



Southwestern Energy

Edward Nichols OHI 6H  
Ohio County, WV  
SCD 41

Plan vs Actual



Weatherford

Plan Data for Edward Nichols OHI 6H

Field: SOUTHWESTERN\_OHIO\_CO, WV UTM NAD 83 (17N)  
Vertical Reference Datum (VRD): Mean Sea Level  
Map Unit: USFT  
Projected Coordinate System: NAD83 / UTM zone 17N

Site: Edward Nichols Pad

Unit: USFeet  
Company Name: SOUTHWESTERN ENERGY  
Position:  
Northing: 14563684.96USft  
Easting: 17438804.84USft  
North Reference: Grid  
Elevation Above VRD: 1310.00USft

Slot: Edward Nichols OHI 6H

Position:  
Offset is from Site centre  
+N/-S: 15.57USft  
+E/-W: 0.54USft  
Northing: 14563700.54USft  
Easting: 17438804.38USft  
Latitude: 40.100928°  
Longitude: -80.630281°  
Elevation Above VRD: 1310.00USft

Well: Edward Nichols OHI 6H

Type: Main-Well  
File Number:  
Plan Folder: P2  
Plan: P2:V1  
Vertical Section: Position offset of origin from Slot centre:  
+N/-S: 0.03USft  
Azimuth: 161.12°  
+E/-W: 0.00USft  
Magnetic Parameters:  
Dip: Date:  
Field Strength: Declination: 67.17° 2017-09-27  
bggm2017 52366(n1) -8.79°

Plan Data for Edward Nichols OHI 6H

Plan Point Information:

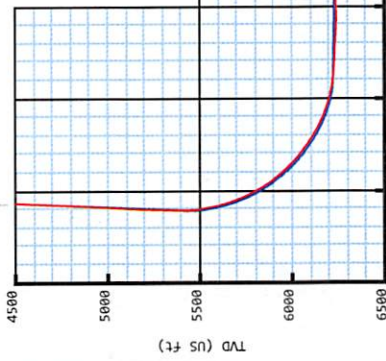
Dogleg Inc	MD	Inc	Az	TVD	+N/-S	+E/-W	VSec	DLS	ToolFace	Comments
(°)	(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(DLSU)	(°)	
4765.00	17.20	259.68	4688.24	-105.72	-541.78	-75.26	0.98	305.0	Last WFT SVY	
5498.26	17.20	259.68	5388.72	-144.56	-755.10	-107.53	0.00	0.0	Curve KOP 7% DLS	
6416.88	60.00	159.78	6137.42	-589.52	-750.80	315.25	7.00	251.2	Build/Turn 9° DLS	
6745.74	89.15	154.40	6224.00	-878.25	-627.79	627.88	9.00	349.0	Landing Point	
14243.08	89.15	154.40	6335.00	-7638.69	2611.70	8072.86	0.00	0.0	PBHL ENH	

Target Set Information:

Name: Edward Nichols OHI 6H

Name	TVD	+N/-S	+E/-W	Northing	Easting	Lat	Long
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(°)	(°)
LP ENH	6224.00	-736.56	-695.69	14562963.98	1743108.69	40.098913	-80.632780
PBHL ENH	6335.00	-7638.69	2611.70	14556061.85	17466416.08	40.079921	-80.621058

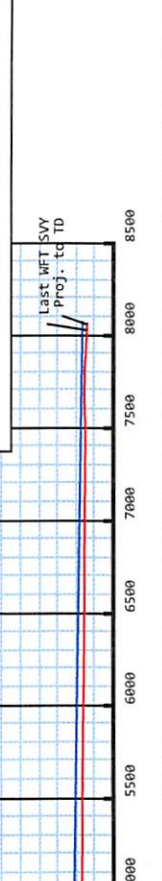
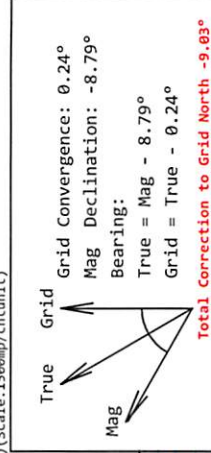
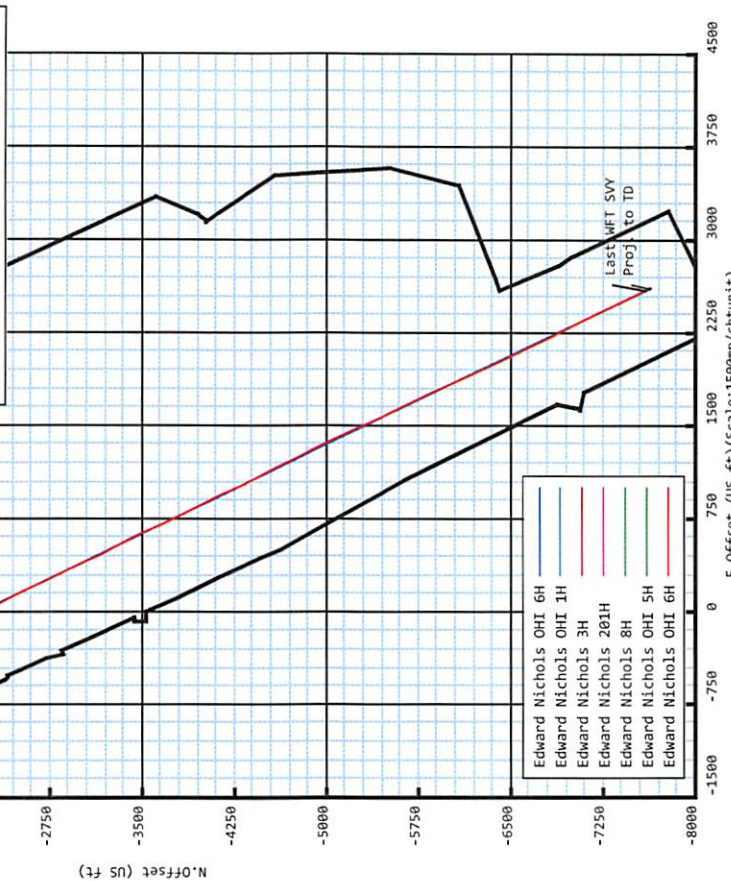
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KB: 1336  
GL: 1310

Formation Point Information:

Name	TVD	SS	MD
(USft)	(USft)	(USft)	(USft)
Onondaga Limestone	-4997.00	0.00	-1.00
Pittsburgh Coal	562.00	774.00	562.00
Top of Salt Water	684.00	652.00	684.00
Base Big Injun	1901.00	-565.00	1901.23
Berea	2245.00	-909.00	2245.28
Upper Rhinestreet	5638.00	-4302.00	5756.74
Lower Rhinestreet	5761.00	-4425.00	5891.64
Basal Rhinestreet	5826.00	-4490.00	5966.60
Cashaqua	5895.00	-4559.00	6050.43
Middlesex	5951.00	-4615.00	6122.92
Lower Middlesex	5980.00	-4644.00	6162.55
Burket	6016.00	-4680.00	6214.26
Rully	6039.00	-4703.00	6249.10
Mahantango	6087.00	-4751.00	6327.75
Levanna	6189.00	-4853.00	6557.37
Upper Marcellus	6200.00	-4864.00	6600.41



VS (US ft) (Bearing: 161.12° Scale: 1000USft/in)



## Edward Nichols OHI 6H

<b>Field Name:</b>	SOUTHWESTER N_OHIO CO, WV UTM NAD 83 (17N)	<b>Map Units:</b> US ft	<b>Company Name:</b> SOUTHWESTERN ENERGY
	<b>Vertical Reference Datum (VRD):</b> Mean Sea Level		
	<b>Projected Coordinate System:</b> NAD83 / UTM zone 17N		
	<b>Comment:</b>		

<b>Site:</b>	Units: US ft	North Reference: Grid	Convergence Angle: 0.24
Edward Nichols Pad	<b>Position:</b>	<b>Northing:</b> 14563684.97 US ft	<b>Latitude:</b> 40.100885
		<b>Easting:</b> 1743803.84 US ft	<b>Longitude:</b> -80.630283
	<b>Elevation above MSL:</b> 1310.00 US ft		
	<b>Comment:</b>		

<b>Slot:</b>	<b>Position (Relative to Site Centre)</b>		
Edward Nichols OHI 6H	<b>+N/-S:</b> 15.57 US ft	<b>Northing:</b> 14563700.54 US ft	<b>Latitude:</b> 40.100928
	<b>+E/-W:</b> 0.54 US ft	<b>Easting:</b> 1743804.38 US ft	<b>Longitude:</b> -80.630281
	<b>Elevation above MSL:</b> 1310.00 US ft		
	<b>Comment:</b>		

<b>Well:</b>	Type: Main well	UWI:	
Edward Nichols OHI 6H	<b>File Number:</b>	<b>Comment:</b>	
	<b>Closure Distance:</b> 8063.9 US ft	<b>Closure Azimuth:</b> 161.09°	
	<b>Vertical Section: Position of Origin (Relative to Slot centre)</b>		
	<b>+N/-S:</b> 0.03 US ft	<b>+E/-W:</b> 0.00 US ft	<b>Az:</b> 161.12°

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<b>Drill floor: Survey Name: Definitive Survey</b>			
<b>Rig Height (Well TVD Reference):</b> 26.00 US ft	<b>Elevation above MSL:</b> 1336.00 US ft	<b>Inclination:</b> 0.00°	<b>Azimuth:</b> 0.00°

<b>Survey Name: Definitive Survey</b>			
<b>Date:</b> 06/Jul/2017	<b>Survey Tool:</b> See Survey Tool Ranges below.	<b>Comment:</b>	<b>Company:</b>

<b>Magnetic Model:</b>				
<b>Model Name:</b> bggm2017	<b>Date:</b> 27/Sep/2017	<b>Field Strength:</b> 52366.8 nT	<b>Declination:</b> -8.79°	<b>Dip:</b> 67.17°

<b>Tie Point:</b>				
<b>MD:</b> 0.00 US ft	<b>Inclination:</b> 0.00°	<b>Azimuth:</b> 0.00°	<b>TVD:</b> 0.00 US ft	<b>North Offset:</b> 0.00 US ft
				<b>East Offset:</b> 0.00 US ft

Name	Start MD(USFt)	End MD(USFt)	Source Survey
MFAC_US_V2	0.00	417.00	WFT MWD_01-MFAC
MFAC_US_V2	417.00	1958.00	WFT MWD_02-MFAC
MWD	1958.00	4765.00	WFT MWD_02-MWD
MWD	4765.00	14225.00	WFT MWD_03

Wellpath created using minimum curvature.

## 5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N. Offset (US ft)	E. Offset (US ft)	Latitude (° ' ")	Longitude (° ' ")	DLS (%/100US ft)	Comment
0.00	0.00	0.00	0.00	0.03	0.00	0.00	40.100928	-80.630281	0.00	
26.00	0.00	0.00	26.00	0.03	0.00	0.00	40.100928	-80.630281	0.00	KB Offset
154.00	0.21	135.76	154.00	0.24	-0.17	0.16	40.100927	-80.630280	0.16	
242.00	0.34	137.16	242.00	0.62	-0.48	0.45	40.100926	-80.630279	0.15	
329.00	0.30	96.80	329.00	0.96	-0.69	0.86	40.100926	-80.630278	0.26	
417.00	0.71	79.65	416.99	1.14	-0.62	1.62	40.100926	-80.630275	0.49	
562.04	0.55	98.57	562.03	1.59	-0.56	3.19	40.100926	-80.630269	0.18	Pittsburgh Coal :
683.00	0.49	121.64	682.98	2.26	-0.92	4.21	40.100925	-80.630266	0.18	
684.06	0.49	121.44	684.04	2.27	-0.93	4.22	40.100925	-80.630266	0.18	Top of Salt Water :
771.00	0.58	107.14	770.98	2.81	-1.25	4.96	40.100924	-80.630263	0.18	
859.00	0.59	116.36	858.97	3.40	-1.58	5.79	40.100923	-80.630260	0.11	
946.00	0.58	116.46	945.97	4.03	-1.98	6.58	40.100922	-80.630257	0.01	
1033.00	0.45	123.31	1032.96	4.61	-2.36	7.26	40.100921	-80.630255	0.17	
1121.00	0.31	144.25	1120.96	5.11	-2.74	7.69	40.100920	-80.630253	0.22	
1210.00	0.28	158.88	1209.96	5.56	-3.14	7.91	40.100919	-80.630253	0.09	
1298.00	0.48	163.17	1297.96	6.14	-3.70	8.09	40.100917	-80.630252	0.23	
1385.00	0.50	168.05	1384.96	6.88	-4.42	8.28	40.100915	-80.630251	0.05	
1472.00	0.52	177.08	1471.95	7.64	-5.18	8.38	40.100913	-80.630251	0.10	
1561.00	0.54	183.01	1560.95	8.42	-6.00	8.38	40.100911	-80.630251	0.07	
1649.00	0.51	200.32	1648.94	9.10	-6.79	8.22	40.100909	-80.630252	0.18	
1737.00	0.53	206.29	1736.94	9.70	-7.52	7.90	40.100907	-80.630253	0.07	
1824.00	0.57	210.65	1823.94	10.26	-8.25	7.50	40.100905	-80.630254	0.07	
1901.23	0.61	203.60	1901.17	10.81	-8.96	7.14	40.100903	-80.630255	0.11	Base Big Injun :
1911.00	0.62	202.78	1910.93	10.89	-9.06	7.10	40.100903	-80.630256	0.11	
1958.00	0.72	205.33	1957.93	11.29	-9.56	6.87	40.100901	-80.630256	0.22	
2085.00	0.66	210.40	2084.92	12.34	-10.91	6.16	40.100898	-80.630259	0.07	
2174.00	0.54	226.59	2173.92	12.85	-11.64	5.60	40.100896	-80.630261	0.23	
2245.28	0.49	229.70	2245.19	13.10	-12.07	5.12	40.100894	-80.630263	0.08	Berea :
2262.00	0.48	230.52	2261.91	13.15	-12.16	5.01	40.100894	-80.630263	0.08	
2349.00	0.45	239.95	2348.91	13.35	-12.56	4.44	40.100893	-80.630265	0.09	
2436.00	0.47	242.58	2435.91	13.47	-12.90	3.82	40.100892	-80.630267	0.03	
2524.00	1.80	265.24	2523.89	13.18	-13.18	2.13	40.100891	-80.630273	1.57	
2614.00	3.82	269.22	2613.77	11.91	-13.34	-2.28	40.100891	-80.630289	2.25	
2701.00	5.21	268.63	2700.50	9.82	-13.47	-9.13	40.100891	-80.630314	1.60	
2788.00	7.23	267.90	2786.99	7.05	-13.77	-18.55	40.100890	-80.630347	2.32	
2876.00	8.22	267.06	2874.19	3.72	-14.29	-30.37	40.100889	-80.630390	1.13	
2965.00	9.89	263.68	2962.07	0.31	-15.46	-44.32	40.100886	-80.630440	1.97	
3051.00	11.16	264.09	3046.63	-3.16	-17.13	-59.94	40.100881	-80.630495	1.48	
3139.00	13.27	266.26	3132.63	-7.71	-18.67	-78.49	40.100877	-80.630562	2.45	
3227.00	14.00	265.28	3218.15	-12.95	-20.20	-99.17	40.100873	-80.630636	2.51	
3315.00	16.21	265.09	3303.10	-18.52	-22.13	-122.02	40.100868	-80.630718	0.97	
3403.00	17.06	265.21	3387.42	-24.63	-24.26	-147.13	40.100863	-80.630807	0.90	
3490.00	17.25	262.62	3470.55	-30.31	-26.98	-172.64	40.100856	-80.630899	0.71	
3577.00	17.51	260.73	3553.58	-35.07	-30.74	-198.35	40.100846	-80.630991	0.89	
3665.00	17.90	258.51	3637.41	-39.02	-35.57	-224.66	40.100833	-80.631085	0.84	
3752.00	17.68	256.22	3720.25	-41.91	-41.38	-250.60	40.100817	-80.631178	0.87	
3841.00	17.10	254.52	3805.18	-43.89	-48.09	-276.33	40.100799	-80.631270	1.04	
3929.00	16.21	255.31	3889.49	-45.55	-54.66	-300.68	40.100781	-80.631357	0.37	
4017.00	15.92	255.81	3974.05	-47.44	-60.73	-324.27	40.100765	-80.631441	1.10	
4106.00	16.90	256.06	4059.43	-49.55	-66.84	-348.66	40.100748	-80.631529	0.43	
4193.00	17.27	256.12	4142.59	-51.76	-72.99	-373.47	40.100732	-80.631617	0.55	
4281.00	16.84	256.88	4226.72	-54.18	-79.01	-398.56	40.100715	-80.631707	0.83	
4369.00	17.49	257.98	4310.80	-57.04	-84.66	-423.91	40.100700	-80.631798	1.09	
4457.00	18.41	258.84	4394.51	-60.49	-90.11	-450.48	40.100685	-80.631893	0.89	
4545.00	17.70	259.90	4478.18	-64.39	-95.14	-477.28	40.100672	-80.631989	0.58	
4633.00	17.35	261.15	4562.10	-68.72	-99.51	-503.42	40.100660	-80.632083	0.46	
4721.00	16.95	260.87	4646.18	-73.18	-103.56	-529.05	40.100649	-80.632174		

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## 5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N. Offset (US ft)	E. Offset (US ft)	Latitude (° ' ")	Longitude (° ' ")	DLS (°/100US ft)	Comment
4765.00	17.20	259.68	4688.24	-75.23	-105.74	-541.78	40.100643	-80.632220	0.98	
4907.00	17.34	260.30	4823.84	-81.73	-113.07	-583.29	40.100624	-80.632368	0.16	
5002.00	17.32	260.82	4914.53	-86.38	-117.71	-611.21	40.100611	-80.632468	0.16	
5098.00	17.53	261.30	5006.13	-91.34	-122.18	-639.61	40.100599	-80.632570	0.27	
5193.00	17.85	262.20	5096.63	-96.67	-126.32	-668.17	40.100588	-80.632672	0.44	
5290.00	17.15	258.28	5189.15	-101.31	-131.24	-696.91	40.100575	-80.632775	1.41	
5386.00	16.72	258.02	5280.98	-104.73	-136.98	-724.28	40.100560	-80.632873	0.45	
5482.00	17.17	256.98	5372.82	-107.83	-143.04	-751.59	40.100543	-80.632971	0.57	
5530.00	17.23	245.39	5418.68	-107.85	-147.60	-764.96	40.100531	-80.633019	7.13	
5578.00	17.11	231.61	5464.56	-104.78	-154.95	-776.96	40.100511	-80.633062	8.46	
5626.00	17.48	218.98	5510.41	-98.58	-164.94	-787.04	40.100484	-80.633098	7.85	
5674.00	17.91	210.01	5556.15	-89.89	-176.94	-795.26	40.100451	-80.633127	5.74	
5722.00	19.35	202.02	5601.64	-79.03	-190.70	-801.94	40.100413	-80.633151	6.10	
5758.11	20.90	196.55	5635.54	-69.26	-202.43	-806.02	40.100381	-80.633166	6.75	Upper Rhinstreet :
5769.00	21.40	195.06	5645.70	-66.03	-206.21	-807.09	40.100371	-80.633170	6.75	
5817.00	23.62	187.82	5690.05	-50.16	-224.19	-810.67	40.100321	-80.633183	7.39	
5864.00	25.79	183.66	5732.75	-32.31	-243.73	-812.61	40.100268	-80.633190	5.91	
5893.59	27.25	181.51	5759.23	-20.01	-256.93	-813.20	40.100231	-80.633193	5.90	Lower Rhinstreet :
5912.00	28.17	180.28	5775.52	-11.96	-265.48	-813.33	40.100208	-80.633193	5.90	
5959.00	30.27	177.94	5816.54	9.87	-288.42	-812.96	40.100145	-80.633192	5.09	
5968.50	30.95	177.47	5824.71	14.50	-293.25	-812.76	40.100132	-80.633192	7.56	Basal Rhinstreet :
6007.00	33.71	175.76	5857.25	34.34	-313.80	-811.54	40.100075	-80.633188	7.56	
6052.40	36.62	172.95	5894.36	59.79	-339.81	-808.94	40.100004	-80.633179	7.32	Cashaqua :
6054.00	36.72	172.86	5895.65	60.73	-340.76	-808.82	40.100001	-80.633178	7.32	
6102.00	40.94	170.27	5933.03	90.32	-370.51	-804.38	40.099919	-80.633163	9.42	
6126.08	42.34	168.87	5951.03	106.14	-386.25	-801.48	40.099876	-80.633153	6.98	Middlesex :
6151.00	43.80	167.49	5969.23	123.03	-402.90	-797.99	40.099830	-80.633140	6.98	
6166.61	44.53	167.07	5980.43	133.84	-413.51	-795.60	40.099801	-80.633132	5.05	Lower Middlesex :
6199.00	46.05	166.22	6003.22	156.75	-435.90	-790.28	40.099740	-80.633113	5.05	
6219.03	47.19	165.66	6016.97	171.26	-450.02	-786.74	40.099701	-80.633101	6.05	Burket :
6246.00	48.73	164.93	6035.03	191.24	-469.40	-781.65	40.099648	-80.633083	6.05	
6254.12	49.41	164.58	6040.35	197.36	-475.32	-780.04	40.099631	-80.633077	9.02	Rully :
6294.00	52.79	162.98	6065.39	228.36	-505.11	-771.36	40.099549	-80.633047	9.02	
6334.64	55.19	161.68	6089.29	261.22	-536.43	-761.38	40.099463	-80.633011	6.44	Mahantango :
6342.00	55.62	161.45	6093.47	267.28	-542.17	-759.46	40.099447	-80.633005	6.44	
6390.00	59.06	159.06	6119.37	307.67	-580.19	-745.80	40.099343	-80.632956	8.30	
6438.00	62.37	157.31	6142.84	349.47	-619.05	-730.24	40.099236	-80.632901	7.59	
6486.00	66.55	156.11	6163.54	392.64	-658.82	-713.11	40.099127	-80.632841	9.00	
6534.00	70.25	156.11	6181.20	437.10	-699.62	-695.04	40.099014	-80.632777	7.71	
6575.99	72.87	156.74	6194.48	476.79	-736.12	-679.11	40.098914	-80.632720	6.41	Levanna :
6582.00	73.25	156.83	6196.23	482.53	-741.41	-676.84	40.098899	-80.632712	6.41	Office of Oil and Gas
6618.39	75.33	157.30	6206.08	517.46	-773.66	-663.20	40.098811	-80.632664	5.85	Upper Marcellus :
6631.00	76.05	157.46	6209.20	529.66	-784.95	-658.49	40.098780	-80.632647	5.85	
6679.00	80.71	159.52	6218.87	576.61	-828.67	-641.27	40.098659	-80.632586	10.58	
6726.00	85.06	160.98	6224.69	623.23	-872.56	-625.52	40.098539	-80.632531	9.75	
6823.00	86.61	160.52	6231.73	719.97	-963.89	-593.62	40.098288	-80.632418	1.67	
6919.00	87.53	159.65	6236.64	815.83	-1054.03	-560.96	40.098040	-80.632302	1.32	
7015.00	87.53	153.94	6240.78	911.42	-1142.14	-523.19	40.097797	-80.632169	5.94	
7112.00	94.44	160.59	6239.11	1008.08	-1231.49	-485.74	40.097551	-80.632036	9.88	
7208.00	90.62	156.98	6234.88	1103.87	-1320.86	-451.05	40.097306	-80.631913	5.47	
7304.00	87.96	152.72	6236.07	1199.26	-1407.73	-410.26	40.097067	-80.631769	5.23	
7400.00	88.46	148.11	6239.07	1293.52	-1491.15	-362.90	40.096837	-80.631601	4.83	
7495.00	87.72	148.02	6242.23	1386.01	-1571.72	-312.68	40.096615	-80.631422	0.78	
7591.00	87.84	152.02	6245.95	1480.12	-1654.80	-264.76	40.096386	-80.631252	4.17	
7687.00	88.22	155.24	6249.25	1575.23	-1740.75	-222.15	40.096150	-80.631101	3.38	

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## 5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Latitude (° ' ")	Longitude (° ' ")	DLS (%/100US ft)	Comment
7783.00	88.27	155.90	6252.19	1670.74	-1828.11	-182.46	40.095910	-80.630960	0.69	
7879.00	88.03	153.44	6255.29	1766.07	-1914.83	-141.42	40.095671	-80.630815	2.57	
7975.00	88.58	153.14	6258.13	1861.14	-2000.55	-98.29	40.095435	-80.630662	0.65	
8071.00	88.15	153.57	6260.87	1956.22	-2086.32	-55.25	40.095199	-80.630509	0.63	
8168.00	88.46	153.83	6263.74	2052.36	-2173.24	-12.29	40.094960	-80.630357	0.42	
8264.00	88.33	154.37	6266.43	2147.61	-2259.56	29.62	40.094722	-80.630209	0.58	
8360.00	87.84	153.79	6269.64	2242.83	-2345.86	71.56	40.094485	-80.630060	0.79	
8456.00	88.03	152.46	6273.10	2337.83	-2431.43	114.93	40.094249	-80.629906	1.40	
8552.00	87.91	154.41	6276.50	2432.90	-2517.24	157.83	40.094013	-80.629754	2.03	
8608.71	88.12	154.42	6278.46	2489.20	-2568.36	182.31	40.093873	-80.629667	0.38	Onondaga Limestone :
8648.00	88.27	154.43	6279.70	2528.20	-2603.78	199.26	40.093775	-80.629607	0.38	
8744.00	88.21	156.07	6282.65	2623.64	-2690.92	239.43	40.093535	-80.629465	1.71	
8841.00	88.09	154.13	6285.78	2720.05	-2778.85	280.25	40.093294	-80.629320	2.00	
8937.00	88.40	152.52	6288.72	2815.12	-2864.59	323.33	40.093058	-80.629167	1.71	
9033.00	91.54	155.80	6288.77	2910.39	-2950.97	365.16	40.092820	-80.629019	4.73	
9129.00	87.29	155.09	6289.75	3005.89	-3038.26	405.04	40.092580	-80.628878	4.49	
9225.00	88.89	156.06	6292.95	3101.38	-3125.62	444.71	40.092339	-80.628737	1.95	
9322.00	88.46	152.59	6295.19	3197.66	-3213.00	486.72	40.092099	-80.628588	3.60	
9418.00	88.40	152.13	6297.82	3292.50	-3298.01	531.24	40.091865	-80.628430	0.48	
9514.00	88.46	151.10	6300.45	3387.15	-3382.44	576.86	40.091633	-80.628269	1.07	
9610.00	88.64	155.95	6302.88	3482.25	-3468.32	619.63	40.091396	-80.628117	5.05	
9706.00	88.77	156.64	6305.05	3577.88	-3556.20	658.22	40.091155	-80.627980	0.73	
9802.00	88.77	155.36	6307.11	3673.48	-3643.87	697.25	40.090913	-80.627842	1.33	
9898.00	88.77	155.13	6309.17	3768.95	-3731.03	737.44	40.090673	-80.627700	0.24	
9994.00	88.64	153.21	6311.34	3864.22	-3817.42	779.26	40.090436	-80.627551	2.00	
10090.00	88.77	153.48	6313.51	3959.31	-3903.19	822.31	40.090200	-80.627399	0.31	
10187.00	88.52	152.46	6315.81	4055.30	-3989.57	866.38	40.089962	-80.627243	1.08	
10283.00	89.01	153.25	6317.88	4150.28	-4074.98	910.17	40.089727	-80.627087	0.97	
10379.00	89.26	155.48	6319.33	4245.60	-4161.51	951.70	40.089489	-80.626940	2.34	
10475.00	89.26	157.02	6320.57	4341.24	-4249.37	990.36	40.089247	-80.626803	1.60	
10572.00	89.01	153.85	6322.03	4437.74	-4337.57	1030.67	40.089005	-80.626660	3.28	
10667.00	89.32	152.98	6323.42	4531.87	-4422.52	1073.18	40.088771	-80.626510	0.97	
10764.00	89.14	152.20	6324.72	4627.79	-4508.62	1117.83	40.088534	-80.626351	0.83	
10860.00	89.20	153.22	6326.11	4722.74	-4593.92	1161.84	40.088299	-80.626195	1.06	
10956.00	89.26	155.30	6327.40	4818.04	-4680.38	1203.53	40.088061	-80.626047	2.17	
11053.00	89.38	154.55	6328.55	4914.47	-4768.24	1244.63	40.087819	-80.625902	0.78	
11149.00	88.89	153.26	6330.00	5009.70	-4854.44	1286.85	40.087582	-80.625752	1.44	
11245.00	88.95	153.53	6331.81	5104.81	-4940.26	1329.84	40.087346	-80.625600	0.29	
11342.00	89.75	154.49	6332.91	5201.05	-5027.44	1372.34	40.087106	-80.625449	1.29	
11438.00	89.75	154.34	6333.33	5296.40	-5114.03	1413.80	40.086868	-80.625302	0.16	
11533.00	89.63	156.05	6333.84	5390.88	-5200.26	1453.65	40.086631	-80.625161	1.80	
11629.00	89.45	155.37	6334.61	5486.45	-5287.76	1493.14	40.086390	-80.625021	0.73	
11725.00	89.69	156.00	6335.33	5582.02	-5375.24	1532.67	40.086149	-80.624881	0.70	
11822.00	89.51	155.28	6336.01	5678.57	-5463.60	1572.68	40.085906	-80.624739	0.77	
11918.00	89.51	153.20	6336.83	5773.87	-5550.05	1614.39	40.085668	-80.624592	2.17	
12015.00	89.20	154.31	6337.92	5870.06	-5637.04	1657.28	40.085429	-80.624440	1.19	
12111.00	89.20	154.50	6339.27	5965.40	-5723.62	1698.75	40.085191	-80.624293	0.20	
12207.00	89.32	154.74	6340.50	6060.77	-5810.34	1739.90	40.084952	-80.624147	0.28	
12304.00	89.38	154.84	6341.61	6157.17	-5898.10	1781.21	40.084710	-80.624000	0.12	
12400.00	89.32	156.77	6342.69	6252.75	-5985.65	1820.55	40.084470	-80.623861	2.01	
12496.00	89.38	154.94	6343.78	6348.33	-6073.25	1859.82	40.084229	-80.623722	1.91	
12593.00	89.63	155.06	6344.62	6444.78	-6161.16	1900.81	40.083987	-80.623577	0.29	
12688.00	89.63	155.17	6345.24	6539.25	-6247.33	1940.78	40.083750	-80.623435	0.12	
12784.00	89.69	154.82	6345.80	6634.70	-6334.33	1981.36	40.083510	-80.623292	0.37	
12881.00	89.82	155.02	6346.22	6731.14	-6422.19	2022.48	40.083268	-80.623146	0.25	
12977.00	89.75	154.13	6346.58	6826.51	-6508.89	2063.69	40.083030	-80.623000	0.93	
13074.00	89.63	154.15	6347.10	6922.79	-6596.17	2106.00	40.082790	-80.622850	0.13	
13170.00	89.69	154.87	6347.67	7018.15	-6682.83	2147.31	40.082551	-80.622704	0.75	

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## 5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Latitude (° ' ")	Longitude (° ' ")	DLS (°/100US ft)	Comment
13266.00	89.51	154.57	6348.34	7113.55	-6769.63	2188.31	40.082312	-80.622558	0.36	
13363.00	89.51	152.53	6349.17	7209.69	-6856.47	2231.51	40.082073	-80.622405	2.10	
13459.00	89.57	152.87	6349.94	7304.66	-6941.77	2275.54	40.081839	-80.622249	0.36	
13555.00	89.94	153.41	6350.36	7399.72	-7027.42	2318.91	40.081603	-80.622095	0.68	
13651.00	89.88	153.78	6350.51	7494.90	-7113.40	2361.60	40.081366	-80.621944	0.39	
13747.00	93.21	154.08	6347.92	7590.09	-7199.59	2403.77	40.081129	-80.621795	3.48	
13844.00	89.08	153.99	6345.98	7686.31	-7286.76	2446.22	40.080889	-80.621644	4.26	
13940.00	89.20	154.67	6347.42	7781.63	-7373.28	2487.80	40.080651	-80.621497	0.72	
14036.00	86.79	154.19	6350.78	7876.91	-7459.81	2529.21	40.080413	-80.621350	2.56	
14132.00	87.16	153.43	6355.85	7972.00	-7545.84	2571.52	40.080176	-80.621200	0.88	
14202.00	87.23	152.52	6359.27	8041.21	-7608.12	2603.29	40.080005	-80.621087	1.30	Last WFT SVY
14225.00	87.23	152.52	6360.38	8063.92	-7628.50	2613.89	40.079949	-80.621050	0.00	Proj. to TD

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