



Company Name: Baker Hughes Incorporated
 Operator Name: Forge Energy, LLC
 Report Date: 19 Sep 2016
 Well: Schubert 18 No. 4H
 Wellbore: Schubert 18 No. 4H St 1
 Reference North: Grid
 Magnetic Declination: 6.84 (deg)
 True to Grid Convergence: -0.67 (deg)
 Surveys From Date: 9/11/2016 4:02:51 AM
 Surveys To Date: 9/19/2016 10:55:44 AM

OCD – HOBBS
10/28/2016
RECEIVED

Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Temperature (degF)	True Vertical Depth (ft)	Northing (ft)	Easting (ft)	DLS (deg/100ft)	Vertical Section (ft)	Closure Distance (ft)	Course Length (ft)	Build Rate (deg/100ft)	Turn Rate (deg/100ft)
1734.00	0.50	207.80		1733.96	-0.20	-8.24	0.16	-0.20	0.00	1734.00	0.00	0.00
1825.00	0.74	201.41	95.95	1824.95	-1.10	-8.64	0.27	-1.03	8.71	91.00	0.26	-7.02
2014.00	0.68	220.25	98.66	2013.94	-3.09	-9.81	0.13	-3.01	10.29	189.00	-0.03	9.97
2202.00	0.13	155.88	104.06	2201.94	-4.14	-10.44	0.34	-4.05	11.23	188.00	-0.29	-34.24
2391.00	0.22	25.14	106.77	2390.93	-4.00	-10.20	0.17	-3.92	10.96	189.00	0.05	-69.17
2579.00	1.12	29.33	109.47	2578.92	-2.08	-9.15	0.48	-2.00	9.38	188.00	0.48	2.23
2768.00	0.54	325.70	112.17	2767.90	0.27	-8.75	0.53	0.34	8.75	189.00	-0.31	-33.67
2956.00	0.35	283.19	114.87	2955.90	1.13	-9.80	0.20	1.21	9.87	188.00	-0.10	-22.61
3145.00	0.44	327.52	117.58	3144.89	1.88	-10.76	0.16	1.97	10.92	189.00	0.05	23.46
3334.00	0.36	9.49	120.28	3333.89	3.08	-11.05	0.16	3.17	11.47	189.00	-0.04	22.21
3522.00	0.24	346.58	120.28	3521.89	4.04	-11.04	0.09	4.13	11.76	188.00	-0.06	-12.19
3710.00	0.22	243.08	122.98	3709.89	4.26	-11.45	0.19	4.35	12.22	188.00	-0.01	-55.05
3776.00	0.26	23.61	95.95	3775.89	4.34	-11.51	0.68	4.43	12.30	66.00	0.06	212.92
3809.00	2.48	15.57	98.66	3808.87	5.10	-11.29	6.74	5.19	12.38	33.00	6.73	-24.36
3840.00	4.25	22.22	101.36	3839.82	6.81	-10.67	5.84	6.89	12.66	31.00	5.71	21.45
3872.00	4.17	21.68	104.06	3871.73	8.99	-9.79	0.28	9.07	13.29	32.00	-0.25	-1.69
3903.00	3.83	21.14	104.06	3902.66	11.00	-9.00	1.10	11.07	14.21	31.00	-1.10	-1.74
3935.00	5.92	21.84	106.77	3934.54	13.53	-8.00	6.53	13.59	15.72	32.00	6.53	2.19
3966.00	9.11	22.65	106.77	3965.27	17.28	-6.46	10.30	17.33	18.45	31.00	10.29	2.61
3997.00	12.17	19.45	106.77	3995.73	22.62	-4.43	10.05	22.66	23.05	31.00	9.87	-10.32
4029.00	14.76	17.80	106.77	4026.85	29.69	-2.06	8.18	29.70	29.76	32.00	8.09	-5.16
4060.00	17.39	17.81	106.77	4056.64	37.86	0.56	8.48	37.85	37.86	31.00	8.48	0.03
4092.00	20.59	17.90	106.77	4086.89	47.77	3.76	10.00	47.74	47.92	32.00	10.00	0.28
4123.00	23.65	17.57	106.77	4115.61	58.89	7.31	9.88	58.82	59.34	31.00	9.87	-1.06
4155.00	26.29	16.68	106.77	4144.61	71.80	11.28	8.33	71.70	72.68	32.00	8.25	-2.78
4186.00	29.06	15.41	109.47	4172.06	85.63	15.25	9.14	85.51	86.98	31.00	8.94	-4.10
4217.00	31.94	14.56	109.47	4198.77	100.83	19.32	9.39	100.67	102.67	31.00	9.29	-2.74
4249.00	34.31	15.00	109.47	4225.57	117.74	23.78	7.44	117.54	120.12	32.00	7.41	1.37
4280.00	37.05	15.43	109.47	4250.75	135.18	28.53	8.88	134.94	138.16	31.00	8.84	1.39
4312.00	39.96	14.49	109.47	4275.79	154.43	33.66	9.28	154.15	158.06	32.00	9.09	-2.94
4343.00	42.99	13.35	112.17	4299.01	174.36	38.60	10.07	174.03	178.58	31.00	9.77	-3.68
4375.00	45.90	11.83	109.47	4321.85	196.22	43.47	9.68	195.86	200.98	32.00	9.09	-4.75
4406.00	48.24	10.35	112.17	4342.97	218.49	47.83	8.32	218.09	223.67	31.00	7.55	-4.77
4437.00	50.61	9.42	112.17	4363.13	241.69	51.87	7.98	241.26	247.19	31.00	7.65	-3.00
4469.00	53.47	8.90	114.87	4382.81	266.60	55.88	9.03	266.13	272.39	32.00	8.94	-1.62
4500.00	56.22	8.70	114.87	4400.66	291.64	59.76	8.89	291.14	297.70	31.00	8.87	-0.65
4532.00	57.95	8.70	114.87	4418.05	318.19	63.82	5.41	317.66	324.53	32.00	5.41	0.00
4563.00	57.99	8.59	114.87	4434.49	344.18	67.77	0.33	343.61	350.79	31.00	0.13	-0.35
4595.00	57.67	8.24	114.87	4451.53	370.97	71.74	1.36	370.37	377.84	32.00	-1.00	-1.09
4626.00	57.81	8.00	114.87	4468.07	396.92	75.44	0.80	396.29	404.03	31.00	0.45	-0.77
4658.00	57.81	7.73	114.87	4485.12	423.75	79.15	0.71	423.09	431.08	32.00	0.00	-0.84
4689.00	57.75	7.46	114.87	4501.65	449.75	82.61	0.76	449.05	457.27	31.00	-0.19	-0.87
4720.00	59.83	6.44	114.87	4517.71	476.06	85.82	7.28	475.34	483.74	31.00	6.71	-3.29
4752.00	63.10	5.11	117.58	4533.00	504.03	88.64	10.85	503.28	511.76	32.00	10.22	-4.16
4783.00	66.36	3.75	114.87	4546.23	531.97	90.80	11.24	531.21	539.67	31.00	10.52	-4.39

4814.00	69.85	2.52	114.87	4557.79	560.69	92.37	11.84	559.91	568.25	31.00	11.26	-3.97
4846.00	72.69	1.24	114.87	4568.06	590.97	93.36	9.65	590.19	598.30	32.00	8.87	-4.00
4877.00	76.13	0.48	252.73	4576.39	620.83	93.81	11.35	620.04	627.87	31.00	11.10	-2.45
4909.00	79.19	0.16	114.87	4583.23	652.08	93.98	9.61	651.29	658.82	32.00	9.56	-1.00
4940.00	81.78	0.01	114.87	4588.35	682.65	94.03	8.37	681.86	689.10	31.00	8.35	-0.48
4972.00	84.20	359.34	117.58	4592.26	714.41	93.85	7.84	713.62	720.55	32.00	7.56	-2.09
5003.00	86.12	359.27	117.58	4594.88	745.30	93.47	6.20	744.51	751.14	31.00	6.19	-0.23
5097.00	90.22	357.99	117.58	4597.88	839.20	91.23	4.57	838.42	844.14	94.00	4.36	-1.36
5192.00	90.22	358.12	117.58	4597.51	934.14	88.00	0.14	933.39	938.28	95.00	0.00	0.14
5286.00	90.25	357.97	120.28	4597.13	1028.09	84.80	0.16	1027.36	1031.58	94.00	0.03	-0.16
5381.00	90.09	0.86	122.98	4596.84	1123.07	83.83	3.05	1122.35	1126.20	95.00	-0.17	3.04
5475.00	90.25	0.05	120.28	4596.57	1217.07	84.57	0.88	1216.34	1220.00	94.00	0.17	-0.86
5569.00	90.25	359.64	117.58	4596.16	1311.07	84.32	0.44	1310.33	1313.78	94.00	0.00	-0.44
5663.00	90.34	1.32	120.28	4595.67	1405.06	85.11	1.79	1404.31	1407.64	94.00	0.10	1.79
5758.00	90.37	0.28	120.28	4595.08	1500.05	86.43	1.10	1499.29	1502.54	95.00	0.03	-1.09
5852.00	90.52	358.96	122.98	4594.35	1594.04	85.81	1.41	1593.28	1596.35	94.00	0.16	-1.40
5946.00	90.37	355.50	122.98	4593.62	1687.91	81.27	3.68	1687.19	1689.87	94.00	-0.16	-3.68
6040.00	90.22	355.00	125.69	4593.14	1781.59	73.48	0.56	1780.93	1783.10	94.00	-0.16	-0.53
6135.00	90.37	355.58	125.69	4592.65	1876.27	65.68	0.63	1875.67	1877.42	95.00	0.16	0.61
6229.00	90.31	0.80	125.69	4592.09	1970.19	62.71	5.55	1969.61	1971.18	94.00	-0.06	5.55
6323.00	90.43	1.50	125.69	4591.48	2064.16	64.60	0.76	2063.57	2065.18	94.00	0.13	0.74
6417.00	90.40	2.02	128.39	4590.80	2158.12	67.49	0.55	2157.49	2159.17	94.00	-0.03	0.55
6512.00	90.40	0.87	128.39	4590.14	2253.08	69.88	1.21	2252.43	2254.17	95.00	0.00	-1.21
6606.00	90.52	0.74	128.39	4589.39	2347.07	71.20	0.19	2346.41	2348.15	94.00	0.13	-0.14
6700.00	90.28	0.97	128.39	4588.73	2441.06	72.61	0.35	2440.38	2442.14	94.00	-0.26	0.24
6795.00	90.28	358.61	128.39	4588.26	2536.05	72.26	2.48	2535.37	2537.08	95.00	0.00	-2.48
6889.00	90.59	358.58	131.09	4587.55	2630.02	69.95	0.33	2629.36	2630.95	94.00	0.33	-0.03
6983.00	90.31	358.08	131.09	4586.81	2723.98	67.21	0.61	2723.33	2724.80	94.00	-0.30	-0.53
7077.00	90.12	358.90	131.09	4586.46	2817.94	64.74	0.90	2817.32	2818.68	94.00	-0.20	0.87
7171.00	90.49	359.97	131.09	4585.96	2911.93	63.81	1.20	2911.31	2912.63	94.00	0.39	1.14
7266.00	90.46	0.20	131.09	4585.17	3006.93	63.95	0.24	3006.30	3007.61	95.00	-0.03	0.24
7360.00	90.40	359.29	131.09	4584.47	3100.93	63.53	0.97	3100.30	3101.58	94.00	-0.06	-0.97
7454.00	90.46	359.75	128.39	4583.76	3194.92	62.75	0.49	3194.30	3195.54	94.00	0.06	0.49
7549.00	90.49	359.96	128.39	4582.97	3289.92	62.50	0.22	3289.29	3290.51	95.00	0.03	0.22
7643.00	90.40	1.23	128.39	4582.24	3383.91	63.48	1.35	3383.27	3384.50	94.00	-0.10	1.35
7738.00	90.59	0.18	128.39	4581.42	3478.89	64.65	1.12	3478.25	3479.49	95.00	0.20	-1.11
7832.00	90.55	0.42	128.39	4580.49	3572.89	65.14	0.26	3572.23	3573.48	94.00	-0.04	0.26
7926.00	90.55	3.47	128.39	4579.59	3666.82	68.33	3.24	3666.13	3667.45	94.00	0.00	3.24
8020.00	90.28	5.68	131.09	4578.90	3760.51	75.83	2.37	3759.76	3761.27	94.00	-0.29	2.35
8114.00	90.03	357.37	131.09	4578.65	3854.39	78.33	8.84	3853.62	3855.19	94.00	-0.27	-8.84
8209.00	90.28	354.12	131.09	4578.39	3949.12	71.28	3.43	3948.40	3949.76	95.00	0.26	-3.42
8303.00	90.18	356.07	133.80	4578.01	4042.77	63.24	2.08	4042.12	4043.26	94.00	-0.11	2.07
8397.00	90.25	0.02	133.80	4577.66	4136.70	60.04	4.20	4136.06	4137.13	94.00	0.07	4.20
8492.00	90.34	0.70	133.80	4577.17	4231.69	60.63	0.72	4231.05	4232.13	95.00	0.09	0.72
8586.00	90.40	359.48	133.80	4576.57	4325.69	60.78	1.30	4325.04	4326.12	94.00	0.06	-1.30
8680.00	90.34	357.51	133.80	4575.96	4419.65	58.31	2.10	4419.02	4420.03	94.00	-0.06	-2.10
8774.00	90.40	357.55	133.80	4575.35	4513.56	54.26	0.08	4512.96	4513.89	94.00	0.06	0.04
8868.00	90.28	357.97	133.80	4574.79	4607.49	50.59	0.46	4606.92	4607.76	94.00	-0.13	0.45
8940.00	90.25	356.15	133.80	4574.46	4679.39	46.90	2.53	4678.85	4679.62	72.00	-0.04	-2.53