

## I General

## 1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

## 1.2 Well Information

Well	RWF 424-29	Wellbore No.	OH
Well Name	RWF 424-29	Common Name	RWF 424-29
Project	RU 29-06S-094W	Site	RWF 14-29 Pad
Vertical Section Azimuth	84.01 (°)	North Reference	
Origin N/S		Origin E/W	
Spud Date	6/11/2013	UWI	RWF 424-29
Active Datum	KB @5,445.2ft (above Mean Sea Level)		

## 2 Survey Name

## 2.1 Survey Name: MOSTAR

Survey Name	MOSTAR	Company	
Date Started	6/2/2013	Ended	6/19/2013
Tool Name	MWD	Engineer	

## 2.1.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
		109.78			

## 2.1.2 Survey Stations

5933

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 (°)
6/1/2013	NORMAL	70.0	0.44	109.78	70.00	-0.09	0.25	0.24	0.00	0.00	0.00	0.00
	NORMAL	100.0	1.23	127.97	100.00	-0.33	0.62	0.58	0.00	0.00	0.00	0.00
	NORMAL	129.0	1.76	107.23	128.99	-0.65	1.29	1.21	0.00	0.00	0.00	0.00
	NORMAL	159.0	2.11	97.91	158.97	-0.86	2.27	2.17	0.00	0.00	0.00	0.00
6/2/2013	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6/2/2013	NORMAL	70.0	0.44	109.70	70.00	-0.09	0.25	0.24	0.63	0.63	0.00	109.70
	NORMAL	100.0	1.23	127.90	100.00	-0.33	0.62	0.58	2.75	2.63	60.67	27.80
	NORMAL	129.0	1.76	107.20	128.99	-0.65	1.29	1.21	2.58	1.83	-71.38	303.80
	NORMAL	159.0	2.11	97.91	158.97	-0.86	2.27	2.17	1.56	1.17	-30.97	313.43
6/11/2013	NORMAL	190.0	2.55	95.89	189.94	-1.01	3.52	3.40	1.44	1.42	-6.52	348.42
	NORMAL	220.0	3.26	92.34	219.90	-1.11	5.04	4.90	2.44	2.37	-11.83	344.00
	NORMAL	250.0	3.78	88.07	249.85	-1.12	6.88	6.73	1.94	1.73	-14.23	331.10
	NORMAL	281.0	4.57	86.84	280.77	-1.01	9.14	8.98	2.56	2.55	-3.97	352.92
	NORMAL	311.0	5.37	89.56	310.65	-0.94	11.73	11.57	2.78	2.67	9.07	17.77
	NORMAL	342.0	6.42	85.61	341.49	-0.79	14.91	14.75	3.63	3.39	-12.74	336.90
	NORMAL	413.0	9.76	88.81	411.77	-0.36	24.89	24.72	4.74	4.70	4.51	9.27
	NORMAL	443.0	10.99	83.98	441.28	-0.01	30.28	30.11	5.02	4.10	-16.10	322.34
	NORMAL	473.0	12.40	83.19	470.66	0.67	36.32	36.19	4.73	4.70	-2.63	353.13
	NORMAL	503.0	13.72	82.31	499.88	1.53	43.04	42.97	4.45	4.40	-2.93	351.00
	NORMAL	533.0	14.95	82.39	528.95	2.52	50.40	50.39	4.10	4.10	0.27	0.96
	NORMAL	593.0	16.36	82.75	586.72	4.61	66.46	66.58	2.36	2.35	0.60	4.1'

## 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 (°)
6/11/2013	NORMAL	685.0	19.63	82.51	674.21	8.26	94.64	94.99	3.56	3.55	-0.26	358.59
	NORMAL	776.0	21.10	81.78	759.52	12.59	126.01	126.64	1.64	1.62	-0.80	349.85
	NORMAL	866.0	22.95	81.60	842.95	17.47	159.40	160.36	2.06	2.06	-0.20	357.83
	NORMAL	957.0	22.21	82.26	926.97	22.38	194.00	195.28	0.86	-0.81	0.73	161.40
	NORMAL	1,052.0	20.58	81.95	1,015.42	27.14	228.32	229.91	1.72	-1.72	-0.33	183.82
	NORMAL	1,128.0	20.76	80.12	1,086.53	31.32	254.82	256.70	0.88	0.24	-2.41	284.71
6/12/2013	NORMAL	1,178.0	20.76	80.12	1,133.28	34.36	272.28	274.38	0.00	0.00	0.00	0.00
	NORMAL	1,250.0	21.41	80.20	1,200.36	38.82	298.06	300.49	0.53	0.53	0.07	2.57
	NORMAL	1,345.0	20.26	80.72	1,289.15	44.42	331.39	334.21	1.23	-1.21	0.55	171.11
6/13/2013	NORMAL	1,441.0	19.08	83.54	1,379.54	48.87	363.38	366.50	1.58	-1.23	2.94	142.51
	NORMAL	1,536.0	18.46	88.11	1,469.50	51.11	393.84	397.03	1.68	-0.65	4.81	115.01
	NORMAL	1,631.0	18.64	87.67	1,559.56	52.23	424.05	427.18	0.24	0.19	-0.46	321.92
	NORMAL	1,726.0	20.13	84.24	1,649.18	54.48	455.48	458.68	1.97	1.57	-3.61	320.99
	NORMAL	1,822.0	20.04	83.89	1,739.34	57.89	488.27	491.65	0.16	-0.09	-0.36	233.01
	NORMAL	1,917.0	18.81	83.54	1,828.93	61.35	519.68	523.24	1.30	-1.29	-0.37	185.24
	NORMAL	2,012.0	19.12	85.38	1,918.77	64.33	550.41	554.11	0.71	0.33	1.94	63.47
	NORMAL	2,108.0	19.69	85.73	2,009.32	66.80	582.20	586.00	0.61	0.59	0.36	11.70
	NORMAL	2,203.0	22.46	88.20	2,097.96	68.56	616.31	620.10	3.06	2.92	2.60	18.94
	NORMAL	2,298.0	22.55	87.58	2,185.72	69.90	652.65	656.38	0.27	0.09	-0.65	290.48
	NORMAL	2,393.0	22.59	80.99	2,273.46	73.52	688.87	692.78	2.66	0.04	-6.94	267.86
	NORMAL	2,489.0	20.92	78.62	2,362.62	79.79	723.89	728.26	1.97	-1.74	-2.47	206.65
	NORMAL	2,584.0	19.03	81.60	2,451.91	85.40	755.84	760.63	2.26	-1.99	3.14	153.09
	NORMAL	2,679.0	18.29	79.58	2,541.91	90.36	785.83	790.97	1.03	-0.78	-2.13	220.18
	NORMAL	2,775.0	19.03	85.29	2,632.87	94.37	816.24	821.63	2.05	0.77	5.95	70.67
	NORMAL	2,870.0	19.39	87.49	2,722.58	96.33	847.43	852.86	0.85	0.38	2.32	64.60
	NORMAL	2,965.0	20.00	88.20	2,812.03	97.54	879.43	884.80	0.69	0.64	0.75	21.75
	NORMAL	3,061.0	21.27	88.28	2,901.87	98.57	913.24	918.54	1.32	1.32	0.08	1.3
	NORMAL	3,155.0	20.79	88.28	2,989.60	99.59	946.96	952.18	0.51	-0.51	0.00	180.00
	NORMAL	3,251.0	20.04	87.84	3,079.57	100.72	980.43	985.58	0.80	-0.78	-0.46	191.36
	NORMAL	3,346.0	20.79	88.90	3,168.61	101.66	1,013.55	1,018.62	0.88	0.79	1.12	26.74
	NORMAL	3,441.0	20.97	87.14	3,257.37	102.83	1,047.38	1,052.40	0.69	0.19	-1.85	285.19
	NORMAL	3,537.0	21.36	84.24	3,346.90	105.44	1,081.94	1,087.03	1.16	0.41	-3.02	289.07
	NORMAL	3,632.0	21.14	85.03	3,435.44	108.66	1,116.22	1,121.46	0.38	-0.23	0.83	127.90
	NORMAL	3,727.0	19.87	83.10	3,524.42	112.08	1,149.31	1,154.73	1.51	-1.34	-2.03	207.13
	NORMAL	3,823.0	20.00	85.12	3,614.67	115.44	1,181.87	1,187.46	0.73	0.14	2.10	80.26
6/14/2013	NORMAL	3,918.0	20.26	80.72	3,703.87	119.47	1,214.29	1,220.13	1.62	0.27	-4.63	277.67
	NORMAL	4,013.0	19.74	81.78	3,793.14	124.42	1,246.40	1,252.58	0.67	-0.55	1.12	145.6
	NORMAL	4,108.0	18.90	80.99	3,882.79	129.12	1,277.48	1,283.98	0.93	-0.88	-0.83	196.9
	NORMAL	4,203.0	18.99	78.97	3,972.64	134.49	1,307.84	1,314.74	0.70	0.09	-2.13	276.86
	NORMAL	4,299.0	17.14	81.25	4,063.91	139.63	1,337.16	1,344.43	2.06	-1.93	2.38	160.17
	NORMAL	4,394.0	15.47	79.41	4,155.08	144.09	1,363.45	1,371.04	1.84	-1.76	-1.94	196.3
	NORMAL	4,489.0	12.62	82.31	4,247.24	147.81	1,386.19	1,394.05	3.09	-3.00	3.05	167.53
	NORMAL	4,585.0	11.91	79.05	4,341.04	151.09	1,406.31	1,414.40	1.03	-0.74	-3.40	222.70
	NORMAL	4,680.0	10.95	83.80	4,434.16	153.93	1,424.91	1,433.19	1.41	-1.01	5.00	137.87
	NORMAL	4,775.0	9.19	83.27	4,527.69	155.79	1,441.41	1,449.80	1.86	-1.85	-0.56	182.75
	NORMAL	4,870.0	8.13	86.00	4,621.61	157.15	1,455.65	1,464.10	1.20	-1.12	2.87	160.15
	NORMAL	4,966.0	6.81	81.43	4,716.79	158.47	1,468.05	1,476.57	1.51	-1.38	-4.76	201.98
	NORMAL	5,061.0	4.92	83.27	4,811.29	159.79	1,477.66	1,486.27	2.00	-1.99	1.94	175.23
	NORMAL	5,156.0	4.48	78.26	4,905.97	161.02	1,485.34	1,494.04	0.63	-0.46	-5.27	220.54
	NORMAL	5,251.0	4.53	77.38	5,000.68	162.60	1,492.64	1,501.46	0.09	0.05	-0.93	305.44
6/15/2013	NORMAL	5,347.0	3.30	80.11	5,096.45	163.90	1,499.06	1,507.98	1.30	-1.28	2.84	172.74
	NORMAL	5,442.0	2.50	87.84	5,191.33	164.45	1,503.82	1,512.77	0.94	-0.84	8.14	157.77
	NORMAL	5,537.0	2.33	75.80	5,286.25	165.00	1,507.77	1,516.75	0.56	-0.18	-12.67	245.52
	NORMAL	5,632.0	2.73	84.94	5,381.16	165.67	1,511.89	1,520.93	0.60	0.42	9.62	49.87
	NORMAL	5,727.0	1.67	72.90	5,476.09	166.28	1,515.47	1,524.55	1.21	-1.12	-12.67	197.62
	NORMAL	5,822.0	2.29	37.92	5,571.03	168.18	1,517.96	1,527.22	1.40	0.65	-36.82	278.95
	NORMAL	5,918.0	2.37	40.29	5,666.95	171.21	1,520.42	1,529.99	0.13	0.08	2.47	51.46

## 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)	Bulld Rate (°/100ft)	Turn (°/100ft)	TFace (°)
6/16/2013	NORMAL	6,013.0	0.53	23.68	5,761.92	173.11	1,521.87	1,531.62	1.97	-1.94	-17.48	184.65
	NORMAL	6,108.0	0.92	29.48	5,856.91	174.18	1,522.42	1,532.28	0.42	0.41	6.11	13.57
	NORMAL	6,203.0	0.61	58.84	5,951.90	175.10	1,523.23	1,533.18	0.52	-0.33	30.91	142.40
	NORMAL	6,298.0	0.35	355.12	6,046.90	175.65	1,523.63	1,533.65	0.58	-0.27	-67.07	214.59
	NORMAL	6,394.0	0.61	45.92	6,142.90	176.30	1,523.98	1,534.05	0.49	0.27	52.92	85.70
	NORMAL	6,489.0	0.18	334.64	6,237.89	176.79	1,524.28	1,534.40	0.61	-0.45	-75.03	197.16
	NORMAL	6,584.0	0.35	34.93	6,332.89	177.16	1,524.38	1,534.54	0.32	0.18	63.46	91.23
6/17/2013	NORMAL	6,680.0	0.40	71.50	6,428.89	177.51	1,524.86	1,535.06	0.25	0.05	38.09	96.88
	NORMAL	6,775.0	0.88	61.65	6,523.88	177.96	1,525.82	1,536.06	0.52	0.51	-10.37	342.13
	NORMAL	6,870.0	1.23	77.65	6,618.87	178.52	1,527.46	1,537.75	0.48	0.37	16.84	48.27
	NORMAL	6,965.0	1.36	88.37	6,713.84	178.77	1,529.58	1,539.89	0.29	0.14	11.28	67.21
	NORMAL	7,061.0	1.14	78.62	6,809.82	178.99	1,531.66	1,541.97	0.32	-0.23	-10.16	219.23
	NORMAL	7,156.0	1.80	80.90	6,904.79	179.42	1,534.06	1,544.40	0.70	0.69	2.40	6.20
	NORMAL	7,251.0	0.88	65.78	6,999.76	179.95	1,536.19	1,546.59	1.03	-0.97	-15.92	193.58
	NORMAL	7,346.0	0.35	305.37	7,094.76	180.42	1,536.62	1,547.06	1.16	-0.56	-126.75	195.94
	NORMAL	7,442.0	0.53	23.42	7,190.76	181.00	1,536.56	1,547.06	0.60	0.19	81.30	114.86
6/18/2013	NORMAL	8,110.0	2.30	23.42	7,858.53	196.13	1,543.12	1,555.16	0.26	0.26	0.00	0.00