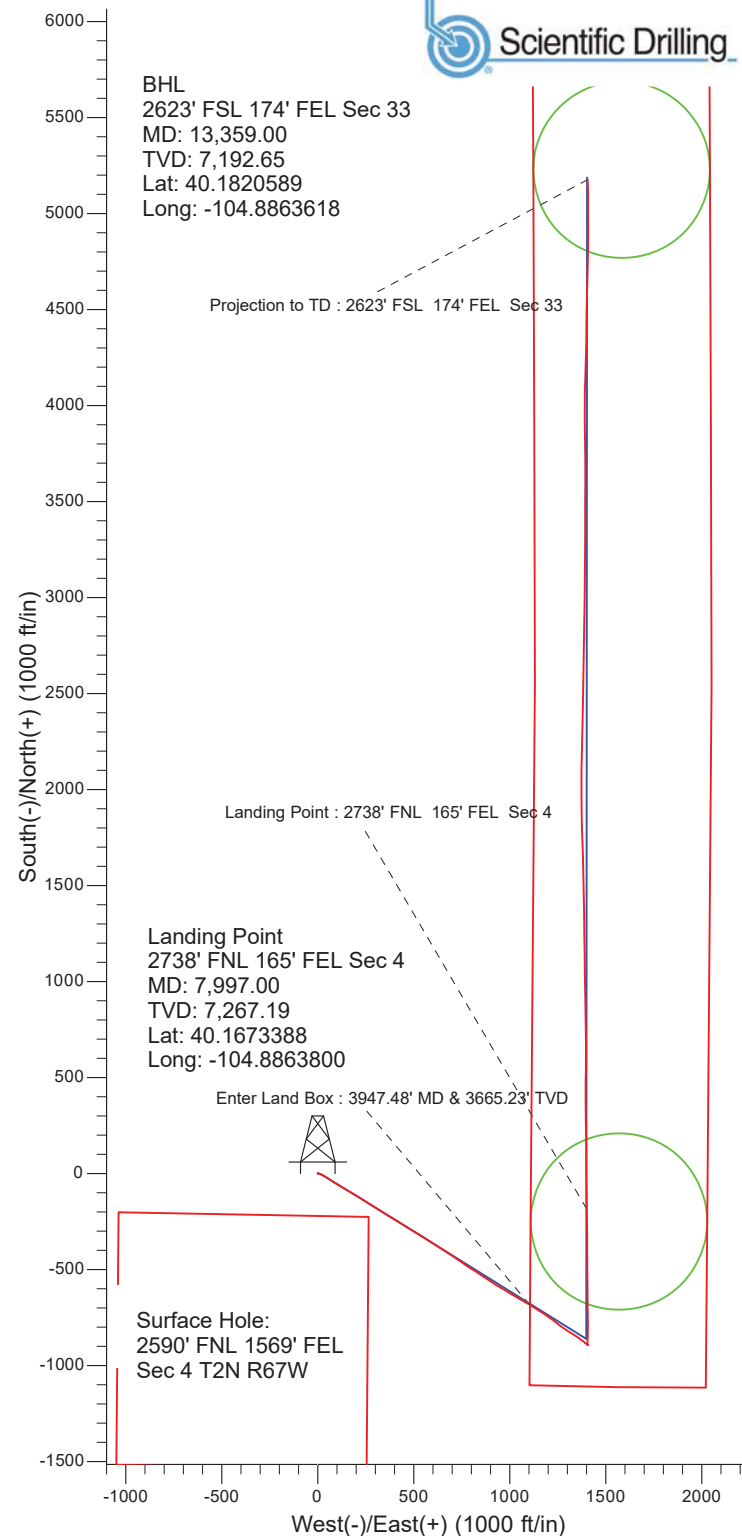
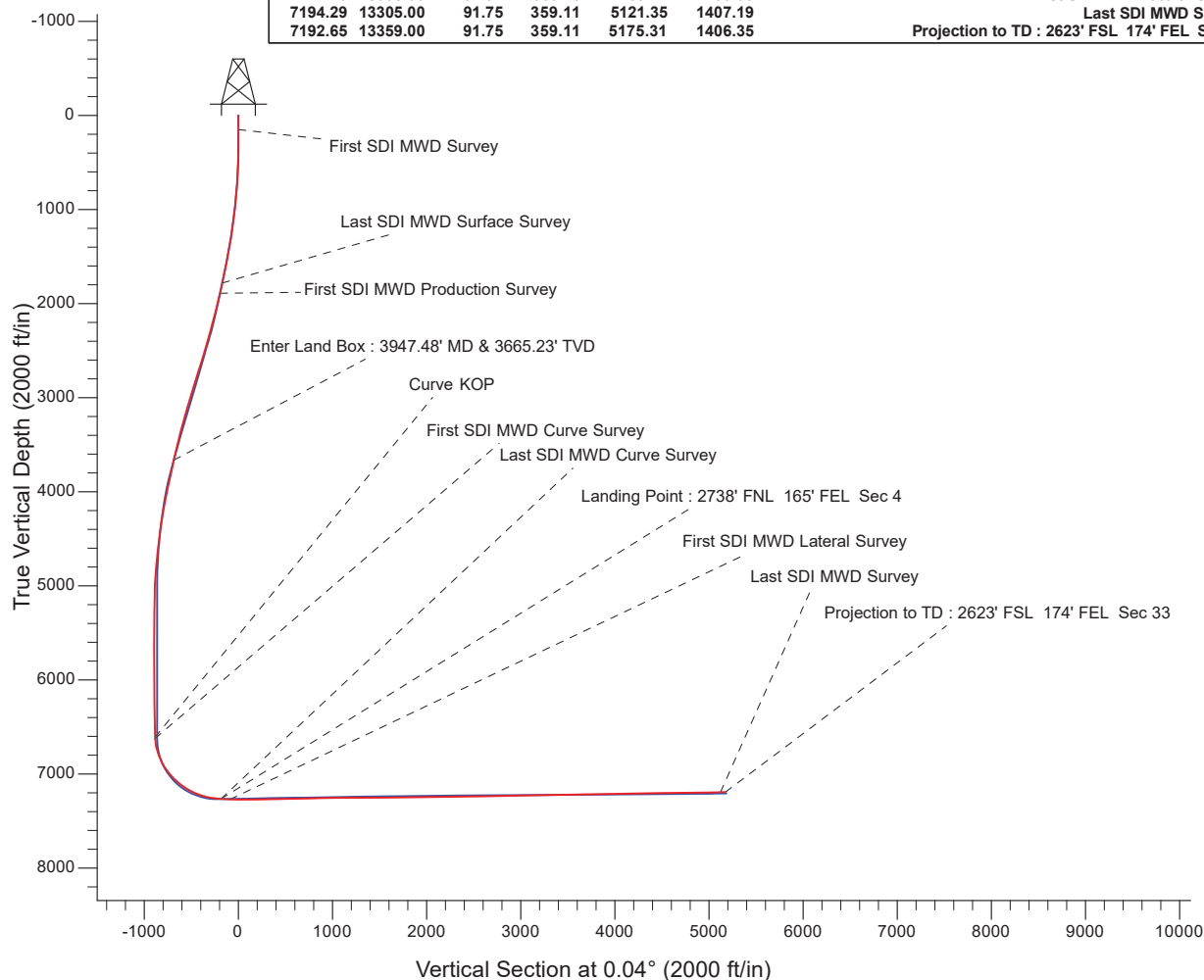


WELL DETAILS: Whiston 40N-33HZ				PROJECT DETAILS: US Rockies Wattenberg Planning UTM83	
GL 4905' & KB 20' @ 4925.00ft (Precision 461)		4905.00		Geodetic System: Universal Transverse Mercator (US Survey Feet)	
Northing 14587872.79	Easting 1670756.44	Latitude 40.1678470	Longitude -104.8913970	Datum: North American Datum 1983	
				Ellipsoid: GRS 1980	
				Zone: Zone 13N (108 W to 102 W)	
Design: OH (Whiston 40N-33HZ/OH)				System Datum: Mean Sea Level	
Created By: Seth Burstad Date: 3-28-2017				Local North: True	

ANNOTATIONS							Annotation
TVD	MD	Inc	Azi	+N/-S	+E/-W		
150.00	150.00	0.34	355.59	0.44	-0.03		First SDI MWD Survey
1783.33	1831.00	21.24	121.61	-171.05	289.40		Last SDI MWD Surface Survey
1891.26	1947.00	21.75	123.19	-193.83	325.28		First SDI MWD Production Survey
3665.23	3947.48	23.64	119.81	-685.43	1105.38		Enter Land Box : 3947.48' MD & 3665.23' TVD
6609.91	6945.00	2.64	353.25	-885.09	1404.79		Curve KOP
6621.90	6957.00	2.89	353.42	-884.52	1404.72		First SDI MWD Curve Survey
7267.19	7997.00	87.26	359.32	-185.05	1401.56		Landing Point : 2738' FNL 165' FEL Sec 4
7267.23	7998.00	87.34	359.32	-184.05	1401.55		Last SDI MWD Curve Survey
7271.16	8093.00	87.92	359.20	-89.14	1400.33		First SDI MWD Lateral Survey
7194.29	13305.00	91.75	359.11	5121.35	1407.19		Last SDI MWD Survey
7192.65	13359.00	91.75	359.11	5175.31	1406.35		Projection to TD : 2623' FSL 174' FEL Sec 33





US ROCKIES REGION PLANNING

US Rockies Wattenberg Planning UTM83

Whiston 4-7HZ Pad 2N-67W-4

Whiston 40N-33HZ

OH

Design: OH

Standard Survey Report

28 March, 2017



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well Whiston 40N-33HZ
Project:	US Rockies Wattenberg Planning UTM83	TVD Reference:	GL 4905' & KB 20' @ 4925.00ft (Precision 461)
Site:	Whiston 4-7HZ Pad 2N-67W-4	MD Reference:	GL 4905' & KB 20' @ 4925.00ft (Precision 461)
Well:	Whiston 40N-33HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales Office

Project	US Rockies Wattenberg Planning UTM83		
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	Whiston 4-7HZ Pad 2N-67W-4, Site Center : Whiston 9N-33HZ				
Site Position:		Northing:	14,587,873.80 usft	Latitude:	40.1678500
From:	Lat/Long	Easting:	1,670,696.66 usft	Longitude:	-104.8916110
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.07 °

Well	Whiston 40N-33HZ, 2590' FNL 1569' FEL Sec 4 T2N R67W					
Well Position	+N/-S	0.00 ft	Northing:	14,587,872.78 usft	Latitude:	40.1678470
	+E/-W	0.00 ft	Easting:	1,670,756.44 usft	Longitude:	-104.8913970
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,905.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2016	1/10/2017	8.47	66.69	52,300

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00		0.04

Survey Program	Date	3/28/2017			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
150.00	1,831.00	Survey #1 - Surface (OH)	APC_ISCWSA REV 2 MWD+	Fixed:v2:crustal field declination	
1,947.00	13,359.00	Survey #2 - Production (OH)	APC_ISCWSA REV 2 MWD+	Fixed:v2:crustal field declination	

Survey										
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)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150.00	0.34	355.59	150.00	0.44	-0.03	0.44	0.23	0.23	0.00	
First SDI MWD Survey										
232.00	0.41	48.62	232.00	0.88	0.17	0.88	0.42	0.09	64.67	
320.00	1.20	91.12	319.99	1.07	1.32	1.07	1.07	0.90	48.30	
407.00	2.33	112.39	406.95	0.38	3.87	0.38	1.48	1.30	24.45	
542.00	5.01	110.69	541.66	-2.75	11.92	-2.74	1.99	1.99	-1.26	
625.00	6.03	115.42	624.27	-5.90	19.25	-5.89	1.34	1.23	5.70	
713.00	7.64	120.67	711.64	-10.87	28.46	-10.85	1.96	1.83	5.97	
802.00	9.25	121.76	799.68	-17.65	39.63	-17.63	1.82	1.81	1.22	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well Whiston 40N-33HZ
Project:	US Rockies Wattenberg Planning UTM83	TVD Reference:	GL 4905' & KB 20' @ 4925.00ft (Precision 461)
Site:	Whiston 4-7HZ Pad 2N-67W-4	MD Reference:	GL 4905' & KB 20' @ 4925.00ft (Precision 461)
Well:	Whiston 40N-33HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales Office

Survey										
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)	
889.00	10.35	123.69	885.41	-25.67	52.08	-25.63	1.32	1.26	2.22	
975.00	11.45	122.92	969.85	-34.59	65.67	-34.55	1.29	1.28	-0.90	
1,064.00	13.10	120.34	1,056.82	-44.49	81.79	-44.43	1.95	1.85	-2.90	
1,153.00	14.72	120.98	1,143.20	-55.41	100.19	-55.34	1.83	1.82	0.72	
1,239.00	15.45	121.53	1,226.24	-67.02	119.33	-66.94	0.86	0.85	0.64	
1,415.00	18.91	120.76	1,394.36	-93.87	163.83	-93.76	1.97	1.97	-0.44	
1,590.00	20.87	122.11	1,558.92	-124.95	214.60	-124.80	1.15	1.12	0.77	
1,677.00	21.54	121.75	1,640.02	-141.59	241.31	-141.42	0.78	0.77	-0.41	
1,764.00	21.55	121.30	1,720.95	-158.30	268.55	-158.11	0.19	0.01	-0.52	
1,831.00	21.24	121.61	1,783.33	-171.05	289.40	-170.85	0.49	-0.46	0.46	
Last SDI MWD Surface Survey										
1,947.00	21.75	123.19	1,891.26	-193.83	325.28	-193.60	0.67	0.44	1.36	
First SDI MWD Production Survey										
2,041.00	23.99	123.11	1,977.87	-213.80	355.86	-213.56	2.38	2.38	-0.09	
2,135.00	25.53	120.88	2,063.22	-234.64	389.26	-234.37	1.92	1.64	-2.37	
2,228.00	27.07	120.88	2,146.59	-255.79	424.62	-255.49	1.66	1.66	0.00	
2,323.00	28.05	121.74	2,230.81	-278.63	462.17	-278.31	1.11	1.03	0.91	
2,417.00	28.49	121.40	2,313.60	-301.94	500.10	-301.59	0.50	0.47	-0.36	
2,512.00	28.81	121.63	2,396.97	-325.75	538.93	-325.37	0.36	0.34	0.24	
2,606.00	29.02	121.61	2,479.25	-349.58	577.63	-349.18	0.22	0.22	-0.02	
2,701.00	29.40	122.53	2,562.17	-374.20	616.92	-373.77	0.62	0.40	0.97	
2,795.00	29.71	123.98	2,643.94	-399.62	655.69	-399.16	0.83	0.33	1.54	
2,889.00	28.93	123.65	2,725.90	-425.24	693.93	-424.76	0.85	-0.83	-0.35	
2,982.00	29.54	124.14	2,807.05	-450.57	731.63	-450.06	0.70	0.66	0.53	
3,077.00	28.28	124.18	2,890.21	-476.36	769.63	-475.82	1.33	-1.33	0.04	
3,170.00	27.93	122.43	2,972.25	-500.42	806.24	-499.85	0.96	-0.38	-1.88	
3,265.00	29.15	123.86	3,055.70	-525.24	844.24	-524.65	1.47	1.28	1.51	
3,359.00	29.04	123.62	3,137.84	-550.63	882.24	-550.01	0.17	-0.12	-0.26	
3,454.00	27.64	123.22	3,221.45	-575.47	919.88	-574.82	1.49	-1.47	-0.42	
3,548.00	26.63	119.92	3,305.11	-597.92	956.38	-597.25	1.93	-1.07	-3.51	
3,643.00	26.58	119.51	3,390.05	-619.01	993.33	-618.32	0.20	-0.05	-0.43	
3,736.00	25.93	121.40	3,473.46	-639.85	1,028.80	-639.14	1.14	-0.70	2.03	
3,829.00	25.21	121.36	3,557.35	-660.76	1,063.07	-660.01	0.77	-0.77	-0.04	
3,923.00	23.96	119.41	3,642.83	-680.55	1,096.79	-679.78	1.59	-1.33	-2.07	
3,947.48	23.64	119.81	3,665.23	-685.43	1,105.38	-684.66	1.47	-1.31	1.62	
Enter Land Box : 3947.48' MD & 3665.23' TVD										
4,017.00	22.73	120.99	3,729.13	-699.27	1,128.99	-698.48	1.47	-1.31	1.70	
4,111.00	21.21	123.02	3,816.31	-717.89	1,158.81	-717.08	1.81	-1.62	2.16	
4,204.00	20.10	124.10	3,903.33	-736.02	1,186.15	-735.19	1.26	-1.19	1.16	
4,298.00	20.74	127.04	3,991.42	-755.10	1,212.81	-754.25	1.29	0.68	3.13	
4,393.00	19.13	126.94	4,080.73	-774.59	1,238.68	-773.72	1.70	-1.69	-0.11	
4,487.00	16.71	127.11	4,170.16	-792.00	1,261.78	-791.12	2.58	-2.57	0.18	
4,582.00	15.28	124.71	4,261.48	-807.37	1,282.96	-806.47	1.66	-1.51	-2.53	
4,676.00	14.23	123.73	4,352.38	-820.84	1,302.75	-819.93	1.15	-1.12	-1.04	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well Whiston 40N-33HZ
Project:	US Rockies Wattenberg Planning UTM83	TVD Reference:	GL 4905' & KB 20' @ 4925.00ft (Precision 461)
Site:	Whiston 4-7HZ Pad 2N-67W-4	MD Reference:	GL 4905' & KB 20' @ 4925.00ft (Precision 461)
Well:	Whiston 40N-33HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales Office

Survey									
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)
4,769.00	13.88	122.10	4,442.59	-833.11	1,321.71	-832.19	0.57	-0.38	-1.75
4,863.00	13.07	122.34	4,534.01	-844.79	1,340.24	-843.85	0.86	-0.86	0.26
4,958.00	11.52	124.33	4,626.83	-855.89	1,357.15	-854.94	1.69	-1.63	2.09
5,052.00	9.13	127.12	4,719.30	-865.68	1,370.85	-864.73	2.60	-2.54	2.97
5,146.00	7.24	128.28	4,812.34	-873.85	1,381.45	-872.89	2.02	-2.01	1.23
5,267.00	5.50	130.99	4,932.58	-882.38	1,391.81	-881.41	1.46	-1.44	2.24
5,363.00	4.09	122.66	5,028.25	-887.25	1,398.16	-886.27	1.63	-1.47	-8.68
5,458.00	2.53	109.56	5,123.09	-889.78	1,402.99	-888.80	1.81	-1.64	-13.79
5,551.00	1.46	156.54	5,216.03	-891.55	1,405.40	-890.57	2.01	-1.15	50.52
5,646.00	1.19	161.83	5,311.01	-893.60	1,406.19	-892.62	0.31	-0.28	5.57
5,739.00	0.38	343.40	5,404.00	-894.22	1,406.40	-893.24	1.69	-0.87	-191.86
5,832.00	0.34	20.15	5,497.00	-893.67	1,406.41	-892.68	0.25	-0.04	39.52
5,928.00	0.33	29.24	5,593.00	-893.16	1,406.64	-892.18	0.06	-0.01	9.47
6,021.00	0.26	10.32	5,686.00	-892.72	1,406.81	-891.73	0.13	-0.08	-20.34
6,115.00	0.23	352.19	5,780.00	-892.32	1,406.82	-891.34	0.09	-0.03	-19.29
6,210.00	0.20	11.41	5,875.00	-891.97	1,406.83	-890.99	0.08	-0.03	20.23
6,302.00	0.28	105.82	5,967.00	-891.87	1,407.08	-890.89	0.39	0.09	102.62
6,397.00	0.28	108.81	6,062.00	-892.01	1,407.52	-891.03	0.02	0.00	3.15
6,492.00	0.05	16.62	6,157.00	-892.05	1,407.75	-891.06	0.30	-0.24	-97.04
6,586.00	0.77	308.67	6,250.99	-891.61	1,407.27	-890.63	0.80	0.77	-72.29
6,679.00	1.01	327.85	6,343.98	-890.53	1,406.35	-889.54	0.41	0.26	20.62
6,772.00	0.96	335.58	6,436.97	-889.12	1,405.59	-888.14	0.15	-0.05	8.31
6,864.00	0.99	349.83	6,528.95	-887.64	1,405.13	-886.66	0.26	0.03	15.49
6,945.00	2.64	353.25	6,609.91	-885.09	1,404.79	-884.11	2.05	2.04	4.22
Curve KOP									
6,957.00	2.89	353.42	6,621.90	-884.52	1,404.72	-883.54	2.05	2.04	1.44
First SDI MWD Curve Survey									
7,052.00	13.33	4.38	6,715.82	-871.18	1,405.28	-870.20	11.06	10.99	11.54
7,146.00	21.05	1.52	6,805.55	-843.46	1,406.56	-842.48	8.26	8.21	-3.04
7,241.00	29.05	0.35	6,891.55	-803.28	1,407.15	-802.29	8.44	8.42	-1.23
7,336.00	36.29	359.24	6,971.47	-752.03	1,406.92	-751.05	7.65	7.62	-1.17
7,430.00	44.57	0.27	7,042.96	-691.13	1,406.71	-690.14	8.84	8.81	1.10
7,525.00	51.33	357.98	7,106.56	-620.64	1,405.56	-619.66	7.34	7.12	-2.41
7,620.00	58.41	359.84	7,161.19	-543.01	1,404.13	-542.03	7.62	7.45	1.96
7,714.00	67.32	359.52	7,204.02	-459.45	1,403.66	-458.47	9.48	9.48	-0.34
7,809.00	73.68	359.78	7,235.71	-369.94	1,403.11	-368.96	6.70	6.69	0.27
7,904.00	80.28	359.49	7,257.11	-277.44	1,402.52	-276.46	6.95	6.95	-0.31
7,997.00	87.26	359.32	7,267.19	-185.05	1,401.56	-184.07	7.51	7.51	-0.18
Landing Point : 2738' FNL 165' FEL Sec 4									
7,998.00	87.34	359.32	7,267.24	-184.05	1,401.55	-183.07	7.51	7.51	-0.18
Last SDI MWD Curve Survey									
8,093.00	87.92	359.20	7,271.16	-89.14	1,400.33	-88.16	0.62	0.61	-0.13
First SDI MWD Lateral Survey									
8,187.00	90.17	359.39	7,272.73	4.83	1,399.17	5.81	2.40	2.39	0.20

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Project:	US Rockies Wattenberg Planning UTM83	TVD Reference:	GL 4905' & KB 20' @ 4925.00ft (Precision 461)
Site:	Whiston 4-7HZ Pad 2N-67W-4	MD Reference:	GL 4905' & KB 20' @ 4925.00ft (Precision 461)
Well:	Whiston 40N-33HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales Office

Survey									
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)
8,280.00	89.83	359.43	7,272.73	97.83	1,398.21	98.81	0.37	-0.37	0.04
8,376.00	91.24	359.64	7,271.83	193.82	1,397.43	194.79	1.48	1.47	0.22
8,469.00	91.58	359.13	7,269.55	286.79	1,396.43	287.76	0.66	0.37	-0.55
8,564.00	90.97	359.29	7,267.43	381.75	1,395.13	382.73	0.66	-0.64	0.17
8,657.00	90.67	0.96	7,266.10	474.74	1,395.33	475.71	1.82	-0.32	1.80
8,752.00	91.38	0.78	7,264.40	569.71	1,396.77	570.69	0.77	0.75	-0.19
8,845.00	90.97	359.73	7,262.49	662.69	1,397.18	663.67	1.21	-0.44	-1.13
8,940.00	91.68	359.39	7,260.30	757.66	1,396.45	758.64	0.83	0.75	-0.36
9,034.00	90.64	358.66	7,258.39	851.63	1,394.86	852.60	1.35	-1.11	-0.78
9,128.00	91.58	358.53	7,256.57	945.58	1,392.55	946.55	1.01	1.00	-0.14
9,222.00	90.13	359.89	7,255.17	1,039.56	1,391.26	1,040.53	2.11	-1.54	1.45
9,316.00	90.13	358.87	7,254.96	1,133.55	1,390.24	1,134.52	1.09	0.00	-1.09
9,410.00	91.08	359.16	7,253.96	1,227.53	1,388.62	1,228.50	1.06	1.01	0.31
9,505.00	89.87	359.25	7,253.18	1,322.51	1,387.30	1,323.48	1.28	-1.27	0.09
9,599.00	90.07	359.47	7,253.23	1,416.51	1,386.25	1,417.48	0.32	0.21	0.23
9,692.00	90.50	358.79	7,252.76	1,509.50	1,384.84	1,510.46	0.87	0.46	-0.73
9,786.00	91.44	357.92	7,251.17	1,603.44	1,382.14	1,604.41	1.36	1.00	-0.93
9,878.00	90.74	359.01	7,249.42	1,695.39	1,379.68	1,696.35	1.41	-0.76	1.18
9,973.00	90.20	357.57	7,248.64	1,790.34	1,376.85	1,791.30	1.62	-0.57	-1.52
10,066.00	90.77	359.11	7,247.86	1,883.30	1,374.15	1,884.25	1.77	0.61	1.66
10,159.00	89.97	0.08	7,247.26	1,976.29	1,373.49	1,977.25	1.35	-0.86	1.04
10,253.00	90.27	359.88	7,247.06	2,070.29	1,373.46	2,071.25	0.38	0.32	-0.21
10,348.00	91.78	2.19	7,245.36	2,165.25	1,375.18	2,166.21	2.90	1.59	2.43
10,442.00	90.57	1.17	7,243.43	2,259.19	1,377.93	2,260.15	1.68	-1.29	-1.09
10,537.00	90.81	0.25	7,242.29	2,354.17	1,379.11	2,355.13	1.00	0.25	-0.97
10,631.00	90.87	1.58	7,240.91	2,448.15	1,380.61	2,449.11	1.42	0.06	1.41
10,724.00	90.67	1.63	7,239.66	2,541.10	1,383.21	2,542.07	0.22	-0.22	0.05
10,820.00	90.94	1.09	7,238.31	2,637.06	1,385.49	2,638.03	0.63	0.28	-0.56
10,914.00	91.24	0.73	7,236.52	2,731.04	1,386.99	2,732.00	0.50	0.32	-0.38
11,009.00	91.38	0.07	7,234.35	2,826.01	1,387.65	2,826.98	0.71	0.15	-0.69
11,103.00	91.71	1.08	7,231.82	2,919.97	1,388.59	2,920.94	1.13	0.35	1.07
11,196.00	91.28	1.00	7,229.39	3,012.92	1,390.28	3,013.89	0.47	-0.46	-0.09
11,291.00	89.87	0.38	7,228.44	3,107.91	1,391.42	3,108.88	1.62	-1.48	-0.65
11,386.00	90.87	0.36	7,227.82	3,202.90	1,392.04	3,203.87	1.05	1.05	-0.02
11,480.00	91.78	0.00	7,225.65	3,296.87	1,392.33	3,297.85	1.04	0.97	-0.38
11,573.00	91.34	0.13	7,223.12	3,389.84	1,392.44	3,390.81	0.49	-0.47	0.14
11,667.00	91.38	0.36	7,220.89	3,483.81	1,392.84	3,484.78	0.25	0.04	0.24
11,761.00	90.97	0.46	7,218.96	3,577.79	1,393.51	3,578.76	0.45	-0.44	0.11
11,855.00	90.64	359.73	7,217.64	3,671.78	1,393.67	3,672.75	0.85	-0.35	-0.78
11,950.00	91.65	358.96	7,215.74	3,766.75	1,392.58	3,767.72	1.34	1.06	-0.81
12,045.00	91.38	359.21	7,213.23	3,861.71	1,391.06	3,862.68	0.39	-0.28	0.26
12,138.00	91.04	0.23	7,211.26	3,954.68	1,390.61	3,955.65	1.16	-0.37	1.10
12,233.00	90.87	1.05	7,209.68	4,049.66	1,391.67	4,050.63	0.88	-0.18	0.86

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well Whiston 40N-33HZ
Project:	US Rockies Wattenberg Planning UTM83	TVD Reference:	GL 4905' & KB 20' @ 4925.00ft (Precision 461)
Site:	Whiston 4-7HZ Pad 2N-67W-4	MD Reference:	GL 4905' & KB 20' @ 4925.00ft (Precision 461)
Well:	Whiston 40N-33HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales Office

Survey									
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)
12,327.00	90.07	1.49	7,208.91	4,143.64	1,393.75	4,144.61	0.97	-0.85	0.47
12,421.00	90.74	1.61	7,208.25	4,237.60	1,396.30	4,238.57	0.72	0.71	0.13
12,515.00	90.57	1.18	7,207.17	4,331.56	1,398.59	4,332.54	0.49	-0.18	-0.46
12,611.00	91.07	0.45	7,205.80	4,427.54	1,399.95	4,428.52	0.92	0.52	-0.76
12,706.00	90.50	1.41	7,204.50	4,522.52	1,401.49	4,523.50	1.18	-0.60	1.01
12,800.00	91.41	0.73	7,202.93	4,616.49	1,403.25	4,617.47	1.21	0.97	-0.72
12,893.00	90.50	1.81	7,201.38	4,709.45	1,405.31	4,710.43	1.52	-0.98	1.16
12,988.00	91.28	0.96	7,199.90	4,804.41	1,407.61	4,805.39	1.21	0.82	-0.89
13,083.00	90.37	359.66	7,198.53	4,899.40	1,408.12	4,900.38	1.67	-0.96	-1.37
13,177.00	90.91	359.95	7,197.48	4,993.39	1,407.80	4,994.37	0.65	0.57	0.31
13,269.00	91.71	359.74	7,195.38	5,085.37	1,407.55	5,086.35	0.90	0.87	-0.23
13,305.00	91.75	359.11	7,194.29	5,121.35	1,407.19	5,122.33	1.75	0.11	-1.75
Last SDI MWD Survey									
13,359.00	91.75	359.11	7,192.65	5,175.32	1,406.35	5,176.30	0.00	0.00	0.00
Projection to TD : 2623' FSL 174' FEL Sec 33									

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
150.00	150.00	0.44	-0.03	First SDI MWD Survey
1,831.00	1,783.33	-171.05	289.40	Last SDI MWD Surface Survey
1,947.00	1,891.26	-193.83	325.28	First SDI MWD Production Survey
3,947.48	3,665.23	-685.43	1,105.38	Enter Land Box : 3947.48' MD & 3665.23' TVD
6,945.00	6,609.91	-885.09	1,404.79	Curve KOP
6,957.00	6,621.90	-884.52	1,404.72	First SDI MWD Curve Survey
7,997.00	7,267.19	-185.05	1,401.56	Landing Point : 2738' FNL 165' FEL Sec 4
7,998.00	7,267.24	-184.05	1,401.55	Last SDI MWD Curve Survey
8,093.00	7,271.16	-89.14	1,400.33	First SDI MWD Lateral Survey
13,305.00	7,194.29	5,121.35	1,407.19	Last SDI MWD Survey
13,359.00	7,192.65	5,175.32	1,406.35	Projection to TD : 2623' FSL 174' FEL Sec 33

Checked By: _____	Approved By: _____	Date: _____
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