

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

API 47-069-00281 County OHIO District LIBERTY
Quad BETHANY, WV Pad Name DALLAS HALL-OHI-PAD1 Field/Pool Name PANHANDLE FIELD WET
Farm name AGNES L. HALL Well Number DALLAS HALL OHI 1H
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 4,442,633.777 Easting 532,973.759
Landing Point of Curve Northing 4,442,705.230 Easting 532,575.222
Bottom Hole Northing 4,445,610.126 Easting 531,737.462

Elevation (ft) 1274.2 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

RECEIVED
Office of Oil and Gas
JUL 16 2019
WV Department of
Environmental Protection

Date permit issued 08/01/2018 Date drilling commenced 10/23/2018 Date drilling ceased 11/07/2018
Date completion activities began 03/07/2019 Date completion activities ceased 04/24/2019
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 411' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 602' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 447' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed
C. J. L. 9.9.19

Reviewed by:
SB 9-9-19

API 47-069 - 00281 Farm name AGNES L. HALL Well number DALLAS HALL OHI 1H

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	518	NEW	J-55/54.5#	435.1 / 394.7	Y
Coal	SEE SURFACE						
Intermediate 1	12.25	9.625	1,909	NEW	J-55/36#		Y
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	16,649	NEW	HCP-110/20#		Y
Tubing		2.375	6,729	NEW	L-80/4.7#		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 (MD)	WOC (hrs)
Conductor	CLASS A	GROUT TO SURFACE				SURFACE	24
Surface	CLASS A	475	15.60	1.20	570	SURFACE	8
Coal	SEE SURFACE						
Intermediate 1	CLASS A	732	15.60	1.19	871.08	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	2,351	15.60	1.19	2,797.69	SURFACE	24
Tubing							

Drillers TD (ft) 16,649' Loggers TD (ft) 16,649'
 Deepest formation penetrated MARCELLUS SHALE Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6,750'

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

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 _____

API 47-069 - 00281

Farm name AGNES L. HALL

Well number DALLAS HALL OHI 1H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	SEE	ATTACHMENT	1		

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations 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 (units)
		SEE	ATTACHMENT	2				

Please insert additional pages as applicable.

API 47- 069 - 00281 Farm name AGNES L. HALL Well number DALLAS HALL OHI 1H

PRODUCING FORMATION(S)	DEPTHS		
MARCELLUS	6,125	TVD	16,649 MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1219 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 5,136 mcfpd Oil 886 bpd NGL _____ bpd Water 786 bpd
 GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		
	SEE	ATTACHMENT	3		

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 SCHLUMBERGER WELL SERVICES
 Address 110 SCHLUMBERGER DRIVE City SUGAR LAND State TX Zip 77478

Stimulating Company HALLIBURTON ENERGY SERVICE
 Address 14851 MILNER ROAD, GATE 5A City HOUSTON State TX Zip 77032

Please insert additional pages as applicable.

Completed by Elizabeth Gee Telephone 832-796-7632
 Signature  Title Staff Regulatory Analyst Date 07/12/2019

**DALLAS HALL OHI 1H
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
1	2/27/2019	16,607	16,509	36
2	3/9/2019	16,474	16,297	36
3	3/14/2019	16,264	16,087	36
4	2/17/2019	16,054	15,877	36
5	3/23/2019	15,844	15,667	36
6	3/23/2019	15,634	15,457	36
7	3/24/2019	15,424	15,247	36
8	3/24/2019	15,214	15,037	36
9	3/25/2019	15,004	14,827	36
10	3/25/2019	14,794	14,617	36
11	3/26/2019	14,584	14,407	36
12	3/26/2019	14,374	14,197	36
13	3/26/2019	14,164	13,987	36
14	3/27/2019	13,954	13,777	36
15	3/27/2019	13,744	13,567	36
16	3/28/2019	13,534	13,357	36
17	3/28/2019	13,324	13,147	36
18	3/28/2019	13,114	12,937	36
19	3/29/2019	12,904	12,727	36
20	3/29/2019	12,694	12,517	36
21	3/29/2019	12,484	12,307	36
22	3/30/2019	12,274	12,097	36
23	3/30/2019	12,064	11,887	36
24	3/31/2019	11,854	11,677	36
25	3/31/2019	11,644	11,467	36
26	3/31/2019	11,434	11,257	36
27	3/31/2019	11,224	11,047	36
28	4/1/2019	11,014	10,837	36
29	4/1/2019	10,804	10,627	36
30	4/1/2019	10,594	10,417	36
31	4/2/2019	10,384	10,207	36
32	4/2/2019	10,174	9,997	36
33	4/2/2019	9,964	9,787	36
34	4/3/2019	9,754	9,577	36
35	4/3/2019	9,544	9,367	36
36	4/3/2019	9,334	9,157	36
37	4/4/2019	9,124	8,947	36
38	4/4/2019	8,914	8,737	36
39	4/4/2019	8,704	8,527	36
40	4/4/2019	8,494	8,317	36
41	4/5/2019	8,284	8,107	36
42	4/5/2019	8,074	7,897	36
43	4/5/2019	7,864	7,687	36
44	4/5/2019	7,654	7,477	36
45	4/6/2019	7,444	7,267	36
46	4/6/2019	7,234	7,057	36
47	4/6/2019	7,024	6,847	36
48	4/6/2019	6,814	6,637	36

**DALLAS HALL OHI 1H
ATTACHMENT 2
STIM REPORT**

STAGE NUM	Stim Date	Ave Pump Rate (BPM)	Ave Treatment	Max Breakdown	ISIP (PSI)	Amount of Proppant (lbs)	Amount of water bbls	Amount of nitrogen/othe
1	3/9/2019	84.8	8,104	5,242	4,064	280,980	7,126	0
2	3/13/2019	73.7	7,358	5,239	4,501	420,175	12,607	0
3	3/22/2019	91.4	8,354	5,039	4,581	418,780	10,902	0
4	3/23/2019	91.6	8,077	4,544	4,392	421,320	11,002	0
5	3/23/2019	91.4	8,186	5,116	4,438	419,620	10,831	0
6	3/23/2019	88.7	8,014	4,836	4,376	420,144	7,396	0
7	3/24/2019	92.8	8,214	5,023	4,394	419,870	7,290	0
8	3/24/2019	93.3	8,059	4,957	4,395	419,331	7,401	0
9	3/25/2019	93.3	8,202	5,127	4,494	419,950	7,245	0
10	3/25/2019	94.1	8,001	5,283	4,610	420,121	7,355	0
11	3/25/2019	92.3	8,181	5,102	4,563	420,330	7,421	0
12	3/26/2019	97.8	8,211	5,070	4,504	420,159	7,333	0
13	3/27/2019	88.8	8,033	5,105	4,655	423,597	7,324	0
14	3/27/2019	94.8	7,857	5,246	4,484	420,484	7,323	0
15	3/28/2019	98.7	8,011	5,098	4,586	427,240	7,433	0
16	3/28/2019	96.7	8,065	5,371	4,393	420,248	7,365	0
17	3/28/2019	99.3	7,972	5,554	4,547	420,480	6,990	0
18	3/28/2019	99.2	7,918	5,291	4,367	420,580	7,259	0
19	3/29/2019	99.5	8,003	5,271	4,514	420,510	7,266	0
20	3/29/2019	98	7,900	6,824	4,539	420,450	7,390	0
21	3/29/2019	96.2	7,789	5,286	4,337	421,250	7,172	0
22	3/30/2019	99.6	7,982	5,190	4,456	420,010	7,040	0
23	3/30/2019	95.7	7,982	5,501	4,418	421,148	7,251	0
24	3/31/2019	98.3	7,952	5,396	4,429	418,810	7,160	0
25	3/31/2019	99.8	7,937	5,469	4,533	420,299	7,206	0
26	3/31/2019	99.2	7,987	5,272	4,637	419,863	7,184	0
27	3/31/2019	99	7,885	5,262	4,615	418,890	7,002	0
28	4/1/2019	99.3	7,999	5,247	4,343	419,992	7,485	0
29	4/1/2019	98	7,972	5,439	4,670	418,816	7,073	0
30	4/1/2019	98.9	7,891	5,578	4,562	420,645	6,999	0
31	4/2/2019	99.4	7,513	5,716	4,303	420,010	7,023	0
32	4/2/2019	100.2	7,271	4,976	4,539	420,080	7,299	0
33	4/3/2019	100.4	7,367	5,297	4,491	420,700	7,112	0
34	4/3/2019	99.7	7,891	5,047	4,612	420,193	7,057	0
35	4/3/2019	100.3	7,572	5,365	4,409	418,650	7,032	0
36	4/4/2019	100.7	7,693	4,876	4,347	419,870	6,935	0
37	4/4/2019	100.2	7,695	5,147	4,789	420,411	6,947	0
38	4/4/2019	100.4	7,681	5,327	4,683	420,797	6,862	0
39	4/4/2019	100.4	6,897	5,306	4,289	419,890	7,039	0
40	4/4/2019	100.3	6,907	5,040	4,334	421,580	6,901	0
41	4/5/2019	94.7	7,672	5,513	4,629	420,520	6,773	0
42	4/5/2019	100.2	7,343	5,500	4,511	419,893	6,828	0
43	4/5/2019	99.1	7,057	5,390	4,239	333,590	6,727	0
44	4/6/2019	99.3	6,281	5,257	4,327	384,860	6,789	0
45	4/6/2019	100.2	6,899	4,844	5,023	421,510	6,936	0
46	4/6/2019	100.5	6,946	5,432	4,144	419,769	6,668	0
47	4/6/2019	99.8	6,746	4,769	4,200	401,742	6,632	0
48	4/6/2019	100	6,499	5,235	4,442	419,620	6,899	0



Well Name: Dallas Hall OHI 1H

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	411.00	411.00	
Top of Salt Water	602.00	602.00	NA	NA	
Pittsburgh Coal	447.00	447.00	453.00	453.00	
Pottsville (ss)	589.00	589.00	653.00	653.00	
Raven Cliff (ss)	925.00	925.00	1114.00	1114.00	
Big Injun (ss)	1644.00	1644.00	1821.00	1821.00	
Burket (shale)	6133.00	5925.00	6155.00	5940.00	
Tully (ls)	6155.00	5940.00	6233.00	5990.00	
Mahantango (shale)	6233.00	5990.00	6458.00	6085.00	
Marcellus (shale)	6458.00	6085.00	NA	NA	GAS

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/9/2019
Job End Date:	4/6/2019
State:	West Virginia
County:	Ohio
API Number:	47-069-02810-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	Dallas Hall OHI 1H
Latitude:	40.13338583
Longitude:	-80.61295517
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,079
Total Base Water Volume (gal):	14,949,645
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
Fresh Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	85.96377	Density = 8.330
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.25008	

EXCELERATE LX-1	Halliburton	Friction Reducer								
					Listed Below					
LD-2850	Multi-Chem	Friction Reducer								
					Listed Below					
CI-01	FTSI	Additive								
					Listed Below					
HYDROCHLORI C ACID	Halliburton	Solvent								
					Listed Below					
SAND- PREMIUM WHITE-40/70, BULK	Halliburton	Proppant								
					Listed Below					
IC-001	FTSI	Additive								
					Listed Below					
BE-9W	Halliburton	Biocide								
					Listed Below					
SAND-COMMON WHITE-100 MESH, SSA-2, BULK (100003676)	Halliburton	Proppant								
					Listed Below					
					Listed Below					

LD-7750W	Multi-Chem	Scale Inhibitor													
					Listed Below										
Nalco Scale	Nalco	Scale Inhibitor													
					Listed Below										
Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.															
			Crystalline silica, quartz	14808-60-7		100.00000	13.73658								
			Hydrochloric acid	7647-01-0		15.00000	0.02687								
			Hydrotreated light petroleum distillate	64742-47-8		30.00000	0.02528								
			Polyacrylate	Proprietary		30.00000	0.02528								
			Propylene glycol	57-55-6		60.00000	0.01222								
			Fatty acid ester	Proprietary		5.00000	0.00843								
			Ammonium chloride	12125-02-9		20.00000	0.00421								
			Ethoxylated fatty acid	Proprietary		5.00000	0.00421								Denise Tuck, Halliburton, 3000 N. Sam Houston Pkwy E., Houston, TX 77032, 281-871-6226
			Acetic Acid	64-19-7		60.00000	0.00324								
			Citric Acid	77-92-9		40.00000	0.00216								
			Tributyl tetradecyl phosphonium chloride	81741-28-8		10.00000	0.00204								
			Ethylene Glycol	107-21-1		30.00000	0.00147								
			Methanol	67-56-1		70.00000	0.00119								
			Sodium Chloride	7647-14-5		20.00000	0.00077								
			Ethananminium,N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-chloride (1:1),polymer with 2-propenamide	69418-26-4		20.00000	0.00077								
			9-Octadecenamide,n,n-bis-2(hydroxy-ethyl)-(Z)	93-83-4		20.00000	0.00077								

			Fatty Acids	Trade Secret	10.00000	0.00015
			Phosphoric Acid Salt	Proprietary	5.00000	0.00001

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

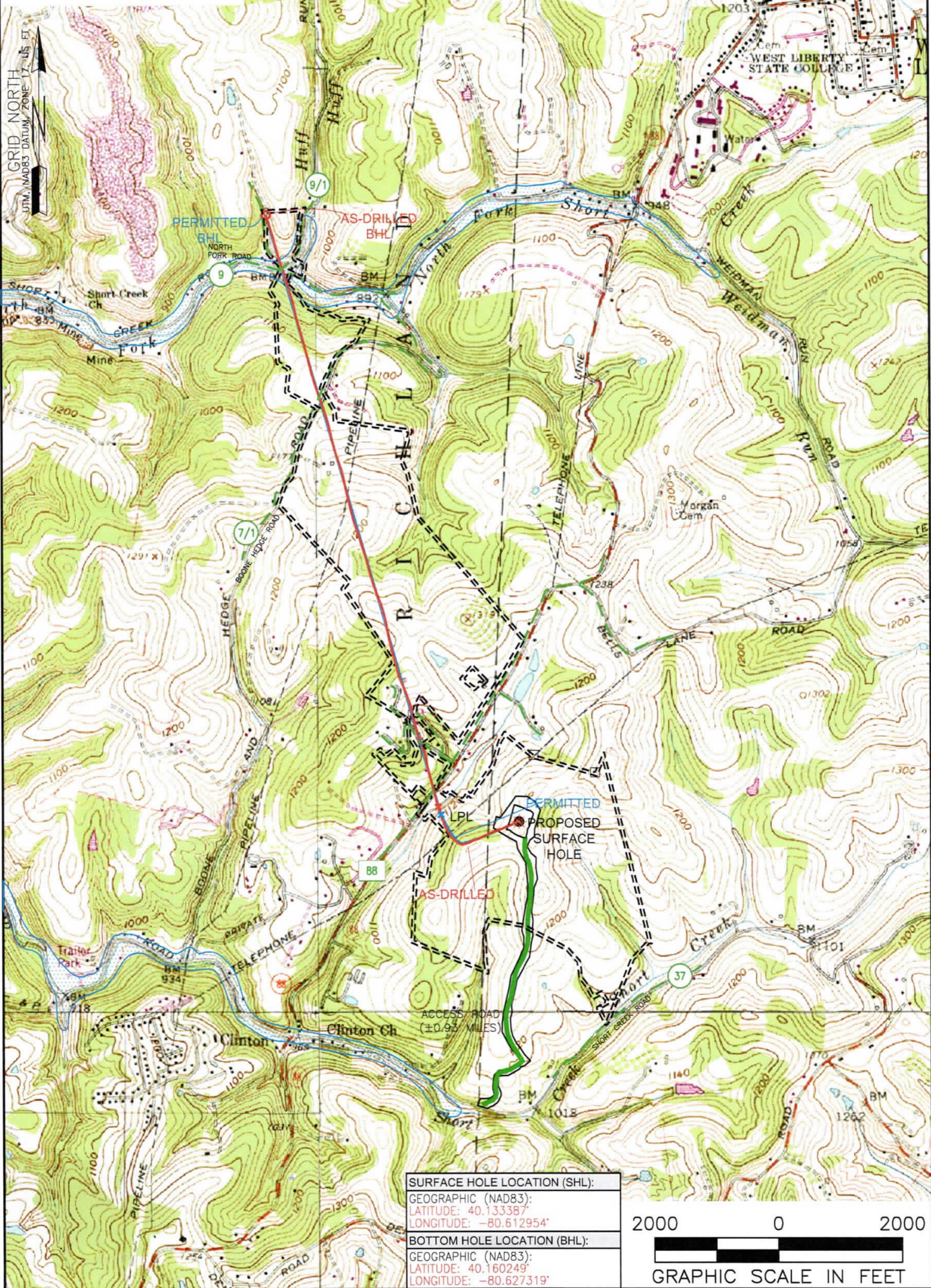
** Information is based on the maximum potential for concentration and thus the total may be over 100%

*** 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)

**JACKSON SURVEYING
INC.**

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



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.
4. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

LEGEND:

- PROPOSED SURFACE HOLE / BOTTOM HOLE
- ☼ EXISTING / PRODUCING WELLHEAD
- LPL ✕ LANDING POINT LOCATION
- 🌊 FLOOD PLAIN
- ACCESS ROAD
- - - PUBLIC ROAD
- ACCESS ROAD TO PREV. SITE
- == LEASE BOUNDARY
- PROPOSED PATH
- ASDRILLED PATH

WELL OPERATOR:
SWN PRODUCTION COMPANY, LLC

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

SURFACE OWNER:
AGNES L. HALL

WELL (FARM) NAME:
DALLAS HALL OHI

COUNTY - CODE
OHIO - 069

USGS 7 1/2 QUADRANGLE MAP NAME
BETHANY, WV

WELL #
1H

SERIAL #
LIBERTY

API #
047-069-00281

Latitude: 40°10'00" SURFACE HOLE 8,283'

BOTTOM HOLE 648'

JACKSON SURVEYING

INC.

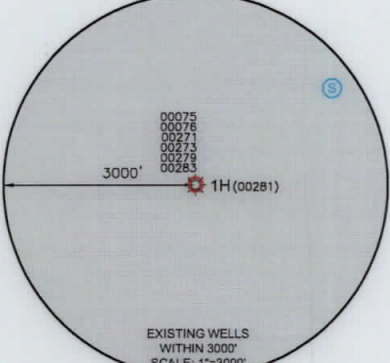
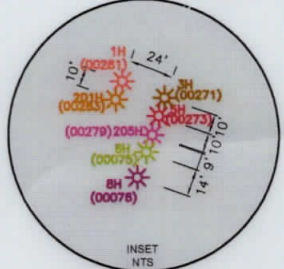
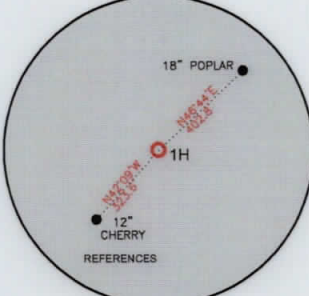
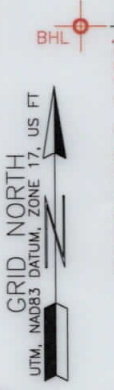
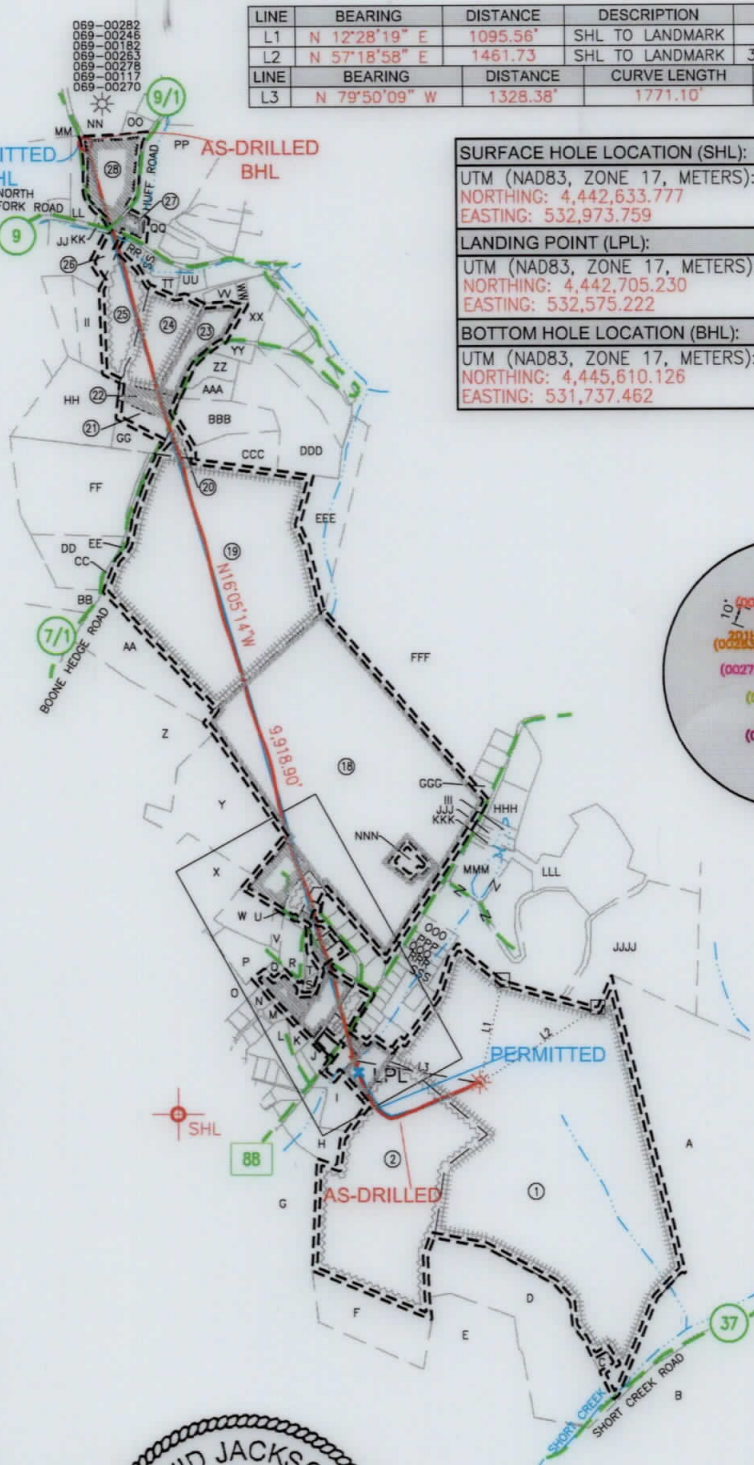
2413 EAST PIKE ST. # 112
Clarksburg, WV 26301
304-623-5851

Latitude: 40°10'00"

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 12°28'19" E	1095.56'	SHL TO LANDMARK	FD. 5/8" REBAR
L2	N 57°18'58" E	1461.73	SHL TO LANDMARK	36" BLACK CHERRY
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L3	N 79°50'09" W	1328.38'	1771.10'	SHL TO LP

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,442,633.700 EASTING: 532,973.700
LANDING POINT (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,442,666.630 EASTING: 532,589.810
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,445,610.220 EASTING: 531,737.400

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,442,633.777 EASTING: 532,973.759
LANDING POINT (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,442,705.230 EASTING: 532,575.222
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,445,610.126 EASTING: 531,737.462



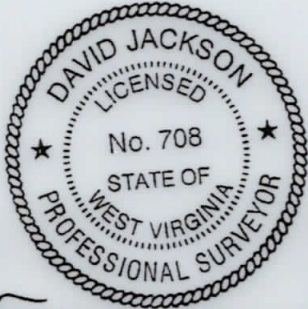
- WELL RESTRICTIONS**
- NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
 - NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
 - NO WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
 - NO PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 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 WELL PAD, LIMITS OF DISTURBANCE, E & S CONTROLS OR PUBLIC WATER SUPPLY.

- NOTES ON SURVEY**
- 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.
 - THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
 - 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

WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200

PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)

DALLAS HALL OHI

OPERATOR'S WELL #: 1H

API WELL #: 47 069 00281

STATE COUNTY PERMIT

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

WATERSHED: SHORT RUN-OHIO RIVER (HUC-10) ELEVATION: 1274.2'

DISTRICT: LIBERTY COUNTY: OHIO QUADRANGLE: BETHANY, WV

SURFACE OWNER: AGNES L. HALL ACREAGE: ±162.58

OIL & GAS ROYALTY OWNER: AGNES L. HALL ACREAGE: ±162.58

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: 6,125 TVD 16,649 TMD

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

DESIGNATED AGENT: BRITTANY WOODY ADDRESS: 1300 FORT PIERPONT RD. SUITE 200 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

LEGEND: PROPOSED SURFACE HOLE / BOTTOM HOLE SURVEYED BOUNDARY

EXISTING / PRODUCING WELLHEAD DRILLING UNIT

LPL LANDING POINT LOCATION LEASE BOUNDARY

EXISTING WATER WELL ASDRILLED PATH

EXISTING SPRING PROPOSED PATH

REVISIONS: DATE: 07-09-2019

DRAWN BY: N. MANO

SCALE: 1" = 2000'



DRAWING NO:

WELL LOCATION PLAT

**JACKSON SURVEYING
INC.**

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



REVISIONS:	COMPANY:		 		
	OPERATOR'S	DALLAS HALL OHI		API NUMBER:	DATE: 07-09-2019
	WELL #:	1H		47-069-00281	DRAWN BY: N. MANO
	DISTRICT:	COUNTY:	STATE:	SCALE: N/A	
LIBERTY	OHIO	WV	DRAWING NO:		
					WELL LOCATION PLAT 2

**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	AGNUS J. HALL (S/R)	03-L7-19
TRACT	SURFACE OWNER	TAX PARCEL
2	AGNUS J. HALL (S)	03-L7-21.1
3	JOHN R. PYLE, SR. T.A. PYLE (S)	04-R12B-1.1
4	DOUGLAS J. ERNEST & JAMIE S. ERNEST (S)	04-R12B-1.2
5	JOHN R. PYLE, SR. T.A. PYLE (S)	04-R12B-05
6	BRADLEY WEEKS & NANCY WEEKS (S)	04-R9-34.1
7	LAUREL HOMEOWNERS ASSN. (S)	04-R9-33
8	DONALD P. HUGHES & M.E. HUGHES (S)	04-R9-34
9	DONALD P. HUGHES & M.E. HUGHES (S)	04-R9-32
10	ROBERT P.W. KANTERS & M.J.E. KANTERS (S)	04-R9-36
11	DENNIS MADAMA (S)	04-R9-37
12	EDDIE L. BLAKE & JAMIE R. BLAKE (S)	04-R9-38
13	BRIAN A. BLEIFUS & MARY ANN BLEIFUS (S)	04-R9-39
14	RAY J. CHENOMETH & J.A. CHENOMETH (S)	04-R9-40
15	GARY S. LATOS & C.M. LATOS (S)	04-R9-41
16	CLARK PAJAK & SHARON L. PAJAK (S)	04-R9-32.1
17	CLARK PAJAK & SHARON L. PAJAK (S)	04-R9-28
18	LILLIAN W. BROWN TRUST (S)	03-L4-1.1
19	CLAIRE M. CAVENEY (S)	04-R9-03
20	MARK J. SWINGER & DAWN S. SWINGER (S)	04-R9-22.14
21	CHARLES R. KELLAM & PHYLLIS J. KELLAM (S)	04-R9-22.12
22	CHARLES R. KELLAM & PHYLLIS J. KELLAM (S)	04-R9-22.11
23	RODNEY W. HALEY & RHONDA L. HALEY (S)	04-R9-22.8
24	JAMES L. WEST, SR. & KATHY L. WEST (S)	04-R9-22.7
25	DAVID L. DELVECCHIO (S)	04-R9-22.6
26	TERRY LEE CRUPE (S)	04-R6-21
27	RICHARD LEE CRABTREE (S)	04-R6-24
28	RICHARD A. WOOD, JR (S)	04-R6-24.8

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	MARY HELEN CUSER, TRUSTEE	03-L7-02
B	WHITAKER REVOCABLE FAMILY TRUST	03-L7-27
C	AGNES L. HALL	03-L7-01
D	AGNES L. HALL	03-L7-20
E	AGNES L. HALL	03-L7-21
F	MELISSA MEALY & JENNA FAUBER	04-R12-39
G	JOHN P. WETTY	04-R12-35
H	DAVID N. CASTLE & RITE A. CASTLE	04-R12B-1.3
I	KEITH D. CASTLE & AMANDA M. CASTLE	04-R12B-1.9
J	JOSEPH S. CARTISANO & S.P. CARTISANO	04-R12B-36.4
K	MARY J.G. BURGHART & M.J. BURGHART	04-R12-36.3
L	JAMES E. CROFT & J.J. CROFT	04-R12-36
M	JAMES CROFT & JOANNE CROFT	04-R12B-10
N	WILLIAM J. GREATHOUSE & SUSAN M. GREATHOUSE	04-R12B-10.7
O	BRADFORD HARTLEY & NANNETTA HARTLEY	04-R9-1.3
P	MARY ANN HART	04-R9-29.1
Q	DANNA M. FUNKHOUSE	04-R9-32.3
R	JOSEPH WAYNE BENLINE	04-R9-31
S	KATHY SUE HUGHES SCHILLING	04-R9-32.4
T	VICKI H. HUFFMAN & D.L. HUFFMAN	04-R9-32.2
U	CLARK PAJAK & SHARON L. PAJAK	04-R9-28.1
V	THE BANK OF NY MELLON CORP.	04-R9-30
W	JUDY K. JOHNSON	04-R9-29
X	RCK 2 GROUP, LLC	04-R9-01
Y	RCK 2 GROUP, LLC	04-R9-27
Z	LA DONNA MARTIN EVANS	04-R9-3.5
AA	WESBANCO TRUST & INVESTMENT SERVICE	04-R9-16.1
BB	JORDAN WEBER & GAYLE WEBER	04-R9-09
CC	CLAIRE M. CAVENEY	04-R9-10.2
DD	DAVID B. MAIN & L.M. MAIN	04-R9-10
EE	DAVID B. MAIN & LISA M. MAIN	04-R9-3.6
FF	DAVID B. MAIN & L.M. MAIN	04-R9-10.1
GG	CHARLES R. KELLAM & PHYLLIS J. KELLAM	04-R9-22.13
HH	CHARLES R. KELLAM & PHYLLIS J. KELLAM	04-R9-22.10
II	JASON D. MILTON	04-R9-22.5
JJ	TERRY LEE CRUPE	04-R6-20.1
KK	GWENDOLYN GODDARD	04-R6-24.5
LL	EDITH M. WOOD	04-R6-22
MM	SHORT CREEK COAL CO.	04-R6-17
NN	SHORT CREEK COAL CO.	04-R6-17.4
OO	WINDSOR COAL COMPANY	04-R6-25
PP	WINDELL H. GOFF II & GLADYS GOFF	04-R6-24.3
QQ	LESLIE A. HUNT	04-R6-29
RR	JOHN D. CRUPE & J.D. CRUPE	04-R6-38

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
SS	ROBERT W. OCHSENBEIN	04-R6-39.3
TT	BRANDON C. GALLOWAY & CYNTHIA A. GALLOWAY	04-R6-39.2
UU	BRANDON C. GALLOWAY & CYNTHIA A. GALLOWAY	04-R6-39.1
VV	JOSHUA M. KLAPKA	04-R9-19
WW	VELMA L. TAGGART	04-R9-18
XX	LARRY BOYNES & TERRY BOYNES	04-R9-22.9
YY	JEFFREY C. TAYLOR & G.K. TAYLOR	04-R9-20
ZZ	JEFFREY C. TAYLOR & GINGER K. TAYLOR	04-R9-22.18
AAA	JOHN C. RATCLIFFE & KATHY J. RATCLIFFE	04-R9-22.17
BBB	GEORGE E. WOOD & CAROL A. WOOD	04-R9-22.16
CCC	MARK J. SWINGER & DAWN S. SWINGER	04-R9-22.15
DDD	JOHN C. RATCLIFFE	04-R9-22.20
EEE	PAUL M. MCKAY & DEBORAH A. MCKAY	04-R9-51
FFF	PAUL M. MCKAY & DEBORAH A. MCKAY	03-L4-01
GGG	REBECCA L. BLAKE	03-L4-1.7
HHH	PAUL M. MCKAY & DEBORAH A. MCKAY	03-L4-10.1
III	PAUL M. MCKAY & DEBORAH A. MCKAY	03-L4-10
JJJ	JAMES F. ROSE & ANN C. ROSE	03-L4-12
KKK	JAMES F. ROSE & ANN C. ROSE	03-L4-14
LLL	DAVID M. WEAVER & BETH R. WEAVER	03-L4-13
MMM	DAVID M. WEAVER & BETH R. WEAVER	03-L4-15
NNN	ROBERT E. BROWN	03-L4-1.3
OOO	YE M. HLA & EI E. MYINT	03-L4-20
PPP	DAVID G. RUTHERS & LINDA F. RUTHERS	03-L4-22
QQQ	GEORGE STROMATOS	03-L4-24.2
RRR	GEORGE STROMATOS	03-L4-24.1
SSS	GEORGE STROMATOS	03-L4-24
TTT	ERIC N. BLEND	03-R12B-02
UUU	JAMES W. FRIO & KAREN L. FRIO	04-R9-47
VVV	S.A. WARREN & W.S. WARREN	04-R9-46
WWW	DAVID W. SONNEFELD & TERRI A. SONNEFELD	04-R9-45
XXX	DAVID W. SONNEFELD & TERRI A. SONNEFELD	04-R9-44
YYY	TYLER P. BECK	04-R9-43
ZZZ	MARK E. PISSOS & J.L. PISSOS	04-R9-42
AAAA	JOHN WAYNE WILLIAMS	04-R9-35
BBBB	DAVID L. TAYLOR & ESTELLA ANN TAYLOR	04-R12B-1.7
CCCC	DAVID L. TAYLOR & ESTELLA ANN TAYLOR	04-R12B-04
DDDD	MARK A. KOZUSNIK	04-R12B-1.8
EEEE	MARY ANN HASTINGS	04-R12B-1.4
FFFF	WILLIAM R. JARVIS & SANDRA K. JARVIS	04-R12B-06
GGGG	BERNARD R. PETTIT	04-R12B-48
HHHH	STEVE KELLAS	04-R12B-1.5
IIII	MATHEW H. GOSSETT	04-R12B-01
JJJJ	CATHERINE EVANS & DAVID EVANS	03-L4-13.1

REVISIONS:

COMPANY:		 SWN ^{PC} Production Company, LLC		 SWN ^{PC} Production Company TM	
OPERATOR'S	DALLAS HALL OHI	API NUMBER:	47-088-00261	DATE:	07-09-2019
WELL #:	1H	STATE:	WV		
DISTRICT:	LIBERTY	COUNTY:	OHIO		