

## 1 General

### 1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

### 1.2 Well Information

Well	SG 413-35	Wellbore No.	
Well Name	SG 413-35	Common Name	SG 413-35
Project	SG 35-07S-096W	Site	SG 13-35 Pad
Vertical Section Azimuth	279.93 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	11/28/2011	UWI	SG 413-35
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	11/28/2011	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)	Bulld (°/100ft)	Turn (°/100ft)	TFace (°)
11/28/2011	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11/28/2011	NORMAL	151.0	1.70	250.00	150.98	-0.77	-2.10	1.94	1.13	1.13	0.00	250.00
	NORMAL	243.0	2.80	263.70	242.91	-1.48	-5.62	5.28	1.32	1.20	14.89	33.01
	NORMAL	334.0	4.60	280.70	333.72	-1.05	-11.42	11.06	2.30	1.98	18.68	40.03
	NORMAL	426.0	7.20	280.50	425.22	0.69	-20.71	20.52	2.83	2.83	-0.22	359.45
	NORMAL	517.0	9.20	283.20	515.29	3.39	-33.40	33.49	2.24	2.20	2.97	12.24
	NORMAL	609.0	10.00	284.20	606.00	7.03	-48.31	48.80	0.89	0.87	1.09	12.27
	NORMAL	700.0	10.60	281.60	695.53	10.65	-64.17	65.04	0.83	0.66	-2.86	320.95
11/29/2011	NORMAL	792.0	9.80	281.60	786.08	13.93	-80.12	81.33	0.87	-0.87	0.00	180.00
	NORMAL	883.0	10.00	277.40	875.72	16.50	-95.55	96.96	0.82	0.22	-4.62	283.41
	NORMAL	974.0	10.60	277.00	965.25	18.54	-111.69	113.21	0.66	0.66	-0.44	353.01
11/30/2011	NORMAL	1,061.0	11.30	277.20	1,050.67	20.58	-128.09	129.72	0.81	0.80	0.23	3.20
	NORMAL	1,156.0	10.30	277.40	1,143.99	22.84	-145.74	147.50	1.05	-1.05	0.21	177.95
	NORMAL	1,250.0	9.00	278.60	1,236.65	25.03	-161.35	163.25	1.40	-1.38	1.28	171.80
	NORMAL	1,344.0	7.90	276.70	1,329.63	26.88	-175.03	177.05	1.21	-1.17	-2.02	193.30
	NORMAL	1,438.0	6.80	283.70	1,422.86	28.95	-186.86	189.05	1.51	-1.17	7.45	144.29
	NORMAL	1,532.0	6.40	282.80	1,516.24	31.43	-197.37	199.84	0.44	-0.43	-0.96	194.05
	NORMAL	1,627.0	7.40	281.60	1,610.55	33.83	-208.53	211.24	1.06	1.05	-1.26	351.20
	NORMAL	1,721.0	7.30	280.40	1,703.78	36.13	-220.33	223.26	0.19	-0.11	-1.28	236.33
	NORMAL	1,815.0	7.50	278.80	1,796.99	38.14	-232.27	235.37	0.31	0.21	-1.70	313.35
	NORMAL	2,004.0	7.00	276.10	1,984.47	41.49	-255.96	259.28	0.45	-0.32	-2.63	224.81

## 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 (°)
11/30/2011	NORMAL	2,098.0	7.00	281.10	2,077.77	43.20	-267.28	270.72	0.65	0.00	5.32	92.48
	NORMAL	2,192.0	7.00	277.00	2,171.07	45.01	-278.58	282.17	0.53	0.00	-4.36	267.97
	NORMAL	2,286.0	7.80	286.70	2,264.29	47.54	-290.38	294.23	1.58	0.85	10.32	62.24
	NORMAL	2,380.0	7.70	285.50	2,357.43	51.05	-302.56	306.83	0.20	-0.11	-1.28	237.69
	NORMAL	2,475.0	7.20	283.20	2,451.63	54.11	-314.49	319.11	0.61	-0.53	-2.42	209.68
	NORMAL	2,569.0	8.60	282.10	2,544.74	56.93	-327.09	332.01	1.50	1.49	-1.17	353.29
	NORMAL	2,663.0	8.40	281.80	2,637.70	59.81	-340.69	345.90	0.22	-0.21	-0.32	192.35
	NORMAL	2,757.0	8.00	277.70	2,730.74	62.09	-353.89	359.29	0.75	-0.43	-4.36	233.61
	NORMAL	2,852.0	6.90	279.10	2,824.94	63.88	-366.08	371.61	1.17	-1.16	1.47	171.32
	NORMAL	2,946.0	6.00	281.20	2,918.34	65.72	-376.47	382.16	0.99	-0.96	2.23	166.35
	NORMAL	3,040.0	5.70	278.10	3,011.86	67.34	-385.91	391.74	0.46	-0.32	-3.30	224.95
	NORMAL	3,134.0	5.30	277.70	3,105.42	68.58	-394.83	400.75	0.43	-0.43	-0.43	185.28
	NORMAL	3,228.0	4.80	291.80	3,199.06	70.62	-402.79	408.93	1.42	-0.53	15.00	118.86
	NORMAL	3,322.0	3.30	291.30	3,292.82	73.06	-408.96	415.43	1.60	-1.60	-0.53	181.10
11/30/2011	NORMAL	1,909.0	7.30	278.60	1,890.21	39.98	-244.24	247.47	0.21	-0.21	-0.21	187.24
12/1/2011	NORMAL	3,416.0	0.80	322.90	3,386.76	74.57	-411.88	418.57	2.82	-2.66	33.62	170.90
	NORMAL	3,511.0	0.80	301.40	3,481.75	75.44	-412.84	419.67	0.31	0.00	-22.63	259.25
	NORMAL	3,605.0	0.70	289.10	3,575.74	75.97	-413.95	420.85	0.20	-0.11	-13.09	232.10
	NORMAL	3,699.0	1.10	268.20	3,669.73	76.13	-415.39	422.30	0.54	0.43	-22.23	309.86
	NORMAL	3,793.0	0.30	296.00	3,763.72	76.21	-416.52	423.42	0.90	-0.85	29.57	170.48
	NORMAL	3,888.0	0.90	352.40	3,858.72	77.06	-416.84	423.88	0.82	0.63	59.37	75.20
	NORMAL	3,982.0	1.10	325.00	3,952.70	78.53	-417.45	424.74	0.54	0.21	-29.15	278.61
	NORMAL	4,076.0	1.20	321.00	4,046.68	80.04	-418.59	426.12	0.14	0.11	-4.26	319.23
	NORMAL	4,170.0	1.10	300.60	4,140.67	81.26	-419.99	427.71	0.45	-0.11	-21.70	246.22
	NORMAL	4,264.0	2.50	323.10	4,234.62	83.36	-421.99	430.05	1.64	1.49	23.94	38.33
	NORMAL	4,359.0	2.30	326.90	4,329.53	86.61	-424.28	432.86	0.27	-0.21	4.00	143.38
	NORMAL	4,453.0	0.40	11.60	4,423.50	88.51	-425.24	434.14	2.17	-2.02	47.55	172.05
	NORMAL	4,547.0	1.10	147.30	4,517.50	88.08	-424.69	433.52	1.50	0.74	144.36	147.09
	NORMAL	4,642.0	1.10	155.40	4,612.48	86.48	-423.82	432.38	0.16	0.00	8.53	94.05
	NORMAL	4,736.0	0.80	158.50	4,706.47	85.05	-423.20	431.53	0.32	-0.32	3.30	171.83
	NORMAL	4,830.0	0.90	201.40	4,800.46	83.75	-423.23	431.33	0.67	0.11	45.64	102.93
	NORMAL	4,925.0	1.70	217.80	4,895.44	81.94	-424.37	432.14	0.92	0.84	17.26	33.29
	NORMAL	5,020.0	2.00	235.40	4,990.39	79.89	-426.59	433.98	0.67	0.32	18.53	71.15
	NORMAL	5,115.0	2.00	235.40	5,085.37	78.95	-427.96	436.34	2.11	-2.11	0.00	180.00
12/2/2011	NORMAL	5,207.0	2.20	234.30	5,177.34	77.92	-429.39	437.54	2.39	2.39	0.00	234.30
	NORMAL	5,260.0	2.30	240.30	5,230.30	76.80	-431.14	437.93	0.48	0.19	11.32	70.01
	NORMAL	5,310.0	2.30	240.30	5,280.26	75.80	-432.89	439.47	0.00	0.00	0.00	0.00