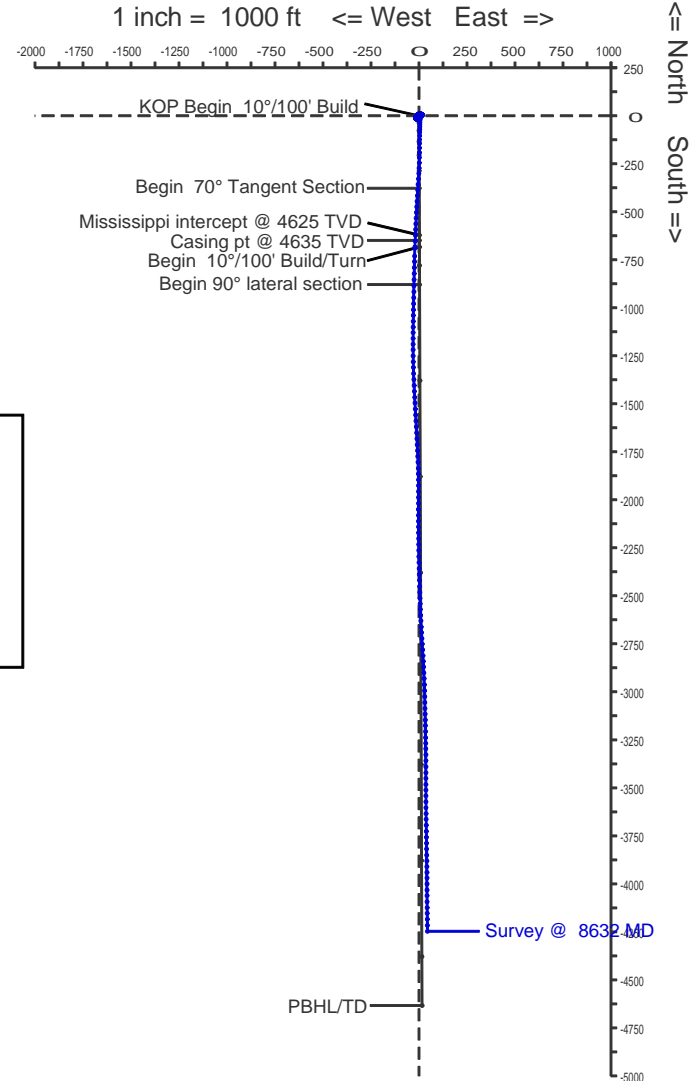


Woolsey Operating Company, LLC

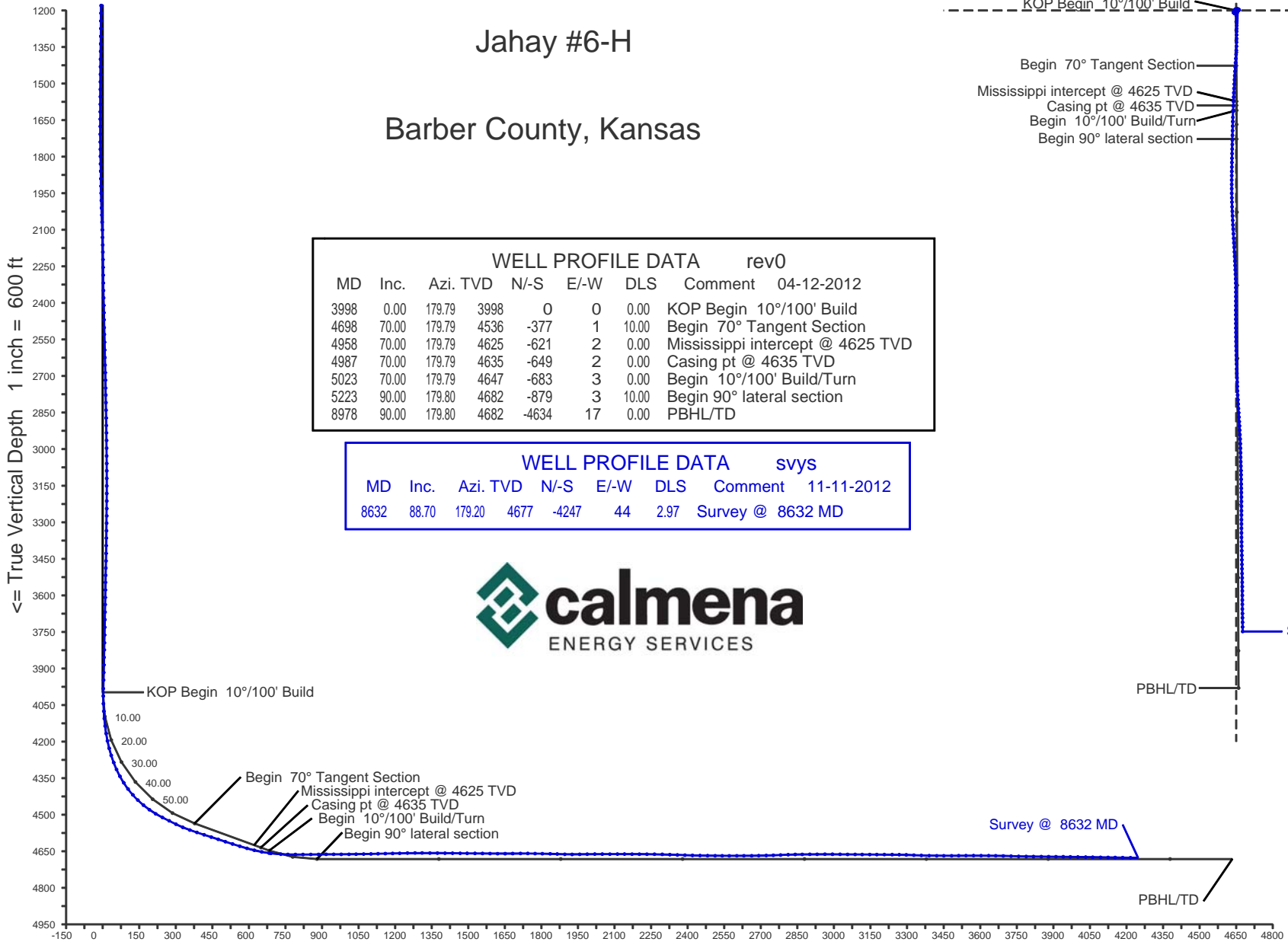
Jahay #6-H

Barber County, Kansas



WELL PROFILE DATA rev0							
MD	Inc.	Azi.	TVD	N/S	E/W	DLS	Comment
3998	0.00	179.79	3998	0	0	0.00	KOP Begin 10°/100' Build
4698	70.00	179.79	4536	-377	1	10.00	Begin 70° Tangent Section
4958	70.00	179.79	4625	-621	2	0.00	Mississippi intercept @ 4625 TVD
4987	70.00	179.79	4635	-649	2	0.00	Casing pt @ 4635 TVD
5023	70.00	179.79	4647	-683	3	0.00	Begin 10°/100' Build/Turn
5223	90.00	179.80	4682	-879	3	10.00	Begin 90° lateral section
8978	90.00	179.80	4682	-4634	17	0.00	PBHL/TD

WELL PROFILE DATA svys							
MD	Inc.	Azi.	TVD	N/S	E/W	DLS	Comment
8632	88.70	179.20	4677	-4247	44	2.97	Survey @ 8632 MD



Vertical Section on 179.79 deg azimuth with reference 0.00 N, 0.00 E

Calmena Energy Services

Company: Woolsey Operating Company, LLC
 Well: Jahay #6-H
 Location: Barber County, Kansas

Date: 11-Nov-2012
 Surveys
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 Job# : 6527

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/S (feet)	E/W (feet)	DLS (deg/100')	VS @ 179.79° Az (feet)	Grid Y	Grid X	Comments
Surface Location								165829.00	2014295.40	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165829.00	2014295.40	
692.00	1.41	79.72	691.93	1.52	8.38	0.20	-1.49	165830.52	2014303.78	
723.00	1.76	95.72	722.92	1.54	9.23	1.81	-1.51	165830.54	2014304.63	
752.00	1.58	82.01	751.91	1.55	10.07	1.51	-1.51	165830.55	2014305.47	
783.00	1.70	94.50	782.89	1.57	10.95	1.21	-1.53	165830.57	2014306.35	
813.00	1.90	84.10	812.88	1.59	11.89	1.27	-1.55	165830.59	2014307.29	
843.00	1.90	88.50	842.86	1.65	12.88	0.49	-1.61	165830.65	2014308.28	
874.00	1.50	73.40	873.85	1.78	13.78	1.93	-1.73	165830.78	2014309.18	
906.00	1.20	82.00	905.84	1.95	14.51	1.13	-1.90	165830.95	2014309.91	
936.00	1.20	59.70	935.83	2.15	15.10	1.55	-2.10	165831.15	2014310.50	
967.00	1.00	30.20	966.83	2.55	15.51	1.91	-2.49	165831.55	2014310.91	
998.00	1.00	45.80	997.82	2.97	15.84	0.88	-2.91	165831.97	2014311.24	
1027.00	1.20	21.90	1026.82	3.43	16.14	1.71	-3.37	165832.43	2014311.54	
1058.00	1.40	26.80	1057.81	4.07	16.43	0.74	-4.01	165833.07	2014311.83	
1089.00	0.90	25.60	1088.80	4.63	16.70	1.61	-4.57	165833.63	2014312.10	
1119.00	1.10	352.50	1118.80	5.13	16.77	2.00	-5.06	165834.13	2014312.17	
1150.00	1.20	349.70	1149.79	5.74	16.67	0.37	-5.68	165834.74	2014312.07	
1180.00	1.00	347.80	1179.79	6.31	16.56	0.68	-6.24	165835.31	2014311.96	
1211.00	1.10	311.40	1210.78	6.77	16.28	2.14	-6.71	165835.77	2014311.68	
1243.00	0.90	297.90	1242.78	7.09	15.83	0.96	-7.03	165836.09	2014311.23	
1274.00	1.10	316.30	1273.77	7.42	15.41	1.21	-7.36	165836.42	2014310.81	
1306.00	1.50	295.90	1305.77	7.82	14.82	1.89	-7.77	165836.82	2014310.22	
1337.00	1.20	285.00	1336.76	8.08	14.14	1.27	-8.03	165837.08	2014309.54	
1368.00	1.70	288.60	1367.75	8.31	13.39	1.64	-8.26	165837.31	2014308.79	
1400.00	1.60	293.10	1399.73	8.64	12.53	0.51	-8.59	165837.64	2014307.93	
1431.00	1.40	274.70	1430.72	8.84	11.75	1.67	-8.80	165837.84	2014307.15	
1462.00	1.80	280.60	1461.71	8.96	10.90	1.39	-8.92	165837.96	2014306.30	
1493.00	1.50	278.20	1492.70	9.11	10.02	0.99	-9.07	165838.11	2014305.42	
1524.00	1.90	273.30	1523.68	9.20	9.10	1.37	-9.16	165838.20	2014304.50	
1554.00	1.80	281.90	1553.67	9.32	8.15	0.98	-9.29	165838.32	2014303.55	

Calmena Energy Services

Company: Woolsey Operating Company, LLC
 Well: Jahay #6-H
 Location: Barber County, Kansas

Date: 11-Nov-2012
 Surveys
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 Job# : 6527

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 179.79° Az (feet)	Grid Y	Grid X	Comments
1585.00	2.40	276.90	1584.65	9.50	7.02	2.02	-9.47	165838.50	2014302.42	
1616.00	2.10	278.20	1615.62	9.66	5.82	0.98	-9.64	165838.66	2014301.22	
1646.00	2.20	266.40	1645.60	9.70	4.70	1.51	-9.68	165838.70	2014300.10	
1676.00	2.60	268.70	1675.58	9.65	3.44	1.37	-9.64	165838.65	2014298.84	
1708.00	2.60	269.70	1707.54	9.63	1.99	0.14	-9.62	165838.63	2014297.39	
1740.00	2.10	264.60	1739.52	9.57	0.68	1.69	-9.57	165838.57	2014296.08	
1770.00	2.10	255.90	1769.50	9.38	-0.40	1.06	-9.39	165838.38	2014295.00	
1799.00	2.20	249.00	1798.48	9.06	-1.43	0.96	-9.06	165838.06	2014293.97	
1830.00	2.20	245.00	1829.45	8.59	-2.53	0.50	-8.60	165837.59	2014292.87	
1860.00	2.50	241.80	1859.43	8.04	-3.63	1.09	-8.05	165837.04	2014291.77	
1891.00	2.40	233.40	1890.40	7.33	-4.74	1.20	-7.35	165836.33	2014290.66	
1921.00	2.40	237.80	1920.37	6.62	-5.78	0.61	-6.64	165835.62	2014289.62	
1950.00	2.60	243.40	1949.35	6.00	-6.88	1.09	-6.03	165835.00	2014288.52	
1980.00	2.80	239.50	1979.31	5.33	-8.12	0.90	-5.36	165834.33	2014287.28	
2011.00	2.40	227.00	2010.28	4.50	-9.25	2.23	-4.54	165833.50	2014286.15	
2040.00	2.20	216.00	2039.26	3.64	-10.02	1.67	-3.67	165832.64	2014285.38	
2069.00	2.20	225.10	2068.24	2.79	-10.74	1.20	-2.83	165831.79	2014284.66	
2101.00	2.10	214.90	2100.21	1.88	-11.51	1.23	-1.92	165830.88	2014283.89	
2132.00	1.70	213.00	2131.20	1.03	-12.09	1.31	-1.07	165830.03	2014283.31	
2163.00	1.10	217.00	2162.19	0.40	-12.52	1.96	-0.45	165829.40	2014282.88	
2192.00	1.10	193.30	2191.18	-0.09	-12.75	1.56	0.04	165828.91	2014282.65	
2223.00	1.10	193.10	2222.18	-0.67	-12.88	0.01	0.62	165828.33	2014282.52	
2255.00	0.90	197.50	2254.17	-1.21	-13.03	0.67	1.16	165827.79	2014282.37	
2287.00	1.30	206.30	2286.17	-1.77	-13.26	1.35	1.72	165827.23	2014282.14	
2319.00	1.20	208.60	2318.16	-2.39	-13.59	0.35	2.34	165826.61	2014281.81	
2350.00	1.00	186.90	2349.15	-2.95	-13.77	1.48	2.89	165826.05	2014281.63	
2380.00	1.30	200.50	2379.15	-3.52	-13.92	1.35	3.47	165825.48	2014281.48	
2411.00	1.20	207.90	2410.14	-4.14	-14.20	0.61	4.09	165824.86	2014281.20	
2441.00	1.10	187.70	2440.13	-4.70	-14.38	1.38	4.65	165824.30	2014281.02	
2470.00	1.10	192.00	2469.13	-5.25	-14.48	0.28	5.20	165823.75	2014280.92	

NAD27 Ks South gr elev=1400 RKB=1417

Calmena Energy Services

Company: Woolsey Operating Company, LLC
 Well: Jahay #6-H
 Location: Barber County, Kansas

Date: 11-Nov-2012
 Surveys
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 Job# : 6527

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 179.79° Az (feet)	Grid Y	Grid X	Comments
2502.00	1.40	206.10	2501.12	-5.90	-14.72	1.34	5.85	165823.10	2014280.68	
2530.00	1.40	208.60	2529.11	-6.51	-15.03	0.22	6.46	165822.49	2014280.37	
2562.00	1.50	205.90	2561.10	-7.23	-15.40	0.38	7.17	165821.77	2014280.00	
2594.00	1.30	189.10	2593.09	-7.97	-15.64	1.42	7.91	165821.03	2014279.76	
2625.00	1.40	207.70	2624.08	-8.65	-15.87	1.44	8.59	165820.35	2014279.53	
2656.00	1.70	199.80	2655.07	-9.42	-16.20	1.19	9.36	165819.58	2014279.20	
2687.00	1.70	195.90	2686.06	-10.29	-16.49	0.37	10.23	165818.71	2014278.91	
2718.00	1.40	188.40	2717.05	-11.11	-16.67	1.17	11.05	165817.89	2014278.73	
2750.00	1.10	174.80	2749.04	-11.80	-16.70	1.31	11.74	165817.20	2014278.70	
2779.00	1.30	181.70	2778.03	-12.41	-16.68	0.85	12.35	165816.59	2014278.72	
2810.00	1.00	168.50	2809.03	-13.02	-16.64	1.29	12.96	165815.98	2014278.76	
2841.00	0.80	175.00	2840.02	-13.50	-16.56	0.72	13.44	165815.50	2014278.84	
2873.00	1.20	170.60	2872.02	-14.06	-16.49	1.27	14.00	165814.94	2014278.91	
2904.00	1.20	165.50	2903.01	-14.69	-16.36	0.34	14.63	165814.31	2014279.04	
2934.00	0.90	152.80	2933.01	-15.20	-16.17	1.26	15.15	165813.80	2014279.23	
2965.00	1.10	128.60	2964.00	-15.61	-15.83	1.49	15.55	165813.39	2014279.57	
2997.00	0.80	103.80	2996.00	-15.85	-15.37	1.57	15.80	165813.15	2014280.03	
3029.00	0.90	107.50	3027.99	-15.98	-14.91	0.36	15.93	165813.02	2014280.49	
3060.00	1.30	101.30	3058.99	-16.12	-14.33	1.34	16.07	165812.88	2014281.07	
3090.00	1.00	97.10	3088.98	-16.22	-13.74	1.04	16.17	165812.78	2014281.66	
3121.00	1.00	86.90	3119.98	-16.24	-13.20	0.57	16.19	165812.76	2014282.20	
3152.00	1.00	95.70	3150.97	-16.25	-12.66	0.49	16.21	165812.75	2014282.74	
3183.00	1.40	90.10	3181.97	-16.28	-12.02	1.34	16.24	165812.72	2014283.38	
3214.00	1.30	100.60	3212.96	-16.35	-11.29	0.86	16.30	165812.65	2014284.11	
3245.00	1.30	73.70	3243.95	-16.31	-10.61	1.95	16.27	165812.69	2014284.79	
3275.00	1.50	75.70	3273.94	-16.12	-9.90	0.69	16.08	165812.88	2014285.50	
3305.00	2.10	64.40	3303.93	-15.78	-9.02	2.31	15.75	165813.22	2014286.38	
3336.00	2.10	60.60	3334.91	-15.26	-8.02	0.45	15.23	165813.74	2014287.38	
3366.00	1.50	57.90	3364.89	-14.78	-7.21	2.02	14.76	165814.22	2014288.19	
3397.00	1.60	41.90	3395.88	-14.24	-6.57	1.43	14.22	165814.76	2014288.83	

Calmena Energy Services

Company: Woolsey Operating Company, LLC
 Well: Jahay #6-H
 Location: Barber County, Kansas

Date: 11-Nov-2012
 Surveys
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 Job# : 6527

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 179.79° Az (feet)	Grid Y	Grid X	Comments
3429.00	1.60	54.20	3427.87	-13.65	-5.91	1.07	13.63	165815.35	2014289.49	
3460.00	1.50	43.00	3458.86	-13.10	-5.29	1.03	13.08	165815.90	2014290.11	
3489.00	2.00	46.30	3487.84	-12.47	-4.66	1.76	12.46	165816.53	2014290.74	
3519.00	1.80	39.10	3517.83	-11.75	-3.98	1.04	11.73	165817.25	2014291.42	
3548.00	1.30	36.10	3546.82	-11.13	-3.50	1.75	11.11	165817.87	2014291.90	
3579.00	1.30	45.40	3577.81	-10.60	-3.05	0.68	10.58	165818.40	2014292.35	
3610.00	1.10	50.00	3608.80	-10.16	-2.57	0.72	10.15	165818.84	2014292.83	
3639.00	1.20	28.20	3637.79	-9.71	-2.21	1.54	9.70	165819.29	2014293.19	
3670.00	1.50	41.20	3668.79	-9.12	-1.79	1.38	9.11	165819.88	2014293.61	
3701.00	1.50	46.00	3699.78	-8.53	-1.23	0.41	8.53	165820.47	2014294.17	
3732.00	1.20	39.50	3730.77	-8.00	-0.73	1.09	8.00	165821.00	2014294.67	
3764.00	1.40	34.70	3762.76	-7.42	-0.30	0.71	7.42	165821.58	2014295.10	
3796.00	1.80	44.00	3794.75	-6.74	0.27	1.49	6.74	165822.26	2014295.67	
3825.00	1.70	47.90	3823.73	-6.12	0.91	0.54	6.12	165822.88	2014296.31	
3856.00	1.80	34.70	3854.72	-5.41	1.53	1.34	5.42	165823.59	2014296.93	
3887.00	2.00	44.20	3885.70	-4.62	2.18	1.20	4.63	165824.38	2014297.58	
3918.00	1.80	42.50	3916.68	-3.88	2.89	0.67	3.89	165825.12	2014298.29	
3949.00	2.00	39.80	3947.67	-3.10	3.56	0.71	3.12	165825.90	2014298.96	
3984.00	1.90	55.80	3982.65	-2.31	4.43	1.58	2.32	165826.69	2014299.83	
4015.00	1.50	92.20	4013.63	-2.03	5.27	3.64	2.05	165826.97	2014300.67	
4046.00	2.10	149.30	4044.62	-2.54	5.96	5.80	2.56	165826.46	2014301.36	
4077.00	4.00	168.30	4075.58	-4.09	6.47	6.86	4.11	165824.91	2014301.87	
4107.00	5.10	185.20	4105.48	-6.44	6.56	5.74	6.46	165822.56	2014301.96	
4138.00	6.80	185.70	4136.31	-9.64	6.25	5.49	9.66	165819.36	2014301.65	
4169.00	8.90	185.70	4167.02	-13.85	5.83	6.77	13.87	165815.15	2014301.23	
4200.00	11.60	185.70	4197.52	-19.34	5.29	8.71	19.36	165809.66	2014300.69	
4231.00	14.40	183.60	4227.73	-26.29	4.73	9.16	26.31	165802.71	2014300.13	
4261.00	17.50	180.90	4256.57	-34.52	4.43	10.62	34.54	165794.48	2014299.83	
4292.00	20.60	179.90	4285.87	-44.64	4.37	10.05	44.66	165784.36	2014299.77	
4323.00	24.20	180.00	4314.52	-56.45	4.37	11.61	56.47	165772.55	2014299.77	

Calmena Energy Services

Company: Woolsey Operating Company, LLC
 Well: Jahay #6-H
 Location: Barber County, Kansas

Date: 11-Nov-2012
 Surveys
 Page 5
 Job# : 6527

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 179.79° Az (feet)	Grid Y	Grid X	Comments
4354.00	28.30	180.60	4342.32	-70.16	4.30	13.25	70.17	165758.84	2014299.70	
4385.00	32.50	181.10	4369.05	-85.84	4.06	13.57	85.85	165743.16	2014299.46	
4416.00	37.00	181.50	4394.52	-103.50	3.66	14.53	103.51	165725.50	2014299.06	
4447.00	41.50	181.30	4418.52	-123.10	3.18	14.52	123.12	165705.90	2014298.58	
4477.00	45.80	180.70	4440.22	-143.80	2.82	14.40	143.81	165685.20	2014298.22	
4508.00	50.10	180.20	4460.98	-166.82	2.64	13.92	166.83	165662.18	2014298.04	
4539.00	54.50	180.20	4479.93	-191.34	2.56	14.19	191.35	165637.66	2014297.96	
4570.00	59.50	180.60	4496.81	-217.33	2.38	16.17	217.34	165611.67	2014297.78	
4601.00	64.30	181.50	4511.41	-244.66	1.87	15.69	244.67	165584.34	2014297.27	
4632.00	63.30	182.90	4525.09	-272.45	0.80	5.18	272.46	165556.55	2014296.20	
4663.00	63.10	183.40	4539.07	-300.08	-0.72	1.58	300.08	165528.92	2014294.68	
4694.00	67.40	183.70	4552.05	-328.17	-2.46	13.90	328.16	165500.83	2014292.94	
4725.00	71.00	183.70	4563.05	-357.09	-4.33	11.61	357.07	165471.91	2014291.07	
4756.00	71.80	183.70	4572.94	-386.41	-6.23	2.58	386.38	165442.59	2014289.17	
4787.00	72.10	183.70	4582.55	-415.82	-8.13	0.97	415.79	165413.18	2014287.27	
4818.00	72.00	183.20	4592.10	-445.26	-9.90	1.57	445.22	165383.74	2014285.50	
4848.00	71.90	183.20	4601.40	-473.74	-11.50	0.33	473.69	165355.26	2014283.90	
4879.00	72.00	182.90	4611.00	-503.17	-13.06	0.98	503.12	165325.83	2014282.34	
4910.00	72.50	182.90	4620.45	-532.66	-14.56	1.61	532.60	165296.34	2014280.84	
4941.00	73.20	182.50	4629.59	-562.25	-15.95	2.57	562.18	165266.75	2014279.45	
4972.00	74.00	182.50	4638.35	-591.96	-17.25	2.58	591.89	165237.04	2014278.15	
5003.00	76.70	182.20	4646.19	-621.92	-18.48	8.76	621.85	165207.08	2014276.92	
5034.00	79.10	182.20	4652.68	-652.21	-19.64	7.74	652.13	165176.79	2014275.76	
5065.00	81.90	182.00	4657.80	-682.76	-20.76	9.05	682.68	165146.24	2014274.64	
5072.00	82.90	182.00	4658.72	-689.69	-21.01	14.29	689.61	165139.31	2014274.39	
5113.00	87.50	182.00	4662.15	-730.51	-22.43	11.22	730.42	165098.49	2014272.97	
5142.00	88.50	181.30	4663.17	-759.48	-23.27	4.21	759.39	165069.52	2014272.13	
5173.00	90.10	181.30	4663.54	-790.47	-23.97	5.16	790.38	165038.53	2014271.43	
5204.00	90.00	181.30	4663.52	-821.46	-24.67	0.32	821.37	165007.54	2014270.73	
5236.00	90.40	180.90	4663.41	-853.46	-25.29	1.77	853.36	164975.54	2014270.11	

NAD27 Ks South gr elev=1400 RKB=1417

Calmena Energy Services

Company: Woolsey Operating Company, LLC
 Well: Jahay #6-H
 Location: Barber County, Kansas

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MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 179.79° Az (feet)	Grid Y	Grid X	Comments
5268.00	90.50	181.30	4663.15	-885.45	-25.90	1.29	885.35	164943.55	2014269.50	
5299.00	90.30	180.90	4662.94	-916.44	-26.50	1.44	916.34	164912.56	2014268.90	
5330.00	89.90	181.30	4662.88	-947.44	-27.09	1.82	947.33	164881.56	2014268.31	
5361.00	89.80	181.50	4662.97	-978.43	-27.85	0.72	978.32	164850.57	2014267.55	
5393.00	90.80	181.30	4662.80	-1010.42	-28.63	3.19	1010.31	164818.58	2014266.77	
5422.00	90.80	181.10	4662.39	-1039.41	-29.24	0.69	1039.29	164789.59	2014266.16	
5453.00	91.40	180.60	4661.80	-1070.40	-29.70	2.52	1070.28	164758.60	2014265.70	
5483.00	91.30	180.60	4661.09	-1100.39	-30.01	0.33	1100.27	164728.61	2014265.39	
5512.00	91.10	180.70	4660.48	-1129.38	-30.34	0.77	1129.26	164699.62	2014265.06	
5542.00	91.10	180.20	4659.91	-1159.37	-30.58	1.67	1159.25	164669.63	2014264.82	
5572.00	91.40	180.20	4659.25	-1189.37	-30.68	1.00	1189.25	164639.63	2014264.72	
5601.00	91.10	179.70	4658.62	-1218.36	-30.65	2.01	1218.24	164610.64	2014264.75	
5633.00	91.40	179.50	4657.92	-1250.35	-30.43	1.13	1250.23	164578.65	2014264.97	
5664.00	90.50	178.50	4657.41	-1281.34	-29.89	4.34	1281.22	164547.66	2014265.51	
5693.00	89.50	177.90	4657.41	-1310.33	-28.98	4.02	1310.21	164518.67	2014266.42	
5725.00	89.40	177.40	4657.72	-1342.30	-27.67	1.59	1342.19	164486.70	2014267.73	
5756.00	89.60	177.60	4657.99	-1373.27	-26.32	0.91	1373.16	164455.73	2014269.08	
5787.00	89.80	177.40	4658.15	-1404.24	-24.96	0.91	1404.14	164424.76	2014270.44	
5818.00	89.30	177.10	4658.39	-1435.20	-23.48	1.88	1435.11	164393.80	2014271.92	
5849.00	89.50	177.20	4658.72	-1466.16	-21.93	0.72	1466.07	164362.84	2014273.47	
5878.00	89.80	177.20	4658.89	-1495.13	-20.52	1.03	1495.04	164333.88	2014274.88	
5910.00	90.00	177.20	4658.95	-1527.09	-18.95	0.63	1527.01	164301.91	2014276.45	
5941.00	89.10	176.40	4659.19	-1558.04	-17.22	3.88	1557.96	164270.96	2014278.18	
5972.00	89.10	176.50	4659.68	-1588.97	-15.31	0.32	1588.91	164240.03	2014280.09	
6003.00	89.50	176.50	4660.06	-1619.91	-13.41	1.29	1619.85	164209.09	2014281.99	
6034.00	90.60	177.20	4660.03	-1650.87	-11.71	4.21	1650.81	164178.13	2014283.69	
6065.00	91.20	177.60	4659.54	-1681.83	-10.30	2.33	1681.78	164147.17	2014285.10	
6097.00	90.30	177.20	4659.13	-1713.79	-8.85	3.08	1713.75	164115.21	2014286.55	
6127.00	89.20	177.10	4659.26	-1743.76	-7.36	3.68	1743.72	164085.24	2014288.04	
6157.00	88.80	177.40	4659.78	-1773.72	-5.92	1.67	1773.68	164055.28	2014289.48	

Calmena Energy Services

Company: Woolsey Operating Company, LLC
 Well: Jahay #6-H
 Location: Barber County, Kansas

Date: 11-Nov-2012
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MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 179.79° Az (feet)	Grid Y	Grid X	NAD27 Ks South gr elev=1400 RKB=1417 Comments
6187.00	89.20	177.20	4660.30	-1803.68	-4.51	1.49	1803.65	164025.32	2014290.89	
6219.00	89.30	178.50	4660.72	-1835.65	-3.31	4.07	1835.63	163993.35	2014292.09	
6248.00	87.80	179.30	4661.46	-1864.64	-2.75	5.86	1864.62	163964.36	2014292.65	
6279.00	87.70	179.30	4662.67	-1895.61	-2.37	0.32	1895.59	163933.39	2014293.03	
6309.00	90.20	179.90	4663.22	-1925.60	-2.16	8.57	1925.58	163903.40	2014293.24	
6340.00	91.30	180.00	4662.82	-1956.60	-2.14	3.56	1956.58	163872.40	2014293.26	
6371.00	91.20	180.20	4662.14	-1987.59	-2.19	0.72	1987.57	163841.41	2014293.21	
6402.00	90.00	180.60	4661.82	-2018.59	-2.41	4.08	2018.57	163810.41	2014292.99	
6433.00	89.50	179.90	4661.95	-2049.59	-2.54	2.77	2049.57	163779.41	2014292.86	
6464.00	90.10	179.90	4662.06	-2080.59	-2.49	1.94	2080.57	163748.41	2014292.91	
6495.00	90.50	179.90	4661.90	-2111.59	-2.43	1.29	2111.56	163717.41	2014292.97	
6524.00	89.70	179.50	4661.85	-2140.59	-2.28	3.08	2140.56	163688.41	2014293.12	
6555.00	89.50	179.30	4662.06	-2171.58	-1.96	0.91	2171.56	163657.42	2014293.44	
6585.00	89.60	179.20	4662.30	-2201.58	-1.56	0.47	2201.56	163627.42	2014293.84	
6616.00	90.00	179.30	4662.41	-2232.58	-1.16	1.33	2232.56	163596.42	2014294.24	
6647.00	90.00	179.30	4662.41	-2263.58	-0.78	0.00	2263.56	163565.43	2014294.62	
6679.00	88.00	178.80	4662.97	-2295.56	-0.25	6.44	2295.55	163533.44	2014295.15	
6710.00	87.60	178.60	4664.16	-2326.53	0.45	1.44	2326.52	163502.47	2014295.85	
6741.00	88.00	178.60	4665.35	-2357.50	1.21	1.29	2357.49	163471.50	2014296.61	
6772.00	88.20	178.60	4666.37	-2388.48	1.97	0.65	2388.47	163440.53	2014297.37	
6803.00	88.70	178.60	4667.21	-2419.45	2.72	1.61	2419.45	163409.55	2014298.12	
6834.00	89.00	178.50	4667.83	-2450.44	3.51	1.02	2450.44	163378.56	2014298.91	
6865.00	89.00	178.30	4668.38	-2481.42	4.37	0.65	2481.42	163347.58	2014299.77	
6896.00	89.90	178.10	4668.67	-2512.40	5.35	2.97	2512.41	163316.60	2014300.75	
6925.00	89.50	178.10	4668.83	-2541.39	6.31	1.38	2541.39	163287.61	2014301.71	
6954.00	90.00	177.60	4668.95	-2570.37	7.40	2.44	2570.38	163258.63	2014302.80	
6985.00	90.30	177.80	4668.87	-2601.34	8.64	1.16	2601.36	163227.66	2014304.04	
7014.00	90.10	176.90	4668.77	-2630.31	9.98	3.18	2630.33	163198.69	2014305.38	
7046.00	90.60	176.70	4668.57	-2662.26	11.77	1.68	2662.29	163166.74	2014307.17	
7075.00	91.00	176.50	4668.17	-2691.21	13.49	1.54	2691.24	163137.79	2014308.89	

Calmena Energy Services

Company: Woolsey Operating Company, LLC
 Well: Jahay #6-H
 Location: Barber County, Kansas

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MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 179.79° Az (feet)	Grid Y	Grid X	Comments
7106.00	91.30	176.50	4667.55	-2722.14	15.38	0.97	2722.18	163106.86	2014310.78	
7135.00	92.00	176.40	4666.71	-2751.07	17.17	2.44	2751.12	163077.93	2014312.57	
7165.00	92.40	176.00	4665.56	-2780.99	19.16	1.88	2781.04	163048.01	2014314.56	
7196.00	92.20	176.50	4664.32	-2811.89	21.19	1.74	2811.95	163017.11	2014316.59	
7225.00	91.20	177.20	4663.46	-2840.84	22.78	4.21	2840.90	162988.16	2014318.18	
7254.00	90.30	177.40	4663.08	-2869.80	24.15	3.18	2869.87	162959.20	2014319.55	
7285.00	90.40	177.20	4662.89	-2900.77	25.61	0.72	2900.84	162928.23	2014321.01	
7315.00	90.50	177.20	4662.65	-2930.73	27.07	0.33	2930.81	162898.27	2014322.47	
7347.00	90.30	178.10	4662.43	-2962.70	28.38	2.88	2962.79	162866.30	2014323.78	
7378.00	89.40	178.60	4662.51	-2993.69	29.28	3.32	2993.78	162835.31	2014324.68	
7409.00	89.20	178.60	4662.89	-3024.68	30.03	0.65	3024.77	162804.32	2014325.43	
7440.00	89.60	178.80	4663.21	-3055.67	30.74	1.44	3055.76	162773.33	2014326.14	
7471.00	89.80	178.30	4663.37	-3086.66	31.52	1.74	3086.75	162742.34	2014326.92	
7500.00	89.60	178.50	4663.53	-3115.65	32.33	0.98	3115.74	162713.35	2014327.73	
7531.00	90.00	178.50	4663.63	-3146.64	33.14	1.29	3146.74	162682.37	2014328.54	
7560.00	89.70	178.80	4663.71	-3175.63	33.83	1.46	3175.73	162653.37	2014329.23	
7591.00	89.70	179.20	4663.87	-3206.62	34.37	1.29	3206.73	162622.38	2014329.77	
7623.00	90.00	179.20	4663.96	-3238.62	34.81	0.94	3238.72	162590.38	2014330.21	
7652.00	89.10	178.80	4664.18	-3267.61	35.32	3.40	3267.72	162561.39	2014330.72	
7681.00	87.80	179.50	4664.97	-3296.60	35.75	5.09	3296.71	162532.40	2014331.15	
7712.00	87.60	179.00	4666.21	-3327.57	36.16	1.74	3327.68	162501.43	2014331.56	
7743.00	88.40	179.90	4667.29	-3358.55	36.45	3.88	3358.66	162470.45	2014331.85	
7775.00	88.60	180.20	4668.13	-3390.54	36.42	1.13	3390.65	162438.46	2014331.82	
7806.00	89.40	180.20	4668.67	-3421.53	36.32	2.58	3421.64	162407.47	2014331.72	
7835.00	90.20	180.40	4668.77	-3450.53	36.16	2.84	3450.64	162378.47	2014331.56	
7867.00	90.40	180.00	4668.61	-3482.53	36.05	1.40	3482.64	162346.47	2014331.45	
7896.00	90.50	180.00	4668.38	-3511.53	36.05	0.34	3511.64	162317.47	2014331.45	
7926.00	90.60	180.00	4668.09	-3541.53	36.05	0.33	3541.64	162287.47	2014331.45	
7957.00	89.70	179.50	4668.01	-3572.53	36.19	3.32	3572.64	162256.47	2014331.59	
7988.00	89.70	179.30	4668.17	-3603.53	36.51	0.65	3603.64	162225.47	2014331.91	

Calmena Energy Services

Company: Woolsey Operating Company, LLC
 Well: Jahay #6-H
 Location: Barber County, Kansas

Date: 11-Nov-2012
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MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 179.79° Az (feet)	Grid Y	Grid X	NAD27 Ks South gr elev=1400 RKB=1417 Comments
8019.00	89.60	179.20	4668.36	-3634.52	36.92	0.46	3634.63	162194.48	2014332.32	
8048.00	88.70	178.80	4668.79	-3663.52	37.42	3.40	3663.63	162165.49	2014332.82	
8079.00	88.50	179.20	4669.55	-3694.50	37.97	1.44	3694.62	162134.50	2014333.37	
8111.00	88.50	179.20	4670.39	-3726.49	38.41	0.00	3726.60	162102.51	2014333.81	
8142.00	88.80	179.00	4671.12	-3757.47	38.90	1.16	3757.59	162071.53	2014334.30	
8173.00	89.20	179.20	4671.66	-3788.47	39.39	1.44	3788.58	162040.53	2014334.79	
8203.00	89.50	179.00	4672.00	-3818.46	39.86	1.20	3818.58	162010.54	2014335.26	
8235.00	89.70	178.60	4672.22	-3850.45	40.53	1.40	3850.58	161978.55	2014335.93	
8265.00	89.50	179.30	4672.43	-3880.45	41.08	2.43	3880.57	161948.55	2014336.48	
8295.00	89.90	179.30	4672.59	-3910.44	41.44	1.33	3910.57	161918.56	2014336.84	
8325.00	89.30	179.90	4672.80	-3940.44	41.65	2.83	3940.57	161888.56	2014337.05	
8354.00	89.40	179.50	4673.13	-3969.44	41.80	1.42	3969.57	161859.56	2014337.20	
8385.00	89.00	179.90	4673.56	-4000.44	41.97	1.82	4000.56	161828.56	2014337.37	
8417.00	88.70	179.70	4674.20	-4032.43	42.08	1.13	4032.56	161796.57	2014337.48	
8446.00	89.10	179.90	4674.76	-4061.42	42.18	1.54	4061.55	161767.58	2014337.58	
8478.00	89.40	179.50	4675.18	-4093.42	42.35	1.56	4093.55	161735.58	2014337.75	
8509.00	89.30	179.20	4675.53	-4124.42	42.70	1.02	4124.55	161704.58	2014338.10	
8538.00	88.90	179.20	4675.99	-4153.41	43.10	1.38	4153.54	161675.59	2014338.50	
8569.00	89.40	179.30	4676.45	-4184.40	43.51	1.64	4184.54	161644.60	2014338.91	
8601.00	89.60	179.00	4676.72	-4216.40	43.98	1.13	4216.53	161612.60	2014339.38	
8632.00	88.70	179.20	4677.18	-4247.39	44.47	2.97	4247.53	161581.61	2014339.87	