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District II
811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

RECEIVED

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

OIL CONSERVATION DIVISION

NOV 22 2011

1220 South St. Francis Drive
Santa Fe, NM 87505

FARMINGTON FIELD OFFICE
Bureau of Land Management

RCVD NOV 29 '11

WELL LOCATION AND ACREAGE DEDICATION PLAT

"As Drilled"

*API Number 30-039-29546	*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 17033	*Property Name ROSA UNIT	*Well Number 260A
*OGRID No 120782	*Operator Name WILLIAMS PRODUCTION COMPANY	*Elevation 6376'

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
0	21	31N	6W		807	SOUTH	1969	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
I	21	31N	6W		2337	SOUTH	361	EAST	RIO ARriba

12 Dedicated Acres 320.0 Acres - (S/2)	13 Joint or Infill	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

16	5280.00'	TRACT 40	2640.00'	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 Signature: <u>Heather R. Wiley</u> Date: <u>11/22/11</u> Printed Name: <u>Heather R. Wiley</u> E-mail Address: <u>heather.wiley@williams.com</u>
	SURFACE LOCATION LAT: 36.87999°N LONG: 107.46528°W DATUM: NAD1927 LAT: 36.88000°N LONG: 107.46588°W DATUM: NAD1983	POINT OF ENTRY LAT: 36.88146°N LONG: 107.46361°W DATUM: NAD1927 LAT: 36.88147°N LONG: 107.46421°W DATUM: NAD1983	END OF LATERAL LAT: 36.88417°N LONG: 107.45976°W DATUM: NAD1927 LAT: 36.88418°N LONG: 107.46036°W DATUM: NAD1983	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: OCTOBER 28, 2011 Survey Date: JANUARY 27, 2003 Signature and Seal of Professional Surveyor  JASON C. EDWARDS Certificate Number 15269
5280.00'	LOT 1	LOT 2	LOT 3	
	21			
	LEASE SF-078766			
	ACCEPTED FOR RECORD			
	NOV 23 2011			
	FARMINGTON FIELD OFFICE			
	BY <u>[Signature]</u>			



Williams Energy

*Rosa Unit #260A-STK
Sec21 T31N-R06W - 260A
Rio Arriba Co. NM*

GL: 6376' KB: 14'

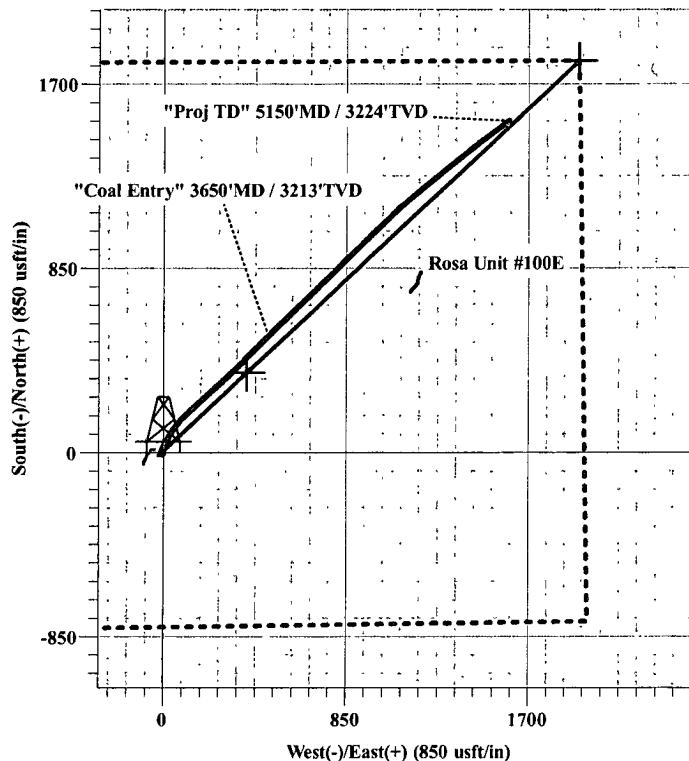
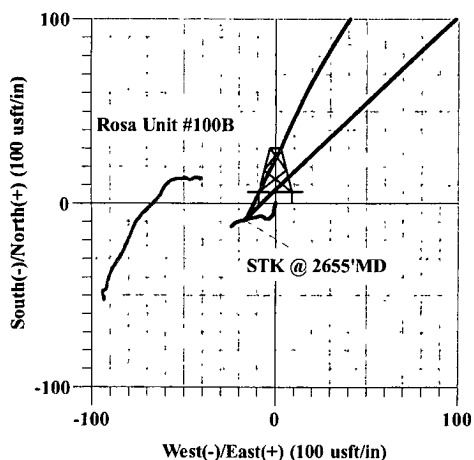


A Schlumberger Company

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

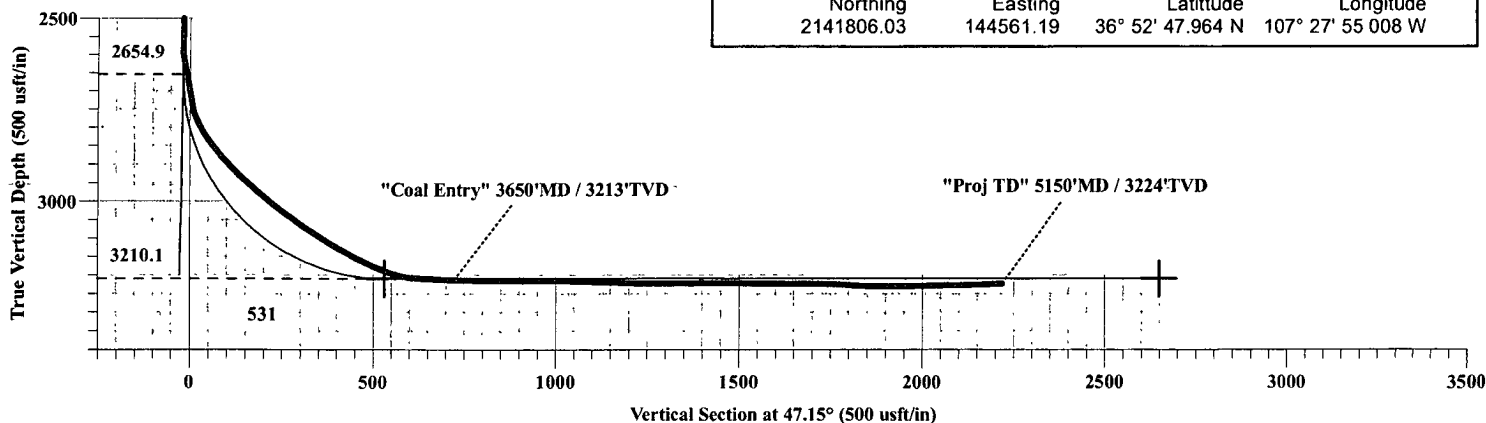
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
LAND-260	3210.0	366.2	384.3	2142167.31	144950.12	Point
TD-260	3210.0	1806.0	1936.3	2143587.23	146520.32	Point

**EOW
No Hardlines
Crossed**



WELL DETAILS. Rosa Unit #260A-STK

Northing	Easting	Latitude	Longitude
2141806.03	144561.19	36° 52' 47.964 N	107° 27' 55.008 W



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
2655.0	0.66	249.87	2654.9	-9.2	-16.7	0.00	0.00	-18.5	
3523.8	90.00	47.15	3210.1	366.2	384.3	10.43	157.28	530.8	
5640.8	90.00	47.15	3210.0	1806.0	1936.3	0.00	0.00	2647.8	TD-260

Plan: Design #3 (Rosa Unit #260A-STK/STK)

Created By: Frank C. Scardino

Date: 10/17/2011

Williams Energy

Rio Arriba Co. NM

Sec21 T31N-R06W - 260A

Rosa Unit #260A-STK

STK

Design: STK

Standard Survey Report

25 October, 2011

Survey Report

Company:	Williams Energy	Local Co-ordinate Reference:	Site Sec21 T31N-R06W - 260A
Project:	Rio Arriba Co NM	TVD Reference:	WELL @ 6390.0usft (Original Well Elev)
Site:	Sec21 T31N-R06W - 260A	MD Reference:	WELL @ 6390.0usft (Original Well Elev)
Well:	Rosa Unit #260A-STK	North Reference:	True
Wellbore:	STK	Survey Calculation Method:	Minimum Curvature
Design:	STK	Database:	EDM 5000 1 Single User Db

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:	Sec21 T31N-R06W - 260A		
Site Position:		Northing:	2,141,806.03 usft
From:	Lat/Long	Easting:	144,561.19 usft
Position Uncertainty:	0 0 usft	Slot Radius:	13-3/16 "
		Latitude:	36° 52' 47.964 N
		Longitude:	107° 27' 55.008 W
		Grid Convergence:	-0.73 °

Well:	Rosa Unit #260A-STK		
Well Position	+N/-S	0 0 usft	Northing: 2,141,806.03 usft
	+E/-W	0 0 usft	Easting: 144,561.19 usft
Position Uncertainty	0 0 usft	Wellhead Elevation:	usft
		Latitude:	36° 52' 47.964 N
		Longitude:	107° 27' 55.008 W
		Ground Level:	6,376.0 usft

Wellbore:	STK		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	09/23/11	(°)
			9.75
			Dip Angle (°)
			63.63
			Field Strength (nT)
			50,828

Design:	STK		
Audit Notes:			
Version:	1 0	Phase:	ACTUAL
		Tie On Depth:	0 0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0 0	0 0	0 0
			Direction (°)
			47.15

Survey Program	Date	10/25/11		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
200.0	5,150.0	Survey #1 (STK)	MWD	MWD - Standard

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.50	209.74	200.0	-0.8	-0.4	-0.8	0.25	0.25	0.00
400.0	0.95	176.58	400.0	-3.2	-0.8	-2.7	0.30	0.23	-16.58
600.0	0.96	206.59	600.0	-6.3	-1.4	-5.3	0.25	0.01	15.01
800.0	0.74	245.53	799.9	-8.4	-3.3	-8.1	0.30	-0.11	19.47
1,000.0	0.50	302.85	999.9	-8.4	-5.3	-9.6	0.32	-0.12	28.66
1,200.0	0.41	310.01	1,199.9	-7.5	-6.5	-9.9	0.05	-0.05	3.58
1,400.0	0.21	273.06	1,399.9	-7.0	-7.4	-10.2	0.14	-0.10	-18.48
1,600.0	0.06	45.34	1,599.9	-6.9	-7.7	-10.4	0.13	-0.08	66.14
1,800.0	0.46	258.51	1,799.9	-7.0	-8.5	-11.0	0.26	0.20	-73.42

Survey Report

Company:	Williams Energy	Local Co-ordinate Reference:	Site Sec21 T31N-R06W - 260A
Project:	Rio Arriba Co. NM	TVD Reference:	WELL @ 6390.0usft (Original Well Elev)
Site:	Sec21 T31N-R06W - 260A	MD Reference:	WELL @ 6390.0usft (Original Well Elev)
Well:	Rosa Unit #260A-STK	North Reference:	True
Wellbore:	STK	Survey Calculation Method:	Minimum Curvature
Design:	STK	Database:	EDM 5000 1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)	
2,000.0	0.48	252.29	1,999.9	-7.4	-10.0	-12.4	0.03	0.01	-3.11	
2,200.0	0.69	268.44	2,199.9	-7.7	-12.0	-14.1	0.13	0.11	8.08	
2,400.0	0.60	250.97	2,399.9	-8.1	-14.2	-15.9	0.11	-0.05	-8.74	
2,600.0	0.62	241.31	2,599.9	-8.9	-16.2	-17.9	0.05	0.01	-4.83	
2,759.0	22.07	27.16	2,755.1	17.6	-3.1	9.7	14.20	13.49	91.73	
2,792.0	27.87	24.41	2,785.0	30.1	2.9	22.6	17.92	17.58	-8.33	
2,823.0	32.18	24.65	2,811.8	44.2	9.3	36.9	13.91	13.90	0.77	
2,855.0	36.84	27.16	2,838.2	60.5	17.3	53.8	15.22	14.56	7.84	
2,887.0	40.01	30.38	2,863.2	77.9	26.9	72.7	11.71	9.91	10.06	
2,919.0	42.03	33.50	2,887.4	95.7	38.0	93.0	8.99	6.31	9.75	
2,951.0	44.58	36.36	2,910.7	113.7	50.6	114.4	10.05	7.97	8.94	
2,983.0	47.48	39.70	2,932.9	131.9	64.8	137.1	11.77	9.06	10.44	
3,014.0	49.07	41.85	2,953.5	149.4	79.9	160.1	7.29	5.13	6.94	
3,046.0	50.03	44.36	2,974.3	167.1	96.5	184.4	6.68	3.00	7.84	
3,078.0	50.65	47.54	2,994.7	184.3	114.2	209.0	7.89	1.94	9.94	
3,109.0	51.62	48.27	3,014.1	200.4	132.1	233.2	3.63	3.13	2.35	
3,142.0	54.26	48.71	3,034.0	217.9	151.8	259.5	8.07	8.00	1.33	
3,173.0	55.40	48.29	3,051.9	234.7	170.8	284.8	3.84	3.68	-1.35	
3,205.0	56.28	47.63	3,069.9	252.4	190.5	311.3	3.24	2.75	-2.06	
3,237.0	56.54	48.92	3,087.6	270.2	210.4	338.0	3.45	0.81	4.03	
3,268.0	57.60	49.66	3,104.4	287.1	230.1	364.0	3.96	3.42	2.39	
3,301.0	59.36	48.98	3,121.7	305.5	251.4	392.1	5.62	5.33	-2.06	
3,332.0	61.38	47.51	3,137.0	323.4	271.5	419.0	7.71	6.52	-4.74	
3,364.0	62.70	46.03	3,152.0	342.8	292.1	447.3	5.81	4.13	-4.63	
3,397.0	64.19	45.83	3,166.8	363.3	313.3	476.8	4.55	4.52	-0.61	
3,428.0	66.48	45.83	3,179.7	382.9	333.5	504.9	7.39	7.39	0.00	
3,460.0	70.35	45.81	3,191.5	403.7	354.9	534.7	12.09	12.09	-0.06	
3,492.0	75.53	44.61	3,200.8	425.2	376.6	565.3	16.58	16.19	-3.75	
3,554.0	87.41	43.02	3,210.0	469.4	418.9	626.4	19.33	19.16	-2.56	
3,617.0	88.46	45.42	3,212.3	514.5	462.8	689.2	4.16	1.67	3.81	
3,650.0	87.92	45.64	3,213.3	537.6	486.4	722.2	1.77	-1.64	0.66	
"Coal Entry" 3650' MD / 3213' TVD										
3,681.0	87.41	45.84	3,214.6	559.2	508.6	753.2	1.77	-1.64	0.66	
3,745.0	89.43	45.60	3,216.4	603.9	554.4	817.1	3.18	3.16	-0.38	
3,808.0	90.57	46.36	3,216.4	647.7	599.7	880.1	2.17	1.81	1.21	
3,871.0	90.04	46.10	3,216.0	691.2	645.2	943.1	0.94	-0.84	-0.41	
3,935.0	89.78	46.27	3,216.1	735.6	691.3	1,007.1	0.49	-0.41	0.27	
3,998.0	89.08	46.54	3,216.8	779.0	737.0	1,070.1	1.19	-1.11	0.43	
4,062.0	86.53	45.52	3,219.2	823.4	783.0	1,134.0	4.29	-3.98	-1.59	
4,127.0	88.11	46.23	3,222.2	868.6	829.6	1,198.9	2.66	2.43	1.09	
4,191.0	89.87	46.87	3,223.4	912.6	876.0	1,262.9	2.93	2.75	1.00	
4,255.0	90.13	45.71	3,223.4	956.8	922.3	1,326.9	1.86	0.41	-1.81	
4,319.0	90.92	45.59	3,222.8	1,001.6	968.1	1,390.9	1.25	1.23	-0.19	
4,382.0	90.22	46.73	3,222.2	1,045.2	1,013.5	1,453.9	2.12	-1.11	1.81	

Survey Report

Company:	Williams Energy	Local Co-ordinate Reference:	Site Sec21 T31N-R06W - 260A
Project:	Rio Arriba Co NM	TVD Reference:	WELL @ 6390 0usft (Original Well Elev)
Site:	Sec21 T31N-R06W - 260A	MD Reference:	WELL @ 6390 0usft (Original Well Elev)
Well:	Rosa Unit #260A-STK	North Reference:	True
Wellbore:	STK	Survey Calculation Method:	Minimum Curvature
Design:	STK	Database:	EDM 5000 1 Single User Db

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)
4,447.0	88.81	46.98	3,222.7	1,089.6	1,060.9	1,518.8	2.20	-2.17	0.38
4,510.0	89.25	47.65	3,223.8	1,132.3	1,107.2	1,581.8	1.27	0.70	1.06
4,574.0	90.57	49.50	3,223.9	1,174.7	1,155.2	1,645.8	3.55	2.06	2.89
4,638.0	89.87	50.22	3,223.6	1,215.9	1,204.1	1,709.7	1.57	-1.09	1.13
4,701.0	86.53	50.31	3,225.6	1,256.2	1,252.6	1,772.6	5.30	-5.30	0.14
4,765.0	86.53	50.62	3,229.5	1,296.9	1,301.8	1,836.4	0.48	0.00	0.48
4,828.0	89.96	52.21	3,231.4	1,336.1	1,351.0	1,899.2	6.00	5.44	2.52
4,891.0	91.54	51.62	3,230.6	1,375.0	1,400.6	1,961.9	2.68	2.51	-0.94
4,955.0	91.54	52.40	3,228.9	1,414.4	1,451.0	2,025.7	1.22	0.00	1.22
5,019.0	90.66	53.54	3,227.6	1,452.9	1,502.1	2,089.3	2.25	-1.38	1.78
5,082.0	91.98	53.91	3,226.2	1,490.2	1,552.9	2,151.9	2.18	2.10	0.59
5,150.0	91.98	53.91	3,223.8	1,530.2	1,607.8	2,219.4	0.00	0.00	0.00
"Proj TD" 5150'MD / 3224'TVD									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
3,650.0	3,213.3	537.6	486.4	"Coal Entry" 3650'MD / 3213'TVD
5,150.0	3,223.8	1,530.2	1,607.8	"Proj TD" 5150'MD / 3224'TVD

Checked By: _____	Approved By: _____	Date: _____
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