

## I General

### 1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

### 1.2 Well Information

Well	SG 41-22	Wellbore No.	00
Well Name	SG 41-22	Common Name	SG 41-22
Project	SG 22-07S-096W	Site	SG 42-22 Pad
Vertical Section Azimuth	358.14 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	8/25/2013	UWI	SG 41-22
Active Datum	KB @5,243.0ft (above Mean Sea Level)		

## 2 Survey Name

### 2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	Scientific Drilling
Date Started	8/25/2013	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 (°)
8/25/2013	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/2013	NORMAL	76.0	0.70	352.53	76.00	0.46	-0.06	0.46	0.92	0.92	0.00	352.53
	NORMAL	168.0	3.26	1.76	167.94	3.63	-0.05	3.63	2.80	2.78	10.03	11.73
	NORMAL	259.0	5.45	0.00	258.67	10.54	0.03	10.53	2.41	2.41	-1.93	355.63
	NORMAL	350.0	8.09	359.47	349.02	21.27	-0.03	21.26	2.90	2.90	-0.58	358.38
8/26/2013	NORMAL	441.0	10.21	359.56	438.86	35.74	-0.15	35.72	2.33	2.33	0.10	0.43
	NORMAL	531.0	12.84	358.95	527.04	53.72	-0.40	53.70	2.93	2.92	-0.68	357.05
	NORMAL	603.0	14.59	357.91	596.98	70.78	-0.88	70.77	2.45	2.43	-1.44	351.47
	NORMAL	695.0	16.67	358.55	685.58	95.55	-1.63	95.55	2.27	2.26	0.70	5.05
	NORMAL	787.0	19.08	359.03	773.13	123.78	-2.22	123.79	2.62	2.62	0.52	3.73
	NORMAL	878.0	22.13	357.66	858.30	155.79	-3.17	155.81	3.39	3.35	-1.51	350.37
	NORMAL	970.0	25.62	357.46	942.41	192.98	-4.76	193.04	3.79	3.79	-0.22	358.58
	NORMAL	1,065.0	27.44	356.83	1,027.41	235.36	-6.88	235.46	1.94	1.92	-0.66	350.93
	NORMAL	1,159.0	28.84	357.53	1,110.29	279.64	-9.06	279.79	1.53	1.49	0.74	13.58
	NORMAL	1,200.0	28.72	357.12	1,146.23	299.36	-9.98	299.52	0.56	-0.29	-1.00	238.52
8/27/2013	NORMAL	1,280.0	29.90	356.48	1,215.99	338.46	-12.17	338.67	1.53	1.48	-0.80	344.85
	NORMAL	1,343.0	29.62	356.31	1,270.68	369.67	-14.14	369.93	0.46	-0.44	-0.27	196.70
	NORMAL	1,437.0	30.74	357.49	1,351.94	416.85	-16.68	417.17	1.35	1.19	1.26	28.42
	NORMAL	1,531.0	29.98	356.80	1,433.04	464.30	-19.05	464.67	0.89	-0.81	-0.73	204.35
	NORMAL	1,625.0	28.74	358.16	1,514.97	510.34	-21.08	510.76	1.50	-1.32	1.45	152.32
	NORMAL	1,720.0	28.33	358.40	1,598.43	555.70	-22.45	556.14	0.45	-0.43	0.25	164.48



## 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 (°)
8/27/2013	NORMAL	1,814.0	28.33	358.66	1,681.17	600.29	-23.59	600.74	0.13	0.00	0.28	90.11
	NORMAL	1,910.0	28.57	359.27	1,765.58	646.02	-24.41	646.47	0.39	0.25	0.64	50.72
	NORMAL	2,004.0	27.87	357.97	1,848.41	690.45	-25.48	690.92	0.99	-0.74	-1.38	220.72
	NORMAL	2,098.0	27.96	356.92	1,931.47	734.41	-27.44	734.92	0.53	0.10	-1.12	279.91
	NORMAL	2,192.0	27.64	355.29	2,014.62	778.15	-30.42	778.73	0.88	-0.34	-1.73	246.45
	NORMAL	2,286.0	26.85	357.38	2,098.19	821.09	-33.18	821.73	1.32	-0.84	2.22	130.47
	NORMAL	2,382.0	25.13	359.53	2,184.48	863.13	-34.34	863.79	2.04	-1.79	2.24	152.25
	NORMAL	2,476.0	24.83	1.96	2,269.69	902.82	-33.82	903.44	1.14	-0.32	2.59	107.39
	NORMAL	2,570.0	23.72	4.26	2,355.38	941.40	-31.74	941.93	1.55	-1.18	2.45	140.62
	NORMAL	2,664.0	22.60	6.00	2,441.81	978.22	-28.45	978.63	1.40	-1.19	1.85	149.37
	NORMAL	2,758.0	20.28	3.74	2,529.30	1,012.44	-25.50	1,012.74	2.62	-2.47	-2.40	198.55
	NORMAL	2,852.0	18.61	3.80	2,617.93	1,043.67	-23.44	1,043.88	1.78	-1.78	0.06	179.34
	NORMAL	2,947.0	16.89	1.36	2,708.41	1,072.59	-22.11	1,072.74	1.97	-1.81	-2.57	202.23
8/28/2013	NORMAL	3,041.0	16.51	1.49	2,798.44	1,099.59	-21.44	1,099.71	0.41	-0.40	0.14	174.45
	NORMAL	3,135.0	15.38	359.52	2,888.83	1,125.41	-21.20	1,125.51	1.33	-1.20	-2.10	204.65
	NORMAL	3,229.0	13.49	359.19	2,979.85	1,148.84	-21.46	1,148.93	2.01	-2.01	-0.35	182.33
	NORMAL	3,323.0	11.99	359.06	3,071.54	1,169.57	-21.77	1,169.66	1.60	-1.60	-0.14	181.03
	NORMAL	3,418.0	10.75	359.67	3,164.67	1,188.29	-21.98	1,188.38	1.31	-1.31	0.64	174.76
	NORMAL	3,512.0	8.63	355.90	3,257.33	1,204.10	-22.54	1,204.19	2.35	-2.26	-4.01	194.81
	NORMAL	3,605.0	7.64	357.17	3,349.39	1,217.23	-23.34	1,217.35	1.08	-1.06	1.37	170.34
	NORMAL	3,698.0	7.12	353.62	3,441.62	1,229.13	-24.29	1,229.27	0.74	-0.56	-3.82	219.50
	NORMAL	3,792.0	5.44	2.07	3,535.05	1,239.38	-24.78	1,239.53	2.04	-1.79	8.99	155.34
	NORMAL	3,886.0	3.28	4.96	3,628.78	1,246.51	-24.38	1,246.64	2.31	-2.30	3.07	175.63
	NORMAL	3,980.0	2.92	355.03	3,722.64	1,251.57	-24.36	1,251.71	0.69	-0.38	-10.56	231.27
	NORMAL	4,075.0	1.58	356.11	3,817.56	1,255.29	-24.66	1,255.43	1.41	-1.41	1.14	178.73
	NORMAL	4,168.0	2.70	348.50	3,910.50	1,258.72	-25.18	1,258.87	1.24	1.20	-8.18	341.94
	NORMAL	4,262.0	2.56	341.25	4,004.40	1,262.88	-26.30	1,263.06	0.38	-0.15	-7.71	243.58
	NORMAL	4,357.0	1.45	338.46	4,099.34	1,266.00	-27.42	1,266.23	1.17	-1.17	-2.94	183.63
	NORMAL	4,450.0	1.76	3.68	4,192.30	1,268.52	-27.76	1,268.75	0.82	0.33	27.12	79.25
	NORMAL	4,544.0	1.30	7.63	4,286.27	1,271.02	-27.53	1,271.24	0.50	-0.49	4.20	169.06
	NORMAL	4,639.0	0.97	5.04	4,381.25	1,272.89	-27.31	1,273.10	0.35	-0.35	-2.73	187.54
	NORMAL	4,733.0	0.57	67.06	4,475.24	1,273.86	-26.81	1,274.06	0.92	-0.43	65.98	144.38
	NORMAL	4,827.0	0.18	50.97	4,569.24	1,274.14	-26.27	1,274.32	0.43	-0.41	-17.12	187.16
	NORMAL	4,921.0	0.35	358.15	4,663.24	1,274.52	-26.16	1,274.70	0.30	0.18	-56.19	276.45
	NORMAL	5,014.0	0.26	176.39	4,756.24	1,274.59	-26.16	1,274.77	0.66	-0.10	191.66	179.25
	NORMAL	5,108.0	0.21	185.72	4,850.24	1,274.21	-26.16	1,274.39	0.07	-0.05	9.93	147.18
	NORMAL	5,200.0	1.05	228.25	4,942.23	1,273.48	-26.81	1,273.68	0.99	0.91	46.23	51.54
	NORMAL	5,295.0	1.31	226.89	5,037.21	1,272.16	-28.25	1,272.40	0.28	0.27	-1.43	353.17
	NORMAL	5,389.0	2.06	220.86	5,131.17	1,270.14	-30.14	1,270.45	0.82	0.80	-6.41	343.67
	NORMAL	5,484.0	2.04	214.29	5,226.11	1,267.46	-32.21	1,267.83	0.25	-0.02	-6.92	261.86
	NORMAL	5,578.0	2.20	222.27	5,320.05	1,264.74	-34.36	1,265.19	0.36	0.17	8.49	65.57
	NORMAL	5,672.0	2.37	237.12	5,413.97	1,262.35	-37.21	1,262.89	0.65	0.18	15.80	81.48
	NORMAL	5,785.0	2.27	232.84	5,526.88	1,259.73	-40.95	1,260.39	0.18	-0.09	-3.79	237.88
	NORMAL	5,850.0	2.21	230.38	5,591.83	1,258.15	-42.95	1,258.88	0.17	-0.09	-3.78	236.81