

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	SG 431-27	Wellbore No.	
Well Name	SG 431-27	Common Name	SG 431-27
Project	SG 27-07S-096W	Site	SG 41-27 Pad
Vertical Section Azimuth	232.00 (°)	North Reference	
Origin N/S		Origin E/W	
Spud Date	10/11/2011	UWI	SG 431-27
Active Datum	KB @5,109.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Started	10/5/2011	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 (°)
10/5/2011	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/5/2011	NORMAL	93.0	0.30	257.20	93.00	-0.05	-0.24	0.22	0.32	0.32	0.00	257.20
	NORMAL	154.0	1.10	269.60	153.99	-0.09	-0.98	0.83	1.33	1.31	20.33	16.96
	NORMAL	246.0	3.60	269.80	245.91	-0.11	-4.75	3.81	2.72	2.72	0.22	0.29
10/12/2011	NORMAL	337.0	6.70	259.10	336.53	-1.12	-12.82	10.80	3.55	3.41	-11.76	337.41
	NORMAL	429.0	10.10	251.00	427.54	-4.77	-25.72	23.21	3.90	3.70	-8.80	336.77
	NORMAL	520.0	12.70	239.60	516.74	-12.43	-41.90	40.67	3.77	2.86	-12.53	313.40
	NORMAL	612.0	14.60	240.60	606.14	-23.24	-60.73	62.16	2.08	2.07	1.09	7.57
	NORMAL	703.0	16.10	237.70	693.89	-35.61	-81.39	86.06	1.85	1.65	-3.19	331.49
	NORMAL	794.0	17.70	234.80	780.96	-50.33	-103.36	112.43	1.99	1.76	-3.19	330.82
	NORMAL	886.0	20.50	232.90	867.89	-68.11	-127.64	142.52	3.12	3.04	-2.07	346.58
	NORMAL	977.0	22.80	232.90	952.47	-88.36	-154.42	176.08	2.53	2.53	0.00	0.00
	NORMAL	1,071.0	25.30	231.70	1,038.30	-111.80	-184.71	214.39	2.71	2.66	-1.28	348.38
	NORMAL	1,165.0	27.80	228.70	1,122.38	-138.72	-216.95	256.36	3.02	2.66	-3.19	330.44
10/13/2011	NORMAL	1,248.0	27.29	227.96	1,195.98	-164.24	-245.62	294.67	0.74	-0.61	-0.89	213.53
	NORMAL	1,343.0	24.92	230.77	1,281.28	-191.49	-277.30	336.41	2.81	-2.49	2.96	153.70
	NORMAL	1,437.0	26.94	231.74	1,365.81	-217.20	-309.37	377.51	2.20	2.15	1.03	12.30
	NORMAL	1,531.0	27.29	231.56	1,449.48	-243.78	-342.96	420.35	0.38	0.37	-0.19	346.73
	NORMAL	1,625.0	26.89	231.47	1,533.17	-270.42	-376.47	463.15	0.43	-0.43	-0.10	185.81
	NORMAL	1,720.0	26.85	227.34	1,617.92	-298.34	-409.06	506.02	1.96	-0.04	-4.35	266.93
	NORMAL	1,814.0	26.54	226.38	1,701.90	-327.22	-439.87	548.08	0.57	-0.33	-1.02	233.86

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 (°)
10/13/2011	NORMAL	1,908.0	25.05	226.81	1,786.53	-355.33	-469.59	588.80	1.60	-1.59	0.46	173.04
	NORMAL	2,002.0	23.25	226.90	1,872.30	-381.63	-497.64	627.10	1.92	-1.91	0.10	178.87
	NORMAL	2,097.0	21.75	227.61	1,960.07	-406.30	-524.34	663.33	1.60	-1.58	0.75	170.06
	NORMAL	2,191.0	20.87	230.15	2,047.64	-428.78	-550.06	697.43	1.36	-0.94	2.70	134.81
	NORMAL	2,285.0	19.56	230.68	2,135.85	-449.48	-575.08	729.90	1.41	-1.39	0.56	172.29
10/14/2011	NORMAL	2,379.0	17.49	229.19	2,224.98	-468.68	-597.95	759.74	2.26	-2.20	-1.59	192.18
	NORMAL	2,474.0	17.14	226.90	2,315.67	-487.58	-618.98	787.94	0.81	-0.37	-2.41	241.73
	NORMAL	2,568.0	15.21	231.65	2,405.95	-504.69	-638.76	814.07	2.49	-2.05	5.05	147.83
	NORMAL	2,662.0	15.56	231.56	2,496.58	-520.18	-658.31	839.01	0.37	0.37	-0.10	356.05
	NORMAL	2,757.0	14.41	236.31	2,588.35	-534.66	-678.13	863.54	1.77	-1.21	5.00	135.39
	NORMAL	2,851.0	11.82	232.79	2,679.90	-546.97	-695.53	884.84	2.88	-2.76	-3.74	195.43
	NORMAL	2,945.0	10.11	233.58	2,772.18	-557.70	-709.84	902.71	1.83	-1.82	0.84	175.37
	NORMAL	3,039.0	8.61	235.78	2,864.92	-566.55	-722.29	917.98	1.64	-1.60	2.34	167.67
	NORMAL	3,133.0	7.29	233.76	2,958.02	-574.03	-732.92	930.96	1.44	-1.40	-2.15	190.95
	NORMAL	3,228.0	6.06	225.06	3,052.37	-581.14	-741.33	941.97	1.67	-1.29	-9.16	215.16
	NORMAL	3,322.0	4.57	227.61	3,145.97	-587.17	-747.61	950.63	1.60	-1.59	2.71	172.26
	NORMAL	3,416.0	3.38	241.84	3,239.74	-591.00	-752.82	957.09	1.64	-1.27	15.14	147.30
	NORMAL	3,510.0	1.67	256.35	3,333.65	-592.63	-756.60	961.07	1.93	-1.82	15.44	166.65
	NORMAL	3,604.0	0.83	264.61	3,427.62	-593.02	-758.61	962.89	0.91	-0.89	8.79	172.00
	NORMAL	3,698.0	0.13	100.34	3,521.62	-593.10	-759.18	963.39	1.02	-0.74	-174.76	182.11
	NORMAL	3,793.0	0.26	155.10	3,616.62	-593.32	-758.98	963.37	0.22	0.14	57.64	84.61
	NORMAL	3,887.0	0.31	249.05	3,710.62	-593.60	-759.13	963.66	0.44	0.05	99.95	132.29
	NORMAL	3,981.0	0.04	246.24	3,804.62	-593.71	-759.40	963.94	0.29	-0.29	-2.99	180.42
	NORMAL	4,075.0	0.26	280.34	3,898.62	-593.68	-759.64	964.11	0.24	0.23	36.28	39.74
	NORMAL	4,169.0	0.48	265.66	3,992.62	-593.67	-760.24	964.58	0.25	0.23	-15.62	329.23
	NORMAL	4,263.0	0.70	243.78	4,086.61	-593.96	-761.15	965.47	0.33	0.23	-23.28	303.03
	NORMAL	4,357.0	0.88	233.85	4,180.60	-594.64	-762.24	966.75	0.24	0.19	-10.56	317.71
	NORMAL	4,452.0	0.83	233.49	4,275.59	-595.48	-763.39	968.17	0.05	-0.05	-0.38	185.95
	NORMAL	4,546.0	0.97	248.17	4,369.58	-596.18	-764.67	969.61	0.29	0.15	15.62	66.21
	NORMAL	4,640.0	0.31	286.31	4,463.57	-596.40	-765.66	970.53	0.80	-0.70	40.57	165.23
	NORMAL	4,734.0	0.44	267.77	4,557.57	-596.34	-766.26	970.97	0.19	0.14	-19.72	307.45
	NORMAL	4,829.0	0.92	284.62	4,652.57	-596.17	-767.36	971.73	0.54	0.51	17.74	31.19
	NORMAL	4,923.0	1.27	270.50	4,746.55	-595.97	-769.13	973.00	0.47	0.37	-15.02	315.17
NORMAL	5,017.0	1.49	266.37	4,840.52	-596.04	-771.40	974.82	0.26	0.23	-4.39	333.60	
NORMAL	5,111.0	1.71	261.71	4,934.48	-596.31	-774.00	977.05	0.27	0.23	-4.96	327.06	
NORMAL	5,205.0	1.93	259.51	5,028.44	-596.81	-776.95	979.67	0.25	0.23	-2.34	341.28	
NORMAL	5,273.0	2.20	257.75	5,096.39	-597.29	-779.35	981.86	0.41	0.40	-2.59	345.90	
NORMAL	5,318.0	2.20	257.75	5,141.36	-597.66	-781.04	983.42	0.00	0.00	0.00	0.00	