



ANTERO RESOURCES CORPORATION



Location: Wetzel County, WV
 Field: Wetzel
 Facility: Red Lady Pad

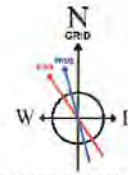
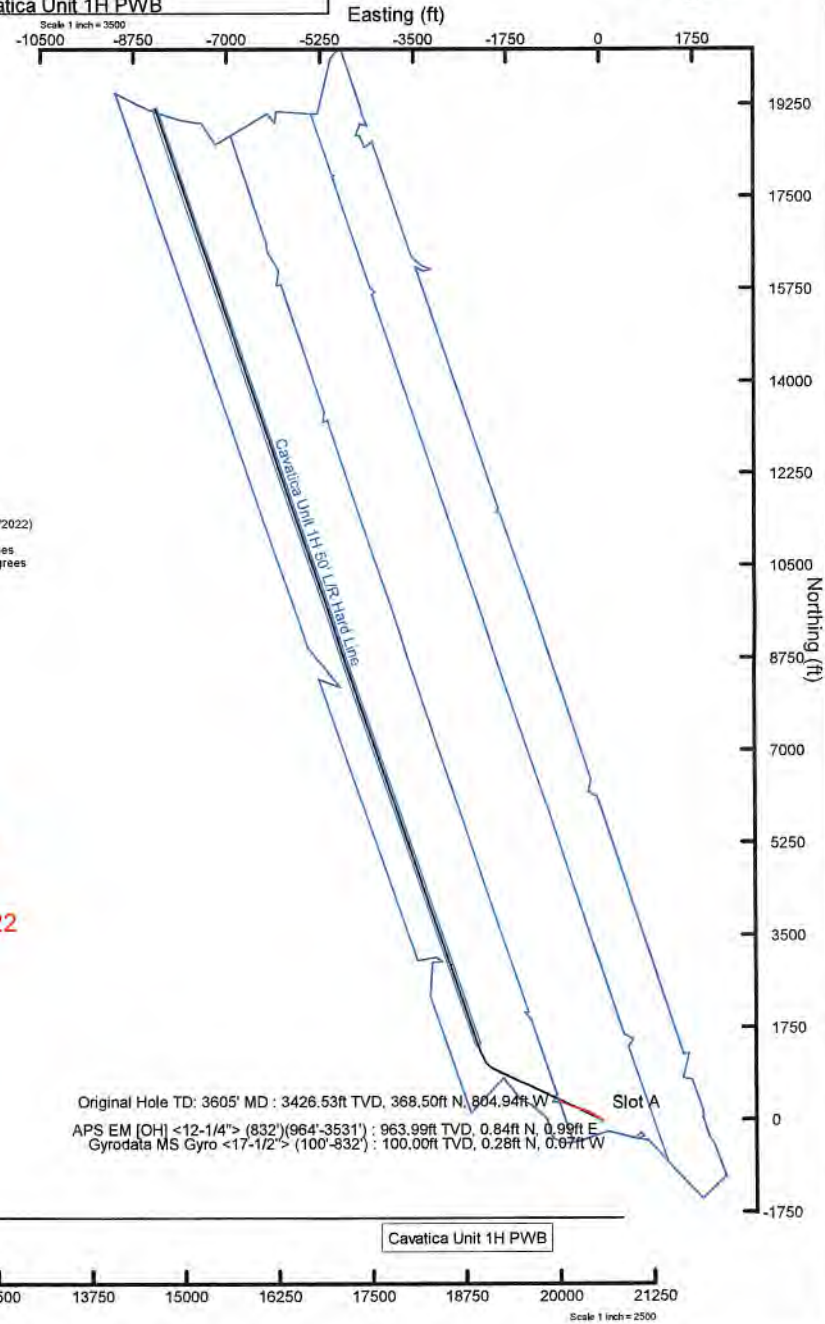
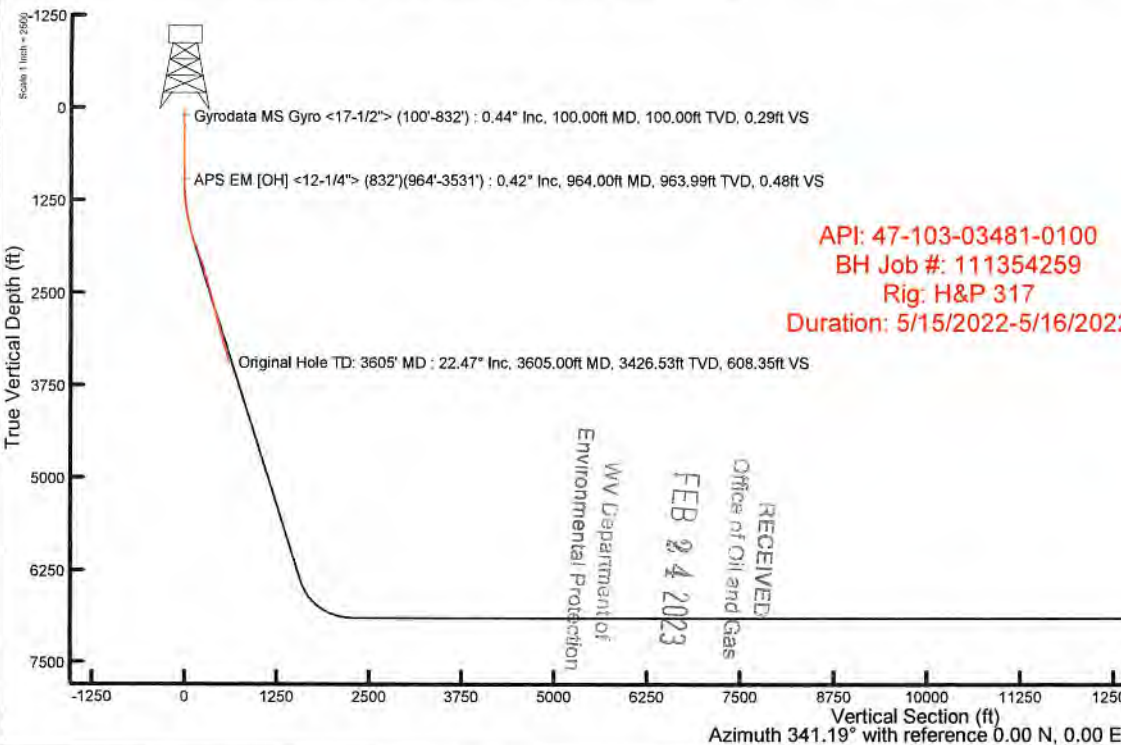
Slot: Slot A
 Well: Cavatica Unit 1H
 Wellbore: Cavatica Unit 1H PWB

Plot reference wellpath is Cavatica Unit 1H PWB Rev-A.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to H&P 317 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to H&P 317 (RKB)	Scale: True distance
H&P 317 (RKB) to Mean Sea Level: 1232.5 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot A): -1207 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: rdjanyar on 2022-07-21; Database: WA MPL_EASTERNUS_Defn

Location Information					
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Red Lady Pad	1707525.450	14353573.910	39°31'33.9280"N	80°45'43.2459"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude
Slot A	0.00	0.00	1707525.450	14353573.910	39°31'33.9280"N
Comment: Cavatica Unit 1H					
H&P 317 (RKB) to Ground level (At Slot: Slot A)					25.5ft
Mean Sea Level to Ground level (At Slot: Slot A)					-1207ft
H&P 317 (RKB) to Mean Sea Level					1232.5ft

Well Profile Data								
Design Comment	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	25.50	0.000	295.968	25.50	0.00	0.00	0.00	0.00
KOP 1	1000.00	0.000	295.968	1000.00	0.00	0.00	0.00	0.00
End of Build	1807.58	24.228	295.968	1783.73	73.39	-151.36	3.00	118.28
Curve KOP	6869.98	24.228	295.968	6400.24	979.78	-2020.61	0.00	1578.96
POE	7598.52	74.217	341.185	6873.00	1415.00	-2291.98	8.00	2078.44
Landing Pt.	7795.81	90.000	341.185	6900.00	1599.39	-2354.80	8.00	2273.23
BHL	26358.58	90.000	341.185	6900.00	19170.31	-8341.42	0.00	20836.01

Well Data			
Slot	Well	Wellbore	Wellpath
Slot A	Cavatica Unit 1H	Cavatica Unit 1H AWB	Cavatica Unit 1H AWP Proj. 3605°
Slot A	Cavatica Unit 1H	Cavatica Unit 1H PWB	Cavatica Unit 1H PWB Rev-A.0



User specified (HDGM) Dip: 66.43° Field: 51781 nT
 Magnetic North is 7.66 degrees West of True North (at 7/20/2022)
 Grid North is 0.15 degrees East of True North
 To correct azimuth from True to Grid subtract 0.15 degrees
 To correct azimuth from Magnetic to Grid subtract 7.81 degrees

Cavatica Unit 1H PWB

Scale 1 inch = 2500



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Cavatica Unit 1H AWP Proj: 3605'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Cavatica Unit 1H
Field	Wetzel	API	47-103-03481-0100
Facility	Red Lady Pad	Wellbore	Cavatica Unit 1H AWB
Slot	Slot A		

REPORT SETUP INFORMATION			
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Edsaryar
Scale	0.999605	Report Generated	7/21/2022 at 6:10:10 PM
Convergence at slot	0.15° 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	0.00	0.00	1707525.45	14353573.91	39°31'33.9280"N	80°45'43.2459"W
Facility Reference Pt			1707525.45	14353573.91	39°31'33.9280"N	80°45'43.2459"W
Field Reference Pt			0.00	0.00	0°00'0.0000"	85°29'19.3013"W

WELLPATH DATUM			
Calculation method	Minimum curvature	H&P 317 (RKB) to Facility Vertical Datum	1232.50ft
Horizontal Reference Pt	Slot	H&P 317 (RKB) to Mean Sea Level	1232.50ft
Vertical Reference Pt	H&P 317 (RKB)	H&P 317 (RKB) to Ground Level at Slot (Slot A)	25.50ft
MD Reference Pt	H&P 317 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	341.19°

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Operator	ANTERO RESOURCES CORPORATION	Well	Cavatica Unit 1H
Field	Wetzel	API	47-103-03481-0100
Facility	Red Lady Pad	Wellbore	Cavatica Unit 1H AWB
Slot	Slot A		

WELLPATH DATA (41 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]	Comments	
0.00	†	0.00	344.940	0.00	0.00	0.00	1707525.45	14353573.91	39°31'33.9280"N	80°45'43.2459"W	0.00	0.000	0.00	0.00	0.00		
25.50		0.000	344.940	25.50	0.00	0.00	1707525.45	14353573.91	39°31'33.9280"N	80°45'43.2459"W	0.00	0.000	0.00	0.00	0.00		
100.00		0.440	344.940	100.00	0.29	0.28	-0.07	1707525.38	14353574.19	39°31'33.9307"N	80°45'43.2469"W	0.29	344.940	0.59	0.59	0.00	Gyrodata MS Gyro <17-1/2"> (100'-832')
200.00		0.340	306.330	200.00	0.91	0.82	-0.41	1707525.04	14353574.73	39°31'33.9362"N	80°45'43.2512"W	0.92	333.339	0.27	-0.10	-38.61	
300.00		0.170	91.750	300.00	1.10	0.99	-0.50	1707524.95	14353574.90	39°31'33.9379"N	80°45'43.2523"W	1.11	333.120	0.49	-0.17	145.42	
400.00		0.450	43.220	400.00	1.24	1.28	-0.09	1707525.36	14353575.19	39°31'33.9406"N	80°45'43.2470"W	1.28	356.113	0.36	0.28	-48.53	
500.00		0.370	114.460	499.99	1.20	1.43	0.48	1707525.93	14353575.34	39°31'33.9421"N	80°45'43.2398"W	1.51	18.439	0.48	-0.08	71.24	
600.00		0.140	128.080	599.99	0.87	1.22	0.87	1707526.32	14353575.13	39°31'33.9400"N	80°45'43.2348"W	1.50	35.395	0.24	-0.23	13.62	
700.00		0.330	71.110	699.99	0.77	1.24	1.23	1707526.68	14353575.15	39°31'33.9402"N	80°45'43.2301"W	1.75	44.951	0.28	0.19	-56.97	
800.00		0.410	168.770	799.99	0.42	0.98	1.58	1707527.03	14353574.89	39°31'33.9377"N	80°45'43.2258"W	1.86	58.161	0.56	0.08	97.66	
832.00		0.090	251.850	831.99	0.31	0.86	1.58	1707527.02	14353574.77	39°31'33.9365"N	80°45'43.2258"W	1.79	61.394	1.28	-1.00	259.62	
964.00		0.420	271.800	963.99	0.48	0.84	0.99	1707526.44	14353574.75	39°31'33.9363"N	80°45'43.2332"W	1.30	49.712	0.26	0.25	15.11	APS EM [OH] <12-1/4"> (832')(964'-3531')
1056.00		1.780	308.370	1055.97	1.80	1.74	-0.46	1707524.99	14353575.65	39°31'33.9452"N	80°45'43.2518"W	1.80	345.066	1.59	1.48	39.75	
1150.00		4.450	303.200	1149.82	5.90	4.64	-4.66	1707520.79	14353578.55	39°31'33.9740"N	80°45'43.3053"W	6.58	314.892	2.85	2.84	-5.50	
1244.00		7.320	298.340	1243.32	13.16	9.48	-12.98	1707512.47	14353583.39	39°31'34.0221"N	80°45'43.4113"W	16.08	306.144	3.10	3.05	-5.17	
1338.00		9.010	295.910	1336.36	22.73	15.54	-24.88	1707500.58	14353589.45	39°31'34.0823"N	80°45'43.5629"W	29.33	301.997	1.83	1.80	-2.59	
1433.00		11.960	298.370	1429.77	35.19	23.47	-40.23	1707485.23	14353597.37	39°31'34.1611"N	80°45'43.7586"W	46.58	300.260	3.14	3.11	2.59	
1527.00		14.860	298.790	1521.19	51.24	33.91	-59.37	1707466.10	14353607.80	39°31'34.2647"N	80°45'44.0024"W	68.37	299.732	3.09	3.09	0.45	
1622.00		17.430	301.330	1612.44	71.16	47.18	-82.20	1707443.28	14353621.07	39°31'34.3964"N	80°45'44.2934"W	94.78	299.851	2.80	2.71	2.67	
1716.00		19.670	302.740	1701.55	94.36	63.05	-107.54	1707417.95	14353636.94	39°31'34.5540"N	80°45'44.6162"W	124.66	300.384	2.43	2.38	1.50	
1811.00		23.240	306.100	1789.96	122.23	82.75	-136.14	1707389.36	14353656.63	39°31'34.7494"N	80°45'44.9805"W	159.32	301.292	3.97	3.76	3.54	
1905.00		26.020	306.920	1875.40	154.45	106.07	-167.62	1707357.90	14353679.94	39°31'34.9807"N	80°45'45.3814"W	198.36	302.326	2.98	2.96	0.87	
2000.00		26.350	301.950	1960.66	188.00	129.74	-202.17	1707323.36	14353703.60	39°31'35.2156"N	80°45'45.8216"W	240.22	302.691	2.33	0.35	-5.23	
2094.00		26.320	295.590	2044.92	218.74	149.79	-238.67	1707286.87	14353723.64	39°31'35.4146"N	80°45'46.2867"W	281.78	302.112	3.00	-0.03	-6.77	
2190.00		26.800	289.200	2130.81	246.97	166.10	-278.31	1707247.25	14353739.95	39°31'35.5769"N	80°45'46.7921"W	324.11	300.829	3.02	0.50	-6.66	
2284.00		27.450	286.410	2214.47	272.51	179.19	-319.11	1707206.46	14353753.03	39°31'35.7073"N	80°45'47.3123"W	365.98	299.316	1.52	0.69	-2.97	
2379.00		27.690	285.000	2298.68	297.42	191.09	-361.44	1707164.16	14353764.93	39°31'35.8260"N	80°45'47.8520"W	408.84	297.865	0.73	0.25	-1.48	
2474.00		27.100	286.280	2383.03	322.15	202.87	-403.53	1707122.08	14353776.70	39°31'35.9436"N	80°45'48.3888"W	451.66	296.691	0.88	-0.62	1.35	
2568.00		24.850	289.150	2467.53	346.61	215.35	-442.75	1707082.88	14353789.18	39°31'36.0679"N	80°45'48.8888"W	492.34	295.938	2.74	-2.39	3.05	
2663.00		23.910	288.980	2554.06	370.68	228.16	-479.81	1707045.83	14353801.98	39°31'36.1955"N	80°45'49.3614"W	531.30	295.432	0.99	-0.99	-0.18	



Actual Wellpath Report

Cavatica Unit 1H AWP Proj: 3605'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Cavatica Unit 1H
Field	Wetzel	API	47-103-03481-0100
Facility	Red Lady Pad	Wellbore	Cavatica Unit 1H AWB
Slot	Slot A		

WELLPATH DATA (41 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]	Comments
2757.00	23.560	288.580	2640.11	393.76	240.35	-515.63	1707010.02	14353814.16	39°31'36.3168"N	80°45'49.8181"W	568.89	294.991	0.41	-0.37	-0.43	
2852.00	23.370	287.650	2727.25	416.49	252.11	-551.58	1706974.09	14353825.92	39°31'36.4340"N	80°45'50.2765"W	606.47	294.563	0.44	-0.20	-0.98	
2946.00	22.030	289.670	2813.97	438.54	263.70	-585.95	1706939.73	14353837.50	39°31'36.5494"N	80°45'50.7147"W	642.55	294.229	1.65	-1.43	2.15	
3041.00	21.100	293.330	2902.32	461.10	276.47	-618.43	1706907.26	14353850.27	39°31'36.6765"N	80°45'51.1288"W	677.41	294.087	1.72	-0.98	3.85	
3135.00	20.860	295.170	2990.09	484.08	290.28	-649.12	1706876.59	14353864.08	39°31'36.8139"N	80°45'51.5199"W	711.07	294.094	0.75	-0.26	1.96	
3230.00	21.420	294.750	3078.70	507.78	304.74	-680.18	1706845.54	14353878.53	39°31'36.9575"N	80°45'51.9158"W	745.32	294.134	0.61	0.59	-0.44	
3325.00	22.080	297.980	3166.94	532.74	320.38	-711.70	1706814.03	14353894.16	39°31'37.1129"N	80°45'52.3176"W	780.49	294.235	1.44	0.69	3.40	
3419.00	21.530	297.770	3254.21	558.15	336.71	-742.57	1706783.18	14353910.48	39°31'37.2751"N	80°45'52.7109"W	815.34	294.391	0.59	-0.59	-0.22	
3513.00	22.070	296.780	3341.49	583.29	352.70	-773.59	1706752.16	14353926.47	39°31'37.4339"N	80°45'53.1064"W	850.20	294.509	0.69	0.57	-1.05	
3531.00	22.470	296.740	3358.15	588.16	355.77	-779.68	1706746.08	14353929.54	39°31'37.4645"N	80°45'53.1840"W	857.02	294.527	2.22	2.22	-0.22	
3605.00‡	22.470	296.740	3426.53	608.35	368.50	-804.94	1706720.83	14353942.26	39°31'37.5909"N	80°45'53.5059"W	885.28	294.598	0.00	0.00	0.00	Original Hole TD: 3605' MD

HOLE & CASING SECTIONS - Ref Wellbore: Cavatica Unit 1H AWB Ref Wellpath: Cavatica Unit 1H AWP Proj: 3605'									
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	25.50	126.00	100.50	25.50	126.00	0.00	0.00	0.46	-0.14
17.5in Open Hole	126.00	936.00	810.00	126.00	935.99	0.46	-0.14	0.84	1.18
13.375in Casing Surface	25.50	916.00	890.50	25.50	915.99	0.00	0.00	0.84	1.29
12.25in Open Hole	936.00	3605.00	2669.00	935.99	3426.53	0.84	1.18	368.50	-804.94
9.625in Casing Intermediate	1770.00	3585.00	1815.00	1752.07	3408.05	73.66	-123.38	365.06	-798.12



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Cavatica Unit 1H AWP Proj: 3605'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Cavatica Unit 1H
Field	Wetzel	API	47-103-03481-0100
Facility	Red Lady Pad	Wellbore	Cavatica Unit 1H AWB
Slot	Slot A		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Cavatica Unit 1H POE Rev-2	6873.00	1415.00	-2291.98	1705234.38	14354988.35	39°31'47.9717"N	80°46'12.4489"W	point
Cavatica Unit 1H BHL Rev-2	6900.00	19170.31	-8341.42	1699187.34	14372736.61	39°34'43.5975"N	80°47'29.1278"W	point
Cavatica Unit 1H 50' L/R Hard Line	7250.00	10292.65	-5316.70	1702210.86	14363862.48	39°33'15.7865"N	80°46'50.7750"W	rectangle
2D Rectangle 18757.6 x 100.								

WELLPATH COMPOSITION - Ref Wellbore: Cavatica Unit 1H AWB Ref Wellpath: Cavatica Unit 1H AWP Proj: 3605'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
25.50	832.00	Gyrodatta 2015 - GC+WIR+DPIPE	01 Gyrodatta MS Gyro <17-1/2"> (100'-832')	Cavatica Unit 1H AWB	5/9/2022
832.00	3605.00	BH NaviTrak (2019) (Axial Corr+HRGM)	02 APS EM <12-1/4"> (832')(964'-3531')	Cavatica Unit 1H AWB	5/9/2022

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Field	Wetzel	API	47-103-03481-0100
Facility	Red Lady Pad	Wellbore	Cavatica Unit 1H AWB
Slot	Slot A		

COMMENTS
<p>Wellpath general comments API: 47-103-03481-0100 BH Job #: 111354259 Rig: H&P 317 Duration: 5/15/2022-5/16/2022 Gyrodatta MS Gyro <17-1/2"> (100'-832') APS EM [OH] <12-1/4"> (832')(964'-3531') Original Hole TD: 3605' MD</p>

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