

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well/Wellbore Information

Well	PA 544-3	Wellbore No.	00
Wellbore Legal Name	PA 544-3	Common Wellbore Name	PA 544-3
Project	PA 02-07S-095W	Site	GV 86-2 Pad
Vertical Section Azimuth	228.65 (°)	North reference	
Origin N/S		Origin E/W	
Spud date	4/28/2014	UWI	PA 544-3
Active datum	KB @5,847.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	SCIENTIFIC
Date Started	4/28/2014	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

5917

Date	Type	MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. sec. (ft)	DLS (°/100usft)	Buidl Rate (°/100usft)	Turn (°/100usft)	Tface (°)
4/28/2014	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/28/2014	NORMAL	162.0	1.76	245.65	161.97	-1.03	-2.27	2.38	1.09	1.09	0.00	245.65
	NORMAL	254.0	4.57	226.49	253.83	-4.13	-6.21	7.39	3.22	3.05	-20.83	329.62
	NORMAL	345.0	9.50	229.92	344.12	-11.47	-14.59	18.53	5.43	5.42	3.77	6.58
	NORMAL	435.0	12.84	227.11	432.40	-23.06	-27.61	35.96	3.76	3.71	-3.12	349.36
	NORMAL	509.0	15.05	226.00	504.21	-35.33	-40.54	53.78	3.01	2.99	-1.50	352.56
	NORMAL	600.0	18.68	226.31	591.29	-53.61	-59.59	80.15	3.99	3.99	0.34	1.57
4/29/2014	NORMAL	690.0	22.82	228.25	675.43	-75.20	-83.04	112.02	4.66	4.60	2.16	10.34
	NORMAL	781.0	25.85	229.78	758.34	-99.76	-111.36	149.51	3.40	3.33	1.68	12.45
	NORMAL	871.0	29.11	230.85	838.17	-126.26	-143.33	191.01	3.66	3.62	1.19	9.09
	NORMAL	961.0	32.99	231.35	915.26	-155.40	-179.45	237.38	4.32	4.31	0.56	4.02
	NORMAL	1,056.0	36.58	230.60	993.27	-189.53	-221.54	291.52	3.81	3.78	-0.79	352.89
	NORMAL	1,151.0	40.90	229.65	1,067.36	-227.65	-267.14	350.94	4.59	4.55	-1.00	351.79
	NORMAL	1,234.0	45.32	226.77	1,127.94	-265.48	-309.37	407.63	5.83	5.33	-3.47	334.94
4/30/2014	NORMAL	1,338.0	46.25	226.00	1,200.46	-316.90	-363.33	482.11	1.04	0.89	-0.74	329.05
	NORMAL	1,432.0	46.08	225.77	1,265.57	-364.10	-412.01	549.84	0.25	-0.18	-0.24	224.22
	NORMAL	1,527.0	45.37	226.27	1,331.89	-411.33	-460.96	617.79	0.84	-0.75	0.53	153.42
	NORMAL	1,622.0	45.29	226.34	1,398.67	-458.01	-509.81	685.29	0.10	-0.08	0.07	148.13
	NORMAL	1,717.0	44.76	228.64	1,465.83	-503.42	-559.34	752.47	1.80	-0.56	2.42	108.85
	NORMAL	1,812.0	44.68	227.86	1,533.33	-547.93	-609.21	819.32	0.58	-0.08	-0.82	261.43
	NORMAL	1,906.0	44.49	227.76	1,600.28	-592.24	-658.10	885.29	0.22	-0.20	-0.11	200.24

2.1.2 Survey Stations (Continued)

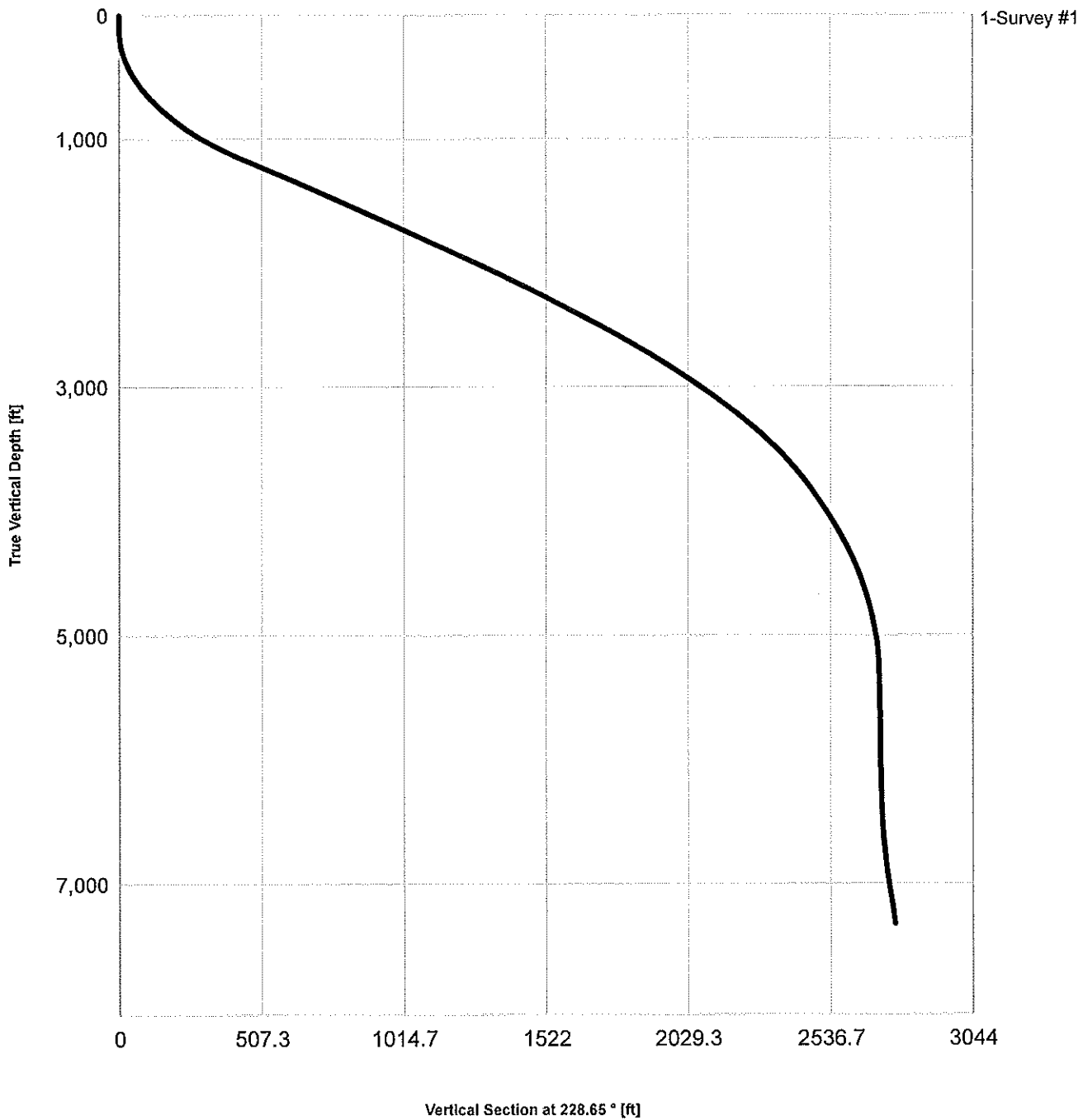
Date	Type	MD (ft)	Inc. (")	Azi. (")	TVD (ft)	N/S (ft)	E/W (ft)	V. sec. (ft)	DLS ("/100usft)	Build Rate ("/100usft)	Turn ("/100usft)	Tface (")
4/30/2014	NORMAL	2,001.0	44.49	227.41	1,668.05	-637.14	-707.25	951.86	0.26	0.00	-0.37	269.88
	NORMAL	2,096.0	44.58	226.88	1,735.77	-682.46	-756.09	1,018.46	0.40	0.09	-0.56	283.42
	NORMAL	2,191.0	43.53	228.38	1,804.04	-726.98	-804.89	1,084.50	1.56	-1.11	1.58	135.73
	NORMAL	2,286.0	43.87	228.49	1,872.72	-770.53	-853.99	1,150.14	0.37	0.36	0.12	12.64
	NORMAL	2,381.0	43.97	228.81	1,941.15	-814.06	-903.46	1,216.03	0.26	0.11	0.34	65.86
	NORMAL	2,476.0	43.95	228.97	2,009.54	-857.42	-953.15	1,281.98	0.12	-0.02	0.17	100.27
	NORMAL	2,571.0	42.03	230.22	2,079.02	-899.42	-1,002.46	1,346.74	2.21	-2.02	1.32	156.52
	NORMAL	2,665.0	42.38	230.04	2,148.65	-939.90	-1,050.93	1,409.87	0.39	0.37	-0.19	340.87
	NORMAL	2,760.0	41.06	229.78	2,219.56	-980.61	-1,099.29	1,473.07	1.40	-1.39	-0.27	187.37
	NORMAL	2,855.0	40.71	230.04	2,291.38	-1,020.65	-1,146.87	1,535.24	0.41	-0.37	0.27	154.17
5/1/2014	NORMAL	2,950.0	40.27	229.12	2,363.63	-1,060.65	-1,193.83	1,596.92	0.78	-0.46	-0.97	233.28
	NORMAL	3,045.0	39.98	229.16	2,436.27	-1,100.70	-1,240.13	1,658.14	0.31	-0.31	0.04	174.94
	NORMAL	3,140.0	39.56	228.55	2,509.29	-1,140.68	-1,285.90	1,718.91	0.60	-0.44	-0.64	222.66
	NORMAL	3,235.0	38.67	228.19	2,583.00	-1,180.50	-1,330.69	1,778.84	0.97	-0.94	-0.38	194.18
	NORMAL	3,330.0	37.82	228.95	2,657.61	-1,219.41	-1,374.78	1,837.65	1.02	-0.89	0.80	151.33
	NORMAL	3,425.0	35.96	229.61	2,733.59	-1,256.62	-1,418.00	1,894.67	2.00	-1.96	0.69	168.24
	NORMAL	3,520.0	35.40	229.52	2,810.76	-1,292.56	-1,460.17	1,950.07	0.59	-0.59	-0.09	185.32
	NORMAL	3,615.0	34.07	228.79	2,888.83	-1,327.95	-1,501.12	2,004.19	1.47	-1.40	-0.77	197.07
	NORMAL	3,709.0	32.97	227.47	2,967.19	-1,362.59	-1,539.78	2,056.10	1.40	-1.17	-1.40	212.98
	NORMAL	3,804.0	31.83	227.40	3,047.40	-1,397.02	-1,577.27	2,106.99	1.20	-1.20	-0.07	181.85
	NORMAL	3,899.0	30.86	228.29	3,128.54	-1,430.19	-1,613.90	2,156.40	1.13	-1.02	0.94	154.86
	NORMAL	3,994.0	29.56	229.81	3,210.63	-1,461.53	-1,649.99	2,204.20	1.59	-1.37	1.60	150.19
	NORMAL	4,089.0	27.70	231.19	3,294.02	-1,490.49	-1,685.10	2,249.69	2.08	-1.96	1.45	161.03
	NORMAL	4,184.0	25.83	229.49	3,378.84	-1,517.77	-1,718.05	2,292.44	2.13	-1.97	-1.79	201.51
	NORMAL	4,279.0	24.62	227.41	3,464.78	-1,544.61	-1,748.35	2,332.92	1.58	-1.27	-2.19	215.29
	NORMAL	4,374.0	22.77	229.08	3,551.77	-1,570.05	-1,776.81	2,371.09	2.07	-1.95	1.76	160.82
	NORMAL	4,468.0	20.49	226.62	3,639.14	-1,593.26	-1,802.52	2,405.73	2.61	-2.43	-2.62	200.55
	NORMAL	4,563.0	18.73	227.94	3,728.63	-1,614.90	-1,825.93	2,437.60	1.91	-1.85	1.39	166.49
	NORMAL	4,658.0	17.77	227.23	3,818.85	-1,634.97	-1,847.90	2,467.35	1.04	-1.01	-0.75	192.70
	NORMAL	4,753.0	16.66	230.32	3,909.59	-1,653.51	-1,869.02	2,495.45	1.51	-1.17	3.25	141.98
	NORMAL	4,848.0	15.95	231.14	4,000.77	-1,670.39	-1,889.67	2,522.11	0.79	-0.75	0.86	162.43
	NORMAL	4,943.0	15.65	229.96	4,092.18	-1,686.83	-1,909.64	2,547.96	0.46	-0.32	-1.24	226.40
5/2/2014	NORMAL	5,037.0	13.98	230.38	4,183.06	-1,702.22	-1,928.10	2,571.98	1.78	-1.78	0.45	176.52
	NORMAL	5,132.0	12.95	229.34	4,275.44	-1,716.48	-1,945.01	2,594.10	1.11	-1.08	-1.09	192.73
	NORMAL	5,227.0	11.61	230.09	4,368.27	-1,729.55	-1,960.42	2,614.30	1.42	-1.41	0.79	173.58
	NORMAL	5,322.0	10.02	231.36	4,461.58	-1,740.84	-1,974.21	2,632.11	1.69	-1.67	1.34	172.10
	NORMAL	5,416.0	9.01	230.28	4,554.29	-1,750.65	-1,986.26	2,647.64	1.09	-1.07	-1.15	189.49
	NORMAL	5,511.0	7.74	230.40	4,648.27	-1,759.48	-1,996.91	2,661.47	1.34	-1.34	0.13	179.27
	NORMAL	5,606.0	6.78	228.84	4,742.51	-1,767.25	-2,006.06	2,673.47	1.03	-1.01	-1.64	190.83
	NORMAL	5,701.0	6.15	226.41	4,836.90	-1,774.45	-2,013.97	2,684.16	0.72	-0.66	-2.56	202.27
	NORMAL	5,796.0	5.10	233.30	4,931.45	-1,780.48	-2,021.04	2,693.46	1.31	-1.11	7.25	150.65
5/3/2014	NORMAL	5,891.0	3.78	231.15	5,026.16	-1,784.97	-2,026.86	2,700.80	1.40	-1.39	-2.26	186.12
	NORMAL	5,985.0	2.29	223.54	5,120.03	-1,788.28	-2,030.57	2,705.76	1.64	-1.59	-8.10	191.35
	NORMAL	6,080.0	1.18	249.35	5,214.98	-1,790.00	-2,032.79	2,708.57	1.40	-1.17	27.17	157.29
	NORMAL	6,175.0	0.47	277.18	5,309.97	-1,790.29	-2,034.10	2,709.74	0.84	-0.75	29.29	163.98
	NORMAL	6,270.0	0.64	262.72	5,404.97	-1,790.31	-2,035.01	2,710.44	0.23	0.18	-15.22	313.13
	NORMAL	6,365.0	0.87	272.23	5,499.96	-1,790.35	-2,036.25	2,711.40	0.27	0.24	10.01	33.39
	NORMAL	6,460.0	0.85	257.84	5,594.95	-1,790.47	-2,037.66	2,712.54	0.23	-0.02	-15.15	257.54
	NORMAL	6,555.0	0.47	291.17	5,689.94	-1,790.48	-2,038.72	2,713.33	0.55	-0.40	35.08	150.55
	NORMAL	6,649.0	0.15	257.13	5,783.94	-1,790.37	-2,039.20	2,713.62	0.38	-0.34	-36.21	193.65
	NORMAL	6,744.0	0.07	217.02	5,878.94	-1,790.44	-2,039.35	2,713.79	0.11	-0.08	-42.22	205.06
	NORMAL	6,839.0	0.42	250.01	5,973.94	-1,790.61	-2,039.71	2,714.17	0.38	0.37	34.73	39.01
	NORMAL	6,934.0	0.62	256.41	6,068.94	-1,790.85	-2,040.54	2,714.95	0.22	0.21	6.74	19.41
	NORMAL	7,029.0	1.14	259.58	6,163.93	-1,791.14	-2,041.97	2,716.21	0.55	0.55	3.34	6.94
	NORMAL	7,124.0	0.48	210.34	6,258.92	-1,791.65	-2,043.10	2,717.40	0.95	-0.69	-51.83	203.74
	NORMAL	7,219.0	0.88	228.46	6,353.91	-1,792.48	-2,043.85	2,718.51	0.47	0.42	19.07	37.52

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc. (")	Azi. (")	TVD (ft)	N/S (ft)	E/W (ft)	V. sec. (ft)	DLS (%/100usft)	Build Rate (%/100usft)	Turn (%/100usft)	Tface (")
5/3/2014	NORMAL	7,314.0	1.06	245.16	6,448.90	-1,793.33	-2,045.19	2,720.08	0.35	0.19	17.58	66.05
	NORMAL	7,409.0	1.67	241.65	6,543.87	-1,794.36	-2,047.21	2,722.27	0.65	0.64	-3.69	350.44
	NORMAL	7,504.0	2.46	246.66	6,638.81	-1,795.83	-2,050.30	2,725.56	0.85	0.83	5.27	15.38
5/4/2014	NORMAL	7,599.0	2.85	249.80	6,733.71	-1,797.45	-2,054.39	2,729.70	0.44	0.41	3.31	22.03
	NORMAL	7,693.0	3.40	250.82	6,827.57	-1,799.17	-2,059.21	2,734.46	0.59	0.59	1.09	6.28
	NORMAL	7,788.0	3.61	246.66	6,922.39	-1,801.28	-2,064.62	2,739.91	0.35	0.22	-4.38	307.46
	NORMAL	7,883.0	4.15	247.35	7,017.17	-1,803.79	-2,070.54	2,746.01	0.57	0.57	0.73	5.29
	NORMAL	7,978.0	4.21	244.83	7,111.92	-1,806.60	-2,076.87	2,752.62	0.20	0.06	-2.65	286.83
	NORMAL	8,072.0	3.74	240.43	7,205.69	-1,809.58	-2,082.65	2,758.93	0.60	-0.50	-4.68	210.80
	NORMAL	8,124.0	3.78	241.00	7,257.58	-1,811.25	-2,085.63	2,762.27	0.11	0.08	1.10	43.34
	NORMAL	8,190.0	3.78	241.00	7,323.44	-1,813.36	-2,089.43	2,766.52	0.00	0.00	0.00	0.00

3 Charts

3.1 Vertical Section View



3.2 Plan View

