

Deviation Summary

PICEANCE VLY

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well/Wellbore Information

Well	GM 333-28	Wellbore No.	00
Wellbore Legal Name	GM 333-28	Common Wellbore Name	GM 333-28
Project	GV 28-06S-096W	Site	GM 323-28 Pad
Vertical Section Azimuth	60.44 (°)	North reference	
Origin N/S		Origin E/W	
Spud date	11/24/2014	UWI	GM 333-28
Active datum	KB @5,500.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	MOSTAR
Date Started	11/24/2014	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 (°/100usft)	Build Rate (°/100usft)	Turn (°/100usft)	Tface (°)
11/24/2014	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11/24/2014	NORMAL	121.0	0.48	57.51	121.00	0.27	0.43	0.51	0.40	0.40	0.00	57.51
	NORMAL	152.0	0.75	71.40	152.00	0.41	0.73	0.84	0.99	0.87	44.81	35.97
	NORMAL	182.0	1.36	72.36	181.99	0.58	1.25	1.38	2.03	2.03	3.20	2.14
	NORMAL	213.0	2.07	62.87	212.98	0.94	2.10	2.30	2.46	2.29	-30.61	333.41
	NORMAL	243.0	2.73	58.65	242.95	1.56	3.20	3.55	2.28	2.20	-14.07	342.90
	NORMAL	273.0	3.47	58.21	272.91	2.41	4.58	5.17	2.47	2.47	-1.47	357.94
	NORMAL	303.0	4.26	57.79	302.84	3.49	6.29	7.19	2.64	2.63	-1.40	357.74
	NORMAL	332.0	5.14	59.19	331.74	4.72	8.32	9.57	3.06	3.03	4.83	8.13
	NORMAL	363.0	6.11	61.73	362.59	6.22	10.97	12.60	3.23	3.13	8.19	15.66
	NORMAL	393.0	7.12	60.32	392.39	7.89	13.99	16.06	3.41	3.37	-4.70	350.16
	NORMAL	423.0	8.00	61.02	422.13	9.83	17.43	20.01	2.95	2.93	2.33	6.32
	NORMAL	514.0	11.12	61.73	511.86	17.05	30.70	35.12	3.43	3.43	0.78	2.51
	NORMAL	604.0	13.32	61.02	599.81	26.19	47.41	54.16	2.45	2.44	-0.79	355.74
	NORMAL	695.0	15.43	59.44	687.96	37.42	67.01	76.75	2.36	2.32	-1.74	348.70
11/25/2014	NORMAL	785.0	16.84	58.92	774.41	50.24	88.49	101.76	1.57	1.57	-0.58	353.90
	NORMAL	877.0	18.86	59.27	861.98	64.72	112.68	129.95	2.20	2.20	0.38	3.21
	NORMAL	967.0	21.19	59.27	946.53	80.47	139.17	160.76	2.59	2.59	0.00	0.00
	NORMAL	1,062.0	22.77	60.67	1,034.62	98.25	169.96	196.31	1.75	1.66	1.47	19.00
	NORMAL	1,156.0	25.14	61.38	1,120.52	116.72	203.35	234.47	2.54	2.52	0.76	7.26
	NORMAL	1,250.0	27.82	61.64	1,204.65	136.71	240.19	276.37	2.85	2.85	0.28	2.59

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 (°)
11/25/2014	NORMAL	1,315.0	29.19	61.73	1,261.77	151.42	267.50	307.38	2.11	2.11	0.14	1.84
11/26/2014	NORMAL	1,448.0	29.45	61.99	1,377.73	182.14	324.93	372.49	0.22	0.20	0.20	26.20
	NORMAL	1,541.0	28.22	61.46	1,459.20	203.38	364.43	417.33	1.35	-1.32	-0.57	191.51
	NORMAL	1,635.0	27.82	61.29	1,542.18	224.54	403.19	461.48	0.43	-0.43	-0.18	191.22
11/27/2014	NORMAL	1,729.0	29.50	60.32	1,624.66	246.54	442.54	506.56	1.85	1.79	-1.03	344.10
	NORMAL	1,823.0	30.68	59.18	1,705.99	270.28	483.25	553.69	1.39	1.26	-1.21	333.66
	NORMAL	1,918.0	30.07	59.44	1,787.95	294.80	524.55	601.71	0.66	-0.64	0.27	167.95
	NORMAL	2,012.0	31.74	58.48	1,868.60	319.70	565.91	649.97	1.85	1.78	-1.02	343.14
	NORMAL	2,106.0	31.03	57.51	1,948.85	345.64	607.43	698.88	0.93	-0.76	-1.03	215.02
	NORMAL	2,201.0	30.68	56.98	2,030.41	372.00	648.40	747.53	0.47	-0.37	-0.56	217.61
	NORMAL	2,295.0	29.98	59.27	2,111.54	397.07	688.70	794.95	1.44	-0.74	2.44	122.17
	NORMAL	2,389.0	29.89	58.65	2,193.00	421.26	728.89	841.84	0.34	-0.10	-0.66	253.51
	NORMAL	2,483.0	27.43	60.23	2,275.48	444.20	767.69	886.91	2.74	-2.62	1.68	163.57
	NORMAL	2,578.0	26.42	59.44	2,360.18	465.81	804.89	929.92	1.13	-1.06	-0.83	199.15
	NORMAL	2,672.0	25.32	61.90	2,444.76	485.91	840.63	970.93	1.63	-1.17	2.62	136.80
	NORMAL	2,765.0	26.24	62.26	2,528.51	504.85	876.37	1,011.36	1.00	0.99	0.39	9.82
	NORMAL	2,859.0	26.02	61.38	2,612.90	524.40	912.86	1,052.75	0.47	-0.23	-0.94	240.02
	NORMAL	2,953.0	25.80	60.85	2,697.45	544.24	948.82	1,093.82	0.34	-0.23	-0.56	226.23
	NORMAL	3,047.0	24.92	59.71	2,782.39	564.19	983.79	1,134.07	1.07	-0.94	-1.21	208.51
	NORMAL	3,141.0	23.03	58.83	2,868.28	583.70	1,016.62	1,172.26	2.05	-2.01	-0.94	190.31
	NORMAL	3,235.0	22.46	61.02	2,954.97	601.92	1,048.07	1,208.60	1.09	-0.61	2.33	124.95
	NORMAL	3,329.0	22.15	61.20	3,041.94	619.15	1,079.30	1,244.27	0.34	-0.33	0.19	167.66
	NORMAL	3,423.0	21.80	60.06	3,129.11	636.40	1,109.96	1,279.44	0.59	-0.37	-1.21	230.10
	NORMAL	3,517.0	21.36	59.79	3,216.52	653.73	1,139.87	1,314.01	0.48	-0.47	-0.29	192.59
	NORMAL	3,611.0	20.04	62.43	3,304.45	669.80	1,168.95	1,347.23	1.72	-1.40	2.81	145.97
	NORMAL	3,705.0	18.68	62.52	3,393.13	684.20	1,196.58	1,378.37	1.45	-1.45	0.10	178.79
	NORMAL	3,799.0	16.66	62.52	3,482.69	697.36	1,221.89	1,406.88	2.15	-2.15	0.00	180.00
	NORMAL	3,893.0	16.00	62.43	3,572.90	709.58	1,245.33	1,433.30	0.70	-0.70	-0.10	182.15
	NORMAL	3,987.0	15.47	62.96	3,663.38	721.27	1,267.98	1,458.77	0.58	-0.56	0.56	165.08
	NORMAL	4,081.0	14.42	61.64	3,754.20	732.53	1,289.45	1,482.99	1.17	-1.12	-1.40	197.33
	NORMAL	4,175.0	12.88	57.77	3,845.54	743.68	1,308.61	1,505.16	1.90	-1.64	-4.12	208.80
11/28/2014	NORMAL	4,270.0	12.35	58.48	3,938.25	754.64	1,326.23	1,525.89	0.58	-0.56	0.75	164.04
	NORMAL	4,364.0	10.59	55.31	4,030.37	764.81	1,341.90	1,544.54	1.99	-1.87	-3.37	198.16
	NORMAL	4,458.0	10.20	53.20	4,122.82	774.71	1,355.67	1,561.40	0.58	-0.41	-2.24	223.28
	NORMAL	4,552.0	8.92	56.89	4,215.52	783.68	1,368.44	1,576.94	1.51	-1.36	3.93	156.23
	NORMAL	4,646.0	7.25	59.62	4,308.58	790.66	1,379.66	1,590.14	1.82	-1.78	2.90	168.40
	NORMAL	4,740.0	5.58	56.63	4,401.99	796.17	1,388.59	1,600.63	1.81	-1.78	-3.18	189.83
	NORMAL	4,834.0	5.05	56.72	4,495.58	800.96	1,395.87	1,609.32	0.56	-0.56	0.10	179.14
	NORMAL	4,928.0	4.88	57.33	4,589.23	805.38	1,402.69	1,617.44	0.19	-0.18	0.65	163.05
	NORMAL	5,022.0	4.26	59.00	4,682.93	809.34	1,409.05	1,624.92	0.67	-0.66	1.78	168.72
	NORMAL	5,116.0	3.82	57.16	4,776.70	812.84	1,414.67	1,631.54	0.49	-0.47	-1.96	195.50
	NORMAL	5,210.0	3.52	61.11	4,870.51	815.93	1,419.83	1,637.55	0.42	-0.32	4.20	141.84
	NORMAL	5,304.0	3.34	62.69	4,964.34	818.58	1,424.79	1,643.17	0.22	-0.19	1.68	153.08
	NORMAL	5,398.0	2.81	60.23	5,058.20	820.98	1,429.22	1,648.21	0.58	-0.56	-2.62	192.76
	NORMAL	5,492.0	2.99	61.99	5,152.08	823.28	1,433.39	1,652.97	0.21	0.19	1.87	27.20
	NORMAL	5,587.0	2.46	62.96	5,246.97	825.37	1,437.39	1,657.48	0.56	-0.56	1.02	175.51
	NORMAL	5,681.0	2.24	61.99	5,340.89	827.15	1,440.81	1,661.33	0.24	-0.23	-1.03	189.76
11/29/2014	NORMAL	5,775.0	2.20	65.42	5,434.82	828.76	1,444.07	1,664.97	0.15	-0.04	3.65	108.46
	NORMAL	5,869.0	2.02	70.61	5,528.76	830.06	1,447.28	1,668.40	0.28	-0.19	5.52	135.86
	NORMAL	5,963.0	2.11	66.91	5,622.70	831.29	1,450.43	1,671.75	0.17	0.10	-3.94	302.16
	NORMAL	6,057.0	1.76	74.56	5,716.65	832.35	1,453.42	1,674.87	0.46	-0.37	8.14	147.35
	NORMAL	6,152.0	1.27	81.24	5,811.61	832.90	1,455.86	1,677.26	0.55	-0.52	7.03	163.50
	NORMAL	6,246.0	1.23	88.53	5,905.59	833.08	1,457.90	1,679.13	0.17	-0.04	7.76	107.74
	NORMAL	6,340.0	1.27	80.80	5,999.57	833.28	1,459.94	1,681.00	0.18	0.04	-8.22	279.46
11/30/2014	NORMAL	6,435.0	0.83	78.16	6,094.55	833.59	1,461.65	1,682.64	0.47	-0.46	-2.78	184.96
	NORMAL	6,529.0	0.57	35.45	6,188.54	834.11	1,462.59	1,683.71	0.60	-0.28	-45.44	223.24

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 (°)
11/30/2014	NORMAL	6,623.0	0.70	352.73	6,282.54	835.06	1,462.79	1,684.35	0.51	0.14	-45.45	263.31
	NORMAL	6,717.0	0.70	333.84	6,376.53	836.14	1,462.46	1,684.60	0.24	0.00	-20.10	260.56
	NORMAL	6,811.0	0.31	302.72	6,470.53	836.80	1,461.99	1,684.52	0.49	-0.41	-33.11	200.24
	NORMAL	6,906.0	0.53	229.51	6,565.53	836.65	1,461.44	1,683.97	0.56	0.23	-77.06	252.82
	NORMAL	7,000.0	0.66	226.43	6,659.52	835.99	1,460.72	1,683.02	0.14	0.14	-3.28	344.63
	NORMAL	7,080.0	0.75	230.65	6,739.52	835.34	1,459.98	1,682.05	0.13	0.11	5.28	32.10
	NORMAL	7,130.0	0.75	230.65	6,789.51	834.93	1,459.47	1,681.41	0.00	0.00	0.00	0.00