

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	RWF 41-34	Wellbore No.	OH
Well Name	RWF 41-34	Common Name	RWF 41-34
Project	RU 27-06S-094W	Site	RMV 28-27 Pad
Vertical Section Azimuth	112.66 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	9/30/2012	UWI	RWF 41-34
Active Datum	KB @5,323.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	MOSTAR
Date Started	9/30/2012	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 (°)
9/30/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/30/2012	NORMAL	102.0	1.76	78.13	101.98	0.32	1.53	1.29	1.73	1.73	0.00	78.13
	NORMAL	163.0	2.64	87.36	162.94	0.58	3.85	3.33	1.55	1.44	15.13	26.59
	NORMAL	254.0	3.26	100.55	253.82	0.20	8.49	7.76	1.01	0.68	14.49	54.31
	NORMAL	344.0	4.57	113.12	343.61	-1.67	14.30	13.84	1.73	1.46	13.97	39.61
	NORMAL	436.0	8.18	117.00	435.02	-6.09	23.51	24.04	3.95	3.92	4.22	8.74
	NORMAL	528.0	12.49	118.65	525.51	-13.83	38.08	40.47	4.70	4.68	1.79	4.74
	NORMAL	619.0	14.60	116.98	613.98	-23.75	56.94	61.69	2.36	2.32	-1.84	348.69
	NORMAL	690.0	17.72	115.48	682.16	-32.46	74.67	81.41	4.43	4.39	-2.11	351.66
	NORMAL	781.0	21.26	112.28	767.94	-44.68	102.45	111.75	4.06	3.89	-3.52	341.70
	NORMAL	872.0	22.60	112.26	852.35	-57.56	133.90	145.74	1.47	1.47	-0.02	359.67
	NORMAL	963.0	21.46	112.43	936.70	-70.54	165.47	179.87	1.25	-1.25	0.19	176.88
	NORMAL	1,059.0	22.42	112.17	1,025.75	-84.14	198.66	215.74	1.01	1.00	-0.27	354.10
	NORMAL	1,155.0	22.34	111.47	1,114.52	-97.73	232.59	252.29	0.29	-0.08	-0.73	252.97
	NORMAL	1,250.0	21.46	112.70	1,202.66	-111.05	265.42	287.72	1.04	-0.93	1.29	153.03
	NORMAL	1,346.0	22.77	113.14	1,291.60	-125.12	298.71	323.85	1.38	1.36	0.46	7.41
	NORMAL	1,442.0	21.63	113.05	1,380.48	-139.35	332.07	360.13	1.19	-1.19	-0.09	181.67
10/1/2012	NORMAL	1,537.0	22.42	112.70	1,468.55	-153.20	364.90	395.75	0.84	0.83	-0.37	350.40
	NORMAL	1,615.0	23.48	112.43	1,540.37	-164.87	392.98	426.16	1.37	1.36	-0.35	354.20
10/2/2012	NORMAL	1,670.0	23.87	112.44	1,590.74	-173.30	413.40	448.25	0.71	0.71	0.02	0.59
	NORMAL	1,735.0	24.26	110.68	1,650.09	-183.03	438.05	474.75	1.26	0.60	-2.71	297.71

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 (°)
10/2/2012	NORMAL	1,830.0	22.95	113.31	1,737.15	-197.26	473.32	512.78	1.77	-1.38	2.77	142.40
	NORMAL	1,925.0	23.30	111.29	1,824.51	-211.41	507.83	550.08	0.91	0.37	-2.13	292.87
	NORMAL	2,021.0	21.98	111.82	1,913.11	-224.98	542.20	587.03	1.39	-1.38	0.55	171.46
	NORMAL	2,116.0	21.45	112.44	2,001.37	-238.22	574.76	622.17	0.61	-0.56	0.65	156.88
	NORMAL	2,212.0	20.75	112.70	2,090.94	-251.48	606.68	656.73	0.74	-0.73	0.27	172.51
	NORMAL	2,308.0	19.96	110.68	2,180.94	-263.83	637.70	690.11	1.10	-0.82	-2.10	220.71
	NORMAL	2,403.0	21.06	110.85	2,269.92	-275.63	668.82	723.38	1.16	1.16	0.18	3.18
	NORMAL	2,497.0	23.34	114.63	2,356.95	-289.41	701.53	758.88	2.86	2.43	4.02	33.83
	NORMAL	2,593.0	23.34	114.37	2,445.09	-305.18	736.14	796.89	0.11	0.00	-0.27	269.88
	NORMAL	2,689.0	23.08	113.66	2,533.32	-320.58	770.70	834.71	0.40	-0.27	-0.74	226.78
	NORMAL	2,784.0	22.46	112.96	2,620.92	-335.13	804.47	871.48	0.71	-0.65	-0.74	203.28
	NORMAL	2,880.0	22.11	111.03	2,709.75	-348.76	838.22	907.88	0.85	-0.36	-2.01	243.55
	NORMAL	2,976.0	22.02	110.68	2,798.72	-361.60	871.92	943.92	0.17	-0.09	-0.36	235.45
	NORMAL	3,071.0	21.63	111.99	2,886.91	-374.45	904.81	979.23	0.66	-0.41	1.38	129.29
	NORMAL	3,167.0	20.88	111.38	2,976.38	-387.31	937.15	1,014.03	0.81	-0.78	-0.64	196.14
	NORMAL	3,263.0	21.71	114.72	3,065.83	-400.97	969.21	1,048.87	1.53	0.86	3.48	57.18
	NORMAL	3,358.0	22.33	112.08	3,153.90	-415.11	1,001.90	1,084.48	1.23	0.65	-2.78	300.83
	NORMAL	3,454.0	22.20	113.66	3,242.74	-429.24	1,035.41	1,120.85	0.64	-0.14	1.65	102.98
	NORMAL	3,549.0	22.02	112.35	3,330.76	-443.21	1,068.32	1,156.61	0.55	-0.19	-1.38	249.34
	NORMAL	3,645.0	22.42	111.38	3,419.63	-456.73	1,102.01	1,192.90	0.57	0.42	-1.01	317.03
	NORMAL	3,740.0	22.86	109.89	3,507.31	-469.61	1,136.23	1,229.45	0.76	0.46	-1.57	306.80
	NORMAL	3,836.0	21.85	111.38	3,596.09	-482.47	1,170.40	1,265.93	1.21	-1.05	1.55	151.39
	NORMAL	3,931.0	21.27	113.31	3,684.45	-495.73	1,202.69	1,300.84	0.96	-0.61	2.03	130.17
	NORMAL	4,027.0	21.06	112.17	3,773.97	-509.13	1,234.66	1,335.50	0.48	-0.22	-1.19	242.44
	NORMAL	4,122.0	21.76	111.91	3,862.42	-522.15	1,266.80	1,370.18	0.74	0.74	-0.27	352.16
	NORMAL	4,218.0	20.66	111.99	3,951.91	-535.13	1,299.01	1,404.90	1.15	-1.15	0.08	178.53
	NORMAL	4,314.0	19.30	114.81	4,042.13	-548.13	1,329.12	1,437.69	1.74	-1.42	2.94	146.00
	NORMAL	4,409.0	17.63	113.84	4,132.24	-560.53	1,356.53	1,467.77	1.79	-1.76	-1.02	189.96
	NORMAL	4,504.0	16.66	109.89	4,223.02	-570.98	1,382.50	1,495.75	1.59	-1.02	-4.16	228.33
10/3/2012	NORMAL	4,599.0	14.95	107.69	4,314.43	-579.34	1,406.98	1,521.57	1.91	-1.80	-2.32	198.26
	NORMAL	4,694.0	13.41	104.88	4,406.53	-585.89	1,429.30	1,544.69	1.78	-1.62	-2.96	202.73
	NORMAL	4,790.0	11.25	108.13	4,500.31	-591.66	1,448.96	1,565.06	2.36	-2.25	3.39	163.77
	NORMAL	4,886.0	9.19	111.91	4,594.78	-597.44	1,464.98	1,582.06	2.26	-2.15	3.94	163.82
	NORMAL	4,981.0	7.34	109.97	4,688.79	-602.34	1,477.72	1,595.71	1.97	-1.95	-2.04	187.61
	NORMAL	5,076.0	4.92	110.50	4,783.24	-605.84	1,487.24	1,605.84	2.55	-2.55	0.56	178.92
	NORMAL	5,172.0	2.42	118.68	4,879.04	-608.26	1,492.87	1,611.97	2.65	-2.60	8.52	172.23
	NORMAL	5,267.0	1.32	118.94	4,973.99	-609.75	1,495.59	1,615.06	1.16	-1.16	0.27	179.69
	NORMAL	5,363.0	1.01	134.85	5,069.97	-610.88	1,497.16	1,616.94	0.46	-0.32	16.57	141.55
10/4/2012	NORMAL	5,458.0	1.19	118.15	5,164.95	-611.94	1,498.62	1,618.70	0.39	0.19	-17.58	290.79
	NORMAL	5,554.0	1.01	132.74	5,260.93	-612.98	1,500.12	1,620.48	0.35	-0.19	15.20	129.88
	NORMAL	5,650.0	0.26	187.76	5,356.93	-613.77	1,500.72	1,621.33	0.92	-0.78	57.31	166.10
	NORMAL	5,745.0	0.13	188.99	5,451.93	-614.09	1,500.67	1,621.41	0.14	-0.14	1.29	178.77
	NORMAL	5,841.0	0.26	225.02	5,547.92	-614.35	1,500.50	1,621.36	0.18	0.14	37.53	62.31
	NORMAL	5,936.0	0.61	171.41	5,642.92	-615.00	1,500.42	1,621.54	0.53	0.37	-56.43	281.72
	NORMAL	6,032.0	0.57	195.05	5,738.92	-615.97	1,500.37	1,621.87	0.26	-0.04	24.63	111.02
	NORMAL	6,127.0	0.53	202.08	5,833.91	-616.83	1,500.09	1,621.93	0.08	-0.04	7.40	124.14
	NORMAL	6,223.0	0.97	199.36	5,929.90	-618.01	1,499.65	1,621.98	0.46	0.46	-2.83	354.01
	NORMAL	6,319.0	0.66	192.94	6,025.89	-619.32	1,499.26	1,622.12	0.34	-0.32	-6.69	193.22
10/5/2012	NORMAL	6,414.0	0.18	111.47	6,120.89	-619.91	1,499.27	1,622.37	0.69	-0.51	-85.76	195.70
	NORMAL	6,510.0	0.04	154.01	6,216.89	-619.99	1,499.43	1,622.54	0.16	-0.15	44.31	169.81
	NORMAL	6,605.0	0.31	70.95	6,311.89	-619.94	1,499.69	1,622.76	0.32	0.28	-87.43	269.53
	NORMAL	6,700.0	0.53	116.57	6,406.89	-620.05	1,500.32	1,623.39	0.40	0.23	48.02	80.90
	NORMAL	6,796.0	0.53	106.55	6,502.88	-620.37	1,501.14	1,624.27	0.10	0.00	-10.44	264.99
	NORMAL	6,891.0	0.70	140.12	6,597.88	-620.94	1,501.94	1,625.22	0.41	0.18	35.34	82.17
	NORMAL	6,988.0	0.57	236.01	6,694.88	-621.67	1,501.92	1,625.49	0.98	-0.13	98.86	143.22
	NORMAL	7,083.0	1.05	250.95	6,789.87	-622.22	1,500.70	1,624.58	0.55	0.51	15.73	31.34
	NORMAL	7,179.0	1.19	238.65	6,885.85	-623.02	1,499.02	1,623.33	0.29	0.15	-12.81	293.97

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 (°)
10/5/2012	NORMAL	7,274.0	0.97	248.84	6,980.83	-623.83	1,497.43	1,622.17	0.31	-0.23	10.73	143.90
	NORMAL	7,369.0	1.45	243.83	7,075.81	-624.65	1,495.60	1,620.80	0.52	0.51	-5.27	345.06
	NORMAL	7,465.0	1.71	252.44	7,171.77	-625.62	1,493.14	1,618.91	0.37	0.27	8.97	46.76
	NORMAL	7,561.0	1.93	252.44	7,267.72	-626.54	1,490.24	1,616.58	0.23	0.23	0.00	0.00
	NORMAL	7,656.0	2.33	249.28	7,362.66	-627.70	1,486.90	1,613.96	0.44	0.42	-3.33	342.05
10/6/2012	NORMAL	7,750.0	2.90	246.91	7,456.56	-629.31	1,482.93	1,610.91	0.62	0.61	-2.52	348.07
	NORMAL	7,846.0	2.64	247.00	7,552.45	-631.13	1,478.66	1,607.67	0.27	-0.27	0.09	179.09
	NORMAL	7,900.0	2.64	247.00	7,606.39	-632.10	1,476.37	1,605.93	0.00	0.00	0.00	0.00