

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 <i>30-039-31046</i>	*Pool Code 72319 / 71599	*Pool Name BLANCO MESAVERDE / BASIN DAKOTA
*Property Code 17033	*Property Name ROSA UNIT	*Well Number 72C
*OGRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY	*Elevation 6441'

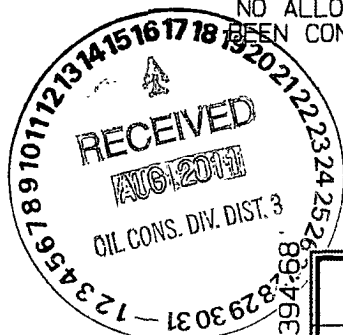
¹⁰ Surface Location

UL or Lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	6	31N	5W		1675	SOUTH	745	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	6	31N	5W		859	SOUTH	985	WEST	RIO ARriba
¹² Dedicated Acres 264.56 Acres - (Entire Section)					¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.		

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

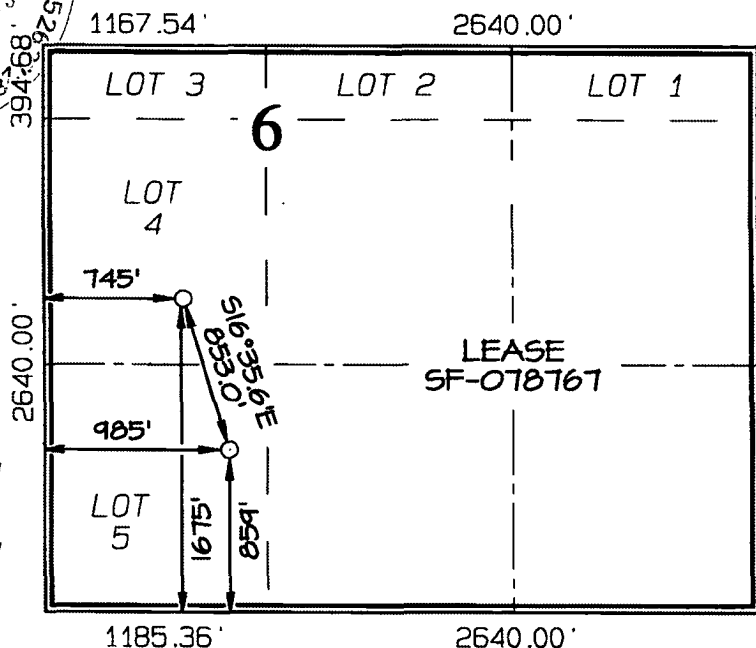


SURFACE LOCATION
LAT: 36.92587°N
LONG: 107.40463°W
DATUM: NAD1927

LAT: 36.92588°N
LONG: 107.40523°W
DATUM: NAD1983

BOTTOM-HOLE
LAT: 36.92362°N
LONG: 107.40381°W
DATUM: NAD1927

LAT: 36.92363°N
LONG: 107.40441°W
DATUM: NAD1983



¹⁷ OPERATOR CERTIFICATION

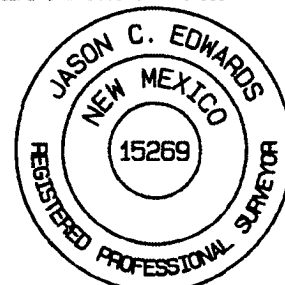
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this 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.

Larry Higgins 8-15-11
Signature Date
LARRY HIGGINS
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.

Survey Revised: AUGUST 11, 2011
Survey Date: SEPTEMBER 22, 2010
Signature and Seal of Professional Surveyor

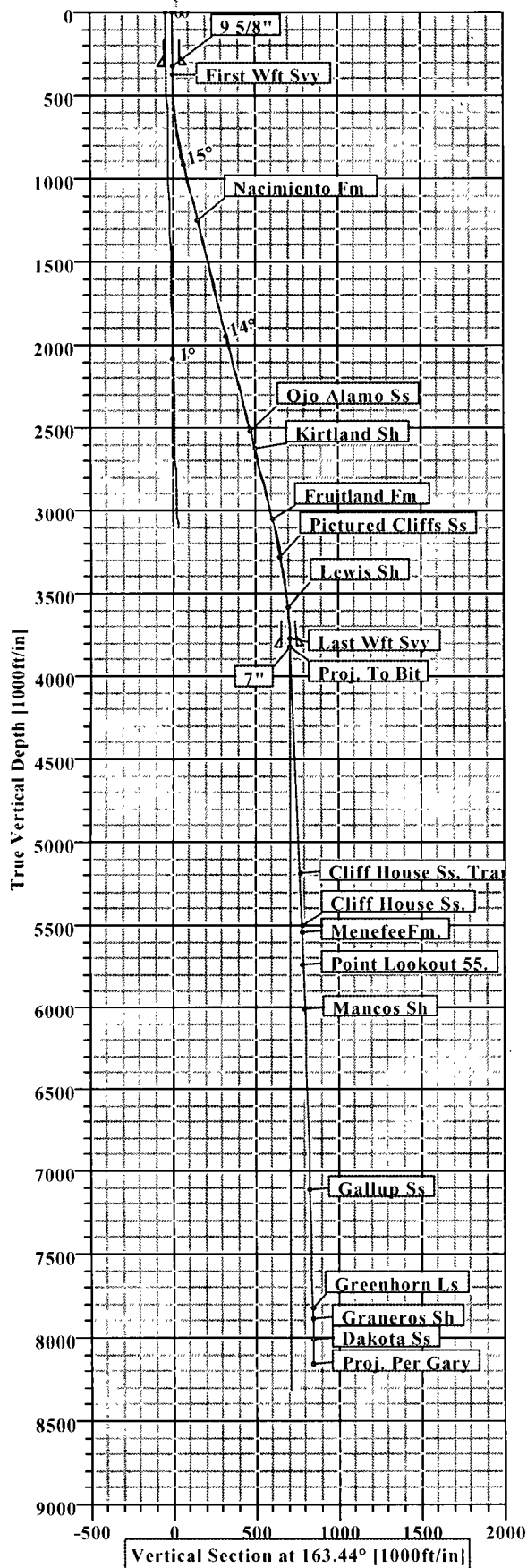


JASON C. EDWARDS
Certificate Number 15269



Rosa Unit 72C
RIO ARRIBA CO. NM
30-039-31046

KB ELEV: 6445
GL ELEV: 6442



SECTION DETAILS									
Sec	MD	Inc	A/z	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
1	0.00	0.00	163.44	0.00	0.00	0.00	0.00	0.00	0.00
2	400.00	0.00	163.44	400.00	0.00	0.00	0.00	0.00	0.00
3	871.44	14.14	163.44	866.67	-55.49	16.50	3.00	163.44	57.89
4	3098.86	14.14	163.44	3026.57	-577.18	171.63	0.00	0.00	602.16
5	4041.75	0.00	163.44	3959.91	-688.16	204.63	1.50	180.00	717.94
6	8391.84	0.00	163.44	8310.00	-688.16	204.63	0.00	0.00	717.94

WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
72C	0.00	0.00	2158361.91	1302754.78	36°55'33.168N	107°24'18.828W	N/A

TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape	
Pbhl	8310.00	-688.16	204.63	36°55'26.364N	107°24'16.308W	Point	

FORMATION TOP DETAILS			
No.	TVDPath	MDPath	Formation
1	1255.00	1272.38	Nacimiento Fm
2	2520.00	2577.39	Ojo Alamo Ss
3	2625.00	2685.37	Kirtland Sh
4	3050.00	3122.82	Fruitland Fm
5	3285.00	3363.19	Pictured Cliffs Ss
6	3580.00	3661.29	Lewis Sh
7	5190.00	5273.18	Cliff House Ss. Trans
8	5495.00	5578.38	Cliff House Ss.
9	5540.00	5623.40	Menefee Fm.
10	5735.00	5818.52	Point Lookout SS.
11	6015.00	6098.66	Mancos Sh
12	7115.00	7199.10	Gallup Ss
13	7825.00	7909.27	Greenhorn Ls
14	7885.00	7969.28	Graneros Sh
15	8010.00	8094.30	Dakota Ss

CASING DETAILS				
No.	TVD	MD	Name	Size
1	319.97	320.00	9 5/8"	9.625
2	3826.00	3908.00	7"	7.000

SITE DETAILS

Rosa Unit 72C

Site Centre Latitude: 36°55'33.168N
Longitude: 107°24'18.828W

Ground Level: 6441.00
Positional Uncertainty: 0.00
Convergence: -0.69



Azimuths to True North
Magnetic North: 9.75°

Magnetic Field
Strength: 50926nT
Dip Angle: 63.68°
Date: 8/1/2011
Model: IGRF2010

Total Correction To True North 9.75°

Survey: Wft Svy (72C/1)

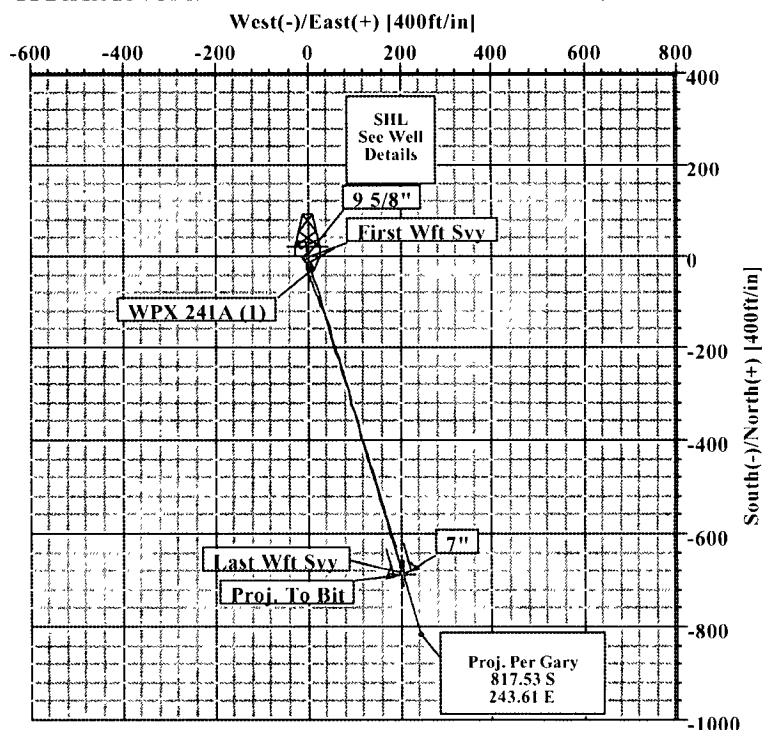
No	MD	Inc	A/z	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
69	8242.00	1.00	163.44	8157.68	-817.53	243.61	0.04	180.00	853.06



Weatherford

LEGEND

- 72C, I, Plan #2
- WPX 241A (1)
- 1
- Wft Svy



Survey: Wft Svy (72C/1)

Created By: Russell W. Joyner

Date: 8/2/2011



Weatherford International Ltd.

WFT Survey Report Lat, Long

**Weatherford**

Company: Williams Production Date: 8/2/2011 Time: 11:25:42 Page: 1
Field: RIO ARRIBA CO. NM (NAD 83) Co-ordinate(NE) Reference: Well: 72C, True North
Site: Rosa Unit 72C Vertical (TVD) Reference: SITE 6445.0
Well: 72C Section (VS) Reference: Well (0 00N,0.00E,163 44Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: Wft Svy Start Date: 7/12/2011
Company: Weatherford International Ltd. Engineer: Russell W. Joyner
Tool: MWD,MWD - Standard Tied-to: From Surface

Field: RIO ARRIBA CO. NM (NAD 83)

Map System: US State Plane Coordinate System 1983 Map Zone: New Mexico, Central Zone
Geo Datum: GRS 1980 Coordinate System: Well Centre
Sys Datum: Mean Sea Level Geomagnetic Model: IGRF2010

Site: Rosa Unit 72C

Site Position: Northing: 2158361.91 ft Latitude: 36 55 33.168 N
From: Geographic Easting: 1302754.78 ft Longitude: 107 24 18.828 W
Position Uncertainty: 0.00 ft North Reference: True
Ground Level: 6441.00 ft Grid Convergence: -0.69 deg

Well: 72C Slot Name:
Well Position: +N/-S 0.00 ft Northing: 2158361.91 ft Latitude: 36 55 33.168 N
+E/-W 0.00 ft Easting: 1302754.78 ft Longitude: 107 24 18.828 W
Position Uncertainty: 0.00 ft

Wellpath: 1 Drilled From: Surface
Current Datum: SITE Height 6445.00 ft Tie-on Depth: 0.00 ft
Magnetic Data: 8/1/2011 Above System Datum: Mean Sea Level
Field Strength: 50926 nT Declination: 9.75 deg
Vertical Section: Depth From (TVD) +N/-S +E/-W Direction
ft ft ft deg
0.00 0.00 0.00 163.44

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Lat	Min	Sec	Long	Min	Sec	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36	55	33.168	107	24	18.828	9 5/8" First Wft Sv
320.00	1.30	240.63	319.97	-1.78	-3.16	0.81	0.41	36	55	33.150	107	24	18.867	
374.00	1.52	240.63	373.96	-2.43	-4.32	1.10	0.41	36	55	33.144	107	24	18.881	
405.00	1.61	232.74	404.94	-2.90	-5.03	1.34	0.75	36	55	33.139	107	24	18.890	
435.00	1.88	208.13	434.93	-3.59	-5.60	1.84	2.63	36	55	33.133	107	24	18.897	
467.00	2.81	181.13	466.90	-4.83	-5.86	2.96	4.44	36	55	33.120	107	24	18.900	
498.00	3.88	169.13	497.85	-6.62	-5.68	4.73	4.11	36	55	33.103	107	24	18.898	
528.00	4.88	163.88	527.76	-8.85	-5.13	7.02	3.59	36	55	33.081	107	24	18.891	
560.00	5.63	162.75	559.63	-11.65	-4.29	9.95	2.37	36	55	33.053	107	24	18.881	
590.00	5.88	163.13	589.48	-14.53	-3.40	12.96	0.84	36	55	33.024	107	24	18.870	
621.00	5.13	168.88	620.34	-17.41	-2.68	15.92	3.00	36	55	32.996	107	24	18.861	
651.00	4.75	178.38	650.22	-19.97	-2.38	18.46	3.00	36	55	32.971	107	24	18.857	
683.00	5.94	174.50	682.08	-22.94	-2.19	21.37	3.88	36	55	32.941	107	24	18.855	
714.00	7.19	169.00	712.88	-26.44	-1.66	24.87	4.51	36	55	32.907	107	24	18.848	
744.00	8.19	164.63	742.61	-30.34	-0.74	28.88	3.86	36	55	32.868	107	24	18.837	
776.00	9.19	159.88	774.24	-34.94	0.75	33.70	3.84	36	55	32.823	107	24	18.819	
808.00	10.69	158.88	805.76	-40.11	2.69	39.21	4.72	36	55	32.771	107	24	18.795	
839.00	11.94	158.88	836.16	-45.78	4.89	45.28	4.03	36	55	32.715	107	24	18.768	
870.00	13.38	160.25	866.40	-52.15	7.25	52.06	4.74	36	55	32.652	107	24	18.739	
901.00	14.75	160.00	896.47	-59.24	9.82	59.58	4.42	36	55	32.582	107	24	18.707	
964.00	15.56	159.75	957.28	-74.70	15.48	76.01	1.29	36	55	32.429	107	24	18.637	
1027.00	15.75	158.88	1017.95	-90.60	21.49	92.97	0.48	36	55	32.272	107	24	18.563	
1090.00	16.00	159.50	1078.54	-106.71	27.61	110.16	0.48	36	55	32.113	107	24	18.488	
1152.00	14.69	159.13	1138.33	-122.06	33.40	126.52	2.12	36	55	31.961	107	24	18.417	



Weatherford International Ltd.

WFT Survey Report Lat, Long

**Weatherford**

Company:	Williams Production	Date:	8/2/2011	Time:	11:25:42	Page:	2
Field:	RIO ARRIBA CO NM (NAD 83)	Co-ordinate(NE) Reference:	Well. 72C, True North				
Site:	Rosa Unit 72C	Vertical (TVD) Reference:	SITE 6445.0				
Well:	72C	Section (VS) Reference:	Well (0.00N,0.00E,163.44Az)				
Wellpath:	1	Survey Calculation Method:	Minimum Curvature	Db:	Sybase		

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Lat	Min	Sec	Long	Min	Sec	Comment
1215.00	14 06	159 00	1199 36	-136.67	38 99	142 11	1.00	36	55	31.817	107	24	18 348	
1279 00	14 25	162.75	1261.42	-151.45	44 11	157 74	1 46	36	55	31.671	107	24	18.285	
1342 00	14.38	163.38	1322 46	-166.35	48 65	173.32	0 32	36	55	31.523	107	24	18 229	
1405 00	14.63	163 13	1383 45	-181.46	53 20	189 10	0.41	36	55	31.374	107	24	18.173	
1468 00	14.69	163 25	1444 40	-196 73	57 81	205 04	0.11	36	55	31.223	107	24	18 116	
1531 00	15 00	163.50	1505.30	-212 19	62.43	221 18	0.50	36	55	31.070	107	24	18 059	
1594.00	14 63	163 63	1566 20	-227.64	66.98	237.29	0.59	36	55	30.917	107	24	18 003	
1658.00	13 06	163 00	1628.34	-242.31	71.38	252 61	2.46	36	55	30.772	107	24	17 949	
1721 00	12 94	163 63	1689.73	-255.89	75 45	266.78	0 29	36	55	30.638	107	24	17 899	
1784 00	13 00	163.50	1751 12	-269.45	79 45	280 92	0.11	36	55	30.504	107	24	17 850	
1847 00	13 06	163 25	1812.50	-283 06	83 51	295 12	0.13	36	55	30.369	107	24	17 800	
1910.00	13 75	163.38	1873.78	-297.05	87.70	309 73	1.10	36	55	30 231	107	24	17 748	
1973 00	14 06	165.13	1934.94	-311.62	91 81	324.86	0.83	36	55	30.087	107	24	17 697	
2035 00	14.34	164.90	1995 04	-326.31	95 74	340 07	0.46	36	55	29.942	107	24	17 649	
2098 00	14 56	162.50	2056 05	-341.40	100 15	355 78	1.01	36	55	29.793	107	24	17 595	
2162 00	14 69	161.88	2117.98	-356 78	105 10	371 94	0.32	36	55	29.640	107	24	17 534	
2225 00	14 88	163.25	2178.89	-372 12	109 91	388 01	0.63	36	55	29 489	107	24	17 474	
2287 00	15 06	163.38	2238.79	-387.46	114 51	404 03	0.30	36	55	29.337	107	24	17 418	
2351 00	14.44	162 00	2300 68	-403.02	119 36	420 32	1.11	36	55	29 183	107	24	17.358	
2413 00	14 31	162.38	2360 74	-417.67	124 06	435 71	0.26	36	55	29 038	107	24	17 300	
2476 00	14 38	163.25	2421 77	-432 58	128 67	451 32	0.36	36	55	28 891	107	24	17 243	
2539.00	14.50	163 25	2482 78	-447.63	133.20	467 03	0.19	36	55	28 742	107	24	17 188	
2601.00	13.46	162.92	2542.94	-461.96	137 56	482 00	1.68	36	55	28 601	107	24	17 134	
2664.00	13.44	163.50	2604 22	-475.99	141 79	496.66	0.22	36	55	28 462	107	24	17 082	
2727 00	13 44	162 63	2665 49	-489.99	146 06	511.30	0 32	36	55	28 323	107	24	17.029	
2790 00	13.31	163 63	2726 78	-503.94	150 29	525.87	0.42	36	55	28 185	107	24	16 977	
2853 00	13 56	162 50	2788.06	-517 94	154 55	540 51	0 58	36	55	28.047	107	24	16 925	
2915 00	13.56	162 88	2848 33	-531 82	158 88	555 04	0.14	36	55	27.910	107	24	16 871	
2978.00	14.00	162.75	2909.52	-546.16	163 31	570 05	0 70	36	55	27.768	107	24	16 817	
3041.00	14.19	162 63	2970 62	-560.80	167.88	585.39	0.31	36	55	27 623	107	24	16 761	
3104 00	13.94	162 25	3031 73	-575.40	172 49	600 70	0 42	36	55	27 479	107	24	16.704	
3166.00	13.63	162.88	3091 95	-589 50	176 92	615 47	0 56	36	55	27.340	107	24	16 649	
3229 00	12 56	163 63	3153 31	-603.16	181 04	629 74	1.72	36	55	27 204	107	24	16 599	
3291 00	10 88	163 88	3214 01	-615.25	184 56	642 34	2 71	36	55	27.085	107	24	16.555	
3354 00	10 13	162 50	3275.96	-626.25	187 88	653 82	1 26	36	55	26.976	107	24	16.514	
3417.00	9 44	163 13	3338.04	-636.48	191.04	664.53	1.11	36	55	26 875	107	24	16 475	
3480 00	8.06	168 00	3400.30	-645.74	193.46	674.10	2 48	36	55	26 783	107	24	16 446	
3543 00	8.08	167 78	3462 68	-654 39	195 32	682 91	0.06	36	55	26 698	107	24	16 423	
3606.00	7 31	164 88	3525 11	-662 59	197 30	691 34	1 37	36	55	26 617	107	24	16 398	
3670.00	6 44	161 63	3588 65	-669 92	199 49	698 99	1.49	36	55	26 544	107	24	16 371	
3732 00	5 31	163 13	3650.33	-675 97	201 42	705 34	1.84	36	55	26 485	107	24	16 348	
3794.00	3 56	163 00	3712.14	-680 55	202 82	710.13	2.82	36	55	26 439	107	24	16 330	
3825.00	2 96	161.53	3743.09	-682 23	203 35	711 90	1.95	36	55	26.423	107	24	16 324	
3856.00	2 63	163.44	3774.05	-683.67	203.81	713.41	1.11	36	55	26 408	107	24	16 318	
3908.00	2 63	163 44	3826.00	-685 96	204 49	715.79	0.00	36	55	26 386	107	24	16 310	Last Wft Svy
8242.00	1.00	163.44	8157 68	-817 53	243 61	853.06	0.04	36	55	25 085	107	24	15.828	Proj Per Ga

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
320.00	319 97	9 625	12.250	9 5/8"
3908.00	3826 00	7 000	8 500	7"



Weatherford International Ltd.

WFT Survey Report Lat, Long



Weatherford

Company: Williams Production Date: 8/2/2011 Time: 11:25:42 Page: 3
Field: RIO ARriba CO: NM (NAD 83) Co-ordinate(NE) Reference: Well: 72C, True North
Site: Rosa Unit 72C Vertical (TVD) Reference: SITE 6445.0
Well: 72C Section (VS) Reference: Well (0.00N,0.00E,163.44Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Annotation

MD ft	TVD ft	
374.00	373.96	First Wft Svy
3856.00	3774.05	Last Wft Svy
3908.00	3826.00	Proj. To Bit
8242.00	8157.68	Proj. Per Gary

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
1272.38	1255.00	Nacimiento Fm		0.00	0.00
2577.39	2520.00	Ojo Alamo Ss		0.00	0.00
2685.37	2625.00	Kirtland Sh		0.00	0.00
3122.82	3050.00	Fruitland Fm		0.00	0.00
3363.19	3285.00	Pictured Cliffs Ss		0.00	0.00
3661.29	3580.00	Lewis Sh		0.00	0.00
5273.18	5190.00	Cliff House Ss Trans		0.00	0.00
5578.38	5495.00	Cliff House Ss		0.00	0.00
5623.40	5540.00	Menefee Fm		0.00	0.00
5818.52	5735.00	Point Lookout 55		0.00	0.00
6098.66	6015.00	Mancos Sh		0.00	0.00
7199.10	7115.00	Gallup Ss		0.00	0.00
7909.27	7825.00	Greenhorn Ls		0.00	0.00
7969.28	7885.00	Graneros Sh		0.00	0.00
8094.30	8010.00	Dakota Ss		0.00	0.00
	0.00	Morrison Fm		0.00	0.00