

EXTRACTION OIL & GAS

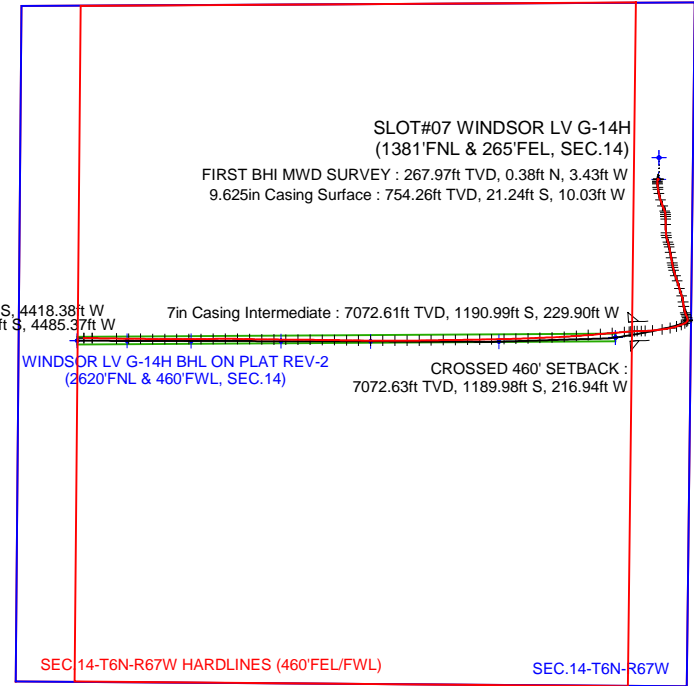
Location: COLORADO Slot: SLOT#07 WINDSOR LV G-14H (1381'FNL & 265'FEL, SEC.14)
 Field: WELD COUNTY (NAD83/TRUE NORTH) Well: WINDSOR LV G-14H
 Facility: SEC.14-T06N-R67W Wellbore: WINDSOR LV G-14H PWB

Plot reference wellpath is WINDSOR LV G-14H PWP (REV-B.0)

True vertical depths are referenced to H&P 319 (24KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to H&P 319 (24KB) (RKB)	North Reference: True north
H&P 319 (24KB) (RKB) to Mean Sea Level: 4869 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#07 WINDSOR LV G-14H (1381'FNL & 265'FEL, SEC.14)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingmjmr on 1/13/2015



Scale 1 inch = 1500
 Easting (ft)
 -5250 -4500 -3750 -3000 -2250 -1500 -750 0 750 1500

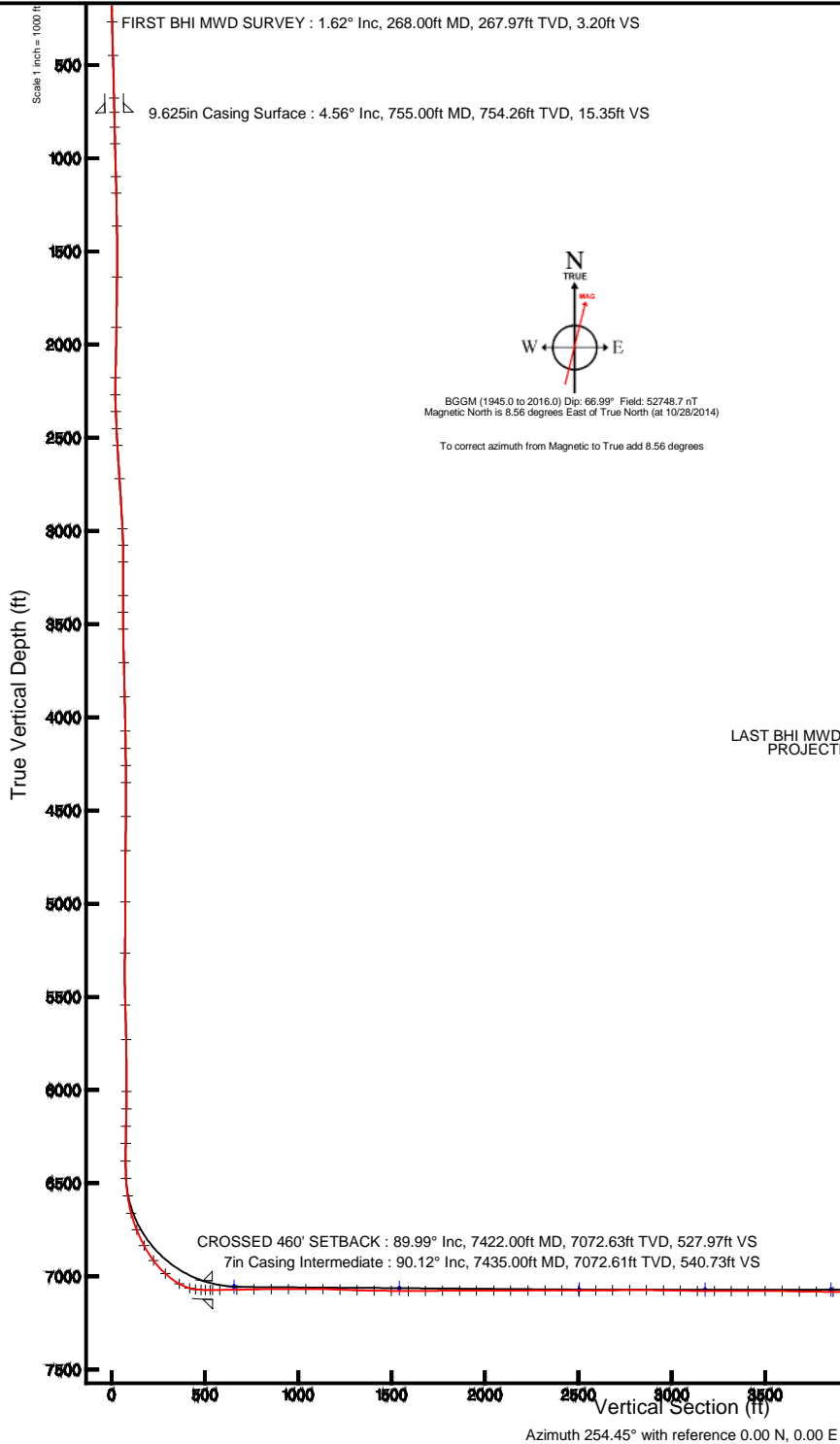


LAST BHI MWD SURVEY : 7080.23ft TVD, 1242.01ft S, 4418.38ft W
 PROJECTION TO BIT : 7080.23ft TVD, 1240.87ft S, 4485.37ft W

CROSSED 460' SETBACK : 89.99° Inc, 7422.00ft MD, 7072.63ft TVD, 527.97ft VS
 7in Casing Intermediate : 90.12° Inc, 7435.00ft MD, 7072.61ft TVD, 540.73ft VS

PROJECTION TO BIT : 90.00° Inc, 11693.00ft MD, 7080.23ft TVD, 4653.84ft VS
 LAST BHI MWD SURVEY : 90.00° Inc, 11626.00ft MD, 7080.23ft TVD, 4589.61ft VS

WINDSOR LV G-14H BHL ON PLAT REV-2 (2620'FNL & 460'FWL, SEC.14)



Northing (ft)



Actual Wellpath Report

WINDSOR LV G-14H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#07 WINDSOR LV G-14H (1381'FNL & 265'FEL, SEC.14)
Area	COLORADO	Well	WINDSOR LV G-14H
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDSOR LV G-14H AWB
Facility	SEC.14-T06N-R67W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Ingmjmr
Scale	0.999966	Report Generated	1/13/2015 at 3:50:46 PM
Convergence at slot	n/a	Database/Source file	Denver/WINDSOR_LV_G-14H_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-169.09	-2.78	3180159.90	1422182.46	40°29'25.749"N	104°51'08.136"W
Facility Reference Pt			3180161.45	1422351.56	40°29'27.420"N	104°51'08.100"W
Field Reference Pt			3185481.27	1419166.81	40°28'55.560"N	104°49'59.556"W

WELLPATH DATUM

Calculation method	Minimum curvature	H&P 319 (24'KB) (RKB) to Facility Vertical Datum	4869.00ft
Horizontal Reference Pt	Slot	H&P 319 (24'KB) (RKB) to Mean Sea Level	4869.00ft
Vertical Reference Pt	H&P 319 (24'KB) (RKB)	H&P 319 (24'KB) (RKB) to Mud Line at Slot (SLOT#07 WINDSOR LV G-14H (1381'FNL & 265'FEL, SEC.14))	4869.00ft
MD Reference Pt	H&P 319 (24'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	254.54°



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Area	COLORADO	Well	WINDSOR LV G-14H
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDSOR LV G-14H AWP
Facility	SEC.14-T06N-R67W		

WELLPATH DATA (99 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	276.280	0.00	0.00	0.00	0.00	0.00	
24.00	0.000	276.280	24.00	0.00	0.00	0.00	0.00	
268.00	1.620	276.280	267.97	3.20	0.38	-3.43	0.66	FIRST BHI MWD SURVEY
448.00	2.200	209.230	447.89	8.00	-2.36	-7.65	1.20	
678.00	4.470	181.060	677.50	13.65	-15.18	-9.97	1.19	
834.00	4.660	179.150	833.00	16.98	-27.59	-9.99	0.16	
923.00	7.800	173.960	921.46	18.88	-37.21	-9.30	3.58	
1103.00	9.130	175.410	1099.50	23.58	-63.60	-6.87	0.75	
1192.00	10.710	170.500	1187.17	25.77	-78.79	-4.94	2.01	
1372.00	10.810	169.100	1364.00	28.85	-111.86	1.01	0.16	
1650.00	10.640	161.490	1637.16	29.56	-161.80	14.09	0.51	
1925.00	9.840	159.780	1907.78	26.26	-207.93	30.27	0.31	
2199.00	8.820	155.240	2178.15	20.93	-248.97	47.16	0.46	
2291.00	8.080	167.690	2269.16	20.14	-261.70	51.50	2.14	
2383.00	9.190	182.270	2360.13	22.74	-275.36	52.59	2.66	
2475.00	10.680	176.480	2450.75	26.74	-291.21	52.82	1.95	
2567.00	12.980	179.200	2540.79	31.12	-310.05	53.49	2.57	
2751.00	15.010	178.830	2719.32	42.24	-354.54	54.26	1.10	
3027.00	12.340	178.030	2987.47	57.94	-419.76	56.00	0.97	
3118.00	11.510	169.240	3076.51	60.96	-438.40	58.03	2.19	
3210.00	11.530	166.340	3166.66	62.00	-456.35	61.92	0.63	
3394.00	11.420	160.600	3346.99	61.33	-491.40	72.31	0.62	
3485.00	11.960	164.780	3436.10	60.75	-509.00	77.78	1.10	
3577.00	13.700	169.120	3525.81	61.66	-528.90	82.34	2.16	
3763.00	13.240	170.050	3706.69	65.47	-571.51	90.18	0.27	
3952.00	13.640	169.510	3890.51	69.48	-614.74	97.98	0.22	
4140.00	11.390	170.500	4074.03	73.33	-654.85	105.08	1.20	
4234.00	9.850	166.740	4166.42	74.61	-671.83	108.45	1.80	
4328.00	12.640	169.190	4258.61	75.75	-689.76	112.23	3.01	
4422.00	14.410	164.250	4350.00	76.53	-711.12	117.33	2.25	



Actual Wellpath Report

WINDSOR LV G-14H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#07 WINDSOR LV G-14H (1381'FNL & 265'FEL, SEC.14)
Area	COLORADO	Well	WINDSOR LV G-14H
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDSOR LV G-14H AWB
Facility	SEC.14-T06N-R67W		

WELLPATH DATA (99 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4610.00	13.460	163.150	4532.47	75.88	-754.58	130.02	0.52	
4798.00	12.070	159.730	4715.82	73.70	-793.96	143.18	0.84	
5080.00	13.900	165.950	4990.61	72.07	-854.49	161.62	0.82	
5362.00	10.830	158.870	5266.05	70.29	-912.08	179.39	1.21	
5645.00	9.130	176.470	5544.82	72.31	-959.30	190.36	1.23	
5833.00	11.600	168.960	5729.75	76.85	-992.74	194.90	1.49	
6116.00	9.430	164.480	6007.98	79.02	-1043.02	206.56	0.82	
6210.00	8.480	156.810	6100.84	78.08	-1056.81	211.35	1.62	
6304.00	8.820	155.300	6193.77	76.00	-1069.73	217.09	0.43	
6398.00	7.160	163.240	6286.86	74.71	-1081.88	221.79	2.12	
6493.00	7.270	161.950	6381.11	74.30	-1093.27	225.36	0.21	
6587.00	5.370	193.020	6474.56	76.13	-1103.21	226.21	4.09	
6681.00	9.610	222.130	6567.77	84.86	-1113.32	219.95	5.92	
6776.00	15.460	240.720	6660.50	103.88	-1125.41	203.57	7.41	
6870.00	21.580	249.140	6749.60	133.28	-1137.71	176.46	7.09	
6964.00	28.320	253.150	6834.79	172.83	-1150.34	138.92	7.39	
7058.00	36.770	257.730	6913.97	223.31	-1162.81	89.99	9.36	
7153.00	46.940	262.090	6984.65	286.29	-1173.66	27.65	11.13	
7247.00	60.990	264.870	7039.81	361.15	-1182.10	-47.69	15.13	
7309.00	74.710	268.250	7063.14	417.15	-1185.46	-104.86	22.69	
7341.00	82.130	268.900	7069.56	447.54	-1186.24	-136.18	23.27	
7372.00	88.300	268.860	7072.14	477.46	-1186.84	-167.05	19.90	
7396.00	89.720	265.660	7072.56	500.86	-1187.99	-191.02	14.59	
7422.00†	89.987	265.553	7072.63	526.38	-1189.98	-216.94	1.10	CROSSED 460' SETBACK
7474.00	90.520	265.340	7072.40	577.44	-1194.11	-268.78	1.10	
7568.00	90.890	265.180	7071.24	669.79	-1201.87	-362.45	0.43	
7661.00	91.290	264.910	7069.47	761.21	-1209.90	-455.08	0.52	
7756.00	90.330	265.420	7068.13	854.57	-1217.91	-549.73	1.14	
7850.00	89.780	266.110	7068.04	946.77	-1224.85	-643.48	0.94	
7944.00	89.870	266.150	7068.32	1038.85	-1231.20	-737.26	0.10	



Actual Wellpath Report

WINDSOR LV G-14H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#07 WINDSOR LV G-14H (1381'FNL & 265'FEL, SEC.14)
Area	COLORADO	Well	WINDSOR LV G-14H
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDSOR LV G-14H AWB
Facility	SEC.14-T06N-R67W		

WELLPATH DATA (99 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8038.00	89.750	268.140	7068.64	1130.58	-1235.88	-831.14	2.12	
8133.00	87.840	267.400	7070.63	1223.03	-1239.57	-926.04	2.16	
8227.00	88.060	267.510	7074.00	1314.59	-1243.74	-1019.89	0.26	
8321.00	89.200	268.700	7076.24	1405.94	-1246.85	-1113.81	1.75	
8415.00	89.410	268.520	7077.38	1497.11	-1249.13	-1207.77	0.29	
8510.00	89.820	268.920	7078.02	1589.21	-1251.25	-1302.75	0.60	
8604.00	90.370	269.040	7077.87	1680.24	-1252.93	-1396.73	0.60	
8699.00	90.890	268.890	7076.82	1772.24	-1254.64	-1491.71	0.57	
8793.00	90.150	269.620	7075.97	1863.15	-1255.86	-1585.70	1.11	
8887.00	89.410	268.810	7076.33	1954.08	-1257.15	-1679.69	1.17	
8982.00	90.060	268.960	7076.77	2046.11	-1259.00	-1774.67	0.70	
9076.00	90.370	269.280	7076.42	2137.08	-1260.44	-1868.65	0.47	
9171.00	90.740	269.680	7075.50	2228.86	-1261.31	-1963.65	0.57	
9266.00	89.600	269.860	7075.21	2320.52	-1261.69	-2058.64	1.21	
9360.00	89.970	269.940	7075.57	2411.16	-1261.85	-2152.64	0.40	
9454.00	90.120	270.660	7075.49	2501.63	-1261.36	-2246.64	0.78	
9549.00	90.520	270.780	7074.96	2592.86	-1260.17	-2341.63	0.44	
9643.00	90.520	271.010	7074.11	2683.05	-1258.70	-2435.62	0.24	
9738.00	90.620	271.010	7073.16	2774.15	-1257.02	-2530.60	0.11	
9832.00	89.260	270.490	7073.26	2864.41	-1255.79	-2624.59	1.55	
9927.00	88.920	270.610	7074.77	2955.71	-1254.88	-2719.57	0.38	
10021.00	89.040	270.330	7076.44	3046.08	-1254.11	-2813.55	0.32	
10116.00	89.470	270.460	7077.68	3137.46	-1253.46	-2908.54	0.47	
10210.00	89.470	270.730	7078.55	3227.79	-1252.48	-3002.53	0.29	
10305.00	90.120	270.810	7078.89	3319.00	-1251.20	-3097.52	0.69	
10399.00	90.240	270.950	7078.59	3409.20	-1249.76	-3191.51	0.20	
10494.00	90.490	271.320	7077.99	3500.24	-1247.88	-3286.49	0.47	
10589.00	88.820	269.600	7078.56	3591.58	-1247.11	-3381.48	2.52	
10683.00	88.920	269.500	7080.41	3682.36	-1247.85	-3475.46	0.15	
10778.00	89.290	269.720	7081.90	3774.08	-1248.50	-3570.44	0.45	



Actual Wellpath Report

WINDSOR LV G-14H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#07 WINDSOR LV G-14H (1381'FNL & 265'FEL, SEC.14)
Area	COLORADO	Well	WINDSOR LV G-14H
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDSOR LV G-14H AWB
Facility	SEC.14-T06N-R67W		

WELLPATH DATA (99 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
10872.00	89.850	269.920	7082.60	3864.75	-1248.79	-3664.44	0.63	
10967.00	90.000	269.950	7082.73	3956.34	-1248.90	-3759.44	0.16	
11061.00	90.180	270.110	7082.58	4046.92	-1248.85	-3853.44	0.26	
11155.00	90.580	270.480	7081.96	4137.39	-1248.37	-3947.43	0.58	
11249.00	90.730	270.750	7080.88	4227.70	-1247.36	-4041.42	0.33	
11343.00	89.720	270.470	7080.51	4318.03	-1246.36	-4135.42	1.11	
11438.00	90.210	270.960	7080.57	4409.26	-1245.17	-4230.41	0.73	
11626.00	90.000	270.970	7080.23	4589.59	-1242.01	-4418.38	0.11	LAST BHI MWD SURVEY
11693.00	90.000	270.970	7080.23	4653.85	-1240.87	-4485.37	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: WINDSOR LV G-14H AWB Ref Wellpath: WINDSOR LV G-14H 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	24.00	755.00	731.00	24.00	754.26	0.00	0.00	-21.24	-10.03
8.75in Open Hole	755.00	7465.00	6710.00	754.26	7072.47	-21.24	-10.03	-1193.38	-259.81
7in Casing Intermediate	24.00	7435.00	7411.00	24.00	7072.61	0.00	0.00	-1190.99	-229.90
6.125in Open Hole	7465.00	11693.00	4228.00	7072.47	7080.23	-1193.38	-259.81	-1240.87	-4485.37



Actual Wellpath Report

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Area	COLORADO	Well	WINDSOR LV G-14H
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDSOR LV G-14H AWB
Facility	SEC.14-T06N-R67W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.14-T6N-R67W		0.00	169.09	2.78	3180161.45	1422351.56	40°29'27.420"N	104°51'08.100"W	polygon
WINDSOR LV G-14H BHL ON PLAT REV-1 (2620'FNL & 460'FWL, SEC.14)		7040.00	-1262.26	-4536.84	3175632.57	1420887.14	40°29'13.272"N	104°52'06.852"W	point
WINDSOR LV G-14H DRILLING CORRIDOR (60')		7040.00	0.00	0.00	3180159.90	1422182.46	40°29'25.749"N	104°51'08.136"W	polygon
WINDSOR LV G-14H LANDING POINT		7040.00	-1237.18	-336.71	3179832.25	1420942.90	40°29'13.524"N	104°51'12.494"W	point
WINDSOR LV G-14H LANDING POINT REV-2		7055.00	-1237.18	-336.71	3179832.25	1420942.90	40°29'13.524"N	104°51'12.494"W	point
WINDSOR LV G-14H TARGET 2		7063.00	-1269.41	-1247.06	3178922.20	1420904.02	40°29'13.205"N	104°51'24.276"W	point
WINDSOR LV G-14H BHL ON PLAT REV-2 (2620'FNL & 460'FWL, SEC.14)		7071.00	-1262.26	-4536.84	3175632.57	1420887.14	40°29'13.272"N	104°52'06.852"W	point
WINDSOR LV G-14H TARGET 3		7071.00	-1267.27	-2247.05	3177922.25	1420898.86	40°29'13.226"N	104°51'37.217"W	point
WINDSOR LV G-14H TARGET 4		7071.00	-1265.72	-2947.05	3177222.29	1420895.29	40°29'13.240"N	104°51'46.277"W	point
WINDSOR LV G-14H TARGET 5		7071.00	-1264.20	-3647.05	3176522.32	1420891.70	40°29'13.254"N	104°51'55.336"W	point
WINDSOR LV G-14H TARGET 6		7071.00	-1263.11	-4147.05	3176022.34	1420889.14	40°29'13.264"N	104°52'01.807"W	point

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.14-T6N-R67W HARDLINES (460'FEL/FWL)		7205.00	169.09	2.78	3180161.45	1422351.56	40°29'27.420"N	104°51'08.100"W	polygon



Actual Wellpath Report

WINDSOR LV G-14H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#07 WINDSOR LV G-14H (1381'FNL & 265'FEL, SEC.14)
Area	COLORADO	Well	WINDSOR LV G-14H
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDSOR LV G-14H AWB
Facility	SEC.14-T06N-R67W		

WELLPATH COMPOSITION - Ref Wellbore: WINDSOR LV G-14H AWB Ref Wellpath: WINDSOR LV G-14H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
24.00	7396.00	NaviTrak (Standard)	BHI MWD/ NAVITRAK (STD) 8.75" HOLE <268-7396>	WINDSOR LV G-14H AWB
7396.00	11626.00	NaviTrak (Standard)	BHI MWD/NAVITRAK (STD) 6.125" HOLE <7474-11626>	WINDSOR LV G-14H AWB
11626.00	11693.00	Blind Drilling (std)	Projection to bit	WINDSOR LV G-14H AWB



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Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	WINDSOR LV G-14H AWB
Facility	SEC.14-T06N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
268.00	1.620	276.280	267.97	FIRST BHI MWD SURVEY
7422.00	89.987	265.553	7072.63	CROSSED 460' SETBACK
11626.00	90.000	270.970	7080.23	LAST BHI MWD SURVEY
11693.00	90.000	270.970	7080.23	PROJECTION TO BIT