Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
JUN 15 2011
Farmington Field Office
Bureau of Land Management

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

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	5. Lease Serial No NMSF-078772 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 #242A
2. Name of Operator Williams Production Company, LLC	9. API Well No 30-045-31888
3a. Address PO Box 640 Aztec, NM 87410 3b. Phone No. *(include area code)* 505-634-4208	10. Field and Pool or Exploratory Area Basin Fruitland Coal
4. Location of Well *(Footage, Sec., T,R,M., or Survey Description)* Sur. 1095' FNL & 1922' FWL, BHL: 1300' FSL & 2546' FWL, sec 33, T32N, R6W	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 recomplete 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 recompletion 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

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

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.

14 I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)* Larry Higgins	Title Permit Supervisor
Signature Larry Higgins	Date 6/14/11

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Troy L Salyers	Title PE	Date 6/21/2011
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

NMOCD

RCVD JUN 22 '11
OIL CONS. DIV.
DIST. 3

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

1 API Number	2 Pool Code	3 Pool Name
30-045-31888	71629	BASIN FRUITLAND COAL

4 Property Code	5 Property Name	6 Well Number
17033	ROSA UNIT	242A

7 OGRID No.	8 Operator Name	9 Elevation
120782	WILLIAMS PRODUCTION COMPANY	6469'

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
C	33	32N	6W		1095	NORTH	1932	WEST	SAN JUAN

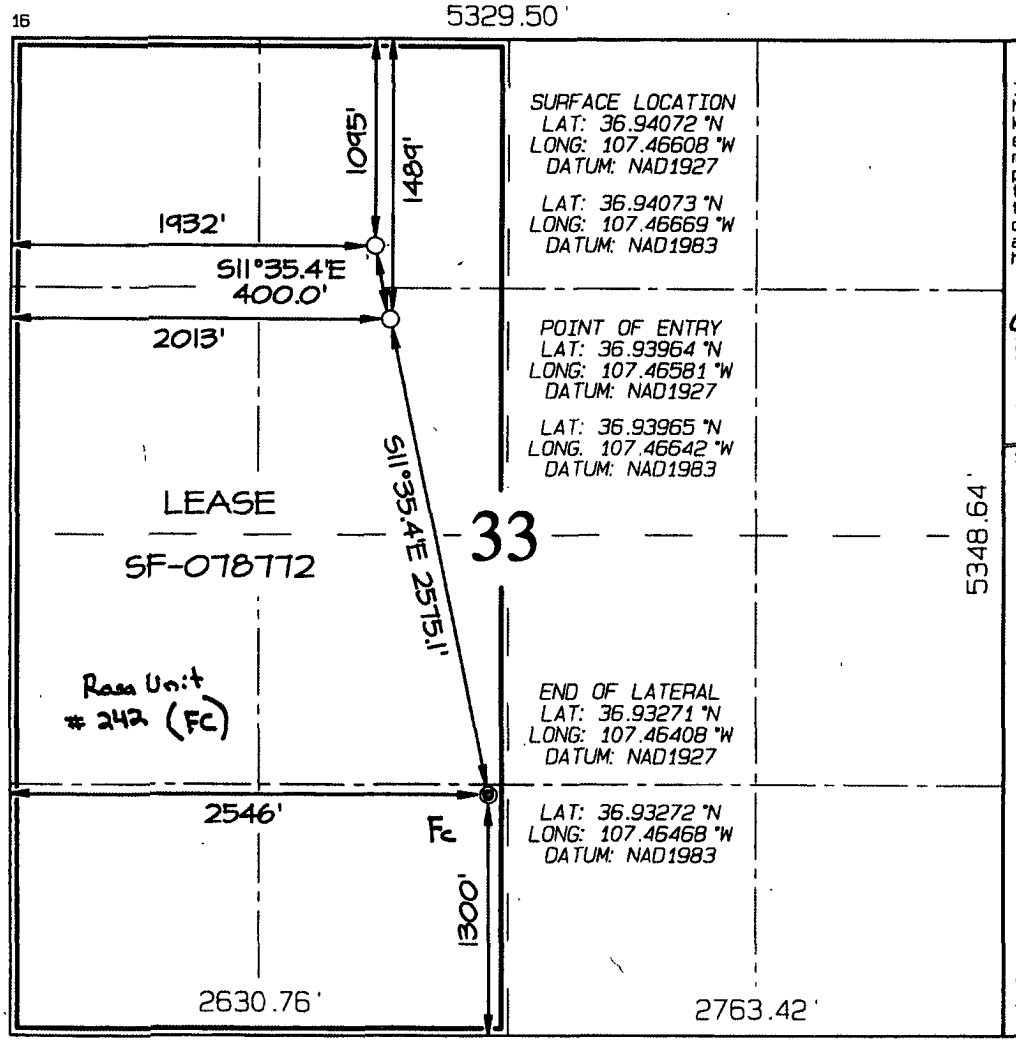
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	33	32N	6W		1300	SOUTH	2546	WEST	SAN JUAN

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

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



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 6-14-11
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 of Revisions: JUNE 2, 2011
Survey Date: DECEMBER 1, 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:	**6/14/2011**		
WELLNAME:	Rosa Unit #242A	**FIELD:**	Basin Fruitland Coal
BH LOCATION:	SESW Sec. 33-T32N-6W San Juan, NM	**SURFACE:**	BLM
ELEVATION:	6,469' GR	**MINERALS:**	BLM
TOTAL DEPTH:	**5,911'**	**LEASE #**	SF-078772
API#:	30-045-31888		

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

NAME		TVD	MD
Kirtland		2,386	2,386
Fruitland		2,998	3,031
Top Target Coal		3,117	3,351
Bottom Target Coal		3,144	
Picture Cliffs		3,202	
TD		3,117	**5,911**

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):

CASING TYPE	HOLE SIZE	DEPTH (MD)	CASING SIZE	WT. & GRADE
Surface	12-1/4"	317'	9-5/8"	36# K-55
Intermediate	8-3/4"	3,078'	7"	20# K-55
Prod. Liner	6-1/4"	3,007'- 3,281'	5-1/2"	17# N-80

B. CASING PROGRAM (after sidetrack):

CASING TYPE	HOLE SIZE	DEPTH (MD)	CASING SIZE	WT. & GRADE
Surface	12-1/4"	317'	9-5/8"	36# K-55
Intermediate	8-3/4"	3,078'	7"	20# K-55
Prod. Liner (motherbore)	9-1/2"	3,007'- 3,281'	5-1/2"	17# N-80
Prod. Liner (sidetrack)	6-1/4"	~2,720'-5,911'	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:

1. PRODUCTION LINER (sidetrack): No centralization

D. CEMENTING:

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

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

V. COMPLETION

A. STIMULATION

1. No stimulation

B. RUNNING TUBING

1. *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.

Larry Higgins
Permit Supervisor

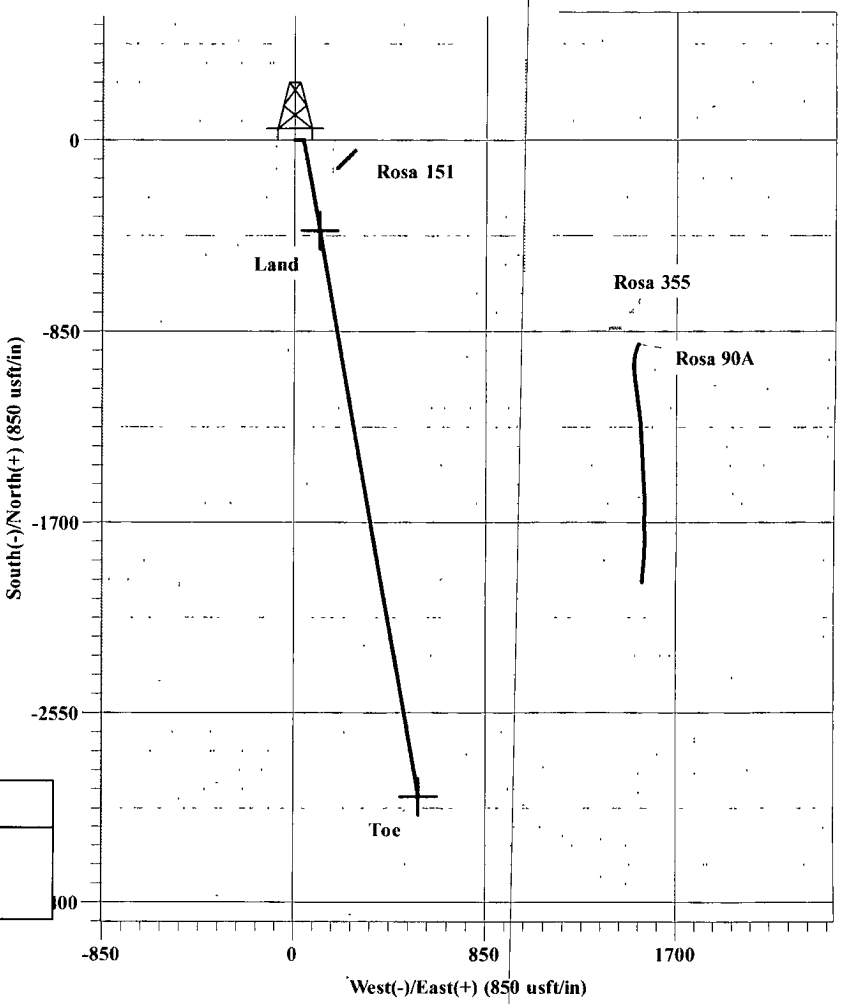
Williams Energy

Rosa Unit #242A - ST01
Rosa Unit #242A
San Juan Co. NM
GL: 6467' KB: 14'

PATHFINDER
A Schlumberger Company

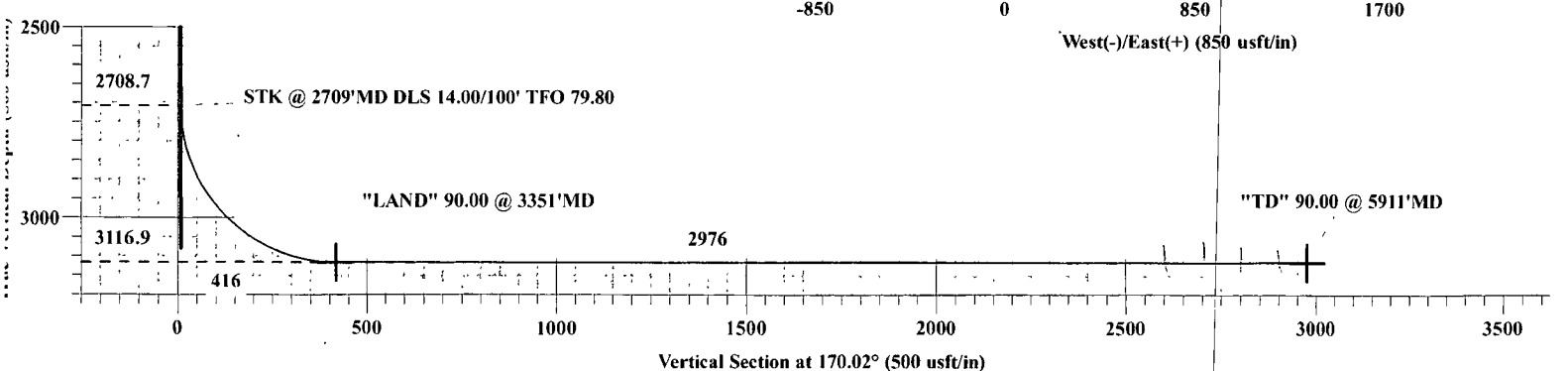
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Land	3117 0	-402 2	113.0	2161494 66	607440 88	Point
Toe	3117 0	-2923.8	556.5	2158974.86	607894.13	Point



WELL DETAILS: Rosa Unit #242A - ST01

Northing	Easting	6467.0 Latitude	Longitude
2161896.46	607326.38	36° 56' 26.606 N	107° 27' 57.895 W



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
2709 0	0.80	90.22	2708 7	-0 1	36 5	0 00	0 00	6.5	
3350.8	90 00	170.02	3116 9	-402 2	113 0	14 00	79 80	415 7	
5911.1	90.00	170.02	3117.0	-2923.8	556.5	0.00	0 00	2976.0	Toe

Plan: Design #1 (Rosa Unit #242A - ST01/STK)

6/9/2011

Database:	EDM 5000 1 Single User Db	**Local Co-ordinate Reference:**	Site Rosa Unit #242A
Company:	Williams Energy	**TVD Reference:**	WELL @ 6481.0usft (Original Well Elev)
Project:	San Juan Co NM	**MD Reference:**	WELL @ 6481.0usft (Original Well Elev)
Site:	Rosa Unit #242A	**North Reference:**	True
Well:	Rosa Unit #242A - ST01	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	STK		
Design:	Design #1		

Project San Juan 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 West 3003		

Site Rosa Unit #242A

Site Position:		**Northing:**	2,161,896 46 usft	**Latitude:**	36° 56' 26 606 N
From:	Lat/Long	**Easting:**	607,326 38 usft	**Longitude:**	107° 27' 57.895 W
Position Uncertainty:	0 0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0 22 °

Well Rosa Unit #242A - ST01

Well Position	**+N/-S**	0 0 usft	**Northing:**	2,161,896 46 usft	**Latitude:**	36° 56' 26 606 N
	+E/-W	0 0 usft	**Easting:**	607,326.38 usft	**Longitude:**	107° 27' 57 895 W
Position Uncertainty		0 0 usft	**Wellhead Elevation:**		**Ground Level:**	6,467 0 usft

Wellbore STK

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	06/09/11	9 80	63 69	50,890

Design Design #1

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	2,709 0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0 0	0 0	0 0	170 02

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
2,709 0	0 80	90 22	2,708 7	-0 1	36.5	0 00	0 00	0.00	0 00	
3,350 8	90 00	170 02	3,116 9	-402 2	113 0	14 00	13 90	12 43	79 80	
5,911 1	90 00	170 02	3,117 0	-2,923 8	556 5	0 00	0 00	0 00	0 00	Toe

Database:	EDM 5000 1 Single User Db	**Local Co-ordinate Reference:**	Site Rosa Unit #242A
Company:	Williams Energy	**TVD Reference:**	WELL @ 6481 0usft (Original Well Elev)
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Site:	Rosa Unit #242A	**North Reference:**	True
Well:	Rosa Unit #242A - ST01	**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)
2,709 0	0 80	90 22	2,708.7	-0 1	36 5	6 5	0 05	-0 05	0 00
STK @ 2709'MD DLS 14.00/100' TFO 79.80									
2,725 0	2 51	151 64	2,724 7	-0 4	36 8	6 8	14 00	10.66	383 89
2,750 0	5 94	162 38	2,749 7	-2 2	37 4	8 6	14 00	13 70	42 95
2,775 0	9 42	165 24	2,774.4	-5 4	38 4	11 9	14.00	13 92	11 44
2,800 0	12 91	166 56	2,799 0	-10 1	39 5	16.8	14 00	13 96	5 29
2,825 0	16 40	167 33	2,823 1	-16 2	40 9	23.1	14 00	13 98	3 07
2,850 0	19 90	167 83	2,846.9	-23 8	42 6	30 9	14 00	13 99	2 01
2,875 0	23 40	168 19	2,870 1	-32 9	44 5	40 1	14 00	13 99	1 43
2,900 0	26 89	168 46	2,892 8	-43 3	46 7	50 7	14.00	13 99	1 08
2,925 0	30 39	168 67	2,914 7	-55.0	49.1	62 7	14 00	13 99	0 85
2,950 0	33 89	168 84	2,935.9	-68 0	51 6	76 0	14 00	14 00	0 69
2,975 0	37 39	168 99	2,956 2	-82 3	54 4	90 5	14 00	14 00	0 57
3,000 0	40 89	169 11	2,975 6	-97 8	57 4	106 3	14 00	14 00	0 49
3,025 0	44 39	169 21	2,993 9	-114 5	60 6	123 2	14 00	14 00	0 42
3,050 0	47 89	169 31	3,011 3	-132 2	64.0	141 3	14.00	14 00	0.37
3,075 0	51 39	169 39	3,027 5	-150 9	67 5	160 3	14 00	14 00	0 33
3,100 0	54 89	169 47	3,042 4	-170 5	71 2	180 3	14 00	14 00	0 30
3,125 0	58 39	169 54	3,056 2	-191 1	75 0	201 2	14 00	14.00	0 28
3,150 0	61 89	169 60	3,068 6	-212 4	78 9	222 8	14 00	14 00	0 26
3,175 0	65 38	169 66	3,079.7	-234 4	82 9	245 2	14 00	14.00	0 24
3,200 0	68 88	169 72	3,089 5	-257 1	87 0	268.3	14 00	14 00	0.23
3,225 0	72 38	169 77	3,097 7	-280 3	91.2	291 9	14 00	14 00	0 22
3,250 0	75 88	169 82	3,104 6	-303 9	95 5	315 9	14 00	14 00	0 21
3,275 0	79 38	169 88	3,109 9	-328 0	99 8	340 3	14 00	14 00	0 20
3,300 0	82 88	169 93	3,113 8	-352 3	104 1	365 0	14 00	14 00	0 20
3,325 0	86 38	169 97	3,116 1	-376 8	108 5	389 9	14.00	14 00	0 20
3,350 8	90 00	170 02	3,116 9	-402 2	113 0	415 7	14 00	14 00	0 19
"LAND" 90.00 @ 3351'MD									
3,400 0	90 00	170 02	3,116.9	-450 6	121 5	464 9	0 00	0 00	0 00
3,500 0	90 00	170 02	3,116 9	-549 1	138 8	564 9	0 00	0 00	0 00
3,600 0	90 00	170 02	3,116 9	-647 6	156 1	664 9	0 00	0 00	0.00
3,700 0	90 00	170 02	3,116 9	-746 1	173 5	764 9	0 00	0 00	0 00
3,800 0	90 00	170 02	3,116 9	-844.6	190 8	864 9	0 00	0 00	0 00
3,900 0	90 00	170 02	3,116 9	-943 1	208 1	964 9	0 00	0 00	0 00
4,000 0	90 00	170 02	3,117 0	-1,041 6	225 4	1,064 9	0.00	0 00	0 00
4,100 0	90 00	170 02	3,117 0	-1,140 1	242 7	1,164 9	0 00	0 00	0 00
4,200 0	90 00	170 02	3,117 0	-1,238 6	260 1	1,264 9	0 00	0.00	0 00
4,300 0	90 00	170 02	3,117 0	-1,337 0	277 4	1,364 9	0 00	0 00	0.00
4,400 0	90 00	170 02	3,117 0	-1,435 5	294 7	1,464 9	0 00	0 00	0 00
4,500 0	90 00	170 02	3,117 0	-1,534 0	312 0	1,564 9	0 00	0 00	0 00
4,600 0	90 00	170 02	3,117 0	-1,632 5	329 4	1,664.9	0 00	0 00	0 00
4,700 0	90 00	170 02	3,117 0	-1,731.0	346 7	1,764 9	0 00	0 00	0 00
4,800 0	90 00	170 02	3,117 0	-1,829 5	364 0	1,864 9	0 00	0 00	0 00
4,900 0	90 00	170 02	3,117 0	-1,928 0	381 3	1,964 9	0 00	0 00	0 00
5,000 0	90 00	170 02	3,117 0	-2,026 5	398 7	2,064 9	0 00	0.00	0 00
5,100 0	90 00	170 02	3,117 0	-2,124.9	416 0	2,164 9	0 00	0 00	0 00
5,200 0	90 00	170 02	3,117 0	-2,223 4	433.3	2,264 9	0 00	0 00	0 00
5,300 0	90 00	170 02	3,117 0	-2,321 9	450 6	2,364 9	0 00	0.00	0 00
5,400 0	90 00	170.02	3,117 0	-2,420 4	468 0	2,464 9	0 00	0.00	0 00
5,500 0	90 00	170 02	3,117 0	-2,518 9	485 3	2,564 9	0 00	0 00	0 00
5,600 0	90 00	170 02	3,117 0	-2,617 4	502 6	2,664 9	0 00	0 00	0 00
5,700 0	90 00	170 02	3,117 0	-2,715 9	519 9	2,764 9	0 00	0 00	0 00
5,800 0	90 00	170 02	3,117 0	-2,814 4	537 2	2,864.9	0 00	0 00	0 00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Site Rosa Unit #242A
Company:	Williams Energy	**TVD Reference:**	WELL @ 6481 0usft (Original Well Elev)
Project:	San Juan Co NM	**MD Reference:**	WELL @ 6481 0usft (Original Well Elev)
Site:	Rosa Unit #242A	**North Reference:**	True
Well:	Rosa Unit #242A - ST01	**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)
5,900 0	90 00	170 02	3,117 0	-2,912 8	554.6	2,964 9	0 00	0 00	0 00
5,911 1	90 00	170 02	3,117 0	-2,923 8	556 5	2,976 0	0 00	0 00	0 00
"TD" 90.00 @ 5911'MD									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Toe	0 00	0 22	3,117 0	-2,923 8	556 5	2,158,974 86	607,894 13	36° 55' 57 695 N	107° 27' 51 041 W
- plan hits target center - Point									
Land	0 00	0 22	3,117 0	-402 2	113 0	2,161,494 66	607,440 88	36° 56' 22 629 N	107° 27' 56 504 W
- plan misses target center by 0 1usft at 3350 8usft MD (3116 9 TVD, -402.2 N, 113 0 E) - Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
2,709 0	2,708 7	-0 1	36 5	STK @ 2709'MD DLS 14 00/100' TFO 79 80
3,350 8	3,116 9	-402.2	113 0	"LAND" 90 00 @ 3351'MD
5,911 1	3,117 0	-2,923 8	556 5	"TD" 90 00 @ 5911'MD