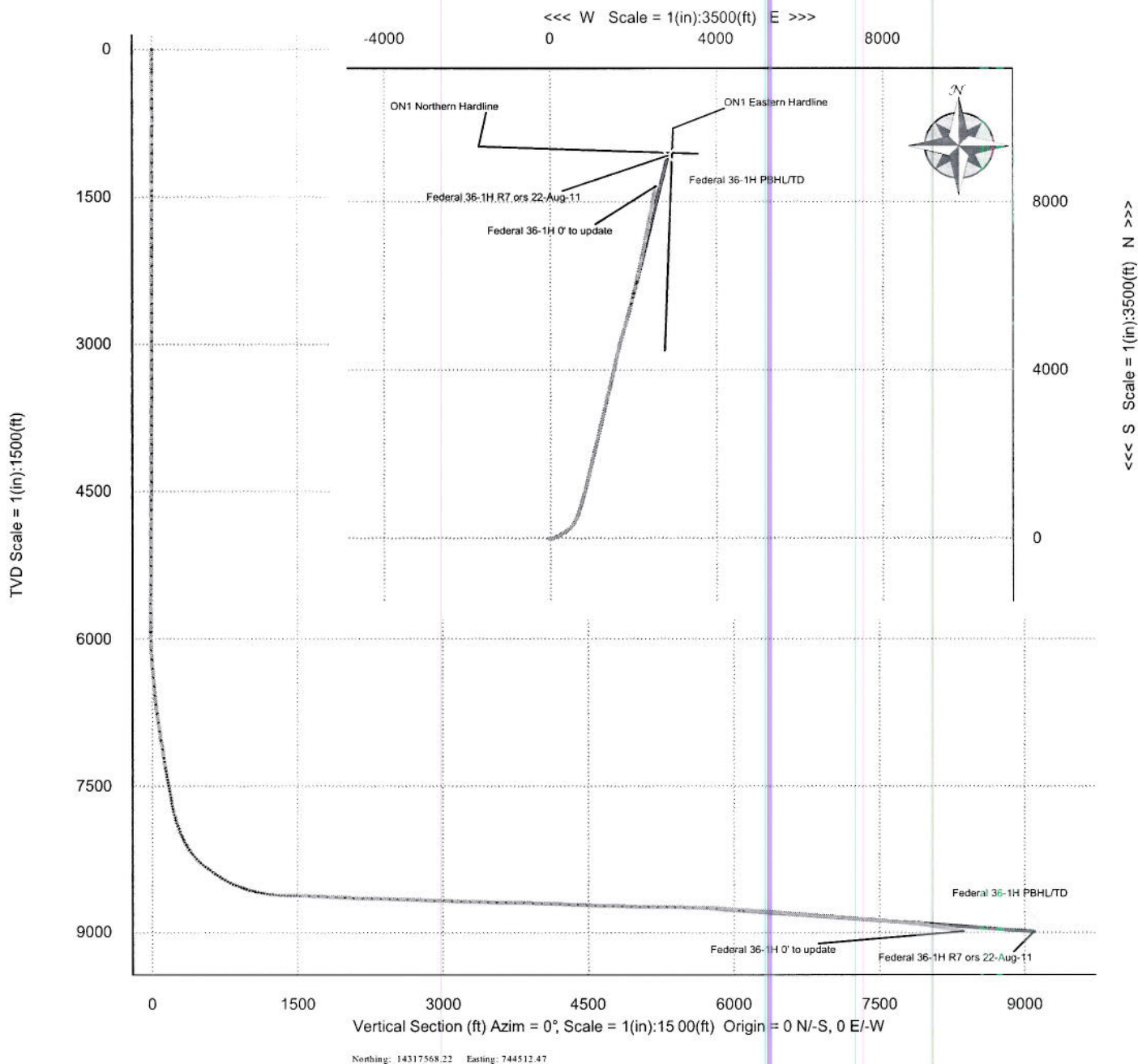


WELL Federal 36-1H		FIELD CO, Garfield County (NAD 83 UTM 13) Encana 01-08S-97W (ON1 Pad)	
Magnetic Parameters Model: BGGM 2011	Dip: 65.645° Mag Dec: 10.534°	Date: August 22, 2010 FS: 52237.6m	Surface Location Lat: N 39 22 56.442 Lon: W 108 10 13.350
NAD83 UTM Zone 13N, US Feet Northing: 14317568.22 RUS Easting: 744512.47 RUS Scale Fact: 1.00051822		Miscellaneous Slot: Federal 36-1H Plan: Federal 36-1H R7 ors 22-Aug-11 TVD Ref: RK3(5411ft above MSL) Sky Date: October 14, 2010	



Target Name	Shape	Major Axis
ON1 Eastern Hardline	Polyline	0.00

Critical Points								
Critical Point	MD	INCL	AZIM	TVD	YSEC	N(+) / S(-)	E(+) / W(-)	DLS
10 3/4" Casing	1500.00							
Tie-in	13790.00	88.88	14.37	8744.36	5573.67	5573.67	1941.73	
Projected Survey Station	13937.00	88.00	14.37	8748.36	5716.01	5716.01	1978.20	0.60
Hold	14041.27	86.00	14.97	8753.82	5816.74	5816.74	2004.57	2.00
KOP, Tum 2 DLS	14281.12	86.00	14.97	8770.54	6047.89	6047.89	2066.36	0.00
Hold	14329.38	86.00	14.00	8773.90	6094.51	6094.51	2078.41	2.00
7 5/8" CSG	Infinity			7313.00				
Federal 36-1H PBHL/TD	17429.38	86.00	14.00	8990.15	9095.10	9095.10	2826.54	0.00



Grid North
Tot Corr (M→G 12.5465°)
Mag Dec (10.534°)
Grid Conv (-2.01282069°)

Legend

- ON1 Eastern Hardline
- ON1 Northern Hard Line
- ON1 Eastern Hard Line
- Federal 36-1H PBHL/TD

Quality Control
Date Drawn: August 30, 2011
11:54:13 AM
Drawn by: Current User
Checked by:
Client OK:

Federal 36-1H MWD 0' to 16658' Definitive Survey Report

(Def Survey)

Report Date: September 08, 2011 - 04:41 PM
 Client: EnCana Oil & Gas (USA) Inc.
 Field: CO, Garfield County (NAD 83 UTM 13) EnCana 2010
 Structure / Slot: Encana 01-08S-97W (ON1 Pad) / Federal 36-1H
 Well: Federal 36-1H
 Borehole: Original Hole
 UWI / API#: Unknown / Unknown
 Survey Name: Federal 36-1H MWD 0' to 16658' Definitive
 Survey Date: September 02, 2011
 Tort / AHD / DDI / ERD Ratio: 179.201' / 9028.002 ft / 6.477 / 1.005
 Coordinate Reference System: NAD83 UTM Zone 13N, US Feet
 Location Lat / Long: N 39° 22' 56.44200", W 108° 10' 13.35002"
 Location Grid N/E Y/X: N 14317568.220 ftUS, E 744512.474 ftUS
 CRS Grid Convergence Angle: -2.01282069°
 Grid Scale Factor: 1.00051822

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 17.284° (Grid North)
 Vertical Section Origin: 0.000 ft 0.000 ft
 TVD Reference Datum: RKB
 TVD Reference Elevation: 5414.000 ft above MSL
 Seabed / Ground Elevation: 5392.000 ft above MSL
 Magnetic Declination: 10.403°
 Total Field Strength: 52116.832 nT
 Magnetic Dip Angle: 65.605°
 Declination Date: September 02, 2011
 Magnetic Declination Model: BGGM 2011
 North Reference: Grid North
 Grid Convergence Used: -2.013°
 Total Corr Mag North->Grid North: 12.416°
 Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Federal 36-1H SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	14317568.22	744512.47	N 39 22 56.44	W 108 10 13.35
Marker MudLine	22.00	0.04	336.25	22.00	0.01	0.01	0.00	0.16	14317568.23	744512.47	N 39 22 56.44	W 108 10 13.35
First SLB MWD	99.00	0.16	336.25	99.00	0.10	0.13	-0.06	0.16	14317568.35	744512.42	N 39 22 56.44	W 108 10 13.35
Survey	199.00	0.06	16.03	199.00	0.26	0.30	-0.10	0.12	14317568.52	744512.38	N 39 22 56.44	W 108 10 13.35
	229.00	0.21	335.96	229.00	0.32	0.37	-0.12	0.56	14317568.59	744512.36	N 39 22 56.45	W 108 10 13.35
	321.00	0.36	279.06	321.00	0.40	0.57	-0.47	0.33	14317568.79	744512.00	N 39 22 56.45	W 108 10 13.36
	413.00	0.49	289.99	413.00	0.38	0.75	-1.12	0.17	14317568.97	744511.35	N 39 22 56.45	W 108 10 13.36
	505.00	0.65	277.16	504.99	0.31	0.95	-2.01	0.22	14317569.17	744510.46	N 39 22 56.45	W 108 10 13.38
	596.00	1.21	273.00	595.98	-0.02	1.06	-3.48	0.62	14317569.28	744508.99	N 39 22 56.45	W 108 10 13.39
	688.00	1.76	276.49	687.95	-0.52	1.27	-5.86	0.61	14317569.49	744506.61	N 39 22 56.45	W 108 10 13.43
	779.00	1.53	254.34	778.91	-1.44	1.10	-8.42	0.74	14317569.32	744504.05	N 39 22 56.45	W 108 10 13.46
	872.00	0.89	251.59	871.89	-2.54	0.54	-10.30	0.69	14317568.76	744502.17	N 39 22 56.44	W 108 10 13.48
	963.00	0.82	239.56	962.88	-3.43	-0.01	-11.53	0.21	14317568.21	744500.94	N 39 22 56.44	W 108 10 13.50
	1056.00	0.85	253.02	1055.87	-4.31	-0.55	-12.76	0.21	14317567.67	744499.70	N 39 22 56.43	W 108 10 13.51
	1150.00	1.31	251.99	1149.85	-5.33	-1.09	-14.45	0.49	14317567.13	744498.02	N 39 22 56.43	W 108 10 13.53
	1246.00	1.77	260.83	1245.82	-6.62	-1.66	-16.96	0.54	14317566.56	744495.51	N 39 22 56.42	W 108 10 13.57
	1341.00	1.59	260.98	1340.78	-7.86	-2.10	-19.71	0.19	14317566.12	744492.76	N 39 22 56.41	W 108 10 13.60
	1437.00	1.66	259.22	1436.74	-9.10	-2.57	-22.39	0.09	14317565.65	744490.07	N 39 22 56.41	W 108 10 13.63
	1488.00	1.81	260.02	1487.72	-9.82	-2.85	-23.91	0.30	14317565.37	744488.55	N 39 22 56.41	W 108 10 13.65
10 3/4" CSG	1536.00	2.05	237.43	1535.69	-10.82	-3.44	-25.38	1.65	14317564.77	744487.08	N 39 22 56.40	W 108 10 13.67
	1537.00	2.06	237.03	1536.69	-10.85	-3.46	-25.41	1.65	14317564.76	744487.05	N 39 22 56.40	W 108 10 13.67
	1633.00	1.35	269.45	1632.65	-12.52	-4.41	-27.99	1.22	14317563.81	744484.47	N 39 22 56.39	W 108 10 13.70
	1727.00	0.04	310.89	1726.64	-12.85	-4.40	-29.12	1.40	14317563.82	744483.34	N 39 22 56.39	W 108 10 13.72
	1822.00	0.00	12.43	1821.64	-12.83	-4.38	-29.15	0.04	14317563.84	744483.31	N 39 22 56.39	W 108 10 13.72
	1918.00	0.06	173.65	1917.64	-12.88	-4.43	-29.14	0.06	14317563.79	744483.32	N 39 22 56.39	W 108 10 13.72
	2013.00	0.03	232.07	2012.64	-12.94	-4.49	-29.15	0.05	14317563.72	744483.31	N 39 22 56.39	W 108 10 13.72
	2109.00	0.06	213.27	2108.64	-13.01	-4.55	-29.20	0.03	14317563.67	744483.26	N 39 22 56.39	W 108 10 13.72
	2204.00	0.00	12.43	2203.64	-13.06	-4.59	-29.23	0.06	14317563.62	744483.23	N 39 22 56.39	W 108 10 13.72
	2300.00	0.04	113.93	2299.64	-13.06	-4.61	-29.20	0.04	14317563.61	744483.26	N 39 22 56.39	W 108 10 13.72
	2395.00	0.06	185.14	2394.64	-13.12	-4.67	-29.17	0.06	14317563.55	744483.29	N 39 22 56.39	W 108 10 13.72
	2491.00	0.03	69.04	2490.64	-13.15	-4.71	-29.15	0.08	14317563.51	744483.31	N 39 22 56.39	W 108 10 13.72
	2586.00	0.10	110.86	2585.64	-13.14	-4.73	-29.05	0.08	14317563.49	744483.41	N 39 22 56.39	W 108 10 13.72
	2681.00	0.06	157.22	2680.64	-13.18	-4.81	-28.96	0.08	14317563.41	744483.50	N 39 22 56.38	W 108 10 13.72
	2777.00	0.09	204.69	2776.64	-13.30	-4.92	-28.97	0.07	14317563.30	744483.49	N 39 22 56.38	W 108 10 13.72
	2872.00	0.03	224.12	2871.64	-13.39	-5.01	-29.02	0.07	14317563.21	744483.44	N 39 22 56.38	W 108 10 13.72
	2968.00	0.04	166.66	2967.64	-13.44	-5.06	-29.03	0.04	14317563.16	744483.43	N 39 22 56.38	W 108 10 13.72
	3063.00	0.10	127.04	3062.64	-13.50	-5.14	-28.95	0.08	14317563.08	744483.51	N 39 22 56.38	W 108 10 13.72
	3158.00	0.17	218.86	3157.64	-13.66	-5.30	-28.97	0.21	14317562.92	744483.48	N 39 22 56.38	W 108 10 13.72
	3253.00	0.10	226.50	3252.64	-13.86	-5.47	-29.12	0.08	14317562.75	744483.34	N 39 22 56.38	W 108 10 13.72
	3349.00	0.20	239.63	3348.64	-14.06	-5.61	-29.33	0.11	14317562.61	744483.13	N 39 22 56.38	W 108 10 13.72
	3444.00	0.21	234.10	3443.64	-14.32	-5.80	-29.61	0.02	14317562.42	744482.85	N 39 22 56.37	W 108 10 13.72
	3540.00	0.12	184.08	3539.64	-14.56	-6.00	-29.76	0.17	14317562.22	744482.70	N 39 22 56.37	W 108 10 13.73
	3635.00	0.26	209.44	3634.64	-14.87	-6.29	-29.87	0.17	14317561.93	744482.58	N 39 22 56.37	W 108 10 13.73
	3731.00	0.17	209.99	3730.63	-15.22	-6.60	-30.05	0.09	14317561.62	744482.41	N 39 22 56.37	W 108 10 13.73
	3827.00	0.28	230.81	3826.63	-15.56	-6.87	-30.31	0.14	14317561.35	744482.15	N 39 22 56.36	W 108 10 13.73
	3923.00	0.12	217.35	3922.63	-15.84	-7.10	-30.55	0.17	14317561.12	744481.91	N 39 22 56.36	W 108 10 13.74
	4018.00	0.14	205.15	4017.63	-16.05	-7.28	-30.66	0.04	14317560.93	744481.80	N 39 22 56.36	W 108 10 13.74
	4114.00	0.12	221.28	4113.63	-16.26	-7.46	-30.77	0.04	14317560.75	744481.68	N 39 22 56.36	W 108 10 13.74
	4209.00	0.04	237.91	4208.63	-16.38	-7.56	-30.87	0.09	14317560.66	744481.59	N 39 22 56.36	W 108 10 13.74
	4305.00	0.16	220.15	4304.63	-16.53	-7.68	-30.98	0.13	14317560.54	744481.47	N 39 22 56.36	W 108 10 13.74
	4401.00	0.34	211.72	4400.63	-16.93	-8.02	-31.22	0.19	14317560.19	744481.24	N 39 22 56.35	W 108 10 13.74
	4496.00	0.47	215.60	4495.63	-17.57	-8.58	-31.59	0.14	14317559.64	744480.86	N 39 22 56.35	W 108 10 13.75
	4592.00	0.66	217.52	4591.62	-18.46	-9.34	-32.16	0.20	14317558.88	744480.30	N 39 22 56.34	W 108 10 13.76
	4688.00	0.48	198.83	4687.62	-19.38	-10.16	-32.63	0.27	14317558.06	744479.83	N 39 22 56.33	W 108 10 13.76
	4783.00	0.59	184.71	4782.62	-20.26	-11.02	-32.80	0.18	14317557.19	744479.66	N 39 22 56.32	W 108 10 13.76
	4879.00	0.92	191.65	4878.61	-21.51	-12.27	-32.99	0.36	14317555.95	744479.46	N 39 22 56.31	W 108 10 13.76
	4973.00	0.26	189.88	4972.60	-22.47	-13.22	-33.18	0.70	14317555.00	744479.26	N 39 22 56.30	W 108 10 13.77
	5069.00	0.14	291.00	5068.60	-22.68	-13.39	-33.33	0.33	14317554.82	744479.13	N 39 22 56.30	W 108 10 13.77
	5165.00	0.12	315.21	5164.60	-22.62	-13.28	-33.51	0.06	14317554.94	744478.95	N 39 22 56.30	W 108 10 13.77
	5260.00	0.29	291.99	5259.60	-22.56	-13.12	-33.80	0.20	14317555.10	744478.66	N 39 22 56.30	W 108 10 13.77
	5355.00	0.64	107.21	5354.60	-22.54	-13.18	-33.52	0.98	14317555.03	744478.94	N 39 22 56.30	W 108 10 13.77
	5451.00	1.86	114.32	5450.57	-22.73	-13.98	-31.59	1.28	14317554.23	744480.87	N 39 22 56.29	W 108 10 13.75
	5546.00	2.74	118.87	5545.50	-23.37	-15.71	-28.19	0.95	14317552.50	744484.27	N 39 22 56.28	W 108 10 13.70
	5642.00	3.89	110.47	5641.34	-24.02	-17.96	-23.13	1.30	14317550.25	744489.33	N 39 22 56.26	W 108 10 13.64
	5737.00	5.08	99.02	5736.04	-23.59	-19.75	-15.96	1.56	14317548.46	744496.51	N 39 22 56.24	W 108 10 13.54

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	5833.00	6.39	86.52	5831.57	-21.09	-20.09	-6.43	1.88	14317548.12	744506.04	N 39 22 56.24	W 108 10 13.42
	5928.00	7.98	81.01	5925.82	-16.30	-18.74	5.36	1.82	14317549.47	744517.84	N 39 22 56.26	W 108 10 13.27
	6024.00	9.53	78.27	6020.70	-9.50	-16.08	19.73	1.67	14317552.13	744532.21	N 39 22 56.29	W 108 10 13.09
	6120.00	10.53	74.85	6115.23	-0.95	-12.17	35.98	1.21	14317556.04	744548.47	N 39 22 56.33	W 108 10 12.89
	6215.00	12.09	70.19	6208.38	9.70	-6.53	53.72	1.90	14317561.68	744566.22	N 39 22 56.40	W 108 10 12.66
	6311.00	12.34	68.25	6302.21	22.22	0.67	72.70	0.50	14317568.89	744585.22	N 39 22 56.47	W 108 10 12.42
	6399.00	12.38	68.65	6388.17	34.03	7.59	90.22	0.11	14317575.82	744602.74	N 39 22 56.55	W 108 10 12.21
	6495.00	12.56	67.01	6481.91	47.19	15.42	109.42	0.41	14317583.64	744621.95	N 39 22 56.63	W 108 10 11.96
	6591.00	14.38	63.38	6575.26	62.20	24.84	129.69	2.09	14317593.07	744642.23	N 39 22 56.73	W 108 10 11.71
	6686.00	15.26	62.34	6667.10	79.21	35.92	151.31	0.97	14317604.16	744663.86	N 39 22 56.85	W 108 10 11.44
	6781.00	15.89	63.37	6758.61	97.06	47.56	174.01	0.72	14317615.80	744686.57	N 39 22 56.97	W 108 10 11.16
	6877.00	17.76	62.38	6850.50	116.50	60.24	198.73	1.97	14317628.49	744711.30	N 39 22 57.11	W 108 10 10.85
	6973.00	17.45	61.57	6942.00	137.13	73.88	224.36	0.41	14317642.14	744736.95	N 39 22 57.25	W 108 10 10.53
	7068.00	18.77	60.25	7032.30	158.51	88.24	250.16	1.45	14317656.51	744762.76	N 39 22 57.40	W 108 10 10.21
	7163.00	17.22	59.90	7122.65	180.04	102.88	275.59	1.64	14317671.15	744788.21	N 39 22 57.55	W 108 10 9.89
	7259.00	18.58	60.47	7214.00	201.84	117.55	301.20	1.43	14317685.83	744813.83	N 39 22 57.71	W 108 10 9.57
	7295.00	18.28	60.00	7248.15	209.97	123.20	311.08	0.93	14317691.48	744823.71	N 39 22 57.77	W 108 10 9.45
	7313.00	17.79	59.71	7285.27	214.07	126.00	315.89	2.77	14317694.28	744828.53	N 39 22 57.80	W 108 10 9.39
	7364.00	16.40	58.81	7314.01	225.21	133.65	328.78	2.77	14317701.94	744841.43	N 39 22 57.88	W 108 10 9.23
	7394.00	16.66	58.44	7342.77	231.61	138.10	336.07	0.94	14317706.39	744848.72	N 39 22 57.92	W 108 10 9.13
	7428.00	17.30	57.37	7375.29	239.15	143.37	344.48	2.09	14317711.67	744857.13	N 39 22 57.98	W 108 10 9.03
	7459.00	18.43	57.03	7404.80	245.44	148.53	352.47	3.66	14317716.82	744865.13	N 39 22 58.03	W 108 10 8.93
	7491.00	19.37	56.16	7435.07	254.46	154.23	361.12	3.07	14317722.53	744873.78	N 39 22 58.09	W 108 10 8.82
	7522.00	20.07	55.59	7464.25	262.63	160.10	369.78	2.34	14317728.41	744882.43	N 39 22 58.15	W 108 10 8.72
	7554.00	18.85	56.61	7494.42	270.94	166.05	378.63	3.96	14317734.36	744891.30	N 39 22 58.21	W 108 10 8.61
	7586.00	18.68	56.21	7524.72	278.92	171.75	387.20	0.67	14317740.05	744899.88	N 39 22 58.27	W 108 10 8.50
	7617.00	19.03	56.05	7554.06	286.72	177.33	395.52	1.14	14317745.64	744908.20	N 39 22 58.33	W 108 10 8.40
	7649.00	19.29	56.73	7584.29	294.87	183.14	404.27	1.07	14317751.46	744916.95	N 39 22 58.39	W 108 10 8.29
	7681.00	19.21	56.01	7614.50	303.06	188.99	413.05	0.78	14317757.30	744925.74	N 39 22 58.45	W 108 10 8.18
	7712.00	17.78	56.76	7643.90	310.69	194.43	421.24	4.68	14317762.75	744933.93	N 39 22 58.51	W 108 10 8.08
	7744.00	18.40	55.16	7674.31	318.44	199.99	429.47	2.48	14317768.32	744942.17	N 39 22 58.57	W 108 10 7.97
	7775.00	18.45	54.28	7703.72	326.22	205.86	437.47	0.93	14317773.98	744950.17	N 39 22 58.63	W 108 10 7.87
	7807.00	19.32	54.20	7734.00	334.50	211.71	445.87	2.72	14317780.04	744958.58	N 39 22 58.69	W 108 10 7.77
	7839.00	20.83	51.24	7764.06	343.45	218.37	454.80	5.89	14317786.70	744967.31	N 39 22 58.76	W 108 10 7.66
	7870.00	22.12	47.49	7792.91	353.06	225.76	463.21	6.08	14317794.10	744975.92	N 39 22 58.83	W 108 10 7.56
	7902.00	22.05	44.03	7822.56	363.63	234.15	471.82	4.07	14317802.49	744984.54	N 39 22 58.92	W 108 10 7.45
	7933.00	22.92	40.60	7851.20	374.37	242.92	479.80	5.08	14317811.27	744992.52	N 39 22 59.01	W 108 10 7.35
	7965.00	24.31	38.77	7880.52	386.22	252.79	487.98	4.91	14317821.14	745000.70	N 39 22 59.11	W 108 10 7.25
	7997.00	24.02	40.16	7909.72	398.35	262.90	496.30	2.00	14317831.26	745009.03	N 39 22 59.21	W 108 10 7.15
	8028.00	24.64	39.42	7937.97	410.14	272.72	504.47	2.23	14317841.08	745017.23	N 39 22 59.31	W 108 10 7.05
	8060.00	26.95	39.49	7966.78	423.04	283.47	513.32	7.22	14317851.83	745026.06	N 39 22 59.42	W 108 10 6.94
	8092.00	29.44	37.27	7994.98	437.14	295.32	522.70	8.44	14317863.70	745035.44	N 39 22 59.54	W 108 10 6.83
	8123.00	30.10	33.76	8021.89	451.75	307.85	531.63	6.01	14317876.23	745044.34	N 39 22 59.67	W 108 10 6.72
	8155.00	30.73	31.23	8049.49	467.38	321.51	540.33	4.46	14317889.90	745053.08	N 39 22 59.81	W 108 10 6.62
	8187.00	31.38	31.37	8076.90	483.40	335.62	548.91	2.04	14317904.01	745061.66	N 39 22 59.95	W 108 10 6.51
	8218.00	33.26	31.58	8103.09	499.46	349.75	557.56	6.08	14317918.15	745070.32	N 39 23 0.09	W 108 10 6.41
	8250.00	35.90	31.70	8129.44	517.06	365.21	567.09	8.25	14317933.62	745079.85	N 39 23 0.25	W 108 10 6.30
	8281.00	39.08	31.45	8154.03	535.34	381.28	576.96	10.27	14317949.70	745089.74	N 39 23 0.41	W 108 10 6.18
	8313.00	42.60	29.59	8178.24	555.70	399.31	587.58	11.64	14317967.74	745100.35	N 39 23 0.59	W 108 10 6.05
	8344.00	43.29	30.19	8200.93	576.31	417.62	598.10	2.59	14317986.06	745110.89	N 39 23 0.77	W 108 10 5.92
	8376.00	44.77	28.23	8223.94	598.07	437.04	608.95	6.29	14318005.48	745121.74	N 39 23 0.97	W 108 10 5.79
	8408.00	46.40	26.74	8246.33	620.56	457.31	619.50	6.08	14318025.77	745132.29	N 39 23 1.17	W 108 10 5.67
	8439.00	49.15	25.23	8267.17	643.25	477.95	629.55	9.58	14318046.42	745142.34	N 39 23 1.38	W 108 10 5.55
	8471.00	50.96	23.70	8287.71	667.59	500.28	639.70	6.74	14318068.76	745152.51	N 39 23 1.61	W 108 10 5.43
	8503.00	53.02	21.99	8307.42	692.68	523.51	649.48	7.69	14318092.00	745162.29	N 39 23 1.84	W 108 10 5.32
	8534.00	54.57	20.02	8325.73	717.64	546.86	658.45	7.16	14318115.37	745171.26	N 39 23 2.07	W 108 10 5.21
	8566.00	55.79	18.79	8344.00	743.89	571.64	667.17	4.95	14318140.16	745179.95	N 39 23 2.32	W 108 10 5.11
	8598.00	56.42	18.14	8361.85	770.44	596.84	675.58	2.59	14318165.36	745188.41	N 39 23 2.57	W 108 10 5.02
	8629.00	56.42	17.73	8378.99	796.27	621.41	683.54	1.10	14318189.95	745196.36	N 39 23 2.82	W 108 10 4.93
	8661.00	57.37	18.08	8396.47	823.07	646.91	691.78	3.11	14318215.47	745204.61	N 39 23 3.07	W 108 10 4.83
	8692.00	57.77	18.23	8413.09	849.23	671.78	699.93	1.35	14318240.34	745212.77	N 39 23 3.32	W 108 10 4.74
	8724.00	58.72	18.53	8429.94	876.44	697.60	708.51	3.07	14318266.18	745221.35	N 39 23 3.58	W 108 10 4.64
	8756.00	59.51	17.83	8446.36	903.90	723.69	717.06	3.10	14318292.28	745229.92	N 39 23 3.84	W 108 10 4.55
	8787.00	61.19	16.65	8461.70	930.84	749.42	725.06	6.35	14318318.03	745237.91	N 39 23 4.10	W 108 10 4.46
	8819.00	63.07	16.19	8476.66	959.12	776.55	733.05	6.01	14318345.17	745245.91	N 39 23 4.37	W 108 10 4.37
	8851.00	65.69	16.17	8490.49	987.97	804.26	741.09	8.19	14318372.90	745253.95	N 39 23 4.64	W 108 10 4.28
	8882.00	67.20	16.06	8502.88	1016.38	831.56	748.98	4.88	14318400.21	745261.84	N 39 23 4.92	W 108 10 4.19
	8914.00	68.26	15.93	8515.01	1045.98	860.03	757.14	3.33	14318428.69	745270.01	N 39 23 5.20	W 108 10 4.10
	8946.00	70.02	15.56	8526.40	1075.87	888.81	765.25	5.61	14318457.49	745278.12	N 39 23 5.49	W 108 10 4.01
	8977.00	70.88	15.67	8536.77	1105.07	916.94	773.12	2.79	14318485.63	745285.99	N 39 23 5.77	W 108 10 3.92
	9009.00	71.92	15.46	8546.98	1135.39	946.16	781.26	3.31	14318514.87	745294.13	N 39 23 6.06	W 108 10 3.83
	9040.00	73.08	15.26	8556.30	1164.94	974.67	789.09	3.79	14318543.39	745301.97	N 39 23 6.34	W 108 10 3.74
	9072.00	74.50	15.30	8565.24	1195.64	1004.31	797.18	4.44	14318573.04	745310.37	N 39 23 6.64	W 108 10 3.65
	9104.00	76.16	15.15	8573.34	1226.58	1034.18	805.31	5.21	14318602.93	745318.20	N 39 23 6.94	W 108 10 3.56
	9135.00	77.92	15.20	8580.29	1256.77	1063.33	813.22	5.68	14318632.10	745326.12	N 39 23 7.23	W 108 10 3.47
	9167.00	79.36	14.98	8586.59	1288.12	1093.62	821.39	4.55	14318662.41	745334.29	N 39 23 7.53	W 108 10 3.38
	9198.00</											

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	9710.00	87.59	12.89	8625.06	1828.13	1617.59	954.99	2.22	14319186.64	745467.95	N 39 23 12.75	W 108 10 1.92
	9807.00	87.42	13.21	8629.29	1924.77	1711.99	976.87	0.37	14319281.09	745489.85	N 39 23 13.69	W 108 10 1.68
	9900.00	87.54	12.61	8633.38	2017.41	1802.55	997.63	0.86	14319371.70	745510.61	N 39 23 14.59	W 108 10 1.46
	9995.00	87.54	14.37	8637.45	2112.12	1894.84	1019.77	1.85	14319464.04	745532.77	N 39 23 15.51	W 108 10 1.22
	10090.00	87.48	14.58	8641.58	2206.91	1986.74	1043.49	0.23	14319555.98	745556.50	N 39 23 16.43	W 108 10 0.96
	10186.00	87.54	12.63	8645.75	2302.62	2079.95	1066.05	2.03	14319649.25	745579.07	N 39 23 17.36	W 108 10 0.71
	10279.00	88.32	13.45	8649.11	2395.31	2170.49	1087.02	1.22	14319739.83	745600.05	N 39 23 18.26	W 108 10 0.48
	10377.00	88.43	13.50	8651.89	2493.05	2265.76	1109.85	0.12	14319835.15	745622.89	N 39 23 19.21	W 108 10 0.24
	10471.00	88.38	13.94	8654.51	2586.84	2357.04	1132.13	0.47	14319926.48	745645.19	N 39 23 20.12	W 108 9 59.99
	10566.00	88.32	13.55	8657.24	2681.62	2449.28	1154.69	0.42	14320018.77	745667.76	N 39 23 21.03	W 108 9 59.75
	10659.00	88.38	13.68	8659.92	2774.39	2539.63	1176.58	0.15	14320109.16	745689.66	N 39 23 21.93	W 108 9 59.51
	10755.00	88.38	13.69	8662.63	2870.17	2632.87	1199.28	0.01	14320202.45	745712.37	N 39 23 22.86	W 108 9 59.26
	10852.00	88.26	13.95	8665.48	2966.95	2727.02	1222.44	0.30	14320296.65	745735.55	N 39 23 23.80	W 108 9 59.01
	10945.00	88.26	13.92	8668.30	3059.75	2817.24	1244.83	0.03	14320386.91	745757.94	N 39 23 24.70	W 108 9 58.76
	11040.00	88.32	13.90	8671.14	3154.55	2909.41	1267.65	0.07	14320479.14	745780.78	N 39 23 25.62	W 108 9 58.52
	11135.00	88.26	14.05	8673.97	3249.35	3001.56	1290.59	0.17	14320571.33	745803.73	N 39 23 26.54	W 108 9 58.26
	11229.00	88.38	13.26	8676.73	3343.12	3092.86	1312.77	0.85	14320662.68	745825.92	N 39 23 27.45	W 108 9 58.02
	11323.00	88.38	13.24	8679.39	3436.85	3184.32	1334.30	0.02	14320754.19	745847.47	N 39 23 28.36	W 108 9 57.79
	11418.00	88.38	12.73	8682.07	3531.55	3276.86	1355.64	0.54	14320846.77	745868.81	N 39 23 29.28	W 108 9 57.56
	11513.00	88.54	13.75	8684.62	3626.28	3369.30	1377.39	1.09	14320939.26	745890.58	N 39 23 30.20	W 108 9 57.32
	11608.00	88.43	13.30	8687.14	3721.04	3461.63	1399.60	0.49	14321031.64	745912.80	N 39 23 31.12	W 108 9 57.08
	11702.00	88.66	13.04	8689.52	3814.77	3553.13	1421.01	0.37	14321123.18	745934.22	N 39 23 32.03	W 108 9 56.85
	11798.00	88.54	13.67	8691.87	3910.52	3646.50	1443.18	0.67	14321216.61	745956.40	N 39 23 32.96	W 108 9 56.61
	11893.00	88.43	13.30	8694.38	4005.28	3738.85	1465.32	0.41	14321309.00	745978.55	N 39 23 33.88	W 108 9 56.37
	11987.00	88.43	13.72	8696.96	4099.04	3830.22	1487.28	0.45	14321400.41	746000.52	N 39 23 34.79	W 108 9 56.13
	12082.00	88.32	12.43	8699.65	4193.75	3922.72	1508.76	1.36	14321492.96	746022.01	N 39 23 35.71	W 108 9 55.90
	12177.00	88.26	12.02	8702.48	4288.34	4015.52	1528.87	0.44	14321585.81	746042.13	N 39 23 36.63	W 108 9 55.68
	12274.00	88.21	12.82	8705.47	4384.95	4110.20	1549.72	0.83	14321680.55	746062.99	N 39 23 37.58	W 108 9 55.46
	12368.00	88.10	12.82	8708.50	4478.62	4201.81	1570.56	0.12	14321772.20	746083.85	N 39 23 38.49	W 108 9 55.24
	12463.00	88.10	12.31	8711.65	4573.24	4294.49	1591.22	0.54	14321864.92	746104.52	N 39 23 39.41	W 108 9 55.02
	12558.00	87.98	13.63	8714.90	4667.92	4387.01	1612.53	1.39	14321957.49	746125.83	N 39 23 40.33	W 108 9 54.79
	12652.00	88.04	14.17	8718.16	4761.70	4478.20	1635.10	0.58	14322048.73	746148.41	N 39 23 41.24	W 108 9 54.54
	12747.00	88.15	14.22	8721.32	4856.51	4570.25	1658.38	0.13	14322140.83	746171.71	N 39 23 42.16	W 108 9 54.28
	12842.00	88.15	14.67	8724.39	4951.35	4662.20	1682.07	0.47	14322232.62	746195.41	N 39 23 43.08	W 108 9 54.02
	12936.00	88.66	16.53	8727.00	5045.27	4752.69	1707.33	2.05	14322323.37	746220.69	N 39 23 43.98	W 108 9 53.74
	13032.00	88.88	16.85	8729.06	5141.24	4844.63	1734.90	0.40	14322415.35	746248.27	N 39 23 44.90	W 108 9 53.43
	13128.00	88.82	16.40	8730.99	5237.21	4936.60	1762.36	0.47	14322507.36	746275.74	N 39 23 45.81	W 108 9 53.12
	13221.00	88.88	16.07	8732.86	5330.18	5025.87	1788.35	0.36	14322596.68	746301.75	N 39 23 46.70	W 108 9 52.83
	13317.00	88.82	15.67	8734.78	5426.13	5118.19	1814.60	0.42	14322689.05	746328.01	N 39 23 47.63	W 108 9 52.54
	13412.00	88.71	16.18	8736.83	5521.08	5209.52	1840.66	0.55	14322780.43	746354.08	N 39 23 48.54	W 108 9 52.25
	13508.00	88.88	16.19	8738.85	5617.05	5301.70	1867.41	0.18	14322872.66	746380.85	N 39 23 49.46	W 108 9 51.95
	13601.00	88.88	15.10	8740.67	5709.99	5391.24	1892.49	1.17	14322962.24	746405.94	N 39 23 50.35	W 108 9 51.67
	13696.00	88.88	15.47	8742.53	5804.91	5482.86	1917.53	0.39	14323053.91	746430.99	N 39 23 51.26	W 108 9 51.39
	13790.00	88.88	14.37	8744.36	5898.82	5573.67	1941.72	1.17	14323144.77	746455.20	N 39 23 52.17	W 108 9 51.12
	13886.00	88.88	14.86	8746.24	5994.69	5666.54	1965.94	0.51	14323237.69	746479.43	N 39 23 53.09	W 108 9 50.86
	13980.00	88.32	14.27	8748.54	6088.56	5757.50	1989.57	0.87	14323328.69	746503.07	N 39 23 54.00	W 108 9 50.60
	14075.00	87.42	13.55	8752.07	6183.33	5849.64	2012.40	1.21	14323420.88	746525.91	N 39 23 54.92	W 108 9 50.35
	14171.00	86.70	12.90	8756.99	6278.97	5942.97	2034.33	1.01	14323514.26	746547.85	N 39 23 55.85	W 108 9 50.11
	14266.00	85.91	13.16	8763.11	6373.51	6035.34	2055.70	0.88	14323606.67	746569.24	N 39 23 56.77	W 108 9 49.88
	14360.00	85.91	12.55	8769.82	6466.99	6126.75	2076.56	0.65	14323698.13	746590.11	N 39 23 57.68	W 108 9 49.66
	14455.00	85.85	13.39	8776.64	6561.48	6219.08	2097.83	0.88	14323790.51	746611.39	N 39 23 58.60	W 108 9 49.43
	14550.00	85.85	12.90	8783.52	6655.99	6311.35	2119.38	0.51	14323882.83	746632.95	N 39 23 59.52	W 108 9 49.19
	14644.00	85.97	12.75	8790.22	6749.46	6402.77	2140.19	0.20	14323974.30	746653.77	N 39 24 0.43	W 108 9 48.97
	14739.00	85.91	12.39	8796.95	6843.91	6495.26	2160.81	0.38	14324066.83	746674.40	N 39 24 1.35	W 108 9 48.75
	14835.00	85.85	13.33	8803.85	6939.38	6588.61	2182.12	0.98	14324160.23	746695.72	N 39 24 2.28	W 108 9 48.52
	14929.00	86.08	12.87	8810.46	7032.90	6679.94	2203.38	0.55	14324251.61	746716.99	N 39 24 3.19	W 108 9 48.29
	15024.00	85.68	12.24	8817.29	7127.33	6772.43	2223.97	0.78	14324344.11	746737.60	N 39 24 4.11	W 108 9 48.07
	15119.00	85.96	11.90	8824.21	7221.69	6865.08	2243.79	0.46	14324436.84	746757.42	N 39 24 5.03	W 108 9 47.86
	15214.00	85.51	11.91	8831.28	7316.01	6957.78	2263.33	0.47	14324529.59	746776.97	N 39 24 5.95	W 108 9 47.65
	15308.00	85.68	11.71	8838.50	7409.31	7049.51	2282.51	0.28	14324621.37	746796.16	N 39 24 6.86	W 108 9 47.45
	15403.00	85.80	11.55	8845.55	7503.59	7142.31	2301.61	0.21	14324714.21	746815.27	N 39 24 7.79	W 108 9 47.24
	15498.00	85.85	10.75	8852.47	7597.80	7235.27	2319.93	0.84	14324807.22	746833.60	N 39 24 8.71	W 108 9 47.05
	15593.00	85.63	10.96	8859.53	7691.94	7328.31	2337.77	0.32	14324900.31	746851.45	N 39 24 9.64	W 108 9 46.87
	15687.00	85.57	10.99	8866.74	7785.10	7420.32	2355.62	0.07	14324992.37	746869.31	N 39 24 10.55	W 108 9 46.68
	15783.00	85.79	9.84	8873.97	7880.14	7514.47	2372.92	1.22	14325086.56	746886.62	N 39 24 11.49	W 108 9 46.50
	15878.00	85.40	10.07	8881.26	7974.09	7607.76	2389.29	0.48	14325179.91	746903.03	N 39 24 12.41	W 108 9 46.34
	15972.00	84.78	10.13	8889.31	8067.02	7699.96	2405.72	0.66	14325272.16	746919.43	N 39 24 13.33	W 108 9 46.17
	16066.00	83.94	10.08	8898.55	8159.83	7792.05	2422.13	0.90	14325364.30	746935.86	N 39 24 14.25	W 108 9 46.00
	16161.00	83.09	10.43	8909.28	8253.52	7884.94	2438.94	0.97	14325457.23	746952.67	N 39 24 15.17	W 108 9 45.83
	16256.00	82.25	10.26	8921.40	8347.05	7977.63	2455.86	0.90	14325549.97	746969.60	N 39 24 16.09	W 108 9 45.65
	16351.00	81.34	11.32	8934.96	8440.48	8069.99	2473.46	1.46	14325642.38	746987.21	N 39 24 17.01	W 108 9 45.47
	16446.00	80.59	11.37	8949.87	8533.80	8161.98	2491.91	0.79	14325734.41	747005.67	N 39 24 17.92	W 108 9 45.28
	16540.00	79.87	12.15	8965.83	8626.01	8252.67	2510.79	1.12	14325825.15	747024.56	N 39 24 18.83	W 108 9 45.08
	16606.00	79.33	12.16	8977.74	8690.66	8316.13	2524.46	0.82	14325888.64	747038.24	N 39 24 19.46	W 108 9 44.93
	16658.00	79.33	12.16	8987.37	8741.56	8366.09	2535.22	0				