

Anadarko Petroleum Corp.

Weld County, CO (NAD 83)

Sec. 14-T3N-R66W

FERGE 29N-14HZ

Plan A

Plan: Rev A0 Permit

Sperry Drilling Services

Proposal Report

18 November, 2013

Well Coordinates: 1,323,360.78 N, 3,209,464.62 E (40° 13' 06.93" N, 104° 44' 59.67" W)

Ground Level: 4,913.00 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 FERGE 29N-14HZ

RKB = 17' @ 4930.00usft (Drilling Rig)

N

True

Dec-Deg - API - US Survey Feet - Custom

HALLIBURTON

Project: Weld County, CO (NAD 83)
Site: Sec. 14-T3N-R66W
Well: FERGE 29N-14HZ
Wellbore: Plan A
Design: Rev A0 Permit

Anadarko Petroleum Corp.

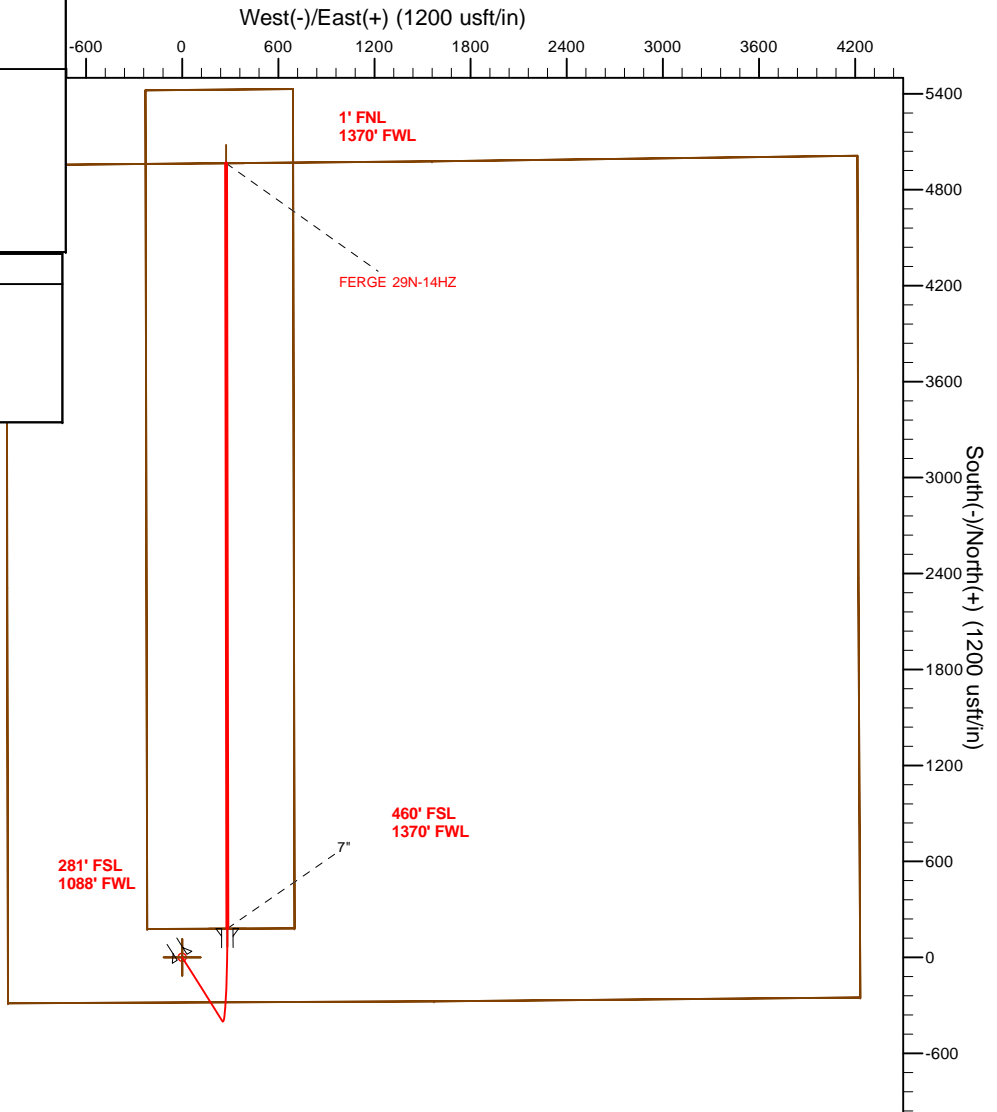
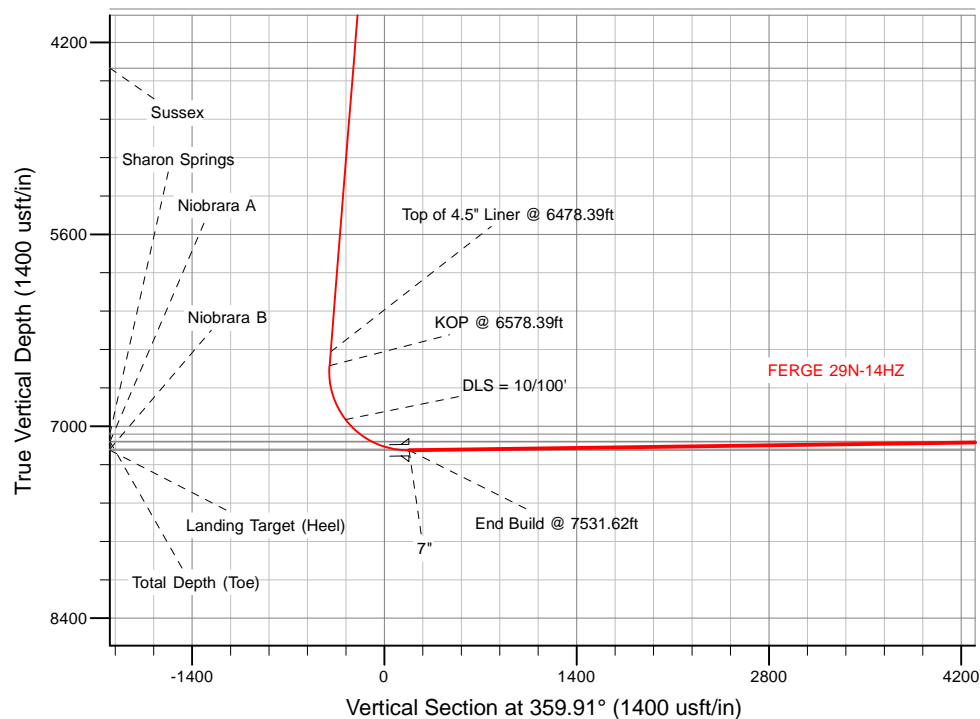
HALLIBURTON
Sperry Drilling

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00	
3	1668.34	5.37	147.83	1667.95	-10.63	6.69	2.00	147.83	-10.64	
4	6578.39	5.37	147.83	6556.48	-399.37	251.22	0.00	0.00	-399.76	
5	7531.62	90.78	359.91	7174.00	179.61	281.50	10.00	-147.77	179.17	FERGE 29N-14HZ_CP
6	12317.88	90.78	359.91	7109.00	4965.42	273.63	0.00	0.00	4964.99	FERGE 29N-14HZ_BHL

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Polygon
FERGE 29N-14HZ_LD	0.00	0.00	0.00	40.218591	-104.749909	Polygon
FERGE 29N-14HZ_SEC	0.00	0.00	0.00	40.218591	-104.749909	Polygon
FERGE 29N-14HZ_SHL	0.00	0.00	0.00	40.218591	-104.749909	Polygon
FERGE 29N-14HZ_BHL	7109.00	4965.42	273.63	40.232221	-104.748929	Point
FERGE 29N-14HZ_CP	7174.00	179.61	281.50	40.219084	-104.748901	Point



TVD

MD

6456.91 6478.39 Top of 4.5" Liner @ 6478.39ft
6556.47 6578.39 KOP @ 6578.39ft

WELL DETAILS: FERGE 29N-14HZ

Ground Level: 4913.00

RKB = 17' @ 4930.00usft (Drilling Rig)

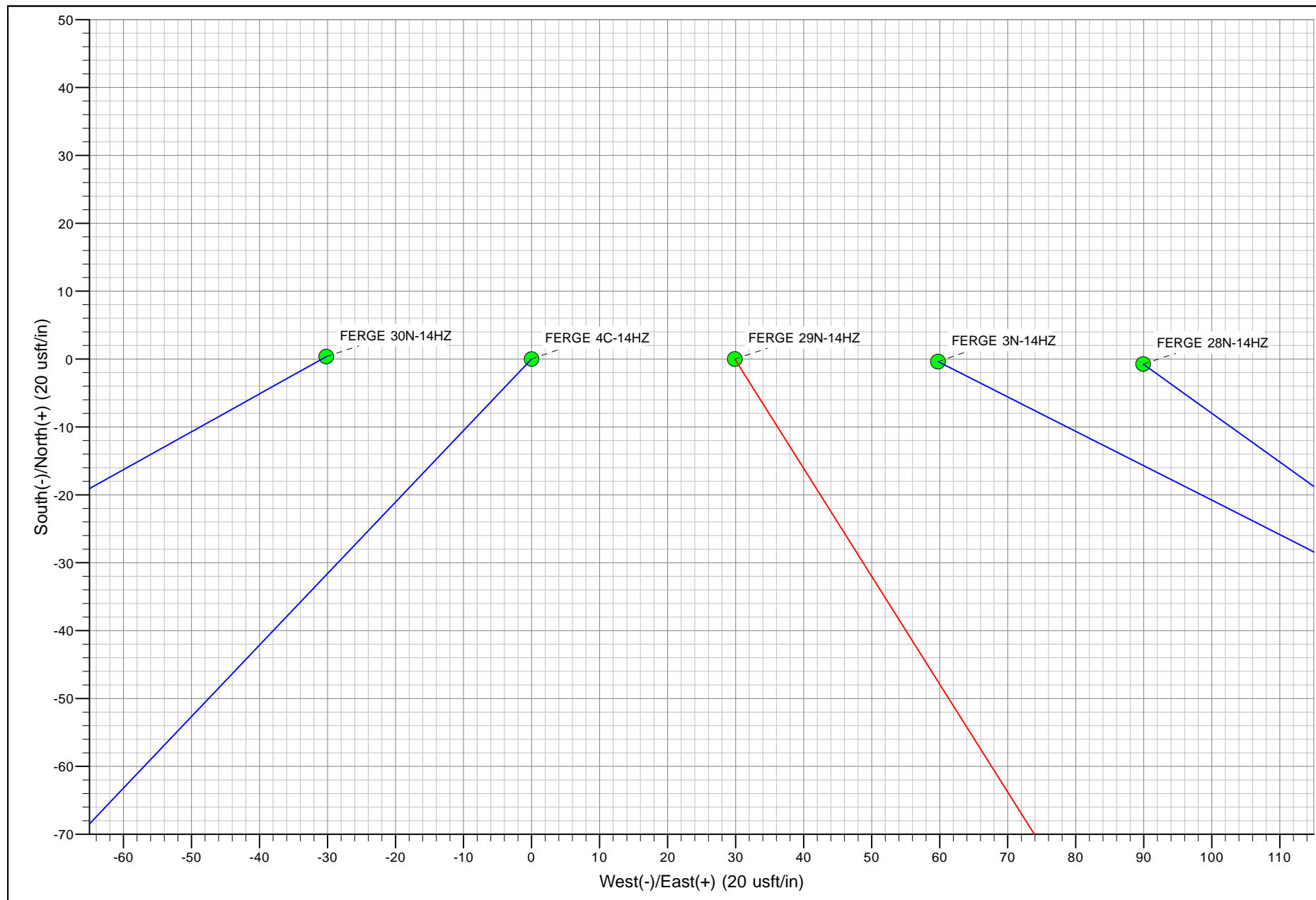
Plan: Rev A0 Permit (FERGE 29N-14HZ/Plan A)

Created By: Clint Eshelman

Date: 11/18/2013

Reviewed:

Date:



Plan Report for FERGE 29N-14HZ - Rev A0 Permit

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
FERGE 29N-14HZ_SHL - FERGE 29N-14HZ_LD - FERGE 29N-14HZ_SEC										
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
1,095.00	0.00	0.00	1,095.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fox Hills Marker										
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,145.00	0.00	0.00	1,145.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"										
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
Begin Nudge @ 1400.00ft										
1,500.00	2.00	147.83	1,499.98	-1.48	0.93	-1.48	2.00	2.00	0.00	147.83
1,600.00	4.00	147.83	1,599.84	-5.91	3.72	-5.91	2.00	2.00	0.00	0.00
1,668.34	5.37	147.83	1,667.95	-10.63	6.69	-10.64	2.00	2.00	0.00	0.00
End Nudge @ 1668.34ft										
1,700.00	5.37	147.83	1,699.47	-13.14	8.26	-13.15	0.00	0.00	0.00	0.00
1,800.00	5.37	147.83	1,799.03	-21.05	13.24	-21.07	0.00	0.00	0.00	0.00
1,900.00	5.37	147.83	1,898.59	-28.97	18.22	-29.00	0.00	0.00	0.00	0.00
2,000.00	5.37	147.83	1,998.15	-36.89	23.20	-36.92	0.00	0.00	0.00	0.00
2,100.00	5.37	147.83	2,097.72	-44.81	28.18	-44.85	0.00	0.00	0.00	0.00
2,200.00	5.37	147.83	2,197.28	-52.72	33.16	-52.77	0.00	0.00	0.00	0.00
2,300.00	5.37	147.83	2,296.84	-60.64	38.14	-60.70	0.00	0.00	0.00	0.00
2,400.00	5.37	147.83	2,396.40	-68.56	43.12	-68.62	0.00	0.00	0.00	0.00
2,500.00	5.37	147.83	2,495.96	-76.47	48.11	-76.55	0.00	0.00	0.00	0.00
2,600.00	5.37	147.83	2,595.52	-84.39	53.09	-84.47	0.00	0.00	0.00	0.00
2,700.00	5.37	147.83	2,695.09	-92.31	58.07	-92.40	0.00	0.00	0.00	0.00
2,800.00	5.37	147.83	2,794.65	-100.23	63.05	-100.32	0.00	0.00	0.00	0.00
2,900.00	5.37	147.83	2,894.21	-108.14	68.03	-108.25	0.00	0.00	0.00	0.00
3,000.00	5.37	147.83	2,993.77	-116.06	73.01	-116.17	0.00	0.00	0.00	0.00
3,100.00	5.37	147.83	3,093.33	-123.98	77.99	-124.10	0.00	0.00	0.00	0.00
3,200.00	5.37	147.83	3,192.89	-131.89	82.97	-132.02	0.00	0.00	0.00	0.00
3,300.00	5.37	147.83	3,292.45	-139.81	87.95	-139.95	0.00	0.00	0.00	0.00
3,400.00	5.37	147.83	3,392.02	-147.73	92.93	-147.87	0.00	0.00	0.00	0.00
3,500.00	5.37	147.83	3,491.58	-155.65	97.91	-155.80	0.00	0.00	0.00	0.00
3,600.00	5.37	147.83	3,591.14	-163.56	102.89	-163.72	0.00	0.00	0.00	0.00
3,700.00	5.37	147.83	3,690.70	-171.48	107.87	-171.65	0.00	0.00	0.00	0.00
3,800.00	5.37	147.83	3,790.26	-179.40	112.85	-179.57	0.00	0.00	0.00	0.00
3,900.00	5.37	147.83	3,889.82	-187.31	117.83	-187.50	0.00	0.00	0.00	0.00
3,965.46	5.37	147.83	3,955.00	-192.50	121.09	-192.69	0.00	0.00	0.00	0.00
Parkman										
4,000.00	5.37	147.83	3,989.39	-195.23	122.81	-195.42	0.00	0.00	0.00	0.00
4,100.00	5.37	147.83	4,088.95	-203.15	127.79	-203.35	0.00	0.00	0.00	0.00
4,200.00	5.37	147.83	4,188.51	-211.07	132.77	-211.27	0.00	0.00	0.00	0.00
4,300.00	5.37	147.83	4,288.07	-218.98	137.75	-219.20	0.00	0.00	0.00	0.00
4,399.36	5.37	147.83	4,387.00	-226.85	142.70	-227.07	0.00	0.00	0.00	0.00
Sussex										
4,400.00	5.37	147.83	4,387.63	-226.90	142.73	-227.12	0.00	0.00	0.00	0.00

Plan Report for FERGE 29N-14HZ - Rev A0 Permit

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 (°)
4,500.00	5.37	147.83	4,487.19	-234.82	147.71	-235.05	0.00	0.00	0.00	0.00
4,600.00	5.37	147.83	4,586.76	-242.73	152.69	-242.97	0.00	0.00	0.00	0.00
4,700.00	5.37	147.83	4,686.32	-250.65	157.67	-250.90	0.00	0.00	0.00	0.00
4,800.00	5.37	147.83	4,785.88	-258.57	162.65	-258.82	0.00	0.00	0.00	0.00
4,900.00	5.37	147.83	4,885.44	-266.49	167.63	-266.75	0.00	0.00	0.00	0.00
5,000.00	5.37	147.83	4,985.00	-274.40	172.61	-274.67	0.00	0.00	0.00	0.00
5,100.00	5.37	147.83	5,084.56	-282.32	177.59	-282.60	0.00	0.00	0.00	0.00
5,200.00	5.37	147.83	5,184.13	-290.24	182.57	-290.52	0.00	0.00	0.00	0.00
5,300.00	5.37	147.83	5,283.69	-298.16	187.55	-298.45	0.00	0.00	0.00	0.00
5,400.00	5.37	147.83	5,383.25	-306.07	192.53	-306.37	0.00	0.00	0.00	0.00
5,500.00	5.37	147.83	5,482.81	-313.99	197.51	-314.30	0.00	0.00	0.00	0.00
5,600.00	5.37	147.83	5,582.37	-321.91	202.49	-322.22	0.00	0.00	0.00	0.00
5,700.00	5.37	147.83	5,681.93	-329.82	207.47	-330.15	0.00	0.00	0.00	0.00
5,800.00	5.37	147.83	5,781.50	-337.74	212.45	-338.07	0.00	0.00	0.00	0.00
5,900.00	5.37	147.83	5,881.06	-345.66	217.43	-346.00	0.00	0.00	0.00	0.00
6,000.00	5.37	147.83	5,980.62	-353.58	222.41	-353.92	0.00	0.00	0.00	0.00
6,100.00	5.37	147.83	6,080.18	-361.49	227.39	-361.85	0.00	0.00	0.00	0.00
6,200.00	5.37	147.83	6,179.74	-369.41	232.37	-369.77	0.00	0.00	0.00	0.00
6,300.00	5.37	147.83	6,279.30	-377.33	237.35	-377.70	0.00	0.00	0.00	0.00
6,400.00	5.37	147.83	6,378.87	-385.24	242.33	-385.62	0.00	0.00	0.00	0.00
6,478.39	5.37	147.83	6,456.91	-391.45	246.24	-391.84	0.00	0.00	0.00	0.00
Top of 4.5" Liner @ 6478.39ft										
6,500.00	5.37	147.83	6,478.43	-393.16	247.31	-393.55	0.00	0.00	0.00	0.00
6,578.39	5.37	147.83	6,556.47	-399.37	251.22	-399.76	0.00	0.00	0.00	0.00
KOP @ 6578.39ft										
6,600.00	3.72	129.78	6,578.02	-400.67	252.29	-401.07	10.00	-7.61	-83.51	-147.77
6,700.00	8.13	20.40	6,677.66	-396.11	257.27	-396.51	10.00	4.41	-109.38	-129.78
6,800.00	17.84	8.87	6,775.00	-374.29	262.11	-374.70	10.00	9.71	-11.53	-20.65
6,900.00	27.75	5.39	6,867.08	-335.87	266.67	-336.29	10.00	9.91	-3.48	-9.37
7,000.00	37.71	3.65	6,951.10	-282.04	270.81	-282.46	10.00	9.96	-1.74	-6.15
DLS = 10/100'										
7,100.00	47.68	2.55	7,024.50	-214.41	274.41	-214.84	10.00	9.97	-1.10	-4.68
7,150.81	52.75	2.12	7,057.00	-175.41	276.00	-175.84	10.00	9.98	-0.85	-3.87
Sharon Springs										
7,200.00	57.66	1.76	7,085.06	-135.05	277.36	-135.48	10.00	9.98	-0.74	-3.59
7,258.99	63.55	1.37	7,114.00	-83.70	278.76	-84.13	10.00	9.98	-0.66	-3.38
Niobrara A										
7,300.00	67.65	1.12	7,130.94	-46.36	279.57	-46.80	10.00	9.98	-0.60	-3.19
7,400.00	77.63	0.57	7,160.74	48.95	280.96	48.51	10.00	9.99	-0.55	-3.09
7,427.59	80.39	0.43	7,166.00	76.04	281.20	75.59	10.00	9.99	-0.52	-2.93
Niobrara B										
7,500.00	87.62	0.06	7,173.56	148.00	281.51	147.55	10.00	9.99	-0.51	-2.90
7,531.62	90.78	359.91	7,174.00	179.61	281.50	179.17	10.00	9.99	-0.50	-2.86
End Build @ 7531.62ft - Landing Target (Heel) - 7" - FERGE 29N-14HZ_CP										
7,600.00	90.78	359.91	7,173.07	247.98	281.39	247.54	0.00	0.00	0.00	-2.86
7,700.00	90.78	359.91	7,171.71	347.97	281.22	347.53	0.00	0.00	0.00	0.00
7,800.00	90.78	359.91	7,170.36	447.96	281.06	447.52	0.00	0.00	0.00	0.00
7,900.00	90.78	359.91	7,169.00	547.95	280.89	547.51	0.00	0.00	0.00	0.00
8,000.00	90.78	359.91	7,167.64	647.95	280.73	647.50	0.00	0.00	0.00	0.00
8,100.00	90.78	359.91	7,166.28	747.94	280.56	747.49	0.00	0.00	0.00	0.00
8,200.00	90.78	359.91	7,164.92	847.93	280.40	847.49	0.00	0.00	0.00	0.00
8,300.00	90.78	359.91	7,163.56	947.92	280.24	947.48	0.00	0.00	0.00	0.00
8,400.00	90.78	359.91	7,162.21	1,047.91	280.07	1,047.47	0.00	0.00	0.00	0.00
8,500.00	90.78	359.91	7,160.85	1,147.90	279.91	1,147.46	0.00	0.00	0.00	0.00
8,600.00	90.78	359.91	7,159.49	1,247.89	279.74	1,247.45	0.00	0.00	0.00	0.00
8,700.00	90.78	359.91	7,158.13	1,347.88	279.58	1,347.44	0.00	0.00	0.00	0.00
8,800.00	90.78	359.91	7,156.77	1,447.87	279.41	1,447.43	0.00	0.00	0.00	0.00
8,900.00	90.78	359.91	7,155.42	1,547.86	279.25	1,547.42	0.00	0.00	0.00	0.00
9,000.00	90.78	359.91	7,154.06	1,647.85	279.08	1,647.41	0.00	0.00	0.00	0.00

Plan Report for FERGE 29N-14HZ - Rev A0 Permit

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 (°)
9,100.00	90.78	359.91	7,152.70	1,747.84	278.92	1,747.40	0.00	0.00	0.00	0.00
9,200.00	90.78	359.91	7,151.34	1,847.83	278.76	1,847.39	0.00	0.00	0.00	0.00
9,300.00	90.78	359.91	7,149.98	1,947.82	278.59	1,947.38	0.00	0.00	0.00	0.00
9,400.00	90.78	359.91	7,148.63	2,047.81	278.43	2,047.37	0.00	0.00	0.00	0.00
9,500.00	90.78	359.91	7,147.27	2,147.81	278.26	2,147.37	0.00	0.00	0.00	0.00
9,600.00	90.78	359.91	7,145.91	2,247.80	278.10	2,247.36	0.00	0.00	0.00	0.00
9,700.00	90.78	359.91	7,144.55	2,347.79	277.93	2,347.35	0.00	0.00	0.00	0.00
9,800.00	90.78	359.91	7,143.19	2,447.78	277.77	2,447.34	0.00	0.00	0.00	0.00
9,900.00	90.78	359.91	7,141.84	2,547.77	277.60	2,547.33	0.00	0.00	0.00	0.00
10,000.00	90.78	359.91	7,140.48	2,647.76	277.44	2,647.32	0.00	0.00	0.00	0.00
10,100.00	90.78	359.91	7,139.12	2,747.75	277.28	2,747.31	0.00	0.00	0.00	0.00
10,200.00	90.78	359.91	7,137.76	2,847.74	277.11	2,847.30	0.00	0.00	0.00	0.00
10,300.00	90.78	359.91	7,136.40	2,947.73	276.95	2,947.29	0.00	0.00	0.00	0.00
10,400.00	90.78	359.91	7,135.05	3,047.72	276.78	3,047.28	0.00	0.00	0.00	0.00
10,500.00	90.78	359.91	7,133.69	3,147.71	276.62	3,147.27	0.00	0.00	0.00	0.00
10,600.00	90.78	359.91	7,132.33	3,247.70	276.45	3,247.26	0.00	0.00	0.00	0.00
10,700.00	90.78	359.91	7,130.97	3,347.69	276.29	3,347.25	0.00	0.00	0.00	0.00
10,800.00	90.78	359.91	7,129.61	3,447.68	276.12	3,447.25	0.00	0.00	0.00	0.00
10,900.00	90.78	359.91	7,128.26	3,547.67	275.96	3,547.24	0.00	0.00	0.00	0.00
11,000.00	90.78	359.91	7,126.90	3,647.66	275.80	3,647.23	0.00	0.00	0.00	0.00
11,100.00	90.78	359.91	7,125.54	3,747.66	275.63	3,747.22	0.00	0.00	0.00	0.00
11,200.00	90.78	359.91	7,124.18	3,847.65	275.47	3,847.21	0.00	0.00	0.00	0.00
11,300.00	90.78	359.91	7,122.82	3,947.64	275.30	3,947.20	0.00	0.00	0.00	0.00
11,400.00	90.78	359.91	7,121.47	4,047.63	275.14	4,047.19	0.00	0.00	0.00	0.00
11,500.00	90.78	359.91	7,120.11	4,147.62	274.97	4,147.18	0.00	0.00	0.00	0.00
11,600.00	90.78	359.91	7,118.75	4,247.61	274.81	4,247.17	0.00	0.00	0.00	0.00
11,700.00	90.78	359.91	7,117.39	4,347.60	274.64	4,347.16	0.00	0.00	0.00	0.00
11,800.00	90.78	359.91	7,116.03	4,447.59	274.48	4,447.15	0.00	0.00	0.00	0.00
11,900.00	90.78	359.91	7,114.68	4,547.58	274.31	4,547.14	0.00	0.00	0.00	0.00
12,000.00	90.78	359.91	7,113.32	4,647.57	274.15	4,647.13	0.00	0.00	0.00	0.00
12,100.00	90.78	359.91	7,111.96	4,747.56	273.99	4,747.13	0.00	0.00	0.00	0.00
12,200.00	90.78	359.91	7,110.60	4,847.55	273.82	4,847.12	0.00	0.00	0.00	0.00
12,300.00	90.78	359.91	7,109.24	4,947.54	273.66	4,947.11	0.00	0.00	0.00	0.00
12,317.88	90.78	359.91	7,109.00	4,965.42	273.63	4,964.99	0.00	0.00	0.00	0.00

TD Well @ 12317.88ft - Total Depth (Toe) - FERGE 29N-14HZ_BHL

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,400.00	1,400.00	0.00	0.00	Begin Nudge @ 1400.00ft
1,668.34	1,667.95	-10.63	6.69	End Nudge @ 1668.34ft
6,478.39	6,456.91	-391.45	246.24	Top of 4.5" Liner @ 6478.39ft
6,578.39	6,556.47	-399.37	251.22	KOP @ 6578.39ft
7,000.00	6,951.10	-282.04	270.81	DLS = 10'/100'
7,531.62	7,174.00	179.61	281.50	End Build @ 7531.62ft
12,317.88	7,109.00	4,965.42	273.63	TD Well @ 12317.88ft

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	+N/_S (usft)	+E/-W (usft)	Start TVD (usft)
User	No Target (Freehand)	359.91	Slot	0.00	0.00	0.00

Plan Report for FERGE 29N-14HZ - Rev A0 Permit

Survey tool program

From (usft)	To (usft)	Survey/Plan	Survey Tool
0.00	7,531.62	Rev A0 Permit	MWD
7,531.62	12,317.88	Rev A0 Permit	MWD

Casing Details

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,145.00	1,145.00	9 5/8"	9-5/8	13-1/2
7,531.62	7,174.00	7"	7	8-3/4

Formation Details

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,095.00	1,095.00	Fox Hills Marker		0.00	
3,965.46	3,955.00	Parkman		0.00	
4,399.36	4,387.00	Sussex		0.00	
7,150.81	7,057.00	Sharon Springs		0.00	
7,258.99	7,114.00	Niobrara A		0.00	
7,427.59	7,166.00	Niobrara B		0.00	
7,531.62	7,174.00	Landing Target (Heel)		0.00	
12,317.88	7,109.00	Total Depth (Toe)		0.00	

Targets associated with this wellbore

Target Name	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Shape
FERGE 29N-14HZ_SHL	0.00	0.00	0.00	Point
FERGE 29N-14HZ_LD	0.00	0.00	0.00	Polygon
FERGE 29N-14HZ_SEC	0.00	0.00	0.00	Polygon
FERGE 29N-14HZ_BHL	7,109.00	4,965.42	273.63	Point
FERGE 29N-14HZ_CP	7,174.00	179.61	281.50	Point

Directional Difficulty Index

Average Dogleg over Survey:	0.82 °/100usft	Maximum Dogleg over Survey:	10.00 °/100usft at 7,531.62 usft
Net Tortousity applicable to Plans:	0.82 °/100usft	Directional Difficulty Index:	6.123

Audit Info

North Reference Sheet for Sec. 14-T3N-R66W - FERGE 29N-14HZ - 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 = 17' @ 4930.00usft (Drilling Rig). Northing and Easting are relative to FERGE 29N-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: 0.99995700

Grid Coordinates of Well: 1,323,360.78 usft N, 3,209,464.62 usft E
 Geographical Coordinates of Well: 40° 13' 06.93" N, 104° 44' 59.67" W
 Grid Convergence at Surface is: 0.48°

Based upon Minimum Curvature type calculations, at a Measured Depth of 12,317.88usft
 the Bottom Hole Displacement is 4,972.95usft in the Direction of 3.15° (True).
 Magnetic Convergence at surface is: -8.07° (14 November 2013, , BGGM2013)

