

## General

### 1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

### 1.2 Well Information

Well	RWF 524-29	Wellbore No.	OH
Well Name	RWF 524-29	Common Name	RWF 524-29
Project	RU 29-06S-094W	Site	RWF 14-29 Pad
Vertical Section Azimuth	58.77 (°)	North Reference	
Origin N/S		Origin E/W	
Spud Date	5/4/2013	UWI	RWF 524-29
Active Datum	KB @5,445.2ft (above Mean Sea Level)		

## Survey Name

### 2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	MOSTAR
Date Started	5/4/2013	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

5928

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 (°)
5/4/2013	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/4/2013	NORMAL	101.0	1.67	112.76	100.99	-0.57	1.36	0.87	1.65	1.65	0.00	112.76
	NORMAL	132.0	1.67	83.41	131.97	-0.69	2.22	1.54	2.73	0.00	-94.68	255.33
	NORMAL	163.0	2.46	70.75	162.95	-0.42	3.30	2.60	2.93	2.55	-40.84	323.57
	NORMAL	194.0	2.99	60.82	193.92	0.19	4.63	4.06	2.28	1.71	-32.03	313.28
	NORMAL	224.0	3.61	62.14	223.87	1.02	6.15	5.79	2.08	2.07	4.40	7.65
	NORMAL	254.0	4.05	62.58	253.80	1.94	7.93	7.79	1.47	1.47	1.47	4.04
	NORMAL	285.0	5.01	68.03	284.70	2.96	10.15	10.21	3.39	3.10	17.58	26.88
	NORMAL	316.0	6.33	69.26	315.55	4.07	13.01	13.23	4.28	4.26	3.97	5.87
	NORMAL	347.0	7.30	67.15	346.33	5.44	16.42	16.86	3.23	3.13	-6.81	344.48
	NORMAL	377.0	8.80	68.47	376.04	7.02	20.31	21.01	5.04	5.00	4.40	7.68
	NORMAL	408.0	10.47	68.03	406.60	8.94	25.13	26.13	5.39	5.39	-1.42	357.26
	NORMAL	439.0	11.52	65.65	437.03	11.27	30.56	31.98	3.69	3.39	-7.68	335.45
	NORMAL	511.0	14.25	58.23	507.21	18.91	44.65	47.98	4.43	3.79	-10.31	325.12
	NORMAL	602.0	17.67	60.34	594.69	31.64	66.18	72.99	3.81	3.76	2.32	10.65
	NORMAL	693.0	19.17	61.22	681.03	45.67	91.28	101.73	1.68	1.65	0.97	10.92
5/5/2013	NORMAL	785.0	21.11	59.70	767.40	61.30	118.82	133.39	2.18	2.11	-1.65	344.19
	NORMAL	877.0	21.19	53.84	853.21	79.47	146.56	166.52	2.30	0.09	-6.37	269.43
	NORMAL	969.0	21.04	55.86	939.04	98.55	173.65	199.58	0.81	-0.16	2.20	102.55
	NORMAL	1,064.0	20.20	58.94	1,027.95	116.59	201.82	233.02	1.44	-0.88	3.24	129.19
	NORMAL	1,150.0	21.15	59.05	1,108.41	132.23	227.84	263.38	1.11	1.10	0.13	2.35

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	EW (ft)	V. Sec (ft)	DLS (%/100ft)	Build Rate (%/100ft)	Turn (%/100ft)	TFace (°)
------	------	------------	------------	------------	-------------	-------------	------------	----------------	------------------	-------------------------	-------------------	--------------

5/6/2013	NORMAL	1,260.0	21.76	58.59	1,210.79	153.06	262.26	303.62	0.58	0.55	-0.42	344.37
	NORMAL	1,355.0	22.77	57.71	1,298.71	172.06	292.83	339.61	1.12	1.06	-0.93	341.32
	NORMAL	1,450.0	21.23	58.06	1,386.79	190.98	322.97	375.19	1.63	-1.62	0.37	175.30
	NORMAL	1,546.0	20.04	60.26	1,476.63	208.33	352.01	409.01	1.48	-1.24	2.29	147.94
	NORMAL	1,641.0	20.61	58.67	1,565.71	225.10	380.42	442.01	0.84	0.60	-1.67	315.16
	NORMAL	1,736.0	19.74	61.05	1,654.88	241.56	408.74	474.76	1.26	-0.92	2.51	137.78
	NORMAL	1,831.0	20.61	59.91	1,744.05	257.71	437.25	507.51	1.00	0.92	-1.20	335.14
	NORMAL	1,927.0	19.43	63.33	1,834.26	273.35	466.14	540.32	1.73	-1.23	3.56	136.82
	NORMAL	2,022.0	19.82	62.80	1,923.74	287.81	494.58	572.14	0.45	0.41	-0.56	335.22
	NORMAL	2,117.0	20.44	61.05	2,012.93	303.20	523.42	604.78	0.91	0.65	-1.84	315.01
	NORMAL	2,213.0	21.27	59.20	2,102.64	320.23	553.05	638.94	1.10	0.86	-1.93	320.70
	NORMAL	2,308.0	21.85	57.00	2,191.00	338.68	582.68	673.84	1.05	0.61	-2.32	304.63
	NORMAL	2,403.0	22.50	55.07	2,278.97	358.72	612.41	709.65	1.03	0.68	-2.03	310.85
	NORMAL	2,499.0	21.19	54.98	2,368.08	379.19	641.68	745.30	1.37	-1.36	-0.09	181.42
	NORMAL	2,594.0	20.70	56.92	2,456.80	398.21	669.81	779.21	0.89	-0.52	2.04	126.15
	NORMAL	2,689.0	20.97	61.40	2,545.59	415.51	698.80	812.97	1.70	0.28	4.72	82.48
	NORMAL	2,784.0	21.41	61.66	2,634.17	431.88	728.99	847.27	0.47	0.46	0.27	12.18
	NORMAL	2,880.0	21.71	61.66	2,723.45	448.63	760.04	882.51	0.31	0.31	0.00	0.00
	NORMAL	2,975.0	20.57	59.55	2,812.06	465.75	789.89	916.74	1.44	-1.20	-2.22	212.74
	NORMAL	3,071.0	20.97	59.29	2,901.82	482.73	819.20	950.78	0.43	0.42	-0.27	346.90
	NORMAL	3,165.0	21.45	58.85	2,989.45	500.23	848.37	984.79	0.54	0.51	-0.47	341.45
	NORMAL	3,260.0	20.31	57.80	3,078.21	518.00	877.19	1,018.65	1.26	-1.20	-1.11	197.68
	NORMAL	3,356.0	20.79	57.44	3,168.11	536.05	905.65	1,052.34	0.52	0.50	-0.38	345.08
	NORMAL	3,451.0	21.19	56.92	3,256.80	554.49	934.24	1,086.36	0.46	0.42	-0.55	334.79
	NORMAL	3,546.0	21.01	57.18	3,345.43	573.09	962.94	1,120.54	0.21	-0.19	0.27	152.66
	NORMAL	3,642.0	20.35	57.27	3,435.25	591.45	991.45	1,154.43	0.69	-0.69	0.09	177.29
5/7/2013	NORMAL	3,737.0	19.96	57.71	3,524.43	609.04	1,019.05	1,187.15	0.44	-0.41	0.46	158.96
	NORMAL	3,832.0	20.26	62.54	3,613.64	625.29	1,047.36	1,219.78	1.78	0.32	5.08	82.03
	NORMAL	3,928.0	20.61	63.77	3,703.60	640.42	1,077.26	1,253.20	0.58	0.36	1.28	51.40
	NORMAL	4,023.0	20.04	59.55	3,792.69	656.06	1,106.29	1,286.13	1.66	-0.60	-4.44	246.78
	NORMAL	4,118.0	18.81	59.55	3,882.28	672.07	1,133.53	1,317.72	1.29	-1.29	0.00	180.00
	NORMAL	4,213.0	18.50	57.18	3,972.29	688.00	1,159.40	1,348.10	0.86	-0.33	-2.49	246.64
	NORMAL	4,309.0	17.10	65.35	4,063.71	702.15	1,185.03	1,377.36	2.98	-1.46	8.51	123.12
	NORMAL	4,404.0	15.08	67.20	4,154.98	712.76	1,209.12	1,403.46	2.19	-2.13	1.95	166.64
	NORMAL	4,499.0	15.03	60.90	4,246.73	723.54	1,231.28	1,427.99	1.72	-0.05	-6.63	265.27
	NORMAL	4,594.0	14.64	61.05	4,338.56	735.34	1,252.55	1,452.30	0.41	-0.41	0.16	174.45
	NORMAL	4,690.0	13.19	57.44	4,431.74	747.11	1,272.39	1,475.37	1.76	-1.51	-3.76	209.17
	NORMAL	4,785.0	11.43	56.13	4,524.56	758.19	1,289.35	1,495.61	1.88	-1.85	-1.38	188.38
	NORMAL	4,880.0	9.58	55.07	4,617.96	767.96	1,303.64	1,512.91	1.96	-1.95	-1.12	185.44
	NORMAL	4,975.0	8.57	55.07	4,711.77	776.54	1,315.93	1,527.86	1.06	-1.06	0.00	180.00
5/8/2013	NORMAL	5,071.0	7.25	58.59	4,806.85	783.80	1,326.96	1,541.06	1.46	-1.38	3.67	161.59
	NORMAL	5,166.0	5.98	63.59	4,901.22	789.12	1,336.51	1,551.98	1.47	-1.34	5.26	158.07
	NORMAL	5,261.0	5.23	59.29	4,995.77	793.53	1,344.67	1,561.24	0.90	-0.79	-4.53	207.12
	NORMAL	5,356.0	3.38	62.01	5,090.49	797.06	1,350.86	1,568.37	1.96	-1.95	-2.86	175.06
	NORMAL	5,452.0	2.20	25.80	5,186.39	800.05	1,354.16	1,572.74	2.15	-1.23	-37.72	219.07
	NORMAL	5,547.0	1.36	349.24	5,281.34	802.80	1,354.75	1,574.67	1.44	-0.88	-38.48	216.15
	NORMAL	5,642.0	1.19	6.12	5,376.32	804.89	1,354.64	1,575.66	0.43	-0.18	17.77	122.63
	NORMAL	5,737.0	0.97	11.04	5,471.30	806.66	1,354.90	1,576.80	0.25	-0.23	5.18	159.59
	NORMAL	5,832.0	1.27	343.88	5,566.28	808.46	1,354.76	1,577.61	0.63	0.32	-28.59	285.43
	NORMAL	5,927.0	1.36	339.22	5,661.26	810.52	1,354.07	1,578.09	0.15	0.09	-4.90	307.74
5/9/2013	NORMAL	6,023.0	1.27	331.49	5,757.23	812.52	1,353.16	1,578.35	0.21	-0.09	-8.05	239.27
	NORMAL	6,118.0	1.10	329.02	5,852.21	814.23	1,352.19	1,578.40	0.19	-0.18	-2.60	195.49
	NORMAL	6,215.0	1.23	324.45	5,949.19	815.87	1,351.10	1,578.33	0.16	0.13	-4.71	322.15
	NORMAL	6,310.0	1.23	307.32	6,044.17	817.32	1,349.70	1,577.88	0.39	0.00	-18.03	261.44
5/10/2013	NORMAL	6,406.0	0.92	359.88	6,140.16	818.72	1,348.88	1,577.90	1.03	-0.32	54.75	132.55
	NORMAL	6,501.0	0.48	344.57	6,235.15	819.86	1,348.77	1,578.40	0.50	-0.46	-16.12	195.50
	NORMAL	6,596.0	0.57	358.91	6,330.15	820.72	1,348.66	1,578.75	0.17	0.09	15.09	62.90

August 08, 2013 at 2:44 pm

2

OpenWells

## 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 (°)
5/10/2013	NORMAL	6,692.0	2.15	357.50	6,426.12	823.00	1,348.57	1,579.85	1.65	1.65	-1.47	358.08
	NORMAL	6,787.0	1.89	358.12	6,521.06	826.34	1,348.44	1,581.48	0.27	-0.27	0.65	175.51
	NORMAL	6,882.0	1.45	23.34	6,616.02	829.01	1,348.86	1,583.23	0.89	-0.46	26.55	133.10
	NORMAL	6,977.0	0.88	2.16	6,711.00	830.84	1,349.37	1,584.61	0.74	-0.60	-22.29	206.80
	NORMAL	7,168.0	0.88	30.11	6,901.98	833.58	1,350.16	1,586.70	0.22	0.00	14.63	103.97
5/12/2013	NORMAL	7,358.0	0.09	42.33	7,091.97	834.95	1,350.99	1,588.12	0.42	-0.42	6.43	178.62
	NORMAL	7,549.0	0.75	118.18	7,282.96	834.47	1,352.19	1,588.90	0.38	0.35	39.71	82.69
	NORMAL	7,644.0	0.97	152.72	7,377.95	833.46	1,353.11	1,589.16	0.58	0.23	36.36	84.90
	NORMAL	7,740.0	1.23	144.72	7,473.93	831.90	1,354.08	1,589.18	0.31	0.27	-8.33	325.39
	NORMAL	7,835.0	1.50	141.11	7,568.91	830.10	1,355.45	1,589.42	0.30	0.28	-3.80	340.52
	NORMAL	7,930.0	1.01	128.37	7,663.88	828.61	1,356.88	1,589.88	0.59	-0.52	-13.41	203.39
	NORMAL	8,025.0	1.01	128.37	7,758.87	827.57	1,358.20	1,590.46	0.00	0.00	0.00	0.00
	NORMAL	8,120.0	1.45	138.57	7,853.85	826.15	1,359.65	1,590.97	0.52	0.46	10.74	31.62
	NORMAL	8,165.0	1.45	138.57	7,898.83	825.30	1,360.40	1,591.17	0.00	0.00	0.00	0.00