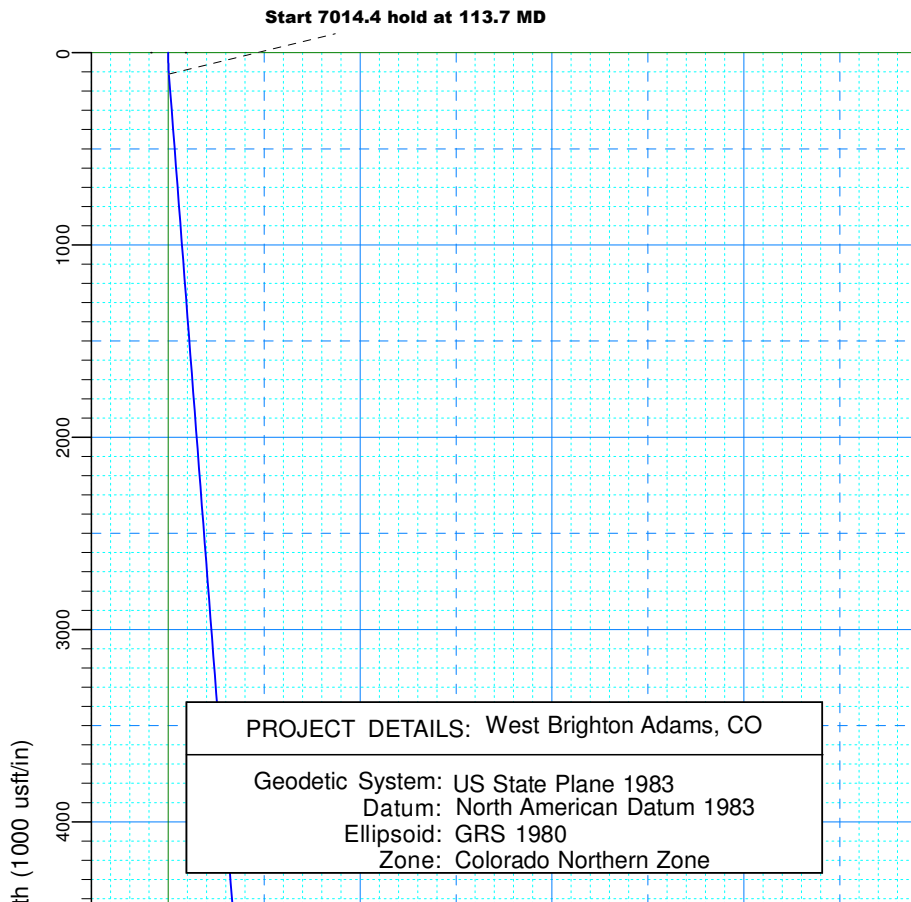
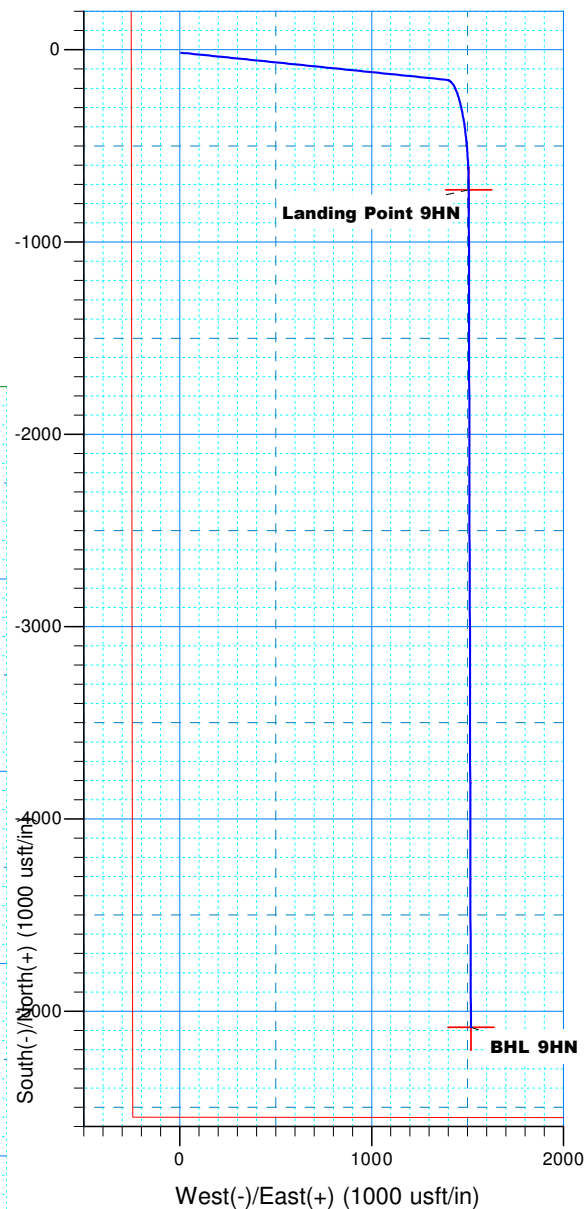




WARD PETROLEUM

WELL DETAILS: Sharp 25-1-9HN

Ground Level: 5019.0
Northing 1223135.30
Easting 3183431.32
Site Sharp Pad, True North



PROJECT DETAILS: West Brighton Adams, CO

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	-15.0	7.5	0.00	0.00	0.0	
2	113.7	11.37	95.81	113.0	-16.2	18.7	10.00	95.81	4.3	
3	7128.1	11.37	95.81	6989.7	-156.2	1394.8	0.00	0.00	531.3	
4	8016.4	90.00	179.85	7540.0	-728.8	1506.3	10.00	84.16	1111.9	Landing Point 9HN
5	8016.4	90.00	179.85	7540.0	-728.8	1506.3	0.01	0.00	1111.9	
6	12329.2	90.00	179.85	7540.0	-5041.5	1517.3	0.00	0.00	5248.3	
7	12371.4	90.00	179.85	7540.0	-5083.7	1517.4	0.01	-90.00	5288.8	BHL 9HN

Start DLS 10.00 TFO 84.16

Start 4312.8 hold at 8016.4 MD

TD at 12371.4 TFO -90.00

Landing Point 9HN

BHL 9HN

Vertical Section at 163.41° (1000.0 usft/in)

Ward Petroleum

West Brighton Adams, CO

Sharp Pad

Sharp 25-1-9HN

State Plan #1

Plan: State Plan #1

Standard Planning Report - Geographic

21 October, 2015

Ward Petroleum Corp
Planning Report - Geographic

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Sharp Pad
Company:	Ward Petroleum	TVD Reference:	WELL @ 5037.0usft (Original Well Elev)
Project:	West Brighton Adams, CO	MD Reference:	WELL @ 5037.0usft (Original Well Elev)
Site:	Sharp Pad	North Reference:	True
Well:	Sharp 25-1-9HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	State Plan #1		
Design:	State Plan #1		

Project	West Brighton Adams, CO		
Map System:	US State Plane 1983	System Datum:	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	Sharp Pad					
Site Position:		Northing:	1,223,150.26 usft	Latitude:	39° 56' 38.658 N	
From:	Map	Easting:	3,183,423.69 usft	Longitude:	104° 50' 44.898 W	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.42 °

Well	Sharp 25-1-9HN					
Well Position	+N/-S	-15.0 usft	Northing:	1,223,135.30 usft	Latitude:	39° 56' 38.510 N
	+E/-W	7.5 usft	Easting:	3,183,431.32 usft	Longitude:	104° 50' 44.802 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	5,019.0 usft	Ground Level:	5,019.0 usft

Wellbore	State Plan #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	9.02	66.72	53,012

Design	State Plan #1				
Audit Notes:					
Version:	Phase:	PROTOTYPE		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	-15.0	7.5	163.41	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	-15.0	7.5	0.00	0.00	0.00	0.00	
113.7	11.37	95.81	113.0	-16.2	18.7	10.00	10.00	0.00	95.81	
7,128.1	11.37	95.81	6,989.7	-156.2	1,394.8	0.00	0.00	0.00	0.00	
8,016.4	90.00	179.85	7,540.0	-728.8	1,506.3	10.00	8.85	9.46	84.16	Landing Point 9HN
8,016.4	90.00	179.85	7,540.0	-728.8	1,506.3	0.01	0.00	0.00	0.00	
12,329.2	90.00	179.85	7,540.0	-5,041.5	1,517.3	0.00	0.00	0.00	0.00	
12,371.4	90.00	179.85	7,540.0	-5,083.7	1,517.4	0.01	0.00	-0.01	-90.00	BHL 9HN

Ward Petroleum Corp
Planning Report - Geographic

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Sharp Pad
Company:	Ward Petroleum	TVD Reference:	WELL @ 5037.0usft (Original Well Elev)
Project:	West Brighton Adams, CO	MD Reference:	WELL @ 5037.0usft (Original Well Elev)
Site:	Sharp Pad	North Reference:	True
Well:	Sharp 25-1-9HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	State Plan #1		
Design:	State Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.0	0.00	0.00	0.0	-15.0	7.5	1,223,135.30	3,183,431.32	39° 56' 38.510 N	104° 50' 44.802 W	
100.0	10.00	95.81	99.5	-15.9	16.2	1,223,134.48	3,183,439.99	39° 56' 38.501 N	104° 50' 44.691 W	
113.7	11.37	95.81	113.0	-16.2	18.7	1,223,134.24	3,183,442.52	39° 56' 38.498 N	104° 50' 44.658 W	
200.0	11.37	95.81	197.6	-17.9	35.6	1,223,132.64	3,183,459.46	39° 56' 38.481 N	104° 50' 44.441 W	
300.0	11.37	95.81	295.6	-19.9	55.3	1,223,130.79	3,183,479.09	39° 56' 38.462 N	104° 50' 44.189 W	
400.0	11.37	95.81	393.6	-21.9	74.9	1,223,128.94	3,183,498.72	39° 56' 38.442 N	104° 50' 43.937 W	
500.0	11.37	95.81	491.7	-23.9	94.5	1,223,127.09	3,183,518.35	39° 56' 38.422 N	104° 50' 43.685 W	
600.0	11.37	95.81	589.7	-25.9	114.1	1,223,125.24	3,183,537.98	39° 56' 38.402 N	104° 50' 43.433 W	
700.0	11.37	95.81	687.7	-27.9	133.7	1,223,123.38	3,183,557.62	39° 56' 38.383 N	104° 50' 43.181 W	
800.0	11.37	95.81	785.8	-29.9	153.3	1,223,121.53	3,183,577.25	39° 56' 38.363 N	104° 50' 42.930 W	
900.0	11.37	95.81	883.8	-31.9	173.0	1,223,119.68	3,183,596.88	39° 56' 38.343 N	104° 50' 42.678 W	
1,000.0	11.37	95.81	981.9	-33.9	192.6	1,223,117.83	3,183,616.51	39° 56' 38.323 N	104° 50' 42.426 W	
1,100.0	11.37	95.81	1,079.9	-35.8	212.2	1,223,115.98	3,183,636.14	39° 56' 38.304 N	104° 50' 42.174 W	
1,200.0	11.37	95.81	1,177.9	-37.8	231.8	1,223,114.12	3,183,655.77	39° 56' 38.284 N	104° 50' 41.922 W	
1,300.0	11.37	95.81	1,276.0	-39.8	251.4	1,223,112.27	3,183,675.41	39° 56' 38.264 N	104° 50' 41.670 W	
1,400.0	11.37	95.81	1,374.0	-41.8	271.0	1,223,110.42	3,183,695.04	39° 56' 38.245 N	104° 50' 41.418 W	
1,500.0	11.37	95.81	1,472.0	-43.8	290.7	1,223,108.57	3,183,714.67	39° 56' 38.225 N	104° 50' 41.166 W	
1,600.0	11.37	95.81	1,570.1	-45.8	310.3	1,223,106.72	3,183,734.30	39° 56' 38.205 N	104° 50' 40.915 W	
1,700.0	11.37	95.81	1,668.1	-47.8	329.9	1,223,104.87	3,183,753.93	39° 56' 38.185 N	104° 50' 40.663 W	
1,800.0	11.37	95.81	1,766.1	-49.8	349.5	1,223,103.01	3,183,773.56	39° 56' 38.166 N	104° 50' 40.411 W	
1,900.0	11.37	95.81	1,864.2	-51.8	369.1	1,223,101.16	3,183,793.19	39° 56' 38.146 N	104° 50' 40.159 W	
2,000.0	11.37	95.81	1,962.2	-53.8	388.7	1,223,099.31	3,183,812.83	39° 56' 38.126 N	104° 50' 39.907 W	
2,100.0	11.37	95.81	2,060.3	-55.8	408.4	1,223,097.46	3,183,832.46	39° 56' 38.106 N	104° 50' 39.655 W	
2,200.0	11.37	95.81	2,158.3	-57.8	428.0	1,223,095.61	3,183,852.09	39° 56' 38.087 N	104° 50' 39.403 W	
2,300.0	11.37	95.81	2,256.3	-59.8	447.6	1,223,093.75	3,183,871.72	39° 56' 38.067 N	104° 50' 39.151 W	
2,400.0	11.37	95.81	2,354.4	-61.8	467.2	1,223,091.90	3,183,891.35	39° 56' 38.047 N	104° 50' 38.899 W	
2,500.0	11.37	95.81	2,452.4	-63.8	486.8	1,223,090.05	3,183,910.98	39° 56' 38.027 N	104° 50' 38.648 W	
2,600.0	11.37	95.81	2,550.4	-65.8	506.5	1,223,088.20	3,183,930.62	39° 56' 38.008 N	104° 50' 38.396 W	
2,700.0	11.37	95.81	2,648.5	-67.8	526.1	1,223,086.35	3,183,950.25	39° 56' 37.988 N	104° 50' 38.144 W	
2,800.0	11.37	95.81	2,746.5	-69.8	545.7	1,223,084.50	3,183,969.88	39° 56' 37.968 N	104° 50' 37.892 W	
2,900.0	11.37	95.81	2,844.5	-71.8	565.3	1,223,082.64	3,183,989.51	39° 56' 37.948 N	104° 50' 37.640 W	
3,000.0	11.37	95.81	2,942.6	-73.8	584.9	1,223,080.79	3,184,009.14	39° 56' 37.929 N	104° 50' 37.388 W	
3,100.0	11.37	95.81	3,040.6	-75.8	604.5	1,223,078.94	3,184,028.77	39° 56' 37.909 N	104° 50' 37.136 W	
3,200.0	11.37	95.81	3,138.7	-77.8	624.2	1,223,077.09	3,184,048.40	39° 56' 37.889 N	104° 50' 36.884 W	
3,300.0	11.37	95.81	3,236.7	-79.8	643.8	1,223,075.24	3,184,068.04	39° 56' 37.870 N	104° 50' 36.633 W	
3,400.0	11.37	95.81	3,334.7	-81.8	663.4	1,223,073.38	3,184,087.67	39° 56' 37.850 N	104° 50' 36.381 W	
3,500.0	11.37	95.81	3,432.8	-83.8	683.0	1,223,071.53	3,184,107.30	39° 56' 37.830 N	104° 50' 36.129 W	
3,600.0	11.37	95.81	3,530.8	-85.8	702.6	1,223,069.68	3,184,126.93	39° 56' 37.810 N	104° 50' 35.877 W	
3,700.0	11.37	95.81	3,628.8	-87.8	722.2	1,223,067.83	3,184,146.56	39° 56' 37.791 N	104° 50' 35.625 W	
3,800.0	11.37	95.81	3,726.9	-89.8	741.9	1,223,065.98	3,184,166.19	39° 56' 37.771 N	104° 50' 35.373 W	
3,900.0	11.37	95.81	3,824.9	-91.8	761.5	1,223,064.12	3,184,185.83	39° 56' 37.751 N	104° 50' 35.121 W	
4,000.0	11.37	95.81	3,923.0	-93.7	781.1	1,223,062.27	3,184,205.46	39° 56' 37.731 N	104° 50' 34.869 W	
4,100.0	11.37	95.81	4,021.0	-95.7	800.7	1,223,060.42	3,184,225.09	39° 56' 37.712 N	104° 50' 34.618 W	
4,200.0	11.37	95.81	4,119.0	-97.7	820.3	1,223,058.57	3,184,244.72	39° 56' 37.692 N	104° 50' 34.366 W	
4,300.0	11.37	95.81	4,217.1	-99.7	839.9	1,223,056.72	3,184,264.35	39° 56' 37.672 N	104° 50' 34.114 W	
4,400.0	11.37	95.81	4,315.1	-101.7	859.6	1,223,054.87	3,184,283.98	39° 56' 37.652 N	104° 50' 33.862 W	
4,500.0	11.37	95.81	4,413.1	-103.7	879.2	1,223,053.01	3,184,303.62	39° 56' 37.633 N	104° 50' 33.610 W	
4,600.0	11.37	95.81	4,511.2	-105.7	898.8	1,223,051.16	3,184,323.25	39° 56' 37.613 N	104° 50' 33.358 W	
4,700.0	11.37	95.81	4,609.2	-107.7	918.4	1,223,049.31	3,184,342.88	39° 56' 37.593 N	104° 50' 33.106 W	
4,800.0	11.37	95.81	4,707.2	-109.7	938.0	1,223,047.46	3,184,362.51	39° 56' 37.573 N	104° 50' 32.854 W	
4,900.0	11.37	95.81	4,805.3	-111.7	957.7	1,223,045.61	3,184,382.14	39° 56' 37.554 N	104° 50' 32.603 W	
5,000.0	11.37	95.81	4,903.3	-113.7	977.3	1,223,043.75	3,184,401.77	39° 56' 37.534 N	104° 50' 32.351 W	
5,100.0	11.37	95.81	5,001.4	-115.7	996.9	1,223,041.90	3,184,421.40	39° 56' 37.514 N	104° 50' 32.099 W	
5,200.0	11.37	95.81	5,099.4	-117.7	1,016.5	1,223,040.05	3,184,441.04	39° 56' 37.495 N	104° 50' 31.847 W	
5,300.0	11.37	95.81	5,197.4	-119.7	1,036.1	1,223,038.20	3,184,460.67	39° 56' 37.475 N	104° 50' 31.595 W	

Ward Petroleum Corp
Planning Report - Geographic

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Sharp Pad
Company:	Ward Petroleum	TVD Reference:	WELL @ 5037.0usft (Original Well Elev)
Project:	West Brighton Adams, CO	MD Reference:	WELL @ 5037.0usft (Original Well Elev)
Site:	Sharp Pad	North Reference:	True
Well:	Sharp 25-1-9HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	State Plan #1		
Design:	State Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,400.0	11.37	95.81	5,295.5	-121.7	1,055.7	1,223,036.35	3,184,480.30	39° 56' 37.455 N	104° 50' 31.343 W	
5,500.0	11.37	95.81	5,393.5	-123.7	1,075.4	1,223,034.50	3,184,499.93	39° 56' 37.435 N	104° 50' 31.091 W	
5,600.0	11.37	95.81	5,491.5	-125.7	1,095.0	1,223,032.64	3,184,519.56	39° 56' 37.416 N	104° 50' 30.839 W	
5,700.0	11.37	95.81	5,589.6	-127.7	1,114.6	1,223,030.79	3,184,539.19	39° 56' 37.396 N	104° 50' 30.588 W	
5,800.0	11.37	95.81	5,687.6	-129.7	1,134.2	1,223,028.94	3,184,558.83	39° 56' 37.376 N	104° 50' 30.336 W	
5,900.0	11.37	95.81	5,785.6	-131.7	1,153.8	1,223,027.09	3,184,578.46	39° 56' 37.356 N	104° 50' 30.084 W	
6,000.0	11.37	95.81	5,883.7	-133.7	1,173.4	1,223,025.24	3,184,598.09	39° 56' 37.337 N	104° 50' 29.832 W	
6,100.0	11.37	95.81	5,981.7	-135.7	1,193.1	1,223,023.38	3,184,617.72	39° 56' 37.317 N	104° 50' 29.580 W	
6,200.0	11.37	95.81	6,079.8	-137.7	1,212.7	1,223,021.53	3,184,637.35	39° 56' 37.297 N	104° 50' 29.328 W	
6,300.0	11.37	95.81	6,177.8	-139.7	1,232.3	1,223,019.68	3,184,656.98	39° 56' 37.277 N	104° 50' 29.076 W	
6,400.0	11.37	95.81	6,275.8	-141.7	1,251.9	1,223,017.83	3,184,676.61	39° 56' 37.258 N	104° 50' 28.824 W	
6,500.0	11.37	95.81	6,373.9	-143.7	1,271.5	1,223,015.98	3,184,696.25	39° 56' 37.238 N	104° 50' 28.573 W	
6,600.0	11.37	95.81	6,471.9	-145.7	1,291.1	1,223,014.12	3,184,715.88	39° 56' 37.218 N	104° 50' 28.321 W	
6,700.0	11.37	95.81	6,569.9	-147.7	1,310.8	1,223,012.27	3,184,735.51	39° 56' 37.198 N	104° 50' 28.069 W	
6,800.0	11.37	95.81	6,668.0	-149.7	1,330.4	1,223,010.42	3,184,755.14	39° 56' 37.179 N	104° 50' 27.817 W	
6,900.0	11.37	95.81	6,766.0	-151.7	1,350.0	1,223,008.57	3,184,774.77	39° 56' 37.159 N	104° 50' 27.565 W	
7,000.0	11.37	95.81	6,864.0	-153.6	1,369.6	1,223,006.72	3,184,794.40	39° 56' 37.139 N	104° 50' 27.313 W	
7,100.0	11.37	95.81	6,962.1	-155.6	1,389.2	1,223,004.87	3,184,814.04	39° 56' 37.119 N	104° 50' 27.061 W	
7,128.1	11.37	95.81	6,989.7	-156.2	1,394.8	1,223,004.34	3,184,819.56	39° 56' 37.114 N	104° 50' 26.990 W	
7,200.0	14.03	126.69	7,059.8	-162.1	1,408.8	1,222,998.52	3,184,833.66	39° 56' 37.055 N	104° 50' 26.810 W	
7,300.0	21.46	149.27	7,155.1	-185.2	1,427.9	1,222,975.63	3,184,852.95	39° 56' 36.828 N	104° 50' 26.565 W	
7,400.0	30.36	159.88	7,245.0	-224.7	1,446.0	1,222,936.21	3,184,871.32	39° 56' 36.437 N	104° 50' 26.332 W	
7,500.0	39.74	165.93	7,326.8	-279.6	1,462.5	1,222,881.46	3,184,888.23	39° 56' 35.894 N	104° 50' 26.120 W	
7,600.0	49.34	169.96	7,398.0	-348.1	1,476.9	1,222,813.04	3,184,903.16	39° 56' 35.217 N	104° 50' 25.935 W	
7,700.0	59.04	172.96	7,456.5	-428.2	1,488.8	1,222,733.02	3,184,915.64	39° 56' 34.425 N	104° 50' 25.783 W	
7,800.0	68.80	175.40	7,500.4	-517.5	1,497.8	1,222,643.84	3,184,925.31	39° 56' 33.543 N	104° 50' 25.667 W	
7,900.0	78.59	177.54	7,528.4	-613.2	1,503.7	1,222,548.21	3,184,931.87	39° 56' 32.598 N	104° 50' 25.592 W	
8,000.0	88.39	179.53	7,539.8	-712.4	1,506.2	1,222,449.04	3,184,935.12	39° 56' 31.618 N	104° 50' 25.560 W	
8,016.4	90.00	179.85	7,540.0	-728.8	1,506.3	1,222,432.63	3,184,935.33	39° 56' 31.455 N	104° 50' 25.559 W	
8,100.0	90.00	179.85	7,540.0	-812.3	1,506.5	1,222,349.04	3,184,936.16	39° 56' 30.629 N	104° 50' 25.556 W	
8,200.0	90.00	179.85	7,540.0	-912.3	1,506.8	1,222,249.05	3,184,937.15	39° 56' 29.641 N	104° 50' 25.553 W	
8,300.0	90.00	179.85	7,540.0	-1,012.3	1,507.0	1,222,149.05	3,184,938.14	39° 56' 28.653 N	104° 50' 25.550 W	
8,400.0	90.00	179.85	7,540.0	-1,112.3	1,507.3	1,222,049.06	3,184,939.14	39° 56' 27.665 N	104° 50' 25.546 W	
8,500.0	90.00	179.85	7,540.0	-1,212.3	1,507.5	1,221,949.06	3,184,940.13	39° 56' 26.676 N	104° 50' 25.543 W	
8,600.0	90.00	179.85	7,540.0	-1,312.3	1,507.8	1,221,849.07	3,184,941.12	39° 56' 25.688 N	104° 50' 25.540 W	
8,700.0	90.00	179.85	7,540.0	-1,412.3	1,508.0	1,221,749.07	3,184,942.11	39° 56' 24.700 N	104° 50' 25.537 W	
8,800.0	90.00	179.85	7,540.0	-1,512.3	1,508.3	1,221,649.08	3,184,943.11	39° 56' 23.711 N	104° 50' 25.534 W	
8,900.0	90.00	179.85	7,540.0	-1,612.3	1,508.6	1,221,549.08	3,184,944.10	39° 56' 22.723 N	104° 50' 25.530 W	
9,000.0	90.00	179.85	7,540.0	-1,712.3	1,508.8	1,221,449.09	3,184,945.09	39° 56' 21.735 N	104° 50' 25.527 W	
9,100.0	90.00	179.85	7,540.0	-1,812.3	1,509.1	1,221,349.09	3,184,946.08	39° 56' 20.747 N	104° 50' 25.524 W	
9,200.0	90.00	179.85	7,540.0	-1,912.3	1,509.3	1,221,249.10	3,184,947.07	39° 56' 19.758 N	104° 50' 25.521 W	
9,300.0	90.00	179.85	7,540.0	-2,012.3	1,509.6	1,221,149.10	3,184,948.07	39° 56' 18.770 N	104° 50' 25.518 W	
9,400.0	90.00	179.85	7,540.0	-2,112.3	1,509.8	1,221,049.11	3,184,949.06	39° 56' 17.782 N	104° 50' 25.515 W	
9,500.0	90.00	179.85	7,540.0	-2,212.3	1,510.1	1,220,949.11	3,184,950.05	39° 56' 16.794 N	104° 50' 25.511 W	
9,600.0	90.00	179.85	7,540.0	-2,312.3	1,510.3	1,220,849.12	3,184,951.04	39° 56' 15.805 N	104° 50' 25.508 W	
9,700.0	90.00	179.85	7,540.0	-2,412.3	1,510.6	1,220,749.12	3,184,952.04	39° 56' 14.817 N	104° 50' 25.505 W	
9,800.0	90.00	179.85	7,540.0	-2,512.3	1,510.8	1,220,649.13	3,184,953.03	39° 56' 13.829 N	104° 50' 25.502 W	
9,900.0	90.00	179.85	7,540.0	-2,612.3	1,511.1	1,220,549.13	3,184,954.02	39° 56' 12.840 N	104° 50' 25.499 W	
10,000.0	90.00	179.85	7,540.0	-2,712.3	1,511.4	1,220,449.14	3,184,955.01	39° 56' 11.852 N	104° 50' 25.495 W	
10,100.0	90.00	179.85	7,540.0	-2,812.3	1,511.6	1,220,349.14	3,184,956.00	39° 56' 10.864 N	104° 50' 25.492 W	
10,200.0	90.00	179.85	7,540.0	-2,912.3	1,511.9	1,220,249.15	3,184,957.00	39° 56' 9.876 N	104° 50' 25.489 W	
10,300.0	90.00	179.85	7,540.0	-3,012.3	1,512.1	1,220,149.15	3,184,957.99	39° 56' 8.887 N	104° 50' 25.486 W	
10,400.0	90.00	179.85	7,540.0	-3,112.3	1,512.4	1,220,049.16	3,184,958.98	39° 56' 7.899 N	104° 50' 25.483 W	
10,500.0	90.00	179.85	7,540.0	-3,212.3	1,512.6	1,219,949.16	3,184,959.97	39° 56' 6.911 N	104° 50' 25.479 W	
10,600.0	90.00	179.85	7,540.0	-3,312.3	1,512.9	1,219,849.17	3,184,960.96	39° 56' 5.923 N	104° 50' 25.476 W	

Ward Petroleum Corp
Planning Report - Geographic

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Sharp Pad
Company:	Ward Petroleum	TVD Reference:	WELL @ 5037.0usft (Original Well Elev)
Project:	West Brighton Adams, CO	MD Reference:	WELL @ 5037.0usft (Original Well Elev)
Site:	Sharp Pad	North Reference:	True
Well:	Sharp 25-1-9HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	State Plan #1		
Design:	State Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
10,700.0	90.00	179.85	7,540.0	-3,412.3	1,513.1	1,219,749.17	3,184,961.96	39° 56' 4.934 N	104° 50' 25.473 W	
10,800.0	90.00	179.85	7,540.0	-3,512.3	1,513.4	1,219,649.18	3,184,962.95	39° 56' 3.946 N	104° 50' 25.470 W	
10,900.0	90.00	179.85	7,540.0	-3,612.3	1,513.6	1,219,549.18	3,184,963.94	39° 56' 2.958 N	104° 50' 25.467 W	
11,000.0	90.00	179.85	7,540.0	-3,712.3	1,513.9	1,219,449.19	3,184,964.93	39° 56' 1.970 N	104° 50' 25.463 W	
11,100.0	90.00	179.85	7,540.0	-3,812.3	1,514.2	1,219,349.19	3,184,965.93	39° 56' 0.981 N	104° 50' 25.460 W	
11,200.0	90.00	179.85	7,540.0	-3,912.3	1,514.4	1,219,249.20	3,184,966.92	39° 55' 59.993 N	104° 50' 25.457 W	
11,300.0	90.00	179.85	7,540.0	-4,012.3	1,514.7	1,219,149.20	3,184,967.91	39° 55' 59.005 N	104° 50' 25.454 W	
11,400.0	90.00	179.85	7,540.0	-4,112.3	1,514.9	1,219,049.21	3,184,968.90	39° 55' 58.016 N	104° 50' 25.451 W	
11,500.0	90.00	179.85	7,540.0	-4,212.3	1,515.2	1,218,949.21	3,184,969.89	39° 55' 57.028 N	104° 50' 25.448 W	
11,600.0	90.00	179.85	7,540.0	-4,312.3	1,515.4	1,218,849.22	3,184,970.89	39° 55' 56.040 N	104° 50' 25.444 W	
11,700.0	90.00	179.85	7,540.0	-4,412.3	1,515.7	1,218,749.22	3,184,971.88	39° 55' 55.052 N	104° 50' 25.441 W	
11,800.0	90.00	179.85	7,540.0	-4,512.3	1,515.9	1,218,649.23	3,184,972.87	39° 55' 54.063 N	104° 50' 25.438 W	
11,900.0	90.00	179.85	7,540.0	-4,612.3	1,516.2	1,218,549.23	3,184,973.86	39° 55' 53.075 N	104° 50' 25.435 W	
12,000.0	90.00	179.85	7,540.0	-4,712.3	1,516.4	1,218,449.24	3,184,974.85	39° 55' 52.087 N	104° 50' 25.432 W	
12,100.0	90.00	179.85	7,540.0	-4,812.3	1,516.7	1,218,349.24	3,184,975.85	39° 55' 51.099 N	104° 50' 25.428 W	
12,200.0	90.00	179.85	7,540.0	-4,912.3	1,516.9	1,218,249.25	3,184,976.84	39° 55' 50.110 N	104° 50' 25.425 W	
12,300.0	90.00	179.85	7,540.0	-5,012.3	1,517.2	1,218,149.25	3,184,977.83	39° 55' 49.122 N	104° 50' 25.422 W	
12,329.2	90.00	179.85	7,540.0	-5,041.5	1,517.3	1,218,120.08	3,184,978.12	39° 55' 48.834 N	104° 50' 25.421 W	
12,371.4	90.00	179.85	7,540.0	-5,083.7	1,517.4	1,218,077.85	3,184,978.54	39° 55' 48.416 N	104° 50' 25.420 W	

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										
Landing Point 9HN	0.00	0.00	7,540.0	-728.8	1,506.3	1,222,432.63	3,184,935.33	39° 56' 31.455 N	104° 50' 25.559 W	
- plan hits target center										
- Point										
BHL 9HN	0.00	0.00	7,540.0	-5,083.7	1,517.4	1,218,077.85	3,184,978.54	39° 55' 48.416 N	104° 50' 25.420 W	
- plan hits target center										
- Point										