



XTO ENERGY INC



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

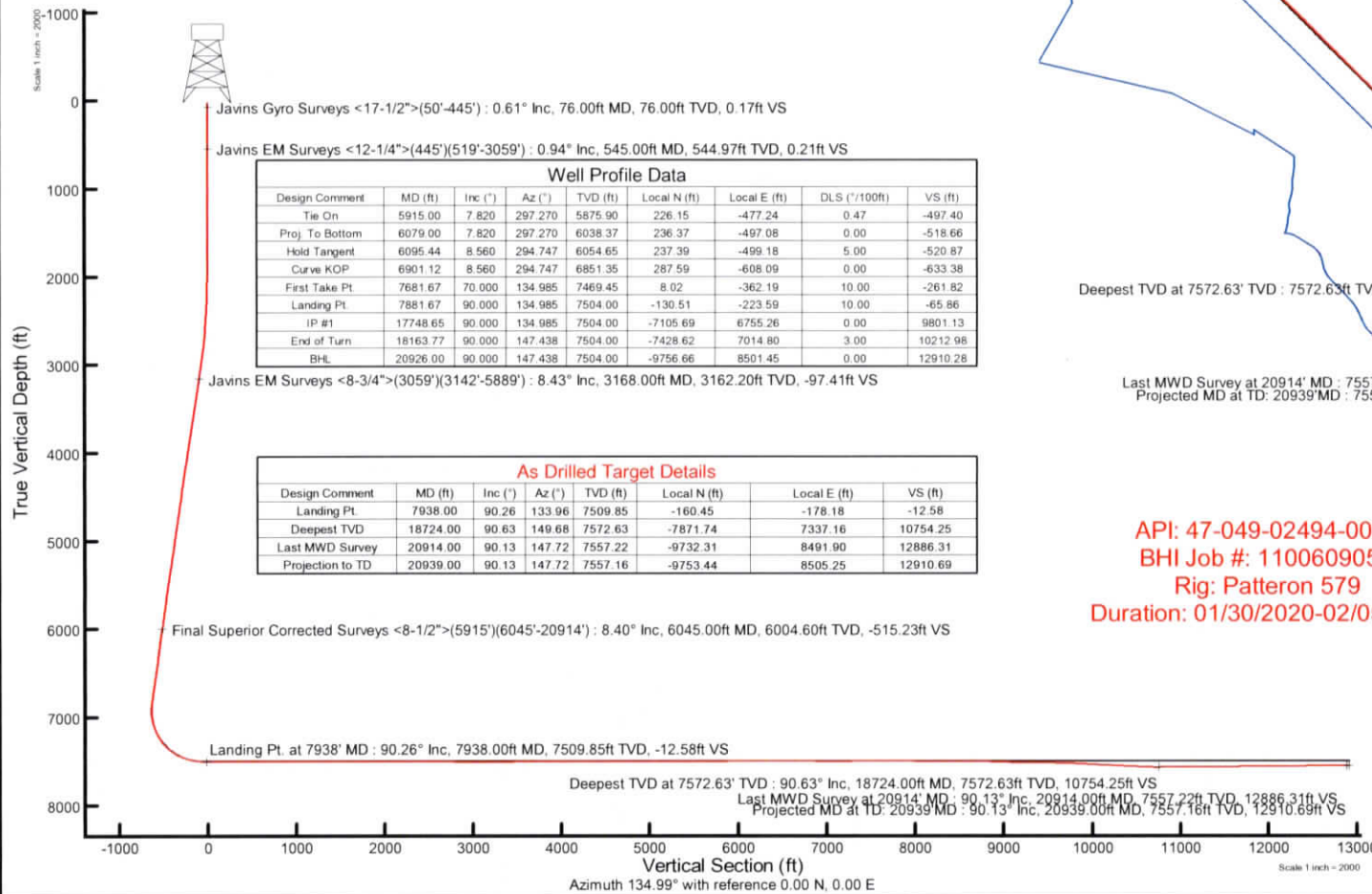
Slot: Slot #07
 Well: Sands Unit B 7H
 Wellbore: Sands Unit B 7H PWB

Easting (ft)

Plot reference wellpath is Sands Unit B 7H PWB Rev-C.0	Grid System: NAD27 / Lambert West Virginia SP, Northern Zone (4701), US feet
True vertical depths are referenced to Patterson 570 (RKB)	North Reference: True north
Reference wellpath measured depths are referenced to Patterson 570 (RKB)	Scale: True distance
Patterson 570 (RKB) to Mean Sea Level: 1261 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot #07): -1235 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: Joeseph on 2020-02-11 Database: VIA-MPI_EasternUS_Dat

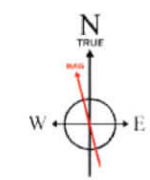
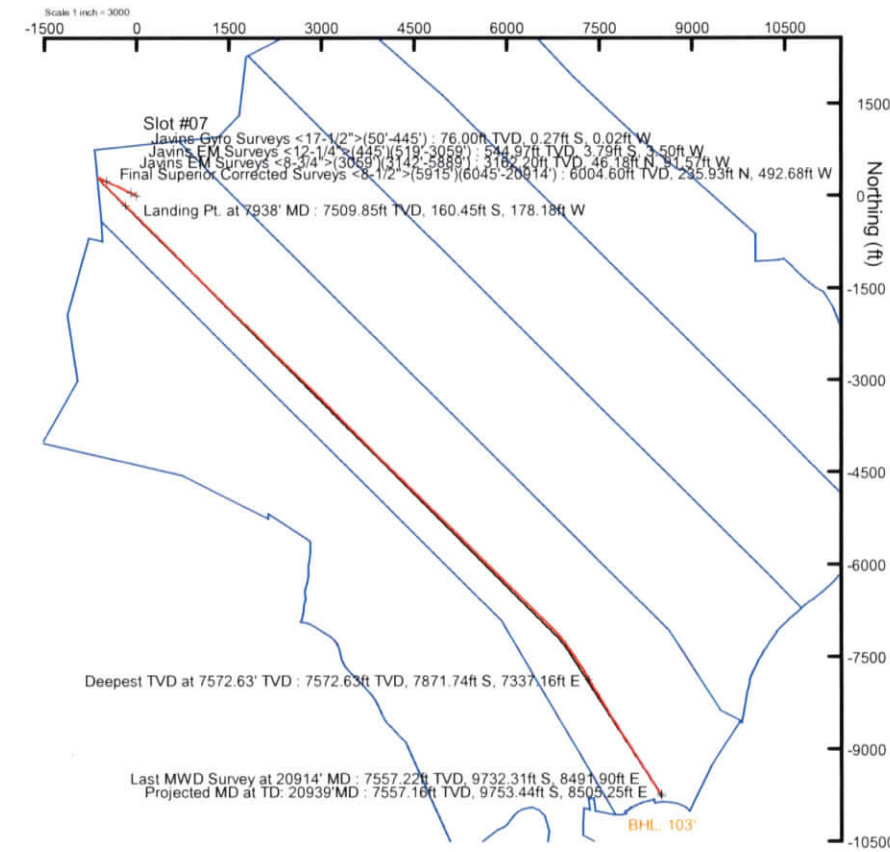
Location Information				
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Sands Pad	1770291.903	351831.811	39°27'47.2674"N	80°18'48.9893"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
Slot #07	6.85	-7.29	1770284.680	351838.730
Patterson 570 (RKB) to Ground level (At Slot: Slot #07)			26ft	
Mean Sea Level to Ground level (At Slot: Slot #07)			-1235ft	
Patterson 570 (RKB) to Mean Sea Level			1261ft	

Well Data			
Slot	Well	Wellbore	Wellpath
Slot #07	Sands Unit B 7H	Sands Unit B 7H AWB	Sands Unit B 7H AWP Proj: 20939'
Slot #07	Sands Unit B 7H	Sands Unit B 7H PWB	Sands Unit B 7H PWB 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	5915.00	7.820	297.270	5875.90	226.15	-477.24	0.47	-497.40
Proj. To Bottom	6079.00	7.820	297.270	6038.37	236.37	-497.08	0.00	-518.66
Hold Tangent	6095.44	8.560	294.747	6054.65	237.39	-499.18	5.00	-520.87
Curve KOP	6901.12	8.560	294.747	6851.35	287.59	-608.09	0.00	-633.38
First Take Pt	7681.67	70.000	134.985	7469.45	8.02	-362.19	10.00	-261.82
Landing Pt	7881.67	90.000	134.985	7504.00	-130.51	-223.59	10.00	-65.86
IP #1	17748.65	90.000	134.985	7504.00	-7105.69	6755.26	0.00	9801.13
End of Turn	18163.77	90.000	147.438	7504.00	-7428.62	7014.80	3.00	10212.98
BHL	20926.00	90.000	147.438	7504.00	-9756.66	8501.45	0.00	12910.28

As Drilled Target Details							
Design Comment	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	VS (ft)
Landing Pt	7938.00	90.26	133.96	7509.85	-160.45	-178.18	-12.58
Deepest TVD	18724.00	90.63	149.68	7572.63	-7871.74	7337.16	10754.25
Last MWD Survey	20914.00	90.13	147.72	7557.22	-9732.31	8491.90	12886.31
Projection to TD	20939.00	90.13	147.72	7557.16	-9753.44	8505.25	12910.69



User specified (HDGM) Dip: 66.43° Field: 52138 nT
 Magnetic North is 9.13 degrees West of True North (at 1/23/2020)
 To correct azimuth from Magnetic to True subtract 9.13 degrees

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Actual Wellpath Report
Sands Unit B 7H AWP Proj: 20939'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 7H
Field	Marion	API	47-049-02494-0000
Facility	Sands Pad	Wellbore	Sands Unit B 7H AWB
Slot	Slot #07		

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	2/11/2020 at 2:59:45 PM
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	6.85	-7.29	1770284.68	351838.73	39°27'47.3351"N	80°18'49.0822"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 #07)	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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Field	Marion	API	47-049-02494-0000
Facility	Sands Pad	Wellbore	Sands Unit B 7H AWB
Slot	Slot #07		

WELLPATH DATA (229 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	184.600	0.00	0.00	0.00	0.00	1770284.68	351838.73	39°27'47.3351"N	80°18'49.0822"W	0.00	0.000	0.00	0.00	0.00	
26.00	0.000	184.600	26.00	0.00	0.00	0.00	1770284.68	351838.73	39°27'47.3351"N	80°18'49.0822"W	0.00	0.000	0.00	0.00	0.00	
76.00	0.610	184.600	76.00	0.17	-0.27	-0.02	1770284.66	351838.46	39°27'47.3325"N	80°18'49.0825"W	0.27	184.600	1.22	1.22	0.00	Javins Gyro Surveys <17-1/2">(50'-445')
126.00	0.290	216.400	126.00	0.36	-0.63	-0.12	1770284.56	351838.10	39°27'47.3289"N	80°18'49.0837"W	0.64	190.549	0.79	-0.64	63.60	
176.00	0.400	245.600	176.00	0.32	-0.81	-0.35	1770284.32	351837.93	39°27'47.3272"N	80°18'49.0867"W	0.88	203.570	0.41	0.22	58.40	
226.00	0.530	246.200	225.99	0.18	-0.97	-0.72	1770283.95	351837.76	39°27'47.3255"N	80°18'49.0914"W	1.21	216.623	0.26	0.26	1.20	
276.00	0.630	243.900	275.99	0.00	-1.19	-1.18	1770283.49	351837.55	39°27'47.3234"N	80°18'49.0973"W	1.67	224.872	0.21	0.20	-4.60	
326.00	0.810	235.100	325.99	-0.15	-1.51	-1.72	1770282.95	351837.24	39°27'47.3202"N	80°18'49.1041"W	2.29	228.693	0.42	0.36	-17.60	
376.00	0.580	220.300	375.98	-0.19	-1.90	-2.17	1770282.49	351836.85	39°27'47.3163"N	80°18'49.1099"W	2.89	228.743	0.58	-0.46	-29.60	
426.00	0.760	206.100	425.98	-0.06	-2.40	-2.48	1770282.18	351836.36	39°27'47.3115"N	80°18'49.1138"W	3.45	226.003	0.49	0.36	-28.40	
471.00	0.820	209.800	470.98	0.12	-2.94	-2.77	1770281.88	351835.81	39°27'47.3061"N	80°18'49.1175"W	4.04	223.289	0.17	0.13	8.22	
545.00	0.940	229.780	544.97	0.21	-3.79	-3.50	1770281.15	351834.97	39°27'47.2976"N	80°18'49.1268"W	5.16	222.679	0.44	0.16	27.00	Javins EM Surveys <12-1/4">(445')(519'-3059')
639.00	0.840	217.500	638.96	0.23	-4.84	-4.51	1770280.13	351833.93	39°27'47.2873"N	80°18'49.1397"W	6.61	222.966	0.23	-0.11	-13.06	
734.00	0.730	205.020	733.95	0.53	-5.94	-5.19	1770279.44	351832.84	39°27'47.2764"N	80°18'49.1483"W	7.89	221.129	0.21	-0.12	-13.14	
828.00	0.130	69.170	827.95	0.78	-6.44	-5.34	1770279.28	351832.33	39°27'47.2714"N	80°18'49.1503"W	8.37	219.648	0.88	-0.64	-144.52	
923.00	0.650	50.600	922.94	0.88	-6.06	-4.82	1770279.80	351832.71	39°27'47.2752"N	80°18'49.1437"W	7.75	218.498	0.56	0.55	-19.55	
1018.00	0.870	55.810	1017.94	1.06	-5.32	-3.81	1770280.82	351833.45	39°27'47.2826"N	80°18'49.1308"W	6.54	215.628	0.24	0.23	5.48	
1113.00	1.330	54.260	1112.92	1.38	-4.27	-2.32	1770282.32	351834.48	39°27'47.2930"N	80°18'49.1118"W	4.86	208.518	0.49	0.48	-1.63	
1208.00	1.300	31.180	1207.89	1.30	-2.70	-0.87	1770283.79	351836.04	39°27'47.3084"N	80°18'49.0932"W	2.84	197.772	0.55	-0.03	-24.29	
1302.00	0.580	349.800	1301.88	0.65	-1.32	-0.40	1770284.27	351837.41	39°27'47.3221"N	80°18'49.0873"W	1.38	196.771	1.01	-0.77	-44.02	
1397.00	0.270	279.520	1396.88	0.08	-0.81	-0.70	1770283.97	351837.93	39°27'47.3271"N	80°18'49.0912"W	1.07	220.976	0.58	-0.33	-73.98	
1492.00	0.530	205.400	1491.88	0.04	-1.17	-1.11	1770283.56	351837.57	39°27'47.3236"N	80°18'49.0964"W	1.62	223.565	0.55	0.27	-78.02	
1587.00	0.500	179.500	1586.87	0.48	-1.98	-1.30	1770283.36	351836.76	39°27'47.3155"N	80°18'49.0987"W	2.37	213.224	0.24	-0.03	-27.26	
1681.00	0.630	135.910	1680.87	1.29	-2.76	-0.93	1770283.72	351835.98	39°27'47.3078"N	80°18'49.0941"W	2.92	198.692	0.46	0.14	-46.37	
1776.00	0.690	44.560	1775.86	1.81	-2.73	-0.17	1770284.49	351836.00	39°27'47.3081"N	80°18'49.0844"W	2.74	183.564	0.99	0.06	-96.16	
1871.00	1.620	338.240	1870.85	0.57	-1.08	-0.27	1770284.40	351837.66	39°27'47.3245"N	80°18'49.0856"W	1.11	193.915	1.56	0.98	-69.81	
1965.00	2.140	333.700	1964.80	-2.31	1.73	-1.54	1770283.16	351840.48	39°27'47.3523"N	80°18'49.1018"W	2.32	318.413	0.58	0.55	-4.83	
2060.00	1.110	320.830	2059.76	-4.91	4.04	-2.90	1770281.81	351842.79	39°27'47.3750"N	80°18'49.1192"W	4.97	324.260	1.14	-1.08	-13.55	
2155.00	1.170	299.540	2154.74	-6.76	5.23	-4.33	1770280.40	351844.00	39°27'47.3868"N	80°18'49.1374"W	6.79	320.368	0.45	0.06	-22.41	
2249.00	1.900	290.500	2248.70	-9.10	6.25	-6.62	1770278.11	351845.04	39°27'47.3969"N	80°18'49.1666"W	9.10	313.319	0.82	0.78	-9.62	

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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 7H
Field	Marion	API	47-049-02494-0000
Facility	Sands Pad	Wellbore	Sands Unit B 7H AWB
Slot	Slot #07		

WELLPATH DATA (229 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
2344.00	2.920	296.250	2343.62	-12.82	7.87	-10.27	1770274.48	351846.69	39°27'47.4129"N	80°18'49.2131"W	12.94	307.457	1.10	1.07	6.05	
2439.00	3.670	297.430	2438.46	-18.01	10.34	-15.14	1770269.64	351849.20	39°27'47.4373"N	80°18'49.2752"W	18.33	304.331	0.79	0.79	1.24	
2534.00	4.140	294.940	2533.24	-24.14	13.19	-20.95	1770263.86	351852.10	39°27'47.4654"N	80°18'49.3493"W	24.75	302.190	0.53	0.49	-2.62	
2628.00	4.930	294.880	2626.95	-31.12	16.32	-27.69	1770257.14	351855.29	39°27'47.4964"N	80°18'49.4352"W	32.14	300.510	0.84	0.84	-0.06	
2723.00	6.330	295.630	2721.49	-39.89	20.30	-36.11	1770248.75	351859.35	39°27'47.5358"N	80°18'49.5426"W	41.43	299.340	1.48	1.47	0.79	
2818.00	6.710	296.140	2815.87	-50.08	25.01	-45.82	1770239.09	351864.15	39°27'47.5823"N	80°18'49.6664"W	52.20	298.628	0.40	0.40	0.54	
2913.00	7.850	295.100	2910.10	-61.44	30.21	-56.67	1770228.28	351869.45	39°27'47.6337"N	80°18'49.8048"W	64.22	298.057	1.21	1.20	-1.09	
3007.00	8.960	295.140	3003.09	-74.36	36.04	-69.11	1770215.90	351875.39	39°27'47.6913"N	80°18'49.9634"W	77.95	297.539	1.18	1.18	0.04	
3085.00	8.920	294.730	3080.14	-85.75	41.15	-80.11	1770204.95	351880.60	39°27'47.7418"N	80°18'50.1036"W	90.06	297.189	0.10	-0.05	-0.53	
3168.00	8.430	292.610	3162.20	-97.41	46.18	-91.57	1770193.54	351885.73	39°27'47.7916"N	80°18'50.2497"W	102.55	296.763	0.70	-0.59	-2.55	Javins EM Surveys <8-3/4">(3059')(3142'-5889')
3263.00	9.390	294.320	3256.05	-111.10	52.05	-105.06	1770180.10	351891.73	39°27'47.8496"N	80°18'50.4217"W	117.24	296.355	1.05	1.01	1.80	
3357.00	9.700	295.370	3348.75	-125.73	58.60	-119.20	1770166.02	351898.40	39°27'47.9143"N	80°18'50.6020"W	132.83	296.179	0.38	0.33	1.12	
3452.00	9.600	294.960	3442.40	-140.71	65.37	-133.61	1770151.67	351905.31	39°27'47.9812"N	80°18'50.7858"W	148.75	296.071	0.13	-0.11	-0.43	
3547.00	9.450	292.380	3536.09	-155.35	71.68	-148.01	1770137.34	351911.75	39°27'48.0436"N	80°18'50.9693"W	164.45	295.842	0.48	-0.16	-2.72	
3641.00	9.010	293.320	3628.88	-169.32	77.54	-161.90	1770123.50	351917.72	39°27'48.1015"N	80°18'51.1465"W	179.51	295.590	0.49	-0.47	1.00	
3736.00	9.050	296.830	3722.70	-183.33	83.85	-175.40	1770110.06	351924.16	39°27'48.1639"N	80°18'51.3186"W	194.41	295.551	0.58	0.04	3.69	
3830.00	8.740	297.190	3815.57	-197.16	90.45	-188.35	1770097.17	351930.88	39°27'48.2291"N	80°18'51.4837"W	208.94	295.652	0.34	-0.33	0.38	
3925.00	9.600	296.190	3909.35	-211.53	97.25	-201.88	1770083.70	351937.80	39°27'48.2963"N	80°18'51.6562"W	224.08	295.721	0.92	0.91	-1.05	
4019.00	9.970	296.560	4001.99	-226.67	104.35	-216.19	1770069.46	351945.02	39°27'48.3664"N	80°18'51.8386"W	240.05	295.765	0.40	0.39	0.39	
4114.00	9.110	292.630	4095.67	-241.42	110.92	-230.49	1770055.22	351951.72	39°27'48.4314"N	80°18'52.0209"W	255.79	295.698	1.14	-0.91	-4.14	
4208.00	8.960	297.010	4188.51	-255.27	117.10	-243.88	1770041.89	351958.03	39°27'48.4925"N	80°18'52.1917"W	270.54	295.649	0.75	-0.16	4.66	
4303.00	8.530	294.260	4282.40	-268.90	123.36	-256.89	1770028.93	351964.40	39°27'48.5543"N	80°18'52.3576"W	284.98	295.650	0.63	-0.45	-2.89	
4398.00	7.970	297.230	4376.42	-281.76	129.27	-269.17	1770016.70	351970.42	39°27'48.6127"N	80°18'52.5142"W	298.60	295.652	0.74	-0.59	3.13	
4492.00	8.600	298.230	4469.44	-294.69	135.57	-281.16	1770004.78	351976.84	39°27'48.6751"N	80°18'52.6670"W	312.14	295.743	0.69	0.67	1.06	
4587.00	9.410	300.210	4563.27	-309.00	142.84	-294.13	1769991.87	351984.22	39°27'48.7469"N	80°18'52.8324"W	326.98	295.903	0.91	0.85	2.08	
4682.00	8.870	295.340	4657.06	-323.41	149.88	-307.46	1769978.61	351991.38	39°27'48.8165"N	80°18'53.0024"W	342.05	295.989	0.99	-0.57	-5.13	
4779.00	8.590	293.290	4752.94	-337.18	155.95	-320.87	1769965.25	351997.57	39°27'48.8764"N	80°18'53.1734"W	356.76	295.920	0.43	-0.29	-2.11	
4874.00	8.380	294.250	4846.90	-350.25	161.60	-333.70	1769952.47	352003.33	39°27'48.9323"N	80°18'53.3369"W	370.77	295.839	0.27	-0.22	1.01	
4968.00	8.820	295.170	4939.84	-363.44	167.48	-346.47	1769939.76	352009.33	39°27'48.9903"N	80°18'53.4997"W	384.82	295.798	0.49	0.47	0.98	
5063.00	8.710	293.490	5033.73	-376.98	173.44	-359.66	1769926.63	352015.41	39°27'49.0493"N	80°18'53.6679"W	399.29	295.745	0.29	-0.12	-1.77	

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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 7H
Field	Marion	API	47-049-02494-0000
Facility	Sands Pad	Wellbore	Sands Unit B 7H AWB
Slot	Slot #07		

WELLPATH DATA (229 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
5158.00	9.330	296.010	5127.56	-390.96	179.68	-373.18	1769913.17	352021.78	39°27'49.1110"N	80°18'53.8402"W	414.18	295.711	0.77	0.65	2.65	
5252.00	9.290	293.460	5220.32	-405.22	186.05	-386.98	1769899.42	352028.26	39°27'49.1739"N	80°18'54.0163"W	429.38	295.676	0.44	-0.04	-2.71	
5347.00	9.060	294.710	5314.10	-419.37	192.23	-400.81	1769885.65	352034.57	39°27'49.2350"N	80°18'54.1926"W	444.52	295.622	0.32	-0.24	1.32	
5442.00	9.190	294.370	5407.90	-433.48	198.48	-414.52	1769872.00	352040.95	39°27'49.2968"N	80°18'54.3674"W	459.59	295.586	0.15	0.14	-0.36	
5536.00	8.440	292.540	5500.79	-446.89	204.22	-427.73	1769858.84	352046.81	39°27'49.3535"N	80°18'54.5358"W	473.98	295.523	0.85	-0.80	-1.95	
5631.00	8.200	292.460	5594.79	-459.59	209.49	-440.43	1769846.19	352052.18	39°27'49.4055"N	80°18'54.6977"W	487.71	295.438	0.25	-0.25	-0.08	
5725.00	8.550	294.010	5687.79	-472.30	214.89	-453.01	1769833.66	352057.70	39°27'49.4589"N	80°18'54.8581"W	501.39	295.378	0.44	0.37	1.65	
5820.00	7.990	294.240	5781.80	-485.07	220.47	-465.48	1769821.25	352063.40	39°27'49.5141"N	80°18'55.0171"W	515.05	295.345	0.59	-0.59	0.24	
5915.00	7.820	297.270	5875.90	-497.40	226.15	-477.24	1769809.53	352069.18	39°27'49.5702"N	80°18'55.1671"W	528.11	295.354	0.47	-0.18	3.19	
6045.00	8.400	307.110	6004.60	-515.23	235.93	-492.68	1769794.19	352079.10	39°27'49.6669"N	80°18'55.3639"W	546.25	295.588	1.16	0.45	7.57	Final Superior Corrected Surveys <8-1/2">(5915')(6045'-20914')
6140.00	8.500	292.740	6098.58	-528.61	242.83	-504.69	1769782.24	352086.11	39°27'49.7351"N	80°18'55.5170"W	560.07	295.694	2.22	0.11	-15.13	
6235.00	8.400	292.100	6192.55	-541.50	248.15	-517.59	1769769.39	352091.55	39°27'49.7877"N	80°18'55.6816"W	574.00	295.615	0.14	-0.11	-0.67	
6329.00	8.210	294.680	6285.57	-554.12	253.54	-530.05	1769756.98	352097.04	39°27'49.8409"N	80°18'55.8404"W	587.57	295.563	0.44	-0.20	2.74	
6424.00	8.310	294.190	6379.58	-566.90	259.18	-542.48	1769744.60	352102.80	39°27'49.8967"N	80°18'55.9989"W	601.21	295.538	0.13	0.11	-0.52	
6519.00	8.220	293.630	6473.59	-579.64	264.72	-554.96	1769732.17	352108.45	39°27'49.9514"N	80°18'56.1580"W	614.86	295.501	0.13	-0.09	-0.59	
6613.00	8.820	294.120	6566.56	-592.63	270.36	-567.70	1769719.49	352114.20	39°27'50.0071"N	80°18'56.3204"W	628.79	295.466	0.64	0.64	0.52	
6708.00	8.810	293.830	6660.43	-606.22	276.27	-581.00	1769706.24	352120.24	39°27'50.0656"N	80°18'56.4900"W	643.34	295.432	0.05	-0.01	-0.31	
6802.00	8.740	294.090	6753.33	-619.60	282.10	-594.10	1769693.19	352126.18	39°27'50.1232"N	80°18'56.6571"W	657.67	295.400	0.09	-0.07	0.28	
6897.00	8.160	287.710	6847.30	-632.34	287.09	-607.11	1769680.23	352131.29	39°27'50.1725"N	80°18'56.8230"W	671.57	295.309	1.16	-0.61	-6.72	
6992.00	5.720	198.440	6941.82	-636.23	284.65	-615.05	1769672.26	352128.92	39°27'50.1484"N	80°18'56.9242"W	677.73	294.835	10.41	-2.57	-93.97	
7087.00	10.110	148.020	7035.99	-625.97	273.07	-612.13	1769675.08	352117.31	39°27'50.0339"N	80°18'56.8870"W	670.28	294.041	8.22	4.62	-53.07	
7181.00	19.220	135.940	7126.85	-602.41	254.91	-596.97	1769690.08	352099.02	39°27'49.8544"N	80°18'56.6936"W	649.11	293.123	10.17	9.69	-12.85	
7276.00	27.300	135.920	7214.06	-564.93	227.98	-570.89	1769715.91	352071.85	39°27'49.5883"N	80°18'56.3612"W	614.73	291.768	8.51	8.51	-0.02	
7371.00	37.020	135.390	7294.39	-514.42	191.88	-535.57	1769750.90	352035.44	39°27'49.2315"N	80°18'55.9108"W	568.90	289.711	10.24	10.23	-0.56	
7465.00	47.450	134.690	7363.89	-451.33	147.26	-490.96	1769795.11	351990.42	39°27'48.7905"N	80°18'55.3419"W	512.57	286.696	11.11	11.10	-0.74	
7560.00	59.230	135.040	7420.51	-375.25	93.58	-437.05	1769848.52	351936.26	39°27'48.2600"N	80°18'54.6546"W	446.96	282.086	12.40	12.40	0.37	
7654.00	69.250	134.980	7461.31	-290.70	33.79	-377.27	1769907.75	351875.93	39°27'47.6690"N	80°18'53.8924"W	378.78	275.117	10.66	10.66	-0.06	
7748.00	76.500	134.950	7488.97	-200.93	-29.65	-313.75	1769970.69	351811.92	39°27'47.0420"N	80°18'53.0826"W	315.15	264.601	7.71	7.71	-0.03	
7843.00	83.970	133.500	7505.07	-107.39	-94.90	-246.70	1770037.14	351746.08	39°27'46.3972"N	80°18'52.2277"W	264.33	248.960	8.01	7.86	-1.53	
7938.00	90.260	133.960	7509.85	-12.58	-160.45	-178.18	1770105.07	351679.91	39°27'45.7493"N	80°18'51.3540"W	239.77	227.997	6.64	6.62	0.48	Landing Pt. at 7938' MD

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Actual Wellpath Report
Sands Unit B 7H AWP Proj: 20939'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 7H
Field	Marion	API	47-049-02494-0000
Facility	Sands Pad	Wellbore	Sands Unit B 7H AWB
Slot	Slot #07		

WELLPATH DATA (229 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
8033.00	89.860	134.500	7509.75	82.41	-226.72	-110.11	1770172.53	351613.03	39°27'45.0944"N	80°18'50.4860"W	252.04	205.904	0.71	-0.42	0.57	
8127.00	89.270	133.900	7510.47	176.40	-292.25	-42.72	1770239.32	351546.90	39°27'44.4467"N	80°18'49.6269"W	295.35	188.316	0.90	-0.63	-0.64	
8222.00	89.800	134.630	7511.24	271.39	-358.55	25.31	1770306.74	351479.98	39°27'43.7914"N	80°18'48.7595"W	359.45	175.962	0.95	0.56	0.77	
8316.00	90.130	134.290	7511.30	365.39	-424.39	92.40	1770373.23	351413.54	39°27'43.1407"N	80°18'47.9041"W	434.33	167.717	0.50	0.35	-0.36	
8411.00	89.890	134.690	7511.28	460.38	-490.97	160.17	1770440.39	351346.36	39°27'42.4827"N	80°18'47.0401"W	516.43	161.932	0.49	-0.25	0.42	
8505.00	90.410	135.180	7511.03	554.38	-557.36	226.71	1770506.32	351279.37	39°27'41.8265"N	80°18'46.1917"W	601.70	157.865	0.76	0.55	0.52	
8600.00	89.730	133.660	7510.92	649.37	-623.85	294.56	1770573.56	351212.28	39°27'41.1694"N	80°18'45.3266"W	689.89	154.725	1.75	-0.72	-1.60	
8695.00	90.070	136.360	7511.08	744.36	-691.03	361.72	1770640.11	351144.49	39°27'40.5054"N	80°18'44.4704"W	779.97	152.370	2.86	0.36	2.84	
8790.00	90.070	135.800	7510.97	839.35	-759.46	427.62	1770705.38	351075.48	39°27'39.8291"N	80°18'43.6303"W	871.57	150.618	0.59	0.00	-0.59	
8884.00	90.100	135.960	7510.83	933.33	-826.94	493.06	1770770.20	351007.41	39°27'39.1621"N	80°18'42.7959"W	962.77	149.195	0.17	0.03	0.17	
8979.00	89.950	134.930	7510.79	1028.33	-894.63	559.71	1770836.23	350939.12	39°27'38.4931"N	80°18'41.9462"W	1055.29	147.969	1.10	-0.16	-1.08	
9073.00	90.350	136.050	7510.54	1122.32	-961.66	625.60	1770901.51	350871.49	39°27'37.8305"N	80°18'41.1061"W	1147.25	146.954	1.27	0.43	1.19	
9168.00	89.730	135.460	7510.47	1217.32	-1029.72	691.89	1770967.17	350802.85	39°27'37.1579"N	80°18'40.2610"W	1240.57	146.102	0.90	-0.65	-0.62	
9262.00	90.260	135.720	7510.48	1311.31	-1096.87	757.66	1771032.34	350735.11	39°27'36.4942"N	80°18'39.4224"W	1333.11	145.365	0.63	0.56	0.28	
9357.00	90.350	136.730	7509.98	1406.29	-1165.46	823.39	1771097.43	350665.93	39°27'35.8163"N	80°18'38.5845"W	1426.98	144.759	1.07	0.09	1.06	
9451.00	90.200	135.010	7509.53	1500.27	-1232.93	888.83	1771162.26	350597.87	39°27'35.1494"N	80°18'37.7501"W	1519.91	144.212	1.84	-0.16	-1.83	
9546.00	89.730	134.050	7509.58	1595.27	-1299.55	956.56	1771229.37	350530.65	39°27'34.4910"N	80°18'36.8867"W	1613.64	143.644	1.13	-0.49	-1.01	
9641.00	89.640	134.770	7510.11	1690.26	-1366.03	1024.42	1771296.63	350463.56	39°27'33.8339"N	80°18'36.0215"W	1707.47	143.133	0.76	-0.09	0.76	
9735.00	90.100	135.040	7510.32	1784.26	-1432.38	1091.00	1771362.60	350396.61	39°27'33.1780"N	80°18'35.1728"W	1800.55	142.705	0.57	0.49	0.29	
9829.00	89.890	134.330	7510.33	1878.26	-1498.48	1157.83	1771428.82	350329.91	39°27'32.5247"N	80°18'34.3207"W	1893.68	142.308	0.79	-0.22	-0.76	
9923.00	89.860	134.970	7510.53	1972.25	-1564.54	1224.70	1771495.09	350263.25	39°27'31.8718"N	80°18'33.4682"W	1986.88	141.947	0.68	-0.03	0.68	
10018.00	89.860	134.210	7510.76	2067.25	-1631.24	1292.35	1771562.14	350195.95	39°27'31.2126"N	80°18'32.6057"W	2081.13	141.612	0.80	0.00	-0.80	
10113.00	90.100	134.620	7510.80	2162.24	-1697.72	1360.21	1771629.38	350128.86	39°27'30.5555"N	80°18'31.7406"W	2175.42	141.298	0.50	0.25	0.43	
10207.00	89.640	135.020	7511.01	2256.24	-1763.98	1426.89	1771695.45	350062.00	39°27'29.9006"N	80°18'30.8906"W	2268.84	141.031	0.65	-0.49	0.43	
10302.00	90.320	134.570	7511.04	2351.24	-1830.91	1494.30	1771762.25	349994.46	39°27'29.2390"N	80°18'30.0312"W	2363.30	140.780	0.86	0.72	-0.47	
10397.00	89.950	134.270	7510.82	2446.24	-1897.41	1562.15	1771829.50	349927.36	39°27'28.5818"N	80°18'29.1662"W	2457.74	140.535	0.50	-0.39	-0.32	
10491.00	89.730	133.920	7511.08	2540.22	-1962.82	1629.66	1771896.41	349861.35	39°27'27.9353"N	80°18'28.3056"W	2551.17	140.298	0.44	-0.23	-0.37	
10586.00	89.730	133.520	7511.53	2635.20	-2028.47	1698.32	1771964.46	349795.08	39°27'27.2863"N	80°18'27.4303"W	2645.56	140.063	0.42	0.00	-0.42	
10680.00	89.580	134.450	7512.10	2729.18	-2093.75	1765.95	1772031.50	349729.19	39°27'26.6411"N	80°18'26.5681"W	2739.05	139.854	1.00	-0.16	0.99	
10775.00	89.580	134.070	7512.79	2824.17	-2160.05	1833.99	1772098.93	349662.28	39°27'25.9858"N	80°18'25.7008"W	2833.61	139.667	0.40	0.00	-0.40	

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Actual Wellpath Report
Sands Unit B 7H AWP Proj: 20939'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 7H
Field	Marion	API	47-049-02494-0000
Facility	Sands Pad	Wellbore	Sands Unit B 7H AWB
Slot	Slot #07		

WELLPATH DATA (229 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
10869.00	89.520	134.620	7513.53	2918.16	-2225.75	1901.21	1772165.55	349595.98	39°27'25.3364"N	80°18'24.8439"W	2927.21	139.496	0.59	-0.06	0.59	
10964.00	89.700	134.630	7514.18	3013.16	-2292.48	1968.82	1772232.55	349528.64	39°27'24.6768"N	80°18'23.9819"W	3021.88	139.343	0.19	0.19	0.01	
11058.00	89.760	134.980	7514.62	3107.16	-2358.73	2035.52	1772298.63	349461.80	39°27'24.0220"N	80°18'23.1318"W	3115.59	139.207	0.38	0.06	0.37	
11152.00	90.750	135.760	7514.20	3201.15	-2425.62	2101.55	1772364.06	349394.32	39°27'23.3608"N	80°18'22.2899"W	3209.38	139.094	1.34	1.05	0.83	
11247.00	90.070	135.070	7513.52	3296.15	-2493.28	2168.24	1772430.12	349326.06	39°27'22.6921"N	80°18'21.4399"W	3304.19	138.989	1.02	-0.72	-0.73	
11341.00	90.440	134.610	7513.10	3390.14	-2559.56	2234.89	1772496.17	349259.18	39°27'22.0370"N	80°18'20.5902"W	3397.95	138.874	0.63	0.39	-0.49	
11436.00	90.530	134.350	7512.30	3485.14	-2626.12	2302.67	1772563.34	349192.02	39°27'21.3791"N	80°18'19.7262"W	3492.67	138.755	0.29	0.09	-0.27	
11531.00	90.380	134.500	7511.55	3580.13	-2692.61	2370.51	1772630.57	349124.91	39°27'20.7218"N	80°18'18.8614"W	3587.41	138.640	0.22	-0.16	0.16	
11626.00	90.290	134.520	7510.99	3675.12	-2759.21	2438.26	1772697.71	349057.71	39°27'20.0635"N	80°18'17.9978"W	3682.17	138.534	0.10	-0.09	0.02	
11720.00	90.320	134.290	7510.49	3769.12	-2824.98	2505.41	1772764.26	348991.33	39°27'19.4134"N	80°18'17.1417"W	3775.93	138.431	0.25	0.03	-0.24	
11815.00	90.440	134.330	7509.86	3864.11	-2891.34	2573.39	1772831.63	348924.37	39°27'18.7575"N	80°18'16.2752"W	3870.68	138.330	0.13	0.13	0.04	
11910.00	90.290	133.920	7509.25	3959.10	-2957.48	2641.58	1772899.22	348857.61	39°27'18.1037"N	80°18'15.4059"W	3965.43	138.229	0.46	-0.16	-0.43	
12004.00	90.160	133.940	7508.89	4053.08	-3022.70	2709.28	1772966.32	348791.79	39°27'17.4591"N	80°18'14.5430"W	4059.17	138.130	0.14	-0.14	0.02	
12099.00	90.350	134.290	7508.46	4148.07	-3088.83	2777.48	1773033.92	348725.05	39°27'16.8054"N	80°18'13.6736"W	4153.94	138.038	0.42	0.20	0.37	
12193.00	90.260	134.210	7507.96	4242.06	-3154.42	2844.81	1773100.65	348658.86	39°27'16.1571"N	80°18'12.8153"W	4247.74	137.954	0.13	-0.10	-0.09	
12288.00	90.160	134.180	7507.61	4337.05	-3220.64	2912.92	1773168.15	348592.02	39°27'15.5025"N	80°18'11.9471"W	4342.54	137.872	0.11	-0.11	-0.03	
12382.00	89.580	135.350	7507.83	4431.05	-3286.84	2979.66	1773234.28	348525.23	39°27'14.8482"N	80°18'11.0964"W	4436.40	137.806	1.39	-0.62	1.24	
12477.00	89.490	134.980	7508.60	4526.04	-3354.20	3046.64	1773300.65	348457.27	39°27'14.1823"N	80°18'10.2426"W	4531.30	137.751	0.40	-0.09	-0.39	
12572.00	89.800	135.220	7509.19	4621.04	-3421.49	3113.70	1773367.09	348389.38	39°27'13.5172"N	80°18'9.3878"W	4626.20	137.697	0.41	0.33	0.25	
12667.00	89.400	135.240	7509.85	4716.04	-3488.94	3180.60	1773433.37	348321.33	39°27'12.8505"N	80°18'8.5351"W	4721.11	137.647	0.42	-0.42	0.02	
12761.00	89.670	135.650	7510.61	4810.03	-3555.92	3246.55	1773498.71	348253.76	39°27'12.1884"N	80°18'7.6944"W	4815.04	137.604	0.52	0.29	0.44	
12856.00	89.610	135.300	7511.21	4905.02	-3623.64	3313.16	1773564.70	348185.44	39°27'11.5190"N	80°18'6.8453"W	4909.97	137.563	0.37	-0.06	-0.37	
12951.00	89.700	135.510	7511.78	5000.02	-3691.29	3379.86	1773630.78	348117.19	39°27'10.8503"N	80°18'5.9952"W	5004.91	137.522	0.24	0.09	0.22	
13046.00	90.410	135.710	7511.69	5095.01	-3759.18	3446.32	1773696.61	348048.71	39°27'10.1793"N	80°18'5.1481"W	5099.85	137.486	0.78	0.75	0.21	
13140.00	90.380	135.510	7511.04	5189.01	-3826.35	3512.07	1773761.75	347980.95	39°27'9.5153"N	80°18'4.3100"W	5193.80	137.452	0.22	-0.03	-0.21	
13234.00	90.500	135.120	7510.32	5283.00	-3893.18	3578.17	1773827.24	347913.53	39°27'8.8547"N	80°18'3.4675"W	5287.73	137.414	0.43	0.13	-0.41	
13329.00	90.440	135.670	7509.54	5378.00	-3960.81	3644.88	1773893.33	347845.30	39°27'8.1861"N	80°18'2.6172"W	5382.67	137.379	0.58	-0.06	0.58	
13424.00	90.380	135.510	7508.86	5472.99	-4028.67	3711.36	1773959.19	347776.84	39°27'7.5153"N	80°18'1.7698"W	5477.63	137.348	0.18	-0.06	-0.17	
13519.00	90.260	135.770	7508.33	5567.98	-4096.59	3777.78	1774024.99	347708.33	39°27'6.8440"N	80°18'0.9233"W	5572.58	137.319	0.30	-0.13	0.27	
13613.00	90.530	136.250	7507.68	5661.96	-4164.22	3843.06	1774089.65	347640.12	39°27'6.1755"N	80°18'0.0911"W	5666.56	137.297	0.59	0.29	0.51	

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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 7H
Field	Marion	API	47-049-02494-0000
Facility	Sands Pad	Wellbore	Sands Unit B 7H AWB
Slot	Slot #07		

WELLPATH DATA (229 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
13708.00	90.560	135.690	7506.78	5756.94	-4232.52	3909.09	1774155.05	347571.22	39°27'5.5003"N	80°17'59.2496"W	5761.53	137.275	0.59	0.03	-0.59	
13802.00	90.320	134.390	7506.06	5850.94	-4299.03	3975.50	1774220.86	347504.12	39°27'4.8429"N	80°17'58.4030"W	5855.45	137.239	1.41	-0.26	-1.38	
13897.00	90.720	134.390	7505.20	5945.93	-4365.48	4043.39	1774288.14	347437.06	39°27'4.1860"N	80°17'57.5378"W	5950.33	137.194	0.42	0.42	0.00	
13992.00	90.160	134.390	7504.47	6040.92	-4431.94	4111.27	1774355.41	347370.00	39°27'3.5291"N	80°17'56.6726"W	6045.22	137.150	0.59	-0.59	0.00	
14087.00	89.640	133.790	7504.63	6135.91	-4498.04	4179.50	1774423.04	347303.28	39°27'2.8757"N	80°17'55.8029"W	6140.08	137.102	0.84	-0.55	-0.63	
14181.00	90.040	134.470	7504.89	6229.90	-4563.49	4246.97	1774489.91	347237.23	39°27'2.2287"N	80°17'54.9430"W	6233.96	137.057	0.84	0.43	0.72	
14276.00	89.860	134.000	7504.98	6324.89	-4629.76	4315.04	1774557.37	347170.35	39°27'1.5736"N	80°17'54.0754"W	6328.84	137.015	0.53	-0.19	-0.49	
14371.00	90.380	136.250	7504.78	6419.88	-4697.08	4382.06	1774623.78	347102.43	39°27'0.9082"N	80°17'53.2212"W	6423.78	136.987	2.43	0.55	2.37	
14465.00	89.920	134.650	7504.53	6513.88	-4764.06	4448.00	1774689.10	347034.85	39°27'0.2460"N	80°17'52.3807"W	6517.75	136.965	1.77	-0.49	-1.70	
14559.00	89.670	134.540	7504.87	6607.87	-4830.06	4514.94	1774755.44	346968.26	39°26'59.5936"N	80°17'51.5276"W	6611.67	136.931	0.29	-0.27	-0.12	
14654.00	89.920	134.150	7505.21	6702.87	-4896.46	4582.88	1774822.77	346901.25	39°26'58.9372"N	80°17'50.6617"W	6706.57	136.895	0.49	0.26	-0.41	
14749.00	89.860	134.260	7505.39	6797.86	-4962.70	4650.98	1774890.26	346834.40	39°26'58.2824"N	80°17'49.7937"W	6801.47	136.857	0.13	-0.06	0.12	
14843.00	89.330	135.770	7506.06	6891.85	-5029.18	4717.43	1774956.10	346767.32	39°26'57.6253"N	80°17'48.9469"W	6895.41	136.832	1.70	-0.56	1.61	
14938.00	89.430	134.640	7507.08	6986.84	-5096.59	4784.36	1775022.41	346699.31	39°26'56.9589"N	80°17'48.0938"W	6990.37	136.810	1.19	0.11	-1.19	
15032.00	90.290	134.610	7507.31	7080.84	-5162.62	4851.26	1775088.71	346632.68	39°26'56.3062"N	80°17'47.2412"W	7084.30	136.781	0.92	0.91	-0.03	
15127.00	90.530	134.420	7506.63	7175.83	-5229.22	4919.00	1775155.84	346565.48	39°26'55.6478"N	80°17'46.3778"W	7179.23	136.751	0.32	0.25	-0.20	
15221.00	90.350	133.100	7505.91	7269.81	-5294.23	4986.88	1775223.13	346499.86	39°26'55.0051"N	80°17'45.5126"W	7273.09	136.712	1.42	-0.19	-1.40	
15316.00	90.350	134.620	7505.33	7364.79	-5360.05	5055.38	1775291.02	346433.42	39°26'54.3544"N	80°17'44.6397"W	7367.97	136.676	1.60	0.00	1.60	
15411.00	90.470	135.400	7504.65	7459.78	-5427.24	5122.54	1775357.57	346365.63	39°26'53.6903"N	80°17'43.7837"W	7462.93	136.654	0.83	0.13	0.82	
15506.00	90.290	135.360	7504.02	7554.78	-5494.86	5189.27	1775423.67	346297.42	39°26'53.0218"N	80°17'42.9333"W	7557.90	136.638	0.19	-0.19	-0.04	
15600.00	89.920	134.510	7503.85	7648.78	-5561.25	5255.81	1775489.61	346230.43	39°26'52.3655"N	80°17'42.0852"W	7651.86	136.617	0.99	-0.39	-0.90	
15695.00	90.010	135.140	7503.91	7743.78	-5628.22	5323.19	1775556.38	346162.86	39°26'51.7035"N	80°17'41.2265"W	7746.82	136.595	0.67	0.09	0.66	
15790.00	89.670	134.570	7504.17	7838.77	-5695.22	5390.53	1775623.11	346095.25	39°26'51.0411"N	80°17'40.3682"W	7841.77	136.574	0.70	-0.36	-0.60	
15884.00	89.060	135.040	7505.21	7932.77	-5761.46	5457.22	1775689.19	346028.42	39°26'50.3863"N	80°17'39.5183"W	7935.72	136.553	0.82	-0.65	0.50	
15979.00	89.760	134.890	7506.19	8027.76	-5828.59	5524.43	1775755.79	345960.68	39°26'49.7227"N	80°17'38.6618"W	8030.68	136.535	0.75	0.74	-0.16	
16073.00	89.860	134.560	7506.50	8121.76	-5894.74	5591.22	1775821.97	345893.94	39°26'49.0688"N	80°17'37.8106"W	8124.63	136.514	0.37	0.11	-0.35	
16168.00	89.860	134.900	7506.74	8216.76	-5961.59	5658.71	1775888.85	345826.48	39°26'48.4079"N	80°17'36.9505"W	8219.59	136.493	0.36	0.00	0.36	
16263.00	89.890	134.490	7506.94	8311.76	-6028.41	5726.24	1775955.76	345759.05	39°26'47.7473"N	80°17'36.0899"W	8314.54	136.473	0.43	0.03	-0.43	
16357.00	88.380	134.690	7508.36	8405.74	-6094.39	5793.17	1776022.09	345692.47	39°26'47.0951"N	80°17'35.2369"W	8408.48	136.452	1.62	-1.61	0.21	
16452.00	90.900	135.250	7508.96	8500.73	-6161.52	5860.38	1776088.68	345624.74	39°26'46.4314"N	80°17'34.3804"W	8503.44	136.435	2.72	2.65	0.59	

XTO ENERGY
Marion Field

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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 7H
Field	Marion	API	47-049-02494-0000
Facility	Sands Pad	Wellbore	Sands Unit B 7H AWB
Slot	Slot #07		

WELLPATH DATA (229 stations)																
MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Vert Sect	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
16547.00	90.010	134.510	7508.20	8595.73	-6228.56	5927.69	1776155.38	345557.10	39°26'45.7688"N	80°17'33.5226"W	8598.40	136.418	1.22	-0.94	-0.78	
16641.00	88.720	134.570	7509.25	8689.72	-6294.48	5994.68	1776221.77	345490.58	39°26'45.1170"N	80°17'32.6688"W	8692.34	136.397	1.37	-1.37	0.06	
16735.00	88.960	134.910	7511.15	8783.70	-6360.63	6061.44	1776287.92	345423.83	39°26'44.4631"N	80°17'31.8181"W	8786.28	136.380	0.44	0.26	0.36	
16830.00	87.730	133.390	7513.89	8878.64	-6426.78	6129.57	1776355.45	345357.08	39°26'43.8092"N	80°17'30.9499"W	8881.16	136.356	2.06	-1.29	-1.60	
16925.00	88.660	135.750	7516.89	8973.58	-6493.41	6197.21	1776422.48	345289.84	39°26'43.1505"N	80°17'30.0879"W	8976.06	136.337	2.67	0.98	2.48	
17019.00	88.290	134.760	7519.39	9067.55	-6560.14	6263.36	1776488.01	345222.51	39°26'42.4907"N	80°17'29.2449"W	9070.01	136.326	1.12	-0.39	-1.05	
17114.00	89.920	135.040	7520.87	9162.53	-6627.19	6330.64	1776554.68	345154.86	39°26'41.8279"N	80°17'28.3875"W	9164.97	136.311	1.74	1.72	0.29	
17209.00	89.830	135.050	7521.08	9257.53	-6694.42	6397.76	1776621.19	345087.03	39°26'41.1633"N	80°17'27.5322"W	9259.95	136.298	0.10	-0.09	0.01	
17304.00	90.200	135.000	7521.05	9352.53	-6761.62	6464.91	1776687.72	345019.22	39°26'40.4989"N	80°17'26.6765"W	9354.92	136.285	0.39	0.39	-0.05	
17398.00	88.440	134.060	7522.17	9446.52	-6827.54	6531.91	1776754.12	344952.71	39°26'39.8473"N	80°17'25.8227"W	9448.87	136.268	2.12	-1.87	-1.00	
17493.00	88.410	134.340	7524.78	9541.47	-6893.74	6599.99	1776821.59	344885.89	39°26'39.1928"N	80°17'24.9551"W	9543.77	136.247	0.30	-0.03	0.29	
17587.00	88.750	134.890	7527.11	9635.44	-6959.74	6666.88	1776887.88	344819.30	39°26'38.5403"N	80°17'24.1027"W	9637.70	136.231	0.69	0.36	0.59	
17682.00	88.160	134.390	7529.67	9730.40	-7026.47	6734.45	1776954.84	344751.96	39°26'37.8806"N	80°17'23.2416"W	9732.63	136.216	0.81	-0.62	-0.53	
17777.00	86.960	136.370	7533.72	9825.31	-7094.02	6801.12	1777020.88	344683.81	39°26'37.2128"N	80°17'22.3921"W	9827.53	136.208	2.44	-1.26	2.08	
17872.00	87.240	140.500	7538.52	9920.00	-7164.99	6864.05	1777083.17	344612.28	39°26'36.5112"N	80°17'21.5901"W	9922.32	136.229	4.35	0.29	4.35	
17967.00	87.180	141.740	7543.15	10014.34	-7238.86	6923.61	1777142.05	344537.88	39°26'35.7810"N	80°17'20.8312"W	10016.86	136.275	1.31	-0.06	1.31	
18061.00	87.300	146.120	7547.68	10107.07	-7314.73	6978.88	1777196.63	344461.51	39°26'35.0310"N	80°17'20.1271"W	10109.90	136.346	4.66	0.13	4.66	
18156.00	87.860	145.430	7551.69	10200.30	-7393.21	7032.26	1777249.30	344382.56	39°26'34.2552"N	80°17'19.4469"W	10203.54	136.433	0.93	0.59	-0.73	
18251.00	87.180	146.280	7555.80	10293.51	-7471.76	7085.53	1777301.85	344303.54	39°26'33.4787"N	80°17'18.7681"W	10297.18	136.520	1.15	-0.72	0.89	
18346.00	87.430	146.400	7560.27	10386.55	-7550.75	7138.13	1777353.73	344224.08	39°26'32.6979"N	80°17'18.0980"W	10390.70	136.609	0.29	0.26	0.13	
18440.00	87.300	147.170	7564.59	10478.47	-7629.30	7189.57	1777404.45	344145.07	39°26'31.9213"N	80°17'17.4427"W	10483.14	136.700	0.83	-0.14	0.82	
18535.00	87.520	148.890	7568.88	10570.92	-7709.81	7239.81	1777453.96	344064.11	39°26'31.1255"N	80°17'16.8025"W	10576.20	136.801	1.82	0.23	1.81	
18630.00	88.660	148.690	7572.05	10663.13	-7791.01	7289.01	1777502.42	343982.47	39°26'30.3228"N	80°17'16.1757"W	10669.09	136.907	1.22	1.20	-0.21	
18724.00	90.630	149.680	7572.63	10754.25	-7871.74	7337.16	1777549.83	343901.32	39°26'29.5248"N	80°17'15.5623"W	10760.96	137.013	2.35	2.10	1.05	Deepest TVD at 7572.63' TVD
18819.00	90.070	147.510	7572.05	10846.58	-7952.81	7386.66	1777598.59	343819.80	39°26'28.7234"N	80°17'14.9317"W	10854.03	137.114	2.36	-0.59	-2.28	
18914.00	89.800	149.010	7572.16	10939.04	-8033.60	7436.63	1777647.83	343738.57	39°26'27.9248"N	80°17'14.2950"W	10947.25	137.210	1.60	-0.28	1.58	
19008.00	90.100	149.430	7572.24	11030.15	-8114.36	7484.74	1777695.20	343657.38	39°26'27.1264"N	80°17'13.6822"W	11039.21	137.311	0.55	0.32	0.45	
19102.00	90.600	150.240	7571.66	11121.01	-8195.63	7531.97	1777741.69	343575.69	39°26'26.3231"N	80°17'13.0805"W	11130.99	137.416	1.01	0.53	0.86	
19197.00	90.530	147.180	7570.73	11213.28	-8276.80	7581.30	1777790.28	343494.09	39°26'25.5207"N	80°17'12.4520"W	11224.15	137.511	3.22	-0.07	-3.22	
19292.00	90.660	148.840	7569.74	11305.83	-8357.36	7631.63	1777839.87	343413.07	39°26'24.7243"N	80°17'11.8109"W	11317.56	137.599	1.75	0.14	1.75	

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Field	Marion	API	47-049-02494-0000
Facility	Sands Pad	Wellbore	Sands Unit B 7H AWB
Slot	Slot #07		

WELLPATH DATA (229 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
19386.00	90.500	148.420	7568.79	11397.18	-8437.62	7680.56	1777888.07	343332.38	39°26'23.9310"N	80°17'11.1875"W	11409.84	137.689	0.48	-0.17	-0.45	
19481.00	90.560	148.780	7567.91	11489.51	-8518.70	7730.05	1777936.82	343250.86	39°26'23.1294"N	80°17'10.5570"W	11503.13	137.779	0.38	0.06	0.38	
19575.00	90.780	148.700	7566.81	11580.81	-8599.05	7778.83	1777984.87	343170.08	39°26'22.3352"N	80°17'9.9356"W	11595.42	137.867	0.25	0.23	-0.09	
19670.00	90.380	147.580	7565.85	11673.31	-8679.73	7828.97	1778034.27	343088.95	39°26'21.5376"N	80°17'9.2969"W	11688.90	137.950	1.25	-0.42	-1.18	
19765.00	90.750	147.640	7564.91	11766.01	-8759.95	7879.85	1778084.43	343008.28	39°26'20.7446"N	80°17'8.6486"W	11782.56	138.028	0.39	0.39	0.06	
19860.00	90.750	147.630	7563.67	11858.70	-8840.18	7930.70	1778134.55	342927.59	39°26'19.9515"N	80°17'8.0008"W	11876.23	138.104	0.01	0.00	-0.01	
19954.00	90.720	148.160	7562.46	11950.31	-8919.80	7980.66	1778183.78	342847.53	39°26'19.1644"N	80°17'7.3644"W	11968.87	138.181	0.56	-0.03	0.56	
20049.00	90.290	147.420	7561.63	12042.95	-9000.18	8031.29	1778233.68	342766.70	39°26'18.3699"N	80°17'6.7194"W	12062.54	138.256	0.90	-0.45	-0.78	
20144.00	90.200	148.620	7561.22	12135.50	-9080.76	8081.61	1778283.26	342685.68	39°26'17.5733"N	80°17'6.0785"W	12156.17	138.332	1.27	-0.09	1.26	
20239.00	90.290	147.680	7560.81	12228.00	-9161.45	8131.74	1778332.65	342604.54	39°26'16.7756"N	80°17'5.4398"W	12249.79	138.408	0.99	0.09	-0.99	
20334.00	90.630	148.000	7560.05	12320.62	-9241.87	8182.30	1778382.48	342523.66	39°26'15.9806"N	80°17'4.7957"W	12343.51	138.480	0.49	0.36	0.34	
20428.00	90.380	147.870	7559.22	12412.23	-9321.53	8232.20	1778431.66	342443.56	39°26'15.1932"N	80°17'4.1600"W	12436.24	138.551	0.30	-0.27	-0.14	
20523.00	90.690	147.540	7558.34	12504.89	-9401.83	8282.96	1778481.68	342362.81	39°26'14.3993"N	80°17'3.5135"W	12530.04	138.620	0.48	0.33	-0.35	
20618.00	90.600	148.040	7557.27	12597.53	-9482.21	8333.59	1778531.58	342281.99	39°26'13.6048"N	80°17'2.8685"W	12623.82	138.689	0.53	-0.09	0.53	
20712.00	90.230	147.790	7556.59	12689.14	-9561.85	8383.52	1778580.78	342201.90	39°26'12.8175"N	80°17'2.2325"W	12716.61	138.757	0.48	-0.39	-0.27	
20807.00	89.490	147.350	7556.82	12781.86	-9642.03	8434.46	1778631.00	342121.27	39°26'12.0249"N	80°17'1.5835"W	12810.50	138.822	0.91	-0.78	-0.46	
20902.00	90.010	147.680	7557.23	12874.60	-9722.16	8485.49	1778681.29	342040.68	39°26'11.2327"N	80°17'0.9335"W	12904.42	138.886	0.65	0.55	0.35	
20914.00	90.130	147.720	7557.22	12886.31	-9732.31	8491.90	1778687.61	342030.48	39°26'11.1324"N	80°17'0.8519"W	12916.27	138.894	1.05	1.00	0.33	Last MWD Survey at 20914' MD
20939.00‡	90.130	147.720	7557.16	12910.69	-9753.44	8505.25	1778700.77	342009.22	39°26'10.9235"N	80°17'0.6818"W	12940.98	138.911	0.00	0.00	0.00	Projected MD at TD: 20939'MD

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Actual Wellpath Report

Sands Unit B 7H AWP Proj: 20939'

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REFERENCE WELLPATH IDENTIFICATION

Operator	XTO ENERGY INC	Well	Sands Unit B 7H
Field	Marion	API	47-049-02494-0000
Facility	Sands Pad	Wellbore	Sands Unit B 7H AWB
Slot	Slot #07		

HOLE & CASING SECTIONS - Ref Wellbore: Sands Unit B 7H AWB Ref Wellpath: Sands Unit B 7H AWP Proj: 20939'

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	-0.50	-0.06
17.5in Open Hole	102.00	550.00	448.00	102.00	549.97	-0.50	-0.06	-3.85	-3.56
13.375in Casing Surface	26.00	550.00	524.00	26.00	549.97	0.00	0.00	-3.85	-3.56
12.25in Open Hole	550.00	3150.00	2600.00	549.97	3144.39	-3.85	-3.56	45.15	-89.12
9.625in Casing Intermediate	26.00	3150.00	3124.00	26.00	3144.39	0.00	0.00	45.15	-89.12
8.75in Open Hole	3150.00	6079.00	2929.00	3144.39	6038.24	45.15	-89.12	238.74	-496.76
8.5in Open Hole	6079.00	20939.00	14860.00	6038.24	7557.16	238.74	-496.76	-9753.44	8505.25
5.5in Casing Production	26.00	20939.00	20913.00	26.00	7557.16	0.00	0.00	-9753.44	8505.25

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Sands Unit B 7H - BHL - Rev-4	7504.00	-9756.66	8501.45	1778696.94	342006.04	39°26'10.8917"N	80°17'0.7303"W	point
Sands Unit B 7H - IP #1 - Rev-4	7504.00	-7105.69	6755.26	1776974.93	344672.56	39°26'37.0976"N	80°17'22.9766"W	point
Sands Unit B 7H - LP - Rev-4	7504.00	-130.51	-223.59	1770059.94	351710.26	39°27'46.0452"N	80°18'51.9329"W	point

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Sands Unit B 7H AWP Proj: 20939'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 7H
Field	Marion	API	47-049-02494-0000
Facility	Sands Pad	Wellbore	Sands Unit B 7H AWB
Slot	Slot #07		

WELLPATH COMPOSITION - Ref Wellbore: Sands Unit B 7H AWB Ref Wellpath: Sands Unit B 7H AWP Proj: 20939'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	471.00	BH Generic gyro - northseeking (Standard)	01 Javins Gyro Surveys <17-1/2">(50'-445')	Sands Unit B 7H AWB	12/16/2019
471.00	3085.00	OWSG MWD rev2 + HRGM	02 Javins EM Surveys <12-1/4">(445')(519'-3059')	Sands Unit B 7H AWB	12/16/2019
3085.00	5915.00	OWSG MWD rev2 + HRGM	03 Javins EM Surveys <8-3/4">(3059')(3142'-5889')	Sands Unit B 7H AWB	12/16/2019
5915.00	20939.00	OWSG MWD rev2 +HRGM + Multi-Station Correction	07 Final Superior Corrected Surveys <8-1/2">(5915')(6045'-20914')	Sands Unit B 7H AWB	1/28/2020

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Sands Unit B 7H AWP Proj: 20939'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO ENERGY INC	Well	Sands Unit B 7H
Field	Marion	API	47-049-02494-0000
Facility	Sands Pad	Wellbore	Sands Unit B 7H AWB
Slot	Slot #07		

COMMENTS
<p>Wellpath general comments API: 47-049-02494-0000 BHI Job #: 110060905A Rig: Patteron 579 Duration: 01/30/2020-02/05/2020 Javins Gyro Surveys <17-1/2">(50'-445') Javins EM Surveys <12-1/4">(445')(519'-3059') Javins EM Surveys <8-3/4">(3059')(3142'-5889') Final Superior Corrected Surveys <8-1/2">(5915')(6045'-20914') Landing Pt. at 7938' MD Deepest TVD at 7572.63' TVD Last MWD Survey at 20914' MD Projected MD at TD: 20939'MD</p>

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