

SWN PRODUCTION COMPANY, LLC

Location: Brooke County, WV
 Field: Brooke
 Facility: OV Royalty Trust LLC Pad

Slot: Slot #405
 Well: OV Royalty Trust LLC BRK 405H
 Wellbore: OV Royalty Trust LLC BRK 405H PWB



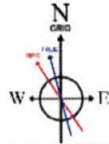
Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude		
OV Royalty Trust LLC Pad	1756330.520	14631069.400	40°17'8.7828"N	80°35'3.6961"W		
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Slot #405	-42.42	55.58	1756386.080	14631027.000	40°17'8.3610"N	80°35'2.9814"W

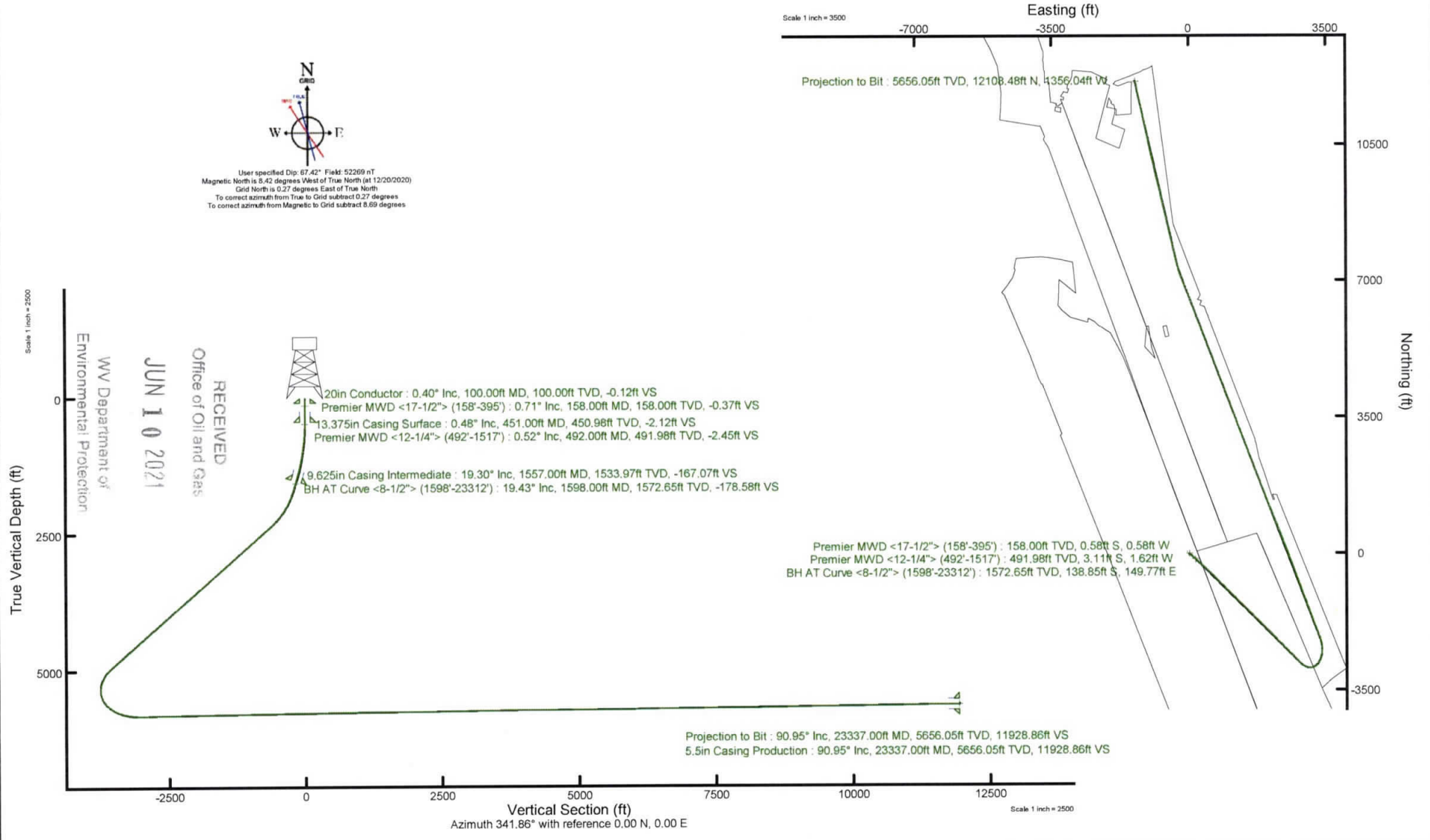
SDC 41 (RKB) to Ground level (At Slot: Slot #405)	26ft
Mean Sea Level to Ground level (At Slot: Slot #405)	-1180.8ft
SDC 41 (RKB) to Mean Sea Level	1206.8ft

API: 47-009-00307-0000
 BH Job #: 110685703
 Rig: SDC 41
 Duration: 01/02/2021 - 01/09/2021

Plot reference wellpath is OV Royalty Trust LLC BRK 405H PWB Rev-A-0	Grid System: NAD83 / UTM Zone 17 North, US feet
True vertical depths are referenced to SDC 41 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to SDC 41 (RKB)	Scale: True distance
SDC 41 (RKB) to Mean Sea Level: 1206.8 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot #405): -1180.8 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: atarjen on 2021-01-12; Database: WA_MPL_EASTERNUS_Def



User specified Dip: 87.42° Field: 52269 nT
 Magnetic North is 3.43 degrees West of True North (at 12/20/2020)
 Grid North is 0.27 degrees East of True North
 To correct azimuth from True to Grid subtract 0.27 degrees
 To correct azimuth from Magnetic to Grid subtract 8.69 degrees



REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	OV Royalty Trust LLC BRK 405H
Field	Brooke	API/Legal	
Facility	OV Royalty Trust LLC Pad	Wellbore	OV Royalty Trust LLC BRK 405H AWB
Slot	Slot #405		

REPORT SETUP INFORMATION

Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Atenjen
Scale	0.999615	Report Generated	1/12/2021 at 2:09:50 PM
Convergence at slot	0.27° East	Database	WA_MPL_EASTERNUS_Defn

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-42.42	55.58	1756386.08	14631027.00	40°17'8.3610"N	80°35'2.9814"W
Facility Reference Pt			1756330.52	14631069.40	40°17'8.7828"N	80°35'3.6961"W
Field Reference Pt			0.00	0.00	0°00'0.0000"	85°29'19.4780"W

WELLPATH DATUM

Calculation method	Minimum curvature	SDC 41 (RKB) to Facility Vertical Datum	1206.80ft
Horizontal Reference Pt	Slot	SDC 41 (RKB) to Mean Sea Level	1206.80ft
Vertical Reference Pt	SDC 41 (RKB)	SDC 41 (RKB) to Ground Level at Slot (Slot #405)	26.00ft
MD Reference Pt	SDC 41 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	341.86°

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Field	Brooke	API/Legal	
Facility	OV Royalty Trust LLC Pad	Wellbore	OV Royalty Trust LLC BRK 405H AWB
Slot	Slot #405		

WELLPATH DATA (260 stations) † = interpolated, ‡ = extrapolated station															
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
0.00†	0.000	225.100	0.00	0.00	0.00	0.00	1756386.08	14631027.00	40°17'8.3610"N	80°35'2.9814"W	0.00	0.000	0.00	0.00	0.00
26.00	0.000	225.100	26.00	0.00	0.00	0.00	1756386.08	14631027.00	40°17'8.3610"N	80°35'2.9814"W	0.00	0.000	0.00	0.00	0.00
158.00	0.710	225.100	158.00	-0.37	-0.58	-0.58	1756385.50	14631026.42	40°17'8.3554"N	80°35'2.9889"W	0.82	225.100	0.54	0.54	0.00
219.00	0.610	223.390	218.99	-0.69	-1.08	-1.07	1756385.01	14631025.92	40°17'8.3504"N	80°35'2.9953"W	1.52	224.735	0.17	-0.16	-2.80
309.00	0.460	216.850	308.99	-1.13	-1.72	-1.62	1756384.46	14631025.28	40°17'8.3441"N	80°35'3.0024"W	2.36	223.257	0.18	-0.17	-7.27
395.00	0.460	158.590	394.99	-1.67	-2.31	-1.70	1756384.38	14631024.69	40°17'8.3382"N	80°35'3.0035"W	2.87	216.242	0.52	0.00	-67.74
492.00	0.520	188.240	491.98	-2.45	-3.11	-1.62	1756384.46	14631023.89	40°17'8.3304"N	80°35'3.0025"W	3.51	207.460	0.27	0.06	30.57
581.00	1.420	160.020	580.97	-3.92	-4.55	-1.30	1756384.78	14631022.45	40°17'8.3161"N	80°35'2.9985"W	4.73	195.935	1.12	1.01	-31.71
670.00	3.140	147.660	669.90	-7.38	-7.65	0.38	1756386.46	14631019.36	40°17'8.2855"N	80°35'2.9770"W	7.65	177.140	2.00	1.93	-13.89
759.00	5.100	144.770	758.66	-13.53	-12.94	3.97	1756390.05	14631014.07	40°17'8.2330"N	80°35'2.9310"W	13.53	162.947	2.21	2.20	-3.25
847.00	6.980	138.790	846.17	-22.19	-20.15	9.75	1756395.82	14631006.85	40°17'8.1614"N	80°35'2.8569"W	22.39	154.189	2.25	2.14	-6.80
936.00	8.830	134.220	934.32	-33.22	-28.99	18.21	1756404.28	14630998.02	40°17'8.0737"N	80°35'2.7483"W	34.23	147.868	2.19	2.08	-5.13
1024.00	10.820	132.680	1021.03	-46.41	-39.30	29.12	1756415.19	14630987.72	40°17'7.9713"N	80°35'2.6080"W	48.91	143.461	2.28	2.26	-1.75
1113.00	12.560	130.600	1108.18	-61.98	-51.26	42.61	1756428.67	14630975.76	40°17'7.8525"N	80°35'2.4347"W	66.66	140.265	2.01	1.96	-2.34
1201.00	14.010	128.950	1193.82	-79.10	-64.18	58.16	1756444.22	14630962.84	40°17'7.7241"N	80°35'2.2348"W	86.62	137.819	1.70	1.65	-1.88
1290.00	15.860	127.790	1279.81	-98.22	-78.41	76.15	1756462.20	14630948.62	40°17'7.5827"N	80°35'2.0036"W	109.30	135.837	2.11	2.08	-1.30
1378.00	17.250	128.270	1364.16	-119.05	-93.86	95.90	1756481.94	14630933.18	40°17'7.4291"N	80°35'1.7497"W	134.19	134.385	1.59	1.58	0.55
1467.00	18.470	130.340	1448.87	-142.06	-111.16	117.01	1756503.04	14630915.88	40°17'7.2572"N	80°35'1.4784"W	161.39	133.533	1.55	1.37	2.33
1517.00	19.170	130.650	1496.20	-155.84	-121.64	129.27	1756515.30	14630905.41	40°17'7.1531"N	80°35'1.3208"W	177.50	133.257	1.41	1.40	0.62
1598.00	19.430	129.380	1572.65	-178.58	-138.85	149.77	1756535.80	14630888.21	40°17'6.9820"N	80°35'1.0572"W	204.23	132.832	0.61	0.32	-1.57
1687.00	20.160	130.370	1656.39	-204.14	-158.17	172.90	1756558.91	14630868.89	40°17'6.7900"N	80°35'0.7600"W	234.34	132.453	0.90	0.82	1.11
1777.00	20.580	133.990	1740.76	-231.35	-179.21	196.10	1756582.10	14630847.86	40°17'6.5811"N	80°35'0.4619"W	265.65	132.423	1.48	0.47	4.02
1867.00	24.290	134.100	1823.94	-261.73	-203.08	220.78	1756606.78	14630824.00	40°17'6.3440"N	80°35'0.1449"W	299.98	132.609	4.12	4.12	0.12
1955.00	27.780	133.540	1902.99	-295.81	-229.81	248.65	1756634.64	14630797.28	40°17'6.0785"N	80°34'59.7869"W	338.59	132.745	3.98	3.97	-0.64
2045.00	31.210	133.330	1981.32	-334.77	-260.27	280.83	1756666.80	14630766.83	40°17'5.7761"N	80°34'59.3736"W	382.89	132.824	3.81	3.81	-0.23
2135.00	34.750	133.640	2056.80	-377.87	-293.98	316.36	1756702.32	14630733.13	40°17'5.4413"N	80°34'58.9171"W	431.87	132.900	3.94	3.93	0.34
2224.00	38.620	133.290	2128.16	-424.63	-330.55	354.95	1756740.90	14630696.58	40°17'5.0782"N	80°34'58.4214"W	485.03	132.961	4.35	4.35	-0.39
2314.00	42.190	133.470	2196.68	-475.90	-370.61	397.34	1756783.27	14630656.53	40°17'4.6803"N	80°34'57.8769"W	543.35	133.006	3.97	3.97	0.20
2404.00	45.740	133.450	2261.45	-530.85	-413.58	442.69	1756828.60	14630613.58	40°17'4.2536"N	80°34'57.2944"W	605.82	133.053	3.94	3.94	-0.02
2492.00	48.620	133.370	2321.26	-587.60	-457.93	489.57	1756875.46	14630569.24	40°17'3.8131"N	80°34'56.6921"W	670.36	133.087	3.27	3.27	-0.09

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Field	Brooke	API/Legal	
Facility	OV Royalty Trust LLC Pad	Wellbore	OV Royalty Trust LLC BRK 405H AWB
Slot	Slot #405		

WELLPATH DATA (260 stations)															
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
2581.00	51.880	133.940	2378.16	-647.89	-505.17	539.07	1756924.94	14630522.03	40°17'3.3441"N	80°34'56.0563"W	738.78	133.141	3.70	3.66	0.64
2669.00	51.910	135.340	2432.47	-709.47	-553.82	588.34	1756974.19	14630473.39	40°17'2.8610"N	80°34'55.4236"W	808.00	133.269	1.25	0.03	1.59
2758.00	51.800	135.480	2487.44	-772.14	-603.67	637.48	1757023.31	14630423.57	40°17'2.3661"N	80°34'54.7926"W	877.95	133.440	0.17	-0.12	0.16
2847.00	51.840	135.310	2542.45	-834.76	-653.48	686.60	1757072.42	14630373.78	40°17'1.8716"N	80°34'54.1617"W	947.87	133.584	0.16	0.04	-0.19
2936.00	51.850	135.230	2597.44	-897.35	-703.20	735.86	1757121.65	14630324.08	40°17'1.3780"N	80°34'53.5292"W	1017.82	133.700	0.07	0.01	-0.09
3025.00	51.840	135.210	2652.42	-959.90	-752.87	785.15	1757170.93	14630274.42	40°17'0.8848"N	80°34'52.8962"W	1087.79	133.798	0.02	-0.01	-0.02
3117.00	51.880	135.080	2709.24	-1024.54	-804.17	836.19	1757221.94	14630223.14	40°17'0.3756"N	80°34'52.2408"W	1160.13	133.882	0.12	0.04	-0.14
3206.00	51.810	134.810	2764.22	-1086.94	-853.61	885.72	1757271.46	14630173.72	40°16'59.8847"N	80°34'51.6047"W	1230.10	133.942	0.25	-0.08	-0.30
3298.00	51.870	135.380	2821.07	-1151.53	-904.84	936.79	1757322.50	14630122.51	40°16'59.3760"N	80°34'50.9489"W	1302.42	134.006	0.49	0.07	0.62
3386.00	51.920	135.320	2875.37	-1213.49	-954.10	985.45	1757371.15	14630073.27	40°16'58.8870"N	80°34'50.3240"W	1371.65	134.074	0.08	0.06	-0.07
3477.00	51.940	134.950	2931.48	-1277.48	-1004.88	1035.99	1757421.67	14630022.51	40°16'58.3828"N	80°34'49.6750"W	1443.28	134.127	0.32	0.02	-0.41
3568.00	51.870	135.040	2987.63	-1341.37	-1055.52	1086.63	1757472.29	14629971.89	40°16'57.8801"N	80°34'49.0247"W	1514.89	134.168	0.11	-0.08	0.10
3658.00	51.680	134.910	3043.32	-1404.43	-1105.49	1136.65	1757522.29	14629921.94	40°16'57.3839"N	80°34'48.3824"W	1585.58	134.204	0.24	-0.21	-0.14
3748.00	51.660	135.110	3099.13	-1467.42	-1155.42	1186.56	1757572.18	14629872.03	40°16'56.8882"N	80°34'47.7414"W	1656.18	134.238	0.18	-0.02	0.22
3839.00	51.740	134.890	3155.53	-1531.13	-1205.92	1237.06	1757622.66	14629821.55	40°16'56.3868"N	80°34'47.0929"W	1727.59	134.270	0.21	0.09	-0.24
3929.00	51.780	134.660	3211.24	-1594.06	-1255.70	1287.24	1757672.82	14629771.78	40°16'55.8925"N	80°34'46.4485"W	1798.27	134.289	0.21	0.04	-0.26
4020.00	51.610	134.900	3267.64	-1657.64	-1306.00	1337.93	1757723.49	14629721.50	40°16'55.3931"N	80°34'45.7976"W	1869.68	134.308	0.28	-0.19	0.26
4111.00	51.760	135.020	3324.06	-1721.32	-1356.46	1388.45	1757773.99	14629671.07	40°16'54.8921"N	80°34'45.1488"W	1941.07	134.332	0.19	0.16	0.13
4201.00	51.600	135.340	3379.87	-1784.41	-1406.54	1438.22	1757823.75	14629621.00	40°16'54.3949"N	80°34'44.5097"W	2011.68	134.362	0.33	-0.18	0.36
4292.00	51.650	135.350	3436.36	-1848.25	-1457.29	1488.36	1757873.87	14629570.27	40°16'53.8910"N	80°34'43.8658"W	2083.01	134.396	0.06	0.05	0.01
4382.00	51.570	135.040	3492.25	-1911.29	-1507.34	1538.07	1757923.56	14629520.24	40°16'53.3941"N	80°34'43.2275"W	2153.54	134.422	0.28	-0.09	-0.34
4471.00	51.670	135.450	3547.51	-1973.66	-1556.88	1587.20	1757972.66	14629470.72	40°16'52.9022"N	80°34'42.5967"W	2223.30	134.448	0.38	0.11	0.46
4561.00	51.610	135.100	3603.36	-2036.77	-1607.02	1636.86	1758022.30	14629420.60	40°16'52.4044"N	80°34'41.9591"W	2293.87	134.473	0.31	-0.07	-0.39
4649.00	51.650	135.250	3657.99	-2098.42	-1655.96	1685.49	1758070.92	14629371.68	40°16'51.9186"N	80°34'41.3345"W	2362.86	134.494	0.14	0.05	0.17
4738.00	51.530	135.540	3713.28	-2160.85	-1705.61	1734.47	1758119.87	14629322.05	40°16'51.4256"N	80°34'40.7057"W	2432.59	134.519	0.29	-0.13	0.33
4826.00	51.630	134.780	3767.97	-2222.44	-1754.50	1783.08	1758168.47	14629273.18	40°16'50.9403"N	80°34'40.0815"W	2501.53	134.537	0.69	0.11	-0.86
4915.00	51.680	135.400	3823.18	-2284.76	-1803.93	1832.36	1758217.73	14629223.77	40°16'50.4494"N	80°34'39.4487"W	2571.33	134.552	0.55	0.06	0.70
5003.00	51.610	135.400	3877.79	-2346.54	-1853.07	1880.81	1758266.17	14629174.65	40°16'49.9616"N	80°34'38.8265"W	2640.33	134.574	0.08	-0.08	0.00
5094.00	51.700	135.400	3934.25	-2410.43	-1903.89	1930.93	1758316.26	14629123.85	40°16'49.4571"N	80°34'38.1831"W	2711.69	134.596	0.10	0.10	0.00
5184.00	51.700	135.170	3990.03	-2473.60	-1954.08	1980.62	1758365.93	14629073.68	40°16'48.9588"N	80°34'37.5450"W	2782.31	134.613	0.20	0.00	-0.26

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Slot	Slot #405		

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MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
5275.00	51.720	134.880	4046.42	-2537.33	-2004.60	2031.10	1758416.40	14629023.17	40°16'48.4571"N	80°34'36.8968"W	2853.74	134.624	0.25	0.02	-0.32
5366.00	51.660	135.270	4102.83	-2601.08	-2055.16	2081.53	1758466.80	14628972.64	40°16'47.9551"N	80°34'36.2493"W	2925.14	134.635	0.34	-0.07	0.43
5456.00	51.780	135.790	4158.58	-2664.40	-2105.58	2131.02	1758516.28	14628922.24	40°16'47.4546"N	80°34'35.6138"W	2995.78	134.656	0.47	0.13	0.58
5547.00	51.690	136.000	4214.94	-2728.63	-2156.88	2180.75	1758565.98	14628870.95	40°16'46.9453"N	80°34'34.9754"W	3067.21	134.685	0.21	-0.10	0.23
5637.00	51.680	135.920	4270.74	-2792.16	-2207.64	2229.84	1758615.05	14628820.21	40°16'46.4413"N	80°34'34.3452"W	3137.81	134.713	0.07	-0.01	-0.09
5728.00	51.760	136.240	4327.11	-2856.48	-2259.10	2279.39	1758664.58	14628768.78	40°16'45.9305"N	80°34'33.7090"W	3209.22	134.744	0.29	0.09	0.35
5818.00	51.740	135.770	4382.83	-2920.08	-2309.94	2328.48	1758713.66	14628717.95	40°16'45.4258"N	80°34'33.0788"W	3279.89	134.771	0.41	-0.02	-0.52
5909.00	51.700	135.790	4439.21	-2984.25	-2361.14	2378.30	1758763.46	14628666.77	40°16'44.9175"N	80°34'32.4391"W	3351.31	134.793	0.05	-0.04	0.02
6000.00	51.430	135.870	4495.78	-3048.30	-2412.27	2427.97	1758813.11	14628615.67	40°16'44.4099"N	80°34'31.8015"W	3422.58	134.814	0.30	-0.30	0.09
6092.00	51.770	135.680	4552.92	-3113.05	-2463.93	2478.25	1758863.38	14628564.02	40°16'43.8970"N	80°34'31.1558"W	3494.67	134.834	0.40	0.37	-0.21
6185.00	51.660	135.760	4610.54	-3178.58	-2516.20	2529.22	1758914.32	14628511.78	40°16'43.3781"N	80°34'30.5015"W	3567.66	134.852	0.14	-0.12	0.09
6278.00	51.700	135.640	4668.21	-3244.07	-2568.42	2580.18	1758965.26	14628459.58	40°16'42.8597"N	80°34'29.8473"W	3640.62	134.869	0.11	0.04	-0.13
6371.00	51.610	135.730	4725.90	-3309.53	-2620.60	2631.13	1759016.20	14628407.41	40°16'42.3416"N	80°34'29.1931"W	3713.55	134.885	0.12	-0.10	0.10
6463.00	51.790	135.810	4782.92	-3374.38	-2672.34	2681.50	1759066.54	14628355.69	40°16'41.8280"N	80°34'28.5465"W	3785.74	134.902	0.21	0.20	0.09
6556.00	51.750	135.940	4840.47	-3440.05	-2724.78	2732.36	1759117.38	14628303.27	40°16'41.3073"N	80°34'27.8935"W	3858.78	134.920	0.12	-0.04	0.14
6648.00	51.810	136.020	4897.39	-3505.08	-2776.75	2782.59	1759167.59	14628251.32	40°16'40.7913"N	80°34'27.2487"W	3931.05	134.940	0.09	0.07	0.09
6741.00	51.920	136.660	4954.82	-3570.81	-2829.23	2833.55	1759218.53	14628198.86	40°16'40.2704"N	80°34'26.5945"W	4004.19	134.956	0.33	0.12	-0.39
6834.00	46.260	125.490	5015.79	-3630.84	-2875.02	2886.61	1759271.57	14628153.09	40°16'39.8154"N	80°34'25.9128"W	4074.09	134.885	10.25	-6.09	-10.94
6926.00	42.190	115.620	5081.78	-3679.05	-2907.73	2941.61	1759326.55	14628120.40	40°16'39.4896"N	80°34'25.2051"W	4136.17	134.668	8.68	-4.42	-10.73
7019.00	38.830	105.120	5152.56	-3716.69	-2928.86	2998.00	1759382.92	14628099.27	40°16'39.2780"N	80°34'24.4789"W	4191.21	134.332	8.17	-3.61	-11.29
7111.00	36.050	93.690	5225.69	-3742.61	-2938.14	3052.93	1759437.83	14628089.99	40°16'39.1837"N	80°34'23.7707"W	4237.11	133.902	8.12	-3.02	-12.42
7204.00	37.440	81.900	5300.31	-3757.74	-2935.92	3108.30	1759493.18	14628092.22	40°16'39.2030"N	80°34'23.0562"W	4275.65	133.366	7.72	1.49	-12.68
7297.00	37.710	66.200	5374.19	-3759.87	-2920.42	3162.44	1759547.30	14628107.71	40°16'39.3536"N	80°34'22.3568"W	4304.63	132.722	10.28	0.29	-16.88
7389.00	40.300	49.690	5445.87	-3745.82	-2889.73	3211.01	1759595.85	14628138.39	40°16'39.6546"N	80°34'21.7282"W	4319.85	131.985	11.61	2.82	-17.95
7482.00	44.410	42.950	5514.61	-3718.72	-2846.42	3256.16	1759640.98	14628181.68	40°16'40.0804"N	80°34'21.1430"W	4324.89	131.159	6.58	4.42	-7.25
7575.00	49.370	31.610	5578.26	-3680.09	-2792.42	3296.92	1759681.73	14628235.66	40°16'40.6121"N	80°34'20.6137"W	4320.57	130.264	10.36	5.33	-12.19
7667.00	53.580	20.360	5635.66	-3628.43	-2727.82	3328.16	1759712.96	14628300.23	40°16'41.2489"N	80°34'20.2067"W	4303.22	129.339	10.61	4.58	-12.25
7759.00	58.170	14.660	5687.29	-3566.54	-2655.22	3350.95	1759735.73	14628372.80	40°16'41.9652"N	80°34'19.9082"W	4275.40	128.393	7.14	4.99	-6.17
7852.00	65.070	9.110	5731.50	-3495.71	-2575.22	3367.65	1759752.43	14628452.77	40°16'42.7550"N	80°34'19.6877"W	4239.44	127.405	9.09	7.42	-5.97
7944.00	71.270	2.480	5765.72	-3417.71	-2490.35	3376.16	1759760.93	14628537.62	40°16'43.5933"N	80°34'19.5726"W	4195.27	126.414	9.49	6.74	-7.21

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	OV Royalty Trust LLC BRK 405H
Field	Brooke	API/Legal	
Facility	OV Royalty Trust LLC Pad	Wellbore	OV Royalty Trust LLC BRK 405H AWB
Slot	Slot #405		

WELLPATH DATA (260 stations)															
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
8034.00	77.190	355.690	5790.20	-3335.05	-2403.84	3374.70	1759759.48	14628624.09	40°16'44.4482"N	80°34'19.5860"W	4143.32	125.463	9.79	6.58	-7.54
8126.00	80.760	348.180	5807.81	-3246.22	-2314.52	3362.01	1759746.79	14628713.37	40°16'45.3314"N	80°34'19.7443"W	4081.68	124.545	8.90	3.88	-8.16
8218.00	85.010	343.480	5819.21	-3155.19	-2226.06	3339.65	1759724.44	14628801.80	40°16'46.2067"N	80°34'20.0271"W	4013.56	123.686	6.86	4.62	-5.11
8311.00	89.450	338.960	5823.71	-3062.35	-2138.16	3309.76	1759694.56	14628889.67	40°16'47.0767"N	80°34'20.4074"W	3940.33	122.863	6.81	4.77	-4.86
8404.00	90.430	338.770	5823.81	-2969.48	-2051.42	3276.23	1759661.04	14628976.38	40°16'47.9354"N	80°34'20.8346"W	3865.48	122.053	1.07	1.05	-0.20
8496.00	90.710	339.730	5822.89	-2877.58	-1965.39	3243.63	1759628.46	14629062.37	40°16'48.7871"N	80°34'21.2498"W	3792.61	121.213	1.09	0.30	1.04
8589.00	90.990	339.360	5821.51	-2784.67	-1878.26	3211.14	1759595.97	14629149.46	40°16'49.6496"N	80°34'21.6637"W	3720.12	120.324	0.50	0.30	-0.40
8682.00	90.920	339.540	5819.96	-2691.76	-1791.19	3178.50	1759563.35	14629236.50	40°16'50.5116"N	80°34'22.0794"W	3648.45	119.403	0.21	-0.08	0.19
8772.00	90.920	339.730	5818.52	-2601.84	-1706.83	3147.18	1759532.04	14629320.83	40°16'51.3467"N	80°34'22.4782"W	3580.22	118.473	0.21	0.00	0.21
8863.00	90.830	339.810	5817.13	-2510.91	-1621.45	3115.72	1759500.59	14629406.17	40°16'52.1919"N	80°34'22.8789"W	3512.38	117.493	0.13	-0.10	0.09
8954.00	90.490	339.610	5816.08	-2419.98	-1536.11	3084.16	1759469.05	14629491.49	40°16'53.0367"N	80°34'23.2807"W	3445.53	116.476	0.43	-0.37	-0.22
9043.00	90.770	339.830	5815.10	-2331.05	-1452.63	3053.32	1759438.22	14629574.93	40°16'53.8631"N	80°34'23.6735"W	3381.25	115.443	0.40	0.31	0.25
9131.00	90.680	339.000	5813.99	-2243.14	-1370.25	3022.38	1759407.29	14629657.28	40°16'54.6786"N	80°34'24.0676"W	3318.49	114.388	0.95	-0.10	-0.94
9220.00	90.460	338.800	5813.10	-2154.26	-1287.23	2990.34	1759375.26	14629740.27	40°16'55.5006"N	80°34'24.4758"W	3255.62	113.290	0.33	-0.25	-0.22
9309.00	90.650	339.760	5812.24	-2065.36	-1203.99	2958.85	1759343.79	14629823.48	40°16'56.3246"N	80°34'24.8769"W	3194.43	112.142	1.10	0.21	1.08
9399.00	90.710	339.650	5811.17	-1975.43	-1119.58	2927.64	1759312.59	14629907.85	40°16'57.1602"N	80°34'25.2744"W	3134.41	110.928	0.14	0.07	-0.12
9488.00	90.680	339.790	5810.09	-1886.50	-1036.10	2896.79	1759281.75	14629991.30	40°16'57.9865"N	80°34'25.6672"W	3076.51	109.681	0.16	-0.03	0.16
9576.00	91.230	339.830	5808.62	-1798.56	-953.52	2866.43	1759251.40	14630073.85	40°16'58.8040"N	80°34'26.0539"W	3020.86	108.400	0.63	0.63	0.05
9669.00	91.350	340.370	5806.53	-1705.63	-866.10	2834.78	1759219.76	14630161.24	40°16'59.6694"N	80°34'26.4568"W	2964.14	106.989	0.59	0.13	0.58
9753.00	90.460	338.840	5805.20	-1621.71	-787.38	2805.51	1759190.51	14630239.93	40°17'0.4487"N	80°34'26.8296"W	2913.91	105.677	2.11	-1.06	-1.82
9842.00	90.520	339.990	5804.44	-1532.80	-704.06	2774.22	1759159.23	14630323.21	40°17'1.2735"N	80°34'27.2282"W	2862.17	104.240	1.29	0.07	1.29
9931.00	90.580	339.590	5803.59	-1443.86	-620.55	2743.48	1759128.49	14630406.69	40°17'2.1002"N	80°34'27.6197"W	2812.78	102.745	0.45	0.07	-0.45
10020.00	91.350	340.810	5802.09	-1354.91	-536.82	2713.33	1759098.36	14630490.38	40°17'2.9290"N	80°34'28.0034"W	2765.93	101.191	1.62	0.87	1.37
10108.00	90.550	339.620	5800.63	-1266.96	-454.03	2683.55	1759068.59	14630573.14	40°17'3.7485"N	80°34'28.3826"W	2721.69	99.603	1.63	-0.91	-1.35
10197.00	90.680	339.810	5799.67	-1178.03	-370.56	2652.70	1759037.75	14630656.59	40°17'4.5749"N	80°34'28.7755"W	2678.45	97.952	0.26	0.15	0.21
10286.00	90.490	340.050	5798.77	-1089.08	-286.97	2622.16	1759007.22	14630740.15	40°17'5.4024"N	80°34'29.1644"W	2637.81	96.246	0.34	-0.21	0.27
10374.00	90.990	339.380	5797.63	-1001.15	-204.43	2591.65	1758976.73	14630822.65	40°17'6.2194"N	80°34'29.5529"W	2599.70	94.510	0.95	0.57	-0.76
10463.00	91.200	340.420	5795.93	-912.22	-120.87	2561.07	1758946.16	14630906.18	40°17'7.0466"N	80°34'29.9424"W	2563.92	92.702	1.19	0.24	1.17
10551.00	90.250	339.250	5794.81	-824.29	-38.27	2530.74	1758915.84	14630988.74	40°17'7.8642"N	80°34'30.3286"W	2531.03	90.866	1.71	-1.08	-1.33
10640.00	90.770	339.010	5794.02	-735.39	44.89	2499.03	1758884.15	14631071.87	40°17'8.6875"N	80°34'30.7326"W	2499.44	88.971	0.64	0.58	-0.27

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REFERENCE WELLPATH IDENTIFICATION			
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Field	Brooke	API/Legal	
Facility	OV Royalty Trust LLC Pad	Wellbore	OV Royalty Trust LLC BRK 405H AWB
Slot	Slot #405		

WELLPATH DATA (260 stations)															
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
10728.00	90.710	338.930	5792.89	-647.51	127.02	2467.46	1758852.58	14631153.97	40°17'9.5005"N	80°34'31.1350"W	2470.72	87.053	0.11	-0.07	-0.09
10820.00	90.920	338.940	5791.58	-555.64	212.86	2434.39	1758819.53	14631239.78	40°17'10.3504"N	80°34'31.5563"W	2443.68	85.003	0.23	0.23	0.01
10912.00	90.770	338.860	5790.22	-463.77	298.68	2401.28	1758786.43	14631325.57	40°17'11.2000"N	80°34'31.9783"W	2419.78	82.910	0.18	-0.16	-0.09
11003.00	90.920	339.150	5788.88	-372.90	383.63	2368.68	1758753.84	14631410.48	40°17'12.0410"N	80°34'32.3937"W	2399.54	80.800	0.36	0.16	0.32
11096.00	90.610	338.780	5787.64	-280.03	470.43	2335.30	1758720.47	14631497.25	40°17'12.9003"N	80°34'32.8191"W	2382.21	78.611	0.52	-0.33	-0.40
11187.00	90.920	338.900	5786.42	-189.16	555.28	2302.45	1758687.64	14631582.07	40°17'13.7404"N	80°34'33.2376"W	2368.46	76.441	0.37	0.34	0.13
11280.00	90.030	337.530	5785.65	-96.35	641.64	2267.94	1758653.14	14631668.39	40°17'14.5953"N	80°34'33.6776"W	2356.96	74.203	1.76	-0.96	-1.47
11372.00	90.650	337.080	5785.10	-4.65	726.51	2232.44	1758617.66	14631753.23	40°17'15.4357"N	80°34'34.1304"W	2347.69	71.973	0.83	0.67	-0.49
11462.00	91.230	339.400	5783.63	85.15	810.08	2199.09	1758584.32	14631836.77	40°17'16.2631"N	80°34'34.5557"W	2343.55	69.778	2.66	0.64	2.58
11554.00	90.460	339.450	5782.27	177.06	896.20	2166.76	1758552.00	14631922.86	40°17'17.1156"N	80°34'34.9676"W	2344.79	67.529	0.84	-0.84	0.05
11645.00	90.550	338.320	5781.47	267.93	981.09	2133.98	1758519.23	14632007.71	40°17'17.9560"N	80°34'35.3853"W	2348.70	65.310	1.25	0.10	-1.24
11735.00	89.750	337.090	5781.23	357.69	1064.36	2099.84	1758485.10	14632090.95	40°17'18.7804"N	80°34'35.8207"W	2354.18	63.121	1.63	-0.89	-1.37
11825.00	91.170	339.140	5780.51	447.49	1147.86	2066.29	1758451.57	14632174.42	40°17'19.6072"N	80°34'36.2484"W	2363.72	60.947	2.77	1.58	2.28
11914.00	90.710	337.510	5779.05	536.31	1230.55	2033.43	1758418.72	14632257.08	40°17'20.4259"N	80°34'36.6675"W	2376.78	58.819	1.90	-0.52	-1.83
12004.00	91.630	339.430	5777.21	626.13	1314.25	2000.41	1758385.71	14632340.74	40°17'21.2545"N	80°34'37.0884"W	2393.51	56.695	2.37	1.02	2.13
12095.00	90.680	338.860	5775.38	717.00	1399.27	1968.02	1758353.34	14632425.73	40°17'22.0962"N	80°34'37.5011"W	2414.76	54.587	1.22	-1.04	-0.63
12183.00	90.800	338.480	5774.24	804.86	1481.24	1936.01	1758321.34	14632507.66	40°17'22.9077"N	80°34'37.9091"W	2437.66	52.580	0.45	0.14	-0.43
12272.00	90.310	339.400	5773.38	893.74	1564.29	1904.03	1758289.37	14632590.68	40°17'23.7299"N	80°34'38.3166"W	2464.21	50.595	1.17	-0.55	1.03
12363.00	90.740	339.080	5772.55	984.64	1649.37	1871.78	1758257.13	14632675.74	40°17'24.5722"N	80°34'38.7276"W	2494.79	48.614	0.59	0.47	-0.35
12453.00	90.490	339.390	5771.58	1074.54	1733.52	1839.87	1758225.24	14632759.85	40°17'25.4052"N	80°34'39.1342"W	2527.89	46.705	0.44	-0.28	0.34
12542.00	90.370	338.870	5770.91	1163.44	1816.68	1808.17	1758193.55	14632842.98	40°17'26.2285"N	80°34'39.5382"W	2563.16	44.865	0.60	-0.13	-0.58
12631.00	90.000	339.140	5770.63	1252.32	1899.77	1776.28	1758161.67	14632926.04	40°17'27.0510"N	80°34'39.9446"W	2600.83	43.076	0.51	-0.42	0.30
12723.00	90.000	338.590	5770.63	1344.20	1985.58	1743.11	1758128.51	14633011.82	40°17'27.9006"N	80°34'40.3673"W	2642.15	41.279	0.60	0.00	-0.60
12816.00	90.220	339.590	5770.45	1437.09	2072.46	1709.91	1758095.33	14633098.66	40°17'28.7606"N	80°34'40.7903"W	2686.80	39.525	1.10	0.24	1.08
12907.00	89.970	338.440	5770.30	1527.97	2157.42	1677.33	1758062.76	14633183.59	40°17'29.6017"N	80°34'41.2056"W	2732.74	37.864	1.29	-0.27	-1.26
12999.00	90.430	339.190	5769.97	1619.84	2243.20	1644.08	1758029.52	14633269.33	40°17'30.4509"N	80°34'41.6294"W	2781.18	36.238	0.96	0.50	0.82
13091.00	90.120	339.310	5769.53	1711.75	2329.23	1611.49	1757996.94	14633355.33	40°17'31.3026"N	80°34'42.0447"W	2832.35	34.678	0.36	-0.34	0.13
13184.00	90.120	339.060	5769.34	1804.65	2416.16	1578.44	1757963.91	14633442.23	40°17'32.1632"N	80°34'42.4659"W	2886.05	33.156	0.27	0.00	-0.27
13274.00	89.780	339.020	5769.42	1894.54	2500.21	1546.24	1757931.73	14633526.24	40°17'32.9952"N	80°34'42.8762"W	2939.71	31.735	0.38	-0.38	-0.04
13364.00	90.060	339.030	5769.54	1984.43	2584.24	1514.03	1757899.52	14633610.24	40°17'33.8271"N	80°34'43.2867"W	2995.09	30.365	0.31	0.31	0.01

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Actual Wellpath Report

OV Royalty Trust LLC BRK 405H AWP Proj: 23337'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	OV Royalty Trust LLC BRK 405H
Field	Brooke	API/Legal	
Facility	OV Royalty Trust LLC Pad	Wellbore	OV Royalty Trust LLC BRK 405H AWB
Slot	Slot #405		

WELLPATH DATA (260 stations)															
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
13456.00	90.520	339.330	5769.08	2076.32	2670.23	1481.33	1757866.83	14633696.20	40°17'34.6784"N	80°34'43.7034"W	3053.60	29.020	0.60	0.50	0.33
13546.00	90.860	339.570	5767.99	2166.24	2754.50	1449.74	1757835.26	14633780.44	40°17'35.5126"N	80°34'44.1059"W	3112.72	27.759	0.46	0.38	0.27
13638.00	89.720	339.010	5767.53	2258.14	2840.55	1417.20	1757802.74	14633866.46	40°17'36.3644"N	80°34'44.5205"W	3174.46	26.515	1.38	-1.24	-0.61
13728.00	90.620	339.740	5767.26	2348.06	2924.78	1385.50	1757771.05	14633950.65	40°17'37.1983"N	80°34'44.9244"W	3236.35	25.347	1.29	1.00	0.81
13819.00	91.600	339.810	5765.50	2438.98	3010.16	1354.05	1757739.61	14634035.99	40°17'38.0434"N	80°34'45.3251"W	3300.68	24.220	1.08	1.08	0.08
13909.00	91.010	339.390	5763.45	2528.88	3094.49	1322.69	1757708.25	14634120.29	40°17'38.8782"N	80°34'45.7247"W	3365.32	23.143	0.80	-0.66	-0.47
13999.00	91.630	339.280	5761.37	2618.77	3178.67	1290.93	1757676.51	14634204.45	40°17'39.7116"N	80°34'46.1293"W	3430.81	22.103	0.70	0.69	-0.12
14092.00	90.400	339.620	5759.73	2711.67	3265.74	1258.29	1757643.89	14634291.48	40°17'40.5735"N	80°34'46.5452"W	3499.77	21.072	1.37	-1.32	0.37
14185.00	90.460	339.490	5759.03	2804.59	3352.88	1225.81	1757611.42	14634378.58	40°17'41.4361"N	80°34'46.9591"W	3569.93	20.082	0.15	0.06	-0.14
14275.00	91.170	339.390	5757.75	2894.50	3437.14	1194.21	1757579.82	14634462.81	40°17'42.2702"N	80°34'47.3618"W	3638.69	19.159	0.80	0.79	-0.11
14367.00	91.080	340.530	5755.94	2986.43	3523.55	1162.69	1757548.32	14634549.19	40°17'43.1256"N	80°34'47.7632"W	3710.42	18.262	1.24	-0.10	1.24
14459.00	90.280	339.190	5754.85	3078.37	3609.92	1131.01	1757516.65	14634635.52	40°17'43.9805"N	80°34'48.1667"W	3782.95	17.396	1.70	-0.87	-1.46
14551.00	90.830	339.730	5753.96	3170.28	3696.06	1098.73	1757484.39	14634721.63	40°17'44.8333"N	80°34'48.5780"W	3855.92	16.556	0.84	0.60	0.59
14643.00	90.770	339.620	5752.67	3262.21	3782.33	1066.78	1757452.45	14634807.86	40°17'45.6872"N	80°34'48.9851"W	3929.89	15.751	0.14	-0.07	-0.12
14733.00	90.890	339.450	5751.37	3352.12	3866.64	1035.32	1757421.00	14634892.14	40°17'46.5218"N	80°34'49.3860"W	4002.85	14.990	0.23	0.13	-0.19
14824.00	90.980	339.350	5749.89	3443.03	3951.81	1003.30	1757389.00	14634977.28	40°17'47.3649"N	80°34'49.7939"W	4077.18	14.246	0.15	0.10	-0.11
14915.00	90.800	339.040	5748.47	3533.92	4036.86	970.99	1757356.69	14635062.30	40°17'48.2069"N	80°34'50.2058"W	4152.00	13.524	0.39	-0.20	-0.34
15007.00	90.980	339.130	5747.04	3625.80	4122.79	938.15	1757323.87	14635148.20	40°17'49.0576"N	80°34'50.6244"W	4228.18	12.819	0.22	0.20	0.10
15100.00	90.310	338.970	5746.00	3718.68	4209.64	904.90	1757290.63	14635235.01	40°17'49.9173"N	80°34'51.0482"W	4305.80	12.132	0.74	-0.72	-0.17
15191.00	90.430	339.570	5745.41	3809.59	4294.74	872.69	1757258.43	14635320.08	40°17'50.7598"N	80°34'51.4587"W	4382.51	11.486	0.67	0.13	0.66
15282.00	90.490	339.200	5744.68	3900.50	4379.91	840.65	1757226.40	14635405.22	40°17'51.6030"N	80°34'51.8669"W	4459.86	10.865	0.41	0.07	-0.41
15375.00	90.460	339.540	5743.91	3993.41	4466.95	807.88	1757193.65	14635492.22	40°17'52.4645"N	80°34'52.2845"W	4539.42	10.252	0.37	-0.03	0.37
15463.00	90.400	339.380	5743.25	4081.33	4549.35	777.01	1757162.79	14635574.59	40°17'53.2802"N	80°34'52.6779"W	4615.23	9.692	0.19	-0.07	-0.18
15555.00	90.060	339.280	5742.88	4173.24	4635.43	744.53	1757130.33	14635660.64	40°17'54.1323"N	80°34'53.0918"W	4694.84	9.125	0.39	-0.37	-0.11
15647.00	90.120	339.470	5742.73	4265.15	4721.53	712.13	1757097.93	14635746.71	40°17'54.9847"N	80°34'53.5048"W	4774.93	8.577	0.22	0.07	0.21
15738.00	89.690	338.640	5742.88	4356.04	4806.52	679.60	1757065.42	14635831.66	40°17'55.8260"N	80°34'53.9194"W	4854.32	8.048	1.03	-0.47	-0.91
15830.00	89.720	339.260	5743.36	4447.92	4892.38	646.55	1757032.38	14635917.48	40°17'56.6760"N	80°34'54.3407"W	4934.91	7.528	0.67	0.03	0.67
15922.00	90.030	339.120	5743.56	4539.82	4978.37	613.87	1756999.71	14636003.45	40°17'57.5273"N	80°34'54.7572"W	5016.08	7.029	0.37	0.34	-0.15
16013.00	90.620	339.400	5743.04	4630.72	5063.47	581.64	1756967.50	14636088.52	40°17'58.3698"N	80°34'55.1680"W	5096.77	6.553	0.72	0.65	0.31
16105.00	90.950	338.890	5741.78	4722.61	5149.44	548.90	1756934.76	14636174.45	40°17'59.2208"N	80°34'55.5854"W	5178.61	6.084	0.66	0.36	-0.55

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WELLPATH DATA (260 stations)															
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16198.00	91.050	338.950	5740.16	4815.47	5236.20	515.45	1756901.33	14636261.18	40°18'0.0797"N	80°34'56.0117"W	5261.51	5.622	0.13	0.11	0.06
16291.00	90.220	339.160	5739.13	4908.36	5323.05	482.21	1756868.10	14636347.99	40°18'0.9395"N	80°34'56.4355"W	5344.85	5.176	0.92	-0.89	0.23
16383.00	90.370	338.860	5738.65	5000.24	5408.94	449.25	1756835.16	14636433.85	40°18'1.7898"N	80°34'56.8556"W	5427.57	4.748	0.36	0.16	-0.33
16475.00	90.280	338.310	5738.13	5092.09	5494.59	415.66	1756801.58	14636519.47	40°18'2.6377"N	80°34'57.2839"W	5510.29	4.326	0.61	-0.10	-0.60
16568.00	90.460	339.130	5737.53	5184.95	5581.25	381.91	1756767.84	14636606.09	40°18'3.4956"N	80°34'57.7142"W	5594.30	3.915	0.90	0.19	0.88
16659.00	90.370	338.720	5736.87	5275.83	5666.16	349.19	1756735.14	14636690.97	40°18'4.3362"N	80°34'58.1314"W	5676.91	3.527	0.46	-0.10	-0.45
16751.00	90.280	338.740	5736.35	5367.69	5751.89	315.82	1756701.77	14636776.67	40°18'5.1849"N	80°34'58.5569"W	5760.55	3.143	0.10	-0.10	0.02
16842.00	90.400	338.970	5735.81	5458.56	5836.76	282.99	1756668.96	14636861.50	40°18'6.0251"N	80°34'58.9754"W	5843.62	2.776	0.29	0.13	0.25
16935.00	90.490	339.090	5735.09	5551.44	5923.60	249.71	1756635.69	14636948.31	40°18'6.8847"N	80°34'59.3997"W	5928.86	2.414	0.16	0.10	0.13
17028.00	90.430	339.070	5734.34	5644.33	6010.47	216.50	1756602.50	14637035.14	40°18'7.7447"N	80°34'59.8230"W	6014.36	2.063	0.07	-0.06	-0.02
17119.00	90.520	339.130	5733.59	5735.22	6095.48	184.04	1756570.05	14637120.12	40°18'8.5862"N	80°35'0.2368"W	6098.25	1.729	0.12	0.10	0.07
17212.00	90.370	338.970	5732.87	5828.11	6182.32	150.79	1756536.81	14637206.93	40°18'9.4460"N	80°35'0.6607"W	6184.16	1.397	0.24	-0.16	-0.17
17305.00	90.520	339.320	5732.14	5921.00	6269.23	117.68	1756503.72	14637293.81	40°18'10.3063"N	80°35'1.0827"W	6270.33	1.075	0.41	0.16	0.38
17397.00	90.770	339.030	5731.11	6012.89	6355.21	84.98	1756471.02	14637379.76	40°18'11.1575"N	80°35'1.4996"W	6355.78	0.766	0.42	0.27	-0.32
17489.00	91.020	339.230	5729.67	6104.78	6441.17	52.21	1756438.27	14637465.68	40°18'12.0084"N	80°35'1.9174"W	6441.38	0.464	0.35	0.27	0.22
17579.00	91.010	339.380	5728.08	6194.67	6525.35	20.41	1756406.48	14637549.82	40°18'12.8417"N	80°35'2.3227"W	6525.38	0.179	0.17	-0.01	0.17
17671.00	90.830	339.180	5726.60	6286.57	6611.38	-12.14	1756373.95	14637635.83	40°18'13.6934"N	80°35'2.7376"W	6611.40	359.895	0.29	-0.20	-0.22
17764.00	91.630	338.800	5724.60	6379.43	6698.18	-45.47	1756340.62	14637722.59	40°18'14.5526"N	80°35'3.1626"W	6698.34	359.611	0.95	0.86	-0.41
17854.00	91.200	339.170	5722.38	6469.29	6782.17	-77.74	1756308.37	14637806.55	40°18'15.3841"N	80°35'3.5739"W	6782.61	359.343	0.63	-0.48	0.41
17943.00	90.710	338.620	5720.90	6558.16	6865.19	-109.78	1756276.34	14637889.53	40°18'16.2059"N	80°35'3.9825"W	6866.06	359.084	0.83	-0.55	-0.62
18034.00	90.740	338.870	5719.75	6649.01	6949.99	-142.77	1756243.37	14637974.30	40°18'17.0454"N	80°35'4.4031"W	6951.46	358.823	0.28	0.03	0.27
18125.00	90.460	339.080	5718.79	6739.89	7034.93	-175.42	1756210.73	14638059.21	40°18'17.8863"N	80°35'4.8193"W	7037.11	358.572	0.38	-0.31	0.23
18215.00	90.490	338.770	5718.05	6829.77	7118.90	-207.78	1756178.38	14638143.15	40°18'18.7176"N	80°35'5.2319"W	7121.93	358.328	0.35	0.03	-0.34
18308.00	90.430	340.870	5717.30	6922.01	7206.19	-239.86	1756146.32	14638230.40	40°18'19.5816"N	80°35'5.6407"W	7210.18	358.094	2.26	-0.06	2.26
18400.00	90.520	343.250	5716.54	7014.70	7293.70	-268.19	1756117.99	14638317.88	40°18'20.4477"N	80°35'6.0011"W	7298.63	357.894	2.59	0.10	2.59
18492.00	90.490	344.760	5715.73	7106.62	7382.14	-293.54	1756092.65	14638406.28	40°18'21.3228"N	80°35'6.3230"W	7387.97	357.723	1.64	-0.03	1.64
18581.00	90.370	347.140	5715.06	7195.39	7468.47	-315.14	1756071.06	14638492.58	40°18'22.1768"N	80°35'6.5966"W	7475.11	357.584	2.68	-0.13	2.67
18672.00	90.490	346.790	5714.37	7286.03	7557.12	-335.67	1756050.54	14638581.20	40°18'23.0538"N	80°35'6.8562"W	7564.57	357.457	0.41	0.13	-0.38
18764.00	90.580	347.000	5713.52	7377.67	7646.72	-356.53	1756029.69	14638670.76	40°18'23.9402"N	80°35'7.1200"W	7655.02	357.331	0.25	0.10	0.23
18856.00	90.370	346.710	5712.75	7469.31	7736.30	-377.45	1756008.78	14638760.31	40°18'24.8264"N	80°35'7.3846"W	7745.51	357.207	0.39	-0.23	-0.32

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18946.00	90.430	347.080	5712.12	7558.96	7823.96	-397.86	1755988.38	14638847.93	40°18'25.6935"N	80°35'7.6427"W	7834.07	357.089	0.42	0.07	0.41	
19039.00	90.550	347.080	5711.33	7651.58	7914.60	-418.65	1755967.59	14638938.54	40°18'26.5902"N	80°35'7.9056"W	7925.66	356.972	0.13	0.13	0.00	
19131.00	90.150	346.770	5710.77	7743.21	8004.21	-439.46	1755946.79	14639028.12	40°18'27.4767"N	80°35'8.1688"W	8016.27	356.857	0.55	-0.43	-0.34	
19223.00	90.400	346.840	5710.33	7834.87	8093.78	-460.46	1755925.80	14639117.65	40°18'28.3627"N	80°35'8.4345"W	8106.87	356.744	0.28	0.27	0.08	
19315.00	90.430	347.090	5709.66	7926.50	8183.41	-481.21	1755905.06	14639207.25	40°18'29.2494"N	80°35'8.6969"W	8197.55	356.635	0.27	0.03	0.27	
19405.00	90.400	347.320	5709.01	8016.11	8271.17	-501.14	1755885.13	14639294.97	40°18'30.1175"N	80°35'8.9489"W	8286.34	356.533	0.26	-0.03	0.26	
19496.00	90.310	347.150	5708.44	8106.71	8359.92	-521.25	1755865.03	14639383.69	40°18'30.9955"N	80°35'9.2031"W	8376.16	356.432	0.21	-0.10	-0.19	
19587.00	90.280	346.770	5707.98	8197.35	8448.57	-541.78	1755844.51	14639472.31	40°18'31.8724"N	80°35'9.4627"W	8465.93	356.331	0.42	-0.03	-0.42	
19680.00	91.110	346.790	5706.85	8290.00	8539.10	-563.05	1755823.25	14639562.80	40°18'32.7680"N	80°35'9.7318"W	8557.64	356.228	0.89	0.89	0.02	
19771.00	91.050	347.180	5705.13	8380.62	8627.75	-583.54	1755802.77	14639651.41	40°18'33.6449"N	80°35'9.9909"W	8647.46	356.131	0.43	-0.07	0.43	
19861.00	91.050	347.100	5703.48	8470.22	8715.48	-603.56	1755782.75	14639739.11	40°18'34.5127"N	80°35'10.2441"W	8736.35	356.038	0.09	0.00	-0.09	
19954.00	90.950	347.100	5701.86	8562.82	8806.11	-624.32	1755762.00	14639829.71	40°18'35.4094"N	80°35'10.5066"W	8828.22	355.945	0.11	-0.11	0.00	
20046.00	90.950	346.970	5700.33	8654.43	8895.76	-644.96	1755741.37	14639919.32	40°18'36.2961"N	80°35'10.7676"W	8919.11	355.853	0.14	0.00	-0.14	
20137.00	91.010	346.790	5698.78	8745.07	8984.37	-665.61	1755720.72	14640007.90	40°18'37.1727"N	80°35'11.0289"W	9008.99	355.763	0.21	0.07	-0.20	
20230.00	91.140	346.900	5697.03	8837.70	9074.91	-686.78	1755699.57	14640098.40	40°18'38.0684"N	80°35'11.2966"W	9100.86	355.672	0.18	0.14	0.12	
20323.00	91.170	346.860	5695.16	8930.32	9165.47	-707.88	1755678.47	14640188.92	40°18'38.9642"N	80°35'11.5636"W	9192.76	355.584	0.05	0.03	-0.04	
20414.00	91.080	347.190	5693.37	9020.93	9254.13	-728.31	1755658.05	14640277.55	40°18'39.8413"N	80°35'11.8219"W	9282.74	355.500	0.38	-0.10	0.36	
20505.00	91.050	346.900	5691.68	9111.55	9342.79	-748.71	1755637.66	14640366.18	40°18'40.7184"N	80°35'12.0799"W	9372.75	355.418	0.32	-0.03	-0.32	
20597.00	91.080	346.820	5689.97	9203.18	9432.37	-769.62	1755616.76	14640455.72	40°18'41.6045"N	80°35'12.3444"W	9463.72	355.335	0.09	0.03	-0.09	
20688.00	90.580	347.090	5688.65	9293.81	9521.01	-790.16	1755596.23	14640544.33	40°18'42.4814"N	80°35'12.6042"W	9553.74	355.256	0.62	-0.55	0.30	
20780.00	90.580	346.850	5687.72	9385.44	9610.64	-810.90	1755575.50	14640633.92	40°18'43.3680"N	80°35'12.8665"W	9644.79	355.177	0.26	0.00	-0.26	
20873.00	90.090	347.010	5687.18	9478.08	9701.23	-831.93	1755554.47	14640724.48	40°18'44.2641"N	80°35'13.1325"W	9736.83	355.099	0.55	-0.53	0.17	
20965.00	89.880	346.790	5687.20	9569.72	9790.83	-852.78	1755533.63	14640814.05	40°18'45.1506"N	80°35'13.3963"W	9827.90	355.022	0.33	-0.23	-0.24	
21058.00	89.880	346.890	5687.40	9662.37	9881.39	-873.95	1755512.46	14640904.57	40°18'46.0464"N	80°35'13.6642"W	9919.96	354.946	0.11	0.00	0.11	
21148.00	89.750	346.880	5687.69	9752.02	9969.04	-894.38	1755492.05	14640992.19	40°18'46.9135"N	80°35'13.9225"W	10009.08	354.873	0.14	-0.14	-0.01	
21240.00	89.970	347.190	5687.91	9843.65	10058.70	-915.02	1755471.42	14641081.81	40°18'47.8004"N	80°35'14.1835"W	10100.23	354.802	0.41	0.24	0.34	
21333.00	91.050	346.450	5687.08	9936.29	10149.24	-936.22	1755450.22	14641172.32	40°18'48.6961"N	80°35'14.4518"W	10192.33	354.730	1.41	1.16	-0.80	
21425.00	91.320	347.220	5685.18	10027.93	10238.80	-957.17	1755429.28	14641261.84	40°18'49.5821"N	80°35'14.7169"W	10283.45	354.659	0.89	0.29	0.84	
21513.00	91.200	348.190	5683.25	10115.45	10324.76	-975.90	1755410.55	14641347.77	40°18'50.4324"N	80°35'14.9535"W	10370.78	354.600	1.11	-0.14	1.10	
21606.00	91.110	348.030	5681.37	10207.87	10415.75	-995.06	1755391.40	14641438.72	40°18'51.3323"N	80°35'15.1953"W	10463.17	354.543	0.20	-0.10	-0.17	

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	OV Royalty Trust LLC BRK 405H
Field	Brooke	API/Legal	
Facility	OV Royalty Trust LLC Pad	Wellbore	OV Royalty Trust LLC BRK 405H AWP
Slot	Slot #405		

WELLPATH DATA (260 stations) † = interpolated, ‡ = extrapolated station															
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
21697.00	90.920	348.170	5679.76	10298.32	10504.78	-1013.82	1755372.65	14641527.72	40°18'52.2130"N	80°35'15.4322"W	10553.59	354.487	0.26	-0.21	0.15
21789.00	90.650	347.600	5678.50	10389.80	10594.72	-1033.13	1755353.35	14641617.63	40°18'53.1026"N	80°35'15.6760"W	10644.97	354.430	0.69	-0.29	-0.62
21881.00	90.770	348.390	5677.36	10481.27	10684.70	-1052.26	1755334.22	14641707.57	40°18'53.9927"N	80°35'15.9176"W	10736.39	354.375	0.87	0.13	0.86
21971.00	90.800	348.400	5676.13	10570.68	10772.85	-1070.37	1755316.13	14641795.69	40°18'54.8646"N	80°35'16.1460"W	10825.90	354.326	0.04	0.03	0.01
22063.00	90.520	347.740	5675.07	10662.13	10862.86	-1089.38	1755297.12	14641885.66	40°18'55.7549"N	80°35'16.3861"W	10917.35	354.273	0.78	-0.30	-0.72
22156.00	90.280	347.570	5674.42	10754.65	10953.71	-1109.26	1755277.24	14641976.47	40°18'56.6535"N	80°35'16.6373"W	11009.73	354.217	0.32	-0.26	-0.18
22248.00	90.680	348.070	5673.65	10846.15	11043.63	-1128.67	1755257.84	14642066.36	40°18'57.5430"N	80°35'16.8825"W	11101.16	354.165	0.70	0.43	0.54
22340.00	90.860	347.920	5672.41	10937.62	11133.61	-1147.81	1755238.72	14642156.31	40°18'58.4331"N	80°35'17.1241"W	11192.62	354.114	0.25	0.20	-0.16
22432.00	90.890	347.850	5671.00	11029.10	11223.55	-1167.11	1755219.42	14642246.21	40°18'59.3227"N	80°35'17.3679"W	11284.07	354.063	0.08	0.03	-0.08
22525.00	91.050	347.870	5669.43	11121.57	11314.46	-1186.67	1755199.87	14642337.09	40°19'0.2219"N	80°35'17.6149"W	11376.52	354.013	0.17	0.17	0.02
22617.00	91.290	347.990	5667.55	11213.04	11404.41	-1205.90	1755180.64	14642427.00	40°19'1.1116"N	80°35'17.8578"W	11467.99	353.964	0.29	0.26	0.13
22709.00	91.110	347.800	5665.63	11304.51	11494.34	-1225.19	1755161.36	14642516.90	40°19'2.0012"N	80°35'18.1014"W	11559.45	353.916	0.28	-0.20	-0.21
22800.00	90.800	348.050	5664.11	11394.99	11583.32	-1244.23	1755142.34	14642605.84	40°19'2.8813"N	80°35'18.3417"W	11649.95	353.869	0.44	-0.34	0.27
22891.00	90.830	347.960	5662.81	11485.45	11672.32	-1263.14	1755123.43	14642694.81	40°19'3.7617"N	80°35'18.5805"W	11740.47	353.824	0.10	0.03	-0.10
22984.00	90.860	347.860	5661.44	11577.93	11763.25	-1282.61	1755103.96	14642785.70	40°19'4.6611"N	80°35'18.8265"W	11832.97	353.777	0.11	0.03	-0.11
23075.00	90.890	348.030	5660.05	11668.40	11852.23	-1301.62	1755084.97	14642874.65	40°19'5.5413"N	80°35'19.0665"W	11923.49	353.733	0.19	0.03	0.19
23167.00	90.860	348.010	5658.65	11759.86	11942.22	-1320.71	1755065.88	14642964.60	40°19'6.4314"N	80°35'19.3076"W	12015.02	353.689	0.04	-0.03	-0.02
23258.00	90.830	348.110	5657.31	11850.32	12031.24	-1339.53	1755047.06	14643053.59	40°19'7.3119"N	80°35'19.5453"W	12105.58	353.647	0.11	-0.03	0.11
23312.00	90.950	347.850	5656.47	11904.00	12084.05	-1350.78	1755035.82	14643106.38	40°19'7.8343"N	80°35'19.6873"W	12159.31	353.622	0.53	0.22	-0.48
23337.00†	90.950	347.850	5656.05	11928.86	12108.48	-1356.04	1755030.56	14643130.80	40°19'8.0760"N	80°35'19.7537"W	12184.18	353.610	0.00	0.00	0.00

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Field	Brooke	API/Legal	
Facility	OV Royalty Trust LLC Pad	Wellbore	OV Royalty Trust LLC BRK 405H AWB
Slot	Slot #405		

HOLE & CASING SECTIONS - Ref Wellbore: OV Royalty Trust LLC BRK 405H AWB Ref Wellpath: OV Royalty Trust LLC BRK 405H AWP Proj: 23337'									
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]
20in Conductor	26.00	100.00	74.00	26.00	100.00	0.00	0.00	-0.18	-0.18
17.5in Open Hole	100.00	451.00	351.00	100.00	450.98	-0.18	-0.18	-2.76	-1.60
13.375in Casing Surface	26.00	451.00	425.00	26.00	450.98	0.00	0.00	-2.76	-1.60
12.25in Open Hole	451.00	1599.00	1148.00	450.98	1573.59	-2.76	-1.60	-139.06	150.03
9.625in Casing Intermediate	26.00	1557.00	1531.00	26.00	1533.97	0.00	0.00	-130.16	139.32
8.5in Open Hole	1599.00	23337.00	21738.00	1573.59	5656.05	-139.06	150.03	12108.48	-1356.04
5.5in Casing Production	26.00	23337.00	23311.00	26.00	5656.05	0.00	0.00	12108.48	-1356.04

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
OV Royalty Trust LLC BRK 405H BHL Rev-6	5655.95	12116.47	-1368.29	1755018.32	14643138.79	40°19'8.1555"N	80°35'19.9114"W	point
OV Royalty Trust LLC BRK 405H LP Rev-6	5827.00	-2177.30	3316.19	1759700.99	14628850.54	40°16'46.6896"N	80°34'20.3268"W	point

WELLPATH COMPOSITION - Ref Wellbore: OV Royalty Trust LLC BRK 405H AWB Ref Wellpath: OV Royalty Trust LLC BRK 405H AWP Proj: 23337'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	395.00	OWSG MWD rev2 + HRGM	01 Premier MWD <17-1/2"> (158'-395')	OV Royalty Trust LLC BRK 405H AWB	1/2/2021
395.00	1517.00	OWSG MWD rev2 + HRGM	02 Premier MWD <12-1/4"> (492'-1517')	OV Royalty Trust LLC BRK 405H AWB	1/2/2021
1517.00	23337.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	03 BH AT Curve <8-1/2"> (1598'-23312')	OV Royalty Trust LLC BRK 405H AWB	1/2/2021

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Slot	Slot #405		

COMMENTS
Wellpath general comments API: 47-009-00307-0000 BH Job #: 110685703 Rig: SDC 41 Duration: 01/02/2021 - 01/09/2021

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