

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

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OCT 22 2024

WV Department of
Environmental Protection

API 47009003390000 County BROOKE District BUFFALO
Quad BETHANY, WV Pad Name WORTHLEY-BRK-PAD1 Field/Pool Name PANHANDLE FIELD - WET
Farm Name KIMBERLY CARMAN WORTHLEY Well Number WORTHLEY BRK 6 H
Operator (as registered with the OOG) SWN Production Company LLC
Address PO Box 12359 City Spring State TX
Zip 77391-2359

As Drilled Location NAD83/UTM Attach an as-drilled plat, profile view, and deviation survey

Landing Point of Curve
Top Hole Northing 4,451,763.86 Easting 537,852.36
Northing 4,451,548.60 Easting 537,630.56
Bottom Hole Northing 4,448,002.03 Easting 539,351.50

Elevation (ft) 1156.3' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviate Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrill Re-Work Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other
Type of Completion Single Multiple Fluids Produce 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
See attached Mud Summary Report

Date permit issued 2024-04-09 Date drilling commenced 2024-05-28 Date drilling ceased 2024-06-06

Date Completion activities began 2024-07-20 Date Completion activities ceased 2024-08-21

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 521' Opm mine(s) (Y/N) depths N
Salt water depth(s) ft 637' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 330' Cavern(s) encountered (Y/N) depth N
Is coal being mined in area (Y/N) N

Reviewed by: 
2/10/2025

APPROVED

OCT 22 2024

WR-35
Rev. 8/23/13

WV Department of
Environmental Protection

API 47009003390000

Farm name KIMBERLY CARMAN WORTHLEY

Well number WORTHLEY BRK 6 H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Wt lb/ft	Grade	Basket Depth	Did cement circulate (Y/N) *Provide details below*
Conductor	20.000	20.000	136	NEW	94.00	J-55		Y
Surface	17.500	13.375	578	NEW	54.50	J-55	281.5' / 296.54'	Y/ 38 BBLS
Coal	SEE SURFACE							
Intermediate 1	12.250	9.625	1709	NEW	36.00	J-55		Y/ 26 BBLS
Intermediate 2								
Intermediate 3								
Production	8.500	5.500	19466	NEW	20.00	P-110 HP		Y/ 81 BBLS
Tubing								
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 ²)	Cement Top (MD)	WOC (hrs)
Conductor	CLASS A	GROUT TO SURFACE				SURFACE	24
Surface	CLASS A	783	15.6	1.19	931.77	SURFACE	8
Coal	SEE SURFACE						
Intermediate 1	CLASS A	670	15.6	1.18	790.60	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	3712	14.5	1.29	4788.48	SURFACE	24
Tubing							

Drillers TD (ft) 19482

Loggers TD (ft) 19482

Deepest formation penetrated MARCELLUS

Plug back to (ft) 19381

Plug back procedure N/A

Kick off depth (ft) 5450' MD _____

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

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: 21 CENTRALIZERS - EVERY THIRD JOINT OF CASING

PRODUCTION: 405 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 AS OPEN HOLE Yes No Details _____

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

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Farm name KIMBERLY CARMAN WORTHLEY Well number WORTHLEY BRK 6 H

Department of Environmental Protection

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	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
SEE ATTACHMENT 2								

Please insert additional pages as applicable.

02/28/2025

API 47009003390000 Farm name KIMBERLY CARMAN WORTHLEY Well number WORTHLEY BRK 6 H

PRODUCING FORMATION(S) _____ DEPTHS _____
MARCELLUS _____ 5983' TVD _____ 6247' MD _____
 _____ _____ _____ _____
 _____ _____ _____ _____

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Please insert additional pages applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump Environmental Protection

SHUT-IN PRESSURE Surface 2519 psi Bottom Hole _____ psi DURATION OF TEST (hrs) 24

OPEN FLOW GAS 12,920 mcpd OIL 875 bpd NGL _____ bpd WATER 870 bpd GAS MEASURED BY Estimate Orifice Pilot

LITHOLOGY/ FORMATION TOP DEPTH IN FT NAME TVD BOTTOM DEPTH IN FT TVD TOP DEPTH IN FT MD BOTTOM DEPTH IN FT MD DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESH WATER, BRINE, OIL, GAS, H2S, ETC)

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESH WATER, BRINE, OIL, GAS, H2S, ETC)
SEE ATTACHMENT 3					

Please insert additional pages as applicable

Drilling Contractor SWN DRILLING COMPANY City SPRING State TX Zip 77391-2359
 Address PO BOX 12359
 Logging Company SCHLUMBERGER City SUGAR LAND State TX Zip 77478
 Address 110 SCHLUMBERGER DRIVE
 Cementing Company SCHLUMBERGER City SUGAR LAND State TX Zip 77478
 Address 110 SCHLUMBERGER DRIVE
 Company SWN DRILLING COMPANY City SPRING State TX Zip 77391-2359
 Address PO BOX 12359

Please insert additional pages as applicable.

Completed by DENISE GRANTHAM Telephone 832-796-6139
 Signature Denise Grantham Title REGULATORY SPECIALIST Date 10.21.2024

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

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	07/20/2024
Job End Date:	08/05/2024
State:	West Virginia
County:	Brooke
API Number:	47-009-00339-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	WORTHLEY BRK 6H
Latitude:	40.215435
Longitude:	-80.555152
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6103
Total Base Water Volume (gal)*:	20164466
Total Base Non Water Volume:	108735.6



Water Source	Percent
Surface Water, < 1000TDS	80.86%
Produced Water	19.14%

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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					
FERRIPLEX 80	SWN Well Services	Iron Control Agent					
FSTI-CI-02	SWN Well Services	Corrosion Inhibitor					
Hydrochloric Acid	SWN Well Services	Solvent					
PLEXAID 655NM	SWN Well Services	Scale Inhibitor					
PLEXSLICK 930	SWN Well Services	Friction Reducer					
Sand	SWN Well Services	Proppant					
TOLCIDE 4FRAC	SWN Well	Biocide					

02/28/2025

Services						
Items above are Trade Names. Items below are the individual ingredients.						
			Water	7732-18-5	100.00000	87.95991
			Crystalline Silica, Quartz	14808-60-7	100.00000	11.83757
			HYDROCHLORIC ACID	7647-01-0	37.00000	0.14938
			Hydrotreated light distillate	64742-47-8	30.00000	0.01693
			Copolymer of 2-propenamides	Proprietary	60.00000	0.01693
			Phosphonium, tetrakis(hydroxymethyl)-, sulfate (2:1)	55566-30-8	50.00000	0.00516
			Oleic Acid Diethanolamide	93-83-4	5.00000	0.00423
			Surfactant	Proprietary	3.00000	0.00423
			Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	10.00000	0.00103
			Sodium erythorbate	6381-77-7	98.00000	0.00084
			Ethylene glycol	107-21-1	40.00000	0.00062
			Ethanol	64-17-5	1.50000	0.00052
			Diethylenetriamine penta (methylene phosphonic acid)	15827-60-8	10.00000	0.00042
			Cinnamaldehyde	104-55-2	19.00000	0.00029
			1-Octanol	111-87-5	19.00000	0.00029
			1-Decanol	112-30-1	19.00000	0.00029
			N,N-Dimethylformamide	68-12-2	19.00000	0.00029
			Triethyl phosphate	78-40-0	19.00000	0.00029
			Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-	9016-45-9	19.00000	0.00029
			2-Butoxyethanol	111-76-2	10.00000	0.00015
			Isopropyl alcohol	67-63-0	10.00000	0.00015
			Tar bases, quinoline derivatives, benzyl chloride-quaternized	72480-70-7	10.00000	0.00015

* 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%

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)

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Well Name: WORTHLEY BRK 6H

47009003390000

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	521.00	521.00	
Top of Salt Water	637.00	637.00	NA	NA	
Pittsburgh Coal	330.00	330.00	334.00	334.00	
Raven Cliff (ss)	798.00	798.00	1057.00	1057.00	
Maxton (ss)	1203.00	1202.00	1357.00	1355.00	
Big Injun (ss)	1528.00	1524.00	1606.00	1601.00	
Berea (siltstone)	1938.00	1926.00	2070.00	2055.00	
Rhinestreet (shale)	5526.00	5425.00	5791.00	5676.00	
Cashaqua (shale)	5791.00	5676.00	5861.00	5737.00	
Middlesex (shale)	5861.00	5737.00	5946.00	5804.00	
Burket (shale)	5946.00	5804.00	5965.00	5819.00	
Tully (ls)	5965.00	5819.00	6042.00	5874.00	
Mahantango (shale)	6042.00	5874.00	6247.00	5983.00	
Marcellus (shale)	6247.00	5983.00	NA	NA	GAS

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**WORTHLEY BRK 6
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
1	6/30/2024	19,381	19,286	36
2	7/20/2024	19,252	19,073	36
3	7/20/2024	19,039	18,860	36
4	7/20/2024	18,827	18,648	36
5	7/20/2024	18,614	18,435	36
6	7/21/2024	18,401	18,222	36
7	7/22/2024	18,189	18,010	36
8	7/22/2024	17,976	17,797	36
9	7/22/2024	17,764	17,584	36
10	7/22/2024	17,551	17,372	36
11	7/23/2024	17,338	17,159	36
12	7/23/2024	17,126	16,946	36
13	7/23/2024	16,913	16,734	36
14	7/23/2024	16,700	16,521	36
15	7/24/2024	16,488	16,308	36
16	7/24/2024	16,275	16,096	36
17	7/24/2024	16,062	15,883	36
18	7/25/2024	15,850	15,671	36
19	7/25/2024	15,637	15,458	36
20	7/25/2024	15,424	15,245	36
21	7/25/2024	15,212	15,033	36
22	7/26/2024	14,999	14,820	36
23	7/26/2024	14,787	14,607	36
24	7/26/2024	14,574	14,395	36
25	7/26/2024	14,361	14,182	36
26	7/27/2024	14,149	13,969	36
27	7/27/2024	13,936	13,757	36
28	7/27/2024	13,723	13,544	36
29	7/27/2024	13,511	13,332	36
30	7/28/2024	13,298	13,119	36
31	7/28/2024	13,085	12,906	36
32	7/28/2024	12,873	12,694	36
33	7/28/2024	12,660	12,481	36
34	7/29/2024	12,448	12,268	36
35	7/29/2024	12,235	12,056	36
36	7/29/2024	12,022	11,843	36
37	7/30/2024	11,810	11,630	36
38	7/30/2024	11,597	11,418	36
39	7/30/2024	11,384	11,205	36
40	7/30/2024	11,172	10,993	36
41	7/30/2024	10,959	10,780	36
42	7/31/2024	10,746	10,567	36

**WORTHLEY BRK 6
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
43	7/31/2024	10,534	10,355	36
44	7/31/2024	10,321	10,142	36
45	7/31/2024	10,109	9,929	36
46	8/1/2024	9,896	9,717	36
47	8/1/2024	9,683	9,504	36
48	8/1/2024	9,471	9,291	36
49	8/1/2024	9,258	9,079	36
50	8/2/2024	9,045	8,866	36
51	8/2/2024	8,833	8,653	36
52	8/2/2024	8,620	8,441	36
53	8/3/2024	8,407	8,228	36
54	8/3/2024	8,195	8,016	36
55	8/3/2024	7,982	7,803	36
56	8/3/2024	7,769	7,590	36
57	8/3/2024	7,557	7,378	36
58	8/4/2024	7,344	7,165	36
59	8/4/2024	7,132	6,952	36
60	8/4/2024	6,919	6,740	36
61	8/5/2024	6,706	6,527	36
62	8/5/2024	6,494	6,314	36

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**WORTHLEY BRK 6
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	7/20/2024	93	6,411	9,931	4,762	177,090	8,944	0
2	7/20/2024	98.4	9,348	6,140	4,680	373,590	7,981	0
3	7/21/2024	98.3	9,079	6,670	5,280	372,750	8,012	0
4	7/21/2024	94	8,742	6,697	4,456	374,580	8,113	0
5	7/21/2024	96.8	8,965	7,090	4,750	350,540	7,877	0
6	7/21/2024	88.3	8,655	6,355	4,790	376,810	7,929	0
7	7/22/2024	94.8	9,058	6,591	4,530	372,760	7,888	0
8	7/22/2024	91.4	8,875	6,211	4,700	370,170	7,825	0
9	7/22/2024	97	6,853	6,450	4,600	349,760	7,689	0
10	7/23/2024	97.8	9,159	6,370	4,891	373,610	8,928	0
11	7/23/2024	92.4	8,847	5,975	4,761	373,810	8,227	0
12	7/23/2024	90.8	8,812	6,017	4,718	372,380	7,646	0
13	7/23/2024	97.5	9,005	6,015	5,000	354,090	7,540	0
14	7/24/2024	92.3	8,795	6,231	4,645	370,080	7,304	0
15	7/24/2024	94	7,958	6,114	4,496	368,800	7,761	0
16	7/24/2024	98.4	8,852	5,945	5,200	368,490	7,739	0
17	7/25/2024	99	9,032	6,231	5,150	375,210	7,602	0
18	7/25/2024	97.5	8,453	5,897	4,508	373,840	7,732	0
19	7/25/2024	92	8,221	5,599	4,850	372,950	7,973	0
20	7/25/2024	99.4	8,540	6,125	4,900	352,440	7,189	0
21	7/26/2024	90.5	7,734	6,012	5,460	365,840	7,048	0
22	7/26/2024	97.6	8,365	6,011	4,468	370,640	7,592	0
23	7/26/2024	94.5	7,855	5,986	4,470	373,760	7,792	0
24	7/26/2024	99.4	8,299	6,035	5,000	353,510	7,159	0
25	7/26/2024	99.4	8,356	6,090	5,200	371,790	8,031	0
26	7/27/2024	99.5	8,137	5,755	5,530	369,290	7,800	0
27	7/27/2024	95.3	7,905	5,588	4,158	372,620	7,788	0
28	7/27/2024	96.2	7,620	5,755	4,456	368,220	7,853	0
29	7/27/2024	99.4	8,051	5,855	4,850	352,270	7,637	0
30	7/28/2024	99.4	7,902	5,905	5,240	374,650	7,937	0
31	7/28/2024	96	7,089	6,110	4,189	371,480	7,980	0
32	7/28/2024	99.4	7,751	6,110	5,000	353,080	8,019	0
33	7/29/2024	98.9	8,190	5,900	5,000	374,300	7,807	0
34	7/29/2024	95.3	7,448	5,409	4,115	371,870	7,847	0
35	7/29/2024	97	7,354	5,408	4,650	372,120	8,208	0
36	7/29/2024	99.4	7,583	5,525	4,750	352,170	7,530	0
37	7/30/2024	99.4	7,585	5,920	4,900	375,000	7,725	0
38	7/30/2024	95.2	7,410	5,753	3,913	376,320	7,738	0
39	7/30/2024	97.2	7,348	5,519	4,365	370,310	7,985	0
40	7/30/2024	99.4	7,327	5,740	5,000	345,200	7,363	0
41	7/30/2024	99.4	7,430	5,570	4,900	370,300	7,768	0
42	7/31/2024	96.5	7,275	5,250	4,550	374,200	7,143	0
43	7/31/2024	95.5	7,087	4,300	4,454	371,110	7,260	0
44	7/31/2024	98.5	7,369	5,843	4,258	372,970	7,508	0
45	8/1/2024	94.5	7,053	5,565	4,603	375,770	7,337	0
46	8/1/2024	94.5	7,017	5,820	4,550	376,360	7,252	0
47	8/1/2024	99.5	7,155	5,488	4,470	373,660	7,567	0
48	8/1/2024	94.9	6,883	5,617	5,233	370,560	7,336	0
49	8/1/2024	94.9	7,064	5,785	4,854	376,940	7,316	0
50	8/2/2024	94.9	7,038	5,846	4,667	379,200	8,023	0
51	8/2/2024	95.8	6,791	5,270	5,387	373,560	7,879	0
52	8/2/2024	72.3	5,039	5,785	4,872	372,220	8,445	0
53	8/3/2024	89.5	6,824	5,564	4,774	377,230	7,647	0

58,079.00
 Office Use and Gas
 8,445
 7,647
 OCT 23 2024
 My Recurrence of
 02/28/2025

WORTHLEY BRK 6
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	8/3/2024	98.7	6,785	5,380	4,993	376,660	8,163	0
55	8/3/2024	95.5	6,683	5,503	4,529	371,460	7,761	0
56	8/3/2024	88.7	6,373	5,665	4,775	370,030	7,734	0
57	8/4/2024	75.4	5,297	5,358	4,473	371,230	8,122	0
58	8/4/2024	85.5	6,113	5,888	4,899	373,440	7,953	0
59	8/4/2024	95.6	6,320	5,523	4,885	367,390	7,526	0
60	8/4/2024	90.9	6,285	6,076	5,255	370,630	8,079	0
61	8/5/2024	86	5,849	5,556	4,655	376,410	7,838	0
62	8/5/2024	80	5,680	5,328	4,865	375,410	7,578	0

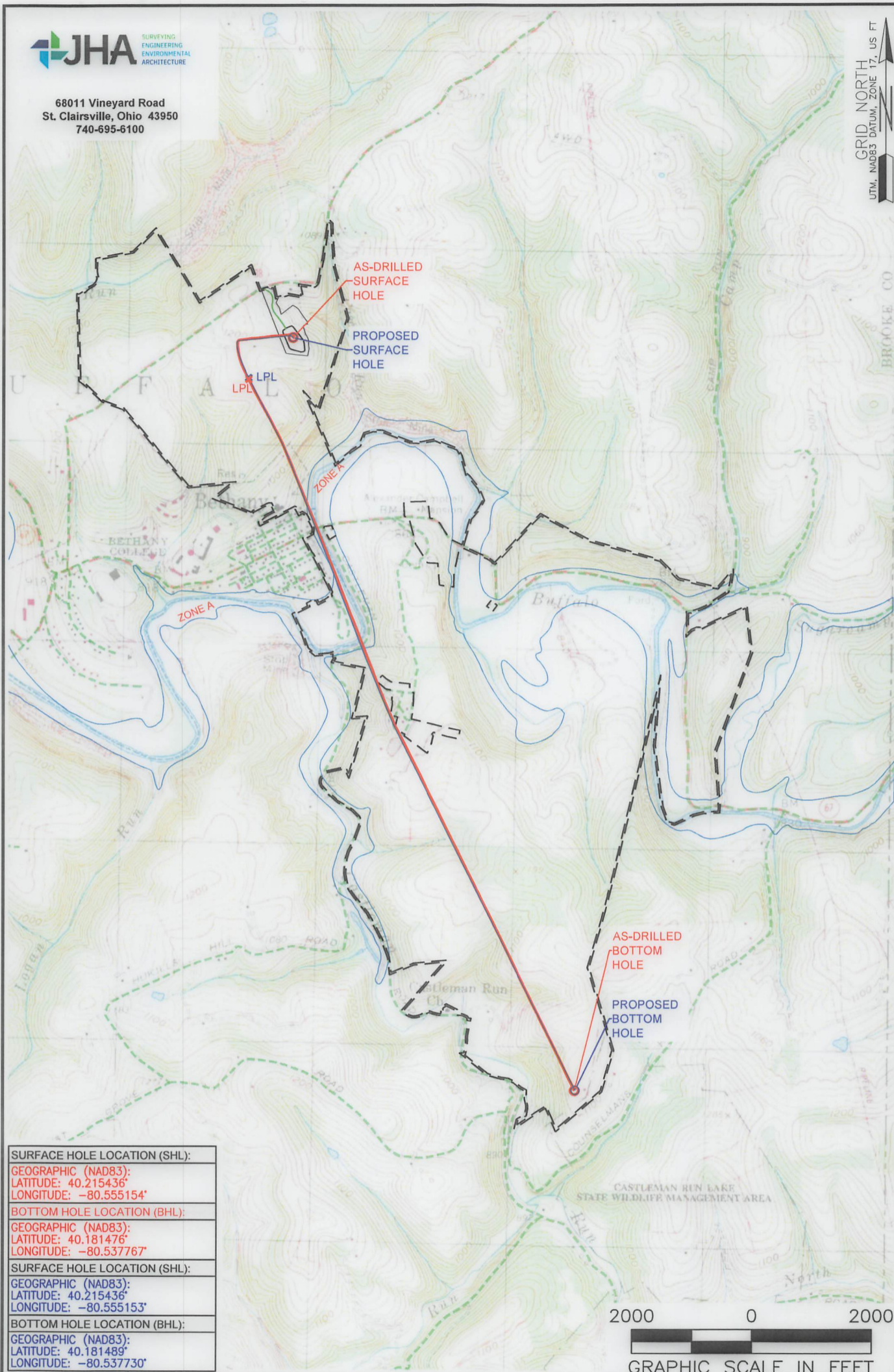
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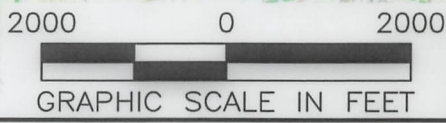


68011 Vineyard Road
St. Clairsville, Ohio 43950
740-695-6100

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



SURFACE HOLE LOCATION (SHL):
GEOGRAPHIC (NAD83): LATITUDE: 40.215436° LONGITUDE: -80.555154°
BOTTOM HOLE LOCATION (BHL):
GEOGRAPHIC (NAD83): LATITUDE: 40.181476° LONGITUDE: -80.537767°
SURFACE HOLE LOCATION (SHL):
GEOGRAPHIC (NAD83): LATITUDE: 40.215436° LONGITUDE: -80.555153°
BOTTOM HOLE LOCATION (BHL):
GEOGRAPHIC (NAD83): LATITUDE: 40.181489° LONGITUDE: -80.537730°



- 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:

- EXISTING BOTTOM HOLE
- ⊙ EXISTING / PRODUCING WELLHEAD
- LPL* EXISTING LANDING POINT LOCATION
- PROPOSED SURFACE HOLE / BOTTOM HOLE
- LPL* PROPOSED LANDING POINT LOCATION
- PUBLIC ROAD
- FLOOD PLAIN
- LEASE BOUNDARY
- AS DRILLED PATH
- PROPOSED PATH

02/28/2025

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	WELL (FARM) NAME: WORTHLEY BRK	WELL # 6H	SERIAL # XXXX
ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201, MORGANTOWN, WV 26508	COUNTY: BROOKE	CODE: 009	DISTRICT: BUFFALO
SURFACE OWNER: KIMBERLY CARMAN WORTHLEY	USGS 7 1/2 QUADRANGLE MAP NAME: BETHANY, WV		
		API # 47-009-00339	

LATITUDE: 40°15'00" SURFACE HOLE (2000' SCALE) 3,834'

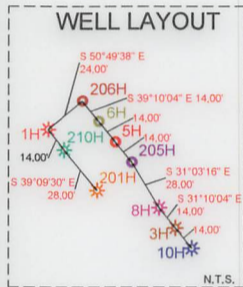
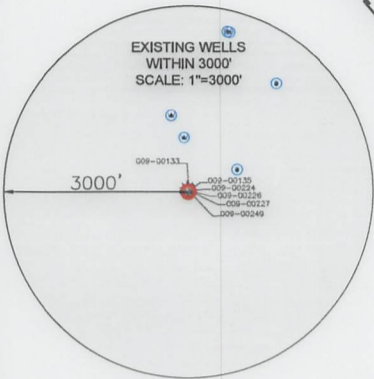
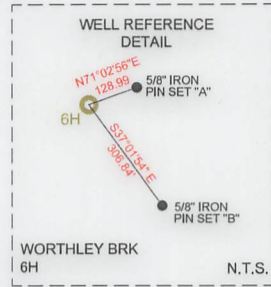


68011 Vineyard Road
St. Clairsville, Ohio 43950
740-695-6100

LATITUDE: 40°12'30" BOTTOM HOLE (2000' SCALE)

NOTES ON SURVEY

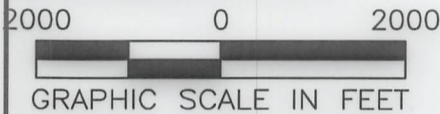
1. COORDINATE SYSTEM IS UTM NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
2. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
3. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. NO DWELLINGS OR BUILDINGS WITHIN 625 FEET OF PROPOSED CENTER OF PAD
5. NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
6. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF THE LIMITS OF DISTURBANCE.
7. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.



LINE	BEARING	DISTANCE
L1	N68°01'25"W	1,735.01'
L2	N16°28'39"W	700.43'

SURFACE HOLE LOCATION (SHL):	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4451763.86
	EASTING: 537852.36
LANDING POINT LOCATION (LPL):	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4451548.60
	EASTING: 537630.56
BOTTOM HOLE LOCATION (BHL):	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4448002.03
	EASTING: 539351.50

SURFACE HOLE LOCATION (SHL):	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4451763.86
	EASTING: 537852.45
LANDING POINT LOCATION (LPL):	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4451556.59
	EASTING: 537630.84
BOTTOM HOLE LOCATION (BHL):	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4448003.46
	EASTING: 539354.66



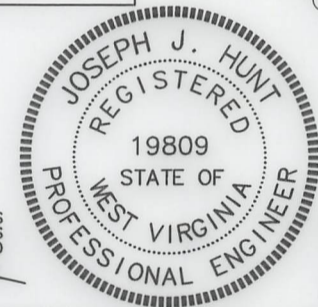
I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.E. 19809

(*) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS



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



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

WORTHLEY BRK
OPERATOR'S WELL #: 6H
API WELL #: 47 STATE 009 COUNTY 00339 PERMIT

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

WATERSHED: UPPER OHIO SOUTH ELEVATION: 1156.3'

DISTRICT: BUFFALO COUNTY: BROOKE QUADRANGLE: BETHANY, WV

SURFACE OWNER: KIMBERLY CARMAN WORTHLEY ACREAGE: ±40.0

OIL & GAS ROYALTY OWNER: COLONIAL CORP, A NEVADA CORP, & KIMBERLY J. CARMAN AKA KIMBERLY J. WORTHLEY, A MARRIED WOMAN DEALING IN HER SASP ACREAGE: ±40.0

DRILL DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION

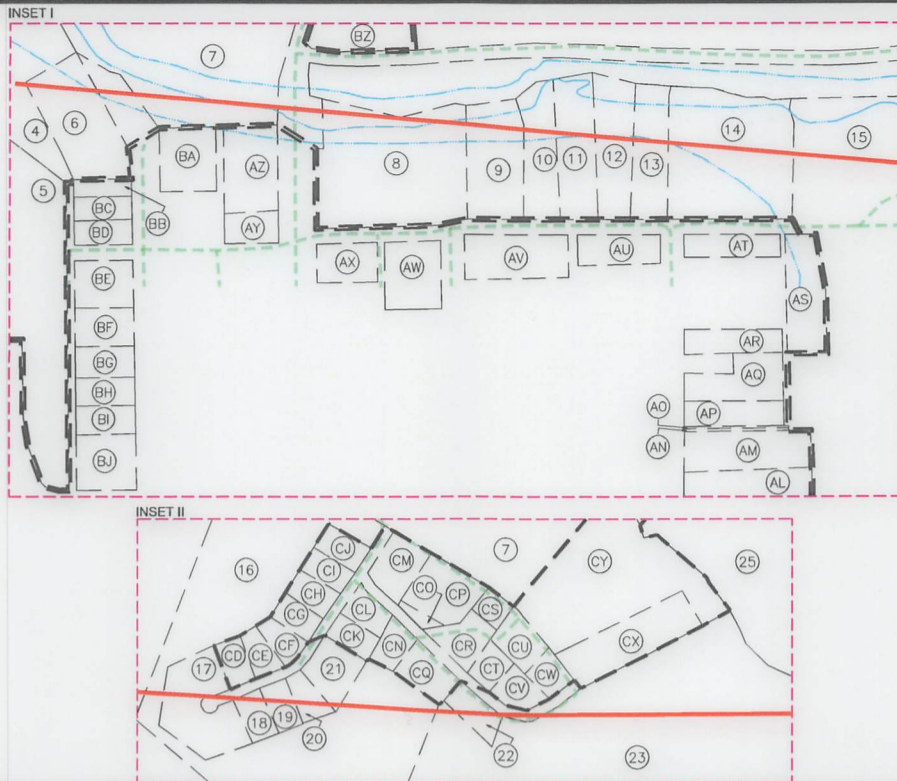
CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY) AS-DRILLED

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,285' TO 11,890' TMD

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

DESIGNATED AGENT: BRITTANY WOODY ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

LEGEND:	REVISIONS:	DATE:
● EXISTING BOTTOM HOLE		08-13-2024
⊙ EXISTING / PRODUCING WELLHEAD		API NO: 47-009-00339
LPL* EXISTING LANDING POINT LOCATION		DRAWN BY: Z. WOOD
● PROPOSED SURFACE HOLE / BOTTOM HOLE		SCALE: 1" = 2000'
LPL* PROPOSED LANDING POINT LOCATION		DRAWING NO: 2023-1649
		WELL LOCATION PLAT



WELL BORE TABLE FOR SURFACE/ROYALTY OWNERS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	WORTHLEY KIMBERLY CARMAN (S) COLONIAL CORP, A NEVADA CORP, & KIMBERLY J. CARMAN AKA KIMBERLY J. WORTHLEY, A MARRIED WOMAN DEALING IN HER SASP(R)	3-B38-27
TRACT	SURFACE OWNER	TAX PARCEL
2	BETHANY COLLEGE	3-B38-31
3	BETHANY COLLEGE	2-B43C-127
4	BETHANY COLLEGE	2-B43C-3
5	BETHANY COLLEGE	2-B43C-2
6	LARSON GARY E & VAUGHNDA S	2-B43C-4
7	BETHANY COLLEGE	3-B43-66
	STATE OF WEST VIRGINIA, DIVISION OF HIGHWAYS	BETHANY PIKE
8	BETHANY CHURCH OF GOD	2-B43C-71
9	MENZ HARALD J A & KIMBERLY J LAWLESS	2-B43C-125
10	SCHWERTFEGER CHARLES E & NANCY	2-B43C-124
11	VRM LLC	2-B43C-123
12	KEMP LAURA RAE (LIFE ESTATE- RAYMOND GODINA)	2-B43C-122
13	KEMP JAMES E JR & GODINA LAURA	2-B43C-121
14	SCHWERTFEGER RUSSELL ETAL (LE- ALVAH RUSSELL&LOIS SCHWERTFER	2-B43C-120
15	BETHANY COMMUNITY RECREATIONAL ASSOCIATION	2-B43G-15
16	COLLINS RANDY & VANESSA (JTWS)	3-B43-34
17	VALENTINE GENE CHARLES TRUST DATED 11/26/86	3-B43-35.2
18	D REYNOLDS INVESTMENTS LLC	3-B43-35.4
19	RIPLEY NICKOLAS	3-B43-35.3
20	RIPLEY NICKOLAS	3-B43-35
21	WILLIAMS WILHELMINA WILLIAMSON	3-B43-35.1
22	STARR STEPHEN J & DEBRA L JTWS	3-B43-45
23	DONINI SAMUEL J & MELANIE A (JTWS)	3-B43-49.6
24	UNKNOWN	3-B43-49.7
25	DONINI SAMUEL J & MELANIE (JTWS)	3-B43-49.4
26	DONINI SAMUEL & MELANIE	3-B43-57
27	PRESLIE ROWAN LLC	3-B43-28
28	WV ST OF DEPT OF COMM DIV OF NAT RE WILDLIFE RES SEC	3-B43-62
29	HOGAN ANDREW P	3-B48-34
ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	HENSLER JEFFREY W	3-B38-27.1
B	OWEN MARK WEAVER & KREUTZ VIRGINIA BEALL	3-B38-19
C	ELSON LANCE M	3-B38-21
D	HENSLER JEFFREY A (LC) KIMBERLY WORTHLEY (SELLER)	3-B38-25
E	OWEN MARK W 1/2 INT: KRUTZ VIRGINIA BEALL 1/2 INT:	3-B38-24
F	BELVEDERE FARMS LP	3-B43-28.1
G	VANHORN AMY LYNNE	3-B43-28.2
H	TREDWAY RAYMOND L & LINDSEY G	3-B39-11

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
I	CONLEY DONNA M	3-B44-2
J	NEEL CURTIS LEE & LOUANN L (SURV)	3-B44-7
K	JACKSON JANICE F (LE-PHILLIS SWAIN)	3-B44-8
L	JACKSON JANICE F (LE-PHILLIS A SWAIN)	3-B44-9
M	JACKSON JANICE F (LE-PHILLIS A SWAIN)	3-B44-10
N	GREATHOUSE JAMES R & LINDA R	3-B39-12
O	MIELKE CHERYL	3-B44-6
P	FORNEY & SONS HOLDING CO LLC	3-B44-5
Q	FORNEY & SONS HOLDING CO LLC	3-B44-5
R	ST OF WV DEPT OF COMM DIV OF NAT RE WILDLIFE RES SEC	3-B44-14
S	COUNSELMAN CLIFFORD E	3-B49-2
T	WV BUREAU OF COMMERCE DIV OF NATURAL RESOURCES	3-B49-1
U	MCNICHOLAS JOHN WALTER III	3-B48-36
V	STATE ROAD COMMISSION	3-B48-42
W	TABLE ROCK REALTY LLC	3-B48-30
X	CAMMARATA NICHOLAS J & JENNIFER C (SURV)	3-B48-25
Y	HOGAN ANDREW P	3-B48-34
Z	HOGAN ANDREW P	3-B48-34
AA	CASTLEMANS RUN METHODIST CHURC	3-B48-33
AB	JONES CHARLES H	3-B48-31
AC	SMITH KAREN K	3-B48-32
AD	CHAMBERS CHARLOTTE A	3-B48-24
AE	CHAMBERS CHARLOTTE A	3-B48-24
AF	FONNER MARY LOU	3-B43-58
AG	PRESLIE ROWAN LLC	3-B43-49.3
AH	GULF COAST BANK & TRUST CO	3-B43-56
AI	GULF COAST BANK & TRUST CO	3-B43-35.8
AJ	PRESLIE ROWAN LLC	3-B43-33
AK	BETHANY COLLEGE	3-B43-31
AL	DISCIPLES OF CHRIST AKA CHRISTIAN CHURCH IN WV AKA	2-B43G-9
AM	PAULS THEODORE N & REBECCA K (SURV)	2-B43G-10
AN	PAULS THEODORE N & REBECCA K (SURV)	2-B43G-20
AO	SWIGER MARK J & DAWN S	2-B43G-22
AP	SWIGER MARK J & DAWN S (SURV)	2-B43G-11
AQ	COUNSELMAN PHILLIP KENT JR & ANGELA ISABEL (SURV)	2-B43G-12
AR	SCHWERTFEGER JAY ALAN & MARY FRANCES (SURV) (TOD)	2-B43G-14
AS	BETHANY TOWN OF	2-B43G-16
AT	HICKS WILLIAM T	2-B43C-119
AU	MITCHELL RAYMOND L & JANET L	2-B43C-108
AV	MILLER SIHAM K L EST GEORGE F, MILLER JR ETAL	2-B43C-107
AW	BETA THETA PI FRATERNITY	2-B43C-72
AX	PAULL STEPHEN B & ANN S (SURV)	2-B43C-70
AY	BETHANY COLLEGE TRUSTEES OF	2-B43C-38

02/28/2025

REVISIONS:

COMPANY:

SWN
Production Company, LLC

SWN *R⁺ V⁺*
Production Company™

OPERATOR'S

WORTHLEY BRK

WELL #:

6H

DISTRICT:
BUFFALO

COUNTY:
BROOKE



STATE:
WV

DATE: 08-13-2024
API NO: 47-009-00339
DRAWN BY: Z. WOOD
SCALE: N/A
DRAWING NO: 2023-1649
WELL LOCATION PLAT

COMPLETION ID 2501166240
PAD ID 3001155499

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
AZ	MURRAY GERALD L MURRAY LANDREA (JTWS)	2-B43C-37
BA	CHAMBERS CATHERINE E	2-B43C-36
BB	MCFADDEN FLOYD A & KAREN K TR OF MCFADDEN TR AGREE 2012	2-B43C-6
BC	VAN METER JAMES & MARY LOUISE TOD VAN METER THOMAS J	2-B43C-7
BD	MOUGIANIS INDUSTRIES INC	2-B43C-8
BE	MENEELY ROBERT DARRELL MENEELY II	2-B43C-9
BF	VEMURI HOME & GARDEN LLC	2-B43C-10
BG	BONE ROBERT O	2-B43C-11
BH	FRANKE ALEXANDRA E	2-B43C-12
BI	DEAL SHAWN T & BROOKE L	2-B43C-13
BJ	WEIRTON SHOPPING PLAZA INC	2-B43C-14
BK	BETHANY COLLEGE	2-B43C-15
BL	BETHANY COLLEGE	2-B43C-1
BM	BETHANY COLLEGE	2-B43C-126
BN	BETHANY COLLEGE	2-B43B-30
BO	BETHANY COLLEGE	2-B43B-29
BP	OWENS DAVID G;WALTERS LINDA (LE-ROY R OWENS)	3-B38-32
BQ	JOHNSON ALLEN;WARREN; CHARLES ETAL	3-B38-36
BR	PELUCHETTE FAMILY TRUST	3-B37-63
BS	STARVAGGI INDUSTRIES INC	3-B37-53
BT	FEDAK MARK A & GEORGIA M (SURV)	3-B38-14
BU	HENSLER JEFFREY W	3-B38-28
BV	HENSLER JEFFREY W	3-B38-27.1
BW	BROWN CHARLES F & DONNA	3-B38-30
BX	HENSLER JEFFREY WILLIAM	3-B38-29
BY	HENSLER JEFFREY	3-B38-26
BZ	GORBY RICHARD FRANCIS	3-B43-27
CA	BETHANY COLLEGE	3-B43-67
CB	BETHANY COLLEGE	3-B43-65
CC	ROBERTS CLYDE B	3-B43-29
CD	GRAHAM KAYLA & BENNETT ROGER JR (JTWS)	3-B43-41
CE	GRAHAM KAYLA & BENNETT ROGER JR (JTWS)	3-B43-40
CF	CHASE GREGORY	3-B43-39
CG	TUCKER RICKIE W & MAY M JTWS	3-B43-38
CH	TUCKER RICKIE W & MAY M JTWS	3-B43-37
CI	VAN CAMP WILLIAM C JR	3-B43-35.7
CJ	WALTERS LINDA	3-B43-36
CK	LONG MARK E & SHERYL E (SURV)	3-B43-35.5
CL	LONG MARK E & SHERYL E (SURV)	3-B43-42
CM	RIPLEY NICKOLAS	3-B43-55
CN	LONG MARK E & SHERYL E (SURV)	3-B43-43
CO	RIPLEY NICKOLAS	3-B43-54
CP	RIPLEY NICKOLAS	3-B43-53
CQ	OWENS RAYMOND	3-B43-44
CR	RIPLEY NICKOLAS	3-B43-52
CS	VALENTINE GENE C TRUST OF 11/26/86	3-B43-51
CT	VALENTINE GENE C TRUST OF 11/26/86	3-B43-50
CU	ARACICH JUDITH	3-B43-48
CV	RIPLEY NICKOLAS	3-B43-46
CW	BAYLESS MARY M & RICHARD L (SURV)	3-B43-47
CX	COLLINS RANDY L & VANESSA J	3-B43-49.1
CY	COLLINS RANDY & VANESSA (JTWS)	3-B43-49.5
CZ	COLLINS RANDY L & VANESSA J (SURV)	3-B43-49.2
DA	COLLINS MARY E	3-B43-49

02/28/2025

REVISIONS:	 	
	COMPANY:	WORTHLEY BRK
	OPERATOR'S	6H
	WELL #:	DATE: 08-13-2024
	DISTRICT:	API NO: 47-009-00339
	BUFFALO	DRAWN BY: Z. WOOD
	COUNTY:	SCALE: N/A
	BROOKE	DRAWING NO: 2023-1649
	STATE:	WV
		WELL LOCATION PLAT