

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

API 47-069-00338 County OHIO District RICHLAND  
Quad WHEELING 7.5', WV Pad Name SHANNON FIELDS-OHI-PAD1 Field/Pool Name PANHANDLE FIELD WET  
Farm name SWN PRODUCTION COMPANY, LLC Well Number SHANNON FIELDS OHI 10H  
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 4,437,626.463 Easting 529,171.867  
Landing Point of Curve Northing 4,437,305.230 Easting 528,559.632  
Bottom Hole Northing 4,433,809.558 Easting 530,194.129

Elevation (ft) 1,235.91' 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 4/11/2022 Date drilling commenced 10/22/2022 Date drilling ceased 11/4/2022  
Date completion activities began 12/16/2022 Date completion activities ceased 1/30/2023  
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 352' Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 602' Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 504' Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N



Reviewed by:  
[Signature]  
09/15/2023

API 47-069 - 00338 Farm name SWN PRODUCTION COMPANY, LLC Well number SHANNON FIELDS OHI 10H

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	136'	NEW	J-55/94#		Y
Surface	17.5	13.375	554'	NEW	J-55/54.5#	466.8' / 435.5'	Y; 42 BBLS
Coal	SEE INTERMEDIATE						
Intermediate 1	12.25	9.625	1,914'	NEW	J-55/36#		Y; 36 BBLS
Intermediate 2							
Intermediate 3							
Production	8.75	5.5	19,767'	NEW	P-110 HP/24#		Y; 27 BBLS
Tubing		2.875	6,893'	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	694	15.60	1.19	825.86	SURFACE	8
Coal	SEE INTERMEDIATE						
Intermediate 1	CLASS A	713	15.60	1.19	848.47	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	3,577	14.50	1.29	4,614.33		24
Tubing							

Drillers TD (ft) 19,767' Loggers TD (ft) 19,767'

Deepest formation penetrated MARCELLUS Plug back to (ft) 19,680'

Plug back procedure N/A

Kick off depth (ft) 5,895' MD

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: 6 CENTRALIZERS - EVERY THIRD JOINT OF CASING

INTERMEDIATE: 24 CENTRALIZERS - EVERY THIRD JOINT OF CASING

PRODUCTION: 394 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 - 00338 Farm name SWN PRODUCTION COMPANY, LLC Well number SHANNON FIELDS OHI 10H

**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 - 00338 Farm name SWN PRODUCTION COMPANY, LLC Well number SHANNON FIELDS OHI 10H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>MARCELLUS</u>	<u>6,036'</u>	<u>TVD</u>	<u>6,714'</u> <u>MD</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 2,446 psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST \_\_\_\_\_ hrs

OPEN FLOW Gas 9,469 mcfpd Oil 1,110 bpd NGL \_\_\_\_\_ bpd Water 1,508 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 <sub>2</sub> S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	<u>0</u>		<u>0</u>		
	<u>SEE</u>	<u>ATTACHMENT</u>	<u>3</u>		

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 SWN WELL SERVICES  
Address PO BOX 12359 City SPRING State TX Zip 77391

Please insert additional pages as applicable.

Completed by DENISE GRANTHAM Telephone 832.796.6139  
Signature *Denise Grantham* Title REGULATORY SPECIALIST Date 3.28.2023

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

**09/15/2023**

SHANNON FIELDS OHI 10H

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	12/16/2022	90.4	9,181	8,010	3,678	198,940	5,807	0
2	12/17/2022	97.4	9,620	5,206	4,251	366,620	8,993	0
3	12/17/2022	98.3	9,071	4,551	4,410	363,680	8,661	0
4	12/17/2022	93.8	8,662	3,684	4,120	365,100	8,698	0
5	12/18/2022	93.5	8,288	4,147	4,421	364,320	8,566	0
6	12/18/2022	97.9	8,453	5,698	4,752	365,100	8,355	0
7	12/18/2022	92.8	8,937	5,731	4,416	366,820	8,313	0
8	12/19/2022	93.3	9,122	6,080	4,585	367,540	8,222	0
9	12/19/2022	98.6	8,944	6,396	4,458	362,740	8,269	0
10	12/19/2022	95.2	8,879	6,045	4,450	366,140	8,297	0
11	12/19/2022	95.7	9,003	5,920	4,142	367,440	7,889	0
12	12/20/2022	97.9	9,031	5,925	4,586	367,860	7,967	0
13	12/20/2022	97	9,459	6,002	4,475	368,500	8,258	0
14	12/20/2022	93.6	8,937	5,906	4,539	366,020	8,117	0
15	12/21/2022	94.9	9,245	5,841	4,996	363,080	8,525	0
16	12/21/2022	94.7	8,436	5,558	4,233	365,940	8,213	0
17	12/21/2022	94.7	8,362	5,806	4,618	371,380	8,077	0
18	12/22/2022	98.6	8,720	5,834	4,615	367,640	6,936	0
19	12/22/2022	92.3	8,520	5,907	4,232	367,640	8,166	0
20	12/22/2022	98.4	8,552	6,079	4,725	368,200	7,950	0
21	12/23/2022	94.8	8,400	6,262	4,108	365,820	8,346	0
22	12/29/2022	98.9	8,391	6,102	4,426	368,260	7,990	0
23	12/29/2022	94.9	8,519	5,826	4,612	367,500	7,985	0
24	12/29/2022	90.2	7,678	4,797	4,250	368,380	8,059	0
25	12/29/2022	99	8,361	6,123	4,298	367,300	7,996	0
26	12/30/2022	85.3	7,277	6,223	4,404	366,160	10,388	0
27	12/30/2022	95.8	8,200	5,948	4,241	368,020	8,059	0
28	12/30/2022	96.8	7,929	6,017	4,872	366,460	7,816	0
29	12/31/2022	96.4	7,931	6,137	4,652	368,300	7,839	0
30	12/31/2022	95.5	7,649	5,698	4,335	368,040	8,096	0
31	12/31/2022	97.3	7,774	6,235	4,316	367,780	8,032	0
32	1/1/2023	97	7,582	5,521	4,365	367,440	7,902	0
33	1/1/2023	93.2	7,255	5,062	4,733	365,200	8,064	0
34	1/2/2023	93.8	7,743	3,834	3,847	367,600	13,091	0
35	1/2/2023	98	7,508	5,798	4,215	367,240	7,665	0
36	1/3/2023	96.2	7,555	6,128	4,202	366,500	7,732	0
37	1/3/2023	95.6	7,636	5,318	3,989	367,440	8,019	0
38	1/3/2023	98	7,554	5,623	4,312	364,320	7,834	0
39	1/5/2023	98.8	7,844	5,873	3,952	368,840	7,718	0
40	1/6/2023	97.6	7,259	5,650	4,290	364,980	8,183	0
41	1/6/2023	96	7,624	5,883	3,697	369,200	7,515	0
42	1/6/2023	96.3	7,504	5,824	4,854	369,920	7,641	0
43	1/7/2023	98	7,650	5,420	4,640	367,120	8,125	0
44	1/7/2023	98.1	7,690	4,679	4,359	367,840	7,949	0
45	1/7/2023	96.4	7,491	5,825	4,508	366,260	7,684	0
46	1/7/2023	98	7,506	5,823	5,637	366,900	7,564	0
47	1/8/2023	97.8	7,363	5,486	4,370	367,700	7,761	0
48	1/8/2023	96.2	7,272	5,979	4,675	358,100	7,057	0
49	1/8/2023	97.7	7,188	4,120	4,851	364,820	7,386	0
50	1/9/2023	97.7	7,235	5,774	4,591	368,820	7,798	0
51	1/9/2023	96	7,209	5,920	4,265	368,120	7,633	0
52	1/9/2023	97	6,960	6,063	4,327	367,160	7,495	0
53	1/9/2023	97.5	7,115	5,701	4,678	367,100	7,618	0

09/15/2023

SHANNON FIELDS OHI 10H

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
54	1/10/2023	97.7	7,192	4,852	4,041	367,400	7,622	0
55	1/10/2023	96.2	6,968	4,958	4,325	350,800	7,279	0
56	1/10/2023	96	6,663	5,855	4,457	368,280	7,377	0
57	1/10/2023	97.9	6,482	4,652	4,521	365,840	8,722	0
58	1/11/2023	97.8	6,398	4,521	4,516	368,580	7,610	0
59	1/11/2023	97.6	6,429	5,497	4,477	366,000	7,270	0
60	1/11/2023	96.4	6,255	6,200	4,602	362,840	7,311	0

**SHANNON FIELDS OHI 10H  
ATTACHMENT 1  
PERF REPORT**

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
1	12/7/2022	19,680	19,588	36
2	12/17/2022	19,552	19,372	36
3	12/17/2022	19,338	19,158	36
4	12/17/2022	19,124	18,944	36
5	12/18/2022	18,910	18,730	36
6	12/18/2022	18,697	18,516	36
7	12/18/2022	18,483	18,302	36
8	12/19/2022	18,269	18,089	36
9	12/19/2022	18,055	17,875	36
10	12/19/2022	17,841	17,661	36
11	12/19/2022	17,627	17,447	36
12	12/20/2022	17,413	17,233	36
13	12/20/2022	17,199	17,019	36
14	12/20/2022	16,986	16,805	36
15	12/20/2022	16,772	16,592	36
16	12/21/2022	16,558	16,378	36
17	12/21/2022	16,344	16,164	36
18	12/22/2022	16,130	15,950	36
19	12/22/2022	15,916	15,736	36
20	12/22/2022	15,702	15,522	36
21	12/22/2022	15,489	15,308	36
22	12/26/2022	15,275	15,094	36
23	12/29/2022	15,061	14,881	36
24	12/29/2022	14,847	14,667	36
25	12/29/2022	14,633	14,453	36
26	12/30/2022	14,419	14,239	36
27	12/30/2022	14,205	14,025	36
28	12/30/2022	13,992	13,811	36
29	12/30/2022	13,778	13,597	36
30	12/31/2022	13,564	13,384	36
31	12/31/2022	13,350	13,170	36
32	1/1/2023	13,136	12,956	36
33	1/1/2023	12,922	12,742	36
34	1/1/2023	12,708	12,528	36
35	1/2/2023	12,494	12,314	36
36	1/3/2023	12,281	12,100	36
37	1/3/2023	12,067	11,887	36
38	1/3/2023	11,853	11,673	36
39	1/3/2023	11,639	11,459	36
40	1/5/2023	11,425	11,245	36
41	1/6/2023	11,211	11,031	36
42	1/6/2023	10,997	10,817	36
43	1/6/2023	10,784	10,603	36

**SHANNON FIELDS OHI 10H  
ATTACHMENT 1  
PERF REPORT**

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
44	1/7/2023	10,570	10,389	36
45	1/7/2023	10,356	10,176	36
46	1/7/2023	10,142	9,962	36
47	1/7/2023	9,928	9,748	36
48	1/8/2023	9,714	9,534	36
49	1/8/2023	9,500	9,320	36
50	1/8/2023	9,287	9,106	36
51	1/9/2023	9,073	8,892	36
52	1/9/2023	8,859	8,679	36
53	1/9/2023	8,645	8,465	36
54	1/9/2023	8,431	8,251	36
55	1/10/2023	8,217	8,037	36
56	1/10/2023	8,003	7,823	36
57	1/10/2023	7,789	7,609	36
58	1/11/2023	7,576	7,395	36
59	1/11/2023	7,362	7,182	36
60	1/11/2023	7,148	6,968	36



# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	12/16/2022
Job End Date:	1/11/2023
State:	West Virginia
County:	Ohio
API Number:	47-069-00338-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	SHANNON FIELDS OHI 10
Latitude:	40.08841383
Longitude:	-80.65780638
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,185
Total Base Water Volume (gal):	20,161,770
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
Base Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	88.16755	Density = 8.345
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	85.00000	0.30461	

			Water	7732-18-5	100.00000	0.30461	
			Water	7732-18-5	45.00000	0.30461	
Sand	SWN Well Services	Proppant					
				Listed Below			
PLEXSLICK 930	SWN Well Services	Friction Reducer					
				Listed Below			
Tolicide 4Frac	SWN Well Services	Biocide					
				Listed Below			
HCL	SWN Well Services	Solvent					
				Listed Below			
FSTI-CI-02	SWN Well Services	Corrosion Inhibitor					
				Listed Below			
Ferriplex 80	SWN Well Services	Iron Control					
				Listed Below			
Plexaid 655WG	SWN Well Services	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	11.43484	
			Hydrochloric Acid	7647-01-0	15.00000	0.04327	

			Tetrakis(Hydroxymethyl) Phosphonium Sulfate	55566-30-8	45.00000	0.00471	
			Sodium Erythorbate	6381-77-7	100.00000	0.00154	
			Quaternary ammonium compounds	68424-85-1	7.50000	0.00078	
			Ethanol	64-17-5	2.50000	0.00026	
			Ethylene glycol	107-21-1	40.00000	0.00018	
			Cinnamaldehyde	104-55-2	10.00000	0.00004	
			N,N-Dimethylformamide	68-12-2	10.00000	0.00004	
			Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-	9016-45-9	10.00000	0.00004	
			1-Decanol	112-30-1	5.00000	0.00002	
			2-Butoxyethanol	111-76-2	5.00000	0.00002	
			benzyl chloridequaternized	72480-70-7	5.00000	0.00002	
			Isopropyl alcohol	67-63-0	5.00000	0.00002	
			1-Octanol	111-87-5	5.00000	0.00002	
			Triethyl phosphate	78-40-0	5.00000	0.00002	

\* 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

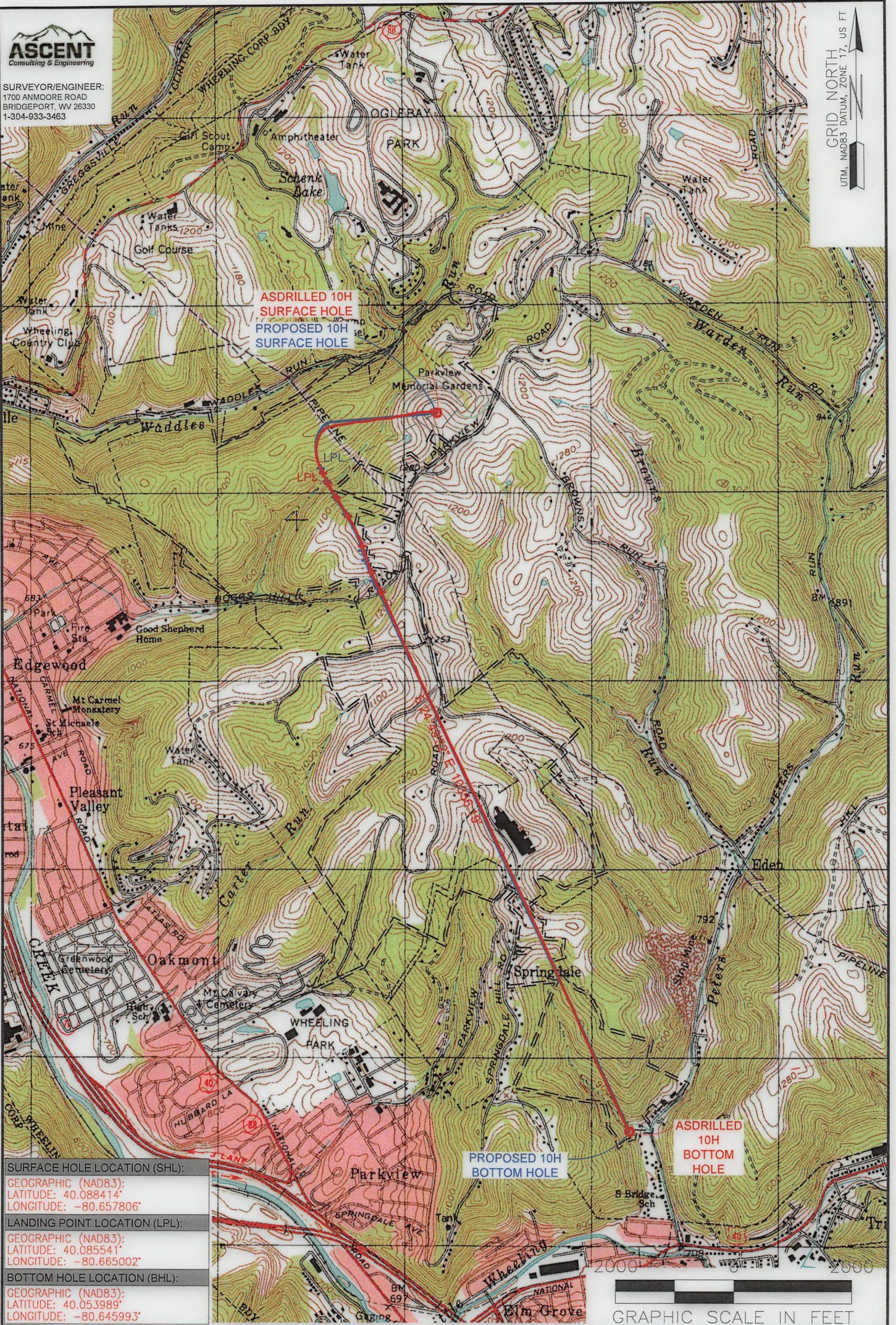
Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)



SURVEYOR/ENGINEER:  
1700 ANMOORE ROAD  
BRIDGEPORT WV 26330  
1-304-933-3463

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



**SURFACE HOLE LOCATION (SHL):**

GEOGRAPHIC (NAD83):  
LATITUDE: 40.088414°  
LONGITUDE: -80.657806°

**LANDING POINT LOCATION (LPL):**

GEOGRAPHIC (NAD83):  
LATITUDE: 40.085541°  
LONGITUDE: -80.665002°

**BOTTOM HOLE LOCATION (BHL):**

GEOGRAPHIC (NAD83):  
LATITUDE: 40.053989°  
LONGITUDE: -80.645993°

**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.

**LEGEND:**

- PROPOSED SURFACE HOLE / BOTTOM HOLE
- ⊙ EXISTING / PRODUCING WELLHEAD
- LPL ✕ LANDING POINT LOCATION
- ⊕ EXISTING WATER WELL
- ⊙ EXISTING SPRING

- SURVEYED BOUNDARY
- LEASE BOUNDARY
- ASDRILLED PATH
- PROPOSED PATH
- DHP BUFFER

09/15/2023

GRAPHIC SCALE IN FEET

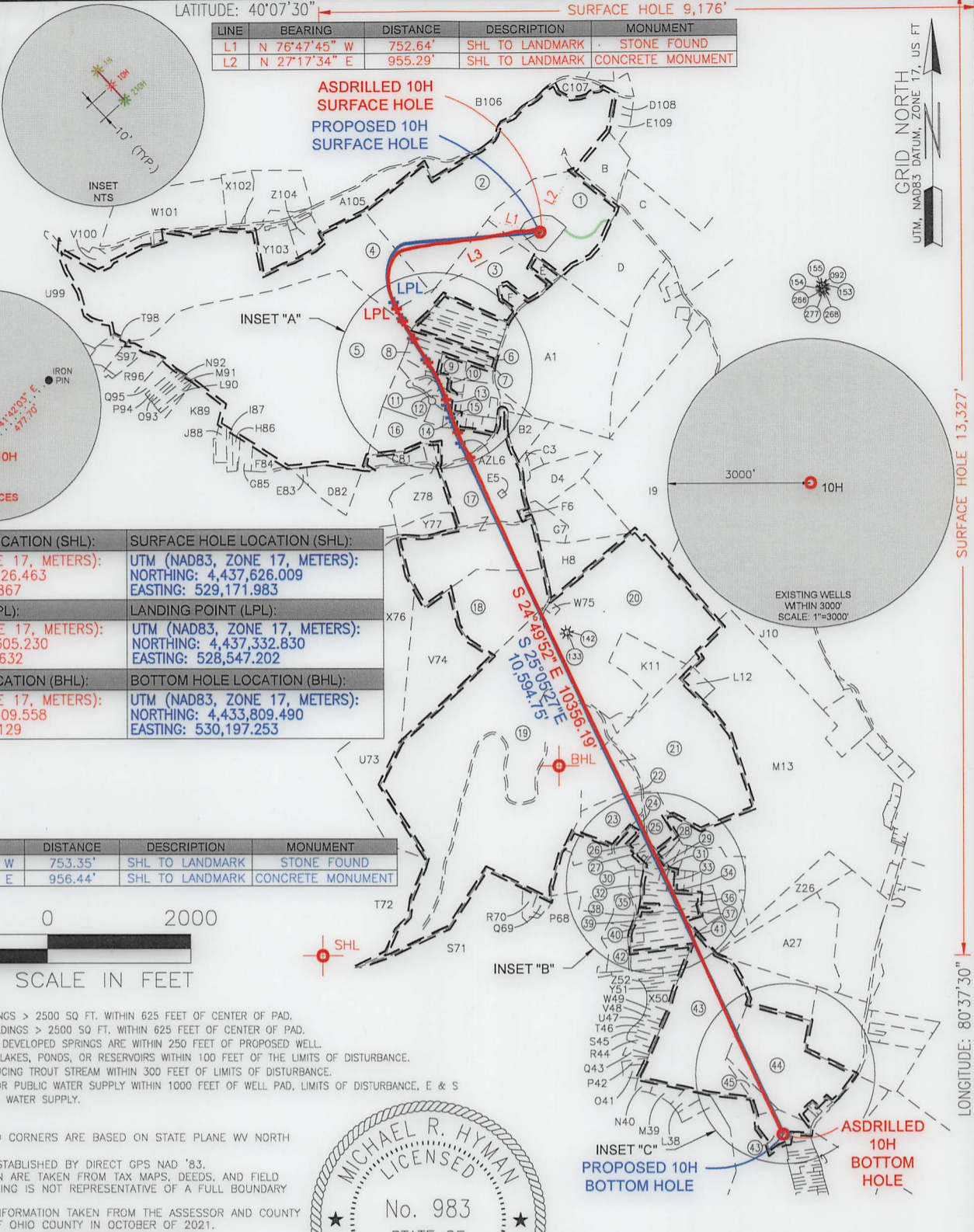
WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	WELL (FARM) NAME: SHANNON FIELDS OHI	WELL # 10H	SERIAL # XXXX
ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201	COUNTY - CODE OHIO - 35	DISTRICT; RICHLAND	
SURFACE OWNER: SHANNON FIELDS, LLC	USGS 7 1/2 QUADRANGLE MAP NAME WHEELING, WV		

LATITUDE: 40°07'30" SURFACE HOLE 9,176' BOTTOM HOLE 5,875'



SURVEYOR/ENGINEER:  
1700 ANMOORE ROAD  
BRIDGEPORT, WV 26330  
1-304-933-3463

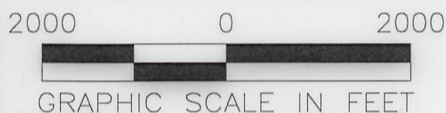
LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 76°47'45" W	752.64'	SHL TO LANDMARK	STONE FOUND
L2	N 27°17'34" E	955.29'	SHL TO LANDMARK	CONCRETE MONUMENT



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

<b>SURFACE HOLE LOCATION (SHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,437,626.463 EASTING: 529,171.867	<b>SURFACE HOLE LOCATION (SHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,437,626.009 EASTING: 529,171.983
<b>LANDING POINT (LPL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,437,305.230 EASTING: 528,559.632	<b>LANDING POINT (LPL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,437,332.830 EASTING: 528,547.202
<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,433,809.558 EASTING: 530,194.129	<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,433,809.490 EASTING: 530,197.253

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 76°41'32" W	753.35'	SHL TO LANDMARK	STONE FOUND
L2	N 27°13'53" E	956.44'	SHL TO LANDMARK	CONCRETE MONUMENT



**WELL RESTRICTIONS**

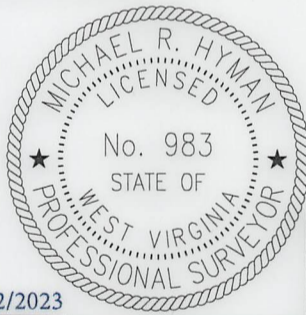
- NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
- NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
- PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS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

- TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE WV NORTH ZONE NAD '83.
- WELL LAT./LONG ESTABLISHED BY DIRECT GPS NAD '83.
- BOUNDARIES SHOWN ARE TAKEN FROM TAX MAPS, DEEDS, AND FIELD SURVEY. THIS DRAWING IS NOT REPRESENTATIVE OF A FULL BOUNDARY SURVEY.
- SURFACE OWNER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF OHIO COUNTY IN OCTOBER OF 2021.
- WELLS SHOWN ARE TAKEN FROM RECORDS OF WVDEP.

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 STATE OF WEST VIRGINIA.

P.S. 983 *Michael R. Hyman* 04/12/2023



COMPANY: **SWN** Production Company, LLC **SWN** Production Company™

<p>STATE OF WEST VIRGINIA MONTANI SEMPER LIBERI</p>	(+ = = 1 - = ON UNITED STATES TOPOGRAPHIC MAPS WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034	MINIMUM DEGREE OF ACCURACY: 1/200	OPERATOR'S WELL #: 10H
		PROVEN SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)	API WELL #: 47 STATE 069 COUNTY 00338 PERMIT

WELL TYPE: OIL <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/> PRODUCTION <input checked="" type="checkbox"/> DEEP <input type="checkbox"/> GAS <input checked="" type="checkbox"/> LIQUID INJECTION <input type="checkbox"/> STORAGE <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/>	WATERSHED: UPPER OHIO SOUTH ELEVATION: 1235.91'
DISTRICT: RICHLAND COUNTY: OHIO	QUADRANGLE: WHEELING 7.5', WV
SURFACE OWNER: SHANNON FIELDS, LLC	ACREAGE: ±35.07
OIL & GAS ROYALTY OWNER: SHANNON FIELDS, LLC	ACREAGE: ±35.07
DRILL <input checked="" type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input checked="" type="checkbox"/> PLUG OFF OLD FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input type="checkbox"/>	ESTIMATED DEPTH: 6,091.15/2023 MD
CONVERT <input type="checkbox"/> PLUG & ABANDON <input type="checkbox"/> CLEAN OUT & REPLUG <input type="checkbox"/> OTHER CHANGE <input checked="" type="checkbox"/> (SPECIFY) AS-DRILLED	

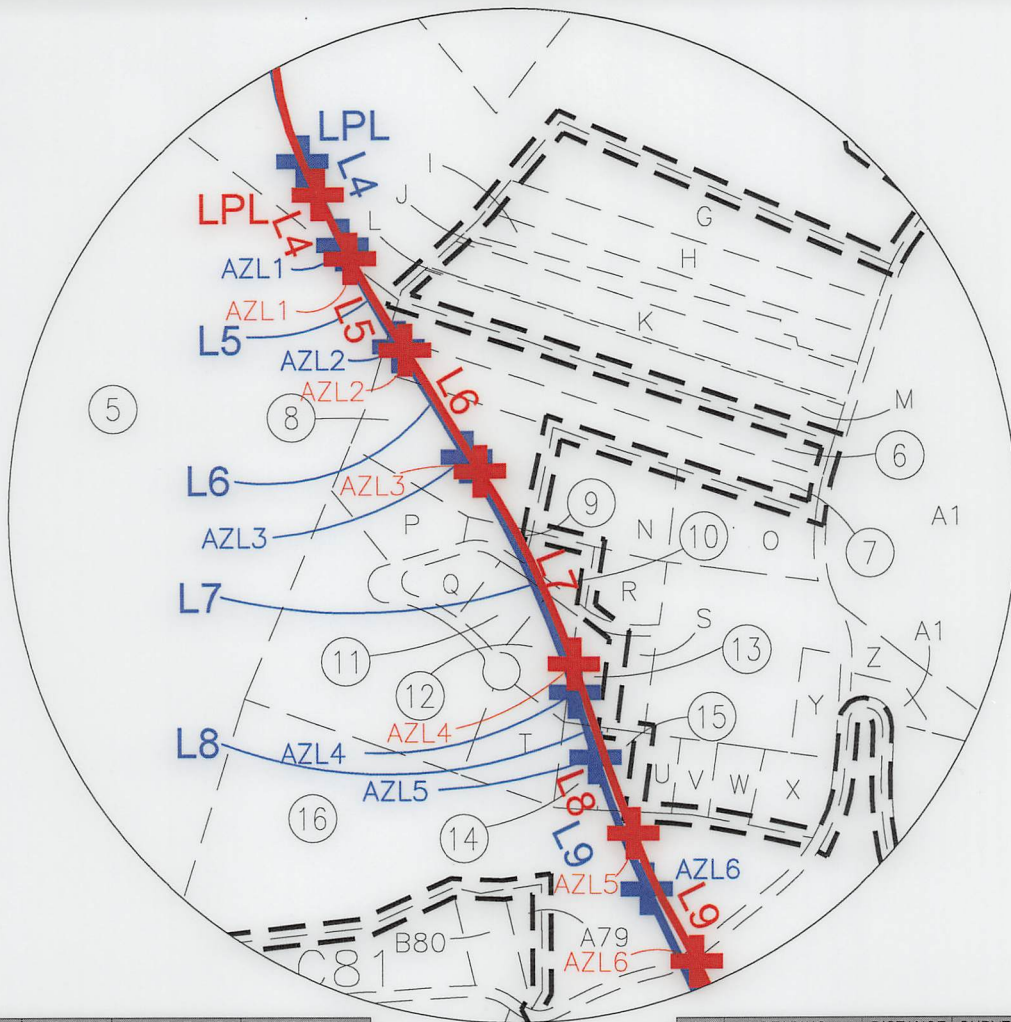
WELL OPERATOR: SWN PRODUCTION COMPANY, LLC ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508	DESIGNATED AGENT: BRITANY WOODY ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508
--	---

<b>LEGEND:</b> ○ PROPOSED SURFACE HOLE / BOTTOM HOLE * EXISTING / PRODUCING WELLHEAD LPL* LANDING POINT LOCATION W EXISTING WATER WELL S EXISTING SPRING	— SURVEYED BOUNDARY — DRILLING UNIT — LEASE BOUNDARY — ASDRILLED PATH — PROPOSED PATH — DHP BUFFER	REVISIONS: DATE: 04/12/2023 DRAWN BY: TMF SCALE: 1" = 2000' DRAWING NO: ACE-2326 WELL LOCATION PLAT
---	---	--

SURFACE HOLE 13,327' BOTTOM HOLE 10,689' LONGITUDE: 80°37'30"



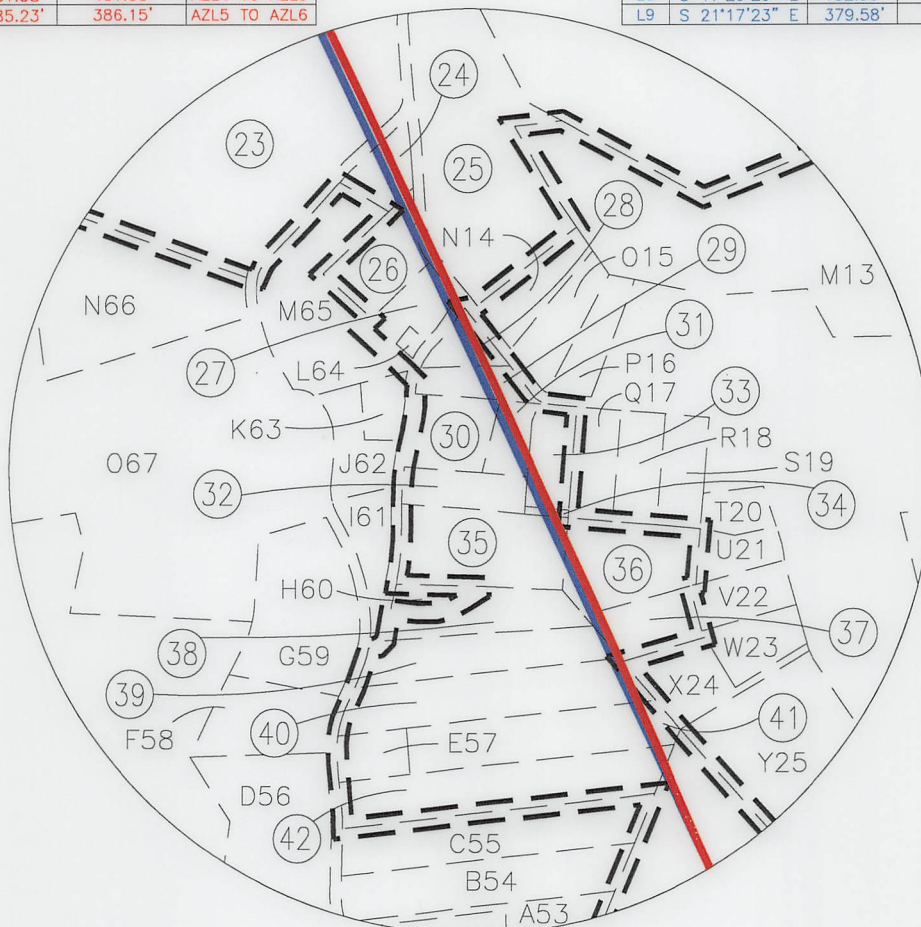
SURVEYOR/ENGINEER:  
1700 ANMOORE ROAD  
BRIDGEPORT, WV 26330  
1-304-933-3463



**INSET "A"**  
SCALE: 1"=500'

LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L3	S 62°18'52" W	2268.34'	2875.42	SHL TO LPL
L4	S 26°21'52" E	192.89'	192.89'	LPL TO AZL1
L5	S 30°33'09" E	288.83'	289.08'	AZL1 TO AZL2
L6	S 31°32'17" E	384.81'	384.81'	AZL2 TO AZL3
L7	S 25°45'46" E	577.41'	578.39'	AZL3 TO AZL4
L8	S 19°17'33" E	481.58'	481.58'	AZL4 TO AZL5
L9	S 26°07'48" E	385.23'	386.15'	AZL5 TO AZL6

LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L3	S 64°51'42" W	2,264.26'	2,812.64'	SHL TO LPL
L4	S 25°12'33" E	249.88'	249.88'	LPL TO AZL1
L5	S 28°21'22" E	314.10'	314.25'	AZL1 TO AZL2
L6	S 31°30'02" E	349.83'	349.83'	AZL2 TO AZL3
L7	S 24°29'39" E	698.38'	700.06'	AZL3 TO AZL4
L8	S 17°29'29" E	182.99'	182.99'	AZL4 TO AZL5
L9	S 21°17'23" E	379.58'	379.84'	AZL5 TO AZL6



**INSET "B"**  
SCALE: 1"=500'

REVISIONS:

COMPANY:

**SWN**  
Production Company, LLC

**SWN**  
Production Company™

09/15/2023

OPERATOR'S SHANNON FIELDS OHI

DATE: 04/12/2023

WELL #: 10H

DRAWN BY: TMF

DISTRICT:  
RICHLAND

COUNTY:  
OHIO

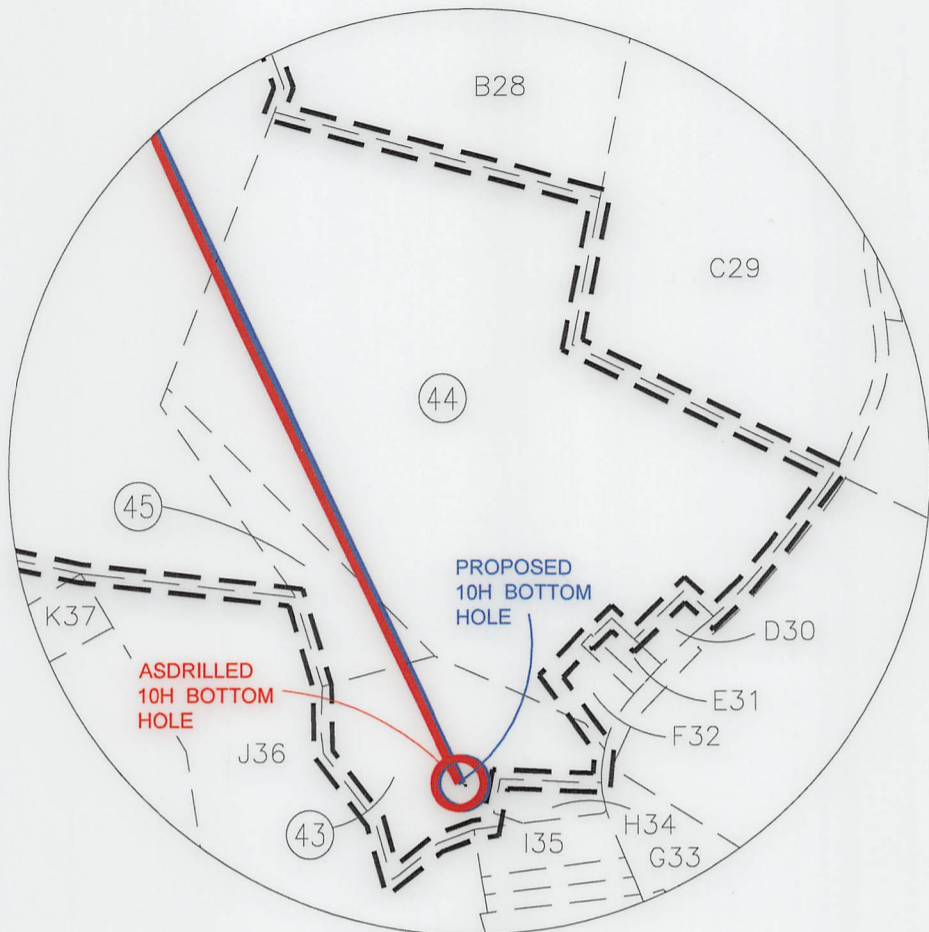
STATE:  
WV

SCALE: N/A  
DRAWING NO: ACE-2326

WELL LOCATION PLAT



SURVEYOR/ENGINEER:  
 1700 ANMOORE ROAD  
 BRIDGEPORT, WV 26330  
 1-304-933-3463



**INSET "C"**  
 SCALE: 1"=500'

REVISIONS:	

COMPANY:		09/15/2023	
OPERATOR'S		DATE: 04/12/2023	
WELL #:		DRAWN BY: TMF	
DISTRICT:		SCALE: N/A	
RICHLAND		DRAWING NO: ACE-2326	
COUNTY:	OHIO	WELL LOCATION PLAT	
STATE:	WV		





SURVEYOR/ENGINEER:  
1700 ANMOORE ROAD  
BRIDGEPORT, WV 26330  
1-304-933-3463

WELL BORE TABLE FOR SURFACE/ROYALTY OWNERS		
TRACT	SURFACE OWNER ( S )/ROYALTY OWNER ( R )	TAX PARCEL
1	SHANNON FIELDS, LLC ( S/R )	4-R17-23.2
2	PARK VIEW MEMORIAL GARDENS, INC.	4-R17-8
3	NADA E. BENEKE, ET AL	4-R17-19
4	WHEELING PARK COMMISSION	4-R17-6.1
5	WHEELING PARK COMMISSION	6-T1-2
6	HARRY S. & BARBARA J. FISHER	4-R17-11
7	HARRY S. & BARBARA J. FISHER	4-R17-11.1
8	ATTILA A. LENKEY	4-R17-10.1
9	ATTILA A. LENKEY	6-T2J-9.1
10	MICHAEL J. & SUSAN P. BAKER	6-T2J-9
11	KIM S. & STEPHANIE P. WILEY	6-T2J-18
12	JOSHUA & REBECCA JEFFERSON	6-T2J-20
13	ERIC K. & TONYA ANDERSON	6-T2J-14
14	MICHAEL J. & SUSAN P. BAKER	6-T2J-20.5
15	MICHAEL J. & SUSAN P. BAKER	6-T2J-20.4
16	KAREN A. & VARONE K.J. PACHUTA	6-T2-3
17	CATHOLIC DIOCESE OF WHEELING - CHARLESTON	6-T2-11
18	STEPHEN T. & MICHELLE L. VOGGRIN	6-T2-13
19	WHEELING PARK COMMISSION	6-T7-1
20	WHEELING PARK COMMISSION	6-T7-95
21	BOARD OF EDUCATION	10-W56-2
22	VINCENET J. MAGNONE	6-T7-6
23	BRIAN M. HINERLITER	6-T7-6.4
24	DONALD A. BRADEN	10-W56-6.5
25	FRANCES L. BRADEN - IRREVOC TRUST	10-W56-3
26	TIMOTHY J. BRADEN	6-T7-6.2
27	FRANCES L. BRADEN	6-T7-44
28	FRANCES L. BRADEN - IRREVOC TRUST	6-T7-65.1
29	JOYCE I. & ANDREW WEISAL	6-T7-65.2
30	JOYCE I. WEISAL	6-T7-65
31	ANDREW C., II & CHARLENE WEISAL	6-T7-65.3
32	MATTHEW J. KINKADE	6-T7-66
33	LUKE D. & SHANNON N. REDD	6-T7-67.24
34	FRANCES L. BRADEN	6-T7-67
35	EARL P. HUFFNER	6-T7-72
36	EARL P. HUFFNER	6-T7-72.2
37	MICHAEL E. & S.G. SOVINSKY	6-T7-75.1
38	CHARLES V. SOVINSKY	6-T7-75
39	THOMAS A. ORTH	6-T7-76
40	GEORGE F. & MARY A. LONGWELL	6-T7-78
41	ROBERT L. MILLER, Jr.	6-T7-81
42	RICHARD J. & MICKEY ROBRECHT	6-T7-84
43	JOSEPHINE L. TAGGART	6-T7-125
44	PETERS RUN LAND Co., INC.	6-T7-119
45	PETERS RUN LAND Co., INC.	6-T7-125.1
A	EARL P. HUFFNER	4-R17-24.1
B	JAMES R. MULL	4-R17-24
C	ROBERT W. MINCH, Jr. & HERBERT P. MINCH	4-R17-57
D	RUTH CARTER LEWIS, REVOCABLE TRUST	4-R17-23
E	NADA E. BENEKE	4-R17-22
F	THOMAS J. & MICHELLE N. JOHN	4-R17-20
G	CRAIG V. & EMMA L. OLEARY	4-R17-17
H	JERMEY A. SCHREIBER & ELIZABETH PHILBRICK	4-R17-16
I	GUNTHER F. & M.E. HEMPELMAN	4-R17-14
J	COLUMBIA GAS TRANSMISSION CORP.	4-R17-15
K	GUNTHER F. & M.E. HEMPELMAN	4-R17-13
L	CARL D. III & JOLIN H. BURKLAND	4-R17-13.1
M	CARL D. III & JOLIN H. BURKLAND	4-R17-12
N	MICHAEL J. & SUSAN J. BAKER	4-R17-10
O	MATTHEW & VICTORIA GOMPERS	4-R17-10.2
P	RONALD & ANASTASIA MAUCK	6-T2J-11
Q	LOWELL C. SHINN	6-T2J-16
R	MICHAEL J. & SUSAN J. BAKER	6-T2J-7
S	RODD A. & LISA R. FRANKE	6-T2J-12
T	MICHAEL J. & STACI A. WILCOX	6-T2J-21
U	ROBERT B. & KIMBERLY S. NELSON	6-T2J-20.3
V	JAMES C. & MARY ELLEN WRIGHT	6-T2J-20.2
W	SHASHI R. & MONISHA URVAL	6-T2J-20.1
X	ROBERT J. & TAMI LOU SEEVERS-WESBANCO TRUST	6-T2-2
Y	DAVID N. GAUDINO & ANN C. HOGE	6-T2-2
Z	RICHARD P. & KIM M. CARTER	4-R17-23.1
A1	RICHARD P. CARTER	4-R17-23.3
B2	ERICA D. & WARREN C. III, WILCOX	6-T2-14
C3	MICHAEL W. WILHELM	6-T2-15
D4	DONALD G. & BECKY J. VILLANOVA	6-T2-15.2
E5	CITY OF WHEELING	6-T2-11.1
F6	D. A. & M. R. BECKER	6-T2-10
G7	LUANN & ARTHUR W., Jr. DANEHART	6-T2-16.1
H8	LUANN & ARTHUR W., Jr. DANEHART	6-T2-16.2
I9	TIMMY B. & AMY L. MINCH	6-T2-18
J10	WILLIAM A. & CYNTHIA ORUM	6-T7-178
K11	BOARD OF EDUCATION	10-W56-1
L12	DONALD A. & RHONDA L. BRADEN	6-T7-97.1
M13	FRANCES L. BRADEN, IRREVOC TRUST	6-T7-97
N14	CAYLA J. & MATTHEW D. BLACK	6-T7-67.10
O15	BENJAMIN & DANIELLE ELLWOOD	6-T7-67.23
P16	MARIO B. & LOIS R. JULIAN	6-T7-67.13
Q17	LEAH J. JONES	6-T7-67.12
R18	RALPH W. JORDEN	6-T7-67.4
S19	PHYLLIS A. WHARTON	6-T7-67.2
T20	JOHN J. & MARSHA M. ROTH	6-T7-67.21

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
U21	MICHAEL A. ANDLINGER & BETH ANN MYSLIVIC	6-T7-72.1
V22	JOHN P. & MEREDITH L. TRISCHLER	6-T7-75.2
W23	JOHN P. & MEREDITH L. TRISCHLER	6-T7-75.3
X24	JOHN P. & MEREDITH L. TRISCHLER	6-T7-75.4
Y25	JAMES D., Jr. & CAROLINE K. MILLER	6-T7-67.1
Z26	JAMES D., Jr. & CAROLINE K. MILLER	6-T7-117.2
A27	JAMES D., Jr. & CAROLINE K. MILLER	6-T7-117.1
B28	JAMES D., Jr. & CAROLINE K. MILLER	6-T7-117.3
C29	PETERS RUN LAND Co., INC.	6-T7-118
D30	JOHN BUCHANAN	6-T7-121
E31	JOHN BUCHANAN	6-T7-122
F32	CHRISTINE M. POWELL	6-T7-124
G33	JANET NOEL	6-T7-126.3
H34	CARL McCARDLE	6-T7-127
I35	CARL W. & CHRISTINE S. McCARDLE	6-T7-128
J36	JAMES F. & ANDREA WITZGALL	6-T7-126
K37	JON H. & TINA R. GREER	10-W71-5
L38	DENNIS A. & CARRIE B. KOZICKI	10-W71-7
M39	THOMAS L. WHARTON & MICHAEL C. GAST	10-W71-8
N40	WILLIAM C. & AUDREY A. ROBINSON	10-W71-9.1
O41	SCOTT S. & KATHY A. BLASS	6-T7-62
P42	DAVID M. STEAD, ET AL	6-T7-93
Q43	WILLIAM D. & CYNTHIA A. HARTLIEB	6-T7-93.4
R44	DANNY C. & KATHLEEN B. ADERHOLT; JENNIFER D. ADERHOLT	6-T7-93.6
S45	DANNY C. & KATHLEEN B. ADERHOLT; JENNIFER D. ADERHOLT	6-T7-93.5
T46	CHARLES D. & LISA R. WARRICK	6-T7-93.1
U47	LINDA J. SEACHMAN	6-T7-91
V48	CHAS L. & M. L. GRIFFIN	6-T7-91.1
W49	ROSE M. WITSBERGER	6-T7-92
X50	JOSHUA J. & SARAH E. MUTH	6-T7-90
Y51	TIMOTHY A. & CARLA J. MINOR	6-T7-89
Z52	THERESA M. COWIE	6-T7-88
A53	THOMAS E. & K. L. EVICK	6-T7-87
B54	THOMAS E. & K. L. EVICK	6-T7-86
C55	KIMBERLY SUE BREEDEN & SUSAN LYNN NICK	6-T7-85
D56	CHARLES G., Sr. & DARLENE E. LOY	6-T7-83
E57	ROBERT L. MILLER, Jr.	6-T7-80
F58	ELSIE D. LOY	6-T7-82
G59	ELIZABETH P. CONWAY	6-T7-80
H60	MAUREEN B. FARMER	6-T7-74
I61	HENRY R. & ANNA M. SHORES (LE); MICHAEL P. ORTH; THOMAS A. ORTH	6-T7-47
J62	JUNE A. CHIPLINSKI	6-T7-46
K63	MICHAEL E. & SUSAN G. SOVINSKY	6-T7-46.1
L64	360° COMMUNICATIONS Co., ALLTELL PROPERTY MGT	6-T7-44.1
M65	FRANCES L. BRADEN, IRREVOC TRUST	6-T7-6.3
N66	WILLIAM E. & MARY S. ADAMS	6-T7-9
O67	WILLIAM E. & MARY S. ADAMS	6-T7-10
P68	ARNOLD P. MISZAROS, Jr.	6-T7-14
Q69	PATTY J. JOSEPH	6-T7-15
R70	DOUGLAS E. & A. E. NICKERSON	6-T7-16
S71	WHEELING PARK COMMISSION	10-W70-11
T72	CATHOLIC DIOCESE OF WHEELING - CHARLESTON	10-W64-1
U73	CATHOLIC DIOCESE OF WHEELING - CHARLESTON	6-T7-1.1
V74	RCK 2 GROUP, LLC	6-T2-13.1
W75	WHEELING PARK COMMISSION	6-T2-17
X76	CATHOLIC DIOCESE OF WHEELING - CHARLESTON	6-T2-1
Y77	WILLIAM & P. M. HESLOP	6-T2-8
Z78	MARGUERITE M. CERRA	6-T2-7
A79	STEVEN M. MOSKAL ESTATE	6-T2-4
B80	STEVEN M. MOSKAL ESTATE	6-T2-4.1
C81	STEVEN M. MOSKAL ESTATE	6-T2-4
D82	DANIEL L. & JULIE A. DOBBS	6-T1-13
E83	DONALD L. & D ANN M. CARROLL	10-W41-57
F84	DONALD H. THOMAS	10-W41-46
G85	ROBERT J. KOVALICK, Jr.	10-W41-45
H86	JOSEPH R. & KELLY K. MCGINLEY	10-W41-44.2
I87	JOSEPH R. & KELLY K. MCGINLEY	10-W41-44.1
J88	JOSEPH R. & KELLY K. MCGINLEY	10-W41-44
K89	JAMES & CINDY SNIDER	10-W34-18.2
L90	WHEELING PARK COMMISSION	10-W34-29
M91	WHEELING PARK COMMISSION	10-W34-28
N92	JAMES R. SNIDER	10-W34-27
O93	LONNIE J. & K. B. WINEMAN	10-W34-26
P94	LONNIE J. WINEMAN	10-W34-25
Q95	DANIEL R. & CHELSEA R. YOUNG	10-W34-25.1
R96	TAMS, LLC	10-W33-331.9
T98	SANDIE E. PHILLIPSON	6-T1-1
U99	GC&P DEVELOPMENT, LLC	10-W26-90
V100	LLL, LLC	4-R17-6
W101	VINEYARD CHRISTIAN FELLOWSHIP WHEELING TRUSTEES	10-W27-1
X102	WHEELING HOSPITAL, INC	10-W27-1.1
Y103	FOREST BROOK CONDOS	10-W27-3
Z104	CHERRY BROOK CONDOS	10-W27-6
A105	GACS LP	10-W27A-1
B106	CITY OF WHEELING	4-R14-15
C107	SAM HINEBAUGH	4-R17-8.1
D108	KENDRA L. TAYLOR	4-R17-59.1
E109	DONALD R. & M. M. EDDY	4-R17-59.2

09/15/2023

REVISIONS:	COMPANY:		 		DATE: 04/12/2023
	OPERATOR'S		SHANNON FIELDS OHI		DRAWN BY: TMF
	WELL #:		10H		SCALE: N/A
	DISTRICT:	COUNTY:	STATE:		DRAWING NO: ACE-2326
	RICHLAND	OHIO	WV		WELL LOCATION PLAT