



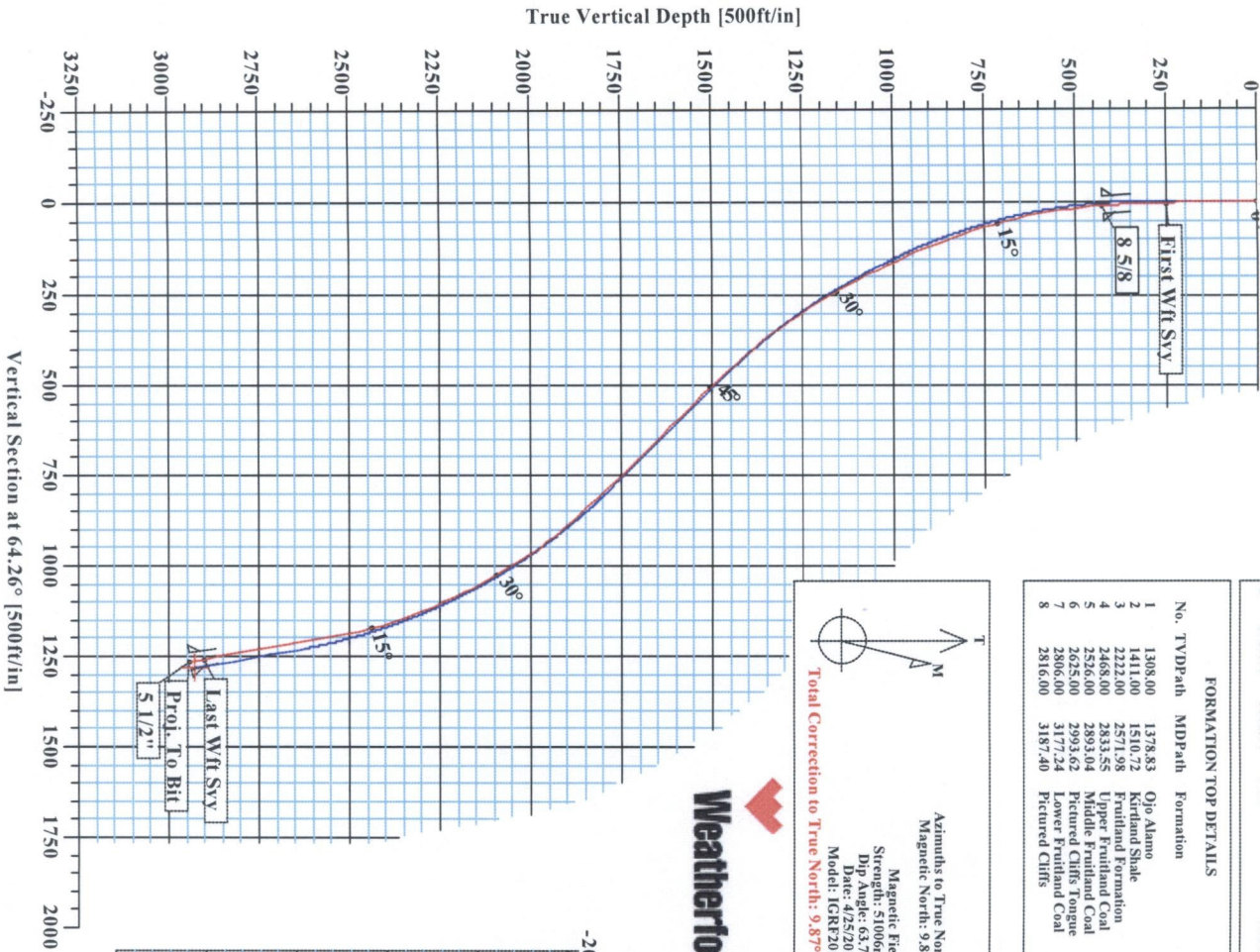
Ute Government #101
La Plata County, CO

KB ELEV: 6424
GL ELEV: 6412

CASING DETAILS			
No.	TYD	MD	Name
1	429.90	430.00	8 5/8"
2	2925.00	3308.04	5 1/2"
			5,500

FORMATION TOP DETAILS			
No.	TYDPath	MDPath	Formation
1	1308.00	1378.83	Ojo Alamo
2	1411.00	1510.72	Kirtland Shale
3	2222.00	2571.98	Fruitland Formation
4	2468.00	2833.55	Upper Fruitland Coal
5	2526.00	2893.04	Middle Fruitland Coal
6	2625.00	2993.62	Pictured Cliffs Tongue
7	3177.24	3187.40	Lower Fruitland Coal
8	2816.00		Pictured Cliffs

Azimuths to True North
Magnetic North: 9.87°
Magnetic Field Strength: 51006nT
Dip Angle: 63.77°
Date: 4/25/2011
Model: IGR2010
Total Correction to True North: 9.87°



SECTION DETAILS									
Sec	MD	Inc	Azi	TYD	+N/-S	+E/-W	DLeg	TFace	VSec Target
1	0.00	0.00	64.26	0.00	0.00	0.00	0.00	0.00	
2	312.02	0.00	312.02	0.00	0.00	0.00	0.00	0.00	
3	1597.73	45.00	64.26	1469.57	208.22	431.90	3.50	64.26	479.47
4	2020.37	45.00	64.26	1768.42	337.99	701.10	0.00	0.00	778.32
5	3020.37	10.00	64.26	2641.70	535.41	1110.60	3.50	180.00	1232.92
6	3308.04	10.00	64.26	2925.00	557.10	1155.60	0.00	0.00	1282.88
									Pbhl

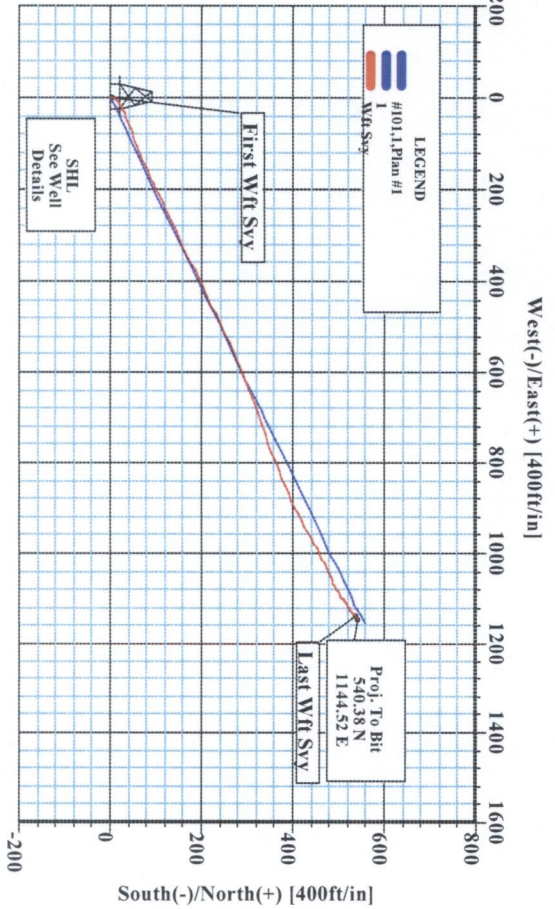
WELL DETAILS				
Name	+N/-S	+E/-W	Northing	Latitude
#101	0.00	0.00	1148846.90	37°03'25.776N
				107°33'51.840W
				N/A

TARGET DETAILS				
Name	TYD	+N/-S	+E/-W	Latitude
Pbhl	2925.00	557.10	1155.60	37°03'31.284N
				107°33'37.584W
				Point

FIELD DETAILS
La Plata County, CO (NAD 83)
Geodetic System: US State Plane Coordinate System 1983
Datum: Colorado Southern Zone
Elevation: CRS 1980
Magnetic Model: IGR2010
System Datum: Mean Sea Level
Local North: True North

SITE DETAILS
Ute Government #101
Site Centre Latitude: 37°03'25.776N
Longitude: 107°33'51.840W
Ground Level: 6412.00
Positional Uncertainty: 0.00
Convergence: -1.27

Survey: Wh Svy (#101/1)									
No	MD	Inc	Az	TYD	+N/-S	+E/-W	DLeg	TFace	VSec
98	3315.00	10.41	56.62	2941.55	540.38	1144.52	0.00	180.00	1265.63





Weatherford International Ltd.

WFT Survey Report Lat, Long

**Weatherford**

Company: XTO	Date: 4/18/2011	Time: 07:17:35	Page: 1
Field: La Plata County, CO (NAD 83)	Co-ordinate(NE) Reference: Well: #101, True North		
Site: Ute Government #101	Vertical (TVD) Reference: SITE 6424.0		
Well: #101	Section (VS) Reference: Well (0.00N,0.00E,64.26Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: Wft Svy	Start Date: 4/14/2011
Company: Weatherford International Ltd.	Engineer: Russell W. Joyner
Tool: MWD;MWD - Standard	Tied-to: From Surface

Field: La Plata County, CO (NAD 83)

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

Site: Ute Government #101

Site Position:	Northing: 1148846.90 ft	Latitude: 37 3 25.776 N
From: Geographic	Easting: 2397611.53 ft	Longitude: 107 33 51.840 W
Position Uncertainty: 0.00 ft		North Reference: True
Ground Level: 6412.00 ft		Grid Convergence: -1.27 deg

Well: #101	Slot Name:
Well Position: +N/-S 0.00 ft	Northing: 1148846.90 ft
+E/-W 0.00 ft	Easting: 2397611.53 ft
Position Uncertainty: 0.00 ft	Latitude: 37 3 25.776 N
	Longitude: 107 33 51.840 W

Wellpath: 1	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 4/25/2011	Above System Datum: Mean Sea Level
Field Strength: 51006 nT	Declination: 9.87 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 63.77 deg
ft	+N/-S
	ft
	+E/-W
	ft
	Direction
	deg
0.00	0.00
0.00	0.00
0.00	64.26

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	37	3	25.776	107	33	51.840	First Wft Sv
249.00	2.49	9.84	248.92	5.33	0.92	3.15	1.00	37	3	25.829	107	33	51.829	
278.00	2.63	11.37	277.89	6.60	1.16	3.92	0.54	37	3	25.841	107	33	51.826	
308.00	2.63	14.37	307.86	7.94	1.47	4.77	0.46	37	3	25.854	107	33	51.822	
336.00	2.88	20.50	335.83	9.23	1.88	5.70	1.38	37	3	25.867	107	33	51.817	
374.00	3.69	33.62	373.77	11.14	2.89	7.44	2.90	37	3	25.886	107	33	51.804	8 5/8
430.00	4.88	43.88	429.61	14.36	5.54	11.22	2.52	37	3	25.918	107	33	51.772	
447.00	5.26	46.06	446.54	15.42	6.60	12.64	2.52	37	3	25.928	107	33	51.759	
478.00	5.82	47.72	477.40	17.46	8.78	15.49	1.88	37	3	25.949	107	33	51.732	
509.00	6.89	52.74	508.21	19.64	11.43	18.82	3.89	37	3	25.970	107	33	51.699	
540.00	8.00	58.87	538.95	21.88	14.75	22.79	4.40	37	3	25.992	107	33	51.658	
571.00	9.25	62.12	569.60	24.16	18.80	27.43	4.33	37	3	26.015	107	33	51.608	
603.00	10.44	65.37	601.12	26.58	23.71	32.90	4.10	37	3	26.039	107	33	51.547	
634.00	11.75	65.87	631.54	29.04	29.15	38.86	4.24	37	3	26.063	107	33	51.480	
665.00	13.06	67.12	661.82	31.69	35.25	45.52	4.31	37	3	26.089	107	33	51.405	
697.00	14.19	68.00	692.92	34.56	42.22	53.04	3.59	37	3	26.118	107	33	51.319	
728.00	15.38	68.00	722.89	37.53	49.56	60.94	3.84	37	3	26.147	107	33	51.229	
760.00	16.69	67.12	753.65	40.90	57.72	69.76	4.16	37	3	26.180	107	33	51.128	
792.00	17.63	66.75	784.22	44.60	66.41	79.19	2.96	37	3	26.217	107	33	51.021	
823.00	18.50	67.37	813.69	48.35	75.26	88.79	2.87	37	3	26.254	107	33	50.912	
854.00	19.19	69.37	843.03	52.04	84.57	98.78	3.05	37	3	26.290	107	33	50.797	
885.00	19.81	70.25	872.25	55.61	94.28	109.08	2.21	37	3	26.326	107	33	50.677	
916.00	20.50	69.75	901.35	59.26	104.32	119.71	2.29	37	3	26.362	107	33	50.553	
948.00	21.56	68.12	931.22	63.39	115.03	131.15	3.78	37	3	26.403	107	33	50.421	



Weatherford International Ltd.

WFT Survey Report Lat, Long



Company:	XTO	Date:	4/18/2011	Time:	07:17:35	Page:	2
Field:	La Plata County, CO (NAD 83)	Co-ordinate(NE) Reference:	Well: #101, True North				
Site:	Ute Government #101	Vertical (TVD) Reference:	SITE 6424.0				
Well:	#101	Section (VS) Reference:	Well (0.00N,0.00E,64.26Azi)				
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
978.00	22.63	67.25	959.02	67.68	125.47	142.41	3.73	37	3	26.445	107	33	50.292	
1009.00	23.56	66.12	987.53	72.49	136.64	154.56	3.32	37	3	26.493	107	33	50.154	
1040.00	24.56	65.75	1015.84	77.65	148.18	167.19	3.26	37	3	26.544	107	33	50.012	
1071.00	25.75	65.25	1043.90	83.11	160.17	180.37	3.90	37	3	26.598	107	33	49.864	
1103.00	26.94	65.37	1072.58	89.04	173.07	194.57	3.72	37	3	26.656	107	33	49.705	
1134.00	27.94	64.87	1100.09	95.05	186.03	208.85	3.31	37	3	26.716	107	33	49.545	
1166.00	28.98	65.25	1128.22	101.48	199.86	224.10	3.30	37	3	26.779	107	33	49.375	
1198.00	29.94	64.87	1156.08	108.12	214.13	239.83	3.06	37	3	26.845	107	33	49.199	
1229.00	30.81	64.75	1182.83	114.79	228.31	255.51	2.81	37	3	26.911	107	33	49.024	
1260.00	31.88	64.75	1209.30	121.67	242.89	271.63	3.45	37	3	26.979	107	33	48.844	
1291.00	32.81	64.75	1235.49	128.75	257.90	288.22	3.00	37	3	27.049	107	33	48.659	
1322.00	33.88	64.62	1261.39	136.03	273.30	305.26	3.46	37	3	27.121	107	33	48.469	
1354.00	35.00	64.62	1287.78	143.79	289.65	323.35	3.50	37	3	27.198	107	33	48.267	
1385.00	36.19	64.25	1312.99	151.58	305.93	341.40	3.90	37	3	27.275	107	33	48.066	
1417.00	37.50	64.00	1338.59	159.95	323.19	360.59	4.12	37	3	27.357	107	33	47.853	
1448.00	38.88	65.50	1362.96	168.12	340.53	379.75	5.36	37	3	27.438	107	33	47.639	
1479.00	40.13	63.87	1386.88	176.56	358.35	399.47	5.24	37	3	27.522	107	33	47.419	
1511.00	40.88	63.75	1411.21	185.73	377.00	420.25	2.36	37	3	27.612	107	33	47.189	
1542.00	41.88	63.50	1434.47	194.84	395.36	440.74	3.27	37	3	27.702	107	33	46.963	
1573.00	42.88	65.12	1457.37	203.89	414.19	461.64	4.78	37	3	27.792	107	33	46.730	
1604.00	44.13	64.87	1479.85	212.91	433.53	482.98	4.07	37	3	27.881	107	33	46.492	
1635.00	44.94	63.75	1501.95	222.34	453.12	504.72	3.64	37	3	27.974	107	33	46.250	
1666.00	45.75	63.87	1523.74	232.07	472.91	526.77	2.63	37	3	28.070	107	33	46.006	
1698.00	46.38	64.87	1545.94	242.04	493.68	549.81	2.99	37	3	28.169	107	33	45.750	
1729.00	45.06	65.12	1567.58	251.42	513.80	572.00	4.30	37	3	28.262	107	33	45.502	
1761.00	45.31	64.87	1590.14	261.01	534.37	594.70	0.96	37	3	28.357	107	33	45.248	
1792.00	45.00	65.87	1612.00	270.17	554.35	616.68	2.50	37	3	28.447	107	33	45.001	
1823.00	45.50	65.50	1633.82	279.24	574.41	638.68	1.82	37	3	28.537	107	33	44.754	
1855.00	45.63	67.37	1656.23	288.37	595.35	661.52	4.19	37	3	28.627	107	33	44.496	
1886.00	45.00	68.12	1678.03	296.72	615.75	683.51	2.66	37	3	28.710	107	33	44.244	
1918.00	44.44	69.62	1700.77	304.84	636.75	705.96	3.73	37	3	28.790	107	33	43.985	
1949.00	43.88	70.37	1723.01	312.23	657.04	727.45	2.47	37	3	28.863	107	33	43.734	
1980.00	43.25	71.37	1745.47	319.23	677.23	748.67	3.01	37	3	28.932	107	33	43.486	
2043.00	43.25	71.12	1791.36	333.11	718.10	791.51	0.27	37	3	29.069	107	33	42.981	
2074.00	43.75	71.12	1813.84	340.01	738.29	812.70	1.61	37	3	29.138	107	33	42.732	
2105.00	43.46	70.24	1836.29	347.09	758.47	833.95	2.17	37	3	29.207	107	33	42.483	
2137.00	42.94	69.37	1859.62	354.65	779.03	855.75	2.47	37	3	29.282	107	33	42.230	
2167.00	41.56	68.25	1881.82	361.94	797.84	875.85	5.24	37	3	29.354	107	33	41.998	
2197.00	40.06	68.00	1904.53	369.24	816.03	895.42	5.03	37	3	29.426	107	33	41.773	
2227.00	38.81	67.50	1927.70	376.45	833.67	914.44	4.30	37	3	29.498	107	33	41.556	
2258.00	37.13	68.00	1952.14	383.68	851.32	933.47	5.51	37	3	29.569	107	33	41.338	
2288.00	35.88	67.50	1976.25	390.43	867.84	951.29	4.28	37	3	29.636	107	33	41.134	
2319.00	34.31	66.00	2001.61	397.46	884.21	969.09	5.78	37	3	29.706	107	33	40.932	
2350.00	33.19	63.87	2027.39	404.76	899.81	986.31	5.26	37	3	29.778	107	33	40.740	
2380.00	32.25	62.25	2052.63	412.10	914.27	1002.52	4.28	37	3	29.850	107	33	40.561	
2410.00	30.75	61.75	2078.21	419.46	928.11	1018.18	5.08	37	3	29.923	107	33	40.391	
2441.00	29.25	61.62	2105.05	426.81	941.75	1033.67	4.84	37	3	29.996	107	33	40.222	
2471.00	28.13	61.75	2131.37	433.64	954.43	1048.05	3.74	37	3	30.063	107	33	40.066	
2501.00	26.88	61.87	2157.98	440.18	966.64	1061.89	4.17	37	3	30.128	107	33	39.915	
2531.00	25.69	62.25	2184.88	446.41	978.38	1075.17	4.01	37	3	30.189	107	33	39.770	
2560.00	24.81	62.87	2211.11	452.11	989.36	1087.53	3.17	37	3	30.246	107	33	39.635	
2590.00	23.84	62.68	2238.44	457.76	1000.35	1099.89	3.24	37	3	30.302	107	33	39.499	



Weatherford International Ltd.

WFT Survey Report Lat, Long



Company: XTO
Field: La Plata County, CO (NAD 83)
Site: Ute Government #101
Well: #101
Wellpath: 1

Date: 4/18/2011 Time: 07:17:35 Page: 3
Co-ordinate(NE) Reference: Well: #101, True North
Vertical (TVD) Reference: SITE 6424.0
Section (VS) Reference: Well (0.00N,0.00E,64.26Azi)
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
2621.00	23.31	61.75	2266.86	463.54	1011.32	1112.28	2.09	37	3	30.359	107	33	39.364	
2651.00	22.06	63.00	2294.53	468.91	1021.56	1123.84	4.47	37	3	30.412	107	33	39.238	
2682.00	21.25	64.12	2323.35	474.00	1031.81	1135.28	2.93	37	3	30.462	107	33	39.111	
2711.00	19.50	65.12	2350.53	478.33	1040.93	1145.37	6.15	37	3	30.505	107	33	38.999	
2742.00	17.88	66.37	2379.90	482.42	1049.98	1155.30	5.38	37	3	30.545	107	33	38.887	
2772.00	16.31	65.87	2408.57	485.99	1058.04	1164.12	5.26	37	3	30.581	107	33	38.788	
2803.00	15.00	65.25	2438.42	489.45	1065.66	1172.48	4.26	37	3	30.615	107	33	38.694	
2835.00	13.88	63.37	2469.41	492.90	1072.85	1180.46	3.79	37	3	30.649	107	33	38.605	
2867.00	12.69	61.00	2500.55	496.33	1079.36	1187.81	4.09	37	3	30.683	107	33	38.525	
2897.00	11.69	57.87	2529.87	499.54	1084.81	1194.12	3.99	37	3	30.715	107	33	38.457	
2927.00	10.44	55.75	2559.32	502.69	1089.63	1199.83	4.38	37	3	30.746	107	33	38.398	
2957.00	9.44	55.37	2588.87	505.61	1093.91	1204.94	3.34	37	3	30.775	107	33	38.345	
2988.00	9.19	54.62	2619.46	508.49	1098.02	1209.90	0.90	37	3	30.803	107	33	38.294	
3018.00	9.25	54.62	2649.07	511.28	1101.93	1214.64	0.20	37	3	30.831	107	33	38.246	
3048.00	9.50	54.62	2678.67	514.10	1105.92	1219.45	0.83	37	3	30.859	107	33	38.197	
3080.00	9.68	54.95	2710.22	517.18	1110.27	1224.71	0.59	37	3	30.889	107	33	38.143	
3111.00	9.88	55.75	2740.77	520.17	1114.61	1229.91	0.78	37	3	30.919	107	33	38.090	
3143.00	10.00	55.37	2772.29	523.30	1119.16	1235.37	0.43	37	3	30.950	107	33	38.034	
3174.00	10.13	55.75	2802.81	526.36	1123.63	1240.73	0.47	37	3	30.980	107	33	37.978	
3206.00	10.13	55.75	2834.31	529.53	1128.28	1246.30	0.00	37	3	31.011	107	33	37.921	
3237.00	10.25	55.75	2864.83	532.61	1132.82	1251.72	0.39	37	3	31.042	107	33	37.865	
3273.00	10.41	56.62	2900.24	536.21	1138.18	1258.11	0.62	37	3	31.077	107	33	37.799	Last Wft Svy
3315.00	10.41	56.62	2941.55	540.38	1144.52	1265.63	0.00	37	3	31.118	107	33	37.721	5 1/2"

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
430.00	429.61	8.625	12.257	8 5/8
3315.00	2941.55	5.500	7.875	5 1/2"

Annotation

MD ft	TVD ft	
249.00	248.92	First Wft Svy
3273.00	2900.24	Last Wft Svy
3315.00	2941.55	Proj. To Bit

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
1378.83	1308.00	Ojo Alamo		0.00	0.00
1510.72	1411.00	Kirtland Shale		0.00	0.00
2571.98	2222.00	Fruitland Formation		0.00	0.00
2833.55	2468.00	Upper Fruitland Coal		0.00	0.00
2893.04	2526.00	Middle Fruitland Coal		0.00	0.00
2993.62	2625.00	Pictured Cliffs Tongue		0.00	0.00
3177.24	2806.00	Lower Fruitland Coal		0.00	0.00
3187.40	2816.00	Pictured Cliffs		0.00	0.00