

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 30-039-30123	*Pool Code 97232 / 72319 / 71599	*Pool Name BASIN MANCOS / BLANCO MESAVERDE / BASIN DAKOTA
*Property Code 17033	*Property Name ROSA UNIT	*Well Number 149C
*GRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY	*Elevation 6286'

10 Surface Location

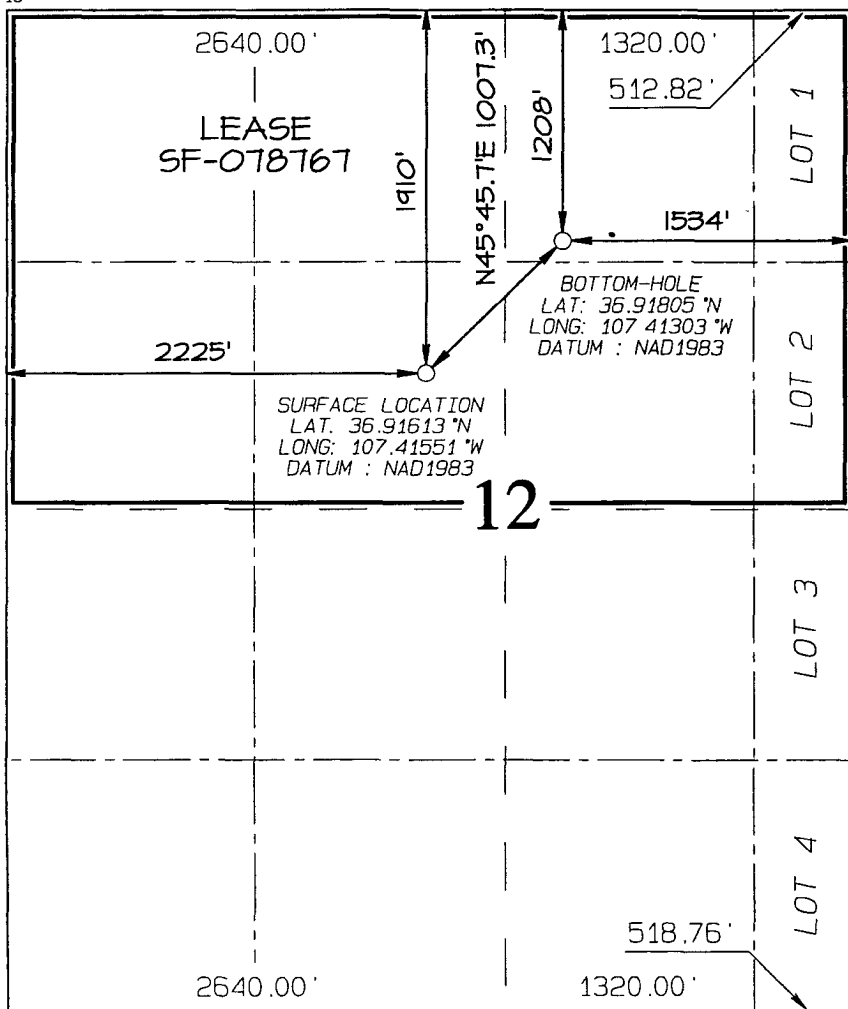
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	12	31N	6W		1910	NORTH	2225	WEST	RIO ARRIBA

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
B	12	31N	6W		1208	NORTH	1534	EAST	RIO ARRIBA

12 Dedicated Acres 271.17 Acres - (N/2)	13 Joint or Infill	14 Consolidation Code	15 Order No RCVD JUL 15 '09 OIL CONS. DIV.
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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**



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 7-14-09
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
Date Revised: JULY 14, 2009
Survey Date: DECEMBER 2, 2008

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

B 7/20



ROSA UNIT #149C
RIO ARriba CO., NEW MEXICO

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	46.95	0.00	0.00	0.00	0.00	0.00	0.00	
2	400.00	0.00	46.95	400.00	0.00	0.00	0.00	0.00	0.00	
3	1008.92	24.36	46.95	990.74	87.03	93.17	4.00	46.95	127.49	
4	2603.63	24.36	46.95	2443.52	535.97	573.79	0.00	0.00	785.17	
5	3821.46	0.00	46.95	3625.00	710.02	760.12	2.00	180.00	1040.15	Int. Csg. Pt. 2
6	8181.46	0.00	46.95	7985.00	710.02	760.12	0.00	46.95	1040.15	PBHL 2

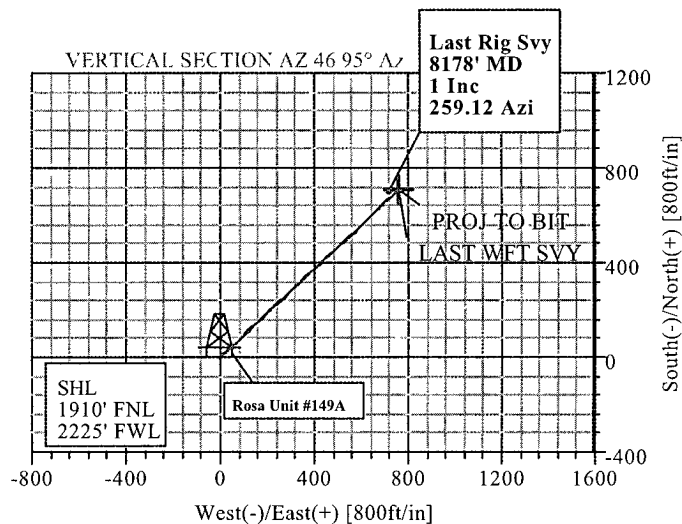
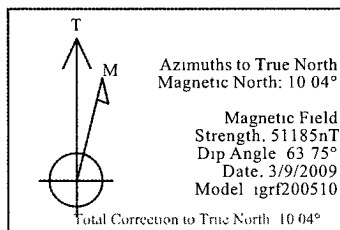
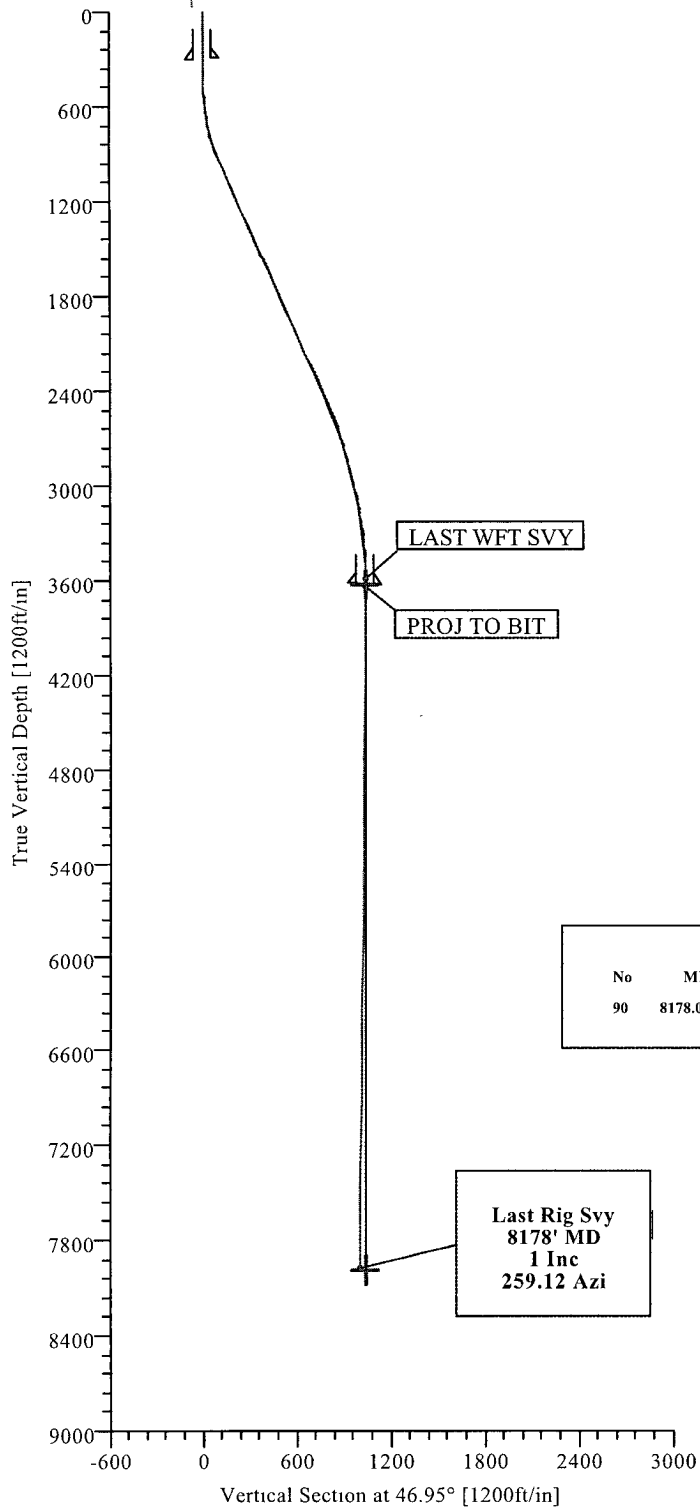
WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#149C	0.00	0.00	2154848.90	1299706.19	36°54'58.070N	107°24'55.840W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Int. Csg. Pt. 2	3625.00	710.02	760.12	2155549.58	1300474.93	36°55'05.090N	107°24'46.480W	Point
PBHL 2	7985.00	710.02	760.12	2155549.58	1300474.93	36°55'05.090N	107°24'46.480W	Point

KB ELEV: 6300'
GR ELEV: 6286



Last Rig Svy

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
90	8178.00	1.00	259.12	7979.54	701.72	714.01	0.02	0.00	1000.79

Last Rig Svy
8178' MD
1 Inc
259.12 Azi



Weatherford

Survey: WFT SVY (#149C/1)

Created By: Lindsey Maddux

Date: 7/9/2009



Weatherford International, Inc.

Survey Report



Weatherford

Company: WILLIAMS PRODUCTION Date: 7/9/2009 Time: 10:49:08 Page: 1
 Field: Rio Arriba Co., NM (NAD 83) Co-ordinate(NE) Reference: Well #149C, True-North
 Site: Rosa Unit #149C Vertical (TVD) Reference: SITE 6300.0
 Well: #149C Section (VS) Reference: Well (0.00N,0.00E,46.95Azi)
 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 #149C

1910' FNL 2225' FWL of SEC 12 T31N R6W

Site Position: Northing: 2154848.90 ft Latitude: 36 54 58.070 N
 From: Geographic Easting: 1299706.19 ft Longitude: 107 24 55.840 W
 Position Uncertainty: 0.00 ft North Reference: True
 Ground Level: 6286.00 ft Grid Convergence: -0.70 deg

Well: #149C

Slot Name:

Well Position: +N/-S 0.00 ft Northing: 2154848.90 ft Latitude: 36 54 58.070 N
 +E/-W 0.00 ft Easting: 1299706.19 ft Longitude: 107 24 55.840 W
 Position Uncertainty: 0.00 ft

Wellpath: 1

Current Datum: SITE Height 6300.00 ft
 Magnetic Data: 3/9/2009
 Field Strength: 51185 nT
 Vertical Section: Depth From (TVD) +N/-S
 ft ft
 0.00 0.00 0.00 46.95

Survey: WFT SVY

Start Date: 6/29/2009

Company: Weatherford International, Inc
 Tool: MWD;MWD - Standard

Engineer: Lindsey Maddux
 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
327.00	1.32	27.99	326.97	3.33	1.77	3.56	0.40	0.40	0.00	MWD
358.00	1.76	23.73	357.96	4.08	2.13	4.34	1.47	1.42	-13.74	MWD
389.00	2.06	31.67	388.94	4.99	2.61	5.31	1.29	0.97	25.61	MWD
420.00	2.06	38.39	419.92	5.90	3.25	6.40	0.78	0.00	21.68	MWD
451.00	2.44	42.64	450.90	6.82	4.04	7.61	1.34	1.23	13.71	MWD
482.00	2.94	46.88	481.86	7.85	5.07	9.06	1.73	1.61	13.68	MWD
512.00	3.56	47.39	511.82	9.01	6.32	10.76	2.07	2.07	1.70	MWD
543.00	4.13	50.51	542.75	10.37	7.89	12.84	1.96	1.84	10.06	MWD
573.00	4.99	52.20	572.65	11.85	9.75	15.22	2.90	2.87	5.63	MWD
604.00	5.69	53.26	603.52	13.60	12.05	18.09	2.28	2.26	3.42	MWD
633.00	6.75	53.39	632.35	15.48	14.57	21.21	3.66	3.66	0.45	MWD
664.00	8.06	53.01	663.09	17.87	17.77	25.18	4.23	4.23	-1.23	MWD
695.00	9.31	53.38	693.73	20.67	21.52	29.83	4.04	4.03	1.19	MWD
726.00	10.88	53.63	724.25	23.90	25.88	35.23	5.07	5.06	0.81	MWD
757.00	12.94	52.76	754.58	27.74	31.00	41.59	6.67	6.65	-2.81	MWD
788.00	14.69	52.76	784.68	32.22	36.90	48.96	5.65	5.65	0.00	MWD
818.00	16.40	52.10	813.58	37.12	43.27	56.96	5.73	5.70	-2.20	MWD
849.00	18.25	50.13	843.18	42.92	50.45	66.17	6.26	5.97	-6.35	MWD
911.00	22.50	47.64	901.28	57.15	66.67	87.73	6.99	6.85	-4.02	MWD
973.00	24.94	47.14	958.04	74.03	85.02	112.67	3.95	3.94	-0.81	MWD
1036.00	24.69	45.39	1015.23	92.31	104.13	139.10	1.23	-0.40	-2.78	MWD
1099.00	24.66	44.28	1072.47	110.96	122.67	165.39	0.74	-0.05	-1.76	MWD
1162.00	24.63	42.76	1129.74	130.01	140.76	191.61	1.01	-0.05	-2.41	MWD



Weatherford International, Inc.

Survey Report

**Weatherford**

Company:	WILLIAMS PRODUCTION	Date:	7/9/2009	Time:	10:49:08	Page:	2
Field:	Rio Arriba Co., NM (NAD 83)	Co-ordinate(NE) Reference:	Well: #149C, True North				
Site:	Rosa Unit #149C	Vertical (TVD) Reference:	SITE 6300.0				
Well:	#149C	Section (VS) Reference:	Well (0.00N,0.00E,46.95Azi)				
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
1226.00	24.69	43.89	1187.90	149.43	159.08	218.26	0.74	0.09	1.77	MWD
1289.00	24.63	43.39	1245.15	168.46	177.22	244.50	0.34	-0.10	-0.79	MWD
1351.00	24.13	48.01	1301.63	186.32	195.52	270.07	3.18	-0.81	7.45	MWD
1414.00	25.13	47.39	1358.90	204.00	214.93	296.32	1.64	1.59	-0.98	MWD
1446.00	25.31	46.89	1387.85	213.27	224.93	309.95	0.87	0.56	-1.56	MWD
1477.00	24.00	47.64	1416.02	222.05	234.42	322.88	4.34	-4.23	2.42	MWD
1509.00	23.50	47.26	1445.31	230.76	243.92	335.77	1.63	-1.56	-1.19	MWD
1541.00	23.88	46.89	1474.61	239.52	253.33	348.63	1.28	1.19	-1.16	MWD
1573.00	24.31	46.76	1503.83	248.46	262.86	361.69	1.35	1.34	-0.41	MWD
1604.00	24.44	46.89	1532.06	257.21	272.19	374.49	0.45	0.42	0.42	MWD
1636.00	24.42	46.91	1561.20	266.25	281.85	387.72	0.07	-0.06	0.06	MWD
1667.00	24.56	47.39	1589.41	274.99	291.27	400.57	0.78	0.45	1.55	MWD
1698.00	24.88	48.39	1617.57	283.69	300.89	413.53	1.70	1.03	3.23	MWD
1761.00	24.13	47.26	1674.89	301.23	320.26	439.66	1.40	-1.19	-1.79	MWD
1823.00	24.00	46.51	1731.51	318.50	338.71	464.94	0.54	-0.21	-1.21	MWD
1886.00	24.13	47.76	1789.03	335.98	357.54	490.63	0.83	0.21	1.98	MWD
1950.00	25.00	48.14	1847.24	353.80	377.30	517.23	1.38	1.36	0.59	MWD
2013.00	24.88	47.14	1904.36	371.70	396.93	543.79	0.70	-0.19	-1.59	MWD
2076.00	25.19	46.64	1961.44	389.92	416.39	570.45	0.60	0.49	-0.79	MWD
2138.00	24.13	47.01	2017.79	407.62	435.26	596.32	1.73	-1.71	0.60	MWD
2201.00	24.06	47.89	2075.30	425.01	454.20	622.04	0.58	-0.11	1.40	MWD
2264.00	24.78	46.76	2132.66	442.67	473.35	648.08	1.36	1.14	-1.79	MWD
2328.00	24.44	46.64	2190.85	460.94	492.74	674.73	0.54	-0.53	-0.19	MWD
2391.00	24.19	49.76	2248.26	478.23	512.07	700.66	2.08	-0.40	4.95	MWD
2423.00	24.13	50.14	2277.46	486.66	522.10	713.74	0.52	-0.19	1.19	MWD
2454.00	24.50	50.64	2305.71	494.80	531.93	726.48	1.37	1.19	1.61	MWD
2517.00	23.89	49.56	2363.18	511.36	551.74	752.26	1.20	-0.97	-1.71	MWD
2581.00	24.56	48.01	2421.54	528.66	571.49	778.51	1.44	1.05	-2.42	MWD
2644.00	24.88	46.29	2478.77	546.58	590.80	804.85	1.25	0.51	-2.73	MWD
2675.00	23.69	45.51	2507.02	555.45	599.96	817.60	3.98	-3.84	-2.52	MWD
2707.00	22.63	44.26	2536.45	564.36	608.84	830.17	3.65	-3.31	-3.91	MWD
2738.00	21.56	42.51	2565.17	572.83	616.86	841.81	4.05	-3.45	-5.65	MWD
2800.00	19.22	40.28	2623.28	589.02	631.15	863.31	3.98	-3.77	-3.60	MWD
2863.00	17.19	43.26	2683.13	603.71	644.24	882.90	3.54	-3.22	4.73	MWD
2895.00	16.88	47.39	2713.72	610.30	650.90	892.26	3.90	-0.97	12.91	MWD
2926.00	17.13	48.01	2743.37	616.40	657.60	901.33	1.00	0.81	2.00	MWD
2958.00	17.50	47.89	2773.92	622.78	664.68	910.85	1.16	1.16	-0.37	MWD
2988.00	16.75	47.39	2802.59	628.73	671.20	919.68	2.55	-2.50	-1.67	MWD
3019.00	15.38	47.39	2832.38	634.54	677.52	928.26	4.42	-4.42	0.00	MWD
3051.00	14.63	48.51	2863.28	640.09	683.67	936.54	2.51	-2.34	3.50	MWD
3082.00	14.81	48.89	2893.27	645.29	689.59	944.42	0.66	0.58	1.23	MWD
3145.00	14.32	47.17	2954.24	655.88	701.37	960.26	1.04	-0.78	-2.73	MWD
3175.00	13.94	47.89	2983.33	660.82	706.77	967.58	1.40	-1.27	2.40	MWD
3206.00	12.88	48.64	3013.49	665.61	712.13	974.77	3.47	-3.42	2.42	MWD
3237.00	12.56	50.14	3043.73	670.06	717.31	981.59	1.48	-1.03	4.84	MWD
3269.00	11.69	49.26	3075.01	674.40	722.44	988.30	2.78	-2.72	-2.75	MWD
3301.00	11.50	49.89	3106.36	678.57	727.34	994.72	0.71	-0.59	1.97	MWD
3333.00	10.75	46.76	3137.76	682.67	731.95	1000.89	3.01	-2.34	-9.78	MWD
3362.00	10.75	46.01	3166.25	686.40	735.87	1006.30	0.48	0.00	-2.59	MWD
3394.00	10.25	46.26	3197.71	690.44	740.07	1012.13	1.57	-1.56	0.78	MWD
3426.00	9.38	47.39	3229.25	694.18	744.05	1017.59	2.78	-2.72	3.53	MWD
3458.00	8.44	49.39	3260.86	697.47	747.75	1022.54	3.09	-2.94	6.25	MWD
3488.00	7.25	49.39	3290.58	700.14	750.86	1026.63	3.97	-3.97	0.00	MWD



Weatherford International, Inc.

Survey Report



Weatherford

Company: WILLIAMS PRODUCTION
Field: Rio Arriba Co., NM (NAD 83)
Site: Rosa Unit #149C
Well: #149C
Wellpath: 1
Date: 7/9/2009
Co-ordinate(N/E) Reference: Well: #149C, True North
Vertical (TVD) Reference: SITE 6300.0
Section (VS) Reference: Well (0.00N,0.00E,46.95Azi)
Survey Calculation Method: Minimum Curvature
Db: Sybase
Page: 3

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
3519.00	6.44	47.39	3321.36	702.59	753.62	1030.33	2.72	-2.61	-6.45	MWD
3550.00	5.88	42.76	3352.18	704.93	755.98	1033.65	2.41	-1.81	-14.94	MWD
3582.00	5.13	38.01	3384.03	707.26	757.97	1036.70	2.74	-2.34	-14.84	MWD
3613.00	4.31	37.01	3414.93	709.28	759.53	1039.21	2.66	-2.65	-3.23	MWD
3644.00	2.81	40.64	3445.86	710.79	760.72	1041.12	4.89	-4.84	11.71	MWD
3676.00	1.18	67.85	3477.84	711.51	761.54	1042.20	5.75	-5.09	85.03	MWD
3691.00	0.75	88.51	3492.84	711.57	761.78	1042.42	3.64	-2.87	137.73	MWD
3707.00	0.63	117.76	3508.84	711.53	761.96	1042.53	2.30	-0.75	182.81	MWD
3738.00	0.69	148.89	3539.84	711.29	762.21	1042.55	1.16	0.19	100.42	MWD
3769.00	0.31	195.89	3570.84	711.05	762.28	1042.44	1.71	-1.23	151.61	MWD
3789.00	0.29	259.12	3590.84	710.99	762.22	1042.35	1.57	-0.10	316.15	LAST WFT SVY
3840.00	0.29	259.12	3641.84	710.94	761.97	1042.13	0.00	0.00	0.00	PROJ TO BIT
8178.00	1.00	259.12	7979.54	701.72	714.01	1000.79	0.02	0.02	0.00	LAST RIG SVY

Annotation

MD ft	TVD ft	
3789.00	3590.84	LAST WFT SVY
3840.00	3641.84	PROJ TO BIT
8178.00	7979.54	LAST RIG SVY