

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	RWF 322-34	Wellbore No.	OH
Well Name	RWF 322-34	Common Name	RWF 322-34
Project	RU 27-06S-094W	Site	RMV 28-27 Pad
Vertical Section Azimuth	202.91 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	6/16/2012	UWI	RWF 322-34
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	6/16/2012	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 (°)
6/16/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6/16/2012	NORMAL	103.0	1.14	207.95	102.99	-0.91	-0.48	1.02	1.11	1.11	0.00	207.95
	NORMAL	164.0	3.08	209.53	163.95	-2.87	-1.57	3.25	3.18	3.18	2.59	2.51
	NORMAL	255.0	5.10	208.04	254.71	-8.56	-4.68	9.71	2.22	2.22	-1.64	356.24
	NORMAL	346.0	7.65	203.47	345.14	-17.69	-8.99	19.80	2.85	2.80	-5.02	346.47
	NORMAL	436.0	11.35	202.47	433.89	-31.38	-14.77	34.65	4.12	4.11	-1.11	356.95
6/17/2012	NORMAL	528.0	14.52	202.32	523.55	-50.42	-22.61	55.24	3.45	3.45	-0.16	359.32
	NORMAL	603.0	16.62	202.64	595.79	-69.01	-30.31	75.37	2.80	2.80	0.43	2.50
	NORMAL	694.0	19.26	209.34	682.37	-94.12	-42.68	103.30	3.68	2.90	7.36	41.24
	NORMAL	784.0	21.81	208.09	766.64	-121.81	-57.82	134.71	2.87	2.83	-1.39	349.66
	NORMAL	875.0	25.50	204.40	849.99	-154.57	-73.88	171.14	4.37	4.05	-4.05	336.44
	NORMAL	966.0	29.63	202.82	930.64	-193.16	-90.71	213.24	4.61	4.54	-1.74	349.26
	NORMAL	1,062.0	33.68	199.48	1,012.35	-240.16	-108.80	263.56	4.60	4.22	-3.48	335.16
	NORMAL	1,158.0	36.84	199.30	1,090.73	-292.43	-127.19	318.87	3.29	3.29	-0.19	358.04
	NORMAL	1,253.0	39.83	199.83	1,165.24	-347.94	-146.93	377.69	3.17	3.15	0.56	6.48
	NORMAL	1,349.0	40.10	203.52	1,238.82	-405.22	-169.70	439.32	2.48	0.28	3.84	84.92
	NORMAL	1,444.0	40.27	204.40	1,311.40	-461.23	-194.59	500.60	0.62	0.18	0.93	73.67
	NORMAL	1,540.0	42.12	205.29	1,383.64	-518.60	-221.16	563.79	2.02	1.93	0.92	17.86
	NORMAL	1,636.0	42.30	205.10	1,454.74	-576.97	-248.62	628.24	0.23	0.19	-0.19	325.02
	NORMAL	1,732.0	40.54	204.40	1,526.73	-634.64	-275.21	691.71	1.90	-1.83	-0.73	194.48
6/18/2012	NORMAL	1,843.0	40.71	203.69	1,610.98	-700.64	-304.66	763.97	0.44	0.15	-0.64	289.92

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 (°)
6/18/2012	NORMAL	1,938.0	41.59	201.94	1,682.51	-758.26	-328.89	826.48	1.53	0.93	-1.84	306.73
	NORMAL	2,033.0	42.30	200.00	1,753.17	-817.55	-351.60	889.93	1.56	0.75	-2.04	297.98
	NORMAL	2,129.0	40.27	198.95	1,825.31	-877.26	-372.73	953.16	2.23	-2.11	-1.09	198.45
	NORMAL	2,224.0	38.78	200.35	1,898.59	-934.19	-393.05	1,013.51	1.83	-1.57	1.47	149.66
6/19/2012	NORMAL	2,320.0	38.43	202.47	1,973.61	-989.95	-414.91	1,073.38	1.43	-0.36	2.21	105.65
	NORMAL	2,416.0	38.87	203.69	2,048.58	-1,045.11	-438.42	1,133.34	0.92	0.46	1.27	60.47
	NORMAL	2,510.0	39.57	202.99	2,121.41	-1,099.68	-461.96	1,192.77	0.88	0.74	-0.74	327.42
	NORMAL	2,606.0	39.83	203.34	2,195.27	-1,156.06	-486.08	1,254.09	0.36	0.27	0.36	40.83
	NORMAL	2,701.0	40.45	202.99	2,267.90	-1,212.36	-510.17	1,315.33	0.69	0.65	-0.37	339.87
	NORMAL	2,797.0	41.24	203.17	2,340.52	-1,270.12	-534.79	1,378.12	0.83	0.82	0.19	8.54
	NORMAL	2,892.0	41.51	202.29	2,411.81	-1,328.04	-559.05	1,440.91	0.68	0.28	-0.93	294.57
	NORMAL	2,988.0	41.77	202.11	2,483.55	-1,387.10	-583.15	1,504.69	0.30	0.27	-0.19	335.23
	NORMAL	3,083.0	41.42	201.76	2,554.60	-1,445.60	-606.71	1,567.75	0.44	-0.37	-0.37	213.45
	NORMAL	3,179.0	39.92	203.17	2,627.41	-1,503.41	-630.60	1,630.30	1.83	-1.56	1.47	149.04
	NORMAL	3,275.0	37.90	203.87	2,702.11	-1,558.70	-654.66	1,690.59	2.15	-2.10	0.73	167.99
	NORMAL	3,370.0	37.64	202.82	2,777.20	-1,612.12	-677.71	1,748.78	0.73	-0.27	-1.11	247.57
	NORMAL	3,466.0	35.75	204.05	2,854.18	-1,664.76	-700.51	1,806.14	2.11	-1.97	1.28	159.24
	NORMAL	3,561.0	34.65	204.22	2,931.80	-1,714.73	-722.90	1,860.88	1.16	-1.16	0.18	174.98
	NORMAL	3,657.0	33.50	204.05	3,011.32	-1,763.81	-744.90	1,914.66	1.20	-1.20	-0.18	184.66
	NORMAL	3,753.0	32.98	203.69	3,091.61	-1,811.93	-766.19	1,967.27	0.58	-0.54	-0.38	200.63
	NORMAL	3,849.0	33.15	202.82	3,172.07	-1,860.05	-786.87	2,019.65	0.53	0.18	-0.91	289.34
	NORMAL	3,943.0	31.66	202.64	3,251.43	-1,906.52	-806.34	2,070.02	1.59	-1.59	-0.19	183.63
	NORMAL	4,039.0	31.04	200.88	3,333.41	-1,952.89	-824.86	2,119.95	1.15	-0.65	-1.83	235.15
	NORMAL	4,135.0	31.22	201.76	3,415.59	-1,999.13	-842.90	2,169.56	0.51	0.19	0.92	68.79
6/20/2012	NORMAL	4,230.0	31.13	200.53	3,496.87	-2,044.99	-860.64	2,218.71	0.68	-0.09	-1.29	261.43
	NORMAL	4,326.0	26.64	198.60	3,580.91	-2,088.65	-876.22	2,264.99	4.78	-4.68	-2.01	190.89
	NORMAL	4,422.0	26.29	201.94	3,666.85	-2,128.77	-891.03	2,307.71	1.59	-0.36	3.48	104.72
	NORMAL	4,516.0	24.45	201.06	3,751.78	-2,166.24	-905.79	2,347.97	2.00	-1.96	-0.94	191.18
	NORMAL	4,612.0	24.09	204.75	3,839.30	-2,202.57	-921.14	2,387.41	1.62	-0.38	3.84	105.03
	NORMAL	4,707.0	21.90	203.87	3,926.75	-2,236.39	-936.43	2,424.51	2.33	-2.31	-0.93	188.52
	NORMAL	4,803.0	19.52	204.05	4,016.54	-2,267.41	-950.21	2,458.45	2.48	-2.48	0.19	178.55
	NORMAL	4,899.0	16.80	204.40	4,107.75	-2,294.69	-962.48	2,488.36	2.84	-2.83	0.36	177.87
	NORMAL	4,994.0	15.48	204.75	4,199.00	-2,318.71	-973.46	2,514.76	1.39	-1.39	0.37	175.95
	NORMAL	5,089.0	13.45	202.99	4,290.99	-2,340.40	-983.08	2,538.48	2.19	-2.14	-1.85	191.37
	NORMAL	5,184.0	11.08	208.40	4,383.81	-2,358.60	-991.74	2,558.62	2.77	-2.49	5.69	156.76
	NORMAL	5,280.0	9.67	199.13	4,478.25	-2,374.34	-998.77	2,575.85	2.27	-1.47	-9.66	225.32
	NORMAL	5,376.0	7.47	197.54	4,573.17	-2,387.91	-1,003.29	2,590.11	2.30	-2.29	-1.66	185.36
	NORMAL	5,472.0	3.69	202.11	4,668.70	-2,396.72	-1,006.34	2,599.41	3.96	-3.94	4.76	175.57
	NORMAL	5,567.0	2.37	233.58	4,763.57	-2,400.72	-1,009.07	2,604.16	2.19	-1.39	33.13	143.44
	NORMAL	5,662.0	1.14	284.03	4,858.53	-2,401.66	-1,011.57	2,606.00	1.96	-1.29	53.11	151.86
	NORMAL	5,758.0	1.05	307.76	4,954.51	-2,400.89	-1,013.19	2,605.92	0.48	-0.09	24.72	112.93
	NORMAL	5,853.0	0.79	325.34	5,049.50	-2,399.81	-1,014.25	2,605.34	0.40	-0.27	18.51	141.21
	NORMAL	5,949.0	0.88	337.64	5,145.49	-2,398.59	-1,014.91	2,604.47	0.21	0.09	12.81	69.58
	NORMAL	6,045.0	0.97	347.48	5,241.48	-2,397.11	-1,015.36	2,603.29	0.19	0.09	10.25	65.45
6/21/2012	NORMAL	6,140.0	1.05	358.73	5,336.46	-2,395.46	-1,015.56	2,601.84	0.22	0.08	11.84	73.72
	NORMAL	6,236.0	1.23	7.17	5,432.44	-2,393.56	-1,015.45	2,600.05	0.26	0.19	8.79	47.28
	NORMAL	6,331.0	1.23	26.86	5,527.42	-2,391.64	-1,014.86	2,598.05	0.44	0.00	20.73	99.84
	NORMAL	6,427.0	1.32	25.63	5,623.40	-2,389.72	-1,013.92	2,595.91	0.10	0.09	-1.28	342.47
	NORMAL	6,523.0	0.79	320.94	5,719.39	-2,388.21	-1,013.86	2,594.50	1.27	-0.55	-67.39	216.02
	NORMAL	6,618.0	0.35	345.02	5,814.38	-2,387.42	-1,014.34	2,593.96	0.52	-0.46	25.35	163.11
	NORMAL	6,713.0	0.26	43.38	5,909.38	-2,386.98	-1,014.27	2,593.53	0.32	-0.09	61.43	133.98
	NORMAL	6,809.0	0.18	146.74	6,005.38	-2,386.95	-1,014.04	2,593.41	0.36	-0.08	107.67	149.86
6/22/2012	NORMAL	6,904.0	0.26	158.87	6,100.38	-2,387.28	-1,013.88	2,593.65	0.10	0.08	12.77	36.37
	NORMAL	7,000.0	0.53	159.75	6,196.38	-2,387.90	-1,013.65	2,594.13	0.28	0.28	0.92	1.73
	NORMAL	7,096.0	0.97	188.40	6,292.37	-2,389.12	-1,013.61	2,595.24	0.59	0.46	29.84	55.36
	NORMAL	7,191.0	1.05	198.77	6,387.35	-2,390.74	-1,014.01	2,596.89	0.21	0.08	10.92	71.60
	NORMAL	7,287.0	0.97	192.09	6,483.34	-2,392.36	-1,014.46	2,598.56	0.15	-0.08	-6.96	232.50

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 (°)
6/22/2012	NORMAL	7,382.0	0.79	160.10	6,578.33	-2,393.77	-1,014.41	2,599.83	0.54	-0.19	-33.67	234.37
	NORMAL	7,478.0	1.14	118.79	6,674.31	-2,394.85	-1,013.35	2,600.42	0.79	0.36	-43.03	275.04
	NORMAL	7,573.0	1.58	163.44	6,769.29	-2,396.56	-1,012.14	2,601.52	1.17	0.46	47.00	90.82
	NORMAL	7,668.0	1.85	162.04	6,864.25	-2,399.27	-1,011.30	2,603.69	0.29	0.28	-1.47	350.48
	NORMAL	7,763.0	2.20	164.50	6,959.19	-2,402.49	-1,010.34	2,606.28	0.38	0.37	2.59	15.18
	NORMAL	7,858.0	2.11	192.27	7,054.12	-2,405.95	-1,010.22	2,609.43	1.09	-0.09	29.23	108.71
	NORMAL	7,954.0	2.46	187.52	7,150.05	-2,409.72	-1,010.87	2,613.15	0.41	0.36	-4.95	329.20
	NORMAL	8,050.0	2.11	184.54	7,245.97	-2,413.53	-1,011.28	2,616.82	0.38	-0.36	-3.10	197.27
	NORMAL	8,145.0	2.20	173.11	7,340.90	-2,417.08	-1,011.20	2,620.06	0.46	0.09	-12.03	276.08
	NORMAL	8,240.0	2.37	168.54	7,435.83	-2,420.82	-1,010.59	2,623.26	0.26	0.18	-4.81	310.72
	NORMAL	8,275.0	2.37	168.89	7,470.80	-2,422.24	-1,010.30	2,624.46	0.04	0.00	1.00	90.17
	NORMAL	8,320.0	2.37	168.89	7,515.76	-2,424.06	-1,009.95	2,626.00	0.00	0.00	0.00	0.00