

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	RWF 11-34	Wellbore No.	OH
Well Name	RWF 11-34	Common Name	RWF 11-34
Project	RU 27-06S-094W	Site	RMV 28-27 Pad
Vertical Section	250.58 (")	North Reference	True
Azimuth		Origin E/W	
Origin N/S		UWI	RWF 11-34
Spud Date	7/10/2012		
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	7/10/2012	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 (°)
7/10/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/10/2012	NORMAL	103.0	0.26	329.15	103.00	0.20	-0.12	0.05	0.25	0.25	0.00	329.15
	NORMAL	163.0	0.44	326.95	163.00	0.51	-0.32	0.13	0.30	0.30	-3.67	354.63
	NORMAL	255.0	2.29	250.40	254.97	0.19	-2.24	2.05	2.42	2.01	-83.21	272.39
	NORMAL	345.0	5.19	247.41	344.77	-1.98	-7.69	7.91	3.23	3.22	-3.32	354.66
7/11/2012	NORMAL	436.0	8.71	250.49	435.09	-5.86	-17.99	18.92	3.89	3.87	3.38	7.58
	NORMAL	526.0	12.32	252.42	523.56	-11.04	-33.57	35.33	4.03	4.01	2.14	6.52
	NORMAL	602.0	15.25	249.84	597.37	-16.93	-50.69	53.44	3.94	3.86	-3.39	346.89
	NORMAL	693.0	19.08	251.51	684.30	-25.78	-76.04	80.28	4.24	4.21	1.84	8.13
	NORMAL	784.0	22.24	251.68	769.43	-35.91	-106.50	112.38	3.47	3.47	0.19	1.17
	NORMAL	875.0	23.25	250.54	853.36	-47.31	-139.78	147.56	1.21	1.11	-1.25	335.90
	NORMAL	966.0	25.41	251.68	936.27	-59.43	-175.26	185.05	2.43	2.37	1.25	12.79
	NORMAL	1,062.0	27.69	250.98	1,022.14	-73.17	-215.90	227.95	2.40	2.38	-0.73	351.87
	NORMAL	1,157.0	29.85	250.63	1,105.41	-88.21	-259.08	273.67	2.28	2.27	-0.37	355.39
	NORMAL	1,253.0	33.36	249.22	1,187.16	-105.51	-306.31	323.96	3.74	3.66	-1.47	347.51
7/12/2012	NORMAL	1,348.0	33.80	249.05	1,266.31	-124.22	-355.41	376.49	0.47	0.46	-0.18	347.87
	NORMAL	1,444.0	34.33	248.87	1,345.83	-143.53	-405.60	430.24	0.56	0.55	-0.19	349.15
	NORMAL	1,540.0	33.32	250.19	1,425.58	-162.22	-455.66	483.67	1.30	-1.05	1.38	144.51
	NORMAL	1,635.0	32.00	249.93	1,505.56	-179.70	-503.85	534.93	1.40	-1.39	-0.27	185.96
	NORMAL	1,695.0	32.04	250.45	1,556.43	-190.48	-533.78	566.75	0.46	0.07	0.87	81.97
7/13/2012	NORMAL	1,779.0	33.27	251.60	1,627.15	-205.21	-576.64	612.07	1.64	1.46	1.37	27.26

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 (°)
7/13/2012	NORMAL	1,843.0	33.27	251.60	1,680.66	-216.30	-609.96	647.17	0.00	0.00	0.00	0.00
	NORMAL	1,938.0	32.40	249.49	1,760.49	-233.44	-658.52	698.67	1.51	-0.92	-2.22	231.87
	NORMAL	2,034.0	32.13	250.89	1,841.67	-250.81	-706.73	749.92	0.83	-0.28	1.46	110.45
	NORMAL	2,129.0	32.09	250.63	1,922.13	-267.45	-754.41	800.41	0.15	-0.04	-0.27	253.75
	NORMAL	2,225.0	32.35	251.07	2,003.35	-284.24	-802.76	851.60	0.36	0.27	0.46	42.25
	NORMAL	2,321.0	32.48	251.33	2,084.39	-300.82	-851.48	903.05	0.20	0.14	0.27	47.10
	NORMAL	2,416.0	32.48	250.19	2,164.53	-317.63	-899.64	954.07	0.64	0.00	-1.20	269.52
	NORMAL	2,510.0	32.40	249.22	2,243.87	-335.12	-946.93	1,004.48	0.56	-0.09	-1.03	260.85
	NORMAL	2,606.0	32.79	248.78	2,324.75	-353.65	-995.21	1,056.18	0.48	0.41	-0.46	328.52
7/14/2012	NORMAL	2,702.0	31.47	249.75	2,406.04	-371.74	-1,042.96	1,107.22	1.48	-1.38	1.01	159.06
	NORMAL	2,797.0	31.16	250.37	2,487.20	-388.58	-1,089.37	1,156.59	0.47	-0.33	0.65	134.16
	NORMAL	2,893.0	31.91	249.40	2,569.02	-405.85	-1,136.52	1,206.80	0.94	0.78	-1.01	325.51
	NORMAL	2,988.0	30.59	250.54	2,650.24	-422.74	-1,182.81	1,256.07	1.52	-1.39	1.20	156.35
	NORMAL	3,084.0	31.03	252.91	2,732.69	-438.15	-1,229.50	1,305.23	1.34	0.46	2.47	71.10
	NORMAL	3,179.0	31.12	252.56	2,814.06	-452.70	-1,276.32	1,354.23	0.21	0.09	-0.37	296.33
	NORMAL	3,275.0	31.34	252.21	2,896.15	-467.76	-1,323.76	1,403.97	0.30	0.23	-0.36	320.33
	NORMAL	3,371.0	30.81	249.75	2,978.38	-483.90	-1,370.60	1,453.52	1.43	-0.55	-2.56	246.29
	NORMAL	3,466.0	30.02	251.42	3,060.30	-499.89	-1,415.95	1,501.61	1.22	-0.83	1.76	133.78
	NORMAL	3,562.0	28.53	250.37	3,144.04	-515.25	-1,460.31	1,548.55	1.64	-1.55	-1.09	198.56
	NORMAL	3,657.0	27.52	249.22	3,227.90	-530.66	-1,502.20	1,593.18	1.21	-1.06	-1.21	207.64
	NORMAL	3,753.0	26.02	248.52	3,313.61	-546.24	-1,542.54	1,636.39	1.60	-1.56	-0.73	191.56
	NORMAL	3,848.0	24.97	251.42	3,399.36	-560.26	-1,580.94	1,677.27	1.72	-1.11	3.05	131.37
	NORMAL	3,944.0	23.52	253.53	3,486.89	-572.14	-1,618.51	1,716.66	1.76	-1.51	2.20	150.10
	NORMAL	4,039.0	21.98	249.84	3,574.50	-583.65	-1,653.39	1,753.38	2.21	-1.62	-3.88	221.13
	NORMAL	4,135.0	20.92	252.83	3,663.86	-594.90	-1,686.63	1,788.47	1.59	-1.10	3.11	135.50
	NORMAL	4,231.0	18.33	244.56	3,754.29	-606.45	-1,716.65	1,820.62	3.95	-2.70	-8.61	223.16
	NORMAL	4,326.0	17.01	245.09	3,844.81	-618.72	-1,742.74	1,849.31	1.40	-1.39	0.56	173.30
	NORMAL	4,422.0	13.32	255.73	3,937.46	-627.36	-1,766.20	1,874.31	4.80	-3.84	11.08	148.03
	NORMAL	4,422.0	13.32	255.73	3,947.72	-593.31	-1,699.32	1,799.91	4.80	-3.84	11.08	148.03
7/15/2012	NORMAL	4,516.0	11.60	254.76	4,028.87	-635.46	-1,786.41	1,896.06	3.10	-2.85	5.09	160.80
	NORMAL	4,612.0	9.63	255.55	4,123.22	-640.00	-1,803.50	1,913.69	2.06	-2.05	0.82	176.16
	NORMAL	4,707.0	7.82	255.90	4,217.12	-643.56	-1,817.47	1,928.04	1.91	-1.91	0.37	178.49
	NORMAL	4,803.0	6.86	257.05	4,312.33	-646.43	-1,829.39	1,940.24	1.01	-1.00	1.20	171.87
	NORMAL	4,899.0	6.81	256.34	4,407.65	-649.06	-1,840.51	1,951.60	0.10	-0.05	-0.74	239.03
	NORMAL	4,994.0	5.85	253.79	4,502.07	-651.75	-1,850.63	1,962.04	1.05	-1.01	-2.68	195.06
	NORMAL	5,089.0	4.70	255.99	4,596.67	-654.04	-1,859.06	1,970.75	1.23	-1.21	2.32	171.12
	NORMAL	5,184.0	4.04	261.62	4,691.39	-655.47	-1,866.14	1,977.91	0.83	-0.69	5.93	149.76
	NORMAL	5,280.0	1.98	241.93	4,787.26	-656.74	-1,870.95	1,982.87	2.37	-2.15	-20.51	197.05
	NORMAL	5,375.0	1.05	205.58	4,882.22	-658.30	-1,872.78	1,985.11	1.36	-0.98	-38.26	208.75
	NORMAL	5,471.0	0.75	125.75	4,978.21	-659.46	-1,872.65	1,985.37	1.23	-0.31	-83.16	218.82
	NORMAL	5,567.0	1.05	69.31	5,084.84	-622.52	-1,803.83	1,908.19	0.93	0.31	-58.79	259.04
	NORMAL	5,662.0	1.14	25.81	5,179.82	-621.36	-1,802.61	1,906.65	0.86	0.09	-45.79	254.14
	NORMAL	5,758.0	1.23	38.28	5,275.80	-619.70	-1,801.55	1,905.10	0.28	0.09	12.99	77.07
7/16/2012	NORMAL	5,853.0	0.88	57.36	5,370.79	-618.50	-1,800.31	1,903.53	0.52	-0.37	20.08	144.17
	NORMAL	5,949.0	1.05	46.37	5,466.77	-617.50	-1,799.05	1,902.01	0.26	0.18	-11.45	306.98
	NORMAL	6,045.0	1.19	51.91	5,562.75	-616.28	-1,797.63	1,900.26	0.18	0.15	5.77	40.51
	NORMAL	6,140.0	0.40	65.00	5,657.74	-615.53	-1,796.55	1,899.00	0.85	-0.83	13.78	173.54
	NORMAL	6,236.0	0.57	72.91	5,753.74	-615.25	-1,795.79	1,898.19	0.19	0.18	8.24	25.48
	NORMAL	6,331.0	0.61	277.70	5,848.74	-615.04	-1,795.84	1,898.16	1.21	0.04	-163.38	192.82
	NORMAL	6,427.0	0.57	261.70	5,944.73	-615.04	-1,796.82	1,899.09	0.18	-0.04	-16.67	248.44
	NORMAL	6,523.0	0.61	247.20	6,040.73	-615.31	-1,797.76	1,900.07	0.16	0.04	-15.10	277.67
	NORMAL	6,618.0	0.53	241.58	6,135.72	-615.71	-1,798.62	1,901.01	0.10	-0.08	-5.92	212.16
	NORMAL	6,713.0	0.70	209.58	6,230.72	-616.43	-1,799.29	1,901.88	0.40	0.18	-33.68	279.74
	NORMAL	6,809.0	0.88	200.53	6,326.71	-617.63	-1,799.84	1,902.79	0.23	0.19	-9.43	320.69
	NORMAL	6,904.0	0.92	199.65	6,421.70	-619.03	-1,800.35	1,903.74	0.04	0.04	-0.93	340.50
	NORMAL	7,000.0	0.40	244.74	6,517.69	-619.90	-1,800.91	1,904.56	0.73	-0.54	46.97	156.04
	NORMAL	7,096.0	0.53	244.88	6,613.69	-620.23	-1,801.61	1,905.33	0.13	0.13	0.15	0.58

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 (°)
7/17/2012	NORMAL	7,191.0	1.01	242.28	6,708.68	-620.80	-1,802.75	1,906.60	0.51	0.51	-2.74	354.57
	NORMAL	7,287.0	0.44	215.21	6,804.67	-621.50	-1,803.71	1,907.74	0.68	-0.59	-28.20	197.95
	NORMAL	7,382.0	0.48	243.77	6,899.67	-621.97	-1,804.28	1,908.43	0.24	0.04	30.06	94.59
7/18/2012	NORMAL	7,478.0	0.44	247.73	6,995.67	-622.29	-1,804.98	1,909.20	0.05	-0.04	4.13	143.49
	NORMAL	7,573.0	0.66	291.41	7,090.66	-622.23	-1,805.83	1,909.97	0.48	0.23	45.98	85.32
	NORMAL	7,668.0	0.83	274.71	7,185.65	-621.97	-1,807.02	1,911.02	0.29	0.18	-17.58	299.51
	NORMAL	7,763.0	1.01	260.12	7,280.64	-622.06	-1,808.53	1,912.47	0.31	0.19	-15.36	300.09
	NORMAL	7,858.0	0.83	230.50	7,375.63	-622.64	-1,809.89	1,913.94	0.53	-0.19	-31.18	234.89
	NORMAL	7,954.0	0.83	201.15	7,471.62	-623.73	-1,810.68	1,915.05	0.44	0.00	-30.57	255.33
	NORMAL	8,057.0	0.92	180.84	7,574.61	-625.25	-1,810.96	1,915.82	0.31	0.09	-19.72	275.87
	NORMAL	8,102.0	0.92	180.84	7,619.60	-625.97	-1,810.97	1,916.07	0.00	0.00	0.00	0.00