

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	PA 323-29	Wellbore No.	OH
Well Name	PA 323-29	Common Name	PA 323-29
Project	PA 29-06S-095W	Site	DOE 3-W-29 Pad
Vertical Section Azimuth	345.10 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	2/7/2012	UWI	PA 323-29
Active Datum	KB @5,702.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Date Started	2/1/2012	Ended	
Tool Name	MWD	Engineer	

2.1.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
0.0	0.00	0.00	0.00	0.00	0.00

2.1.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLS (°/100ft)	Build Rate (°/100ft)	Turn (°/100ft)	TFace (°)
2/1/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2/7/2012	NORMAL	83.0	0.44	187.29	83.00	-0.32	-0.04	-0.30	0.53	0.53	0.00	187.29
	NORMAL	113.0	0.53	236.43	113.00	-0.51	-0.17	-0.45	1.37	0.30	163.80	103.10
	NORMAL	144.0	0.70	321.68	144.00	-0.44	-0.41	-0.32	2.72	0.55	275.00	124.08
	NORMAL	174.0	0.88	357.71	174.00	0.04	-0.11	0.06	0.00	0.00	0.00	0.00
	NORMAL	174.0	0.88	357.71	174.00	0.04	-0.11	0.06	1.45	0.48	187.27	173.61
	NORMAL	205.0	1.88	3.78	204.99	0.78	-0.09	0.78	3.26	3.23	19.58	11.36
	NORMAL	235.0	3.08	10.55	234.96	2.06	0.09	1.97	4.11	4.00	22.57	17.12
	NORMAL	265.0	3.96	2.99	264.90	3.87	0.02	3.74	3.39	3.38	5.80	6.78
	NORMAL	265.0	3.96	2.99	264.90	3.87	0.02	3.74	0.00	0.00	0.00	0.00
	NORMAL	296.0	4.49	1.41	295.82	6.15	0.11	5.92	1.75	1.71	-5.10	346.82
	NORMAL	326.0	5.10	355.25	325.72	8.66	0.03	8.36	2.66	2.03	-20.53	316.73
	NORMAL	357.0	5.81	345.41	356.57	11.55	-0.98	11.42	0.00	0.00	0.00	0.00
	NORMAL	357.0	5.81	345.41	356.57	11.55	-0.98	11.42	2.56	2.01	-19.11	312.04
	NORMAL	387.0	6.95	336.71	386.39	14.69	-2.08	14.73	4.97	3.80	-29.00	315.32
	NORMAL	417.0	7.92	335.48	416.13	18.24	-3.66	18.56	3.28	3.23	-4.10	350.07
	NORMAL	448.0	8.45	336.97	446.86	22.17	-4.76	22.64	0.00	0.00	0.00	0.00
	NORMAL	448.0	8.45	336.97	446.86	22.17	-4.76	22.64	3.11	2.90	-9.27	334.13
	NORMAL	478.0	9.06	343.21	476.51	26.46	-6.31	27.19	3.76	2.03	20.80	60.40
	NORMAL	509.0	9.77	340.58	507.10	31.27	-7.89	32.25	2.68	2.29	-8.48	327.48
	NORMAL	539.0	10.29	347.34	536.65	36.25	-9.16	37.39	0.00	0.00	0.00	0.00

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLS (°/100ft)	Build Rate (°/100ft)	Turn (°/100ft)	TFace (°)
2/7/2012	NORMAL	539.0	10.29	347.34	536.65	36.25	-9.16	37.39	2.74	2.02	11.40	47.73
	NORMAL	570.0	10.65	350.24	567.13	41.78	-10.25	43.01	2.06	1.16	9.35	57.09
	NORMAL	600.0	11.26	348.84	596.59	47.38	-11.29	48.69	2.22	2.03	-4.67	335.75
	NORMAL	630.0	11.70	350.95	625.98	53.29	-12.39	54.69	1.72	1.55	3.97	27.81
2/8/2012	NORMAL	630.0	11.70	350.95	625.98	53.29	-12.39	54.69	0.00	0.00	0.00	0.00
	NORMAL	642.0	11.82	349.15	637.73	55.70	-12.81	57.12	3.22	1.00	-15.00	287.23
	NORMAL	672.0	12.64	347.49	667.05	61.92	-14.10	63.47	2.97	2.73	-5.53	335.98
	NORMAL	703.0	13.16	349.39	697.26	68.70	-15.49	70.38	2.16	1.68	6.13	40.13
	NORMAL	793.0	14.24	340.20	784.71	89.19	-21.12	91.63	2.70	1.20	-10.21	291.88
	NORMAL	884.0	15.45	337.53	872.67	110.93	-29.55	114.79	1.53	1.33	-2.93	329.22
	NORMAL	976.0	14.62	340.66	961.53	133.21	-38.08	138.52	1.26	-0.90	3.40	137.13
	NORMAL	1,071.0	14.46	346.25	1,053.49	156.04	-44.87	162.33	1.49	-0.17	5.88	99.20
	NORMAL	1,167.0	15.32	347.25	1,146.26	180.05	-50.52	186.99	0.93	0.90	1.04	17.12
	NORMAL	1,262.0	14.45	346.79	1,238.07	203.83	-55.99	211.38	0.92	-0.92	-0.48	187.51
	NORMAL	1,357.0	14.37	347.16	1,330.09	226.87	-61.32	235.01	0.13	-0.08	0.39	131.16
	NORMAL	1,452.0	14.69	348.26	1,422.05	250.15	-66.39	258.81	0.44	0.34	1.16	41.31
	NORMAL	1,547.0	14.60	347.26	1,513.96	273.63	-71.49	282.81	0.28	-0.09	-1.05	249.92
	NORMAL	1,642.0	15.08	348.02	1,605.79	297.39	-76.69	307.11	0.55	0.51	0.80	22.44
	NORMAL	1,738.0	14.11	347.01	1,698.69	321.01	-81.91	331.28	1.04	-1.01	-1.05	194.21
	NORMAL	1,833.0	13.73	346.31	1,790.90	343.25	-87.18	354.13	0.44	-0.40	-0.74	203.56
	NORMAL	1,929.0	14.60	343.27	1,883.98	365.91	-93.36	377.61	1.19	0.91	-3.17	317.99
	NORMAL	2,024.0	14.91	343.19	1,975.85	389.07	-100.34	401.79	0.33	0.33	-0.08	356.20
	NORMAL	2,120.0	14.96	342.31	2,068.61	412.70	-107.68	426.51	0.24	0.05	-0.92	282.01
	NORMAL	2,174.0	15.39	343.15	2,120.73	426.20	-111.88	440.63	0.89	0.80	1.56	27.49
2/10/2012	NORMAL	2,301.0	16.57	343.13	2,242.82	459.66	-122.02	475.58	0.93	0.93	-0.02	359.72
	NORMAL	2,396.0	15.89	343.19	2,334.03	485.07	-129.71	502.11	0.72	-0.72	0.06	178.62
	NORMAL	2,492.0	14.55	344.10	2,426.66	509.25	-136.81	527.31	1.42	-1.40	0.95	170.33
	NORMAL	2,587.0	14.72	345.04	2,518.58	532.39	-143.20	551.31	0.31	0.18	0.99	54.86
	NORMAL	2,683.0	14.02	345.17	2,611.57	555.41	-149.32	575.13	0.73	-0.73	0.14	177.42
	NORMAL	2,778.0	13.60	343.70	2,703.83	577.26	-155.40	597.81	0.58	-0.44	-1.55	219.17
	NORMAL	2,874.0	14.27	345.30	2,797.00	599.53	-161.57	620.92	0.81	0.70	1.67	30.68
	NORMAL	2,969.0	14.28	344.48	2,889.07	622.15	-167.68	644.35	0.21	0.01	-0.86	272.43
	NORMAL	3,065.0	14.75	342.42	2,982.01	645.21	-174.54	668.39	0.73	0.49	-2.15	311.31
	NORMAL	3,160.0	15.29	343.63	3,073.76	668.75	-181.72	692.99	0.66	0.57	1.27	30.73
	NORMAL	3,255.0	14.62	344.66	3,165.54	692.33	-188.43	717.51	0.76	-0.71	1.08	158.86
	NORMAL	3,351.0	14.64	346.99	3,258.43	715.84	-194.36	741.75	0.61	0.02	2.43	89.18
	NORMAL	3,446.0	14.62	347.71	3,350.35	739.25	-199.62	765.72	0.19	-0.02	0.76	96.62
	NORMAL	3,542.0	13.50	348.47	3,443.47	762.07	-204.44	789.01	1.18	-1.17	0.79	171.01
	NORMAL	3,638.0	12.82	348.63	3,536.95	783.49	-208.77	810.83	0.71	-0.71	0.17	177.01
	NORMAL	3,733.0	13.49	348.24	3,629.46	804.67	-213.11	832.41	0.71	0.71	-0.41	352.26
	NORMAL	3,829.0	13.90	347.45	3,722.73	826.89	-217.90	855.11	0.47	0.43	-0.82	335.09
	NORMAL	3,923.0	13.84	345.60	3,813.99	848.80	-223.15	877.64	0.48	-0.06	-1.97	261.40
	NORMAL	4,018.0	13.84	345.83	3,906.23	870.82	-228.76	900.36	0.06	0.00	0.24	90.11
	NORMAL	4,114.0	12.79	344.24	3,999.65	892.18	-234.45	922.47	1.16	-1.09	-1.66	198.45
	NORMAL	4,209.0	12.26	342.28	4,092.39	911.91	-240.38	943.06	0.72	-0.56	-2.06	217.78
2/11/2012	NORMAL	4,305.0	12.12	343.47	4,186.22	931.28	-246.35	963.31	0.30	-0.15	1.24	119.71
	NORMAL	4,400.0	12.27	344.53	4,279.08	950.57	-251.88	983.38	0.28	0.16	1.12	56.70
	NORMAL	4,496.0	11.39	343.00	4,373.04	969.47	-257.37	1,003.05	0.97	-0.92	-1.59	198.87
	NORMAL	4,592.0	10.23	343.87	4,467.33	986.72	-262.51	1,021.05	1.22	-1.21	0.91	172.42
	NORMAL	4,687.0	9.43	342.64	4,560.94	1,002.26	-267.18	1,037.26	0.87	-0.84	-1.29	194.10
	NORMAL	4,782.0	9.50	344.72	4,654.65	1,017.25	-271.57	1,052.87	0.37	0.07	2.19	79.46
	NORMAL	4,877.0	9.63	349.59	4,748.33	1,032.62	-275.07	1,068.63	0.86	0.14	5.13	83.28
	NORMAL	4,972.0	8.28	356.94	4,842.17	1,047.27	-276.87	1,083.25	1.86	-1.42	7.74	143.31
	NORMAL	5,067.0	6.82	3.10	4,936.35	1,059.74	-276.93	1,095.31	1.76	-1.54	6.48	154.03
	NORMAL	5,163.0	5.31	5.89	5,031.81	1,069.85	-276.16	1,104.88	1.60	-1.57	2.91	170.34
	NORMAL	5,258.0	3.74	12.01	5,126.51	1,077.25	-275.07	1,111.76	1.73	-1.65	6.44	165.94
	NORMAL	5,354.0	2.90	8.15	5,222.35	1,082.72	-274.07	1,116.78	0.90	-0.88	-4.02	192.98

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLS (°/100ft)	Build Rate (°/100ft)	Turn (°/100ft)	TFace (°)
2/11/2012	NORMAL	5,449.0	2.29	1.25	5,317.25	1,086.99	-273.69	1,120.82	0.72	-0.64	-7.26	203.70
	NORMAL	5,545.0	1.26	16.15	5,413.20	1,089.92	-273.35	1,123.57	1.17	-1.07	15.52	163.19
	NORMAL	5,640.0	0.58	74.91	5,508.19	1,091.05	-272.60	1,124.46	1.14	-0.72	61.85	152.66
2/12/2012	NORMAL	5,736.0	0.53	179.13	5,604.19	1,090.74	-272.12	1,124.03	0.91	-0.05	108.56	144.12
	NORMAL	5,831.0	1.29	191.19	5,699.17	1,089.25	-272.32	1,122.65	0.82	0.80	12.69	20.22
	NORMAL	5,926.0	1.49	199.43	5,794.15	1,087.03	-272.94	1,120.67	0.30	0.21	8.67	49.15
	NORMAL	6,021.0	1.65	206.69	5,889.11	1,084.65	-273.97	1,118.62	0.27	0.17	7.64	54.85
	NORMAL	6,117.0	1.30	193.50	5,985.08	1,082.35	-274.84	1,116.63	0.51	-0.36	-13.74	217.66
	NORMAL	6,212.0	1.36	199.19	6,080.05	1,080.24	-275.47	1,114.75	0.15	0.06	5.99	68.43
2/13/2012	NORMAL	6,308.0	1.30	209.35	6,176.03	1,078.21	-276.37	1,113.03	0.25	-0.06	10.58	109.32
	NORMAL	6,403.0	1.05	221.55	6,271.01	1,076.62	-277.48	1,111.77	0.37	-0.26	12.84	140.97
	NORMAL	6,499.0	0.91	227.78	6,366.99	1,075.45	-278.63	1,110.94	0.18	-0.15	6.49	145.81
	NORMAL	6,594.0	1.31	242.11	6,461.98	1,074.44	-280.15	1,110.35	0.51	0.42	15.08	42.06
	NORMAL	6,689.0	1.68	262.26	6,556.94	1,073.74	-282.49	1,110.28	0.67	0.39	21.21	65.21
	NORMAL	6,784.0	1.61	275.66	6,651.91	1,073.69	-285.19	1,110.92	0.41	-0.07	14.11	106.96
	NORMAL	6,880.0	1.90	274.09	6,747.86	1,073.93	-288.12	1,111.91	0.31	0.30	-1.64	349.80
	NORMAL	6,975.0	2.18	268.18	6,842.80	1,073.99	-291.50	1,112.83	0.37	0.29	-6.22	320.10
2/14/2012	NORMAL	7,071.0	2.30	267.24	6,938.73	1,073.84	-295.25	1,113.65	0.13	0.12	-0.98	342.51
	NORMAL	7,167.0	3.21	272.82	7,034.61	1,073.88	-299.86	1,114.87	0.99	0.95	5.81	19.22
	NORMAL	7,262.0	3.53	280.52	7,129.45	1,074.54	-305.39	1,116.94	0.58	0.34	8.11	58.62
	NORMAL	7,357.0	3.76	279.05	7,224.26	1,075.57	-311.34	1,119.46	0.26	0.24	-1.55	337.15
	NORMAL	7,452.0	3.38	280.11	7,319.07	1,076.55	-317.17	1,121.91	0.41	-0.40	1.12	170.68
	NORMAL	7,548.0	3.02	279.45	7,414.92	1,077.46	-322.46	1,124.15	0.38	-0.38	-0.69	185.51

2.2 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Date Started	2/7/2012	Ended	
Tool Name	MWD	Engineer	

2.2.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
0.0	0.00	0.00	0.00	0.00	0.00

2.2.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLS (°/100ft)	Build Rate (°/100ft)	Turn (°/100ft)	TFace (°)
2/7/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2/7/2012	NORMAL	83.0	0.44	187.29	83.00	-0.32	-0.04	-0.30	0.53	0.53	0.00	187.29
	NORMAL	113.0	0.53	236.43	113.00	-0.51	-0.17	-0.45	1.37	0.30	163.80	103.10
	NORMAL	144.0	0.70	321.68	144.00	-0.44	-0.41	-0.32	2.72	0.55	275.00	124.08
	NORMAL	174.0	0.88	357.71	173.99	-0.06	-0.53	0.07	1.73	0.60	120.10	88.71
	NORMAL	205.0	1.85	3.78	204.99	0.67	-0.51	0.78	3.16	3.13	19.58	11.52
	NORMAL	235.0	3.08	10.55	234.96	1.95	-0.33	1.97	4.21	4.10	22.57	16.72
	NORMAL	265.0	3.96	2.99	264.90	3.78	-0.13	3.68	3.31	2.93	-25.20	328.38
	NORMAL	296.0	4.49	1.41	295.82	6.06	-0.04	5.86	1.75	1.71	-5.10	346.82
	NORMAL	326.0	5.10	355.25	325.71	8.56	-0.12	8.30	2.66	2.03	-20.53	316.73
	NORMAL	357.0	5.81	345.41	356.57	11.45	-0.63	11.23	3.78	2.29	-31.74	302.23
	NORMAL	387.0	6.95	336.71	386.39	14.59	-1.73	14.54	4.97	3.80	-29.00	315.32
	NORMAL	417.0	7.92	335.48	416.13	18.14	-3.31	18.38	3.28	3.23	-4.10	350.07
	NORMAL	448.0	8.45	336.97	446.82	22.18	-5.08	22.74	1.84	1.71	4.81	22.55
	NORMAL	478.0	9.06	343.21	476.47	26.47	-6.63	27.28	3.76	2.03	20.80	60.40
	NORMAL	509.0	9.77	340.58	507.05	31.28	-8.21	32.34	2.68	2.29	-8.48	327.48

2.2.2 Survey Stations (Continued)

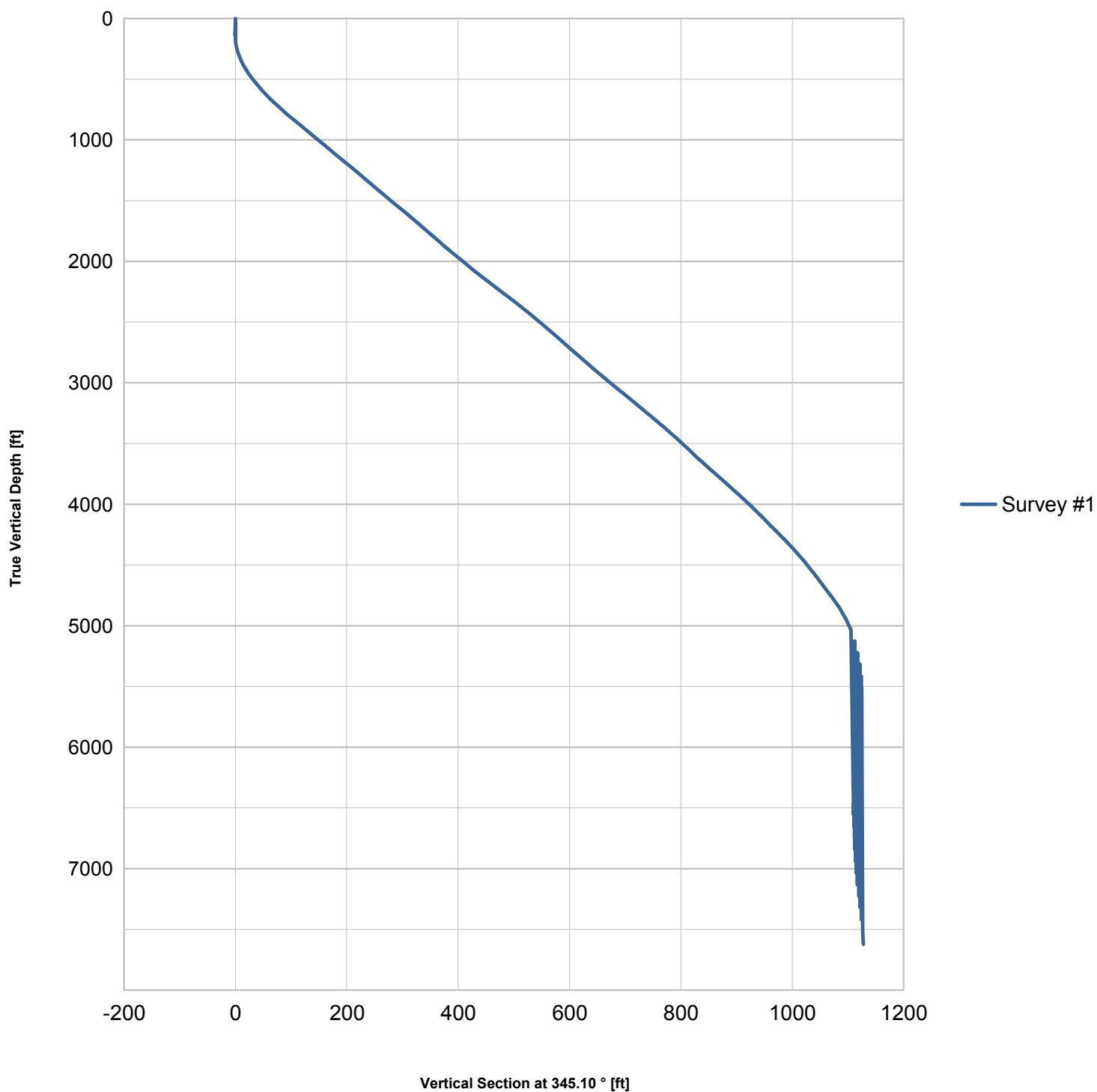
Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLS (°/100ft)	Build Rate (°/100ft)	Turn (°/100ft)	TFace (°)
2/7/2012	NORMAL	539.0	10.29	347.34	536.59	36.30	-9.64	37.56	4.29	1.73	22.53	69.52
	NORMAL	570.0	10.65	350.24	567.08	41.82	-10.73	43.18	2.06	1.16	9.35	57.09
	NORMAL	600.0	11.26	348.84	596.53	47.43	-11.77	48.86	2.22	2.03	-4.67	335.75
	NORMAL	630.0	11.70	350.95	625.93	53.31	-12.82	54.81	2.03	1.47	7.03	44.70
	NORMAL	642.0	11.82	349.15	637.68	55.72	-13.24	57.25	3.22	1.00	-15.00	287.23
	NORMAL	672.0	12.64	347.49	667.00	61.94	-14.53	63.59	2.97	2.73	-5.53	335.98
	NORMAL	703.0	13.16	349.39	697.21	68.72	-15.91	70.50	2.16	1.68	6.13	40.13
	NORMAL	793.0	14.24	340.20	784.66	89.21	-21.55	91.75	2.70	1.20	-10.21	291.88
	NORMAL	884.0	15.45	337.53	872.63	110.94	-29.97	114.91	1.53	1.33	-2.93	329.22
	NORMAL	976.0	14.62	340.66	961.48	133.22	-38.50	138.64	1.26	-0.90	3.40	137.13
	NORMAL	1,071.0	14.46	346.25	1,053.44	156.05	-45.29	162.45	1.49	-0.17	5.88	99.20
	NORMAL	1,167.0	15.32	347.25	1,146.21	180.06	-50.94	187.11	0.93	0.90	1.04	17.12
	NORMAL	1,262.0	14.45	346.79	1,238.03	203.85	-56.42	211.50	0.92	-0.92	-0.48	187.51
	NORMAL	1,357.0	14.37	347.16	1,330.04	226.88	-61.75	235.13	0.13	-0.08	0.39	131.16
	NORMAL	1,452.0	14.69	348.26	1,422.00	250.17	-66.82	258.94	0.44	0.34	1.16	41.31
	NORMAL	1,547.0	14.60	347.26	1,513.91	273.64	-71.91	282.93	0.28	-0.09	-1.05	249.92
	NORMAL	1,642.0	15.08	348.02	1,605.74	297.41	-77.12	307.23	0.55	0.51	0.80	22.44
	NORMAL	1,738.0	14.11	347.01	1,698.64	321.02	-82.34	331.40	1.04	-1.01	-1.05	194.21
	NORMAL	1,833.0	13.73	346.31	1,790.85	343.26	-87.61	354.25	0.44	-0.40	-0.74	203.56
	NORMAL	1,929.0	14.60	343.27	1,883.94	365.92	-93.79	377.73	1.19	0.91	-3.17	317.99
	NORMAL	2,024.0	14.91	343.19	1,975.80	389.08	-100.77	401.91	0.33	0.33	-0.08	356.20
	NORMAL	2,120.0	14.96	342.31	2,068.56	412.71	-108.11	426.63	0.24	0.05	-0.92	282.01
	NORMAL	2,174.0	15.39	343.15	2,120.68	426.21	-112.30	440.76	0.89	0.80	1.56	27.49
	NORMAL	2,301.0	16.57	343.13	2,242.77	459.67	-122.44	475.70	0.93	0.93	-0.02	359.72
	NORMAL	2,396.0	15.89	343.19	2,333.98	485.08	-130.14	502.24	0.72	-0.72	0.06	178.62
	NORMAL	2,492.0	14.55	344.10	2,426.61	509.26	-137.24	527.43	1.42	-1.40	0.95	170.33
	NORMAL	2,587.0	14.72	345.04	2,518.53	532.40	-143.62	551.43	0.31	0.18	0.99	54.86
	NORMAL	2,683.0	14.02	345.17	2,611.53	555.42	-149.75	575.25	0.73	-0.73	0.14	177.42
	NORMAL	2,778.0	13.60	343.70	2,703.78	577.27	-155.83	597.93	0.58	-0.44	-1.55	219.17
	NORMAL	2,874.0	14.27	345.30	2,796.95	599.55	-162.00	621.04	0.81	0.70	1.67	30.68
	NORMAL	2,969.0	14.28	344.48	2,889.02	622.16	-168.11	644.47	0.21	0.01	-0.86	272.43
	NORMAL	3,065.0	14.75	342.42	2,981.96	645.22	-174.97	668.51	0.73	0.49	-2.15	311.31
	NORMAL	3,160.0	15.29	343.63	3,073.71	668.77	-182.15	693.12	0.66	0.57	1.27	30.73
	NORMAL	3,255.0	14.72	344.66	3,165.47	692.42	-188.87	717.71	0.66	-0.60	1.08	155.42
	NORMAL	3,351.0	14.64	346.99	3,258.34	716.01	-194.83	742.03	0.62	-0.08	2.43	98.84
	NORMAL	3,446.0	14.62	347.71	3,350.26	739.42	-200.08	766.00	0.19	-0.02	0.76	96.62
	NORMAL	3,542.0	13.50	348.47	3,443.38	762.24	-204.90	789.29	1.18	-1.17	0.79	171.01
	NORMAL	3,638.0	12.82	348.63	3,536.86	783.66	-209.24	811.11	0.71	-0.71	0.17	177.01
	NORMAL	3,733.0	13.49	348.24	3,629.37	804.84	-213.58	832.70	0.71	0.71	-0.41	352.26
	NORMAL	3,829.0	13.90	347.45	3,722.64	827.06	-218.37	855.40	0.47	0.43	-0.82	335.09
	NORMAL	3,923.0	13.84	345.60	3,813.90	848.97	-223.62	877.92	0.48	-0.06	-1.97	261.40
	NORMAL	4,018.0	13.84	345.83	3,906.14	870.99	-229.22	900.64	0.06	0.00	0.24	90.11
	NORMAL	4,114.0	12.79	344.24	3,999.56	892.35	-234.92	922.75	1.16	-1.09	-1.66	198.45
	NORMAL	4,209.0	12.26	342.28	4,092.30	912.08	-240.85	943.34	0.72	-0.56	-2.06	217.78
	NORMAL	4,305.0	12.12	343.47	4,186.13	931.45	-246.82	963.59	0.30	-0.15	1.24	119.71
	NORMAL	4,400.0	12.27	344.53	4,278.99	950.74	-252.35	983.66	0.28	0.16	1.12	56.70
	NORMAL	4,496.0	11.39	343.00	4,372.95	969.64	-257.84	1,003.33	0.97	-0.92	-1.59	198.87
	NORMAL	4,592.0	10.23	343.87	4,467.24	986.89	-262.98	1,021.33	1.22	-1.21	0.91	172.42
	NORMAL	4,687.0	9.43	342.64	4,560.85	1,002.42	-267.64	1,037.54	0.87	-0.84	-1.29	194.10
	NORMAL	4,782.0	9.50	344.72	4,654.55	1,017.41	-272.03	1,053.15	0.37	0.07	2.19	79.46
	NORMAL	4,877.0	9.63	349.59	4,748.24	1,032.79	-275.53	1,068.91	0.86	0.14	5.13	83.28
	NORMAL	4,972.0	8.28	356.94	4,842.08	1,047.44	-277.34	1,083.53	1.86	-1.42	7.74	143.31
	NORMAL	5,067.0	6.82	3.10	4,936.25	1,059.90	-277.40	1,095.59	1.76	-1.54	6.48	154.03
	NORMAL	5,163.0	5.31	5.89	5,031.71	1,070.01	-276.63	1,105.17	1.60	-1.57	2.91	170.34
	NORMAL	5,258.0	3.74	12.01	5,126.42	1,077.42	-275.54	1,112.04	1.73	-1.65	6.44	165.94
	NORMAL	5,354.0	2.90	8.15	5,222.25	1,082.88	-274.54	1,117.07	0.90	-0.88	-4.02	192.98
	NORMAL	5,449.0	2.29	1.25	5,317.16	1,087.16	-274.16	1,121.10	0.72	-0.64	-7.26	203.70

2.2.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLS (°/100ft)	Build Rate (°/100ft)	Turn (°/100ft)	TFace (°)
2/7/2012	NORMAL	5,545.0	1.26	16.15	5,413.11	1,090.09	-273.82	1,123.85	1.17	-1.07	15.52	163.19
	NORMAL	5,640.0	0.58	74.91	5,508.10	1,091.22	-273.07	1,124.74	1.14	-0.72	61.85	152.66
	NORMAL	5,736.0	0.53	179.13	5,604.10	1,090.90	-272.59	1,124.32	0.91	-0.05	108.56	144.12
	NORMAL	5,831.0	1.29	191.19	5,699.08	1,089.41	-272.79	1,122.93	0.82	0.80	12.69	20.22
	NORMAL	5,926.0	1.49	199.43	5,794.05	1,087.20	-273.41	1,120.95	0.30	0.21	8.67	49.15
	NORMAL	6,021.0	1.65	206.69	5,889.02	1,084.81	-274.44	1,118.91	0.27	0.17	7.64	54.85
	NORMAL	6,117.0	1.30	193.50	5,984.99	1,082.52	-275.31	1,116.91	0.51	-0.36	-13.74	217.66
	NORMAL	6,212.0	1.36	199.19	6,079.96	1,080.41	-275.93	1,115.03	0.15	0.06	5.99	68.43
	NORMAL	6,308.0	1.30	209.35	6,175.94	1,078.38	-276.84	1,113.31	0.25	-0.06	10.58	109.32
	NORMAL	6,403.0	1.05	221.55	6,270.92	1,076.79	-277.95	1,112.06	0.37	-0.26	12.84	140.97
	NORMAL	6,499.0	0.91	227.78	6,366.90	1,075.62	-279.10	1,111.22	0.18	-0.15	6.49	145.81
	NORMAL	6,594.0	1.31	242.11	6,461.88	1,074.61	-280.61	1,110.63	0.51	0.42	15.08	42.06
	NORMAL	6,689.0	1.68	262.26	6,556.85	1,073.91	-282.95	1,110.56	0.67	0.39	21.21	65.21
	NORMAL	6,784.0	1.61	275.66	6,651.81	1,073.86	-285.66	1,111.20	0.41	-0.07	14.11	106.96
	NORMAL	6,880.0	1.90	274.09	6,747.77	1,074.10	-288.59	1,112.19	0.31	0.30	-1.64	349.80
	NORMAL	6,975.0	2.18	268.18	6,842.71	1,074.16	-291.97	1,113.11	0.37	0.29	-6.22	320.10
	NORMAL	7,071.0	2.30	267.24	6,938.64	1,074.01	-295.72	1,113.93	0.13	0.12	-0.98	342.51
	NORMAL	7,167.0	3.21	272.82	7,034.52	1,074.05	-300.33	1,115.16	0.99	0.95	5.81	19.22
	NORMAL	7,262.0	3.53	280.50	7,129.36	1,074.71	-305.86	1,117.22	0.58	0.34	8.08	58.54
	NORMAL	7,357.0	3.76	279.05	7,224.17	1,075.73	-311.81	1,119.74	0.26	0.24	-1.53	337.43
	NORMAL	7,452.0	3.38	280.11	7,318.98	1,076.71	-317.64	1,122.19	0.41	-0.40	1.12	170.68
	NORMAL	7,548.0	3.02	279.24	7,414.83	1,077.62	-322.92	1,124.42	0.38	-0.38	-0.91	187.25
	NORMAL	7,644.0	2.43	278.67	7,510.72	1,078.33	-327.43	1,126.27	0.62	-0.61	-0.59	182.35
	NORMAL	7,697.0	2.43	272.72	7,563.68	1,078.55	-329.67	1,127.05	0.48	0.00	-11.23	267.03
	NORMAL	7,755.0	2.43	272.72	7,621.62	1,078.67	-332.12	1,127.80	0.00	0.00	0.00	0.00

3 Charts

3.1 Vertical Section View



3.2 Plan View

