

**5D Survey Report**

SOUTHWESTERN ENERGY

Field Name: *SOUTHWESTERN_OHIO CO, WV UTM NAD 83 (17N)*
Site Name: *Melvin Kahle OHI Pad*
Well Name: *Melvin Kahle OHI 206H*
Survey: *Definitive survey*

28 February 2018

**Weatherford®**RECEIVED
Office of Oil and Gas

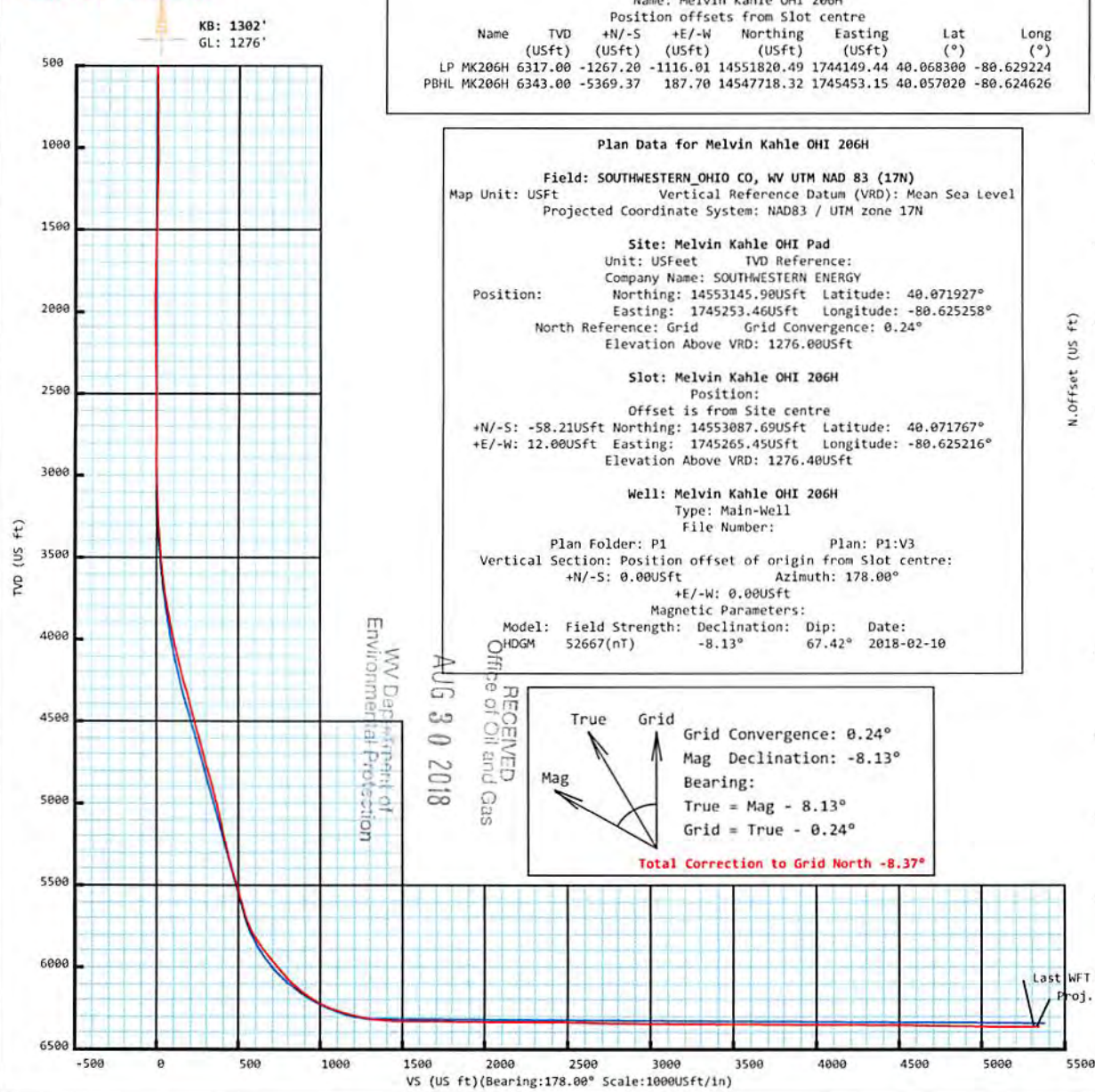
AUG 30 2018

WV Department of
Environmental Protection



Southwestern Energy
Melvin Kahle OHI 206H
Ohio Co, WV
SDC 41

Plan vs Actual



Plan Data for Melvin Kahle OHI 206H

Plan Point Information:									
Dogleg Severity Unit: %/100.00ft Position offsets from Slot centre									
MD	Inc	Az	TVD	+N/-S	+E/-W	VSec	DLS	Toolface	Comments
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(DLSU)	(°)	(°)
0.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.0	0.0
2974.07	0.00	0.00	2974.07	0.00	0.00	0.00	0.00	0.0	0.0 Nudge KOP
4474.07	30.00	239.42	4406.47	-195.27	-330.43	183.60	2.00	239.4	0.0 Hold
5962.58	30.00	239.42	5695.55	-573.91	-971.16	539.63	0.00	0.0	0.0 Curve KOP 7° DLS
6827.14	70.00	174.07	6272.43	-1141.70	-1130.32	1101.52	7.00	281.2	0.0 Build/Turn 9° DLS
7079.77	89.64	162.37	6317.00	-1383.33	-1079.11	1344.78	9.00	328.4	0.0 Landing Point
11262.36	89.64	162.37	6343.00	-5369.37	187.70	5372.65	0.00	0.0	0.0 PBHL MK206H

Target Set Information:
Name: Melvin Kahle OHI 206H

Position offsets from Slot centre						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Lat Long
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(°) (°)
LP MK206H	6317.00	-1267.20	-1116.01	14551820.49	1744149.44	40.068300 -80.629224
PBHL MK206H	6343.00	-5369.37	187.70	14547718.32	1745453.15	40.057020 -80.624626

Plan Data for Melvin Kahle OHI 206H

Field: SOUTHWESTERN OHIO CO, WV UTM NAD 83 (17N)
Map Unit: USFt Vertical Reference Datum (VRD): Mean Sea Level
Projected Coordinate System: NAD83 / UTM zone 17N

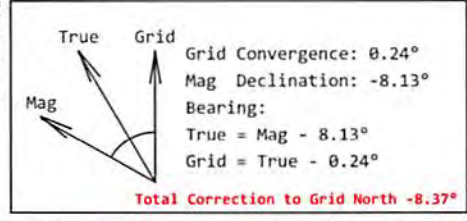
Site: Melvin Kahle OHI Pad
Unit: USFeet TVD Reference:
Company Name: SOUTHWESTERN ENERGY
Position: Northing: 14553145.90USft Latitude: 40.071927°
Easting: 1745253.46USft Longitude: -80.625258°
North Reference: Grid Grid Convergence: 0.24°
Elevation Above VRD: 1276.00USft

Slot: Melvin Kahle OHI 206H
Position:
Offset is from Site centre
+N/-S: -58.21USft Northing: 14553087.69USft Latitude: 40.071767°
+E/-W: 12.00USft Easting: 1745265.45USft Longitude: -80.625216°
Elevation Above VRD: 1276.40USft

Well: Melvin Kahle OHI 206H
Type: Main-Well
File Number:

Plan Folder: P1 Plan: P1:V3
Vertical Section: Position offset of origin from Slot centre:
+N/-S: 0.00USft Azimuth: 178.00°
+E/-W: 0.00USft

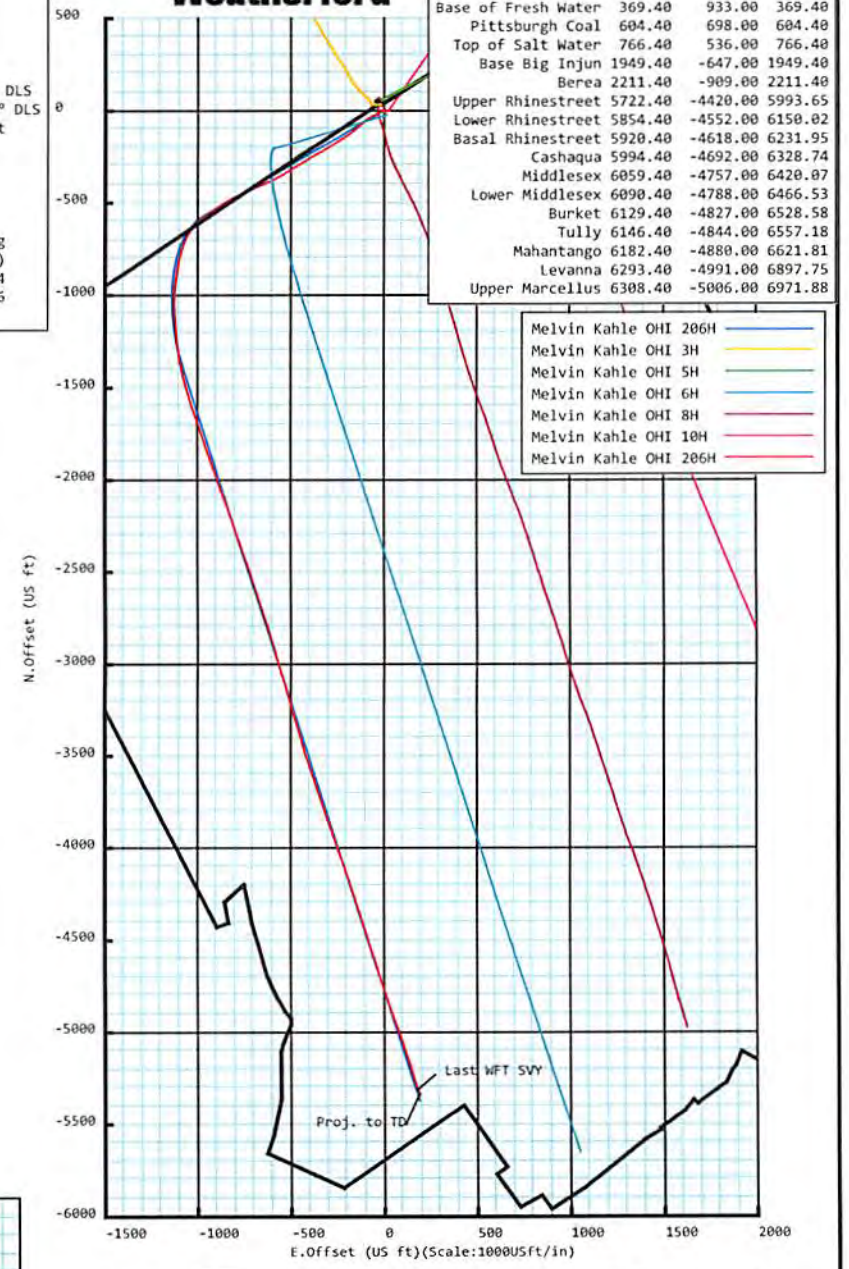
Magnetic Parameters:
Model: Field Strength: Declination: Dip: Date:
HDGM 52667(nT) -8.13° 67.42° 2018-02-10



Plan Data for Melvin Kahle OHI 206H

Formation Point Information:

Name	TVD	Elevation	MD
(USft)	(USft)	(USft)	(USft)
Base of Fresh Water	369.40	933.00	369.40
Pittsburgh Coal	604.40	698.00	604.40
Top of Salt Water	766.40	536.00	766.40
Base Big Injun	1949.40	-647.00	1949.40
Berea	2211.40	-909.00	2211.40
Upper Rhinestreet	5722.40	-4420.00	5993.65
Lower Rhinestreet	5854.40	-4552.00	6150.02
Basal Rhinestreet	5920.40	-4618.00	6231.95
Cashaqua	5994.40	-4692.00	6328.74
Middlesex	6059.40	-4757.00	6420.07
Lower Middlesex	6090.40	-4788.00	6466.53
Burket	6129.40	-4827.00	6528.58
Tully	6146.40	-4844.00	6557.18
Mahantango	6182.40	-4880.00	6621.81
Levanna	6293.40	-4991.00	6897.75
Upper Marcellus	6308.40	-5006.00	6971.88



Drawing By: Vilaphanh (Cot) Sinakone Date: 15 February 2018
Office Name: Weatherford Drilling Services
Address: 12101 Cutten Road
Houston, TX 77066
Phone: 281-701-4760

RECEIVED
Office of Oil and Gas
AUG 30 2018
WV Department of
Environmental Protection

Melvin Kahle OHI 206H

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

Site: Melvin Kahle OHI Pad	Units: US ft	North Reference: Grid	Convergence Angle: 0.24
	Position:	Northing: 14553145.90 US ft	Latitude: 40.071927
	Easting: 1745253.46 US ft	Longitude: -80.625258	
	Elevation above MSL: 1276.00 US ft		
	Comment:		

Slot: Melvin Kahle OHI 206H	Position (Relative to Site Centre)		
	+N/-S: -58.21 US ft	Northing: 14553087.69 US ft	Latitude: 40.071767
	+E/-W: 12.00 US ft	Easting: 1745265.45 US ft	Longitude: -80.625216
	Elevation above MSL: 1276.40 US ft		
	Comment:		

Well: Melvin Kahle OHI 206H	Type: Main well	UWI:
	File Number:	Comment:
	Closure Distance: 5342.53 US ft	Closure Azimuth: 177.97°
	Vertical Section: Position of Origin (Relative to Slot centre)	
	+N/-S: 0.00 US ft	+E/-W: 0.00 US ft Az: 178.00°

Drill floor: Survey Name: Definitive Survey			
Rig Height (Drill Floor): 26.00 US ft	Elevation above MSL: 1302.40 US ft	Inclination: 0.00°	Azimuth: 0.00°

Survey Name: Definitive Survey			
Date: 28/Dec/2017	Survey Tool: See Survey Tool Ranges below.	Comment:	Company:

Magnetic Model:				
Model Name: HDGM	Date: 10/Feb/2018	Field Strength: 52667.0nT	Declination: -8.13°	Dip: 67.42°

Tie Point:					
MD: 0.00 US ft	Inclination: 0.00°	Azimuth: 0.00°	TVD: -0.00 US ft	North Offset: 0.00 US ft	East Offset: 0.00 US ft

Survey Tool Ranges:			
Name	Start MD(USft)	End MD(USft)	Source Survey
MFAC_US_V2	0.00	602.00	WFT MFAC_01
GYRO_GC_WIR+DPIPE_GYD	602.00	767.00	Gyro_02
MWD	767.00	1969.00	WFT MWD_02
MFAC_US_V2	1969.00	2163.00	WFT MFAC_02
MWD	2163.00	6445.00	WFT MWD_03
MWD	6445.00	11215.00	WFT MWD_04

Wellpath created using minimum curvature.

RECEIVED
Office of Oil and Gas
AUG 30 2018
WV Department of Environmental Protection

GD Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
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	-0.00	0.00	0.00	40.071767	-80.625216	0.00	
232.00	0.64	97.39	232.00	0.21	-0.17	1.28	40.071767	-80.625211	0.28	
318.00	0.70	118.42	317.99	0.56	-0.48	2.22	40.071766	-80.625208	0.29	
409.00	0.96	116.96	408.98	1.21	-1.09	3.39	40.071764	-80.625204	0.29	
505.00	1.18	124.77	504.96	2.19	-2.02	4.92	40.071761	-80.625198	0.27	
602.00	1.33	128.01	601.94	3.51	-3.28	6.63	40.071758	-80.625192	0.17	
670.00	1.57	133.68	669.92	4.68	-4.41	7.92	40.071755	-80.625188	0.41	
767.00	1.23	141.40	766.89	6.47	-6.14	9.53	40.071750	-80.625182	0.40	
882.00	0.71	227.34	881.88	7.93	-7.59	9.78	40.071746	-80.625181	1.20	
978.00	0.85	246.57	977.87	8.57	-8.27	8.69	40.071744	-80.625185	0.31	
1074.00	1.00	282.12	1073.86	8.63	-8.38	7.22	40.071744	-80.625190	0.61	
1170.00	1.02	315.25	1169.84	7.80	-7.60	5.80	40.071746	-80.625195	0.60	
1266.00	1.69	315.12	1265.81	6.13	-5.99	4.20	40.071751	-80.625201	0.70	
1363.00	1.70	314.36	1362.77	4.04	-3.97	2.16	40.071756	-80.625208	0.03	
1459.00	1.37	323.35	1458.74	2.07	-2.05	0.45	40.071761	-80.625214	0.42	
1555.00	1.32	345.78	1554.71	0.04	-0.06	-0.50	40.071767	-80.625218	0.55	
1651.00	1.01	23.68	1650.69	-1.80	1.79	-0.43	40.071772	-80.625218	0.85	
1747.00	1.71	40.83	1746.67	-3.61	3.65	0.84	40.071777	-80.625213	0.84	
1843.00	1.65	47.48	1842.63	-5.56	5.66	2.80	40.071783	-80.625206	0.21	
1939.00	0.59	106.88	1938.61	-6.30	6.45	4.29	40.071785	-80.625201	1.50	
1969.00	0.58	125.17	1968.61	-6.16	6.32	4.56	40.071784	-80.625200	0.62	
2131.00	0.90	129.57	2130.59	-4.82	5.04	6.21	40.071781	-80.625194	0.20	
2163.00	0.69	126.73	2162.59	-4.53	4.76	6.56	40.071780	-80.625192	0.67	
2260.00	0.47	185.26	2259.59	-3.77	4.02	6.99	40.071778	-80.625191	0.62	
2356.00	0.92	231.81	2355.58	-2.93	3.15	6.35	40.071776	-80.625193	0.72	
2453.00	0.79	241.49	2452.57	-2.17	2.35	5.15	40.071773	-80.625198	0.20	
2549.00	0.95	243.82	2548.56	-1.55	1.68	3.85	40.071772	-80.625202	0.17	
2645.00	0.97	242.69	2644.54	-0.87	0.96	2.42	40.071770	-80.625207	0.03	
2742.00	0.85	252.72	2741.53	-0.33	0.37	1.00	40.071768	-80.625212	0.21	
2838.00	0.92	262.12	2837.52	-0.07	0.05	-0.44	40.071767	-80.625218	0.17	
2935.00	1.94	251.68	2934.49	0.48	-0.57	-2.77	40.071765	-80.625226	1.08	
3030.00	3.76	245.81	3029.37	2.10	-2.35	-7.14	40.071761	-80.625242	1.94	
3126.00	5.47	246.24	3125.05	4.99	-5.49	-14.20	40.071752	-80.625267	1.78	
3222.00	6.64	243.03	3220.52	9.03	-9.85	-23.33	40.071740	-80.625300	1.27	
3318.00	7.93	239.79	3315.74	14.50	-15.70	-34.00	40.071724	-80.625338	1.41	
3415.00	9.27	241.89	3411.65	21.10	-22.75	-46.68	40.071705	-80.625383	1.42	
3511.00	10.91	242.14	3506.16	28.47	-30.64	-61.53	40.071684	-80.625436	1.71	
3608.00	12.19	239.52	3601.19	37.35	-40.12	-78.47	40.071658	-80.625497	1.43	
3704.00	13.75	229.32	3694.75	49.32	-52.70	-95.86	40.071623	-80.625559	2.88	
3800.00	15.73	228.89	3787.59	64.66	-68.70	-114.32	40.071580	-80.625626	2.07	
3897.00	17.45	229.34	3880.55	82.04	-86.82	-135.26	40.071530	-80.625701	1.78	
3993.00	19.26	230.47	3971.66	100.68	-106.28	-158.40	40.071477	-80.625784	1.92	
4090.00	21.80	233.15	4062.49	120.72	-127.26	-185.15	40.071420	-80.625880	2.79	
4186.00	24.46	237.07	4150.77	141.12	-148.76	-216.11	40.071361	-80.625991	3.20	
4281.00	26.24	236.12	4236.62	162.32	-171.17	-250.05	40.071300	-80.626112	1.92	
4377.00	27.72	236.80	4322.17	185.10	-195.22	-286.36	40.071234	-80.626242	1.57	
4473.00	29.32	240.71	4406.53	207.44	-218.95	-325.54	40.071169	-80.626383	2.56	
4570.00	28.79	240.34	4491.32	229.18	-242.13	-366.56	40.071106	-80.626530	0.58	
4666.00	28.13	238.21	4575.72	251.15	-265.49	-405.88	40.071043	-80.626671	1.26	
4763.00	29.75	239.04	4660.61	274.16	-289.92	-445.96	40.070976	-80.626814	1.72	
4859.00	29.51	238.59	4744.05	297.30	-314.50	-486.56	40.070909	-80.626960	0.34	
4955.00	28.99	236.94	4827.81	320.92	-339.51	-526.24	40.070841	-80.627102	1.00	
5051.00	30.56	242.53	4911.15	343.42	-363.46	-567.40	40.070775	-80.627250	3.32	
5147.00	32.01	245.58	4993.20	363.62	-385.24	-612.23	40.070716	-80.627410	2.24	
5243.00	31.12	245.30	5074.99	382.89	-406.13	-657.93	40.070659	-80.627574	0.94	
5339.00	32.01	247.67	5156.79	401.31	-426.16	-704.01	40.070605	-80.627739	1.59	
5436.00	31.18	246.00	5239.42	419.64	-446.14	-750.73	40.070550	-80.627906	1.24	
5532.00	31.03	242.36	5321.62	439.66	-467.73	-795.36	40.070492	-80.628066	1.96	
5629.00	29.94	239.28	5405.21	462.11	-491.70	-838.32	40.070426	-80.628220	1.96	

RECEIVED
Office of Oil and Gas

AUG 30 2018

WV Department of
Environmental Protection

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
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
5724.00	28.67	236.01	5488.06	485.58	-516.55	-877.60	40.070359	-80.628361	2.15	
5821.00	27.04	234.38	5573.82	510.11	-542.40	-914.82	40.070288	-80.628494	1.85	
5885.00	27.07	237.89	5630.82	525.47	-558.62	-938.98	40.070244	-80.628581	2.49	
5917.00	27.52	236.49	5659.26	532.99	-566.57	-951.31	40.070222	-80.628625	2.45	
5949.00	29.62	234.64	5687.36	541.20	-575.23	-963.92	40.070198	-80.628670	7.12	
5982.00	32.13	232.36	5715.68	550.80	-585.31	-977.53	40.070171	-80.628719	8.39	
6014.00	33.82	228.23	5742.53	561.46	-596.44	-990.91	40.070141	-80.628767	8.79	
6062.00	36.40	222.07	5781.81	580.24	-615.92	-1010.42	40.070087	-80.628837	9.13	
6110.00	37.31	215.23	5820.23	602.07	-638.39	-1028.37	40.070026	-80.628901	8.75	
6158.00	38.33	209.86	5858.16	626.30	-663.18	-1044.17	40.069958	-80.628958	7.18	
6206.00	39.30	205.49	5895.56	652.43	-689.82	-1058.13	40.069885	-80.629009	6.05	
6254.00	40.29	200.69	5932.45	680.24	-718.07	-1070.16	40.069807	-80.629052	6.72	
6302.00	41.14	197.97	5968.84	709.40	-747.61	-1080.51	40.069726	-80.629089	4.10	
6350.00	42.47	194.49	6004.62	739.79	-778.32	-1089.44	40.069642	-80.629122	5.57	
6397.00	43.76	192.18	6038.93	770.76	-809.58	-1096.84	40.069556	-80.629149	4.34	
6445.00	44.98	191.03	6073.24	803.39	-842.46	-1103.59	40.069466	-80.629173	3.04	
6490.00	47.05	189.43	6104.49	835.03	-874.32	-1109.33	40.069379	-80.629194	5.26	
6525.00	48.92	188.06	6127.92	860.57	-900.02	-1113.28	40.069308	-80.629209	6.08	
6573.00	52.58	187.02	6158.29	897.22	-936.86	-1118.15	40.069207	-80.629227	7.81	
6621.00	56.37	184.28	6186.17	935.93	-975.72	-1121.97	40.069100	-80.629241	9.16	
6669.00	60.14	181.58	6211.43	976.59	-1016.48	-1124.04	40.068989	-80.629249	9.20	
6717.00	64.58	179.05	6233.69	1019.06	-1058.98	-1124.25	40.068872	-80.629250	10.36	
6765.00	69.68	177.30	6252.34	1063.27	-1103.17	-1122.83	40.068750	-80.629246	11.14	
6814.00	72.68	175.36	6268.15	1109.62	-1149.45	-1119.86	40.068623	-80.629236	7.18	
6876.00	75.29	174.11	6285.25	1169.11	-1208.78	-1114.38	40.068460	-80.629217	4.63	
6924.00	76.37	173.50	6297.00	1215.53	-1255.05	-1109.36	40.068333	-80.629200	2.57	
6972.00	78.84	171.67	6307.31	1262.19	-1301.53	-1103.31	40.068206	-80.629179	6.35	
7020.00	81.22	169.67	6315.62	1309.08	-1348.18	-1095.64	40.068077	-80.629152	6.44	
7068.00	83.76	167.83	6321.89	1356.04	-1394.84	-1086.36	40.067949	-80.629120	6.51	
7115.00	85.56	165.86	6326.27	1401.95	-1440.41	-1075.71	40.067824	-80.629083	5.66	
7163.00	88.09	164.02	6328.92	1448.63	-1486.68	-1063.25	40.067697	-80.629039	6.51	
7212.00	90.06	162.92	6329.72	1496.05	-1533.65	-1049.32	40.067568	-80.628990	4.60	
7308.00	89.51	161.86	6330.08	1588.51	-1625.15	-1020.27	40.067316	-80.628887	1.24	
7404.00	89.32	161.75	6331.06	1680.70	-1716.34	-990.30	40.067065	-80.628781	0.23	
7500.00	89.32	161.47	6332.20	1772.79	-1807.43	-960.01	40.066815	-80.628674	0.29	
7597.00	89.32	160.82	6333.35	1865.62	-1899.22	-928.67	40.066562	-80.628564	0.67	
7693.00	89.20	160.80	6334.59	1957.32	-1989.88	-897.12	40.066313	-80.628452	0.13	
7788.00	90.06	159.80	6335.20	2047.82	-2079.31	-865.09	40.066067	-80.628339	1.39	
7884.00	89.63	160.22	6335.46	2139.13	-2169.53	-832.28	40.065819	-80.628223	0.63	
7981.00	89.45	161.04	6336.24	2231.70	-2261.04	-800.10	40.065567	-80.628110	0.87	
8077.00	89.75	161.06	6336.91	2323.53	-2351.83	-768.93	40.065317	-80.628000	0.31	
8174.00	89.69	161.29	6337.38	2416.38	-2443.64	-737.63	40.065065	-80.627889	0.25	
8269.00	89.38	162.35	6338.15	2507.61	-2533.89	-707.99	40.064817	-80.627785	1.16	
8366.00	88.77	162.60	6339.72	2601.06	-2626.38	-678.79	40.064563	-80.627682	0.68	
8462.00	88.71	162.48	6341.83	2693.57	-2717.93	-649.99	40.064311	-80.627580	0.14	
8559.00	89.26	162.30	6343.55	2786.97	-2810.37	-620.65	40.064057	-80.627477	0.60	
8655.00	89.20	164.06	6344.84	2879.77	-2902.25	-592.87	40.063804	-80.627379	1.83	
8751.00	89.63	163.45	6345.82	2972.81	-2994.42	-566.02	40.063551	-80.627284	0.78	
8847.00	89.45	163.64	6346.59	3065.77	-3086.48	-538.83	40.063297	-80.627188	0.27	
8943.00	89.38	164.42	6347.57	3158.93	-3178.77	-512.42	40.063044	-80.627095	0.82	
9039.00	89.88	163.86	6348.19	3252.13	-3271.11	-486.18	40.062790	-80.627003	0.78	
9135.00	89.82	163.78	6348.44	3345.21	-3363.31	-459.43	40.062536	-80.626909	0.10	
9230.00	89.82	163.32	6348.74	3437.20	-3454.42	-432.53	40.062286	-80.626814	0.48	
9327.00	89.82	161.35	6349.04	3530.59	-3546.84	-403.10	40.062032	-80.626710	2.03	
9422.00	89.44	161.65	6349.66	3621.68	-3636.93	-372.95	40.061784	-80.626604	0.51	
9519.00	89.32	161.10	6350.71	3714.62	-3728.85	-341.97	40.061531	-80.626494	0.58	
9615.00	89.51	161.43	6351.69	3806.55	-3819.75	-311.14	40.061281	-80.626385	0.40	
9711.00	89.75	161.37	6352.31	3898.55	-3910.74	-280.52	40.061031	-80.626277	0.26	
9806.00	89.82	160.75	6352.66	3989.43	-4000.59	-249.69	40.060784	-80.626169	0.66	

RECEIVED
Office of Oil and Gas
AUG 30 2018
WV Department of
Environmental Protection

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
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
9902.00	90.06	160.68	6352.76	4081.09	-4091.21	-217.98	40.060535	-80.626057	0.26	
9999.00	89.63	162.19	6353.03	4174.07	-4183.16	-187.10	40.060282	-80.625948	1.62	
10095.00	89.69	161.45	6353.60	4266.26	-4274.36	-157.15	40.060031	-80.625842	0.77	
10192.00	89.75	162.57	6354.07	4359.51	-4366.62	-127.19	40.059777	-80.625736	1.16	
10288.00	89.69	162.55	6354.54	4452.04	-4458.20	-98.42	40.059525	-80.625635	0.07	
10384.00	89.32	162.28	6355.37	4544.51	-4549.71	-69.42	40.059274	-80.625533	0.48	
10479.00	89.20	162.89	6356.60	4636.09	-4640.35	-40.99	40.059025	-80.625432	0.65	
10575.00	89.32	162.93	6357.84	4728.77	-4732.10	-12.78	40.058772	-80.625333	0.13	
10671.00	89.20	161.75	6359.08	4821.20	-4823.57	16.34	40.058521	-80.625230	1.24	
10767.00	89.32	160.06	6360.32	4912.94	-4914.28	47.74	40.058271	-80.625119	1.76	
10863.00	89.26	160.43	6361.51	5004.37	-5004.62	80.19	40.058023	-80.625005	0.39	
10958.00	89.38	161.64	6362.63	5095.22	-5094.45	111.06	40.057776	-80.624896	1.28	
11054.00	89.75	162.18	6363.36	5187.46	-5185.71	140.87	40.057525	-80.624791	0.68	
11150.00	89.94	162.81	6363.62	5279.97	-5277.26	169.74	40.057273	-80.624689	0.69	
11192.00	90.00	161.97	6363.64	5320.42	-5317.29	182.45	40.057163	-80.624644	2.01	Last WFT SVY
11215.00	90.00	161.97	6363.64	5342.53	-5339.16	189.57	40.057103	-80.624619	0.00	Proj. to TD

RECEIVED
Office of Oil and Gas
AUG 30 2018
WV Department of
Environmental Protection