

Conoco Phillips Company

Arapahoe County, Colorado

Sec. 2-T4S-R65W (Prosper Farms 4-65 2-1 Pad)

PROSPER FARMS #4-65 2-1 4AH (MagVar Cube Required)

Plan A

Plan: Rev A0

Sperry Drilling Services

Proposal Report

30 July, 2015

Well Coordinates: 1,691,511.20 N, 3,242,232.69 E (39° 43' 43.86" N, 104° 38' 19.56" W)

Ground Level: 5,632.40 usft

Local Coordinate Origin:

Centered on Well PROSPER FARMS #4-65 2-1 4AH (MagVar Cube Required)

Viewing Datum:

RKB = 24' @ 5656.40usft (H&P 280)

TVDs to System:

N

North Reference:

True

Unit System:

API - US Survey Feet - Custom

Geodetic Scale Factor Applied

Version: 5000.1 Build: 73

HALLIBURTON

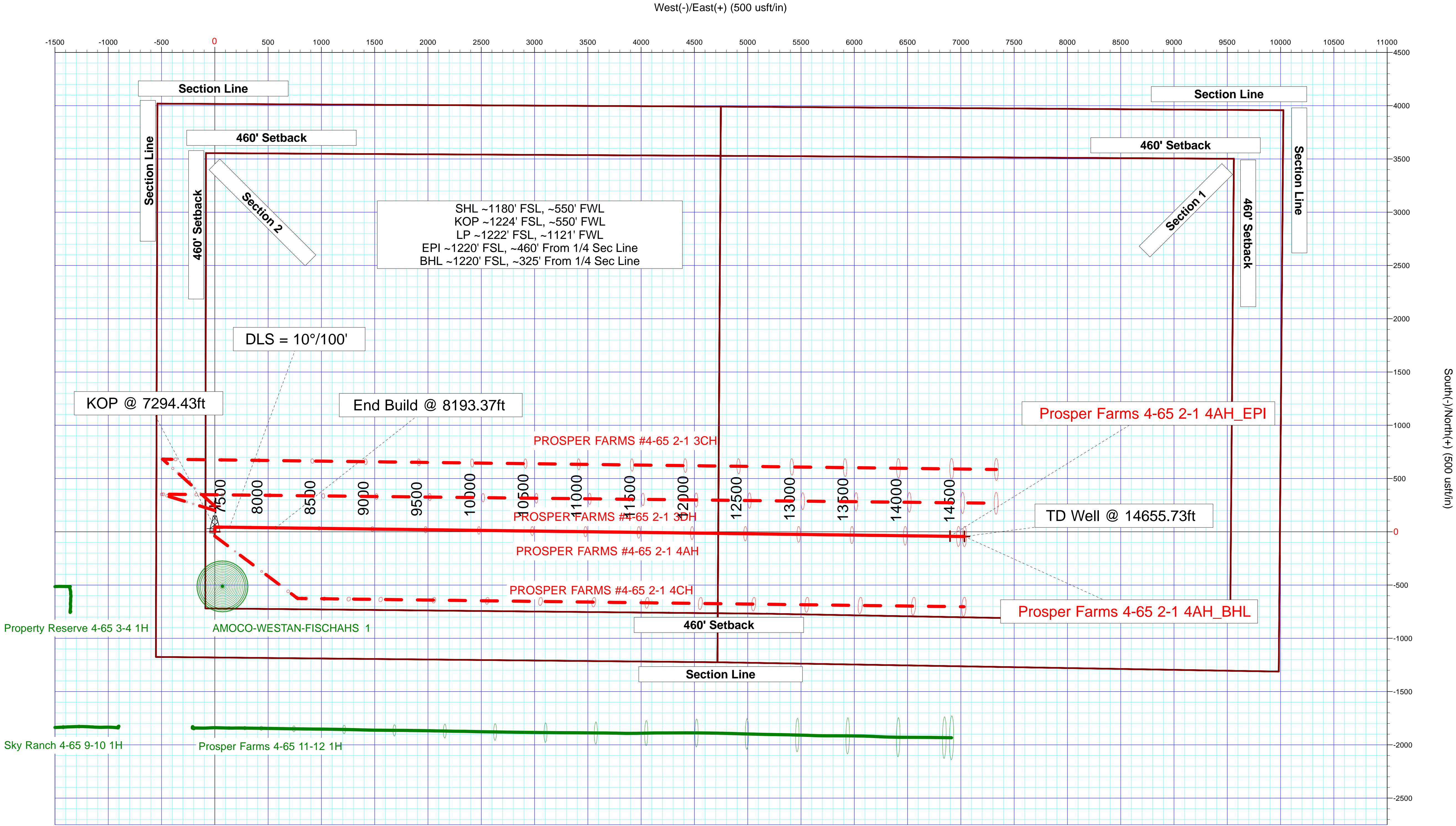
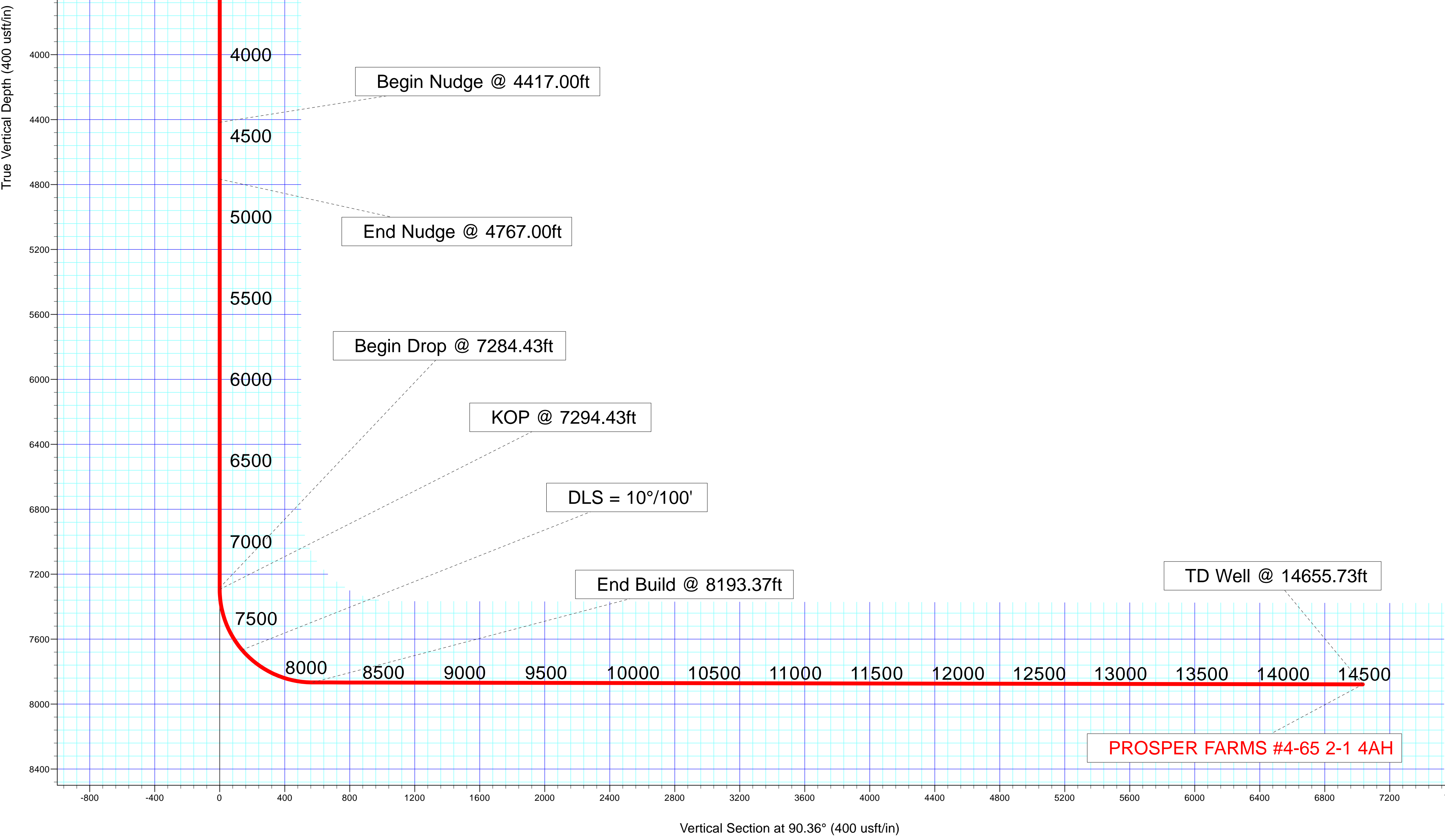
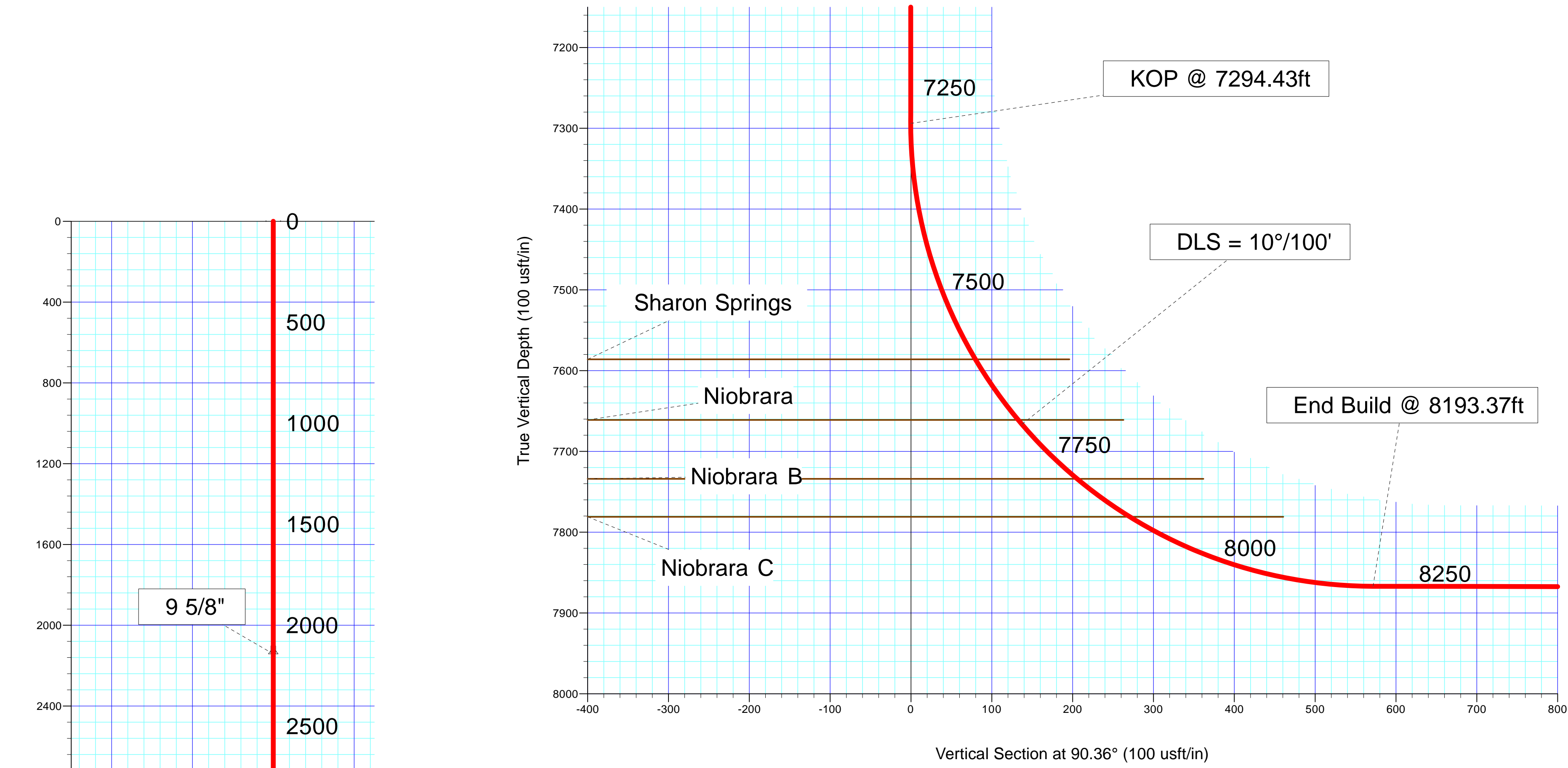
“Charge for permit plan will be credited back to Conoco Phillips if well is drilled using Sperry Drilling as the directional provider.”

Project: Arapahoe County, Colorado
Site: Sec. 2-T4S-R65W (Prosper Farms 4-65 2-1 Pad)
Well: PROSPER FARMS #4-65 2-1 4AH (MagVar Cube Required)
Wellbore: Plan A
Plan: Rev A0

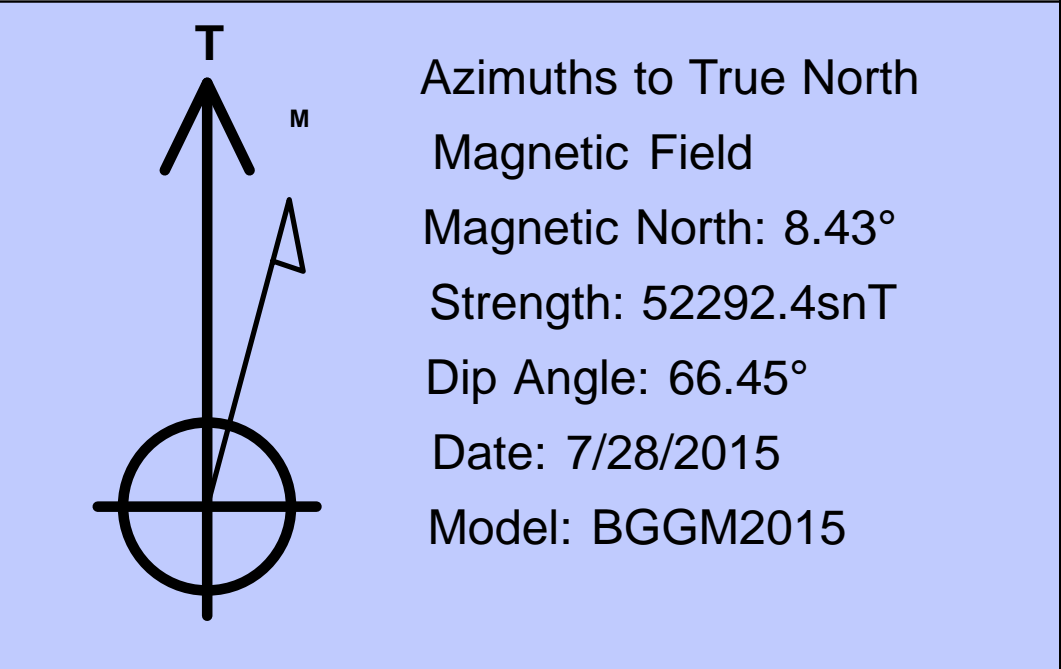
Conoco Phillips Company

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	4717.00	0.00	0.00	4717.00	0.00	0.00	0.00	0.00	0.00	
3	4767.00	1.00	0.00	4767.00	0.44	0.00	2.00	0.00	0.00	
4	7284.43	1.00	0.00	7284.04	44.37	0.00	0.00	0.00	-0.28	
5	7294.43	0.00	0.00	7294.04	44.46	0.00	10.00	180.00	-0.28	
6	8193.37	89.89	90.72	7867.00	37.29	571.85	10.00	90.72	571.61	
7	14655.73	89.89	90.72	7879.00	-43.66	7033.69	0.00	0.00	7033.83	Prosper Farms 4-65 2-1 4AH_BHL



Plan: Rev A0 (PROSPER FARMS #4-65 2-1 4AH (MagVar Cube Required)/Plan A)	
Created By: Kansa B. Becker	Date: 16:22, July 30 2015
Checked: _____	Date: _____
Reviewed: _____	Date: _____
Approved: _____	Date: _____



Plan Report for PROSPER FARMS #4-65 2-1 4AH (MagVar Cube Required) - 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
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,712.00	0.00	0.00	1,712.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fox Hills										
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
1,942.00	0.00	0.00	1,942.00	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
2,142.00	0.00	0.00	2,142.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"										
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,417.00	0.00	0.00	4,417.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 4417.00ft										
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,717.00	0.00	0.00	4,717.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,767.00	1.00	0.00	4,767.00	0.44	0.00	0.00	2.00	2.00	0.00	0.00

Plan Report for PROSPER FARMS #4-65 2-1 4AH (MagVar Cube Required) - 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 (°)
End Nudge @ 4767.00ft										
4,800.00	1.00	0.00	4,799.99	1.01	0.00	-0.01	0.00	0.00	0.00	0.00
4,900.00	1.00	0.00	4,899.98	2.76	0.00	-0.02	0.00	0.00	0.00	0.00
5,000.00	1.00	0.00	4,999.96	4.50	0.00	-0.03	0.00	0.00	0.00	0.00
5,100.00	1.00	0.00	5,099.95	6.25	0.00	-0.04	0.00	0.00	0.00	0.00
5,200.00	1.00	0.00	5,199.93	7.99	0.00	-0.05	0.00	0.00	0.00	0.00
5,300.00	1.00	0.00	5,299.92	9.74	0.00	-0.06	0.00	0.00	0.00	0.00
5,400.00	1.00	0.00	5,399.90	11.48	0.00	-0.07	0.00	0.00	0.00	0.00
5,500.00	1.00	0.00	5,499.89	13.23	0.00	-0.08	0.00	0.00	0.00	0.00
5,600.00	1.00	0.00	5,599.87	14.97	0.00	-0.09	0.00	0.00	0.00	0.00
5,700.00	1.00	0.00	5,699.86	16.72	0.00	-0.10	0.00	0.00	0.00	0.00
5,800.00	1.00	0.00	5,799.84	18.46	0.00	-0.11	0.00	0.00	0.00	0.00
5,900.00	1.00	0.00	5,899.82	20.21	0.00	-0.13	0.00	0.00	0.00	0.00
6,000.00	1.00	0.00	5,999.81	21.96	0.00	-0.14	0.00	0.00	0.00	0.00
6,100.00	1.00	0.00	6,099.79	23.70	0.00	-0.15	0.00	0.00	0.00	0.00
6,200.00	1.00	0.00	6,199.78	25.45	0.00	-0.16	0.00	0.00	0.00	0.00
6,300.00	1.00	0.00	6,299.76	27.19	0.00	-0.17	0.00	0.00	0.00	0.00
6,400.00	1.00	0.00	6,399.75	28.94	0.00	-0.18	0.00	0.00	0.00	0.00
6,500.00	1.00	0.00	6,499.73	30.68	0.00	-0.19	0.00	0.00	0.00	0.00
6,600.00	1.00	0.00	6,599.72	32.43	0.00	-0.20	0.00	0.00	0.00	0.00
6,700.00	1.00	0.00	6,699.70	34.17	0.00	-0.21	0.00	0.00	0.00	0.00
6,800.00	1.00	0.00	6,799.69	35.92	0.00	-0.22	0.00	0.00	0.00	0.00
6,900.00	1.00	0.00	6,899.67	37.66	0.00	-0.23	0.00	0.00	0.00	0.00
7,000.00	1.00	0.00	6,999.66	39.41	0.00	-0.24	0.00	0.00	0.00	0.00
7,100.00	1.00	0.00	7,099.64	41.15	0.00	-0.26	0.00	0.00	0.00	0.00
7,200.00	1.00	0.00	7,199.63	42.90	0.00	-0.27	0.00	0.00	0.00	0.00
7,284.43	1.00	0.00	7,284.04	44.37	0.00	-0.28	0.00	0.00	0.00	0.00
Begin Drop @ 7284.43ft										
7,294.43	0.00	0.00	7,294.04	44.46	0.00	-0.28	10.00	-10.00	0.00	180.00
KOP @ 7294.43ft										
7,300.00	0.56	90.72	7,299.61	44.46	0.03	-0.25	10.00	10.00	0.00	90.72
7,400.00	10.56	90.72	7,399.02	44.34	9.70	9.42	10.00	10.00	0.00	0.00
7,500.00	20.56	90.72	7,495.23	44.00	36.48	36.21	10.00	10.00	0.00	0.00
7,600.00	30.56	90.72	7,585.33	43.46	79.56	79.29	10.00	10.00	0.00	0.00
7,600.78	30.63	90.72	7,586.00	43.46	79.96	79.69	10.00	10.00	0.00	0.00
Sharon Springs										
7,692.69	39.83	90.72	7,661.00	42.79	132.92	132.65	10.00	10.00	0.00	0.00
Niobrara										
7,700.00	40.56	90.72	7,666.58	42.73	137.64	137.37	10.00	10.00	0.00	0.00
DLS = 10°/100'										
7,796.06	50.16	90.72	7,734.00	41.88	205.90	205.64	10.00	10.00	0.00	0.00
Niobrara B										
7,800.00	50.56	90.72	7,736.51	41.84	208.94	208.67	10.00	10.00	0.00	0.00
7,876.44	58.20	90.72	7,781.00	41.06	271.02	270.76	10.00	10.00	0.00	0.00
Niobrara C										
7,900.00	60.56	90.72	7,793.00	40.81	291.29	291.03	10.00	10.00	0.00	0.00
8,000.00	70.56	90.72	7,834.33	39.67	382.21	381.95	10.00	10.00	0.00	0.00
8,100.00	80.56	90.72	7,859.24	38.46	478.92	478.67	10.00	10.00	0.00	0.00
8,193.37	89.89	90.72	7,867.00	37.29	571.85	571.61	10.00	10.00	0.00	0.00
End Build @ 8193.37ft										
8,200.00	89.89	90.72	7,867.01	37.21	578.48	578.24	0.00	0.00	0.00	0.00
8,300.00	89.89	90.72	7,867.20	35.96	678.47	678.24	0.00	0.00	0.00	0.00
8,400.00	89.89	90.72	7,867.38	34.71	778.47	778.24	0.00	0.00	0.00	0.00
8,500.00	89.89	90.72	7,867.57	33.45	878.46	878.23	0.00	0.00	0.00	0.00
8,600.00	89.89	90.72	7,867.76	32.20	978.45	978.23	0.00	0.00	0.00	0.00
8,700.00	89.89	90.72	7,867.94	30.95	1,078.44	1,078.23	0.00	0.00	0.00	0.00
8,800.00	89.89	90.72	7,868.13	29.69	1,178.43	1,178.23	0.00	0.00	0.00	0.00
8,900.00	89.89	90.72	7,868.31	28.44	1,278.43	1,278.23	0.00	0.00	0.00	0.00

Plan Report for PROSPER FARMS #4-65 2-1 4AH (MagVar Cube Required) - 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 (°)
9,000.00	89.89	90.72	7,868.50	27.19	1,378.42	1,378.22	0.00	0.00	0.00	0.00
9,100.00	89.89	90.72	7,868.68	25.94	1,478.41	1,478.22	0.00	0.00	0.00	0.00
9,200.00	89.89	90.72	7,868.87	24.68	1,578.40	1,578.22	0.00	0.00	0.00	0.00
9,300.00	89.89	90.72	7,869.06	23.43	1,678.39	1,678.22	0.00	0.00	0.00	0.00
9,400.00	89.89	90.72	7,869.24	22.18	1,778.39	1,778.21	0.00	0.00	0.00	0.00
9,500.00	89.89	90.72	7,869.43	20.93	1,878.38	1,878.21	0.00	0.00	0.00	0.00
9,600.00	89.89	90.72	7,869.61	19.67	1,978.37	1,978.21	0.00	0.00	0.00	0.00
9,700.00	89.89	90.72	7,869.80	18.42	2,078.36	2,078.21	0.00	0.00	0.00	0.00
9,800.00	89.89	90.72	7,869.98	17.17	2,178.35	2,178.21	0.00	0.00	0.00	0.00
9,900.00	89.89	90.72	7,870.17	15.91	2,278.35	2,278.20	0.00	0.00	0.00	0.00
10,000.00	89.89	90.72	7,870.35	14.66	2,378.34	2,378.20	0.00	0.00	0.00	0.00
10,100.00	89.89	90.72	7,870.54	13.41	2,478.33	2,478.20	0.00	0.00	0.00	0.00
10,200.00	89.89	90.72	7,870.73	12.16	2,578.32	2,578.20	0.00	0.00	0.00	0.00
10,300.00	89.89	90.72	7,870.91	10.90	2,678.31	2,678.19	0.00	0.00	0.00	0.00
10,400.00	89.89	90.72	7,871.10	9.65	2,778.31	2,778.19	0.00	0.00	0.00	0.00
10,500.00	89.89	90.72	7,871.28	8.40	2,878.30	2,878.19	0.00	0.00	0.00	0.00
10,600.00	89.89	90.72	7,871.47	7.15	2,978.29	2,978.19	0.00	0.00	0.00	0.00
10,700.00	89.89	90.72	7,871.65	5.89	3,078.28	3,078.19	0.00	0.00	0.00	0.00
10,800.00	89.89	90.72	7,871.84	4.64	3,178.27	3,178.18	0.00	0.00	0.00	0.00
10,900.00	89.89	90.72	7,872.03	3.39	3,278.27	3,278.18	0.00	0.00	0.00	0.00
11,000.00	89.89	90.72	7,872.21	2.13	3,378.26	3,378.18	0.00	0.00	0.00	0.00
11,100.00	89.89	90.72	7,872.40	0.88	3,478.25	3,478.18	0.00	0.00	0.00	0.00
11,200.00	89.89	90.72	7,872.58	-0.37	3,578.24	3,578.18	0.00	0.00	0.00	0.00
11,300.00	89.89	90.72	7,872.77	-1.62	3,678.23	3,678.17	0.00	0.00	0.00	0.00
11,400.00	89.89	90.72	7,872.95	-2.88	3,778.23	3,778.17	0.00	0.00	0.00	0.00
11,500.00	89.89	90.72	7,873.14	-4.13	3,878.22	3,878.17	0.00	0.00	0.00	0.00
11,600.00	89.89	90.72	7,873.33	-5.38	3,978.21	3,978.17	0.00	0.00	0.00	0.00
11,700.00	89.89	90.72	7,873.51	-6.63	4,078.20	4,078.16	0.00	0.00	0.00	0.00
11,800.00	89.89	90.72	7,873.70	-7.89	4,178.19	4,178.16	0.00	0.00	0.00	0.00
11,900.00	89.89	90.72	7,873.88	-9.14	4,278.19	4,278.16	0.00	0.00	0.00	0.00
12,000.00	89.89	90.72	7,874.07	-10.39	4,378.18	4,378.16	0.00	0.00	0.00	0.00
12,100.00	89.89	90.72	7,874.25	-11.65	4,478.17	4,478.16	0.00	0.00	0.00	0.00
12,200.00	89.89	90.72	7,874.44	-12.90	4,578.16	4,578.15	0.00	0.00	0.00	0.00
12,300.00	89.89	90.72	7,874.63	-14.15	4,678.15	4,678.15	0.00	0.00	0.00	0.00
12,400.00	89.89	90.72	7,874.81	-15.40	4,778.15	4,778.15	0.00	0.00	0.00	0.00
12,500.00	89.89	90.72	7,875.00	-16.66	4,878.14	4,878.15	0.00	0.00	0.00	0.00
12,600.00	89.89	90.72	7,875.18	-17.91	4,978.13	4,978.14	0.00	0.00	0.00	0.00
12,700.00	89.89	90.72	7,875.37	-19.16	5,078.12	5,078.14	0.00	0.00	0.00	0.00
12,800.00	89.89	90.72	7,875.55	-20.41	5,178.11	5,178.14	0.00	0.00	0.00	0.00
12,900.00	89.89	90.72	7,875.74	-21.67	5,278.11	5,278.14	0.00	0.00	0.00	0.00
13,000.00	89.89	90.72	7,875.93	-22.92	5,378.10	5,378.14	0.00	0.00	0.00	0.00
13,100.00	89.89	90.72	7,876.11	-24.17	5,478.09	5,478.13	0.00	0.00	0.00	0.00
13,200.00	89.89	90.72	7,876.30	-25.43	5,578.08	5,578.13	0.00	0.00	0.00	0.00
13,300.00	89.89	90.72	7,876.48	-26.68	5,678.07	5,678.13	0.00	0.00	0.00	0.00
13,400.00	89.89	90.72	7,876.67	-27.93	5,778.07	5,778.13	0.00	0.00	0.00	0.00
13,500.00	89.89	90.72	7,876.85	-29.18	5,878.06	5,878.13	0.00	0.00	0.00	0.00
13,600.00	89.89	90.72	7,877.04	-30.44	5,978.05	5,978.12	0.00	0.00	0.00	0.00
13,700.00	89.89	90.72	7,877.23	-31.69	6,078.04	6,078.12	0.00	0.00	0.00	0.00
13,800.00	89.89	90.72	7,877.41	-32.94	6,178.03	6,178.12	0.00	0.00	0.00	0.00
13,900.00	89.89	90.72	7,877.60	-34.20	6,278.03	6,278.12	0.00	0.00	0.00	0.00
14,000.00	89.89	90.72	7,877.78	-35.45	6,378.02	6,378.11	0.00	0.00	0.00	0.00
14,100.00	89.89	90.72	7,877.97	-36.70	6,478.01	6,478.11	0.00	0.00	0.00	0.00
14,200.00	89.89	90.72	7,878.15	-37.95	6,578.00	6,578.11	0.00	0.00	0.00	0.00
14,300.00	89.89	90.72	7,878.34	-39.21	6,677.99	6,678.11	0.00	0.00	0.00	0.00
14,400.00	89.89	90.72	7,878.53	-40.46	6,777.99	6,778.11	0.00	0.00	0.00	0.00
14,500.00	89.89	90.72	7,878.71	-41.71	6,877.98	6,878.10	0.00	0.00	0.00	0.00
14,600.00	89.89	90.72	7,878.90	-42.96	6,977.97	6,978.10	0.00	0.00	0.00	0.00
14,655.73	89.89	90.72	7,879.00	-43.66	7,033.69	7,033.83	0.00	0.00	0.00	0.00

TD Well @ 14655.73ft

Plan Report for PROSPER FARMS #4-65 2-1 4AH (MagVar Cube Required) - Rev A0

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
4,417.00	4,417.00	0.00	0.00	Begin Nudge @ 4417.00ft
4,767.00	4,767.00	0.44	0.00	End Nudge @ 4767.00ft
7,284.43	7,284.04	44.37	0.00	Begin Drop @ 7284.43ft
7,294.43	7,294.04	44.46	0.00	KOP @ 7294.43ft
7,700.00	7,666.58	42.73	137.64	DLS = 10°/100'
8,193.37	7,867.00	37.29	571.85	End Build @ 8193.37ft
14,655.73	7,879.00	-43.66	7,033.69	TD Well @ 14655.73ft

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (usft)
				+N/_S (usft)	+E/-W (usft)	
Target	Prosper Farms 4-65 2-1 4AH_BHL	90.36	Slot	0.00	0.00	0.00

Survey tool program

From (usft)	To (usft)	Survey/Plan	Survey Tool
0.00	2,142.00	Rev A0	MWD+IFR1+MS_WY
2,142.00	14,655.73	Rev A0	MWD+IFR1+MS_WY

Casing Details

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
2,142.00	2,142.00	9 5/8"	9-5/8	13-1/2

Formation Details

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,712.00	1,712.00	Fox Hills			
1,942.00	1,942.00	Pierre Shale			
7,600.78	7,586.00	Sharon Springs			
7,692.69	7,661.00	Niobrara			
7,796.06	7,734.00	Niobrara B			
7,876.44	7,781.00	Niobrara C			

Plan Report for PROSPER FARMS #4-65 2-1 4AH (MagVar Cube Required) - Rev A0

Targets associated with this wellbore

Target Name	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Shape
Prosper Farms 4-65 2-1 4AH_SHL	0.00	0.00	0.00	Point
Section 2-T4S-R65W Section Lines	0.00	239.91	0.72	Polygon
Prosper Farms 4-65 2-1 (Pad)_SB	0.00	239.90	0.72	Polygon
Section 1-T4S-R65W Section Lines	0.00	239.91	0.72	Polygon
Prosper Farms 4-65 2-1 4AH_EPI	7,879.00	-41.40	6,898.75	Point
Prosper Farms 4-65 2-1 4AH_BHL	7,879.00	-43.66	7,033.69	Point

Directional Difficulty Index

Average Dogleg over Survey:	0.63 °/100usft	Maximum Dogleg over Survey:	10.00 °/100usft at 8,193.37 usft
Net Tortousity applicable to Plans:	0.63 °/100usft	Directional Difficulty Index:	6.325

Audit Info

**North Reference Sheet for Sec. 2-T4S-R65W (Prosper Farms 4-65 2-1 Pad) -
PROSPER FARMS #4-65 2-1 4AH (MagVar Cube Required) - 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' @ 5656.40usft (H&P 280). Northing and Easting are relative to PROSPER FARMS #4-65 2-1 4AH (MagVar Cube Required)

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: 0.99999588

Grid Coordinates of Well: 1,691,511.20 usft N, 3,242,232.69 usft E

Geographical Coordinates of Well: 39° 43' 43.86" N, 104° 38' 19.56" W

Grid Convergence at Surface is: 0.54°

Based upon Minimum Curvature type calculations, at a Measured Depth of 14,655.73usft the Bottom Hole Displacement is 7,033.83usft in the Direction of 90.36° (True).

Magnetic Convergence at surface is: -7.89° (28 July 2015, , BGGM2015)

