

Ocean Munds-Dry Associate omundsdry@hollandhart.com

	June 6, 2006	2006
HAND-DELIVERED		
Mark E. Fesmire, P. E.		0
Director	12	
Oil Conservation Division	13743	
New Mexico Department of Energy,	Case (3743	-E
Minerals and Natural Resources	C With	င
1220 South Saint Francis Drive		ယ
Santa Fe, New Mexico 87505		

Re: Application of Williams Production Company for Horizontal Drilling and Unorthodox Surface and Bottomhole Location in the Basin-Fruitland Coal Gas Pool, Rio Arriba County, New Mexico.

# Dear Mr. Fesmire:

Enclosed is the Application of Williams Production Company in the above-referenced case as well as a copy of a legal advertisement. Williams requests that this application be placed on the docket for the July 6, 2006 Examiner hearings.

Sincerely,

Ocean Munds Dry

### **Enclosures**

cc: Vern Hansen (w/enclosures)

CASE 13743:

Application of Williams Production Co. for Horizontal Drilling and an Unorthodox Surface and Bottomhole Location in the Basin-Fruitland Coal Gas Pool, Rio Arriba County, New Mexico. Applicant in the above-styled cause seeks an exception to the requirements of Rule 7 of the Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool to authorize the drilling of its Rosa Unit Well No. 351A as an intentionally deviated horizontal wellbore on a standard coalbed methane gas spacing unit comprised of the W/2 of Section 11, Township 31 North, Range 5 West, NMPM, Rio Arriba County, New Mexico. The spacing unit will be the Project Area for this horizontal well. The surface location for said well is 1310 feet from the North line and 215 feet from the West line of said section. The Point of Entry into the Fruitland Coal is 1390 feet from the North line and 705 feet from the West line and the terminus is 1700 feet from the North line and 2620 feet from the West line of the section. Said area is located approximately 9 miles southeast of Arbolies, Colorado.

DATE IN	SUSPENSE	ENGINEER	LOGGEDIN	TYPE	APP NO.

ABOVE THIS LINE FOR DIVISION USE ONLY

# NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



Case 13743

# **ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE **Application Acronyms:** [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication] [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response] **TYPE OF APPLICATION** - Check Those Which Apply for [A] [1] Location - Spacing Unit - Simultaneous Dedication [A] ☐ NSL ☐ NSP ☐ SD Check One Only for [B] or [C] Commingling - Storage - Measurement  $\square$  DHC  $\square$  CTB  $\square$  PLC  $\square$  PC  $\square$  OLS  $\square$  OLM Injection - Disposal - Pressure Increase - Enhanced Oil Recovery [C] □ WFX □ PMX □ SWD □ IPI □ EOR □ PPR Other: Specify [D] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply [2] Working, Royalty or Overriding Royalty Interest Owners [A] Offset Operators, Leaseholders or Surface Owner [B] Application is One Which Requires Published Legal Notice [C] [D] Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office [E] For all of the above, Proof of Notification or Publication is Attached, and/or, [F] Waivers are Attached [3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE. CERTIFICATION: I hereby certify that the information submitted with this application for administrative [4] approval is accurate and complete to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division. Note: Statement must be completed by an indigridual with managerial and/or supervisory capacity. Title Date Date Hollandhart.com



William F. Carr wcarr@hollandhart.com

Case 13743

June 6, 2006

# **HAND DELIVERED**

Mark Fesmire, P.E.
Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
1220 Saint Francis Drive
Santa Fe, New Mexico 87505

Re: Application of Williams Production Company, L.L.C. for Administrative Approval of Horizontal Drilling and an Unorthodox Surface and Bottomhole Location in the Basin-Fruitland Coal Gas Pool, Rio Arriba County, New Mexico. Rosa Unit Well No. 351A

Dear Mr. Fesmire:

Pursuant to the provisions of Division Rule 111.C(2) and Rules 8 and 9 of the Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool, as promulgated by Division Order No. R-8768 dated October 17, 1988, Williams Production Company, L.L.C. hereby files its application for an administrative exception to the requirements of Rule 7 as amended by Division Order No. R-8768-B, effective February 10, 2000, for the drilling of its Rosa Unit Well No. 351A as an intentionally deviated horizontal wellbore on a standard coalbed methane gas spacing unit comprised of the W/2 of Section 11, Township 31 North, Range 5 West, NMPM, Rio Arriba County, New Mexico. This spacing unit will be the Project Area for this horizontal well.

Rule 7 of the Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool provides that wells shall be located in the NE/4 or SW/4 of a single governmental section and shall be located no closer than 660 feet to any outer boundary of the spacing unit nor closer than 10 feet to any interior quarter or quarter-quarter section line.

The Rosa Unit Well No. 351A has been drilled by Williams Production Company as operator of the Rosa Unit. The surface location for the proposed Rosa Unit Well No. 351A well is 1310 feet from the North line and 215 feet from the West line of said Section 11, Township 31 North, Range 5 West, and is therefore does not comply with Rule 7 of the Special Rules and Regulations for the Basin Fruitland Coal Gas Pool. This unorthodox surface location is necessary to enable Williams to enter the Fruitland

# HOLLAND&HART

Coal at the proposed Entry Point and thereby have as much of the horizontal portion of the wellbore as possible in the Project Area for the well. The Point of Entry into the Fruitland Coal is 1390 feet from the North line and 705 feet from the West line of Section 11. The lateral portion of the well is projected to a point 1700 feet from the North line and 2620 feet from the West line of the section or approximately 10 feet from the outer boundary of the Project Area for the well (W/2 of Section 11). The horizontal portion of the wellbore of the Rosa Unit Well No. 351A will be entirely confined within the NW/4 of Section 11. The wellbore is therefore unorthodox under to Division Rule 111.C (2) and Rule 7 of the Special Pool Rules and Regulations for the Basin-Fruitland Coal Gas Pool.

Williams proposes to drill a vertical well to a kick-off point at a depth of 3147.83 feet and build a curve at a rate of 12.00 degrees per 100 feet and drill until a 90 degree curve is achieved at a true vertical depth of 4053.61 feet. Williams proposes to then drill a lateral in an easterly direction along an azimuth of 98.85 degrees for a bottomhole displacement of approximately 1942.4 feet to a terminus in the NW/4 of Section 11 at a point 1700 feet from the North line and 2620 feet from the West line of said Section 11.

The spacing unit for the proposed horizontal well comprised of the W/2 of said Section 11 is located within the Rosa Unit, a voluntary exploratory unit operated by Williams Production Company, LLC. This spacing unit/project area is offset on the all sides by the Rosa Unit except for Section 2 which offsets this spacing unit project/area to the north that is located in the Carracas Canyon Unit which is operated by Energen Resources Corporation. Pursuant to Rules 8 and 9(A)of the Special Pool Rules for the Basin Fruitland Coal Gas Pool, Energen Resources Corporation has been notified of this application by certified mail and have been advised that if they have objections to this application the objection must be filed in writing with the Santa Fe Office of the Division located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, within 20 days of the date of this application or the application may be approved.

Attached to this application are the following documents:

- **Exhibit A.** Plats showing the proposed spacing unit, the unorthodox surface location, projected horizontal wellbore and the proposed lateral end of the wellbore and the boundary of the offsetting Carracas Unit;
- **Exhibit B.** A copy of Division Form C-102 identifying the proposed 320-acre standard gas spacing or proration unit/project area to be dedicated to the well; and
- Exhibit C. The Halliburton Sperry-Sun Proposal Report for the Rosa Unit Well No. 351A which contains schematic drawings of the proposed well that fully



describe the casing, tubing, perforated or open hole interval, kick-off point, and proposed trajectory of the directional wellbore.

Enclosed in hard copy and on disc is a proposed order granting this application.

Your attention to this matter is appreciated.

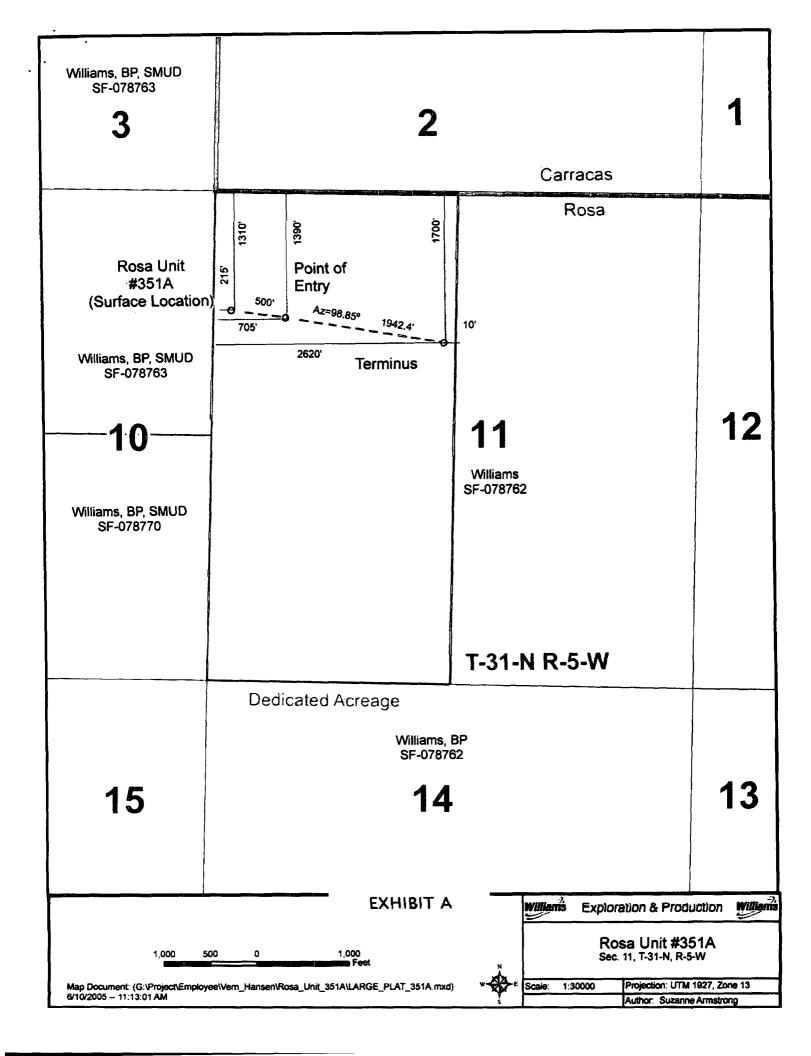
yery truly yours

William F. Carr

Attorney for Williams Production Company

**Enclosures** 

cc: Oil Conservation Division-Aztec



	Rio Arriba	34	T-32-N	35	36
4	Rosa Williams, BP, SMUD SF-078763		T-31-N	2	1 Carracas
9	(S Williams, BP, SMUD SF-078763 10 Williams, BP, SMUD SF-078770	Rosa Unit #351A urface Location)	Point of Entry  Sop Terminus  ROS	11 Williams	Rosa 8P SF-078762 12
16	Williams, BP, SMUD SF-078770 15		SF-C	ms, 8P 978762	VAlliams, BP SF-078762 13 ROSA 371

,District I PO Box 1980, Hobbs, NM 88241-1980

District II PO Drawer DD, Artesia, NM 88211-0719

District III 1000 Rio Brazos Rd., Aztec. NM 87410

District IV PO Box 2088, Santa Fe, NM 87504-2088

'API Number

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVÍSION PO Box 2088 Santa Fe, NM 87504-2088

\*Pool Code

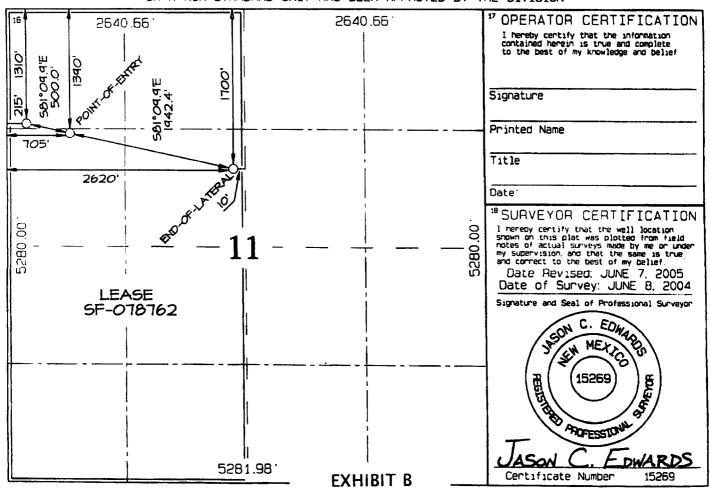
Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4.Copies
Fee Lease - 3 Copies

AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

•	ri Number			71629		BAS	SIN FRUITLA	ND COAL	
*Property 1703	,	***			*Property ROSA 1			4	11 Number 351A
'0GP10 + 12078			<u> </u>	WILL]	*Operator [AMS PRODU	Name CTION COMPAN	<b>1</b> Y	1	1evat 10n 6825
					<sup>10</sup> Surface	Location			
u, er lat na.	Section 11	Township 31N	East/Hest line WEST	County RIO ARRIBA					
		11 E	3ottom	Hole L	location I	f Different	ace		
ucor lot ma	Section 11	Township 31N	Range 5W	Lot fan	Feet from the 1700.	NORTH	Feet from the 2520	East/West Tune WEST	RIO ARRIBA
Dedicated Acres		.O Acre	5 - (W	/2)	<sup>13</sup> Joint or Infill	<sup>36</sup> Eoreolidation Code	<sup>S.</sup> Order No.	<del></del>	

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 New Mexico Rio Arriba County Sec. 11-T31N-R05W Rosa Unit #351A - Plan 052605

Revised: 8 June, 2005

# Fallburton Spery-Drilling

# Proposal Report

8 June, 2005

Data Source: Mr. Gary Sizemore Surface Coordinates: 2153778.68 N. 644275.04 E (36" 55' 04.6862" N. 107" 20' 23.2724" W) Grid Coordinate System: NAD27 New Mexico State Planes, Westem Zone

Surface Coordinates relative to Global Coordinates: 648787.56 N, 346594.28 E (Grid) Surface Coordinates relative to Structure: 1310.00 S, 215.00 E (True) Kelly Bushting Elevation: 6840.00ft above Mean Sea Level Kelly Bushting Elevation: 73.00ft above Structure

Proposal Ref: pro8521

IALLIBUTION

Sperry Drilling Services

**EXHIBIT C** 

DrillQuest Sperry-Sun E 115 11 8 21 Service IVI Reference is True North 1 2100 2153415.71 N, 646692.61 E 38\* 55' 00.9724" N, 107" 19' 53.5249" W 375.47 S, 2415,65 E (True North) 1685.46 S, 2830.66 E (True North) Plan 052605 Bottom Hole Location 1400 Dogleg Rate 0.00 0.00 0.00 0.00 0.00 Eastings eta/Time. 8 June, 2005 - 10:10 3628.00ft 3555.00ft -3212.00ft 0.00 0.00 460.80 633.22 2444.66 Vertical Section 8 Williams Production Company Scale: 1inch = 700ft 0.00 E 0.00 E 455.33 E 625.71 E 2415.65 E Ref. Global Coordinates: Ref. Geographical Coordinates: Eastings Ref. RKB(6825'+15'KB): Ref. Structure: Ref. Moan Soa Level: Point Large 3628,00 TVD, 378 - 78, 2412 by 1 Ref. Wellhead: Ref. Structure: Total Depth at 5865.05ft 0.00 N 0.00 N 70.77 S 97.26 S Northings Plan 052605 Proposal Data Morthings Scale: 1 inch = 700ft 0.00 3147.83 3628.00 3628.01 3628.01 Plan 05260518111 Vertical Depth Section Azimuth: 98,835' (True Morth) 2153778.68 N, 644275.04 E 36\* 55' 04,6882" N, 107\* 20' 23:2724" W 2 8 1 8 0.000 0.000 98.835 98.835 Azim. 5840 000 above Mean See Level Build Rate = 1,16\*/100ft | End of Build at 4053,61ft Hold Angle at 90,000 0.000 0.000 88.000 90.000 Continue Build/Turn at 3881, 16ft Rosa Unit #351A Surface Location 힏 Point Target 3625:00 TVD, 70.77 S, 455.33 E Vertical Section 1310 00 S. 215.00 E <del>2</del> 0.00 3147.83 3881.16 4053.61 5865.05 Measured Depth thant Fin. (845 €)
Build Rate = 12.00\*/100ft Kick-Off Point Continue Build/Turn Hold Angle Total Depth Kick-Off at 3147 83ft 8 Ref. Global Coordinates; Ref. Geographical Coordinates; New Mexico Rio Arriba County Sec. 11-T31N-R05W Scale: 1inch = 700ft Rosa Unit #351A Plan 052605 Spemy Drittling Services MALLIBURTON RKB Elevation Ref. Structure: 2450 DriftQuest 3.03.06.011 3150 -3850 Vertical Depth

Rio Arriba County

I DELEMENTON

Sperry Drilling Services

# Proposal Report for Sec. 11-T31N-R05W - Rosa Unit #351A - Plan 052605

Data Source: Mr. Gary Sizemore

Revised: 8 June, 2005

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates N-S E-W (ft) (ft)	ordinates E-W (ft)	Dogleg Severit (*/100ft)	Lease Calls FNL-FSL FE (ff)	Calls FEL-FWL (ft)	Global Coordinates Grid Y Grid (ft) (ft)	ordinates Grid X (ft)
0.00	0.000	0.000	0.00	0.00	0.00 N	0.00 E		1310.00 FNL	215.00 FWL	2153778.68 N	644275.04 E
Kirtiand Shale 1625.00	0.000	0.000	1625.00	0.00	N 000	0.00 E	0.00	1310.00 FNL	215.00 FWL	2153778.68 N	644275.04 E
Fruitland Fm 3095.00	0.000	0.000	3095.00	0.00	0.00 N	0.00 E	0:00	1310.00 FNL	215.00 FWL	2153778.68 N	644275.04 E
Kick-Off at 3147.83ft 3147.83 0.0 3200.00 6.2 3300.00 182 3400.00 30.2	0.000 0.000 6.261 18.261 30.261	0.000 98.835 98.835 98.835	3147.83 3199.90 3297.44 3388.44	0.00 24.05 65.06	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 E 2.81 E 23.76 E 64.29 E	0.00 12.00 12.00	1310.00 FNL 1310.44 FNL 1313.69 FNL 1319.99 FNL	215.00 FWL 217.81 FWL 238.76 FWL 279.29 FWL	2153778.68 N 2153778.26 N 2153775.11 N 2153769.02 N	644275.04 E 644277.06 E 644288.62 E 644339.38 E
350.00 <b>Top of Coal</b> 356.70 360.00 3700.00	50.265 54.261 78.261	98. 83.5 98. 83.5 98. 83.5 98. 83.5 98. 83.5	3615.00 3535.38 3684.89 3615.30	172.25 198.58 285.25 380.32	26.45 20.50	170.21 E 196.22 E 281.87 E 375.81 E	2.20 2.20 2.20 2.00 2.00	1336.45 PM. 1340.50 PM. 1353.81 PM.	385.21 FW. 411.22 FW. 496.87 FW. 590.81 FW.	2153753.11 N 2153749.20 N 2153736.33 N 2153722.21 N	64445.38 E 644471.42 E 644557.13 E 644851.15 E
Continue Build/Turn at 3881.16ff, 3881.16 88.000 98.835 3900.00 88.218 98.835 4000.00 89.378 98.835	7 urn at 3 88.000 88.218 89.378	3881.16ff, 98.835 98.835 98.835	<b>Top Tang</b> 3625.00 3625.62 3627.72	arget Coal, 0 460.80 2 479.63 2 579.61	<b>Target - 7"</b> 70.77 S 73.66 S 89.02 S	Csg, Current 455.33 E 473.94 E 572.73 E	nt Target 12.00 1.16 1.16	1360.77 FNL 1363.66 FNL 1369.02 FNL	670.33 FWL 688.94 FWL 787.73 FWL	2153710.26 N 2153707.47 N 2153692.62 N	644730.74 E 644749.36 E 644848.23 E

# End of Build at 4053.61ft

2000		100	70 000	00000	07.75.0	835.74 E	116	1407 25 FN	840 71 FWL	2153684.66 N	644901.24 E
4033.01		80.050	30707	77.00	2 .	1	2 :		1000	M 04 14.000	644047 42 G
4100.00		98.835	3628.01	679.61	104.38 S	671.54 E	0 0 0	1414.38 FN	880.34 FWL	N 97.7/00CL7	1 71 . I & E
420000		9R R35	3628.01	779.61	119.73 \$	770.36 E	0.00	1429.73 FNL	985.36 FWL	2153662.93 N	645046.01 E
73000		00 036	2628 O4	870.61	135 00 S	969.17 F	000	1445.09 FML	1084.17 FWL	2153648.08 N	645144.90 E
4500.00		0.00	2070	0.00					1000077	04 F50000 50 M	CAE242 70 E
4400.00		98.835	3628.01	979.61	150.45 S	967.98 E	0.00	1460.45 FNL	1182.98 FWL	V152.6506612	043243.73 E
4500.00		00 925	3628.04	4070 G1	165.81.5	1066.80 E	000	1475.81 FNL	1281.80 FWL	2153618.39 N	645342.68 E
43.00°		20.00	2000	200					4200 64 6344	2152602 54 N	RASAA1 SR F
4600.00		98.835	3628.01	1179.61	181.17 S	1165.61 E	9	1481.17 FINE	1300.01 FWL	VI 90000017	
4700.00		96.835	3628.01	1279.61	196.52 S	1264.43 E	0.00	1506.52 FNL	1479.43 FWL	2153588.69 N	645540.47 E
4800.00		98.835	3628.01	1379.61	211.88 S	1363.24 E	0.00	1521.88 FNL	1578.24 FWL	2153573.84 N	645639.36 E
4900.00		98.835	3628.01	1479.61	227.24 S	1462.05 E	0.00	1537.24 FNL	1677.05 FWL	2153559.00 N	645738.25 E
200000		98.835	3628.00	1579.61	242.60 S	1560.87 E	0.00	1552.60 FNL	1775.87 FWL	2153544.15 N	645837.14 E
5100.00		98 835	3628.00	1679.61	257.96 S	1659.68 E	0.00	1567.96 FINIL	1874.68 FWL	2153529.30 N	645936.03 E
5200.00		98.835	3628.00	1779.61	273.32 S	1758.49 E	0.00	1583.32 FNL	1973.49 FWL	2153514.45 N	646034.93 E
530000		98 835	3628 00	1879.61	288.67 S	1857.31 E	0.00	1598.67 FNL	2072.31 FWL	2153499.61 N	646133.82 E
5400.00	00006	98.835	3628.00	1979.61	304.03 S	1956.12 E	0.00	1614.03 FNL	2171.12 FML	2153484.76 N	646232.71 E
											•
5500.00		98.835	3628.00	2079.61	319.39 S	2054.93 E	0.0	1629.39 FNL	2269.93 FWL	2153469.91 N	646331.60 E
2600.00		98.835	3628.00	2179.61	334.75 S	2153.75 E	0.00	1644.75 FNL	2368.75 FWL	2153455.06 N	646430.49 E
670000		98 835	3628 00	2279.61	350.11 S	2252.56 E	0.00	1660.11 FNL	2467.56 FWL	2153440.22 N	646529.38 E
5800.00		98.835	3628.00	2379.61	365.47 S	2351.38 E	0.00	1675.47 FINL	2566.38 FWL	2153425.37 N	646628.27 E
Total Depth at 5865.05ff,	5865.05ft,	Target .	· PBHL, C	Target - PBHL, Current Target	<b>30t</b>	2415 BE E	8	1685 46 FM	2630.66 FWL	2153415.71 N	646692.61 E
2002.02	<b>20.00</b>	80.000	3020.00	7444.00	37.070	1 20:01 1	***				

Global Coordinates Grid Y Grid X (ft) (ft)

FEL-PM. E

Lease Calls FNLFSL FEL-

£

Dogleg Severit (\*/100ft)

Local Coordinates
N-S E-W
(ff) (ff)

Vertical Section (ft)

True Vertical Depth

Drift Direction (Deg)

Incl. Angle (Deg)

Measure Depth

E

All data is in Feet (US) unless otherwise stated. Directions and coordinates are relative to True North. Vertical depths are relative to Wellhead.

Based upon Minimum Curvature type calculations, at a Measured Depth of 5665.05ft., The Bottom Hole Displacement is 2444.66ft., in the Direction of 98.835" (True).

Sperry Drilling Services

Rio Arriba County

Proposal Report for Sec. 11-T31N-R05W - Rosa Unit #351A - Plan 052605

Data Source: Mr. Gary Sizemore

Revised: 8 June, 2005

# Comments

	Comment	Kick-Off at 3147.83ft	Continue Build/Turn at 3881.16ft	End of Build at 4053.61ft	Total Depth at 5865.05ft
nates	Eastings (ft)	0.00 E		625.71 E	
llon Coordi	TVD Northings Eastings (ft)	N 00:0	70.77 S	97.25 S	375.46 S
Stat	도 () ()	3147.83	3625.00	3628.01	3628.00
Measured	Depth	3147.83	3881.16	4053.61	5865.05

# Formation Tops

	Formation Name	Kirtland Shale	Fruitland Fin	Top of Coal	Top Target Coal
t	Eastings (ft)	0.00 E	0.00E	170.21 E	455.33 E
ation Po	Depth Northings Eastin (ft) (ft) (ft)	0.00 N	0.00 V	26.45 S	70.77 S
Penetr Sub-Sea	Depth (ft)	-5215.00	-3745.00	-3325.00	-3215.00
	Septh Depth (ft)				
P r Measured	Depth (ft)	1625.00	3095.00	3566.70	3881.16
a _ ( <u>c</u>	Up-Dip Dim.	180.683	180.683	180.683	180.683
Vell Orig	Angle	0.00	0.00	0.00	0.00
Forma (Below	Sub-Sea Dip Up-Dip (ft) Angle Dim.	-5215.00	-3745.00	-3325.00	-3215.00

Sperry Drilling Services

Rio Arriba County

Proposal Report for Sec. 11-T31N-R05W - Rosa Unit #351A - Plan 052605

Data Source: Mr. Gary Sizemore Revised: 8 June, 2005

# Targets associated with this wellpath

Target Name		Targ TVD	Target Entry Coordinates TVD Northings East (ft) (ft) (ft)	rdinates Eastings (ft)	Target Target Shape Type	Target Type
7" Csg	Mean Sea Level/Global Coordinates: Geographical Coordinates:	3625.00 -3215.00	70.77 S 2153710.26 N 36° 55'03.9863" N	70.77 S 455.33 E 2153710.26 N 644730.74 E 36" 55' 03.9863"N 107" 20' 17.6651" W	Point	Current Target
<b>148</b>	Mean Sea Level/Global Coordinates: Geographical Coordinates:	3628.00 -3212.00	375.46 S 2153415.71 N 36° 55 00.9724" N	375.46 S 2415.66 E 2153415.71 N 646692.61 E 36° 55 00.9724" N 107° 19' 53.5249" W	Point	Current Target

Sperry Drilling Services

Rio Arriba County

# North Reference Sheet for Sec. 11-T31N-R05W - Rosa Unit #351A

Coordinate System is NAD27 New Mexico State Planes, Western Zone, US Fool Source: Snyder, J.P., 1987, Map Projections - A Working Manual

Datum is North American Datum of 1927 (US48, AK, HI, and Canada)

Spheroid is Clarke - 1866

Equatorial Radius: 6378206.400m.

Polar Radius: 6356583.800m.

Inverse Flattening: 294.978698213901

Projection method is Transverse Mercator or Gauss Knuger Projection

Central Meridian is -107.833°

Longitude Orlgin: 0.000°

Latitude Origin: 31,000°

False Easting: 152400.00m

False Northing: 0.00m

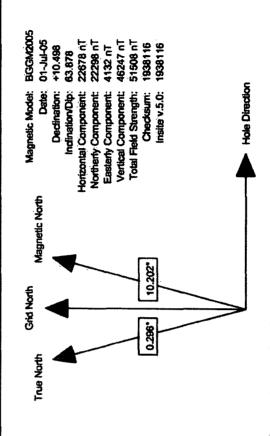
Scale Reduction: 0.99991667

Geographical Coordinates of Well: 36° 55' 04.6862" N, 107° 20' 23.2724" W Grid Coordinates of Well: 2153778.68 N, 644275.04 E

Surface Elevation of Well: 6840.00ft

Grid Convergence at Surface is +0.296°

Magnetic Declination at Surface is +10.498" (1 July, 2005)



Magnetic North is 10.202" East of Grid North (Magnetic Convergence) Magnetic North is 10.498" East of True North (Magnetic Declination) Grid North is 0.296" East of True North (Grid Convergence)

To convert a Magnetic Direction to a True Direction, Add 10.498 degrees To convert a Magnetic Direction to a Grid Direction, Add 10.202 degrees To convert a True Direction to a Grid Direction, Subtract 0.298 degrees

Halliburton Sperry-Sun

Williams Production Company Rosa Unit #351A - Plan 052605

New Medico Filo Arriba County Sec. 11-T31N-R05W Data Source: Mr. Gary Sizemore

Dogleg	0	0 Kirtland Shale	0 Fruitland Fm	0 Kick-Off at 3147.83ft	12	12	12	12	12 Top of Coal	12	- 22	27	12 Continue Build/Turn at 3881.16ft - Top Target Coal - Target - /* Csg. Current Larget	1.16	1.16	1.16 End of Build at 4053.61ft	0	0	•	0	0	0	0	0	0	0	0	0	•	0	•	•	0		0 Total Depth at 5865.05ff - Target - PBHL Current Target
Vert.	0	0	0	0	2.85	24.05	65.06	124.1	172.25	198.58	285.25	380.32	460.8	479.63	579.61	633.22	679.61	779.61	879.61	979.61	1079.61	1179.61	1279.61	1379.61	1479.61	1579.61	1679.61	1779.61	1879.61	1979.61	2079.61	2179.61	2279.61	2379.61	2444.66
Global	644275.04 E	644275.04 E	644275.04 E	644275.04 E	644277.86 E	644298.82 E	644339.38 E	644397.76 E	644445.38 E	644471.42 E	644557.13 E	644651.15 E	644730.74 E	644749.36 E	644848.23 E	644901.24 E	644947.12 E	645046.01 E	645144.90 E	645243.79 E	645342.68 E	645441.58 E	645540.47 E	645639.36 E	645738.25 E	645837.14 E	645936.03 E	646034.93 E	646133.82 E	646232.71 E	646331.60 E	646430.49 E	646529.38 E	646628.27 E	646692.61 E
Giobal	2153778.68 N	2153778.68 N	2153778.68 N	2153778.68 N	2153778.26 N	2153775.11 N	2153769.02 N	2153760.26 N	2153753.11 N	2153749.20 N	2153736.33 N	2153722.21 N	2153710.26 N	2153707.47 N	2153692.62 N	2153684.68 N	2153677.78 N	2153662.93 N	2153648.08 N	2153633.23 N	2153618.39 N	2153803.54 N	2153588.69 N	2153573.84 N	2153559.00 N	2153544.15 N	2153529.30 N	2153514.45 N	2153499.61 N	2153484.76 N	2153469.91 N	2153455.06 N	2153440.22 N	2153425.37 N	2153415.71 N
Local	0.00 E	0.00 E	0.00 E	0.00 E	2.81 E	23.76 E	64.29 E	122.63 E	170.21 E	196.22 E	281.87 E	375.81 E	455.33 E	473.94 E	572.73 E	625.71 E	671.54 E	770.36 E	869.17 E	967.98 E	1066.80 E	1165.61 E	1264.42 E	1383.24 E	1462.05 E	1560.86 E	1659.68 E	1758.49 E	1857.31 E	1956.12 E	2054.93 E	2153.75 E	2252.56 E	2351.37 E	2415.85 E
Local	0.00 N	0.00 N	0,00 N	0.00 N	0.44 S	3.69 S	9.89 S	19.06 S	26.46 S	30.50 S	43.81 \$	58.41 S	70.77 S	73.67 S	89.02 S	97.26 S	104.38 S	119.74 S	135.10 S	150.46 S	165.82 S	181.18 S	196.53 S	211.89 S	227.25 S	242.61 S	257.97 S	273.33 S	288.69 S	304.05 S	319.41 S	334.76 S	350.12 S	365.48 S	375.47 S
Vert.	0	1625	3095	3147.83	3199.9	3297.44	3388.44	3468.92	3515	3535.38	3584.89	3615.3	3625	3625.62	3627.72	3628.01	3828.01	3628.01	3628.01	3628.01	3628.01	3628.01	3628.01	3628.01	3628.01	3628	3628	3628	3628	3628	3628	3628	3628	3628	3628
Sub-Sea \	6840	-5215	3745	-3692.17	-3640.1	3542.56	3451.56	-3371.08	3325	3304.62	-3255.11	3224.7	3215	-3214.38	-3212.28	-3211.99	3211.99	3211.99	-3211.99	3211.99	-3211.99	-3211.99	-3211.99	-3211.99	-3211.99	<b>3212</b>	3212	<b>3212</b>	3212	3212	3212	3212	3212	3212	3212 3212
<i>u,</i>	0	0	0	0	98.835	98.835	98.835	98.835	98.835					98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835	98.835
	0	0	0	0	6.263	18.261	30.261	42.261	50.265	54.261	66.261	78.261	28	88.218	89.378	8	8	S	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Meas	0	1625	3092	3147.83	3200	3300	3400	3500	3566.7	3800	3700	3800	3881.16	3900	4000	4053.61	4100	4200	4300	4400	4500	4600	4700	4800	4900	2000	5100	2500	2300	2400	2200	2600	5700	2800	5865.05

All data is in feet (us) unless otherwise stated. Directions and coordinates are relative to True North. Vertical depths are relative to RKB(6825"+15 KB). Northings and Eastings are relative to Welthead.

The Dogleg Severity is in Degrees per 100 feet. Vertical Section is from Welfread and calculated along an Azimuth of 98.835° (True).

Based upo at a Measured Depth of 5865.05ft. The Botton in the Direction of 98.835° (True).

June , 2006

Williams Production Company, L.L.C. c/o Holland & Hart LLP
Post Office Box 2208
Santa Fe, New Mexico 87504-2208
Attention: William F. Carr

Telefax No. (505) 983-6043

Administrative Order NSL-\_\_\_\_ (Non-Standard Subsurface Location/Producing Area)

Dear Mr. Carr:

Reference is made to the following: (i) your application on behalf of the operator, Williams Production Company, L.L.C. ("Williams") dated July 1, 2005 (application reference No. \_\_\_\_\_\_\_); (ii) the records of the New Mexico Oil Conservation Division ("Division") in Aztec and Santa Fe: all concerning William's request for exception to Division Rules 111.A (13) and 111.C (2) and Rule 7 of the "Special Rules and Regulations for the Basin-Fruitland Coal (Gas) Pool," as promulgated by Division Order No. R-8768, as amended.

# The Division Director Finds That:

- (1) The subject application has been duly filed under the provisions of Division Rule 111.C (2) and the applicable provisions of the special rules governing the Basin-Fruitland Coal (Gas) Pool (71629);
- (2) The special rules governing the Basin-Fruitland Coal (Gas) Pool provides for 320-acre gas spacing units and wells to be located within either the NE/4 or SW/4 of the section and not closer than 660 feet from any outer boundary of the spacing unit nor closer than 10 feet from any quarter-quarter section line or subdivision inner boundary;
- (4) The "project area" proposed by Williams is to consist of a single standard 320-acre stand-up gas spacing unit comprising the W/2 of Section 11, Township 31 North, Range 5 West, NMPM, Rio Arriba County, New Mexico;
- (5) It is our understanding that Williams intends to drill its Rosa Unit Well No. 351A (API No. 30-039-\_\_\_\_) from a surface location 1310 feet from the North line and 215 feet from the West line (Unit D) of Section 11, Township 31 North, Range 5 West, and directionally drill a vertical wellbore to an approximate depth of 3147.83 feet, kick-off in an easterly direction, build angle at a rate of 12 degrees per 100 feet until 90 degrees of vertical is achieved at a depth of 4053.61 feet (TVD). The point of entry into the Fruitland Coal will be at a point 1390 feet

from the North line and 705 feet from the West line of Section 11, Township 31 North, Range 5 West and Williams will then directionally drill a horizontal drainhole a lateral distance of 1942.4 feet to an unorthodox terminus location at a point 1700 feet from the North line and 2620 feet from the West line of said Section 11;

- (6) It appears that the applicant has satisfied all of the appropriate requirements prescribed in Division Rule 111.C (2) and Rule 9 (B) of the Special Rules and Regulations for the Basin-Fruitland Coal (Gas) Pool; therefore the subject application should be approved; and
- (7) The provisions contained within this order and all other applicable provisions of Division Rule 111 and Division Order No. R-8768, as amended, should govern the subject well and 320-acre gas spacing unit.

### It Is Therefore Ordered That:

- (1) By the authority granted me under the provisions of Rule 9 (B) of the "Special Rules and Regulations for the Basin-Fruitland Coal (Gas) Pool," as promulgated by Division Order No. R-8768, as amended, the application of Williams Production Company, L.L.C. ("Williams") for exception to Division Rules 111.A (13) and 111.C (2) and Rule 7 of the Special Rules and Regulations for the Basin-Fruitland Coal (Gas) Pool (71629), is hereby approved. Williams is further authorized to drill its Rosa Unit Well No. 351A (API No. \_\_\_\_\_\_) at a surface location 1310 feet from the North line and 215 feet from the West line (Unit D) of Section 11, Township 31 North, Range 5 West, NMPM, Rio Arriba County, New Mexico, drill vertical to an approximate depth of 3147.83 feet, kick-off in an easterly direction, build angle at a rate of 12 degrees per 100 feet until 90 degrees off of vertical is achieved at a depth of 4053.61 feet (TVD). The point of entry into the Fruitland Coal will be at a point 1390 feet from the North line and 705 feet from the East line of Section 11, Township 31 North, Range 5 West and Williams will then directionally drill a horizontal drainhole a lateral distance of 1942.4 feet to an unorthodox location at a point 1700 feet from the North line and 2620 feet from the West line of said Section 11.
- (2) The "project area" for this well shall consist of a single standard 320-acre stand-up gas spacing unit comprising the W/2 of Section 11.
- (3) An exception to the provisions of Rule 7 of the Special Rules for the Basin-Fruitland Coal (Gas) Pool is hereby granted to permit the horizontal portion of the wellbore to be within a drilling window or producing area for the within the Basin-Fruitland Coal (Gas) Pool for this wellbore 10 feet from the outer boundary of the project area.

- (4) The operator shall comply with all applicable requirements and conditions set forth in Division Rule 111 and Division Order No. R-8768, as amended.
- (6) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E. Director

cc: New Mexico Oil Conservation Division – Aztec U. S. Bureau of Land Management - Farmington





June 6, 2006

# **CERTIFIED MAIL -RETURN RECEIPT REQUESTED**

# AFFECTED INTEREST OWNERS

Re:

Application of Williams Production Company, L.L.C. for Administrative Approval of Horizontal Drilling and an Unorthodox Surface and Bottomhole Location in the Basin-Fruitland Coal Gas Pool, Rio Arriba County, New Mexico.

### Ladies and Gentlemen:

Enclosed is a copy of the above-referenced application which was filed with the Oil Conservation Division on this date by Williams Production Company, L.L.C. for administrative approval of horizontal drilling and an unorthodox surface and bottomhole location in the Basin-Fruitland Coal Gas Pool for its proposed Rosa Unit Well No. 351A. The Project Area for the well will be a standard Fruitland Coal Gas Unit comprised of the W/2 of Section 11, Township 31 North, Range 5 West, NMPM, and the horizontal portion of the wellbore will be entirely confined to the NW/4 of Section 11. The surface location for the well will be at a point 1310 feet from the North line and 215 feet from the West line of Section 11. Williams proposes to drill a vertical well to a kick-off point at a depth of 3147.83 feet and build a curve at a rate of 12.00 degrees per 100 feet and drill until a 90 degree curve is achieved at a true vertical depth of 4053.61 feet. Williams proposes to then drill a lateral in an easterly direction along an azimuth of 98.85 degrees for a bottomhole displacement of approximately 1942.4 feet to a terminus in the NW/4 of Section 11 at a point 1700 feet from the North line and 2620 feet from the West line of Section 11.

As the owner of an interest which will be affected by the proposed well, you may object to this application. Objections must be filed in writing at the Division's Santa Fe office located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, within twenty days from the date this notice was sent to you. If no objection is received within twenty days after the Division Director receives this application, the unorthodox location may be approved.

Very truly yours,

William F. Carr
ATTORNEY FOR WILLIAMS PRODUCTION COMPANY
enc.