

RECEIVED

Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SEP 23 2011

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

Farmington Field Office
Bureau of Land Management

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		5. Lease Serial No. 07-07866
☐ Oil Well ☒ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator Williams Production Company, LLC		7. If Unit of CA/Agreement, Name and/or No. Rosa Unit
3a. Address PO Box 640 Aztec, NM 87410		8. Well Name and No. Rosa Unit #201A
3b. Phone No. (include area code) 505-333-1808		9. API Well No. 30-039-27417
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sur 911' FSL & 1819' FEL – BHL 2620' FSL & 20' Sec 22, FEL, T31N, R6W		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 _____
	☐ 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. All disturbance will be on permitted location.

NOTE: 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.

BLANK Lined to Production interval

14. I hereby certify that the foregoing is true and correct.	
Name (Printed/Typed) Larry Higgins	Title Permit Supervisor
Signature <i>Larry Higgins</i>	Date 9/23/11

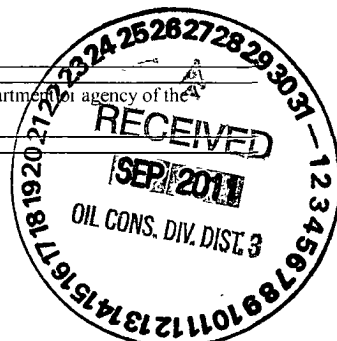
THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Original Signed: Stephen Mason		SEP 26 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	

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 AV



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

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

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

05 Farmington Field Office
Bureau of Land Management

TRACT 40

LOT 1

22

LEASE SF-078766

5258.88'

5280.00'

20'

2620'

1530'

1819'

411'

1185'

400.0'

N46°02.8'E

N46°02.8'E 2089.4'

END OF LATERAL
 LAT: 36.88506 °N
 LONG: 107.44065 °W
 DATUM: NAD1927

LAT: 36.88507 °N
LONG: 107.44125 °W
DATUM: NAD1983

POINT OF ENTRY
 LAT: 36.88109 °N
 LONG: 107.44581 °W
 DATUM: NAD1927

LAT: 36.88110 °N
LONG: 107.44641 °W
DATUM: NAD1983

SURFACE LOCATION
 LAT: 36.88033 °N
 LONG: 107.44680 °W
 DATUM: NAD1927

LAT: 36.88034 °N
LONG: 107.44740 °W
DATUM: NAD1983

16

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.

Larry Higgins 9-23-11
 Signature Date

LARRY HIGGINS
 Printed Name

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: AUGUST 5, 2011
 Survey Date: FEBRUARY 4, 2003

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
 NEW MEXICO
 15269
 REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
 Certificate Number 15269



WILLIAMS PRODUCTION COMPANY

Operations Plan

(Note: This procedure will be adjusted on site based upon actual conditions)

DATE: 9/22/2011

WELLNAME: Rosa Unit #201A **FIELD:** Basin Fruitland Coal

BH LOCATION: NESE Sec. 22-T31N-4W **LEASE #** SF-078766

SUR LOCATION: SWSE Sec. 22-T31N-6W **SURFACE:** BLM
Rio Arriba, NM

ELEVATION: 6,232' GR **MINERALS:** BLM

TOTAL DEPTH: 5,267' **API#:** 30-039-27417

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

NAME		TVD	MD
Kirtland		2,394	2,394
Fruitland		2,784	2,803
Top Target Coal		3,057	3,376
Bottom Target Coal		3,071	
Picture Cliffs		3,079	
TD		3,057	5,267

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 2,480' 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"	538'	9-5/8"	36# K-55
Intermediate	8-3/4"	2,891'	7"	23# K-55
Prod. Liner	6-1/4"	2,860'- 3,094'	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"	538'	9-5/8"	36# K-55
Intermediate	8-3/4"	2,891'	7"	23# K-55
Prod. Liner (motherbore)	6-1/4"	2,860'- 3,094'	5-1/2"	17# N-80
Prod. Liner (sidetrack)	6-1/4"	~2,490'-5,267'	4-1/2"	11.6# K-55

- Sidetrack production liner is pre-perforated 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.

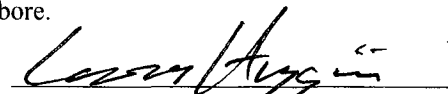
V. COMPLETION

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 3,089' MD inside of motherbore.


 Larry Higgins
 Permit Supervisor



Williams Energy

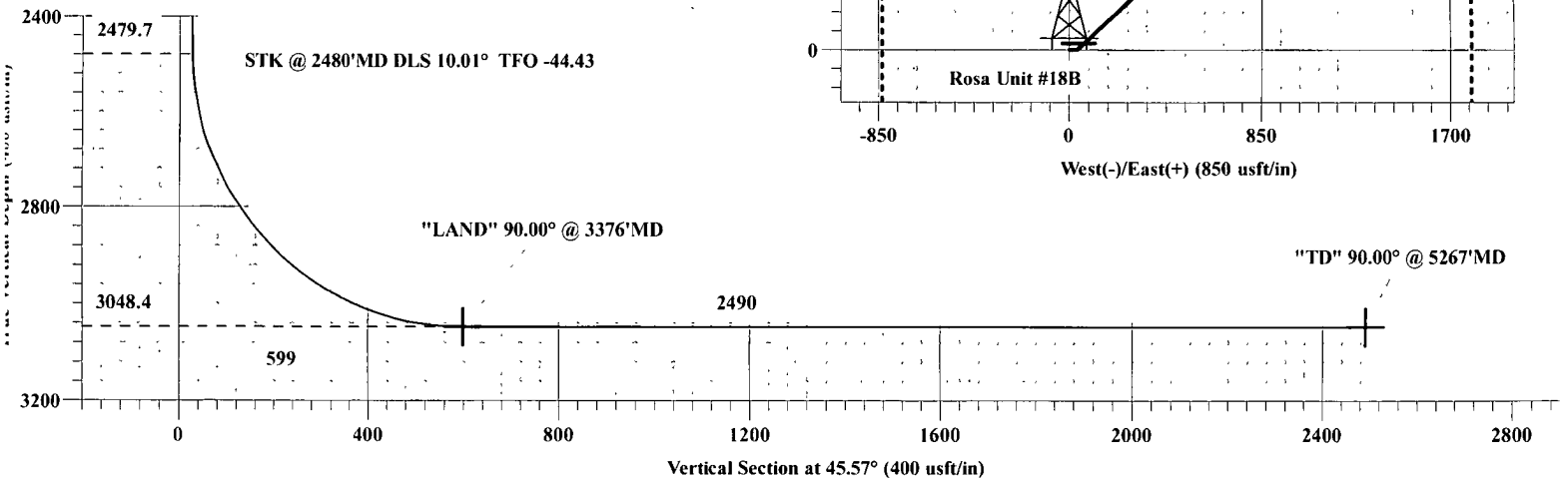
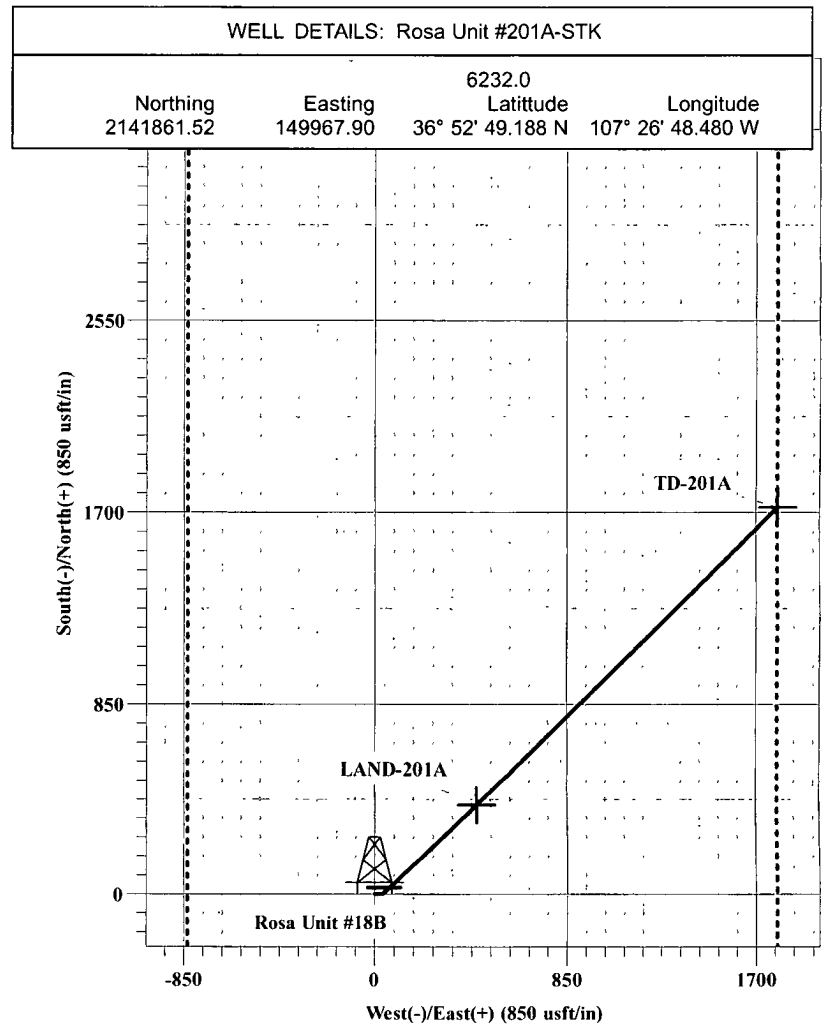
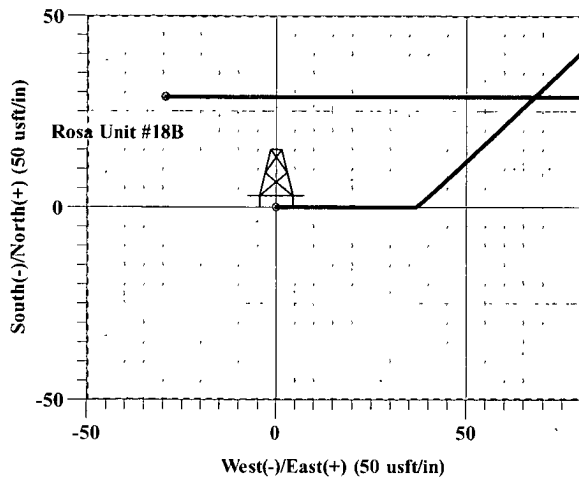
Rosa Unit #201A-STK
Sec22 T31N-R06W - 201A
Rio Arriba Co. NM
30-039-27417
GL: 6232' KB: 14'

PATHFINDER

A Schlumberger Company

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
LAND-201A	3048.0	398.2	448.2	2142254.07	150421.06	Point
TD-201A	3048.0	1722.2	1798.8	2143561.08	151788.17	Point



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
2480.0	0.51	90.00	2479.7	0.0	36.8	0.00	0.00	26.3	
3375.6	90.01	45.57	3048.4	398.2	448.2	10.01	-44.43	598.8	
5266.9	90.01	45.57	3048.0	1722.2	1798.8	0.00	0.00	2490.2	TD-201A

Plan: Design #1 (Rosa Unit #201A-STK/STK)

10/27/2011 10:27:11 AM C:\Users\james\Documents\Standard Planning Report.docx

Williams Energy

Rio Arriba Co. NM

Sec22 T31N-R06W - 201A

Rosa Unit #201A-STK

STK

Plan: Design #1

Standard Planning Report

22 September, 2011



Planning Report

Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Site Sec22 T31N-R06W - 201A
Company:	Williams Energy	TVD Reference:	WELL @ 6246 0usft (Original Well Elev)
Project:	Rio Arriba Co NM	MD Reference:	WELL @ 6246 0usft (Original Well Elev)
Site:	Sec22 T31N-R06W - 201A	North Reference:	True
Well:	Rosa Unit #201A-STK	Survey Calculation Method:	Minimum Curvature
Wellbore:	STK		
Design:	Design #1		

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	Sec22 T31N-R06W - 201A				
Site Position:		Northing:	2,141,861 52 usft	Latitude:	36° 52' 49 188 N
From:	Lat/Long	Easting:	149,967 91 usft	Longitude:	107° 26' 48 480 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0 72 °

Well	Rosa Unit #201A-STK					
Well Position	+N/-S	0 0 usft	Northings:	2,141,861 52 usft	Latitude:	36° 52' 49 188 N
	+E/-W	0 0 usft	Easting:	149,967 91 usft	Longitude:	107° 26' 48 480 W
Position Uncertainty	0 0 usft	Wellhead Elevation:		Ground Level:	6,232 0 usft	

Wellbore	STK		
----------	-----	--	--

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	09/22/11	9 75	63 63	50,832

Design	Design #1		
--------	-----------	--	--

Audit Notes:

Version:	Phase:	PROTOTYPE	Tie On Depth:	2,480 0
----------	--------	-----------	---------------	---------

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0 0	0 0	0 0	45.57

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
2,480 0	0 51	90 00	2,479 7	0 0	36 8	0 00	0 00	0 00	0 00	
3,375 6	90 01	45 57	3,048 4	398 2	448 2	10 01	9 99	-4 96	-44 43	
5,266 9	90 01	45 57	3,048 0	1,722 2	1,798 8	0 00	0 00	0 00	0 00	TD-201A

Planning Report

Database: EDM 5000 1 Single User Db
 Company: Williams Energy
 Project: Rio Arriba Co NM
 Site: Sec22 T31N-R06W - 201A
 Well: Rosa Unit #201A-STK
 Wellbore: STK
 Design: Design #1

Local Co-ordinate Reference: Site Sec22 T31N-R06W - 201A
 TVD Reference: WELL @ 6246.0usft (Original Well Elev)
 MD Reference: WELL @ 6246.0usft (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)
2,480.0	0.51	90.00	2,479.7	0.0	36.8	26.3	0.10	-0.10	0.00
STK @ 2480' MD DLS 10.01° TFO -44.43°									
2,500.0	2.40	54.20	2,499.7	0.2	37.3	26.8	10.01	9.41	-179.02
2,550.0	7.38	48.35	2,549.5	3.0	40.5	31.0	10.01	9.97	-11.70
2,600.0	12.38	47.21	2,598.7	8.8	46.8	39.6	10.01	10.00	-2.28
2,650.0	17.39	46.72	2,647.0	17.5	56.2	52.4	10.01	10.01	-0.98
2,700.0	22.39	46.44	2,694.0	29.2	68.6	69.4	10.01	10.01	-0.55
2,750.0	27.40	46.26	2,739.4	43.8	83.8	90.5	10.01	10.01	-0.36
2,800.0	32.40	46.14	2,782.7	61.0	101.8	115.4	10.01	10.01	-0.25
2,850.0	37.41	46.04	2,823.7	80.8	122.4	144.0	10.01	10.01	-0.19
2,900.0	42.41	45.96	2,862.0	103.1	145.4	176.1	10.01	10.01	-0.15
2,950.0	47.41	45.90	2,897.4	127.7	170.8	211.3	10.01	10.01	-0.13
3,000.0	52.42	45.85	2,929.6	154.3	198.3	249.6	10.01	10.01	-0.11
3,050.0	57.42	45.80	2,958.3	182.8	227.6	290.5	10.01	10.01	-0.09
3,100.0	62.43	45.76	2,983.4	213.0	258.6	333.7	10.01	10.01	-0.08
3,150.0	67.43	45.72	3,004.6	244.6	291.0	379.0	10.01	10.01	-0.08
3,200.0	72.44	45.68	3,021.7	277.4	324.6	426.0	10.01	10.01	-0.07
3,250.0	77.44	45.65	3,034.7	311.1	359.1	474.2	10.01	10.01	-0.07
3,300.0	82.45	45.62	3,043.4	345.5	394.3	523.5	10.01	10.01	-0.06
3,350.0	87.45	45.59	3,047.8	380.3	429.9	573.2	10.01	10.01	-0.06
3,375.6	90.01	45.57	3,048.4	398.2	448.2	598.8	10.01	10.01	-0.06
"LAND" 90.00° @ 3376' MD									
3,400.0	90.01	45.57	3,048.4	415.3	465.6	623.2	0.00	0.00	0.00
3,500.0	90.01	45.57	3,048.4	485.3	537.0	723.2	0.00	0.00	0.00
3,600.0	90.01	45.57	3,048.4	555.3	608.4	823.2	0.00	0.00	0.00
3,700.0	90.01	45.57	3,048.3	625.3	679.8	923.2	0.00	0.00	0.00
3,800.0	90.01	45.57	3,048.3	695.3	751.3	1,023.2	0.00	0.00	0.00
3,900.0	90.01	45.57	3,048.3	765.3	822.7	1,123.2	0.00	0.00	0.00
4,000.0	90.01	45.57	3,048.3	835.3	894.1	1,223.2	0.00	0.00	0.00
4,100.0	90.01	45.57	3,048.2	905.3	965.5	1,323.2	0.00	0.00	0.00
4,200.0	90.01	45.57	3,048.2	975.3	1,036.9	1,423.2	0.00	0.00	0.00
4,300.0	90.01	45.57	3,048.2	1,045.4	1,108.3	1,523.2	0.00	0.00	0.00
4,400.0	90.01	45.57	3,048.2	1,115.4	1,179.7	1,623.2	0.00	0.00	0.00
4,500.0	90.01	45.57	3,048.2	1,185.4	1,251.1	1,723.2	0.00	0.00	0.00
4,600.0	90.01	45.57	3,048.1	1,255.4	1,322.5	1,823.2	0.00	0.00	0.00
4,700.0	90.01	45.57	3,048.1	1,325.4	1,394.0	1,923.2	0.00	0.00	0.00
4,800.0	90.01	45.57	3,048.1	1,395.4	1,465.4	2,023.2	0.00	0.00	0.00
4,900.0	90.01	45.57	3,048.1	1,465.4	1,536.8	2,123.2	0.00	0.00	0.00
5,000.0	90.01	45.57	3,048.1	1,535.4	1,608.2	2,223.2	0.00	0.00	0.00
5,100.0	90.01	45.57	3,048.0	1,605.4	1,679.6	2,323.2	0.00	0.00	0.00
5,200.0	90.01	45.57	3,048.0	1,675.4	1,751.0	2,423.2	0.00	0.00	0.00
5,266.9	90.01	45.57	3,048.0	1,722.2	1,798.8	2,490.2	0.00	0.00	0.00
"TD" 90.00° @ 5267' MD									

Planning Report

Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Site Sec22 T31N-R06W - 201A
Company:	Williams Energy	TVD Reference:	WELL @ 6246.0usft (Original Well Elev)
Project:	Rio Arriba Co NM	MD Reference:	WELL @ 6246 0usft (Original Well Elev)
Site:	Sec22 T31N-R06W - 201A	North Reference:	True
Well:	Rosa Unit #201A-STK	Survey Calculation Method:	Minimum Curvature
Wellbore:	STK		
Design:	Design #1		

Design Targets									
Target Name	Dip Angle	Dip Dir	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
TD-201A	0 00	0 00	3,048 0	1,722 2	1,798 8	2,143,561 07	151,788 17	36° 53' 6 216 N	107° 26' 26 340 W
- plan hits target center									
- Point									
LAND-201A	0 00	0 00	3,048 0	398 2	448 2	2,142,254 07	150,421 06	36° 52' 53.125 N	107° 26' 42 964 W
- plan misses target center by 0 4usft at 3375 6usft MD (3048 4 TVD, 398.2 N, 448 2 E)									
- Point									

Plan Annotations:				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
2,480 0	2,479.7	0 0	36 8	STK @ 2480'MD DLS 10 01" TFO -44 43
3,375 6	3,048 4	398 2	448 2	"LAND" 90 00° @ 3376'MD
5,266 9	3,048.0	1,722 2	1,798 8	"TD" 90.00° @ 5267'MD