

# US ROCKIES WATTENBERG PLANNING



Project: WELD-NAD83-UTMFT13N

Site: 4N-68W-26 Wilson Ranch 8-26HZ

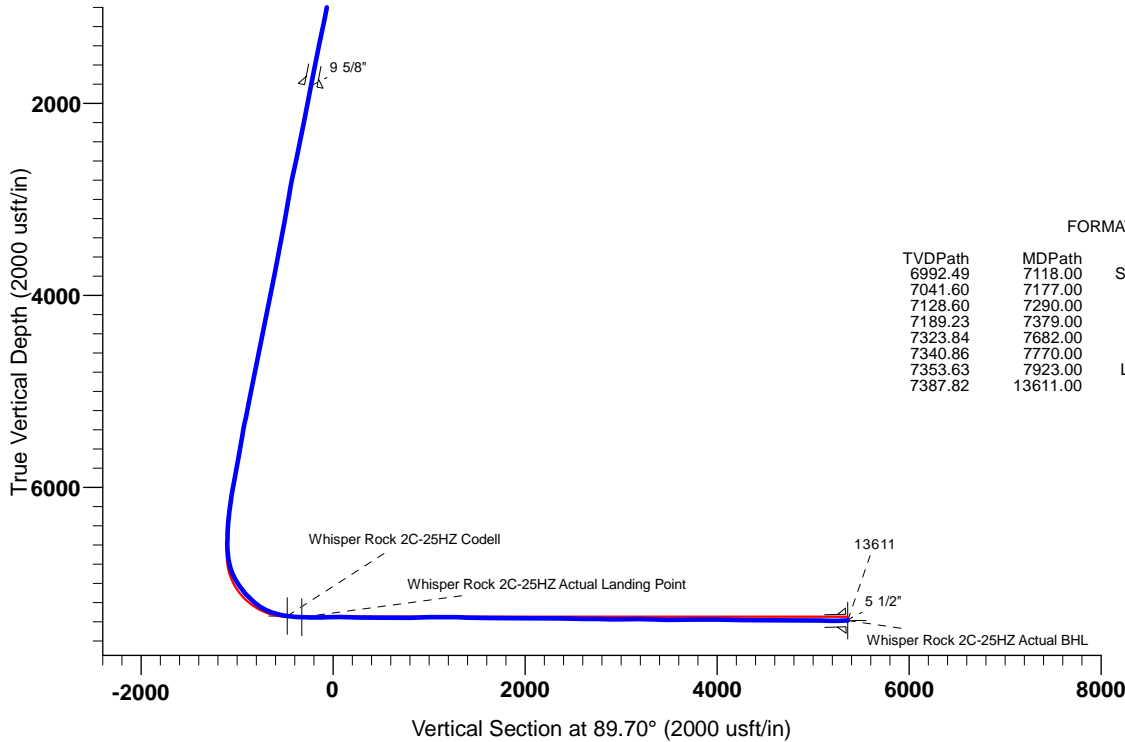
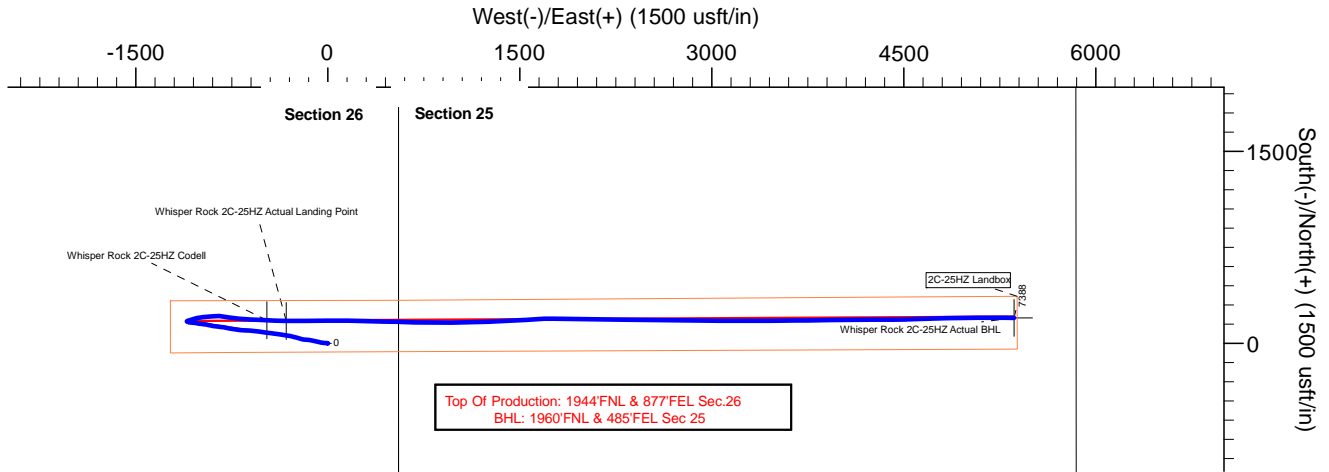
Well: Whisper Rock 2C-25HZ

Wellbore: Whisper Rock 2C-25HZ

Design: Actual Surveys

## CASING DETAILS

TVD	MD	Name	Size
1819.50	1840.38	9 5/8"	9-5/8
7388.31	13592.00	5 1/2"	5-1/2



## FORMATION TOP DETAILS

TVDPath	MDPath	Formation	DipAngle	DipDir
6992.49	7118.00	Sharon Springs	0.00	
7041.60	7177.00	Niobrara	0.00	
7128.60	7290.00	Niobrara B	0.00	
7189.23	7379.00	Niobrara C	0.00	
7323.84	7682.00	Fort Hays	0.00	
7340.86	7770.00	Codell	0.00	
7353.63	7923.00	Landing Depth	0.00	
7387.82	13611.00	Toe Depth	0.00	

## TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Whisper Rock 2C-25HZ Codell	7340.86	179.63	-477.39	14631094.60	1650341.94	40.286583	-104.964410	Point
Whisper Rock 2C-25HZ Actual Landing Point	7353.63	174.26	-325.12	14631089.30	1650494.20	40.286569	-104.963864	Point
Whisper Rock 2C-25HZ Actual BHL	7387.82	198.39	5360.61	14631115.83	1656179.92	40.286633	-104.943476	Point



# **US ROCKIES WATTENBERG PLANNING**

**WELD-NAD83-UTMFT13N**

**4N-68W-26 Wilson Ranch 8-26HZ**

**Whisper Rock 2C-25HZ**

**Whisper Rock 2C-25HZ**

**Design: Actual Surveys**

## **Standard Survey Report**

**09 December, 2015**

# PDD

## Survey Report

<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>Local Co-ordinate Reference:</b>	Well Whisper Rock 2C-25HZ
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>TVD Reference:</b>	4992' GL + 20' KB @ 5012.00usft (P462)
<b>Site:</b>	4N-68W-26 Wilson Ranch 8-26HZ	<b>MD Reference:</b>	4992' GL + 20' KB @ 5012.00usft (P462)
<b>Well:</b>	Whisper Rock 2C-25HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	Whisper Rock 2C-25HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Actual Surveys	<b>Database:</b>	EDM 5000.1 Single User Db

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

Site	4N-68W-26 Wilson Ranch 8-26HZ, centered on 3N-25HZ				
Site Position:		Northing:	14,630,963.58 usft	Latitude:	40.286223
From:	Lat/Long	Easting:	1,650,762.21 usft	Longitude:	-104.962903
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.02 °

Well	Whisper Rock 2C-25HZ					
Well Position	+N/-S	0.00 usft	Northing:	14,630,915.17 usft	Latitude:	40.286090
	+E/-W	0.00 usft	Easting:	1,650,819.40 usft	Longitude:	-104.962698
Position Uncertainty		3.28 usft	Wellhead Elevation:	0.00 usft	Ground Level:	4,992.00 usft

<b>Wellbore</b>	Whisper Rock 2C-25HZ				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	12/31/2009	9.12	66.98	53,221

<b>Design</b>	Actual Surveys				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	89.70	

<b>Survey Program</b>	<b>Date</b>	12/9/2015			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
98.00	1,792.00	SDI MWD Surveys (Whisper Rock 2C-25H	APC_ISCWSA REV 2 MWD	Fixed:v2:standard declination	
1,961.00	13,539.00	PDD MWD+IFR Surveys (Whisper Rock 2	APC_ISCWSA REV 2 MWD+	Fixed:v2:crustal field declination	

<b>Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
98.00	0.69	120.85	98.00	-0.30	0.51	0.51	0.70	0.70	0.00	
189.00	0.62	235.16	188.99	-0.86	0.57	0.57	1.21	-0.08	125.62	
280.00	1.46	271.04	279.98	-1.13	-0.99	-1.00	1.13	0.92	39.43	
386.00	1.92	293.09	385.93	-0.40	-3.97	-3.98	0.74	0.43	20.80	
476.00	3.11	278.74	475.85	0.56	-7.77	-7.77	1.49	1.32	-15.94	
611.00	5.63	272.91	610.44	1.45	-18.01	-18.00	1.89	1.87	-4.32	
701.00	5.60	272.33	700.01	1.85	-26.81	-26.80	0.07	-0.03	-0.64	
791.00	6.80	275.84	789.48	2.57	-36.49	-36.48	1.40	1.33	3.90	
881.00	7.66	280.20	878.77	4.18	-47.70	-47.68	1.13	0.96	4.84	

# PDD

## Survey Report

<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>Local Co-ordinate Reference:</b>	Well Whisper Rock 2C-25HZ
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>TVD Reference:</b>	4992' GL + 20' KB @ 5012.00usft (P462)
<b>Site:</b>	4N-68W-26 Wilson Ranch 8-26HZ	<b>MD Reference:</b>	4992' GL + 20' KB @ 5012.00usft (P462)
<b>Well:</b>	Whisper Rock 2C-25HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	Whisper Rock 2C-25HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Actual Surveys	<b>Database:</b>	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)
971.00	9.01	281.01	967.82	6.59	-60.52	-60.48	1.51	1.50	0.90
1,106.00	11.25	285.13	1,100.70	12.04	-83.61	-83.55	1.74	1.66	3.05
1,196.00	12.06	281.46	1,188.85	16.20	-101.30	-101.22	1.22	0.90	-4.08
1,287.00	12.17	282.59	1,277.82	20.18	-119.98	-119.87	0.29	0.12	1.24
1,377.00	11.61	279.55	1,365.89	23.75	-138.17	-138.04	0.93	-0.62	-3.38
1,467.00	11.46	275.52	1,454.08	26.12	-156.00	-155.86	0.91	-0.17	-4.48
1,557.00	11.86	274.80	1,542.22	27.75	-174.12	-173.97	0.47	0.44	-0.80
1,647.00	11.85	280.27	1,630.30	30.17	-192.42	-192.26	1.25	-0.01	6.08
1,737.00	12.27	282.93	1,718.32	33.96	-210.84	-210.66	0.77	0.47	2.96
1,792.00	11.67	284.66	1,772.12	36.67	-221.92	-221.72	1.27	-1.09	3.15
1,961.00	11.50	286.34	1,937.68	45.74	-254.62	-254.38	0.22	-0.10	0.99
2,151.00	10.40	282.65	2,124.22	54.82	-289.53	-289.24	0.69	-0.58	-1.94
2,341.00	11.00	279.24	2,310.92	61.49	-324.15	-323.83	0.46	0.32	-1.79
2,531.00	12.90	278.94	2,496.79	67.70	-363.00	-362.64	1.00	1.00	-0.16
2,719.00	12.20	277.84	2,680.30	73.67	-403.41	-403.02	0.39	-0.37	-0.59
2,907.00	10.90	277.44	2,864.49	78.68	-440.71	-440.30	0.69	-0.69	-0.21
3,097.00	9.60	276.24	3,051.45	82.73	-474.28	-473.84	0.69	-0.68	-0.63
3,287.00	10.20	276.75	3,238.62	86.43	-506.73	-506.27	0.32	0.32	0.27
3,476.00	10.90	279.24	3,424.42	91.26	-540.99	-540.51	0.44	0.37	1.32
3,666.00	10.90	275.34	3,611.00	95.82	-576.61	-576.10	0.39	0.00	-2.05
3,856.00	11.10	273.34	3,797.51	98.56	-612.75	-612.23	0.23	0.11	-1.05
4,046.00	10.60	274.14	3,984.11	100.88	-648.44	-647.90	0.27	-0.26	0.42
4,235.00	11.70	274.73	4,169.54	103.72	-684.88	-684.33	0.59	0.58	0.31
4,422.00	11.70	277.04	4,352.66	107.61	-722.59	-722.02	0.25	0.00	1.24
4,611.00	12.50	281.84	4,537.46	114.15	-761.63	-761.02	0.68	0.42	2.54
4,796.00	11.90	281.04	4,718.28	121.91	-799.95	-799.30	0.34	-0.32	-0.43
4,982.00	10.29	275.04	4,900.81	127.05	-835.32	-834.65	1.06	-0.87	-3.23
5,173.00	11.50	277.64	5,088.36	131.08	-871.19	-870.49	0.68	0.63	1.36
5,359.00	12.10	282.14	5,270.43	137.64	-908.62	-907.89	0.59	0.32	2.42
5,548.00	9.80	280.24	5,455.98	144.67	-943.82	-943.05	1.23	-1.22	-1.01
5,738.00	10.29	276.44	5,643.07	149.45	-976.60	-975.80	0.43	0.26	-2.00
5,929.00	11.40	279.74	5,830.66	154.55	-1,012.16	-1,011.33	0.67	0.58	1.73
6,119.00	8.30	275.64	6,017.84	159.08	-1,044.32	-1,043.47	1.67	-1.63	-2.16
6,308.00	9.30	277.44	6,204.61	162.40	-1,073.04	-1,072.17	0.55	0.53	0.95
6,498.00	4.20	294.44	6,393.25	167.27	-1,094.61	-1,093.72	2.85	-2.68	8.95
6,688.00	1.10	345.24	6,583.04	171.91	-1,101.41	-1,100.50	1.90	-1.63	26.74
6,783.00	3.80	60.84	6,677.96	174.33	-1,098.90	-1,097.97	3.88	2.84	79.58
6,878.00	12.80	76.14	6,771.87	178.39	-1,085.90	-1,084.95	9.67	9.47	16.11
6,971.00	19.21	68.94	6,861.23	186.37	-1,061.59	-1,060.60	7.20	6.89	-7.74
7,066.00	29.30	79.44	6,947.77	196.27	-1,024.04	-1,023.00	11.51	10.62	11.05
7,162.00	34.40	83.64	7,029.30	203.59	-973.96	-972.88	5.79	5.31	4.38
7,257.00	41.30	82.94	7,104.27	210.42	-916.11	-914.99	7.28	7.26	-0.74
7,352.00	48.60	93.54	7,171.55	212.08	-849.25	-848.12	10.99	7.68	11.16

# PDD Survey Report

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<b>Well:</b>	Whisper Rock 2C-25HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	Whisper Rock 2C-25HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Actual Surveys	<b>Database:</b>	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)	
7,448.00	52.40	100.64	7,232.65	202.82	-775.85	-774.78	6.94	3.96	7.40	
7,543.00	65.39	95.54	7,281.65	191.65	-695.50	-694.48	14.42	13.67	-5.37	
7,638.00	75.50	92.35	7,313.41	185.58	-606.31	-605.33	11.10	10.64	-3.36	
7,733.00	78.90	92.84	7,334.46	181.38	-513.78	-512.83	3.61	3.58	0.52	
7,828.00	84.70	92.44	7,348.00	177.06	-419.89	-418.96	6.12	6.11	-0.42	
7,923.00	88.50	90.94	7,353.63	174.26	-325.12	-324.21	4.30	4.00	-1.58	
8,018.00	89.70	89.84	7,355.13	173.62	-230.14	-229.23	1.71	1.26	-1.16	
8,114.00	90.20	88.84	7,355.21	174.72	-134.15	-133.23	1.16	0.52	-1.04	
8,209.00	91.80	88.94	7,353.55	176.56	-39.18	-38.26	1.69	1.68	0.11	
8,304.00	90.30	91.14	7,351.81	176.50	55.79	56.72	2.80	-1.58	2.32	
8,397.00	88.10	90.64	7,353.11	175.05	148.77	149.68	2.43	-2.37	-0.54	
8,491.00	88.50	90.84	7,355.90	173.84	242.72	243.62	0.48	0.43	0.21	
8,586.00	89.40	91.14	7,357.64	172.20	337.69	338.58	1.00	0.95	0.32	
8,681.00	91.10	91.84	7,357.22	169.73	432.65	433.53	1.94	1.79	0.74	
8,776.00	88.70	91.35	7,357.39	167.08	527.60	528.47	2.58	-2.53	-0.52	
8,871.00	89.20	91.04	7,359.13	165.10	622.57	623.42	0.62	0.53	-0.33	
8,966.00	90.40	90.64	7,359.46	163.71	717.55	718.40	1.33	1.26	-0.42	
9,061.00	91.30	90.84	7,358.05	162.48	812.53	813.37	0.97	0.95	0.21	
9,156.00	92.40	90.24	7,354.99	161.59	907.48	908.31	1.32	1.16	-0.63	
9,252.00	89.90	89.14	7,353.06	162.11	1,003.45	1,004.28	2.84	-2.60	-1.15	
9,346.00	90.20	89.14	7,352.98	163.52	1,097.44	1,098.28	0.32	0.32	0.00	
9,442.00	90.70	88.54	7,352.22	165.46	1,193.42	1,194.27	0.81	0.52	-0.63	
9,537.00	88.10	87.14	7,353.22	169.04	1,288.33	1,289.20	3.11	-2.74	-1.47	
9,632.00	87.80	86.64	7,356.62	174.19	1,383.13	1,384.02	0.61	-0.32	-0.53	
9,727.00	88.50	86.14	7,359.68	180.17	1,477.89	1,478.82	0.91	0.74	-0.53	
9,822.00	88.80	87.54	7,361.92	185.41	1,572.72	1,573.67	1.51	0.32	1.47	
9,917.00	89.70	86.94	7,363.16	189.98	1,667.60	1,668.57	1.14	0.95	-0.63	
10,012.00	90.40	90.14	7,363.08	192.40	1,762.56	1,763.54	3.45	0.74	3.37	
10,107.00	89.30	91.64	7,363.33	190.92	1,857.54	1,858.51	1.96	-1.16	1.58	
10,202.00	89.80	91.35	7,364.08	188.45	1,952.50	1,953.46	0.61	0.53	-0.31	
10,295.00	90.70	90.54	7,363.67	186.91	2,045.49	2,046.44	1.30	0.97	-0.87	
10,388.00	89.20	91.44	7,363.75	185.31	2,138.47	2,139.41	1.88	-1.61	0.97	
10,483.00	89.10	90.54	7,365.16	183.66	2,233.45	2,234.38	0.95	-0.11	-0.95	
10,579.00	89.20	90.24	7,366.59	183.01	2,329.43	2,330.36	0.33	0.10	-0.31	
10,673.00	90.60	89.24	7,366.75	183.44	2,423.43	2,424.36	1.83	1.49	-1.06	
10,768.00	88.10	91.04	7,367.83	183.21	2,518.41	2,519.33	3.24	-2.63	1.89	
10,862.00	88.60	91.54	7,370.53	181.09	2,612.35	2,613.26	0.75	0.53	0.53	
10,958.00	90.30	90.54	7,371.46	179.35	2,708.32	2,709.22	2.05	1.77	-1.04	
11,053.00	88.40	90.64	7,372.53	178.37	2,803.31	2,804.20	2.00	-2.00	0.11	
11,148.00	89.30	90.44	7,374.44	177.47	2,898.28	2,899.17	0.97	0.95	-0.21	
11,241.00	90.50	90.44	7,374.60	176.76	2,991.28	2,992.16	1.29	1.29	0.00	
11,333.00	91.60	90.54	7,372.92	175.97	3,083.26	3,084.14	1.20	1.20	0.11	
11,427.00	88.70	90.64	7,372.67	175.01	3,177.24	3,178.11	3.09	-3.09	0.11	

# PDD Survey Report

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<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>TVD Reference:</b>	4992' GL + 20' KB @ 5012.00usft (P462)
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<b>Well:</b>	Whisper Rock 2C-25HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	Whisper Rock 2C-25HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Actual Surveys	<b>Database:</b>	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)	
11,521.00	89.20	91.04	7,374.39	173.63	3,271.22	3,272.08	0.68	0.53	0.43	
11,615.00	87.90	89.04	7,376.77	173.56	3,365.18	3,366.04	2.54	-1.38	-2.13	
11,710.00	88.80	89.04	7,379.51	175.15	3,460.12	3,460.99	0.95	0.95	0.00	
11,805.00	90.40	89.33	7,380.17	176.50	3,555.11	3,555.99	1.71	1.68	0.31	
11,900.00	91.70	89.24	7,378.43	177.69	3,650.08	3,650.96	1.37	1.37	-0.09	
11,995.00	89.60	89.24	7,377.35	178.95	3,745.06	3,745.95	2.21	-2.21	0.00	
12,090.00	89.90	89.33	7,377.77	180.13	3,840.06	3,840.95	0.33	0.32	0.09	
12,185.00	90.80	89.14	7,377.19	181.40	3,935.04	3,935.94	0.97	0.95	-0.20	
12,281.00	88.10	89.44	7,378.11	182.59	4,031.02	4,031.92	2.83	-2.81	0.31	
12,375.00	88.20	89.84	7,381.14	183.18	4,124.97	4,125.88	0.44	0.11	0.43	
12,471.00	89.20	89.64	7,383.32	183.62	4,220.95	4,221.85	1.06	1.04	-0.21	
12,566.00	91.20	89.64	7,382.99	184.22	4,315.94	4,316.84	2.11	2.11	0.00	
12,661.00	88.60	89.54	7,383.15	184.90	4,410.93	4,411.84	2.74	-2.74	-0.11	
12,756.00	89.40	89.04	7,384.81	186.07	4,505.91	4,506.82	0.99	0.84	-0.53	
12,851.00	89.30	88.04	7,385.89	188.49	4,600.87	4,601.79	1.06	-0.11	-1.05	
12,946.00	90.90	87.34	7,385.72	192.32	4,695.79	4,696.73	1.84	1.68	-0.74	
13,041.00	88.90	89.04	7,385.89	195.32	4,790.73	4,791.69	2.76	-2.11	1.79	
13,134.00	89.80	89.33	7,386.94	196.64	4,883.71	4,884.68	1.02	0.97	0.31	
13,229.00	90.60	89.14	7,386.61	197.91	4,978.70	4,979.67	0.87	0.84	-0.20	
13,325.00	87.99	89.94	7,387.79	198.68	5,074.68	5,075.66	2.84	-2.72	0.83	
13,420.00	88.90	89.74	7,390.37	198.95	5,169.65	5,170.62	0.98	0.96	-0.21	
13,514.00	91.20	90.54	7,390.29	198.72	5,263.64	5,264.61	2.59	2.45	0.85	
13,539.00	91.50	90.14	7,389.70	198.57	5,288.63	5,289.60	2.00	1.20	-1.60	
13,611.00	91.50	90.14	7,387.82	198.39	5,360.61	5,361.57	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
Whisper Rock 2C-25HZ	0.00	0.00	7,340.86	179.63	-477.39	14,631,094.60	1,650,341.94	40.286583	-104.964410	
- actual wellpath hits target center										
- Point										
Whisper Rock 2C-25HZ	0.00	0.00	7,353.63	174.26	-325.12	14,631,089.30	1,650,494.20	40.286569	-104.963864	
- actual wellpath hits target center										
- Point										
Whisper Rock 2C-25HZ	0.00	0.00	7,387.82	198.39	5,360.61	14,631,115.82	1,656,179.92	40.286633	-104.943476	
- actual wellpath hits target center										
- Point										

# PDD

## Survey Report

<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>Local Co-ordinate Reference:</b>	Well Whisper Rock 2C-25HZ
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>TVD Reference:</b>	4992' GL + 20' KB @ 5012.00usft (P462)
<b>Site:</b>	4N-68W-26 Wilson Ranch 8-26HZ	<b>MD Reference:</b>	4992' GL + 20' KB @ 5012.00usft (P462)
<b>Well:</b>	Whisper Rock 2C-25HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	Whisper Rock 2C-25HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Actual Surveys	<b>Database:</b>	EDM 5000.1 Single User Db

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,840.38	1,819.50	9 5/8"		9-5/8	13-1/2
13,592.00	7,388.31	5 1/2"		5-1/2	8-1/2

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,118.00	1,980.49	Sharon Springs		0.00	
7,177.00	2,029.60	Niobrara		0.00	
7,290.00	2,116.60	Niobrara B		0.00	
7,379.00	2,177.23	Niobrara C		0.00	
7,682.00	2,311.84	Fort Hays		0.00	
7,770.00	2,328.86	Codell		0.00	
7,923.00	2,341.63	Landing Depth		0.00	
13,611.00	2,375.82	Toe Depth		0.00	

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
13,611.00	7,387.82	198.39	5,360.61	Projection to Bit	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_