

Conoco Phillips Company

Arapahoe County, Colorado

Sec. 29-T4S-R64W

Tebo 29-2H

Plan A

Plan: Plan A Rev 0

Sperry Drilling Services Proposal Report

08 April, 2013

Well Coordinates: 1,672,349.02 N, 3,263,300.52 E (39° 40' 32.43" N, 104° 33' 52.45" W)

Ground Level: 5,838.00 ft

Local Coordinate Origin:

Centered on Well Tebo 29-2H

Viewing Datum:

RKB 24 ft @ 5862.00ft (H&P 280)

TVDs to System:

N

North Reference:

True

Unit System:

API - US Survey Feet - Custom

Version: 2003.16 Build: 431

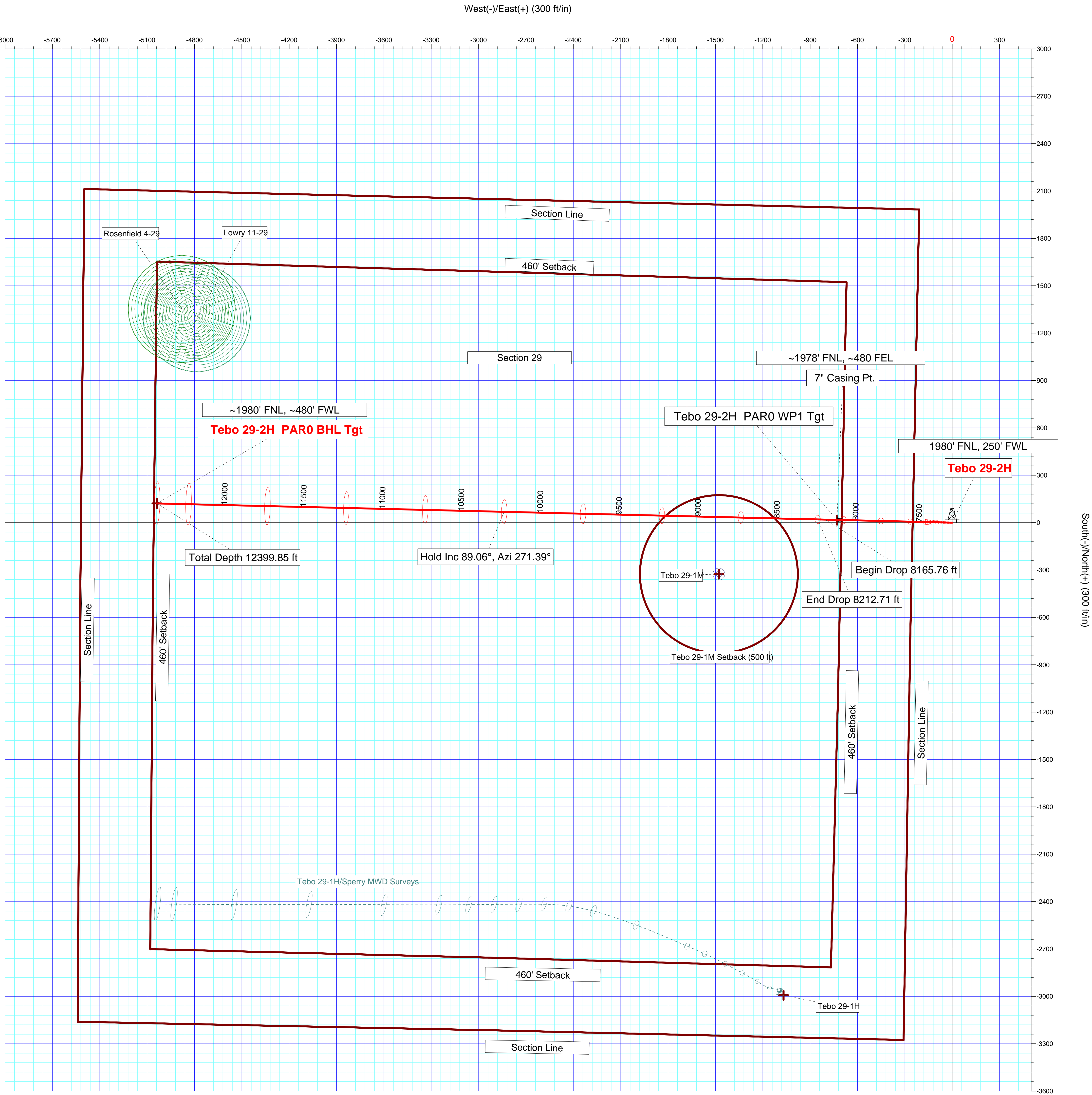
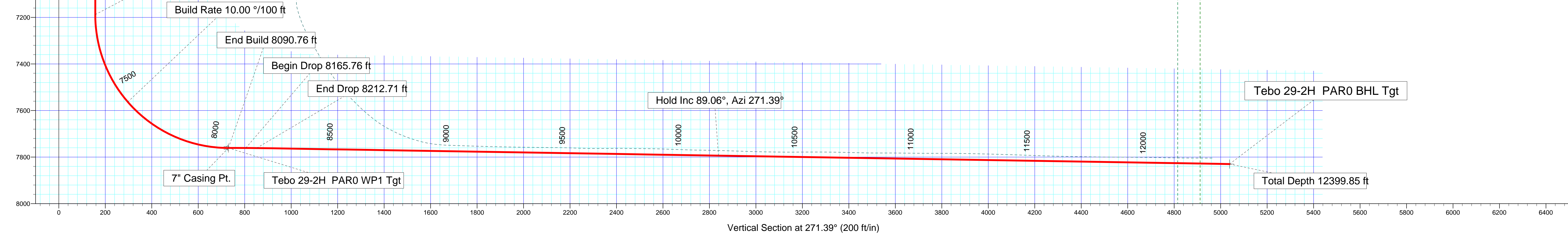
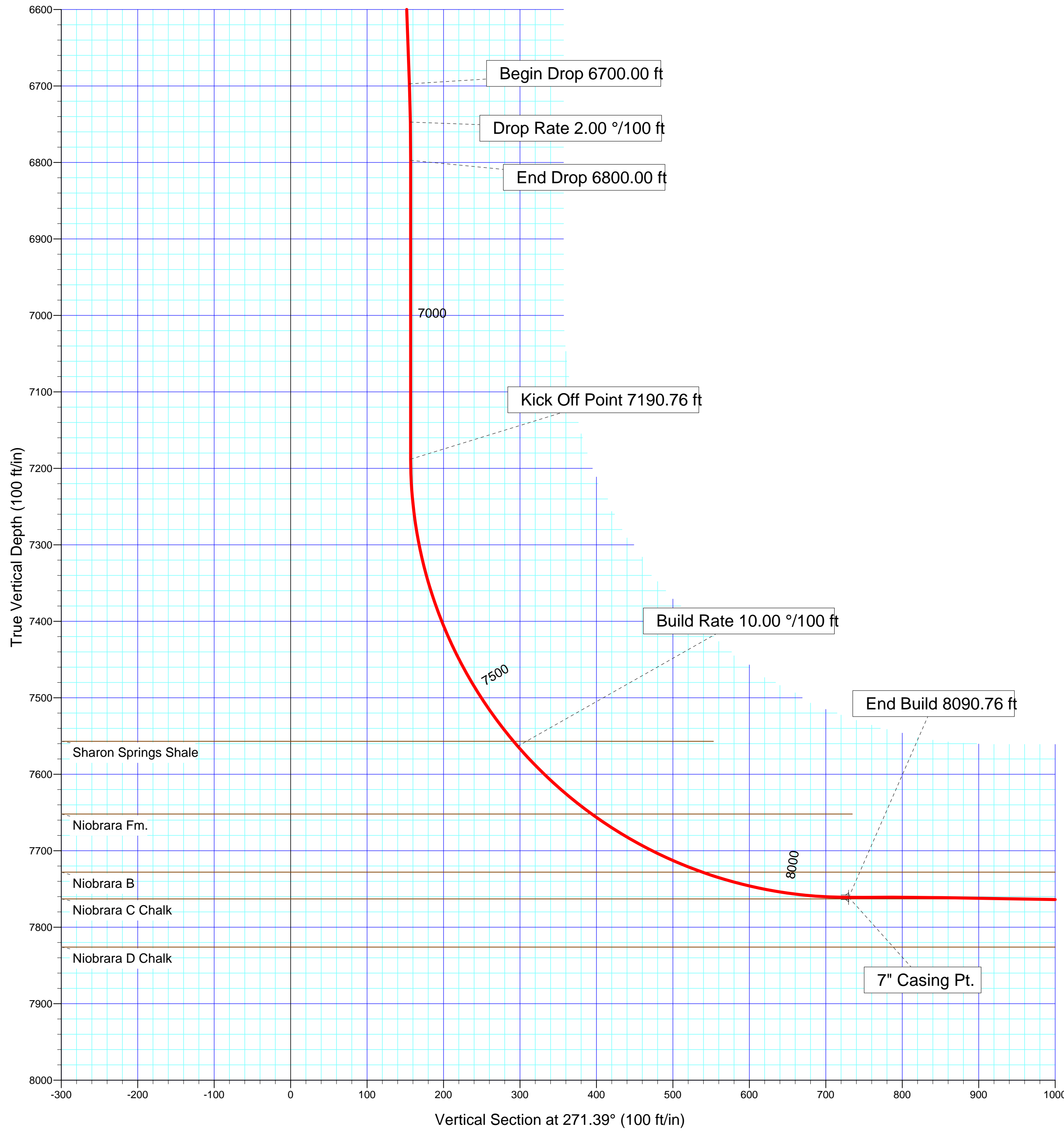
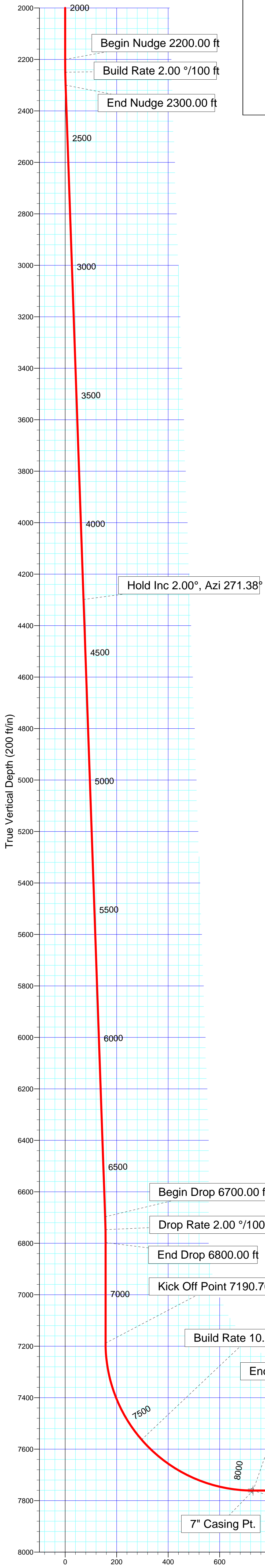
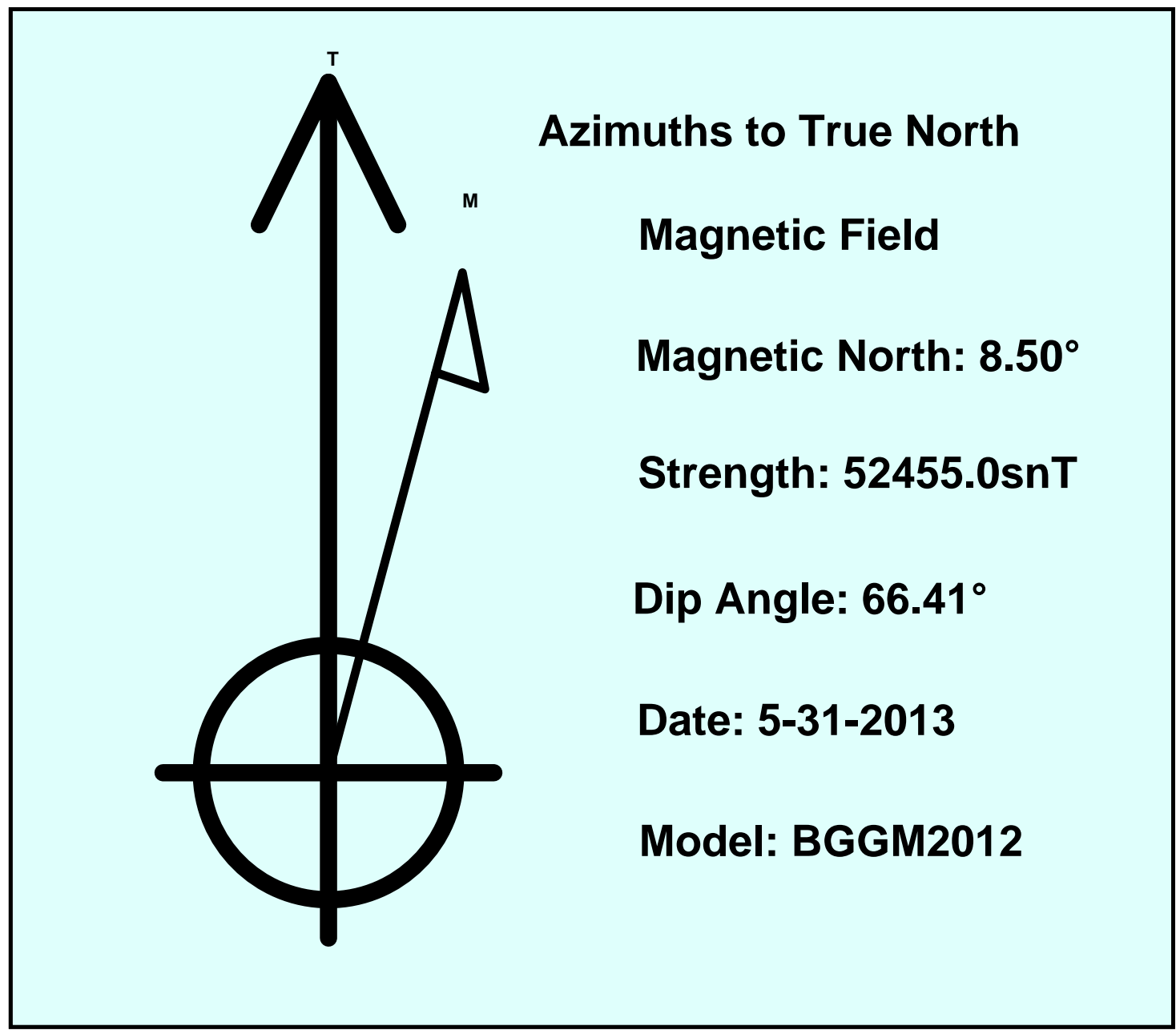
HALLIBURTON

Project: Arapahoe County, Colorado
Site: Sec. 29-T4S-R64W
Well: Tebo 29-2H
Wellbore: Plan A
Plan: Plan A Rev 0

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	2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	
3	2300.00	2.00	271.38	2299.98	0.04	-1.74	2.00	271.38	1.75	
4	6700.00	2.00	271.38	6697.30	3.75	-155.26	0.00	0.00	155.30	
5	6800.00	0.00	0.00	6797.28	3.79	-157.00	2.00	180.00	157.05	
6	7190.76	0.00	0.00	7188.04	3.79	-157.00	0.00	0.00	157.05	
7	8090.76	90.00	271.38	7761.00	17.62	-729.79	10.00	271.38	730.01	
8	8165.76	90.00	271.38	7761.00	19.43	-804.77	0.00	0.00	805.01	
9	8212.71	89.06	271.39	7761.38	20.56	-851.71	2.00	179.82	851.95	
10	12399.85	89.06	271.39	7830.00	121.80	-5037.06	0.00	0.00	5038.53	Tebo 29-2H PAR0 BHL Tgt



Lowry 11-29/Approximate Survey
Rosenfield 4-29/Approximate Surv

Plan Report for Tebo 29-2H - Plan A Rev 0

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	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
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,811.00	0.00	0.00	1,811.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fox Hills Aquifer										
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,912.00	0.00	0.00	1,912.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pierre Shale										
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,115.00	0.00	0.00	2,115.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface Casing										
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge 2200.00 ft										
2,250.00	1.00	271.38	2,250.00	0.01	-0.44	0.44	2.00	2.00	0.00	271.38
Build Rate 2.00 °/100 ft										
2,300.00	2.00	271.38	2,299.98	0.04	-1.74	1.75	2.00	2.00	0.00	0.00
End Nudge 2300.00 ft										
2,400.00	2.00	271.38	2,399.92	0.13	-5.23	5.24	0.00	0.00	0.00	0.00
2,500.00	2.00	271.38	2,499.86	0.21	-8.72	8.73	0.00	0.00	0.00	0.00
2,600.00	2.00	271.38	2,599.80	0.29	-12.21	12.22	0.00	0.00	0.00	0.00
2,700.00	2.00	271.38	2,699.74	0.38	-15.70	15.70	0.00	0.00	0.00	0.00
2,800.00	2.00	271.38	2,799.68	0.46	-19.19	19.19	0.00	0.00	0.00	0.00
2,900.00	2.00	271.38	2,899.61	0.55	-22.68	22.68	0.00	0.00	0.00	0.00
3,000.00	2.00	271.38	2,999.55	0.63	-26.17	26.17	0.00	0.00	0.00	0.00
3,100.00	2.00	271.38	3,099.49	0.72	-29.66	29.66	0.00	0.00	0.00	0.00
3,200.00	2.00	271.38	3,199.43	0.80	-33.15	33.15	0.00	0.00	0.00	0.00
3,300.00	2.00	271.38	3,299.37	0.88	-36.63	36.64	0.00	0.00	0.00	0.00
3,400.00	2.00	271.38	3,399.31	0.97	-40.12	40.13	0.00	0.00	0.00	0.00
3,500.00	2.00	271.38	3,499.25	1.05	-43.61	43.62	0.00	0.00	0.00	0.00
3,600.00	2.00	271.38	3,599.19	1.14	-47.10	47.11	0.00	0.00	0.00	0.00
3,700.00	2.00	271.38	3,699.13	1.22	-50.59	50.60	0.00	0.00	0.00	0.00
3,800.00	2.00	271.38	3,799.07	1.31	-54.08	54.09	0.00	0.00	0.00	0.00
3,900.00	2.00	271.38	3,899.01	1.39	-57.57	57.58	0.00	0.00	0.00	0.00
4,000.00	2.00	271.38	3,998.94	1.47	-61.06	61.07	0.00	0.00	0.00	0.00
4,100.00	2.00	271.38	4,098.88	1.56	-64.55	64.56	0.00	0.00	0.00	0.00
4,200.00	2.00	271.38	4,198.82	1.64	-68.03	68.05	0.00	0.00	0.00	0.00
4,300.00	2.00	271.38	4,298.76	1.73	-71.52	71.54	0.00	0.00	0.00	0.00
Hold Inc 2.00°, Azi 271.38°										
4,400.00	2.00	271.38	4,398.70	1.81	-75.01	75.03	0.00	0.00	0.00	0.00
4,500.00	2.00	271.38	4,498.64	1.89	-78.50	78.52	0.00	0.00	0.00	0.00

Plan Report for Tebo 29-2H - Plan A Rev 0

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
4,600.00	2.00	271.38	4,598.58	1.98	-81.99	82.01	0.00	0.00	0.00	0.00
4,700.00	2.00	271.38	4,698.52	2.06	-85.48	85.50	0.00	0.00	0.00	0.00
4,800.00	2.00	271.38	4,798.46	2.15	-88.97	88.99	0.00	0.00	0.00	0.00
4,900.00	2.00	271.38	4,898.40	2.23	-92.46	92.48	0.00	0.00	0.00	0.00
5,000.00	2.00	271.38	4,998.33	2.32	-95.95	95.97	0.00	0.00	0.00	0.00
5,100.00	2.00	271.38	5,098.27	2.40	-99.43	99.46	0.00	0.00	0.00	0.00
5,200.00	2.00	271.38	5,198.21	2.48	-102.92	102.95	0.00	0.00	0.00	0.00
5,300.00	2.00	271.38	5,298.15	2.57	-106.41	106.44	0.00	0.00	0.00	0.00
5,400.00	2.00	271.38	5,398.09	2.65	-109.90	109.93	0.00	0.00	0.00	0.00
5,500.00	2.00	271.38	5,498.03	2.74	-113.39	113.42	0.00	0.00	0.00	0.00
5,600.00	2.00	271.38	5,597.97	2.82	-116.88	116.91	0.00	0.00	0.00	0.00
5,700.00	2.00	271.38	5,697.91	2.91	-120.37	120.40	0.00	0.00	0.00	0.00
5,800.00	2.00	271.38	5,797.85	2.99	-123.86	123.89	0.00	0.00	0.00	0.00
5,900.00	2.00	271.38	5,897.79	3.07	-127.35	127.38	0.00	0.00	0.00	0.00
6,000.00	2.00	271.38	5,997.73	3.16	-130.84	130.87	0.00	0.00	0.00	0.00
6,100.00	2.00	271.38	6,097.66	3.24	-134.32	134.36	0.00	0.00	0.00	0.00
6,200.00	2.00	271.38	6,197.60	3.33	-137.81	137.85	0.00	0.00	0.00	0.00
6,300.00	2.00	271.38	6,297.54	3.41	-141.30	141.34	0.00	0.00	0.00	0.00
6,400.00	2.00	271.38	6,397.48	3.49	-144.79	144.83	0.00	0.00	0.00	0.00
6,500.00	2.00	271.38	6,497.42	3.58	-148.28	148.32	0.00	0.00	0.00	0.00
6,600.00	2.00	271.38	6,597.36	3.66	-151.77	151.81	0.00	0.00	0.00	0.00
6,700.00	2.00	271.38	6,697.30	3.75	-155.26	155.30	0.00	0.00	0.00	0.00
Begin Drop 6700.00 ft										
6,750.00	1.00	271.38	6,747.28	3.78	-156.57	156.61	2.00	-2.00	0.00	-180.00
Drop Rate 2.00 °/100 ft										
6,800.00	0.00	0.00	6,797.28	3.79	-157.00	157.05	2.00	-2.00	0.00	180.00
End Drop 6800.00 ft										
6,900.00	0.00	0.00	6,897.28	3.79	-157.00	157.05	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	6,997.28	3.79	-157.00	157.05	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,097.28	3.79	-157.00	157.05	0.00	0.00	0.00	0.00
7,190.76	0.00	0.00	7,188.04	3.79	-157.00	157.05	0.00	0.00	0.00	0.00
Kick Off Point 7190.76 ft										
7,200.00	0.92	271.38	7,197.28	3.79	-157.08	157.12	10.00	10.00	0.00	271.38
7,300.00	10.92	271.38	7,296.62	4.04	-167.38	167.43	10.00	10.00	0.00	0.00
7,400.00	20.92	271.38	7,392.66	4.70	-194.77	194.83	10.00	10.00	0.00	0.00
7,500.00	30.92	271.38	7,482.48	5.76	-238.42	238.49	10.00	10.00	0.00	0.00
7,591.64	40.09	271.38	7,557.00	7.04	-291.57	291.66	10.00	10.00	0.00	0.00
Sharon Springs Shale										
7,600.00	40.92	271.38	7,563.36	7.17	-297.00	297.09	10.00	10.00	0.00	0.00
Build Rate 10.00 °/100 ft										
7,700.00	50.92	271.38	7,632.83	8.90	-368.73	368.84	10.00	10.00	0.00	0.00
7,731.49	54.07	271.38	7,652.00	9.50	-393.70	393.82	10.00	10.00	0.00	0.00
Niobrara Fm.										
7,800.00	60.92	271.38	7,688.79	10.90	-451.43	451.57	10.00	10.00	0.00	0.00
7,895.36	70.46	271.38	7,728.00	12.99	-538.21	538.37	10.00	10.00	0.00	0.00
Niobrara B										
7,900.00	70.92	271.38	7,729.53	13.10	-542.59	542.75	10.00	10.00	0.00	0.00
8,000.00	80.92	271.38	7,753.82	15.43	-639.44	639.62	10.00	10.00	0.00	0.00
8,090.76	90.00	271.38	7,761.00	17.62	-729.79	730.00	10.00	10.00	0.00	0.00
End Build 8090.76 ft - 7" Casing Pt.										
8,100.00	90.00	271.38	7,761.00	17.84	-739.03	739.24	0.00	0.00	0.00	0.00
8,165.76	90.00	271.38	7,761.00	19.43	-804.77	805.01	0.00	0.00	0.00	0.00
Begin Drop 8165.76 ft										
8,200.00	89.32	271.38	7,761.20	20.25	-839.00	839.24	2.00	-2.00	0.01	179.82
8,212.71	89.06	271.39	7,761.38	20.56	-851.71	851.95	2.00	-2.00	0.01	179.82
End Drop 8212.71 ft										
8,300.00	89.06	271.39	7,762.81	22.67	-938.96	939.23	0.00	0.00	0.00	0.00
8,311.41	89.06	271.39	7,763.00	22.95	-950.37	950.64	0.00	0.00	0.00	0.00

Plan Report for Tebo 29-2H - Plan A Rev 0

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
Niobrara C Chalk										
8,400.00	89.06	271.39	7,764.45	25.09	-1,038.91	1,039.22	0.00	0.00	0.00	0.00
8,500.00	89.06	271.39	7,766.09	27.51	-1,138.87	1,139.20	0.00	0.00	0.00	0.00
8,600.00	89.06	271.39	7,767.73	29.92	-1,238.83	1,239.19	0.00	0.00	0.00	0.00
8,700.00	89.06	271.39	7,769.37	32.34	-1,338.79	1,339.18	0.00	0.00	0.00	0.00
8,800.00	89.06	271.39	7,771.01	34.76	-1,438.74	1,439.16	0.00	0.00	0.00	0.00
8,900.00	89.06	271.39	7,772.65	37.18	-1,538.70	1,539.15	0.00	0.00	0.00	0.00
9,000.00	89.06	271.39	7,774.28	39.60	-1,638.66	1,639.14	0.00	0.00	0.00	0.00
9,100.00	89.06	271.39	7,775.92	42.01	-1,738.62	1,739.12	0.00	0.00	0.00	0.00
9,200.00	89.06	271.39	7,777.56	44.43	-1,838.57	1,839.11	0.00	0.00	0.00	0.00
9,300.00	89.06	271.39	7,779.20	46.85	-1,938.53	1,939.10	0.00	0.00	0.00	0.00
9,400.00	89.06	271.39	7,780.84	49.27	-2,038.49	2,039.08	0.00	0.00	0.00	0.00
9,500.00	89.06	271.39	7,782.48	51.69	-2,138.45	2,139.07	0.00	0.00	0.00	0.00
9,600.00	89.06	271.39	7,784.12	54.10	-2,238.40	2,239.06	0.00	0.00	0.00	0.00
9,700.00	89.06	271.39	7,785.76	56.52	-2,338.36	2,339.04	0.00	0.00	0.00	0.00
9,800.00	89.06	271.39	7,787.39	58.94	-2,438.32	2,439.03	0.00	0.00	0.00	0.00
9,900.00	89.06	271.39	7,789.03	61.36	-2,538.27	2,539.02	0.00	0.00	0.00	0.00
10,000.00	89.06	271.39	7,790.67	63.78	-2,638.23	2,639.00	0.00	0.00	0.00	0.00
10,100.00	89.06	271.39	7,792.31	66.19	-2,738.19	2,738.99	0.00	0.00	0.00	0.00
10,200.00	89.06	271.39	7,793.95	68.61	-2,838.15	2,838.98	0.00	0.00	0.00	0.00
Hold Inc 89.06°, Azi 271.39°										
10,300.00	89.06	271.39	7,795.59	71.03	-2,938.10	2,938.96	0.00	0.00	0.00	0.00
10,400.00	89.06	271.39	7,797.23	73.45	-3,038.06	3,038.95	0.00	0.00	0.00	0.00
10,500.00	89.06	271.39	7,798.87	75.87	-3,138.02	3,138.94	0.00	0.00	0.00	0.00
10,600.00	89.06	271.39	7,800.50	78.28	-3,237.98	3,238.92	0.00	0.00	0.00	0.00
10,700.00	89.06	271.39	7,802.14	80.70	-3,337.93	3,338.91	0.00	0.00	0.00	0.00
10,800.00	89.06	271.39	7,803.78	83.12	-3,437.89	3,438.90	0.00	0.00	0.00	0.00
10,900.00	89.06	271.39	7,805.42	85.54	-3,537.85	3,538.88	0.00	0.00	0.00	0.00
11,000.00	89.06	271.39	7,807.06	87.96	-3,637.81	3,638.87	0.00	0.00	0.00	0.00
11,100.00	89.06	271.39	7,808.70	90.37	-3,737.76	3,738.86	0.00	0.00	0.00	0.00
11,200.00	89.06	271.39	7,810.34	92.79	-3,837.72	3,838.84	0.00	0.00	0.00	0.00
11,300.00	89.06	271.39	7,811.98	95.21	-3,937.68	3,938.83	0.00	0.00	0.00	0.00
11,400.00	89.06	271.39	7,813.61	97.63	-4,037.63	4,038.81	0.00	0.00	0.00	0.00
11,500.00	89.06	271.39	7,815.25	100.05	-4,137.59	4,138.80	0.00	0.00	0.00	0.00
11,600.00	89.06	271.39	7,816.89	102.46	-4,237.55	4,238.79	0.00	0.00	0.00	0.00
11,700.00	89.06	271.39	7,818.53	104.88	-4,337.51	4,338.77	0.00	0.00	0.00	0.00
11,800.00	89.06	271.39	7,820.17	107.30	-4,437.46	4,438.76	0.00	0.00	0.00	0.00
11,900.00	89.06	271.39	7,821.81	109.72	-4,537.42	4,538.75	0.00	0.00	0.00	0.00
12,000.00	89.06	271.39	7,823.45	112.14	-4,637.38	4,638.73	0.00	0.00	0.00	0.00
12,100.00	89.06	271.39	7,825.09	114.55	-4,737.34	4,738.72	0.00	0.00	0.00	0.00
12,155.77	89.06	271.39	7,826.00	115.90	-4,793.08	4,794.48	0.00	0.00	0.00	0.00
Niobrara D Chalk										
12,200.00	89.06	271.39	7,826.72	116.97	-4,837.29	4,838.71	0.00	0.00	0.00	0.00
12,300.00	89.06	271.39	7,828.36	119.39	-4,937.25	4,938.69	0.00	0.00	0.00	0.00
12,399.85	89.06	271.39	7,830.00	121.80	-5,037.06	5,038.53	0.00	0.00	0.00	0.00
Total Depth 12399.85 ft - Tebo 29-2H PAR0 BHL Tgt										

Plan Report for Tebo 29-2H - Plan A Rev 0

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,200.00	2,200.00	0.00	0.00	Begin Nudge 2200.00 ft
2,250.00	2,250.00	0.01	-0.44	Build Rate 2.00 °/100 ft
2,300.00	2,299.98	0.04	-1.74	End Nudge 2300.00 ft
4,300.00	4,298.76	1.73	-71.52	Hold Inc 2.00°, Azi 271.38°
6,700.00	6,697.30	3.75	-155.26	Begin Drop 6700.00 ft
6,750.00	6,747.28	3.78	-156.57	Drop Rate 2.00 °/100 ft
6,800.00	6,797.28	3.79	-157.00	End Drop 6800.00 ft
7,190.76	7,188.04	3.79	-157.00	Kick Off Point 7190.76 ft
7,600.00	7,563.36	7.17	-297.00	Build Rate 10.00 °/100 ft
8,090.76	7,761.00	17.62	-729.79	End Build 8090.76 ft
8,165.76	7,761.00	19.43	-804.77	Begin Drop 8165.76 ft
8,212.71	7,761.38	20.56	-851.71	End Drop 8212.71 ft
10,200.00	7,793.95	68.61	-2,838.15	Hold Inc 89.06°, Azi 271.39°
12,399.85	7,830.00	121.80	-5,037.06	Total Depth 12399.85 ft

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (ft)
				+N/-S (ft)	+E/-W (ft)	
Target	Tebo 29-2H PAR0 BHL Tgt	271.39	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
0.00	12,399.85	Plan A Rev 0	MWD

Casing Details

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
8,090.76	7,761.00	7" Casing Pt.	7	8-3/4

Formation Details

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,811.00	1,811.00	Fox Hills Aquifer			
1,912.00	1,912.00	Pierre Shale			
2,115.00	2,115.00	Surface Casing			
7,591.64	7,557.00	Sharon Springs Shale			
7,731.49	7,652.00	Niobrara Fm.			
7,895.36	7,728.00	Niobrara B			
8,311.41	7,763.00	Niobrara C Chalk			
12,155.77	7,826.00	Niobrara D Chalk			

Plan Report for Tebo 29-2H - Plan A Rev 0

Targets associated with this wellbore

Target Name	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Shape
Tebo 29-1H SB	0.00	-2,993.09	-1,068.34	Polygon
Tebo 29-2H PAR0 BHL Tgt	7,830.00	121.80	-5,037.06	Point
Tebo 29-2H PAR0 WP1 Tgt	7,761.00	16.05	-729.60	Point
Tebo 29-1H SL	0.00	-2,993.09	-1,068.34	Polygon

North Reference Sheet for Sec. 29-T4S-R64W - Tebo 29-2H - 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 RKB 24 ft @ 5862.00ft (H&P 280). Northing and Easting are relative to Tebo 29-2H
 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:0.000000°, Latitude Origin:39.750000°
 False Easting: 3,000,000.00ft, False Northing: 1,000,000.00ft, Scale Reduction: 0.99998614

Grid Coordinates of Well: 1,672,349.02 ft N, 3,263,300.52 ft E
 Geographical Coordinates of Well: 39° 40' 32.43" N, 104° 33' 52.45" W
 Grid Convergence at Surface is: 0.59°

Based upon Minimum Curvature type calculations, at a Measured Depth of 12,399.85ft
 the Bottom Hole Displacement is 5,038.53ft in the Direction of 271.39° (True).

Magnetic Convergence at surface is: -7.91° (31 May 2013, , BGGM2012)

