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PICEANCE HL

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	AP 41-23-696	Wellbore No.	OH
Well Name	AP 41-23-696	Common Name	AP 41-23-696
Project	AP 14-06S-096W	Site	AP 34-14-696 Pad
Vertical Section Azimuth	106.19 (°)	North Reference	
Origin N/S		Origin E/W	
Spud Date	10/14/2008	UWI	AP 41-23-696
Active Datum	KELLY BUSHING @6,685.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Gyro

Survey Name	Gyro	Company	VES
Started	10/14/2008	Ended	
Tool Name	GSS	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 (°)
10/14/2008	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/14/2008	NORMAL	67.0	0.51	305.47	67.00	0.17	-0.24	-0.28	0.76	0.76	0.00	305.47
	NORMAL	97.0	0.66	351.29	97.00	0.42	-0.38	-0.48	1.59	0.50	152.73	96.03
	NORMAL	127.0	0.74	128.13	127.00	0.47	-0.25	-0.37	4.34	0.27	456.13	157.12
10/15/2008	NORMAL	158.0	1.06	111.29	157.99	0.24	0.17	0.10	1.33	1.03	-54.32	311.80
	NORMAL	190.0	1.43	135.10	189.99	-0.15	0.73	0.74	1.96	1.16	74.41	66.72
	NORMAL	220.0	2.20	141.16	219.97	-0.86	1.36	1.54	2.64	2.57	20.20	17.04
	NORMAL	250.0	2.03	131.68	249.95	-1.66	2.11	2.49	1.29	-0.57	-31.60	239.40
	NORMAL	280.0	2.20	114.85	279.93	-2.26	3.03	3.54	2.14	0.57	-56.10	276.79
	NORMAL	311.0	2.94	113.62	310.90	-2.82	4.30	4.92	2.39	2.39	-3.97	355.12
	NORMAL	342.0	4.10	107.93	341.84	-3.48	6.08	6.81	3.90	3.74	-18.35	340.39
	NORMAL	374.0	4.07	109.84	373.76	-4.22	8.24	9.09	0.44	-0.09	5.97	103.39
	NORMAL	407.0	4.62	115.89	406.66	-5.20	10.54	11.57	2.17	1.67	18.33	42.85
	NORMAL	437.0	5.24	112.55	436.55	-6.25	12.89	14.12	2.28	2.07	-11.13	333.49
	NORMAL	465.0	6.06	111.99	464.42	-7.30	15.44	16.86	2.94	2.93	-2.00	355.87
10/16/2008	NORMAL	496.0	6.73	106.73	495.22	-8.43	18.70	20.31	2.87	2.16	-16.97	316.20
	NORMAL	526.0	6.72	108.51	525.02	-9.50	22.05	23.82	0.70	-0.03	5.93	93.63
	NORMAL	557.0	7.67	103.19	555.77	-10.54	25.78	27.70	3.74	3.06	-17.16	322.30
10/25/2008	NORMAL	588.0			586.68	-11.02	27.80	29.77	24.74	-24.74	0.00	180.00

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2.2 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Started	10/16/2008	Ended	
Tool Name	MWD	Engineer	

2.2.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
557.0	7.67	103.19	555.77	-10.54	25.78

2.2.2 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 (°)
10/16/2008	Tie On	557.0	7.67	103.19	555.77	-10.54	25.78	27.70	3.74	3.06	-17.16	322.30
10/16/2008	NORMAL	588.0	8.01	104.48	586.48	-11.56	29.89	31.92	1.23	1.10	4.16	28.00
	NORMAL	624.0	9.25	98.21	622.08	-12.60	35.18	37.30	4.32	3.44	-17.42	319.68
	NORMAL	655.0	9.63	99.46	652.66	-13.38	40.20	42.34	1.39	1.23	4.03	28.97
	NORMAL	685.0	9.87	102.52	682.22	-14.35	45.19	47.40	1.90	0.80	10.20	66.66
	NORMAL	716.0	10.25	105.21	712.75	-15.65	50.44	52.81	1.95	1.23	8.68	52.37
	NORMAL	747.0	10.69	106.84	743.23	-17.20	55.86	58.44	1.71	1.42	5.26	34.75
	NORMAL	778.0	11.31	106.34	773.66	-18.89	61.53	64.35	2.02	2.00	-1.61	351.01
	NORMAL	808.0	12.15	106.08	803.03	-20.59	67.38	70.45	2.81	2.80	-0.87	356.27
	NORMAL	840.0	12.75	106.34	834.28	-22.52	74.01	77.35	1.88	1.88	0.81	5.46
	NORMAL	870.0	13.31	106.84	863.51	-24.45	80.49	84.11	1.90	1.87	1.67	11.63
	NORMAL	901.0	14.06	107.34	893.63	-26.61	87.50	91.45	2.45	2.42	1.61	9.21
	NORMAL	931.0	14.69	106.46	922.69	-28.77	94.63	98.89	2.22	2.10	-2.93	340.45
	NORMAL	962.0	15.20	107.18	952.64	-31.09	102.28	106.89	1.75	1.65	2.32	20.35
	NORMAL	993.0	16.13	105.96	982.49	-33.47	110.30	115.26	3.18	3.00	-3.94	339.91
	NORMAL	1,057.0	16.94	104.84	1,043.84	-38.30	127.86	133.47	1.36	1.27	-1.75	337.98
	NORMAL	1,151.0	17.94	106.21	1,133.52	-45.85	155.00	161.64	1.15	1.06	1.46	22.98
10/17/2008	NORMAL	1,246.0	18.69	104.59	1,254.61	-54.24	185.80	193.55	0.95	0.79	-1.71	325.06
	NORMAL	1,341.0	19.19	105.71	1,344.47	-62.31	215.56	224.38	0.65	0.53	1.18	36.55
	NORMAL	1,436.0	20.00	104.71	1,433.97	-70.66	246.30	256.24	0.92	0.85	-1.05	337.04
	NORMAL	1,531.0	19.81	105.71	1,523.29	-79.14	277.51	288.57	0.41	-0.20	1.05	119.63
	NORMAL	1,627.0	19.75	105.21	1,613.63	-87.80	308.82	321.06	0.19	-0.06	-0.52	250.24
	NORMAL	1,721.0	19.63	106.71	1,702.13	-96.51	339.27	352.73	0.55	-0.13	1.60	104.06
	NORMAL	1,817.0	19.81	107.59	1,792.50	-106.06	370.22	385.12	0.36	0.19	0.92	59.19
	NORMAL	1,912.0	20.13	108.96	1,881.79	-116.24	401.03	417.54	0.60	0.34	1.44	56.28
10/18/2008	NORMAL	2,006.0	20.50	110.84	1,969.95	-127.35	431.71	450.10	0.80	0.39	2.00	61.34
	NORMAL	2,101.0	20.50	108.59	2,058.93	-138.57	463.03	483.30	0.83	0.00	-2.37	268.95
	NORMAL	2,196.0	19.00	105.59	2,148.34	-148.03	493.69	515.39	1.91	-1.58	-3.16	212.65
	NORMAL	2,291.0	19.19	105.71	2,238.12	-156.42	523.62	546.46	0.20	0.20	0.13	11.73
	NORMAL	2,386.0	19.51	104.21	2,327.75	-164.54	554.02	577.93	0.62	0.34	-1.58	302.07
10/20/2008	NORMAL	2,492.0	19.85	102.28	2,427.56	-172.71	588.77	613.58	0.69	0.32	-1.82	296.70
	NORMAL	2,579.0	20.13	104.46	2,509.32	-179.59	617.70	643.28	0.92	0.32	2.51	70.43
	NORMAL	2,674.0	17.90	103.94	2,599.13	-187.19	647.70	674.21	2.35	-2.35	-0.55	184.10
	NORMAL	2,769.0	17.94	103.46	2,689.52	-194.11	676.10	703.41	0.16	0.04	-0.51	284.93
	NORMAL	2,864.0	17.88	105.09	2,779.92	-201.31	704.41	732.61	0.53	-0.06	1.72	97.48
	NORMAL	2,959.0	17.69	102.71	2,870.38	-208.29	732.57	761.60	0.79	-0.20	-2.51	254.14
10/21/2008	NORMAL	3,054.0	17.13	102.84	2,961.03	-214.57	760.29	789.97	0.59	-0.59	0.14	176.09
	NORMAL	3,149.0	18.44	103.84	3,051.48	-221.28	788.52	818.95	1.42	1.38	1.05	13.60
	NORMAL	3,243.0	18.75	104.59	3,140.58	-228.64	817.58	848.91	0.42	0.33	0.80	38.01
	NORMAL	3,338.0	18.39	103.39	3,230.63	-235.95	846.93	879.14	0.55	-0.38	-1.26	226.14
	NORMAL	3,433.0	17.88	103.34	3,320.91	-242.79	875.70	908.67	0.54	-0.54	-0.05	181.72
	NORMAL	3,528.0	17.56	102.09	3,411.40	-249.16	903.91	937.53	0.52	-0.34	-1.32	229.34
	NORMAL	3,623.0	17.13	101.34	3,502.08	-254.91	931.64	965.76	0.51	-0.45	-0.79	207.12
	NORMAL	3,717.0	16.19	107.09	3,592.14	-261.48	957.74	992.66	2.02	-1.00	6.12	122.43

2.2.2 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 (°)
10/21/2008	NORMAL	3,812.0	15.44	106.84	3,683.55	-269.04	982.50	1,018.55	0.79	-0.79	-0.26	185.07
	NORMAL	3,907.0	14.69	105.96	3,775.28	-276.01	1,006.19	1,043.24	0.83	-0.79	-0.93	196.54
	NORMAL	4,002.0	14.16	105.47	3,867.29	-282.43	1,028.97	1,066.91	0.57	-0.56	-0.52	192.73
	NORMAL	4,097.0	13.25	104.34	3,959.58	-288.22	1,050.71	1,089.41	1.00	-0.96	-1.19	195.85
	NORMAL	4,192.0	12.88	102.71	4,052.12	-293.25	1,071.59	1,110.86	0.55	-0.39	-1.72	224.09
	NORMAL	4,286.0	12.25	102.34	4,143.87	-297.68	1,091.55	1,131.27	0.68	-0.67	-0.39	187.10
	NORMAL	4,381.0	11.69	108.09	4,236.81	-302.83	1,110.55	1,150.94	1.39	-0.59	6.05	117.95
10/22/2008	NORMAL	4,475.0	11.38	109.71	4,328.91	-308.91	1,128.33	1,169.72	0.48	-0.33	1.72	134.53
	NORMAL	4,570.0	8.94	108.21	4,422.41	-314.38	1,144.17	1,186.45	2.58	-2.57	-1.58	185.45
	NORMAL	4,665.0	8.50	107.59	4,516.31	-318.81	1,157.87	1,200.85	0.47	-0.46	-0.65	191.75
	NORMAL	4,759.0	8.75	107.84	4,609.25	-323.10	1,171.30	1,214.94	0.27	0.27	0.27	8.65
	NORMAL	4,853.0	7.01	104.86	4,702.36	-326.76	1,183.65	1,227.82	1.90	-1.85	-3.17	191.74
	NORMAL	4,948.0	6.81	107.21	4,796.67	-329.91	1,194.64	1,239.25	0.36	-0.21	2.47	126.44
	NORMAL	5,043.0	5.38	107.84	4,891.13	-332.94	1,204.26	1,249.33	1.51	-1.51	0.66	177.63
	NORMAL	5,136.0	4.94	114.46	4,983.75	-335.94	1,212.05	1,257.65	0.80	-0.47	7.12	129.73
	NORMAL	5,231.0	4.31	101.09	5,078.45	-338.32	1,219.28	1,265.26	1.31	-0.66	-14.07	233.15
	NORMAL	5,324.0	4.25	98.99	5,171.19	-339.53	1,226.11	1,272.16	0.18	-0.06	-2.26	248.01
	NORMAL	5,419.0	2.31	115.46	5,266.03	-340.90	1,231.32	1,277.54	2.25	-2.04	17.34	162.16
	NORMAL	5,513.0	0.75	118.34	5,359.99	-342.01	1,233.57	1,280.01	1.66	-1.66	3.06	178.62
	NORMAL	5,610.0	1.30	127.71	5,456.98	-342.98	1,235.00	1,281.65	0.59	0.57	9.66	21.67
10/23/2008	NORMAL	5,704.0	0.63	174.46	5,550.96	-344.15	1,235.89	1,282.84	1.04	-0.71	49.73	152.14
	NORMAL	5,799.0	1.06	167.71	5,645.95	-345.53	1,236.13	1,283.45	0.46	0.45	-7.11	343.58
	NORMAL	5,893.0	1.05	196.13	5,739.94	-347.20	1,236.08	1,283.86	0.55	-0.01	30.23	105.28
	NORMAL	5,988.0	0.44	181.46	5,834.93	-348.41	1,235.82	1,283.96	0.67	-0.64	-15.44	190.12
	NORMAL	6,083.0	0.81	190.59	5,929.92	-349.43	1,235.69	1,284.12	0.40	0.39	9.61	19.66
	NORMAL	6,178.0	0.94	205.09	6,024.91	-350.80	1,235.24	1,284.06	0.27	0.14	15.26	66.97
	NORMAL	6,272.0	0.69	216.34	6,118.90	-351.95	1,234.58	1,283.75	0.31	-0.27	11.97	152.92
	NORMAL	6,367.0	0.94	199.71	6,213.89	-353.14	1,233.97	1,283.50	0.36	0.26	-17.51	308.07
	NORMAL	6,461.0	1.69	190.84	6,307.87	-355.23	1,233.45	1,283.58	0.82	0.80	-9.44	340.35
	NORMAL	6,556.0	0.44	200.96	6,402.85	-356.95	1,233.06	1,283.68	1.33	-1.32	10.65	176.48
	NORMAL	6,651.0	0.38	194.84	6,497.85	-357.59	1,232.85	1,283.66	0.08	-0.06	-6.44	213.09
10/24/2008	NORMAL	6,745.0	0.63	210.59	6,591.84	-358.34	1,232.51	1,283.54	0.30	0.27	16.76	37.07
	NORMAL	6,839.0	0.81	202.71	6,685.84	-359.40	1,231.99	1,283.34	0.22	0.19	-8.38	327.21
	NORMAL	6,934.0	0.75	186.46	6,780.83	-360.63	1,231.66	1,283.37	0.24	-0.06	-17.11	246.80
	NORMAL	7,029.0	0.84	182.56	6,875.82	-361.95	1,231.56	1,283.63	0.11	0.09	-4.11	327.02
10/25/2008	NORMAL	7,121.0	0.94	165.59	6,967.81	-363.35	1,231.71	1,284.18	0.31	0.11	-18.45	282.15
	NORMAL	7,216.0	0.88	9.08	7,062.80	-363.39	1,232.02	1,284.48	1.88	-0.06	-164.75	191.35
	NORMAL	7,311.0	1.06	348.09	7,157.79	-361.81	1,231.96	1,283.98	0.42	0.19	-22.09	286.11
	NORMAL	7,406.0	0.88	327.71	7,252.78	-360.33	1,231.38	1,283.02	0.41	-0.19	-21.45	232.51
	NORMAL	7,595.0	0.63	335.34	7,441.76	-358.16	1,230.18	1,281.25	0.14	-0.13	4.04	161.88
	NORMAL	7,784.0	0.81	273.21	7,630.75	-357.14	1,228.41	1,279.27	0.40	0.10	-32.87	250.66
	NORMAL	7,974.0	1.25	263.08	7,820.72	-357.31	1,225.01	1,276.06	0.25	0.23	-5.33	332.40
	NORMAL	8,164.0	1.88	193.71	8,010.66	-360.59	1,222.21	1,274.29	0.98	0.33	-36.51	251.54
10/26/2008	NORMAL	8,353.0	0.31	220.34	8,199.62	-363.99	1,221.15	1,274.21	0.85	-0.83	14.09	175.04
	NORMAL	8,447.0	2.06	226.84	8,293.60	-365.34	1,219.75	1,273.25	1.86	1.86	6.91	7.65
	NORMAL	8,542.0	1.81	246.81	8,388.54	-367.10	1,217.13	1,271.22	0.75	-0.26	21.02	120.13
	Projection	8,784.0	1.16	266.61	8,630.46	-368.75	1,211.17	1,265.95	0.34	-0.27	8.18	151.33