

## 1 General

### 1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

### 1.2 Well/Wellbore Information

Well	RWF 11-25	Wellbore No.	00
Wellbore Legal Name	RWF 11-25	Common Wellbore Name	RWF 11-25
Project	RU 25-06S-094W	Site	RWF 22-25 Pad
Vertical Section Azimuth	335.85 (°)	North reference	True
Origin N/S		Origin E/W	
Spud date	2/2/2014	UWI	RWF 11-25
Active datum	KB @6,058.4ft (above Mean Sea Level)		

## 2 Survey Name

### 2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Date Started	2/3/2014	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 (°/100usft)	Build Rate (°/100usft)	Turn (°/100usft )	Tface (°)
2/3/2014	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2/3/2014	NORMAL	74.0	0.26	14.15	74.00	0.16	0.04	0.13	0.35	0.35	0.00	14.15
	NORMAL	165.0	2.02	329.15	164.98	1.74	-0.73	1.89	2.03	1.93	-49.45	309.28
	NORMAL	255.0	4.13	341.28	254.85	6.17	-2.58	6.69	2.44	2.34	13.48	23.26
	NORMAL	347.0	8.09	335.30	346.31	15.19	-6.35	16.46	4.35	4.30	-6.50	347.88
	NORMAL	437.0	10.82	335.74	435.07	28.65	-12.47	31.25	3.03	3.03	0.49	1.73
	NORMAL	527.0	14.43	336.36	522.88	46.63	-20.44	50.91	4.01	4.01	0.69	2.45
	NORMAL	617.0	16.80	336.80	609.56	68.86	-30.06	75.14	2.64	2.63	0.49	3.07
	NORMAL	707.0	20.23	335.65	694.88	95.00	-41.61	103.71	3.83	3.81	-1.28	353.38
	NORMAL	797.0	23.84	336.36	778.30	125.85	-55.32	137.47	4.02	4.01	0.79	4.55
	NORMAL	868.0	24.98	336.49	842.95	152.74	-67.06	166.81	1.61	1.61	0.18	2.76
	NORMAL	959.0	26.88	336.13	924.78	189.18	-83.05	206.60	2.10	2.09	-0.40	355.10
	NORMAL	1,053.0	28.34	334.93	1,008.08	228.82	-101.10	250.16	1.66	1.55	-1.28	338.61
	NORMAL	1,151.0	27.05	335.08	1,094.85	270.10	-120.35	295.70	1.32	-1.32	0.15	176.97
2/5/2014	NORMAL	1,238.0	27.35	335.37	1,172.23	306.18	-137.08	335.46	0.38	0.34	0.33	23.97
	NORMAL	1,332.0	28.28	334.63	1,255.37	345.93	-155.62	379.32	1.06	0.99	-0.79	339.30
	NORMAL	1,426.0	28.03	336.76	1,338.25	386.35	-173.87	423.67	1.10	-0.27	2.27	104.91
	NORMAL	1,522.0	26.68	337.86	1,423.51	427.04	-190.90	467.76	1.50	-1.41	1.15	159.96
	NORMAL	1,616.0	26.92	337.22	1,507.41	466.20	-207.09	510.13	0.40	0.26	-0.68	309.46
	NORMAL	1,711.0	27.75	337.37	1,591.80	506.45	-223.93	553.74	0.88	0.87	0.16	4.81
	NORMAL	1,806.0	26.76	335.97	1,676.26	546.40	-241.15	597.23	1.24	-1.04	-1.47	212.31

## 2.1.2 Survey Stations (Continued)

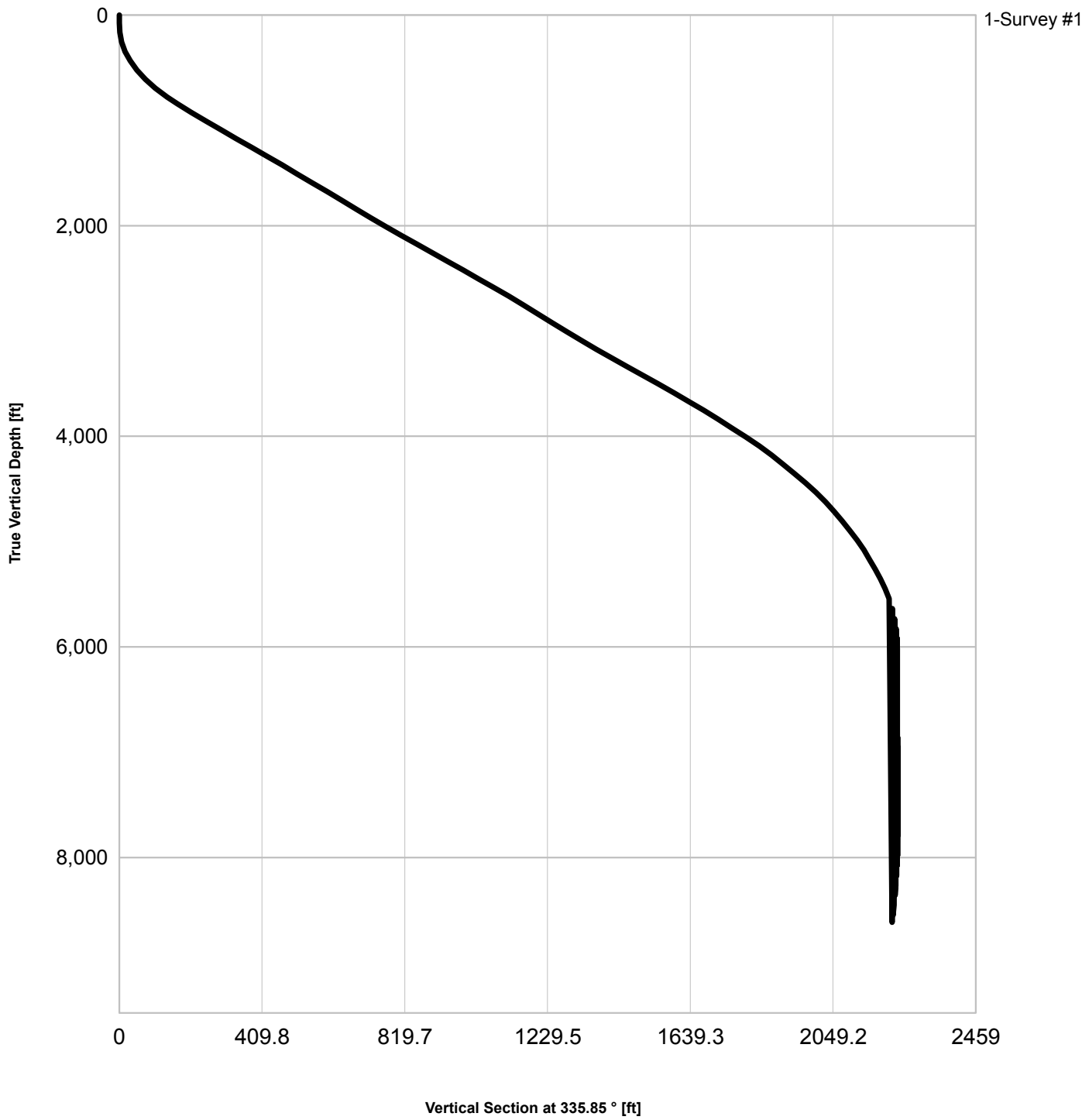
Date	Type	MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. sec. (ft)	DLS (°/100usft)	Build Rate (°/100usft)	Turn (°/100usft)	Tface (°)
2/5/2014	NORMAL	1,899.0	26.38	335.05	1,759.44	584.25	-258.39	638.83	0.60	-0.41	-0.99	226.87
	NORMAL	1,993.0	26.91	334.79	1,843.45	622.43	-276.26	680.98	0.58	0.56	-0.28	347.48
	NORMAL	2,087.0	26.63	334.21	1,927.38	660.65	-294.48	723.31	0.41	-0.30	-0.62	222.76
	NORMAL	2,180.0	27.62	335.65	2,010.15	699.05	-312.44	765.70	1.28	1.06	1.55	34.19
	NORMAL	2,273.0	28.23	334.92	2,092.32	738.62	-330.65	809.25	0.75	0.66	-0.78	330.41
	NORMAL	2,367.0	28.45	335.15	2,175.05	779.07	-349.49	853.87	0.26	0.23	0.24	26.50
	NORMAL	2,460.0	28.10	334.68	2,256.96	818.97	-368.16	897.91	0.45	-0.38	-0.51	212.25
	NORMAL	2,553.0	28.32	335.41	2,338.91	858.82	-386.71	941.87	0.44	0.24	0.78	57.80
	NORMAL	2,647.0	28.58	335.75	2,421.56	899.60	-405.22	986.65	0.33	0.28	0.36	32.07
	NORMAL	2,741.0	27.75	336.20	2,504.43	940.12	-423.29	1,031.02	0.91	-0.88	0.48	165.84
	NORMAL	2,835.0	28.23	336.45	2,587.43	980.53	-441.00	1,075.13	0.53	0.51	0.27	13.85
	NORMAL	2,927.0	27.58	336.51	2,668.73	1,020.01	-458.18	1,118.19	0.71	-0.71	0.07	177.55
	NORMAL	3,021.0	25.76	336.45	2,752.73	1,058.69	-475.02	1,160.38	1.94	-1.94	-0.06	180.82
	NORMAL	3,115.0	26.13	336.67	2,837.26	1,096.42	-491.38	1,201.50	0.41	0.39	0.23	14.68
	NORMAL	3,210.0	25.55	335.87	2,922.76	1,134.33	-508.04	1,242.90	0.71	-0.61	-0.84	210.65
	NORMAL	3,305.0	26.88	336.61	3,007.98	1,172.74	-524.94	1,284.86	1.44	1.40	0.78	14.14
	NORMAL	3,398.0	27.46	336.86	3,090.72	1,211.75	-541.71	1,327.33	0.64	0.62	0.27	11.25
	NORMAL	3,490.0	27.55	336.89	3,172.32	1,250.83	-558.40	1,369.81	0.10	0.10	0.03	8.76
	NORMAL	3,583.0	28.07	337.53	3,254.58	1,290.83	-575.20	1,413.18	0.64	0.56	0.69	30.15
	NORMAL	3,677.0	28.20	337.32	3,337.47	1,331.76	-592.22	1,457.49	0.17	0.14	-0.22	322.61
	NORMAL	3,771.0	28.64	337.91	3,420.15	1,373.12	-609.26	1,502.21	0.56	0.47	0.63	32.80
2/6/2014	NORMAL	3,865.0	28.77	337.72	3,502.59	1,414.93	-626.30	1,547.33	0.17	0.14	-0.20	324.85
	NORMAL	3,960.0	27.36	336.69	3,586.42	1,456.13	-643.61	1,592.01	1.57	-1.48	-1.08	198.51
	NORMAL	4,054.0	27.09	336.07	3,670.01	1,495.54	-660.84	1,635.01	0.42	-0.29	-0.66	226.14
	NORMAL	4,148.0	26.93	335.95	3,753.76	1,534.54	-678.20	1,677.70	0.18	-0.17	-0.13	198.76
	NORMAL	4,242.0	25.52	335.86	3,838.08	1,572.46	-695.15	1,719.24	1.50	-1.50	-0.10	181.58
	NORMAL	4,336.0	25.48	335.03	3,922.92	1,609.26	-711.97	1,759.70	0.38	-0.04	-0.88	263.24
	NORMAL	4,428.0	24.85	336.53	4,006.19	1,644.94	-728.02	1,798.82	0.97	-0.68	1.63	135.32
	NORMAL	4,523.0	23.32	337.54	4,092.92	1,680.62	-743.16	1,837.58	1.67	-1.61	1.06	165.38
	NORMAL	4,618.0	21.46	336.10	4,180.75	1,713.89	-757.38	1,873.76	2.04	-1.96	-1.52	195.77
	NORMAL	4,711.0	20.30	337.07	4,267.64	1,744.31	-770.56	1,906.90	1.30	-1.25	1.04	163.86
	NORMAL	4,804.0	20.32	337.93	4,354.86	1,774.13	-782.91	1,939.16	0.32	0.02	0.92	86.57
	NORMAL	4,897.0	18.51	336.36	4,442.57	1,802.62	-794.90	1,970.06	2.03	-1.95	-1.69	195.35
	NORMAL	4,991.0	18.29	338.65	4,531.76	1,830.03	-806.26	1,999.72	0.80	-0.23	2.44	108.01
	NORMAL	5,086.0	16.01	339.41	4,622.53	1,856.18	-816.29	2,027.69	2.41	-2.40	0.80	174.75
	NORMAL	5,180.0	13.94	337.78	4,713.34	1,878.80	-825.13	2,051.94	2.25	-2.20	-1.73	190.72
	NORMAL	5,274.0	14.57	338.78	4,804.44	1,900.30	-833.69	2,075.07	0.72	0.67	1.06	21.83
	NORMAL	5,367.0	13.58	338.13	4,894.65	1,921.34	-842.00	2,097.66	1.08	-1.06	-0.70	188.76
	NORMAL	5,461.0	12.36	338.95	4,986.25	1,940.97	-849.72	2,118.73	1.31	-1.30	0.87	171.82
2/7/2014	NORMAL	5,555.0	10.80	338.37	5,078.33	1,958.55	-856.58	2,137.58	1.66	-1.66	-0.62	183.98
	NORMAL	5,649.0	9.85	337.12	5,170.81	1,974.14	-862.95	2,154.42	1.04	-1.01	-1.33	192.66
	NORMAL	5,742.0	10.23	337.63	5,262.39	1,989.11	-869.19	2,170.62	0.42	0.41	0.55	13.42
	NORMAL	5,836.0	8.46	341.49	5,355.14	2,003.38	-874.56	2,185.85	2.00	-1.88	4.11	162.40
	NORMAL	5,931.0	7.51	339.57	5,449.21	2,015.83	-878.95	2,199.00	1.04	-1.00	-2.02	194.73
	NORMAL	6,025.0	6.60	339.27	5,542.50	2,026.64	-883.00	2,210.52	0.97	-0.97	-0.32	182.17
	NORMAL	6,120.0	4.54	340.23	5,637.05	2,035.28	-886.21	2,219.72	2.17	-2.17	1.01	177.89
	NORMAL	6,215.0	3.31	350.08	5,731.82	2,041.52	-887.95	2,226.13	1.47	-1.29	10.37	156.12
2/8/2014	NORMAL	6,309.0	2.23	341.18	5,825.71	2,045.93	-889.01	2,230.58	1.23	-1.15	-9.47	197.31
	NORMAL	6,402.0	0.97	356.32	5,918.68	2,048.42	-889.64	2,233.12	1.42	-1.35	16.28	168.92
	NORMAL	6,495.0	0.19	174.46	6,011.67	2,049.06	-889.68	2,233.71	1.25	-0.84	191.55	179.70
	NORMAL	6,589.0	0.49	264.56	6,105.67	2,048.86	-890.07	2,233.69	0.56	0.32	95.85	111.28
	NORMAL	6,682.0	0.63	185.69	6,198.67	2,048.32	-890.51	2,233.38	0.77	0.15	-84.81	239.21
	NORMAL	6,777.0	0.82	181.29	6,293.66	2,047.12	-890.58	2,232.31	0.21	0.20	-4.63	341.46
2/9/2014	NORMAL	6,870.0	0.71	239.59	6,386.65	2,046.16	-891.09	2,231.65	0.81	-0.12	62.69	126.49
	NORMAL	6,965.0	0.70	19.08	6,481.65	2,046.41	-891.41	2,232.00	1.39	-0.01	146.83	159.89
	NORMAL	7,060.0	0.72	10.16	6,576.64	2,047.55	-891.11	2,232.92	0.12	0.02	-9.39	275.78

### 2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. sec. (ft)	DLS (°/100usft)	Build Rate (°/100usft)	Turn (°/100usft )	Tface (°)
2/9/2014	NORMAL	7,155.0	1.14	43.69	6,671.63	2,048.82	-890.36	2,233.77	0.71	0.44	35.29	69.91
	NORMAL	7,248.0	0.62	70.72	6,764.62	2,049.65	-889.24	2,234.08	0.70	-0.56	29.06	154.39
	NORMAL	7,342.0	0.83	15.05	6,858.61	2,050.48	-888.58	2,234.56	0.75	0.22	-59.22	257.51
	NORMAL	7,436.0	0.34	98.28	6,952.61	2,051.10	-888.13	2,234.94	0.91	-0.52	88.54	156.86
	NORMAL	7,529.0	0.50	109.83	7,045.61	2,050.92	-887.48	2,234.51	0.19	0.17	12.42	33.74
	NORMAL	7,622.0	0.97	178.34	7,138.60	2,049.99	-887.07	2,233.50	0.98	0.51	73.67	99.10
	NORMAL	7,716.0	0.08	246.89	7,232.60	2,049.17	-887.11	2,232.76	1.00	-0.95	72.93	175.47
	NORMAL	7,810.0	0.35	62.72	7,326.60	2,049.28	-886.92	2,232.78	0.46	0.29	187.05	176.61
	NORMAL	7,904.0	0.73	208.45	7,420.59	2,048.88	-886.95	2,232.43	1.10	0.40	155.03	156.67
	NORMAL	7,997.0	0.10	63.68	7,513.59	2,048.40	-887.15	2,232.08	0.87	-0.68	-155.67	184.07
2/10/2014	NORMAL	8,091.0	1.14	276.86	7,607.59	2,048.55	-888.01	2,232.56	1.30	1.11	-156.19	210.62
	NORMAL	8,185.0	1.32	273.17	7,701.56	2,048.72	-890.02	2,233.54	0.21	0.19	-3.93	334.40
	NORMAL	8,279.0	1.50	256.87	7,795.54	2,048.50	-892.30	2,234.27	0.47	0.19	-17.34	285.88
	NORMAL	8,372.0	3.25	253.05	7,888.45	2,047.45	-896.01	2,234.84	1.89	1.88	-4.11	352.92
	NORMAL	8,466.0	3.11	232.02	7,982.31	2,045.11	-900.56	2,234.56	1.24	-0.15	-22.37	252.73
	NORMAL	8,560.0	4.60	234.70	8,076.10	2,041.36	-905.65	2,233.22	1.60	1.59	2.85	8.23
	NORMAL	8,655.0	4.09	231.68	8,170.82	2,037.06	-911.42	2,231.66	0.59	-0.54	-3.18	202.66
	NORMAL	8,749.0	4.70	231.75	8,264.55	2,032.60	-917.07	2,229.90	0.65	0.65	0.07	0.54
	NORMAL	8,843.0	4.68	221.82	8,358.23	2,027.35	-922.65	2,227.40	0.86	-0.02	-10.56	263.64
	NORMAL	8,937.0	4.54	226.35	8,451.93	2,021.93	-927.90	2,224.59	0.41	-0.15	4.82	113.28
	NORMAL	9,032.0	5.59	223.63	8,546.56	2,015.98	-933.82	2,221.59	1.13	1.11	-2.86	345.76
	NORMAL	9,100.0	5.59	223.63	8,614.23	2,011.19	-938.39	2,219.08	0.00	0.00	0.00	0.00

3 Charts

3.1 Vertical Section View



### 3.2 Plan View

