

30-045-34250



ROSA UNIT 355 A
SAN JUAN COUNTY, NM
PLAN 1
Plan vs. Actual



Weatherford

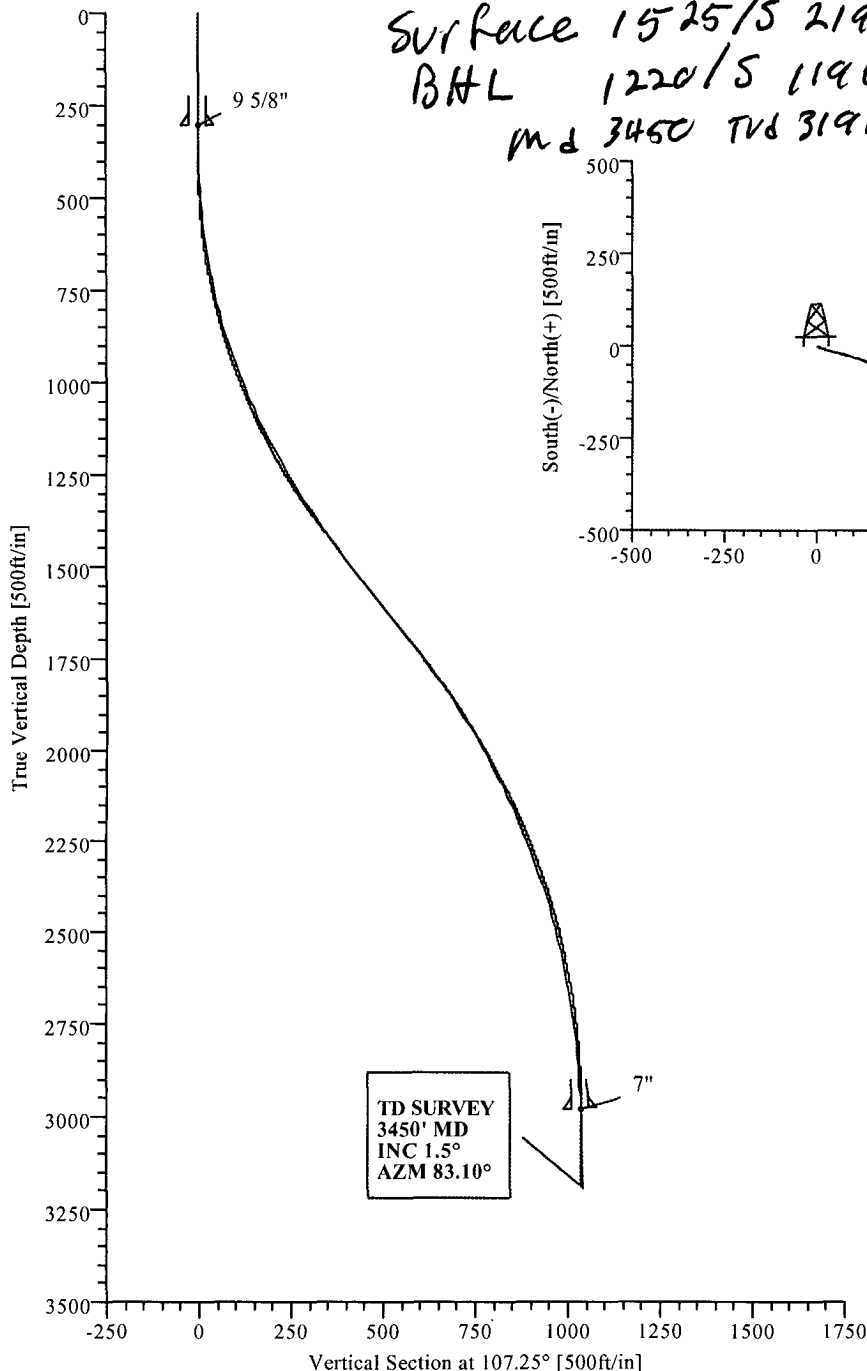
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0 00	0 00	107 25	0.00	0 00	0 00	0 00	0.00	0 00	
2	400 00	0 00	107 25	400 00	0 00	0 00	0 00	0.00	0 00	
3	1485 71	38 00	107 25	1407 85	-102.91	331 42	3 50	107 25	347 03	
4	1917 67	38 00	107 25	1748 24	-181 77	585 40	0 00	0 00	612 97	
5	3244 59	0 00	107 25	2980 00	-307 54	990 45	2 86	180 00	1037 10	
6	3449 59	0 00	107 25	3185 00	-307 54	990 45	0 00	107 25	1037 10	

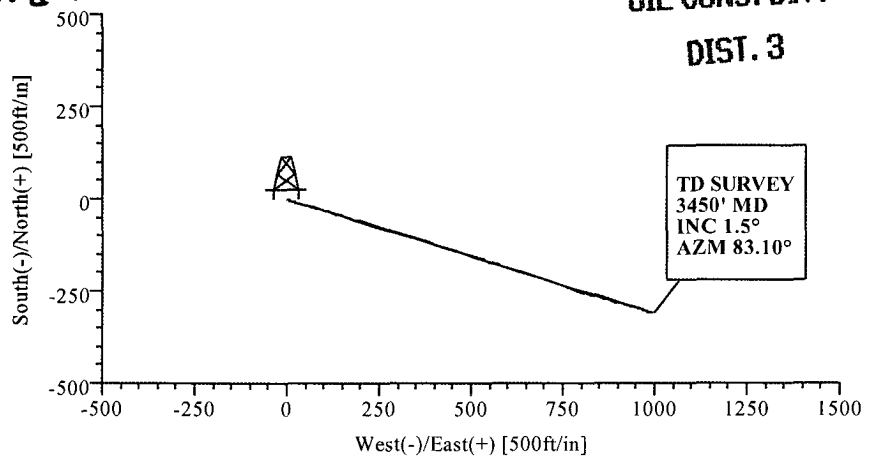
WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Rosa Unit 355 A	0 00	0 00	2159286 52	2831475 39	36°56'00 096N	107°27'45 036W	N/A

KB ELEVATION: 6430'
GR ELEVATION: 6326'



RCVD NOV 29 '07
OIL CONS. DIV.
DIST. 3



LEGEND

== Rosa Unit 355 A, I, Plan #1
WFT SVY



Azimuths to True North
Magnetic North. 10 35°

Magnetic Field
Strength 51416nT
Dip Angle 63 80°
Date 10/26/2006
Model. igrf2005

Total Correction 10.35°



Weatherford International, Inc.

Survey Report



Weatherford

Company: WILLIAMS PRODUCTION	Date: 11/19/2007	Time: 16:03 06	Page: 1
Field: San Juan County, NM (NAD 83)	Co-ordinate(NE) Reference: Site. Rosa Unit 355 A, True North		
Site: Rosa Unit 355 A	Vertical (TVD) Reference: SITE 6340.0		
Well: Rosa Unit 355 A	Section (VS) Reference: Well (0 00N,0.00E,107.25Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Field: San Juan County, NM (NAD 83)

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

Map Zone: New Mexico, Western Zone
Coordinate System: Site Centre
Geomagnetic Model: igrf2005

Site: Rosa Unit 355 A
 Well Pad 33
 San Juan County, NM

Site Position:	Northing: 2159286 52 ft	Latitude: 36 56 0 096 N
From: Geographic	Easting: 2831475 39 ft	Longitude: 107 27 45.036 W
Position Uncertainty: 0.00 ft		North Reference: True
Ground Level: 6326.00 ft		Grid Convergence: 0.22 deg

Well: Rosa Unit 355 A
 1525' FSL & 2190' FEL

Slot Name:

Well Position: +N/-S 0 00 ft	Northing: 2159286.52 ft	Latitude: 36 56 0.096 N
+E/-W 0 00 ft	Easting: 2831475 39 ft	Longitude: 107 27 45.036 W
Position Uncertainty: 0.00 ft		

Wellpath: 1
 Section 33 T 32N R 6W
Current Datum: SITE
Magnetic Data: 10/26/2006
Field Strength: 51416 nT
Vertical Section: Depth From (TVD)
 ft

Height 6340.00 ft

Drilled From: Surface
Tie-on Depth: 0.00 ft
Above System Datum: Mean Sea Level
Declination: 10.35 deg
Mag Dip Angle: 63.80 deg
+E/-W Direction
 ft deg

0 00

0.00

0.00

107.25

Survey: WFT SVY

Start Date: 9/11/2007

Company: Weatherford International, Inc
Tool:

Engineer: Lindsey Maddux
Tied-to: User Defined

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
300.00	0 00	107.25	300.00	0.00	0.00	0.00	0.00	0 00	0 00	9 5/8"
342.00	0.00	0.00	342.00	0.00	0.00	0.00	0.00	0 00	0.00	
387.00	1.44	138.35	387.00	-0.42	0.38	0.48	3.20	3.20	0 00	
417.00	1.81	123.73	416.98	-0.97	1.02	1.26	1.84	1.23	-48.73	
448.00	2.56	118.48	447.96	-1.57	2 04	2.41	2.50	2.42	-16 94	
479.00	3.44	113.73	478.92	-2 27	3 50	4.01	2 95	2.84	-15.32	
510.00	4 50	109.10	509.84	-3.05	5.50	6.15	3.57	3.42	-14 94	
540.00	5.50	107.98	539.73	-3.87	7.98	8 77	3.35	3.33	-3.73	
570.00	6.50	106.23	569.56	-4.79	10.97	11.90	3.39	3 33	-5 83	
601.00	7 44	105.73	600.33	-5.83	14.59	15.66	3.04	3.03	-1.61	
632.00	8.38	106.60	631.04	-7.02	18.69	19.93	3.06	3 03	2 81	
662.00	9 38	106.85	660.68	-8 35	23 12	24 56	3 34	3.33	0.83	
693.00	10.44	107.23	691.22	-9.91	28.22	29.89	3 43	3.42	1.23	
723.00	11 69	106.23	720.66	-11.57	33.74	35.65	4.22	4 17	-3.33	
754.00	12.94	106 85	750 94	-13 45	40 08	42.26	4.05	4.03	2.00	
783.00	13 94	107.48	779.15	-15.44	46.51	49 00	3.48	3 45	2.17	
814.00	15.06	106.98	809.16	-17.74	53.93	56.76	3.64	3.61	-1 61	
844.00	16.00	106.48	838.07	-20.05	61.62	64.80	3 16	3.13	-1 67	
875.00	17.13	106.23	867.78	-22.54	70.10	73 63	3.65	3 65	-0.81	
905.00	18.19	106.35	896.36	-25 09	78.84	82 73	3.54	3.53	0.40	
936.00	19.25	106.23	925 72	-27.88	88.39	92.68	3 42	3.42	-0.39	
967.00	20.25	105.73	954.90	-30 77	98.46	103.15	3.27	3 23	-1.61	
997.00	21.19	105.85	982.96	-33.66	108.67	113.76	3.14	3.13	0.40	
1028.00	22 13	105 35	1011.77	-36.73	119 69	125.20	3.09	3.03	-1 61	



Weatherford International, Inc.

Survey Report



Weatherford

Company: WILLIAMS PRODUCTION	Date: 11/19/2007	Time: 16:03:06	Page: 2
Field: San Juan County, NM (NAD 83)	Co-ordinate(NE) Reference:	Site: Rosa Unit 355 A, True North	
Site: Rosa Unit 355 A	Vertical (TVD) Reference:	SITE 6340.0	
Well: Rosa Unit 355 A	Section (VS) Reference:	Well (0 00N,0.00E,107.25Azi)	
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
1059.00	23.13	105.35	1040.38	-39.89	131.19	137.12	3.23	3.23	0.00	
1091.00	24.31	105.98	1069.68	-43.37	143.59	149.99	3.77	3.69	1.97	
1123.00	25.50	106.10	1098.70	-47.09	156.54	163.46	3.72	3.72	0.37	
1154.00	26.63	106.85	1126.55	-50.95	169.60	177.08	3.80	3.65	2.42	
1186.00	27.86	106.98	1155.00	-55.22	183.61	191.73	3.85	3.84	0.41	
1218.00	28.31	106.85	1183.23	-59.60	198.03	206.79	1.42	1.41	-0.41	
1249.00	28.88	106.85	1210.45	-63.90	212.23	221.63	1.84	1.84	0.00	
1281.00	30.13	107.60	1238.30	-68.57	227.28	237.39	4.07	3.91	2.34	
1313.00	31.13	107.23	1265.83	-73.45	242.84	253.69	3.18	3.12	-1.16	
1345.00	32.00	107.35	1293.10	-78.43	258.83	270.44	2.73	2.72	0.37	
1376.00	32.88	107.85	1319.26	-83.46	274.68	287.07	2.97	2.84	1.61	
1408.00	34.00	108.10	1345.96	-88.90	291.45	304.70	3.53	3.50	0.78	
1439.00	34.88	108.60	1371.53	-94.42	308.09	322.23	2.98	2.84	1.61	
1471.00	35.56	107.85	1397.67	-100.19	325.62	340.69	2.52	2.12	-2.34	
1503.00	36.31	107.23	1423.58	-105.85	343.53	359.46	2.60	2.34	-1.94	
1535.00	36.75	106.98	1449.30	-111.45	361.73	378.51	1.45	1.37	-0.78	
1566.00	37.06	107.35	1474.08	-116.94	379.52	397.13	1.23	1.00	1.19	
1630.00	37.50	106.60	1525.01	-128.26	416.60	435.89	0.99	0.69	-1.17	
1693.00	38.00	107.60	1574.82	-139.60	453.46	474.46	1.25	0.79	1.59	
1757.00	38.75	107.73	1625.00	-151.66	491.32	514.19	1.18	1.17	0.20	
1820.00	38.88	107.60	1674.08	-163.64	528.94	553.68	0.24	0.21	-0.21	
1852.00	39.06	107.85	1698.96	-169.77	548.11	573.80	0.75	0.56	0.78	
1883.00	38.44	108.10	1723.14	-175.76	566.57	593.20	2.06	-2.00	0.81	
1915.00	38.00	108.98	1748.28	-182.05	585.34	613.00	2.19	-1.37	2.75	
1947.00	36.81	108.73	1773.70	-188.33	603.73	632.43	3.75	-3.72	-0.78	
1979.00	35.63	107.73	1799.51	-194.25	621.69	651.33	4.12	-3.69	-3.12	
2010.00	34.50	107.35	1824.89	-199.62	638.67	669.14	3.71	-3.65	-1.23	
2042.00	33.44	107.23	1851.43	-204.93	655.74	687.02	3.32	-3.31	-0.37	
2074.00	32.75	107.10	1878.23	-210.09	672.44	704.49	2.17	-2.16	-0.41	
2105.00	31.81	107.35	1904.44	-214.99	688.25	721.05	3.06	-3.03	0.81	
2137.00	30.69	107.73	1931.80	-219.99	704.08	737.65	3.55	-3.50	1.19	
2169.00	29.69	107.73	1959.46	-224.89	719.41	753.74	3.12	-3.12	0.00	
2201.00	28.88	108.23	1987.37	-229.73	734.30	769.39	2.64	-2.53	1.56	
2232.00	28.13	108.98	2014.61	-234.44	748.32	784.18	2.68	-2.42	2.42	
2264.00	27.31	109.35	2042.94	-239.33	762.38	799.06	2.62	-2.56	1.16	
2295.00	26.00	109.48	2070.64	-243.95	775.49	812.95	4.23	-4.23	0.42	
2327.00	24.94	109.35	2099.53	-248.53	788.47	826.71	3.32	-3.31	-0.41	
2359.00	24.19	108.60	2128.64	-252.85	801.05	840.00	2.54	-2.34	-2.34	
2391.00	23.69	107.35	2157.88	-256.86	813.40	852.99	2.23	-1.56	-3.91	
2422.00	22.88	106.85	2186.36	-260.47	825.11	865.24	2.69	-2.61	-1.61	
2488.00	21.00	105.10	2247.58	-267.27	848.81	889.89	3.02	-2.85	-2.65	
2519.00	20.25	105.85	2276.59	-270.18	859.34	900.80	2.57	-2.42	2.42	
2551.00	19.63	106.73	2306.67	-273.24	869.81	911.72	2.15	-1.94	2.75	
2583.00	18.81	105.48	2336.89	-276.16	879.93	922.25	2.87	-2.56	-3.91	
2614.00	18.13	105.10	2366.29	-278.75	889.41	932.06	2.23	-2.19	-1.23	
2646.00	17.38	105.85	2396.77	-281.36	898.81	941.82	2.45	-2.34	2.34	
2678.00	16.25	104.85	2427.40	-283.81	907.74	951.07	3.65	-3.53	-3.12	
2709.00	15.19	104.48	2457.24	-285.94	915.86	959.46	3.43	-3.42	-1.19	
2742.00	14.44	105.85	2489.14	-288.14	924.01	967.89	2.51	-2.27	4.15	
2774.00	13.63	106.48	2520.18	-290.30	931.46	975.65	2.58	-2.53	1.97	
2806.00	12.63	106.10	2551.35	-292.34	938.44	982.92	3.14	-3.12	-1.19	
2837.00	11.75	106.48	2581.65	-294.18	944.72	989.46	2.85	-2.84	1.23	
2869.00	10.81	106.98	2613.03	-295.98	950.71	995.72	2.95	-2.94	1.56	



Weatherford International, Inc.

Survey Report

**Weatherford**

Company: WILLIAMS PRODUCTION	Date: 11/19/2007	Time: 16:03:06	Page: 3
Field: San Juan County, NM (NAD 83)	Co-ordinate(NE) Reference:	Site: Rosa Unit 355 A, True North	
Site: Rosa Unit 355 A	Vertical (TVD) Reference:	SITE 6340 0	
Well: Rosa Unit 355 A	Section (VS) Reference:	Well (0.00N,0.00E,107.25Azi)	
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
2901.00	10 19	105.73	2644.49	-297.62	956 31	1001.55	2.06	-1 94	-3.91	
2933.00	9 44	105.60	2676.03	-299.09	961.56	1007.00	2.34	-2 34	-0.41	
2965.00	8 56	105 85	2707 63	-300.45	966.38	1012 01	2.75	-2.75	0 78	
2996.00	7.69	106 60	2738.32	-301.67	970.59	1016.39	2.83	-2.81	2.42	
3028.00	6.94	109 23	2770 06	-302.92	974.46	1020 46	2.57	-2.34	8 22	
3060.00	6.00	111.23	2801.85	-304.16	977 85	1024.06	3.02	-2.94	6 25	
3090.00	5.19	110.60	2831.71	-305.21	980 58	1026.98	2 71	-2.70	-2.10	
3122 00	4 44	103.23	2863.60	-306.00	983.14	1029.66	3 03	-2.34	-23.03	
3154 00	3 50	91.73	2895.52	-306.31	985 32	1031.84	3 84	-2.94	-35.94	
3185 00	2 25	83.60	2926.48	-306.27	986.87	1033.31	4 23	-4 03	-26.23	
3205.00	1 50	83.10	2946.47	-306.20	987 52	1033.91	3 75	-3.75	-2.50	LAST SVY
3238.54	1.50	83.10	2980.00	-306.09	988.40	1034.71	0 00	0.00	0.00	7"
3250.00	1.50	83.10	2991.46	-306.06	988.69	1034 98	0 00	0.00	0.00	PROJ TO BIT
3450.00	1.50	83 10	3191.39	-305.43	993.89	1039 76	0.00	0 00	0 00	LAST RIG SVY

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
300.00	300.00	9.625	12.250	9 5/8"
3238 54	2980.00	7.000	8 500	7"

Annotation

MD ft	TVD ft	
3205.00	2946.47	LAST SVY
3250.00	2991.46	PROJ TO BIT
3450 00	3191.39	LAST RIG SVY

16

5329.50'

2620.20'

33

5348.54'

2652.54'

2630.76'

**LEASE
SF-078T12**

SURFACE LOCATION
LAT: 36.93336° N
LONG: 107.46251° W
DATUM: NAD1983

BOTTOM-HOLE
LAT: 36.93256° N
LONG: 107.45911° W
DATUM: NAD1983

1525'

S73°50'5"E
1036.3'

2190'

1196'

1220'

1381.71'

1381.71'