

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	GM 314-14	Wellbore No.	
Well Name	GM 314-14	Common Name	GM 314-14
Project	SG 23-07S-096W	Site	GV 18-23 Pad
Vertical Section Azimuth	335.01 (°) (°)	North Reference	
Origin N/S		Origin E/W	
Spud Date	1/13/2012	UWI	GM 314-14
Active Datum	KB @5,158.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Date Started	1/13/2012	Ended	1/18/2012
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

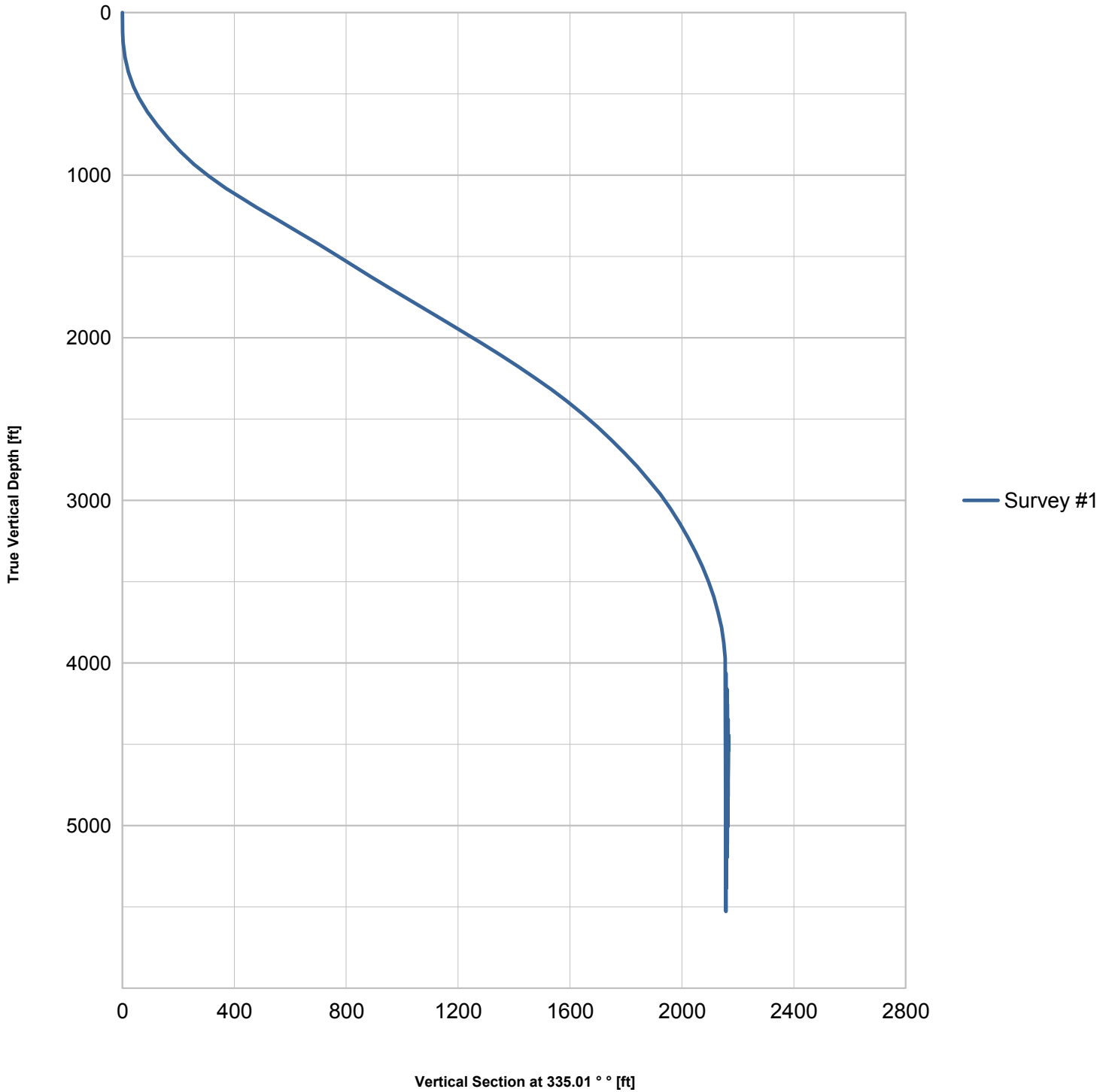
Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLS (°/100ft)	Build Rate (°/100ft)	Turn (°/100ft)	TFace (°)
1/13/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1/13/2012	NORMAL	123.0	1.06	325.64	122.99	0.94	-0.64	1.12	0.86	0.86	0.00	325.64
	NORMAL	185.0	2.11	329.77	184.97	2.40	-1.54	2.83	1.70	1.69	6.66	8.28
	NORMAL	276.0	6.07	338.60	275.72	8.33	-4.14	9.30	4.39	4.35	9.70	13.46
	NORMAL	367.0	9.68	335.74	365.85	19.79	-9.04	21.75	3.99	3.97	-3.14	352.39
	NORMAL	457.0	13.72	339.61	453.96	36.70	-15.87	39.97	4.57	4.49	4.30	12.90
	NORMAL	531.0	17.40	332.30	525.24	54.73	-24.08	59.77	5.63	4.97	-9.88	328.39
	NORMAL	622.0	21.20	331.80	611.11	81.28	-38.18	89.80	4.18	4.18	-0.55	357.27
	NORMAL	713.0	24.80	333.90	694.87	112.94	-54.36	125.33	4.06	3.96	2.31	13.81
	NORMAL	804.0	26.90	335.90	776.76	148.87	-71.16	165.00	2.50	2.31	2.20	23.45
	NORMAL	894.0	29.70	337.30	855.99	188.03	-88.08	207.64	3.20	3.11	1.56	13.95
	NORMAL	986.0	34.50	335.30	933.91	232.76	-107.78	256.50	5.34	5.22	-2.17	346.66
	NORMAL	1,077.0	37.50	338.10	1,007.53	281.88	-128.88	309.94	3.76	3.30	3.08	29.89
	NORMAL	1,172.0	41.60	337.80	1,080.76	337.94	-151.60	370.34	4.32	4.32	-0.32	357.22
	NORMAL	1,266.0	43.40	335.90	1,150.07	396.31	-176.58	433.81	2.35	1.91	-2.02	323.80
	NORMAL	1,330.0	44.00	331.80	1,196.34	435.98	-196.06	477.99	4.52	0.94	-6.41	280.47
1/15/2012	NORMAL	1,452.0	45.10	328.50	1,283.30	510.18	-238.67	563.25	2.10	0.90	-2.70	294.23
	NORMAL	1,547.0	44.70	330.60	1,350.59	567.98	-272.65	629.99	1.62	-0.42	2.21	105.84
	NORMAL	1,641.0	43.40	335.00	1,418.17	626.07	-302.54	695.27	3.54	-1.38	4.68	114.59
	NORMAL	1,736.0	43.00	336.40	1,487.42	685.33	-329.30	760.29	1.09	-0.42	1.47	113.16
	NORMAL	1,830.0	43.10	337.60	1,556.11	744.40	-354.37	824.42	0.88	0.11	1.28	83.48

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 (°)
1/15/2012	NORMAL	1,925.0	43.30	337.30	1,625.37	804.46	-379.31	889.39	0.30	0.21	-0.32	314.13
	NORMAL	2,019.0	44.10	336.70	1,693.32	864.23	-404.69	954.29	0.96	0.85	-0.64	332.39
	NORMAL	2,114.0	44.50	337.00	1,761.32	925.24	-430.77	1,020.61	0.48	0.42	0.32	27.75
	NORMAL	2,208.0	44.10	334.60	1,828.60	985.12	-457.68	1,086.24	1.83	-0.43	-2.55	255.72
	NORMAL	2,303.0	44.70	335.00	1,896.47	1,045.26	-485.98	1,152.71	0.70	0.63	0.42	25.15
	NORMAL	2,397.0	43.30	334.40	1,964.09	1,104.29	-513.88	1,218.00	1.55	-1.49	-0.64	196.36
	NORMAL	2,492.0	43.30	333.90	2,033.23	1,162.93	-542.28	1,283.15	0.36	0.00	-0.53	269.82
	NORMAL	2,586.0	43.00	335.10	2,101.81	1,220.95	-569.96	1,347.43	0.93	-0.32	1.28	110.52
	NORMAL	2,681.0	41.10	335.00	2,172.35	1,278.64	-596.80	1,411.06	2.00	-2.00	-0.11	181.98
	NORMAL	2,776.0	40.50	335.70	2,244.26	1,335.05	-622.69	1,473.13	0.79	-0.63	0.74	142.95
	NORMAL	2,870.0	38.40	335.70	2,316.84	1,389.49	-647.27	1,532.85	2.23	-2.23	0.00	180.00
	NORMAL	2,964.0	36.60	335.10	2,391.41	1,441.52	-671.08	1,590.07	1.95	-1.91	-0.64	191.23
	NORMAL	3,059.0	34.60	336.60	2,468.66	1,491.96	-693.72	1,645.36	2.30	-2.11	1.58	157.02
	NORMAL	3,154.0	32.50	335.00	2,547.83	1,539.86	-715.22	1,697.85	2.40	-2.21	-1.68	202.17
	NORMAL	3,248.0	31.10	334.10	2,627.71	1,584.58	-736.50	1,747.38	1.57	-1.49	-0.96	198.33
	NORMAL	3,343.0	29.50	333.00	2,709.74	1,627.50	-757.84	1,795.29	1.78	-1.68	-1.16	198.66
1/16/2012	NORMAL	3,437.0	27.50	334.30	2,792.34	1,667.68	-777.76	1,840.13	2.23	-2.13	1.38	163.34
	NORMAL	3,532.0	26.00	333.90	2,877.17	1,706.14	-796.43	1,882.88	1.59	-1.58	-0.42	186.67
	NORMAL	3,626.0	23.90	332.90	2,962.39	1,741.60	-814.17	1,922.51	2.28	-2.23	-1.06	190.91
	NORMAL	3,721.0	21.30	332.50	3,050.09	1,774.04	-830.91	1,958.99	2.74	-2.74	-0.42	183.20
	NORMAL	3,815.0	19.20	337.10	3,138.28	1,803.43	-844.81	1,991.49	2.80	-2.23	4.89	144.97
	NORMAL	3,910.0	17.90	334.80	3,228.35	1,831.03	-857.10	2,021.71	1.57	-1.37	-2.42	208.29
	NORMAL	4,004.0	15.90	335.70	3,318.28	1,855.84	-868.55	2,049.03	2.15	-2.13	0.96	172.98
	NORMAL	4,099.0	14.30	337.60	3,410.00	1,878.55	-878.38	2,073.76	1.76	-1.68	2.00	163.73
	NORMAL	4,193.0	12.70	338.10	3,501.40	1,898.87	-886.66	2,095.68	1.71	-1.70	0.53	176.07
	NORMAL	4,288.0	9.90	340.60	3,594.55	1,916.27	-893.27	2,114.24	2.99	-2.95	2.63	171.30
	NORMAL	4,382.0	8.60	337.60	3,687.33	1,930.39	-898.63	2,129.30	1.47	-1.38	-3.19	198.88
	NORMAL	4,477.0	6.20	340.40	3,781.53	1,941.79	-903.06	2,141.51	2.55	-2.53	2.95	172.84
	NORMAL	4,571.0	3.90	345.50	3,875.16	1,949.67	-905.56	2,149.71	2.49	-2.45	5.43	171.49
	NORMAL	4,666.0	2.30	9.40	3,970.02	1,954.68	-906.06	2,154.46	2.13	-1.68	25.16	152.59
	NORMAL	4,760.0	2.00	7.20	4,063.95	1,958.16	-905.55	2,157.40	0.33	-0.32	-2.34	194.29
	NORMAL	4,855.0	2.20	8.40	4,158.89	1,961.61	-905.07	2,160.33	0.22	0.21	1.26	13.00
	NORMAL	4,949.0	1.50	359.80	4,252.84	1,964.63	-904.81	2,162.95	0.80	-0.74	-9.15	197.37
	NORMAL	5,044.0	1.10	343.30	4,347.81	1,966.75	-905.08	2,164.98	0.57	-0.42	-17.37	215.05
1/17/2012	NORMAL	6,225.0	2.30	240.60	5,528.37	1,948.50	-925.64	2,157.13	0.00	0.00	0.00	0.00
1/17/2012	NORMAL	5,139.0	1.30	325.50	4,442.79	1,968.51	-905.95	2,166.95	0.44	0.21	-18.74	289.12
	NORMAL	5,233.0	1.10	214.20	4,536.78	1,968.64	-907.06	2,167.54	2.11	-0.21	-118.40	211.10
	NORMAL	5,328.0	1.80	207.90	4,631.75	1,966.57	-908.27	2,166.17	0.75	0.74	-6.63	344.01
	NORMAL	5,422.0	0.90	242.90	4,725.73	1,964.93	-909.62	2,165.25	1.26	-0.96	37.23	154.09
	NORMAL	5,517.0	1.00	228.60	4,820.71	1,964.04	-910.91	2,164.99	0.27	0.11	-15.05	285.61
	NORMAL	5,611.0	1.20	212.30	4,914.70	1,962.66	-912.05	2,164.23	0.39	0.21	-17.34	294.26
	NORMAL	5,706.0	1.50	221.40	5,009.67	1,960.89	-913.40	2,163.19	0.39	0.32	9.58	40.16
	NORMAL	5,800.0	1.65	218.80	5,103.63	1,958.91	-915.07	2,162.10	0.18	0.16	-2.77	333.22
	NORMAL	5,895.0	1.80	216.30	5,198.59	1,956.64	-916.81	2,160.78	0.18	0.16	-2.63	332.10
	NORMAL	5,989.0	2.10	220.50	5,292.54	1,954.14	-918.80	2,159.36	0.35	0.32	4.47	27.58
	NORMAL	6,084.0	2.10	224.60	5,387.47	1,951.58	-921.15	2,158.03	0.16	0.00	4.32	92.05
	NORMAL	6,180.0	2.30	240.60	5,483.40	1,949.38	-924.06	2,157.26	0.67	0.21	16.67	80.07

3 Charts

3.1 Vertical Section View



3.2 Plan View

