



TVD	MD	ANNOTATIONS	+N/-S	+E/-W	Annotation
7236.38	7668.00	-225.46	324.06	Land Box Entry	
7245.29	7782.00	-111.98	322.34	Landing Point	
7230.91	9048.00	1153.53	313.03	460' Heel Exit	
7191.76	10915.00	3019.67	304.97	460' Toe Entry	

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Surface 23N-33HZ	0.00	0.00	0.00	14588356.79	1669266.31	40.169181°N	104.896729°W	Point
PBHL 23N-33HZ	7177.00	4307.55	329.31	14592664.72	1669590.61	40.181010°N	104.895550°W	Point
BHL 23N-33HZ	7178.49	4286.04	336.33	14592643.21	1669597.66	40.180951°N	104.895525°W	Point
460' Toe Entry 23N-33HZ	7191.76	3019.67	304.97	14591376.81	1669567.77	40.177473°N	104.895637°W	Point
460' Heel Exit 23N-33HZ	7230.91	1153.53	313.03	14589510.68	1669577.99	40.172349°N	104.895608°W	Point
Land Box Entry 23N-33HZ	7236.38	-225.46	324.06	14588131.70	1669590.63	40.168562°N	104.895569°W	Point
Landing Point 23N-33HZ	7245.29	-111.98	322.34	14588245.19	1669588.78	40.168873°N	104.895575°W	Point

Precision Drilling Corporation

Survey Report

Company: US ROCKIES WATTENBERG PLANNING	Local Co-ordinate Reference: Well Babcock 23N-33HZ
Project: WELD-NAD83-UTMFT13N	TVD Reference: 4886'GL + 21'KB @ 4907.00usft (PD464)
Site: 3N-67W-33 Babcock 6-4HZ Pad	MD Reference: 4886'GL + 21'KB @ 4907.00usft (PD464)
Well: Babcock 23N-33HZ	North Reference: True
Wellbore: Original Hole	Survey Calculation Method: Minimum Curvature
Design: Original Hole	Database: Local Database

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 3N-67W-33 Babcock 6-4HZ Pad		
Site Position:	Northing: 14,588,357.65 usft	Latitude: 40.169184°N
From: Lat/Long	Easting: 1,669,071.31 usft	Longitude: 104.897427°W
Position Uncertainty: 0.00 usft	Slot Radius: 13.20 in	Grid Convergence: 0.07 °

Well Babcock 23N-33HZ		
Well Position +N/-S 0.00 usft	Northing: 14,588,356.78 usft	Latitude: 40.169181°N
+E/-W 0.00 usft	Easting: 1,669,266.31 usft	Longitude: 104.896729°W
Position Uncertainty 3.28 usft	Wellhead Elevation: 0.00 usft	Ground Level: 4,886.00 usft

Wellbore Original Hole					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2016/04/04	8.27	66.68	52,490

Design Original Hole				
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	0.12

Survey Program		Date 2017/05/23		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
9.00	1,817.00	Survey #1 (Original Hole)	APC_ISCWSA REV 2 MV Fixed:v2:crustal field declination	
1,928.00	12,127.00	Survey #2 (Original Hole)	APC_ISCWSA REV 2 MV Fixed:v2:crustal field declination	
12,182.00	12,182.00	Survey #3 (Original Hole)	APC_BLIND	OWSG BLIND

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	
9.00	0.00	0.00	9.00	0.00	0.00	0.00	0.00	0.00	0.00	
203.00	0.67	147.31	203.00	-0.95	0.61	-0.95	0.35	0.35	0.00	
291.00	1.43	150.78	290.98	-2.35	1.43	-2.34	0.87	0.86	3.94	
380.00	2.90	151.77	379.91	-5.30	3.03	-5.29	1.65	1.65	1.11	
469.00	4.08	158.30	468.75	-10.22	5.27	-10.21	1.40	1.33	7.34	
554.00	5.29	155.91	553.46	-16.61	7.99	-16.59	1.44	1.42	-2.81	
640.00	6.29	159.01	639.02	-24.63	11.29	-24.61	1.22	1.16	3.60	
729.00	7.86	159.20	727.34	-34.87	15.20	-34.84	1.76	1.76	0.21	

Precision Drilling Corporation

Survey Report

Company:	US ROCKIES WATTENBERG PLANNING	Local Co-ordinate Reference:	Well Babcock 23N-33HZ
Project:	WELD-NAD83-UTMFT13N	TVD Reference:	4886'GL + 21'KB @ 4907.00usft (PD464)
Site:	3N-67W-33 Babcock 6-4HZ Pad	MD Reference:	4886'GL + 21'KB @ 4907.00usft (PD464)
Well:	Babcock 23N-33HZ	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Local Database

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)	
816.00	9.52	161.64	813.34	-47.26	19.58	-47.22	1.95	1.91	2.80	
904.00	10.99	159.47	899.93	-62.02	24.81	-61.97	1.73	1.67	-2.47	
989.00	12.06	154.16	983.22	-77.60	31.53	-77.54	1.77	1.26	-6.25	
1,078.00	12.77	153.04	1,070.14	-94.74	40.04	-94.66	0.84	0.80	-1.26	
1,166.00	14.30	154.28	1,155.69	-113.20	49.16	-113.10	1.77	1.74	1.41	
1,255.00	15.68	153.52	1,241.66	-133.87	59.30	-133.74	1.57	1.55	-0.85	
1,344.00	16.12	158.16	1,327.26	-156.10	69.26	-155.96	1.51	0.49	5.21	
1,430.00	15.15	158.81	1,410.08	-177.66	77.76	-177.50	1.15	-1.13	0.76	
1,517.00	15.67	159.03	1,493.95	-199.24	86.07	-199.06	0.60	0.60	0.25	
1,604.00	14.17	160.12	1,578.01	-220.22	93.90	-220.03	1.75	-1.72	1.25	
1,692.00	13.46	164.66	1,663.47	-240.23	100.27	-240.02	1.47	-0.81	5.16	
1,781.00	13.60	162.46	1,750.00	-260.20	106.17	-259.97	0.60	0.16	-2.47	
1,817.00	13.63	161.35	1,784.99	-268.25	108.80	-268.02	0.73	0.08	-3.08	
1,928.00	15.05	162.94	1,892.53	-294.42	117.21	-294.17	1.33	1.28	1.43	
2,018.00	16.31	164.14	1,979.18	-317.75	124.09	-317.49	1.45	1.40	1.33	
2,107.00	15.27	153.75	2,064.84	-340.29	132.69	-340.01	3.38	-1.17	-11.67	
2,197.00	14.77	159.17	2,151.76	-361.64	142.01	-361.34	1.66	-0.56	6.02	
2,287.00	14.26	155.51	2,238.89	-382.45	150.69	-382.13	1.17	-0.57	-4.07	
2,376.00	15.27	155.90	2,324.95	-403.12	160.02	-402.79	1.14	1.13	0.44	
2,466.00	12.53	158.60	2,412.31	-423.04	168.42	-422.68	3.13	-3.04	3.00	
2,555.00	12.99	163.67	2,499.12	-441.63	174.76	-441.26	1.36	0.52	5.70	
2,645.00	14.90	163.60	2,586.46	-462.43	180.87	-462.05	2.12	2.12	-0.08	
2,735.00	14.64	162.17	2,673.49	-484.36	187.62	-483.97	0.50	-0.29	-1.59	
2,824.00	14.22	161.59	2,759.68	-505.44	194.51	-505.03	0.50	-0.47	-0.65	
2,914.00	13.43	159.73	2,847.07	-525.73	201.63	-525.31	1.01	-0.88	-2.07	
3,004.00	14.09	158.84	2,934.49	-545.75	209.20	-545.32	0.77	0.73	-0.99	
3,093.00	14.48	161.68	3,020.74	-566.42	216.61	-565.97	0.90	0.44	3.19	
3,183.00	15.21	161.02	3,107.73	-588.27	223.99	-587.80	0.83	0.81	-0.73	
3,273.00	13.78	160.84	3,194.86	-609.56	231.34	-609.07	1.59	-1.59	-0.20	
3,362.00	14.28	158.12	3,281.21	-629.76	238.91	-629.25	0.93	0.56	-3.06	
3,452.00	14.59	155.76	3,368.37	-650.39	247.70	-649.87	0.74	0.34	-2.62	
3,542.00	14.48	158.53	3,455.49	-671.20	256.48	-670.66	0.78	-0.12	3.08	
3,631.00	12.46	155.87	3,542.04	-690.32	264.48	-689.76	2.37	-2.27	-2.99	
3,720.00	12.59	154.49	3,628.92	-707.84	272.58	-707.26	0.37	0.15	-1.55	
3,810.00	12.97	156.90	3,716.69	-725.98	280.77	-725.39	0.73	0.42	2.68	
3,900.00	12.75	154.93	3,804.43	-744.26	288.94	-743.66	0.55	-0.24	-2.19	
3,989.00	12.90	151.95	3,891.21	-761.93	297.77	-761.30	0.76	0.17	-3.35	
4,079.00	13.67	158.03	3,978.81	-780.66	306.47	-780.01	1.77	0.86	6.76	
4,168.00	12.72	157.28	4,065.46	-799.45	314.19	-798.79	1.08	-1.07	-0.84	
4,258.00	11.47	161.74	4,153.46	-817.09	320.82	-816.41	1.73	-1.39	4.96	
4,348.00	10.02	162.67	4,241.88	-833.06	325.96	-832.38	1.62	-1.61	1.03	
4,438.00	7.47	163.06	4,330.83	-846.13	330.00	-845.44	2.83	-2.83	0.43	
4,527.00	4.97	170.12	4,419.30	-855.47	332.34	-854.77	2.93	-2.81	7.93	

Precision Drilling Corporation

Survey Report

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Well:	Babcock 23N-33HZ	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Local Database

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)	
4,617.00	2.77	164.71	4,509.09	-861.41	333.59	-860.71	2.48	-2.44	-6.01	
4,707.00	1.36	116.30	4,599.03	-863.98	335.12	-863.27	2.36	-1.57	-53.79	
4,796.00	1.32	271.60	4,688.02	-864.42	335.04	-863.71	2.94	-0.04	174.49	
4,886.00	1.80	288.08	4,777.99	-863.95	332.66	-863.25	0.72	0.53	18.31	
4,976.00	2.15	298.24	4,867.94	-862.71	329.83	-862.02	0.55	0.39	11.29	
5,092.00	2.26	293.82	4,983.85	-860.76	325.82	-860.07	0.17	0.09	-3.81	
5,182.00	2.86	297.98	5,073.76	-858.99	322.21	-858.31	0.70	0.67	4.62	
5,272.00	2.81	292.25	5,163.65	-857.10	318.19	-856.43	0.32	-0.06	-6.37	
5,361.00	1.85	296.00	5,252.58	-855.64	314.88	-854.98	1.09	-1.08	4.21	
5,451.00	0.48	199.71	5,342.56	-855.36	313.45	-854.70	2.18	-1.52	-106.99	
5,541.00	0.42	213.40	5,432.56	-855.99	313.14	-855.33	0.14	-0.07	15.21	
5,630.00	0.68	225.32	5,521.55	-856.64	312.58	-855.98	0.32	0.29	13.39	
5,719.00	0.81	232.21	5,610.55	-857.39	311.71	-856.74	0.18	0.15	7.74	
5,809.00	0.64	242.35	5,700.54	-858.02	310.76	-857.36	0.24	-0.19	11.27	
5,899.00	0.84	275.58	5,790.53	-858.19	309.66	-857.53	0.52	0.22	36.92	
5,988.00	0.97	87.53	5,879.53	-858.09	309.76	-857.44	2.03	0.15	193.20	
6,078.00	0.75	81.64	5,969.52	-857.97	311.11	-857.32	0.26	-0.24	-6.54	
6,168.00	0.48	31.10	6,059.51	-857.56	311.88	-856.91	0.64	-0.30	-56.16	
6,257.00	0.66	340.33	6,148.51	-856.76	311.90	-856.11	0.58	0.20	-57.04	
6,347.00	0.86	308.20	6,238.50	-855.85	311.20	-855.20	0.51	0.22	-35.70	
6,436.00	0.90	182.83	6,327.50	-856.14	310.64	-855.49	1.76	0.04	-140.87	
6,526.00	0.81	202.74	6,417.49	-857.43	310.36	-856.78	0.34	-0.10	22.12	
6,616.00	0.62	222.98	6,507.48	-858.38	309.78	-857.72	0.35	-0.21	22.49	
6,705.00	4.20	352.84	6,596.41	-855.49	309.05	-854.84	5.19	4.02	145.91	
6,795.00	14.90	359.64	6,685.03	-840.61	308.56	-839.96	11.93	11.89	7.56	
6,885.00	21.38	2.32	6,770.51	-812.62	309.15	-811.97	7.26	7.20	2.98	
6,974.00	27.86	0.17	6,851.38	-775.57	309.87	-774.92	7.35	7.28	-2.42	
7,064.00	37.14	357.36	6,927.21	-727.29	308.68	-726.65	10.44	10.31	-3.12	
7,154.00	44.02	0.94	6,995.53	-668.81	307.94	-668.16	8.07	7.64	3.98	
7,244.00	49.64	2.98	7,057.09	-603.24	310.24	-602.59	6.46	6.24	2.27	
7,333.00	53.40	4.61	7,112.46	-533.74	314.87	-533.08	4.46	4.22	1.83	
7,423.00	63.33	2.76	7,159.61	-457.37	319.73	-456.70	11.17	11.03	-2.06	
7,513.00	71.18	1.10	7,194.38	-374.48	322.49	-373.81	8.89	8.72	-1.84	
7,602.00	73.49	0.73	7,221.38	-289.70	323.84	-289.02	2.63	2.60	-0.42	
7,668.00	80.22	359.67	7,236.38	-225.46	324.06	-224.78	10.32	10.20	-1.60	
Land Box Entry										
7,692.00	82.67	359.30	7,239.95	-201.73	323.84	-201.05	10.32	10.20	-1.55	
7,782.00	90.52	358.78	7,245.29	-111.98	322.34	-111.30	8.74	8.72	-0.58	
Landing Point										
7,871.00	90.03	358.25	7,244.87	-23.01	320.03	-22.34	0.81	-0.55	-0.60	
7,961.00	89.66	358.04	7,245.11	66.95	317.12	67.61	0.47	-0.41	-0.23	
8,050.00	91.18	358.99	7,244.46	155.91	314.81	156.57	2.01	1.71	1.07	
8,140.00	90.63	358.58	7,243.00	245.88	312.90	246.53	0.76	-0.61	-0.46	
8,230.00	89.40	358.12	7,243.01	335.84	310.31	336.49	1.46	-1.37	-0.51	

Precision Drilling Corporation

Survey Report

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Site:	3N-67W-33 Babcock 6-4HZ Pad	MD Reference:	4886'GL + 21'KB @ 4907.00usft (PD464)
Well:	Babcock 23N-33HZ	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Local Database

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)
8,320.00	90.21	358.98	7,243.32	425.81	308.03	426.45	1.31	0.90	0.96
8,409.00	91.59	358.69	7,241.92	514.78	306.22	515.42	1.58	1.55	-0.33
8,499.00	92.41	359.86	7,238.78	604.71	305.09	605.35	1.59	0.91	1.30
8,588.00	90.98	0.25	7,236.15	693.67	305.17	694.31	1.67	-1.61	0.44
8,678.00	90.87	359.55	7,234.70	783.66	305.01	784.29	0.79	-0.12	-0.78
8,768.00	90.39	1.38	7,233.71	873.64	305.74	874.28	2.10	-0.53	2.03
8,857.00	89.89	1.38	7,233.49	962.62	307.89	963.26	0.56	-0.56	0.00
8,947.00	91.35	1.64	7,232.51	1,052.58	310.26	1,053.23	1.65	1.62	0.29
9,037.00	90.54	1.52	7,231.03	1,142.53	312.74	1,143.18	0.91	-0.90	-0.13
9,048.00	90.72	1.44	7,230.91	1,153.53	313.03	1,154.18	1.78	1.63	-0.71
460' Heel Exit									
9,126.00	91.99	0.89	7,229.07	1,231.49	314.61	1,232.14	1.78	1.63	-0.71
9,216.00	91.44	0.52	7,226.37	1,321.44	315.72	1,322.10	0.74	-0.61	-0.41
9,306.00	90.78	0.90	7,224.63	1,411.42	316.83	1,412.08	0.85	-0.73	0.42
9,395.00	89.85	1.28	7,224.14	1,500.40	318.53	1,501.06	1.13	-1.04	0.43
9,485.00	91.44	0.35	7,223.13	1,590.38	319.81	1,591.04	2.05	1.77	-1.03
9,575.00	90.93	359.30	7,221.26	1,680.36	319.53	1,681.02	1.30	-0.57	-1.17
9,664.00	90.89	0.25	7,219.85	1,769.34	319.18	1,770.01	1.07	-0.04	1.07
9,754.00	90.54	0.56	7,218.73	1,859.34	319.82	1,860.00	0.52	-0.39	0.34
9,844.00	90.14	0.36	7,218.19	1,949.33	320.54	1,950.00	0.50	-0.44	-0.22
9,933.00	92.49	0.15	7,216.15	2,038.30	320.94	2,038.97	2.65	2.64	-0.24
10,023.00	91.90	359.63	7,212.70	2,128.23	320.76	2,128.90	0.87	-0.66	-0.58
10,113.00	92.16	359.30	7,209.52	2,218.17	319.92	2,218.84	0.47	0.29	-0.37
10,202.00	92.49	359.16	7,205.91	2,307.09	318.73	2,307.75	0.40	0.37	-0.16
10,292.00	92.58	358.94	7,201.93	2,396.99	317.24	2,397.65	0.26	0.10	-0.24
10,382.00	91.31	358.45	7,198.87	2,486.91	315.19	2,487.57	1.51	-1.41	-0.54
10,471.00	91.09	357.61	7,197.01	2,575.84	312.13	2,576.49	0.98	-0.25	-0.94
10,561.00	92.41	0.14	7,194.26	2,665.77	310.37	2,666.42	3.17	1.47	2.81
10,650.00	89.24	359.49	7,192.98	2,754.75	310.08	2,755.39	3.64	-3.56	-0.73
10,740.00	90.08	359.30	7,193.51	2,844.74	309.13	2,845.38	0.96	0.93	-0.21
10,830.00	90.38	357.67	7,193.15	2,934.71	306.75	2,935.34	1.84	0.33	-1.81
10,915.00	91.50	359.93	7,191.76	3,019.67	304.97	3,020.30	2.97	1.31	2.66
460' Toe Entry									
10,919.00	91.55	0.04	7,191.65	3,023.67	304.97	3,024.30	2.97	1.31	2.66
11,009.00	91.22	2.02	7,189.48	3,113.62	306.59	3,114.26	2.23	-0.37	2.20
11,099.00	91.62	0.96	7,187.24	3,203.56	308.93	3,204.20	1.26	0.44	-1.18
11,188.00	92.01	0.24	7,184.43	3,292.51	309.86	3,293.16	0.92	0.44	-0.81
11,278.00	90.12	1.15	7,182.75	3,382.49	310.95	3,383.13	2.33	-2.10	1.01
11,368.00	89.99	1.33	7,182.67	3,472.47	312.90	3,473.11	0.25	-0.14	0.20
11,457.00	89.70	0.39	7,182.91	3,561.45	314.23	3,562.10	1.11	-0.33	-1.06
11,547.00	90.23	2.11	7,182.96	3,651.43	316.20	3,652.08	2.00	0.59	1.91
11,637.00	89.22	2.33	7,183.39	3,741.36	319.68	3,742.02	1.15	-1.12	0.24
11,726.00	91.09	2.09	7,183.15	3,830.29	323.11	3,830.96	2.12	2.10	-0.27

Precision Drilling Corporation

Survey Report

Company:	US ROCKIES WATTENBERG PLANNING	Local Co-ordinate Reference:	Well Babcock 23N-33HZ
Project:	WELD-NAD83-UTMFT13N	TVD Reference:	4886'GL + 21'KB @ 4907.00usft (PD464)
Site:	3N-67W-33 Babcock 6-4HZ Pad	MD Reference:	4886'GL + 21'KB @ 4907.00usft (PD464)
Well:	Babcock 23N-33HZ	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Local Database

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)	
11,816.00	91.33	1.90	7,181.25	3,920.21	326.25	3,920.89	0.34	0.27	-0.21	
11,906.00	91.12	1.51	7,179.33	4,010.15	328.92	4,010.83	0.49	-0.23	-0.43	
11,995.00	90.54	1.76	7,178.04	4,099.11	331.46	4,099.79	0.71	-0.65	0.28	
12,085.00	89.99	1.44	7,177.62	4,189.07	333.98	4,189.76	0.71	-0.61	-0.36	
12,127.00	89.35	1.38	7,177.87	4,231.06	335.01	4,231.75	1.53	-1.52	-0.14	
12,182.00	89.35	1.38	7,178.49	4,286.04	336.33	4,286.73	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	
Surface 23N-33HZ - hit/miss target - Shape	0.00	0.00	0.00	0.00	0.00	14,588,356.78	1,669,266.31	40.169181°N	104.896729°W	
- actual wellpath hits target center										
- Point										
PBHL 23N-33HZ - actual wellpath misses target center by 22.68usft at 12182.00usft MD (7178.49 TVD, 4286.04 N, 336.33 E) - Point	0.00	0.00	7,177.00	4,307.55	329.31	14,592,664.72	1,669,590.60	40.181010°N	104.895550°W	
BHL 23N-33HZ - actual wellpath hits target center - Point	0.00	0.00	7,178.49	4,286.04	336.33	14,592,643.21	1,669,597.66	40.180951°N	104.895525°W	
460' Toe Entry 23N-33 - actual wellpath hits target center - Point	0.00	0.00	7,191.76	3,019.67	304.97	14,591,376.81	1,669,567.77	40.177473°N	104.895637°W	
460' Heel Exit 23N-33 - actual wellpath hits target center - Point	0.00	0.00	7,230.91	1,153.53	313.03	14,589,510.67	1,669,577.99	40.172349°N	104.895609°W	
Land Box Entry 23N-33 - actual wellpath hits target center - Point	0.00	0.00	7,236.38	-225.46	324.06	14,588,131.70	1,669,590.62	40.168562°N	104.895569°W	
Landing Point 23N-33 - actual wellpath hits target center - Point	0.00	0.00	7,245.29	-111.98	322.34	14,588,245.18	1,669,588.77	40.168874°N	104.895575°W	

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
7,668.00	7,236.38	-225.46	324.06	Land Box Entry	
7,782.00	7,245.29	-111.98	322.34	Landing Point	
9,048.00	7,230.91	1,153.53	313.03	460' Heel Exit	
10,915.00	7,191.76	3,019.67	304.97	460' Toe Entry	