

Deviation Summary

PICEANCE VLY

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well/Wellbore Information

Well	SG 432-28	Wellbore No.	00
Wellbore Legal Name	SG 432-28	Common Wellbore Name	SG 432-28
Project	SG 28-07S-096W	Site	SG 43-28 Pad
Vertical Section Azimuth	293.19 (°)	North reference	
Origin N/S		Origin E/W	
Spud date	10/2/2014	UWI	SG 432-28
Active datum	KB @5,143.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	MOSTAR
Date Started	10/2/2014	Ended	10/8/2014
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 (°/100usft)	Build Rate (°/100usft)	Turn (°/100usft)	Tface (°)
10/2/2014	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/2/2014	NORMAL	114.0	0.97	279.05	113.99	0.15	-0.95	0.94	0.85	0.85	0.00	279.05
	NORMAL	134.0	1.23	288.63	133.99	0.25	-1.32	1.31	1.59	1.30	47.90	40.13
	NORMAL	164.0	1.94	284.59	163.98	0.48	-2.12	2.14	2.39	2.37	-13.47	349.03
	NORMAL	194.0	2.90	289.95	193.95	0.86	-3.32	3.40	3.28	3.20	17.87	15.95
	NORMAL	224.0	3.17	289.34	223.91	1.40	-4.82	4.98	0.91	0.90	-2.03	352.87
	NORMAL	255.0	3.96	285.21	254.85	1.96	-6.66	6.90	2.68	2.55	-13.32	339.92
	NORMAL	285.0	4.49	287.31	284.77	2.58	-8.78	9.09	1.84	1.77	7.00	17.32
	NORMAL	315.0	5.63	284.41	314.65	3.30	-11.33	11.71	3.89	3.80	-9.67	345.91
	NORMAL	345.0	6.51	286.08	344.48	4.14	-14.39	14.86	2.99	2.93	5.57	12.18
	NORMAL	375.0	7.83	286.26	374.25	5.18	-17.99	18.57	4.40	4.40	0.60	1.06
	NORMAL	406.0	8.97	285.73	404.91	6.43	-22.34	23.06	3.69	3.68	-1.71	355.85
	NORMAL	436.0	9.59	286.70	434.52	7.78	-26.98	27.87	2.13	2.07	3.23	14.64
	NORMAL	466.0	10.82	286.52	464.05	9.30	-32.08	33.15	4.10	4.10	-0.60	358.43
	NORMAL	496.0	11.70	291.36	493.47	11.21	-37.61	38.98	4.30	2.93	16.13	49.43
	NORMAL	526.0	12.40	294.35	522.81	13.64	-43.38	45.24	3.13	2.33	9.97	43.19
	NORMAL	556.0	13.37	296.98	552.05	16.54	-49.40	51.93	3.78	3.23	8.77	32.44
	NORMAL	587.0	14.25	296.19	582.16	19.85	-56.02	59.31	2.90	2.84	-2.55	347.52
	NORMAL	617.0	15.04	296.37	611.18	23.21	-62.82	66.89	2.64	2.63	0.60	3.38
	NORMAL	647.0	16.36	295.22	640.06	26.74	-70.13	75.00	4.52	4.40	-3.83	346.18
	NORMAL	677.0	17.33	294.79	668.77	30.42	-78.01	83.68	3.26	3.23	-1.43	352.47

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. sec. (ft)	DLS (°/100usft)	Build Rate (°/100usft)	Turn (°/100usft)	Tface (°)
10/2/2014	NORMAL	707.0	18.04	294.70	697.36	34.23	-86.29	92.79	2.37	2.37	-0.30	357.75
	NORMAL	738.0	19.09	294.96	726.74	38.38	-95.24	102.66	3.40	3.39	0.84	4.63
	NORMAL	768.0	19.79	294.70	755.03	42.57	-104.31	112.64	2.35	2.33	-0.87	352.83
	NORMAL	798.0	21.03	293.55	783.15	46.84	-113.85	123.10	4.34	4.13	-3.83	341.54
	NORMAL	829.0	22.17	292.32	811.97	51.29	-124.37	134.51	3.96	3.68	-3.97	337.76
	NORMAL	859.0	22.79	293.12	839.69	55.72	-134.95	145.98	2.30	2.07	2.67	26.63
	NORMAL	890.0	23.49	294.17	868.20	60.60	-146.10	158.16	2.62	2.26	3.39	31.00
	NORMAL	920.0	24.55	293.99	895.60	65.59	-157.25	170.37	3.54	3.53	-0.60	355.96
	NORMAL	961.0	26.17	294.22	932.65	72.76	-173.28	187.93	3.96	3.95	0.56	3.58
	NORMAL	1,055.0	30.00	294.81	1,015.56	91.13	-213.53	232.16	4.09	4.07	0.63	4.41
	NORMAL	1,150.0	33.33	293.51	1,096.41	111.51	-259.04	282.02	3.58	3.51	-1.37	347.86
	NORMAL	1,244.0	36.63	293.22	1,173.42	132.88	-308.50	335.90	3.52	3.51	-0.31	357.00
	NORMAL	1,338.0	38.43	290.87	1,247.96	154.34	-361.58	393.14	2.45	1.91	-2.50	320.57
	NORMAL	1,432.0	41.38	291.11	1,320.06	175.94	-417.87	453.39	3.14	3.14	0.26	3.08
10/3/2014	NORMAL	1,526.0	44.46	293.38	1,388.90	200.20	-477.09	517.38	3.67	3.28	2.41	27.49
	NORMAL	1,570.0	45.40	293.16	1,420.05	212.48	-505.63	548.45	2.17	2.14	-0.50	350.54
10/4/2014	NORMAL	1,720.0	47.47	294.74	1,523.42	256.62	-604.94	657.12	1.58	1.38	1.05	29.49
	NORMAL	1,814.0	46.99	292.80	1,587.26	284.43	-668.09	726.11	1.60	-0.51	-2.06	250.72
	NORMAL	1,909.0	47.65	291.92	1,651.66	311.00	-732.67	795.94	0.97	0.69	-0.93	315.27
	NORMAL	2,003.0	46.73	292.80	1,715.54	337.23	-796.45	864.89	1.20	-0.98	0.94	145.24
	NORMAL	2,097.0	46.99	292.10	1,779.81	363.42	-859.84	933.48	0.61	0.28	-0.74	296.74
	NORMAL	2,191.0	45.41	291.75	1,844.87	388.76	-922.77	1,001.30	1.70	-1.68	-0.37	188.96
	NORMAL	2,285.0	45.63	292.80	1,910.74	414.18	-984.84	1,068.36	0.83	0.23	1.12	74.00
	NORMAL	2,380.0	45.85	295.44	1,977.04	441.98	-1,046.92	1,136.38	2.00	0.23	2.78	84.29
	NORMAL	2,474.0	44.40	294.30	2,043.37	470.00	-1,107.35	1,202.96	1.77	-1.54	-1.21	208.72
	NORMAL	2,568.0	42.86	294.30	2,111.40	496.69	-1,166.46	1,267.80	1.64	-1.64	0.00	180.00
10/5/2014	NORMAL	2,662.0	40.40	293.07	2,181.66	521.79	-1,223.63	1,330.24	2.76	-2.62	-1.31	197.92
	NORMAL	2,757.0	38.81	292.80	2,254.85	545.39	-1,279.40	1,390.80	1.68	-1.67	-0.28	186.07
	NORMAL	2,851.0	36.84	292.01	2,329.10	567.37	-1,332.69	1,448.43	2.16	-2.10	-0.84	193.51
	NORMAL	2,945.0	34.51	292.01	2,405.45	587.91	-1,383.51	1,503.24	2.48	-2.48	0.00	180.00
	NORMAL	3,039.0	32.62	292.63	2,483.77	607.64	-1,431.59	1,555.20	2.04	-2.01	0.66	169.98
	NORMAL	3,134.0	30.33	292.98	2,564.79	626.86	-1,477.31	1,604.80	2.42	-2.41	0.37	175.59
	NORMAL	3,228.0	28.88	293.24	2,646.52	645.08	-1,520.02	1,651.23	1.55	-1.54	0.28	175.05
	NORMAL	3,322.0	27.52	293.68	2,729.36	662.76	-1,560.77	1,695.65	1.46	-1.45	0.47	171.50
	NORMAL	3,416.0	25.80	294.30	2,813.36	679.91	-1,599.31	1,737.82	1.85	-1.83	0.66	171.09
	NORMAL	3,511.0	24.75	294.03	2,899.27	696.51	-1,636.31	1,778.38	1.11	-1.11	-0.28	186.14
	NORMAL	3,605.0	22.42	293.51	2,985.41	711.68	-1,670.73	1,815.98	2.49	-2.48	-0.55	184.86
	NORMAL	3,699.0	20.53	292.89	3,072.88	725.24	-1,702.35	1,850.39	2.03	-2.01	-0.66	186.56
	NORMAL	3,793.0	18.81	291.13	3,161.39	737.12	-1,731.67	1,882.02	1.94	-1.83	-1.87	198.18
	NORMAL	3,887.0	16.26	290.25	3,251.01	747.13	-1,758.16	1,910.32	2.73	-2.71	-0.94	185.52
10/6/2014	NORMAL	3,983.0	15.30	291.83	3,343.40	756.50	-1,782.53	1,936.40	1.10	-1.00	1.65	156.65
	NORMAL	4,076.0	13.06	292.71	3,433.56	765.12	-1,803.61	1,959.18	2.42	-2.41	0.95	174.93
	NORMAL	4,170.0	10.81	292.19	3,525.52	772.55	-1,821.58	1,978.61	2.40	-2.39	-0.55	182.48
	NORMAL	4,264.0	8.79	294.91	3,618.14	778.90	-1,836.25	1,994.61	2.20	-2.15	2.89	168.43
	NORMAL	4,359.0	7.03	296.23	3,712.24	784.53	-1,848.05	2,007.67	1.86	-1.85	1.39	174.76
	NORMAL	4,453.0	5.19	296.93	3,805.70	789.00	-1,857.00	2,017.66	1.96	-1.96	0.74	178.03
	NORMAL	4,547.0	3.91	303.35	3,899.40	792.69	-1,863.47	2,025.06	1.46	-1.36	6.83	161.48
	NORMAL	4,641.0	2.33	290.69	3,993.26	795.12	-1,867.94	2,030.12	1.82	-1.68	-13.47	197.33
	NORMAL	4,736.0	0.22	293.68	4,088.23	795.88	-1,869.91	2,032.23	2.22	-2.22	3.15	179.69
	NORMAL	4,830.0	1.58	46.01	4,182.22	796.85	-1,869.14	2,031.91	1.78	1.45	119.50	119.30
	NORMAL	4,924.0	1.41	30.98	4,276.19	798.74	-1,867.62	2,031.25	0.45	-0.18	-15.99	239.17
	NORMAL	5,018.0	0.92	29.83	4,370.17	800.39	-1,866.64	2,031.01	0.52	-0.52	-1.22	182.16
	NORMAL	5,112.0	0.53	348.61	4,464.16	801.47	-1,866.36	2,031.17	0.67	-0.41	-43.85	213.82
	NORMAL	5,206.0	0.31	302.21	4,558.16	802.03	-1,866.66	2,031.66	0.41	-0.23	-49.36	215.37
	NORMAL	5,300.0	0.83	266.26	4,652.15	802.12	-1,867.55	2,032.52	0.65	0.55	-38.24	306.60
	NORMAL	5,395.0	1.14	286.21	4,747.14	802.34	-1,869.15	2,034.07	0.48	0.33	21.00	58.15

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. sec. (ft)	DLS (°/100usft)	Build Rate (°/100usft)	Turn (°/100usft)	Tface (°)
10/6/2014	NORMAL	5,489.0	1.27	287.53	4,841.12	802.92	-1,871.04	2,036.04	0.14	0.14	1.40	12.71
10/7/2014	NORMAL	5,583.0	1.19	275.31	4,935.10	803.32	-1,873.00	2,038.00	0.29	-0.09	-13.00	246.99
	NORMAL	5,677.0	1.71	276.98	5,029.07	803.58	-1,875.37	2,040.28	0.55	0.55	1.78	5.48
	NORMAL	5,715.0	1.76	282.78	5,067.05	803.78	-1,876.50	2,041.40	0.48	0.13	15.26	77.02
	NORMAL	5,775.0	1.76	282.78	5,127.02	804.19	-1,878.29	2,043.21	0.00	0.00	0.00	0.00