

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 "As Drilled"

*API Number 30039 30780	*Pool Code 97232 / 72319 / 71599	*Pool Name BASIN MANCOS / BLANCO MESAVERDE / BASIN DAKOTA	
*Property Code 17033	*Property Name ROSA UNIT		*Well Number 50
*OGRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6318'

¹⁰ Surface Location

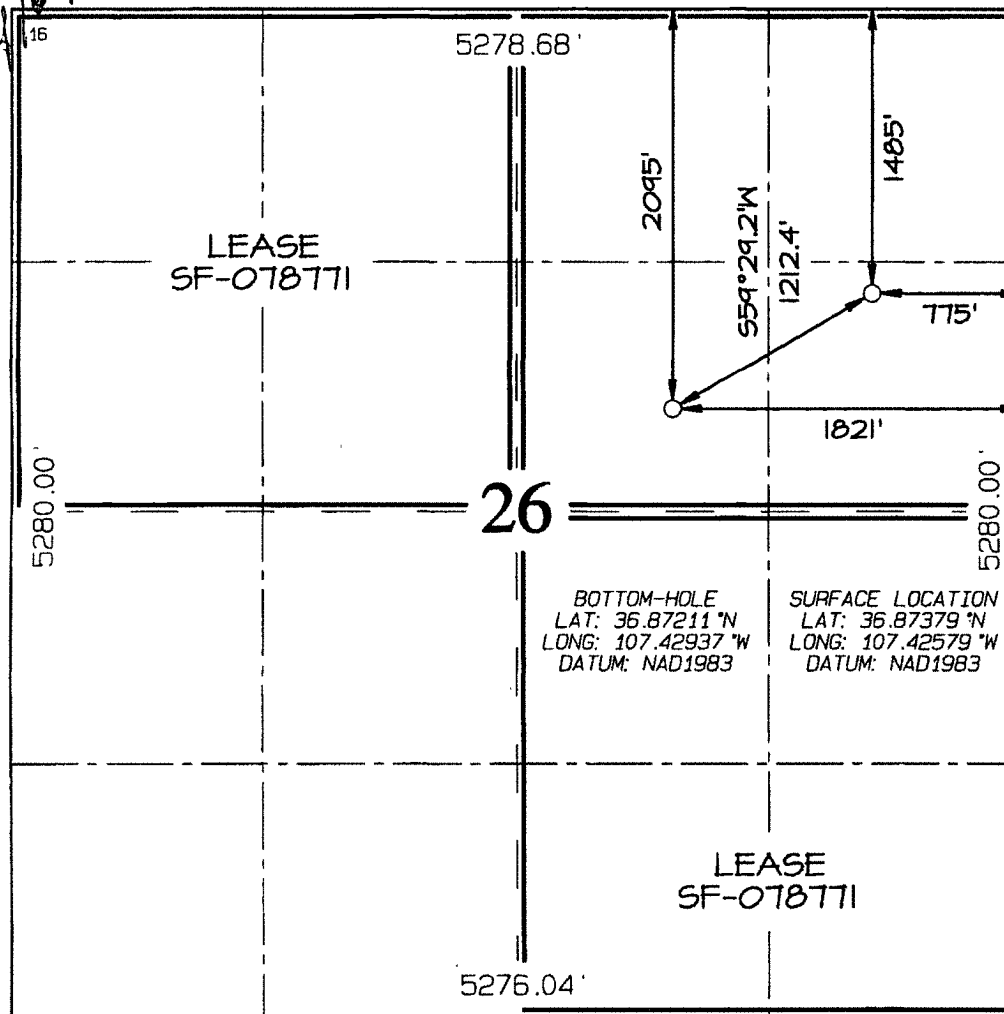
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	26	31N	6W		1485	NORTH	775	EAST	RIO ARriba

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
G	26	31N	6W		2095	NORTH	1821	EAST	RIO ARriba

¹² Dedicated Acres 320.0 Acres (E/2) - MV 320.0 Acres (N/2) - MANCOS, DK	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. RCVD AUG 14 '09 OIL CONS. DIV.
---	-------------------------------	----------------------------------	--

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 DIST. 3



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

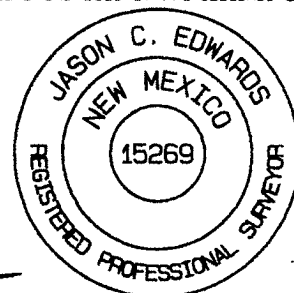
Signature: Heather Riley Date: 8/13/09
Printed Name: Heather Riley

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: AUGUST 12, 2009
Date of Survey: MAY 23, 2009

Signature and Seal of Professional Surveyor



Signature: Jason C. Edwards
Certificate Number: 15269



ROSA UNIT #5D
RIO ARRIBA CO., NEW MEXICO

API - 30 039 30780

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	237.83	0.00	0.00	0.00	0.00	0.00	0.00	
2	400.00	0.00	237.83	400.00	0.00	0.00	0.00	0.00	0.00	
3	1108.09	28.32	237.83	1079.61	-91.31	-145.16	4.00	237.83	171.49	
4	2457.87	28.32	237.83	2267.79	-432.30	-687.23	0.00	0.00	811.89	
5	3874.06	0.00	237.83	3627.00	-614.92	-977.54	2.00	180.00	1154.87	Int. Csg. Pt.
6	8199.06	0.00	237.83	7952.00	-614.92	-977.54	0.00	237.83	1154.87	PBHL

WELL DETAILS

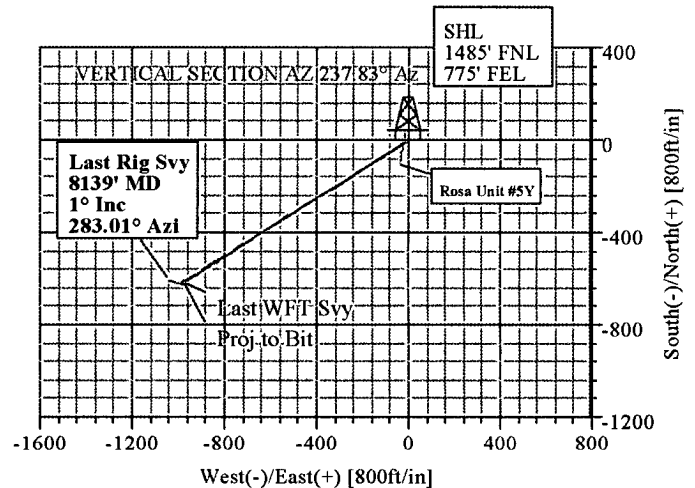
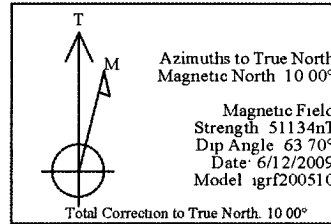
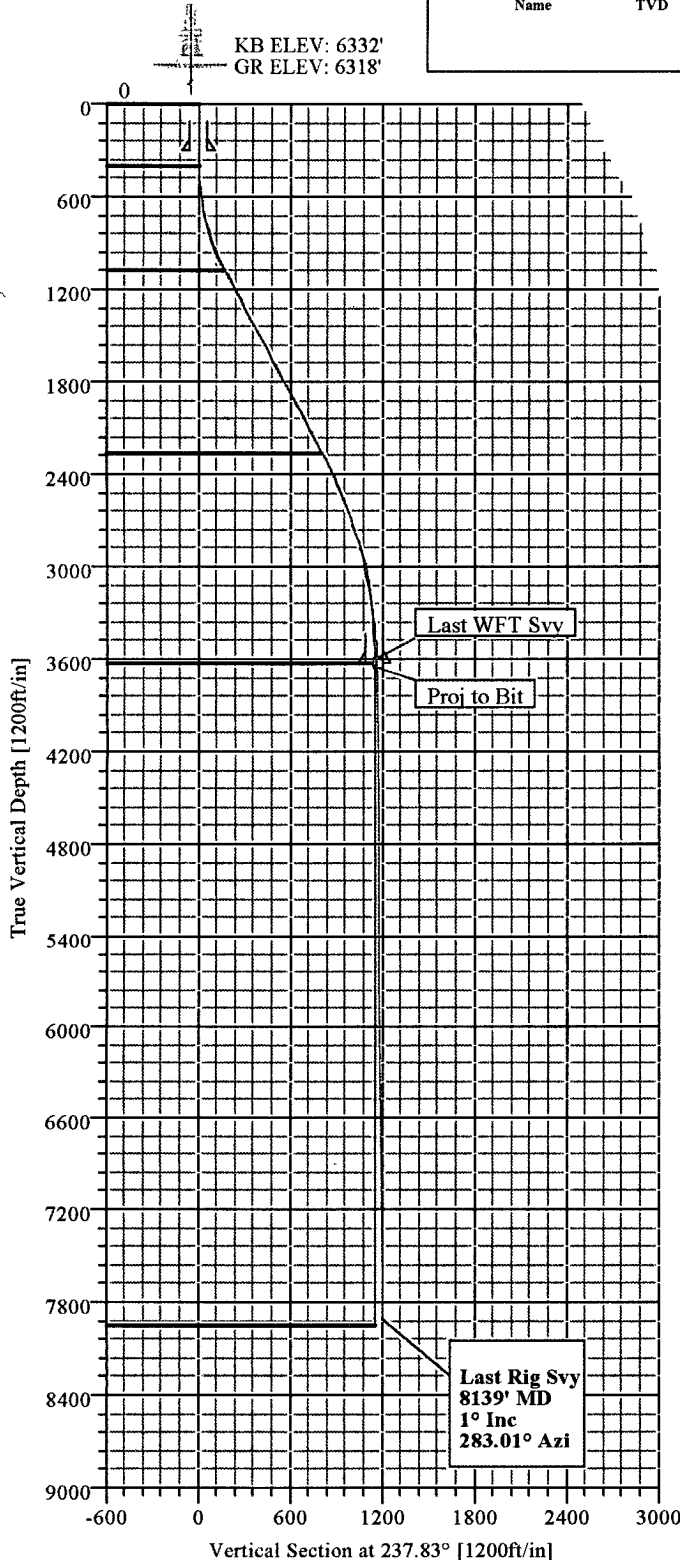
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#SD	0.00	0.00	2139470.09	1296511.62	36°52'25.640N	107°25'32.840W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
								None

FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	2402.00	2608.28	Ojo Alamo Ss.
2	2507.00	2723.37	Kirtland Sh.
3	2882.00	3120.40	Fruitland Fm.
4	3152.00	3396.86	Pictured Cliffs Ss
5	3467.00	3713.98	Lewis Sh.
6	5002.00	5249.06	Cliff House Ss. Trans.
7	5317.00	5564.06	Cliff House Ss.
8	5367.00	5614.06	Menefee Fm.
9	5612.00	5859.06	Point Lookout Ss.
10	5927.00	6174.06	Mancos Sh.
11	6917.00	7164.06	Gallup Ss
12	7622.00	7869.06	Greenhorn Ls.
13	7677.00	7924.06	Graneros Ss.
14	7797.00	8044.06	Dakota Ss.



RCVD AUG 14 '09

OIL CONS. DIV.

DIST. 3



Weatherford®

CASING DETAILS

No.	TVD	MD	Name	Size
1	300.00	300.00	10 3/4"	10.750
2	3627.00	3874.06	7 5/8" Int. Csg.	0.000

Plan: Plan #1 (#5D/1)

Created By: Lindsey Maddux

Date: 8/11/2009



Weatherford International, Inc.

Survey Report



Weatherford

Company: WILLIAMS PRODUCTION	Date: 8/11/2009	Time: 10:44:15	Page: 1
Field: RIO ARRIBA CO. NM (NAD 83)	Co-ordinate(NE) Reference: Well: #5D, True North		
Site: Rosa Unit #5D	Vertical (TVD) Reference: SITE 6332.0		
Well: #5D	Section (VS) Reference: Well (0.00N,0.00E,237.83Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Field: RIO ARRIBA CO. NM (NAD 83)

Map System: US State Plane Coordinate System 1983
Geo Datum: GRS 1980
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Central Zone
Coordinate System: Well Centre
Geomagnetic Model: igf200510

Site: Rosa Unit #5D

1485' FNL 775' FEL of SEC 26 T31N R6W

Site Position:	Northing: 2139470.09 ft	Latitude: 36 52 25.640 N
From: Geographic	Easting: 1296511.62 ft	Longitude: 107 25 32.840 W
Position Uncertainty: 0.00 ft		North Reference: True
Ground Level: 6318.00 ft		Grid Convergence: -0.71 deg

Well: #5D

Slot Name:

Well Position:	+N/-S 0.00 ft	Northing: 2139470.09 ft	Latitude: 36 52 25.640 N
	+E/-W 0.00 ft	Easting: 1296511.62 ft	Longitude: 107 25 32.840 W
Position Uncertainty: 0.00 ft			

Wellpath: 1

Current Datum: SITE	Height 6332.00 ft	Drilled From: Surface
Magnetic Data: 6/12/2009		Tie-on Depth: 0.00 ft
Field Strength: 51134 nT		Above System Datum: Mean Sea Level
Vertical Section: Depth From (TVD)	+N/-S	Declination: 10.00 deg
ft	ft	Mag Dip Angle: 63.70 deg
		+E/-W
		ft
		Direction
		deg
0.00	0.00	0.00
		237.83

Survey: WFT SVY

Start Date: 7/27/2009

Company: Weatherford International, Inc
Tool: MWD;MWD - Standard

Engineer: Lindsey Maddux
Tied-to: From Surface

Survey: WFT SVY

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	MWD
353.00	1.36	250.26	352.97	-1.41	-3.94	4.09	0.39	0.39	0.00	MWD
384.00	1.69	246.36	383.96	-1.72	-4.71	4.90	1.12	1.06	-12.58	MWD
414.00	2.27	243.53	413.94	-2.16	-5.65	5.93	1.96	1.93	-9.43	MWD
445.00	2.85	241.10	444.91	-2.81	-6.87	7.31	1.90	1.87	-7.84	MWD
476.00	3.72	234.03	475.86	-3.77	-8.36	9.08	3.09	2.81	-22.81	MWD
507.00	4.72	234.31	506.77	-5.11	-10.21	11.36	3.23	3.23	0.90	MWD
537.00	5.66	232.63	536.65	-6.73	-12.39	14.07	3.17	3.13	-5.60	MWD
568.00	6.45	233.68	567.47	-8.69	-15.00	17.33	2.57	2.55	3.39	MWD
599.00	7.37	232.67	598.25	-10.92	-17.99	21.04	2.99	2.97	-3.26	MWD
630.00	8.48	233.97	628.95	-13.47	-21.42	25.30	3.63	3.58	4.19	MWD
660.00	10.02	234.93	658.56	-16.27	-25.34	30.12	5.16	5.13	3.20	MWD
691.00	11.65	235.19	689.01	-19.61	-30.12	35.94	5.26	5.26	0.84	MWD
721.00	13.00	234.88	718.32	-23.28	-35.37	42.33	4.51	4.50	-1.03	MWD
752.00	14.31	234.75	748.44	-27.50	-41.35	49.64	4.23	4.23	-0.42	MWD
783.00	15.81	235.63	778.37	-32.09	-47.96	57.69	4.89	4.84	2.84	MWD
814.00	17.36	236.65	808.08	-37.02	-55.31	66.53	5.09	5.00	3.29	MWD
845.00	18.44	236.50	837.58	-42.27	-63.26	76.06	3.49	3.48	-0.48	MWD
876.00	19.50	237.50	866.90	-47.76	-71.72	86.13	3.58	3.42	3.23	MWD
907.00	20.56	237.00	896.02	-53.50	-80.65	96.75	3.46	3.42	-1.61	MWD
939.00	21.88	237.88	925.85	-59.73	-90.41	108.33	4.24	4.12	2.75	MWD
970.00	23.24	238.25	954.48	-66.02	-100.50	120.22	4.41	4.39	1.19	MWD
1002.00	24.57	239.09	983.73	-72.76	-111.58	133.19	4.29	4.16	2.62	MWD
1033.00	25.60	238.11	1011.81	-79.61	-122.80	146.33	3.58	3.32	-3.16	MWD



Weatherford International, Inc.

Survey Report



Weatherford

Company: WILLIAMS PRODUCTION	Date: 8/11/2009	Time: 10:44:15	Page: 2
Field: RIO ARRIBA CO. NM (NAD 83)	Co-ordinate(NE) Reference:	Well: #5D, True North	
Site: Rosa Unit #5D	Vertical (TVD) Reference:	SITE 6332.0	
Well: #5D	Section (VS) Reference:	Well (0.00N,0.00E,237.83Azi)	
Wellpath: 1	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: WFT SVY

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1065.00	26.10	237.47	1040.61	-87.05	-134.60	160.28	1.79	1.56	-2.00	MWD
1097.00	26.32	237.32	1069.32	-94.66	-146.51	174.42	0.72	0.69	-0.47	MWD
1129.00	26.65	237.29	1097.96	-102.37	-158.52	188.69	1.03	1.03	-0.09	MWD
1160.00	27.01	236.38	1125.62	-110.03	-170.23	202.67	1.76	1.16	-2.94	MWD
1191.00	27.41	236.04	1153.19	-117.91	-182.01	216.84	1.38	1.29	-1.10	MWD
1223.00	27.73	235.44	1181.56	-126.25	-194.25	231.64	1.32	1.00	-1.87	MWD
1255.00	28.41	235.20	1209.79	-134.82	-206.63	246.69	2.15	2.12	-0.75	MWD
1287.00	27.87	237.27	1238.01	-143.20	-219.17	261.77	3.49	-1.69	6.47	MWD
1319.00	27.33	237.62	1266.37	-151.18	-231.67	276.60	1.76	-1.69	1.09	MWD
1351.00	27.30	237.77	1294.80	-159.03	-244.08	291.28	0.23	-0.09	0.47	MWD
1382.00	27.52	237.87	1322.32	-166.63	-256.16	305.55	0.73	0.71	0.32	MWD
1413.00	27.69	237.82	1349.79	-174.28	-268.32	319.92	0.55	0.55	-0.16	MWD
1444.00	28.19	237.88	1377.18	-182.00	-280.62	334.44	1.62	1.61	0.19	MWD
1476.00	28.56	238.63	1405.33	-190.01	-293.55	349.65	1.61	1.16	2.34	MWD
1508.00	28.81	239.00	1433.41	-197.96	-306.69	365.01	0.96	0.78	1.16	MWD
1540.00	29.31	239.13	1461.38	-205.95	-320.02	380.54	1.57	1.56	0.41	MWD
1571.00	28.75	239.38	1488.48	-213.64	-332.95	395.58	1.85	-1.81	0.81	MWD
1635.00	28.56	240.00	1544.65	-229.13	-359.45	426.26	0.55	-0.30	0.97	MWD
1667.00	28.06	239.63	1572.82	-236.76	-372.56	441.42	1.66	-1.56	-1.16	MWD
1699.00	28.19	239.50	1601.04	-244.40	-385.57	456.50	0.45	0.41	-0.41	MWD
1730.00	27.69	238.50	1628.43	-251.88	-398.02	471.02	2.21	-1.61	-3.23	MWD
1762.00	27.75	238.50	1656.75	-259.66	-410.71	485.91	0.19	0.19	0.00	MWD
1794.00	28.26	238.46	1685.01	-267.51	-423.52	500.93	1.59	1.59	-0.12	MWD
1826.00	28.45	238.68	1713.17	-275.44	-436.49	516.13	0.68	0.59	0.69	MWD
1857.00	28.94	238.75	1740.36	-283.17	-449.21	531.01	1.58	1.58	0.23	MWD
1889.00	29.05	239.33	1768.35	-291.15	-462.51	546.52	0.94	0.34	1.81	MWD
1920.00	27.87	239.76	1795.60	-298.63	-475.24	561.28	3.86	-3.81	1.39	MWD
1952.00	27.73	239.93	1823.91	-306.13	-488.15	576.20	0.50	-0.44	0.53	MWD
1983.00	27.42	239.17	1851.39	-313.40	-500.52	590.54	1.51	-1.00	-2.45	MWD
2015.00	27.31	239.12	1879.81	-320.95	-513.15	605.25	0.35	-0.34	-0.16	MWD
2047.00	27.30	238.50	1908.24	-328.55	-525.70	619.92	0.89	-0.03	-1.94	MWD
2078.00	27.38	237.50	1935.78	-336.09	-537.78	634.16	1.50	0.26	-3.23	MWD
2110.00	27.75	236.00	1964.15	-344.21	-550.16	648.97	2.46	1.16	-4.69	MWD
2140.00	28.18	235.75	1990.64	-352.11	-561.81	663.03	1.49	1.43	-0.83	MWD
2172.00	28.56	235.88	2018.80	-360.65	-574.38	678.22	1.20	1.19	0.41	MWD
2204.00	28.44	236.63	2046.92	-369.13	-587.08	693.48	1.18	-0.37	2.34	MWD
2236.00	28.06	237.75	2075.11	-377.34	-599.81	708.63	2.04	-1.19	3.50	MWD
2267.00	28.06	238.50	2102.47	-385.04	-612.19	723.21	1.14	0.00	2.42	MWD
2299.00	28.50	239.50	2130.65	-392.85	-625.19	738.37	2.02	1.37	3.12	MWD
2331.00	28.63	240.13	2158.75	-400.54	-638.41	753.66	1.03	0.41	1.97	MWD
2362.00	28.31	239.13	2186.00	-408.01	-651.16	768.43	1.85	-1.03	-3.23	MWD
2394.00	28.39	238.00	2214.17	-415.93	-664.13	783.62	1.70	0.25	-3.53	MWD
2426.00	28.25	237.63	2242.34	-424.02	-676.98	798.80	0.70	-0.44	-1.16	MWD
2458.00	27.97	237.94	2270.56	-432.06	-689.73	813.88	0.99	-0.87	0.97	MWD
2489.00	26.64	238.98	2298.11	-439.50	-701.85	828.10	4.56	-4.29	3.35	MWD
2519.00	25.64	238.47	2325.04	-446.36	-713.15	841.32	3.42	-3.33	-1.70	MWD
2551.00	25.13	237.42	2353.95	-453.64	-724.77	855.03	2.13	-1.59	-3.28	MWD
2583.00	24.19	236.15	2383.03	-460.95	-735.94	868.38	3.37	-2.94	-3.97	MWD
2615.00	24.00	236.38	2412.24	-468.20	-746.81	881.44	0.66	-0.59	0.72	MWD
2647.00	23.95	236.26	2441.48	-475.42	-757.63	894.44	0.22	-0.16	-0.37	MWD
2679.00	23.60	235.23	2470.77	-482.68	-768.29	907.33	1.70	-1.09	-3.22	MWD
2709.00	23.25	235.75	2498.29	-489.43	-778.12	919.25	1.35	-1.17	1.73	MWD
2740.00	23.08	235.46	2526.79	-496.32	-788.18	931.43	0.66	-0.55	-0.94	MWD



Weatherford International, Inc.

Survey Report

**Weatherford**

Company: WILLIAMS PRODUCTION	Date: 8/11/2009	Time: 10:44:15	Page: 3
Field: RIO ARRIBA CO: NM (NAD 83)	Co-ordinate(NE) Reference: Well: #5D, True North		
Site: Rosa Unit #5D	Vertical (TVD) Reference: SITE 6332.0		
Well: #5D	Section (VS) Reference: Well (0.00N,0.00E,237.83Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: WFT SVY

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
2772.00	22.43	235.37	2556.30	-503.35	-798.37	943.80	2.03	-2.03	-0.28	MWD
2804.00	22.14	234.15	2585.91	-510.35	-808.28	955.92	1.71	-0.91	-3.81	MWD
2836.00	21.55	234.10	2615.62	-517.33	-817.93	967.80	1.84	-1.84	-0.16	MWD
2867.00	20.91	234.33	2644.51	-523.89	-827.04	979.00	2.08	-2.06	0.74	MWD
2899.00	20.37	233.99	2674.46	-530.49	-836.18	990.26	1.73	-1.69	-1.06	MWD
2931.00	19.93	235.88	2704.50	-536.83	-845.20	1001.27	2.46	-1.37	5.91	MWD
2963.00	19.46	239.46	2734.63	-542.60	-854.31	1012.04	4.05	-1.47	11.19	MWD
2995.00	18.81	240.50	2764.86	-547.85	-863.39	1022.53	2.29	-2.03	3.25	MWD
3027.00	18.88	238.75	2795.14	-553.07	-872.31	1032.86	1.78	0.22	-5.47	MWD
3059.00	18.31	237.00	2825.47	-558.50	-880.95	1043.06	2.49	-1.78	-5.47	MWD
3090.00	17.69	237.38	2854.96	-563.69	-889.00	1052.64	2.04	-2.00	1.23	MWD
3121.00	17.19	238.75	2884.53	-568.60	-896.88	1061.93	2.09	-1.61	4.42	MWD
3153.00	16.31	240.13	2915.17	-573.29	-904.82	1071.15	3.02	-2.75	4.31	MWD
3185.00	15.25	240.63	2945.97	-577.59	-912.39	1079.84	3.34	-3.31	1.56	MWD
3217.00	13.81	240.25	2976.94	-581.55	-919.37	1087.86	4.51	-4.50	-1.19	MWD
3279.00	11.13	237.50	3037.48	-588.44	-930.84	1101.24	4.43	-4.32	-4.44	MWD
3310.00	10.50	236.63	3067.92	-591.60	-935.73	1107.06	2.10	-2.03	-2.81	MWD
3342.00	9.75	234.50	3099.43	-594.78	-940.37	1112.68	2.62	-2.34	-6.66	MWD
3373.00	9.38	232.50	3130.00	-597.84	-944.51	1117.81	1.60	-1.19	-6.45	MWD
3404.00	9.06	234.08	3160.59	-600.81	-948.49	1122.76	1.32	-1.03	5.10	MWD
3435.00	9.22	235.59	3191.20	-603.65	-952.51	1127.68	0.93	0.52	4.87	MWD
3466.00	8.77	237.03	3221.82	-606.34	-956.55	1132.52	1.62	-1.45	4.65	MWD
3498.00	8.64	238.80	3253.45	-608.91	-960.65	1137.37	0.93	-0.41	5.53	MWD
3530.00	8.04	239.92	3285.11	-611.28	-964.64	1142.01	1.94	-1.87	3.50	MWD
3562.00	6.94	243.39	3316.84	-613.27	-968.31	1146.17	3.72	-3.44	10.84	MWD
3593.00	6.22	241.81	3347.64	-614.90	-971.46	1149.71	2.39	-2.32	-5.10	MWD
3624.00	5.83	235.55	3378.46	-616.58	-974.24	1152.95	2.46	-1.26	-20.19	MWD
3656.00	5.36	230.93	3410.31	-618.44	-976.74	1156.06	2.03	-1.47	-14.44	MWD
3687.00	4.56	228.75	3441.20	-620.17	-978.79	1158.72	2.65	-2.58	-7.03	MWD
3719.00	3.75	226.88	3473.11	-621.72	-980.51	1161.00	2.57	-2.53	-5.84	MWD
3750.00	2.88	228.38	3504.06	-622.93	-981.83	1162.76	2.82	-2.81	4.84	MWD
3782.00	1.97	240.58	3536.03	-623.74	-982.91	1164.11	3.25	-2.84	38.12	MWD
3814.00	0.87	257.52	3568.02	-624.06	-983.63	1164.88	3.64	-3.44	52.94	MWD
3841.00	0.69	283.01	3595.02	-624.07	-983.99	1165.19	1.43	-0.67	94.41	Last WFT Svy
3891.00	0.69	283.01	3645.01	-623.93	-984.57	1165.62	0.00	0.00	0.00	Proj to Bit
8139.00	1.00	283.01	7892.55	-609.83	-1045.61	1209.78	0.01	0.01	0.00	Last Rig Svy

Annotation

MD ft	TVD ft	
3841.00	3595.02	Last WFT Svy
3891.00	3645.01	Proj to Bit
8139.00	7892.55	Last Rig Svy