



## Directional Survey Data

Well Name <b>Beezley 5X22</b>	Lease <b>Beezley</b>	Field Name <b>Rangely</b>	Business Unit <b>Mid-Continent/Alaska</b>	Surface UWI <b>0510311742</b>	Surface ChevNo <b>MH9747</b>
Wellbore Name <b>Original Hole</b>	Directional Type <b>Shallow Kick Off 'S'</b>	Wellbore UWI <b>051031174200</b>	Wellbore ChevNo <b>MH9747-00</b>	Kick Off Depth (ftKB) <b>105</b>	Total Depth (ftKB) <b>6,923.00</b>
UTM Northing (Y) (ft)	UTM Easting (X) (ft)	UTM Grid Zone	Latitude (DMS)	Longitude (DMS)	Date TD Reached (wellbore) <b>10/22/2010 07:30</b>
					Closure Direction (°) <b>321.61</b>

### Directional Surveys

Description Surveys	Planned? <b>No</b>	Definitive? <b>No</b>	Note Correction
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### Survey Data

Survey Company	Date	MD (ftKB)	TVD (ftKB)	Incl (°)	Azm (°)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Build (°/100ft)	Turn (°/100ft)
Scientific Drilling	9/27/2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Scientific Drilling	9/27/2010	127.00	127.00	0.62	133.09	-0.68	-0.47	0.50	0.49	0.49	104.80
Scientific Drilling	9/27/2010	218.00	217.99	0.79	343.77	-0.59	-0.20	0.69	1.50	0.19	231.52
Scientific Drilling	9/27/2010	309.00	308.98	1.14	349.30	0.80	1.29	0.34	0.40	0.38	6.08
Scientific Drilling	9/27/2010	401.00	400.97	0.97	47.75	1.66	2.71	0.75	1.13	-0.18	-327.77
Scientific Drilling	9/27/2010	492.00	491.96	0.62	157.26	1.24	2.78	1.51	1.44	-0.38	120.34
Scientific Drilling	9/27/2010	583.00	582.95	1.06	170.45	0.03	1.49	1.84	0.53	0.48	14.49
Scientific Drilling	9/27/2010	674.00	673.93	1.32	162.36	-1.69	-0.34	2.30	0.34	0.29	-8.89
Scientific Drilling	9/28/2010	765.00	764.92	0.88	226.79	-2.73	-1.82	2.11	1.35	-0.48	70.80
Scientific Drilling	9/28/2010	862.00	861.91	1.23	307.29	-1.78	-1.69	0.73	1.43	0.36	82.99
Scientific Drilling	9/28/2010	959.00	958.89	1.23	345.79	0.17	-0.05	-0.35	0.84	0.00	39.69
Scientific Drilling	9/28/2010	1,056.00	1,055.86	1.67	5.30	2.15	2.36	-0.47	0.68	0.45	-351.02
Scientific Drilling	9/28/2010	1,153.00	1,152.84	0.44	289.89	3.49	3.90	-0.69	1.67	-1.27	293.39
Scientific Drilling	9/28/2010	1,250.00	1,249.84	0.62	218.26	3.68	3.61	-1.37	0.66	0.19	-73.85
Scientific Drilling	9/28/2010	1,348.00	1,347.83	0.35	182.49	3.33	2.90	-1.71	0.40	-0.28	-36.50
Scientific Drilling	9/28/2010	1,445.00	1,444.83	0.70	133.88	2.52	2.19	-1.30	0.55	0.36	-50.11
Scientific Drilling	9/28/2010	1,542.00	1,541.81	1.67	132.04	0.54	0.83	0.18	1.00	1.00	-1.90
Scientific Drilling	9/28/2010	1,639.00	1,638.77	1.93	83.17	-1.71	0.08	2.85	1.55	0.27	-50.38
Scientific Drilling	9/28/2010	1,736.00	1,735.73	1.23	63.22	-2.77	0.74	5.40	0.91	-0.72	-20.57
Scientific Drilling	9/28/2010	1,833.00	1,832.72	0.44	332.52	-2.62	1.54	6.16	1.35	-0.81	277.63
Scientific Drilling	9/28/2010	1,930.00	1,929.72	0.44	306.85	-1.89	2.10	5.69	0.20	0.00	-26.46
Scientific Drilling	9/28/2010	1,980.00	1,979.71	0.97	315.73	-1.28	2.51	5.24	1.08	1.06	17.76
Scientific Drilling	10/14/2010	2,039.00	2,038.71	0.35	20.33	-0.69	3.04	4.96	1.49	-1.05	-500.68
Scientific Drilling	10/14/2010	2,107.00	2,106.70	1.41	16.81	-0.11	4.04	5.27	1.56	1.56	-5.18
Scientific Drilling	10/14/2010	2,204.00	2,203.64	2.64	343.68	2.64	7.32	4.99	1.70	1.27	336.98
Scientific Drilling	10/14/2010	2,301.00	2,300.49	3.78	321.62	7.91	11.97	2.37	1.71	1.18	-22.74
Scientific Drilling	10/15/2010	2,398.00	2,397.16	5.72	313.80	15.90	17.83	-3.10	2.10	2.00	-8.06
Scientific Drilling	10/15/2010	2,495.00	2,493.48	7.74	310.11	27.09	25.38	-11.59	2.13	2.08	-3.80
Scientific Drilling	10/15/2010	2,593.00	2,590.41	9.23	305.27	41.10	34.17	-23.05	1.68	1.52	-4.94
Scientific Drilling	10/15/2010	2,691.00	2,687.07	9.76	309.75	56.77	44.02	-35.85	0.93	0.54	4.57
Scientific Drilling	10/15/2010	2,788.00	2,782.44	11.26	317.22	74.26	56.23	-48.61	2.09	1.55	7.70
Scientific Drilling	10/15/2010	2,855.00	2,847.94	13.01	321.62	88.33	66.95	-57.74	2.95	2.61	6.57
Scientific Drilling	10/15/2010	2,982.00	2,971.34	14.33	319.42	118.33	90.09	-76.84	1.12	1.04	-1.73
Scientific Drilling	10/15/2010	3,079.00	3,065.08	15.48	314.85	143.18	108.34	-93.82	1.69	1.19	-4.71
Scientific Drilling	10/15/2010	3,176.00	3,158.53	15.65	317.58	169.09	127.13	-111.83	0.78	0.18	2.81
Scientific Drilling	10/15/2010	3,273.00	3,251.56	17.23	324.08	196.49	148.42	-129.08	2.50	1.63	6.70
Scientific Drilling	10/15/2010	3,370.00	3,345.03	13.72	323.73	222.35	169.34	-144.32	3.62	-3.62	-0.36
Scientific Drilling	10/15/2010	3,468.00	3,440.06	14.60	318.63	246.30	187.98	-159.36	1.56	0.90	-5.20
Scientific Drilling	10/15/2010	3,566.00	3,534.78	15.12	320.56	271.41	207.12	-175.64	0.73	0.53	1.97



## Directional Survey Data

Well Name		Lease		Field Name		Business Unit		Surface UWI		Surface ChevNo	
Beezley 5X22		Beezley		Rangely		Mid-Continent/Alaska		0510311742		MH9747	
Survey Data											
Survey Company	Date	MD (ftKB)	TVD (ftKB)	Incl (°)	Azm (°)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Build (°/100ft)	Turn (°/100ft)
Scientific Drilling	10/15/2010	3,662.00	3,627.48	15.04	323.82	296.38	226.84	-190.95	0.89	-0.08	3.40
Scientific Drilling	10/15/2010	3,759.00	3,721.10	15.30	325.57	321.72	247.55	-205.61	0.54	0.27	1.80
Scientific Drilling	10/16/2010	3,856.00	3,814.42	16.36	330.23	348.00	269.97	-219.63	1.71	1.09	4.80
Scientific Drilling	10/16/2010	3,954.00	3,908.13	17.67	332.34	376.26	295.13	-233.39	1.48	1.34	2.15
Scientific Drilling	10/16/2010	4,053.00	4,002.25	18.47	328.12	406.60	321.75	-248.65	1.55	0.81	-4.26
Scientific Drilling	10/16/2010	4,149.00	4,093.12	19.17	323.11	437.47	347.27	-266.14	1.83	0.73	-5.22
Scientific Drilling	10/16/2010	4,244.00	4,183.14	18.11	319.33	467.82	370.95	-285.13	1.69	-1.12	-3.98
Scientific Drilling	10/16/2010	4,340.00	4,274.83	16.36	315.73	496.18	391.95	-304.29	2.13	-1.82	-3.75
Scientific Drilling	10/16/2010	4,438.00	4,368.91	16.18	314.59	523.46	411.42	-323.65	0.37	-0.18	-1.16
Scientific Drilling	10/16/2010	4,535.00	4,461.98	16.53	313.18	550.52	430.35	-343.34	0.55	0.36	-1.45
Scientific Drilling	10/16/2010	4,632.00	4,554.60	18.03	309.58	578.86	449.36	-364.97	1.90	1.55	-3.71
Scientific Drilling	10/16/2010	4,729.00	4,646.75	18.38	305.52	608.24	467.81	-388.99	1.36	0.36	-4.19
Scientific Drilling	10/16/2010	4,827.00	4,740.93	13.72	317.58	634.70	485.38	-409.42	5.82	-4.76	12.31
Scientific Drilling	10/16/2010	4,924.00	4,834.49	16.88	311.95	660.06	503.29	-427.66	3.60	3.26	-5.80
Scientific Drilling	10/16/2010	5,022.00	4,927.38	20.22	311.69	690.78	524.07	-450.90	3.41	3.41	-0.27
Scientific Drilling	10/16/2010	5,119.00	5,017.98	21.63	311.25	724.88	547.01	-476.86	1.46	1.45	-0.45
Scientific Drilling	10/17/2010	5,216.00	5,108.45	20.66	312.22	759.35	570.29	-502.97	1.06	-1.00	1.00
Scientific Drilling	10/17/2010	5,314.00	5,200.45	19.70	320.48	792.93	594.66	-526.29	3.07	-0.98	8.43
Scientific Drilling	10/17/2010	5,411.00	5,291.50	20.66	320.92	826.39	620.55	-547.48	1.00	0.99	0.45
Scientific Drilling	10/17/2010	5,506.00	5,380.42	20.58	317.66	859.80	645.91	-569.30	1.21	-0.08	-3.43
Scientific Drilling	10/17/2010	5,604.00	5,472.85	18.20	316.26	892.23	669.70	-591.48	2.47	-2.43	-1.43
Scientific Drilling	10/17/2010	5,701.00	5,564.49	20.05	316.87	923.88	692.78	-613.32	1.92	1.91	0.63
Scientific Drilling	10/17/2010	5,798.00	5,655.96	18.82	317.75	956.07	716.50	-635.21	1.30	-1.27	0.91
Scientific Drilling	10/17/2010	5,895.00	5,749.05	13.81	327.68	983.21	737.88	-651.94	5.89	-5.16	10.24
Scientific Drilling	10/17/2010	5,993.00	5,844.77	10.90	331.55	1,003.97	755.92	-662.61	3.09	-2.97	3.95
Scientific Drilling	10/17/2010	6,089.00	5,939.15	10.20	325.84	1,021.39	770.93	-671.70	1.31	-0.73	-5.95
Scientific Drilling	10/17/2010	6,187.00	6,035.65	9.85	326.72	1,038.40	785.12	-681.17	0.39	-0.36	0.90
Scientific Drilling	10/17/2010	6,283.00	6,130.73	6.16	351.15	1,051.06	797.08	-686.48	5.15	-3.84	25.45
Scientific Drilling	10/17/2010	6,477.00	6,323.76	5.28	2.66	1,066.85	816.28	-687.66	0.74	-0.45	-179.63
Scientific Drilling	10/17/2010	6,547.00	6,393.47	5.19	15.23	1,071.16	822.55	-686.68	1.64	-0.13	17.96
Scientific Drilling	10/17/2010	6,618.00	6,464.18	5.19	15.23	1,074.97	828.75	-685.00	0.00	0.00	0.00
Scientific Drilling	10/22/2010	6,923.00	6,767.93	5.19	15.23	1,091.33	855.37	-677.75	0.00	0.00	0.00





# Directional Plot

Well Name <b>Beezley 6X22</b>	Lease <b>Beezley</b>	Field Name <b>Rangely</b>	Business Unit <b>Mid-Continent/Alaska</b>	Surface UWI <b>0510311743</b>	Surface ChevNo <b>MH9748</b>
Wellbore Name <b>Original Hole</b>	Directional Type <b>Shallow Kick Off 'S'</b>	Kick Off Depth (ftKB)	Total Depth of Wellbore (ftKB) <b>6,837.00</b>	Wellbore UWI <b>051031174300</b>	Wellbore ChevNo <b>MH9748-00</b>

