

51-01713



### Northeast District

**Company:** Chevron

**Date :** 9/18/2014

**Field:** Marcellus

**North Ref:** TRUE

**Well:** Francis 6H

**Grid Correction:** 0.76

**County:** Marshall County

**Declination :** -7.97

**State:** WV

**VS Azimuth:** 325.22°

**Rig:** Nabors X07

**RKB-GL:** 32' ft. + 1260' = 1292'

**MWD:** D. Kilby, A. Langford, R. Mayercheck

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	Course Length
0	0	0	0	0	0	0	Invalid	Invalid
100	0.25	278.88	100	0.15	0.03	-0.22	0.25	100
125	0.19	260.39	125	0.21	0.04	-0.31	0.37	25
150	0.19	261.32	150	0.24	0.02	-0.39	0.01	25
175	0.2	265.05	175	0.28	0.01	-0.48	0.06	25
200	0.26	273.73	200	0.34	0.01	-0.58	0.28	25
225	0.25	263.9	225	0.4	0.01	-0.69	0.18	25
250	0.26	267.44	250	0.46	0	-0.8	0.07	25
275	0.26	283.07	275	0.53	0.01	-0.91	0.28	25
300	0.28	277.52	300	0.61	0.03	-1.03	0.13	25
325	0.23	260.81	325	0.67	0.03	-1.14	0.36	25
350	0.27	284.45	350	0.74	0.04	-1.24	0.44	25
375	0.27	297.49	375	0.84	0.08	-1.35	0.25	25
400	0.2	266.24	400	0.91	0.11	-1.45	0.57	25
425	0.21	264.71	425	0.96	0.1	-1.54	0.05	25
450	0.15	289.42	450	1.01	0.11	-1.61	0.39	25
475	0.18	277.73	475	1.06	0.12	-1.68	0.18	25
500	0.13	303.97	500	1.11	0.14	-1.75	0.34	25
525	0.12	269.29	525	1.15	0.16	-1.8	0.3	25
550	0.07	260.97	550	1.18	0.16	-1.84	0.21	25
575	0.05	278.4	575	1.19	0.15	-1.86	0.11	25
600	0.12	265.13	600	1.21	0.15	-1.9	0.29	25
625	0.14	261.21	625	1.24	0.15	-1.96	0.09	25
650	0.16	283.68	650	1.28	0.15	-2.02	0.25	25
745	0.22	359.91	745	1.52	0.36	-2.15	0.25	95
840	0.27	34.3	840	1.75	0.73	-2.02	0.16	95
934	0.73	12.62	933.99	2.24	1.5	-1.77	0.52	94
1028	1.21	354.67	1027.98	3.51	3.07	-1.73	0.6	94
1122	1.41	351.6	1121.95	5.41	5.2	-1.99	0.23	94
1217	0.69	326.55	1216.94	7.03	6.84	-2.48	0.88	95
1311	1.19	269.48	1310.93	8.14	7.3	-3.76	1.06	94

10/23/2015

51-01713

1405	1.6	270.79	1404.9	9.46	7.31	-6.05	0.44	94
1500	1.86	296.02	1499.86	11.57	8	-8.76	0.84	95
1600	2.11	314.5	1599.8	14.8	10.01	-11.54	0.68	100
1700	2.31	315.15	1699.72	18.59	12.73	-14.27	0.2	100
1800	2.71	315.21	1799.63	22.9	15.83	-17.36	0.4	100
1900	3.48	315.48	1899.48	28.22	19.67	-21.15	0.77	100
2000	3.91	314.52	1999.27	34.57	24.23	-25.71	0.43	100
2066	4.28	316.25	2065.1	39.21	27.59	-29.02	0.59	66
2165	4.35	316.67	2163.82	46.57	32.99	-34.15	0.08	99
2259	4.17	311.95	2257.56	53.42	37.86	-39.13	0.42	94
2354	4.08	306.74	2352.32	59.98	42.19	-44.41	0.4	95
2448	3.44	301.77	2446.11	65.74	45.67	-49.48	0.77	94
2543	2.99	299.03	2540.97	70.58	48.38	-54.07	0.5	95
2637	2.69	290	2634.85	74.58	50.32	-58.29	0.57	94
2776	1.48	291.41	2773.76	78.74	52.09	-63.03	0.87	139
2871	1.38	300.57	2868.73	80.8	53.12	-65.16	0.26	95
2965	0.91	283.18	2962.71	82.39	53.87	-66.87	0.62	94
3060	0.71	275.35	3057.7	83.33	54.1	-68.19	0.24	95
3154	0.59	279.29	3151.69	84.04	54.23	-69.24	0.14	94
3249	0.74	288.58	3246.69	84.87	54.5	-70.3	0.19	95
3343	0.6	284.7	3340.68	85.73	54.82	-71.35	0.16	94
3437	0.15	322.03	3434.68	86.22	55.04	-71.89	0.52	94
3532	0.61	311	3529.67	86.83	55.47	-72.35	0.48	95
3627	1.05	302.4	3624.66	88.12	56.27	-73.47	0.49	95
3721	0.84	310.29	3718.65	89.58	57.17	-74.72	0.26	94
3816	0.75	315.64	3813.64	90.87	58.07	-75.69	0.12	95
3910	0.53	336.56	3907.64	91.9	58.91	-76.29	0.34	94
4005	0.67	333.46	4002.63	92.87	59.8	-76.71	0.15	95
4100	0.54	343.08	4097.63	93.85	60.73	-77.09	0.17	95
4194	0.71	346.36	4191.62	94.81	61.71	-77.35	0.18	94
4222	0.69	329.99	4219.62	95.14	62.03	-77.48	0.71	28
4316	1.12	345.05	4313.61	96.58	63.41	-78	0.52	94
4410	4.65	104.68	4407.51	94.55	63.34	-74.55	5.63	94
4505	10.39	112.78	4501.66	84.38	59.04	-62.92	6.13	95
4600	17.43	118.58	4593.81	64.4	48.9	-42.49	7.54	95
4695	28.56	116.57	4681.13	31.65	31.88	-9.58	11.74	95
4789	30.68	113.87	4762.85	-8.55	12.13	32.45	2.67	94
4883	26.85	118.27	4845.24	-47.97	-7.64	73.1	4.65	94
4978	26.72	122.23	4930.05	-86.77	-29.2	110.06	1.88	95
5072	27.82	119.09	5013.61	-125.91	-51.13	147.11	1.92	94
5167	29.71	119.45	5096.88	-167.02	-73.49	186.98	2	95
5262	36.29	121.79	5176.52	-214.07	-99.9	231.43	7.05	95
5357	31.3	119.52	5255.44	-262.13	-126.89	276.83	5.42	95
5451	25.34	117.87	5338.16	-302.03	-148.34	315.89	6.39	94
5546	19.3	114.84	5426.01	-333.66	-164.45	348.13	6.47	95
5640	14	112.82	5516.04	-356.67	-175.39	372.73	5.67	94
5735	9.46	109.96	5609.03	-372.75	-182.51	390.66	4.81	95
5830	6.94	111.42	5703.05	-383.9	-187.27	403.35	2.66	95
5925	3.46	101.95	5797.65	-390.76	-189.96	411.5	3.76	95

10/23/2015

51-01713

5972	3.16	356.96	5844.6	-390.69	-188.96	412.82	11.18	47
6019	8.71	346.33	5891.33	-386.27	-184.21	411.91	11.98	47
6066	14.26	345.57	5937.37	-377.52	-175.14	409.63	11.82	47
6113	16.15	346.88	5982.73	-366.01	-163.17	406.7	4.08	47
6160	17.56	346.93	6027.71	-353.35	-149.9	403.61	3.01	47
6208	19.36	346.96	6073.23	-339.23	-135.09	400.18	3.75	48
6255	22.58	348.43	6117.12	-323.7	-118.66	396.61	6.93	47
6302	26.43	348.55	6159.88	-305.8	-99.56	392.73	8.19	47
6349	30.5	348.2	6201.18	-285.2	-77.63	388.21	8.68	47
6397	32.18	350.28	6242.18	-262.4	-53.1	383.56	4.16	48
6444	35.57	349.86	6281.2	-238.64	-27.3	379.04	7.21	47
6491	44.5	348.2	6317.15	-210.99	2.34	373.25	19.13	47
6538	47.37	348.07	6349.84	-179.89	35.38	366.3	6.12	47
6586	49.86	347.75	6381.57	-146.66	70.59	358.76	5.21	48
6633	53.83	345.94	6410.6	-112.31	106.57	350.33	8.98	47
6681	59.07	344.67	6437.12	-74.75	145.25	340.18	11.14	48
6728	63.49	342.02	6459.7	-35.58	184.71	328.35	10.61	47
6775	67.28	340.48	6479.27	5.48	225.16	314.61	8.62	47
6822	71.98	337.04	6495.63	48.3	266.21	298.63	12.11	47
6870	76.13	335.41	6508.81	93.59	308.43	280.03	9.25	48
6917	78.82	333.96	6519	138.85	349.9	260.4	6.46	47
6965	78.68	331.67	6528.37	185.51	391.77	238.89	4.69	48
7012	79.81	326.86	6537.14	231.55	431.44	215.3	10.33	47
7060	83.21	322.79	6544.23	279.01	470.23	187.95	10.98	48
7155	89.55	321.41	6550.22	373.63	545	129.74	6.85	95
7249	90.07	321.53	6550.52	467.42	618.53	71.18	0.55	94
7343	90.84	322.67	6549.78	561.28	692.7	13.44	1.47	94
7438	89.78	321	6549.27	656.11	767.39	-45.25	2.08	95
7532	89.87	320.74	6549.56	749.84	840.31	-104.57	0.3	94
7627	89.87	320.83	6549.78	844.55	913.92	-164.63	0.09	95
7722	90.13	320.13	6549.78	939.23	987.19	-225.09	0.79	95
7817	90.48	319.25	6549.27	1033.78	1059.63	-286.55	1	95
7912	90.84	317.66	6548.18	1128.11	1130.73	-349.54	1.71	95
8006	92.95	321.27	6545.08	1221.57	1202.11	-410.59	4.44	94
8101	93.03	322.76	6540.12	1316.28	1276.89	-468.98	1.57	95
8196	92.33	322.32	6535.67	1411.08	1352.21	-526.69	0.87	95
8291	89.52	321.62	6534.14	1505.9	1427.03	-585.2	3.05	95
8385	88.72	321.8	6535.59	1599.71	1500.8	-643.44	0.86	94
8480	87.85	321.09	6538.43	1694.46	1575.05	-702.63	1.18	95
8575	88.2	321.09	6541.71	1789.16	1648.93	-762.26	0.37	95
8669	91.28	323.11	6542.14	1883	1723.1	-819.98	3.92	94
8764	91.36	322.06	6539.96	1977.88	1798.53	-877.69	1.11	95
8859	91.36	321.8	6537.7	2072.69	1873.3	-936.25	0.28	95
8954	91.1	320.74	6535.65	2167.44	1947.39	-995.68	1.14	95
9049	90.66	318.46	6534.2	2261.97	2019.72	-1057.24	2.45	95
9143	92.95	320.48	6531.24	2355.44	2091.12	-1118.29	3.25	94
9238	93.91	320.3	6525.56	2449.93	2164.17	-1178.75	1.03	95
9332	93.91	320.21	6519.14	2543.36	2236.28	-1238.71	0.09	94
9427	90.48	321.62	6515.5	2638.01	2309.96	-1298.55	3.9	95

10/23/2015

51-01713

9521	90.4	322.15	6514.78	2731.84	2383.91	-1356.57	0.57	94
9616	90.75	322.5	6513.83	2826.72	2459.1	-1414.63	0.52	95
9710	91.36	322.94	6512.1	2920.61	2533.88	-1471.56	0.8	94
9805	89.69	321.88	6511.22	3015.49	2609.15	-1529.5	2.08	95
9899	89.43	321.36	6511.94	3109.3	2682.83	-1587.86	0.63	94
9994	90.22	321.44	6512.24	3204.09	2757.08	-1647.13	0.84	95
10089	90.48	320.65	6511.65	3298.83	2830.95	-1706.85	0.88	95
10184	89.16	321.62	6511.94	3393.59	2904.92	-1766.46	1.72	95
10278	91.63	323.11	6511.3	3487.46	2979.35	-1823.85	3.06	94
10373	90.22	321.36	6509.76	3582.31	3054.44	-1882.02	2.37	95
10468	87.85	318.02	6511.37	3676.84	3126.85	-1943.46	4.31	95
10563	87.76	318.02	6515.01	3771.02	3197.42	-2006.96	0.09	95
10657	87.93	317.93	6518.55	3864.2	3267.19	-2069.84	0.21	94
10752	91.36	321	6519.13	3958.69	3339.38	-2131.57	4.85	95
10846	93.03	321.27	6515.52	4052.38	3412.51	-2190.5	1.8	94
10941	93.47	320.74	6510.13	4146.97	3486.23	-2250.19	0.72	95
11036	93.83	320.04	6504.09	4241.44	3559.26	-2310.63	0.83	95
11130	94.44	319.77	6497.31	4334.79	3630.99	-2371.01	0.71	94
11225	88.29	317.58	6495.05	4429.1	3702.27	-2433.69	6.88	95
11320	87.41	317.49	6498.62	4523.18	3772.3	-2497.79	0.93	95
11414	88.02	318.54	6502.37	4616.36	3842.11	-2560.62	1.3	94
11508	89.16	320.04	6504.68	4709.82	3913.34	-2621.9	2	94
11603	90.48	321.27	6504.97	4804.52	3986.81	-2682.13	1.9	95
11697	90.04	320.83	6504.54	4898.27	4059.91	-2741.22	0.66	94
11792	92.33	324.26	6502.57	4993.12	4135.28	-2798.98	4.34	95
11887	91.8	324.08	6499.15	5088.04	4212.26	-2854.55	0.59	95
11982	91.89	323.64	6496.08	5182.97	4288.94	-2910.55	0.47	95
12076	90.92	323.03	6493.78	5276.89	4364.31	-2966.66	1.22	94
12171	90.04	322.59	6492.97	5371.8	4439.99	-3024.09	1.03	95
12266	89.43	322.5	6493.41	5466.69	4515.4	-3081.87	0.65	95
12361	88.72	322.15	6494.94	5561.56	4590.57	-3139.92	0.83	95
12455	90.04	323.03	6495.95	5655.45	4665.23	-3197.03	1.69	94
12549	94.44	326.45	6492.28	5749.34	4741.89	-3251.23	5.93	94
12644	93.83	324.78	6485.43	5844.08	4820.09	-3304.74	1.87	95
12739	91.98	322.85	6480.62	5938.93	4896.66	-3360.75	2.81	95
12833	90.22	321.8	6478.82	6032.78	4971.04	-3418.19	2.18	94
12928	89.78	321.97	6478.82	6127.62	5045.78	-3476.83	0.5	95
13022	88.99	321.88	6479.83	6221.46	5119.78	-3534.79	0.85	94
13121	88.46	321.62	6482.03	6320.25	5197.51	-3596.06	0.6	99
13193	88.46	321.62	6483.96	6392.09	5253.93	-3640.75	0	72

10/23/2015