

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

RECEIVED
Office of Oil and Gas

OCT 07 2019

WV Department of
Environmental Protection

API 47-069-00271 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 3
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 4,442,631.178 Easting 532,980.496
Landing Point of Curve Northing 4,442,776.973 Easting 532,875.011
Bottom Hole Northing 4,445,587.418 Easting 531,965.358

Elevation (ft) 1274.5 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 6/7/2018 Date drilling commenced 11/17/2018 Date drilling ceased 12/25/2018
Date completion activities began 03/07/2019 Date completion activities ceased 04/16/2019
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 by:
QB 12-17-19

Reviewed
[Signature] 12-17-19

API 47- 069 - 00271

Farm name AGNES L. HALL

Well number DALLAS HALL OHI 3

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	520	NEW	J-55/54.5#	437.9 / 398.3	Y
Coal	SEE SURFACE						
Intermediate 1	12.25	9.625	1,921	NEW	J-55/36#		Y
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	16,239	NEW	P-110/20#		Y
Tubing		2.375	6,480	NEW	P-110/4.7#		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) 16,239' Loggers TD (ft) 16,239'
 Deepest formation penetrated MARCELLUS SHALE Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6,557

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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JUL 16 2019

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WV Department of
Environmental Protection

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

API 47- 069 - 00271 Farm name AGNES L. HALL Well number DALLAS HALL OHI 3

PRODUCING FORMATION(S)	DEPTHS	
MARCELLUS	6,139'	TVD 16,239' MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1211 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 5,512 mcfpd Oil 866 bpd NGL _____ bpd Water 557 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 DR 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 07/12/2011

**DALLAS HALL OHI 3H
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
1	2/27/2019	16,197	16,099	36
2	3/10/2019	16,064	15,887	36
3	3/14/2019	15,854	15,677	36
4	3/23/2019	15,644	15,467	36
5	3/23/2019	15,434	15,257	36
6	3/23/2019	15,224	15,047	36
7	3/24/2019	15,014	14,837	36
8	3/24/2019	14,814	14,627	72
9	3/25/2019	14,594	14,417	36
10	3/25/2019	14,384	14,207	36
11	3/26/2019	14,174	13,997	36
12	3/26/2019	13,964	13,787	36
13	3/27/2019	13,754	13,577	36
14	3/27/2019	13,544	13,367	36
15	3/28/2019	13,334	13,157	36
16	3/28/2019	13,124	12,947	36
17	3/29/2019	12,914	12,737	36
18	3/29/2019	12,704	12,527	36
19	3/29/2019	12,494	12,317	36
20	3/29/2019	12,284	12,107	36
21	3/30/2019	12,074	11,897	36
22	3/30/2019	11,864	11,687	36
23	3/31/2019	11,654	11,477	36
24	3/31/2019	11,444	11,267	36
25	2/18/2019	11,234	11,057	36
26	3/31/2019	11,024	10,847	36
27	4/1/2019	10,814	10,637	36
28	4/1/2019	10,604	10,427	36
29	4/1/2019	10,394	10,217	36
30	4/2/2019	10,184	10,007	36
31	4/2/2019	9,974	9,797	36
32	4/3/2019	9,764	9,587	36
33	4/3/2019	9,554	9,377	36
34	4/3/2019	9,344	9,167	36
35	4/4/2019	9,134	8,957	36
36	4/4/2019	8,924	8,747	36
37	4/4/2019	8,714	8,537	36
38	4/4/2019	8,504	8,327	36
39	4/5/2019	8,294	8,117	36
40	4/5/2019	8,084	7,907	36
41	4/5/2019	7,874	7,697	36
42	4/5/2019	7,664	7,487	36
43	4/6/2019	7,454	7,277	36
44	2/18/2019	7,244	7,067	36
45	4/6/2019	7,034	6,857	36
46	4/6/2019	6,824	6,647	36
47	4/6/2019	6,614	6,437	36

**DALLAS HALL OHI 3H
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	3/10/2019	77.8	8,020	7,764	3,902	279,350	7,295	0
2	3/12/2019	88.6	8,095	6,672	4,414	420,656	10,935	0
3	3/22/2019	85.9	8,010	4,625	4,653	419,230	11,095	0
4	3/23/2019	90.2	8,163	5,519	4,560	419,660	10,961	0
5	3/23/2019	91.9	8,083	5,352	4,564	420,113	10,906	0
6	3/24/2019	88.1	8,055	5,036	4,747	420,250	7,454	0
7	3/24/2019	92.3	8,116	5,611	4,414	420,040	7,365	0
8	3/24/2019	74.2	7,903	5,602	4,471	429,365	11,678	0
9	3/25/2019	95.6	8,150	5,549	4,481	423,542	7,369	0
10	3/26/2019	90.2	7,953	5,631	4,761	419,640	7,446	0
11	3/26/2019	97.3	8,196	5,457	4,685	420,360	7,319	0
12	3/26/2019	92.8	8,090	5,391	4,613	419,600	7,335	0
13	3/27/2019	90.3	8,130	5,399	4,787	419,987	7,494	0
14	3/27/2019	95.4	7,928	5,316	4,648	420,940	7,614	0
15	3/28/2019	97.6	8,005	5,468	4,670	420,610	7,388	0
16	3/28/2019	98.9	7,929	5,570	4,759	420,480	7,384	0
17	3/29/2019	99.6	8,122	5,396	4,880	421,700	7,202	0
18	3/29/2019	99.2	7,894	5,499	4,598	421,305	10,383	0
19	3/29/2019	96.8	7,977	5,324	4,642	420,020	7,266	0
20	3/29/2019	97.3	7,955	5,241	4,565	420,180	7,212	0
21	3/30/2019	99.1	7,761	5,295	4,407	419,734	7,255	0
22	3/30/2019	96.2	7,842	5,414	3,978	420,640	7,093	0
23	3/31/2019	97.5	7,938	5,315	4,986	418,610	7,129	0
24	3/31/2019	98.3	7,961	5,017	4,573	419,651	7,192	0
25	3/31/2019	98	7,885	5,038	4,901	421,690	7,116	0
26	4/1/2019	99.4	7,758	5,303	4,821	420,030	7,038	0
27	4/1/2019	96.2	7,536	5,281	4,102	426,480	7,232	0
28	4/1/2019	89	6,900	5,408	4,715	421,728	7,255	0
29	4/2/2019	99.2	7,835	4,891	4,693	421,434	6,968	0
30	4/2/2019	97.3	7,845	5,393	4,716	419,879	6,968	0
31	4/2/2019	100.6	7,465	5,345	4,826	419,740	7,176	0
32	4/3/2019	100.1	7,451	5,492	4,691	419,710	7,092	0
33	4/3/2019	99.9	8,052	5,715	4,705	422,286	7,018	0
34	4/3/2019	100.4	7,544	5,360	4,567	419,620	7,057	0
35	4/4/2019	99.9	7,322	5,574	4,941	419,973	6,949	0
36	4/4/2019	100.2	7,849	4,667	4,822	419,872	6,918	0
37	4/4/2019	100.1	6,927	5,013	4,642	420,464	6,950	0
38	4/4/2019	100.2	7,345	4,502	4,545	420,470	6,954	0
39	4/5/2019	95.3	6,916	5,567	4,533	420,400	6,884	0
40	4/5/2019	98.4	7,143	5,172	4,911	420,703	6,812	0
41	4/5/2019	100.3	6,938	5,299	4,596	419,530	6,836	0
42	4/5/2019	100.5	6,720	5,221	4,742	419,340	6,824	0
43	4/6/2019	100.1	6,309	5,341	4,502	395,540	6,719	0
44	4/6/2019	100.3	7,098	5,261	4,407	419,761	6,725	0
45	4/6/2019	100	7,096	5,427	4,644	419,657	6,724	0
46	4/6/2019	100.3	6,605	5,183	4,570	419,910	6,734	0
47	4/7/2019	100	6,680	5,530	4,509	413,240	6,786	0



Well Name: Dallas Hall OHI 3H

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	1871.00	1871.00	
Rhinestreet (shale)	5675.00	5655.00	5858.00	5810.00	
Cashaqua (shale)	5858.00	5810.00	5930.00	5865.00	
Middlesex (shale)	5930.00	5865.00	6033.00	5937.00	
Burket (shale)	6033.00	5937.00	6056.00	5951.00	
Tully (ls)	6056.00	5951.00	6146.00	6004.00	
Mahantango (shale)	6146.00	6004.00	6322.00	6093.00	
Marcellus (shale)	6322.00	6093.00	NA	NA	GAS

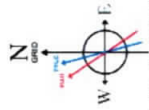
SOUTHWESTERN ENERGY

Location: Ohio County, WV
 Well: Dallas Hall OHI 3H
 Facility: Dallas Hall OHI Pad Wellbore: Dallas Hall OHI 3H PWB

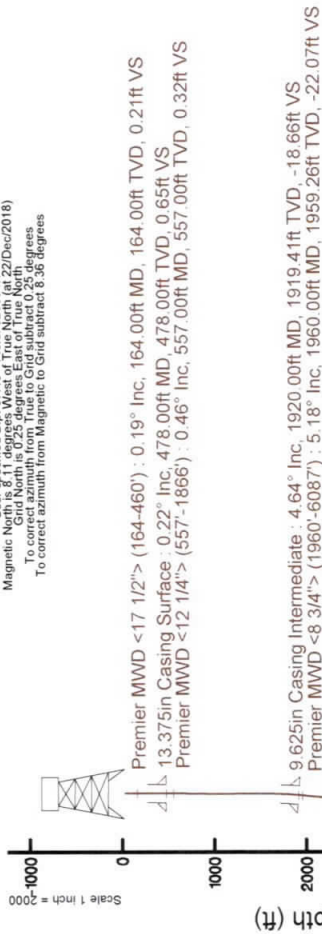
Plot reference wellpath is Dallas Hall OHI 3H PWP Rev-B.0
 Grid System: NAD83 / UTM Zone 17 North, US feet
 SDC 41 (KB) to Mean Sea Level: 1300 feet
 Mean Sea Level to Ground level (At Slot Slot 3H): -1274 feet
 Coordinates are in feet referenced to Slot

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	6087.00	53.240	340.540	5971.03	93.68	-223.98	7.46	161.18
Projection to Bit	6160.00	57.480	340.540	6012.51	150.29	-243.98	5.81	221.22
End of 3D Arc	6191.37	54.583	341.996	6030.04	174.93	-252.34	10.00	247.24
End of 3D Arc (J)	6551.04	90.563	342.139	6136.00	496.09	-356.23	10.00	584.73
End of Tangent (J)	16224.44	90.563	342.139	6041.00	9702.83	-3323.01	0.00	10256.08



User specified Dip: 67.46° Field: 52609 nT
 Magnetic North is 8.11 degrees West of True North (at 22/Dec/2018)
 To correct azimuth from True to Grid subtract 0.25 degrees
 To correct azimuth from Magnetic to Grid subtract 8.36 degrees



Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Dallas Hall OHI Pad	1748601.815	14575539.433	40°08'00.176"N	80°36'46.588"W
Slot	Local N (ft)	Local E (ft)	Grid North (US ft)	Grid East (US ft)
Slot 3H	-6.87	18.77	1748620.580	14575532.565
Comment	Slot 3			
SDC 41 (KB) to Ground level (At Slot Slot 3H)			26ft	
Mean Sea Level to Ground level (At Slot Slot 3H)			-1274ft	
SDC 41 (KB) to Mean Sea Level			1300ft	

Comments

API: 47-069-00271-0000
 BH Job #: 109499432
 Rig: SDC 41
 Duration: 12/20/2018 - 12/23/2018



BH AT Curve <8 1/2'> (6162'-16214') : 6013.23ft TVD, 152.17ft N, 244.47ft W
 Premier MWD <8 3/4'> (1960'-6087') : 1959.26ft TVD, 22.30ft S, 3.01ft E
 Premier MWD <12 1/4'> (557'-1866') : 557.00ft TVD, 0.04ft S, 1.11ft W
 Premier MWD <17 1/2'> (164-460') : 164.00ft TVD, 0.16ft N, 0.16ft W



Vertical Section (ft)
 Azimuth 341.10° with reference 0.00 N, 0.00 E

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/10/2019
Job End Date:	4/7/2019
State:	West Virginia
County:	Ohio
API Number:	47-069-02710-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	Dallas Hall OHI 3H
Latitude:	40.13336312
Longitude:	-80.61287408
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,087
Total Base Water Volume (gal):	14,826,779
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	86.04585	Density = 8.330
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.25760	

			Fatty Acids	Trade Secret	10.00000	0.00016
			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

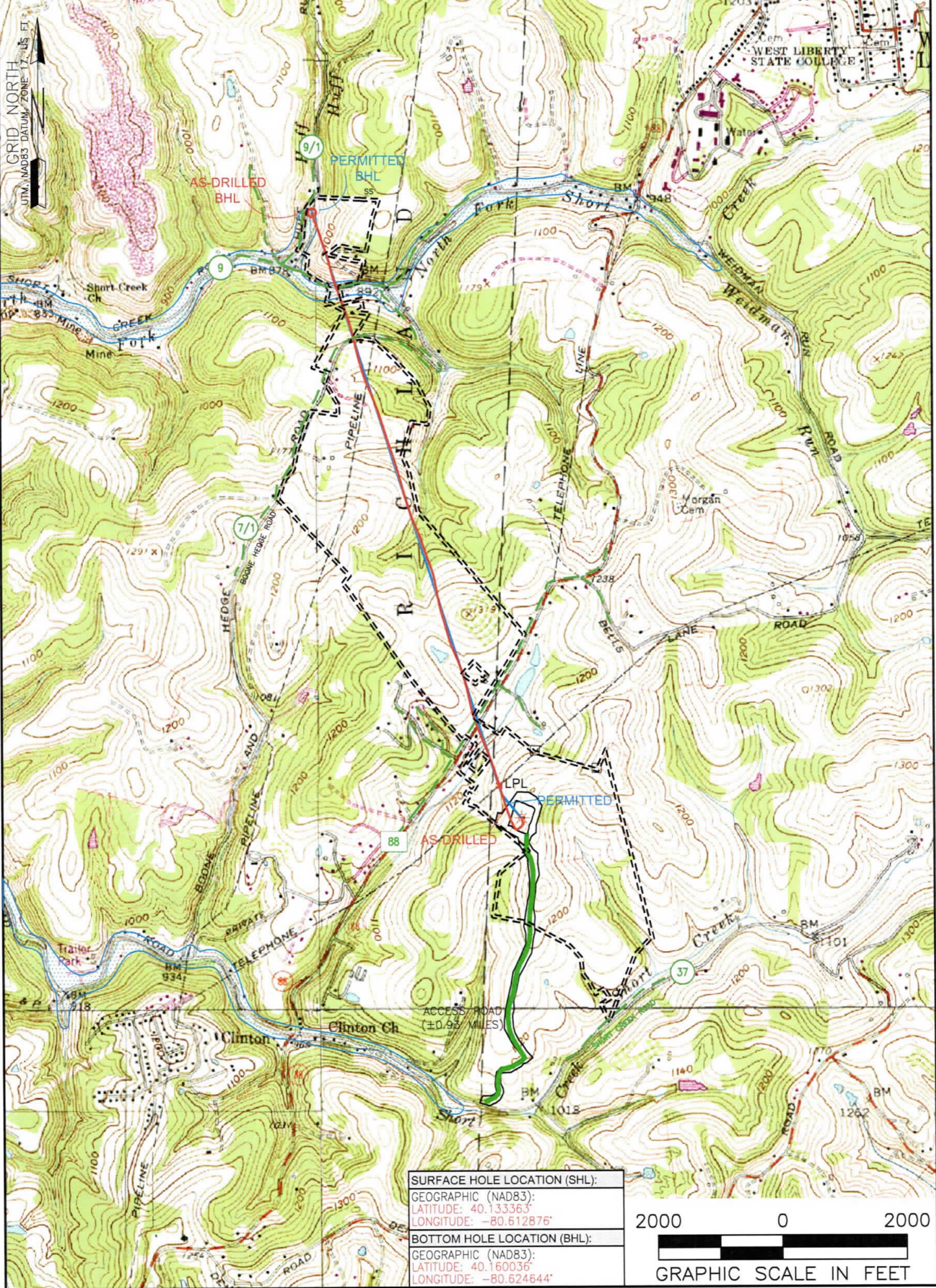
** Information is based on the maximum potential for concentration and thus the total may be over 100%

*** 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



SURFACE HOLE LOCATION (SHL):
GEOGRAPHIC (NAD83):
LATITUDE: 40.133363°
LONGITUDE: -80.612876°
BOTTOM HOLE LOCATION (BHL):
GEOGRAPHIC (NAD83):
LATITUDE: 40.160036°
LONGITUDE: -80.624644°



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	WELL (FARM) NAME: DALLAS HALL OHI	WELL # 3H	SERIAL #
ADDRESS: 1300 FORT PIERPONT RD, SUITE 200 MORGANTOWN, WV 26508	COUNTY - CODE OHIO - 069	DISTRICT; LIBERTY	
SURFACE OWNER: AGNES L. HALL	USGS 7 1/2 QUADRANGLE MAP NAME BETHANY, WV	API # 047-069-00271	

Latitude: 40°10'00" SURFACE HOLE 8,260'

Latitude: 40°10'00" BOTTOM HOLE 11,546'

JACKSON SURVEYING INC.

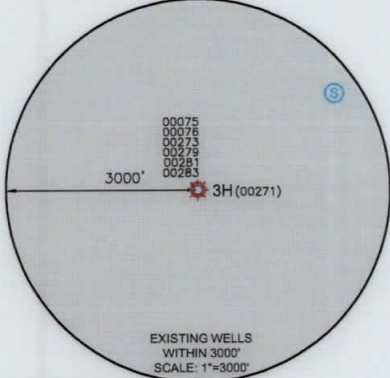
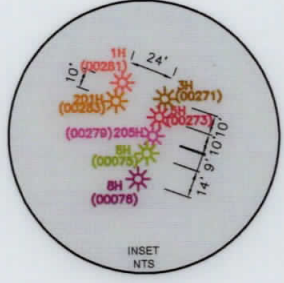
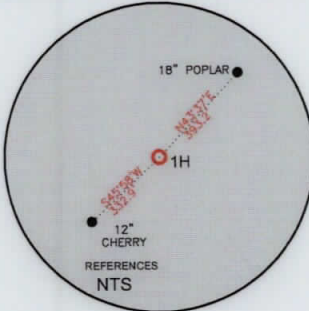
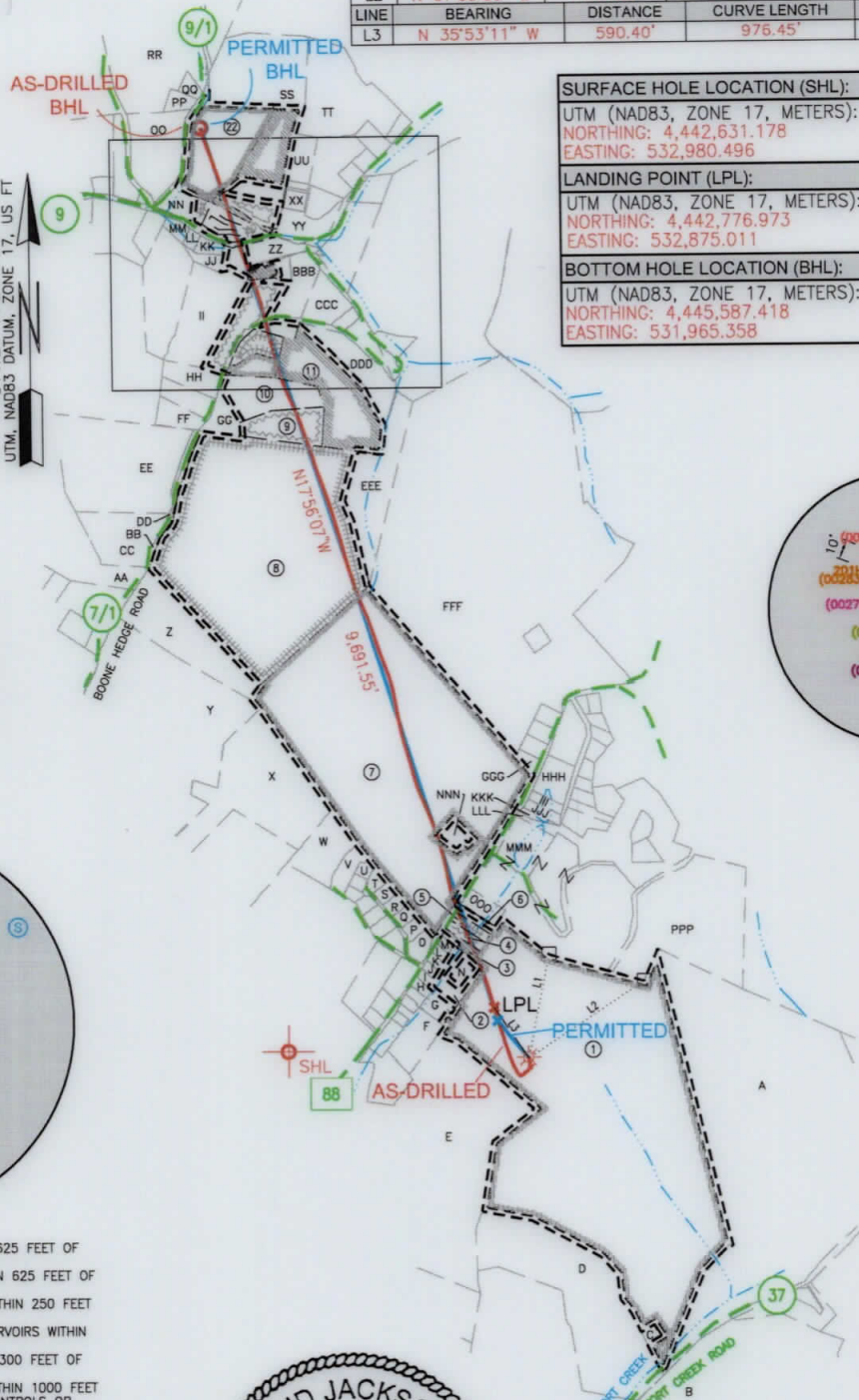
2413 EAST PIKE ST. # 112
Clarksburg, WV 26301
304-623-5851

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 11°15'04" E	1099.36'	SHL TO LANDMARK	FD. 5/8" REBAR
L2	N 57°33'35" E	1447.85'	SHL TO LANDMARK	36" BLACK CHERRY
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L3	N 35°53'11" W	590.40'	976.45'	SHL TO LP

SURFACE HOLE LOCATION (SHL):	
UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,442,631.178	EASTING: 532,980.496
LANDING POINT (LPL):	
UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,442,776.973	EASTING: 532,875.011
BOTTOM HOLE LOCATION (BHL):	
UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,445,587.418	EASTING: 531,965.358

SURFACE HOLE LOCATION (SHL):	
UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,442,631.210	EASTING: 532,980.620
LANDING POINT (LPL):	
UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,442,748.790	EASTING: 532,882.880
BOTTOM HOLE LOCATION (BHL):	
UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,445,587.490	EASTING: 531,968.160

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



WELL RESTRICTIONS

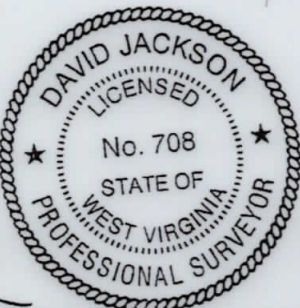
- NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
- NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS 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.
- 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



(+) 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)

COMPANY: **SWN** Production Company, LLC

DALLAS HALL OHI

OPERATOR'S WELL #: 3H

API WELL #: 47 069 00271

STATE COUNTY PERMIT

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

WATERSHED: SHORT RUN-OHIO RIVER (HUC-10) ELEVATION: 1274.5'

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: 6,139 TVD 16,239 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

LEGEND: PROPOSED SURFACE HOLE / BOTTOM HOLE EXISTING / PRODUCING WELLHEAD LPL EXISTING WATER WELL EXISTING SPRING SURVEYED BOUNDARY DRILLING UNIT LEASE BOUNDARY ASDRILLED PATH 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 #:	3H	47-069-00271	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	MATHEW H. GOSSETT (S)	04-R12B-01
3	GEORGE STROMATOS (S)	03-L4-24
4	GEORGE STROMATOS (S)	03-L4-24.1
5	GEORGE STROMATOS (S)	03-L4-24.2
6	DAVID G. RUTHERS & LINDA F. RUTHERS (S)	03-L4-22
7	LILLIAN W. BROWN TRUST (S)	03-L4-1.1
8	CLAIRE M. CAENEY (S)	04-R9-03
9	MARK J. SWIGER & DAWN S. SWIGER (S)	04-R9-22.15
10	GEORGE E. WOOD & CAROL A. WOOD (S)	04-R9-22.16
11	JOHN C. RATCLIFFE (S)	04-R9-22.20
12	JOHN C. RATCLIFFE & KATHY J. RATCLIFFE (S)	04-R9-22.17
13	JEFFREY C. TAYLOR & GINGER K. TAYLOR (S)	04-R9-22.18
14	JEFFREY C. TAYLOR & G.K. TAYLOR (S)	04-R9-20
15	RODNEY W. HALEY & RHONDA L. HALEY (S)	04-R9-22.8
16	JOSHUA M. KLAPKA (S)	04-R9-19
17	BRANDON C. GALLOWAY & CYNTHIA A. GALLOWAY (S)	04-R6-39.1
18	LESLIE A. HUNT (S)	04-R6-29
19	LUTHER R. SMITH, JR. & E.L. SMITH (S)	04-R6-39
20	NICOLE L. CARENBAUER (S)	04-R6-28.6
21	DOUGLES HUDSON & JACQUELINE HUDSON (S)	04-R6-28.7
22	WINDELL H. GOFF II & GLADYS GOFF (S)	04-R6-24.3

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	MARY HELEN CLISER, 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	AGNUS J. HALL	03-L7-21.1
F	JOHN R. PYLE, SR. & T.A. PYLE	04-R12B-1.1
G	STEVE KELLAS	04-R12B-1.5
H	MARK A. KOZUSNIK	04-R12B-1.8
I	DAVID L. TAYLOR & ESTELLA TAYLOR	04-R12B-04
J	DAVID L. TAYLOR & ESTELLA ANN TAYLOR	04-R12B-1.7
K	PATRICIA A. MERCER	04-R12B-03
L	LARRY N. BECK & JANE K. BECK	04-R12B-07
M	ERIC N. BLEND	03-R12B-02
N	DENNIS M. GUMAER & DANACA L. GUMAER	03-R12B-1.6
O	JAMES W. FRIO & KAREN L. FRIO	04-R9-47
P	S.A. WARREN & W.S. WARREN	04-R9-46
Q	DAVID W. SONNEFELD & TERRI A. SONNEFELD	04-R9-45
R	DAVID W. SONNEFELD & TERRI A. SONNEFELD	04-R9-44
S	TYLER P. BECK	04-R9-43
T	MARK E. PISSOS & J.L. PISSOS	04-R9-42
U	GARY S. LATOS & C.M. LATOS	04-R9-41
V	CLARK PAJAK & SHARON L. PAJAK	04-R9-32.1
W	CLARK PAJAK & SHARON L. PAJAK	04-R9-28
X	RCK 2 GROUP, LLC	04-R9-27
Y	LA DONNA MARTIN EVANS	04-R9-3.5
Z	WESBANCO TRUST & INVESTMENT SERVICE	04-R9-16.1
AA	JORDAN WEBER & GAYLE WEBER	04-R9-09
BB	CLAIRE M. CAENEY	04-R9-10.2
CC	DAVID B. MAIN & L.M. MAIN	04-R9-10
DD	DAVID B. MAIN & LISA M. MAIN	04-R9-3.6
EE	DAVID B. MAIN & L.M. MAIN	04-R9-10.1
FF	CHARLES R. KELLAM & PHYLLIS J. KELLAM	04-R9-22.13
GG	MARK J. SWINGER & DAWN S. SWINGER	04-R9-22.14
HH	CHARLES R. KELLAM & PHYLLIS J. KELLAM	04-R9-22.11

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
II	JAMES L. WEST, SR. & KATHY L. WEST	04-R9-22.7
JJ	BRANDON C. GALLOWAY & CYNTHIA A. GALLOWAY	04-R6-39.2
KK	EDWARD A. SMITH	04-R6-39.4
LL	ROBERT W. OCHSENBEIN	04-R6-39.3
MM	JOHN D. CRUPE & J.D. CRUPE	04-R6-38
NN	RICHARD LEE CRABTREE	04-R6-24
OO	RICHARD A. WOOD, JR	04-R6-24.6
PP	WINDSOR COAL COMPANY	04-R6-25
QQ	STELLA M. BRYAN & KATHLEEN J. BRYAN	04-R6-17.1
RR	SHORT CREEK COAL CO.	04-R6-17.4
SS	WENDELL H. GOFF II & GLADY S. GOFF	04-R6-27.1
TT	RANDALL L. CRABTREE & CYNTHIA S. KOVALSKI	04-R6-27.3
UU	RANDALL CRABTREE	04-R6-28.8
VV	RANDALL L. CRABTREE & CYNTHIA S. KOVALSKI	04-R6-28.9
WW	DOUGLAS HUDSON & JACQUELINE HUDSON	04-R6-28.3
XX	RALPH D. ROBINSON, JR. & GA ROBINSON	04-R6-28.2
YY	RALPH D. ROBINSON, JR. & GRACE A. ROBINSON	04-R6-27
ZZ	ROBERT L. JEWELL II & JENNIFER J. JEWELL	04-R6-40
AAA	VELMA L. TAGGART	04-R9-18
BBB	LARRY BOYNES & TERRY BOYNES	04-R9-22.9
CCC	CARLA DIETRICH	04-R9-21.1
DDD	JOHN C. RATCLIFFE	04-R9-22.21
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	CATHERINE EVANS & DAVID EVANS	03-L4-13.1

REVISIONS:	COMPANY:	 		
	OPERATOR'S	DALLAS HALL OHI	API NUMBER:	DATE: 07-09-2019
	WELL #:	3H	47-069-00271	DRAWN BY: N. MANO
	DISTRICT:	COUNTY:	STATE:	SCALE: N/A
	LIBERTY	OHIO	WV	DRAWING NO:
				WELL LOCATION PLAT 3