

Anadarko Petroleum Corp.

Weld County, CO (NAD 83)

Sec. 28-T1N-R67W

D&C FARMS 35C-33HZ

Plan A Rev 0

Plan: Plan A Rev 0 Permit

Sperry Drilling Services

Proposal Report

13 June, 2013

Well Coordinates: 1,249,556.41 N, 3,168,818.17 E (40° 01' 00.64" N, 104° 53' 50.12" W)

Ground Level: 5,011.00 ft

Local Coordinate Origin: Centered on Well D&C FARMS 35C-33HZ

Viewing Datum: RKB = 17' @ 5028.00ft (Drilling Rig)

TVDs to System: N

North Reference: True

Unit System: API - US Survey Feet - Custom

Geodetic Scale Factor Applied

Version: 2003.16 Build: 43I

HALLIBURTON

Project: Weld County, CO (NAD 83)
 Site: Sec. 28-T1N-R67W
 Well: D&C FARMS 35C-33HZ
 Wellbore: Plan A Rev 0
 Design: Plan A Rev 0 Permit



HALLIBURTON
 Sperry Drilling

SECTION DETAILS

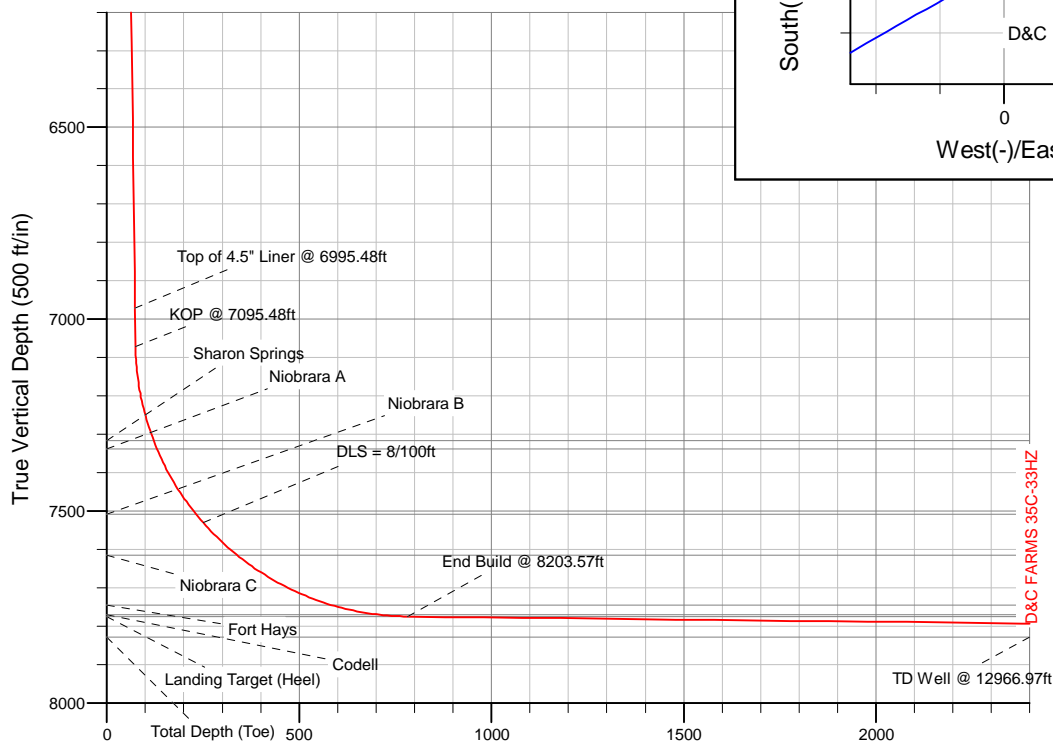
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	
3	1262.38	5.25	261.93	1262.01	-1.69	-11.89	2.00	261.93	1.64	
4	7095.48	5.25	261.93	7070.66	-76.58	-540.10	0.00	0.00	74.69	
5	8203.57	89.36	179.80	7775.00	-785.00	-601.00	8.00	-82.22	782.90	D&C FARMS 35C-33HZ_CP
6	12966.97	89.36	179.80	7828.00	-5548.08	-584.41	0.00	0.00	5546.00	D&C FARMS 35C-33HZ_BHL

WELLBORE TARGET DETAILS (LAT/LONG)

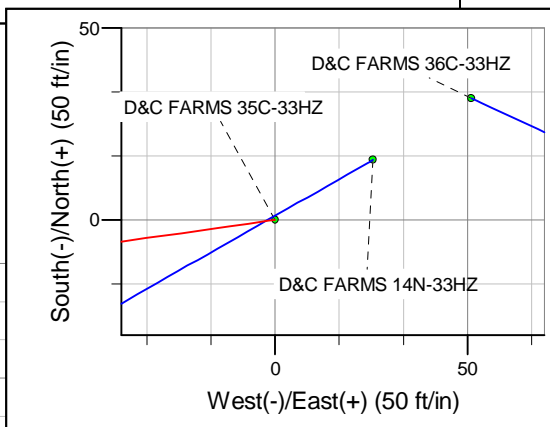
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
D&C FARMS 35C-33HZ_SHL	0.00	0.00	0.00	40.016844	-104.897255	Point
D&C FARMS_SEC	3.00	-233.50	-615.37	40.016203	-104.899452	Polygon
D&C FARMS 35C-33HZ_CP	7775.00	-785.00	-601.00	40.014689	-104.899401	Point
D&C FARMS 35C-33HZ_BHL	7828.00	-5548.08	-584.41	40.001614	-104.899341	Point

TVD MD

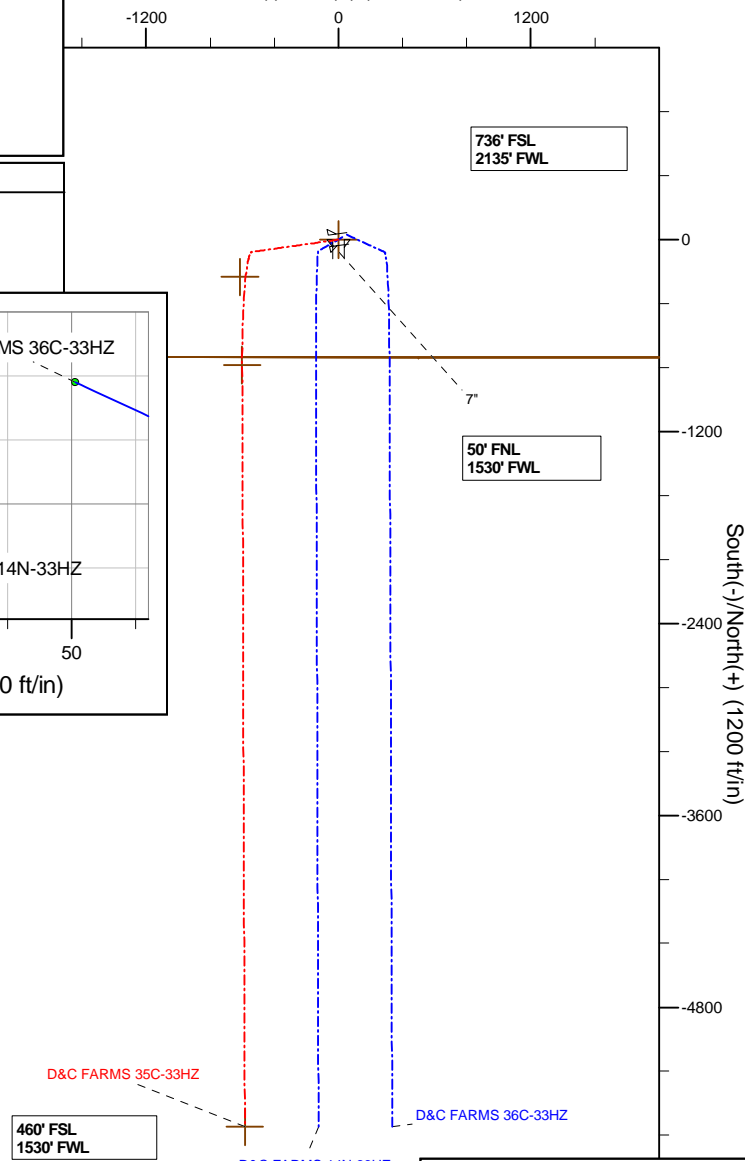
6971.08 6995.48 Top of 4.5" Liner @ 6995.48ft
 7070.67 7095.48 KOP @ 7095.48ft



Vertical Section at 179.80° (500 ft/in)



West(-)/East(+) (1200 ft/in)



WELL DETAILS: D&C FARMS 35C-33HZ

Ground Level: 5011.00
 RKB = 17' @ 5028.00ft (Drilling Rig)

Plan: Plan A Rev 0 Permit (D&C FARMS 35C-33HZ/Plan A Rev 0)

Created By: Fred Hartmann Date: 06/05/2013

Plan Report for D&C FARMS 35C-33HZ - Plan A Rev 0 Permit

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
798.00	0.00	0.00	798.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"										
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
Begin Nudge @ 1000.00ft										
1,100.00	2.00	261.93	1,099.98	-0.24	-1.73	0.24	2.00	2.00	0.00	261.93
1,200.00	4.00	261.93	1,199.84	-0.98	-6.91	0.96	2.00	2.00	0.00	0.00
1,262.38	5.25	261.93	1,262.01	-1.69	-11.89	1.64	2.00	2.00	0.00	0.00
End Nudge @ 1262.38ft										
1,300.00	5.25	261.93	1,299.48	-2.17	-15.29	2.12	0.00	0.00	0.00	0.00
1,400.00	5.25	261.93	1,399.06	-3.45	-24.35	3.37	0.00	0.00	0.00	0.00
1,500.00	5.25	261.93	1,498.64	-4.74	-33.41	4.62	0.00	0.00	0.00	0.00
1,600.00	5.25	261.93	1,598.22	-6.02	-42.46	5.87	0.00	0.00	0.00	0.00
1,700.00	5.25	261.93	1,697.80	-7.30	-51.52	7.12	0.00	0.00	0.00	0.00
1,777.53	5.25	261.93	1,775.00	-8.30	-58.54	8.10	0.00	0.00	0.00	0.00
7"										
1,800.00	5.25	261.93	1,797.38	-8.59	-60.57	8.38	0.00	0.00	0.00	0.00
1,900.00	5.25	261.93	1,896.96	-9.87	-69.63	9.63	0.00	0.00	0.00	0.00
2,000.00	5.25	261.93	1,996.54	-11.16	-78.68	10.88	0.00	0.00	0.00	0.00
2,100.00	5.25	261.93	2,096.12	-12.44	-87.74	12.13	0.00	0.00	0.00	0.00
2,200.00	5.25	261.93	2,195.70	-13.72	-96.79	13.39	0.00	0.00	0.00	0.00
2,300.00	5.25	261.93	2,295.28	-15.01	-105.85	14.64	0.00	0.00	0.00	0.00
2,400.00	5.25	261.93	2,394.87	-16.29	-114.90	15.89	0.00	0.00	0.00	0.00
2,500.00	5.25	261.93	2,494.45	-17.58	-123.96	17.14	0.00	0.00	0.00	0.00
2,600.00	5.25	261.93	2,594.03	-18.86	-133.01	18.40	0.00	0.00	0.00	0.00
2,700.00	5.25	261.93	2,693.61	-20.14	-142.07	19.65	0.00	0.00	0.00	0.00
2,800.00	5.25	261.93	2,793.19	-21.43	-151.13	20.90	0.00	0.00	0.00	0.00
2,900.00	5.25	261.93	2,892.77	-22.71	-160.18	22.15	0.00	0.00	0.00	0.00
3,000.00	5.25	261.93	2,992.35	-24.00	-169.24	23.40	0.00	0.00	0.00	0.00
3,100.00	5.25	261.93	3,091.93	-25.28	-178.29	24.66	0.00	0.00	0.00	0.00
3,200.00	5.25	261.93	3,191.51	-26.56	-187.35	25.91	0.00	0.00	0.00	0.00
3,300.00	5.25	261.93	3,291.09	-27.85	-196.40	27.16	0.00	0.00	0.00	0.00
3,400.00	5.25	261.93	3,390.67	-29.13	-205.46	28.41	0.00	0.00	0.00	0.00
3,500.00	5.25	261.93	3,490.26	-30.42	-214.51	29.67	0.00	0.00	0.00	0.00
3,600.00	5.25	261.93	3,589.84	-31.70	-223.57	30.92	0.00	0.00	0.00	0.00
3,700.00	5.25	261.93	3,689.42	-32.98	-232.62	32.17	0.00	0.00	0.00	0.00
3,800.00	5.25	261.93	3,789.00	-34.27	-241.68	33.42	0.00	0.00	0.00	0.00
3,900.00	5.25	261.93	3,888.58	-35.55	-250.73	34.68	0.00	0.00	0.00	0.00
4,000.00	5.25	261.93	3,988.16	-36.83	-259.79	35.93	0.00	0.00	0.00	0.00
4,100.00	5.25	261.93	4,087.74	-38.12	-268.84	37.18	0.00	0.00	0.00	0.00
4,200.00	5.25	261.93	4,187.32	-39.40	-277.90	38.43	0.00	0.00	0.00	0.00
4,300.00	5.25	261.93	4,286.90	-40.69	-286.96	39.68	0.00	0.00	0.00	0.00
4,400.00	5.25	261.93	4,386.48	-41.97	-296.01	40.94	0.00	0.00	0.00	0.00
4,500.00	5.25	261.93	4,486.06	-43.25	-305.07	42.19	0.00	0.00	0.00	0.00
4,600.00	5.25	261.93	4,585.64	-44.54	-314.12	43.44	0.00	0.00	0.00	0.00
4,700.00	5.25	261.93	4,685.23	-45.82	-323.18	44.69	0.00	0.00	0.00	0.00
4,800.00	5.25	261.93	4,784.81	-47.11	-332.23	45.95	0.00	0.00	0.00	0.00
4,856.43	5.25	261.93	4,841.00	-47.83	-337.34	46.65	0.00	0.00	0.00	0.00
Sussex										

Plan Report for D&C FARMS 35C-33HZ - Plan A Rev 0 Permit

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 (°)
4,900.00	5.25	261.93	4,884.39	-48.39	-341.29	47.20	0.00	0.00	0.00	0.00
5,000.00	5.25	261.93	4,983.97	-49.67	-350.34	48.45	0.00	0.00	0.00	0.00
5,100.00	5.25	261.93	5,083.55	-50.96	-359.40	49.70	0.00	0.00	0.00	0.00
5,200.00	5.25	261.93	5,183.13	-52.24	-368.45	50.96	0.00	0.00	0.00	0.00
5,300.00	5.25	261.93	5,282.71	-53.53	-377.51	52.21	0.00	0.00	0.00	0.00
5,347.49	5.25	261.93	5,330.00	-54.14	-381.81	52.80	0.00	0.00	0.00	0.00
Shannon										
5,400.00	5.25	261.93	5,382.29	-54.81	-386.56	53.46	0.00	0.00	0.00	0.00
5,500.00	5.25	261.93	5,481.87	-56.09	-395.62	54.71	0.00	0.00	0.00	0.00
5,600.00	5.25	261.93	5,581.45	-57.38	-404.67	55.96	0.00	0.00	0.00	0.00
5,700.00	5.25	261.93	5,681.03	-58.66	-413.73	57.22	0.00	0.00	0.00	0.00
5,800.00	5.25	261.93	5,780.62	-59.95	-422.79	58.47	0.00	0.00	0.00	0.00
5,900.00	5.25	261.93	5,880.20	-61.23	-431.84	59.72	0.00	0.00	0.00	0.00
6,000.00	5.25	261.93	5,979.78	-62.51	-440.90	60.97	0.00	0.00	0.00	0.00
6,100.00	5.25	261.93	6,079.36	-63.80	-449.95	62.23	0.00	0.00	0.00	0.00
6,200.00	5.25	261.93	6,178.94	-65.08	-459.01	63.48	0.00	0.00	0.00	0.00
6,300.00	5.25	261.93	6,278.52	-66.37	-468.06	64.73	0.00	0.00	0.00	0.00
6,400.00	5.25	261.93	6,378.10	-67.65	-477.12	65.98	0.00	0.00	0.00	0.00
6,500.00	5.25	261.93	6,477.68	-68.93	-486.17	67.24	0.00	0.00	0.00	0.00
6,600.00	5.25	261.93	6,577.26	-70.22	-495.23	68.49	0.00	0.00	0.00	0.00
6,700.00	5.25	261.93	6,676.84	-71.50	-504.28	69.74	0.00	0.00	0.00	0.00
6,800.00	5.25	261.93	6,776.42	-72.79	-513.34	70.99	0.00	0.00	0.00	0.00
6,900.00	5.25	261.93	6,876.01	-74.07	-522.39	72.25	0.00	0.00	0.00	0.00
6,995.48	5.25	261.93	6,971.08	-75.29	-531.04	73.44	0.00	0.00	0.00	0.00
Top of 4.5" Liner @ 6995.48ft										
7,000.00	5.25	261.93	6,975.59	-75.35	-531.45	73.50	0.00	0.00	0.00	0.00
7,095.48	5.25	261.93	7,070.67	-76.58	-540.10	74.69	0.00	0.00	0.00	0.00
KOP @ 7095.48ft										
7,100.00	5.31	258.05	7,075.17	-76.65	-540.51	74.76	8.01	1.35	-85.83	-82.22
7,200.00	10.45	209.31	7,174.28	-85.53	-549.48	83.61	8.00	5.14	-48.74	-78.36
7,300.00	17.83	196.18	7,271.21	-108.17	-558.20	106.22	8.00	7.38	-13.13	-29.98
7,347.57	21.49	193.11	7,316.00	-123.65	-562.21	121.69	8.00	7.70	-6.46	-17.22
Sharon Springs										
7,371.36	23.34	191.92	7,338.00	-132.51	-564.17	130.54	8.00	7.77	-4.99	-14.32
Niobrara A										
7,400.00	25.57	190.70	7,364.06	-144.14	-566.49	142.16	8.00	7.81	-4.24	-13.22
7,500.00	33.43	187.66	7,451.03	-192.73	-574.18	190.72	8.00	7.86	-3.04	-12.12
7,570.64	39.02	186.19	7,508.00	-234.16	-579.18	232.14	8.00	7.90	-2.09	-9.47
Niobrara B										
7,600.00	41.34	185.68	7,530.43	-253.00	-581.14	250.97	8.00	7.92	-1.74	-8.28
7,700.00	49.28	184.23	7,600.70	-323.77	-587.21	321.72	8.00	7.93	-1.44	-7.88
7,720.74	50.93	183.98	7,614.00	-339.64	-588.35	337.58	8.00	7.94	-1.23	-6.87
Niobrara C										
7,800.00	57.23	183.10	7,660.48	-403.67	-592.29	401.60	8.00	7.95	-1.11	-6.70
7,900.00	65.18	182.15	7,708.61	-491.14	-596.28	489.06	8.00	7.96	-0.95	-6.19
8,000.00	73.15	181.32	7,744.15	-584.48	-599.09	582.39	8.00	7.96	-0.83	-5.73
8,002.96	73.38	181.30	7,745.00	-587.31	-599.16	585.22	8.00	7.96	-0.79	-5.43
Fort Hays										
8,100.00	81.11	180.56	7,766.41	-681.88	-600.68	679.78	8.00	7.97	-0.76	-5.43
8,126.34	83.21	180.36	7,770.00	-707.97	-600.89	705.87	8.00	7.97	-0.74	-5.26
Codell										
8,200.00	89.08	179.83	7,774.95	-781.43	-601.01	779.33	8.00	7.97	-0.73	-5.24
8,203.57	89.36	179.80	7,775.00	-785.00	-601.00	782.90	8.00	7.97	-0.73	-5.20
End Build @ 8203.57ft - Landing Target (Heel) - D&C FARMS 35C-33HZ_CP										
8,300.00	89.36	179.80	7,776.07	-881.42	-600.66	879.32	0.00	0.00	0.00	0.00
8,400.00	89.36	179.80	7,777.19	-981.42	-600.32	979.32	0.00	0.00	0.00	0.00
8,500.00	89.36	179.80	7,778.30	-1,081.41	-599.97	1,079.31	0.00	0.00	0.00	0.00
8,600.00	89.36	179.80	7,779.41	-1,181.40	-599.62	1,179.30	0.00	0.00	0.00	0.00

Plan Report for D&C FARMS 35C-33HZ - Plan A Rev 0 Permit

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 (°)
8,700.00	89.36	179.80	7,780.52	-1,281.40	-599.27	1,279.30	0.00	0.00	0.00	0.00
8,800.00	89.36	179.80	7,781.64	-1,381.39	-598.92	1,379.29	0.00	0.00	0.00	0.00
8,900.00	89.36	179.80	7,782.75	-1,481.38	-598.57	1,479.28	0.00	0.00	0.00	0.00
9,000.00	89.36	179.80	7,783.86	-1,581.38	-598.23	1,579.28	0.00	0.00	0.00	0.00
9,100.00	89.36	179.80	7,784.97	-1,681.37	-597.88	1,679.27	0.00	0.00	0.00	0.00
9,200.00	89.36	179.80	7,786.09	-1,781.36	-597.53	1,779.27	0.00	0.00	0.00	0.00
9,300.00	89.36	179.80	7,787.20	-1,881.36	-597.18	1,879.26	0.00	0.00	0.00	0.00
9,400.00	89.36	179.80	7,788.31	-1,981.35	-596.83	1,979.25	0.00	0.00	0.00	0.00
9,500.00	89.36	179.80	7,789.42	-2,081.34	-596.48	2,079.25	0.00	0.00	0.00	0.00
9,600.00	89.36	179.80	7,790.54	-2,181.34	-596.14	2,179.24	0.00	0.00	0.00	0.00
9,700.00	89.36	179.80	7,791.65	-2,281.33	-595.79	2,279.24	0.00	0.00	0.00	0.00
9,800.00	89.36	179.80	7,792.76	-2,381.32	-595.44	2,379.23	0.00	0.00	0.00	0.00
9,900.00	89.36	179.80	7,793.88	-2,481.32	-595.09	2,479.22	0.00	0.00	0.00	0.00
10,000.00	89.36	179.80	7,794.99	-2,581.31	-594.74	2,579.22	0.00	0.00	0.00	0.00
10,100.00	89.36	179.80	7,796.10	-2,681.30	-594.39	2,679.21	0.00	0.00	0.00	0.00
10,200.00	89.36	179.80	7,797.21	-2,781.29	-594.05	2,779.20	0.00	0.00	0.00	0.00
10,300.00	89.36	179.80	7,798.33	-2,881.29	-593.70	2,879.20	0.00	0.00	0.00	0.00
10,400.00	89.36	179.80	7,799.44	-2,981.28	-593.35	2,979.19	0.00	0.00	0.00	0.00
10,500.00	89.36	179.80	7,800.55	-3,081.27	-593.00	3,079.19	0.00	0.00	0.00	0.00
10,600.00	89.36	179.80	7,801.66	-3,181.27	-592.65	3,179.18	0.00	0.00	0.00	0.00
10,700.00	89.36	179.80	7,802.78	-3,281.26	-592.30	3,279.17	0.00	0.00	0.00	0.00
10,800.00	89.36	179.80	7,803.89	-3,381.25	-591.96	3,379.17	0.00	0.00	0.00	0.00
10,900.00	89.36	179.80	7,805.00	-3,481.25	-591.61	3,479.16	0.00	0.00	0.00	0.00
11,000.00	89.36	179.80	7,806.11	-3,581.24	-591.26	3,579.15	0.00	0.00	0.00	0.00
11,100.00	89.36	179.80	7,807.23	-3,681.23	-590.91	3,679.15	0.00	0.00	0.00	0.00
11,200.00	89.36	179.80	7,808.34	-3,781.23	-590.56	3,779.14	0.00	0.00	0.00	0.00
11,300.00	89.36	179.80	7,809.45	-3,881.22	-590.21	3,879.14	0.00	0.00	0.00	0.00
11,400.00	89.36	179.80	7,810.57	-3,981.21	-589.87	3,979.13	0.00	0.00	0.00	0.00
11,500.00	89.36	179.80	7,811.68	-4,081.21	-589.52	4,079.12	0.00	0.00	0.00	0.00
11,600.00	89.36	179.80	7,812.79	-4,181.20	-589.17	4,179.12	0.00	0.00	0.00	0.00
11,700.00	89.36	179.80	7,813.90	-4,281.19	-588.82	4,279.11	0.00	0.00	0.00	0.00
11,800.00	89.36	179.80	7,815.02	-4,381.19	-588.47	4,379.11	0.00	0.00	0.00	0.00
11,900.00	89.36	179.80	7,816.13	-4,481.18	-588.12	4,479.10	0.00	0.00	0.00	0.00
12,000.00	89.36	179.80	7,817.24	-4,581.17	-587.78	4,579.09	0.00	0.00	0.00	0.00
12,100.00	89.36	179.80	7,818.35	-4,681.17	-587.43	4,679.09	0.00	0.00	0.00	0.00
12,200.00	89.36	179.80	7,819.47	-4,781.16	-587.08	4,779.08	0.00	0.00	0.00	0.00
12,300.00	89.36	179.80	7,820.58	-4,881.15	-586.73	4,879.07	0.00	0.00	0.00	0.00
12,400.00	89.36	179.80	7,821.69	-4,981.15	-586.38	4,979.07	0.00	0.00	0.00	0.00
12,500.00	89.36	179.80	7,822.80	-5,081.14	-586.03	5,079.06	0.00	0.00	0.00	0.00
12,600.00	89.36	179.80	7,823.92	-5,181.13	-585.69	5,179.06	0.00	0.00	0.00	0.00
12,700.00	89.36	179.80	7,825.03	-5,281.13	-585.34	5,279.05	0.00	0.00	0.00	0.00
12,800.00	89.36	179.80	7,826.14	-5,381.12	-584.99	5,379.04	0.00	0.00	0.00	0.00
12,900.00	89.36	179.80	7,827.25	-5,481.11	-584.64	5,479.04	0.00	0.00	0.00	0.00
12,966.97	89.36	179.80	7,828.00	-5,548.08	-584.41	5,546.00	0.00	0.00	0.00	0.00

TD Well @ 12966.97ft - D&C FARMS 35C-33HZ_BHL

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,000.00	1,000.00	0.00	0.00	Begin Nudge @ 1000.00ft
1,262.38	1,262.01	-1.69	-11.89	End Nudge @ 1262.38ft
6,995.48	6,971.08	-75.29	-531.04	Top of 4.5" Liner @ 6995.48ft
7,095.48	7,070.67	-76.58	-540.10	KOP @ 7095.48ft
8,203.57	7,775.00	-785.00	-601.00	End Build @ 8203.57ft
12,966.97	7,828.00	-5,548.08	-584.41	TD Well @ 12966.97ft

Plan Report for D&C FARMS 35C-33HZ - Plan A Rev 0 Permit

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/-S (ft)	Origin +E/-W (ft)	Start TVD (ft)
User	No Target (Freehand)	179.80	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
0.00	12,966.97	Plan A Rev 0 Permit	MWD

Casing Details

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
798.00	798.00	9 5/8"	9-5/8	13-1/2
1,777.53	1,775.00	7"	7	8-3/4

Formation Details

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,856.43	4,841.00	Sussex		0.00	
5,347.49	5,330.00	Shannon		0.00	
7,347.57	7,316.00	Sharon Springs		0.00	
7,371.36	7,338.00	Niobrara A		0.00	
7,570.64	7,508.00	Niobrara B		0.00	
7,720.74	7,614.00	Niobrara C		0.00	
8,002.96	7,745.00	Fort Hays		0.00	
8,126.34	7,770.00	Codell		0.00	
8,203.57	7,775.00	Landing Target (Heel)		0.00	
12,966.97	7,828.00	Total Depth (Toe)		0.00	

Targets associated with this wellbore

Target Name	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Shape
D&C FARMS_SEC	0.00	31.70	50.98	Polygon
D&C FARMS 35C-33HZ_SHL	0.00	0.00	0.00	Point
D&C FARMS 35C-33HZ_CP	7,775.00	-785.00	-601.00	Point
D&C FARMS 35C-33HZ_BHL	7,828.00	-5,548.08	-584.41	Point

North Reference Sheet for Sec. 28-T1N-R67W - D&C FARMS 35C-33HZ - Plan A Rev 0

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.

Vertical Depths are relative to RKB = 17' @ 5028.00ft (Drilling Rig). Northing and Easting are relative to D&C FARMS 35C-33HZ

Coordinate System is US State Plane 1983, Colorado Northern 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:40.783333°

False Easting: 3,000,000.00ft, False Northing: 1,000,000.00ft, Scale Reduction: 0.99996513

Grid Coordinates of Well: 1,249,556.41 ft N, 3,168,818.17 ft E

Geographical Coordinates of Well: 40° 01' 00.64" N, 104° 53' 50.12" W

Grid Convergence at Surface is: 0.39°

Based upon Minimum Curvature type calculations, at a Measured Depth of 12,966.97ft
the Bottom Hole Displacement is 5,578.77ft in the Direction of 186.01° (True).

Magnetic Convergence at surface is: -8.27° (13 June 2013, , BGGM2013)

