

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	SG 23-35	Wellbore No.	
Well Name	SG 23-35	Common Name	SG 23-35
Project	SG 35-07S-096W	Site	SG 13-35 Pad
Vertical Section Azimuth	44.40 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	12/12/2011	UWI	SG 23-35
Active Datum	KB @5,403.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Started	12/12/2011	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)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
12/12/2011	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12/12/2011	NORMAL	88.0	1.10	34.60	87.99	0.70	0.48	0.83	1.25	1.25	0.00	34.60
	NORMAL	149.0	2.26	43.99	148.97	2.04	1.65	2.61	1.95	1.90	15.39	18.07
	NORMAL	241.0	3.88	48.68	240.83	5.40	5.25	7.53	1.78	1.76	5.10	11.16
	NORMAL	333.0	8.70	40.90	332.25	12.72	12.14	17.59	5.31	5.24	-8.46	346.08
	NORMAL	425.0	12.00	45.60	422.75	24.68	23.54	34.10	3.70	3.59	5.11	16.68
	NORMAL	516.0	15.60	43.90	511.10	40.12	38.78	55.80	3.98	3.96	-1.87	352.75
12/13/2011	NORMAL	608.0	18.90	43.40	598.95	59.86	57.60	83.07	3.59	3.59	-0.54	357.19
	NORMAL	699.0	23.40	44.40	683.80	83.49	80.39	115.90	4.96	4.95	1.10	5.05
	NORMAL	790.0	26.10	45.80	766.44	110.36	107.38	153.99	3.04	2.97	1.54	12.89
	NORMAL	881.0	26.90	46.00	847.88	138.62	136.54	194.57	0.88	0.88	0.22	6.45
	NORMAL	972.0	27.60	45.00	928.78	167.83	166.26	236.23	0.92	0.77	-1.10	326.37
	NORMAL	1,040.0	28.40	44.80	988.82	190.44	188.79	268.15	1.18	1.18	-0.29	353.22
12/14/2011	NORMAL	1,160.0	28.90	44.40	1,094.12	231.41	229.19	325.69	0.45	0.42	-0.33	338.84
	NORMAL	1,254.0	29.20	44.80	1,176.30	263.91	261.24	371.33	0.38	0.32	0.43	33.10
	NORMAL	1,349.0	30.40	44.30	1,258.73	297.55	294.36	418.54	1.29	1.26	-0.53	348.08
	NORMAL	1,443.0	28.90	42.80	1,340.42	331.24	326.40	465.04	1.78	-1.60	-1.60	205.67
	NORMAL	1,537.0	25.80	42.00	1,423.91	363.12	355.53	508.19	3.32	-3.30	-0.85	186.41
	NORMAL	1,631.0	25.80	40.90	1,508.54	393.78	382.61	549.05	0.51	0.00	-1.17	269.50
	NORMAL	1,726.0	25.20	42.00	1,594.28	424.44	409.68	589.89	0.80	-0.63	1.16	142.21
	NORMAL	1,820.0	24.40	46.40	1,679.62	452.70	437.13	629.29	2.14	-0.85	4.68	115.42

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
12/14/2011	NORMAL	1,914.0	25.40	46.40	1,764.88	480.00	465.79	668.84	1.06	1.06	0.00	0.00
	NORMAL	2,008.0	26.20	46.90	1,849.51	508.08	495.54	709.72	0.88	0.85	0.53	15.44
	NORMAL	2,102.0	28.60	46.90	1,932.96	537.63	527.13	752.94	2.55	2.55	0.00	0.00
	NORMAL	2,197.0	29.00	45.80	2,016.21	569.22	560.24	798.67	0.70	0.42	-1.16	306.56
	NORMAL	2,291.0	29.60	43.50	2,098.19	601.95	592.56	844.67	1.36	0.64	-2.45	297.05
	NORMAL	2,385.0	30.40	45.00	2,179.59	635.61	625.36	891.66	1.17	0.85	1.60	43.80
	NORMAL	2,479.0	28.80	42.80	2,261.33	669.04	657.56	938.08	2.06	-1.70	-2.34	213.23
	NORMAL	2,573.0	27.40	42.50	2,344.24	701.61	687.56	982.34	1.50	-1.49	-0.32	185.63
	NORMAL	2,668.0	26.40	45.60	2,428.97	732.50	717.42	1,025.30	1.81	-1.05	3.26	126.86
	NORMAL	2,762.0	24.50	44.10	2,513.84	761.12	745.92	1,065.69	2.13	-2.02	-1.60	198.06
	NORMAL	2,856.0	22.10	45.30	2,600.17	787.56	772.05	1,102.87	2.60	-2.55	1.28	169.36
	NORMAL	2,950.0	21.50	45.30	2,687.45	812.12	796.87	1,137.77	0.64	-0.64	0.00	180.00
	NORMAL	3,045.0	19.40	44.60	2,776.46	835.60	820.32	1,170.96	2.23	-2.21	-0.74	186.32
	NORMAL	3,139.0	18.20	43.90	2,865.44	857.29	841.46	1,201.25	1.30	-1.28	-0.74	190.32
	NORMAL	3,233.0	16.50	44.40	2,955.16	877.41	860.98	1,229.28	1.82	-1.81	0.53	175.23
	NORMAL	3,327.0	14.80	43.70	3,045.67	895.63	878.62	1,254.64	1.82	-1.81	-0.74	186.00
	NORMAL	3,421.0	13.80	45.30	3,136.76	912.19	894.88	1,277.85	1.14	-1.06	1.70	159.21
	NORMAL	3,515.0	11.30	42.70	3,228.51	926.85	909.10	1,298.27	2.73	-2.66	-2.77	191.47
	NORMAL	3,609.0	9.60	43.90	3,320.94	939.27	920.78	1,315.32	1.82	-1.81	1.28	173.29
12/15/2011	NORMAL	3,798.0	8.00	41.40	3,507.69	960.50	940.65	1,344.39	1.01	-0.96	-2.13	197.10
	NORMAL	3,892.0	5.50	28.40	3,601.03	969.37	947.11	1,355.25	3.10	-2.66	-13.83	205.09
	NORMAL	3,986.0	1.90	358.90	3,694.83	974.90	949.23	1,360.68	4.21	-3.83	-31.38	193.68
	NORMAL	4,080.0	1.20	336.80	3,788.79	977.36	948.81	1,362.14	0.97	-0.74	-23.51	209.80
	NORMAL	4,175.0	1.10	311.60	3,883.77	978.88	947.74	1,362.48	0.54	-0.11	-26.53	246.39
	NORMAL	4,269.0	1.40	301.40	3,977.75	980.08	946.08	1,362.18	0.40	0.32	-10.85	318.26
	NORMAL	4,363.0	1.50	278.90	4,071.72	980.87	943.89	1,361.20	0.61	0.11	-23.94	268.59
	NORMAL	4,458.0	0.60	297.90	4,166.71	981.29	942.22	1,360.34	1.00	-0.95	20.00	168.17
	NORMAL	4,552.0	0.10	214.80	4,260.70	981.45	941.74	1,360.12	0.63	-0.53	-88.40	189.58
	NORMAL	4,646.0	0.60	242.20	4,354.70	981.16	941.25	1,359.57	0.55	0.53	29.15	32.54
	NORMAL	4,740.0	0.60	257.60	4,448.70	980.82	940.34	1,358.69	0.17	0.00	16.38	97.70
	NORMAL	4,835.0	1.20	229.90	4,543.69	980.07	939.09	1,357.28	0.76	0.63	-29.16	309.66
12/15/2011	NORMAL	3,704.0	8.90	43.40	3,414.71	950.31	931.32	1,330.59	0.74	-0.74	-0.53	186.30
12/16/2011	NORMAL	4,929.0	0.80	208.80	4,637.67	978.86	938.02	1,355.67	0.57	-0.43	-22.45	212.41
	NORMAL	5,023.0	0.30	238.30	4,731.67	978.16	937.50	1,354.80	0.59	-0.53	31.38	164.67
	NORMAL	5,117.0	0.30	311.60	4,825.67	978.19	937.10	1,354.55	0.38	0.00	77.98	126.65
	NORMAL	5,211.0	0.60	339.70	4,919.66	978.82	936.75	1,354.75	0.39	0.32	29.89	50.95
	NORMAL	5,306.0	0.70	269.10	5,014.66	979.28	936.00	1,354.55	0.80	0.11	-74.32	240.90
	NORMAL	5,400.0	0.90	240.10	5,108.65	978.90	934.78	1,353.43	0.47	0.21	-30.85	281.30
	NORMAL	5,494.0	0.80	217.90	5,202.64	978.01	933.74	1,352.07	0.36	-0.11	-23.62	242.21
	NORMAL	5,588.0	1.20	212.80	5,296.63	976.67	932.80	1,350.45	0.44	0.43	-5.43	344.90
	NORMAL	5,605.0	1.10	227.10	5,313.62	976.41	932.59	1,350.11	1.78	-0.59	84.12	116.27