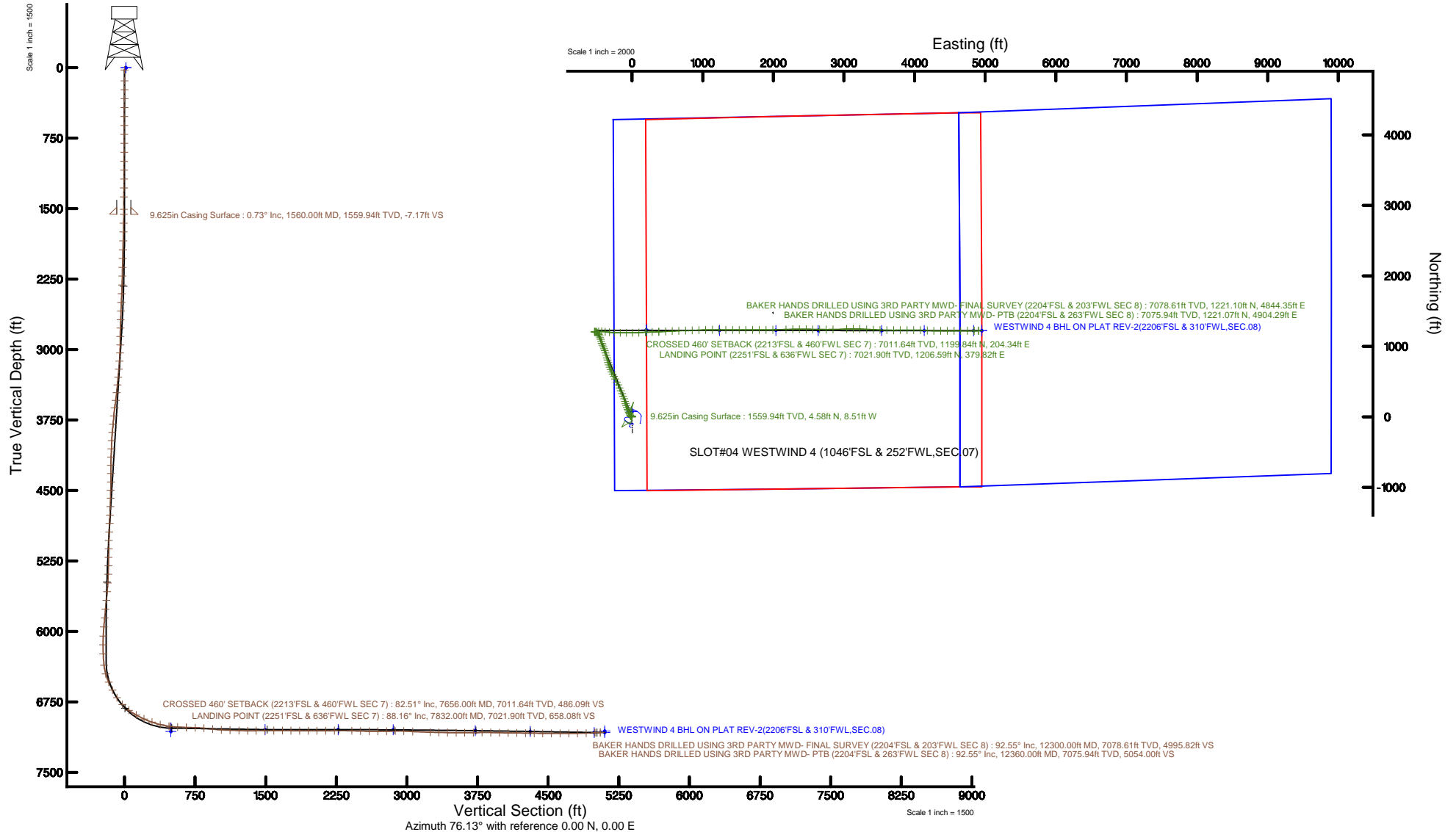


EXTRACTION OIL & GAS

Location: COLORADO Slot: SLOT#04 WESTWIND 4 (1046'FSL & 252'FWL,SEC.07)
 Field: WELD COUNTY (NAD83/TRUE NORTH) Well: WESTWIND 4
 Facility: SEC.07-T06N-R67W Wellbore: WESTWIND 4 PWB



Plot reference wellpath is WESTWIND 4 PWP (REV-D.0)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to PATTERSON 346 (25) (RT)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to PATTERSON 346 (25) (RT)	North Reference: True north
PATTERSON 346 (25) (RT) to Mean Sea Level: 4844 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#04 WESTWIND 4 (1046'FSL & 252'FWL,SEC.07)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wagnjam on 2016-05-20
	Database: WA_DEN_Denver_Defn





Actual Wellpath Report

WESTWIND 4 AWP

Page 1 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WESTWIND 4 (1046'FSL & 252'FWL,SEC.07)
Area	COLORADO	Well	WESTWIND 4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WESTWIND 4 AWB
Facility	SEC.07-T06N-R67W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Wagnjam
Scale	0.999966	Report Generated	5/20/2016 at 11:15:56 AM
Convergence at slot	0.36° East	Database/Source file	WA_DEN_Denver_Defn/WESTWIND_4_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-74.99	1.39	3154841.33	1424257.29	40°29'47.951"N	104°56'35.664"W
Facility Reference Pt			3154839.47	1424332.26	40°29'48.692"N	104°56'35.682"W
Field Reference Pt			3185481.27	1419166.81	40°28'55.560"N	104°49'59.556"W

WELLPATH DATUM			
Calculation method	Minimum curvature	PATTERSON 346 (25') (RT) to Facility Vertical Datum	4844.00ft
Horizontal Reference Pt	Slot	PATTERSON 346 (25') (RT) to Mean Sea Level	4844.00ft
Vertical Reference Pt	PATTERSON 346 (25') (RT)	PATTERSON 346 (25') (RT) to Mud Line at Slot (SLOT#04 WESTWIND 4 (1046'FSL & 252'FWL,SEC.07))	4844.00ft
MD Reference Pt	PATTERSON 346 (25') (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	76.13°



Actual Wellpath Report

WESTWIND 4 AWP

Page 2 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WESTWIND 4 (1046'FSL & 252'FWL,SEC.07)
Area	COLORADO	Well	WESTWIND 4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WESTWIND 4 AWB
Facility	SEC.07-T06N-R67W		

WELLPATH DATA (130 stations) † = interpolated/extrapolated station									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments	
0.00†	0.000	19.300	0.00	0.00	0.00	0.00	0.00		
25.00	0.000	19.300	25.00	0.00	0.00	0.00	0.00		
140.00	0.200	19.300	140.00	0.11	0.19	0.07	0.17		
235.00	0.200	259.300	235.00	0.04	0.32	-0.04	0.36		
330.00	0.300	332.800	330.00	-0.19	0.51	-0.32	0.33		
425.00	0.900	303.200	424.99	-0.75	1.14	-1.06	0.69		
520.00	0.300	9.000	519.99	-1.16	1.79	-1.64	0.87		
616.00	1.100	343.000	615.98	-1.12	2.92	-1.87	0.88		
711.00	0.400	243.200	710.97	-1.49	3.64	-2.43	1.30		
806.00	0.300	273.900	805.97	-2.05	3.51	-2.98	0.22		
901.00	0.400	283.600	900.97	-2.58	3.60	-3.55	0.12		
996.00	0.900	285.200	995.96	-3.53	3.88	-4.59	0.53		
1091.00	0.200	176.000	1090.96	-4.21	3.91	-5.30	1.04		
1186.00	0.300	216.900	1185.96	-4.43	3.54	-5.44	0.21		
1281.00	0.900	287.700	1280.96	-5.26	3.57	-6.30	0.89		
1376.00	0.400	314.700	1375.95	-6.07	4.03	-7.24	0.60		
1507.00	0.400	276.600	1506.95	-6.73	4.41	-8.02	0.20		
1655.00	1.390	306.030	1654.93	-8.37	5.52	-9.99	0.72		
1749.00	2.080	301.440	1748.88	-10.31	7.08	-12.37	0.75		
1844.00	2.030	291.890	1843.82	-12.88	8.61	-15.40	0.36		
1938.00	3.140	318.250	1937.73	-15.44	11.15	-18.66	1.70		
2032.00	5.560	330.770	2031.45	-17.85	17.05	-22.60	2.75		
2127.00	7.080	333.960	2125.87	-20.30	26.32	-27.41	1.64		
2221.00	8.290	340.610	2219.03	-22.17	37.92	-32.21	1.60		
2316.00	10.080	332.080	2312.81	-24.85	51.73	-38.37	2.36		
2411.00	11.100	332.950	2406.19	-28.95	67.22	-46.43	1.09		
2506.00	12.770	336.490	2499.14	-32.79	84.99	-54.77	1.92		
2601.00	15.700	339.060	2591.21	-36.13	106.63	-63.56	3.15		
2696.00	16.700	338.410	2682.44	-39.55	131.33	-73.17	1.07		
2790.00	18.360	341.520	2772.07	-42.55	157.93	-82.84	2.03		



Actual Wellpath Report

WESTWIND 4 AWP

Page 3 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WESTWIND 4 (1046'FSL & 252'FWL,SEC.07)
Area	COLORADO	Well	WESTWIND 4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WESTWIND 4 AWB
Facility	SEC.07-T06N-R67W		

WELLPATH DATA (130 stations)									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments	
2885.00	19.010	344.340	2862.06	-44.23	187.02	-91.76	1.17		
2980.00	22.590	345.190	2950.86	-45.01	219.57	-100.60	3.78		
3074.00	24.820	339.680	3036.93	-47.52	255.53	-112.07	3.34		
3169.00	25.360	337.340	3122.97	-52.87	293.01	-126.83	1.19		
3263.00	24.350	336.930	3208.26	-59.04	329.41	-142.18	1.09		
3358.00	28.210	336.450	3293.43	-65.95	368.03	-158.83	4.07		
3453.00	29.140	335.450	3376.78	-74.01	409.65	-177.41	1.10		
3547.00	29.800	334.610	3458.61	-82.91	451.57	-196.94	0.83		
3641.00	30.080	333.380	3540.07	-92.77	493.73	-217.51	0.72		
3736.00	29.430	332.690	3622.54	-103.44	535.76	-238.89	0.77		
3830.00	23.970	334.890	3706.49	-112.54	573.59	-257.60	5.90		
3924.00	21.200	332.420	3793.28	-120.29	605.96	-273.57	3.11		
4019.00	22.110	331.390	3881.57	-128.90	636.88	-290.09	1.04		
4114.00	22.580	342.070	3969.47	-134.74	669.94	-304.27	4.30		
4208.00	21.560	340.280	4056.59	-137.78	703.37	-315.65	1.30		
4303.00	22.210	339.060	4144.74	-141.77	736.57	-327.96	0.84		
4397.00	22.690	347.160	4231.64	-143.62	770.85	-338.34	3.33		
4491.00	20.810	345.870	4318.94	-143.37	804.72	-346.45	2.06		
4587.00	20.870	344.100	4408.66	-144.05	837.70	-355.30	0.66		
4681.00	23.860	344.100	4495.58	-145.32	872.10	-365.09	3.18		
4775.00	22.030	342.290	4582.14	-147.17	907.18	-375.67	2.09		
4870.00	18.080	340.010	4671.36	-149.93	938.02	-386.13	4.24		
4964.00	17.520	337.550	4760.87	-153.60	964.80	-396.52	1.00		
5058.00	18.890	337.870	4850.16	-157.89	991.98	-407.66	1.46		
5153.00	15.190	335.300	4940.97	-162.44	1017.54	-418.65	3.97		
5247.00	16.720	341.560	5031.36	-165.83	1041.56	-428.08	2.45		
5342.00	20.100	345.330	5121.48	-167.14	1070.32	-436.54	3.77		
5436.00	15.870	341.850	5210.87	-168.33	1098.17	-444.63	4.64		
5530.00	16.170	342.400	5301.22	-170.13	1122.86	-452.60	0.36		
5625.00	16.010	339.020	5392.50	-172.61	1147.71	-461.29	1.00		



Actual Wellpath Report

WESTWIND 4 AWP

Page 4 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WESTWIND 4 (1046'FSL & 252'FWL,SEC.07)
Area	COLORADO	Well	WESTWIND 4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WESTWIND 4 AWB
Facility	SEC.07-T06N-R67W		

WELLPATH DATA (130 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5719.00	12.750	330.990	5483.56	-176.93	1168.89	-470.96	4.06	
5814.00	9.810	317.990	5576.73	-183.48	1184.08	-481.47	4.07	
5908.00	8.040	301.160	5669.60	-191.91	1193.43	-492.45	3.34	
6002.00	6.360	289.110	5762.86	-200.92	1198.54	-503.00	2.39	
6098.00	5.600	273.690	5858.34	-209.85	1200.58	-512.70	1.84	
6193.00	4.880	270.620	5952.95	-218.18	1200.92	-521.37	0.81	
6289.00	4.980	305.720	6048.61	-224.83	1203.40	-528.83	3.10	
6384.00	2.030	358.160	6143.44	-227.16	1207.49	-532.24	4.29	
6480.00	2.070	61.690	6239.39	-225.12	1210.01	-530.76	2.25	
6600.00	6.650	94.200	6359.03	-216.41	1210.53	-521.92	4.19	
6695.00	15.550	87.440	6452.16	-198.66	1210.70	-503.68	9.45	
6789.00	23.980	85.570	6540.54	-167.41	1212.74	-471.99	8.99	
6884.00	29.560	94.220	6625.36	-126.04	1212.50	-429.32	7.15	
6979.00	34.470	98.390	6705.90	-78.85	1206.85	-379.32	5.67	
7074.00	45.580	97.230	6778.53	-22.14	1198.63	-318.88	11.72	
7169.00	55.140	90.840	6839.10	47.41	1193.78	-246.03	11.31	
7264.00	60.690	90.240	6889.55	125.34	1193.03	-165.58	5.87	
7358.00	66.210	89.500	6931.55	206.99	1193.24	-81.53	5.91	
7452.00	71.240	89.950	6965.64	292.09	1193.65	6.04	5.37	
7547.00	76.720	88.170	6991.85	381.06	1195.17	97.30	6.04	
7642.00	81.610	86.970	7009.71	472.48	1199.13	190.49	5.29	
7656.00†	82.515	87.177	7011.64	486.09	1199.84	204.34	6.63	CROSSED 460' SETBACK (2213'FSL & 460'FWL SEC 7)
7737.00	87.750	88.360	7018.51	565.11	1202.98	284.95	6.63	
7832.00	88.160	87.280	7021.90	658.08	1206.59	379.82	1.22	LANDING POINT (2251'FSL & 636'FWL SEC 7)
7927.00	88.490	87.030	7024.68	751.28	1211.30	474.67	0.44	
8022.00	84.620	87.640	7030.38	844.28	1215.71	569.37	4.12	
8116.00	83.950	86.500	7039.75	936.11	1220.49	662.78	1.40	
8211.00	86.510	89.600	7047.65	1028.72	1223.71	757.38	4.22	
8306.00	88.830	87.990	7051.51	1121.32	1225.71	852.27	2.97	
8402.00	87.240	87.150	7054.80	1215.35	1229.77	948.12	1.87	

REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WESTWIND 4 (1046'FSL & 252'FWL,SEC.07)
Area	COLORADO	Well	WESTWIND 4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WESTWIND 4 AWB
Facility	SEC.07-T06N-R67W		

WELLPATH DATA (130 stations)									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments	
8497.00	89.700	88.890	7057.34	1308.27	1233.05	1043.02	3.17		
8591.00	91.440	89.400	7056.40	1399.85	1234.46	1137.00	1.93		
8686.00	89.530	90.310	7055.60	1492.12	1234.70	1231.99	2.23		
8782.00	89.800	90.460	7056.16	1585.16	1234.05	1327.99	0.32		
8877.00	90.470	90.960	7055.94	1677.10	1232.87	1422.98	0.88		
8971.00	88.990	89.620	7056.38	1768.24	1232.40	1516.97	2.12		
9066.00	89.600	90.360	7057.55	1860.46	1232.41	1611.97	1.01		
9160.00	90.230	89.490	7057.69	1951.75	1232.54	1705.96	1.14		
9255.00	89.930	89.280	7057.55	2044.21	1233.56	1800.96	0.39		
9351.00	90.270	90.200	7057.39	2137.52	1233.99	1896.96	1.02		
9446.00	90.840	88.960	7056.47	2229.90	1234.69	1991.95	1.44		
9635.00	88.350	88.400	7057.80	2414.36	1239.04	2180.88	1.35		
9730.00	88.550	88.390	7060.37	2507.16	1241.70	2275.80	0.21		
9825.00	89.260	90.830	7062.19	2599.52	1242.35	2370.78	2.67		
9920.00	89.130	89.780	7063.52	2691.61	1241.84	2465.76	1.11		
10015.00	91.550	91.300	7062.96	2783.61	1240.95	2560.75	3.01		
10111.00	91.810	91.040	7060.14	2876.28	1238.99	2656.69	0.38		
10205.00	87.210	90.100	7060.95	2967.28	1238.05	2750.65	4.99		
10301.00	87.150	88.640	7065.67	3060.61	1239.11	2846.53	1.52		
10492.00	88.390	87.580	7073.10	3247.30	1245.40	3037.27	0.85		
10586.00	89.030	89.660	7075.22	3339.04	1247.67	3131.22	2.31		
10681.00	89.430	92.770	7076.50	3430.75	1245.65	3226.18	3.30		
10777.00	89.730	92.820	7077.20	3522.71	1240.97	3322.06	0.32		
10872.00	89.800	92.590	7077.59	3613.76	1236.49	3416.95	0.25		
10967.00	90.600	92.870	7077.26	3704.80	1231.96	3511.84	0.89		
11063.00	91.040	90.940	7075.88	3797.17	1228.77	3607.77	2.06		
11158.00	88.420	89.890	7076.33	3889.22	1228.08	3702.76	2.97		
11254.00	89.060	89.220	7078.44	3982.57	1228.83	3798.73	0.97		
11349.00	89.090	89.050	7079.98	4075.12	1230.26	3893.71	0.18		
11444.00	89.760	90.500	7080.93	4167.43	1230.64	3988.70	1.68		

REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WESTWIND 4 (1046'FSL & 252'FWL,SEC.07)
Area	COLORADO	Well	WESTWIND 4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WESTWIND 4 AWB
Facility	SEC.07-T06N-R67W		

WELLPATH DATA (130 stations)									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments	
11540.00	88.760	91.600	7082.17	4260.18	1228.88	4084.68	1.55		
11635.00	89.430	93.890	7083.67	4351.19	1224.33	4179.55	2.51		
11730.00	89.400	90.900	7084.64	4442.37	1220.36	4274.45	3.15		
11825.00	89.870	90.000	7085.25	4534.42	1219.61	4369.44	1.07		
11920.00	90.100	89.720	7085.27	4626.70	1219.84	4464.44	0.38		
12014.00	90.370	90.310	7084.89	4717.95	1219.82	4558.44	0.69		
12110.00	90.670	89.240	7084.01	4811.23	1220.20	4654.44	1.16		
12205.00	91.650	89.820	7082.09	4903.62	1220.98	4749.41	1.20		
12300.00	92.550	90.030	7078.61	4995.82	1221.10	4844.35	0.97	BAKER HANDS DRILLED USING 3RD PARTY MWD- FINAL SURVEY (2204'FSL & 203'FWL SEC 8)	
12360.00	92.550	90.030	7075.94	5054.00	1221.07	4904.29	0.00	BAKER HANDS DRILLED USING 3RD PARTY MWD- PTB (2204'FSL & 263'FWL SEC 8)	

HOLE & CASING SECTIONS - Ref Wellbore: WESTWIND 4 AWB Ref Wellpath: WESTWIND 4 AWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	25.00	1560.00	1535.00	25.00	1559.94	0.00	0.00	4.58	-8.51
5.5in Casing Production	25.00	12630.00	12605.00	25.00	N/A	0.00	0.00	N/A	N/A
7.875in Open Hole	1507.00	12360.00	10853.00	1506.95	7075.94	4.41	-8.02	1221.07	4904.29
13.5in Open Hole	25.00	12360.00	12335.00	25.00	7075.94	0.00	0.00	1221.07	4904.29

TARGETS									
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape	
SEC.07-T06N-R67W	1.00	75.03	-1.39	3154839.47	1424332.30	40°29'48.692"N	104°56'35.682"W	polygon	
SEC.08-T06N-R67W	1.00	75.03	-1.39	3154839.47	1424332.30	40°29'48.692"N	104°56'35.682"W	polygon	
WESTWIND 4 TARGET #1	7029.00	1227.10	205.59	3155039.21	1425485.61	40°30'00.077"N	104°56'33.003"W	point	
WESTWIND 4 TARGET #2	7045.00	1226.23	1236.21	3156069.77	1425491.21	40°30'00.068"N	104°56'19.662"W	point	
WESTWIND 4 TARGET #3	7045.00	1225.56	2036.17	3156869.69	1425495.56	40°30'00.061"N	104°56'09.307"W	point	
WESTWIND 4 TARGET #4	7047.00	1225.05	2636.14	3157469.63	1425498.82	40°30'00.055"N	104°56'01.540"W	point	
WESTWIND 4 TARGET #5	7056.00	1224.29	3536.10	3158369.55	1425503.71	40°30'00.046"N	104°55'49.891"W	point	
WESTWIND 4 BHL ON PLAT REV-1 (2206'FSL & 310'FWL,SEC.08)	7060.00	1223.09	4951.74	3159785.12	1425511.40	40°30'00.032"N	104°55'31.566"W	point	
SEC.07-T06N-R67W (460' FWL SEC.07 & 310'FWL SEC.08 SETBACK)	7065.00	74.99	-1.39	3154839.47	1424332.26	40°29'48.692"N	104°56'35.682"W	polygon	
WESTWIND 4 LANDING POINT (2277'FSL & 460'FWL, SEC.07)	7065.00	1232.81	203.87	3155037.45	1425491.31	40°30'00.133"N	104°56'33.025"W	point	
WESTWIND 4 TARGET #6	7065.00	1223.78	4136.07	3158969.49	1425506.97	40°30'00.040"N	104°55'42.124"W	point	
WESTWIND 4 BHL ON PLAT REV-2 (2206'FSL & 310'FWL,SEC.08)	7076.00	1223.09	4951.74	3159785.12	1425511.40	40°30'00.032"N	104°55'31.566"W	point	

TARGETS									
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape	
WESTWIND 4 TARGET #7	7076.00	1223.19	4836.03	3159669.41	1425510.77	40°30'00.033"N	104°55'33.064"W	point	



Actual Wellpath Report

WESTWIND 4 AWP

Page 7 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WESTWIND 4 (1046'FSL & 252'FWL,SEC.07)
Area	COLORADO	Well	WESTWIND 4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WESTWIND 4 AWB
Facility	SEC.07-T06N-R67W		

WELLPATH COMPOSITION - Ref Wellbore: WESTWIND 4 AWB Ref Wellpath: WESTWIND 4 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	1507.00	ISCWSA MWD, Rev. 4 (Standard)	BAKER HANDS DRILLED 3RD PARTY MWD 13.5"HOLE<140-1507>	WESTWIND 4 AWB
1507.00	12300.00	ISCWSA MWD, Rev. 4 (Standard)	BAKER HANDS DRILLED USING 3RD PARY MWD 7 7/8"HOLE <1655-12300>	WESTWIND 4 AWB
12300.00	12360.00	Blind Drilling (std)	Projection to bit	WESTWIND 4 AWB



Actual Wellpath Report

WESTWIND 4 AWP

Page 8 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#04 WESTWIND 4 (1046'FSL & 252'FWL,SEC.07)
Area	COLORADO	Well	WESTWIND 4
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WESTWIND 4 AWB
Facility	SEC.07-T06N-R67W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
7656.00	82.515	87.177	7011.64	CROSSED 460' SETBACK (2213'FSL & 460'FWL SEC 7)
7832.00	88.160	87.280	7021.90	LANDING POINT (2251'FSL & 636'FWL SEC 7)
12300.00	92.550	90.030	7078.61	BAKER HANDS DRILLED USING 3RD PARTY MWD- FINAL SURVEY (2204'FSL & 203'FWL SEC 8)
12360.00	92.550	90.030	7075.94	BAKER HANDS DRILLED USING 3RD PARTY MWD- PTB (2204'FSL & 263'FWL SEC 8)