

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

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

JUN 09 2011

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE - Other instructions on page 2.

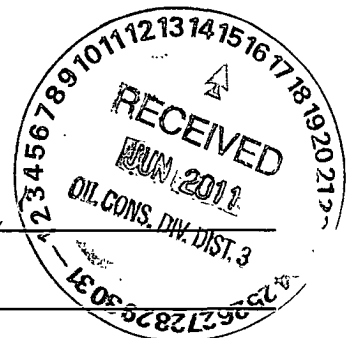
1. Type of Well ☐ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMSF-078772
2. Name of Operator Williams Production Company, LLC		6. If Indian, Allottee or Tribe Name
3a. Address PO Box 640 Aztec, NM 87410	3b. Phone No (include area code) 505-634-4208	7. If Unit of CA/Agreement, Name and/or No Rosa Unit
4. Location of Well (Footage, Sec., T, R, M, or Survey Description) Sur 1669 FSL & 698 FEL, BHL 1550 FNL & 2500 FEL, sec 35, T32N, R6W		8. Well Name and No Rosa Unit #279A
		9. API Well No 30-039-29534
		10. Field and Pool or Exploratory Area Basin Fruitland Coal
		11. Country or Parish, State Rio Arriba

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 horizontal cavitation to a horizontal completion as per attached plat, operation plan and directional plan



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 6/9/11

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Original Signed: Stephen Mason	Title	Date JUN 13 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)

Hold C104
for Directional Survey
and "As Drilled" plat

NMOCD

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 17033	*Property Name ROSA UNIT		*Well Number 279A
*GRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6317'

¹⁰ Surface Location

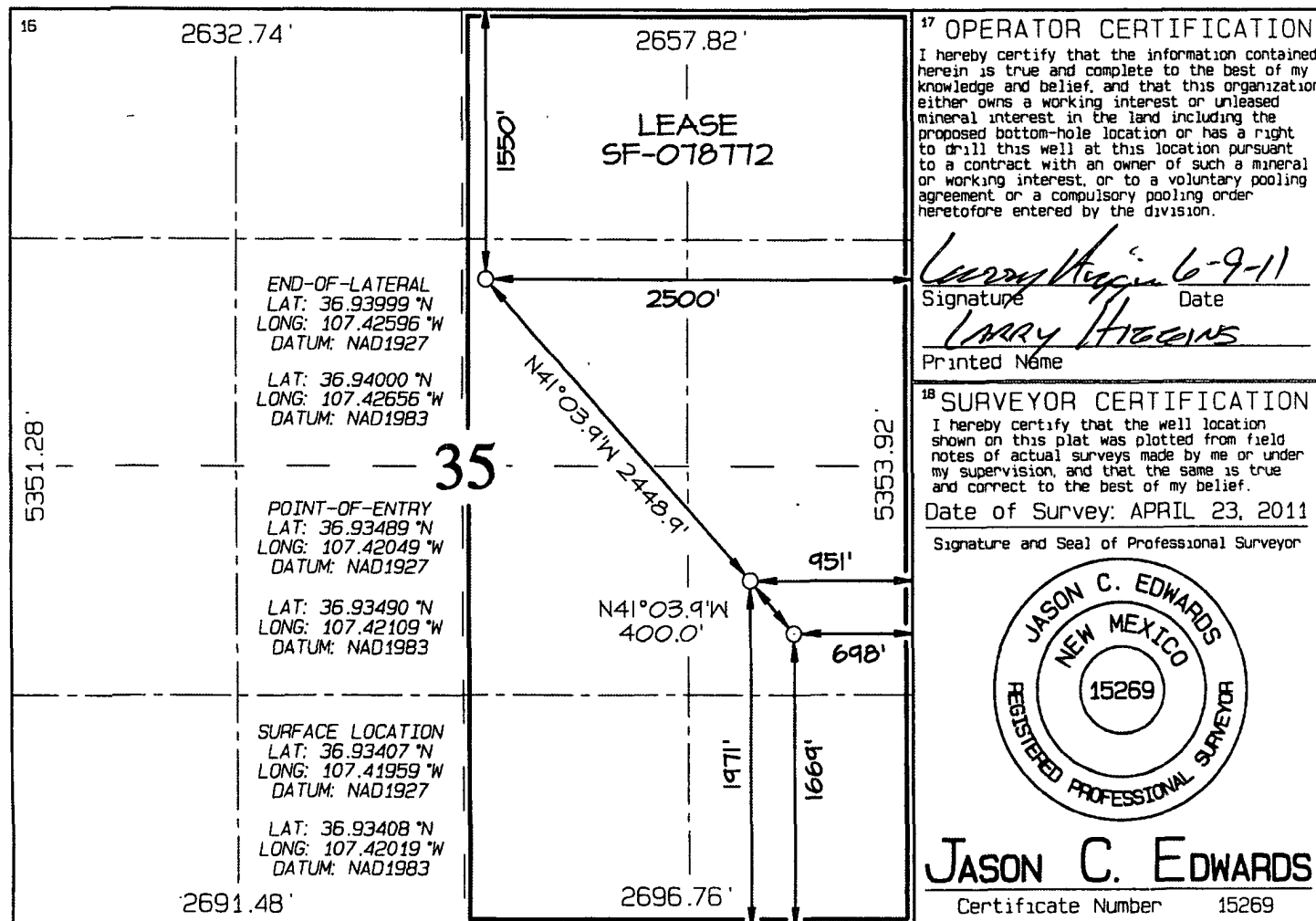
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	35	32N	6W		1669	SOUTH	698	EAST	RIO ARriba

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
G	35	32N	6W		1550	NORTH	2500	EAST	RIO ARriba

¹² Dedicated Acres 320.0 Acres - (E/2)	¹³ Joint or Infall	¹⁴ Consolidation Code	¹⁵ Order No.
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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: 6/8/2011

WELLNAME: Rosa Unit #279A **FIELD:** Basin Fruitland Coal

BH LOCATION: SWNE Sec. 35-T32N-6W **SURFACE:** BLM
Rio Arriba, NM

ELEVATION: 6,318' GR **MINERALS:** BLM

TOTAL DEPTH: 5,499' **LEASE #** SF-078772

API#: 30-039-29488

I. **GEOLOGY:** Surface formation - San Jose

A. **FORMATION TOPS:** (KB)

NAME		TVD	MD
Kirtland		2,487	2,487
Fruitland		2,997	3,102
Top Target Coal		3,040	3,301
Bottom Target Coal		3,061	
Picture Cliffs		3,240	
TD		3,040	5,746

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 2,980' 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"	348'	9-5/8"	36# K-55
Intermediate	8-3/4"	2,997'	7"	23# K-55
Prod. Liner	6-1/4"	2,929' - 3,240'	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"	348'	9-5/8"	36# K-55
Intermediate	8-3/4"	2,997'	7"	23# K-55
Prod. Liner (motherbore)	9-1/2"	2,929' - 3,240'	5-1/2"	17# N-80
Prod. Liner (sidetrack)	6-1/4"	~2,586' - 5,746'	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 3,237' MD inside of motherbore.


Brian Alleman

Drilling Engineer II



Williams Energy

Rosa Unit #279A
Sec35 T32N-R6W
Rio Arriba Co. NM
GL: 6318' KB: 14'

PATHFINDER

A Schlumberger Company

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

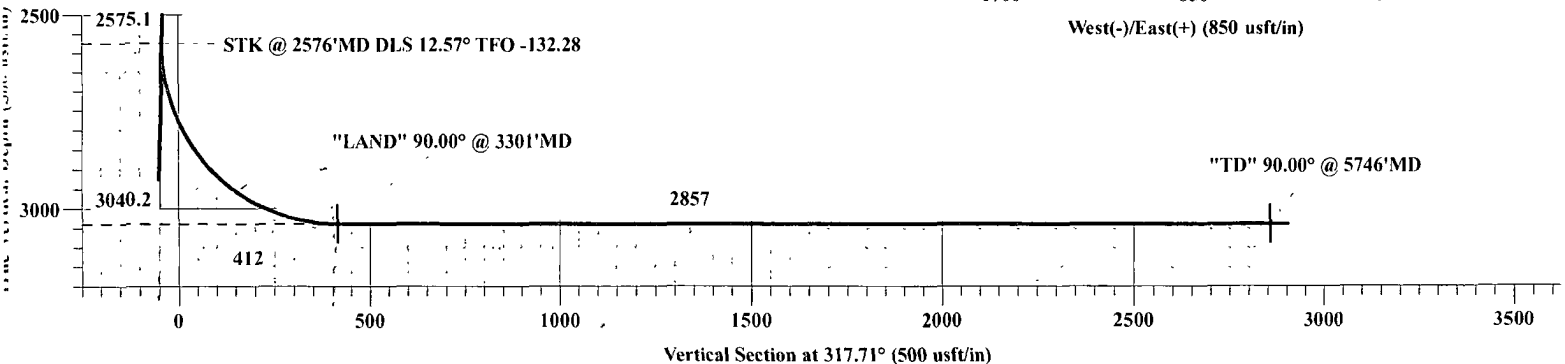
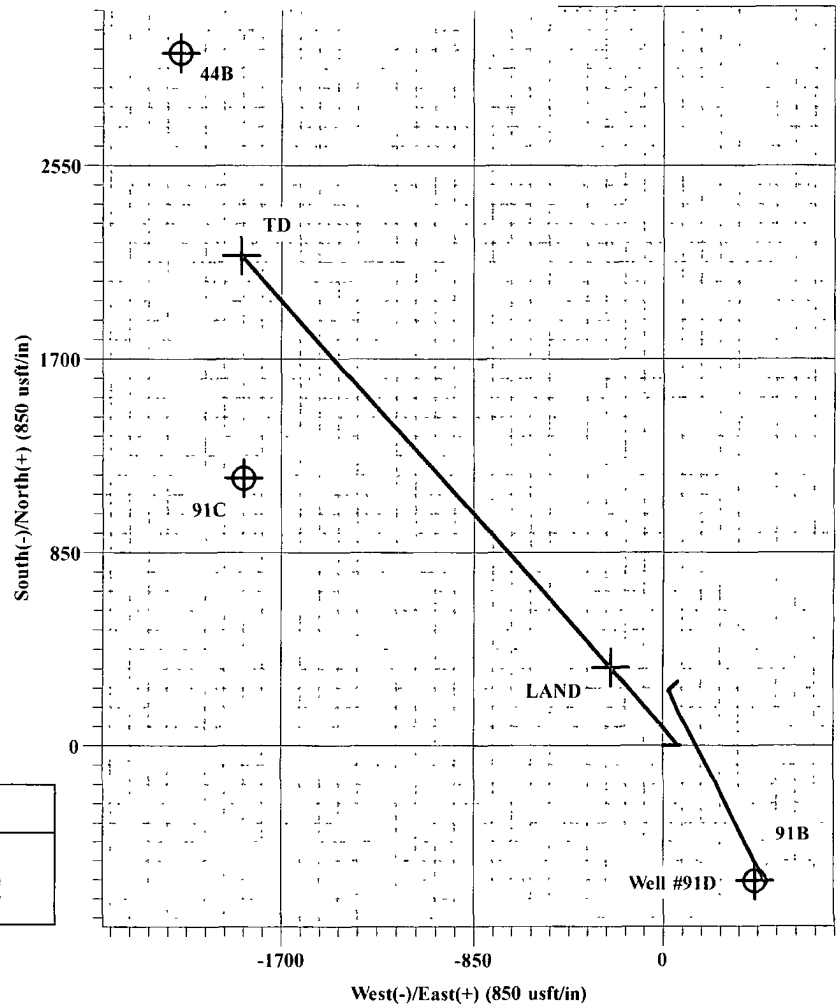
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
44B	1.0	3042.9	-2152.0	2164396.66	156051.50	Circle (Radius: 50.0)
91B	1.0	-602.9	415.4	2160719.63	158573.94	Circle (Radius: 50.0)
91C	1.0	1175.0	-1867.4	2162525.46	156313.11	Circle (Radius: 50.0)
LAND	3040.0	344.2	-234.6	2161674.68	157935.63	Point
TD	3040.0	2152.6	-1879.6	2163503.14	156312.90	Point

LEGEND

- ⊕ Rosa Unit #279A, OH, OH V0
- △ Well #91D, Wellbore #1, Wellbore #1 V0
- ⊕ Design #2

WELL DETAILS: Rosa Unit #279A

		6318.0	
Northing	Easting	Latitude	Longitude
2161327.63	158165.99	36° 56' 2.648 N	107° 25' 10.528 W



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSecl	Target
2576.0	1.75	90.00	2575.1	0.0	64.3	0.00	0.00	-43.3	
3301.4	90.00	317.71	3040.2	344.2	-234.6	12.57	-132.28	412.5	
5746.1	90.00	317.71	3040.0	2152.6	-1879.6	0.00	0.00	2857.2	TD

Plan: Design #2 (Rosa Unit #279A/STK)

2450'

Williams Energy

Rio Arriba Co. NM

Sec35 T32N-R6W

Rosa Unit #279A

STK

Plan: Design #2

Standard Planning Report

03 June, 2011

Planning Report

Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Site Sec35 T32N-R6W
Company:	Williams Energy	TVD Reference:	WELL @ 6332 0usft (Original Well Elev)
Project:	Rio Arriba Co NM	MD Reference:	WELL @ 6332.0usft (Original Well Elev)
Site:	Sec35 T32N-R6W	North Reference:	True
Well:	Rosa Unit #279A	Survey Calculation Method:	Minimum Curvature
Wellbore:	STK		
Design:	Design #2		

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	Sec35 T32N-R6W		
Site Position:	Northings:	2,161,327 63 usft	Latitude: 36° 56' 2 648 N
From: Lat/Long	Easting:	158,166 00 usft	Longitude: 107° 25' 10 528 W
Position Uncertainty:	0 0 usft	Slot Radius: 13-3/16"	Grid Convergence: -0 70 °

Well:	Rosa Unit #279A		
Well Position	+N/-S	0 0 usft	Northings: 2,161,327 63 usft
	+E/-W	0 0 usft	Easting: 158,166 00 usft
Position Uncertainty	0 0 usft	Wellhead Elevation:	Ground Level: 6,318 0 usft

Wellbore	STK		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	06/03/11	9 78
			Dip Angle
			(°)
			Field Strength
			(nT)
			63 69
			50,896

Design	Design #2		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 2,576 0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0 0	0 0	0 0
			Direction
			(°)
			317 71

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
2,576.0	1 75	90 00	2,575 1	0 0	64 3	0 00	0 00	0 00	0 00	
3,301 4	90 00	317 71	3,040 2	344.2	-234 6	12 57	12 17	-18 24	-132 28	
5,746 1	90 00	317 71	3,040 0	2,152 6	-1,879 6	0 00	0 00	0 00	0 00 TD	

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Sec35 T32N-R6W
Company:	Williams Energy	TVD Reference:	WELL @ 6332 0usft (Original Well Elev)
Project:	Rio Arriba Co NM	MD Reference:	WELL @ 6332 0usft (Original Well Elev)
Site:	Sec35 T32N-R6W	North Reference:	True
Well:	Rosa Unit #279A	Survey Calculation Method:	Minimum Curvature
Wellbore:	STK		
Design:	Design #2		

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)	
2,576 0	1 75	90 00	2,575 1	0 0	64 3	-43 3	0 00	0 00	0 00	
STK @ 2576' MD DLS 12.57° TFO -132.28										
2,600 0	2 25	352 84	2,599.1	0 5	64 6	-43 2	12 57	2 08	-404 84	
2,625 0	5 15	332 24	2,624 1	1 9	64.1	-41 7	12.57	11 59	-82.39	
2,650 0	8.23	326 70	2,648 9	4 4	62 6	-38 8	12 57	12 32	-22 15	
2,675 0	11.34	324 18	2,673 5	7 9	60 1	-34.6	12 57	12 46	-10 09	
2,700 0	14 47	322 73	2,697 9	12 4	56.8	-29 0	12 57	12 50	-5 78	
2,725 0	17 60	321 79	2,721 9	17 9	52 6	-22 2	12 57	12 53	-3 76	
2,750 0	20 73	321 13	2,745 5	24 3	47 5	-14 0	12 57	12 54	-2 65	
2,775 0	23 87	320 64	2,768 6	31 6	41 5	-4 5	12.57	12 55	-1 98	
2,800 0	27 01	320 25	2,791.2	39 9	34 6	6 2	12 57	12 55	-1 54	
2,825 0	30 15	319 94	2,813 2	49 1	27 0	18 2	12 57	12 56	-1 24	
2,850 0	33 29	319 68	2,834 4	59 1	18 5	31 3	12 57	12 56	-1 03	
2,875 0	36 43	319.46	2,854 9	70 0	9 2	45 6	12 57	12.56	-0 87	
2,900 0	39 57	319 28	2,874 6	81.7	-0 8	61 0	12 57	12 56	-0 75	
2,925 0	42 71	319.11	2,893 5	94 1	-11.6	77 4	12 57	12 56	-0 66	
2,950 0	45 85	318 97	2,911 4	107 3	-23 0	94 8	12 57	12 56	-0 58	
2,975 0	48 99	318 83	2,928 3	121 2	-35 1	113 2	12 57	12 56	-0 52	
3,000 0	52 13	318 71	2,944 2	135 7	-47 8	132 5	12 57	12 56	-0 48	
3,025 0	55 27	318 61	2,959 0	150 8	-61 1	152 7	12.57	12 57	-0 44	
3,050 0	58 41	318 50	2,972 6	166 5	-75 0	173 6	12 57	12 57	-0 41	
3,075 0	61 55	318 41	2,985 1	182 7	-89 3	195 3	12.57	12 57	-0 38	
3,100 0	64 70	318 32	2,996 4	199 4	-104 1	217 6	12 57	12 57	-0 36	
3,125 0	67 84	318 24	3,006 5	216 4	-119 4	240 4	12 57	12 57	-0 34	
3,150 0	70 98	318 15	3,015 3	233 9	-135 0	263 8	12 57	12 57	-0 32	
3,175 0	74 12	318 08	3,022 8	251 6	-150 9	287 7	12 57	12 57	-0 31	
3,200 0	77 26	318 00	3,029 0	269 6	-167 1	311 9	12 57	12 57	-0 30	
3,225 0	80 40	317 93	3,033 8	287 9	-183 5	336 4	12 57	12 57	-0 30	
3,250 0	83 55	317 85	3,037 3	306 2	-200 1	361 2	12 57	12 57	-0 29	
3,275 0	86 69	317 78	3,039 4	324 7	-216 8	386 1	12 57	12 57	-0 29	
3,301 4	90 00	317 71	3,040 2	344 2	-234 6	412 5	12 57	12 57	-0 28	
"LAND" 90.00° @ 3301' MD										
3,400 0	90 00	317 71	3,040 2	417 1	-300 9	511 1	0 00	0 00	0 00	
3,500 0	90 00	317 71	3,040 2	491.1	-368 2	611 1	0 00	0 00	0 00	
3,600 0	90.00	317 71	3,040 2	565 1	-435 5	711 1	0 00	0 00	0 00	
3,700 0	90 00	317 71	3,040 2	639 1	-502 8	811 1	0 00	0 00	0 00	
3,800 0	90 00	317 71	3,040 1	713 0	-570 1	911 1	0 00	0 00	0 00	
3,900 0	90 00	317 71	3,040 1	787 0	-637 4	1,011 1	0 00	0 00	0 00	
4,000 0	90 00	317 71	3,040 1	861 0	-704 7	1,111 1	0 00	0 00	0 00	
4,100 0	90 00	317 71	3,040 1	935 0	-772 0	1,211 1	0 00	0 00	0 00	
4,200 0	90 00	317 71	3,040 1	1,008 9	-839 3	1,311 1	0 00	0 00	0 00	
4,300.0	90 00	317 71	3,040 1	1,082.9	-906 5	1,411 1	0 00	0 00	0 00	
4,400 0	90 00	317 71	3,040 1	1,156 9	-973 8	1,511 1	0 00	0 00	0 00	
4,500 0	90 00	317 71	3,040 1	1,230 8	-1,041 1	1,611 1	0 00	0 00	0 00	
4,600 0	90 00	317 71	3,040 1	1,304 8	-1,108 4	1,711 1	0 00	0 00	0 00	
4,700 0	90 00	317 71	3,040 1	1,378 8	-1,175 7	1,811 1	0 00	0 00	0 00	
4,800 0	90 00	317 71	3,040 1	1,452 8	-1,243 0	1,911 1	0 00	0 00	0 00	
4,900.0	90 00	317 71	3,040 1	1,526 7	-1,310 3	2,011 1	0 00	0 00	0 00	
5,000 0	90 00	317 71	3,040 1	1,600 7	-1,377.6	2,111 1	0 00	0 00	0 00	
5,100 0	90 00	317 71	3,040 0	1,674 7	-1,444 9	2,211 1	0 00	0 00	0 00	
5,200 0	90 00	317 71	3,040 0	1,748 6	-1,512 2	2,311 1	0 00	0 00	0 00	
5,300 0	90 00	317 71	3,040 0	1,822 6	-1,579 5	2,411 1	0 00	0 00	0 00	
5,400 0	90 00	317 71	3,040 0	1,896 6	-1,646 7	2,511 1	0 00	0 00	0 00	
5,500 0	90 00	317 71	3,040 0	1,970 6	-1,714 0	2,611 1	0 00	0 00	0 00	

Planning Report

Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Site: Sec35 T32N-R6W
Company:	Williams Energy	TVD Reference:	WELL @ 6332 0usft (Original Well Elev)
Project:	Rio Arriba Co NM	MD Reference:	WELL @ 6332 0usft (Original Well Elev)
Site:	Sec35 T32N-R6W	North Reference:	True
Well:	Rosa Unit #279A	Survey Calculation Method:	Minimum Curvature
Wellbore:	STK		
Design:	Design #2		

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)
5,600 0	90 00	317 71	3,040 0	2,044 5	-1,781.3	2,711 1	0 00	0 00	0 00
5,700 0	90 00	317 71	3,040 0	2,118 5	-1,848 6	2,811 1	0 00	0 00	0 00
5,746 1	90 00	317 71	3,040 0	2,152 6	-1,879 6	2,857.2	0 00	0 00	0 00

"TD" 90.00° @ 5746'MD

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
91B		0 00	0 00	1 0	-602 9	415 4	2,160,719 63	158,573 94	36° 55' 56 687 N	107° 25' 5 412 W
- plan misses target center by 2667 0usft at 2576 0usft MD (2575 1 TVD, 0 0 N, 64 3 E)										
- Circle (radius 50 0)										
44B		0 00	0 00	1 0	3,042 9	-2,152 0	2,164,396 66	156,051 51	36° 56' 32 734 N	107° 25' 37 034 W
- plan misses target center by 3178 4usft at 5746.1usft MD (3040 0 TVD, 2152 6 N, -1879 6 E)										
- Circle (radius 50.0)										
91C		0 00	0 00	1 0	1,175.0	-1,867.4	2,162,525 46	156,313 12	36° 56' 14 266 N	107° 25' 33 528 W
- plan misses target center by 3107 5usft at 5015.0usft MD (3040 1 TVD, 1611 8 N, -1387 6 E)										
- Circle (radius 50 0)										
TD		0 00	0 00	3,040 0	2,152 6	-1,879 6	2,163,503 14	156,312 90	36° 56' 23.932 N	107° 25' 33 679 W
- plan hits target center										
- Point										
LAND		0 00	0 00	3,040 0	344 2	-234 6	2,161,674 68	157,935 64	36° 56' 6 052 N	107° 25' 13 417 W
- plan misses target center by 0 2usft at 3301 4usft MD (3040 2 TVD, 344 2 N, -234 6 E)										
- Point										

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
2,576 0	2,575 1	0 0	64 3	STK @ 2576'MD DLS 12 57° TFO -132 28
3,301 4	3,040 2	344 2	-234.6	"LAND" 90 00° @ 3301'MD
5,746 1	3,040 0	2,152 6	-1,879 6	"TD" 90 00° @ 5746'MD