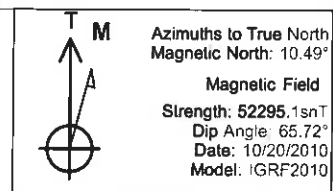
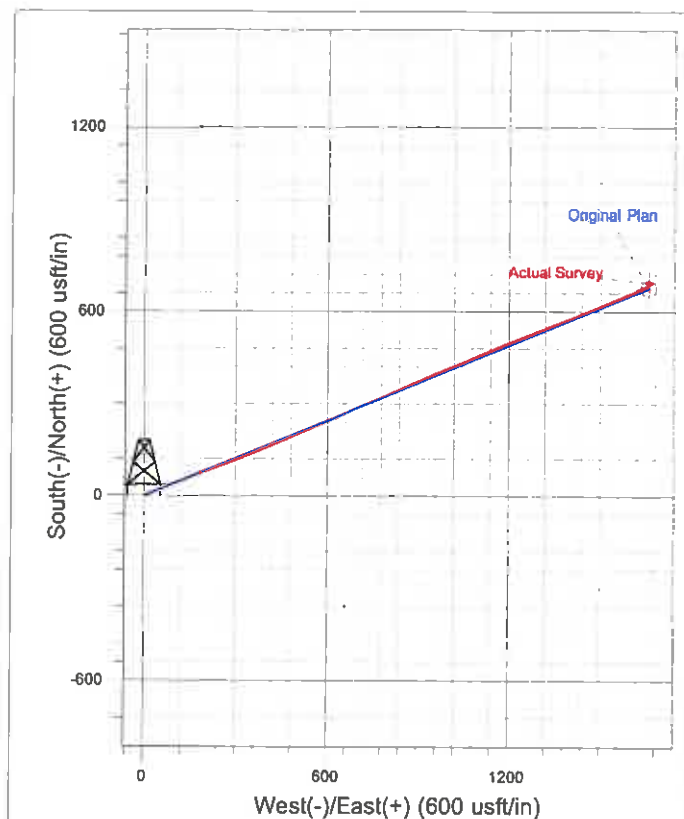
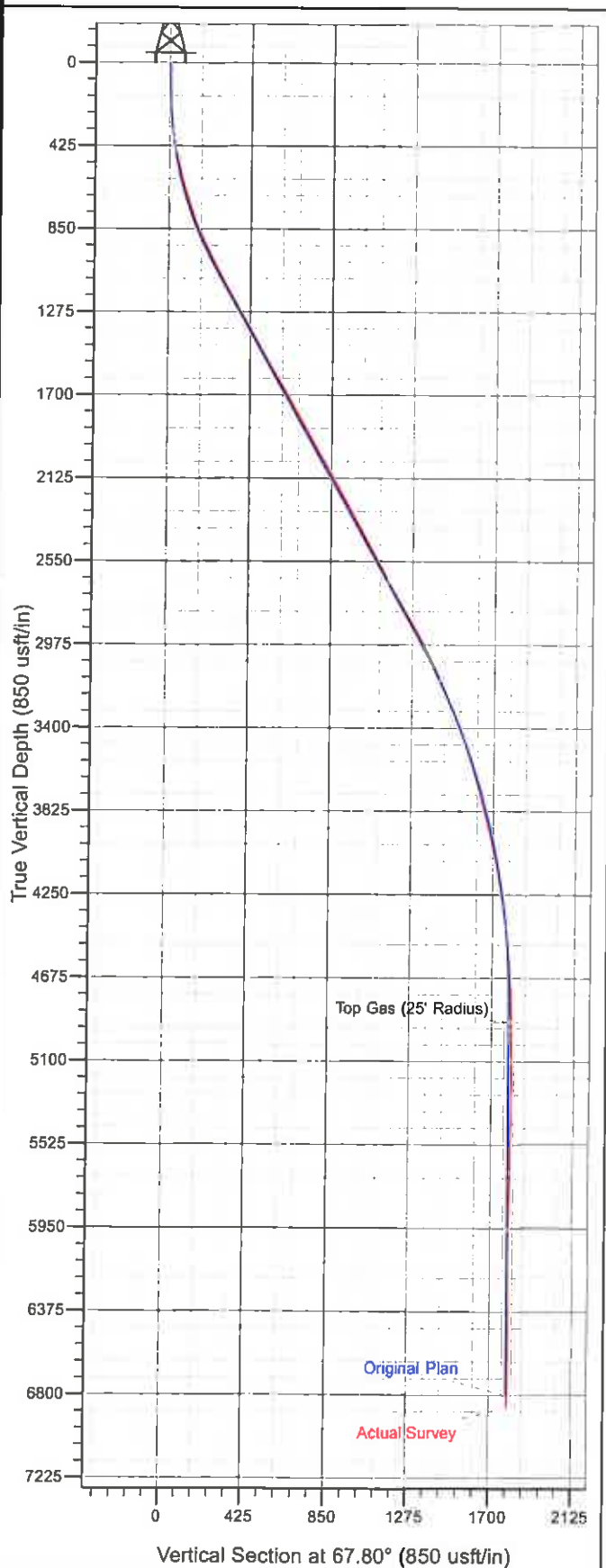


PICEANCE VLY NAD 83



Well Name: GM 421-33
 Surface Location: GM 214-33 Pad
 North American Datum 1983 , US State Plane 1983 . Colorado Central Zone
 Ground Elevation: 5724.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1612145.60 2260029.30 39° 29' 5.266 N 108° 7' 19.532 W A1
 KB @ 5745.0usft (Cyclone 17 (21' KB) NF)



1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	GM 421-33	Wellbore No.	OH
Well Name	GM 421-33	Common Name	GM 421-33
Project	GV 33-06S-096W	Site	GM 214-33 Pad
Vertical Section Azimuth	67.80 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	10/20/2010	UWI	GM 421-33
Active Datum	KB @5,748.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Started	10/20/2010	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)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
10/20/2010	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/20/2010	NORMAL	81.0	0.40	81.10	81.00	0.04	0.28	0.28	0.49	0.49	0.00	81.10
	NORMAL	111.0	0.70	63.30	111.00	0.14	0.55	0.56	1.14	1.00	-59.33	321.24
	NORMAL	141.0	1.10	73.00	140.99	0.31	0.99	1.03	1.42	1.33	32.33	25.75
	NORMAL	172.0	1.70	75.40	171.98	0.51	1.72	1.78	1.94	1.94	7.74	6.78
	NORMAL	202.0	2.30	60.90	201.97	0.92	2.67	2.82	2.60	2.00	-48.33	312.46
	NORMAL	237.0	3.60	63.10	236.92	1.76	4.27	4.61	3.73	3.71	6.29	6.08
	NORMAL	267.0	4.70	68.50	266.84	2.63	6.25	6.78	3.89	3.67	18.00	22.26
	NORMAL	298.0	6.30	68.10	297.70	3.73	9.01	9.75	5.16	5.16	-1.29	358.43
	NORMAL	329.0	7.40	69.40	328.48	5.07	12.46	13.45	3.58	3.55	4.19	8.67
	NORMAL	359.0	8.70	69.10	358.18	6.56	16.38	17.65	4.34	4.33	-1.00	358.00
	NORMAL	390.0	10.10	69.10	388.76	8.36	21.11	22.71	4.52	4.52	0.00	0.00
	NORMAL	420.0	10.70	68.50	418.27	10.32	26.16	28.12	2.03	2.00	-2.00	349.47
	NORMAL	450.0	11.30	68.80	447.72	12.41	31.49	33.85	2.01	2.00	1.00	5.60
	NORMAL	481.0	12.00	67.80	478.08	14.72	37.31	40.11	2.35	2.26	-3.23	343.42
	NORMAL	512.0	12.80	69.40	508.36	17.15	43.51	46.76	2.81	2.58	5.16	24.02
	NORMAL	542.0	14.00	68.20	537.54	19.67	49.99	53.71	4.11	4.00	-4.00	346.37
	NORMAL	573.0	14.70	68.40	567.57	22.51	57.13	61.40	2.26	2.26	0.65	4.15
	NORMAL	603.0	15.60	68.70	596.53	25.37	64.42	69.24	3.01	3.00	1.00	5.12
	NORMAL	634.0	16.70	68.10	626.31	28.35	71.80	77.19	3.59	3.55	-1.94	351.08
10/21/2010	NORMAL	694.0	18.00	68.30	683.64	35.02	88.89	95.53	2.64	2.64	-0.44	357.05

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
10/21/2010	NORMAL	786.0	19.00	66.70	770.88	46.20	115.86	124.72	1.22	1.09	-1.74	332.32
	NORMAL	878.0	22.30	69.40	856.96	58.27	145.96	157.15	3.73	3.59	2.93	17.36
	NORMAL	968.0	26.90	70.00	938.77	71.24	181.09	194.59	5.12	5.11	0.67	3.38
10/22/2010	NORMAL	1,064.0	27.90	69.90	1,024.00	86.39	222.59	238.73	1.04	1.04	-0.10	357.32
	NORMAL	1,159.0	28.00	69.90	1,107.92	101.69	264.41	283.23	0.11	0.11	0.00	0.00
	NORMAL	1,256.0	28.70	68.70	1,193.29	117.98	307.49	329.27	0.93	0.72	-1.24	320.32
	NORMAL	1,351.0	29.10	66.90	1,276.46	135.33	349.99	375.18	1.01	0.42	-1.89	293.90
	NORMAL	1,444.0	29.50	67.10	1,357.56	153.11	391.89	420.69	0.44	0.43	0.22	13.84
	NORMAL	1,540.0	30.00	67.20	1,440.91	171.61	435.79	468.32	0.52	0.52	0.10	5.71
	NORMAL	1,636.0	30.30	65.80	1,523.92	190.84	480.00	516.52	0.80	0.31	-1.46	292.50
	NORMAL	1,732.0	30.70	65.60	1,606.64	210.89	524.41	565.22	0.43	0.42	-0.21	345.67
10/23/2010	NORMAL	1,828.0	29.80	68.50	1,689.57	229.76	568.92	613.56	1.79	-0.94	3.02	122.88
	NORMAL	1,925.0	29.40	66.70	1,773.91	248.01	613.22	661.47	1.01	-0.41	-1.86	245.00
	NORMAL	2,020.0	29.20	66.80	1,856.76	266.36	655.93	707.95	0.22	-0.21	0.11	166.29
	NORMAL	2,116.0	29.80	66.70	1,940.31	285.02	699.37	755.22	0.63	0.63	-0.10	355.26
	NORMAL	2,211.0	29.50	66.60	2,022.87	303.65	742.51	802.20	0.32	-0.32	-0.11	189.32
	NORMAL	2,306.0	29.50	66.90	2,105.55	322.11	785.49	848.97	0.16	0.00	0.85	90.13
	NORMAL	2,399.0	29.20	65.90	2,186.62	340.36	827.27	894.54	0.62	-0.32	-1.08	238.10
	NORMAL	2,494.0	29.30	67.10	2,269.51	358.87	869.83	940.95	0.63	0.11	1.26	80.85
	NORMAL	2,591.0	29.90	66.40	2,353.85	377.78	913.85	988.85	0.71	0.62	-0.72	329.74
	NORMAL	2,685.0	28.80	66.10	2,435.78	396.34	956.02	1,034.91	1.18	-1.17	-0.32	187.48
	NORMAL	2,781.0	27.60	68.00	2,520.39	414.04	997.79	1,080.26	1.56	-1.25	1.98	144.03
	NORMAL	2,877.0	27.60	68.80	2,605.46	430.41	1,039.14	1,124.73	0.39	0.00	0.83	90.35
	NORMAL	2,973.0	29.40	67.30	2,689.82	447.55	1,081.61	1,170.54	2.02	1.88	-1.56	337.65
	NORMAL	3,070.0	30.70	66.30	2,773.79	466.69	1,126.25	1,219.10	1.44	1.34	-1.03	338.50
	NORMAL	3,164.0	30.40	65.90	2,854.74	486.05	1,169.94	1,266.86	0.39	-0.32	-0.43	213.95
	NORMAL	3,260.0	28.20	68.70	2,938.45	504.21	1,213.25	1,313.82	2.70	-2.29	2.92	149.30
	NORMAL	3,356.0	26.60	68.50	3,023.68	520.32	1,254.38	1,357.99	1.67	-1.67	-0.21	183.20
	NORMAL	3,451.0	24.40	69.30	3,109.42	535.06	1,292.53	1,398.88	2.34	-2.32	0.84	171.46
	NORMAL	3,547.0	24.10	69.80	3,196.95	548.83	1,329.47	1,438.29	0.38	-0.31	0.52	145.83
	NORMAL	3,643.0	22.90	67.80	3,284.99	562.66	1,365.16	1,476.56	1.50	-1.25	-2.08	212.69
	NORMAL	3,738.0	21.50	67.30	3,372.95	576.36	1,398.34	1,512.45	1.49	-1.47	-0.53	187.45
	NORMAL	3,833.0	19.60	68.30	3,461.90	588.97	1,429.21	1,545.80	2.03	-2.00	1.05	170.00
	NORMAL	3,929.0	18.00	67.40	3,552.77	600.63	1,457.86	1,576.73	1.69	-1.67	-0.94	189.85
10/24/2010	NORMAL	4,026.0	17.40	68.20	3,645.18	611.77	1,485.17	1,606.22	0.67	-0.62	0.82	158.31
	NORMAL	4,122.0	15.10	66.00	3,737.34	622.19	1,509.92	1,633.08	2.48	-2.40	-2.29	193.93
	NORMAL	4,217.0	14.60	67.10	3,829.17	631.88	1,532.25	1,657.42	0.60	-0.53	1.16	151.11
	NORMAL	4,313.0	14.00	67.80	3,922.19	640.98	1,554.15	1,681.13	0.65	-0.63	0.73	164.26
	NORMAL	4,406.0	12.20	67.20	4,012.77	649.04	1,573.63	1,702.21	1.94	-1.94	-0.65	184.03
	NORMAL	4,501.0	10.50	67.80	4,105.91	656.20	1,590.90	1,720.90	1.79	-1.79	0.63	176.32
	NORMAL	4,597.0	9.70	67.50	4,200.42	662.60	1,606.47	1,737.74	0.84	-0.83	-0.31	183.61
	NORMAL	4,693.0	8.30	65.20	4,295.23	668.60	1,620.23	1,752.75	1.51	-1.46	-2.40	193.28
10/25/2010	NORMAL	4,789.0	7.30	67.50	4,390.34	673.84	1,632.16	1,765.77	1.09	-1.04	2.40	163.80
	NORMAL	4,882.0	6.00	65.30	4,482.72	678.13	1,642.03	1,776.53	1.42	-1.40	-2.37	190.00
	NORMAL	4,977.0	4.60	62.70	4,577.31	681.96	1,649.93	1,785.29	1.49	-1.47	-2.74	188.44
	NORMAL	5,073.0	3.70	54.90	4,673.06	685.50	1,655.88	1,792.14	1.10	-0.94	-8.13	208.25
	NORMAL	5,169.0	3.40	50.60	4,768.87	689.09	1,660.62	1,797.88	0.42	-0.31	-4.48	219.46
10/26/2010	NORMAL	5,264.0	2.70	38.40	4,863.74	692.63	1,664.18	1,802.52	1.00	-0.74	-12.84	216.86
	NORMAL	5,360.0	0.70	190.80	4,959.71	693.83	1,665.48	1,804.17	3.48	-2.08	158.75	174.42
	NORMAL	5,457.0	1.40	173.50	5,056.69	692.07	1,665.50	1,803.53	0.78	0.72	-17.84	326.82
	NORMAL	5,552.0	0.10	235.40	5,151.68	690.87	1,665.56	1,803.14	1.43	-1.37	65.16	176.27
	NORMAL	5,646.0	1.60	332.40	5,245.67	691.99	1,664.89	1,802.93	1.72	1.60	103.19	100.52
	NORMAL	5,742.0	1.70	323.90	5,341.63	694.32	1,663.43	1,802.46	0.28	0.10	-8.85	287.94
	NORMAL	5,838.0	0.80	336.00	5,437.61	696.09	1,662.32	1,802.10	0.97	-0.94	12.60	169.65
	NORMAL	5,932.0	0.90	293.40	5,531.60	696.98	1,661.37	1,801.56	0.66	0.11	-45.32	257.28
	NORMAL	6,027.0	1.10	276.10	5,626.58	697.37	1,659.78	1,800.24	0.38	0.21	-18.21	294.67
	NORMAL	6,122.0	1.10	262.50	5,721.57	697.35	1,657.97	1,798.55	0.27	0.00	-14.32	263.20

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
10/26/2010	NORMAL	6,219.0	1.00	195.60	5,818.55	696.41	1,656.82	1,797.13	1.20	-0.10	-68.97	232.43
	NORMAL	6,312.0	1.50	252.40	5,911.53	695.26	1,655.44	1,795.42	1.36	0.54	61.08	98.09
	NORMAL	6,409.0	1.30	216.10	6,008.51	693.99	1,653.58	1,793.22	0.92	-0.21	-37.42	239.56
10/27/2010	NORMAL	6,502.0	0.60	223.70	6,101.49	692.79	1,652.62	1,791.88	0.76	-0.75	8.17	173.58
	NORMAL	6,601.0	1.40	29.20	6,200.49	693.47	1,652.86	1,792.35	2.01	0.81	167.17	169.84
	NORMAL	6,696.0	1.30	29.60	6,295.46	695.42	1,653.96	1,794.11	0.11	-0.11	0.42	174.82
	NORMAL	6,792.0	1.10	35.00	6,391.44	697.12	1,655.02	1,795.74	0.24	-0.21	5.62	153.20
	NORMAL	6,887.0	0.70	357.00	6,486.43	698.45	1,655.51	1,796.69	0.73	-0.42	-40.00	218.16
	NORMAL	6,983.0	0.40	304.00	6,582.42	699.22	1,655.21	1,796.70	0.58	-0.31	-55.21	214.82
	NORMAL	7,079.0	0.80	214.80	6,678.42	698.86	1,654.55	1,795.95	0.93	0.42	-92.92	244.08
	NORMAL	7,173.0	1.10	220.90	6,772.41	697.64	1,653.58	1,794.60	0.34	0.32	6.49	21.70
	NORMAL	7,212.0	1.20	207.50	6,811.40	696.99	1,653.15	1,793.95	0.73	0.26	-34.36	283.61
	NORMAL	7,262.0	1.20	207.50	6,861.39	696.06	1,652.66	1,793.15	0.00	0.00	0.00	0.00

4101