

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	RWF 11-36	Wellbore No.	
Well Name	RWF 11-36	Common Name	RWF 11-36
Project	RU 36-06S-094W	Site	GV 15-36 Pad
Vertical Section Azimuth	317.89 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	3/21/2012	UWI	RWF 11-36
Active Datum	KB @6,413.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Date Started	3/21/2012	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 (°)
3/21/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3/22/2012	NORMAL	86.0	0.53	341.28	86.00	0.38	-0.13	0.37	0.62	0.62	0.00	341.28
	NORMAL	177.0	2.20	334.51	176.97	2.35	-1.01	2.43	1.84	1.84	-7.44	351.09
	NORMAL	268.0	3.61	327.30	267.85	6.34	-3.31	6.93	1.60	1.55	-7.92	341.85
	NORMAL	359.0	5.37	319.92	358.57	12.01	-7.60	14.01	2.03	1.93	-8.11	338.12
	NORMAL	450.0	8.09	318.34	448.93	20.05	-14.60	24.67	3.00	2.99	-1.74	355.32
	NORMAL	522.0	9.64	316.07	520.07	28.18	-22.15	35.76	2.21	2.15	-3.15	346.16
	NORMAL	614.0	9.96	315.40	610.73	39.39	-33.08	51.41	0.37	0.35	-0.73	340.05
	NORMAL	705.0	11.20	317.28	700.18	51.49	-44.61	68.11	1.41	1.36	2.07	16.48
3/23/2012	NORMAL	796.0	10.98	316.06	789.48	64.22	-56.62	85.61	0.35	-0.24	-1.34	226.25
	NORMAL	888.0	10.95	314.53	879.80	76.66	-68.92	103.09	0.32	-0.03	-1.66	263.36
	NORMAL	984.0	10.72	315.60	974.09	89.43	-81.67	121.11	0.32	-0.24	1.11	139.35
	NORMAL	1,079.0	11.70	321.05	1,067.28	103.24	-93.91	139.56	1.52	1.03	5.74	49.93
	NORMAL	1,119.0	12.31	321.58	1,106.40	109.73	-99.11	147.86	1.55	1.53	1.32	10.50
3/24/2012	NORMAL	1,263.0	13.37	320.61	1,246.80	134.63	-119.21	179.81	0.75	0.74	-0.67	348.03
	NORMAL	1,358.0	14.16	319.47	1,339.07	151.95	-133.73	202.40	0.88	0.83	-1.20	340.50
	NORMAL	1,454.0	13.54	318.85	1,432.28	169.33	-148.76	225.37	0.66	-0.65	-0.65	193.16
	NORMAL	1,549.0	12.05	317.97	1,524.92	185.08	-162.72	246.41	1.58	-1.57	-0.93	187.02
	NORMAL	1,645.0	11.70	317.45	1,618.86	199.69	-176.01	266.17	0.38	-0.36	-0.54	196.75
	NORMAL	1,741.0	10.42	315.77	1,713.08	213.08	-188.65	284.58	1.37	-1.33	-1.75	193.31
	NORMAL	1,836.0	10.90	315.95	1,806.44	225.69	-200.89	302.14	0.51	0.51	0.19	4.06

2.1.2 Survey Stations (Continued)

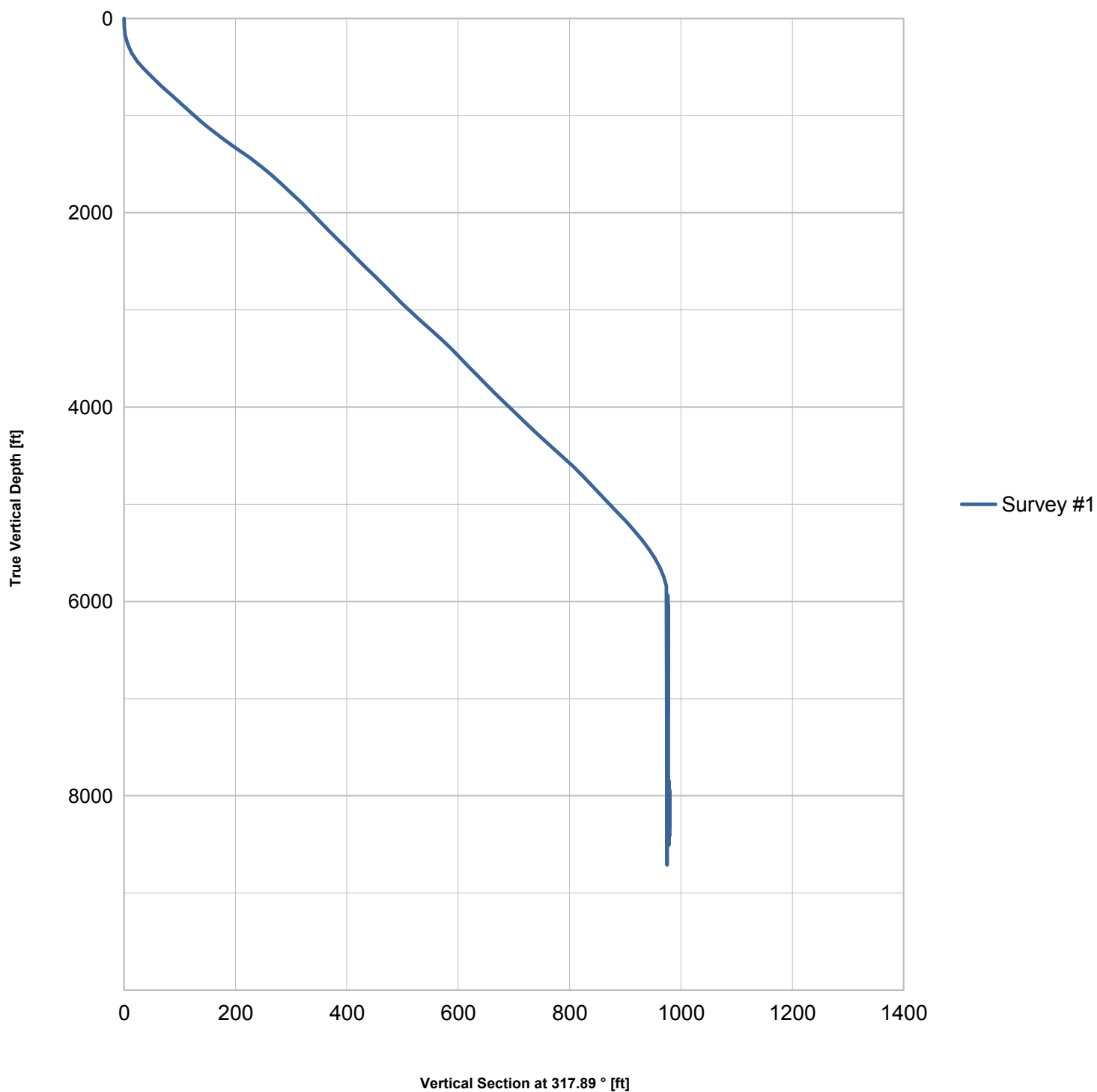
Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLS (°/100ft)	Build Rate (°/100ft)	Turn (°/100ft)	TFace (°)
3/24/2012	NORMAL	1,931.0	10.11	316.48	1,899.85	238.19	-212.87	319.45	0.84	-0.83	0.56	173.29
	NORMAL	2,026.0	9.38	317.19	1,993.48	249.92	-223.88	335.53	0.78	-0.77	0.75	171.00
	NORMAL	2,122.0	9.58	317.45	2,088.16	261.54	-234.59	351.34	0.21	0.21	0.27	12.21
	NORMAL	2,217.0	9.85	317.27	2,181.80	273.34	-245.45	367.37	0.29	0.28	-0.19	353.49
	NORMAL	2,313.0	10.29	317.36	2,276.32	285.68	-256.83	384.15	0.46	0.46	0.09	2.09
	NORMAL	2,409.0	9.73	318.36	2,370.86	298.05	-268.03	400.84	0.61	-0.58	1.04	163.25
	NORMAL	2,503.0	9.67	318.41	2,463.52	309.89	-278.55	416.68	0.06	-0.06	0.05	172.03
	NORMAL	2,597.0	10.18	318.13	2,556.11	321.98	-289.34	432.88	0.54	0.54	-0.30	354.46
	NORMAL	2,692.0	10.46	319.38	2,649.57	334.78	-300.55	449.89	0.38	0.29	1.32	39.27
	NORMAL	2,787.0	9.76	317.09	2,743.10	347.22	-311.65	466.57	0.85	-0.74	-2.41	208.74
	NORMAL	2,883.0	9.39	318.41	2,837.76	359.04	-322.39	482.53	0.45	-0.39	1.38	149.96
	NORMAL	2,978.0	10.37	313.19	2,931.35	370.68	-333.77	498.81	1.40	1.03	-5.49	314.98
3/25/2012	NORMAL	3,072.0	10.90	312.91	3,023.74	382.53	-346.44	516.09	0.57	0.56	-0.30	354.29
	NORMAL	3,164.0	10.82	317.01	3,114.09	394.76	-358.70	533.39	0.84	-0.09	4.46	97.92
	NORMAL	3,260.0	11.43	317.97	3,208.29	408.42	-371.22	551.91	0.66	0.64	1.00	17.36
	NORMAL	3,355.0	10.20	315.95	3,301.60	421.46	-383.37	569.73	1.35	-1.29	-2.13	196.14
	NORMAL	3,451.0	10.38	315.25	3,396.05	433.71	-395.37	586.87	0.23	0.19	-0.73	324.87
	NORMAL	3,546.0	9.32	319.12	3,489.65	445.61	-406.43	603.11	1.31	-1.12	4.07	149.91
	NORMAL	3,642.0	9.67	319.12	3,584.34	457.58	-416.79	618.94	0.36	0.36	0.00	0.00
	NORMAL	3,737.0	9.71	320.46	3,677.98	469.79	-427.11	634.92	0.24	0.04	1.41	80.60
	NORMAL	3,833.0	9.87	318.46	3,772.59	482.19	-437.72	651.24	0.39	0.17	-2.08	294.21
	NORMAL	3,927.0	10.02	318.32	3,865.17	494.33	-448.50	667.47	0.16	0.16	-0.15	350.77
	NORMAL	4,022.0	10.23	318.93	3,958.69	506.86	-459.54	684.17	0.25	0.22	0.64	27.35
	NORMAL	4,117.0	10.35	317.68	4,052.17	519.53	-470.83	701.14	0.27	0.13	-1.32	297.64
3/26/2012	NORMAL	4,213.0	10.38	318.59	4,146.60	532.40	-482.36	718.41	0.17	0.03	0.95	80.06
	NORMAL	4,308.0	10.55	318.15	4,240.02	545.29	-493.82	735.66	0.20	0.18	-0.46	334.60
	NORMAL	4,402.0	10.67	317.82	4,332.41	558.15	-505.40	752.97	0.14	0.13	-0.35	332.98
	NORMAL	4,497.0	10.97	319.29	4,425.72	571.52	-517.21	770.80	0.43	0.32	1.55	43.33
	NORMAL	4,591.0	11.10	318.28	4,517.98	585.05	-529.06	788.79	0.25	0.14	-1.07	303.42
	NORMAL	4,687.0	10.73	322.28	4,612.25	599.02	-540.68	806.94	0.88	-0.39	4.17	117.99
	NORMAL	4,783.0	9.39	326.31	4,706.77	612.61	-550.49	823.60	1.58	-1.40	4.20	154.26
	NORMAL	4,878.0	9.55	327.35	4,800.48	625.69	-559.04	839.04	0.25	0.17	1.09	47.44
	NORMAL	4,974.0	9.15	322.37	4,895.20	638.44	-568.00	854.51	0.94	-0.42	-5.19	241.25
	NORMAL	5,069.0	9.45	322.28	4,988.96	650.59	-577.38	869.81	0.32	0.32	-0.09	357.18
	NORMAL	5,165.0	9.83	322.87	5,083.60	663.36	-587.15	885.84	0.41	0.40	0.61	14.87
	NORMAL	5,261.0	9.50	322.72	5,178.24	676.20	-596.89	901.89	0.34	-0.34	-0.16	184.29
3/27/2012	NORMAL	5,356.0	8.21	318.12	5,272.10	687.48	-606.17	916.49	1.55	-1.36	-4.84	206.50
	NORMAL	5,451.0	8.10	315.86	5,366.14	697.34	-615.36	929.96	0.36	-0.12	-2.38	249.95
	NORMAL	5,547.0	6.92	316.60	5,461.32	706.39	-624.04	942.50	1.23	-1.23	0.77	175.68
	NORMAL	5,642.0	6.13	316.65	5,555.70	714.24	-631.46	953.29	0.83	-0.83	0.05	179.61
	NORMAL	5,738.0	4.66	321.66	5,651.27	721.03	-637.40	962.31	1.61	-1.53	5.22	164.72
	NORMAL	5,834.0	3.60	325.25	5,747.02	726.56	-641.53	969.19	1.14	-1.10	3.74	168.08
	NORMAL	5,929.0	2.20	327.90	5,841.90	730.56	-644.20	973.95	1.48	-1.47	2.79	175.85
	NORMAL	6,024.0	0.70	337.05	5,936.87	732.64	-645.40	976.29	1.59	-1.58	9.63	175.78
	NORMAL	6,120.0	0.65	32.70	6,032.86	733.64	-645.33	976.99	0.66	-0.05	57.97	121.84
	NORMAL	6,216.0	0.41	25.98	6,128.86	734.40	-644.89	977.26	0.26	-0.25	-7.00	191.18
	NORMAL	6,311.0	0.17	49.61	6,223.86	734.80	-644.63	977.38	0.28	-0.25	24.87	165.00
	NORMAL	6,407.0	0.24	207.47	6,319.86	734.71	-644.62	977.30	0.42	0.07	164.44	167.02
3/28/2012	NORMAL	6,502.0	0.42	235.06	6,414.85	734.34	-644.99	977.28	0.25	0.19	29.04	55.79
	NORMAL	6,598.0	1.01	206.93	6,510.85	733.38	-645.67	977.02	0.70	0.61	-29.30	314.67
	NORMAL	6,693.0	0.36	193.33	6,605.84	732.34	-646.11	976.55	0.70	-0.68	-14.32	187.31
	NORMAL	6,787.0	0.18	336.78	6,699.84	732.19	-646.24	976.52	0.55	-0.19	152.61	168.01
	NORMAL	6,883.0	0.18	247.13	6,795.84	732.27	-646.44	976.72	0.26	0.00	-93.39	225.18
	NORMAL	6,978.0	0.18	13.43	6,890.84	732.36	-646.54	976.85	0.34	0.00	132.95	153.15
	NORMAL	7,073.0	0.09	243.53	6,985.84	732.47	-646.57	976.95	0.26	-0.09	-136.74	196.20
	NORMAL	7,169.0	0.15	134.56	7,081.84	732.35	-646.55	976.85	0.21	0.06	-113.51	225.63
	NORMAL	7,264.0	0.57	178.85	7,176.84	731.79	-646.45	976.37	0.50	0.44	46.62	57.05

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 (°)
3/28/2012	NORMAL	7,360.0	0.58	161.74	7,272.83	730.85	-646.29	975.56	0.18	0.01	-17.82	264.75
	NORMAL	7,454.0	0.15	87.28	7,366.83	730.41	-646.02	975.05	0.59	-0.46	-79.21	194.99
	NORMAL	7,550.0	0.24	246.37	7,462.83	730.33	-646.08	975.03	0.40	0.09	165.72	167.11
	NORMAL	7,644.0	0.65	245.89	7,556.83	730.03	-646.74	975.26	0.44	0.44	-0.51	359.24
	NORMAL	7,740.0	0.87	292.00	7,652.82	730.08	-647.92	976.08	0.65	0.23	48.03	94.27
3/29/2012	NORMAL	7,835.0	0.88	292.16	7,747.81	730.63	-649.26	977.39	0.01	0.01	0.17	13.81
	NORMAL	7,931.0	0.62	330.19	7,843.80	731.36	-650.20	978.56	0.57	-0.27	39.61	135.72
	NORMAL	8,025.0	0.69	301.86	7,937.79	732.10	-650.94	979.60	0.35	0.07	-30.14	267.79
	NORMAL	8,120.0	0.41	219.50	8,032.79	732.14	-651.64	980.10	0.79	-0.29	-86.69	212.60
	NORMAL	8,214.0	0.97	224.28	8,126.78	731.31	-652.41	980.00	0.60	0.60	5.09	8.26
3/30/2012	NORMAL	8,309.0	1.23	230.43	8,221.77	730.08	-653.76	980.00	0.30	0.27	6.47	27.52
3/31/2012	NORMAL	8,405.0	1.75	227.32	8,317.73	728.43	-655.63	980.03	0.55	0.54	-3.24	349.60
	NORMAL	8,501.0	2.73	217.43	8,413.66	725.62	-658.09	979.60	1.09	1.02	-10.30	333.48
	NORMAL	8,596.0	3.61	207.49	8,508.51	721.17	-660.85	978.15	1.09	0.93	-10.46	322.98
	NORMAL	8,743.0	3.61	208.72	8,655.22	713.01	-665.21	975.01	0.05	0.00	0.84	90.61
4/1/2012	NORMAL	8,800.0	3.61	28.72	8,712.18	713.01	-665.21	975.01	12.67	0.00	315.79	180.00

3 Charts

3.1 Vertical Section View



3.2 Plan View

