

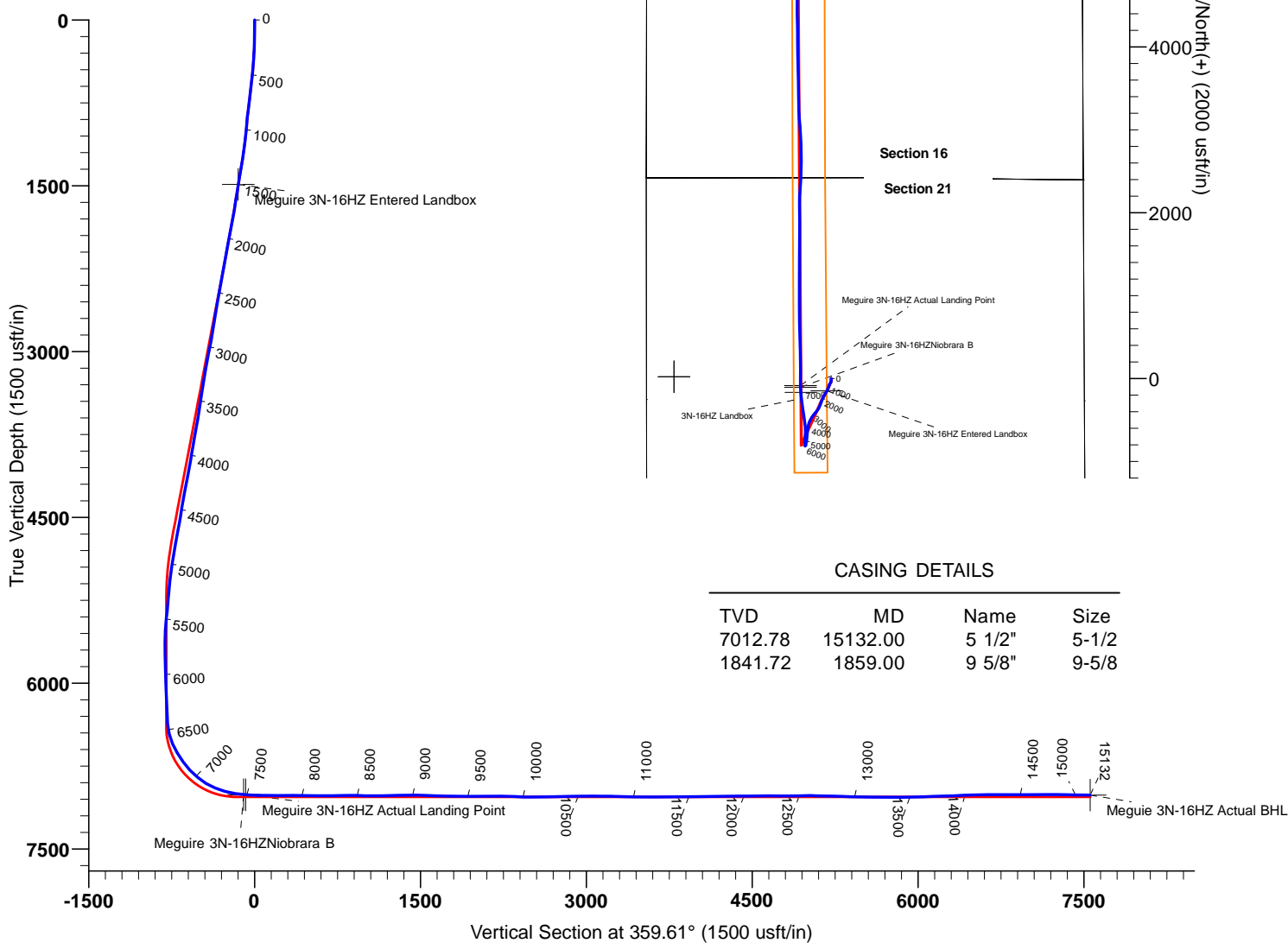
US ROCKIES WATTENBERG PLANNING



Project: WELD-NAD83-UTMFT13N
 Site: 2N-65W-21 Meguire 6-21HZ Pad
 Well: MEGUIRE 3N-16HZ
 Wellbore: MEGUIRE 3N-16HZ
 Design: PDD Actual Surveys

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1489.20	1500.00	Entered Landbox
6898.16	7094.00	Sharon Springs
6953.88	7217.00	Niobrara
7008.59	7471.00	Niobrara B
7010.47	7491.00	Landing Depth
7012.78	15132.00	Toe Depth



CASING DETAILS

TVD	MD	Name	Size
7012.78	15132.00	5 1/2"	5-1/2
1841.72	1859.00	9 5/8"	9-5/8

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Meguire 3N-16HZ Entered Landbox	1489.20	-147.42	-52.26	14572205.45	1732487.86	40.124405	-104.670636	Point
Meguire 3N-16HZNiobrara B	7008.59	-102.64	-368.54	14572249.06	1732171.42	40.124528	-104.671767	Point
Meguire 3N-16HZ Actual Landing Point	7010.47	-82.73	-368.71	14572268.97	1732171.17	40.124583	-104.671768	Point
Meguire 3N-16HZ Actual BHL	7012.78	7553.97	-425.78	14579905.41	1732085.79	40.145554	-104.671973	Point



US ROCKIES WATTENBERG PLANNING

WELD-NAD83-UTMFT13N

2N-65W-21 Meguire 6-21HZ Pad

MEGUIRE 3N-16HZ

MEGUIRE 3N-16HZ

Design: PDD Actual Surveys

Standard Survey Report

16 October, 2015

PDD

Survey Report

Company:	US ROCKIES WATTENBERG PLANNING	Local Co-ordinate Reference:	Well MEGUIRE 3N-16HZ
Project:	WELD-NAD83-UTMFT13N	TVD Reference:	4888'+20'=4908' @ 4908.00usft (p462)
Site:	2N-65W-21 Meguire 6-21HZ Pad	MD Reference:	4888'+20'=4908' @ 4908.00usft (p462)
Well:	MEGUIRE 3N-16HZ	North Reference:	True
Wellbore:	MEGUIRE 3N-16HZ	Survey Calculation Method:	Minimum Curvature
Design:	PDD Actual Surveys	Database:	EDM 5000.1 Single User Db

Project	WELD-NAD83-UTMFT13N		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 13N (108 W to 102 W)		

Site		2N-65W-21 Meguire 6-21HZ Pad, Centered on 29N-16HZ			
Site Position:		Northing:	14,572,335.50 usft	Latitude:	40.124762
From:	Lat/Long	Easting:	1,732,515.32 usft	Longitude:	-104.670536
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.21 °

Well		MEGUIRE 3N-16HZ				
Well Position	+N/-S	0.00 usft	Northing:	14,572,353.06 usft	Latitude:	40.124810
	+E/-W	0.00 usft	Easting:	1,732,539.57 usft	Longitude:	-104.670449
Position Uncertainty		3.28 usft	Wellhead Elevation:	0.00 usft	Ground Level:	4,888.00 usft

Wellbore	MEGUIRE 3N-16HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/10/2015	8.22	66.70	52,550

Design	PDD Actual Surveys				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	359.61	

Survey Program	Date	10/16/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
128.00	1,810.00	Scientific Drilling MWD Surveys (MEGUIRE)	APC_ISCWSA REV 2 MWD	Fixed:v2:standard declination	
1,888.00	15,132.00	PDD MWD+IFR+MSA Surveys (MEGUIRE)	APC_ISCWSA REV 2 MWD+	Fixed:v2:Rockies, crustal dec + 3-axis correction	

Survey										
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)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
128.00	0.59	161.56	128.00	-0.63	0.21	-0.63	0.46	0.46	0.00	
217.00	1.46	163.63	216.98	-2.15	0.67	-2.15	0.98	0.98	2.33	
315.00	3.37	172.60	314.89	-6.20	1.40	-6.21	1.98	1.95	9.15	
385.00	4.44	177.67	384.73	-10.95	1.77	-10.96	1.60	1.53	7.24	
475.00	5.60	179.10	474.38	-18.82	1.98	-18.83	1.30	1.29	1.59	
565.00	6.67	189.58	563.87	-28.37	1.18	-28.37	1.72	1.19	11.64	
655.00	7.31	198.70	653.20	-38.94	-1.52	-38.93	1.42	0.71	10.13	
745.00	7.66	211.81	742.44	-49.47	-6.52	-49.42	1.93	0.39	14.57	
835.00	7.94	212.90	831.61	-59.78	-13.06	-59.69	0.35	0.31	1.21	

PDD Survey Report

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Site:	2N-65W-21 Meguire 6-21HZ Pad	MD Reference:	4888'+20'=4908' @ 4908.00usft (p462)
Well:	MEGUIRE 3N-16HZ	North Reference:	True
Wellbore:	MEGUIRE 3N-16HZ	Survey Calculation Method:	Minimum Curvature
Design:	PDD Actual Surveys	Database:	EDM 5000.1 Single User Db

Survey									
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)
926.00	6.26	213.33	921.91	-69.21	-19.20	-69.07	1.85	-1.85	0.47
1,016.00	5.47	199.15	1,011.44	-77.36	-23.30	-77.20	1.83	-0.88	-15.76
1,109.00	7.25	194.65	1,103.86	-87.22	-26.24	-87.04	1.99	1.91	-4.84
1,196.00	8.48	197.75	1,190.04	-98.65	-29.59	-98.44	1.50	1.41	3.56
1,286.00	10.04	200.07	1,278.87	-112.33	-34.30	-112.10	1.78	1.73	2.58
1,376.00	10.52	208.49	1,367.43	-126.93	-40.91	-126.64	1.75	0.53	9.36
1,466.00	11.17	209.15	1,455.82	-141.76	-49.08	-141.42	0.74	0.72	0.73
1,556.00	10.34	210.21	1,544.24	-156.35	-57.39	-155.96	0.95	-0.92	1.18
1,646.00	10.24	210.77	1,632.79	-170.21	-65.55	-169.76	0.16	-0.11	0.62
1,736.00	11.05	207.24	1,721.24	-184.75	-73.59	-184.24	1.16	0.90	-3.92
1,810.00	11.85	209.45	1,793.77	-197.67	-80.57	-197.12	1.23	1.08	2.99
1,888.00	12.05	209.28	1,870.08	-211.75	-88.49	-211.14	0.26	0.26	-0.22
2,078.00	11.66	202.40	2,056.04	-246.80	-105.51	-246.07	0.77	-0.21	-3.62
2,268.00	10.68	198.83	2,242.44	-281.21	-118.51	-280.40	0.63	-0.52	-1.88
2,458.00	10.99	200.40	2,429.05	-314.85	-130.50	-313.96	0.23	0.16	0.83
2,647.00	10.46	205.90	2,614.75	-347.17	-144.28	-346.18	0.61	-0.28	2.91
2,837.00	11.22	215.22	2,801.38	-377.79	-162.47	-376.68	1.00	0.40	4.91
3,028.00	14.72	220.03	2,987.48	-411.56	-188.80	-410.27	1.92	1.83	2.52
3,218.00	12.92	218.10	3,171.97	-446.77	-217.44	-445.28	0.98	-0.95	-1.02
3,407.00	9.91	213.13	3,357.22	-477.02	-239.37	-475.38	1.67	-1.59	-2.63
3,598.00	10.04	207.92	3,545.33	-505.50	-256.15	-503.74	0.48	0.07	-2.73
3,788.00	11.14	195.91	3,732.12	-537.79	-268.94	-535.94	1.29	0.58	-6.32
3,977.00	8.59	186.89	3,918.32	-569.37	-275.64	-567.48	1.57	-1.35	-4.77
4,167.00	11.90	192.05	4,105.27	-602.62	-281.43	-600.69	1.81	1.74	2.72
4,357.00	10.06	186.05	4,291.79	-638.28	-287.27	-636.31	1.14	-0.97	-3.16
4,547.00	9.35	180.01	4,479.07	-670.22	-289.02	-668.24	0.65	-0.37	-3.18
4,737.00	11.10	187.32	4,666.06	-703.80	-291.36	-701.80	1.14	0.92	3.85
4,928.00	9.36	187.67	4,854.01	-737.43	-295.77	-735.40	0.91	-0.91	0.18
5,118.00	6.92	181.18	5,042.09	-764.19	-298.07	-762.15	1.37	-1.28	-3.42
5,306.00	4.91	205.30	5,229.10	-782.79	-301.74	-780.72	1.68	-1.07	12.83
5,494.00	6.59	193.60	5,416.16	-800.56	-307.72	-798.44	1.09	0.89	-6.22
5,684.00	2.53	257.66	5,605.61	-812.06	-314.38	-809.90	3.12	-2.14	33.72
5,875.00	2.62	55.10	5,796.54	-810.46	-314.92	-808.30	2.64	0.05	82.43
6,065.00	2.07	25.77	5,986.39	-804.89	-309.87	-802.76	0.68	-0.29	-15.44
6,255.00	2.77	341.89	6,176.23	-797.43	-309.80	-795.30	1.01	0.37	-23.09
6,446.00	3.11	328.83	6,366.98	-788.61	-313.92	-786.46	0.39	0.18	-6.84
6,541.00	14.40	351.64	6,460.74	-774.67	-316.98	-772.50	12.20	11.88	24.01
6,636.00	23.77	3.99	6,550.45	-743.80	-317.37	-741.63	10.69	9.86	13.00
6,730.00	30.66	7.30	6,634.00	-701.08	-313.00	-698.93	7.50	7.33	3.52
6,825.00	36.79	2.28	6,712.99	-648.57	-308.79	-646.45	7.08	6.45	-5.28
6,920.00	42.77	354.71	6,786.01	-587.93	-310.63	-585.81	8.09	6.29	-7.97
7,015.00	50.11	352.77	6,851.43	-519.56	-318.20	-517.39	7.87	7.73	-2.04
7,111.00	58.86	350.85	6,907.15	-442.31	-329.39	-440.06	9.26	9.11	-2.00

PDD Survey Report

Company:	US ROCKIES WATTENBERG PLANNING	Local Co-ordinate Reference:	Well MEGUIRE 3N-16HZ
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Site:	2N-65W-21 Meguire 6-21HZ Pad	MD Reference:	4888'+20'=4908' @ 4908.00usft (p462)
Well:	MEGUIRE 3N-16HZ	North Reference:	True
Wellbore:	MEGUIRE 3N-16HZ	Survey Calculation Method:	Minimum Curvature
Design:	PDD Actual Surveys	Database:	EDM 5000.1 Single User Db

Survey									
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)
7,205.00	67.65	351.43	6,949.41	-359.45	-342.29	-357.11	9.37	9.35	0.62
7,300.00	75.35	352.22	6,979.53	-270.34	-355.08	-267.92	8.14	8.11	0.83
7,396.00	81.18	355.56	6,999.05	-176.93	-365.05	-174.44	6.96	6.07	3.48
7,491.00	85.02	359.97	7,010.47	-82.73	-368.71	-80.22	6.13	4.04	4.64
7,586.00	88.49	0.17	7,015.85	12.10	-368.59	14.61	3.66	3.65	0.21
7,682.00	90.24	0.13	7,016.91	108.09	-368.34	110.60	1.82	1.82	-0.04
7,777.00	89.58	359.33	7,017.06	203.09	-368.79	205.59	1.09	-0.69	-0.84
7,872.00	90.83	358.53	7,016.72	298.07	-370.56	300.58	1.56	1.32	-0.84
7,968.00	88.55	358.65	7,017.24	394.03	-372.93	396.56	2.38	-2.38	0.13
8,063.00	89.48	358.23	7,018.87	488.98	-375.51	491.53	1.07	0.98	-0.44
8,158.00	90.29	358.07	7,019.06	583.93	-378.58	586.49	0.87	0.85	-0.17
8,253.00	90.63	358.52	7,018.30	678.88	-381.41	681.47	0.59	0.36	0.47
8,348.00	90.93	359.32	7,017.01	773.86	-383.20	776.45	0.90	0.32	0.84
8,444.00	90.00	359.86	7,016.23	869.85	-383.88	872.44	1.12	-0.97	0.56
8,539.00	88.75	0.03	7,017.27	964.84	-383.97	967.43	1.33	-1.32	0.18
8,634.00	89.24	0.25	7,018.93	1,059.83	-383.74	1,062.42	0.57	0.52	0.23
8,729.00	90.46	0.34	7,019.18	1,154.82	-383.25	1,157.41	1.29	1.28	0.09
8,824.00	91.66	359.97	7,017.42	1,249.81	-383.00	1,252.38	1.32	1.26	-0.39
8,920.00	92.34	0.62	7,014.07	1,345.75	-382.50	1,348.32	0.98	0.71	0.68
9,015.00	89.15	0.83	7,012.84	1,440.72	-381.30	1,443.28	3.37	-3.36	0.22
9,111.00	87.57	0.58	7,015.58	1,536.67	-380.12	1,539.22	1.67	-1.65	-0.26
9,206.00	88.02	0.30	7,019.24	1,631.59	-379.39	1,634.14	0.56	0.47	-0.29
9,301.00	88.53	0.11	7,022.10	1,726.55	-379.05	1,729.09	0.57	0.54	-0.20
9,396.00	89.26	359.91	7,023.93	1,821.53	-379.03	1,824.07	0.80	0.77	-0.21
9,490.00	89.47	359.43	7,024.97	1,915.52	-379.58	1,918.06	0.56	0.22	-0.51
9,585.00	90.03	359.30	7,025.39	2,010.52	-380.63	2,013.06	0.61	0.59	-0.14
9,680.00	91.62	359.17	7,024.02	2,105.50	-381.90	2,108.05	1.68	1.67	-0.14
9,775.00	89.80	3.41	7,022.84	2,200.44	-379.76	2,202.97	4.86	-1.92	4.46
9,871.00	87.33	4.56	7,025.25	2,296.17	-373.09	2,298.65	2.84	-2.57	1.20
9,965.00	87.88	3.78	7,029.17	2,389.84	-366.26	2,392.27	1.01	0.59	-0.83
10,061.00	89.91	0.68	7,031.03	2,485.73	-362.53	2,488.14	3.86	2.11	-3.23
10,156.00	91.25	0.99	7,030.06	2,580.71	-361.14	2,583.11	1.45	1.41	0.33
10,251.00	90.82	359.53	7,028.35	2,675.69	-360.71	2,678.09	1.60	-0.45	-1.54
10,346.00	91.38	359.47	7,026.52	2,770.67	-361.54	2,773.07	0.59	0.59	-0.06
10,441.00	91.87	356.80	7,023.83	2,865.57	-364.63	2,867.99	2.86	0.52	-2.81
10,536.00	89.43	356.39	7,022.75	2,960.39	-370.27	2,962.84	2.60	-2.57	-0.43
10,631.00	89.82	355.71	7,023.37	3,055.16	-376.82	3,057.66	0.83	0.41	-0.72
10,726.00	89.89	355.23	7,023.61	3,149.87	-384.32	3,152.41	0.51	0.07	-0.51
10,821.00	88.45	358.67	7,024.99	3,244.71	-389.37	3,247.28	3.93	-1.52	3.62
10,916.00	88.66	358.72	7,027.39	3,339.65	-391.54	3,342.24	0.23	0.22	0.05
11,009.00	88.93	358.51	7,029.34	3,432.60	-393.78	3,435.20	0.37	0.29	-0.23
11,104.00	89.83	359.70	7,030.37	3,527.58	-395.27	3,530.19	1.57	0.95	1.25
11,199.00	89.90	359.32	7,030.59	3,622.58	-396.08	3,625.19	0.41	0.07	-0.40

PDD Survey Report

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Well:	MEGUIRE 3N-16HZ	North Reference:	True
Wellbore:	MEGUIRE 3N-16HZ	Survey Calculation Method:	Minimum Curvature
Design:	PDD Actual Surveys	Database:	EDM 5000.1 Single User Db

Survey									
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)
11,294.00	90.35	358.87	7,030.39	3,717.57	-397.58	3,720.19	0.67	0.47	-0.47
11,388.00	90.95	358.47	7,029.32	3,811.53	-399.76	3,814.17	0.77	0.64	-0.43
11,480.00	91.64	358.08	7,027.24	3,903.47	-402.53	3,906.12	0.86	0.75	-0.42
11,573.00	89.58	359.86	7,026.25	3,996.44	-404.20	3,999.10	2.93	-2.22	1.91
11,665.00	90.31	359.41	7,026.34	4,088.44	-404.79	4,091.10	0.93	0.79	-0.49
11,758.00	91.00	359.13	7,025.28	4,181.42	-405.97	4,184.09	0.80	0.74	-0.30
11,851.00	91.55	359.34	7,023.21	4,274.39	-407.21	4,277.06	0.63	0.59	0.23
11,945.00	89.85	359.87	7,022.06	4,368.38	-407.86	4,371.05	1.89	-1.81	0.56
12,038.00	90.56	359.83	7,021.73	4,461.38	-408.11	4,464.05	0.76	0.76	-0.04
12,133.00	90.98	359.22	7,020.45	4,556.36	-408.89	4,559.04	0.78	0.44	-0.64
12,227.00	89.70	0.84	7,019.89	4,650.36	-408.84	4,653.03	2.20	-1.36	1.72
12,320.00	89.73	1.05	7,020.35	4,743.34	-407.31	4,746.01	0.23	0.03	0.23
12,416.00	90.47	0.96	7,020.19	4,839.33	-405.63	4,841.98	0.78	0.77	-0.09
12,510.00	91.48	0.70	7,018.59	4,933.30	-404.27	4,935.94	1.11	1.07	-0.28
12,603.00	89.34	0.41	7,017.92	5,026.29	-403.36	5,028.92	2.32	-2.30	-0.31
12,696.00	88.07	359.21	7,020.02	5,119.26	-403.67	5,121.89	1.88	-1.37	-1.29
12,788.00	88.33	358.92	7,022.91	5,211.20	-405.17	5,213.84	0.42	0.28	-0.32
12,881.00	88.56	358.88	7,025.44	5,304.15	-406.96	5,306.80	0.25	0.25	-0.04
12,973.00	88.63	358.69	7,027.69	5,396.10	-408.91	5,398.76	0.22	0.08	-0.21
13,066.00	88.96	358.21	7,029.65	5,489.05	-411.42	5,491.72	0.63	0.35	-0.52
13,158.00	88.93	0.06	7,031.34	5,581.02	-412.81	5,583.70	2.01	-0.03	2.01
13,251.00	89.13	0.78	7,032.92	5,674.00	-412.13	5,676.68	0.80	0.22	0.77
13,343.00	89.68	0.31	7,033.87	5,765.99	-411.25	5,768.66	0.79	0.60	-0.51
13,436.00	90.80	0.70	7,033.48	5,858.99	-410.44	5,861.65	1.28	1.20	0.42
13,529.00	91.55	0.80	7,031.58	5,951.96	-409.22	5,954.61	0.81	0.81	0.11
13,621.00	92.23	0.36	7,028.54	6,043.90	-408.29	6,046.54	0.88	0.74	-0.48
13,714.00	91.52	359.14	7,025.50	6,136.85	-408.69	6,139.49	1.52	-0.76	-1.31
13,806.00	92.27	359.07	7,022.46	6,228.79	-410.13	6,231.44	0.82	0.82	-0.08
13,899.00	91.91	358.50	7,019.07	6,321.70	-412.10	6,324.36	0.72	-0.39	-0.61
13,991.00	93.31	358.16	7,014.88	6,413.57	-414.78	6,416.24	1.57	1.52	-0.37
14,084.00	90.52	358.09	7,011.77	6,506.46	-417.82	6,509.15	3.00	-3.00	-0.08
14,176.00	90.96	357.68	7,010.58	6,598.39	-421.21	6,601.10	0.65	0.48	-0.45
14,269.00	91.68	357.22	7,008.44	6,691.27	-425.35	6,694.01	0.92	0.77	-0.49
14,362.00	88.56	358.64	7,008.24	6,784.19	-428.71	6,786.96	3.69	-3.35	1.53
14,454.00	89.27	358.12	7,009.98	6,876.14	-431.31	6,878.92	0.96	0.77	-0.57
14,547.00	90.04	1.28	7,010.55	6,969.12	-431.80	6,971.90	3.50	0.83	3.40
14,639.00	90.22	1.54	7,010.34	7,061.10	-429.53	7,063.86	0.34	0.20	0.28
14,732.00	91.38	1.57	7,009.04	7,154.05	-427.01	7,156.79	1.25	1.25	0.03
14,824.00	89.53	1.00	7,008.31	7,246.02	-424.95	7,248.75	2.10	-2.01	-0.62
14,917.00	88.74	0.13	7,009.71	7,339.00	-424.03	7,341.72	1.26	-0.85	-0.94
15,009.00	89.03	359.68	7,011.50	7,430.99	-424.18	7,433.70	0.58	0.32	-0.49
15,063.00	89.23	359.21	7,012.32	7,484.98	-424.70	7,487.69	0.95	0.37	-0.87
15,132.00	90.00	359.00	7,012.79	7,553.97	-425.78	7,556.69	1.16	1.12	-0.30

PDD Survey Report

Company:	US ROCKIES WATTENBERG PLANNING	Local Co-ordinate Reference:	Well MEGUIRE 3N-16HZ
Project:	WELD-NAD83-UTMFT13N	TVD Reference:	4888'+20'=4908' @ 4908.00usft (p462)
Site:	2N-65W-21 Meguire 6-21HZ Pad	MD Reference:	4888'+20'=4908' @ 4908.00usft (p462)
Well:	MEGUIRE 3N-16HZ	North Reference:	True
Wellbore:	MEGUIRE 3N-16HZ	Survey Calculation Method:	Minimum Curvature
Design:	PDD Actual Surveys	Database:	EDM 5000.1 Single User Db

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Meguire 3N-16HZ Enter - actual wellpath hits target center - Point	0.00	0.00	1,489.20	-147.42	-52.26	14,572,205.45	1,732,487.86	40.124405	-104.670636
Meguire 3N-16HZNiobra - actual wellpath misses target center by 0.01usft at 7471.01usft MD (7008.59 TVD, -102.64 N, -368.54 E) - Point	0.00	0.00	7,008.59	-102.64	-368.54	14,572,249.06	1,732,171.42	40.124528	-104.671768
Meguire 3N-16HZ Actua - actual wellpath hits target center - Point	0.00	0.00	7,010.47	-82.73	-368.71	14,572,268.97	1,732,171.17	40.124583	-104.671768
Meguire 3N-16HZ Actual - actual wellpath hits target center - Point	0.00	0.00	7,012.79	7,553.97	-425.78	14,579,905.40	1,732,085.79	40.145554	-104.671973

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,859.00	1,841.72	9 5/8"	9-5/8	13-1/2	
15,132.00	7,012.79	5 1/2"	5-1/2	8-1/2	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,500.00	1,489.20	Entered Landbox		0.00	
7,094.00	6,898.16	Sharon Springs		0.00	
7,217.00	6,953.88	Niobrara		0.00	
7,471.00	7,008.59	Niobrara B		0.00	
7,491.00	7,010.47	Landing Depth		0.00	
15,132.00	7,012.79	Toe Depth		0.00	

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
15,132.00	7,012.79	7,553.97	-425.78	Projection to Bit	

Checked By: _____	Approved By: _____	Date: _____
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