

## 1 General

### 1.1 Customer Information

Company	PICEANCE HL
Representative	Eric Kolstad
Address	1515 Arapahoe St., Suite 1000 Denver, CO 80202

### 1.2 Well Information

Well	TR 42-32-597	Wellbore No.	
Well Name	CHEVRON TR 42-32-597	Common Name	TR 42-32-597
Project	TR 32-05S-097W	Site	TR 41-32-597 Pad
Vertical Section Azimuth	195.80 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	8/10/2011	UWI	TR 42-32-597
Active Datum	KB @8,283.0ft (above Mean Sea Level)		

## 2 Survey Name

### 2.1 Survey Name: Survey #2

Survey Name	Survey #2	Company	
Date Started	8/10/2011	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 (°)
8/10/2011	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/10/2011	NORMAL	120.0	0.80	157.60	120.00	-0.77	0.32	0.66	0.67	0.67	0.00	157.60
	NORMAL	212.0	2.60	184.70	211.95	-3.45	0.39	3.21	2.09	1.96	29.46	38.02
	NORMAL	304.0	5.20	193.10	303.73	-9.59	-0.72	9.42	2.89	2.83	9.13	16.61
	NORMAL	396.0	7.80	194.30	395.13	-19.70	-3.21	19.83	2.83	2.83	1.30	3.59
	NORMAL	488.0	10.20	198.90	486.00	-33.46	-7.39	34.21	2.72	2.61	5.00	18.97
	NORMAL	579.0	12.20	195.90	575.26	-50.33	-12.64	51.87	2.29	2.20	-3.30	342.28
	NORMAL	671.0	14.60	196.30	664.75	-70.81	-18.55	73.19	2.61	2.61	0.43	2.41
	NORMAL	763.0	16.00	196.30	753.48	-94.11	-25.37	97.46	1.52	1.52	0.00	0.00
	NORMAL	855.0	15.90	195.00	841.94	-118.46	-32.19	122.74	0.40	-0.11	-1.41	253.74
	NORMAL	946.0	16.10	194.50	929.42	-142.71	-38.57	147.82	0.27	0.22	-0.55	325.19
	NORMAL	1,042.0	17.10	194.00	1,021.42	-169.29	-45.32	175.24	1.05	1.04	-0.52	351.63
	NORMAL	1,138.0	16.60	194.30	1,113.29	-196.28	-52.12	203.05	0.53	-0.52	0.31	170.28
	NORMAL	1,233.0	16.80	193.30	1,204.29	-222.79	-58.63	230.34	0.37	0.21	-1.05	304.36
	NORMAL	1,329.0	16.10	196.40	1,296.36	-249.06	-65.58	257.51	1.17	-0.73	3.23	130.05
	NORMAL	1,424.0	16.20	194.20	1,387.61	-274.54	-72.55	283.93	0.65	0.11	-2.32	278.22
	NORMAL	1,520.0	15.30	198.40	1,480.01	-299.55	-79.84	309.97	1.51	-0.94	4.38	130.30
	NORMAL	1,616.0	14.90	198.20	1,572.69	-323.29	-87.69	334.95	0.42	-0.42	-0.21	187.32
	NORMAL	1,711.0	15.10	197.70	1,664.46	-346.68	-95.27	359.52	0.25	0.21	-0.53	326.85
	NORMAL	1,807.0	14.90	196.10	1,757.19	-370.45	-102.49	384.36	0.48	-0.21	-1.67	243.45

## 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 (°)
8/10/2011	NORMAL	1,901.0	15.30	196.10	1,847.94	-393.98	-109.28	408.85	0.43	0.43	0.00	0.00
8/11/2011	NORMAL	1,997.0	16.10	195.70	1,940.36	-418.96	-116.40	434.83	0.84	0.83	-0.42	352.10
	NORMAL	2,093.0	15.40	192.90	2,032.75	-444.20	-122.84	460.87	1.08	-0.73	-2.92	226.01
	NORMAL	2,188.0	15.20	194.30	2,124.39	-468.57	-128.74	485.92	0.44	-0.21	1.47	119.10
	NORMAL	2,284.0	16.00	196.40	2,216.85	-493.45	-135.58	511.73	1.02	0.83	2.19	36.23
	NORMAL	2,380.0	17.40	197.00	2,308.80	-519.87	-143.51	539.31	1.47	1.46	0.63	7.31
	NORMAL	2,457.0	17.00	196.80	2,382.36	-541.66	-150.13	562.07	0.53	-0.52	-0.26	188.31
	NORMAL	2,570.0	16.60	195.60	2,490.53	-573.02	-159.25	594.73	0.47	-0.35	-1.06	220.36
	NORMAL	2,666.0	17.20	198.90	2,582.39	-599.66	-167.53	622.62	1.18	0.63	3.44	59.56
	NORMAL	2,761.0	16.50	197.70	2,673.31	-625.80	-176.19	650.13	0.82	-0.74	-1.26	205.85
	NORMAL	2,818.0	16.00	197.70	2,728.03	-641.00	-181.03	666.07	0.88	-0.88	0.00	180.00
	NORMAL	2,875.0	15.50	197.70	2,782.89	-655.73	-185.74	681.53	0.88	-0.88	0.00	180.00
8/20/2011	NORMAL	2,941.0	13.18	194.07	2,847.06	-670.75	-189.60	697.04	2.41	-2.29	-2.95	196.22
	NORMAL	3,036.0	14.55	201.11	2,939.29	-692.39	-196.53	719.75	2.29	1.44	7.41	54.37
	NORMAL	3,132.0	16.57	203.13	3,031.77	-716.23	-206.25	745.33	2.18	2.10	2.10	15.99
	NORMAL	3,227.0	16.30	194.34	3,122.90	-741.61	-214.88	772.10	2.63	-0.28	-9.25	259.60
	NORMAL	3,323.0	15.73	190.47	3,215.18	-767.46	-220.58	798.52	1.26	-0.59	-4.03	240.05
8/21/2011	NORMAL	3,418.0	14.50	188.18	3,306.89	-791.90	-224.61	823.14	1.44	-1.29	-2.41	204.79
	NORMAL	3,514.0	13.18	192.84	3,400.11	-814.47	-228.75	845.98	1.80	-1.38	4.85	142.07
	NORMAL	3,609.0	12.57	193.46	3,492.72	-835.08	-233.57	867.12	0.66	-0.64	0.65	167.54
	NORMAL	3,705.0	13.36	198.12	3,586.27	-855.78	-239.45	888.65	1.36	0.82	4.85	55.21
	NORMAL	3,800.0	14.28	196.89	3,678.52	-877.42	-246.27	911.33	1.02	0.97	-1.29	341.69
	NORMAL	3,896.0	13.10	197.15	3,771.79	-899.15	-252.91	934.04	1.23	-1.23	0.27	177.14
	NORMAL	3,991.0	14.11	197.76	3,864.13	-920.47	-259.62	956.38	1.07	1.06	0.64	8.38
	NORMAL	4,087.0	13.89	194.60	3,957.27	-942.76	-266.10	979.59	0.83	-0.23	-3.29	252.42
	NORMAL	4,182.0	13.67	194.60	4,049.54	-964.66	-271.80	1,002.22	0.23	-0.23	0.00	180.00
	NORMAL	4,277.0	14.55	197.15	4,141.67	-986.92	-278.15	1,025.37	1.13	0.93	2.68	36.48
	NORMAL	4,373.0	14.02	195.66	4,234.71	-1,009.64	-284.84	1,049.06	0.67	-0.55	-1.55	214.03
	NORMAL	4,469.0	12.83	196.01	4,328.08	-1,031.09	-290.92	1,071.34	1.24	-1.24	0.36	176.26
	NORMAL	4,564.0	11.95	196.45	4,420.87	-1,050.66	-296.62	1,091.73	0.93	-0.93	0.46	174.09
	NORMAL	4,660.0	10.81	194.95	4,514.98	-1,068.89	-301.75	1,110.67	1.23	-1.19	-1.56	193.82
	NORMAL	4,755.0	9.76	194.87	4,608.45	-1,085.28	-306.12	1,127.63	1.11	-1.11	-0.08	180.74
	NORMAL	4,851.0	8.88	193.19	4,703.18	-1,100.36	-309.90	1,143.16	0.96	-0.92	-1.75	196.35
	NORMAL	4,945.0	8.35	193.81	4,796.12	-1,114.05	-313.18	1,157.23	0.57	-0.56	0.66	170.37
	NORMAL	5,041.0	6.50	188.01	4,891.31	-1,126.20	-315.60	1,169.58	2.08	-1.93	-6.04	199.20
	NORMAL	5,135.0	5.45	188.01	4,984.80	-1,135.89	-316.97	1,179.28	1.12	-1.12	0.00	180.00
	NORMAL	5,229.0	3.55	180.54	5,078.51	-1,143.22	-317.62	1,186.51	2.11	-2.02	-7.95	193.44
	NORMAL	5,324.0	2.24	158.21	5,173.39	-1,147.89	-316.95	1,190.82	1.79	-1.38	-23.51	209.94
	NORMAL	5,417.0	0.75	172.54	5,266.35	-1,150.18	-316.20	1,192.82	1.64	-1.60	15.41	173.01
	NORMAL	5,511.0	0.40	148.46	5,360.35	-1,151.07	-315.95	1,193.61	0.44	-0.37	-25.62	202.98
	NORMAL	5,607.0	0.48	148.63	5,456.35	-1,151.70	-315.56	1,194.11	0.08	0.08	0.18	1.02
	NORMAL	5,702.0	0.40	204.01	5,551.34	-1,152.34	-315.49	1,194.70	0.44	-0.08	58.29	127.52
8/22/2011	NORMAL	5,798.0	0.26	280.47	5,647.34	-1,152.61	-315.84	1,195.06	0.44	-0.15	79.65	143.30
	NORMAL	5,894.0	0.57	284.69	5,743.34	-1,152.45	-316.52	1,195.09	0.32	0.32	4.40	7.74
	NORMAL	5,989.0	1.10	280.47	5,838.33	-1,152.16	-317.87	1,195.18	0.56	0.56	-4.44	351.27
	NORMAL	6,085.0	0.75	245.49	5,934.32	-1,152.25	-319.35	1,195.67	0.68	-0.36	-36.44	221.53
	NORMAL	6,180.0	0.44	225.89	6,029.31	-1,152.77	-320.18	1,196.39	0.39	-0.33	-20.63	203.75
	NORMAL	6,276.0	0.75	259.38	6,125.31	-1,153.14	-321.06	1,196.99	0.47	0.32	34.89	65.86
	NORMAL	6,372.0	1.01	258.76	6,221.30	-1,153.42	-322.51	1,197.65	0.27	0.27	-0.65	357.59
	NORMAL	6,467.0	0.75	275.55	6,316.29	-1,153.52	-323.95	1,198.14	0.38	-0.27	17.67	143.42
	NORMAL	6,562.0	1.36	103.55	6,411.28	-1,153.73	-323.47	1,198.21	2.22	0.64	-181.05	185.16
	NORMAL	6,658.0	1.41	100.47	6,507.25	-1,154.21	-321.20	1,198.06	0.09	0.05	-3.21	302.34
	NORMAL	6,754.0	1.19	127.98	6,603.23	-1,155.04	-319.25	1,198.32	0.68	-0.23	28.66	122.82
	NORMAL	6,849.0	0.48	114.27	6,698.22	-1,155.81	-318.11	1,198.75	0.77	-0.75	-14.43	188.93
	NORMAL	6,945.0	0.57	198.20	6,794.21	-1,156.42	-317.90	1,199.29	0.73	0.09	87.43	126.52
	NORMAL	7,040.0	0.44	196.45	6,889.21	-1,157.22	-318.15	1,200.13	0.14	-0.14	-1.84	185.89
	NORMAL	7,135.0	0.75	315.45	6,984.21	-1,157.13	-318.69	1,200.18	1.09	0.33	125.26	140.77

## 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 (°)
8/22/2011	NORMAL	7,231.0	0.97	255.33	7,080.20	-1,156.89	-319.91	1,200.29	0.92	0.23	-62.63	252.41
	NORMAL	7,327.0	0.97	255.51	7,176.18	-1,157.30	-321.49	1,201.11	0.00	0.00	0.19	90.09
	NORMAL	7,422.0	1.14	280.47	7,271.17	-1,157.33	-323.19	1,201.60	0.51	0.18	26.27	82.47
	NORMAL	7,517.0	0.88	267.64	7,366.15	-1,157.19	-324.85	1,201.92	0.36	-0.27	-13.51	214.72
	NORMAL	7,613.0	0.62	294.27	7,462.15	-1,157.00	-326.06	1,202.07	0.45	-0.27	27.74	139.53
	NORMAL	7,709.0	0.83	263.42	7,558.14	-1,156.87	-327.23	1,202.26	0.45	0.22	-32.14	282.27
	NORMAL	7,804.0	0.92	272.65	7,653.13	-1,156.91	-328.67	1,202.69	0.18	0.09	9.72	62.11
	NORMAL	7,899.0	1.19	268.96	7,748.11	-1,156.89	-330.42	1,203.15	0.29	0.28	-3.88	344.03
8/23/2011	NORMAL	7,995.0	1.14	197.76	7,844.10	-1,157.82	-331.71	1,204.40	1.41	-0.05	-74.17	232.69
	NORMAL	8,090.0	1.36	217.63	7,939.07	-1,159.62	-332.69	1,206.39	0.51	0.23	20.92	73.26
	NORMAL	8,186.0	1.32	221.41	8,035.05	-1,161.35	-334.11	1,208.44	0.10	-0.04	3.94	116.23
	NORMAL	8,282.0	1.41	209.28	8,131.02	-1,163.21	-335.42	1,210.59	0.31	0.09	-12.64	281.18
	NORMAL	8,377.0	1.67	236.17	8,225.99	-1,165.00	-337.14	1,212.78	0.80	0.27	28.31	83.99
	NORMAL	8,457.0	2.07	235.38	8,305.94	-1,166.47	-339.30	1,214.78	0.50	0.50	-0.99	355.92
	NORMAL	8,514.0	2.36	234.82	8,362.90	-1,167.73	-341.11	1,216.48	0.51	0.51	-0.98	355.45