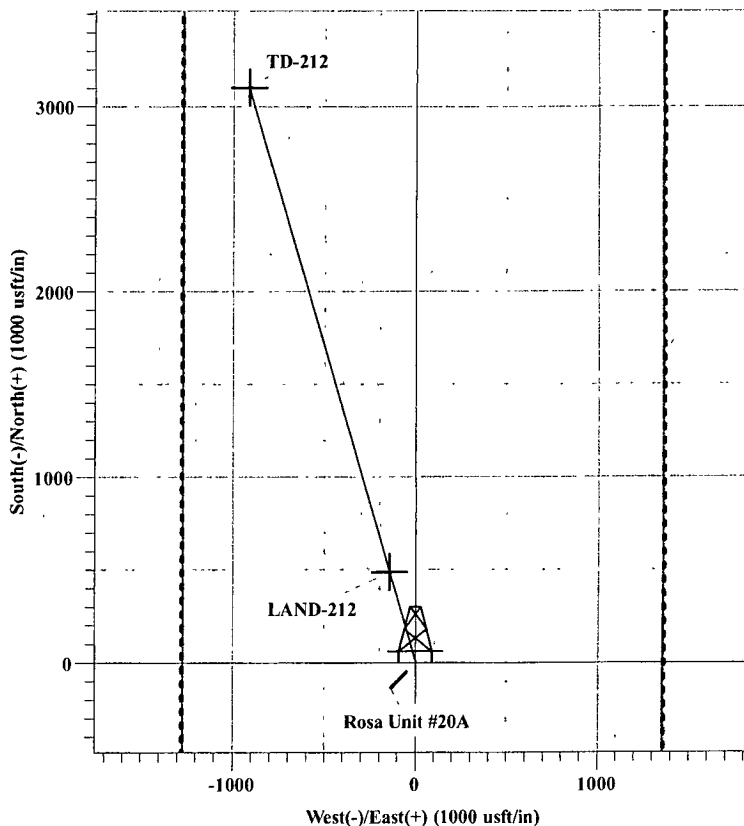
Rosa Unit #212A STK
Sec14 T31N-R06W - 212A
Rio Arriba Co. NM
GL: 6207' KB: 14'



A Schlumberger Company

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
LAND-212	3029.0	488 5	-144.1	2147785.45	155609.98	Point
TD-212	3029 0	3102 1	-915.3	2150408.39	154871.12	Point



WELL DETAILS Rosa Unit #212A STK

Northing	Easting	Latitude	Longitude
2147295 21	155748.04	36° 53' 43.620 N	107° 25' 38.172 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0 0	0 00	0 00	0 0	0 0	0 0	0 00	0 00	0 0	
2519 7	0 00	0 00	2519 7	0 0	0 0	0 00	0 00	0 0	
3319 7	90 00	343 56	3029 0	488 5	-144 1	11 25	343 56	509 3	
6044 7	90 00	343 56	3029 0	3102 1	-915.3	0.00	0 00	3234 3	TD-212

Plan: Design #1 (Rosa Unit #212A STK/Wellbore #1)

Created By: Frank C. Scardino

Date: 10/10/2011

Williams Energy

Rio Arriba Co. NM

Sec14 T31N-R06W - 212A

Rosa Unit #212A STK

Wellbore #1

Plan: Design #1

Standard Planning Report

10 October, 2011

Planning Report

Database: EDM 5000 1 Single User Db
Company: Williams Energy
Project: Rio Arriba Co NM
Site: Sec14 T31N-R06W - 212A
Well: Rosa Unit #212A STK
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Site Sec14 T31N-R06W - 212A
TVD Reference: WELL @ 6221 0usft (Original Well Elev)
MD Reference: WELL @ 6221.0usft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project: Rio Arriba Co NM
Map System: US State Plane 1927 (Exact solution) **System Datum:** Mean Sea Level
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico Central 3002

Site: Sec14 T31N-R06W - 212A
Site Position: **Northing:** 2,147,295 21 usft **Latitude:** 36° 53' 43 620 N
From: Lat/Long **Easting:** 155,748 04 usft **Longitude:** 107° 25' 38 172 W
Position Uncertainty: 0 0 usft **Slot Radius:** 13-3/16 " **Grid Convergence:** -0 71 °

Well: Rosa Unit #212A STK
Well Position **+N/-S** 0 0 usft **Northing:** 2,147,295 21 usft **Latitude:** 36° 53' 43 620 N
+E/-W 0 0 usft **Easting:** 155,748 04 usft **Longitude:** 107° 25' 38 172 W
Position Uncertainty 0 0 usft **Wellhead Elevation:** **Ground Level:** 6,207 0 usft

Wellbore: Wellbore #1
Magnetics **Model Name** **Sample Date** **Declination** **Dip Angle** **Field Strength**
 (°) (°) (nT)
 IGRF2010 10/10/11 9 73 63 65 50,838

Design: Design #1
Audit Notes:
Version: **Phase:** PROTOTYPE **Tie On Depth:** 0 0
Vertical Section **Depth From (TVD)** **+N/-S** **+E/-W** **Direction**
 (usft) (usft) (usft) (°)
 0 0 0 0 343 56

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 00	
2,519 7	0 00	0 00	2,519 7	0 0	0 0	0 00	0 00	0 00	0 00	
3,319 7	90 00	343 56	3,029 0	488 5	-144 1	11 25	11 25	0 00	343 56	
6,044 7	90 00	343 56	3,029 0	3,102 1	-915 3	0 00	0 00	0 00	0 00	TD-212

Planning Report

Database: EDM 5000.1 Single User Db
 Company: Williams Energy
 Project: Rio Arriba Co NM
 Site: Sec14 T31N-R06W - 212A
 Well: Rosa Unit #212A STK
 Wellbore: Wellbore #1
 Design: Design #1

Local Co-ordinate Reference: Site Sec14 T31N-R06W - 212A
 TVD Reference: WELL @ 6221 0usft (Original Well Elev)
 MD Reference: WELL @ 6221 0usft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
2,519.7	0.00	0.00	2,519.7	0.0	0.0	0.0	0.00	0.00	0.00
KOP @ 2520' MD Build 11.25°/100'									
2,550.0	3.41	343.56	2,550.0	0.9	-0.3	0.9	11.25	11.25	0.00
2,600.0	9.03	343.56	2,599.7	6.1	-1.8	6.3	11.25	11.25	0.00
2,650.0	14.66	343.56	2,648.6	15.9	-4.7	16.6	11.25	11.25	0.00
2,700.0	20.28	343.56	2,696.3	30.3	-8.9	31.6	11.25	11.25	0.00
2,750.0	25.91	343.56	2,742.2	49.1	-14.5	51.2	11.25	11.25	0.00
2,800.0	31.53	343.56	2,786.1	72.1	-21.3	75.2	11.25	11.25	0.00
2,850.0	37.16	343.56	2,827.3	99.2	-29.3	103.4	11.25	11.25	0.00
2,900.0	42.78	343.56	2,865.6	130.0	-38.3	135.5	11.25	11.25	0.00
2,950.0	48.41	343.56	2,900.6	164.2	-48.5	171.2	11.25	11.25	0.00
3,000.0	54.03	343.56	2,931.9	201.6	-59.5	210.2	11.25	11.25	0.00
3,050.0	59.66	343.56	2,959.2	241.7	-71.3	252.0	11.25	11.25	0.00
3,100.0	65.28	343.56	2,982.3	284.2	-83.9	296.3	11.25	11.25	0.00
3,150.0	70.91	343.56	3,001.0	328.7	-97.0	342.7	11.25	11.25	0.00
3,200.0	76.53	343.56	3,015.0	374.7	-110.6	390.7	11.25	11.25	0.00
3,250.0	82.16	343.56	3,024.2	421.8	-124.5	439.8	11.25	11.25	0.00
3,300.0	87.78	343.56	3,028.6	469.6	-138.5	489.6	11.25	11.25	0.00
3,319.7	90.00	343.56	3,029.0	488.5	-144.1	509.3	11.25	11.25	0.00
"LAND" 90.00° @ 3320' MD									
3,400.0	90.00	343.56	3,029.0	565.5	-166.8	589.6	0.00	0.00	0.00
3,500.0	90.00	343.56	3,029.0	661.4	-195.1	689.6	0.00	0.00	0.00
3,600.0	90.00	343.56	3,029.0	757.3	-223.4	789.6	0.00	0.00	0.00
3,700.0	90.00	343.56	3,029.0	853.2	-251.7	889.6	0.00	0.00	0.00
3,800.0	90.00	343.56	3,029.0	949.1	-280.0	989.6	0.00	0.00	0.00
3,900.0	90.00	343.56	3,029.0	1,045.1	-308.3	1,089.6	0.00	0.00	0.00
4,000.0	90.00	343.56	3,029.0	1,141.0	-336.6	1,189.6	0.00	0.00	0.00
4,100.0	90.00	343.56	3,029.0	1,236.9	-364.9	1,289.6	0.00	0.00	0.00
4,200.0	90.00	343.56	3,029.0	1,332.8	-393.2	1,389.6	0.00	0.00	0.00
4,300.0	90.00	343.56	3,029.0	1,428.7	-421.5	1,489.6	0.00	0.00	0.00
4,400.0	90.00	343.56	3,029.0	1,524.6	-449.8	1,589.6	0.00	0.00	0.00
4,500.0	90.00	343.56	3,029.0	1,620.5	-478.1	1,689.6	0.00	0.00	0.00
4,600.0	90.00	343.56	3,029.0	1,716.4	-506.4	1,789.6	0.00	0.00	0.00
4,700.0	90.00	343.56	3,029.0	1,812.4	-534.7	1,889.6	0.00	0.00	0.00
4,800.0	90.00	343.56	3,029.0	1,908.3	-563.0	1,989.6	0.00	0.00	0.00
4,900.0	90.00	343.56	3,029.0	2,004.2	-591.3	2,089.6	0.00	0.00	0.00
5,000.0	90.00	343.56	3,029.0	2,100.1	-619.6	2,189.6	0.00	0.00	0.00
5,100.0	90.00	343.56	3,029.0	2,196.0	-647.9	2,289.6	0.00	0.00	0.00
5,200.0	90.00	343.56	3,029.0	2,291.9	-676.2	2,389.6	0.00	0.00	0.00
5,300.0	90.00	343.56	3,029.0	2,387.8	-704.5	2,489.6	0.00	0.00	0.00
5,400.0	90.00	343.56	3,029.0	2,483.7	-732.8	2,589.6	0.00	0.00	0.00
5,500.0	90.00	343.56	3,029.0	2,579.7	-761.1	2,689.6	0.00	0.00	0.00
5,600.0	90.00	343.56	3,029.0	2,675.6	-789.4	2,789.6	0.00	0.00	0.00
5,700.0	90.00	343.56	3,029.0	2,771.5	-817.7	2,889.6	0.00	0.00	0.00
5,800.0	90.00	343.56	3,029.0	2,867.4	-846.0	2,989.6	0.00	0.00	0.00
5,900.0	90.00	343.56	3,029.0	2,963.3	-874.3	3,089.6	0.00	0.00	0.00
6,000.0	90.00	343.56	3,029.0	3,059.2	-902.6	3,189.6	0.00	0.00	0.00
6,044.7	90.00	343.56	3,029.0	3,102.1	-915.3	3,234.3	0.00	0.00	0.00
"TD" 90.00° @ 6045' MD									

Planning Report

Database: EDM 5000 1 Single User Db
Company: Williams Energy
Project: Rio Arriba Co NM
Site: Sec14 T31N-R06W - 212A
Well: Rosa Unit #212A STK
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Site Sec14 T31N-R06W - 212A
TVD Reference: WELL @ 6221 0usft (Original Well Elev)
MD Reference: WELL @ 6221 0usft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Design Targets

Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LAND-212	- plan hits target center - Point	0 00	0 00	3,029 0	488 5	-144 1	2,147,785 45	155,609.98	36° 53' 48.450 N	107° 25' 39 946 W
TD-212	- plan hits target center - Point	0 00	0 00	3,029 0	3,102 1	-915 3	2,150,408 39	154,871.12	36° 54' 14 292 N	107° 25' 49 440 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,519 7	2,519 7	0 0	0 0	KOP @ 2520'MD Build 11 25°/100'
3,319 7	3,029 0	488 5	-144 1	"LAND" 90.00° @ 3320'MD
6,044 7	3,029 0	3,102 1	-915 3	"TD" 90 00° @ 6045'MD