

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47-069-00305 County OHIO District LIBERTY
Quad BETHANY Pad Name GARY KESTNER OHI PAD Field/Pool Name PANHANDLE FIELD WEST
Farm name GARY KESTNER & TERRY KESTNER Well Number GARY KESTNER OHI 210H
Operator (as registered with the OOG) SWN PRODUCTION COMPANY, LLC
Address PO BOX 12359 City SPRING State TX Zip 77391-2359

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,444,350.371 Easting 539,074.539
Landing Point of Curve Northing 4,444,363.002 Easting 539,331.931
Bottom Hole Northing 4,440,573.736 Easting 540,920.820

Elevation (ft) 1,291.5' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other

Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
SOBM

Date permit issued 9/09/2019 Date drilling commenced 12/20/2019 Date drilling ceased 1/18/2020
Date completion activities began 4/01/2020 Date completion activities ceased 5/24/2020
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug
Freshwater depth(s) ft 635 Open mine(s) (Y/N) depths N
Salt water depth(s) ft 780 Void(s) encountered (Y/N) depths Y
Coal depth(s) ft 635(COAL VOID FILLED WITH FW) Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

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Reviewed by:



GB-10-13-20

API 47-069 - 00305 Farm name GARY KESTNER & TERRY KESTNER Well number GARY KESTNER OHI 210H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/ft	Basket Depth(\$)	Did cement circulate (Y/N) * Provide details below*
Conductor	24	20	126	NEW	H-40/94#		Y
Surface	17.5	13.375	716	NEW	J-55/54.50#	486.7	Y, 40 BBLs
Coal	SEE SURFACE						
Intermediate 1	12.25	9.625	2,048	NEW	J-55/36#		Y, 40 BBLs
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	20,475	NEW	P-110/20#		Y
Tubing		2.875	6,924	NEW	P-110/6.50#		N
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MID)	WOC (hrs)
Conductor	CLASS A	GROUT TO SURFACE				SURFACE	24
Surface	CLASS A	675	15.60	1.20	810	SURFACE	8
Coal	SEE SURFACE						
Intermediate 1	CLASS A	730	15.60	1.19	868.7	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	3,564	15.60	1.21	4,312.44	SURFACE	24
Tubing							

Drillers TD (ft) 20,475

Loggers TD (ft) 20,475'

Deepest formation penetrated MARCELLUS

Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) 5,636'

Check all wireline logs run caliper density deviated/directional induction neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

SURFACE: 7 CENTRALIZERS - EVERY THIRD JOINT OF CASING

INTERMEDIATE: 24 CENTRALIZERS - EVERY THIRD JOINT OF CASING

PRODUCTION: 181 CENTRALIZERS - EVERY THIRD JOINT FROM SURFACE TO TOP OF CURVE, THEN EVERY JOINT UNTIL TD

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

API 47- 069 - 00305 Farm name GARY KESTNER & TERRY KESTNER Well number GARY KESTNER OHI 210H

PRODUCING FORMATION(S)

DEPTHS

MARCELLUS 6,442' TVD 6,786' MD

Please insert additional pages as applicable.

GAS TEST Open Flow Drawdown Surface 1331 psi Bottom Hole psi OIL TEST Flow Pump DURATION OF TEST hrs

OPEN FLOW Gas 6,071 mcfpd Oil 624 bpd NGL bpd Water 648 bpd GAS MEASURED BY Estimated Orifice Pilot

Table with columns: LITHOLOGY/FORMATION, TOP DEPTH IN FT, BOTTOM DEPTH IN FT, TVD, MD, TOP DEPTH IN FT, BOTTOM DEPTH IN FT, TVD, MD, DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H2S, ETC).

Please insert additional pages as applicable.

Drilling Contractor SWN DRILLING COMPANY Address PO BOX 12359 City SPRING State TX Zip 77391-2359

Logging Company BAKER HUGHES Address 9110 GROGANS MILL RD City THE WOODLANDS State TX Zip 77380

Cementing Company C&J ENERGY SERVICES Address 3900 RODGERDALE ROAD City HOUSTON State TX Zip 77042

Stimulating Company HALLIBURTON ENERGY SERVICES Address 14851 MILNER ROAD City HOUSTON State TX Zip 77032

Please insert additional pages as applicable.

Completed by LIZ GEE Signature Elizabeth GEE Title STAFF REGULATORY ANALYST Date 08/13/2020 Telephone 832-796-2873

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Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

GARY KESTNER OHI 210H
 ATTACHMENT 1
 PERF REPORT

STAGE NUM	Perf Date	Perf Bottom MID	Perf Top MID	# SHOTS PER STG
1	3/27/2020	20,392	20,298	36
2	4/1/2020	20,261	20,083	36
3	4/2/2020	20,016	19,873	36
4	4/3/2020	19,840	19,662	36
5	4/3/2020	19,629	19,451	36
6	4/3/2020	19,408	19,241	36
7	4/4/2020	19,208	19,030	36
8	4/4/2020	18,997	18,819	36
9	4/4/2020	18,786	18,609	36
10	4/5/2020	18,576	18,394	36
11	4/5/2020	18,365	18,188	36
12	4/5/2020	18,159	17,977	36
13	4/5/2020	17,944	17,766	36
14	4/5/2020	17,733	17,556	36
15	4/6/2020	17,522	17,345	36
16	4/6/2020	17,312	17,134	36
17	4/6/2020	17,101	16,922	36
18	4/6/2020	16,890	16,713	36
19	4/7/2020	16,677	16,502	36
20	4/7/2020	16,469	16,292	36
21	4/7/2020	16,258	16,081	36
22	4/8/2020	16,048	15,870	36
23	4/8/2020	15,837	15,665	36
24	4/8/2020	15,626	15,449	36
25	4/9/2020	15,419	15,238	36
26	4/9/2020	15,205	15,028	36
27	4/9/2020	14,994	14,817	36
28	4/9/2020	14,784	14,606	36
29	4/10/2020	14,573	14,396	36
30	4/10/2020	14,363	14,185	36
31	4/10/2020	14,155	13,974	36
32	4/11/2020	13,941	13,764	36
33	4/11/2020	13,731	13,553	36
34	4/11/2020	13,520	13,342	36
35	4/11/2020	13,309	13,132	36
36	4/11/2020	13,099	12,921	36
37	4/12/2020	12,888	12,710	36
38	4/12/2020	12,679	12,500	36
39	4/12/2020	12,469	12,289	36
40	4/12/2020	12,256	12,078	36
41	4/12/2020	12,045	11,868	36
42	4/13/2020	11,835	11,657	36
43	4/13/2020	11,624	11,446	36

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**GARY KESTNER OHI 210H
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
44	4/13/2020	11,413	11,236	36
45	4/14/2020	11,203	11,025	36
46	4/14/2020	10,992	10,814	36
47	4/14/2020	10,781	10,604	36
48	4/14/2020	10,571	10,393	36
49	4/14/2020	10,360	10,182	36
50	4/15/2020	10,145	9,967	36
51	4/15/2020	9,939	9,761	36
52	4/15/2020	9,726	9,550	36
53	4/15/2020	9,517	9,340	36
54	4/15/2020	9,307	9,129	36
55	4/16/2020	9,096	8,922	36
56	4/16/2020	8,885	8,708	36
57	4/17/2020	8,680	8,497	30
58	4/17/2020	8,464	8,286	30
59	4/18/2020	8,253	8,076	30
60	4/19/2020	8,043	7,867	30
61	4/19/2020	7,832	7,652	30
62	4/20/2020	7,621	7,444	30
63	4/20/2020	7,411	7,233	27
64	4/21/2020	7,200	7,023	27
65	4/22/2020	6,992	6,812	27

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GARY KESTNER OHI 210H
ATTACHMENT 2
STIM REPORT

STAGE NUM	Stim Date	Ave Pump		Breakdown	ISIP (PSI)	Amount of		
		Rate (BPM)	Ave Treatment			Proppant (lbs)	water bbls	nitrogen/othe
1	4/1/2020	79.1	7,846	6,474	3,936	317,620	8,582	0
2	4/2/2020	79.3	7,955	7,097	4,205	324,030	9,270	0
3	4/3/2020	77.3	7,936	6,043	4,634	314,090	11,553	0
4	4/3/2020	84.3	8,013	6,098	4,616	314,585	9,863	0
5	4/3/2020	82.5	8,014	5,536	4,520	315,245	8,966	0
6	4/4/2020	78.8	7,894	6,064	4,432	313,865	8,955	0
7	4/4/2020	83.8	8,481	5,788	4,505	312,490	9,253	0
8	4/4/2020	85.3	8,409	5,834	4,529	316,900	9,464	0
9	4/4/2020	82.5	8,364	6,809	4,565	318,725	9,609	0
10	4/5/2020	83.6	8,400	6,356	4,513	315,625	9,292	0
11	4/5/2020	84.3	8,307	6,142	4,449	312,130	10,080	0
12	4/5/2020	84.4	8,431	6,346	4,422	311,290	8,947	0
13	4/5/2020	87.2	8,382	6,110	4,455	311,340	9,142	0
14	4/6/2020	86.6	8,296	5,580	4,580	313,830	9,058	0
15	4/6/2020	83.2	8,291	5,855	4,489	313,800	8,908	0
16	4/6/2020	88.6	8,513	5,767	4,535	313,190	8,829	0
17	4/6/2020	87.5	8,319	5,507	4,434	313,454	9,111	0
18	4/6/2020	94	8,374	6,667	4,641	312,602	8,881	0
19	4/7/2020	94.6	8,568	5,420	4,284	312,050	8,776	0
20	4/7/2020	93.7	8,482	5,232	4,403	317,660	9,500	0
21	4/7/2020	98.2	8,521	5,466	4,506	314,160	8,677	0
22	4/8/2020	94.9	8,279	6,636	4,289	314,751	9,003	0
23	4/8/2020	93	8,122	5,884	4,439	314,745	9,731	0
24	4/9/2020	100	8,325	5,611	4,444	312,610	8,987	0
25	4/9/2020	99.5	8,246	4,914	4,597	322,895	9,215	0
26	4/9/2020	98.6	8,101	6,029	4,470	324,195	8,830	0
27	4/9/2020	100	8,266	6,399	4,647	322,240	9,022	0
28	4/10/2020	99.9	8,085	6,272	4,566	314,170	9,078	0
29	4/10/2020	99.2	8,155	6,658	4,413	322,421	8,424	0
30	4/10/2020	99.5	8,100	4,783	4,364	317,530	8,720	0
31	4/10/2020	99.9	8,080	6,274	4,551	318,230	8,803	0
32	4/11/2020	100.7	8,126	5,121	4,621	321,635	8,785	0
33	4/11/2020	99	8,182	6,341	4,459	274,935	7,912	0
34	4/11/2020	100	7,920	6,420	4,313	313,090	8,609	0
35	4/11/2020	93.3	7,623	5,113	4,327	326,760	8,542	0
36	4/11/2020	99.1	8,099	5,726	4,377	321,045	8,587	0
37	4/12/2020	99.5	8,109	5,895	4,268	320,519	8,177	0
38	4/12/2020	96	8,137	6,211	4,244	314,180	8,498	0
39	4/12/2020	99.2	8,089	6,091	4,171	312,370	8,449	0
40	4/12/2020	99.5	8,082	5,793	4,375	315,925	8,420	0
41	4/13/2020	98.9	7,898	5,741	4,188	314,130	8,420	0
42	4/13/2020	94.5	7,627	6,714	4,118	314,340	8,447	0
43	4/13/2020	93.3	7,796	6,408	4,248	320,075	8,556	0
44	4/13/2020	100.7	7,929	5,827	4,387	320,670	8,494	0
45	4/14/2020	99	8,012	5,869	4,509	315,610	8,505	0
46	4/14/2020	98.7	8,240	6,389	4,259	315,355	8,466	0
47	4/14/2020	98.4	7,901	6,613	4,351	331,395	8,577	0
48	4/14/2020	100.1	7,745	5,993	4,195	315,705	8,423	0
49	4/15/2020	100	7,645	5,962	4,310	311,755	8,420	0
50	4/15/2020	100.1	7,572	6,383	4,450	315,725	8,352	0
51	4/15/2020	100.1	7,400	6,169	4,379	325,155	8,635	0
52	4/15/2020	100	7,356	6,014	4,478	312,295	8,378	0
53	4/15/2020	100.4	7,313	5,792	4,991	316,675	8,342	0

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GARY KESTNER OHI 210H
ATTACHMENT 2
STIM REPORT

STAGE NUM	Stim Date	Ave Pump		Treatment	Breakdown	ISIP (PSI)	Amount of		
		Rate (BPM)	Ave				Proppant (lbs)	water bbbls	nitrogen/othe
54	4/16/2020	100.1	7,599	7,599	6,733	4,394	315,670	8,309	0
55	4/16/2020	100.1	7,392	7,392	6,413	4,363	316,270	8,277	0
56	4/17/2020	100	7,114	7,114	6,084	4,533	315,331	8,756	0
57	4/17/2020	98.9	7,728	7,728	5,741	4,377	314,835	8,260	0
58	4/18/2020	100	7,322	7,322	6,540	4,336	313,845	8,183	0
59	4/18/2020	99.5	7,514	7,514	6,052	4,360	314,615	8,215	0
60	4/19/2020	100	7,201	7,201	6,404	4,342	314,850	8,209	0
61	4/20/2020	99.8	7,332	7,332	4,919	4,338	313,885	8,138	0
62	4/20/2020	100	7,107	7,107	6,311	4,494	311,610	8,289	0
63	4/21/2020	89.4	7,779	7,779	6,150	4,306	314,065	8,114	0
64	4/22/2020	99.3	7,492	7,492	6,245	4,327	312,855	8,221	0
65	4/22/2020	100	7,293	7,293	6,001	4,370	313,320	8,530	0

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Well Name:

Gary Kestner OHI 210H

47069003050000

LITHOLOGY/FORMATION	TOP DEPTH, MD (FT)	TOP DEPTH, TVD (FT)	BOTTOM DEPTH, MD (FT)	BOTTOM DEPTH, TVD (FT)	QUANTITY AND TYPE OF FLUID
Base of Fresh Water	0.00	0.00	635.00	635.00	
Top of Salt Water	780.00	780.00	NA	NA	
Pittsburgh Coal	635.00	635.00	646.00	646.00	
Pottsville (ss)	770.00	770.00	1386.00	1386.00	
Raven Cliff (ss)	1386.00	1386.00	1850.00	1850.00	
Big Injun (ss)	1850.00	1850.00	2365.00	2363.00	
Berea (siltstone)	2365.00	2363.00	5909.00	5839.00	
Rhinestreet (shale)	5909.00	5839.00	6221.00	6116.00	
Cashqua (shale)	6221.00	6116.00	6374.00	6174.00	
Middlesex (shale)	6374.00	6174.00	6466.00	6251.00	
Burket (shale)	6466.00	6251.00	6490.00	6271.00	
Tully (ls)	6490.00	6271.00	6541.00	6309.00	
Mahantango (shale)	6541.00	6309.00	6786.00	6442.00	
Marcellus (shale)	6786.00	6442.00	NA	NA	GAS

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					Corrosion Inhibitor	FSTI	FSTI-CI-02
			Listed Below		Acid	FSTI	FSTI HCl
			Listed Below		Additive	MultiChem	MC MX 8-4743
			Listed Below		Friction Reducer	MultiChem	LD-2950
			Listed Below		Scale Control	MultiChem	LEGEND(TM) LD-7750W
			Listed Below		Proppant	Halliburton	Sand-Premium White-40/70
			Listed Below		Proppant	Halliburton	Sand-Common White-100 Mesh, SSA-2
			Listed Below		Solvent	Halliburton	LCA-1
			Listed Below		Iron Control Agent		FSTI-IC-002

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				Sodium acetate	127-09-3
				Sodium lactate	72-17-3
				Monopotassium phosphate	7778-77-0
				Formaldehyde	50-00-0
	0.00004	0.10000	0.00004		
	0.00004	0.10000	0.00004		

* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water.

** Information is based on the maximum potential for concentration and thus the total may be over 100%

*** If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

SOUTHWESTERN ENERGY

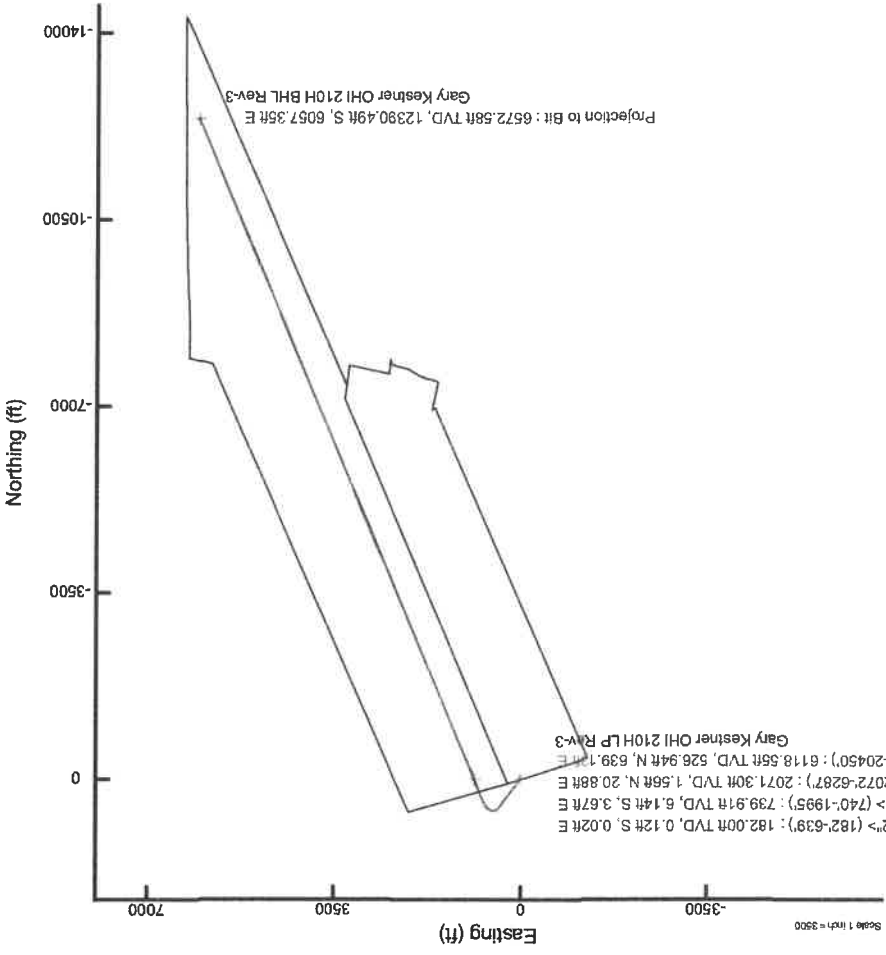
Location: Ohio County, WV
 Field: Ohio
 Well: Gary Kestner OHI 210H
 Slot: Slot #210

Facility: Gary Kestner OHI Pad
 Wellbore: Gary Kestner OHI 210H.PWB

First reference weights (Gary Kestner OHI 210H.PWB) are referenced to SDC 41 (RKB)
Grid System: NAD83 / UTM Zone 17 North, US feet
North Reference: Grid north
Scale: True distance
Coordinates are in feet referenced to Slot
SDC 41 (RKB) to Mean Sea Level: 1317.4 feet
Mean Sea Level to Ground level (At Slot: Slot #210): -1291.4 feet
Depths and in feet
Created by: <i>ammin</i> on 2020-01-21 - Database: WA_MPL_EASSTERUS_Dem



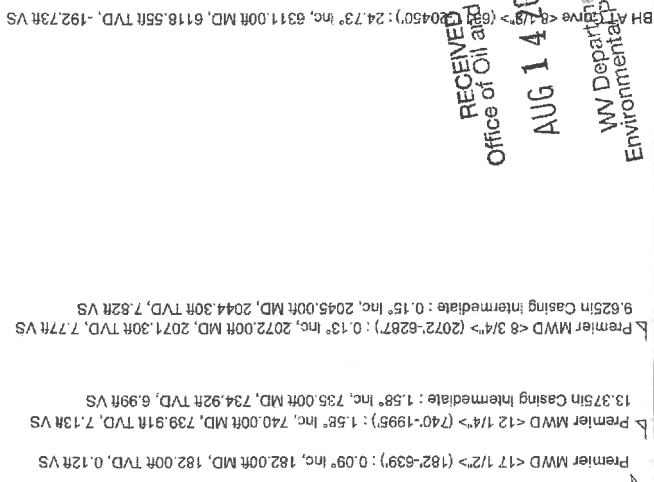
Location Information			
Facility Name	Gary Kestner OHI Pad	Local E (ft)	20.24
Local N (ft)	-8.47	Grid East (US ft)	1768613.700
Grid North (US ft)	14581181.307	Grid East (US ft)	14581172.840
Latitude	40°08'55.0100"N	Longitude	80°32'28.4700"W
Latitude	40°08'54.9253"N	Longitude	80°32'28.4700"W
SDC 41 (RKB) to Ground level (At Slot: Slot #210)	26ft	Mean Sea Level to Ground level (At Slot: Slot #210)	-1291.4ft
SDC 41 (RKB) to Mean Sea Level	1317.4ft		
Comments			
API: 47-069-00305-0000			
BH Job #: 11021711A			
Rig: SDC 41			
Duration: 01/11/2020 - 01/15/2020			



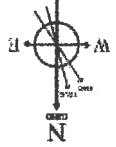
Premier MWD <17 1/2">: (182°-639') : 182.00ft TVD, 0.12ft S, 0.02ft E
 Premier MWD <12 1/4">: (740°-1995') : 739.91ft TVD, 6.14ft S, 3.67ft E
 Premier MWD <8 3/4">: (2072°-6287') : 2071.30ft TVD, 1.56ft N, 20.88ft E
 BH AT Curve <8 1/2">: (6311°-20450') : 6118.56ft TVD, 526.94ft N, 639.17ft E
 Gary Kestner OHI 210H LP RW-3

Projection to Bit : 6572.58ft TVD, 12390.49ft S, 6057.35ft E
 Gary Kestner OHI 210H BHL RW-3

Projection to Bit : 89.11° Inc, 20475.00ft MD, 6572.58ft TVD, 13791.87ft VS
 5.5in Casing Production : 89.11° Inc, 20475.00ft MD, 6572.58ft TVD, 13791.87ft VS



User specified Dip: 67.38° Right, 62570 mt
 Magnetic Azimuth is 8.38 degrees West of True North (at 1/1/2020)
 Grid North is 0.30 degrees East of True North
 To correct azimuth from True to Grid azimuth 0.30 degrees
 To correct azimuth from Magnetic to Grid azimuth 8.68 degrees



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Vertical Section (ft)
 Admuth 153.95° with reference 0.00 N, 0.00 E
 Scale 1 inch = 2500

Latitude: 40°10'00"

SURFACE HOLE 11,527'

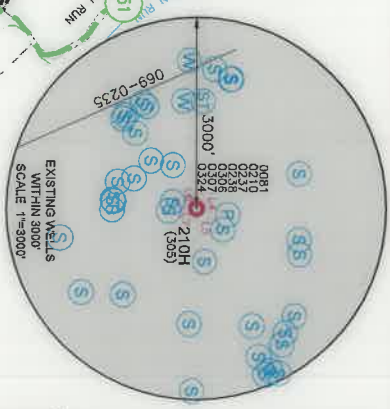
JACKSON SURVEYING INC.

2413 EAST PIKE ST.
SUITE 112
Clarksburg, WV 26301
304-623-5851

Latitude: 40°07'30"

BOTTOM HOLE 5,539'

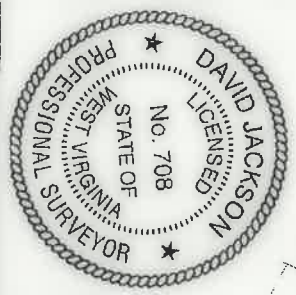
SURFACE HOLE LOCATION (SHL):	
UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,444,350.571	
EASTING: 549,074.539	
LANDING POINT (LPL):	
UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,444,350.002	
EASTING: 539,531.931	
BOTTOM HOLE LOCATION (BHL):	
UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,440,573.736	
EASTING: 540,920.820	
SURFACE HOLE LOCATION (SHL):	
UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,444,580.440	
EASTING: 539,074.531	
LANDING POINT (LPL):	
UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,444,351.221	
EASTING: 539,341.056	
BOTTOM HOLE LOCATION (BHL):	
UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,440,573.736	
EASTING: 540,920.189	



LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	S 71°28'03" W	444.76	SHL TO LANDMARK	CNR FENCE POST
L2	N 64°04'26" E	1833.49	SHL TO LANDMARK	3/4" REBAR FOUND
L4	N 12°06'53" E	536.79	SHL TO PIPELINE	PIPELINE
L5	N 37°44'41" E	565.78	SHL TO SPRING	SPRING
L6	S 14°32'42" W	370.96	SHL TO SPRING	SPRING
L7	S 06°02'34" E	423.22	SHL TO SPRING	SPRING
L3	N 87°11'26" E	845.50	DISTANCE	DESCRIPTION
			CURVE LENGTH	SHL TO LP
				1,517.94'

- WELL RESTRICTIONS**
- NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
 - NO PERMANENT BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
 - NO WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
 - NO PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
 - NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
 - NO GROUND INTAKE OR PUBLIC WATER SUPPLY WITHIN 1000 FEET OF LIMITS OF DISTURBANCE, E & S CONTROLS OR PUBLIC WATER SUPPLY.

GRID NORTH
UTM, NAD83 DATUM, ZONE 17, US FT



P.S. 708
David Jackson

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SOURCE OF GRADE GPS SURVEY ELEVATION: (NAD 88, US FT)DEEP GAS LIQUID INJECTION STORAGE SHALLOW

COMPANY: **SWN SWN**
Production Company, LLC Production Company™
OPERATOR'S WELL #: 210H
API WELL #: 47
STATE: WV COUNTY: PERMIT
069 00305

WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW
WATERSHED: CASTLEMAN RUN OF BUFFALO CREEK (HUC-10)
DISTRICT: LIBERTY COUNTY: OHIO

QUADRANGLE: BETHANY, WV
AGEAGE: ±95,981
AGEAGE: ±85,981

SURFACE OWNER: GARY KESTNER & TERRY KESTNER
OIL & GAS ROYALTY OWNER: GARY KESTNER & TERRY KESTNER
DRILL DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY) *ASDRILLED*
TARGET FORMATION: MARCELLUS

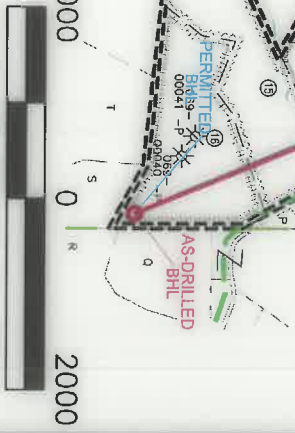
DESIGNATED AGENT: BRITANY WOODY
ADDRESS: 1300 FORT PIERPONT RD, SUITE 200
CITY: MORGANTOWN STATE: WV ZIP CODE: 26508
REVISIONS:
DATE: 06-02-2020
ESTIMATED DEPTH: 6,573 TMD 20,475 TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC
ADDRESS: 1300 FORT PIERPONT RD, SUITE 200
CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

DESIGNATED AGENT: BRITANY WOODY
ADDRESS: 1300 FORT PIERPONT RD, SUITE 200
CITY: MORGANTOWN STATE: WV ZIP CODE: 26508
REVISIONS:
DATE: 06-02-2020

LEGEND:
PROPOSED SURFACE HOLE / BOTTOM HOLE
EXISTING / PRODUCING WELL-HEAD
LPL LANDING POINT LOCATION
EXISTING WATER WELL
EXISTING SPRING
SURVEYED BOUNDARY
DRILLING UNIT
LEASE BOUNDARY
ASDRILLED PATH
PROPOSED PATH

DRAWN BY: N. MANO
SCALE: 1" = 2000'
DRAWING NO.:
WELL LOCATION PLAT



Longitude: 80°30'00"

Longitude: 80°30'00"

SURFACE HOLE 6,585'

BOTTOM HOLE 3,833'

JACKSON SURVEYING

INC.

2413 EAST PIKE ST.
SUITE 112
Clarksburg, WV 26301
304-623-5851

WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	GARY KESTNER & TERRY KESTNER (S/R)	03-15-09
TRACT	SURFACE OWNER	TAX PARCEL
2	JOHN I. TOMINACK JR. (S)	03-15-10
3	WILLIAM I. RODGERS (LIFE ESTATE) & LEWIS I. RODGERS (REMAINDERMAN) (S)	03-16-15
4	JEFFREY J. EISENHAUER (S)	03-16-18
5	DELMER K. LOEW & V.G. LOEW (S)	03-16-19
6	RODNEY G. PLANTS & JESSICA J. PLANTS (S)	03-19-2.1
7	RODNEY G. PLANTS & JESSICA J. PLANTS (S)	03-19-02
8	MARK S. MIKESINOVICH (S)	03-19-6.9
9	JOHN A. SCHULTZ (S)	03-19-6.10
10	ROBERT L. COOK & FLORENCE A. COOK (S)	03-19-06
11	NANCY C. BALL (S)	03-19-6.12
12	NANCY C. BALL (S)	03-19-6.1
13	NANCY C. BALL (S)	03-19-16
14	CARL E. MILLER JR. (S)	03-19-15.4
15	CARL E. MILLER JR. (S)	03-19-15
16	JEFFREY S. OCH & DANA R. OCH (S)	03-19-18

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	WILLIAM I. RODGERS (LIFE)	03-16-16
B	WILLIAM I. RODGERS (LIFE)	03-16-17.3
C	TUNNEL RIDGE, LLC.	03-16-17.1
D	DELMER K. LOEW & VIRGINIA G. LOEW	03-16-18.2
E	DELMER K. LOEW & VIRGINIA G. LOEW	03-16-18.4
F	DELMER K. LOEW & VIRGINIA G. LOEW	03-16-18.1
G	TUNNEL RIDGE, LLC.	03-16-18.3
H	DAVID J. HALL & C.J. HALL	03-19-03
I	DANIEL E. CUMMINS & CHERYL L. CUMMINS	230-15-00-00-0018-00
J	WILLIAM R. WURTZBACHER & JEAN W. WURTZBACHER	230-008-00-00-0001-00
K	LEWIS E. NICHOLSON & SUSAN L. NICHOLSON	03-19-17
L	NANCY C. BALL	03-19-6.11
M	MARTHA E.M. SHALER	03-19-15.1
N	CARL E. MILLER JR. & CARL E. MILLER III	03-19-15.2
O	KEVIN R. WURTZBACHER & J.A. WURTZBACHER	03-19-17.3
P	WILLIAM R. WURTZBACHER & JEAN W. WURTZBACHER	03-19-17.1
Q	LARRY LEE RODGERS	230-008-00-00-0004-03
R	ROBERT E. RODGERS TWO THOUSAND NINETEEN IRR. TR.	230-008-00-00-0004-00
S	TUNNEL RIDGE, LLC.	03-112-03
T	RAYMOND M. MILLER & H.E. MILLER	03-112-02
U	JEFFREY S. OCH & DANA R. OCH	03-112-2.1
V	TIMMY B. MINCH & AMY LYNN MINCH	03-19-12
W	WILLIAM H. BALL & LARRY G. BALL	03-19-11
X	CARL E. MILLER JR.	03-19-15.3
Y	WILLIAM NOBLE & DAWN EBALTICH	03-19-14
Z	DANIEL LEE HENRY & DIANE L. HENRY	03-19-6.5
AA	DONALD L. HENRY & J.A. HENRY	03-19-6.7
BB	DAVID E. MCNABB & B.L. MCNABB	03-19-6.8
CC	MICHAEL H. FISHER & SUSAN K. FISHER	03-19-6.6
DD	ROBERT J. REASS & N.C. REASS	03-19-01
EE	RODNEY G. PLANTS & JESSICA J. PLANTS	03-19-2.3
FF	RODNEY G. PLANTS & JESSICA J. PLANTS	03-19-2.2
GG	GLENN A. DILLE	03-18-9.7
HH	LYNN MCELVANY	03-15-26
II	TUNNEL RIDGE, LLC.	03-16-22
JJ	GEORGE F. SMITH	03-15-27
KK	JOAN L. DOLENCE	03-15-11
LL	JOSEPH E. ENNIS & MARJORIE G. ENNIS	03-15-08
MM	GREGORY D. ATKINSON, ET AL	03-16-10.1
NN	GREGORY D. ATKINSON, ET AL	03-16-10.2
OO	VANESSA M. HICKS & BRAYDEN J. HICKS	03-16-9.1
PP	RICHARD C. COWEN SR. & C.A. WILLIAMS	03-16-21
QQ	PATRICK J. MONTGOMERY & BRENDA LEE MONTGOMERY	03-16-11.1
RR	GREGORY N. MORMANIS & SHARON LEE MORMANIS	03-16-13

REVISIONS:

COMPANY:



Production Company, LLC



Production Company™

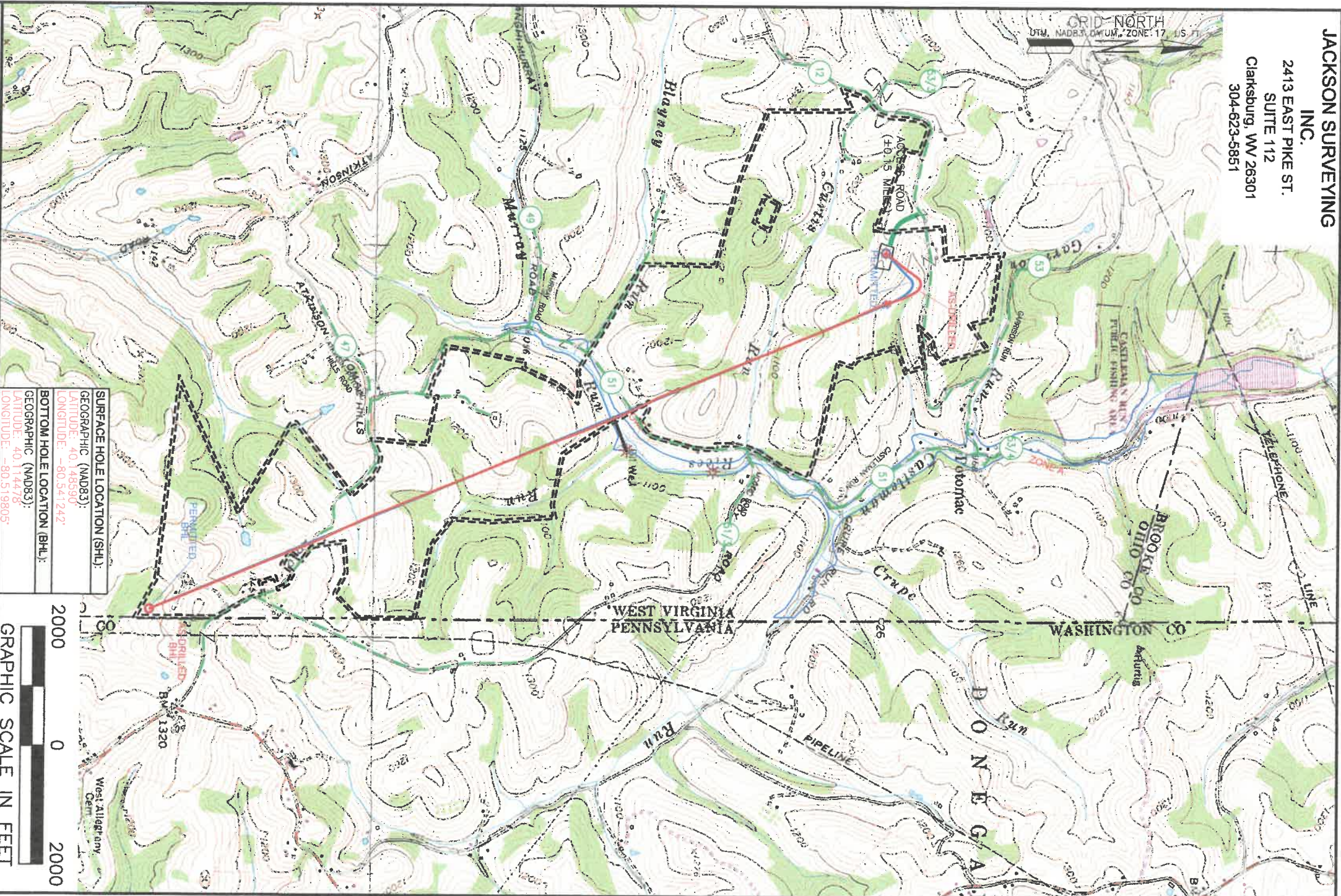
OPERATOR'S
WELL #:
DISTRICT:
LIBERTY

GARY KESTNER OHI
210H
COUNTY:
OHIO

API # 47-069-00305
STATE:
WV
DATE: 06-02-2020
DRAWN BY: N. MANO
SCALE: N/A
DRAWING NO:
WELL LOCATION PLAT 2

JACKSON SURVEYING

INC.
 2413 EAST PIKE ST.
 SUITE 112
 Clarksburg, WV 26301
 304-623-5851



GRID-NORTH
 UTM, NAD83, QWUM, ZONE 17, U.S. FT.

SURFACE HOLE LOCATION (SHL):
 GEOGRAPHIC (NAD83):
 LATITUDE: 40.146390
 LONGITUDE: -80.541242

BOTTOM HOLE LOCATION (BHL):
 GEOGRAPHIC (NAD83):
 LATITUDE: 40.114478
 LONGITUDE: -80.519805



- NOTES ON SURVEY**
1. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
 2. THIS PLAN DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
 4. ALL INSERTS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

- LEGEND:**
- Proposed Surface Hole / Bottom Hole
 - Existing / Producing Wellhead
 - Landing Point Location
 - Existing Water Well
 - Existing Spring
 - Surveyed Boundary
 - Drilling Unit
 - Lease Boundary
 - Assembled Path
 - Proposed Path

WELL OPERATOR:
 SWM PRODUCTION COMPANY, LLC

ADDRESS:
 1300 FORT PIERPONT RD, SUITE 200 MORGANTOWN, WV 26508

SURFACE OWNER:
 GARY KESTNER & TERRY KESTNER

WELL (FARM) NAME:
 GARY KESTNER OHI

COUNTY - CODE
 OHIO - 069

USGS 7 1/2 QUADRANGLE MAP NAME
 BETHANY, WV

DISTRICT:
 LIBERTY

WELL #
 210H

SERIAL #

API # 47-069-00305