

Location: Brooke County, WV
Field: Brooke
Facility: Brooke County Parks BRK Pad

Slot: Slot #01
Well: Brooke County Parks BRK 1H
Wellbore: Brooke County Parks BRK 1H PWB

Plot reference wellpath is Brooke County Parks BRK 1H PWB Rev-A. God System, WAD33 / UTM Zone 17 North, US feet

• = Wellpath was transformed from a different geoidetic datum

Measured depths are referenced to SDC 46 (RKB)

SDC 46 (RKB) to Mean Sea Level: 1232.1 feet

Mean Sea Level to Mud Line (AI Slot Slot #01): -1206.1 feet

Coordinates are in feet referenced to Slot

Database: VA_MPL_EASTERNUS_Dash

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Brooke County Parks BRK Pad	1766555.609	14621905.622	40°15'37.6997N	80°32'52.3107W
Slot #01	13.07	-2.02	40°15'37.6287N	80°32'52.3357W
SDC 46 (RKB) to Mud Line (AI Slot Slot #01)				
Mean Sea Level to Mud Line (AI Slot Slot #01)	26ft			
Mean Sea Level to Mud Line (AI Slot Slot #01)	-1206.1ft			
Mean Sea Level to Mud Line (AI Slot Slot #01)	1232.1ft			

The On: 0.00° Inc, 26.00ft MD, 26.00ft TVD, 0.00ft VS
 20in Conductor : 0.00° Inc, 126.00ft MD, 126.00ft TVD, 0.00ft VS
 13.375in Casing Surface : 0.00° Inc, 350.00ft MD, 350.00ft TVD, 0.00ft VS
 KOP 1 : 0.00° Inc, 500.00ft MD, 500.00ft TVD, 0.00ft VS

Well Profile Data

Design Comment	MD (ft)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (ft/100ft)	VS (ft)
The On	26.00	0.00	249.000	26.00	0.00	0.00	0.00
KOP 1	500.00	0.00	249.000	500.00	0.00	0.00	0.00
End of Build	900.00	6.00	249.000	899.27	-7.59	-19.54	2.19
KOP 2	1800.00	6.00	249.000	1794.34	-41.21	-107.36	0.00
End of 3D Arc	2287.58	15.75	250.142	2272.58	-72.90	-193.60	22.94
Curve KOP	5453.13	15.75	250.142	5320.05	-364.84	-1001.95	0.00
Landing Pt	6465.13	90.50	342.088	5938.03	-191.92	-1366.63	9.00
BRK	13622.50	90.50	342.088	5875.54	-702.12	-3567.85	0.00
							7858.70

Targets

Name	MD (ft)	VS (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Brooke County Parks BRK 1H PWB	13622.50	7858.70	5938.03	-191.92	1766555.609	14621905.622	40°15'37.6997N	80°32'52.3107W
Brooke County Parks BRK 1H PWB	13622.50	7858.70	5938.03	-191.92	1766555.609	14621905.622	40°15'37.6997N	80°32'52.3107W

End of 3D Arc: 15.75° Inc, 2287.58ft MD, 2272.58ft TVD, 22.94ft VS
 End of 3D Arc: 6.00° Inc, 1687.04ft MD, 1682.00ft TVD, 10.79ft VS
 KOP 2 : 6.00° Inc, 1800.00ft MD, 1794.34ft TVD, 12.02ft VS

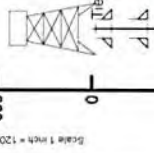
End of 3D Arc: 15.75° Inc, 2287.58ft MD, 2272.58ft TVD, 22.94ft VS
 End of 3D Arc: 6.00° Inc, 1687.04ft MD, 1682.00ft TVD, 10.79ft VS
 KOP 2 : 6.00° Inc, 1800.00ft MD, 1794.34ft TVD, 12.02ft VS

Hole and Casing Sections

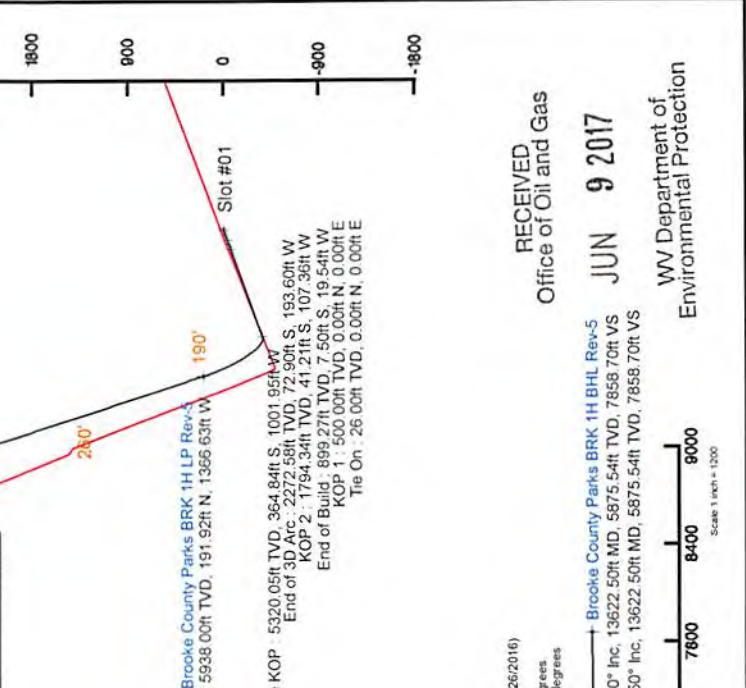
MD (ft)	VS (ft)	Tool	Log Name/Comment	Wellbore
26.00	26.00	OWSG EMS rev2	MS-117.17*	Brooke County Parks BRK 1H PWB
350.00	350.00	BRH 9in/7in	APS EM-11.14*	Brooke County Parks BRK 1H PWB
1800.00	1800.00	BRH 9in/7in	APS EM-6.34*	Brooke County Parks BRK 1H PWB
5453.13	5453.13	BRH 9in/7in	AT Curve-8.17*	Brooke County Parks BRK 1H PWB

Survey Program

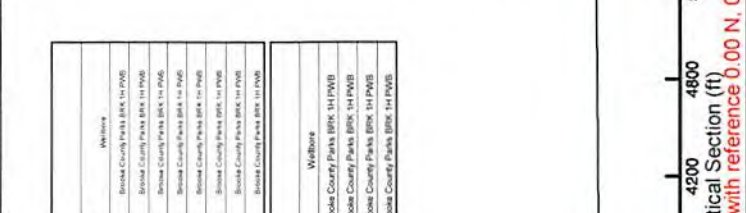
Start MD (ft)	End MD (ft)	Tool	Log Name/Comment	Wellbore
26.00	350.00	OWSG EMS rev2	MS-117.17*	Brooke County Parks BRK 1H PWB
350.00	1800.00	BRH 9in/7in	APS EM-11.14*	Brooke County Parks BRK 1H PWB
1800.00	5453.13	BRH 9in/7in	APS EM-6.34*	Brooke County Parks BRK 1H PWB
5453.13	13622.50	BRH 9in/7in	AT Curve-8.17*	Brooke County Parks BRK 1H PWB



1 50°/100ft
 End of Build : 6.00° Inc, 900.00ft MD, 899.27ft TVD, 2.19ft VS
 KOP 1 : 0.00° Inc, 500.00ft MD, 500.00ft TVD, 0.00ft VS
 9.625in Casing Intermediate : 6.00° Inc, 1687.04ft MD, 1682.00ft TVD, 10.79ft VS
 KOP 2 : 6.00° Inc, 1800.00ft MD, 1794.34ft TVD, 12.02ft VS
 2 00°/100ft
 End of 3D Arc: 15.75° Inc, 2287.58ft MD, 2272.58ft TVD, 22.94ft VS



Brooke County Parks BRK 1H LP Rev-A
 Landing Pt : 5938.03ft W, 191.92ft N, 1366.63ft W
 Curve KOP : 5320.05ft W, 364.84ft S, 1001.95ft W
 End of 3D Arc : 2272.58ft TVD, 72.90ft S, 193.60ft W
 KOP 2 : 1794.34ft TVD, 41.21ft S, 107.36ft W
 End of Build : 899.27ft TVD, 7.50ft S, 19.54ft W
 KOP 1 : 500.00ft TVD, 0.00ft N, 0.00ft E
 The On : 26.00ft TVD, 0.00ft N, 0.00ft E



User specified Dip: 67.85° Field: 52778 nT
 Magnetic North is 8.47 degrees West of True North (at 10/26/2016)
 Grid North is 0.29 degrees East of True North
 To correct azimuth from True to Grid subtract 0.29 degrees
 To correct azimuth from Magnetic to Grid subtract 8.76 degrees

Scale 1 inch = 1200

Vertical Section (ft)
 Azimuth 333.00° with reference 0.00 N, 0.00 E

5.5in Casing Production : 90.50° Inc, 13622.50ft MD, 5875.54ft TVD, 7858.70ft VS

Brooke County Parks BRK 1H LP Rev-5
 BRK : 90.50° Inc, 13622.50ft MD, 5875.54ft TVD, 7858.70ft VS
 5.5in Casing Production : 90.50° Inc, 13622.50ft MD, 5875.54ft TVD, 7858.70ft VS

Scale 1 inch = 1200

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Planned Wellpath Report

Brooke County Parks BRK 1H PWP Rev-A.0
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot #01
Area	Brooke County, WV	Well	Brooke County Parks BRK 1H
Field	Brooke	Wellbore	Brooke County Parks BRK 1H PWB
Facility	Brooke County Parks BRK Pad		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Edsaryar
Scale	0.999618	Report Generated	10/26/2016 at 3:41:40 PM
Convergence at slot	0.30° East	Database/Source file	WA_MPL_EASTERNUS_Defn/Brooke_County_Parks_BRK_1H_PWP_Rev-A.0.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	13.07	-2.02	1766553.59	14621918.69	40°15'37.828"N	80°32'52.335"W
Facility Reference Pt			1766555.61	14621905.62	40°15'37.699"N	80°32'52.310"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.478"W

WELLPATH DATUM			
Calculation method	Minimum curvature	SDC 46 (RKB) to Facility Vertical Datum	1232.10ft
Horizontal Reference Pt	Slot	SDC 46 (RKB) to Mean Sea Level	1232.10ft
Vertical Reference Pt	SDC 46 (RKB)	SDC 46 (RKB) to Mud Line at Slot (Slot #01)	26.00ft
MD Reference Pt	SDC 46 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	333.00°

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REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY
Area	Brooke County, WV
Field	Brooke
Facility	Brooke County Parks BRK Pad
Slot	Wellbore
Slot #01	Brooke County Parks BRK 1H

MD	Inclination	Azimuth	TVD	Vert	North	East	East	Grid East	Grid North	Latitude	Longitude	Closure	Dist	Closure	Dir	Build	Rate	Turn	Comments
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[°]	[ft]	[ft/100ft]	[ft/100ft]	
0.00	0.00	0.00	249.000	0.00	0.00	0.00	0.00	1766553.59	14621918.69	40°15'37.828"N	80°32'52.335"W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26.00	0.00	249.000	26.00	0.00	0.00	0.00	0.00	1766553.59	14621918.69	40°15'37.828"N	80°32'52.335"W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
126.00	0.00	249.000	126.00	0.00	0.00	0.00	0.00	1766553.59	14621918.69	40°15'37.828"N	80°32'52.335"W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
226.00	0.00	249.000	226.00	0.00	0.00	0.00	0.00	1766553.59	14621918.69	40°15'37.828"N	80°32'52.335"W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
326.00	0.00	249.000	326.00	0.00	0.00	0.00	0.00	1766553.59	14621918.69	40°15'37.828"N	80°32'52.335"W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
426.00	0.00	249.000	426.00	0.00	0.00	0.00	0.00	1766553.59	14621918.69	40°15'37.828"N	80°32'52.335"W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	249.000	500.00	0.00	0.00	0.00	0.00	1766553.59	14621918.69	40°15'37.828"N	80°32'52.335"W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
526.00	0.390	249.000	526.00	0.01	-0.03	-0.08	0.00	1766553.51	14621918.66	40°15'37.828"N	80°32'52.336"W	0.09	0.09	249.000	1.50	1.50	-426.92		
626.00	1.890	249.000	625.98	0.22	-0.74	-1.94	0.00	1766551.65	14621917.95	40°15'37.821"N	80°32'52.360"W	2.08	2.08	249.000	1.50	1.50	0.00		
726.00	3.390	249.000	725.87	0.70	-2.40	-5.24	0.00	1766547.35	14621916.30	40°15'37.805"N	80°32'52.416"W	6.68	6.68	249.000	1.50	1.50	0.00		
826.00	4.890	249.000	825.60	1.45	-4.98	-12.98	0.00	1766540.62	14621913.71	40°15'37.780"N	80°32'52.503"W	13.90	13.90	249.000	1.50	1.50	0.00		
900.00	6.000	249.000	899.27	2.19	-7.50	-19.54	0.00	1766534.06	14621911.19	40°15'37.755"N	80°32'52.588"W	20.92	20.92	249.000	1.50	1.50	0.00		
926.00	6.000	249.000	925.13	2.47	-8.47	-22.07	0.00	1766531.53	14621910.22	40°15'37.746"N	80°32'52.620"W	23.64	23.64	249.000	0.00	0.00	0.00		
1026.00	6.000	249.000	1024.58	3.56	-12.22	-31.83	0.00	1766521.77	14621906.48	40°15'37.709"N	80°32'52.747"W	34.10	34.10	249.000	0.00	0.00	0.00		
1126.98	6.000	249.000	1124.03	4.66	-15.96	-41.59	0.00	1766512.02	14621902.73	40°15'37.673"N	80°32'52.873"W	44.55	44.55	249.000	0.00	0.00	0.00		
1127.98	6.000	249.000	1126.00	4.68	-16.04	-41.78	0.00	1766511.82	14621902.66	40°15'37.672"N	80°32'52.875"W	44.76	44.76	249.000	0.00	0.00	0.00		
1226.00	6.000	249.000	1223.48	5.75	-19.71	-51.35	0.00	1766502.26	14621898.99	40°15'37.636"N	80°32'52.999"W	55.00	55.00	249.000	0.00	0.00	0.00		
1326.00	6.000	249.000	1322.94	6.84	-23.46	-61.11	0.00	1766492.51	14621895.24	40°15'37.600"N	80°32'53.125"W	65.45	65.45	249.000	0.00	0.00	0.00		
1426.00	6.000	249.000	1422.39	7.93	-27.20	-70.87	0.00	1766482.75	14621891.50	40°15'37.563"N	80°32'53.251"W	75.91	75.91	249.000	0.00	0.00	0.00		
1526.00	6.000	249.000	1521.84	9.03	-30.95	-80.62	0.00	1766473.00	14621887.75	40°15'37.527"N	80°32'53.377"W	86.36	86.36	249.000	0.00	0.00	0.00		
1626.00	6.000	249.000	1621.29	10.12	-34.69	-90.38	0.00	1766463.24	14621884.01	40°15'37.490"N	80°32'53.503"W	96.81	96.81	249.000	0.00	0.00	0.00		
1636.77	6.000	249.000	1632.00	10.24	-35.10	-91.43	0.00	1766462.19	14621883.61	40°15'37.486"N	80°32'53.517"W	97.94	97.94	249.000	0.00	0.00	0.00	Big Injun Base-1632' TVD	
1726.00	6.000	249.000	1720.74	11.21	-38.44	-100.14	0.00	1766453.49	14621880.26	40°15'37.453"N	80°32'53.629"W	107.27	107.27	249.000	0.00	0.00	0.00		
1800.00	6.000	249.000	1794.34	12.02	-41.21	-107.36	0.00	1766446.27	14621877.49	40°15'37.423"N	80°32'53.723"W	115.00	115.00	249.000	0.00	0.00	0.00		
1826.00	6.520	249.146	1820.18	12.32	-42.22	-110.01	0.00	1766443.62	14621876.48	40°15'37.417"N	80°32'53.757"W	117.84	117.84	249.002	2.00	2.00	0.56		
1926.00	8.519	249.543	1919.32	13.77	-46.84	-122.26	0.00	1766431.38	14621871.87	40°15'37.372"N	80°32'53.915"W	130.92	130.92	249.039	2.00	2.00	0.40		
1983.40	9.667	249.697	1976.00	14.82	-49.99	-130.76	0.00	1766422.88	14621868.72	40°15'37.341"N	80°32'54.025"W	139.99	139.99	249.077	2.00	2.00	0.27	Berea-1976' TVD	
2026.00	10.519	249.790	2017.94	15.70	-52.58	-137.76	0.00	1766415.88	14621866.13	40°15'37.316"N	80°32'54.116"W	147.46	147.46	249.111	2.00	2.00	0.22		
2126.00	12.518	249.959	2115.92	18.09	-59.45	-156.51	0.00	1766397.14	14621859.27	40°15'37.249"N	80°32'54.358"W	167.42	167.42	249.203	2.00	2.00	0.17		
2226.00	14.518	250.082	2213.14	20.95	-67.43	-178.48	0.00	1766375.18	14621851.29	40°15'37.171"N	80°32'54.642"W	190.79	190.79	249.303	2.00	2.00	0.12		

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REFERENCE WELLPATH IDENTIFICATION				
Operator	SOUTHWESTERN ENERGY		Slot	Slot #01
Area	Brooke County, WV		Well	Brooke County Parks BRK 1H
Field	Brooke		Wellbore	Brooke County Parks BRK 1H PWB
Facility	Brooke County Parks BRK Pad			

WELLPATH DATA (158 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
2287.58	15.750	250.142	2272.58	22.94	-72.90	-193.60	1766360.07	14621845.82	40°15'37.118"N	80°32'54.837"W	206.87	249.366	2.00	2.00	0.10	
2326.00†	15.750	250.142	2309.56	24.24	-76.44	-203.41	1766350.26	14621842.28	40°15'37.083"N	80°32'54.964"W	217.30	249.404	0.00	0.00	0.00	
2426.00†	15.750	250.142	2405.81	27.61	-85.66	-228.94	1766324.74	14621833.06	40°15'36.993"N	80°32'55.294"W	244.44	249.486	0.00	0.00	0.00	
2526.00†	15.750	250.142	2502.05	30.98	-94.88	-254.47	1766299.22	14621823.84	40°15'36.903"N	80°32'55.624"W	271.58	249.551	0.00	0.00	0.00	
2626.00†	15.750	250.142	2598.30	34.36	-104.10	-280.00	1766273.70	14621814.63	40°15'36.814"N	80°32'55.954"W	298.72	249.605	0.00	0.00	0.00	
2726.00†	15.750	250.142	2694.55	37.73	-113.32	-305.53	1766248.18	14621805.41	40°15'36.724"N	80°32'56.283"W	325.86	249.650	0.00	0.00	0.00	
2826.00†	15.750	250.142	2790.79	41.11	-122.54	-331.06	1766222.66	14621796.19	40°15'36.634"N	80°32'56.613"W	353.01	249.688	0.00	0.00	0.00	
2926.00†	15.750	250.142	2887.04	44.48	-131.76	-356.58	1766197.14	14621786.98	40°15'36.544"N	80°32'56.943"W	380.15	249.720	0.00	0.00	0.00	
3026.00†	15.750	250.142	2983.28	47.86	-140.98	-382.11	1766171.62	14621777.76	40°15'36.454"N	80°32'57.273"W	407.29	249.748	0.00	0.00	0.00	
3126.00†	15.750	250.142	3079.53	51.23	-150.20	-407.64	1766146.10	14621768.54	40°15'36.365"N	80°32'57.603"W	434.44	249.773	0.00	0.00	0.00	
3226.00†	15.750	250.142	3175.77	54.61	-159.42	-433.17	1766120.58	14621759.33	40°15'36.275"N	80°32'57.933"W	461.58	249.795	0.00	0.00	0.00	
3326.00†	15.750	250.142	3272.02	57.98	-168.64	-458.70	1766095.06	14621750.11	40°15'36.185"N	80°32'58.263"W	488.72	249.814	0.00	0.00	0.00	
3426.00†	15.750	250.142	3368.27	61.36	-177.86	-484.23	1766069.54	14621740.89	40°15'36.095"N	80°32'58.593"W	515.86	249.831	0.00	0.00	0.00	
3526.00†	15.750	250.142	3464.51	64.73	-187.08	-509.76	1766044.02	14621731.68	40°15'36.005"N	80°32'58.923"W	543.01	249.847	0.00	0.00	0.00	
3626.00†	15.750	250.142	3560.76	68.11	-196.30	-535.29	1766018.50	14621722.46	40°15'35.915"N	80°32'59.253"W	570.15	249.861	0.00	0.00	0.00	
3726.00†	15.750	250.142	3657.00	71.48	-205.52	-560.82	1765992.99	14621713.24	40°15'35.826"N	80°32'59.582"W	597.29	249.874	0.00	0.00	0.00	
3826.00†	15.750	250.142	3753.25	74.86	-214.74	-586.35	1765967.47	14621704.03	40°15'35.736"N	80°32'59.912"W	624.44	249.885	0.00	0.00	0.00	
3926.00†	15.750	250.142	3849.49	78.23	-223.96	-611.88	1765941.95	14621694.81	40°15'35.646"N	80°33'00.242"W	651.58	249.896	0.00	0.00	0.00	
4026.00†	15.750	250.142	3945.74	81.61	-233.18	-637.41	1765916.43	14621685.59	40°15'35.556"N	80°33'00.572"W	678.72	249.906	0.00	0.00	0.00	
4126.00†	15.750	250.142	4041.99	84.98	-242.40	-662.94	1765890.91	14621676.38	40°15'35.465"N	80°33'00.902"W	705.87	249.915	0.00	0.00	0.00	
4226.00†	15.750	250.142	4138.23	88.36	-251.63	-688.47	1765865.39	14621667.16	40°15'35.376"N	80°33'01.232"W	733.01	249.923	0.00	0.00	0.00	
4326.00†	15.750	250.142	4234.48	91.73	-260.85	-714.00	1765839.87	14621657.94	40°15'35.287"N	80°33'01.562"W	760.15	249.931	0.00	0.00	0.00	
4426.00†	15.750	250.142	4330.72	95.11	-270.07	-739.53	1765814.35	14621648.73	40°15'35.197"N	80°33'01.892"W	787.30	249.938	0.00	0.00	0.00	
4526.00†	15.750	250.142	4426.97	98.48	-279.29	-765.06	1765788.83	14621639.51	40°15'35.107"N	80°33'02.222"W	814.44	249.945	0.00	0.00	0.00	
4626.00†	15.750	250.142	4523.21	101.86	-288.51	-790.58	1765763.31	14621630.30	40°15'35.017"N	80°33'02.552"W	841.58	249.952	0.00	0.00	0.00	
4726.00†	15.750	250.142	4619.46	105.23	-297.73	-816.11	1765737.79	14621621.08	40°15'34.927"N	80°33'02.881"W	868.73	249.958	0.00	0.00	0.00	
4826.00†	15.750	250.142	4715.71	108.61	-306.95	-841.64	1765712.27	14621611.86	40°15'34.837"N	80°33'03.211"W	895.87	249.963	0.00	0.00	0.00	
4926.00†	15.750	250.142	4811.95	111.98	-316.17	-867.17	1765686.75	14621602.65	40°15'34.748"N	80°33'03.541"W	923.01	249.968	0.00	0.00	0.00	
5026.00†	15.750	250.142	4908.20	115.36	-325.39	-892.70	1765661.23	14621593.43	40°15'34.658"N	80°33'03.871"W	950.15	249.973	0.00	0.00	0.00	
5126.00†	15.750	250.142	5004.44	118.73	-334.61	-918.23	1765635.71	14621584.21	40°15'34.568"N	80°33'04.201"W	977.30	249.978	0.00	0.00	0.00	

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REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY	Slot	Slot #01
Area	Brooke County, WV	Well	Brooke County Parks BRK 1H
Field	Brooke	Wellbore	Brooke County Parks BRK 1H PWB
Facility	Brooke County Parks BRK Pad		

WELLPATH DATA (158 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
5226.00†	15.750	250.142	5100.69	122.11	-343.83	-943.76	1765610.19	14621575.00	40°15'34.478"N	80°33'04.531"W	1004.44	249.983	0.00	0.00	0.00	
5326.00†	15.750	250.142	5196.93	125.48	-353.05	-969.29	1765584.67	14621565.78	40°15'34.388"N	80°33'04.861"W	1031.58	249.987	0.00	0.00	0.00	
5426.00†	15.750	250.142	5293.18	128.86	-362.27	-994.82	1765559.15	14621556.56	40°15'34.298"N	80°33'05.191"W	1058.73	249.991	0.00	0.00	0.00	
5453.91	15.750	250.142	5320.05	129.80	-364.84	-1001.95	1765552.03	14621553.99	40°15'34.273"N	80°33'05.283"W	1066.30	249.992	0.00	0.00	0.00	
5499.61†	16.143	265.082	5364.00	132.96	-367.49	-1014.11	1765539.87	14621551.34	40°15'34.248"N	80°33'05.440"W	1078.65	250.081	9.00	0.86	32.70	Upper Rhinestreet-5364' TVD
5526.00†	16.819	273.117	5389.31	136.25	-367.60	-1021.58	1765532.40	14621551.23	40°15'34.247"N	80°33'05.536"W	1085.71	250.210	9.00	2.56	30.44	
5616.50†	21.042	294.831	5475.00	155.63	-360.05	-1049.45	1765504.55	14621558.78	40°15'34.323"N	80°33'05.895"W	1109.49	251.064	9.00	4.67	23.99	Lower Rhinestreet-5475' TVD
5626.00†	21.611	296.586	5483.85	158.38	-358.55	-1052.56	1765501.43	14621560.27	40°15'34.338"N	80°33'05.935"W	1111.96	251.189	9.00	5.99	18.47	
5681.74†	25.262	305.267	5535.00	177.18	-347.08	-1071.46	1765482.54	14621571.74	40°15'34.452"N	80°33'06.178"W	1126.28	252.051	9.00	6.55	15.57	Basal Rhinestreet-5535' TVD
5726.00†	28.443	310.588	5574.49	195.29	-334.77	-1087.18	1765466.82	14621584.05	40°15'34.575"N	80°33'06.380"W	1137.56	252.885	9.00	7.19	12.02	
5765.83†	31.450	314.502	5609.00	213.92	-321.31	-1101.80	1765452.21	14621597.50	40°15'34.708"N	80°33'06.568"W	1147.70	253.742	9.00	7.55	9.83	Cashaqua-5609' TVD
5826.00†	36.174	319.271	5658.99	246.08	-296.83	-1124.60	1765429.42	14621621.97	40°15'34.951"N	80°33'06.860"W	1163.12	255.214	9.00	7.85	7.93	
5832.23†	36.672	319.703	5664.00	249.67	-294.02	-1127.00	1765427.02	14621624.78	40°15'34.979"N	80°33'06.891"W	1164.73	255.378	9.00	8.01	6.93	Middlesex-5664' TVD
5863.93†	39.233	321.752	5689.00	268.73	-278.92	-1139.34	1765414.69	14621639.87	40°15'35.129"N	80°33'07.049"W	1172.98	256.244	9.00	8.08	6.46	Lower Middlesex-5689' TVD
5903.60†	42.481	324.019	5719.00	294.27	-258.23	-1154.98	1765399.06	14621660.56	40°15'35.334"N	80°33'07.250"W	1183.49	257.397	9.00	8.19	5.71	Burket-5719' TVD
5926.00†	44.333	325.177	5735.27	309.49	-245.68	-1163.89	1765390.14	14621673.10	40°15'35.459"N	80°33'07.364"W	1189.54	258.081	9.00	8.27	5.17	
5931.23†	44.767	325.437	5739.00	313.13	-242.66	-1165.98	1765388.06	14621676.12	40°15'35.489"N	80°33'07.391"W	1190.96	258.243	9.00	8.30	4.96	Tully-5739' TVD
6023.60†	52.514	329.462	5800.00	382.07	-184.21	-1203.12	1765350.94	14621734.55	40°15'36.068"N	80°33'07.866"W	1217.14	261.295	9.00	8.39	4.36	Hamilton-5800' TVD
6026.00†	52.718	329.555	5801.46	383.97	-182.57	-1204.09	1765349.97	14621736.19	40°15'36.085"N	80°33'07.878"W	1217.85	261.378	9.00	8.46	3.87	
6126.00†	61.231	333.044	5855.92	467.69	-109.05	-1244.19	1765309.87	14621809.68	40°15'36.813"N	80°33'08.391"W	1248.96	264.991	9.00	8.51	3.49	
6226.00†	69.821	336.001	5897.32	558.57	-26.94	-1283.23	1765270.85	14621891.76	40°15'37.626"N	80°33'08.889"W	1283.51	268.797	9.00	8.59	2.96	
6246.20†	71.562	336.554	5904.00	577.60	-9.49	-1290.90	1765263.19	14621909.20	40°15'37.799"N	80°33'08.987"W	1290.93	269.579	9.00	8.62	2.74	Levanna-5904' TVD
6308.93†	76.979	338.209	5921.00	637.78	46.23	-1314.10	1765239.99	14621964.90	40°15'38.351"N	80°33'09.282"W	1314.91	272.015	9.00	8.63	2.64	Upper Marcellus-5921' TVD
6326.00†	78.455	338.646	5924.63	654.38	61.74	-1320.23	1765233.86	14621980.40	40°15'38.505"N	80°33'09.360"W	1321.68	272.677	9.00	8.65	2.56	
6426.00†	87.111	341.132	5937.18	752.77	154.81	-1354.29	1765199.82	14622073.44	40°15'39.426"N	80°33'09.794"W	1363.11	276.521	9.00	8.66	2.49	
6465.13	90.500	342.088	5938.00†	791.44	191.92	-1366.63	1765187.48	14622110.54	40°15'39.793"N	80°33'09.950"W	1380.04	277.994	9.00	8.66	2.44	
6526.00†	90.500	342.088	5937.47	851.55	249.84	-1385.35	1765168.77	14622168.44	40°15'40.367"N	80°33'10.188"W	1407.70	280.223	0.00	0.00	0.00	
6626.00†	90.500	342.088	5936.60	950.29	344.99	-1416.11	1765138.03	14622263.55	40°15'41.308"N	80°33'10.579"W	1457.52	283.692	0.00	0.00	0.00	
6726.00†	90.500	342.088	5935.72	1049.03	440.14	-1446.86	1765107.28	14622358.66	40°15'42.250"N	80°33'10.969"W	1512.33	286.920	0.00	0.00	0.00	
6826.00†	90.500	342.088	5934.85	1147.77	535.29	-1477.61	1765076.54	14622453.77	40°15'43.192"N	80°33'11.360"W	1571.59	289.914	0.00	0.00	0.00	

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REFERENCE WELLPATH IDENTIFICATION				
Operator	SOUTHWESTERN ENERGY		Slot	Slot #01
Area	Brooke County, WV		Well	Brooke County Parks BRK 1H
Field	Brooke		Wellbore	Brooke County Parks BRK 1H PWB
Facility	Brooke County Parks BRK Pad			

WELLPATH DATA (158 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
6926.00†	90.500	342.088	5933.98	1246.51	630.44	-1508.37	1765045.80	14622548.89	40°15'44.134"N	80°33'11.750"W	1634.82	292.683	0.00	0.00	0.00	
7026.00†	90.500	342.088	5933.11	1345.25	725.59	-1539.12	1765015.06	14622644.00	40°15'45.075"N	80°33'12.141"W	1701.58	295.241	0.00	0.00	0.00	
7126.00†	90.500	342.088	5932.23	1443.99	820.74	-1569.88	1764984.31	14622739.11	40°15'46.017"N	80°33'12.531"W	1771.48	297.601	0.00	0.00	0.00	
7226.00†	90.500	342.088	5931.36	1542.73	915.89	-1600.63	1764953.57	14622834.23	40°15'46.959"N	80°33'12.922"W	1844.15	299.778	0.00	0.00	0.00	
7326.00†	90.500	342.088	5930.49	1641.48	1011.04	-1631.39	1764922.83	14622929.34	40°15'47.901"N	80°33'13.312"W	1919.28	301.788	0.00	0.00	0.00	
7426.00†	90.500	342.088	5929.61	1740.22	1106.19	-1662.14	1764892.09	14623024.45	40°15'48.843"N	80°33'13.703"W	1996.59	303.644	0.00	0.00	0.00	
7526.00†	90.500	342.088	5928.74	1838.96	1201.34	-1692.90	1764861.34	14623119.56	40°15'49.784"N	80°33'14.093"W	2075.84	305.361	0.00	0.00	0.00	
7626.00†	90.500	342.088	5927.87	1937.70	1296.48	-1723.65	1764830.60	14623214.68	40°15'50.726"N	80°33'14.484"W	2156.81	306.950	0.00	0.00	0.00	
7726.00†	90.500	342.088	5927.00	2036.44	1391.63	-1754.41	1764799.86	14623309.79	40°15'51.668"N	80°33'14.874"W	2239.33	308.422	0.00	0.00	0.00	
7826.00†	90.500	342.088	5926.12	2135.18	1486.78	-1785.16	1764769.11	14623404.90	40°15'52.610"N	80°33'15.265"W	2323.21	309.789	0.00	0.00	0.00	
7926.00†	90.500	342.088	5925.25	2233.92	1581.93	-1815.92	1764738.37	14623500.02	40°15'53.551"N	80°33'15.655"W	2408.33	311.061	0.00	0.00	0.00	
8026.00†	90.500	342.088	5924.38	2332.66	1677.08	-1846.67	1764707.63	14623595.13	40°15'54.493"N	80°33'16.046"W	2494.55	312.245	0.00	0.00	0.00	
8126.00†	90.500	342.088	5923.51	2431.40	1772.23	-1877.43	1764676.89	14623690.24	40°15'55.435"N	80°33'16.437"W	2581.77	313.349	0.00	0.00	0.00	
8226.00†	90.500	342.088	5922.63	2530.14	1867.38	-1908.18	1764646.14	14623785.35	40°15'56.377"N	80°33'16.827"W	2669.88	314.381	0.00	0.00	0.00	
8326.00†	90.500	342.088	5921.76	2628.88	1962.53	-1938.93	1764615.40	14623880.47	40°15'57.318"N	80°33'17.218"W	2758.80	315.347	0.00	0.00	0.00	
8426.00†	90.500	342.088	5920.89	2727.63	2057.68	-1969.69	1764584.66	14623975.58	40°15'58.260"N	80°33'17.608"W	2848.46	316.252	0.00	0.00	0.00	
8526.00†	90.500	342.088	5920.02	2826.37	2152.83	-2000.44	1764553.91	14624070.69	40°15'59.202"N	80°33'17.999"W	2938.78	317.101	0.00	0.00	0.00	
8626.00†	90.500	342.088	5919.14	2925.11	2247.98	-2031.20	1764523.17	14624165.81	40°16'00.144"N	80°33'18.389"W	3029.71	317.900	0.00	0.00	0.00	
8726.00†	90.500	342.088	5918.27	3023.85	2343.13	-2061.95	1764492.43	14624260.92	40°16'01.086"N	80°33'18.780"W	3121.20	318.652	0.00	0.00	0.00	
8826.00†	90.500	342.088	5917.40	3122.59	2438.28	-2092.71	1764461.69	14624356.03	40°16'02.027"N	80°33'19.170"W	3213.19	319.361	0.00	0.00	0.00	
8926.00†	90.500	342.088	5916.53	3221.33	2533.43	-2123.46	1764430.94	14624451.14	40°16'02.969"N	80°33'19.561"W	3305.65	320.031	0.00	0.00	0.00	
9026.00†	90.500	342.088	5915.65	3320.07	2628.58	-2154.22	1764400.20	14624546.26	40°16'03.911"N	80°33'19.952"W	3398.54	320.664	0.00	0.00	0.00	
9126.00†	90.500	342.088	5914.78	3418.81	2723.72	-2184.97	1764369.46	14624641.37	40°16'04.853"N	80°33'20.342"W	3491.82	321.263	0.00	0.00	0.00	
9226.00†	90.500	342.088	5913.91	3517.55	2818.87	-2215.73	1764338.71	14624736.48	40°16'05.794"N	80°33'20.733"W	3585.46	321.832	0.00	0.00	0.00	
9326.00†	90.500	342.088	5913.03	3616.29	2914.02	-2246.48	1764307.97	14624831.59	40°16'06.736"N	80°33'21.123"W	3679.43	322.371	0.00	0.00	0.00	
9426.00†	90.500	342.088	5912.16	3715.04	3009.17	-2277.24	1764277.23	14624926.71	40°16'07.678"N	80°33'21.514"W	3773.71	322.883	0.00	0.00	0.00	
9526.00†	90.500	342.088	5911.29	3813.78	3104.32	-2307.99	1764246.49	14625021.82	40°16'08.620"N	80°33'21.905"W	3868.29	323.370	0.00	0.00	0.00	
9626.00†	90.500	342.088	5910.42	3912.52	3199.47	-2338.74	1764215.74	14625116.93	40°16'09.561"N	80°33'22.295"W	3963.12	323.834	0.00	0.00	0.00	
9726.00†	90.500	342.088	5909.54	4011.26	3294.62	-2369.50	1764185.00	14625212.05	40°16'10.503"N	80°33'22.686"W	4058.21	324.276	0.00	0.00	0.00	
9826.00†	90.500	342.088	5908.67	4110.00	3389.77	-2400.25	1764154.26	14625307.16	40°16'11.445"N	80°33'23.076"W	4153.52	324.698	0.00	0.00	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY	Slot	Slot #01
Area	Brooke County, WV	Well	Brooke County Parks BRK 1H
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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]	Comments
9926.00†	90.500	342.088	5907.80	4208.74	3484.92	-2431.01	1764123.51	14625402.27	40°16'12.387"N	80°33'23.467"W	4249.05	325.101	0.00	0.00	0.00	
10026.00†	90.500	342.088	5906.93	4307.48	3580.07	-2461.76	1764092.77	14625497.38	40°16'13.328"N	80°33'23.858"W	4344.79	325.486	0.00	0.00	0.00	
10126.00†	90.500	342.088	5906.05	4406.22	3675.22	-2492.52	1764062.03	14625592.50	40°16'14.270"N	80°33'24.248"W	4440.71	325.855	0.00	0.00	0.00	
10226.00†	90.500	342.088	5905.18	4504.96	3770.37	-2523.27	1764031.29	14625687.61	40°16'15.212"N	80°33'24.639"W	4536.80	326.208	0.00	0.00	0.00	
10326.00†	90.500	342.088	5904.31	4603.70	3865.52	-2554.03	1764000.54	14625782.72	40°16'16.154"N	80°33'25.029"W	4633.06	326.546	0.00	0.00	0.00	
10426.00†	90.500	342.088	5903.44	4702.45	3960.67	-2584.78	1763969.80	14625877.84	40°16'17.096"N	80°33'25.420"W	4729.48	326.871	0.00	0.00	0.00	
10526.00†	90.500	342.088	5902.56	4801.19	4055.81	-2615.54	1763939.06	14625972.95	40°16'18.037"N	80°33'25.811"W	4826.04	327.183	0.00	0.00	0.00	
10626.00†	90.500	342.088	5901.69	4899.93	4150.96	-2646.29	1763908.31	14626068.06	40°16'18.979"N	80°33'26.201"W	4922.74	327.482	0.00	0.00	0.00	
10726.00†	90.500	342.088	5900.82	4998.67	4246.11	-2677.05	1763877.57	14626163.17	40°16'19.921"N	80°33'26.592"W	5019.57	327.770	0.00	0.00	0.00	
10826.00†	90.500	342.088	5899.94	5097.41	4341.26	-2707.80	1763846.83	14626258.29	40°16'20.863"N	80°33'26.983"W	5116.52	328.047	0.00	0.00	0.00	
10926.00†	90.500	342.088	5899.07	5196.15	4436.41	-2738.55	1763816.09	14626353.40	40°16'21.804"N	80°33'27.373"W	5213.58	328.313	0.00	0.00	0.00	
11026.00†	90.500	342.088	5898.20	5294.89	4531.56	-2769.31	1763785.34	14626448.51	40°16'22.746"N	80°33'27.764"W	5310.76	328.570	0.00	0.00	0.00	
11126.00†	90.500	342.088	5897.33	5393.63	4626.71	-2800.06	1763754.60	14626543.63	40°16'23.688"N	80°33'28.154"W	5408.03	328.818	0.00	0.00	0.00	
11226.00†	90.500	342.088	5896.45	5492.37	4721.86	-2830.82	1763723.86	14626638.74	40°16'24.630"N	80°33'28.545"W	5505.41	329.057	0.00	0.00	0.00	
11326.00†	90.500	342.088	5895.58	5591.11	4817.01	-2861.57	1763693.12	14626733.85	40°16'25.571"N	80°33'28.936"W	5602.87	329.287	0.00	0.00	0.00	
11426.00†	90.500	342.088	5894.71	5689.85	4912.16	-2892.33	1763662.37	14626828.96	40°16'26.513"N	80°33'29.326"W	5700.43	329.510	0.00	0.00	0.00	
11526.00†	90.500	342.088	5893.84	5788.60	5007.31	-2923.08	1763631.63	14626924.08	40°16'27.455"N	80°33'29.717"W	5798.06	329.725	0.00	0.00	0.00	
11626.00†	90.500	342.088	5892.96	5887.34	5102.46	-2953.84	1763600.89	14627019.19	40°16'28.397"N	80°33'30.108"W	5895.78	329.933	0.00	0.00	0.00	
11726.00†	90.500	342.088	5892.09	5986.08	5197.61	-2984.59	1763570.14	14627114.30	40°16'29.338"N	80°33'30.498"W	5993.57	330.135	0.00	0.00	0.00	
11826.00†	90.500	342.088	5891.22	6084.82	5292.76	-3015.35	1763539.40	14627209.41	40°16'30.280"N	80°33'30.889"W	6091.43	330.329	0.00	0.00	0.00	
11926.00†	90.500	342.088	5890.35	6183.56	5387.91	-3046.10	1763508.66	14627304.53	40°16'31.222"N	80°33'31.280"W	6189.37	330.518	0.00	0.00	0.00	
12026.00†	90.500	342.088	5889.47	6282.30	5483.05	-3076.86	1763477.92	14627399.64	40°16'32.164"N	80°33'31.670"W	6287.36	330.701	0.00	0.00	0.00	
12126.00†	90.500	342.088	5888.60	6381.04	5578.20	-3107.61	1763447.17	14627494.75	40°16'33.105"N	80°33'32.061"W	6385.42	330.878	0.00	0.00	0.00	
12226.00†	90.500	342.088	5887.73	6479.78	5673.35	-3138.36	1763416.43	14627589.87	40°16'34.047"N	80°33'32.452"W	6483.54	331.050	0.00	0.00	0.00	
12326.00†	90.500	342.088	5886.85	6578.52	5768.50	-3169.12	1763385.69	14627684.98	40°16'34.989"N	80°33'32.842"W	6581.71	331.216	0.00	0.00	0.00	
12426.00†	90.500	342.088	5885.98	6677.26	5863.65	-3199.87	1763354.94	14627780.09	40°16'35.931"N	80°33'33.233"W	6679.94	331.378	0.00	0.00	0.00	
12526.00†	90.500	342.088	5885.11	6776.01	5958.80	-3230.63	1763324.20	14627875.20	40°16'36.872"N	80°33'33.624"W	6778.22	331.535	0.00	0.00	0.00	
12626.00†	90.500	342.088	5884.24	6874.75	6053.95	-3261.38	1763293.46	14627970.32	40°16'37.814"N	80°33'34.014"W	6876.55	331.688	0.00	0.00	0.00	
12726.00†	90.500	342.088	5883.36	6973.49	6149.10	-3292.14	1763262.72	14628065.43	40°16'38.756"N	80°33'34.405"W	6974.93	331.836	0.00	0.00	0.00	
12826.00†	90.500	342.088	5882.49	7072.23	6244.25	-3322.89	1763231.97	14628160.54	40°16'39.698"N	80°33'34.796"W	7073.35	331.980	0.00	0.00	0.00	



Planned Wellpath Report

Brooke County Parks BRK 1H PWP Rev-A.0
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot #01
Area	Brooke County, WV	Well	Brooke County Parks BRK 1H
Field	Brooke	Wellbore	Brooke County Parks BRK 1H PWB
Facility	Brooke County Parks BRK Pad		

WELLPATH DATA (158 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
12926.00†	90.500	342.088	5881.62	7170.97	6339.40	-3353.65	1763201.23	14628255.66	40°16'40.639"N	80°33'35.187"W	7171.81	332.120	0.00	0.00	0.00	
13026.00†	90.500	342.088	5880.75	7269.71	6434.55	-3384.40	1763170.49	14628350.77	40°16'41.581"N	80°33'35.577"W	7270.32	332.257	0.00	0.00	0.00	
13126.00†	90.500	342.088	5879.87	7368.45	6529.70	-3415.16	1763139.74	14628445.88	40°16'42.523"N	80°33'35.968"W	7368.87	332.390	0.00	0.00	0.00	
13226.00†	90.500	342.088	5879.00	7467.19	6624.85	-3445.91	1763109.00	14628540.99	40°16'43.465"N	80°33'36.359"W	7467.46	332.519	0.00	0.00	0.00	
13326.00†	90.500	342.088	5878.13	7565.93	6720.00	-3476.67	1763078.26	14628636.11	40°16'44.406"N	80°33'36.749"W	7566.08	332.645	0.00	0.00	0.00	
13426.00†	90.500	342.088	5877.26	7664.67	6815.14	-3507.42	1763047.52	14628731.22	40°16'45.348"N	80°33'37.140"W	7664.74	332.767	0.00	0.00	0.00	
13526.00†	90.500	342.088	5876.38	7763.42	6910.29	-3538.17	1763016.77	14628826.33	40°16'46.290"N	80°33'37.531"W	7763.43	332.887	0.00	0.00	0.00	
13622.50	90.500	342.088	5875.54 ²	7858.70	7002.12	-3567.85	1762987.10	14628918.12	40°16'47.199"N	80°33'37.908"W	7858.70	332.999	0.00	0.00	0.00	

HOLE & CASING SECTIONS - Ref Wellbore: Brooke County Parks BRK 1H PWB Ref Wellpath: Brooke County Parks BRK 1H PWP Rev-A.0									
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	126.00	100.00	26.00	126.00	0.00	0.00	0.00	0.00
17.5in Open Hole	126.00	350.00	224.00	126.00	350.00	0.00	0.00	0.00	0.00
13.375in Casing Surface	26.00	350.00	324.00	26.00	350.00	0.00	0.00	0.00	0.00
12.25in Open Hole	350.00	1687.04	1337.04	350.00	1682.00	0.00	0.00	-36.98	-96.34
9.625in Casing Intermediate	26.00	1687.04	1661.04	26.00	1682.00	0.00	0.00	-36.98	-96.34
8.75in Open Hole	1687.04	5450.00	3762.96	1682.00	5316.28	-36.98	-96.34	-364.48	-1000.95
8.5in Open Hole	5450.00	13622.50	8172.50	5316.28	5875.54	-364.48	-1000.95	7002.12	-3567.85
5.5in Casing Production	26.00	13622.50	13596.50	26.00	5875.54	0.00	0.00	7002.12	-3567.85



Planned Wellpath Report

Brooke County Parks BRK 1H PWP Rev-A.0
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot #01
Area	Brooke County, WV	Well	Brooke County Parks BRK 1H
Field	Brooke	Wellbore	Brooke County Parks BRK 1H PWB
Facility	Brooke County Parks BRK Pad		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
2) Brooke County Parks BRK 1H BHL Rev-5	13622.50	5875.54	7002.12	-3567.85	1762987.11	14628918.12	40°16'47.199"N	80°33'37.908"W	point
1) Brooke County Parks BRK 1H LP Rev-5	6465.13	5938.00	191.92	-1366.63	1765187.49	14622110.54	40°15'39.793"N	80°33'09.950"W	point

SURVEY PROGRAM - Ref Wellbore: Brooke County Parks BRK 1H PWB Ref Wellpath: Brooke County Parks BRK 1H PWP Rev-A.0					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	
26.00	350.00	OWSG EMS rev2 + HRGM	MSS <17-1/2">	Brooke County Parks BRK 1H PWB	
350.00	1650.00	BHI NaviTrak (Axial)	APS EM <12-1/4">	Brooke County Parks BRK 1H PWB	
1650.00	5450.00	BHI NaviTrak (Axial)	APS EM <8-3/4">	Brooke County Parks BRK 1H PWB	
5450.00	13622.50	BHI AutoTrak Curve (Short)	AT Curve <8-1/2">	Brooke County Parks BRK 1H PWB	