

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	RMV 86-34	Wellbore No.	
Well Name	RMV 86-34	Common Name	RMV 86-34
Project	RU 27-06S-094W	Site	RMV 28-27 Pad
Vertical Section	185.21 (°)	North Reference	True
Azimuth		Origin E/W	
Origin N/S		UWI	RMV 86-34
Spud Date	7/27/2012		
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	7/27/2012	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 (°)
7/27/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/27/2012	NORMAL	103.0	0.97	136.49	103.00	-0.63	0.60	0.58	0.94	0.94	0.00	136.49
	NORMAL	164.0	1.94	162.51	163.98	-1.99	1.27	1.87	1.89	1.59	42.66	47.73
	NORMAL	255.0	3.78	176.04	254.86	-6.45	1.94	6.25	2.14	2.02	14.87	26.99
	NORMAL	346.0	7.04	179.91	345.44	-15.02	2.15	14.77	3.60	3.58	4.25	8.32
	NORMAL	436.0	10.82	177.89	434.33	-28.99	2.47	28.64	4.21	4.20	-2.24	354.26
	NORMAL	512.0	13.06	175.75	508.69	-44.68	3.37	44.19	3.00	2.95	-2.82	347.77
	NORMAL	603.0	16.92	176.89	596.57	-68.17	4.85	67.44	4.25	4.24	1.25	4.92
	NORMAL	693.0	21.23	176.98	681.61	-97.53	6.42	96.54	4.79	4.79	0.10	0.43
	NORMAL	784.0	24.31	178.38	765.51	-132.72	7.82	131.46	3.44	3.38	1.54	10.62
	NORMAL	875.0	27.87	176.10	847.23	-172.67	9.80	171.07	4.06	3.91	-2.51	343.24
7/28/2012	NORMAL	966.0	30.64	175.31	926.61	-217.01	13.14	214.92	3.07	3.04	-0.87	351.72
	NORMAL	1,062.0	33.14	175.77	1,008.12	-267.57	17.08	264.92	2.62	2.60	0.48	5.75
	NORMAL	1,158.0	34.64	174.95	1,087.80	-320.92	21.41	317.65	1.63	1.56	-0.85	342.71
	NORMAL	1,254.0	34.59	176.54	1,166.81	-375.30	25.46	371.44	0.94	-0.05	1.66	93.82
	NORMAL	1,349.0	35.91	176.98	1,244.39	-430.04	28.56	425.67	1.41	1.39	0.46	11.07
	NORMAL	1,445.0	37.45	177.15	1,321.38	-487.31	31.49	482.44	1.61	1.60	0.18	3.84
	NORMAL	1,541.0	38.90	178.12	1,396.85	-546.59	33.93	541.25	1.63	1.51	1.01	22.85
	NORMAL	1,636.0	39.25	178.21	1,470.60	-606.44	35.85	600.68	0.37	0.37	0.09	9.24
	NORMAL	1,707.0	39.30	177.85	1,525.56	-651.36	37.39	645.28	0.33	0.07	-0.51	282.24
7/29/2012	NORMAL	1,758.0	39.69	177.23	1,564.92	-683.77	38.79	677.42	1.09	0.76	-1.22	314.44

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 (°)
7/29/2012	NORMAL	1,843.0	38.33	179.60	1,630.97	-737.24	40.28	730.54	2.37	-1.60	2.79	133.27
	NORMAL	1,939.0	35.69	179.43	1,707.62	-795.02	40.77	788.04	2.75	-2.75	-0.18	182.15
	NORMAL	2,034.0	35.16	179.87	1,785.03	-850.09	41.11	842.84	0.62	-0.56	0.46	154.48
	NORMAL	2,130.0	36.13	182.68	1,863.05	-906.00	39.85	898.64	1.98	1.01	2.93	60.51
	NORMAL	2,225.0	36.92	185.49	1,939.40	-962.39	35.81	955.16	1.95	0.83	2.96	65.85
	NORMAL	2,321.0	36.79	187.69	2,016.21	-1,019.58	29.20	1,012.71	1.38	-0.14	2.29	96.51
	NORMAL	2,417.0	36.92	186.46	2,093.03	-1,076.72	22.11	1,070.26	0.78	0.14	-1.28	279.50
	NORMAL	2,511.0	36.79	185.05	2,168.25	-1,132.81	16.45	1,126.64	0.91	-0.14	-1.50	260.70
	NORMAL	2,606.0	36.84	184.79	2,244.30	-1,189.53	11.57	1,183.56	0.17	0.05	-0.27	287.69
	NORMAL	2,702.0	36.66	183.82	2,321.22	-1,246.80	7.26	1,240.99	0.63	-0.19	-1.01	252.38
	NORMAL	2,798.0	36.88	185.14	2,398.12	-1,304.09	2.77	1,298.45	0.85	0.23	1.38	74.97
	NORMAL	2,893.0	36.79	184.35	2,474.16	-1,360.85	-1.94	1,355.40	0.51	-0.09	-0.83	258.92
7/30/2012	NORMAL	2,989.0	36.97	185.32	2,550.95	-1,418.25	-6.80	1,413.01	0.63	0.19	1.01	73.21
	NORMAL	3,084.0	36.92	184.26	2,626.88	-1,475.15	-11.57	1,470.11	0.67	-0.05	-1.12	265.09
	NORMAL	3,180.0	36.44	184.44	2,703.87	-1,532.33	-15.92	1,527.45	0.51	-0.50	0.19	167.45
	NORMAL	3,276.0	36.70	183.91	2,780.97	-1,589.38	-20.08	1,584.63	0.43	0.27	-0.55	309.25
	NORMAL	3,371.0	36.79	184.09	2,857.09	-1,646.07	-24.04	1,641.46	0.15	0.09	0.19	50.18
	NORMAL	3,467.0	36.92	184.26	2,933.91	-1,703.50	-28.24	1,699.03	0.17	0.14	0.18	38.18
	NORMAL	3,562.0	37.36	183.38	3,009.64	-1,760.73	-32.06	1,756.37	0.73	0.46	-0.93	309.28
	NORMAL	3,658.0	36.13	184.88	3,086.56	-1,818.01	-36.18	1,813.78	1.59	-1.28	1.56	144.49
	NORMAL	3,754.0	34.68	183.73	3,164.81	-1,873.47	-40.36	1,869.39	1.66	-1.51	-1.20	204.21
	NORMAL	3,849.0	32.44	187.16	3,243.97	-1,925.73	-45.30	1,921.89	3.09	-2.36	3.61	141.17
	NORMAL	3,944.0	33.14	186.55	3,323.84	-1,976.81	-51.44	1,973.31	0.81	0.74	-0.64	334.48
	NORMAL	4,040.0	31.08	186.46	3,405.15	-2,027.50	-57.22	2,024.32	2.15	-2.15	-0.09	181.29
7/31/2012	NORMAL	4,136.0	29.14	186.37	3,488.19	-2,075.36	-62.60	2,072.47	2.02	-2.02	-0.09	181.29
	NORMAL	4,231.0	27.30	187.78	3,571.89	-2,119.94	-68.12	2,117.36	2.06	-1.94	1.48	160.70
	NORMAL	4,327.0	25.23	187.61	3,657.98	-2,162.03	-73.81	2,159.80	2.16	-2.16	-0.18	182.01
	NORMAL	4,422.0	23.03	188.39	3,744.67	-2,200.49	-79.20	2,198.59	2.34	-2.32	0.82	172.11
	NORMAL	4,517.0	20.61	184.26	3,832.86	-2,235.56	-83.16	2,233.87	3.02	-2.55	-4.35	210.48
	NORMAL	4,613.0	18.42	184.35	3,923.34	-2,267.53	-85.56	2,265.93	2.28	-2.28	0.09	179.26
	NORMAL	4,708.0	15.96	186.55	4,014.09	-2,295.48	-88.19	2,294.00	2.68	-2.59	2.32	166.24
	NORMAL	4,803.0	13.67	185.40	4,105.93	-2,319.63	-90.74	2,318.29	2.43	-2.41	-1.21	186.76
	NORMAL	4,899.0	12.18	183.65	4,199.50	-2,341.04	-92.45	2,339.76	1.60	-1.55	-1.82	193.87
	NORMAL	4,994.0	10.68	187.69	4,292.61	-2,359.76	-94.26	2,358.57	1.79	-1.58	4.25	153.88
	NORMAL	5,089.0	9.49	184.70	4,386.14	-2,376.29	-96.08	2,375.20	1.37	-1.25	-3.15	202.28
	NORMAL	5,185.0	7.91	184.70	4,481.03	-2,390.76	-97.27	2,389.72	1.65	-1.65	0.00	180.00
8/1/2012	NORMAL	5,280.0	7.21	173.45	4,575.21	-2,403.20	-97.13	2,402.09	1.72	-0.74	-11.84	239.18
	NORMAL	5,376.0	5.05	172.05	4,670.66	-2,413.37	-95.86	2,412.11	2.26	-2.25	-1.46	183.26
	NORMAL	5,472.0	3.78	162.64	4,766.37	-2,420.58	-94.33	2,419.14	1.52	-1.32	-9.80	205.06
	NORMAL	5,567.0	2.37	154.38	4,861.23	-2,425.34	-92.55	2,423.72	1.55	-1.48	-8.69	193.35
	NORMAL	5,663.0	1.19	171.08	4,957.19	-2,428.11	-91.53	2,426.39	1.33	-1.23	17.40	164.47
	NORMAL	5,759.0	0.18	286.65	5,053.18	-2,429.05	-91.52	2,427.33	1.33	-1.05	120.39	172.70
	NORMAL	5,854.0	0.40	317.42	5,148.18	-2,428.77	-91.89	2,427.08	0.28	0.23	32.39	51.34
	NORMAL	5,950.0	0.75	316.45	5,244.17	-2,428.07	-92.55	2,426.44	0.36	0.36	-1.01	357.92
	NORMAL	6,045.0	0.75	336.31	5,339.17	-2,427.05	-93.23	2,425.48	0.27	0.00	20.91	99.93
	NORMAL	6,141.0	0.61	351.96	5,435.16	-2,425.96	-93.55	2,424.44	0.24	-0.15	16.30	134.66
	NORMAL	6,236.0	0.48	350.38	5,530.16	-2,425.07	-93.69	2,423.56	0.14	-0.14	-1.66	185.80
	NORMAL	6,332.0	0.61	19.03	5,626.15	-2,424.19	-93.59	2,422.67	0.31	0.14	29.84	79.29
8/2/2012	NORMAL	6,428.0	0.66	20.96	5,722.15	-2,423.19	-93.23	2,421.65	0.06	0.05	2.01	24.13
	NORMAL	6,523.0	0.75	27.90	5,817.14	-2,422.13	-92.74	2,420.55	0.13	0.09	7.31	47.00
	NORMAL	6,619.0	0.44	21.66	5,913.13	-2,421.23	-92.31	2,419.61	0.33	-0.32	-6.50	188.70
	NORMAL	6,714.0	0.44	10.15	6,008.13	-2,420.54	-92.11	2,418.90	0.09	0.00	-12.12	264.25
	NORMAL	6,809.0	0.35	29.57	6,103.13	-2,419.92	-91.90	2,418.27	0.17	-0.09	20.44	133.37
	NORMAL	6,905.0	0.31	79.50	6,199.13	-2,419.62	-91.50	2,417.93	0.29	-0.04	52.01	122.38
	NORMAL	7,001.0	0.48	81.78	6,295.12	-2,419.52	-90.85	2,417.77	0.18	0.18	2.38	6.42
	NORMAL	7,096.0	0.44	129.24	6,390.12	-2,419.69	-90.17	2,417.88	0.39	-0.04	49.96	119.38
	NORMAL	7,192.0	0.48	141.90	6,486.12	-2,420.24	-89.64	2,418.38	0.11	0.04	13.19	74.93

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 (°)
8/2/2012	NORMAL	7,287.0	0.79	149.02	6,581.11	-2,421.12	-89.06	2,419.20	0.34	0.33	7.49	17.86
8/3/2012	NORMAL	7,383.0	0.79	136.63	6,677.10	-2,422.16	-88.26	2,420.17	0.18	0.00	-12.91	263.81
	NORMAL	7,478.0	0.92	136.19	6,772.09	-2,423.19	-87.28	2,421.10	0.14	0.14	-0.46	356.89
	NORMAL	7,574.0	1.01	138.12	6,868.08	-2,424.38	-86.18	2,422.19	0.10	0.09	2.01	20.82
	NORMAL	7,669.0	1.23	153.15	6,963.06	-2,425.91	-85.17	2,423.62	0.38	0.23	15.82	60.84
	NORMAL	7,764.0	1.32	156.22	7,058.04	-2,427.82	-84.26	2,425.44	0.12	0.09	3.23	38.74
	NORMAL	7,859.0	1.27	139.17	7,153.01	-2,429.62	-83.13	2,427.13	0.41	-0.05	-17.95	254.14
	NORMAL	7,954.0	1.27	135.31	7,247.99	-2,431.16	-81.71	2,428.54	0.09	0.00	-4.06	268.07
	NORMAL	8,050.0	1.50	140.84	7,343.96	-2,432.89	-80.16	2,430.12	0.28	0.24	5.76	32.95
	NORMAL	8,145.0	1.32	142.07	7,438.93	-2,434.72	-78.71	2,431.81	0.19	-0.19	1.29	171.07
	NORMAL	8,205.0	1.36	135.31	7,498.92	-2,435.77	-77.78	2,432.77	0.27	0.07	-11.27	280.80
	NORMAL	8,250.0	1.36	135.31	7,543.90	-2,436.53	-77.03	2,433.46	0.00	0.00	0.00	0.00