

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

OCT 11 2011

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

Farming on Field Office
Bureau of Land Management
Lease Serial No. SF-078766

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 1572' FSL & 1327' FWL – BHL 850' FNL & 2481' FWL, Sec 22, 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 #332

9 API Well No
30-039-24929

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

☐ Subsequent Report

☐ Final Abandonment Notice

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to
Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☒ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☐ Other

RCVD OCT 11 2011
OIL CONS. DIV.
DIST. 3

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 recompleate 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 recompleation 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.

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

Signature

Date 10/10/11

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Troy L. Salvors

Title PE

Date 10/17/2011

Office FFO

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.

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

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 30-039-24929		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 17033	*Property Name ROSA UNIT		*Well Number 332
*GRID No 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6238'

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
K	22	31N	6W		1572	SOUTH	1327	WEST	RIO ARRIBA

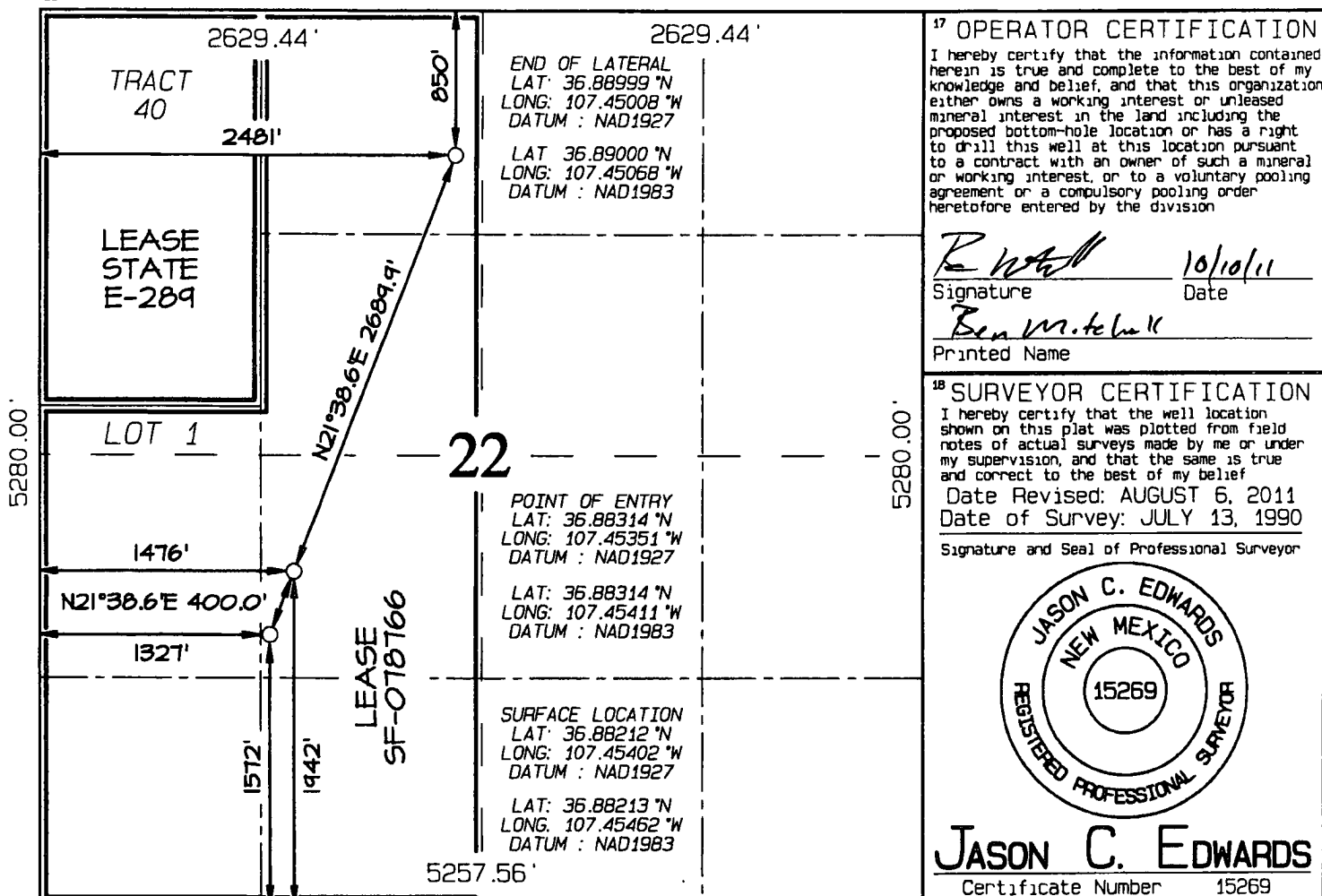
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	22	31N	6W		850	NORTH	2481	WEST	RIO ARRIBA

¹² Dedicated Acres 319.83 320.0 Acres - (W/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. SD-201120
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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

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WILLIAMS PRODUCTION COMPANY

Operations Plan

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

DATE: 10/7/2011

WELLNAME: Rosa Unit #332 **FIELD:** Basin Fruitland Coal

BH LOCATION: NENE^{NW} Sec. 22-T31N-6W **SURFACE:** BLM
Rio Arriba, NM

ELEVATION: 6,231' GR **MINERALS:** BLM

TOTAL DEPTH: 5,953' **LEASE #** SF-078766

API#: 30-039-24929

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

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

NAME		TVD	MD
Kirtland		2,400	2,400
Fruitland		2,910	
Top Target Coal		3,081	3,368
Bottom Target Coal		3,097	
Picture Cliffs		3,110	
TD		3,080	5,953

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 2,580' 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"	230'	9-5/8"	36# J-55
Intermediate	8-3/4"	2,929'	7"	20# K-55
Prod. Liner	6-1/4"	2,744' - 3,167'	4-1/2"	10 5#K-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"	230'	9-5/8"	36# J-55
Intermediate	8-3/4"	2,929'	7"	20# K-55
Prod. Liner	6-1/4"	2,744' - 3,167'	4-1/2"	10 5#K-55
Prod Liner (sidetrack)	6-1/4"	~2,590' - 5,953'	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 *Perfs in Prod formation only*

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 3,122' MD inside of motherbore.

Brian Alleman
 Brian Alleman
 Drilling Engineer II



Williams Energy

Rosa Unit #332 STK
Sec22 T31N-R06W - #332

Rio Arriba Co. NM

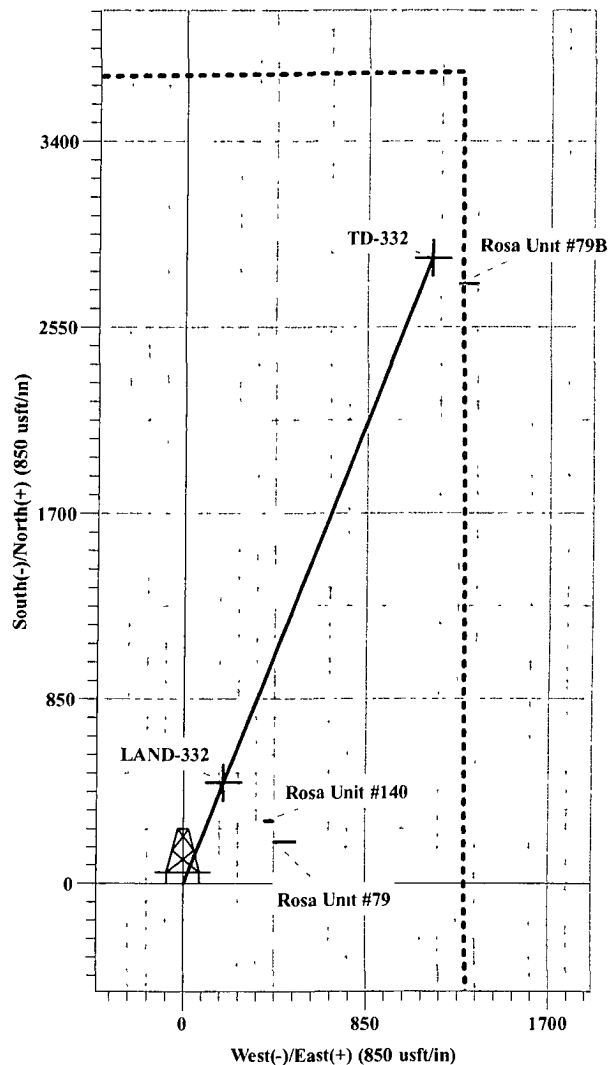
GL: 6238' KB: 14'



A Schlumberger Company

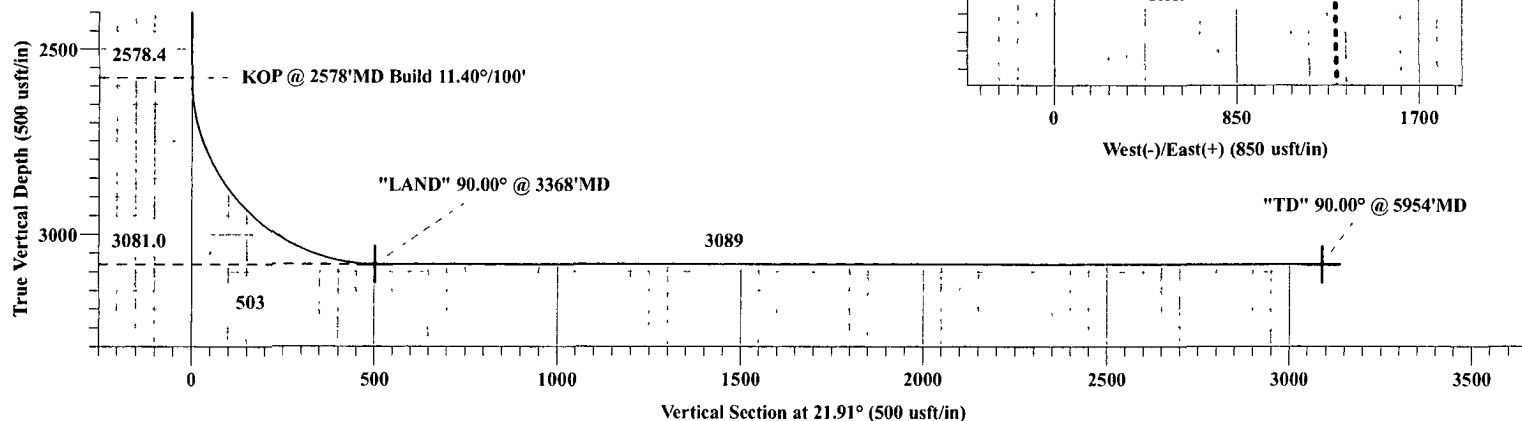
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
LAND-332	3081.0	466.3	187.5	2143003.66	148057.74	Point
TD-332	3081.0	2865.5	1152.3	2145390.48	149052.77	Point



WELL DETAILS Rosa Unit #332 STK

		6238.0	
Northing	Easting	Latitude	Longitude
2142539.77	147864.38	36° 52' 55.632 N	107° 27' 14.472 W



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2578.4	0.00	0.00	2578.4	0.0	0.0	0.00	0.00	0.0	
3367.9	90.00	21.91	3081.0	466.3	187.5	11.40	21.91	502.6	
5953.8	90.00	21.91	3081.0	2865.5	1152.3	0.00	0.00	3088.5	TD-332

Plan: Design #2 (Rosa Unit #332 STK/Wellbore #1)

Created By: Frank C Scardino

Date: 10/07/2011

Williams Energy

Rio Arriba Co. NM

Sec22 T31N-R06W - #332

Rosa Unit #332 STK

Wellbore #1

Plan: Design #2

Standard Planning Report

07 October, 2011

Planning Report

Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Site Sec22 T31N-R06W - #332
Company:	Williams Energy	TVD Reference:	WELL @ 6252 0usft (Original Well Elev)
Project:	Rio Arriba Co NM	MD Reference:	WELL @ 6252 0usft (Original Well Elev)
Site:	Sec22 T31N-R06W - #332	North Reference:	True
Well:	Rosa Unit #332 STK	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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:	Sec22 T31N-R06W - #332		
Site Position:	Lat/Long	Northing:	2,142,539 76 usft
From		Easting:	147,864 38 usft
Position Uncertainty	0 0 usft	Slot Radius:	13-3/16 "
		Latitude:	36° 52' 55 632 N
		Longitude:	107° 27' 14 472 W
		Grid Convergence:	-0 72 "

Well:	Rosa Unit #332 STK		
Well Position	+N/-S	0 0 usft	Northing:
	+E/-W	0 0 usft	Easting:
Position Uncertainty	0 0 usft	Wellhead Elevation:	Ground Level
			6,238 0 usft

Wellbore:	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	10/06/11	9 74
			Dip Angle
			(°)
			63 63
			Field Strength
			(nT)
			50,828

Design	Design #2		
Audit Notes			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			0 0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0 0	0 0	0 0
			Direction
			(°)
			21 91

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	
2,578 4	0 00	0 00	2,578 4	0 0	0 0	0 00	0 00	0 00	0 00	
3,367 9	90 00	21 91	3,081 0	466 3	187 5	11 40	11 40	0 00	21 91	
5,953 8	90 00	21 91	3,081 0	2,865 5	1,152 3	0 00	0 00	0 00	0 00	TD-332

Planning Report

Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Site Sec22 T31N-R06W - #332
Company:	Williams Energy	TVD Reference:	WELL @ 6252 0usft (Original Well Elev)
Project:	Rio Arriba Co NM	MD Reference:	WELL @ 6252 0usft (Original Well Elev)
Site:	Sec22 T31N-R06W - #332	North Reference:	True
Well:	Rosa Unit #332 STK	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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)	
2,578.4	0.00	0.00	2,578.4	0.0	0.0	0.0	0.00	0.00	0.00	
KOP @ 2578'MD Build 11.40°/100'										
2,600.0	2.46	21.91	2,600.0	0.4	0.2	0.5	11.40	11.40	0.00	
2,650.0	8.16	21.91	2,649.8	4.7	1.9	5.1	11.40	11.40	0.00	
2,700.0	13.86	21.91	2,698.8	13.6	5.5	14.6	11.40	11.40	0.00	
2,750.0	19.56	21.91	2,746.7	26.9	10.8	29.0	11.40	11.40	0.00	
2,800.0	25.26	21.91	2,792.9	44.6	17.9	48.1	11.40	11.40	0.00	
2,850.0	30.96	21.91	2,837.0	66.4	26.7	71.6	11.40	11.40	0.00	
2,900.0	36.66	21.91	2,878.5	92.2	37.1	99.4	11.40	11.40	0.00	
2,950.0	42.36	21.91	2,917.1	121.7	49.0	131.2	11.40	11.40	0.00	
3,000.0	48.06	21.91	2,952.3	154.7	62.2	166.7	11.40	11.40	0.00	
3,050.0	53.76	21.91	2,983.8	190.7	76.7	205.5	11.40	11.40	0.00	
3,100.0	59.46	21.91	3,011.3	229.4	92.2	247.2	11.40	11.40	0.00	
3,150.0	65.16	21.91	3,034.5	270.4	108.8	291.5	11.40	11.40	0.00	
3,200.0	70.86	21.91	3,053.2	313.4	126.0	337.8	11.40	11.40	0.00	
3,250.0	76.56	21.91	3,067.2	357.9	143.9	385.8	11.40	11.40	0.00	
3,300.0	82.26	21.91	3,076.4	403.5	162.3	434.9	11.40	11.40	0.00	
3,350.0	87.96	21.91	3,080.7	449.7	180.9	484.7	11.40	11.40	0.00	
3,367.9	90.00	21.91	3,081.0	466.3	187.5	502.6	11.40	11.40	0.00	
"LAND" 90.00° @ 3368'MD										
3,400.0	90.00	21.91	3,081.0	496.1	199.5	534.7	0.00	0.00	0.00	
3,500.0	90.00	21.91	3,081.0	588.9	236.8	634.7	0.00	0.00	0.00	
3,600.0	90.00	21.91	3,081.0	681.7	274.1	734.7	0.00	0.00	0.00	
3,700.0	90.00	21.91	3,081.0	774.4	311.4	834.7	0.00	0.00	0.00	
3,800.0	90.00	21.91	3,081.0	867.2	348.7	934.7	0.00	0.00	0.00	
3,900.0	90.00	21.91	3,081.0	960.0	386.1	1,034.7	0.00	0.00	0.00	
4,000.0	90.00	21.91	3,081.0	1,052.8	423.4	1,134.7	0.00	0.00	0.00	
4,100.0	90.00	21.91	3,081.0	1,145.6	460.7	1,234.7	0.00	0.00	0.00	
4,200.0	90.00	21.91	3,081.0	1,238.3	498.0	1,334.7	0.00	0.00	0.00	
4,300.0	90.00	21.91	3,081.0	1,331.1	535.3	1,434.7	0.00	0.00	0.00	
4,400.0	90.00	21.91	3,081.0	1,423.9	572.6	1,534.7	0.00	0.00	0.00	
4,500.0	90.00	21.91	3,081.0	1,516.7	609.9	1,634.7	0.00	0.00	0.00	
4,600.0	90.00	21.91	3,081.0	1,609.4	647.2	1,734.7	0.00	0.00	0.00	
4,700.0	90.00	21.91	3,081.0	1,702.2	684.5	1,834.7	0.00	0.00	0.00	
4,800.0	90.00	21.91	3,081.0	1,795.0	721.9	1,934.7	0.00	0.00	0.00	
4,900.0	90.00	21.91	3,081.0	1,887.8	759.2	2,034.7	0.00	0.00	0.00	
5,000.0	90.00	21.91	3,081.0	1,980.6	796.5	2,134.7	0.00	0.00	0.00	
5,100.0	90.00	21.91	3,081.0	2,073.3	833.8	2,234.7	0.00	0.00	0.00	
5,200.0	90.00	21.91	3,081.0	2,166.1	871.1	2,334.7	0.00	0.00	0.00	
5,300.0	90.00	21.91	3,081.0	2,258.9	908.4	2,434.7	0.00	0.00	0.00	
5,400.0	90.00	21.91	3,081.0	2,351.7	945.7	2,534.7	0.00	0.00	0.00	
5,500.0	90.00	21.91	3,081.0	2,444.5	983.0	2,634.7	0.00	0.00	0.00	
5,600.0	90.00	21.91	3,081.0	2,537.2	1,020.3	2,734.7	0.00	0.00	0.00	
5,700.0	90.00	21.91	3,081.0	2,630.0	1,057.6	2,834.7	0.00	0.00	0.00	
5,800.0	90.00	21.91	3,081.0	2,722.8	1,095.0	2,934.7	0.00	0.00	0.00	
5,900.0	90.00	21.91	3,081.0	2,815.6	1,132.3	3,034.7	0.00	0.00	0.00	
5,953.8	90.00	21.91	3,081.0	2,865.5	1,152.3	3,088.5	0.00	0.00	0.00	
"TD" 90.00° @ 5954'MD										

Planning Report

Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Site Sec22 T31N-R06W - #332
Company:	Williams Energy	TVD Reference:	WELL @ 6252 0usft (Original Well Elev)
Project:	Rio Arriba Co NM	MD Reference:	WELL @ 6252 0usft (Original Well Elev)
Site:	Sec22 T31N-R06W - #332	North Reference:	True
Well:	Rosa Unit #332 STK	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Design Targets										
Target Name	hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Shape		(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
TD-332		0 00	0 00	3,081 0	2,865 5	1,152 3	2,145,390 48	149,052 77	36° 53' 23 964 N	107° 27' 0 288 W
- plan hits target center										
- Point										
LAND-332		0 00	0 00	3,081 0	466 3	187 5	2,143,003 66	148,057 75	36° 53' 0 243 N	107° 27' 12 164 W
- plan hits target center										
- Point										

Plan Annotations					
Measured	Vertical	Local Coordinates			
Depth	Depth	+N/-S	+E/-W		
(usft)	(usft)	(usft)	(usft)	Comment	
2,578 4	2,578 4	0 0	0 0	KOP @ 2578'MD Build 11 40"/100'	
3,367 9	3,081 0	466 3	187 5	"LAND" 90 00° @ 3368'MD	
5,953 8	3,081 0	2,865 5	1,152 3	"TD" 90 00° @ 5954'MD	