

UNITED STATES
DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT

SEP 29 2009

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICE AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION TO DRILL" for permit for such proposals

SUBMIT IN TRIPPLICATE

1. Type of Well
Oil Well Gas Well ☒ Other

2. Name of Operator
WILLIAMS PRODUCTION COMPANY

3. Address and Telephone No.
PO Box 640 Aztec, NM 87410-0640

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
600' FNL & 645' FEL
1143' FNL & 1815' FEL SEC 34 32N 6W ☒

5. Lease Designation and Serial No.
NMSF-078772 ☒

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
Rosa Unit

8. Well Name and No.
Rosa Unit 089D

9. API Well No.
30-039-30783

10. Field and Pool, or Exploratory Area
BLANCO MV/BASIN DK/BASIN MC

11. County or Parish, State
Rio Arriba, New Mexico

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

Notice of Intent

☒ Subsequent Report

Final Abandonment

TYPE OF ACTION

Abandonment

Recompletion

Plugging Back

Casing Repair

Altering Casing

☒ Other Completion

Change of Plans

New Construction

Non-Routine Fracturing

Water Shut-Off

Conversion to Injection

Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

8-13-09 - MIRU AWS #266. Test 5-1/2" casing to 1000 psi for 30 min, no leak off ☒

8-14-09 - DO cement to PBTD @ 8614'. MOL with AWS #266

8-28-09 - Rigless - RU BWWC and run CBL, TOC @ 3760'. Perf Dakota, 8482'-8600', with 75, 0.34" holes. Frac Dakota with 5000# 100 mesh BASF followed with 113,600# 40/70 BASF. Set Flo-Thru BP @ 7978'. Perf Lower Mancos, 7700'-7840', with 51, 0.34" holes ☒

8-29-09 - Frac Lower Mancos with 5000# 100 mesh BASF followed with 99,400# 40/70 BASF. Set Flo-thru BP @ 7670'. Perf Upper Mancos, 7400'-7650', with 78, 0.34" holes. Frac Upper Mancos with 5000# 100 mesh BASF followed with 109,100# 40/70 BASF ☒

9-3-09 - MIRU AWS #442 for completion

9-9-09 - Set CBP @ 6584'

9-10-09 thru 9-14-09 - Perf Mesaverde formation 6459'-6516', 6238'-6260', 6032'-6036' & 5976'-5980' and do DFIT tests

14. I hereby certify that the foregoing is true and correct

Signed

Larry Higgins

Title Drilling COM Date 9/29/09

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

ACCEPTED FOR RECORD

SEP 30 2009

FARMINGTON FIELD OFFICE
BY T. Salyers

Title 18 U.S.C. Section 1001, makes 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.

NMOCD

Rosa Unit # 89D – Page 2

9-15-09 – Perf Lower Mesaverde, 6203'-6516', with 54, 0.34" holes

9-16-09 – Frac Lower Mesaverde with 87,700# 20/40 mesh BASF. Set Flo-thru BP @ 6190'. Perf Upper Mesaverde, 5976'-6171', with 43, 0.34" holes. Frac Upper Measverde with 104,396# 20/40 mesh BASF ✓

9-18-09 – DQ Flo-thru BP @ 6190'

9-24-09 – DO CBP @ 6584', DQ Flo-thru BP @ 7670'

9-25-09 – DQ Flo-thru BP @ 7978'

9-26-09 – FLOW TEST: Duration = 1 hr, Test Method, choke = 1/2", MCF/D = 1077, Csg Psi = 180 lbs , Tbg Psi = 0 psi , Gas Type = wet, Gas Disposition = non flaring

9-28-09 – Land well as follows, 2-3/8" half muleshoe, 1 jt 2-3/8" J-55 tbg, 1.780 I.D. F-nipple, 141 jts 2-3/8" 4.70# J-55 EUE tbg, & 124 jts 2-3/8" 4.70# N-80 EUE tbg, EQT @ 8511' F-nipple @ 8477' ✓

ROSA UNIT #089D

BLANCO MV / BASIN MC / BASIN DK

Spud: 07/21/09

Completed: 09/28/09

1st Delivery: 0/0/00

Surface Location:

600' FNL and 645' FEL
NE/4 NE/4 Sec 34 (A), T32N, R06W
Rio Arriba, NM

Bottom Hole Location:

1143' FNL and 1815' FEL
NW/4 NE/4 Sec 34 (B), T32N, R06W
Rio Arriba, NM

Elevation: 6664' GR

API # 30-039-30783

Top	MD Depth	TVD Depth
Lewis	4026'	3749'
Cliffhouse Ss.	5962'	5684'
Menefee	6012'	5734'
Point Lookout	6211'	5933'
Mancos	6706'	6428'
Dakota	8482'	8204'

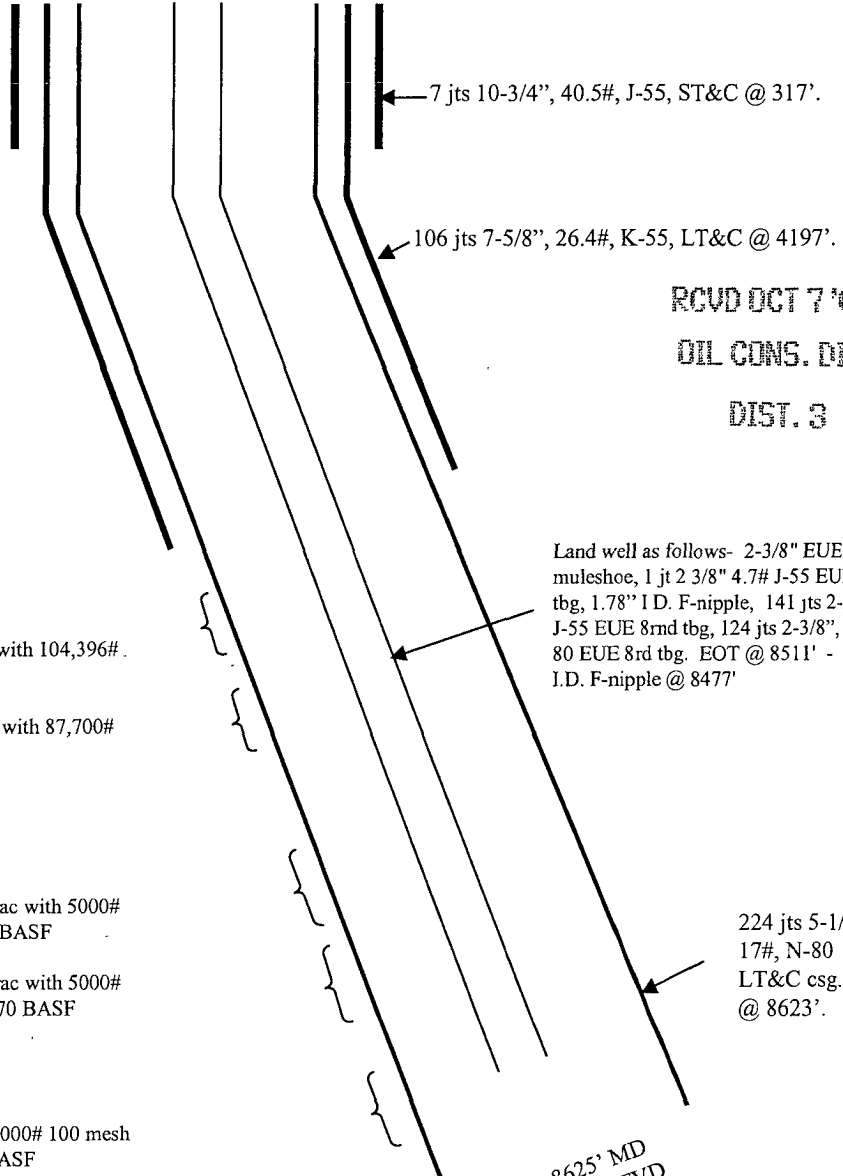
Upper MV: 5976'-6171' (43, 0.34" holes) Frac with 104,396#
20/40 mesh BASF

Lower MV: 6203'-6516' (54, 0.34" holes) Frac with 87,700#
20/40 mesh BASF

Upper Mancos: 7400'-7650' (78, 0.34" holes) Frac with 5000#
100 mesh followed with 109,100# 40/70 BASF

Lower Mancos: 7700'-7840' (51, 0.34" holes) Frac with 5000#
100 mesh BASF followed with 99,400# 40/70 BASF

Dakota: 8482'-8600' (75, 0.34" holes) Frac with 5000# 100 mesh
BASF followed with 113,600# 40/70 BASF



RCVD OCT 7 '09

OIL CONS. DIV.

DIST. 3

TD @ 8625' MD
TD @ 8347' TVD
PBTd @ 8614' MD
PBTd @ 8336' TVD

Hole Size	Casing	Cement	Volume	Top of Cmt
14-3/4"	10-3/4", 40.5#	290 sxs	521 cu.ft.	Surface
9-7/8"	7-5/8", 26.4#	710 sxs	1783 cu.ft.	Surface
6-3/4"	5-1/2", 17#	385 sxs	538 cu.ft.	3760' CBL



ROSA UNIT #89D
RIO ARriba CO., NEW MEXICO

API# 30-089-30783

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	242.66	0.00	0.00	0.00	0.00	0.00	0.00	
2	400.00	0.00	242.66	400.00	0.00	0.00	0.00	0.00	0.00	
3	1393.88	29.82	242.66	1349.62	-116.11	-224.58	3.00	242.66	252.82	
4	2718.12	29.82	242.66	2498.56	-418.50	-809.48	0.00	0.00	911.26	
5	4208.94	0.00	242.66	3923.00	-592.67	-1146.35	2.00	180.00	1290.49	
6	8663.94	0.00	242.66	8378.00	-592.67	-1146.35	0.00	242.66	1290.49	

WELL DETAILS

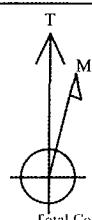
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#89D	0.00	0.00	2164546.39	1293123.29	36°56'33.140N	107°26'18.380W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Int. Csg. Pt. 2	3923.00	-592.67	-1146.35	2163968.06	1291969.64	36°56'27.280N	107°26'32.500W	Point
PBHL	8378.00	-592.67	-1146.35	2163968.06	1291969.64	36°56'27.280N	107°26'32.500W	Point

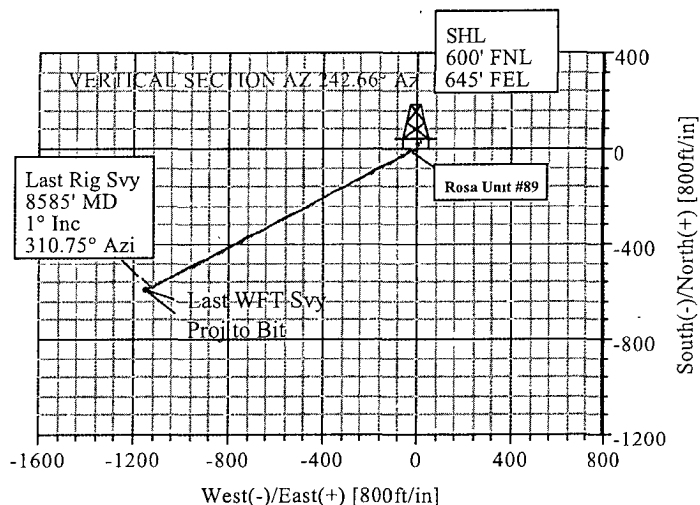
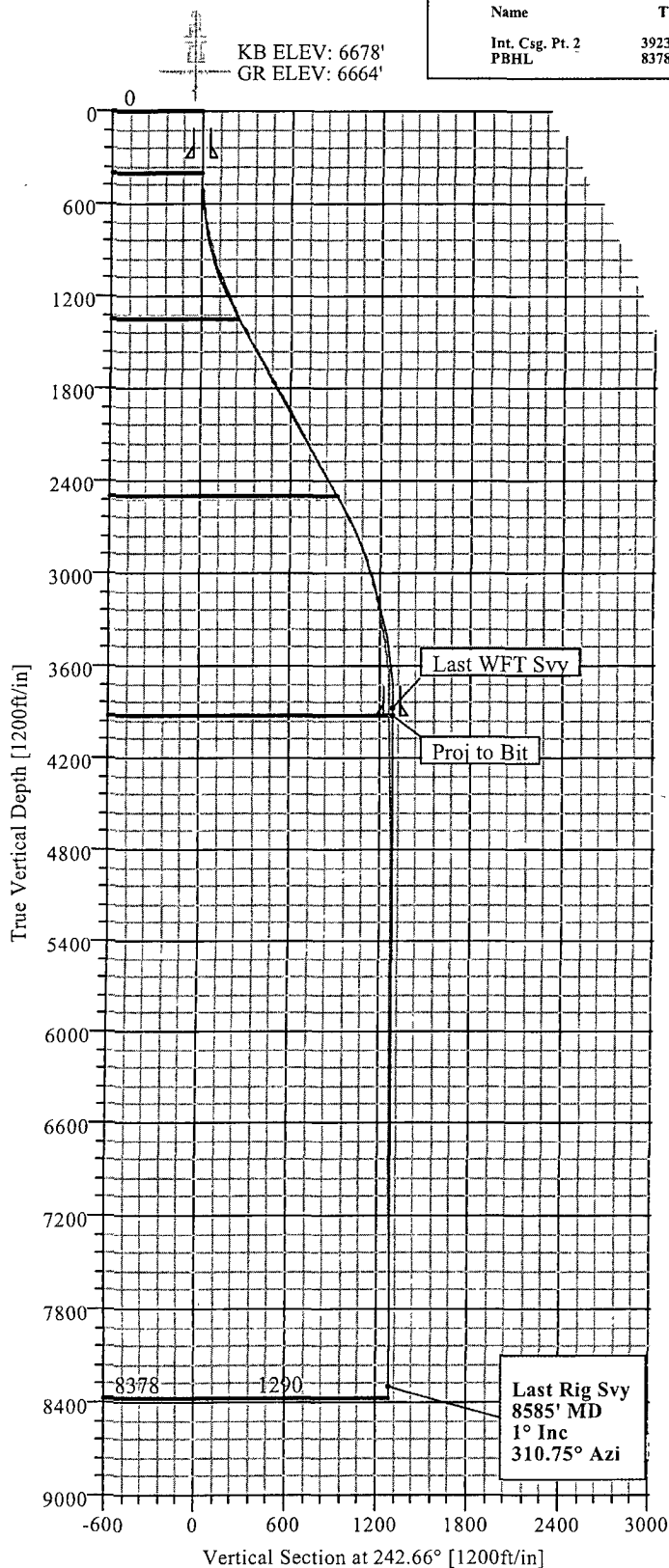
FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	2673.00	2915.43	Ojo Alamo Ss
2	2768.00	3020.11	Kirtland Sh.
3	3193.00	3470.80	Fruitland Fm.
4	3448.00	3731.73	Pictured Cliffs Ss.
5	3743.00	4028.82	Lewis Sh.
6	5378.00	5663.94	Cliff House Ss. Trans.
7	5703.00	5988.94	Cliff House Ss.
8	5748.00	6033.94	Menefee Fm.
9	5928.00	6213.94	Point Lookout Ss.
10	6238.00	6523.94	Mancos Sh.
11	7283.00	7568.94	Gallup Ss.
12	8023.00	8308.94	Greenhorn Ls.
13	8083.00	8368.94	Graneros Ss.
14	8213.00	8498.94	Dakota Ss.



Azimuths to True North
Magnetic North. 10.02°
Magnetic Field
Strength: 51172nT
Dip Angle: 63.76°
Date 6/11/2009
Model igrf200510

Total Correction to True North 10.02°



RCVD OCT 7 '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	3923.00	4208.94	7 5/8" Int. Csg.	0.000

Plan. Plan #2 (#89D/1)

Created By: Lindsey Maddux

Date: 8/12/2009



Weatherford International, Inc.

Survey Report



Weatherford

Company:	WILLIAMS PRODUCTION	Date:	8/12/2009	Time:	14:52:26	Page:	1
Field:	RIO ARRIBA CO. NM (NAD 83)	Co-ordinate(NE) Reference:	Well: #89D; True North				
Site:	Rosa Unit #89D	Vertical (TVD) Reference:	SITE 6678.0				
Well:	#89D	Section (VS) Reference:	Well: (0.00N;0.00E;242.66Azi)				
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:

igr200510

Site: Rosa Unit #89D

600' FNL 645' FEL of SEC 34 T32N R6W

Site Position:	From: Geographic	Northing:	2164546.39 ft	Latitude:	36 56 33.140 N
		Easting:	1293123.29 ft	Longitude:	107 26 18.380 W
Position Uncertainty:	0.00 ft			North Reference:	True
Ground Level:	6664.00 ft			Grid Convergence:	-0.71 deg

Well: #89D

Slot Name:

Well Position:	+N/-S	0.00 ft	Northing:	2164546.39 ft	Latitude:	36 56 33.140 N
	+E/-W	0.00 ft	Easting:	1293123.29 ft	Longitude:	107 26 18.380 W
Position Uncertainty:		0.00 ft				

Wellpath: 1

Current Datum:	SITE	Height	6678.00 ft	Drilled From:	Surface
Magnetic Data:	6/11/2009			Tie-on Depth:	0.00 ft
Field Strength:	51172 nT			Above System Datum:	Mean Sea Level
Vertical Section:	Depth From (TVD)	+N/-S		Declination:	10.02 deg
	ft	ft		Mag Dip Angle:	63.76 deg
				+E/-W	Direction
				ft	deg
	0.00	0.00		0.00	242.66

Survey: WFT SVY

Start Date: 7/27/2009

Company: Weatherford International, Inc

Engineer: Lindsey Maddux

Tool: MWD;MWD - Standard

Tied-to: From Surface

Survey: WFT SVY

MD	Incl	Azim	TVD	+N/-S	+E/-W	VS	DLS	Build	Turn	Tool/Comment
ft	deg	deg	ft	ft	ft	ft	deg/100ft	deg/100ft	deg/100ft	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	MWD
421.00	1.08	275.77	420.98	0.40	-3.95	3.32	0.26	0.26	0.00	MWD
452.00	2.11	266.78	451.96	0.40	-4.81	4.09	3.41	3.32	-29.00	MWD
482.00	3.21	262.24	481.93	0.25	-6.19	5.38	3.73	3.67	-15.13	MWD
513.00	4.28	257.90	512.86	-0.11	-8.18	7.32	3.57	3.45	-14.00	MWD
544.00	5.23	251.11	543.76	-0.81	-10.65	9.83	3.56	3.06	-21.90	MWD
573.00	6.12	249.54	572.61	-1.78	-13.35	12.67	3.12	3.07	-5.41	MWD
604.00	6.85	246.20	603.42	-3.10	-16.59	16.16	2.65	2.35	-10.77	MWD
635.00	7.52	240.21	634.17	-4.85	-20.04	20.03	3.24	2.16	-19.32	MWD
666.00	8.56	237.76	664.87	-7.09	-23.75	24.36	3.53	3.35	-7.90	MWD
697.00	9.88	240.26	695.47	-9.64	-28.01	29.31	4.45	4.26	8.06	MWD
728.00	10.94	239.64	725.96	-12.45	-32.86	34.91	3.44	3.42	-2.00	MWD
759.00	12.00	240.51	756.34	-15.52	-38.21	41.07	3.46	3.42	2.81	MWD
790.00	13.06	242.89	786.60	-18.70	-44.13	47.79	3.80	3.42	7.68	MWD
819.00	13.88	241.14	814.80	-21.88	-50.09	54.54	3.16	2.83	-6.03	MWD
849.00	14.56	242.56	843.88	-25.35	-56.59	61.91	2.55	2.27	4.73	MWD
880.00	15.13	241.14	873.85	-29.10	-63.59	69.85	2.18	1.84	-4.58	MWD
911.00	16.00	239.89	903.71	-33.20	-70.83	78.16	3.01	2.81	-4.03	MWD
941.00	16.94	239.39	932.48	-37.50	-78.17	86.66	3.17	3.13	-1.67	MWD
971.00	17.88	240.51	961.10	-41.99	-85.94	95.62	3.33	3.13	3.73	MWD
1001.00	18.69	238.51	989.59	-46.77	-94.05	105.02	3.42	2.70	-6.67	MWD
1032.00	19.44	239.26	1018.89	-52.00	-102.72	115.12	2.55	2.42	2.42	MWD
1063.00	20.13	238.76	1048.06	-57.40	-111.71	125.60	2.29	2.23	-1.61	MWD
1093.00	20.98	238.13	1076.15	-62.91	-120.69	136.10	2.93	2.83	-2.10	MWD



Weatherford International, Inc.

Survey Report



Weatherford

Company: WILLIAMS PRODUCTION	Date: 8/12/2009	Time: 14:52:26	Page: 2
Field: RIO ARRIBA CO. NM (NAD 83)	Co-ordinate(NE) Reference: Well: #89D, True North		
Site: Rosa Unit #89D	Vertical (TVD) Reference: SITE 6678.0		
Well: #89D	Section (VS) Reference: Well (0.00N:0.00E,242.66Azi)		
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
1124.00	21.29	239.96	1105.06	-68.66	-130.27	147.25	2.35	1.00	5.90	MWD
1155.00	21.75	239.87	1133.90	-74.36	-140.11	158.61	1.49	1.48	-0.29	MWD
1186.00	22.72	241.12	1162.60	-80.14	-150.32	170.33	3.48	3.13	4.03	MWD
1218.00	23.37	241.51	1192.04	-86.15	-161.31	182.86	2.09	2.03	1.22	MWD
1249.00	23.75	240.26	1220.46	-92.18	-172.13	195.24	2.02	1.23	-4.03	MWD
1280.00	25.03	242.42	1248.69	-98.31	-183.37	208.04	5.03	4.13	6.97	MWD
1312.00	25.97	242.15	1277.57	-104.72	-195.56	221.81	2.96	2.94	-0.84	MWD
1342.00	26.58	243.74	1304.47	-110.76	-207.39	235.09	3.10	2.03	5.30	MWD
1374.00	27.65	242.97	1332.96	-117.30	-220.43	249.68	3.52	3.34	-2.41	MWD
1406.00	28.20	244.39	1361.23	-123.94	-233.86	264.66	2.70	1.72	4.44	MWD
1437.00	28.12	244.73	1388.56	-130.23	-247.07	279.28	0.58	-0.26	1.10	MWD
1468.00	28.24	244.24	1415.89	-136.53	-260.28	293.91	0.84	0.39	-1.58	MWD
1499.00	28.84	243.82	1443.12	-143.02	-273.60	308.72	2.04	1.94	-1.35	MWD
1530.00	29.51	244.00	1470.19	-149.66	-287.17	323.83	2.18	2.16	0.58	MWD
1560.00	29.88	243.87	1496.25	-156.19	-300.52	338.68	1.25	1.23	-0.43	MWD
1623.00	30.34	244.03	1550.75	-170.07	-328.91	370.28	0.74	0.73	0.25	MWD
1686.00	30.32	241.96	1605.13	-184.52	-357.25	402.09	1.66	-0.03	-3.29	MWD
1749.00	30.76	240.18	1659.39	-200.00	-385.27	434.09	1.60	0.70	-2.83	MWD
1812.00	30.92	241.47	1713.48	-215.75	-413.46	466.37	1.08	0.25	2.05	MWD
1876.00	30.48	240.10	1768.51	-231.69	-441.98	499.02	1.29	-0.69	-2.14	MWD
1938.00	29.89	241.68	1822.10	-246.86	-469.21	530.18	1.60	-0.95	2.55	MWD
1970.00	28.88	243.51	1849.99	-254.09	-483.15	545.88	4.22	-3.16	5.72	MWD
2033.00	29.52	243.51	1904.98	-267.80	-510.66	576.61	1.02	1.02	0.00	MWD
2097.00	29.83	243.13	1960.59	-282.02	-538.97	608.29	0.57	0.48	-0.59	MWD
2160.00	29.11	241.60	2015.44	-296.40	-566.43	639.28	1.65	-1.14	-2.43	MWD
2224.00	28.78	241.65	2071.44	-311.12	-593.68	670.25	0.52	-0.52	0.08	MWD
2288.00	28.31	243.76	2127.66	-325.14	-620.85	700.83	1.74	-0.73	3.30	MWD
2351.00	28.75	243.39	2183.01	-338.53	-647.80	730.91	0.75	0.70	-0.59	MWD
2383.00	28.91	243.40	2211.05	-345.44	-661.59	746.34	0.50	0.50	0.03	MWD
2415.00	29.03	242.61	2239.04	-352.48	-675.40	761.84	1.25	0.37	-2.47	MWD
2447.00	29.06	242.78	2267.02	-359.61	-689.21	777.38	0.27	0.09	0.53	MWD
2479.00	29.00	243.52	2295.00	-366.62	-703.06	792.91	1.14	-0.19	2.31	MWD
2511.00	29.17	242.53	2322.96	-373.68	-716.93	808.46	1.59	0.53	-3.09	MWD
2543.00	29.31	241.70	2350.89	-380.99	-730.74	824.09	1.34	0.44	-2.59	MWD
2574.00	29.56	240.72	2377.88	-388.32	-744.09	839.32	1.75	0.81	-3.16	MWD
2606.00	29.94	240.88	2405.67	-396.07	-757.95	855.19	1.21	1.19	0.50	MWD
2638.00	29.48	243.11	2433.46	-403.52	-771.95	871.05	3.74	-1.44	6.97	MWD
2670.00	29.73	243.79	2461.28	-410.58	-786.09	886.85	1.31	0.78	2.12	MWD
2701.00	29.67	243.34	2488.21	-417.42	-799.85	902.21	0.74	-0.19	-1.45	MWD
2733.00	29.46	242.98	2516.04	-424.55	-813.93	918.00	0.86	-0.66	-1.12	MWD
2765.00	28.87	243.12	2543.99	-431.62	-827.84	933.59	1.86	-1.84	0.44	MWD
2797.00	28.57	243.40	2572.05	-438.54	-841.57	948.97	1.03	-0.94	0.87	MWD
2828.00	27.84	242.12	2599.37	-445.24	-854.59	963.62	3.06	-2.35	-4.13	MWD
2860.00	27.10	241.54	2627.76	-452.21	-867.61	978.38	2.46	-2.31	-1.81	MWD
2892.00	26.68	240.97	2656.30	-459.17	-880.30	992.85	1.54	-1.31	-1.78	MWD
2924.00	26.26	240.99	2684.95	-466.09	-892.77	1007.10	1.31	-1.31	0.06	MWD
2956.00	25.47	242.34	2713.74	-472.71	-905.06	1021.06	3.08	-2.47	4.22	MWD
2988.00	24.72	242.11	2742.72	-479.04	-917.06	1034.63	2.36	-2.34	-0.72	MWD
3020.00	24.05	241.63	2771.87	-485.27	-928.71	1047.84	2.18	-2.09	-1.50	MWD
3052.00	23.40	240.94	2801.16	-491.45	-940.01	1060.71	2.21	-2.03	-2.16	MWD
3083.00	22.58	242.00	2829.70	-497.24	-950.64	1072.82	2.96	-2.65	3.42	MWD
3114.00	21.95	244.43	2858.39	-502.53	-961.12	1084.56	3.60	-2.03	7.84	MWD
3177.00	19.84	246.42	2917.24	-511.89	-981.55	1107.00	3.53	-3.35	3.16	MWD



Weatherford International, Inc.

Survey Report



Weatherford

Company: WILLIAMS PRODUCTION	Date: 8/12/2009	Time: 14:52:26	Page: 3
Field: RIO ARRIBA CO NM (NAD 83)	Co-ordinate(NE) Reference:	Well: #89D, True North	
Site: Rosa Unit #89D	Vertical (TVD) Reference:	SITE 6678.0	
Well: #89D	Section (VS) Reference:	Well (0.00N,0.00E,242.66Azi)	
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
3209.00	18.27	247.62	2947.49	-515.97	-991.16	1117.42	5.06	-4.91	3.75	MWD
3240.00	17.51	249.78	2976.99	-519.43	-1000.03	1126.89	3.25	-2.45	6.97	MWD
3272.00	16.62	248.79	3007.58	-522.75	-1008.82	1136.21	2.93	-2.78	-3.09	MWD
3304.00	15.98	246.48	3038.29	-526.17	-1017.12	1145.16	2.85	-2.00	-7.22	MWD
3336.00	15.72	244.06	3069.08	-529.82	-1025.06	1153.89	2.22	-0.81	-7.56	MWD
3367.00	15.41	242.82	3098.94	-533.54	-1032.50	1162.20	1.47	-1.00	-4.00	MWD
3399.00	14.48	242.10	3129.86	-537.35	-1039.82	1170.46	2.96	-2.91	-2.25	MWD
3431.00	13.36	241.99	3160.92	-540.96	-1046.62	1178.15	3.50	-3.50	-0.34	MWD
3462.00	12.71	242.43	3191.12	-544.22	-1052.80	1185.15	2.12	-2.10	1.42	MWD
3494.00	12.26	243.23	3222.36	-547.38	-1058.96	1192.06	1.51	-1.41	2.50	MWD
3526.00	11.73	245.53	3253.66	-550.26	-1064.95	1198.71	2.23	-1.66	7.19	MWD
3558.00	11.42	245.92	3285.01	-552.90	-1070.80	1205.12	1.00	-0.97	1.22	MWD
3590.00	11.06	245.39	3316.40	-555.47	-1076.49	1211.35	1.17	-1.12	-1.66	MWD
3621.00	10.68	245.32	3346.84	-557.91	-1081.80	1217.19	1.23	-1.23	-0.23	MWD
3653.00	8.84	245.05	3378.38	-560.18	-1086.72	1222.61	5.75	-5.75	-0.84	MWD
3684.00	8.07	243.88	3409.04	-562.15	-1090.84	1227.16	2.54	-2.48	-3.77	MWD
3715.00	8.03	243.92	3439.74	-564.06	-1094.74	1231.50	0.13	-0.13	0.13	MWD
3747.00	8.10	243.38	3471.42	-566.05	-1098.76	1235.99	0.32	0.22	-1.69	MWD
3779.00	7.87	243.61	3503.11	-568.03	-1102.74	1240.44	0.73	-0.72	0.72	MWD
3811.00	7.66	242.73	3534.82	-569.98	-1106.59	1244.76	0.75	-0.66	-2.75	MWD
3842.00	7.40	241.25	3565.55	-571.89	-1110.18	1248.82	1.05	-0.84	-4.77	MWD
3874.00	7.03	241.78	3597.29	-573.81	-1113.71	1252.84	1.17	-1.16	1.66	MWD
3905.00	6.09	242.48	3628.09	-575.47	-1116.84	1256.38	3.04	-3.03	2.26	MWD
3937.00	4.78	247.14	3659.95	-576.77	-1119.58	1259.41	4.32	-4.09	14.56	MWD
3968.00	3.93	254.93	3690.86	-577.55	-1121.79	1261.73	3.33	-2.74	25.13	MWD
3999.00	3.52	261.04	3721.79	-577.97	-1123.76	1263.68	1.84	-1.32	19.71	MWD
4031.00	3.16	265.04	3753.74	-578.20	-1125.61	1265.42	1.34	-1.12	12.50	MWD
4062.00	2.50	269.53	3784.70	-578.28	-1127.14	1266.82	2.24	-2.13	14.48	MWD
4093.00	1.49	278.94	3815.68	-578.22	-1128.21	1267.74	3.41	-3.26	30.35	MWD
4125.00	0.70	292.84	3847.67	-578.08	-1128.80	1268.21	2.59	-2.47	43.44	MWD
4157.00	0.41	310.75	3879.67	-577.93	-1129.07	1268.37	1.05	-0.91	55.97	Last WFT Svy
4209.00	0.41	310.75	3931.67	-577.69	-1129.35	1268.51	0.00	0.00	0.00	Proj to Bit
8585.00	1.00	310.75	8307.32	-542.54	-1170.14	1288.60	0.01	0.01	0.00	Last Rig Svy

Annotation

MD ft	TVD ft	
4157.00	3879.67	Last WFT Svy
4209.00	3931.67	Proj to Bit
8585.00	8307.32	Last Rig Svy