



XTO ENERGY INC



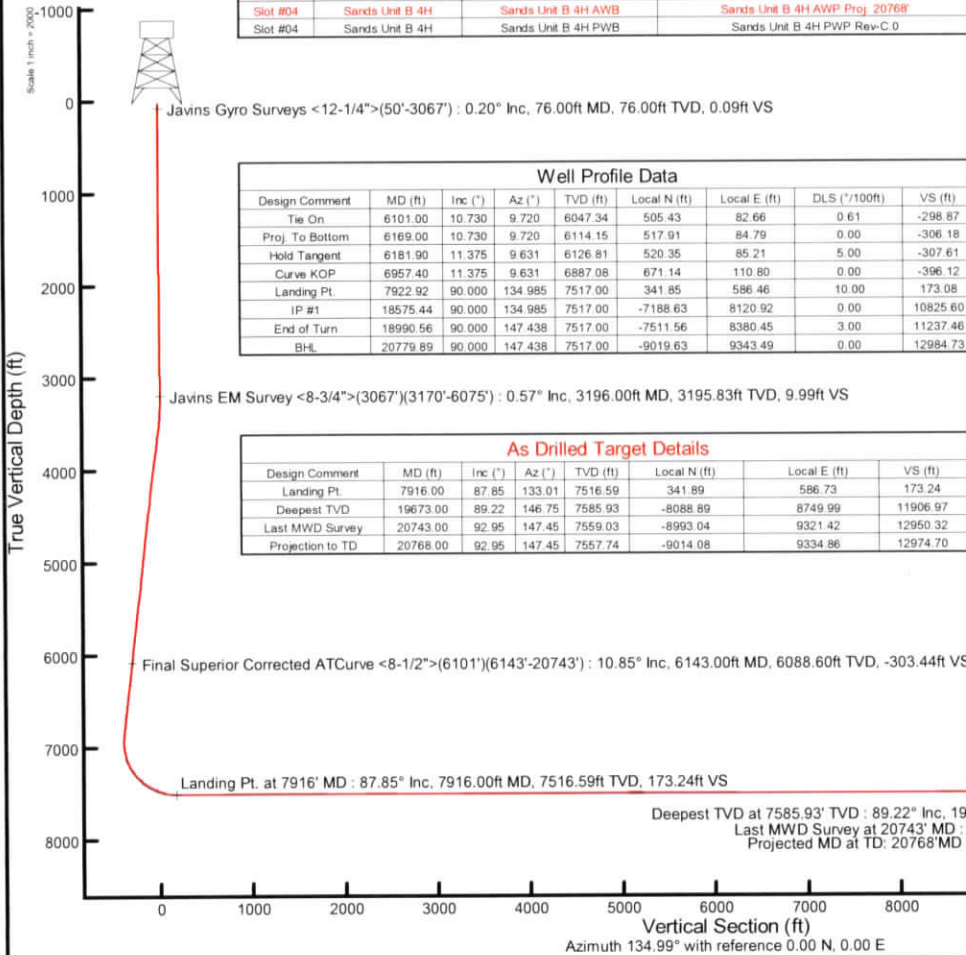
Location: Marion County, WV
 Field: Marion
 Facility: Sands Pad

Slot: Slot #04
 Well: Sands Unit B 4H
 Wellbore: Sands Unit B 4H PWB

Plot reference wellpath is Sands Unit B 4H PWP Rev-C.0	Grid System: NAD27 / Lambert West Virginia SP, Northern Zone (4701) US feet
True vertical depths are referenced to Patterson 579 (RKB)	North Reference: True north
Reference wellpath measured depths are referenced to Patterson 579 (RKB)	Scale: True distance
Patterson 579 (RKB) to Mean Sea Level: 1261 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot Slot #04): -1235 feet	Depths are in feet
Other wellpath MDs are referenced to each path's default MD datum	Created by: daleton on 20240207 Database: VVA_MPL_EachemUS_Datb

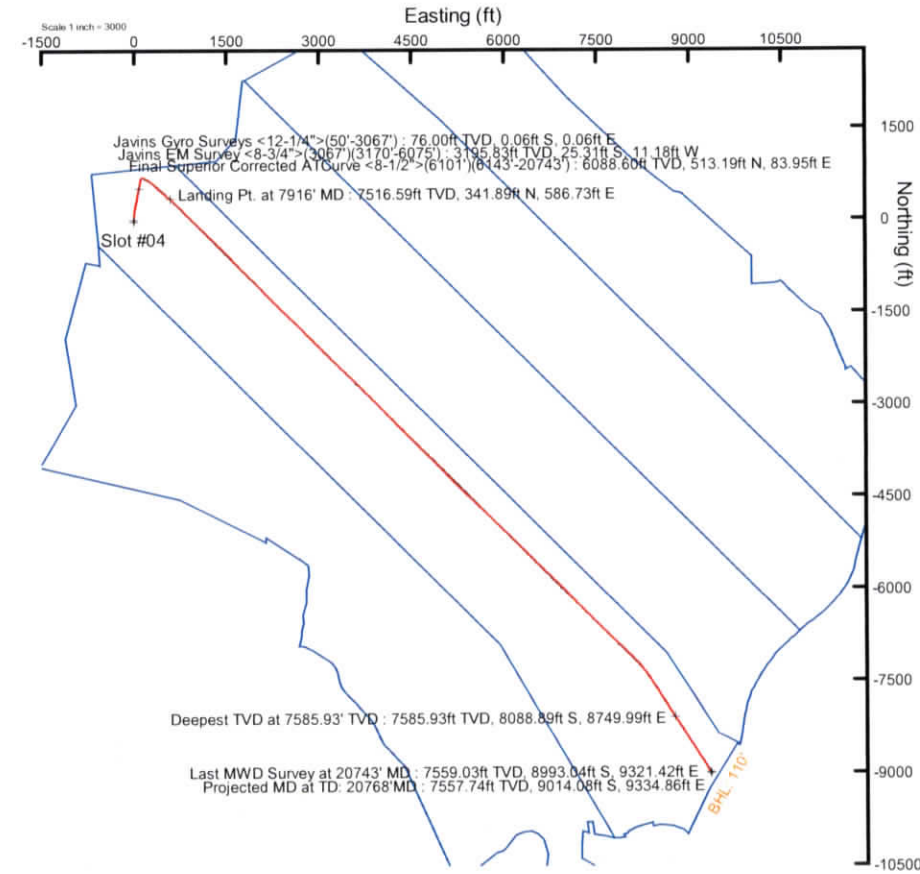
Location Information				
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Sands Pad	1770291.903	351831.811	30°27'47.2674"N	80°18'48.9893"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
Slot #04	-0.00	-0.00	1770291.900	351831.810
			30°27'47.2674"N	80°18'48.9893"W
Patterson 579 (RKB) to Ground level (At Slot Slot #04)	26ft			
Mean Sea Level to Ground level (At Slot Slot #04)	-1235ft			
Patterson 579 (RKB) to Mean Sea Level	1261ft			

Well Data			
Slot	Well	Wellbore	Wellpath
Slot #04	Sands Unit B 4H	Sands Unit B 4H AWB	Sands Unit B 4H AWP Proj. 20768
Slot #04	Sands Unit B 4H	Sands Unit B 4H PWB	Sands Unit B 4H PWP Rev-C.0

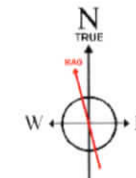


Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	6101.00	10.730	9.720	6047.34	505.43	82.66	0.61	-298.87
Proj To Bottom	6169.00	10.730	9.720	6114.15	517.91	84.79	0.00	-306.18
Hold Tangent	6181.90	11.375	9.631	6126.81	520.35	85.21	5.00	-307.61
Curve KOP	6957.40	11.375	9.631	6887.08	671.14	110.80	0.00	-396.12
Landing Pt.	7922.92	90.000	134.985	7517.00	341.85	586.46	10.00	173.08
IP #1	18575.44	90.000	134.985	7517.00	-7188.63	8120.92	0.00	10825.60
End of Turn	18990.56	90.000	147.438	7517.00	-7511.56	8380.45	3.00	11237.46
BHL	20779.89	90.000	147.438	7517.00	-9019.63	9343.49	0.00	12984.73

As Drilled Target Details					
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	VS (ft)
Landing Pt.	7916.00	87.85	133.01	7516.59	173.24
Deepest TVD	19673.00	89.22	146.75	7585.93	11906.97
Last MWD Survey	20743.00	92.95	147.45	7559.03	12950.32
Projection to TD	20768.00	92.95	147.45	7557.74	12974.70



API: 47-049-02492-0000
 BHI Job #: 110067661A
 Rig: Patteron 579
 Duration: 01/20/2020-01/28/2020



User specified (HDGM) Dip: 66.43° Field: 52140 nT
 Magnetic North is 9.13 degrees West of True North (at 1/17/2020)
 To correct azimuth from Magnetic to True subtract 9.13 degrees

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Actual Wellpath Report

Sands Unit B 4H AWP Proj: 20768'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 4H
Field	Marion	API	47-049-02492-0000
Facility	Sands Pad	Wellbore	Sands Unit B 4H AWB
Slot	Slot #04		

REPORT SETUP INFORMATION			
Projection System	NAD27 / Lambert West Virginia SP, Northern Zone (4701), US feet	Software System	WellArchitect® 6.0
North Reference	True	User	Delaset
Scale	0.999945	Report Generated	2/7/2020 at 11:05:32 AM
Convergence at slot	0.52° West	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	1770291.90	351831.81	39°27'47.2674"N	80°18'48.9893"W
Facility Reference Pt			1770291.90	351831.81	39°27'47.2674"N	80°18'48.9893"W
Field Reference Pt			609601.22	0.00	38°23'48.7532"N	84°21'9.7646"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Patterson 579 (RKB) to Facility Vertical Datum	1261.00ft
Horizontal Reference Pt	Slot	Patterson 579 (RKB) to Mean Sea Level	1261.00ft
Vertical Reference Pt	Patterson 579 (RKB)	Patterson 579 (RKB) to Ground Level at Slot (Slot #04)	26.00ft
MD Reference Pt	Patterson 579 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	134.99°

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REFERENCE WELLPATH IDENTIFICATION			
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Field	Marion	API	47-049-02492-0000
Facility	Sands Pad	Wellbore	Sands Unit B 4H AWB
Slot	Slot #04		

WELLPATH DATA (252 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†	0.000	134.100	0.00	0.00	0.00	0.00	1770291.90	351831.81	39°27'47.2674"N	80°18'48.9893"W	0.00	0.000	0.00	0.00	0.00	
26.00	0.000	134.100	26.00	0.00	0.00	0.00	1770291.90	351831.81	39°27'47.2674"N	80°18'48.9893"W	0.00	0.000	0.00	0.00	0.00	
76.00	0.200	134.100	76.00	0.09	-0.06	0.06	1770291.96	351831.75	39°27'47.2668"N	80°18'48.9885"W	0.09	134.100	0.40	0.40	0.00	Javins Gyro Surveys <12-1/4">(50'-3067')
126.00	0.200	86.900	126.00	0.23	-0.12	0.21	1770292.11	351831.69	39°27'47.2662"N	80°18'48.9866"W	0.24	118.786	0.32	0.00	0.00	-94.40
176.00	0.160	169.800	176.00	0.35	-0.18	0.31	1770292.21	351831.63	39°27'47.2656"N	80°18'48.9854"W	0.36	120.084	0.48	-0.08	165.80	
226.00	0.340	209.100	226.00	0.45	-0.38	0.25	1770292.15	351831.43	39°27'47.2636"N	80°18'48.9861"W	0.46	146.364	0.48	0.36	78.60	
276.00	0.550	218.400	276.00	0.51	-0.70	0.03	1770291.92	351831.11	39°27'47.2605"N	80°18'48.9889"W	0.70	177.454	0.44	0.42	18.60	
326.00	0.610	220.500	325.99	0.56	-1.09	-0.29	1770291.60	351830.73	39°27'47.2566"N	80°18'48.9931"W	1.13	194.981	0.13	0.12	4.20	
376.00	0.630	220.700	375.99	0.60	-1.50	-0.64	1770291.24	351830.32	39°27'47.2526"N	80°18'48.9975"W	1.63	203.232	0.04	0.04	0.40	
426.00	0.740	218.700	425.99	0.66	-1.96	-1.02	1770290.86	351829.86	39°27'47.2480"N	80°18'49.0024"W	2.21	207.608	0.23	0.22	-4.00	
476.00	0.710	239.200	475.98	0.62	-2.37	-1.49	1770290.39	351829.45	39°27'47.2440"N	80°18'49.0084"W	2.80	212.205	0.52	-0.06	41.00	
526.00	0.770	235.800	525.98	0.48	-2.72	-2.04	1770289.84	351829.11	39°27'47.2405"N	80°18'49.0153"W	3.39	216.853	0.15	0.12	-6.80	
576.00	0.920	203.100	575.98	0.57	-3.27	-2.47	1770289.40	351828.56	39°27'47.2350"N	80°18'49.0209"W	4.10	217.044	0.99	0.30	-65.40	
626.00	0.950	202.700	625.97	0.87	-4.03	-2.79	1770289.07	351827.81	39°27'47.2276"N	80°18'49.0249"W	4.90	214.710	0.06	0.06	-0.80	
676.00	0.460	217.600	675.96	1.06	-4.57	-3.07	1770288.79	351827.27	39°27'47.2222"N	80°18'49.0285"W	5.50	213.918	1.04	-0.98	29.80	
726.00	0.630	221.200	725.96	1.10	-4.93	-3.37	1770288.48	351826.91	39°27'47.2186"N	80°18'49.0324"W	5.98	214.375	0.35	0.34	7.20	
776.00	0.560	226.300	775.96	1.11	-5.31	-3.73	1770288.12	351826.54	39°27'47.2149"N	80°18'49.0369"W	6.49	215.110	0.18	-0.14	10.20	
826.00	0.780	230.900	825.96	1.07	-5.69	-4.17	1770287.68	351826.16	39°27'47.2111"N	80°18'49.0426"W	7.06	216.246	0.45	0.44	9.20	
876.00	0.480	224.700	875.95	1.04	-6.06	-4.58	1770287.26	351825.80	39°27'47.2075"N	80°18'49.0478"W	7.60	217.128	0.61	-0.60	-12.40	
926.00	0.620	231.300	925.95	1.01	-6.37	-4.94	1770286.90	351825.48	39°27'47.2044"N	80°18'49.0524"W	8.07	217.795	0.31	0.28	13.20	
976.00	0.560	220.600	975.95	1.00	-6.73	-5.31	1770286.53	351825.13	39°27'47.2009"N	80°18'49.0571"W	8.57	218.297	0.25	-0.12	-21.40	
1026.00	0.450	220.700	1025.95	1.03	-7.06	-5.60	1770286.24	351824.80	39°27'47.1976"N	80°18'49.0607"W	9.01	218.411	0.22	-0.22	0.20	
1126.00	0.320	232.700	1125.94	1.02	-7.53	-6.08	1770285.75	351824.34	39°27'47.1930"N	80°18'49.0668"W	9.68	218.912	0.15	-0.13	12.00	
1176.00	0.100	141.400	1175.94	1.05	-7.65	-6.16	1770285.67	351824.22	39°27'47.1918"N	80°18'49.0679"W	9.82	218.858	0.67	-0.44	-182.60	
1226.00	0.300	230.800	1225.94	1.08	-7.77	-6.24	1770285.59	351824.10	39°27'47.1906"N	80°18'49.0689"W	9.96	218.769	0.63	0.40	178.80	
1276.00	0.220	160.500	1275.94	1.15	-7.94	-6.31	1770285.52	351823.93	39°27'47.1889"N	80°18'49.0697"W	10.14	218.462	0.61	-0.16	-140.60	
1326.00	0.270	231.600	1325.94	1.23	-8.10	-6.37	1770285.46	351823.77	39°27'47.1873"N	80°18'49.0705"W	10.30	218.158	0.58	0.10	142.20	
1376.00	0.270	228.500	1375.94	1.21	-8.25	-6.55	1770285.28	351823.62	39°27'47.1858"N	80°18'49.0728"W	10.53	218.422	0.03	0.00	-6.20	
1426.00	0.290	227.600	1425.94	1.19	-8.42	-6.73	1770285.10	351823.45	39°27'47.1842"N	80°18'49.0751"W	10.78	218.639	0.04	0.04	-1.80	
1476.00	0.310	121.100	1475.94	1.32	-8.57	-6.71	1770285.12	351823.30	39°27'47.1827"N	80°18'49.0748"W	10.88	218.037	0.96	0.04	-213.00	

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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 4H
Field	Marion	API	47-049-02492-0000
Facility	Sands Pad	Wellbore	Sands Unit B 4H AWB
Slot	Slot #04		

WELLPATH DATA (252 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)	Comments
1526.00	0.530	206.100	1525.94	1.52	-8.85	-6.69	1770285.13	351823.02	39°27'47.1799"N	80°18'49.0747"W	11.10	217.096	1.18	0.44	170.00	
1576.00	0.230	224.300	1575.94	1.60	-9.13	-6.86	1770284.95	351822.74	39°27'47.1772"N	80°18'49.0769"W	11.42	216.938	0.64	-0.60	36.40	
1626.00	0.240	226.100	1625.94	1.60	-9.27	-7.01	1770284.81	351822.60	39°27'47.1757"N	80°18'49.0787"W	11.62	217.084	0.02	0.02	3.60	
1676.00	0.340	215.400	1675.94	1.62	-9.47	-7.17	1770284.64	351822.41	39°27'47.1738"N	80°18'49.0808"W	11.88	217.142	0.23	0.20	-21.40	
1726.00	0.210	152.600	1725.94	1.73	-9.67	-7.21	1770284.60	351822.21	39°27'47.1718"N	80°18'49.0813"W	12.06	216.727	0.61	-0.26	-125.60	
1776.00	0.640	170.100	1775.94	2.05	-10.03	-7.12	1770284.69	351821.85	39°27'47.1683"N	80°18'49.0802"W	12.30	215.398	0.89	0.86	35.00	
1826.00	0.280	138.600	1825.93	2.40	-10.39	-7.00	1770284.81	351821.48	39°27'47.1647"N	80°18'49.0785"W	12.53	213.946	0.85	-0.72	-63.00	
1876.00	0.360	156.700	1875.93	2.67	-10.63	-6.85	1770284.95	351821.24	39°27'47.1623"N	80°18'49.0767"W	12.65	212.812	0.26	0.16	36.20	
1926.00	0.340	149.500	1925.93	2.96	-10.90	-6.72	1770285.09	351820.97	39°27'47.1597"N	80°18'49.0750"W	12.80	211.635	0.10	-0.04	-14.40	
1976.00	0.420	162.900	1975.93	3.26	-11.20	-6.59	1770285.21	351820.67	39°27'47.1567"N	80°18'49.0733"W	13.00	210.449	0.24	0.16	26.80	
2026.00	0.450	163.200	2025.93	3.60	-11.57	-6.48	1770285.32	351820.30	39°27'47.1531"N	80°18'49.0719"W	13.26	209.242	0.06	0.06	0.60	
2076.00	0.520	168.900	2075.93	3.96	-11.98	-6.38	1770285.42	351819.89	39°27'47.1490"N	80°18'49.0706"W	13.57	208.024	0.17	0.14	11.40	
2126.00	0.600	168.800	2125.93	4.37	-12.46	-6.28	1770285.51	351819.41	39°27'47.1443"N	80°18'49.0694"W	13.95	206.756	0.16	0.16	-0.20	
2176.00	0.700	175.100	2175.92	4.82	-13.02	-6.20	1770285.58	351818.85	39°27'47.1387"N	80°18'49.0684"W	14.42	205.480	0.25	0.20	12.60	
2226.00	0.700	174.200	2225.92	5.29	-13.63	-6.15	1770285.63	351818.24	39°27'47.1327"N	80°18'49.0677"W	14.95	204.280	0.02	0.00	-1.80	
2276.00	0.760	179.500	2275.91	5.76	-14.26	-6.11	1770285.66	351817.61	39°27'47.1264"N	80°18'49.0673"W	15.52	203.201	0.18	0.12	10.60	
2326.00	0.740	179.000	2325.91	6.23	-14.92	-6.10	1770285.66	351816.95	39°27'47.1200"N	80°18'49.0672"W	16.12	202.257	0.04	-0.04	-1.00	
2376.00	0.800	181.100	2375.91	6.70	-15.59	-6.11	1770285.65	351816.28	39°27'47.1133"N	80°18'49.0672"W	16.74	201.389	0.13	0.12	4.20	
2426.00	0.660	181.500	2425.90	7.14	-16.22	-6.12	1770285.63	351815.64	39°27'47.1070"N	80°18'49.0674"W	17.34	200.666	0.28	-0.28	0.80	
2476.00	0.680	179.400	2475.90	7.55	-16.81	-6.12	1770285.62	351815.06	39°27'47.1013"N	80°18'49.0674"W	17.89	200.018	0.06	0.04	-4.20	
2526.00	0.640	182.200	2525.90	7.95	-17.38	-6.13	1770285.61	351814.48	39°27'47.0956"N	80°18'49.0675"W	18.43	199.428	0.10	-0.08	5.60	
2576.00	0.710	191.500	2575.89	8.32	-17.97	-6.20	1770285.53	351813.90	39°27'47.0898"N	80°18'49.0684"W	19.01	199.050	0.26	0.14	18.60	
2626.00	0.800	216.300	2625.89	8.54	-18.55	-6.47	1770285.26	351813.32	39°27'47.0840"N	80°18'49.0719"W	19.65	199.233	0.67	0.18	49.60	
2676.00	0.790	217.800	2675.88	8.63	-19.11	-6.89	1770284.84	351812.77	39°27'47.0786"N	80°18'49.0772"W	20.31	199.832	0.05	-0.02	3.00	
2726.00	0.790	219.600	2725.88	8.71	-19.64	-7.32	1770284.40	351812.23	39°27'47.0732"N	80°18'49.0827"W	20.96	200.441	0.05	0.00	3.60	
2776.00	0.770	218.400	2775.87	8.78	-20.17	-7.75	1770283.97	351811.71	39°27'47.0680"N	80°18'49.0882"W	21.61	201.015	0.05	-0.04	-2.40	
2826.00	0.790	219.500	2825.87	8.85	-20.70	-8.18	1770283.54	351811.18	39°27'47.0628"N	80°18'49.0936"W	22.26	201.555	0.05	0.04	2.20	
2876.00	0.900	217.700	2875.86	8.94	-21.28	-8.64	1770283.07	351810.61	39°27'47.0571"N	80°18'49.0995"W	22.97	202.092	0.23	0.22	-3.60	
2926.00	0.930	216.500	2925.86	9.05	-21.92	-9.12	1770282.58	351809.98	39°27'47.0508"N	80°18'49.1056"W	23.74	202.591	0.07	0.06	-2.40	
2976.00	0.840	200.000	2975.85	9.26	-22.59	-9.49	1770282.21	351809.31	39°27'47.0442"N	80°18'49.1103"W	24.50	202.781	0.54	-0.18	-33.00	

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REFERENCE WELLPATH IDENTIFICATION			
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Field	Marion	API	47-049-02492-0000
Facility	Sands Pad	Wellbore	Sands Unit B 4H AWB
Slot	Slot #04		

WELLPATH DATA (252 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
5754.00	10.760	11.970	5706.96	-260.86	439.20	70.20	1770366.07	352270.33	39°27'51.6082"N	80°18'48.0942"W	444.77	9.081	0.39	-0.38	0.30	
5849.00	11.130	10.390	5800.23	-270.90	456.89	73.70	1770369.73	352287.99	39°27'51.7831"N	80°18'48.0497"W	462.80	9.163	0.50	0.39	-1.66	
5944.00	11.730	10.900	5893.34	-281.52	475.39	77.17	1770373.37	352306.46	39°27'51.9659"N	80°18'48.0053"W	481.62	9.221	0.64	0.63	0.54	
6038.00	11.100	10.230	5985.48	-292.03	493.68	80.59	1770376.95	352324.71	39°27'52.1467"N	80°18'47.9618"W	500.22	9.271	0.68	-0.67	-0.71	
6101.00	10.730	9.720	6047.34	-298.87	505.43	82.66	1770379.12	352336.44	39°27'52.2628"N	80°18'47.9355"W	512.14	9.288	0.61	-0.59	-0.81	
6143.00	10.850	9.220	6088.60	-303.44	513.19	83.95	1770380.49	352344.19	39°27'52.3394"N	80°18'47.9190"W	520.01	9.290	0.36	0.29	-1.19	Final Superior Corrected ATCurve <8-1/2">(6101')(6143'-20743')
6238.00	10.790	9.080	6181.91	-313.88	530.79	86.79	1770383.48	352361.77	39°27'52.5134"N	80°18'47.8828"W	537.84	9.286	0.07	-0.06	-0.15	
6332.00	10.900	11.910	6274.23	-323.90	548.18	90.01	1770386.86	352379.12	39°27'52.6853"N	80°18'47.8417"W	555.52	9.324	0.58	0.12	3.01	
6427.00	13.380	11.280	6367.10	-334.90	567.75	94.01	1770391.04	352398.65	39°27'52.8787"N	80°18'47.7907"W	575.48	9.402	2.61	2.61	-0.66	
6522.00	12.110	10.820	6459.76	-346.60	588.32	98.03	1770395.25	352419.18	39°27'53.0820"N	80°18'47.7394"W	596.43	9.460	1.34	-1.34	-0.48	
6616.00	12.120	11.020	6551.67	-357.65	607.69	101.77	1770399.16	352438.52	39°27'53.2734"N	80°18'47.6917"W	616.15	9.507	0.05	0.01	0.21	
6711.00	11.980	11.030	6644.57	-368.73	627.16	105.56	1770403.13	352457.95	39°27'53.4658"N	80°18'47.6434"W	635.98	9.555	0.15	-0.15	0.01	
6806.00	12.020	11.300	6737.50	-379.73	646.53	109.39	1770407.13	352477.29	39°27'53.6573"N	80°18'47.5946"W	655.72	9.603	0.07	0.04	0.28	
6901.00	11.620	12.280	6830.48	-390.38	665.58	113.36	1770411.28	352496.30	39°27'53.8456"N	80°18'47.5439"W	675.17	9.666	0.47	-0.42	1.03	
6995.00	11.530	30.560	6922.60	-397.84	682.93	120.15	1770418.23	352513.58	39°27'54.0170"N	80°18'47.4573"W	693.42	9.978	3.89	-0.10	19.45	
7089.00	11.840	82.050	7014.89	-394.36	692.37	134.52	1770432.67	352522.90	39°27'54.1104"N	80°18'47.2742"W	705.32	10.995	10.74	0.33	54.78	
7184.00	18.940	105.360	7106.51	-375.05	689.63	159.09	1770457.22	352519.93	39°27'54.0833"N	80°18'46.9609"W	707.75	12.990	9.77	7.47	24.54	
7278.00	27.690	118.580	7192.81	-340.74	675.11	193.07	1770491.06	352505.10	39°27'53.9397"N	80°18'46.5276"W	702.17	15.960	10.79	9.31	14.06	
7373.00	37.060	125.050	7272.98	-291.25	648.04	236.00	1770533.74	352477.65	39°27'53.6722"N	80°18'45.9803"W	689.67	20.010	10.50	9.86	6.81	
7468.00	45.680	130.500	7344.23	-229.04	609.44	285.38	1770582.77	352438.61	39°27'53.2908"N	80°18'45.3506"W	672.95	25.092	9.83	9.07	5.74	
7563.00	54.970	133.340	7404.82	-156.11	560.56	339.64	1770636.58	352389.24	39°27'52.8077"N	80°18'44.6589"W	655.43	31.211	10.04	9.78	2.99	
7657.00	64.080	133.000	7452.44	-75.22	505.20	398.67	1770695.10	352333.35	39°27'52.2605"N	80°18'43.9062"W	643.56	38.278	9.70	9.69	-0.36	
7752.00	72.570	130.220	7487.50	12.81	446.69	464.65	1770760.55	352274.25	39°27'51.6821"N	80°18'43.0650"W	644.54	46.129	9.34	8.94	-2.93	
7846.00	80.420	129.860	7509.44	103.80	387.94	534.57	1770829.93	352214.87	39°27'51.1015"N	80°18'42.1734"W	660.50	54.032	8.36	8.35	-0.38	
7916.00†	87.845	133.008	7516.59	173.24	341.89	586.73	1770881.66	352168.35	39°27'50.6463"N	80°18'41.5085"W	679.07	59.771	11.51	10.61	4.50	Landing Pt. at 7916' MD
7941.00	90.500	134.120	7516.95	198.23	324.66	604.84	1770899.62	352150.96	39°27'50.4761"N	80°18'41.2776"W	686.46	61.774	11.51	10.62	4.45	
8035.00	90.160	132.100	7516.41	292.17	260.42	673.46	1770967.65	352086.11	39°27'49.8412"N	80°18'40.4027"W	722.06	68.859	2.18	-0.36	-2.15	
8130.00	90.900	134.580	7515.53	387.12	195.23	742.54	1771036.14	352020.30	39°27'49.1968"N	80°18'39.5219"W	767.78	75.269	2.72	0.78	2.61	
8225.00	90.830	136.860	7514.10	482.10	127.23	808.85	1771101.83	351951.70	39°27'48.5247"N	80°18'38.6764"W	818.80	81.061	2.40	-0.07	2.40	
8320.00	90.100	134.990	7513.33	577.08	58.98	874.93	1771167.28	351882.87	39°27'47.8502"N	80°18'37.8339"W	876.92	86.143	2.11	-0.77	-1.97	

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Actual Wellpath Report

Sands Unit B 4H AWP Proj: 20768'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 4H
Field	Marion	API	47-049-02492-0000
Facility	Sands Pad	Wellbore	Sands Unit B 4H AWB
Slot	Slot #04		

WELLPATH DATA (252 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)	Comments
8414.00	90.770	134.370	7512.61	671.07	-7.11	941.77	1771233.51	351816.17	39°27'47.1970"N	80°18'36.9818"W	941.79	90.432	0.97	0.71	-0.66	
8509.00	90.560	135.530	7511.51	766.06	-74.22	1008.99	1771300.12	351748.46	39°27'46.5337"N	80°18'36.1247"W	1011.72	94.207	1.24	-0.22	1.22	
8603.00	89.790	133.720	7511.22	860.06	-140.25	1075.89	1771366.42	351681.83	39°27'45.8810"N	80°18'35.2718"W	1084.99	97.427	2.09	-0.82	-1.93	
8698.00	89.910	133.970	7511.47	955.04	-206.05	1144.41	1771434.33	351615.41	39°27'45.2306"N	80°18'34.3982"W	1162.81	100.207	0.29	0.13	0.26	
8792.00	90.400	135.110	7511.22	1049.03	-271.99	1211.41	1771500.72	351548.88	39°27'44.5790"N	80°18'33.5441"W	1241.56	102.654	1.32	0.52	1.21	
8887.00	89.970	133.890	7510.91	1144.03	-338.57	1279.16	1771567.87	351481.69	39°27'43.9208"N	80°18'32.6802"W	1323.21	104.825	1.36	-0.45	-1.28	
8981.00	90.250	134.620	7510.73	1238.02	-404.17	1346.49	1771634.60	351415.49	39°27'43.2725"N	80°18'31.8219"W	1405.84	106.708	0.83	0.30	0.78	
9076.00	89.540	134.540	7510.90	1333.01	-470.85	1414.15	1771701.65	351348.20	39°27'42.6134"N	80°18'30.9592"W	1490.48	108.415	0.75	-0.75	-0.08	
9170.00	89.970	134.490	7511.31	1427.01	-536.75	1481.18	1771768.08	351281.70	39°27'41.9620"N	80°18'30.1047"W	1575.44	109.919	0.46	0.46	-0.05	
9265.00	89.820	135.820	7511.48	1522.01	-604.10	1548.17	1771834.45	351213.74	39°27'41.2963"N	80°18'29.2506"W	1661.86	111.316	1.41	-0.16	1.40	
9359.00	89.700	137.220	7511.87	1615.97	-672.31	1612.85	1771898.51	351144.96	39°27'40.6222"N	80°18'28.4260"W	1747.37	112.629	1.49	-0.13	1.49	
9453.00	89.850	135.680	7512.24	1709.94	-740.44	1677.61	1771962.64	351076.25	39°27'39.9488"N	80°18'27.6004"W	1833.75	113.815	1.65	0.16	-1.64	
9548.00	89.880	135.200	7512.47	1804.93	-808.12	1744.27	1772028.68	351007.97	39°27'39.2798"N	80°18'26.7506"W	1922.38	114.858	0.51	0.03	-0.51	
9642.00	89.140	134.690	7513.27	1898.93	-874.53	1810.80	1772094.60	350940.97	39°27'38.6234"N	80°18'25.9024"W	2010.92	115.778	0.96	-0.79	-0.54	
9737.00	90.160	135.070	7513.85	1993.92	-941.56	1878.11	1772161.30	350873.34	39°27'37.9609"N	80°18'25.0443"W	2100.91	116.626	1.15	1.07	0.40	
9832.00	90.470	135.010	7513.33	2088.92	-1008.78	1945.24	1772227.81	350805.51	39°27'37.2965"N	80°18'24.1885"W	2191.25	117.411	0.33	0.33	-0.06	
9927.00	90.370	136.780	7512.63	2183.90	-1076.99	2011.35	1772293.30	350736.71	39°27'36.6222"N	80°18'23.3456"W	2281.55	118.167	1.87	-0.11	1.86	
10116.00	90.160	137.000	7511.76	2372.80	-1214.97	2140.52	1772421.20	350597.58	39°27'35.2585"N	80°18'21.6991"W	2461.29	119.579	0.16	-0.11	0.12	
10210.00	89.760	134.570	7511.82	2466.78	-1282.33	2206.06	1772486.13	350529.62	39°27'34.5926"N	80°18'20.8635"W	2551.68	120.168	2.62	-0.43	-2.59	
10305.00	89.510	134.820	7512.43	2561.78	-1349.15	2273.59	1772553.05	350462.20	39°27'33.9322"N	80°18'20.0026"W	2643.75	120.685	0.37	-0.26	0.26	
10399.00	89.820	134.830	7512.98	2655.78	-1415.41	2340.26	1772619.11	350395.34	39°27'33.2772"N	80°18'19.1526"W	2735.00	121.166	0.33	0.33	0.01	
10494.00	89.630	134.390	7513.43	2750.77	-1482.13	2407.89	1772686.13	350328.02	39°27'32.6178"N	80°18'18.2905"W	2827.48	121.614	0.50	-0.20	-0.46	
10588.00	90.130	133.950	7513.63	2844.76	-1547.63	2475.31	1772752.96	350261.92	39°27'31.9703"N	80°18'17.4310"W	2919.30	122.015	0.71	0.53	-0.47	
10682.00	89.880	134.320	7513.62	2938.75	-1613.08	2542.78	1772819.82	350195.86	39°27'31.3233"N	80°18'16.5709"W	3011.27	122.390	0.48	-0.27	0.39	
10776.00	89.760	133.530	7513.92	3032.73	-1678.29	2610.48	1772886.93	350130.04	39°27'30.6788"N	80°18'15.7079"W	3103.43	122.737	0.85	-0.13	-0.84	
10871.00	90.370	135.900	7513.81	3127.73	-1745.13	2677.98	1772953.82	350062.60	39°27'30.0182"N	80°18'14.8474"W	3196.41	123.091	2.58	0.64	2.49	
10966.00	90.930	136.430	7512.73	3222.70	-1813.65	2743.77	1773018.98	349993.49	39°27'29.3409"N	80°18'14.0087"W	3289.02	123.465	0.81	0.59	0.56	
11061.00	90.030	135.890	7511.94	3317.68	-1882.17	2809.57	1773084.15	349924.39	39°27'28.6636"N	80°18'13.1699"W	3381.75	123.819	1.10	-0.95	-0.57	
11155.00	90.280	135.370	7511.68	3411.67	-1949.36	2875.31	1773149.27	349856.60	39°27'27.9994"N	80°18'12.3320"W	3473.81	124.136	0.61	0.27	-0.55	
11250.00	90.160	135.410	7511.32	3506.67	-2016.99	2942.02	1773215.37	349788.37	39°27'27.3309"N	80°18'11.4815"W	3567.04	124.434	0.13	-0.13	0.04	

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Actual Wellpath Report

Sands Unit B 4H AWP Proj: 20768'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 4H
Field	Marion	API	47-049-02492-0000
Facility	Sands Pad	Wellbore	Sands Unit B 4H AWB
Slot	Slot #04		

WELLPATH DATA (252 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)	Comments
11345.00	89.880	136.300	7511.28	3601.65	-2085.16	3008.19	1773280.91	349719.61	39°27'26.6571"N	80°18'10.6381"W	3660.20	124.728	0.98	-0.29	0.94	
11440.00	90.070	135.760	7511.33	3696.64	-2153.53	3074.14	1773346.24	349650.65	39°27'25.9813"N	80°18'9.7973"W	3753.41	125.012	0.60	0.20	-0.57	
11534.00	89.880	134.050	7511.37	3790.63	-2219.89	3140.72	1773412.21	349583.70	39°27'25.3254"N	80°18'8.9486"W	3846.04	125.253	1.83	-0.20	-1.82	
11629.00	90.190	134.670	7511.31	3885.63	-2286.31	3208.64	1773479.52	349516.67	39°27'24.6688"N	80°18'8.0828"W	3939.87	125.472	0.73	0.33	0.65	
11723.00	90.100	132.620	7511.07	3979.60	-2351.18	3276.66	1773546.94	349451.19	39°27'24.0276"N	80°18'7.2158"W	4032.93	125.662	2.18	-0.10	-2.18	
11818.00	90.070	133.400	7510.93	4074.54	-2415.98	3346.12	1773615.82	349385.76	39°27'23.3870"N	80°18'6.3303"W	4127.17	125.830	0.82	-0.03	0.82	
11912.00	89.820	133.370	7511.02	4168.50	-2480.55	3414.44	1773683.54	349320.58	39°27'22.7488"N	80°18'5.4595"W	4220.37	125.998	0.27	-0.27	-0.03	
12007.00	90.370	133.720	7510.86	4263.47	-2546.00	3483.30	1773751.80	349254.52	39°27'22.1018"N	80°18'4.5817"W	4314.56	126.164	0.69	0.58	0.37	
12102.00	90.130	134.100	7510.45	4358.45	-2611.88	3551.74	1773819.63	349188.02	39°27'21.4506"N	80°18'3.7093"W	4408.71	126.330	0.47	-0.25	0.40	
12197.00	90.280	135.230	7510.11	4453.45	-2678.66	3619.30	1773886.59	349120.63	39°27'20.7905"N	80°18'2.8481"W	4502.73	126.505	1.20	0.16	1.19	
12291.00	90.280	135.580	7509.65	4547.45	-2745.60	3685.30	1773951.97	349053.11	39°27'20.1288"N	80°18'2.0068"W	4595.62	126.687	0.37	0.00	0.37	
12386.00	90.250	135.440	7509.21	4642.44	-2813.37	3751.87	1774017.93	348984.74	39°27'19.4589"N	80°18'1.1582"W	4689.52	126.865	0.15	-0.03	-0.15	
12481.00	89.760	135.270	7509.20	4737.44	-2880.96	3818.63	1774084.06	348916.55	39°27'18.7908"N	80°18'0.3073"W	4783.50	127.033	0.55	-0.52	-0.18	
12575.00	90.560	136.020	7508.94	4831.43	-2948.17	3884.34	1774149.16	348848.76	39°27'18.1264"N	80°17'59.4697"W	4876.46	127.198	1.17	0.85	0.80	
12670.00	90.800	135.600	7507.81	4926.41	-3016.28	3950.56	1774214.75	348780.05	39°27'17.4531"N	80°17'58.6257"W	4970.40	127.362	0.51	0.25	-0.44	
12764.00	91.170	136.460	7506.20	5020.38	-3083.92	4015.81	1774279.39	348711.82	39°27'16.7845"N	80°17'57.7939"W	5063.33	127.522	1.00	0.39	0.91	
12859.00	90.310	136.440	7504.97	5115.34	-3152.77	4081.26	1774344.20	348642.39	39°27'16.1040"N	80°17'56.9597"W	5157.19	127.686	0.91	-0.91	-0.02	
12954.00	88.960	134.920	7505.57	5210.33	-3220.73	4147.63	1774409.95	348573.83	39°27'15.4322"N	80°17'56.1138"W	5251.28	127.830	2.14	-1.42	-1.60	
13048.00	89.360	135.390	7506.95	5304.32	-3287.37	4213.91	1774475.62	348506.60	39°27'14.7734"N	80°17'55.2689"W	5344.51	127.959	0.66	0.43	0.50	
13143.00	89.880	135.100	7507.58	5399.32	-3354.83	4280.79	1774541.89	348438.54	39°27'14.1066"N	80°17'54.4164"W	5438.76	128.086	0.63	0.55	-0.31	
13238.00	89.200	135.490	7508.34	5494.31	-3422.35	4347.62	1774608.10	348370.43	39°27'13.4392"N	80°17'53.5646"W	5533.01	128.209	0.83	-0.72	0.41	
13332.00	89.390	134.870	7509.50	5588.30	-3489.02	4413.87	1774673.74	348303.16	39°27'12.7801"N	80°17'52.7202"W	5626.32	128.325	0.69	0.20	-0.66	
13427.00	89.510	136.210	7510.41	5683.29	-3556.82	4480.40	1774739.65	348234.76	39°27'12.1099"N	80°17'51.8721"W	5720.58	128.445	1.42	0.13	1.41	
13522.00	89.820	135.470	7510.97	5778.28	-3624.97	4546.59	1774805.21	348166.02	39°27'11.4362"N	80°17'51.0286"W	5814.80	128.565	0.84	0.33	-0.78	
13616.00	89.820	135.770	7511.26	5872.27	-3692.16	4612.33	1774870.34	348098.25	39°27'10.7721"N	80°17'50.1906"W	5908.10	128.677	0.32	0.00	0.32	
13711.00	89.790	135.530	7511.59	5967.27	-3760.09	4678.74	1774936.13	348029.72	39°27'10.1006"N	80°17'49.3442"W	6002.40	128.787	0.25	-0.03	-0.25	
13806.00	90.070	135.250	7511.70	6062.26	-3827.72	4745.46	1775002.23	347961.49	39°27'9.4320"N	80°17'48.4938"W	6096.78	128.890	0.42	0.29	-0.29	
13900.00	89.540	134.610	7512.02	6156.26	-3894.10	4812.00	1775068.17	347894.51	39°27'8.7758"N	80°17'47.6456"W	6190.27	128.981	0.88	-0.56	-0.68	
13995.00	89.910	135.390	7512.48	6251.26	-3961.28	4879.18	1775134.73	347826.74	39°27'8.1117"N	80°17'46.7895"W	6284.75	129.072	0.91	0.39	0.82	
14089.00	90.000	135.870	7512.55	6345.25	-4028.47	4944.91	1775199.84	347758.95	39°27'7.4475"N	80°17'45.9517"W	6378.14	129.169	0.52	0.10	0.51	

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Actual Wellpath Report
Sands Unit B 4H AWP Proj: 20768'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 4H
Field	Marion	API	47-049-02492-0000
Facility	Sands Pad	Wellbore	Sands Unit B 4H AWB
Slot	Slot #04		

WELLPATH DATA (252 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)	Comments
14184.00	89.820	135.190	7512.70	6440.25	-4096.27	5011.46	1775265.77	347690.56	39°27'6.7773"N	80°17'45.1035"W	6472.57	129.262	0.74	-0.19	-0.72	
14279.00	89.880	135.060	7512.95	6535.25	-4163.59	5078.49	1775332.19	347622.64	39°27'6.1118"N	80°17'44.2492"W	6567.08	129.347	0.15	0.06	-0.14	
14373.00	89.330	137.520	7513.60	6629.21	-4231.53	5143.44	1775396.51	347554.12	39°27'5.4402"N	80°17'43.4214"W	6660.39	129.444	2.68	-0.59	2.62	
14467.00	89.700	134.910	7514.39	6723.18	-4299.38	5208.47	1775460.93	347485.68	39°27'4.7695"N	80°17'42.5925"W	6753.73	129.538	2.80	0.39	-2.78	
14562.00	90.350	134.660	7514.35	6818.18	-4366.30	5275.90	1775527.74	347418.16	39°27'4.1079"N	80°17'41.7331"W	6848.34	129.611	0.73	0.68	-0.26	
14657.00	89.790	133.830	7514.24	6913.17	-4432.59	5343.95	1775595.19	347351.26	39°27'3.4527"N	80°17'40.8658"W	6943.03	129.674	1.05	-0.59	-0.87	
14751.00	90.010	133.030	7514.40	7007.13	-4497.21	5412.22	1775662.86	347286.03	39°27'2.8138"N	80°17'39.9957"W	7036.83	129.724	0.88	0.23	-0.85	
14846.00	90.010	133.970	7514.38	7102.10	-4562.60	5481.13	1775731.17	347220.02	39°27'2.1674"N	80°17'39.1175"W	7131.62	129.775	0.99	0.00	0.99	
14941.00	90.010	134.380	7514.37	7197.09	-4628.80	5549.26	1775798.70	347153.21	39°27'1.5129"N	80°17'38.2491"W	7226.35	129.832	0.43	0.00	0.43	
15036.00	89.670	133.270	7514.63	7292.07	-4694.58	5617.80	1775866.63	347086.81	39°27'0.8626"N	80°17'37.3756"W	7321.12	129.884	1.22	-0.36	-1.17	
15130.00	89.850	134.090	7515.03	7386.04	-4759.50	5685.78	1775934.02	347021.29	39°27'0.2209"N	80°17'36.5092"W	7414.91	129.932	0.89	0.19	0.87	
15225.00	90.720	136.020	7514.55	7481.04	-4826.74	5752.88	1776000.51	346953.45	39°26'59.5562"N	80°17'35.6539"W	7509.53	129.997	2.23	0.92	2.03	
15319.00	89.580	134.440	7514.31	7575.03	-4893.47	5819.08	1776066.10	346886.13	39°26'58.8965"N	80°17'34.8103"W	7603.14	130.062	2.07	-1.21	-1.68	
15414.00	89.330	133.800	7515.21	7670.02	-4959.60	5887.28	1776133.69	346819.38	39°26'58.2428"N	80°17'33.9411"W	7697.90	130.112	0.72	-0.26	-0.67	
15509.00	89.670	133.450	7516.04	7764.98	-5025.14	5956.04	1776201.85	346753.23	39°26'57.5948"N	80°17'33.0648"W	7792.72	130.154	0.51	0.36	-0.37	
15603.00	90.660	133.960	7515.77	7858.96	-5090.09	6023.99	1776269.21	346687.67	39°26'56.9528"N	80°17'32.1987"W	7886.54	130.197	1.18	1.05	0.54	
15698.00	90.320	133.990	7514.96	7953.94	-5156.05	6092.36	1776336.97	346621.10	39°26'56.3007"N	80°17'31.3275"W	7981.33	130.242	0.36	-0.36	0.03	
15793.00	90.840	134.620	7514.00	8048.93	-5222.40	6160.34	1776404.34	346554.14	39°26'55.6447"N	80°17'30.4611"W	8076.09	130.289	0.86	0.55	0.66	
15887.00	90.250	133.530	7513.10	8142.91	-5287.78	6227.87	1776471.27	346488.15	39°26'54.9984"N	80°17'29.6005"W	8169.88	130.333	1.32	-0.63	-1.16	
15982.00	89.890	135.360	7512.99	8237.90	-5354.30	6295.69	1776538.48	346421.02	39°26'54.3408"N	80°17'28.7362"W	8264.64	130.380	1.96	-0.38	1.93	
16077.00	90.350	135.500	7512.79	8332.90	-5421.98	6362.35	1776604.53	346352.75	39°26'53.6717"N	80°17'27.8866"W	8359.27	130.438	0.51	0.48	0.15	
16171.00	90.320	134.830	7512.24	8426.90	-5488.64	6428.63	1776670.19	346285.50	39°26'53.0128"N	80°17'27.0420"W	8452.95	130.490	0.71	-0.03	-0.71	
16265.00	90.220	134.690	7511.79	8520.89	-5554.82	6495.37	1776736.33	346218.71	39°26'52.3584"N	80°17'26.1914"W	8546.69	130.537	0.18	-0.11	-0.15	
16360.00	90.190	135.290	7511.45	8615.89	-5621.99	6562.56	1776802.90	346150.95	39°26'51.6945"N	80°17'25.3351"W	8641.41	130.586	0.63	-0.03	0.63	
16455.00	89.520	134.210	7511.69	8710.89	-5688.87	6630.03	1776869.76	346083.46	39°26'51.0333"N	80°17'24.4754"W	8736.16	130.631	1.34	-0.71	-1.14	
16549.00	88.990	133.460	7512.92	8804.86	-5753.96	6697.83	1776936.96	346017.76	39°26'50.3897"N	80°17'23.6113"W	8830.00	130.665	0.98	-0.56	-0.80	
16644.00	88.750	134.780	7514.79	8899.83	-5820.08	6766.01	1777004.54	345951.03	39°26'49.7361"N	80°17'22.7424"W	8924.81	130.702	1.41	-0.25	1.39	
16739.00	88.010	135.270	7517.48	8994.79	-5887.26	6833.13	1777071.04	345883.25	39°26'49.0719"N	80°17'21.8871"W	9019.51	130.747	0.93	-0.78	0.52	
16834.00	88.780	134.220	7520.14	9089.75	-5954.11	6900.57	1777137.88	345815.80	39°26'48.4111"N	80°17'21.0276"W	9114.24	130.789	1.37	0.81	-1.11	
16928.00	89.090	136.170	7521.88	9183.73	-6020.79	6966.80	1777203.49	345748.52	39°26'47.7519"N	80°17'20.1836"W	9207.94	130.834	2.10	0.33	2.07	

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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 4H
Field	Marion	API	47-049-02492-0000
Facility	Sands Pad	Wellbore	Sands Unit B 4H AWB
Slot	Slot #04		

WELLPATH DATA (252 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)	Comments
17023.00	89.050	136.840	7523.43	9278.68	-6089.69	7032.18	1777268.24	345679.03	39°26'47.0707"N	80°17'19.3505"W	9302.47	130.892	0.71	-0.04	0.71	
17117.00	88.160	135.890	7525.72	9372.63	-6157.71	7097.02	1777332.46	345610.44	39°26'46.3983"N	80°17'18.5241"W	9396.02	130.946	1.38	-0.95	-1.01	
17212.00	88.190	135.980	7528.74	9467.56	-6225.93	7163.06	1777397.88	345541.62	39°26'45.7238"N	80°17'17.6826"W	9490.61	130.996	0.10	0.03	0.09	
17307.00	87.890	136.180	7531.99	9562.49	-6294.32	7228.92	1777463.11	345472.64	39°26'45.0477"N	80°17'16.8434"W	9585.19	131.047	0.38	-0.32	0.21	
17402.00	87.640	135.010	7535.69	9657.41	-6362.14	7295.34	1777528.91	345404.23	39°26'44.3772"N	80°17'15.9970"W	9679.82	131.091	1.26	-0.26	-1.23	
17497.00	87.760	134.640	7539.51	9752.34	-6429.05	7362.67	1777595.62	345336.71	39°26'43.7157"N	80°17'15.1390"W	9774.54	131.127	0.41	0.13	-0.39	
17591.00	87.730	135.000	7543.21	9846.26	-6495.26	7429.29	1777661.64	345269.91	39°26'43.0611"N	80°17'14.2900"W	9868.27	131.162	0.38	-0.03	0.38	
17686.00	86.870	135.330	7547.68	9941.16	-6562.56	7496.20	1777727.93	345202.02	39°26'42.3959"N	80°17'13.4374"W	9962.94	131.201	0.97	-0.91	0.35	
17781.00	86.960	133.420	7552.79	10036.01	-6628.89	7564.00	1777795.13	345135.07	39°26'41.7400"N	80°17'12.5734"W	10057.65	131.230	2.01	0.09	-2.01	
17874.00	87.330	135.800	7557.43	10128.88	-6694.12	7630.12	1777860.65	345069.25	39°26'41.0951"N	80°17'11.7309"W	10150.37	131.261	2.59	0.40	2.56	
17969.00	87.110	134.970	7562.03	10223.77	-6761.66	7696.76	1777926.68	345001.11	39°26'40.4274"N	80°17'10.8816"W	10245.01	131.300	0.90	-0.23	-0.87	
18064.00	89.080	133.800	7565.19	10318.70	-6828.07	7764.61	1777993.92	344934.09	39°26'39.7708"N	80°17'10.0170"W	10339.82	131.328	2.41	2.07	-1.23	
18159.00	88.870	133.290	7566.89	10413.66	-6893.51	7833.46	1778062.17	344868.04	39°26'39.1239"N	80°17'9.1397"W	10434.73	131.348	0.58	-0.22	-0.54	
18253.00	88.830	133.820	7568.78	10507.61	-6958.27	7901.57	1778129.68	344802.67	39°26'38.4836"N	80°17'8.2718"W	10528.64	131.368	0.57	-0.04	0.56	
18348.00	89.760	135.660	7569.95	10602.60	-7025.13	7969.04	1778196.54	344735.20	39°26'37.8226"N	80°17'7.4121"W	10623.47	131.398	2.17	0.98	1.94	
18443.00	88.770	133.970	7571.17	10697.58	-7092.08	8036.42	1778263.31	344667.65	39°26'37.1607"N	80°17'6.5535"W	10718.29	131.428	2.06	-1.04	-1.78	
18537.00	88.680	134.820	7573.26	10791.55	-7157.82	8103.57	1778329.86	344601.30	39°26'36.5107"N	80°17'5.6978"W	10812.14	131.454	0.91	-0.10	0.90	
18632.00	89.130	137.220	7575.07	10886.51	-7226.17	8169.52	1778395.18	344532.37	39°26'35.8350"N	80°17'4.8574"W	10906.82	131.494	2.57	0.47	2.53	
18727.00	89.310	142.000	7576.37	10981.17	-7298.50	8231.06	1778456.06	344459.49	39°26'35.1200"N	80°17'4.0734"W	11000.84	131.563	5.03	0.19	5.03	
18822.00	88.910	143.190	7577.84	11075.32	-7373.95	8288.76	1778513.07	344383.52	39°26'34.3740"N	80°17'3.3383"W	11094.08	131.657	1.32	-0.42	1.25	
18916.00	88.640	146.790	7579.85	11167.86	-7450.91	8342.67	1778566.27	344306.08	39°26'33.6132"N	80°17'2.6514"W	11185.53	131.768	3.84	-0.29	3.83	
19010.00	89.070	146.430	7581.73	11259.91	-7529.38	8394.39	1778617.28	344227.15	39°26'32.8375"N	80°17'1.9925"W	11276.40	131.891	0.60	0.46	-0.38	
19105.00	89.620	147.570	7582.82	11352.82	-7609.05	8446.12	1778668.29	344147.03	39°26'32.0500"N	80°17'1.3334"W	11368.14	132.015	1.33	0.58	1.20	
19200.00	89.220	147.480	7583.78	11445.55	-7689.19	8497.13	1778718.56	344066.43	39°26'31.2577"N	80°17'0.6836"W	11459.70	132.142	0.43	-0.42	-0.09	
19294.00	89.750	147.700	7584.62	11537.29	-7768.54	8547.51	1778768.22	343986.63	39°26'30.4733"N	80°17'0.0418"W	11550.33	132.267	0.61	0.56	0.23	
19389.00	89.840	147.750	7584.96	11629.95	-7848.86	8598.24	1778818.22	343905.85	39°26'29.6793"N	80°16'59.3956"W	11641.92	132.391	0.11	0.09	0.05	
19483.00	90.760	148.290	7584.47	11721.53	-7928.59	8648.02	1778867.27	343825.68	39°26'28.8911"N	80°16'58.7614"W	11732.47	132.515	1.13	0.98	0.57	
19578.00	89.130	147.560	7584.56	11814.11	-8009.09	8698.47	1778916.98	343744.74	39°26'28.0953"N	80°16'58.1188"W	11824.08	132.637	1.88	-1.72	-0.77	
19673.00	89.220	146.750	7585.93	11906.97	-8088.89	8749.99	1778967.78	343664.47	39°26'27.3064"N	80°16'57.4625"W	11916.06	132.752	0.86	0.09	-0.85	Deepest TVD at 7585.93' TVD
19767.00	91.100	147.120	7585.67	11998.93	-8167.67	8801.27	1779018.34	343585.24	39°26'26.5277"N	80°16'56.8092"W	12007.21	132.862	2.04	2.00	0.39	

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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 4H
Field	Marion	API	47-049-02492-0000
Facility	Sands Pad	Wellbore	Sands Unit B 4H AWB
Slot	Slot #04		

WELLPATH DATA (252 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
19862.00	91.440	148.140	7583.56	12091.60	-8247.88	8852.12	1779068.46	343504.57	39°26'25.7347"N	80°16'56.1614"W	12099.07	132.976	1.13	0.36	1.07	
19957.00	91.280	148.150	7581.31	12184.08	-8328.55	8902.24	1779117.85	343423.46	39°26'24.9372"N	80°16'55.5229"W	12190.76	133.093	0.17	-0.17	0.01	
20052.00	91.810	147.180	7578.75	12276.73	-8408.79	8953.03	1779167.91	343342.77	39°26'24.1440"N	80°16'54.8759"W	12282.69	133.205	1.16	0.56	-1.02	
20147.00	91.840	147.450	7575.72	12369.49	-8488.71	9004.31	1779218.45	343262.40	39°26'23.3540"N	80°16'54.2227"W	12374.80	133.312	0.29	0.03	0.28	
20241.00	91.220	147.620	7573.21	12461.22	-8567.99	9054.75	1779268.17	343182.67	39°26'22.5702"N	80°16'53.5801"W	12465.91	133.418	0.68	-0.66	0.18	
20336.00	91.310	147.940	7571.11	12553.84	-8648.34	9105.39	1779318.08	343101.86	39°26'21.7759"N	80°16'52.9351"W	12557.94	133.525	0.35	0.09	0.34	
20431.00	91.280	147.440	7568.97	12646.49	-8728.61	9156.15	1779368.11	343021.14	39°26'20.9824"N	80°16'52.2884"W	12650.05	133.631	0.53	-0.03	-0.53	
20526.00	91.590	147.790	7566.59	12739.16	-8808.81	9207.02	1779418.24	342940.49	39°26'20.1896"N	80°16'51.6405"W	12742.23	133.734	0.49	0.33	0.37	
20620.00	91.780	148.150	7563.82	12830.72	-8888.46	9256.85	1779467.35	342860.39	39°26'19.4021"N	80°16'51.0057"W	12833.32	133.837	0.43	0.20	0.38	
20715.00	92.420	148.620	7560.34	12923.07	-8969.31	9306.62	1779516.38	342779.10	39°26'18.6029"N	80°16'50.3718"W	12925.23	133.943	0.84	0.67	0.49	
20743.00	92.950	147.450	7559.03	12950.32	-8993.04	9321.42	1779530.97	342755.24	39°26'18.3683"N	80°16'50.1832"W	12952.36	133.973	4.58	1.89	-4.18	Last MWD Survey at 20743' MD
20768.00‡	92.950	147.450	7557.74	12974.70	-9014.08	9334.86	1779544.21	342734.08	39°26'18.1603"N	80°16'50.0121"W	12976.64	133.998	0.00	0.00	0.00	Projected MD at TD: 20768'MD

HOLE & CASING SECTIONS - Ref Wellbore: Sands Unit B 4H AWB Ref Wellpath: Sands Unit B 4H AWP Proj: 20768'									
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)
24in Conductor	26.00	102.00	76.00	26.00	102.00	0.00	0.00	-0.11	0.13
17.5in Open Hole	102.00	550.00	448.00	102.00	549.98	-0.11	0.13	-2.94	-2.28
13.375in Casing Surface	26.00	550.00	524.00	26.00	549.98	0.00	0.00	-2.94	-2.28
12.25in Open Hole	550.00	3150.00	2600.00	549.98	3149.83	-2.94	-2.28	-24.82	-10.98
9.625in Casing Intermediate	26.00	3150.00	3124.00	26.00	3149.83	0.00	0.00	-24.82	-10.98
8.75in Open Hole	3150.00	6169.00	3019.00	3149.83	6114.14	-24.82	-10.98	518.01	84.73
8.5in Open Hole	6169.00	20768.00	14599.00	6114.14	7557.74	518.01	84.73	-9014.08	9334.86
5.5in Casing Production	26.00	20768.00	20742.00	26.00	7557.74	0.00	0.00	-9014.08	9334.86

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Actual Wellpath Report
Sands Unit B 4H AWP Proj: 20768'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 4H
Field	Marion	API	47-049-02492-0000
Facility	Sands Pad	Wellbore	Sands Unit B 4H AWB
Slot	Slot #04		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Sands Unit B 4H - BHL - Rev-3	7517.00	-9019.63	9343.49	1779552.79	342728.45	39°26'18.1054"N	80°16'49.9021"W	point
Sands Unit B 4H - IP #1 - Rev-3	7517.00	-7188.63	8120.92	1778346.92	344570.34	39°26'36.2062"N	80°17'5.4768"W	point
Sands Unit B 4H - LP - Rev-3	7517.00	341.85	586.46	1770881.40	352168.32	39°27'50.6460"N	80°18'41.5118"W	point

WELLPATH COMPOSITION - Ref Wellbore: Sands Unit B 4H AWB Ref Wellpath: Sands Unit B 4H AWP Proj: 20768'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	3093.00	BH Generic gyro - northseeking (Standard)	01_Javins Gyro Surveys <12-1/4">(50'-3067')	Sands Unit B 4H AWB	
3093.00	6101.00	OWSG MWD rev2 + HRGM	02_Javins EM Survey <8-3/4">(3067')(3170'-6075')	Sands Unit B 4H AWB	
6101.00	20768.00	OWSG MWD rev2 +HRGM + Multi-Station Correction	06_Final Superior Corrected ATCurve <8-1/2">(6101')(6143'-20743')	Sands Unit B 4H AWB	1/17/2020

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Actual Wellpath Report

Sands Unit B 4H AWP Proj: 20768'

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REFERENCE WELLPATH IDENTIFICATION

Operator	XTO ENERGY INC	Well	Sands Unit B 4H
Field	Marion	API	47-049-02492-0000
Facility	Sands Pad	Wellbore	Sands Unit B 4H AWB
Slot	Slot #04		

COMMENTS

Wellpath general comments

API: 47-049-02492-0000

BHI Job #: 110067661A

Rig: Patteron 579

Duration: 01/20/2020-01/28/2020

Javins Gyro Surveys <12-1/4">(50'-3067')

Javins EM Survey <8-3/4">(3067')(3170'-6075')

Final Superior Corrected ATCurve <8-1/2">(6101')(6143'-20743')

Landing Pt. at 7916' MD

Deepest TVD at 7585.93' TVD

Last MWD Survey at 20743' MD

Projected MD at TD: 20768'MD

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