

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

As Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-27819		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 17033	*Property Name ROSA UNIT		*Well Number 313A
*OGRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6871'

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
F	29	31N	4W		1836	NORTH	1325	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
N	29	31N	4W		1282	SOUTH	2289	WEST	RIO ARriba

¹² Dedicated Acres 320.0 Acres - (W/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. RCVD SEP 15 '11
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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

	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 <i>B. Mitchell</i> 9/15/2011 Signature Date Ben Mitchell 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 Revised: SEPTEMBER 13, 2011 Date of Survey: APRIL 28, 2004 Signature and Seal of Professional Surveyor JASON C. EDWARDS Certificate Number 15269



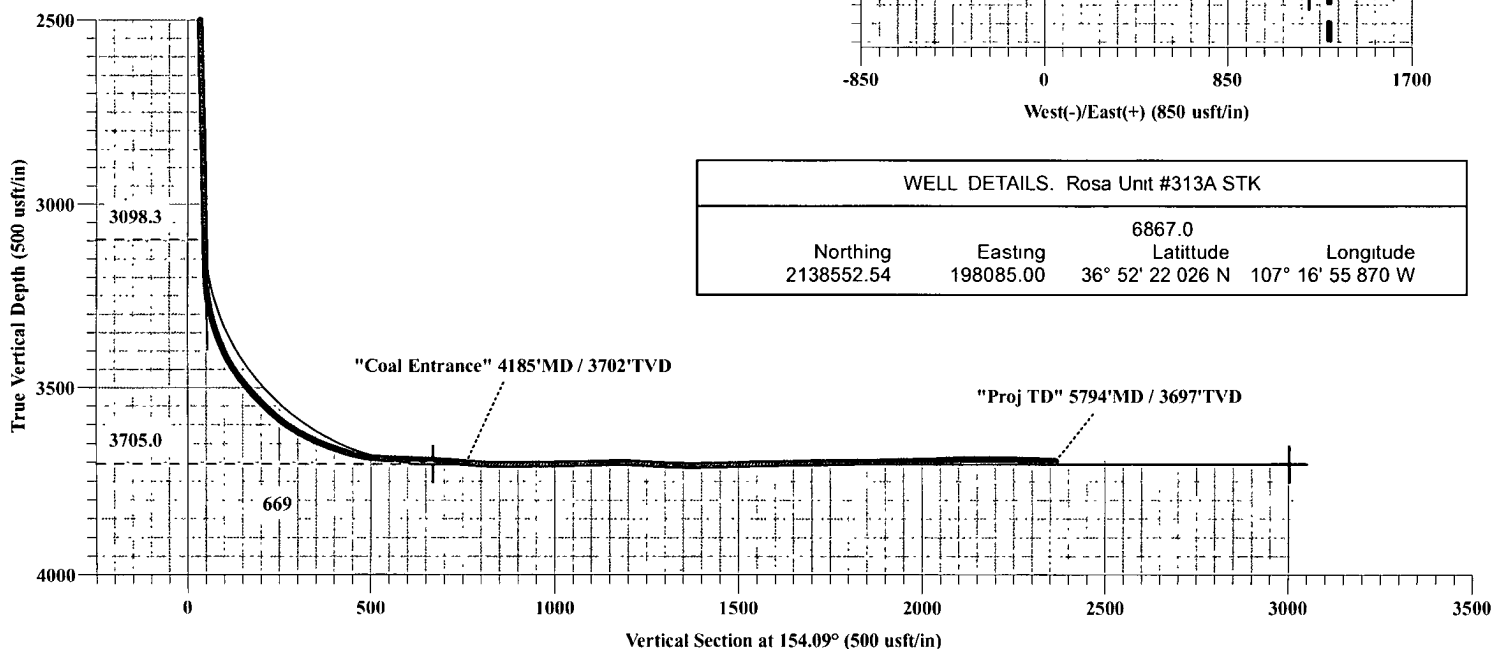
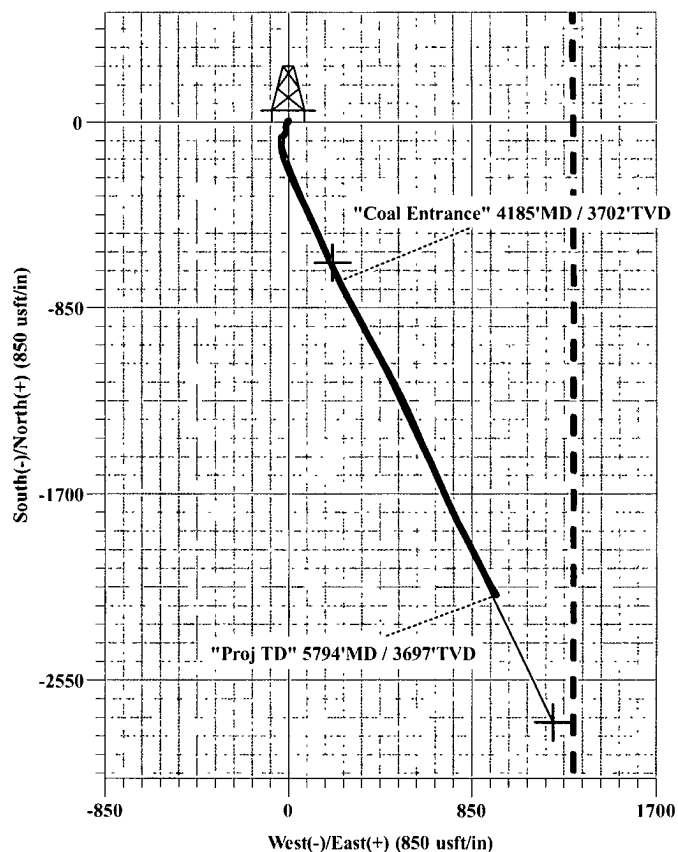
Williams Energy
 API # 30-03A-27819
 Rosa Unit #313A STK
 Sec29 T31N-R4W - 313A
 Rio Arriba Co. NM
 GL: 6867' KB: 14'

PATHFINDER®
 A Schlumberger Company

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
LAND-313A	3705.0	-643.9	205.6	2137906.46	198283.63	Point
TD-313A	3705.0	-2743.0	1225.2	2135796.48	199280.50	Point

EOW
No Hardline Crossed



WELL DETAILS. Rosa Unit #313A STK

		6867.0	
Northing	Easting	Latitude	Longitude
2138552.54	198085.00	36° 52' 22.026 N	107° 16' 55.870 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Target
3100.0	4.26	227.50	3098.3	-66.1	-26.9	0.00	0.00	47.7	
4062.9	90.00	154.09	3705.0	-643.9	205.6	9.22	-73.45	669.0	
6396.6	90.00	154.09	3705.0	-2743.0	1225.2	0.00	0.00	3002.6	TD-313A

Plan: Design #3 (Rosa Unit #313A STK/STK)

Created By: Frank C. Scardino

Date: 8/29/2011

Williams Energy

Rio Arriba Co. NM

Sec29 T31N-R4W - 313A

Rosa Unit #313A STK

STK

Design: STK

Standard Survey Report

12 September, 2011

Survey Report

Company:	Williams Energy	Local Co-ordinate Reference:	Site Sec29 T31N-R4W - 313A
Project:	Rio Arriba Co NM	TVD Reference:	RIG @ 6881 0usft
Site:	Sec29 T31N-R4W - 313A	MD Reference:	RIG @ 6881 0usft
Well:	Rosa Unit #313A 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	Sec29 T31N-R4W - 313A		
Site Position:		Northing:	2,138,552 54 usft
From:	Lat/Long	Easting:	198,085 00 usft
Position Uncertainty:	0 0 usft	Slot Radius:	13-3/16 "
		Latitude:	36° 52' 22 026 N
		Longitude:	107° 16' 55 870 W
		Grid Convergence:	-0 62 °

Well	Rosa Unit #313A STK		
Well Position	+N/-S	0 0 usft	Northing: 2,138,552 54 usft
	+E/-W	0 0 usft	Easting: 198,085 00 usft
Position Uncertainty	0 0 usft	Wellhead Elevation:	usft
		Latitude:	36° 52' 22 026 N
		Longitude:	107° 16' 55 870 W
		Ground Level:	6,867 0 usft

Wellbore	STK		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	08/08/11	9 69
			Dip Angle (°) 63 66
			Field Strength (nT) 50,857

Design	STK		
Audit Notes:			
Version:	1 0	Phase:	ACTUAL
		Tie On Depth:	0 0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0 0	0 0	0 0
			Direction (°) 154.09

Survey Program:	Date	09/12/11		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
200 0	5,794 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 86	29 32	200 0	1 3	0 7	-0 9	0 43	0 43	0 00	
400 0	1 11	11 84	400 0	4 5	1 9	-3 2	0 19	0 13	-8 74	
600 0	0 34	284 88	599 9	6 6	1 7	-5 2	0 57	-0 39	-43 48	
800 0	0 54	233 53	799 9	6 2	0 4	-5 4	0 21	0 10	-25 68	
1,000 0	1 30	228 32	999 9	4 1	-2 1	-4 6	0 38	0 38	-2 61	
1,200 0	1 53	198 10	1,199 9	0 0	-4 6	-2 1	0 39	0 12	-15.11	
1,400 0	1 47	194.08	1,399.8	-5.0	-6 1	1 8	0 06	-0 03	-2 01	
1,600 0	1 83	204 24	1,599 7	-10 4	-8 0	5 8	0 23	0 18	5 08	
1,800 0	1 70	208 63	1,799 6	-15 9	-10 7	9 6	0 09	-0 07	2 20	

Survey Report

Company:	Williams Energy	Local Co-ordinate Reference:	Site Sec29 T31N-R4W - 313A
Project:	Rio Arriba Co NM	TVD Reference:	RIG @ 6881 0usft
Site:	Sec29 T31N-R4W - 313A	MD Reference:	RIG @ 6881 0usft
Well:	Rosa Unit #313A 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)
2,000 0	2 09	176 14	1,999 5	-22 1	-11 9	14 7	0 56	0 20	-16.25
2,200 0	2 44	161 45	2,199 4	-29 8	-10 3	22 3	0 34	0 18	-7 35
2,400 0	2 84	185.20	2,399 1	-38 8	-9 4	30 8	0 58	0 20	11 88
2,600 0	2 19	220 31	2,599 0	-46 6	-12 3	36 6	0 82	-0 33	17 56
2,800 0	2 07	192 21	2,798 8	-53 1	-15 6	40 9	0 52	-0 06	-14.05
3,000 0	4 02	228 21	2,998.6	-61 3	-21 6	45 7	1 32	0 98	18 00
3,200 0	4 51	226 87	3,198 0	-71 3	-32 5	50 0	0 25	0 25	-0 67
3,377 0	23 13	173 31	3,369 5	-111 1	-33 6	85 2	11 72	10 52	-30 26
3,409 0	25 24	171 13	3,398 7	-124 0	-31 8	97 7	7 16	6 59	-6 81
3,441 0	29 81	167 50	3,427.1	-138 6	-29 0	112 0	15 21	14 28	-11 34
3,474 0	34 21	163.62	3,455 0	-155 5	-24 6	129 1	14 71	13 33	-11 76
3,506 0	38 43	160 84	3,480 8	-173 5	-18 8	147 9	14 15	13 19	-8 69
3,537 0	40 63	159 10	3,504 7	-192 0	-12 0	167 5	7 94	7 10	-5.61
3,570 0	43 35	157 99	3,529 2	-212 6	-4 0	189 5	8 54	8 24	-3 36
3,601 0	45 46	156 74	3,551 4	-232 6	4 4	211 1	7 37	6 81	-4 03
3,633 0	49 15	155 06	3,573 1	-254 1	14 0	234 6	12.16	11 53	-5 25
3,664 0	53 20	154 55	3,592 5	-275 9	24 3	258 8	13.13	13 06	-1 65
3,696 0	58 48	154 45	3,610 5	-299 8	35 7	285.3	16.50	16.50	-0 31
3,727 0	63 31	154 57	3,625 6	-324 2	47 3	312 3	15 58	15 58	0 39
3,760 0	65 42	154 61	3,639 8	-351 1	60 1	342 1	6 39	6 39	0 12
3,792 0	67 80	154 48	3,652 5	-377 6	72 7	371 4	7.45	7 44	-0 41
3,824 0	70.96	154 65	3,663 8	-404 7	85 6	401 4	9 89	9 88	0 53
3,855 0	73 25	154 90	3,673 3	-431 4	98 1	430 9	7 43	7 39	0 81
3,886 0	77 82	154.72	3,681 1	-458 5	110 9	460 9	14 75	14 74	-0 58
3,922 0	83 01	156 12	3,687 1	-490 8	125 7	496 4	14 92	14 42	3 89
3,953 0	87 14	155 16	3,689 7	-518 9	138 4	527 2	13 68	13 32	-3 10
3,981 0	88 02	154 98	3,690 9	-544 3	150 2	555 2	3 21	3 14	-0 64
4,013 0	87 93	155 43	3,692 0	-573 3	163 6	587 2	1 43	-0 28	1 41
4,078 0	87 05	154 45	3,694 9	-632 1	191 1	652 1	2 03	-1 35	-1 51
4,142 0	85 82	154 91	3,698 9	-689 9	218.4	716.0	2 05	-1 92	0.72
4,185.0	85 64	154 36	3,702 1	-728.6	236 8	758 9	1 33	-0 41	-1 27
"Coal Entrance" 4185'MD / 3702'TVD									
4,205 0	85 56	154 11	3,703 6	-746.6	245 5	778 8	1 33	-0 41	-1 27
4,269 0	89 78	151 43	3,706 2	-803 4	274 7	842 7	7 81	6 59	-4 19
4,333 0	90 48	150 57	3,706 1	-859 4	305 8	906 6	1 73	1 09	-1 34
4,397 0	90 92	151 04	3,705 3	-915 3	337 0	970 5	1 01	0 69	0 73
4,461 0	91 01	151 35	3,704 2	-971 3	367 8	1,034 4	0 50	0 14	0 48
4,525 0	91 71	151 02	3,702 7	-1,027 4	398 6	1,098 3	1 21	1.09	-0 52
4,589 0	91 19	151 24	3,701 1	-1,083 4	429.5	1,162.2	0.88	-0 81	0 34
4,653 0	86 61	150 07	3,702 3	-1,139 2	460 9	1,226 1	7.39	-7 16	-1.83
4,716 0	86 97	151 69	3,705 8	-1,194 1	491 5	1,288 9	2 63	0 57	2 57
4,780 0	88 81	153.74	3,708 2	-1,251 0	520 8	1,352 8	4 30	2 88	3 20
4,844 0	91 80	154.31	3,707 8	-1,308 5	548 8	1,416 8	4 76	4 67	0 89
4,908 0	91 89	155.83	3,705 8	-1,366 5	575 8	1,480 7	2.38	0 14	2 38

Survey Report

Company:	Williams Energy	Local Co-ordinate Reference:	Site Sec29 T31N-R4W - 313A
Project:	Rio Arriba Co NM	TVD Reference:	RIG @ 6881 0usft
Site:	Sec29 T31N-R4W - 313A	MD Reference:	RIG @ 6881 0usft
Well:	Rosa Unit #313A 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)
4,972 0	90 92	156 67	3,704 2	-1,425 1	601 6	1,544 7	2 00	-1 52	1 31
5,036 0	90 66	155 92	3,703 3	-1,483 7	627 3	1,608 6	1 24	-0 41	-1 17
5,099 0	91 98	156 00	3,701 9	-1,541 2	652 9	1,671 6	2 10	2 10	0 13
5,162 0	90.13	156 22	3,700 7	-1,598 8	678 5	1,734 5	2 96	-2 94	0 35
5,227 0	91 89	155 55	3,699 6	-1,658 1	705 0	1,799 5	2 90	2 71	-1 03
5,290 0	89.96	155 18	3,698 5	-1,715 3	731 3	1,862 4	3 12	-3 06	-0 59
5,354 0	90 13	155 28	3,698 5	-1,773 5	758 1	1,926 4	0 31	0 27	0 16
5,418 0	92.07	152 74	3,697 3	-1,831 0	786 1	1,990 4	4 99	3 03	-3 97
5,482 0	92 51	151 99	3,694 7	-1,887 6	815 8	2,054 3	1 36	0 69	-1 17
5,546 0	92 42	151 83	3,692 0	-1,944 0	845 9	2,118 2	0 29	-0 14	-0 25
5,608 0	88 37	153 83	3,691 5	-1,999 2	874 2	2,180 2	7 29	-6 53	3 23
5,671 0	88 72	152 06	3,693 1	-2,055 3	902 8	2,243 2	2 86	0 56	-2 81
5,733 0	88.20	149 37	3,694 8	-2,109 3	933 1	2,305 0	4 42	-0 84	-4.34
5,794 0	88 20	149 37	3,696 7	-2,161 8	964 2	2,365.8	0 00	0 00	0 00

"Proj TD" 5794'MD / 3697'TVD

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
4,185 0	3,702 1	-728 6	236 8	"Coal Entrance" 4185'MD / 3702'TVD
5,794 0	3,696 7	-2,161 8	964 2	"Proj TD" 5794'MD / 3697'TVD

Checked By: _____ Approved By: _____ Date: _____