

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

*API Number 30-039-30479	*Pool Code 97232 / 72319 / 71599	*Pool Name BASIN MANCOS / BLANCO MESAVERDE / BASIN DAKOTA
*Property Code 17033	*Property Name ROSA UNIT	*Well Number 25C
*GRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY	*Elevation 6154'

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	15	31N	6W		1130	SOUTH	1560	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
M	15	31N	6W		934	SOUTH	329	WEST	RIO ARriba

¹² Dedicated Acres 320.0 Acres - (W/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. <i>NSL 6041 - MNDAS '09</i> <i>IN CHS. DIV.</i>
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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 **DIST. 3**

16 LOT 1 TRACT 38 5253.60' 5280.00' TRACT 39 LOT 2 LEASE SF-078765 BOTTOM-HOLE LAT: 36.89487°N LONG: 107.45803°W DATUM: NAD1983 SURFACE LOCATION LAT: 36.89543°N LONG: 107.45382°W DATUM: NAD1983 1560' 329' 934' 580°27.1°W 1247.4' 1130' TRACT 40 5258.88'	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. <i>Larry Higgins</i> 10-15-09 Signature Date <i>LARRY HIGGINS</i> 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: OCTOBER 13, 2009 Date of Survey: MARCH 15, 2007 Signature and Seal of Professional Surveyor JASON C. EDWARDS NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 15269 <i>JASON C. EDWARDS</i> Certificate Number 15269

MV-PA



ROSA UNIT #25-C
RIO ARRIBA CO., NEW MEXICO
API #: 30-039-30479

CASING DETAILS

No	TVD	MD	Name	Size
1	300 00	300 00	10 3/4"	10 750
2	3453 00	3773 63	7 5/8" Int. Csg	7 000

SECTION DETAILS

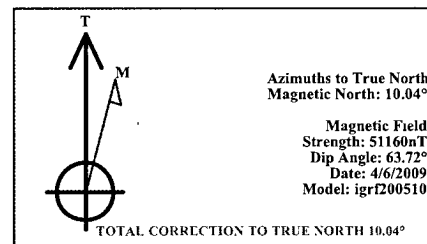
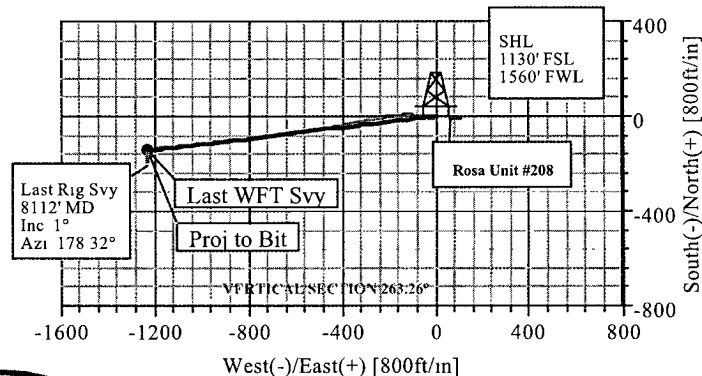
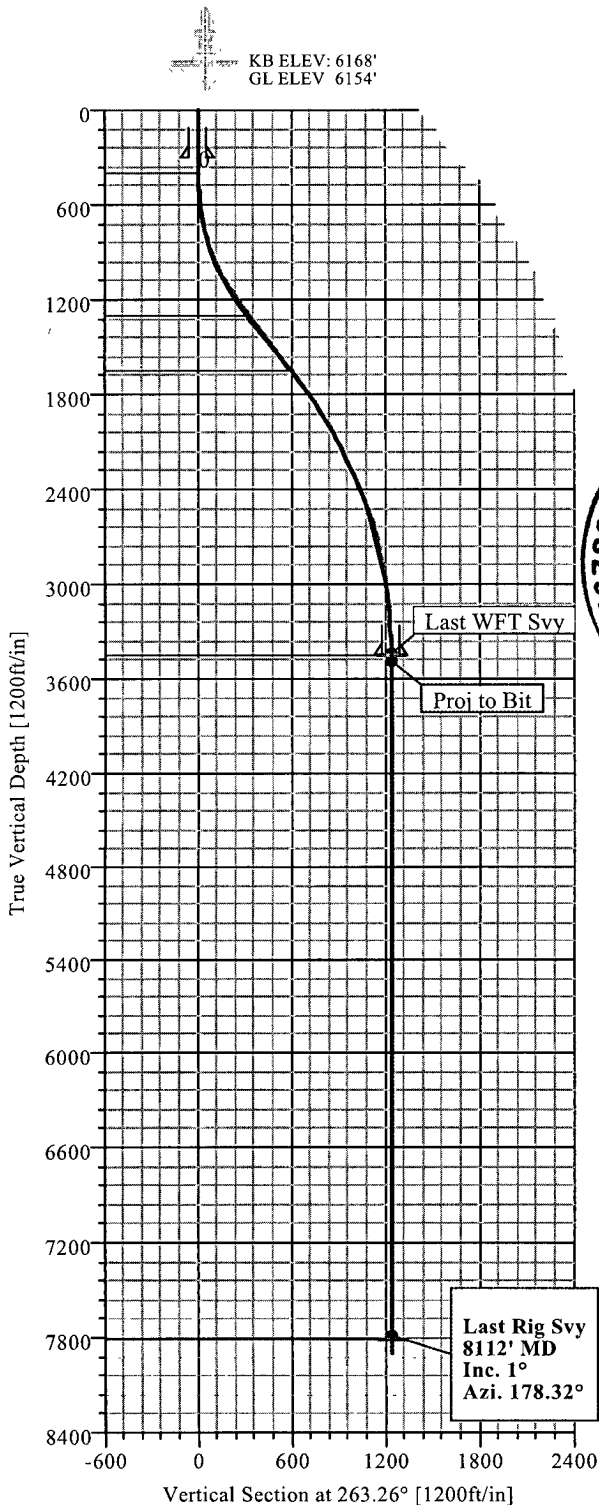
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0 00	0 00	263 26	0 00	0 00	0 00	0 00	0 00	0 00	
2	400 00	0 00	263 26	400 00	0 00	0 00	0 00	0 00	0 00	
3	1374 77	38 99	263 26	1301 25	-37.42	-316.87	4 00	263.26	319 07	
4	1824 09	38 99	263 26	1650 49	-70 58	-597 63	0 00	0 00	601 78	
5	3773 63	0 00	263 26	3453 00	-145 42	-1231 36	2 00	180.00	1239 92	Int Csg Pt
6	8138.63	0 00	263 26	7818 00	-145 42	-1231 36	0 00	263 26	1239 92	P2

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#25C	0 00	0 00	2147451 34	1288411 79	36°53'43.548N	107°27'13 752W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Int Csg Pt	3453 00	-145 42	-1231 36	36°53'42 110N	107°27'28 910W	Point
P2	7818 00	-145 42	-1231 36	36°53'42 110N	107°27'28 910W	Point



FIELD DETAILS

RIO ARRIBA CO NM (NAD 83)

Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: New Mexico, Central Zone
Magnetic Model: igrf200510

System Datum: Mean Sea Level
Local North: True North

SITE DETAILS

Rosa Unit #25C
1130' FSL 1560' FWL of SEC 15 T 31N R 6W

Site Centre Latitude: 36°53'43 548N
Longitude: 107°27'13 752W

Ground Level: 6154 00
Positional Uncertainty: 0 00
Convergence: 0 23

FORMATION TOP DETAILS

No	TVDPath	MDPath	Formation
1	2183 00	2457.85	Ojo Alamo Ss
2	2303 00	2590.26	Kirtland Sh
3	2733 00	3045 82	Fruitland Fm
4	2978 00	3296 42	Pictured Cliffs Ss.
5	3273 00	3593 51	Lewis Sh
6	4853 00	5173 63	Cliff House Ss Trans
7	5168 00	5488.63	Cliff House Ss
8	5208 00	5528 63	Menefee Fm
9	5463 00	5783.63	Point Lookout Ss.
10	5803 00	6123.63	Mancoos Sh
11	6773 00	7093.63	Gallup Ss
12	7493 00	7813.63	Greenhorn Ls
13	7553 00	7873.63	Graneros Sh
14	7688 00	8008.63	Dakota Ss

Plan: Plan #2 (#25C/1)

Created By: Lindsey Maddux

Date: 10/5/2009





Weatherford International, Inc.

Survey Report

**Weatherford**

Company:	WILLIAMS PRODUCTION	Date:	10/5/2009	Time:	10:57:28	Page:	1
Field:	RIO ARRIBA CO. NM (NAD 83)	Co-ordinate(NE) Reference:	Well: #25C, True-North				
Site:	Rosa Unit #25C	Vertical (TVD) Reference:	SITE 6168.0				
Well:	#25C	Section (VS) Reference:	Well (0.00N;0.00E,263.26Azi)				
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:

igrf200510

Site: Rosa Unit #25C

1130' FSL 1560' FWL of SEC 15 T 31N R 6W

Site Position:	From: Geographic	Northing:	2147451.34 ft	Latitude:	36 53 43.548 N
		Easting:	1288411.79 ft	Longitude:	107 27 13.752 W
Position Uncertainty:	0.00 ft			North Reference:	True
Ground Level:	6154.00 ft			Grid Convergence:	0.23 deg

Well: #25C

Slot Name:

Well Position:	+N/-S	0.00 ft	Northing:	2147451.34 ft	Latitude:	36 53 43.548 N
	+E/-W	0.00 ft	Easting:	1288411.79 ft	Longitude:	107 27 13.752 W
Position Uncertainty:	0.00 ft					

Wellpath: 1

Drilled From:

Surface

Current Datum:	SITE	Height	6168.00 ft	Tie-on Depth:	0.00 ft
Magnetic Data:	4/6/2009			Above System Datum:	Mean Sea Level
Field Strength:	51160 nT			Declination:	10.04 deg
Vertical Section:	Depth From (TVD)	+N/-S		Mag Dip Angle:	63.72 deg
	ft	ft		+E/-W	Direction
				ft	deg
	0.00	0.00		0.00	263.26

Survey: WFT SVY

Start Date:

9/18/2009

Company: Weatherford International, Inc

Engineer:

Lindsey Maddux

Tool: MWD;MWD - Standard

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
454.00	2.44	245.04	453.86	-4.08	-8.76	9.18	0.54	0.54	0.00	MWD
485.00	3.19	257.29	484.83	-4.55	-10.20	10.67	3.09	2.42	39.52	MWD
515.00	4.00	264.79	514.77	-4.83	-12.06	12.54	3.12	2.70	25.00	MWD
546.00	4.88	267.00	545.67	-4.99	-14.45	14.94	2.89	2.84	7.13	MWD
577.00	5.56	266.92	576.54	-5.14	-17.27	17.75	2.19	2.19	-0.26	MWD
607.00	6.81	267.64	606.37	-5.29	-20.50	20.98	4.17	4.17	2.40	MWD
669.00	9.69	282.17	667.73	-4.34	-29.27	29.58	5.70	4.65	23.44	MWD
731.00	12.88	277.17	728.52	-2.38	-41.23	41.23	5.38	5.15	-8.06	MWD
762.00	14.38	277.42	758.65	-1.45	-48.48	48.31	4.84	4.84	0.81	MWD
793.00	15.81	278.42	788.58	-0.34	-56.47	56.12	4.69	4.61	3.23	MWD
823.00	17.31	277.79	817.33	0.87	-64.94	64.39	5.04	5.00	-2.10	MWD
852.00	18.52	277.12	844.93	2.02	-73.78	73.04	4.23	4.17	-2.31	MWD
915.00	21.69	274.17	904.08	4.11	-95.33	94.19	5.28	5.03	-4.68	MWD
947.00	23.44	272.15	933.63	4.78	-107.59	106.28	5.98	5.47	-6.31	MWD
977.00	24.88	269.92	961.00	4.99	-119.86	118.45	5.68	4.80	-7.43	MWD
1009.00	26.50	267.67	989.84	4.69	-133.73	132.25	5.91	5.06	-7.03	MWD
1040.00	27.94	266.04	1017.41	3.91	-147.89	146.40	5.23	4.65	-5.26	MWD
1071.00	28.88	263.92	1044.67	2.62	-162.58	161.15	4.45	3.03	-6.84	MWD
1102.00	29.75	262.50	1071.70	0.82	-177.65	176.32	3.59	2.81	-4.58	MWD
1134.00	30.81	261.63	1099.34	-1.41	-193.63	192.45	3.58	3.31	-2.72	MWD
1165.00	31.75	261.25	1125.83	-3.81	-209.54	208.54	3.10	3.03	-1.23	MWD
1196.00	32.75	260.88	1152.05	-6.38	-225.88	225.07	3.29	3.23	-1.19	MWD
1227.00	33.75	260.13	1177.97	-9.18	-242.65	242.05	3.49	3.23	-2.42	MWD



Weatherford International, Inc.

Survey Report



Weatherford

Company: WILLIAMS PRODUCTION	Date: 10/5/2009	Time: 10:57:28	Page: 2
Field: RIO ARRIBA CO. NM (NAD 83)	Co-ordinate(NE) Reference:	Well: #25C, True North	
Site: Rosa Unit #25C	Vertical (TVD) Reference:	SITE 6168.0	
Well: #25C	Section (VS) Reference:	Well (0:00N;0.00E;263.26Azi)	
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
1321.00	35.75	260.25	1255.20	-18.31	-295.44	295.55	2.13	2.13	0.13	MWD
1352.00	36.00	259.13	1280.32	-21.56	-313.31	313.68	2.27	0.81	-3.61	MWD
1384.00	36.13	259.00	1306.19	-25.13	-331.81	332.47	0.47	0.41	-0.41	MWD
1446.00	37.19	258.42	1355.93	-32.38	-368.11	369.37	1.80	1.71	-0.94	MWD
1477.00	37.88	257.67	1380.51	-36.30	-386.59	388.17	2.67	2.23	-2.42	MWD
1509.00	38.25	257.67	1405.70	-40.51	-405.86	407.81	1.16	1.16	0.00	MWD
1541.00	37.88	259.17	1430.90	-44.47	-425.19	427.47	3.11	-1.16	4.69	MWD
1571.00	38.06	259.79	1454.55	-47.84	-443.33	445.88	1.41	0.60	2.07	MWD
1603.00	37.81	262.29	1479.79	-50.91	-462.76	465.54	4.87	-0.78	7.81	MWD
1634.00	37.69	262.42	1504.30	-53.43	-481.57	484.52	0.46	-0.39	0.42	MWD
1666.00	37.63	262.79	1529.63	-55.95	-500.96	504.07	0.73	-0.19	1.16	MWD
1698.00	37.81	263.42	1554.94	-58.30	-520.40	523.64	1.33	0.56	1.97	MWD
1729.00	37.81	262.67	1579.44	-60.60	-539.26	542.65	1.48	0.00	-2.42	MWD
1761.00	37.56	262.17	1604.76	-63.18	-558.65	562.21	1.23	-0.78	-1.56	MWD
1792.00	37.50	262.42	1629.34	-65.71	-577.37	581.09	0.53	-0.19	0.81	MWD
1824.00	37.75	261.92	1654.69	-68.37	-596.72	600.62	1.23	0.78	-1.56	MWD
1856.00	36.75	262.04	1680.16	-71.07	-615.90	619.98	3.13	-3.12	0.37	MWD
1887.00	36.94	262.29	1704.97	-73.61	-634.32	638.57	0.78	0.61	0.81	MWD
1950.00	37.00	262.92	1755.30	-78.49	-671.89	676.46	0.61	0.10	1.00	MWD
1981.00	37.11	262.92	1780.04	-80.79	-690.43	695.14	0.35	0.35	0.00	MWD
2013.00	37.31	262.92	1805.53	-83.17	-709.63	714.49	0.62	0.62	0.00	MWD
2044.00	35.91	262.80	1830.41	-85.47	-727.97	732.97	4.52	-4.52	-0.39	MWD
2075.00	35.00	262.54	1855.66	-87.76	-745.81	750.95	2.98	-2.94	-0.84	MWD
2107.00	34.75	262.42	1881.92	-90.16	-763.95	769.25	0.81	-0.78	-0.37	MWD
2138.00	33.94	262.92	1907.51	-92.39	-781.29	786.74	2.77	-2.61	1.61	MWD
2170.00	33.31	262.79	1934.16	-94.59	-798.88	804.46	1.98	-1.97	-0.41	MWD
2202.00	32.56	263.29	1961.01	-96.70	-816.15	821.85	2.49	-2.34	1.56	MWD
2233.00	31.81	263.42	1987.25	-98.61	-832.55	838.37	2.43	-2.42	0.42	MWD
2265.00	30.38	263.29	2014.65	-100.53	-848.96	854.89	4.47	-4.47	-0.41	MWD
2297.00	29.06	263.04	2042.44	-102.41	-864.71	870.76	4.14	-4.12	-0.78	MWD
2329.00	28.31	262.29	2070.51	-104.37	-879.95	886.12	2.60	-2.34	-2.34	MWD
2392.00	25.56	263.29	2126.67	-107.97	-908.25	914.65	4.42	-4.37	1.59	MWD
2424.00	24.63	263.92	2155.65	-109.48	-921.74	928.22	3.02	-2.91	1.97	MWD
2455.00	24.63	264.29	2183.83	-110.81	-934.59	941.14	0.50	0.00	1.19	MWD
2486.00	23.75	263.29	2212.11	-112.18	-947.22	953.84	3.13	-2.84	-3.23	MWD
2518.00	23.75	264.54	2241.40	-113.54	-960.03	966.73	1.57	0.00	3.91	MWD
2549.00	24.06	263.67	2269.74	-114.84	-972.53	979.29	1.51	1.00	-2.81	MWD
2580.00	24.19	264.79	2298.03	-116.11	-985.14	991.95	1.54	0.42	3.61	MWD
2611.00	24.56	264.29	2326.27	-117.33	-997.87	1004.74	1.37	1.19	-1.61	MWD
2643.00	24.44	264.42	2355.39	-118.63	-1011.08	1018.01	0.41	-0.37	0.41	MWD
2674.00	24.81	264.42	2383.57	-119.89	-1023.93	1030.93	1.19	1.19	0.00	MWD
2705.00	25.06	264.29	2411.68	-121.17	-1036.94	1043.99	0.83	0.81	-0.42	MWD
2737.00	24.00	263.54	2440.79	-122.58	-1050.15	1057.28	3.45	-3.31	-2.34	MWD
2768.00	23.19	263.29	2469.20	-124.00	-1062.48	1069.69	2.63	-2.61	-0.81	MWD
2800.00	22.50	263.17	2498.69	-125.47	-1074.81	1082.11	2.16	-2.16	-0.37	MWD
2833.00	22.13	262.54	2529.22	-127.02	-1087.25	1094.64	1.34	-1.12	-1.91	MWD
2864.00	21.00	262.04	2558.05	-128.55	-1098.54	1106.03	3.69	-3.65	-1.61	MWD
2896.00	19.88	262.29	2588.03	-130.08	-1109.61	1117.20	3.51	-3.50	0.78	MWD
2927.00	18.63	263.79	2617.30	-131.32	-1119.75	1127.43	4.34	-4.03	4.84	MWD
2959.00	17.25	265.42	2647.74	-132.25	-1129.56	1137.28	4.59	-4.31	5.09	MWD
2990.00	15.69	266.92	2677.47	-132.84	-1138.33	1146.06	5.22	-5.03	4.84	MWD
3022.00	14.25	267.29	2708.38	-133.26	-1146.59	1154.30	4.51	-4.50	1.16	MWD
3054.00	13.00	265.42	2739.48	-133.74	-1154.11	1161.83	4.14	-3.91	-5.84	MWD



Weatherford International, Inc.

Survey Report

**Weatherford**

Company: WILLIAMS PRODUCTION
Field: RIO ARRIBA CO. NM (NAD:83)
Site: Rosa Unit #25C
Well: #25C
Wellpath: 1

Date: 10/5/2009 Time: 10:57:28 Page: 3
Co-ordinate(N/E) Reference: Well: #25C, True North
Vertical (TVD) Reference: SITE 6168.0
Section (VS) Reference: Well (0.00N,0.00E,263.26Azi)
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
3086.00	11.63	259.42	2770.75	-134.61	-1160.87	1168.64	5.85	-4.28	-18.75	MWD
3117.00	11.06	262.29	2801.14	-135.59	-1166.89	1174.74	2.59	-1.84	9.26	MWD
3148.00	10.88	262.92	2831.57	-136.35	-1172.74	1180.63	0.70	-0.58	2.03	MWD
3180.00	10.56	262.54	2863.01	-137.10	-1178.64	1186.59	1.02	-1.00	-1.19	MWD
3211.00	10.50	263.92	2893.49	-137.77	-1184.27	1192.25	0.84	-0.19	4.45	MWD
3242.00	10.13	263.92	2923.99	-138.36	-1189.79	1197.80	1.19	-1.19	0.00	MWD
3273.00	9.50	261.92	2954.54	-139.00	-1195.03	1203.09	2.31	-2.03	-6.45	MWD
3304.00	8.25	262.92	2985.17	-139.64	-1199.77	1207.87	4.06	-4.03	3.23	MWD
3335.00	7.44	263.67	3015.88	-140.13	-1203.97	1212.10	2.63	-2.61	2.42	MWD
3366.00	7.45	265.23	3046.61	-140.52	-1207.97	1216.11	0.65	0.03	5.03	MWD
3398.00	6.63	266.29	3078.37	-140.81	-1211.88	1220.03	2.59	-2.56	3.31	MWD
3429.00	6.06	268.42	3109.18	-140.97	-1215.30	1223.45	1.99	-1.84	6.87	MWD
3460.00	5.19	269.42	3140.03	-141.03	-1218.34	1226.47	2.82	-2.81	3.23	MWD
3492.00	4.25	262.29	3171.92	-141.21	-1220.96	1229.10	3.46	-2.94	-22.28	MWD
3524.00	3.75	248.79	3203.85	-141.75	-1223.11	1231.30	3.32	-1.56	-42.19	MWD
3555.00	4.00	244.79	3234.78	-142.57	-1225.04	1233.30	1.19	0.81	-12.90	MWD
3587.00	3.69	242.04	3266.70	-143.53	-1226.96	1235.32	1.13	-0.97	-8.59	MWD
3618.00	3.50	248.29	3297.64	-144.35	-1228.72	1237.17	1.40	-0.61	20.16	MWD
3649.00	2.90	250.17	3328.60	-144.96	-1230.33	1238.84	1.96	-1.94	6.06	MWD
3681.00	1.63	249.04	3360.57	-145.40	-1231.52	1240.07	3.97	-3.97	-3.53	MWD
3713.00	0.63	223.79	3392.56	-145.69	-1232.07	1240.65	3.42	-3.12	-78.91	MWD
3757.00	0.33	178.32	3436.56	-145.99	-1232.23	1240.85	1.05	-0.68	-103.34	Last WFT Svy
3810.00	0.33	178.32	3489.56	-146.30	-1232.22	1240.88	0.00	0.00	0.00	Proj to Bit
8112.00	1.00	178.32	7791.25	-196.21	-1230.76	1245.28	0.02	0.02	0.00	Last Rig Svy

Annotation

MD ft	TVD ft	
3757.00	3436.56	Last WFT Svy
3810.00	3489.56	Proj to Bit
8112.00	7791.25	Last Rig Svy