MidCon Energy

Sauer #3-21H 435 FSL, 1385 FEL (Plan 4)
Sauer #3-21H 435 FSL, 1385 FEL
Trego County, Kansas (MidCon Operating) NAD 27 / Grid

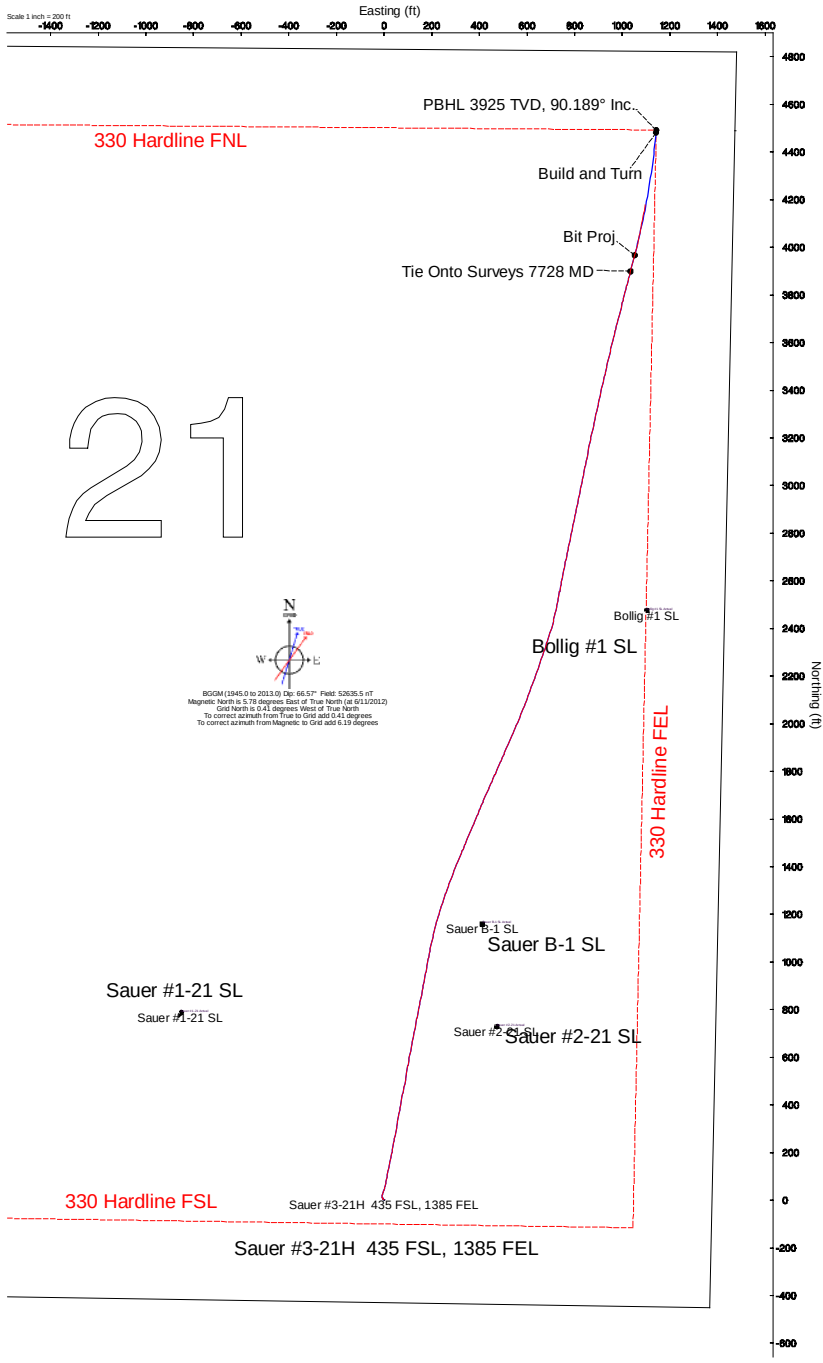
Plot reference wellpath is Plan 4	
True vertical depths are referenced to Trinidad 215 (RKB)	Grid System: NAD27 / UTM Zone 14 North, US feet
Measured depths are referenced to Trinidad 215 (RKB)	North Reference: Grid north
Trinidad 215 (RKB) to Mean Sea Level: 2275 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: Sauer #3-21H 435 FSL, 1385 FEL): -2265 feet	Depths are in feet
Coordinates are in feet referenced to Facility Center	Created by: ferrmikj on 7/16/2012

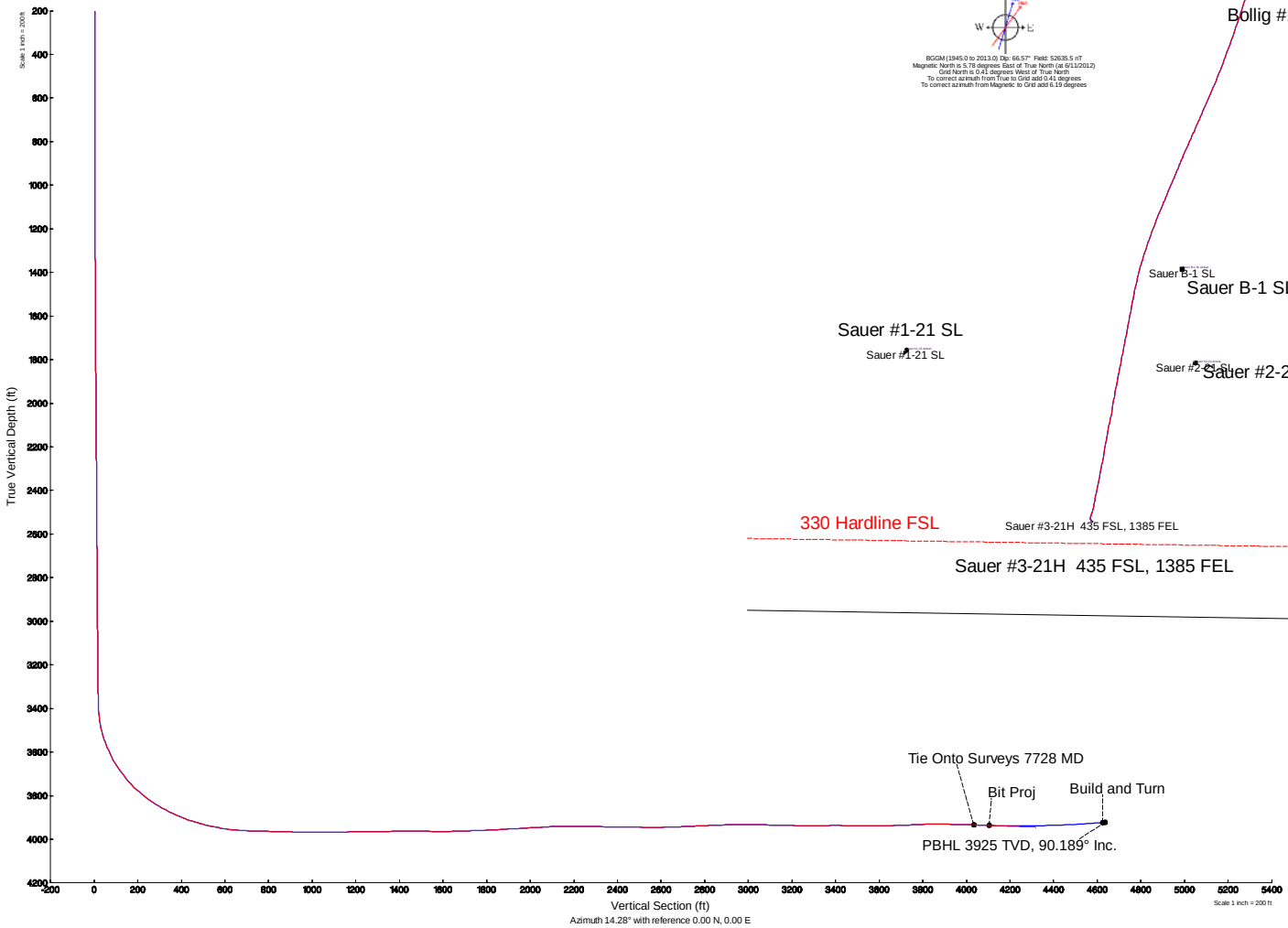
Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Sauer #3-21H Sec. 21 - 13S - 21W			1453875.100	14126553.700	38°54'03.440"N	99°39'20.478"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Sauer #3-21H 435 FSL, 1385 FEL	0.00	0.00	1453875.100	14126553.700	38°54'03.440"N	99°39'20.478"W
Trinidad 215 (RKB) to Mud line (At Slot: Sauer #3-21H 435 FSL, 1385 FEL)					10ft	
Mean Sea Level to Mud line (At Slot: Sauer #3-21H 435 FSL, 1385 FEL)					-2265ft	
Trinidad 215 (RKB) to Mean Sea Level					2275ft	

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie Onto Surveys 7728 MD	7728.00	88.340	14.430	3936.41	3900.98	1036.06	0.00	4036.01
Bit Proj	7798.00	88.340	14.430	3938.44	3968.75	1053.50	0.00	4105.98
Build and Turn	8321.91	94.410	5.348	3925.84	4483.93	1143.36	2.08	4627.41
PBHL 3925 TVD, 90.189° Inc.	8332.88	94.410	5.348	3925.00	4494.82	1144.38	0.00	4638.22





BAKER HUGHES

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Actual Wellpath Report

MidCon Energy Sauer #3-21H 435 FSL, 1385 FEL_Svy (7-18-2012).

REFERENCE WELLPATH IDENTIFICATION			
Operator	**MidCon Energy**	Slot	**Sauer #3-21H 435 FSL, 1385 FEL**
Area	**Kansas**	Well	**Subject**
Field	**Trego County, Kansas (MidCon Operating) NAD 27 / Grid**	Wellbore	**Sauer #3-21H 435 FSL, 1385 FEL Actual**
Facility	**Sauer #3-21H Sec. 21 - 13S - 21W**		

REPORT SETUP INFORMATION			
Projection System	**NAD27 / UTM Zone 14 North, US feet**		
North Reference	**Grid**	Software System	**WellArchitect™ 3.0.0**
Convergence at slot	**0.41° West**	User	**Ferrmikj**
Scale	**0.99964**	Report Generated	**7/18/2012** at **8:07:55 AM**
Wellbore last revised	**06-04-2012**	Database/Source file	**WA_OklahomaCity**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	**East[ft]**	**Easting[US ft]**	**Northing[US ft]**	**Latitude**	**Longitude**
Slot Location	**0.00**	**0.00**	1453875.10	14126553.70	38°54'03.440"N	99°39'20.478"W
Facility Reference Pt			**1453875.10**	**14126553.70**	38°54'03.440"N	99°39'20.478"W
Field Reference Pt			**0.00**	**0.00**	0°00'00.000"	103°29'19.301"W

WELLPATH DATUM			
Calculation method	**Minimum curvature**	Trinidad 215 (RKB) to Facility Vertical Datum	**10.00ft**
Horizontal Reference Pt	**Facility Center**	Trinidad 215 (RKB) to Mean Sea Level	**2275.00ft**
Vertical Reference Pt	**Trinidad 215 (RKB)**	Trinidad 215 (RKB) to Mud Line at Slot (Sauer #3-21H 435 FSL, 1385 FEL)	**10.00ft**
MD Reference Pt	**Trinidad 215 (RKB)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**14.28°**

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Area	**Kansas**	Well	**Subject**
Field	**Trego County, Kansas (MidCon Operating) NAD 27 / Grid**	Wellbore	**Sauer #3-21H 435 FSL, 1385 FEL Actual**
Facility	**Sauer #3-21H Sec. 21 - 13S - 21W**		

WELLPATH DATA (153 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Comments
0.00†	0.000	303.840	0.00	0.00	0.00	0.00	1453875.10	14126553.70	0.00	
10.00	0.000	303.840	10.00	0.00	0.00	0.00	1453875.10	14126553.70	0.00	
471.00	0.570	303.840	470.99	0.77	1.28	-1.90	1453873.20	14126554.98	0.12	
941.00	0.300	291.710	940.98	1.71	3.03	-4.99	1453870.11	14126556.73	0.06	
1873.00	0.420	357.340	1872.96	5.29	7.35	-7.42	1453867.69	14126561.05	0.04	
2801.00	0.440	341.480	2800.94	11.54	14.13	-8.70	1453866.40	14126567.82	0.01	
3338.00	0.580	21.190	3337.92	15.97	18.61	-8.38	1453866.73	14126572.31	0.07	
3366.00	0.640	25.370	3365.92	16.27	18.89	-8.26	1453866.84	14126572.58	0.27	
3397.00	2.300	20.200	3396.90	17.05	19.63	-7.97	1453867.13	14126573.32	5.37	
3429.00	5.650	17.020	3428.82	19.27	21.74	-7.29	1453867.82	14126575.43	10.49	
3461.00	9.170	16.960	3460.55	23.39	25.68	-6.08	1453869.02	14126579.37	11.00	
3493.00	12.520	19.050	3491.98	29.39	31.40	-4.21	1453870.90	14126585.09	10.54	
3524.00	15.970	19.630	3522.02	36.99	38.60	-1.68	1453873.43	14126592.28	11.14	
3555.00	19.450	16.570	3551.54	46.40	47.56	1.23	1453876.33	14126601.25	11.62	
3587.00	22.590	12.460	3581.41	57.87	58.68	4.08	1453879.18	14126612.35	10.83	
3618.00	25.950	10.980	3609.67	70.59	71.15	6.65	1453881.75	14126624.83	11.01	
3650.00	29.180	11.640	3638.03	85.38	85.67	9.56	1453884.66	14126639.34	10.14	
3681.00	32.380	12.040	3664.66	101.23	101.19	12.82	1453887.91	14126654.86	10.34	
3712.00	35.440	12.290	3690.39	118.51	118.10	16.46	1453891.56	14126671.75	9.88	
3744.00	38.840	11.850	3715.89	137.81	136.99	20.50	1453895.59	14126690.64	10.66	
3774.00	42.440	11.420	3738.65	157.33	156.12	24.44	1453899.53	14126709.77	12.04	
3806.00	45.730	11.140	3761.64	179.56	177.95	28.79	1453903.88	14126731.59	10.30	
3837.00	48.930	10.450	3782.65	202.30	200.34	33.06	1453908.14	14126753.97	10.45	
3869.00	51.510	10.540	3803.12	226.84	224.52	37.54	1453912.62	14126778.14	8.07	
3900.00	54.370	10.660	3821.80	251.52	248.83	42.09	1453917.17	14126802.44	9.23	
3932.00	57.390	10.750	3839.75	277.96	274.86	47.01	1453922.09	14126828.46	9.44	
3964.00	60.080	10.060	3856.35	305.25	301.76	51.94	1453927.03	14126855.35	8.61	
3995.00	63.120	9.890	3871.10	332.44	328.62	56.67	1453931.75	14126882.20	9.82	
4027.00	65.400	10.560	3884.99	361.19	356.98	61.78	1453936.86	14126910.55	7.37	
4059.00	67.160	10.460	3897.86	390.42	385.78	67.13	1453942.20	14126939.34	5.51	
4091.00	69.410	10.750	3909.70	420.09	415.00	72.60	1453947.67	14126968.55	7.08	
4122.00	71.860	10.580	3919.98	449.27	443.74	78.01	1453953.08	14126997.28	7.92	
4153.00	74.240	11.140	3929.02	478.87	472.86	83.60	1453958.67	14127026.39	7.87	
4185.00	76.380	10.680	3937.13	509.77	503.25	89.46	1453964.52	14127056.77	6.83	
4215.00	78.360	9.980	3943.69	538.97	532.05	94.70	1453969.77	14127085.56	6.98	
4247.00	80.300	9.380	3949.62	570.31	563.05	99.99	1453975.06	14127116.55	6.34	
4279.00	82.500	10.640	3954.40	601.86	594.21	105.49	1453980.55	14127147.69	7.90	
4311.00	83.520	10.580	3958.30	633.56	625.42	111.34	1453986.40	14127178.90	3.19	
4343.00	85.770	11.020	3961.28	665.36	656.72	117.31	1453992.37	14127210.18	7.16	
4454.00	89.440	10.900	3965.92	776.06	765.58	138.39	1454013.44	14127319.00	3.31	
4486.00	89.480	11.140	3966.22	808.00	796.99	144.51	1454019.56	14127350.40	0.76	
4518.00	88.950	11.160	3966.66	839.95	828.38	150.70	1454025.74	14127381.78	1.66	
4549.00	87.960	11.380	3967.50	870.90	858.77	156.75	1454031.79	14127412.16	3.27	
4581.00	88.310	10.880	3968.54	902.83	890.15	162.93	1454037.97	14127443.53	1.91	
4613.00	89.170	10.740	3969.24	934.77	921.58	168.93	1454043.96	14127474.94	2.72	

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Actual Wellpath Report

MidCon Energy Sauer #3-21H 435 FSL, 1385 FEL_Svy (7-18-2012).

REFERENCE WELLPATH IDENTIFICATION			
Operator	**MidCon Energy**	Slot	**Sauer #3-21H 435 FSL, 1385 FEL**
Area	**Kansas**	Well	**Subject**
Field	**Trego County, Kansas (MidCon Operating) NAD 27 / Grid**	Wellbore	**Sauer #3-21H 435 FSL, 1385 FEL Actual**
Facility	**Sauer #3-21H Sec. 21 - 13S - 21W**		

WELLPATH DATA (153 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Comments
4645.00	88.860	10.420	3969.79	966.69	953.03	174.80	1454049.84	14127506.38	1.39	
4675.00	88.770	10.400	3970.41	996.62	982.53	180.22	1454055.25	14127535.87	0.31	
4706.00	89.350	10.540	3970.92	1027.55	1013.01	185.85	1454060.88	14127566.34	1.92	
4738.00	90.920	11.400	3970.84	1059.49	1044.42	191.94	1454066.97	14127597.74	5.59	
4770.00	92.030	11.980	3970.02	1091.45	1075.75	198.42	1454073.45	14127629.06	3.91	
4801.00	91.080	13.060	3969.18	1122.42	1106.00	205.14	1454080.17	14127659.30	4.64	
4833.00	90.340	14.320	3968.78	1154.42	1137.09	212.71	1454087.74	14127690.37	4.57	
4865.00	90.060	15.110	3968.67	1186.41	1168.04	220.84	1454095.86	14127721.31	2.62	
4897.00	90.030	17.050	3968.65	1218.40	1198.78	229.70	1454104.72	14127752.05	6.06	
4928.00	91.110	17.790	3968.34	1249.35	1228.36	238.98	1454114.00	14127781.61	4.22	
4960.00	91.850	18.690	3967.51	1281.26	1258.74	249.00	1454124.01	14127811.98	3.64	
4992.00	91.290	19.130	3966.63	1313.14	1289.00	259.36	1454134.37	14127842.24	2.23	
5023.00	90.180	20.500	3966.24	1344.00	1318.16	269.87	1454144.87	14127871.39	5.69	
5055.00	90.620	20.420	3966.01	1375.81	1348.14	281.06	1454156.05	14127901.36	1.40	
5086.00	90.310	22.220	3965.76	1406.57	1377.02	292.33	1454167.32	14127930.22	5.89	
5118.00	90.580	22.800	3965.51	1438.24	1406.58	304.58	1454179.57	14127959.77	2.00	
5150.00	89.680	22.280	3965.44	1469.91	1436.14	316.84	1454191.83	14127989.32	3.25	
5182.00	89.690	21.960	3965.62	1501.61	1465.78	328.89	1454203.87	14128018.95	1.00	
5213.00	88.950	22.370	3965.98	1532.32	1494.49	340.59	1454215.56	14128047.65	2.73	
5245.00	89.380	22.440	3966.45	1563.99	1524.07	352.78	1454227.75	14128077.22	1.36	
5277.00	90.400	22.650	3966.51	1595.66	1553.62	365.05	1454240.02	14128106.76	3.25	
5309.00	90.740	23.040	3966.19	1627.30	1583.11	377.47	1454252.44	14128136.24	1.62	
5340.00	91.080	23.130	3965.70	1657.93	1611.62	389.63	1454264.59	14128164.74	1.13	
5372.00	92.100	23.230	3964.81	1689.54	1641.03	402.22	1454277.17	14128194.14	3.20	
5404.00	92.560	23.990	3963.51	1721.09	1670.33	415.02	1454289.97	14128223.42	2.77	
5436.00	91.820	23.660	3962.29	1752.62	1699.58	427.94	1454302.89	14128252.66	2.53	
5467.00	91.760	23.860	3961.32	1783.18	1727.94	440.42	1454315.37	14128281.01	0.67	
5499.00	93.050	23.860	3959.98	1814.71	1757.18	453.36	1454328.29	14128310.24	4.03	
5531.00	93.420	23.440	3958.17	1846.23	1786.44	466.17	1454341.10	14128339.49	1.75	
5562.00	93.570	23.190	3956.28	1876.79	1814.86	478.42	1454353.35	14128367.90	0.94	
5594.00	93.110	23.470	3954.42	1908.34	1844.19	491.07	1454365.99	14128397.22	1.68	
5626.00	91.690	23.530	3953.08	1939.90	1873.51	503.82	1454378.74	14128426.53	4.44	
5658.00	93.110	23.910	3951.74	1971.43	1902.78	516.68	1454391.59	14128455.79	4.59	
5690.00	93.610	23.250	3949.86	2002.96	1932.06	529.46	1454404.37	14128485.06	2.58	
5721.00	93.570	23.390	3947.92	2033.51	1960.47	541.71	1454416.61	14128513.46	0.47	
5753.00	93.850	23.550	3945.85	2065.04	1989.76	554.42	1454429.32	14128542.74	1.01	
5784.00	92.490	22.490	3944.14	2095.63	2018.25	566.53	1454441.42	14128571.22	5.56	
5816.00	91.140	21.530	3943.12	2127.32	2047.90	578.51	1454453.40	14128600.86	5.18	
5848.00	90.460	21.200	3942.68	2159.08	2077.70	590.17	1454465.06	14128630.64	2.36	
5879.00	89.600	20.540	3942.66	2189.87	2106.66	601.21	1454476.10	14128659.60	3.50	
5911.00	89.910	20.810	3942.80	2221.67	2136.60	612.51	1454487.39	14128689.53	1.28	
5943.00	90.030	20.330	3942.81	2253.48	2166.56	623.76	1454498.63	14128719.48	1.55	
5975.00	89.320	20.080	3943.00	2285.31	2196.59	634.81	1454509.68	14128749.50	2.35	
6006.00	87.960	19.450	3943.73	2316.16	2225.76	645.29	1454520.15	14128778.65	4.83	
6038.00	88.090	19.360	3944.83	2348.01	2255.92	655.91	1454530.78	14128808.80	0.49	

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WELLPATH DATA (153 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Comments
6070.00	88.980	18.860	3945.65	2379.89	2286.15	666.39	1454541.24	14128839.02	3.19	
6094.00	89.080	18.430	3946.06	2403.81	2308.88	674.06	1454548.91	14128861.75	1.84	
6126.00	89.600	18.090	3946.43	2435.73	2339.27	684.08	1454558.94	14128892.12	1.94	
6157.00	89.660	17.790	3946.63	2466.67	2368.76	693.63	1454568.48	14128921.60	0.99	
6189.00	88.680	16.180	3947.09	2498.63	2399.36	702.98	1454577.82	14128952.19	5.89	
6221.00	88.950	14.200	3947.75	2530.62	2430.24	711.36	1454586.20	14128983.05	6.24	
6253.00	90.310	12.570	3947.96	2562.61	2461.36	718.77	1454593.61	14129014.17	6.63	
6284.00	91.480	11.790	3947.48	2593.58	2491.66	725.31	1454600.14	14129044.46	4.54	
6316.00	90.990	11.400	3946.79	2625.54	2523.00	731.74	1454606.57	14129075.79	1.96	
6348.00	91.110	10.450	3946.20	2657.48	2554.42	737.80	1454612.63	14129107.19	2.99	
6379.00	93.010	10.490	3945.09	2688.39	2584.88	743.43	1454618.26	14129137.64	6.13	
6411.00	92.710	11.060	3943.49	2720.29	2616.27	749.41	1454624.23	14129169.03	2.01	
6443.00	92.120	10.740	3942.14	2752.21	2647.67	755.45	1454630.28	14129200.41	2.10	
6475.00	92.770	11.940	3940.77	2784.13	2679.01	761.74	1454636.56	14129231.74	4.26	
6506.00	92.650	12.100	3939.31	2815.08	2709.30	768.19	1454643.01	14129262.02	0.64	
6538.00	92.100	12.490	3937.98	2847.03	2740.54	774.99	1454649.81	14129293.25	2.11	
6570.00	91.540	11.270	3936.97	2878.98	2771.84	781.58	1454656.40	14129324.53	4.19	
6601.00	91.290	11.300	3936.20	2909.93	2802.23	787.64	1454662.46	14129354.91	0.81	
6633.00	91.230	11.500	3935.50	2941.88	2833.59	793.97	1454668.78	14129386.26	0.65	
6664.00	91.290	12.320	3934.82	2972.85	2863.92	800.36	1454675.17	14129416.58	2.65	
6696.00	89.880	11.950	3934.49	3004.82	2895.20	807.09	1454681.90	14129447.85	4.56	
6728.00	88.640	12.070	3934.90	3036.80	2926.49	813.75	1454688.55	14129479.13	3.89	
6759.00	88.220	10.980	3935.75	3067.75	2956.86	819.94	1454694.74	14129509.49	3.77	
6791.00	88.890	11.990	3936.56	3099.70	2988.21	826.31	1454701.11	14129540.82	3.79	
6823.00	88.610	10.860	3937.26	3131.65	3019.56	832.64	1454707.44	14129572.17	3.64	
6854.00	88.890	11.690	3937.93	3162.60	3049.96	838.70	1454713.50	14129602.55	2.83	
6886.00	88.300	11.640	3938.72	3194.56	3081.29	845.17	1454719.97	14129633.87	1.85	
6918.00	88.920	11.720	3939.49	3226.51	3112.62	851.65	1454726.44	14129665.19	1.95	
6949.00	89.200	10.930	3940.00	3257.47	3143.01	857.74	1454732.52	14129695.57	2.70	
6981.00	89.630	10.680	3940.33	3289.41	3174.44	863.73	1454738.52	14129726.99	1.55	
6999.00	90.220	11.640	3940.35	3307.38	3192.10	867.22	1454742.00	14129744.64	6.26	
7031.00	91.260	12.230	3939.94	3339.35	3223.40	873.84	1454748.62	14129775.94	3.74	
7063.00	91.080	12.450	3939.29	3371.33	3254.66	880.67	1454755.45	14129807.18	0.89	
7094.00	90.000	12.060	3938.99	3402.30	3284.95	887.25	1454762.03	14129837.46	3.70	
7126.00	88.120	13.030	3939.52	3434.28	3316.18	894.20	1454768.98	14129868.68	6.61	
7158.00	88.860	12.800	3940.36	3466.26	3347.36	901.35	1454776.12	14129899.85	2.42	
7190.00	89.790	12.510	3940.74	3498.25	3378.58	908.36	1454783.13	14129931.06	3.04	
7222.00	90.280	12.830	3940.72	3530.23	3409.80	915.38	1454790.15	14129962.26	1.83	
7253.00	90.950	12.810	3940.39	3561.22	3440.02	922.26	1454797.02	14129992.48	2.16	
7285.00	90.740	12.380	3939.91	3593.21	3471.25	929.23	1454804.00	14130023.69	1.50	
7317.00	90.520	13.370	3939.56	3625.19	3502.44	936.36	1454811.13	14130054.88	3.17	
7349.00	90.620	12.970	3939.24	3657.19	3533.60	943.66	1454818.41	14130086.02	1.29	
7380.00	91.760	12.750	3938.60	3688.17	3563.82	950.55	1454825.31	14130116.23	3.75	
7412.00	92.430	13.880	3937.43	3720.14	3594.93	957.92	1454832.67	14130147.33	4.10	
7444.00	92.740	13.930	3935.99	3752.11	3625.97	965.60	1454840.35	14130178.35	0.98	

üä

Actual Wellpath Report

MidCon Energy Sauer #3-21H 435 FSL, 1385 FEL_Svy (7-18-2012).

REFERENCE WELLPATH IDENTIFICATION			
Operator	**MidCon Energy**	Slot	**Sauer #3-21H 435 FSL, 1385 FEL**
Area	**Kansas**	Well	**Subject**
Field	**Trego County, Kansas (MidCon Operating) NAD 27 / Grid**	Wellbore	**Sauer #3-21H 435 FSL, 1385 FEL Actual**
Facility	**Sauer #3-21H Sec. 21 - 13S - 21W**		

WELLPATH DATA (153 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Comments
7475.00	92.550	13.490	3934.56	3783.07	3656.05	972.94	1454847.69	14130208.43	1.54	
7507.00	91.450	14.060	3933.44	3815.05	3687.11	980.55	1454855.30	14130239.47	3.87	
7538.00	89.970	14.510	3933.06	3846.05	3717.15	988.20	1454862.94	14130269.50	4.99	
7570.00	89.380	15.060	3933.24	3878.05	3748.09	996.37	1454871.11	14130300.43	2.52	
7602.00	89.410	14.270	3933.58	3910.04	3779.04	1004.47	1454879.21	14130331.37	2.47	
7633.00	88.560	15.010	3934.12	3941.04	3809.03	1012.30	1454887.04	14130361.35	3.64	
7665.00	88.710	14.420	3934.89	3973.03	3839.97	1020.43	1454895.16	14130392.28	1.90	
7696.00	88.710	14.320	3935.59	4004.02	3870.00	1028.12	1454902.85	14130422.29	0.32	
7728.00	88.340	14.430	3936.41	4036.01	3900.98	1036.06	1454910.79	14130453.27	1.21	
7760.00	87.900	15.230	3937.46	4067.99	3931.90	1044.25	1454918.97	14130484.18	2.85	
7791.00	88.060	15.010	3938.55	4098.97	3961.81	1052.33	1454927.05	14130514.07	0.88	
7823.00	87.970	13.850	3939.66	4130.95	3992.78	1060.30	1454935.01	14130545.03	3.63	
7855.00	87.940	12.750	3940.80	4162.92	4023.90	1067.66	1454942.37	14130576.14	3.44	
7886.00	87.570	11.460	3942.02	4193.88	4054.19	1074.15	1454948.86	14130606.42	4.33	
7918.00	87.350	10.370	3943.43	4225.79	4085.58	1080.20	1454954.91	14130637.80	3.47	
7950.00	87.530	10.360	3944.86	4257.68	4117.02	1085.96	1454960.66	14130669.23	0.56	
7981.00	87.780	10.900	3946.13	4288.59	4147.47	1091.67	1454966.37	14130699.66	1.92	
8013.00	87.900	10.400	3947.34	4320.51	4178.89	1097.58	1454972.28	14130731.08	1.61	

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Sauer 3-21H PBHL (Plan 1)		3925.00	4494.82	1144.38	**1455019.07**	**14131046.89**	38°54'47.949"N	99°39'06.409"W	point

WELLPATH COMPOSITION - Ref Wellbore: Sauer #3-21H 435 FSL, 1385 FEL Actual Ref Wellpath: AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
10.00	8013.00	NaviTrak (Standard)	INTEQ - MWD	Sauer #3-21H 435 FSL, 1385 FEL Actual

BAKER HUGHES
INTEQ

DRILLING PARAMETERS RECORD

Company: Mid-Con Energy Operating
Well Name No.: Sauer 3-21H
Field: Riga South
Rig Contractor No.: Trinidad 215
County/Block/Parish: Trego Co

Date	Depth From	Depth To	Ftg. Drilled	Mode S/R	Drlg. Hrs.	ROP	WOB (Klbs)	Rot RPM	Rot Tq	TFO	Flow Rate	Diff Pres	Temp.	SPP	BHA No.
7/16/2012	7671	7702	31	R	2.25	13.78	20	65	450		244	100	144	2750	7
7/16/2012	7702	7733	31	R	1.75	17.71	20	65	450		244	100	144	2750	7
7/16/2012	7733	7765	32	R	2.25	14.22	20	65	450		244	100	144	2750	7
7/16/2012	7765	7797	32	R	2.5	12.80	20	65	450		244	100	144	2750	7
7/16/2012	7797	7807	10	O	2.25	4.444	24			80 L	240	75	144	2500	7
7/16/2012	7807	7828	21	R	2	10.5	20	65	450		244	100	144	2750	7
7/16/2012	7828	7836	8	O	2.5	3.200	24			80 L	240	75	144	2500	7
7/16/2012	7836	7860	24	R	1.75	13.71	20	65	450		244	100	144	2750	7
7/16/2012	7860	7868	8	O	1.5	5.333	30			90 L	240	75	144	2500	7
7/16/2012	7868	7892	24	R	1.5	16	20	65	450		244	100	144	2750	7
7/16/2012	7892	7899	7	O	1.5	4.667	30			80 L	240	75	144	2500	7
7/17/2012	7899	7900	1	O	0.25	4	30			80 L	240	75	144	2500	7
7/17/2012	7900	7923	23	R	1.25	18.4	20	65	450		244	100	144	2750	7
7/17/2012	7923	7955	32	R	3.25	9.846	20	65	450		244	100	144	2750	7
7/17/2012	7955	7987	32	R	2.5	12.80	20	65	450		244	100	144	2750	7
7/17/2012	7987	7993	6	O	1.5	4	30			30 L	240	75	144	2500	7
7/17/2012	7993	8018	25	R	2.5	10	20	65	450		244	100	144	2750	7
7/17/2012	8018	8025	7	O	1.75	4	30				240	75	144	2500	7
7/17/2012	8025	8050	25	R	2.25	11.11	20	65	450		244	100	144	2750	7

Mode	Footage:	Drlg Hrs	Circ Hrs	ROP	WOB (Klbs)	Rot RPM	Rot Tq	Flow Rate	Avg Diff	SPP
Sliding	47	11.3	******	4.2	28.3			240.0	75.0	2500.0
Rotating	332	25.8	******	12.9	20.0	65.0	450.0	244.0	100.0	2750.0
Total	379	37.0	16.3	10.2	23.1	65.0	450.0	242.5	90.8	2657.9

BHI Job #: 4744806

BAKER HUGHES

NTEQ

BOTTOM HOLE ASSEMBLY

BHA #: 6

Company: Mid-Con Energy Operating | Well Name & No.: Sauer 3-21H | Date Run: 7/11/2012

Field: Riga South | Rig Contractor & No.: Trinidad 215 | Depth In: 7019

County/Block/Par.: Trego Co | Depth Out: 7671

BIT DATA

No.	Bit Size	Mfr	Type	Serial No.	Noz. or TFA	Gauge Length	Cum. Footage	Cum. Hours	Depth Out	DULL CONDITION								Comp. Lngth
										IR	OR	DC	LOC	B/S	G/16	OC	RPLD	
6	6 1/8	HCC	VGMS38CDX	5210591	3 x 16		652	64.5	7671	3	7	BT	H	E	4/16"	WT	HP	1.00

BHA DESCRIPTION

Item No.	Component Description	Vendor	Serial No.	Gauge OD	OD	ID	Fishing Neck	Top Connection	Bottom Connection	Component Length	Total Length
2	M1XP/LS 4 3/4" 1.6 AKO True S	BHI	10079181		4 3/4"	2 1/2"	1.42	3 1/2" IF Box	3 1/2" Reg Box	22.06	23.06
3	4 3/4" NM Pony Collar	BHI	11768851		4 3/4"	2 1/2"	N/A	3 1/2" IF Box	3 1/2" IF Pin	10.13	33.19
4	4 3/4 LCPG w/Monel SN# 475-1	BHI	DHP-4054		4 3/4"	2 1/2"		3 1/2" IF Box	3 1/2" IF Pin	30.15	63.34
5	4 3/4" Filter Sub w/Filter	BHI	1430216		4 3/4"	2 1/2"	N/A	3 1/2" IF Box	3 1/2" IF Pin	6.39	69.73
6	4 3/4" NM Drill Collar	BHI	11907722		4 3/4"	2 1/2"	N/A	3 1/2" IF Box	3 1/2" IF Pin	30.98	100.71
7	26 Stds Push Pipe	Rig	xxxxx		3 1/2			3 1/2 IF Box	3 1/2 IF Pin	2469.85	2570.56
8	Safety Sub	NOV	SJ475-006		4 3/4"	2 1/2"	0.86	3 1/2 IF Box	3 1/2 IF Pin	2.49	2573.05
9	Agitator	NOV	ASA475-001		4 3/4"	2 1/2"	1.12	3 1/2 IF Box	3 1/2 IF Pin	11.18	2584.23
10	Shock Sub	NOV	HTL0475-007		4 3/4"	2 1/2"	2.08	3 1/2 IF Box	3 1/2 IF Pin	10.37	2594.60
11	25 Stds Push Pipe	Rig	xxxxx		3 1/2			3 1/2 IF Box	3 1/2 IF Pin	2377.35	4971.95
12	15 4 3/4 D.C.	Rig	xxxxx		4 3/4	2 5/16		3 1/2 IF Box	3 1/2 IF Pin	461.53	5433.48
13	35 Jnts HWDP	Rigs	Rigs		3 1/2			3 1/2 IF Box	3 1/2 IF Pin	1082.76	6516.24

STABILIZER DATA

Item #	Stabilizer Description	Spiral	Bld Lgth	Bld Wth	Gge Lgth	Gge In	Gge Out

DRILL PIPE DATA

Drillpipe	Grade	OD	ID	Wt./ft	Conn.	Lgth
Upper				0.0		*****
Lower				0.0		0.00

BHA WEIGHT DATA

BHA Weight	In Air	In Mud
Total	0	0
Lower	0	0

RUN SUMMARY

Mode	Footage:	Drlg Hrs	Circ Hrs	ROP	WOB (Klbs)	Rot RPM	Rot Tq	Flow Rate	Avg Diff	SPP
Sliding	66	23.00	******	2.9	24			240	75	2500
Rotating	586	41.50	******	14.1	21	66	450	244	136	2769
Total	652	64.50	12.75	10.1	22	66	450	243	114	2671

Survey Sensor to Bit: 35.71 | Gamma Sensor to Bit: 40.76 | Motor Bit to Bend: 6.32 | Motor Bit to Stabilizer:

Center of Clamp-on to Center of UBHS: | Mud Type: WBM | Mud Weight 8.8 | Hrs in Hole: 93

Objective For Running BHA: | Avg Temp: 144.2727 | Max Temp: 147

Drill Lateral

BHA Results:

Had 2 runs with this motor and LCPG. No known issues with tools. Drained well

Reason for POOH:

POOH for bit hours.

BHI Directional Drillers: David Luttrell Cliff Prichard

BHI Job #: 4744806

BAKER HUGHES

NTEQ

BOTTOM HOLE ASSEMBLY

BHA #: 7

Company: Mid-Con Energy Operating | Well Name & No.: Sauer 3-21H | Date Run: 7/15/2012

Field: Riga South | Rig Contractor & No.: Trinidad 215 | Depth In: 7671

County/Block/Par.: Trego Co | Depth Out: 8050

BIT DATA

No.	Bit Size	Mfr	Type	Serial No.	Noz. or TFA	Gauge Length	Cum. Footage	Cum. Hours	Depth Out	DULL CONDITION								Comp. Lngth
										IR	OR	DC	LOC	B/S	G/16	OC	RPLD	
9	6 1/8	HCC	STX44CDX	5210667	3 x 16		379	37	8050	2	4	BT	H	E	I	WT	TD	0.00

BHA DESCRIPTION

Item No.	Component Description	Vendor	Serial No.	Gauge OD	OD	ID	Fishing Neck	Top Connection	Bottom Connection	Component Length	Total Length
2	M1XP/LS 4 3/4" 1.5 AKO True S	BHI	11851588		4 3/4"	2 1/2"	1.26	3 1/2" IF Box	3 1/2" Reg Box	22.01	22.01
3	4 3/4" NM Pony Collar	BHI	11768851		4 3/4"	2 1/2"	N/A	3 1/2" IF Box	3 1/2" IF Pin	10.13	32.14
4	4 3/4 LCPG w/Monel SN# SD 31	BHI	DHP-484		4 3/4"	2 1/2"		3 1/2" IF Box	3 1/2" IF Pin	28.83	60.97
5	4 3/4" Filter Sub w/Filter	BHI	1430216		4 3/4"	2 1/2"	N/A	3 1/2" IF Box	3 1/2" IF Pin	6.39	67.36
6	4 3/4" NM Drill Collar	BHI	11907722		4 3/4"	2 1/2"	N/A	3 1/2" IF Box	3 1/2" IF Pin	30.98	98.34
7	26 Stds Push Pipe	Rig	xxxxx		3 1/2			3 1/2 IF Box	3 1/2 IF Pin	2469.85	2568.19
8	Safety Sub	NOV	SJ475-006		4 3/4"	2 1/2"	0.86	3 1/2 IF Box	3 1/2 IF Pin	2.49	2570.68
9	Agitator	NOV	ASA475-001		4 3/4"	2 1/2"	1.12	3 1/2 IF Box	3 1/2 IF Pin	11.18	2581.86
10	Shock Sub	NOV	HTL0475-007		4 3/4"	2 1/2"	2.08	3 1/2 IF Box	3 1/2 IF Pin	10.37	2592.23
11	25 Stds Push Pipe	Rig	xxxxx		3 1/2			3 1/2 IF Box	3 1/2 IF Pin	2377.35	4969.58
12	15 4 3/4 D.C.	Rig	xxxxx		4 3/4	2 5/16		3 1/2 IF Box	3 1/2 IF Pin	461.53	5431.11
13	35 Jnts HWDP	Rigs	Rigs		3 1/2			3 1/2 IF Box	3 1/2 IF Pin	1082.76	6513.87

STABILIZER DATA

Item #	Stabilizer Description	Spiral	Bld Lgth	Bld Wth	Gge Lgth	Gge In	Gge Out

DRILL PIPE DATA

Drillpipe	Grade	OD	ID	Wt./ft	Conn.	Lgth
Upper				0.0		*****
Lower				0.0		0.00

BHA WEIGHT DATA

BHA Weight	In Air	In Mud
Total	0	0
Lower	0	0

RUN SUMMARY

Mode	Footage:	Drlg Hrs	Circ Hrs	ROP	WOB (Klbs)	Rot RPM	Rot Tq	Flow Rate	Avg Diff	SPP
Sliding	47	11.25	******	4.2	28			240	75	2500
Rotating	332	25.75	******	12.9	20	65	450	244	100	2750
Total	379	37.00	16.25	10.2	23	65	450	243	91	2658

Survey Sensor to Bit: 34.3 | Gamma Sensor to Bit: 39.39 | Motor Bit to Bend: 6.31 | Motor Bit to Stabilizer:

Center of Clamp-on to Center of UBHS: | Mud Type: WBM | Mud Weight 9.0 | Hrs in Hole: 71.5

Objective For Running BHA: | Avg Temp: 144 | Max Temp: 144

Drill Lateral

BHA Results:

Good Run, No Mtr or MWD Issues. Had a lot of sliding issues with slackoff weight.

Reason for POOH:

TD Well

BHI Directional Drillers: David Luttrell Cliff Prichard

BHI Job #: 4744806

BAKER HUGHES
NTEQ

DAILY DRILLING REPORT

No: 27 Date: 7/15/2012

Company: Mid-Con Energy Operating
Well Name & No.: Sauer 3-21H
Field: Riga South
Rig Contractor & No.: Trinidad 215
County/Block/Parish: Trego Co
BHA No(s) Today: 6,7
Depth: 7671 Feet last 24 Hrs:
Last CSG Depth: 4383 Size: 7

MUD DATA

Mud Type WBM Weight: 9.1 Viscocity: 84 PV: 38 YP: 22 WL: 4.0
Gels: 22/35 % Oil: -- % Solid: 5.6 % Sand: TR PH: 9 CL: 1000

BIT DATA

No.	Bit Size	Mfr	Type	Serial No.	Noz. or TFA	Gauge Length	Cum. Footage	Cum. Hours	Depth Out	DULL CONDITION							
										IR	OR	DC	LOC	B/S	G/16	OC	RPLD
6	6 1/8	HCC	GMS38CD	5210591	3 x 16		652	64.5	7671	3	7	BT	H	E	4/16"	WT	HP
9	6 1/8	HCC	STX44CDX	5210667	3 x 16					2	4	BT	H	E	I	WT	TD

MOTOR DATA / RUN DATA

BHA No.	Size	Type	Deflection		Serial Number	Avg Diff. Press.	Drill Hrs. Today	Drill Hrs. Accum.	Circ. Hrs. Today	Circ. Hrs. Accum.	Depth In	Depth Out
			Tool	Angle								

PUMP DATA

Pump #	Liner X Stroke	Gal. / Stroke	Max Allowable SPP
1	5.5 X 9	4.45	
2	5.5 X 9	4.45	

TARGET DESCRIPTION / DETAILS

TIME BREAKDOWN

From	HRS	Code	Description
0:00	0.25	SVC	Survey Circulating
			C/S @ 7633' In = 88.56 Az = 15.01
0:15	2.25	CIRC	Circulate
			Circ. 2x B/U, pumped 2 sweeps
2:30	6	TO	Tripping Out (To Surface)
			POOH on bit hours
8:30	1	ONC	Other Non-circulating
			L/D Mtr & MWD
9:30	1	ONC	Other Non-circulating
			P/U New Mtr. & MWD
10:30	0.5	OC	Other Circulating
			Scribe & Test
11:00	5.5	TI	Tripping In (From Surface)
			M/U bit, TIH
16:30	2.5	CIRC	Circulate
			Tight @ 6900'
19:00	1.5	RMG	Reaming
			Washed three stands down
20:30	0.25	RIGS	Rig Service
			Bridle line issues again
20:45	3.25	RMG	Reaming
			Washed & reamed last 3 stands

24 Hr Summary: POOH, TIH, Drill Lateral
Proj svy at 0:00:
Proj svy at 24:00:
Bottom Hole Temp. (F), Circulating:
Formation Name/Depth: Marmington

Remarks:

@ 1230 Hrs Had a few pressure spikes approx 300psi. Bit had 64.5 Hrs on it and had not spiked entire run. Suspected we had a cone getting loose or locking up. After we got out of hole bit was approx 1/4 in out of gauge.

BHI DIRECTIONAL REP: David Luttrell, Cliff Prichard
BHI MWD REP.: Chris Redding, Bryan Kalhor
COMPANY REP.: Ryan Logsdon
DAILY COST: $18,260.00
CUMMULATIVE COST: $363,448.00
BHI JOB #: 4744806

BAKER HUGHES
NTEQ

DAILY DRILLING REPORT

No: 28 Date: 7/16/2012

Company: Mid-Con Energy Operating
Field: Riga South
County/Block/Parish: Trego Co
Depth: 7899 Feet last 24 Hrs: 228

Well Name & No.: Sauer 3-21H
Rig Contractor & No.: Trinidad 215
BHA No(s) Today: 7
Last CSG Depth: 4383 Size: 7

MUD DATA

Mud Type WBM Weight: 9.2 Viscocity: 85 PV: 35 YP: 27 WL: 4.6
Gels: 15/32 % Oil: -- % Solid: 6.3 % Sand: TR PH: 8.5 CL: 1000

BIT DATA

No.	Bit Size	Mfr	Type	Serial No.	Noz. or TFA	Gauge Length	Cum. Footage	Cum. Hours	Depth Out	DULL CONDITION							
										IR	OR	DC	LOC	B/S	G/16	OC	RPLD
9	6 1/8	HCC	STX44CDX	5210667	3 x 16		228	21.75		2	4	BT	H	E	I	WT	TD

MOTOR DATA / RUN DATA

BHA No.	Size	Type	Deflection		Serial Number	Avg Diff. Press.	Drill Hrs. Today	Drill Hrs. Accum.	Circ. Hrs. Today	Circ. Hrs. Accum.	Depth In	Depth Out
			Tool	Angle								

PUMP DATA

Pump #	Liner X Stroke	Gal. / Stroke	Max Allowable SPP
1	5.5 X 9	4.45	
2	5.5 X 9	4.45	

TARGET DESCRIPTION / DETAILS

TIME BREAKDOWN

From	HRS	Code	Description
0:00	0.5	RMG	Reaming
			Washed & reamed last 3 stands
0:30	2.25	ROT	Rotary Drill fr: 7671 to 7702
			Gamma 144 @ 7689'
2:45	0.25	SVC	Survey Circulating
			C/S 7665' In = 88.71 Az = 14.42
3:00	1.75	ROT	Rotary Drill fr: 7702 to 7733
4:45	0.25	SVC	Survey Circulating
			C/S @ 7696' In = 88.71 Az = 14.32
5:00	2.25	ROT	Rotary Drill fr: 7733 to 7765
7:15	0.25	SVC	Survey Circulating
			C/S @ 7728' In = 88.34 Az = 14.43
7:30	2.5	ROT	Rotary Drill fr: 7765 to 7797
10:00	0.25	SVC	Survey Circulating
			C/S @ 7760' In = 87.90 Az = 15.23
10:15	2.25	SLID	Slide Drill fr: 7797 to 7807
			10' 80 L
12:30	2	ROT	Rotary Drill fr: 7807 to 7828
14:30	0.25	SVC	Survey Circulating
			C/S @ 7791' In = 88.06 Az = 15.01
14:45	2.5	SLID	Slide Drill fr: 7828 to 7836
			8' 80 L

24 Hr Summary: TIH, Drill Lateral
Proj svy at 0:00:
Proj svy at 24:00:
Bottom Hole Temp. (F), Circulating: 144
Formation Name/Depth: Marmington

Remarks:

We had to wash and ream the last 6 stasnds more or less. Hole gave alot of cuttings during this time. When we got on bottom we pumped a sweep to finish cleaning the hole. Still haveing some trouble getting back to bottom after a connection.

Received a new well plan. Talked w/Ryan and they want us to turn back right to new plan. Working on turning now. A/B pretty much on target.

BHI DIRECTIONAL REP: David Luttrell, Cliff Prichard
BHI MWD REP.: Chris Redding, Bryan Kalhor
COMPANY REP.: Ryan Logsdon
DAILY COST: $12,550.00
CUMMULATIVE COST: $375,998.00
BHI JOB #: 4744806

BAKER HUGHES
NTEQ

DAILY DRILLING REPORT

No: 28 Date: 7/16/2012

Company: Mid-Con Energy Operating
Well Name & No.: Sauer 3-21H
Field: Riga South
Rig Contractor & No.: Trinidad 215
County/Block/Parish: Trego Co
BHA No(s) Today: 7
Depth: 7899 Feet last 24 Hrs: 228
Last CSG Depth: 4383 Size: 7

MUD DATA

Mud Type WBM Weight: 9.2 Viscocity: 85 PV: 35 YP: 27 WL: 4.6
Gels: 15/32 % Oil: -- % Solid: 6.3 % Sand: TR PH: 8.5 CL: 1000

BIT DATA

No.	Bit Size	Mfr	Type	Serial No.	Noz. or TFA	Gauge Length	Cum. Footage	Cum. Hours	Depth Out	DULL CONDITION							
										IR	OR	DC	LOC	B/S	G/16	OC	RPLD
9	6 1/8	HCC	STX44CDX	5210667	3 x 16		228	21.75		2	4	BT	H	E	I	WT	TD

MOTOR DATA / RUN DATA

BHA No.	Size	Type	Deflection		Serial Number	Avg Diff. Press.	Drill Hrs. Today	Drill Hrs. Accum.	Circ. Hrs. Today	Circ. Hrs. Accum.	Depth In	Depth Out
			Tool	Angle								

PUMP DATA

Pump #	Liner X Stroke	Gal. / Stroke	Max Allowable SPP
1	5.5 X 9	4.45	
2	5.5 X 9	4.45	

TARGET DESCRIPTION / DETAILS

17:15	1.75	ROT	Rotary Drill fr: 7836 to 7860
19:00	0.25	SVC	Survey Circulating
			C/S @ 7823' In = 87.87 Az = 13.85
19:15	1.5	SLID	Slide Drill fr: 7860 to 7868
			8' 90 L
20:45	1.5	ROT	Rotary Drill fr: 7868 to 7892
22:15	0.25	SVC	Survey Circulating
			C/S @ @ 7855' In = 87.94 Az = 12.75
22:30	1.5	SLID	Slide Drill fr: 7892 to 7899
			7' 80 L

BAKER HUGHES
NTEQ

DAILY DRILLING REPORT

No: 29 Date: 7/17/2012

Company: Mid-Con Energy Operating
Field: Riga South
County/Block/Parish: Trego Co
Depth: 8050 Feet last 24 Hrs: 151
Well Name & No.: Sauer 3-21H
Rig Contractor & No.: Trinidad 215
BHA No(s) Today: 7
Last CSG Depth: 4383 Size: 7

MUD DATA

Mud Type WBM Weight: 9.0 Viscocity: 84 PV: 40 YP: 30 WL: 4.0
Gels: 22/35 % Oil: -- % Solid: 5.6 % Sand: TR PH: 9 CL: 1000

BIT DATA

No.	Bit Size	Mfr	Type	Serial No.	Noz. or TFA	Gauge Length	Cum. Footage	Cum. Hours	Depth Out	DULL CONDITION							
										IR	OR	DC	LOC	B/S	G/16	OC	RPLD
9	6 1/8	HCC	STX44CDX	5210667	3 x 16		379	37	8050	2	4	BT	H	E	I	WT	TD

MOTOR DATA / RUN DATA

BHA No.	Size	Type	Deflection		Serial Number	Avg Diff. Press.	Drill Hrs. Today	Drill Hrs. Accum.	Circ. Hrs. Today	Circ. Hrs. Accum.	Depth In	Depth Out
			Tool	Angle								

PUMP DATA

Pump #	Liner X Stroke	Gal. / Stroke	Max Allowable SPP
1	5.5 X 9	4.45	
2	5.5 X 9	4.45	

TARGET DESCRIPTION / DETAILS

TIME BREAKDOWN

From	HRS	Code	Description
0:00	0.25	SLID	Slide Drill fr: 7899 to 7900
			1' 80 L
0:15	1.25	ROT	Rotary Drill fr: 7900 to 7923
1:30	0.25	RIGS	Rig Service
1:45	0.25	SVC	Survey Circulating
			C/S @ 7886' In = 87.57 Az = 15.01
2:00	3.25	ROT	Rotary Drill fr: 7923 to 7955
5:15	0.25	SVC	Survey Circulating
			C/S @ 7918' In = 87.35 Az = 10.37
5:30	0.75	ONC	Other Non-circulating
			Working pipe back down after connection
6:15	2.5	ROT	Rotary Drill fr: 7955 to 7987
8:45	0.25	SVC	Survey Circulating
			@ 7950' 87.53 inc 10.36 az
9:00	1.5	SLID	Slide Drill fr: 7987 to 7993
			Having to rock pipe to point of not holding TF
10:30	2.5	ROT	Rotary Drill fr: 7993 to 8018
13:00	1	CIRC	Circulate
			Circ Pump Sweeps

24 Hr Summary: Drilling Lateral
Proj svy at 0:00:
Proj svy at 24:00:
Bottom Hole Temp. (F), Circulating: 144
Formation Name/Depth: Marmington

Remarks:

Getting to bottom after a connection is getting harder every connection. Once we get to bottom we are able to rock and make a few feet before hanging while sliding. When it hangs we are having to pull +/- 100K to break free. Ryan Logsdon Decided that since they were not going to perforate any hole from here to 8330' that it was not cost effective to keep drilling so we TD Well Early

BHI DIRECTIONAL REP: David Luttrell, Cliff Prichard
BHI MWD REP.: Chris Redding, Bryan Kalhor
COMPANY REP.: Ryan Logsdon
DAILY COST: $12,550.00
CUMMULATIVE COST: $388,548.00
BHI JOB #: 4744806

BAKER HUGHES
NTEQ

DAILY DRILLING REPORT

No: 29 Date: 7/17/2012

Company: Mid-Con Energy Operating
Well Name & No.: Sauer 3-21H
Field: Riga South
Rig Contractor & No.: Trinidad 215
County/Block/Parish: Trego Co
BHA No(s) Today: 7
Depth: 8050 Feet last 24 Hrs: 151
Last CSG Depth: 4383 Size: 7

MUD DATA

Mud Type WBM Weight: 9.0 Viscocity: 84 PV: 40 YP: 30 WL: 4.0
Gels: 22/35 % Oil: -- % Solid: 5.6 % Sand: TR PH: 9 CL: 1000

BIT DATA

No.	Bit Size	Mfr	Type	Serial No.	Noz. or TFA	Gauge Length	Cum. Footage	Cum. Hours	Depth Out	DULL CONDITION							
										IR	OR	DC	LOC	B/S	G/16	OC	RPLD
9	6 1/8	HCC	STX44CDX	5210667	3 x 16		379	37	8050	2	4	BT	H	E	I	WT	TD

MOTOR DATA / RUN DATA

BHA No.	Size	Type	Deflection		Serial Number	Avg Diff. Press.	Drill Hrs. Today	Drill Hrs. Accum.	Circ. Hrs. Today	Circ. Hrs. Accum.	Depth In	Depth Out
			Tool	Angle								

PUMP DATA

Pump #	Liner X Stroke	Gal. / Stroke	Max Allowable SPP
1	5.5 X 9	4.45	
2	5.5 X 9	4.45	

TARGET DESCRIPTION / DETAILS

14:00	0.5	ONC	Other Non-circulating
			Work Pipe to get Bushings back in table
14:30	0.25	SVC	Survey Circulating
			@ 7981' 87.78 inc 10.90 az
14:45	1.75	SLID	Slide Drill fr: 8018 to 8025
16:30	2.25	ROT	Rotary Drill fr: 8025 to 8050
			TD Well
18:45	0.25	SVC	Survey Circulating
			Final Svy @ 8013' 87.90 inc 10.40 az
19:00	2	CIRC	Circulate
			Circ 2 Btms Up
21:00	3	TO	Tripping Out (To Surface)
			Short Trip 15 Stds

BAKER HUGHES
NTEQ

DAILY DRILLING REPORT

No: 30 Date: 7/18/2012

Company: Mid-Con Energy Operating
Well Name & No.: Sauer 3-21H
Field: Riga South
Rig Contractor & No.: Trinidad 215
County/Block/Parish: Trego Co
BHA No(s) Today: 7
Depth: 8050 Feet last 24 Hrs:
Last CSG Depth: 4383 Size: 7

MUD DATA

Mud Type WBM Weight: 9.0 Viscocity: 84 PV: 40 YP: 30 WL: 4.0
Gels: 22/35 % Oil: -- % Solid: 5.6 % Sand: TR PH: 9 CL: 1000

BIT DATA

No.	Bit Size	Mfr	Type	Serial No.	Noz. or TFA	Gauge Length	Cum. Footage	Cum. Hours	Depth Out	DULL CONDITION							
										IR	OR	DC	LOC	B/S	G/16	OC	RPLD
9	6 1/8	HCC	STX44CDX	5210667	3 x 16		379	37	8050	2	4	BT	H	E	I	WT	TD

MOTOR DATA / RUN DATA

BHA No.	Size	Type	Deflection		Serial Number	Avg Diff. Press.	Drill Hrs. Today	Drill Hrs. Accum.	Circ. Hrs. Today	Circ. Hrs. Accum.	Depth In	Depth Out
			Tool	Angle								

PUMP DATA

Pump #	Liner X Stroke	Gal. / Stroke	Max Allowable SPP
1	5.5 X 9	4.45	
2	5.5 X 9	4.45	

TARGET DESCRIPTION / DETAILS

TIME BREAKDOWN

From	HRS	Code	Description
0:00	2	CIRC	Circulate
			Circ 2 Btms up
2:00	8	TO	Tripping Out (To Surface)
			TOH / Lay down Dir Tools

24 Hr Summary: Circ / TOH Lay Down Dir Tools
Proj svy at 0:00:
Proj svy at 24:00: NONE ENTERED
Bottom Hole Temp. (F), Circulating:
Formation Name/Depth: Marmington
Remarks:

BHI DIRECTIONAL REP: David Luttrell, Cliff Prichard
BHI MWD REP.: Chris Redding, Bryan Kalhor
COMPANY REP.: Ryan Logsdon
DAILY COST: $12,550.00
CUMMULATIVE COST: $401,098.00
BHI JOB #: 4744806