

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

API 47 - 051 - 02274 County MARSHALL District LIBERTY  
Quad LITTLETON, WV Pad Name SHAWN HARLAN MSH PAD Field/Pool Name VICTORY FIELD WET  
Farm name SCOTT L. HARLAN & SHAWN D. HARLAN Well Number SHAWN HARLAN MSH 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 4,398,291.525 Easting 532,275.012  
Landing Point of Curve Northing 4,398,601.144 Easting 532,787.519  
Bottom Hole Northing 4,395,987.138 Easting 535,611.813

Elevation (ft) 1,391.3' 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 10/25/2019 Date drilling commenced 1/30/2020 Date drilling ceased 2/15/2020  
Date completion activities began 5/03/2020 Date completion activities ceased 6/28/2020  
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

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Freshwater depth(s) ft 489' Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 750' Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 1116' Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

Reviewed by:  
*Justin Wilson*  
12/7/2020

API 47-051 - 02274 Farm name SCOTT L. HARLAN & SHAWN D. HARLAN Well number SHAWN HARLAN MSH 210H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	24	20	126'	NEW	J-55/94#		Y
Surface	17.5	13.375	596'	NEW	J-55/54.50#		Y; 10 BBLS
Coal	SEE SURFACE						
Intermediate 1	12.25	9.625	2,740'	NEW	J-55/36#		Y; 43 BBLS
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	20,558'	NEW	HCP-110/20#		Y
Tubing		2.375		NEW	P-110/6.5#		N
Packer type and depth set							

Comment Details \_\_\_\_\_

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	CLASS A	GROUT TO SURFACE				SURFACE	24
Surface	CLASS A	601	15.60	1.21	727.21	SURFACE	8
Coal	SEE SURFACE						
Intermediate 1	CLASS A	1,110	16.00	1.11	1,232.1	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	3,723	15.60	1.18	4,393.14	SURFACE	24
Tubing							

Drillers TD (ft) 20,558' Loggers TD (ft) 20,558'  
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 6,845'

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 \_\_\_\_\_

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	5/3/2020
Job End Date:	6/17/2020
State:	West Virginia
County:	Marshall
API Number:	47-051-02274-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	SHAWN HARLAN MSH 210
Latitude:	39.73390281
Longitude:	-80.62335247
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,376
Total Base Water Volume (gal):	21,247,616
Total Base Non Water Volume:	0



## Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Econo-CI200	SWN Well Services	Corrosion Inhibitor					
				Listed Below			
Sand	SWN Well Services	Proppant					
				Listed Below			

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SWN FRW-11LC	SWN Well Services	Friction Reducer					
				Listed Below			
Plexaid 655WG	SWN Well Services	Scale Inhibitor					
				Listed Below			
Tolicide PS 50A	SWN Well Services	Biocide					
				Listed Below			
HCL	SWN Well Services	Solvent					
				Listed Below			
Ecopol-FEAC	SWN Well Services	Iron Control					
				Listed Below			
Base Water	Operator	Base Fluid					
				Listed Below			

Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.

			Water	7732-18-5	100.00000	90.44831	Density = 8.345
			Crystalline Silica, quartz	14808-60-7	100.00000	8.93103	
			Water	7732-18-5	85.00000	0.49289	
			Hydrochloric Acid	7647-01-0	15.00000	0.06894	
			Petroleum Distillates, Hydrotreated	64742-47-8	25.00000	0.03086	
			Tetrakis	55566-30-8	55.00000	0.01458	
			Glycerin	56-81-5	50.00000	0.00400	
			Ammonium Chloride	12125-02-9	2.00000	0.00247	

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			Oleic Acid Diethanolamide	93-83-4	1.50000	0.00185	
			Alcohols, C12-1, ethoxylated	68551-12-2	1.50000	0.00185	
			Acetic Acid	64-19-7	37.50000	0.00092	
			Diethylenetriamine penta	15827-60-8	10.00000	0.00080	
			Methanol	67-56-1	80.00000	0.00056	
			Citric Acid	77-92-9	22.50000	0.00055	
			Acrylic acid terpolymer	397256-50-7	1.00000	0.00027	
			Oxyalkylated fatty acid	68951-67-7	9.67400	0.00007	
			Fatty acids	61790-12-3	5.02700	0.00004	
			Modified thiourea polymer	68527-49-1	4.74600	0.00003	
			Potassium acetate	127-08-2	0.02200	0.00000	
			Formaldehyde	50-00-0	0.00400	0.00000	

\* 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(l) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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**SHAWN HARLAN MSH 210H  
ATTACHMENT 1  
PERF REPORT**

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
1	4/4/2020	20,514	20,420	36
2	5/7/2020	20,259	20,082	36
3	5/9/2020	20,050	19,868	36
4	5/10/2020	19,834	19,654	36
5	5/11/2020	19,618	19,435	36
6	5/11/2020	19,401	19,217	36
7	5/14/2020	19,182	19,003	36
8	5/15/2020	18,969	18,785	36
9	5/16/2020	18,756	18,571	36
10	5/16/2020	18,537	18,355	36
11	5/17/2020	18,317	18,138	36
12	5/18/2020	18,104	17,928	36
13	5/18/2020	17,890	17,706	36
14	5/18/2020	17,672	17,495	36
15	5/19/2020	17,458	17,274	36
16	5/19/2020	17,240	17,059	36
17	5/20/2020	17,023	16,841	36
18	5/20/2020	16,807	16,625	36
19	5/22/2020	16,591	16,409	36
20	5/28/2020	16,375	16,193	36
21	5/28/2020	16,157	15,977	36
22	5/29/2020	15,943	15,760	36
23	5/29/2020	15,726	15,544	36
24	5/30/2020	15,510	15,328	36
25	5/30/2020	15,294	15,110	36
26	5/31/2020	15,078	14,896	36
27	5/31/2020	14,860	14,680	36
28	5/31/2020	14,646	14,463	36
29	6/1/2020	14,429	14,249	36
30	6/1/2020	14,213	14,030	36
31	6/2/2020	13,999	13,815	36
32	6/3/2020	13,779	13,599	36
33	6/3/2020	13,565	13,382	36
34	6/4/2020	13,348	13,166	36
35	6/4/2020	13,132	12,950	36
36	6/5/2020	12,916	12,738	36
37	6/5/2020	12,700	12,518	36
38	6/5/2020	12,484	12,302	36
39	6/6/2020	12,265	12,085	36
40	6/6/2020	12,051	11,869	36
41	6/7/2020	11,835	11,653	36
42	6/7/2020	11,619	11,437	36

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43	6/8/2020	11,403	11,221	36
44	6/8/2020	11,187	11,004	36
45	6/8/2020	10,970	10,788	36
46	6/9/2020	10,754	10,572	36
47	6/9/2020	10,538	10,356	36
48	6/10/2020	10,322	10,140	36
49	6/11/2020	10,106	9,924	36
50	6/12/2020	9,890	9,712	36
51	6/13/2020	9,673	9,491	36
52	6/13/2020	9,457	9,275	36
53	6/14/2020	9,241	9,059	36
54	6/14/2020	9,025	8,843	36
55	6/15/2020	8,809	8,626	36
56	6/16/2020	8,588	8,410	36
57	6/16/2020	8,376	8,194	36
58	6/16/2020	8,160	7,978	36
59	6/17/2020	7,944	7,767	36

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**SHAWN HARLAN MSH 210H  
ATTACHMENT 2  
STIM REPORT**

STAGE NUM	Stim Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of water bbls	Amount of nitrogen/other
1	5/3/2020	78	10,060	8,400	5,264	130,170	6,003	0
2	5/7/2020	78	9,049	6,752	4,645	311,630	18,230	0
3	5/10/2020	88	9,299	6,264	5,124	305,450	8,929	0
4	5/11/2020	87	9,353	6,022	5,210	311,170	8,432	0
5	5/11/2020	84	8,931	5,942	5,529	299,530	9,013	0
6	5/14/2020	77	8,446	6,872	5,226	313,430	8,193	0
7	5/15/2020	92	9,339	5,951	5,732	305,390	9,433	0
8	5/15/2020	98	9,299	5,738	4,808	305,750	8,917	0
9	5/16/2020	90	9,197	6,270	4,762	310,880	8,541	0
10	5/17/2020	93	9,017	5,814	4,806	303,590	8,400	0
11	5/17/2020	94	9,167	5,847	5,330	304,720	8,715	0
12	5/18/2020	93	9,213	5,356	4,569	301,880	8,235	0
13	5/18/2020	92	9,258	5,944	5,586	178,890	7,423	0
14	5/19/2020	96	9,210	6,028	4,619	308,710	8,753	0
15	5/19/2020	87	9,096	6,078	4,899	308,290	8,380	0
16	5/20/2020	100	9,056	5,975	5,146	321,550	8,811	0
17	5/20/2020	98	8,845	6,012	5,963	305,410	8,399	0
18	5/22/2020	90	9,241	6,727	5,120	284,390	9,227	0
19	5/27/2020	91	9,108	6,277	5,254	307,100	8,428	0
20	5/28/2020	86	9,134	6,526	4,654	297,490	8,343	0
21	5/28/2020	90	9,106	6,227	5,015	306,980	8,473	0
22	5/29/2020	87	9,097	6,762	4,505	303,330	8,239	0
23	5/30/2020	90	9,029	6,393	4,913	308,670	8,451	0
24	5/30/2020	87	8,660	6,145	4,856	309,820	8,459	0
25	5/30/2020	90	8,895	5,890	4,773	291,518	8,516	0
26	5/31/2020	87	8,796	6,040	5,382	311,040	8,235	0
27	5/31/2020	90	8,850	5,938	4,429	306,510	8,281	0
28	6/1/2020	86	8,780	5,703	4,654	309,350	8,488	0
29	6/1/2020	85	8,641	5,855	4,446	303,100	8,252	0
30	6/2/2020	78	8,508	6,235	4,705	286,690	10,106	0
31	6/2/2020	87	8,759	5,445	5,179	246,410	11,624	0
32	6/3/2020	88	8,376	5,875	5,025	310,460	8,454	0
33	6/3/2020	95	8,644	5,408	4,476	310,060	8,349	0
34	6/4/2020	93	8,435	5,995	4,782	311,770	8,385	0
35	6/4/2020	91	8,676	5,827	4,777	309,130	9,113	0
36	6/5/2020	88	8,679	6,414	4,914	191,750	6,184	0
37	6/5/2020	93	8,821	5,664	4,510	304,390	8,697	0
38	6/6/2020	89	8,416	5,978	4,910	307,300	8,328	0
39	6/6/2020	93	8,742	5,909	4,962	214,470	7,535	0
40	6/7/2020	89	8,339	5,803	4,607	292,100	8,131	0
41	6/7/2020	96	8,433	5,287	4,715	308,000	8,393	0
42	6/8/2020	94	8,614	5,916	4,985	305,508	8,374	0
43	6/8/2020	93	8,629	6,052	4,600	309,560	8,442	0
44	6/8/2020	94	8,592	6,111	4,450	310,270	8,828	0
45	6/9/2020	95	8,474	6,285	4,912	300,880	8,361	0
46	6/9/2020	97	8,302	5,967	4,624	308,110	8,401	0
47	6/10/2020	100	8,644	6,348	4,794	313,690	9,254	0
48	6/11/2020	97	8,024	5,823	5,533	284,830	7,896	0
49	6/12/2020	99	8,013	6,333	5,196	313,150	9,343	0
50	6/13/2020	98	7,916	6,746	4,993	311,430	8,010	0
51	6/13/2020	86	7,454	6,843	4,650	308,990	7,701	0
52	6/14/2020	101	7,857	6,456	4,972	305,540	8,466	0
53	6/14/2020	98	8,061	6,489	4,327	313,060	8,335	0
54	6/15/2020	101	8,047	6,423	4,731	309,410	8,372	0
55	6/16/2020	100	7,806	6,103	4,023	307,900	7,975	0
56	6/16/2020	99	8,007	6,134	4,717	314,040	8,405	0
57	6/16/2020	100	7,794	6,540	4,536	315,230	8,082	0
58	6/17/2020	94	7,906	6,301	4,561	308,330	8,386	0
59	6/17/2020	100	7,847	6,132	4,440	309,850	8,169	0

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**Well Name: Shawn Harlan MSH 210H 47051022740000**

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	489.00	489.00	489.00	489.00	
Top of Salt Water	750.00	750.00	NA	NA	
Pittsburgh Coal	1116.00	1116.00	1118.00	1118.00	
Pottsville (ss)	1211.00	1211.00	1550.00	1549.00	
Raven Cliff (ss)	1559.00	1557.00	2219.00	2215.00	
Maxton (ss)	1997.00	1993.00	2280.00	2275.00	
Big Injun (ss)	2280.00	2275.00	2518.00	2516.00	
Berea (siltstone)	2872.00	2866.00	2901.00	2895.00	
Rhinestreet (shale)	6863.00	6487.00	7200.00	6791.00	
Cashaqua (shale)	7200.00	6791.00	7341.00	6914.00	
Middlesex (shale)	7341.00	6915.00	7411.00	6973.00	
Burket (shale)	7457.00	7008.00	7488.00	7032.00	
Tully (ls)	7488.00	7032.00	7526.00	7058.00	
Mahantango (shale)	7526.00	7058.00	7684.00	7154.00	
Marcellus (shale)	7684.00	7154.00	NA	NA	GAS

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Latitude: 39°45'00"

SURFACE HOLE 11252'

Latitude: 39°45'00"

BOTTOM HOLE 339'

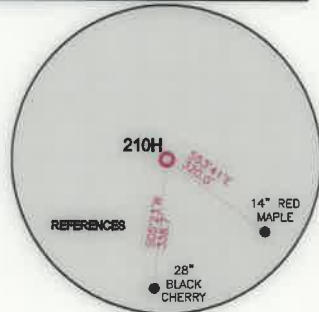
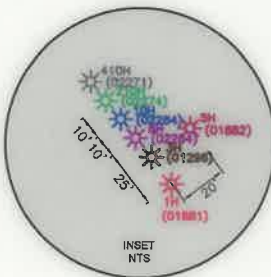
# JACKSON SURVEYING INC.

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

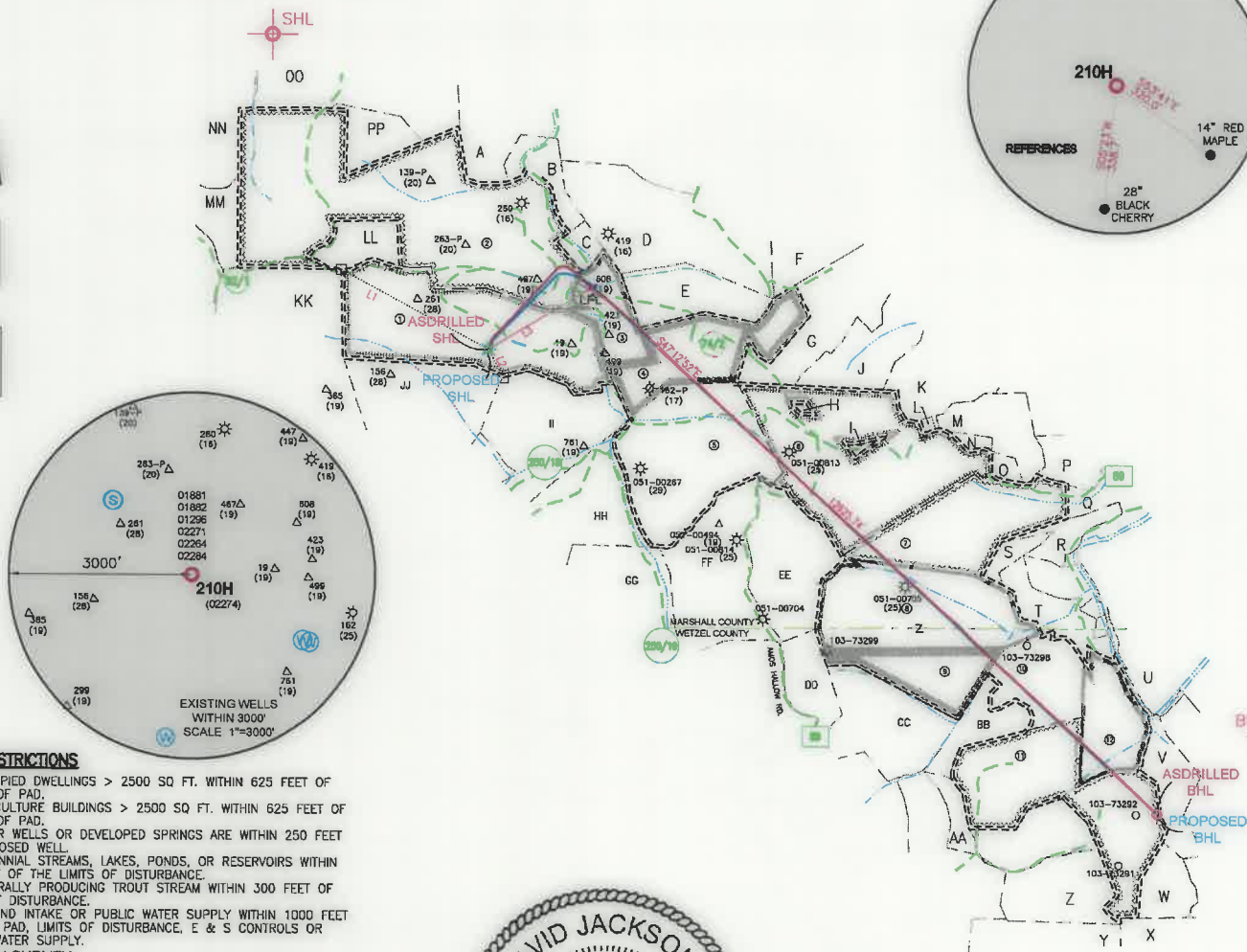
LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 61°50'08" W	2733.11'	SHL TO LANDMARK	CNR FENCE POST
L2	S 27°05'53" E	521.58'	SHL TO LANDMARK	LARGE STONE
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L3	N 58°51'48" E	1964.47'	2449.21'	SHL TO LPL

<b>SURFACE HOLE LOCATION (SHL):</b>
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,398,291.525
EASTING: 532,275.012
<b>LANDING POINT (LPL):</b>
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,398,601.144
EASTING: 532,787.519
<b>BOTTOM HOLE LOCATION (BHL):</b>
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,395,987.138
EASTING: 535,611.813

<b>SURFACE HOLE LOCATION (SHL):</b>
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,398,291.234
EASTING: 532,275.258
<b>LANDING POINT (LPL):</b>
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,398,604.731
EASTING: 532,799.875
<b>BOTTOM HOLE LOCATION (BHL):</b>
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,395,986.481
EASTING: 535,608.978



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



### WELL RESTRICTIONS

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

### 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 PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
3. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 708

*David L Jackson*



COMPANY: **SWN** Production Company, LLC

	(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS	MINIMUM DEGREE OF ACCURACY: 1/200	SHAWN HARLAN MSH
	WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034	PROVEN SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)	OPERATOR'S WELL #: 210H API WELL #: 47 STATE, 051 COUNTY, 02274 PERMIT

WELL TYPE: OIL  WASTE DISPOSAL  PRODUCTION  DEEP  GAS  LIQUID INJECTION  STORAGE  SHALLOW

WATERSHED: LAUREL RUN OF FISH CREEK ( HUC-10) ELEVATION: 1391.3'

DISTRICT: LIBERTY COUNTY: MARSHALL QUADRANGLE: LITTLETON

SURFACE OWNER: SCOTT L. HARLAN AND SHAWN HARLAN ACREAGE: 126.15

OIL & GAS ROYALTY OWNER: SEE (1) IN WELL BORE TABLE ON PAGE 2 ACREAGE: 126.15

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 ESTIMATED DEPTH: 7,491 TVD 20,558 TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: BRITTANY WOODY

ADDRESS: 1300 FORT PIERPONT RD. SUITE 200 ADDRESS: 1300 FORT PIERPONT RD. SUITE 200

CITY: MORGANTOWN STATE: WV ZIP CODE: 26508 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

<b>LEGEND:</b>	<ul style="list-style-type: none"> <li>○ PROPOSED SURFACE HOLE / BOTTOM HOLE</li> <li>⊙ EXISTING / PRODUCING WELLHEAD</li> <li>LPL ⊙ LANDING POINT LOCATION</li> <li>⊙ EXISTING WATER WELL</li> <li>⊙ EXISTING SPRING</li> <li>— SURVEYED BOUNDARY</li> <li>— DRILLING UNIT</li> <li>=== LEASE BOUNDARY</li> <li>— ASDRILLED PATH</li> <li>— PROPOSED PATH</li> </ul>	<b>REVISIONS:</b> DATE: 09-01-2020 DRAWN BY: N. MANO SCALE: 1" = 3000' DRAWING NO: WELL LOCATION PLAT
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# JACKSON SURVEYING INC.

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

## WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS

TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	SCOTT L. HARLAN & SHAWN D. HARLAN (S) JANET E. WILBUR A/K/A JANET T. WILBUR, A/K/A JANET E. TEAGARDEN WILBUR, DAVID A. TEAGARDEN, EVA T. STALKER (EVA T. STALKER, TRUSTEE OF THE EVA T. STALKER TRUST, DATED DECEMBER 28, 1989), JEANNE G. DECLUE (THE JEANNE GOVRO DE CLUE, REVOCABLE LIVING TRUST UDT JULY 9, 2001), STEPHEN E. JUSTMAN, HAYHURST COMPANY (CHESTNUT HOLDINGS, INC.), JACK HAMMERS, PAUL HAMMERS, TWILA ORA WHIPKEY (TWILA ORA WHIPKEY TRUST DATED 8/25/1999, WESBANCO BANK WHEELING, TRUSTEE), TONI JO MASON, ERICA M. MASON, O.E. BURGE (ONWARD E. BURGE, SARAH L. BURGE AND STEPHEN W. BURGE, TRUSTEES OF THE ONWARD E. BURGE TRUST DATED JUNE 21, 2010 & SARAH L. BURGE, ONWARD E. BURGE AND STEPHEN W. BURGE, TRUSTEES OF THE SARAH L. BURGE TRUST DATED JUNE 21, 2010), A.L. EVANS AND RACHEL EVANS, (DONNA K. ALLEN, MARY LOU KITTELBERGER, DEBRA A. LIKAVEC AND JOHN D. LIKAVEC, NANCY JO BLOCK, CHAD E. LONGFELLOW, HOLLY A. LONGFELLOW, TRACY L. BARNBY, LLOYD R. EVANS, GLORIA STINE, ROBERT W. CUBBAGE, CLIFFORD CUBBAGE, ROBBERT W. CUBBAGE, KAREN CUBBAGE, DALE E. WORKMAN, SANDRA E. RUSH, ERMA NELDA JEFFERSON, LAURA K. BAKER, DEBORAH A. COLLINS, PATTY D. JEFFERSON, JOYCE L. LAMB, STACY L. LYONS CARLA CARSWELL DAVIS, MEL TODD CARSWELL, JENNIFER CARSWELL BRIERE, FRANK K. BONACICH, JR., JEAN J. MEIER, HOWARD RAY FURBEE, ROBERT DALE FURBEE, DOROTHY EVANS, ELLEN G. KIRKBRIDE, DARLENE KAY ALBORN, MARLENE FAY WAGMILLER, ELMER DEAN EVANS, JACK HAMMERS, PAUL HAMMERS, TWILA ORA WHIPKEY TRUST DATED 8/25/1999, WESBANCO BANK WHEELING, TRUSTEE, TONI JO MASON, ERICA MASON, O.E. BURGE AND SARAH LOU BURGE, H/W AND STEPHEN BURGE, (CHESTNUT HOLDINGS). (R)	07-28-01
TRACT	SURFACE OWNER	TAX PARCEL
2	C. MICHAEL BLAIR & LINDA L. BLAIR (S)	07-18-09
3	MASON DIXON FARMS, LLC. (S)	07-28-02
4	JAMES E. MORGAN-LIFE (S)	07-28-04
5	MATTHEW ALLAN RICHMOND (S)	07-28-05
6	JOHN E. RIGGS JR. & DALENA RIGGS (S)	07-27-02
7	JOSEPH L. SCHANCK & KATHERINE SCHANCK (S)	07-27-18
8	EDWARD E. WADE JR. (S)	07-27-20
9	EDWARD E. WADE JR. (S)	01-02-14
10	BRIAN T. FERDA & VI-EVA FERDA (S)	01-02-04
11	LARRY RINE, ET AL (S)	P/O 01-02-08
12	STEPHEN ROSS MCINTYRE (S)	01-02-05

## ADJOINING OWNERS TABLE

TRACT	SURFACE OWNER	TAX PARCEL
A	MASON DIXON FARMS, LLC	07-18-07
B	LLOYD A. KARR, ET UX	07-19-33
C	M. ZACHARY BLAIR	07-19-35
D	DONALD Z. ROMACK, ET UX	07-19-36
E	JAMES E. MORGAN-LIFE	07-28-03
F	JENNIFER L. ROMACK TRUST, ET AL	07-19-38
G	JAMES E. MORGAN-LIFE	07-26-14
H	SAMUEL C. WADE & ROSE V. BLAKE	07-27-2.3
I	JOHN E. RIGGS, JR. & DELENA RIGGS	07-27-01
J	WEST VIRGINIA WILDLIFE RESOURCES SECTION	07-24-01
K	CHARLES E. HORNER, ET UX	07-26-10
L	HOWARD L. DEBOLD, ET AL	07-27-2.2
M	IRENE PYLES & DALE PYLES-LIFE	07-27-03
N	JOHN E. RIGGS & DALENA RIGGS	07-27-2.1
O	IRENE PYLES & DALE PYLES	07-27-3.1
P	BETTY T. FRANKLIN	07-27-05
Q	JOSEPHINE PARRIOTT, ET AL	07-27-09
R	ANNIE L. GEHO EST.	07-27-21
S	WV WILDLIFE RESOURCES SECTION	07-27-17
T	BRIAN T. FERDA, ET UX	07-27-15
U	PETER V. VELLEKOOP, ET UX	07-27-13
V	WILLIAM BALTZ, TR. OF VH & F CLUB, ET AL	01-02-5.1
W	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	01-02-09
X	WILLIAM E. RENNER & WILLIAM J. RENNER	01-05-07
Y	WILLIAM E. RENNER	01-05-04
Z	LARRY RINE, ET AL	p/o 1-2-8
AA	LARRY G. RINE & JANA L. RINE	01-05-03
BB	BRIAN T. FERDA & VI-EVA FERDA	01-02-13
CC	MARY E. PYLES	01-02-03
DD	FLOYD B. JOHNSON	01-02-02
EE	VICENZO MICELI, ET UX	07-28-06
FF	CHRISTOPHER COX & NIKKI COX	07-28-07
GG	APPALACHIA MIDSTREAM SERVICES, LLC	01-01-06
HH	APPALACHIA MIDSTREAM SERVICES, LLC.	07-28-08
II	CARL R. RICHMOND & EILENE R. RICHMOND	07-28-13
JJ	G. DAVID EVICK	07-28-14
KK	JAMES E. MORGAN-LIFE	07-29-04
LL	C. MICHAEL BLAIR & LINDA L. BLAIR	07-18-9.1
MM	RONALD K. NEELY & DONA L. NEELY	07-18-10
NN	HOY GLENN CROW, ET UX	07-18-11
OO	MASON DIXON FARMS, LLC	07-18-8.1
PP	BERNARD P. TWIGG AND SHARON ANN TWIGG	07-18-08

### REVISIONS:


### COMPANY:

**SWN**  
Production Company, LLC

**SWN** <sup>R<sup>2</sup>-V<sup>+</sup></sup><sub>A</sub>  
Production Company™

### OPERATOR'S

SHAWN HARLAN MSH

### API #:

47-051-02274

DATE: 09-01-2020

### WELL #:

210H

### DISTRICT:

LIBERTY

### COUNTY:

MARSHALL

### STATE:

WV

DRAWN BY: N. MANO

SCALE: N/A

DRAWING NO:

WELL LOCATION PLAT 2

