

Conoco Phillips Company

Arapahoe County, Colorado

Sec. 8-T4S-R64W

Tiberius 4-64 8-4H

Plan A

Plan: Rev A0

Sperry Drilling Services

Proposal Report

25 June, 2014

Well Coordinates: 1,685,487.12 N, 3,262,774.35 E (39° 42' 42.32" N, 104° 33' 57.45" W)

Ground Level: 5,632.10 usft

Local Coordinate Origin:

Viewing Datum:

TVDs to System:

North Reference:

Unit System:

Geodetic Scale Factor Applied

Version: 5000.1 Build: 70

Centered on Well Tiberius 4-64 8-4H

KB 24 ft @ 5656.10usft (H&P 280)

N

True

API - US Survey Feet - Custom

HALLIBURTON

Project: Arapahoe County, Colorado
Site: Sec. 8-T4S-R64W
Well: Tiberius 4-64 8-4H
Wellbore: Plan A
Plan: Rev A0

Conoco Phillips Company

HALLIBURTON
Sperry Drilling

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2050.00	0.00	0.00	2050.00	0.00	0.00	0.00	0.00	0.00	
3	2240.00	3.80	91.10	2239.86	-0.12	6.30	2.00	91.10	-6.30	
4	6584.69	3.80	91.10	6575.00	-5.65	294.18	0.00	0.00	-294.24	
5	6774.69	0.00	0.00	6764.86	-5.77	300.48	2.00	180.00	-300.54	
6	6992.89	0.00	0.00	6983.06	-5.77	300.48	0.00	0.00	-300.54	
7	7888.30	89.54	271.11	7556.00	5.20	-267.78	10.00	271.11	267.83	
8	12255.33	89.54	271.11	7591.00	89.47	-4633.86	0.00	0.00	4634.72	Tiberius 4-64 8-4H_Rev A0_BHL Tgt

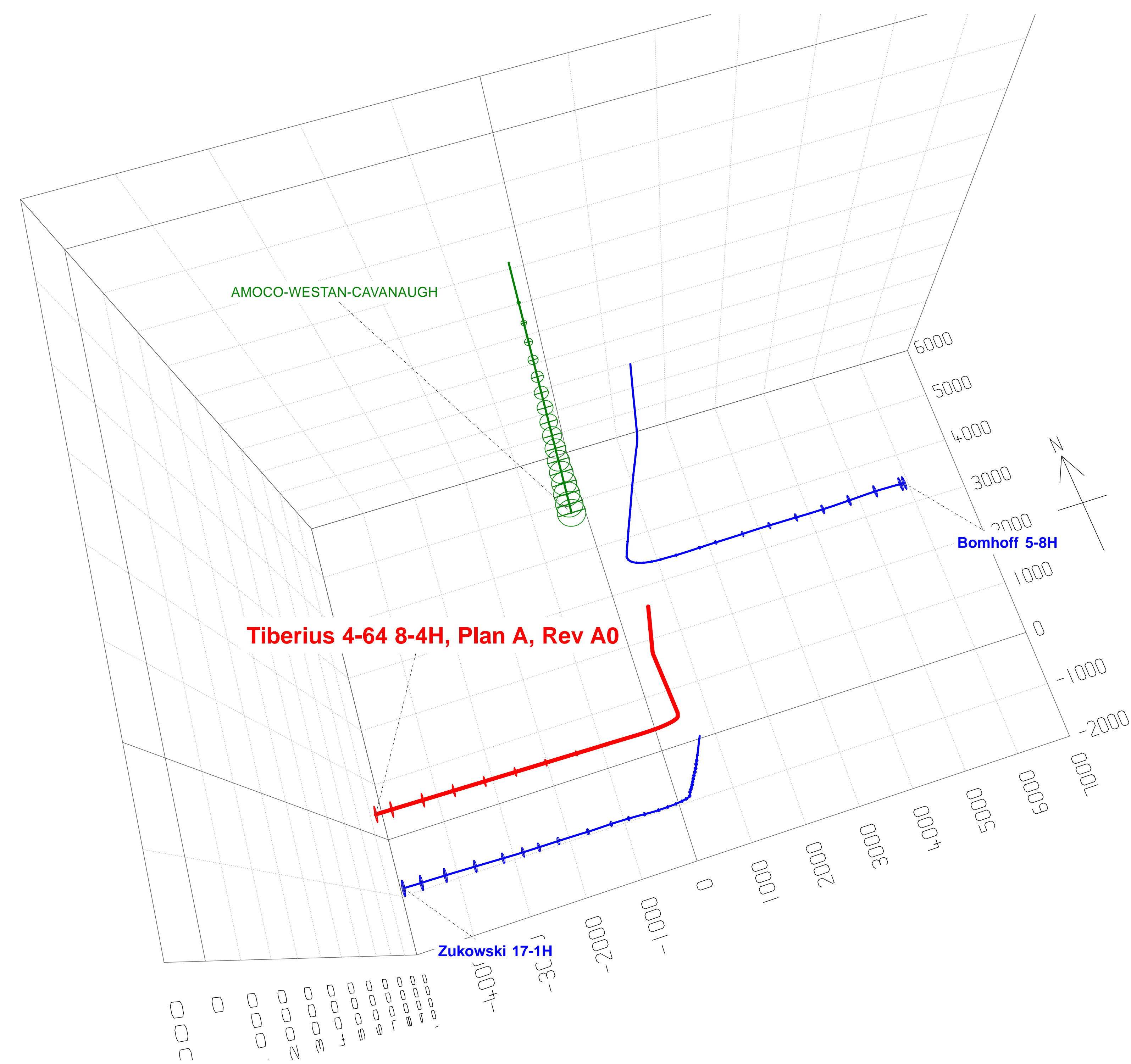
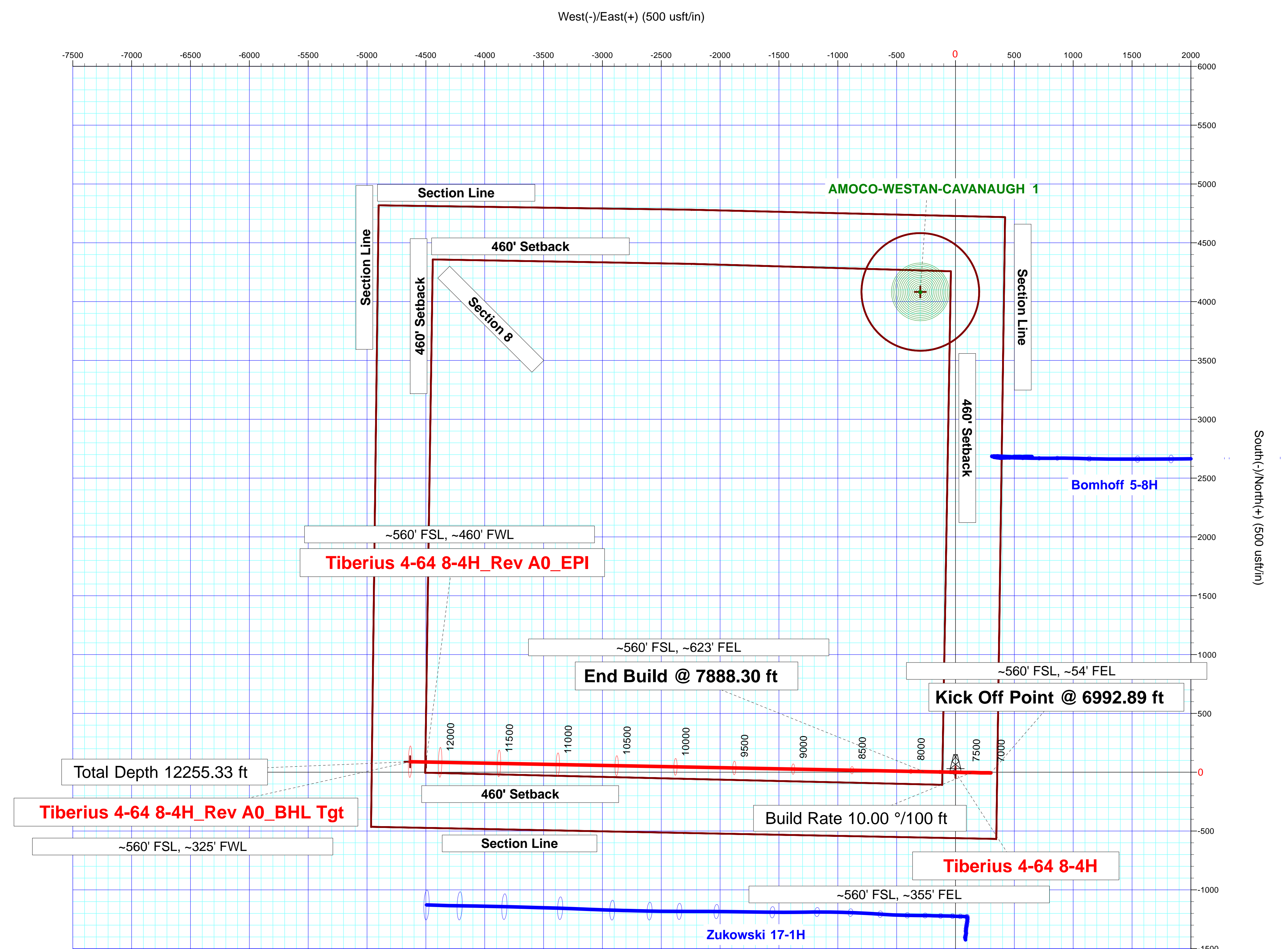
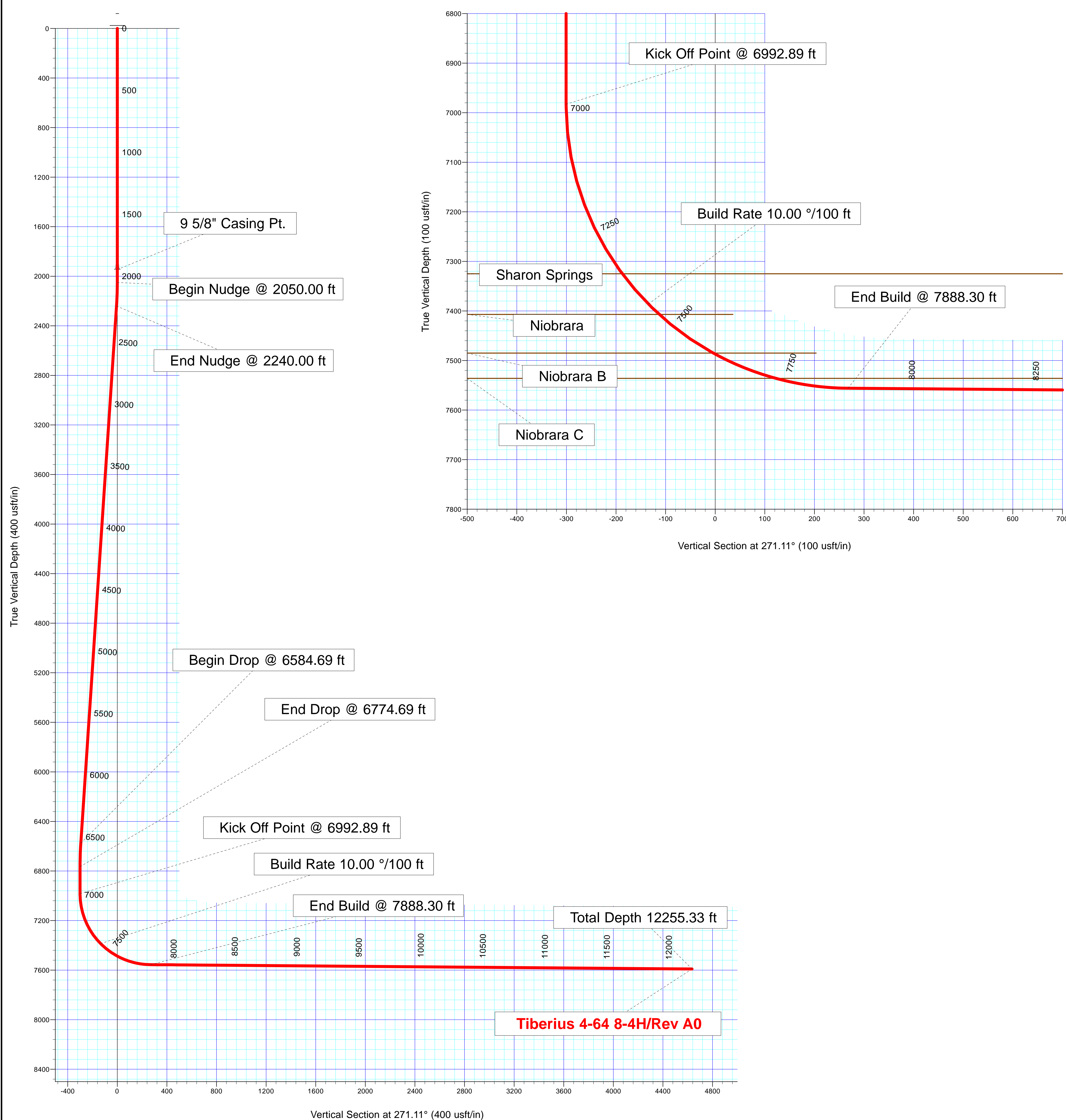
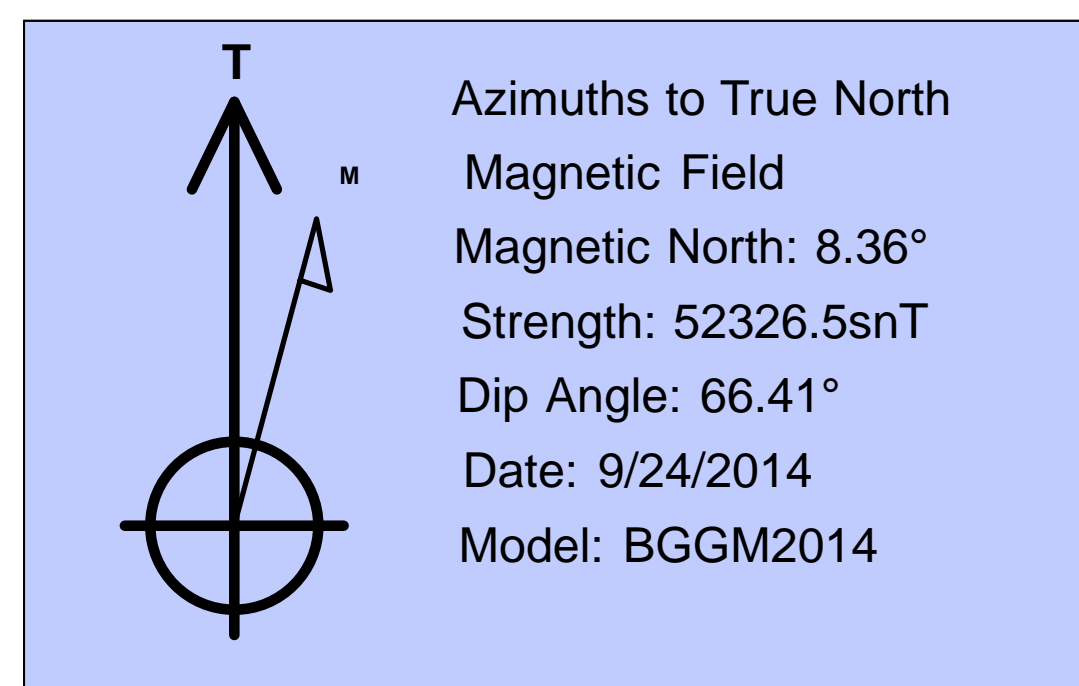
Plan: Rev A0 (Tiberius 4-64 8-4H/Plan A)

Created By: Kansa B. Becker Date: 14:38, June 26 2014

Checked: _____ Date: _____

Reviewed: _____ Date: _____

Approved: _____ Date: _____



Plan Report for Tiberius 4-64 8-4H - Rev A0

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	Toolface Azimuth (°)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,628.00	0.00	0.00	1,628.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fox Hills										
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,746.00	0.00	0.00	1,746.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pierre Shale										
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,946.00	0.00	0.00	1,946.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface casing - 9 5/8" Casing Pt.										
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,050.00	0.00	0.00	2,050.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 2050.00 ft										
2,100.00	1.00	91.10	2,100.00	-0.01	0.44	-0.44	2.00	2.00	0.00	91.10
2,200.00	3.00	91.10	2,199.93	-0.08	3.93	-3.93	2.00	2.00	0.00	0.00
2,240.00	3.80	91.10	2,239.86	-0.12	6.30	-6.30	2.00	2.00	0.00	0.00
End Nudge @ 2240.00 ft										
2,300.00	3.80	91.10	2,299.73	-0.20	10.27	-10.27	0.00	0.00	0.00	0.00
2,400.00	3.80	91.10	2,399.51	-0.32	16.90	-16.90	0.00	0.00	0.00	0.00
2,500.00	3.80	91.10	2,499.29	-0.45	23.53	-23.53	0.00	0.00	0.00	0.00
2,600.00	3.80	91.10	2,599.07	-0.58	30.15	-30.16	0.00	0.00	0.00	0.00
2,700.00	3.80	91.10	2,698.85	-0.71	36.78	-36.78	0.00	0.00	0.00	0.00
2,800.00	3.80	91.10	2,798.63	-0.83	43.40	-43.41	0.00	0.00	0.00	0.00
2,900.00	3.80	91.10	2,898.41	-0.96	50.03	-50.04	0.00	0.00	0.00	0.00
3,000.00	3.80	91.10	2,998.19	-1.09	56.66	-56.67	0.00	0.00	0.00	0.00
3,100.00	3.80	91.10	3,097.97	-1.22	63.28	-63.29	0.00	0.00	0.00	0.00
3,200.00	3.80	91.10	3,197.75	-1.34	69.91	-69.92	0.00	0.00	0.00	0.00
3,300.00	3.80	91.10	3,297.53	-1.47	76.53	-76.55	0.00	0.00	0.00	0.00
3,400.00	3.80	91.10	3,397.31	-1.60	83.16	-83.18	0.00	0.00	0.00	0.00
3,500.00	3.80	91.10	3,497.09	-1.72	89.79	-89.80	0.00	0.00	0.00	0.00
3,600.00	3.80	91.10	3,596.87	-1.85	96.41	-96.43	0.00	0.00	0.00	0.00
3,700.00	3.80	91.10	3,696.65	-1.98	103.04	-103.06	0.00	0.00	0.00	0.00
3,800.00	3.80	91.10	3,796.43	-2.11	109.67	-109.69	0.00	0.00	0.00	0.00
3,900.00	3.80	91.10	3,896.21	-2.23	116.29	-116.31	0.00	0.00	0.00	0.00
4,000.00	3.80	91.10	3,995.99	-2.36	122.92	-122.94	0.00	0.00	0.00	0.00
4,100.00	3.80	91.10	4,095.77	-2.49	129.54	-129.57	0.00	0.00	0.00	0.00
4,200.00	3.80	91.10	4,195.55	-2.61	136.17	-136.20	0.00	0.00	0.00	0.00
4,300.00	3.80	91.10	4,295.33	-2.74	142.80	-142.82	0.00	0.00	0.00	0.00
4,400.00	3.80	91.10	4,395.11	-2.87	149.42	-149.45	0.00	0.00	0.00	0.00
4,500.00	3.80	91.10	4,494.89	-3.00	156.05	-156.08	0.00	0.00	0.00	0.00
4,600.00	3.80	91.10	4,594.67	-3.12	162.67	-162.70	0.00	0.00	0.00	0.00
4,700.00	3.80	91.10	4,694.45	-3.25	169.30	-169.33	0.00	0.00	0.00	0.00

Plan Report for Tiberius 4-64 8-4H - Rev A0

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	Toolface Azimuth (°)
4,800.00	3.80	91.10	4,794.23	-3.38	175.93	-175.96	0.00	0.00	0.00	0.00
4,900.00	3.80	91.10	4,894.01	-3.51	182.55	-182.59	0.00	0.00	0.00	0.00
5,000.00	3.80	91.10	4,993.79	-3.63	189.18	-189.21	0.00	0.00	0.00	0.00
5,100.00	3.80	91.10	5,093.57	-3.76	195.81	-195.84	0.00	0.00	0.00	0.00
5,200.00	3.80	91.10	5,193.35	-3.89	202.43	-202.47	0.00	0.00	0.00	0.00
5,300.00	3.80	91.10	5,293.13	-4.01	209.06	-209.10	0.00	0.00	0.00	0.00
5,400.00	3.80	91.10	5,392.91	-4.14	215.68	-215.72	0.00	0.00	0.00	0.00
5,500.00	3.80	91.10	5,492.69	-4.27	222.31	-222.35	0.00	0.00	0.00	0.00
5,600.00	3.80	91.10	5,592.47	-4.40	228.94	-228.98	0.00	0.00	0.00	0.00
5,700.00	3.80	91.10	5,692.25	-4.52	235.56	-235.61	0.00	0.00	0.00	0.00
5,800.00	3.80	91.10	5,792.03	-4.65	242.19	-242.23	0.00	0.00	0.00	0.00
5,900.00	3.80	91.10	5,891.81	-4.78	248.81	-248.86	0.00	0.00	0.00	0.00
6,000.00	3.80	91.10	5,991.59	-4.90	255.44	-255.49	0.00	0.00	0.00	0.00
6,100.00	3.80	91.10	6,091.37	-5.03	262.07	-262.12	0.00	0.00	0.00	0.00
6,200.00	3.80	91.10	6,191.15	-5.16	268.69	-268.74	0.00	0.00	0.00	0.00
6,300.00	3.80	91.10	6,290.93	-5.29	275.32	-275.37	0.00	0.00	0.00	0.00
6,400.00	3.80	91.10	6,390.71	-5.41	281.95	-282.00	0.00	0.00	0.00	0.00
6,500.00	3.80	91.10	6,490.49	-5.54	288.57	-288.63	0.00	0.00	0.00	0.00
6,584.69	3.80	91.10	6,575.00	-5.65	294.18	-294.24	0.00	0.00	0.00	0.00
Begin Drop @ 6584.69 ft										
6,600.00	3.49	91.10	6,590.28	-5.67	295.16	-295.21	2.00	-2.00	0.00	180.00
6,700.00	1.49	91.10	6,690.18	-5.75	299.51	-299.56	2.00	-2.00	0.00	180.00
6,774.69	0.00	0.00	6,764.86	-5.77	300.48	-300.54	2.00	-2.00	0.00	-180.00
End Drop @ 6774.69 ft										
6,800.00	0.00	0.00	6,790.17	-5.77	300.48	-300.54	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,890.17	-5.77	300.48	-300.54	0.00	0.00	0.00	0.00
6,992.89	0.00	0.00	6,983.06	-5.77	300.48	-300.54	0.00	0.00	0.00	0.00
Kick Off Point @ 6992.89 ft										
7,000.00	0.71	271.11	6,990.17	-5.77	300.44	-300.49	10.00	10.00	0.00	271.11
7,100.00	10.71	271.11	7,089.55	-5.58	290.50	-290.55	10.00	10.00	0.00	0.00
7,200.00	20.71	271.11	7,185.69	-5.06	263.46	-263.51	10.00	10.00	0.00	0.00
7,300.00	30.71	271.11	7,275.67	-4.22	220.14	-220.18	10.00	10.00	0.00	0.00
7,359.30	36.64	271.11	7,325.00	-3.58	187.28	-187.32	10.00	10.00	0.00	0.00
Sharon Springs										
7,400.00	40.71	271.11	7,356.77	-3.09	161.86	-161.89	10.00	10.00	0.00	0.00
7,440.00	44.71	271.11	7,386.15	-2.57	134.74	-134.76	10.00	10.00	0.00	0.00
Build Rate 10.00 °/100 ft										
7,470.13	47.72	271.11	7,407.00	-2.15	112.99	-113.01	10.00	10.00	0.00	0.00
Niobrara										
7,500.00	50.71	271.11	7,426.51	-1.71	90.38	-90.39	10.00	10.00	0.00	0.00
7,600.00	60.71	271.11	7,482.77	-0.12	7.88	-7.88	10.00	10.00	0.00	0.00
7,604.59	61.17	271.11	7,485.00	-0.04	3.87	-3.87	10.00	10.00	0.00	0.00
Niobrara B										
7,700.00	70.71	271.11	7,523.85	1.63	-83.14	83.15	10.00	10.00	0.00	0.00
7,740.99	74.81	271.11	7,536.00	2.39	-122.27	122.29	10.00	10.00	0.00	0.00
Niobrara C										
7,800.00	80.71	271.11	7,548.50	3.50	-179.90	179.94	10.00	10.00	0.00	0.00
7,888.30	89.54	271.11	7,556.00	5.20	-267.78	267.83	10.00	10.00	0.00	0.00
End Build @ 7888.30 ft										
7,900.00	89.54	271.11	7,556.09	5.42	-279.48	279.53	0.00	0.00	0.00	0.00
8,000.00	89.54	271.11	7,556.89	7.35	-379.46	379.53	0.00	0.00	0.00	0.00
8,100.00	89.54	271.11	7,557.70	9.28	-479.43	479.52	0.00	0.00	0.00	0.00
8,200.00	89.54	271.11	7,558.50	11.21	-579.41	579.52	0.00	0.00	0.00	0.00
8,300.00	89.54	271.11	7,559.30	13.14	-679.39	679.52	0.00	0.00	0.00	0.00
8,400.00	89.54	271.11	7,560.10	15.07	-779.37	779.51	0.00	0.00	0.00	0.00
8,500.00	89.54	271.11	7,560.90	17.00	-879.35	879.51	0.00	0.00	0.00	0.00
8,600.00	89.54	271.11	7,561.70	18.93	-979.33	979.51	0.00	0.00	0.00	0.00
8,700.00	89.54	271.11	7,562.50	20.86	-1,079.30	1,079.51	0.00	0.00	0.00	0.00

Plan Report for Tiberius 4-64 8-4H - Rev A0

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	Toolface Azimuth (°)
8,800.00	89.54	271.11	7,563.31	22.79	-1,179.28	1,179.50	0.00	0.00	0.00	0.00
8,900.00	89.54	271.11	7,564.11	24.72	-1,279.26	1,279.50	0.00	0.00	0.00	0.00
9,000.00	89.54	271.11	7,564.91	26.65	-1,379.24	1,379.50	0.00	0.00	0.00	0.00
9,100.00	89.54	271.11	7,565.71	28.58	-1,479.22	1,479.49	0.00	0.00	0.00	0.00
9,200.00	89.54	271.11	7,566.51	30.51	-1,579.19	1,579.49	0.00	0.00	0.00	0.00
9,300.00	89.54	271.11	7,567.31	32.44	-1,679.17	1,679.49	0.00	0.00	0.00	0.00
9,400.00	89.54	271.11	7,568.12	34.37	-1,779.15	1,779.48	0.00	0.00	0.00	0.00
9,500.00	89.54	271.11	7,568.92	36.30	-1,879.13	1,879.48	0.00	0.00	0.00	0.00
9,600.00	89.54	271.11	7,569.72	38.23	-1,979.11	1,979.48	0.00	0.00	0.00	0.00
9,700.00	89.54	271.11	7,570.52	40.16	-2,079.09	2,079.47	0.00	0.00	0.00	0.00
9,800.00	89.54	271.11	7,571.32	42.09	-2,179.06	2,179.47	0.00	0.00	0.00	0.00
9,900.00	89.54	271.11	7,572.12	44.02	-2,279.04	2,279.47	0.00	0.00	0.00	0.00
10,000.00	89.54	271.11	7,572.92	45.95	-2,379.02	2,379.46	0.00	0.00	0.00	0.00
10,100.00	89.54	271.11	7,573.73	47.88	-2,479.00	2,479.46	0.00	0.00	0.00	0.00
10,200.00	89.54	271.11	7,574.53	49.81	-2,578.98	2,579.46	0.00	0.00	0.00	0.00
10,300.00	89.54	271.11	7,575.33	51.74	-2,678.95	2,679.45	0.00	0.00	0.00	0.00
10,400.00	89.54	271.11	7,576.13	53.67	-2,778.93	2,779.45	0.00	0.00	0.00	0.00
10,500.00	89.54	271.11	7,576.93	55.60	-2,878.91	2,879.45	0.00	0.00	0.00	0.00
10,600.00	89.54	271.11	7,577.73	57.53	-2,978.89	2,979.44	0.00	0.00	0.00	0.00
10,700.00	89.54	271.11	7,578.53	59.45	-3,078.87	3,079.44	0.00	0.00	0.00	0.00
10,800.00	89.54	271.11	7,579.34	61.38	-3,178.84	3,179.44	0.00	0.00	0.00	0.00
10,900.00	89.54	271.11	7,580.14	63.31	-3,278.82	3,279.43	0.00	0.00	0.00	0.00
11,000.00	89.54	271.11	7,580.94	65.24	-3,378.80	3,379.43	0.00	0.00	0.00	0.00
11,100.00	89.54	271.11	7,581.74	67.17	-3,478.78	3,479.43	0.00	0.00	0.00	0.00
11,200.00	89.54	271.11	7,582.54	69.10	-3,578.76	3,579.42	0.00	0.00	0.00	0.00
11,300.00	89.54	271.11	7,583.34	71.03	-3,678.74	3,679.42	0.00	0.00	0.00	0.00
11,400.00	89.54	271.11	7,584.14	72.96	-3,778.71	3,779.42	0.00	0.00	0.00	0.00
11,500.00	89.54	271.11	7,584.95	74.89	-3,878.69	3,879.42	0.00	0.00	0.00	0.00
11,600.00	89.54	271.11	7,585.75	76.82	-3,978.67	3,979.41	0.00	0.00	0.00	0.00
11,700.00	89.54	271.11	7,586.55	78.75	-4,078.65	4,079.41	0.00	0.00	0.00	0.00
11,800.00	89.54	271.11	7,587.35	80.68	-4,178.63	4,179.41	0.00	0.00	0.00	0.00
11,900.00	89.54	271.11	7,588.15	82.61	-4,278.60	4,279.40	0.00	0.00	0.00	0.00
12,000.00	89.54	271.11	7,588.95	84.54	-4,378.58	4,379.40	0.00	0.00	0.00	0.00
12,100.00	89.54	271.11	7,589.76	86.47	-4,478.56	4,479.40	0.00	0.00	0.00	0.00
12,200.00	89.54	271.11	7,590.56	88.40	-4,578.54	4,579.39	0.00	0.00	0.00	0.00
12,255.33	89.54	271.11	7,591.00	89.47	-4,633.86	4,634.72	0.00	0.00	0.00	0.00
Total Depth 12255.33 ft										

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
2,050.00	2,050.00	0.00	0.00	Begin Nudge @ 2050.00 ft
2,240.00	2,239.86	-0.12	6.30	End Nudge @ 2240.00 ft
6,584.69	6,575.00	-5.65	294.18	Begin Drop @ 6584.69 ft
6,774.69	6,764.86	-5.77	300.48	End Drop @ 6774.69 ft
6,992.89	6,983.06	-5.77	300.48	Kick Off Point @ 6992.89 ft
7,440.00	7,386.15	-2.57	134.74	Build Rate 10.00 °/100 ft
7,888.30	7,556.00	5.20	-267.78	End Build @ 7888.30 ft
12,255.33	7,591.00	89.47	-4,633.86	Total Depth 12255.33 ft

Plan Report for Tiberius 4-64 8-4H - Rev A0

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/-S (usft)	Origin +E/-W (usft)	Start TVD (usft)
Target	Tiberius 4-64 8-4H_Rev A0_BHL Tgt	271.11	Slot	0.00	0.00	0.00

Survey tool program

From (usft)	To (usft)	Survey/Plan	Survey Tool
0.00	1,946.00	Rev A0	NS-GYRO-MS
1,946.00	12,255.33	Rev A0	MWD

Casing Details

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,946.00	1,946.00	9 5/8" Casing Pt.	9-5/8	13-1/2

Formation Details

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,628.00	1,628.00	Fox Hills			
1,746.00	1,746.00	Pierre Shale			
1,946.00	1,946.00	Surface casing			
7,359.30	7,325.00	Sharon Springs			
7,470.13	7,407.00	Niobrara			
7,604.59	7,485.00	Niobrara B			
7,740.99	7,536.00	Niobrara C			

Targets associated with this wellbore

Target Name	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Shape
Tiberius 4-64 8-4H_SL	0.00	0.00	0.00	Polygon
Tiberius 4-64 8-4H_SB	0.00	0.00	0.00	Polygon
Tiberius 4-64 8-4H_Rev A0_EPI	7,591.00	86.41	-4,498.90	Point
Tiberius 4-64 8-4H_Rev A0_BHL Tgt	7,591.00	89.47	-4,633.86	Point

Directional Difficulty Index

Average Dogleg over Survey:	0.79 °/100usft	Maximum Dogleg over Survey:	10.00 °/100usft at 7,888.30 usft
Net Tortousity applicable to Plans:	0.79 °/100usft	Directional Difficulty Index:	6.109

Plan Report for Tiberius 4-64 8-4H - Rev A0

Audit Info

North Reference Sheet for Sec. 8-T4S-R64W - Tiberius 4-64 8-4H - Plan A

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference .
 Vertical Depths are relative to KB 24 ft @ 5656.10usft (H&P 280). Northing and Easting are relative to Tiberius 4-64 8-4H
 Coordinate System is US State Plane 1983, Colorado Central Zone using datum North American Datum 1983, ellipsoid GRS 1980
 Projection method is Lambert Conformal Conic (2 parallel)
 Central Meridian is -105.50°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:39° 45' 0.000 N°
 False Easting: 3,000,000.00usft, False Northing: 1,000,000.00usft, Scale Reduction: 0.99999266

Grid Coordinates of Well: 1,685,487.12 usft N, 3,262,774.35 usft E
 Geographical Coordinates of Well: 39° 42' 42.32" N, 104° 33' 57.45" W
 Grid Convergence at Surface is: 0.59°

Based upon Minimum Curvature type calculations, at a Measured Depth of 12,255.33usft
 the Bottom Hole Displacement is 4,634.72usft in the Direction of 271.11° (True).
 Magnetic Convergence at surface is: -7.77° (24 September 2014, , BGGM2014)

