

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

1 API Number <b>30-039-30196</b>		2 Pool Code 72319 / 71599		3 Pool Name BLANCO MESAVERDE / BASIN DAKOTA	
4 Property Code 17033		5 Property Name ROSA UNIT COM			6 Well Number 148C
7 OGRID No. 120782		8 Operator Name WILLIAMS PRODUCTION COMPANY			9 Elevation 6250'

10 Surface Location

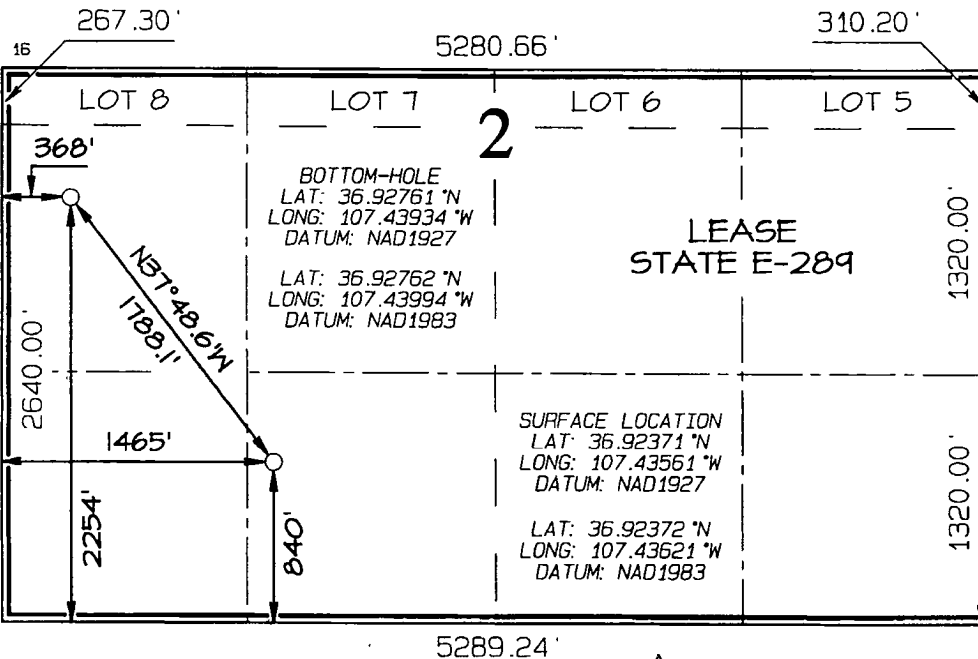
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	2	31N	6W		840	SOUTH	1465	WEST	RIO ARRIBA

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
L	2	31N	6W		2254	SOUTH	368	WEST	RIO ARRIBA

12 Dedicated Acres 356.26 Acres - Entire Section				13 Joint or Infill	14 Consolidation Code	15 Order No
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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.

*Ben Mitchell*      8/19/2011  
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: AUGUST 12, 2011  
Date of Survey: APRIL 26, 2006

Signature and Seal of Professional Surveyor



**JASON C. EDWARDS**  
Certificate Number 15269



Rosa Unit Com #148C  
RIO ARRIBA CO. NM

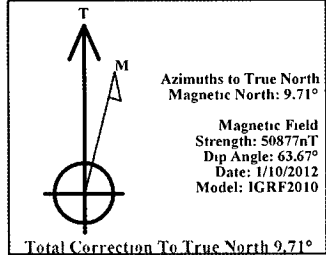
SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	322.56	0.00	0.00	0.00	0.00	0.00	0.00	
2	400.00	0.00	322.56	400.00	0.00	0.00	0.00	0.00	0.00	
3	1791.04	41.73	322.56	1671.28	384.74	-294.60	3.00	322.56	484.58	
4	2718.85	41.73	322.56	2363.67	875.09	-670.06	0.00	0.00	1102.16	
5	4109.90	0.00	322.56	3634.95	1259.83	-964.66	3.00	180.00	1586.74	
6	8423.95	0.00	322.56	7949.00	1259.83	-964.66	0.00	0.00	1586.74	Pbhl

WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#148C	0.00	0.00	2157686.67	1293689.41	36°55'25.392N	107°26'10.356W	N/A

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Pbhl	7949.00	1259.83	-964.66	36°55'37.848N	107°26'22.236W	Point

FORMATION TOP DETAILS			
No.	TVDPath	MDPath	Formation
1	939.00	945.80	Nacimiento Fm.
2	2284.00	2613.56	Ojo Alamo Ss.
3	2389.00	2753.04	Kirtland Sh.
4	2809.00	3261.98	Fruitland Fm.
5	3059.00	3528.77	Pictured Cliffs Ss.
6	3374.00	3853.32	Lewis Sh.
7	4974.00	5455.04	Cliff House Ss. Trans.
8	5294.00	5775.36	Cliff House Ss.
9	5344.00	5825.42	Manefee Fm
10	5529.00	6010.61	Point Lookout Ss.
11	5889.00	6370.99	Mancos Sh.
12	6889.00	7372.15	Gallup Ss.
13	7614.00	8098.08	Greenhorn Ls.
14	7674.00	8158.16	Graneros Sh.
15	7809.00	8293.34	Dakota Ss.

**SITE DETAILS**  
Rosa Unit Com #148C  
Site Centre Latitude: 36°55'25.392N  
Longitude: 107°26'10.356W  
Ground Level: 6250.00  
Positional Uncertainty: 0.00  
Convergence: -0.71

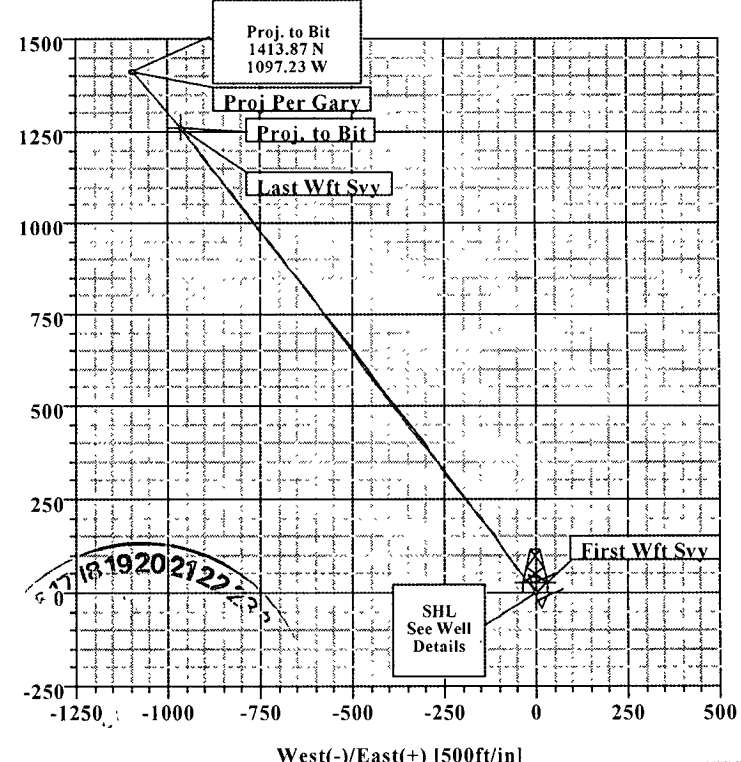
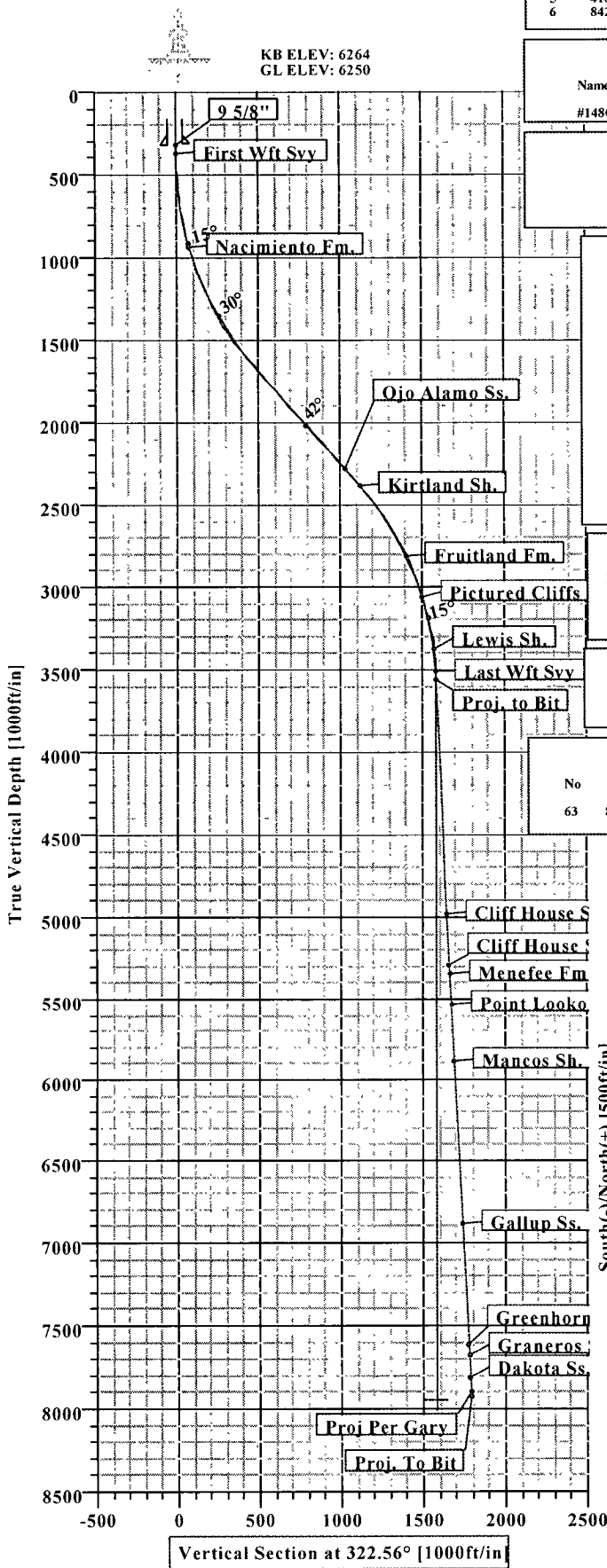


CASING DETAILS				
No.	TVD	MD	Name	Size
1	320.00	320.00	9 5/8"	9.625

**LEGEND**  

 #148C, 1, Plan #2  
 #33-3A (1)  
 Wft Svy

Survey: Wft Svy (#148C/1)									
No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
63	8414.00	3.00	318.71	7929.49	1413.87	-1097.23	0.00	0.00	1789.64



Survey: Wft Svy (#148C/1)  
Created By: Russell W. Joyner Date: 8/1/2011

12345678910



# Weatherford International Ltd.

## WFT Survey Report X & Y's



# Weatherford

Company: Williams Production	Date: 8/1/2011	Time: 09:42:48	Page: 1
Field: RIO ARRIBA CO. NM (NAD 83)	Co-ordinate(NE) Reference: Well: #148C, True North		
Site: Rosa Unit Com #148C	Vertical (TVD) Reference: SITE 6264.0		
Well: #148C	Section(VS) Reference: Well (0'00N:0'00E,322.56Az)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: Wft Svy	Start Date: 7/25/2011
Company: Weatherford International Ltd.	Engineer: Keith Noack
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 Com #148C		
Site Position:	Northing: 2157686.67 ft	Latitude: 36 55 25.392 N
From: Geographic	Easting: 1293689.41 ft	Longitude: 107 26 10.356 W
Position Uncertainty: 0.00 ft		North Reference: True
Ground Level: 6250.00 ft		Grid Convergence: -0.71 deg

Well: #148C			Slot Name:		
Well Position: +N-S 0.00 ft	Northing: 2157686.67 ft	Latitude: 36 55 25.392 N			
+E-W 0.00 ft	Easting: 1293689.41 ft	Longitude: 107 26 10.356 W			
Position Uncertainty: 0.00 ft					

Wellpath: 1	Drilled From: Surface				
Current Datum: SITE	Tie-on Depth: 0.00 ft				
Magnetic Data: 1/10/2012	Above System Datum: Mean Sea Level				
Field Strength: 50877 nT	Declination: 9.71 deg				
Vertical Section: Depth From (TVD)	Mag Dip Angle: 63.67 deg				
ft	+N-S	ft	+E-W	ft	Direction
	ft		ft		deg
0.00	0.00	0.00	0.00	322.56	

Survey											
MD	Incl	Azim	TVD	N/S	E/W	DLS	VS	MapN	MapE	Comment	
ft	deg	deg	ft	ft	ft	deg/100ft	ft	ft	ft	ft	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2157686.67	1293689.41		
320.00	0.21	248.46	320.00	-0.22	-0.56	0.07	0.16	2157686.46	1293688.85		9 5/8"
374.00	0.25	248.46	374.00	-0.30	-0.76	0.07	0.22	2157686.38	1293688.65		First Wft Svy
404.00	0.37	289.98	404.00	-0.29	-0.91	0.82	0.32	2157686.39	1293688.50		
465.00	2.36	322.60	464.98	0.77	-1.86	3.37	1.75	2157687.47	1293687.56		
529.00	3.94	324.09	528.88	3.60	-3.95	2.47	5.26	2157690.32	1293685.51		
590.00	5.56	323.09	589.67	7.66	-6.95	2.66	10.31	2157694.42	1293682.55		
650.00	7.44	323.09	649.28	13.09	-11.03	3.13	17.10	2157699.90	1293678.54		
711.00	9.00	324.34	709.65	20.13	-16.19	2.57	25.82	2157707.00	1293673.48		
774.00	10.69	322.46	771.72	28.77	-22.62	2.73	36.59	2157715.72	1293667.15		
837.00	12.38	322.09	833.45	38.73	-30.33	2.69	49.19	2157725.78	1293659.57		
899.00	14.25	321.34	893.78	49.93	-39.18	3.03	63.46	2157737.09	1293650.85		
963.00	16.06	320.84	955.55	62.95	-49.69	2.84	80.19	2157750.23	1293640.51		
1027.00	18.06	321.84	1016.73	77.61	-61.41	3.16	98.96	2157765.04	1293628.97		
1089.00	20.19	323.46	1075.31	93.77	-73.72	3.54	119.27	2157781.35	1293616.86		
1152.00	22.19	324.34	1134.04	112.17	-87.13	3.21	142.03	2157799.92	1293603.68		
1214.00	24.25	324.96	1191.02	132.11	-101.27	3.35	166.46	2157820.03	1293589.79		
1277.00	26.19	323.71	1248.01	153.91	-116.93	3.19	193.29	2157842.03	1293574.41		
1340.00	28.00	321.59	1304.09	176.71	-134.35	3.26	221.98	2157865.04	1293557.27		
1403.00	30.25	320.84	1359.13	200.60	-153.56	3.62	252.63	2157889.17	1293538.36		
1466.00	32.69	320.84	1412.86	226.10	-174.33	3.87	285.50	2157914.93	1293517.91		
1528.00	34.63	320.21	1464.46	252.62	-196.17	3.18	319.84	2157941.72	1293496.39		
1591.00	36.38	320.46	1515.74	280.79	-219.53	2.79	356.40	2157970.17	1293473.39		
1653.00	38.21	321.40	1565.06	309.96	-243.20	3.09	393.95	2157999.63	1293450.09		



# Weatherford International Ltd.

## WFT Survey Report X & Y's



# Weatherford

Company: Williams Production	Date: 8/1/2011	Time: 09:42:48	Page: 2
Field: RIO ARRIBA CO. NM (NAD 83)	Co-ordinate(NE) Reference: Well: #148C, True North		
Site: Rosa Unit Com #148C	Vertical (TVD) Reference: SITE 6264.0		
Well: #148C	Section (VS) Reference: Well (0.00N, 0.00E, 322.56Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

### Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
1716.00	40 00	322 21	1613.95	341 19	-267 76	2 95	433.68	2158031 17	1293425.91	
1779 00	40.75	322 34	1661 94	373.47	-292.73	1.20	474 49	2158063 75	1293401 35	
1843.00	42.63	321 84	1709 73	407.05	-318.89	2.98	517 05	2158097.66	1293375 61	
1905.00	41.81	320 21	1755.65	439 44	-345.09	2.21	558 70	2158130.37	1293349.82	
1969 00	42.00	320.71	1803.28	472.40	-372.30	0.60	601 42	2158163.67	1293323.02	
2032 00	42 31	323 24	1849.99	505.71	-398 34	2 74	643.69	2158197 30	1293297.39	
2094.00	42 19	323 21	1895.88	539 10	-423 30	0 20	685.37	2158230 99	1293272.85	
2158.00	41 98	324 00	1943 38	573 62	-448.75	0.89	728 26	2158265.83	1293247 83	
2221.00	41 88	324 96	1990.25	607 89	-473.21	1.03	770 33	2158300.40	1293223 80	
2283 00	41.88	324.21	2036 41	641 62	-497.19	0.81	811.70	2158334 43	1293200.24	
2346 00	41.63	323 84	2083.41	675.57	-521.84	0.56	853.64	2158368 68	1293176 02	
2408.00	41.56	323 21	2129.78	708 67	-546 30	0.68	894.79	2158402.08	1293151.97	
2471 00	41 31	323 84	2177 01	742.19	-571 09	0.77	936.47	2158435.91	1293127 60	
2534 00	41.38	322.84	2224 31	775 58	-595 94	1 05	978 09	2158469.60	1293103.17	
2598 00	41.38	322.59	2272.33	809 24	-621.56	0 26	1020 39	2158503 58	1293077.96	
2660.00	41.75	322 34	2318.72	841 86	-646.63	0.65	1061.53	2158536 51	1293053 31	
2722.00	40.69	323 84	2365.35	874 52	-671.16	2.34	1102.38	2158569 47	1293029 18	
2785.00	39 38	324 21	2413.59	907.31	-694 97	2 11	1142.89	2158602.56	1293005 78	
2860 00	39 19	322 21	2471 64	945.34	-723 41	1.71	1190 37	2158640.94	1292977 82	
2923 00	37 94	322 09	2520 90	976.35	-747 50	1 99	1229 64	2158672 25	1292954.11	
2986 00	36 33	322 49	2571 12	1006 43	-770 77	2 58	1267 67	2158702 62	1292931.22	
3049 00	32 38	323 59	2623 12	1034 83	-792.15	6 35	1303 22	2158731.27	1292910.19	
3111.00	31 13	324.09	2675 84	1061.17	-811.41	2 06	1335.84	2158757.85	1292891.27	
3175.00	28 78	322 52	2731 29	1086.80	-830 49	3.87	1367.79	2158783.72	1292872.51	
3237.00	25 75	321.84	2786.40	1109.24	-847 89	4.91	1396.18	2158806.37	1292855 38	
3300.00	23 00	320 59	2843.77	1129.51	-864 17	4.44	1422.17	2158826 85	1292839 36	
3363 00	20 88	322 84	2902 21	1147 97	-878 76	3.62	1445 70	2158845 48	1292824.99	
3426 00	19 06	324 71	2961 42	1165 31	-891 49	3 06	1467 21	2158862 99	1292812.49	
3488 00	18 00	324 84	3020 20	1181.41	-902 86	1 71	1486 90	2158879.22	1292801.32	
3551 00	17.75	323.71	3080 16	1197 11	-914 14	0 68	1506.23	2158895 06	1292790.23	
3614.00	17.00	323 09	3140 29	1212 21	-925.36	1.23	1525 04	2158910 30	1292779.20	
3678 00	14.38	321.96	3201 90	1225.96	-935.88	4 12	1542 35	2158924 17	1292768 86	
3740 00	11.69	319.09	3262.30	1236.77	-944.74	4 46	1556 32	2158935 10	1292760 13	
3802 00	9 56	322 59	3323.23	1245.61	-951.98	3 59	1567.74	2158944 02	1292753 00	
3866.00	6 56	327 84	3386.59	1252 92	-957 15	4.82	1576 69	2158951.41	1292747 92	
3928 00	3 56	324 71	3448.34	1257.49	-960.15	4.86	1582 14	2158956.01	1292744.98	
3988 00	2 31	318 71	3508.26	1259 92	-962 03	2.14	1585 21	2158958 47	1292743 13	Last Wft Svy
4040.00	2 31	318 71	3560 22	1261 50	-963 41	0 00	1587 30	2158960 06	1292741 77	Proj to Bit
8384.00	3 00	318 71	7899 53	1412 69	-1096 19	0 02	1788 07	2159112 89	1292610 88	Proj Per Gary
8414.00	3 00	318 71	7929 49	1413 87	-1097.23	0 00	1789 64	2159114 08	1292609 86	Proj. To Bit

### Annotation

MD ft	TVD ft	
374.00	374 00	First Wft Svy
3988 00	3508.26	Last Wft Svy
4040 00	3560 22	Proj to Bit
8384 00	7899 53	Proj Per Gary
8414 00	7929 49	Proj. To Bit



**Williams Production Co.**  
**Rosa Unit 148C**  
**Rio Arriba County, NM**

# **Section 2**

**Days vs. Depth**

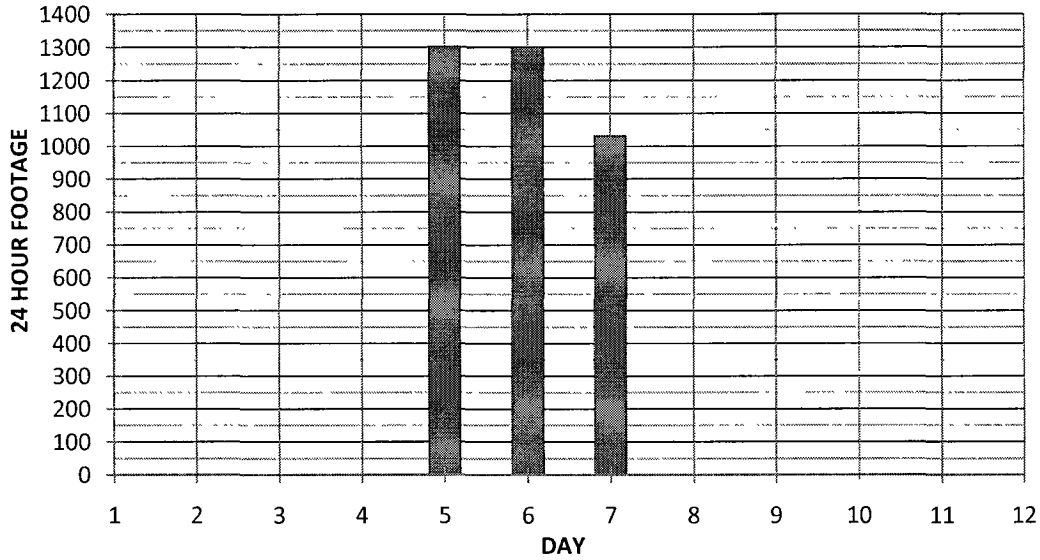


Williams Production Co  
Rosa Unit 148C  
Rio Arriba Co, NM



**Weatherford**

### DAYS VS FEET DRILLED /24 HOURS



### DAYS VS DEPTH

