

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

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

JUL 08 2011

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE – Other instructions on page 2.

5. Lease Serial No
NMSF-078772

6. If Indian, Allottee or Tribe Name
and Management

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

8. Well Name and No.
Rosa Unit COM #329A

9. API Well No.
30-039-29398

10. Field and Pool or Exploratory Area
Basin Fruitland Coal

11. Country or Parish, State
Rio Arriba, NM

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)
505-634-4208

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sur 2254' FSL & 752' FEL, BHL 50' FSL & 2050' FEL, sec 34, T32N, R6W

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

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)

Larry Higgins

Title Permit Supervisor

Signature

Date 7/8/11

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Troy L. Salvors

Title PE

Date 7/11/2011

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)

Hold C104

for Directional Survey
and "As Drilled" plat

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised October 12, 2005

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

Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-29398	*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 17033	*Property Name ROSA UNIT COM	*Well Number 329A
*GRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY	*Elevation 6315'

10 Surface Location

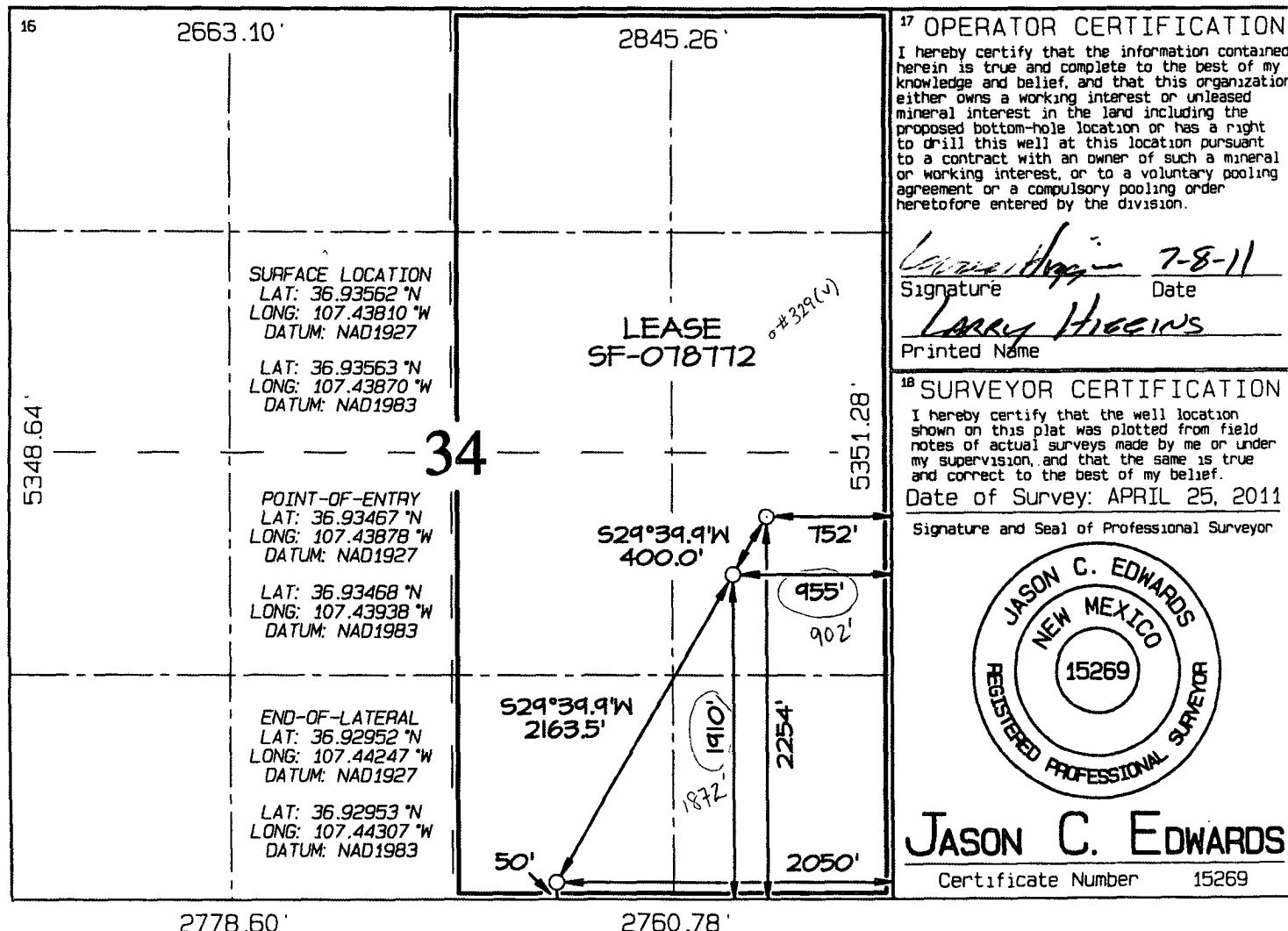
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	34	32N	6W		2254	SOUTH	752	EAST	RIO ARriba

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
0	34	32N	6W		50	SOUTH	2050	EAST	RIO ARriba

12 Dedicated Acres 320.0 Acres - (E/2)	13 Joint or Infill	14 Consolidation Code	15 Order No. R-13200
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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





WILLIAMS PRODUCTION COMPANY

Operations Plan

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

DATE: 7/7/2011

WELLNAME: Rosa Unit #329A **FIELD:** Basin Fruitland Coal

BH LOCATION: SWSE Sec. 34-T32N-6W **SURFACE:** BLM
Rio Arriba, NM

ELEVATION: 6,315' GR **MINERALS:** BLM

TOTAL DEPTH: 5,433' **LEASE #** SF-078772

API#: 30-039-29398

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

NAME		TVD	MD
Kirtland		2,432	2,432
Fruitland		2,857	2,880
Top Target Coal		3,023	3,276
Bottom Target Coal		3,038	
Picture Cliffs		3,107	
TD		3,077	5,499

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 2,576' 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"	316'	9-5/8"	36# K-55
Intermediate	8-3/4"	2,949'	7"	20# K-55
Prod. Liner	6-1/4"	2,904' - 3,206'	5-1/2"	15.5# J-55

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"	316'	9-5/8"	36# K-55
Intermediate	8-3/4"	2,949'	7"	20# K-55
Prod. Liner (motherbore)	9-1/2"	2,904' - 3,206'	5-1/2"	15.5# J-55
Prod. Liner (sidetrack)	6-1/4"	~2,535' - 5,433'	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 3,182' MD inside of motherbore.


Larry Higgins



Williams Energy

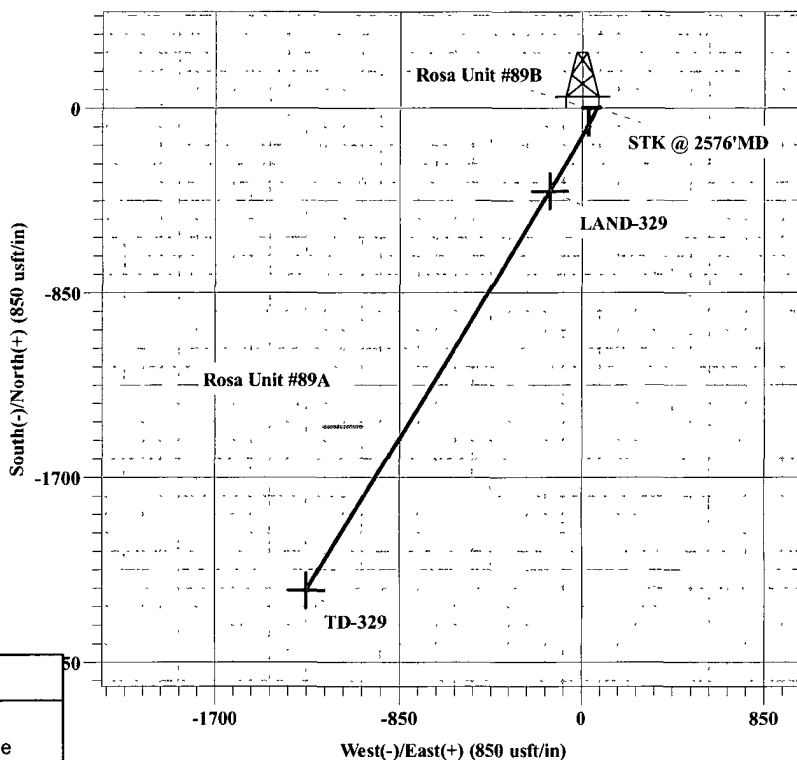
Rosa Unit #329A STK
Sec34 T32N-R6W - 329A
Rio Arriba Co. NM
GL: 6315' KB: 14'



A Schlumberger Company

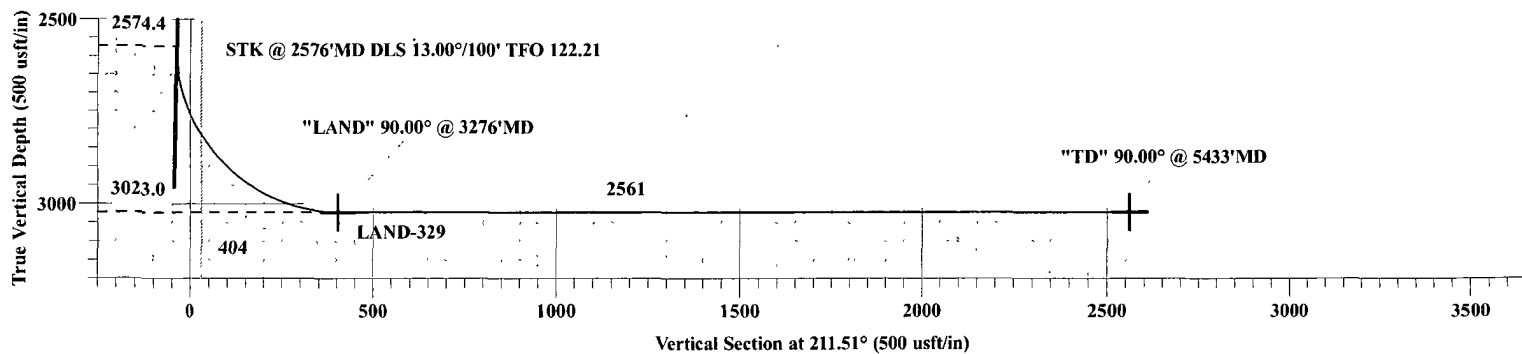
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
LAND-329	3023.0	-381.6	-150.0	2161579.49	152608.48	Point
TD-329	3023.0	-2221.0	-1277.4	2159754.30	151458.21	Point



WELL DETAILS Rosa Unit #329A STK

Northing	Easting	Latitude	Longitude
2161959.20	152763.23	36° 56' 8.232 N	107° 26' 17.160 W



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
2575.5	1.96	89.29	2574.4	0.9	69.3	0.00	0.00	-36.9	
3275.8	90.00	211.51	3023.0	-381.6	-150.0	13.00	122.21	403.7	
5433.2	90.00	211.51	3023.0	-2221.0	-1277.4	0.00	0.00	2561.1	TD-329

Plan: Design #1 (Rosa Unit #329A STK/STK)

Created By: Frank C. Scardino

Date: 6/13/2011

Williams Energy

Rio Arriba Co. NM

Sec34 T32N-R6W - 329A

Rosa Unit #329A STK

STK

Plan: Design #1

Standard Planning Report

13 June, 2011

Planning Report

Database:	EDM-5000 1 Single User Db	Local Co-ordinate Reference:	Site Sec34 T32N-R6W - 329A
Company:	Williams Energy	TVD Reference:	WELL @ 6329 0usft (Original Well Elev)
Project:	Rio Arriba Co. NM	MD Reference:	WELL @ 6329 0usft (Original Well Elev)
Site:	Sec34 T32N-R6W - 329A	North Reference:	True
Well:	Rosa Unit #329A 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:	Sec34 T32N-R6W - 329A		
Site Position:		Northing:	2,161,959 19 usft
From:	Lat/Long	Easting:	152,763 23 usft
Position Uncertainty:	0 0 usft	Slot Radius:	13-3/16"
		Latitude:	36° 56' 8 232 N
		Longitude:	107° 26' 17 160 W
		Grid Convergence:	-0 71 °

Well:		Rosa Unit #329A STK				
Well Position	+N/-S	0 0 usft	Northing:	2,161,959 19 usft	Latitude:	36° 56' 8.232 N
	+E/-W	0 0 usft	Easting:	152,763 23 usft	Longitude:	107° 26' 17 160 W
Position Uncertainty		0 0 usft	Wellhead Elevation:		Ground Level:	6,315.0 usft

Wellbore:	STK
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	06/13/11	9 78	63 69	50,891

Design:	Design #1
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Audit Notes:

Version:	Phase:	PROTOTYPE	Tie On Depth:	2,575 5
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Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0 0	0 0	211 51

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
2,575 5	1 96	89 29	2,574 4	0 9	69 3	0 00	0 00	0 00	0 00	
3,275.8	90 00	211 51	3,023 0	-381 6	-150 0	13 00	12.57	17 45	122 21	
5,433 2	90 00	211 51	3,023.0	-2,221 0	-1,277 4	0 00	0 00	0 00	0 00	TD-329

Planning Report

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Company:	Williams Energy	TVD Reference:	WELL @ 6329 0usft (Original Well Elev)
Project:	Rio Arriba Co NM	MD Reference:	WELL @ 6329 0usft (Original Well Elev)
Site:	Sec34 T32N-R6W - 329A	North Reference:	True
Well:	Rosa Unit #329A STK	Survey Calculation Method:	Minimum Curvature
Wellbore:	STK		
Design:	Design #1		

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)
2,575.5	1.96	89.29	2,574.4	0.9	69.3	-36.9	0.11	0.11	0.00
STK @ 2576'MD DLS 13.00°/100' TFO 122.21									
2,600.0	2.71	173.85	2,598.9	0.3	69.7	-36.7	13.00	3.07	345.16
2,625.0	5.64	194.50	2,623.9	-1.5	69.5	-35.1	13.00	11.73	82.60
2,650.0	8.80	200.75	2,648.7	-4.5	68.5	-32.0	13.00	12.63	25.00
2,675.0	12.01	203.70	2,673.2	-8.6	66.8	-27.5	13.00	12.83	11.80
2,700.0	15.23	205.42	2,697.5	-14.0	64.3	-21.7	13.00	12.90	6.87
2,725.0	18.46	206.54	2,721.5	-20.5	61.1	-14.5	13.00	12.93	4.51
2,750.0	21.70	207.34	2,744.9	-28.1	57.3	-5.9	13.00	12.95	3.20
2,775.0	24.94	207.95	2,767.9	-36.9	52.7	3.9	13.00	12.97	2.41
2,800.0	28.19	208.42	2,790.2	-46.8	47.4	15.1	13.00	12.97	1.88
2,825.0	31.43	208.80	2,811.9	-57.7	41.4	27.5	13.00	12.98	1.52
2,850.0	34.68	209.11	2,832.9	-69.6	34.8	41.1	13.00	12.98	1.26
2,875.0	37.92	209.38	2,853.0	-82.5	27.6	55.9	13.00	12.98	1.07
2,900.0	41.17	209.61	2,872.3	-96.4	19.8	71.8	13.00	12.99	0.93
2,925.0	44.42	209.82	2,890.6	-111.1	11.3	88.8	13.00	12.99	0.81
2,950.0	47.66	210.00	2,908.0	-126.7	2.4	106.8	13.00	12.99	0.73
2,975.0	50.91	210.16	2,924.3	-143.1	-7.1	125.7	13.00	12.99	0.65
3,000.0	54.16	210.31	2,939.5	-160.2	-17.1	145.6	13.00	12.99	0.60
3,025.0	57.41	210.45	2,953.6	-178.1	-27.6	166.2	13.00	12.99	0.55
3,050.0	60.66	210.58	2,966.4	-196.5	-38.5	187.7	13.00	12.99	0.51
3,075.0	63.90	210.70	2,978.1	-215.6	-49.7	209.8	13.00	12.99	0.48
3,100.0	67.15	210.81	2,988.4	-235.1	-61.4	232.5	13.00	12.99	0.45
3,125.0	70.40	210.92	2,997.5	-255.1	-73.3	255.8	13.00	12.99	0.43
3,150.0	73.65	211.02	3,005.2	-275.5	-85.6	279.6	13.00	12.99	0.41
3,175.0	76.90	211.12	3,011.5	-296.2	-98.0	303.8	13.00	12.99	0.40
3,200.0	80.15	211.22	3,016.5	-317.2	-110.7	328.3	13.00	12.99	0.39
3,225.0	83.40	211.31	3,020.1	-338.3	-123.6	353.0	13.00	12.99	0.38
3,250.0	86.64	211.41	3,022.2	-359.6	-136.5	377.9	13.00	12.99	0.38
3,275.8	90.00	211.51	3,023.0	-381.6	-150.0	403.7	13.00	12.99	0.38
"LAND" 90.00° @ 3276'MD									
3,300.0	90.00	211.51	3,023.0	-402.2	-162.6	427.9	0.00	0.00	0.00
3,400.0	90.00	211.51	3,023.0	-487.5	-214.9	527.9	0.00	0.00	0.00
3,500.0	90.00	211.51	3,023.0	-572.7	-267.1	627.9	0.00	0.00	0.00
3,600.0	90.00	211.51	3,023.0	-658.0	-319.4	727.9	0.00	0.00	0.00
3,700.0	90.00	211.51	3,023.0	-743.3	-371.7	827.9	0.00	0.00	0.00
3,800.0	90.00	211.51	3,023.0	-828.5	-423.9	927.9	0.00	0.00	0.00
3,900.0	90.00	211.51	3,023.0	-913.8	-476.2	1,027.9	0.00	0.00	0.00
4,000.0	90.00	211.51	3,023.0	-999.0	-528.4	1,127.9	0.00	0.00	0.00
4,100.0	90.00	211.51	3,023.0	-1,084.3	-580.7	1,227.9	0.00	0.00	0.00
4,200.0	90.00	211.51	3,023.0	-1,169.5	-633.0	1,327.9	0.00	0.00	0.00
4,300.0	90.00	211.51	3,023.0	-1,254.8	-685.2	1,427.9	0.00	0.00	0.00
4,400.0	90.00	211.51	3,023.0	-1,340.1	-737.5	1,527.9	0.00	0.00	0.00
4,500.0	90.00	211.51	3,023.0	-1,425.3	-789.7	1,627.9	0.00	0.00	0.00
4,600.0	90.00	211.51	3,023.0	-1,510.6	-842.0	1,727.9	0.00	0.00	0.00
4,700.0	90.00	211.51	3,023.0	-1,595.8	-894.2	1,827.9	0.00	0.00	0.00
4,800.0	90.00	211.51	3,023.0	-1,681.1	-946.5	1,927.9	0.00	0.00	0.00
4,900.0	90.00	211.51	3,023.0	-1,766.4	-998.8	2,027.9	0.00	0.00	0.00
5,000.0	90.00	211.51	3,023.0	-1,851.6	-1,051.0	2,127.9	0.00	0.00	0.00
5,100.0	90.00	211.51	3,023.0	-1,936.9	-1,103.3	2,227.9	0.00	0.00	0.00
5,200.0	90.00	211.51	3,023.0	-2,022.1	-1,155.5	2,327.9	0.00	0.00	0.00
5,300.0	90.00	211.51	3,023.0	-2,107.4	-1,207.8	2,427.9	0.00	0.00	0.00
5,400.0	90.00	211.51	3,023.0	-2,192.6	-1,260.1	2,527.9	0.00	0.00	0.00
5,433.2	90.00	211.51	3,023.0	-2,221.0	-1,277.4	2,561.1	0.00	0.00	0.00

Planning Report

Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Site Sec34 T32N-R6W - 329A
Company:	Williams Energy	TVD Reference:	WELL @ 6329.0usft (Original Well Elev)
Project:	Rio Arriba Co. NM	MD Reference:	WELL @ 6329.0usft (Original Well Elev)
Site:	Sec34 T32N-R6W - 329A	North Reference:	True
Well:	Rosa Unit #329A STK	Survey Calculation Method:	Minimum Curvature
Wellbore:	STK		
Design:	Design #1		

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)
"TD" 90.00° @ 5433'MD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
TD-329	0 00	359 28	3,023 0	-2,221 0	-1,277 4	2,159,754.30	151,458 22	36° 55' 46 272 N	107° 26' 32 892 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,575 5	2,574 4	0 9	69 3	STK @ 2576'MD DLS 13 00°/100' TFO 122 21
3,275 8	3,023 0	-381 6	-150 0	"LAND" 90 00° @ 3276'MD
5,433 2	3,023 0	-2,221 0	-1,277 4	"TD" 90 00° @ 5433'MD