

Anadarko Petroleum Corp.

Weld County, CO (NAD 83)

Sec. 23-T2N-R67W

Adder 29C-14HZ

API: 05-123-40557 :: Job #: 902039853

Plan C

Plan: Rev C0

Sperry Drilling Services

Proposal Report

12 February, 2015

Well Coordinates: 1,288,221.11 N, 3,179,028.46 E (40° 07' 22.03" N, 104° 51' 35.30" W)

Ground Level: 4,955.00 usft

Local Coordinate Origin:

Viewing Datum:

TVDs to System:

North Reference:

Unit System:

Geodetic Scale Factor Applied

Version: 5000.1 Build: 73

Centered on Well Adder 29C-14HZ

RKB = 25' @ 4980.00usft (H&P 308)

N

True

Dec-Deg - API - US Survey Feet - Custom

HALLIBURTON

Project: Weld County, CO (NAD 83)
Site: Sec. 23-T2N-R67W
Well: Adder 29C-14HZ
Wellbore: Plan C
Design: Rev C0

Anadarko Petroleum Corp.

HALLIBURTON
Sperry Drilling

FORMATIONS

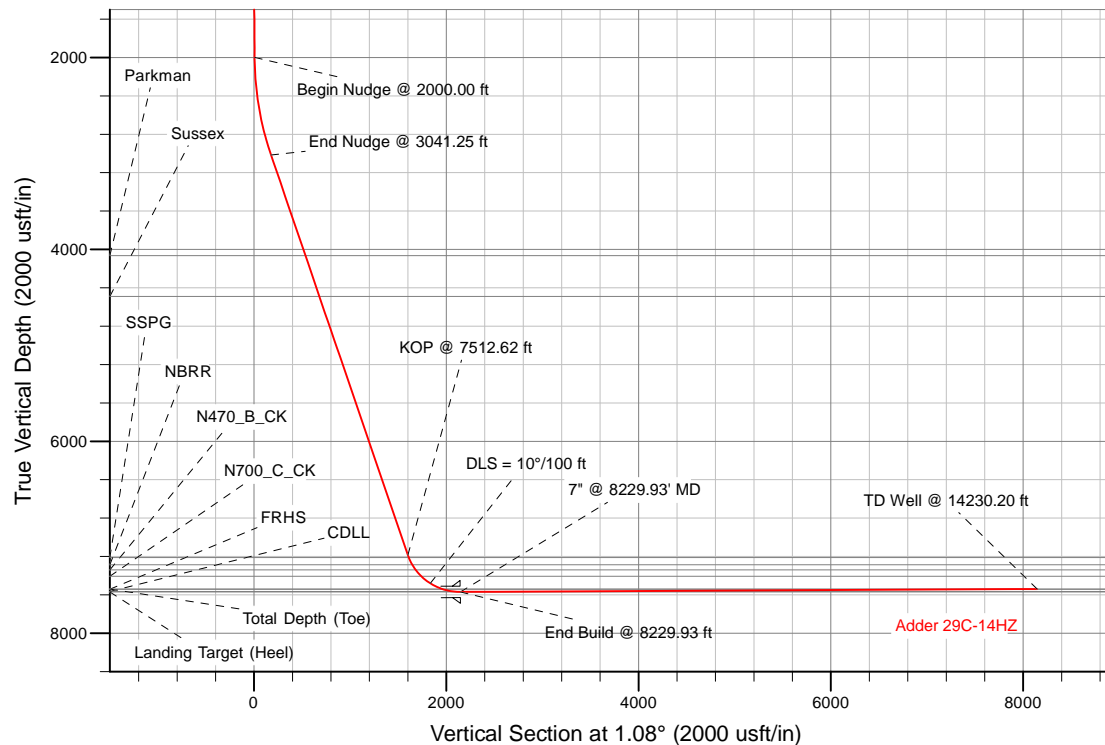
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
4065.00	4165.19	21.20	332.70	540.80	-272.54	535.56	606.14	Parkman
4490.00	4621.04	21.20	332.70	687.28	-348.15	680.60	770.98	Sussex
7213.00	7541.97	23.78	336.34	1626.62	-832.55	1610.63	1828.04	SSPG
7286.00	7624.36	31.35	343.45	1662.44	-845.35	1646.21	1866.39	NBRR
7340.00	7689.87	37.56	347.18	1698.28	-854.65	1681.87	1903.26	N470_B_CK
7407.00	7779.94	46.22	350.87	1757.28	-865.92	1740.64	1963.42	N700_C_CK
7542.00	8045.60	72.17	357.64	1982.36	-886.73	1965.29	2189.29	FRHS
7564.00	8143.25	81.76	359.50	2077.35	-889.07	2060.22	2284.30	CDLL

SECTION DETAILS

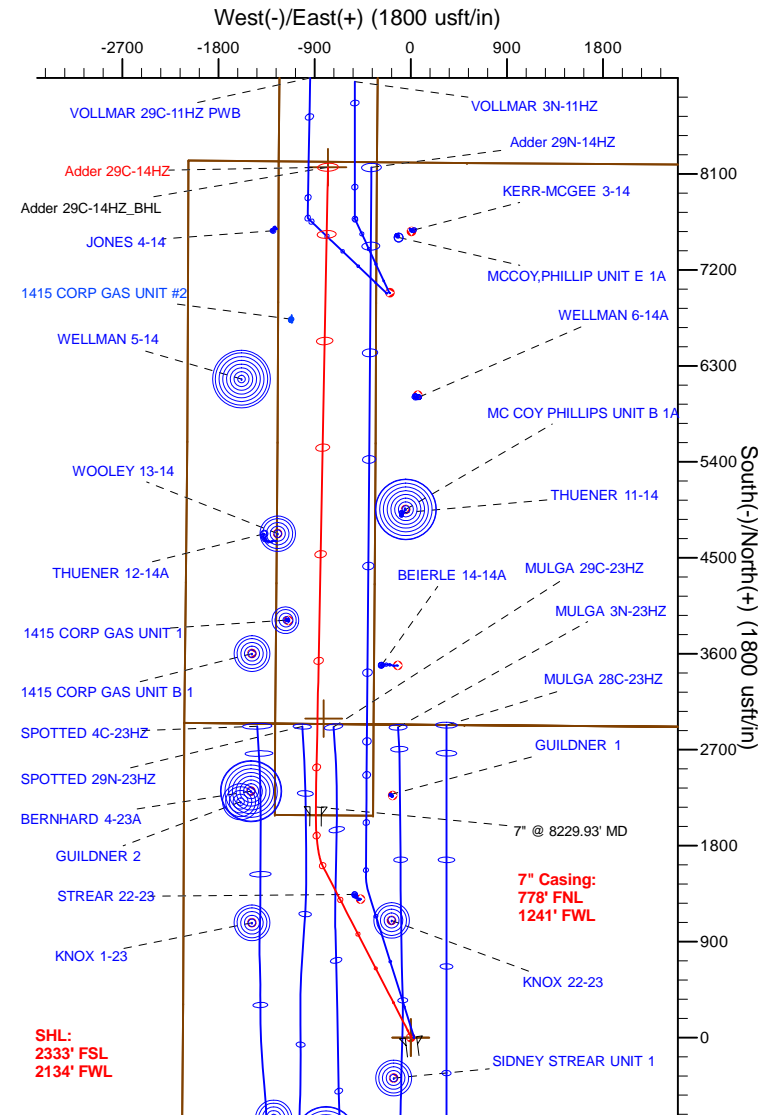
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	1164.00	0.40	352.90	1163.91	1.02	2.36	0.00	0.00	1.06	Tie on to Surface Surveys @ 1164.01 ft
2	2000.00	0.40	352.90	1999.89	6.81	1.64	0.00	0.00	6.84	Begin Nudge @ 2000.00 ft
3	3041.25	21.20	332.70	3017.12	179.62	-86.13	2.00	-20.56	177.97	End Nudge @ 3041.25 ft
4	7512.62	21.20	332.70	7185.89	1616.48	-827.75	0.00	0.00	1600.59	KOP @ 7512.62 ft
5	8229.93	90.29	1.08	7570.00	2163.73	-888.62	10.00	30.04	2146.60	End Build @ 8229.93 ft
6	14230.20	90.29	1.08	7540.00	8162.86	-775.24	0.00	0.00	8146.80	TD Well @ 14230.20 ft

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Adder 29C-14HZ_SEC	0.00	0.00	0.00	40.122786	-104.859805	Polygon
Adder 29C-14HZ_SHL	0.00	0.00	0.00	40.122786	-104.859805	Point
Adder 29C-14HZ_BHL	7540.00	8162.86	-775.24	40.145193	-104.862578	Point
Adder 29C-14HZ_H	7570.00	2991.61	-815.39	40.130998	-104.862721	Polygon



BHL:
50' FNL
1305' FWL

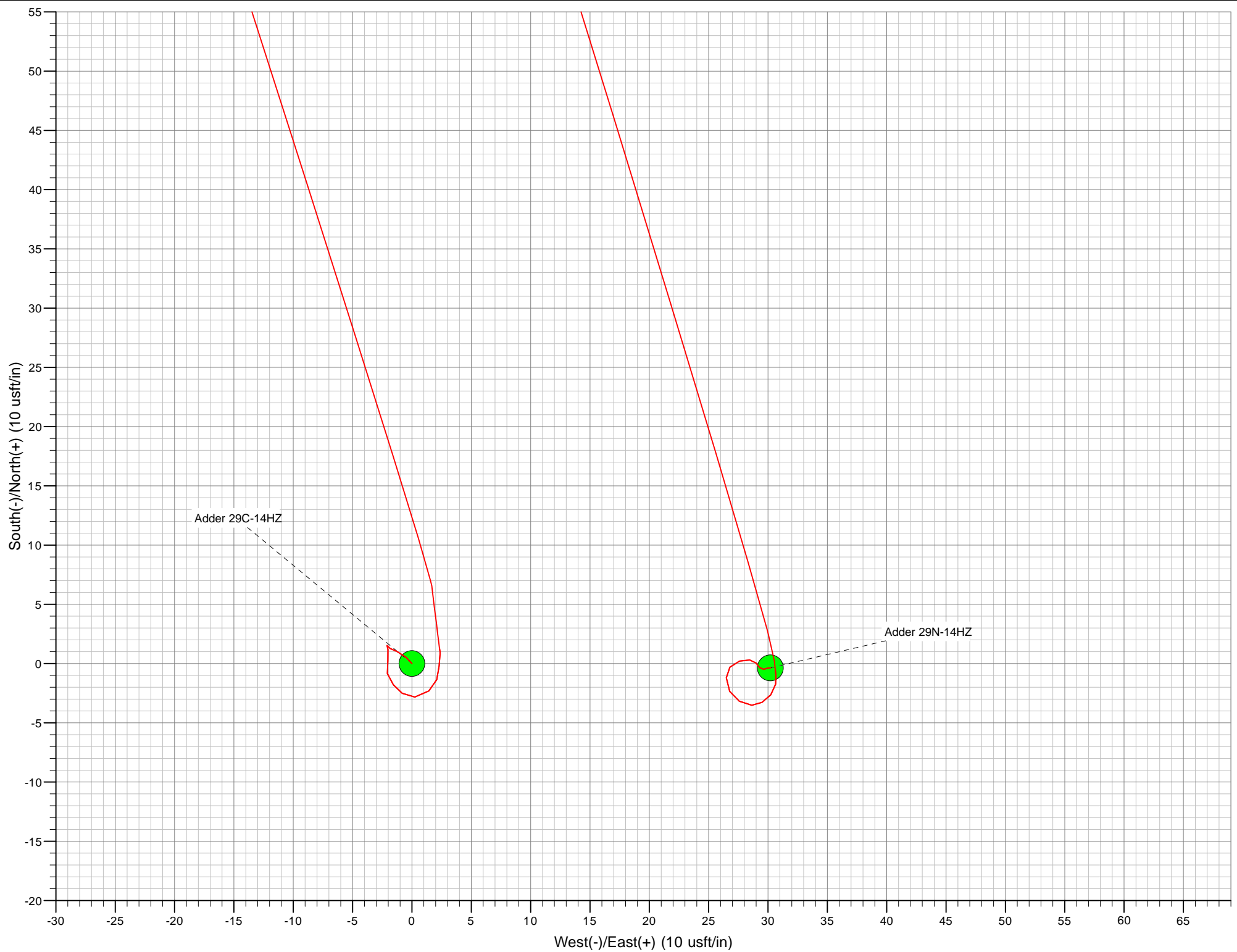


WELL DETAILS: Adder 29C-14HZ

Ground Level: 4955.00
RKB = 25' @ 4980.00usft (H&P 308)

Plan: Rev C0 (Adder 29C-14HZ/Plan C)

Created By: Katie Benner Date: 2/12/2015
Reviewed: Date:



Plan Report for Adder 29C-14HZ - Rev C0

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 (°)
1,164.00	0.40	352.90	1,163.91	1.02	2.36	1.06	0.00	0.00	0.00	0.00
1,164.01	0.40	352.90	1,163.92	1.02	2.36	1.06	0.01	0.00	0.00	0.00
Tie on to Surface Surveys @ 1164.01 ft										
1,171.00	0.40	352.90	1,170.91	1.06	2.35	1.11	0.00	0.00	0.00	0.00
9 5/8"										
1,171.09	0.40	352.90	1,171.00	1.06	2.35	1.11	0.00	0.00	0.00	0.00
Surface Csg Setting Depth										
1,200.00	0.40	352.90	1,199.91	1.26	2.33	1.31	0.00	0.00	0.00	0.00
1,300.00	0.40	352.90	1,299.91	1.96	2.24	2.00	0.00	0.00	0.00	0.00
1,400.00	0.40	352.90	1,399.91	2.65	2.16	2.69	0.00	0.00	0.00	0.00
1,500.00	0.40	352.90	1,499.91	3.34	2.07	3.38	0.00	0.00	0.00	0.00
1,600.00	0.40	352.90	1,599.90	4.04	1.98	4.07	0.00	0.00	0.00	0.00
1,700.00	0.40	352.90	1,699.90	4.73	1.90	4.76	0.00	0.00	0.00	0.00
1,800.00	0.40	352.90	1,799.90	5.42	1.81	5.45	0.00	0.00	0.00	0.00
1,900.00	0.40	352.90	1,899.90	6.11	1.73	6.15	0.00	0.00	0.00	0.00
2,000.00	0.40	352.90	1,999.89	6.81	1.64	6.84	0.00	0.00	0.00	0.00
Begin Nudge @ 2000.00 ft										
2,100.00	2.38	335.72	2,099.86	9.05	0.74	9.06	2.00	1.98	-17.18	-20.56
2,200.00	4.38	334.17	2,199.68	14.37	-1.77	14.34	2.00	2.00	-1.55	-3.39
2,300.00	6.38	333.60	2,299.24	22.78	-5.90	22.67	2.00	2.00	-0.58	-1.84
2,400.00	8.38	333.29	2,398.40	34.26	-11.65	34.04	2.00	2.00	-0.30	-1.27
2,500.00	10.38	333.11	2,497.06	48.80	-19.00	48.43	2.00	2.00	-0.19	-0.96
2,600.00	12.38	332.98	2,595.09	66.38	-27.94	65.84	2.00	2.00	-0.13	-0.78
2,700.00	14.38	332.89	2,692.37	86.98	-38.47	86.24	2.00	2.00	-0.09	-0.66
2,800.00	16.38	332.82	2,788.79	110.57	-50.56	109.59	2.00	2.00	-0.07	-0.57
2,900.00	18.38	332.76	2,884.22	137.12	-64.22	135.89	2.00	2.00	-0.06	-0.50
3,000.00	20.37	332.72	2,978.56	166.61	-79.42	165.08	2.00	2.00	-0.04	-0.45
3,041.25	21.20	332.70	3,017.12	179.62	-86.13	177.97	2.00	2.00	-0.04	-0.40
End Nudge @ 3041.25 ft										
3,100.00	21.20	332.70	3,071.89	198.50	-95.87	196.66	0.00	0.00	0.00	-0.39
3,200.00	21.20	332.70	3,165.13	230.63	-112.46	228.47	0.00	0.00	0.00	0.00
3,300.00	21.20	332.70	3,258.36	262.77	-129.04	260.29	0.00	0.00	0.00	0.00
3,400.00	21.20	332.70	3,351.59	294.90	-145.63	292.11	0.00	0.00	0.00	0.00
3,500.00	21.20	332.70	3,444.82	327.04	-162.22	323.92	0.00	0.00	0.00	0.00
3,600.00	21.20	332.70	3,538.06	359.17	-178.80	355.74	0.00	0.00	0.00	0.00
3,700.00	21.20	332.70	3,631.29	391.31	-195.39	387.56	0.00	0.00	0.00	0.00
3,800.00	21.20	332.70	3,724.52	423.44	-211.97	419.37	0.00	0.00	0.00	0.00
3,900.00	21.20	332.70	3,817.75	455.58	-228.56	451.19	0.00	0.00	0.00	0.00
4,000.00	21.20	332.70	3,910.99	487.71	-245.15	483.00	0.00	0.00	0.00	0.00
4,100.00	21.20	332.70	4,004.22	519.85	-261.73	514.82	0.00	0.00	0.00	0.00
4,165.19	21.20	332.70	4,065.00	540.80	-272.54	535.56	0.00	0.00	0.00	0.00
Parkman - Parkman										
4,200.00	21.20	332.70	4,097.45	551.98	-278.32	546.64	0.00	0.00	0.00	0.00
4,300.00	21.20	332.70	4,190.68	584.11	-294.90	578.45	0.00	0.00	0.00	0.00
4,400.00	21.20	332.70	4,283.91	616.25	-311.49	610.27	0.00	0.00	0.00	0.00
4,500.00	21.20	332.70	4,377.15	648.38	-328.07	642.09	0.00	0.00	0.00	0.00
4,600.00	21.20	332.70	4,470.38	680.52	-344.66	673.90	0.00	0.00	0.00	0.00
4,621.04	21.20	332.70	4,490.00	687.28	-348.15	680.60	0.00	0.00	0.00	0.00
Sussex - Sussex										
4,700.00	21.20	332.70	4,563.61	712.65	-361.25	705.72	0.00	0.00	0.00	0.00
4,800.00	21.20	332.70	4,656.84	744.79	-377.83	737.53	0.00	0.00	0.00	0.00
4,900.00	21.20	332.70	4,750.08	776.92	-394.42	769.35	0.00	0.00	0.00	0.00
5,000.00	21.20	332.70	4,843.31	809.06	-411.00	801.17	0.00	0.00	0.00	0.00
5,100.00	21.20	332.70	4,936.54	841.19	-427.59	832.98	0.00	0.00	0.00	0.00
5,200.00	21.20	332.70	5,029.77	873.33	-444.18	864.80	0.00	0.00	0.00	0.00
5,300.00	21.20	332.70	5,123.01	905.46	-460.76	896.62	0.00	0.00	0.00	0.00
5,400.00	21.20	332.70	5,216.24	937.60	-477.35	928.43	0.00	0.00	0.00	0.00

Plan Report for Adder 29C-14HZ - Rev C0

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 (°)
5,500.00	21.20	332.70	5,309.47	969.73	-493.93	960.25	0.00	0.00	0.00	0.00
5,600.00	21.20	332.70	5,402.70	1,001.86	-510.52	992.06	0.00	0.00	0.00	0.00
5,700.00	21.20	332.70	5,495.94	1,034.00	-527.11	1,023.88	0.00	0.00	0.00	0.00
5,800.00	21.20	332.70	5,589.17	1,066.13	-543.69	1,055.70	0.00	0.00	0.00	0.00
5,900.00	21.20	332.70	5,682.40	1,098.27	-560.28	1,087.51	0.00	0.00	0.00	0.00
6,000.00	21.20	332.70	5,775.63	1,130.40	-576.86	1,119.33	0.00	0.00	0.00	0.00
6,100.00	21.20	332.70	5,868.87	1,162.54	-593.45	1,151.15	0.00	0.00	0.00	0.00
6,200.00	21.20	332.70	5,962.10	1,194.67	-610.04	1,182.96	0.00	0.00	0.00	0.00
6,300.00	21.20	332.70	6,055.33	1,226.81	-626.62	1,214.78	0.00	0.00	0.00	0.00
6,400.00	21.20	332.70	6,148.56	1,258.94	-643.21	1,246.59	0.00	0.00	0.00	0.00
6,500.00	21.20	332.70	6,241.79	1,291.08	-659.79	1,278.41	0.00	0.00	0.00	0.00
6,600.00	21.20	332.70	6,335.03	1,323.21	-676.38	1,310.23	0.00	0.00	0.00	0.00
6,700.00	21.20	332.70	6,428.26	1,355.34	-692.96	1,342.04	0.00	0.00	0.00	0.00
6,800.00	21.20	332.70	6,521.49	1,387.48	-709.55	1,373.86	0.00	0.00	0.00	0.00
6,900.00	21.20	332.70	6,614.72	1,419.61	-726.14	1,405.68	0.00	0.00	0.00	0.00
7,000.00	21.20	332.70	6,707.96	1,451.75	-742.72	1,437.49	0.00	0.00	0.00	0.00
7,100.00	21.20	332.70	6,801.19	1,483.88	-759.31	1,469.31	0.00	0.00	0.00	0.00
7,200.00	21.20	332.70	6,894.42	1,516.02	-775.89	1,501.12	0.00	0.00	0.00	0.00
7,300.00	21.20	332.70	6,987.65	1,548.15	-792.48	1,532.94	0.00	0.00	0.00	0.00
7,400.00	21.20	332.70	7,080.89	1,580.29	-809.07	1,564.76	0.00	0.00	0.00	0.00
7,500.00	21.20	332.70	7,174.12	1,612.42	-825.65	1,596.57	0.00	0.00	0.00	0.00
7,512.62	21.20	332.70	7,185.88	1,616.48	-827.74	1,600.59	0.00	0.00	0.00	0.00
KOP @ 7512.62 ft										
7,541.97	23.78	336.34	7,213.00	1,626.62	-832.55	1,610.63	10.00	8.80	12.41	30.04
SSPG - SSPG										
7,600.00	29.08	341.70	7,264.95	1,650.74	-841.69	1,634.59	10.00	9.13	9.23	26.67
7,624.36	31.35	343.45	7,286.00	1,662.44	-845.35	1,646.21	10.00	9.33	7.16	21.87
NBRR - NBRR										
7,689.87	37.56	347.18	7,340.00	1,698.28	-854.65	1,681.87	10.00	9.47	5.70	20.36
N470_B_CK - N470_B_CK										
7,700.00	38.52	347.66	7,347.98	1,704.38	-856.01	1,687.94	10.00	9.56	4.77	17.28
7,779.94	46.22	350.87	7,407.00	1,757.28	-865.92	1,740.64	10.00	9.63	4.01	16.90
N700_C_CK - N700_C_CK										
7,800.00	48.17	351.55	7,420.63	1,771.82	-868.17	1,755.14	10.00	9.69	3.36	14.52
7,900.00	57.90	354.40	7,480.70	1,851.03	-877.80	1,834.15	10.00	9.74	2.85	14.06
DLS = 10°/100 ft										
8,000.00	67.69	356.70	7,526.36	1,939.59	-884.62	1,922.57	10.00	9.79	2.30	12.34
8,045.60	72.17	357.64	7,542.00	1,982.35	-886.73	1,965.29	10.00	9.81	2.05	11.28
FRHS - FRHS										
8,100.00	77.51	358.69	7,556.22	2,034.82	-888.40	2,017.71	10.00	9.82	1.94	10.96
8,143.25	81.76	359.50	7,564.00	2,077.34	-889.07	2,060.21	10.00	9.83	1.87	10.69
CDLL - CDLL										
8,200.00	87.34	0.54	7,569.39	2,133.82	-889.04	2,116.68	10.00	9.83	1.83	10.54
8,229.93	90.29	1.08	7,570.00	2,163.73	-888.62	2,146.60	10.00	9.83	1.81	10.44
End Build @ 8229.93 ft - Landing Target (Heel) - 7" @ 8229.93' MD										
8,300.00	90.29	1.08	7,569.65	2,233.79	-887.30	2,216.67	0.00	0.00	0.00	0.00
8,400.00	90.29	1.08	7,569.15	2,333.77	-885.41	2,316.67	0.00	0.00	0.00	0.00
8,500.00	90.29	1.08	7,568.65	2,433.75	-883.52	2,416.67	0.00	0.00	0.00	0.00
8,600.00	90.29	1.08	7,568.15	2,533.73	-881.63	2,516.67	0.00	0.00	0.00	0.00
8,700.00	90.29	1.08	7,567.65	2,633.71	-879.74	2,616.66	0.00	0.00	0.00	0.00
8,800.00	90.29	1.08	7,567.15	2,733.69	-877.85	2,716.66	0.00	0.00	0.00	0.00
8,900.00	90.29	1.08	7,566.65	2,833.68	-875.96	2,816.66	0.00	0.00	0.00	0.00
9,000.00	90.29	1.08	7,566.15	2,933.66	-874.07	2,916.66	0.00	0.00	0.00	0.00
9,100.00	90.29	1.08	7,565.65	3,033.64	-872.18	3,016.66	0.00	0.00	0.00	0.00
9,200.00	90.29	1.08	7,565.15	3,133.62	-870.29	3,116.66	0.00	0.00	0.00	0.00
9,300.00	90.29	1.08	7,564.65	3,233.60	-868.40	3,216.66	0.00	0.00	0.00	0.00
9,400.00	90.29	1.08	7,564.15	3,333.58	-866.51	3,316.66	0.00	0.00	0.00	0.00
9,500.00	90.29	1.08	7,563.65	3,433.56	-864.62	3,416.65	0.00	0.00	0.00	0.00
9,600.00	90.29	1.08	7,563.15	3,533.54	-862.73	3,516.65	0.00	0.00	0.00	0.00

Plan Report for Adder 29C-14HZ - Rev C0

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 (°)
9,700.00	90.29	1.08	7,562.65	3,633.52	-860.84	3,616.65	0.00	0.00	0.00	0.00
9,800.00	90.29	1.08	7,562.15	3,733.50	-858.95	3,716.65	0.00	0.00	0.00	0.00
9,900.00	90.29	1.08	7,561.65	3,833.48	-857.06	3,816.65	0.00	0.00	0.00	0.00
10,000.00	90.29	1.08	7,561.15	3,933.47	-855.17	3,916.65	0.00	0.00	0.00	0.00
10,100.00	90.29	1.08	7,560.65	4,033.45	-853.29	4,016.65	0.00	0.00	0.00	0.00
10,200.00	90.29	1.08	7,560.15	4,133.43	-851.40	4,116.65	0.00	0.00	0.00	0.00
10,300.00	90.29	1.08	7,559.65	4,233.41	-849.51	4,216.64	0.00	0.00	0.00	0.00
10,400.00	90.29	1.08	7,559.15	4,333.39	-847.62	4,316.64	0.00	0.00	0.00	0.00
10,500.00	90.29	1.08	7,558.65	4,433.37	-845.73	4,416.64	0.00	0.00	0.00	0.00
10,600.00	90.29	1.08	7,558.15	4,533.35	-843.84	4,516.64	0.00	0.00	0.00	0.00
10,700.00	90.29	1.08	7,557.65	4,633.33	-841.95	4,616.64	0.00	0.00	0.00	0.00
10,800.00	90.29	1.08	7,557.15	4,733.31	-840.06	4,716.64	0.00	0.00	0.00	0.00
10,900.00	90.29	1.08	7,556.65	4,833.29	-838.17	4,816.64	0.00	0.00	0.00	0.00
11,000.00	90.29	1.08	7,556.15	4,933.27	-836.28	4,916.64	0.00	0.00	0.00	0.00
11,100.00	90.29	1.08	7,555.65	5,033.25	-834.39	5,016.63	0.00	0.00	0.00	0.00
11,200.00	90.29	1.08	7,555.15	5,133.24	-832.50	5,116.63	0.00	0.00	0.00	0.00
11,300.00	90.29	1.08	7,554.65	5,233.22	-830.61	5,216.63	0.00	0.00	0.00	0.00
11,400.00	90.29	1.08	7,554.15	5,333.20	-828.72	5,316.63	0.00	0.00	0.00	0.00
11,500.00	90.29	1.08	7,553.65	5,433.18	-826.83	5,416.63	0.00	0.00	0.00	0.00
11,600.00	90.29	1.08	7,553.15	5,533.16	-824.94	5,516.63	0.00	0.00	0.00	0.00
11,700.00	90.29	1.08	7,552.65	5,633.14	-823.05	5,616.63	0.00	0.00	0.00	0.00
11,800.00	90.29	1.08	7,552.15	5,733.12	-821.16	5,716.63	0.00	0.00	0.00	0.00
11,900.00	90.29	1.08	7,551.65	5,833.10	-819.27	5,816.62	0.00	0.00	0.00	0.00
12,000.00	90.29	1.08	7,551.15	5,933.08	-817.38	5,916.62	0.00	0.00	0.00	0.00
12,100.00	90.29	1.08	7,550.65	6,033.06	-815.49	6,016.62	0.00	0.00	0.00	0.00
12,200.00	90.29	1.08	7,550.15	6,133.04	-813.60	6,116.62	0.00	0.00	0.00	0.00
12,300.00	90.29	1.08	7,549.65	6,233.03	-811.72	6,216.62	0.00	0.00	0.00	0.00
12,400.00	90.29	1.08	7,549.15	6,333.01	-809.83	6,316.62	0.00	0.00	0.00	0.00
12,500.00	90.29	1.08	7,548.65	6,432.99	-807.94	6,416.62	0.00	0.00	0.00	0.00
12,600.00	90.29	1.08	7,548.15	6,532.97	-806.05	6,516.62	0.00	0.00	0.00	0.00
12,700.00	90.29	1.08	7,547.65	6,632.95	-804.16	6,616.61	0.00	0.00	0.00	0.00
12,800.00	90.29	1.08	7,547.15	6,732.93	-802.27	6,716.61	0.00	0.00	0.00	0.00
12,900.00	90.29	1.08	7,546.65	6,832.91	-800.38	6,816.61	0.00	0.00	0.00	0.00
13,000.00	90.29	1.08	7,546.15	6,932.89	-798.49	6,916.61	0.00	0.00	0.00	0.00
13,100.00	90.29	1.08	7,545.65	7,032.87	-796.60	7,016.61	0.00	0.00	0.00	0.00
13,200.00	90.29	1.08	7,545.15	7,132.85	-794.71	7,116.61	0.00	0.00	0.00	0.00
13,300.00	90.29	1.08	7,544.65	7,232.83	-792.82	7,216.61	0.00	0.00	0.00	0.00
13,400.00	90.29	1.08	7,544.15	7,332.82	-790.93	7,316.61	0.00	0.00	0.00	0.00
13,500.00	90.29	1.08	7,543.65	7,432.80	-789.04	7,416.60	0.00	0.00	0.00	0.00
13,600.00	90.29	1.08	7,543.15	7,532.78	-787.15	7,516.60	0.00	0.00	0.00	0.00
13,700.00	90.29	1.08	7,542.65	7,632.76	-785.26	7,616.60	0.00	0.00	0.00	0.00
13,800.00	90.29	1.08	7,542.15	7,732.74	-783.37	7,716.60	0.00	0.00	0.00	0.00
13,900.00	90.29	1.08	7,541.65	7,832.72	-781.48	7,816.60	0.00	0.00	0.00	0.00
14,000.00	90.29	1.08	7,541.15	7,932.70	-779.59	7,916.60	0.00	0.00	0.00	0.00
14,100.00	90.29	1.08	7,540.65	8,032.68	-777.70	8,016.60	0.00	0.00	0.00	0.00
14,200.00	90.29	1.08	7,540.15	8,132.66	-775.81	8,116.60	0.00	0.00	0.00	0.00
14,230.20	90.29	1.08	7,540.00	8,162.86	-775.24	8,146.79	0.00	0.00	0.00	0.00

TD Well @ 14230.20 ft - Total Depth (Toe)

Plan Report for Adder 29C-14HZ - Rev C0

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,164.01	1,163.92	1.02	2.36	Tie on to Surface Surveys @ 1164.01 ft
2,000.00	1,999.89	6.81	1.64	Begin Nudge @ 2000.00 ft
3,041.25	3,017.12	179.62	-86.13	End Nudge @ 3041.25 ft
4,165.19	4,065.00	540.80	-272.54	Parkman
4,621.04	4,490.00	687.28	-348.15	Sussex
7,512.62	7,185.88	1,616.48	-827.74	KOP @ 7512.62 ft
7,541.97	7,213.00	1,626.62	-832.55	SSPG
7,624.36	7,286.00	1,662.44	-845.35	NBRR
7,689.87	7,340.00	1,698.28	-854.65	N470_B_CK
7,779.94	7,407.00	1,757.28	-865.92	N700_C_CK
7,900.00	7,480.70	1,851.03	-877.80	DLS = 10"/100 ft
8,045.60	7,542.00	1,982.36	-886.73	FRHS
8,143.25	7,564.00	2,077.35	-889.07	CDLL
8,229.93	7,570.00	2,163.73	-888.62	End Build @ 8229.93 ft
14,230.20	7,540.00	8,162.86	-775.24	TD Well @ 14230.20 ft

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (usft)
				+N/-S (usft)	+E/-W (usft)	
User	No Target (Freehand)	1.08	Slot	0.00	0.00	0.00

Survey tool program

From (usft)	To (usft)	Survey/Plan	Survey Tool
102.00	1,164.00	MWD Surface Surveys	MWD
1,164.00	8,229.93	Rev C0	MWD+IFR1+SC
8,229.20	14,230.20	Rev C0	MWD+IFR1+SC

Casing Details

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,171.00	1,170.91	9 5/8"	9-5/8	13-1/2
8,229.93	7,570.00	7" @ 8229.93' MD	7	8-3/4

Formation Details

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
652.04	652.00	Base Fox Hills		0.00	
1,171.09	1,171.00	Surface Csg Setting Depth		0.00	
4,165.19	4,065.00	Parkman		0.00	
4,621.04	4,490.00	Sussex		0.00	
7,541.97	7,213.00	SSPG		0.00	
7,624.36	7,286.00	NBRR		0.00	
7,689.87	7,340.00	N470_B_CK		0.00	
7,779.94	7,407.00	N700_C_CK		0.00	
8,045.60	7,542.00	FRHS		0.00	
8,143.25	7,564.00	CDLL		0.00	
8,229.93	7,570.00	Landing Target (Heel)		0.00	
14,230.20	7,540.00	Total Depth (Toe)		0.00	

Plan Report for Adder 29C-14HZ - Rev C0

Targets associated with this wellbore

Target Name	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Shape
Adder 29C-14HZ_SEC	0.00	0.00	0.00	Polygon
Adder 29C-14HZ_SHL	0.00	0.00	0.00	Point
Adder 29C-14HZ_BHL	7,540.00	8,162.86	-775.24	Point
Adder 29C-14HZ_H	7,570.00	2,991.61	-815.39	Polygon

Directional Difficulty Index

Average Dogleg over Survey:	0.71 °/100usft	Maximum Dogleg over Survey:	10.00 °/100usft at 8,229.93 usft
Net Tortousity applicable to Plans:	0.71 °/100usft	Directional Difficulty Index:	6.380

Audit Info

North Reference Sheet for Sec. 23-T2N-R67W - Adder 29C-14HZ - Plan C

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.
Vertical Depths are relative to RKB = 25' @ 4980.00usft (H&P 308). Northing and Easting are relative to Adder 29C-14HZ
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: 3,000,000.00usft, False Northing: 1,000,000.00usft, Scale Reduction: 0.99995933

Grid Coordinates of Well: 1,288,221.11 usft N, 3,179,028.46 usft E
Geographical Coordinates of Well: 40° 07' 22.03" N, 104° 51' 35.30" W
Grid Convergence at Surface is: 0.41°

Based upon Minimum Curvature type calculations, at a Measured Depth of 14,230.20usft
the Bottom Hole Displacement is 8,199.59usft in the Direction of 354.57° (True).

Magnetic Convergence at surface is: -8.10° (21 January 2015, , BGGM2014)

