

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

API 47009003400000 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 5
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 4,451,760.64 Easting 537,855.16
Northing 4,451,934.25 Easting 538,123.70
Bottom Hole Northing 4,455,449.76 Easting 536,945.70

Elevation (ft) 1156.9' 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-Wor 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 2024-04-22 Date drilling commenced 2024-06-06 Date drilling ceased 2024-06-16

Date Completion activities began 2024-07-20 Date Completion activities ceased 2024-08-25

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) depths N
Is coal being mined in area (Y/N) N

Reviewed by: 
2/10/2025

APPROVED

02/28/2025

OCT 22 2024

WV Department of
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WR-35
Rev. 8/23/13

API 47009003400000

Farm name KIMBERLY CARMAN WORTHLEY

Well number WORTHLEY BRK 5

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		
Surface	17.500	13.375	578	NEW	54.50	J-55	363.7 / 214.30	38 BBLS
Coal	SEE SURFACE							
Intermediate 1	12.250	9.625	1661	NEW	36.00	J-55		26 BBLS
Intermediate 2								
Intermediate 3								
Production	8.750	5.500	18788	NEW	20.00	P-110 HP		30 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	
Surface	CLASS A	783	15.6	1.19	931.77	SURFACE	
Coal	SEE SURFACE						
Intermediate 1	CLASS A	670	15.6	1.18	790.60	SURFACE	
Intermediate 2							
Intermediate 3							
Production	CLASS A	3578	14.5	1.29	4615.62	SURFACE	
Tubing							

Drillers TD (ft) 18803 Loggers TD (ft) 18803
 Deepest formation penetrated MARCELLUS Plug back to (ft) 18697
 Plug back procedure N/A

Kick off depth (ft 5420' 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: 8 CENTRALIZERS - EVERY THIRD JOINT OF CASING
 INTERMEDIATE: 20 CENTRALIZERS - EVERY THIRD JOINT OF CASING
 PRODUCTION: 396 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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Well number WORTHLEY BRK 5

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

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Farm name KIMBERLY CARMAN WORTHLEY

Well number WORTHLEY BRK 5

PRODUCING FORMATION(S) _____

DEPTHS _____

MARCELLUS

5994' TVD 6299' MD

Please insert additional pages applicable.

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GAS TEST Build up Drawdown Open Flow

OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2373 psi Bottom Hole _____ psi DURATION OF TEST (hrs) 24

OPEN FLOW GAS 12,845 mcpd OIL 990 bpd NGL _____ bpd WATER 880 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 BAKER HUGHES City IE WOODLANI State TX Zip 77380
Address 9110 GROGANS MILL RD

Cementing Company SCHLUMBERGER City SUGAR LAND State TX Zip 77478
Address 110 SCHLUMBERGER DRIVE

Company SWN WELL 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

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

02/28/2025

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:	47-009-00340-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	WORTHLEY BRK 5H
Latitude:	40.215405
Longitude:	-80.55512
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	5965
Total Base Water Volume (gal)*:	19299378
Total Base Non Water Volume:	107267.7



Water Source	Percent
Surface Water, < 1000TDS	80.19%
Produced Water	19.81%

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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	88.03448	
			Crystalline Silica, Quartz	14808-60-7	100.00000	11.75697	
			HYDROCHLORIC ACID	7647-01-0	37.00000	0.15493	
			Hydrotreated light distillate	64742-47-8	30.00000	0.01709	
			Copolymer of 2-propenamides	Proprietary	60.00000	0.01709	
			Phosphonium, tetrakis(hydroxymethyl)-, sulfate (2:1)	55566-30-8	50.00000	0.00511	
			Oleic Acid Diethanolamide	93-83-4	5.00000	0.00427	
			Surfactant	Proprietary	3.00000	0.00427	
			Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	10.00000	0.00102	
			Sodium erythorbate	6381-77-7	98.00000	0.00087	
			Ethylene glycol	107-21-1	40.00000	0.00064	
			Ethanol	64-17-5	1.50000	0.00051	
			Diethylenetriamine penta (methylene phosphonic acid)	15827-60-8	10.00000	0.00043	
			Cinnamaldehyde	104-55-2	19.00000	0.00030	
			1-Octanol	111-87-5	19.00000	0.00030	
			1-Decanol	112-30-1	19.00000	0.00030	
			N,N-Dimethylformamide	68-12-2	19.00000	0.00030	
			Triethyl phosphate	78-40-0	19.00000	0.00030	
			Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-	9016-45-9	19.00000	0.00030	
			2-Butoxyethanol	111-76-2	10.00000	0.00016	
			Isopropyl alcohol	67-63-0	10.00000	0.00016	
			Tar bases, quinoline derivatives, benzyl chloride-quaternized	72480-70-7	10.00000	0.00016	

* 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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Southwestern Energy®

Well Name:

WORTHLEY BRK 5H

47009003400000

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	1056.00	1056.00	
Maxton (ss)	1202.00	1202.00	1355.00	1354.00	
Big Injun (ss)	1525.00	1523.00	1611.00	1609.00	
Berea (siltstone)	1936.00	1929.00	2070.00	2058.00	
Rhinestreet (shale)	5564.00	5444.00	5823.00	5685.00	
Cashaqua (shale)	5823.00	5685.00	5899.00	5750.00	
Middlesex (shale)	5899.00	5750.00	5987.00	5819.00	
Burket (shale)	5987.00	5819.00	6006.00	5833.00	
Tully (ls)	6006.00	5833.00	6084.00	5887.00	
Mahantango (shale)	6084.00	5887.00	6299.00	5994.00	
Marcellus (shale)	6299.00	5994.00	NA	NA	GAS

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**WORTHLEY BRK 5H
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
1	6/29/2024	18,697	18,604	36
2	7/20/2024	18,570	18,393	36
3	7/21/2024	18,360	18,183	36
4	7/21/2024	18,150	17,973	36
5	7/21/2024	17,940	17,763	36
6	7/21/2024	17,730	17,553	36
7	7/22/2024	17,520	17,343	36
8	7/22/2024	17,310	17,133	36
9	7/22/2024	17,100	16,923	36
10	7/22/2024	16,890	16,713	36
11	7/23/2024	16,680	16,503	36
12	7/23/2024	16,470	16,293	36
13	7/23/2024	16,260	16,083	36
14	7/24/2024	16,050	15,873	36
15	7/24/2024	15,840	15,663	36
16	7/24/2024	15,630	15,453	36
17	7/25/2024	15,420	15,243	36
18	7/25/2024	15,210	15,033	36
19	7/25/2024	15,000	14,823	36
20	7/25/2024	14,790	14,613	36
21	7/25/2024	14,580	14,403	36
22	7/26/2024	14,370	14,193	36
23	7/26/2024	14,160	13,983	72
24	7/26/2024	13,950	13,773	36
25	7/27/2024	13,740	13,563	36
26	7/27/2024	13,530	13,353	36
27	7/27/2024	13,320	13,143	36
28	7/27/2024	13,110	12,933	36
29	7/28/2024	12,900	12,723	36
30	7/28/2024	12,690	12,513	36
31	7/28/2024	12,480	12,303	36
32	7/28/2024	12,270	12,093	36
33	7/29/2024	12,060	11,883	36
34	7/29/2024	11,850	11,673	36
35	7/29/2024	11,640	11,463	36
36	7/29/2024	11,430	11,253	36
37	7/30/2024	11,220	11,043	36
38	7/30/2024	11,010	10,833	36
39	7/30/2024	10,800	10,623	36
40	7/30/2024	10,590	10,413	36
41	7/30/2024	10,380	10,203	36
42	7/31/2024	10,170	9,993	36

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**WORTHLEY BRK 5H
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
43	7/31/2024	9,960	9,783	36
44	8/1/2024	9,750	9,573	36
45	8/1/2024	9,540	9,363	36
46	8/1/2024	9,330	9,153	36
47	8/1/2024	9,120	8,943	36
48	8/1/2024	8,910	8,733	36
49	8/2/2024	8,700	8,523	36
50	8/2/2024	8,490	8,313	36
51	8/2/2024	8,280	8,103	36
52	8/3/2024	8,070	7,893	36
53	8/3/2024	7,860	7,683	36
54	8/3/2024	7,650	7,473	36
55	8/3/2024	7,440	7,263	36
56	8/4/2024	7,230	7,053	36
57	8/4/2024	7,020	6,843	36
58	8/4/2024	6,810	6,633	36
59	8/4/2024	6,600	6,423	36

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WORTHLEY BRK 5H
ATTACHMENT 2
STIM REPORT

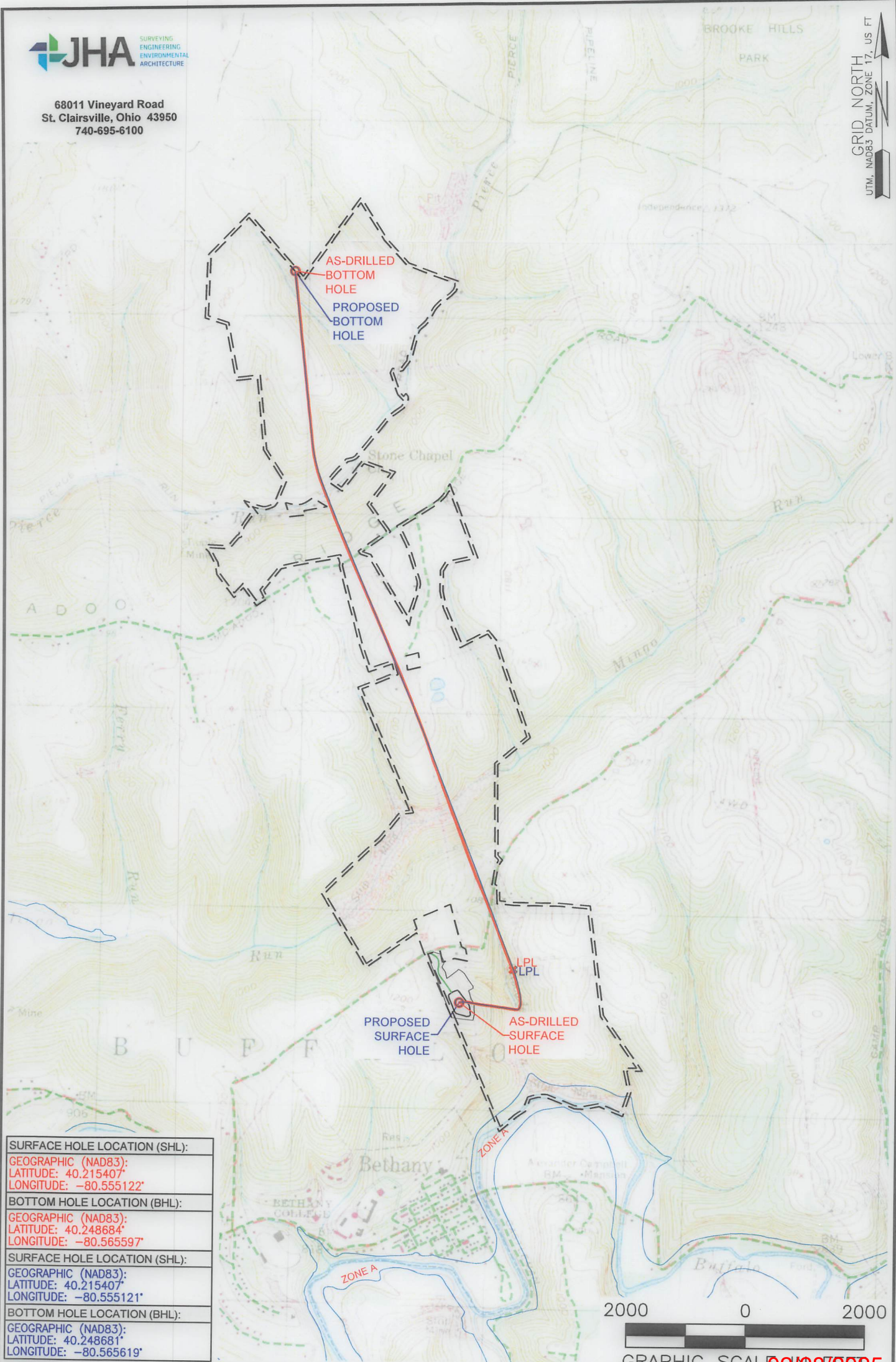
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STAGE NUM	Stim Date	Ave Pump Rate (BPM)	Ave Treatment	Max Breakdown	ISIP (PSI)	Amount of Proppant (lbs)	Amount of water bbls	Amount of nitrogen/othe
1	7/20/2024	88	5,165	10,190	4,300	197,850	9,804	0
2	7/20/2024	97.9	9,090	5,785	4,485	377,960	8,034	0
3	7/21/2024	93.9	8,587	6,092	4,339	374,890	8,323	0
4	7/21/2024	97	8,034	5,851	4,100	374,810	8,345	0
5	7/21/2024	97.5	8,931	6,520	4,750	353,710	7,914	0
6	7/22/2024	97	6,447	6,140	4,965	378,540	8,164	0
7	7/22/2024	94	6,460	6,481	4,512	378,250	8,204	0
8	7/22/2024	93.1	8,630	5,753	4,317	349,720	7,784	0
9	7/22/2024	97.7	9,228	5,825	5,105	348,460	7,726	0
10	7/23/2024	98.7	8,997	6,110	5,000	379,460	8,099	0
11	7/23/2024	72	9,000	5,930	4,017	327,880	8,481	0
12	7/23/2024	95.3	8,950	5,671	4,264	371,540	7,942	0
13	7/23/2024	96.9	9,082	6,000	4,835	307,348	6,548	0
14	7/24/2024	91	7,878	5,778	4,800	375,090	7,379	0
15	7/24/2024	93.8	9,257	5,824	4,237	375,930	7,813	0
16	7/24/2024	97.7	8,885	6,100	5,000	397,640	7,879	0
17	7/25/2024	88.5	9,038	6,385	4,565	389,930	7,134	0
18	7/25/2024	97.1	8,601	5,646	4,738	377,420	7,786	0
19	7/25/2024	95.3	6,283	5,666	5,000	372,780	7,528	0
20	7/25/2024	98.5	8,810	5,970	5,130	355,960	7,267	0
21	7/26/2024	99	8,393	5,702	5,162	374,360	6,980	0
22	7/26/2024	97	7,562	5,743	4,195	369,760	7,751	0
23	7/26/2024	76.4	6,502	6,049	5,000	354,900	10,067	0
24	7/26/2024	98.2	7,954	5,955	5,100	370,410	7,643	0
25	7/27/2024	98.3	7,867	5,875	4,212	369,430	7,716	0
26	7/27/2024	95	7,187	5,675	4,250	372,400	7,868	0
27	7/27/2024	97.6	8,014	6,000	4,800	373,460	7,605	0
28	7/28/2024	98	7,035	5,465	5,103	370,960	7,883	0
29	7/28/2024	71.4	5,764	5,608	3,802	373,190	7,917	0
30	7/28/2024	97.9	7,787	5,103	4,432	371,170	7,931	0
31	7/28/2024	98.8	8,113	5,780	4,700	351,620	7,813	0
32	7/28/2024	99	7,104	5,600	4,800	370,770	7,553	0
33	7/29/2024	99.3	7,886	5,720	4,333	303,610	6,449	0
34	7/29/2024	94.7	7,379	5,600	4,322	381,630	8,032	0
35	7/29/2024	97.4	7,393	5,753	5,069	330,120	6,960	0
36	7/29/2024	99.4	7,798	5,650	4,765	371,990	7,835	0
37	7/30/2024	78.8	5,907	5,745	3,954	376,740	9,120	0
38	7/30/2024	99.4	7,210	5,520	4,587	365,100	7,686	0
39	7/30/2024	99.8	7,440	5,455	4,800	369,860	7,824	0
40	7/30/2024	99.4	7,380	5,360	4,820	395,700	7,910	0
41	7/31/2024	87.8	6,867	5,745	4,850	374,580	7,607	0
42	7/31/2024	93	7,077	5,518	4,765	372,670	7,987	0
43	7/31/2024	94.5	7,080	5,314	4,500	374,290	7,325	0
44	8/1/2024	94.5	7,063	5,514	4,468	374,250	7,282	0
45	8/1/2024	98.9	7,308	5,689	4,379	381,850	7,645	0
46	8/1/2024	94.9	6,829	5,436	4,724	375,570	7,601	0
47	8/1/2024	94.9	6,879	5,653	4,832	374,680	7,406	0
48	8/1/2024	94.9	6,826	5,679	4,586	374,360	7,323	0
49	8/2/2024	93.8	6,809	5,680	4,716	375,200	7,973	0
50	8/2/2024	96	6,921	5,518	4,475	368,820	7,804	0
51	8/2/2024	89.9	6,463	5,707	4,735	375,380	7,544	0
52	8/3/2024	93.2	6,758	4,550	4,545	372,150	7,633	0
53	8/3/2024	94.7	6,878	5,683	4,276	375,360	8,135	0

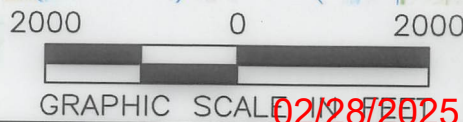
**WORTHLEY BRK 5H
ATTACHMENT 2
STIM REPORT**

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/other
54	8/3/2024	92.5	6,612	5,636	3,991	369,560	7,804	0
55	8/3/2024	89.9	6,528	5,738	4,735	372,500	7,727	0
56	8/4/2024	86.5	6,353	5,634	4,545	374,060	7,668	0
57	8/4/2024	85.5	6,226	5,724	4,751	367,500	7,847	0
58	8/4/2024	89.9	6,117	5,083	4,836	374,270	8,117	0
59	8/5/2024	63.8	4,431	5,315	4,423	376,570	8,434	0

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SURFACE HOLE LOCATION (SHL):
GEOGRAPHIC (NAD83): LATITUDE: 40.215407° LONGITUDE: -80.555122°
BOTTOM HOLE LOCATION (BHL):
GEOGRAPHIC (NAD83): LATITUDE: 40.248684° LONGITUDE: -80.565597°
SURFACE HOLE LOCATION (SHL):
GEOGRAPHIC (NAD83): LATITUDE: 40.215407° LONGITUDE: -80.555121°
BOTTOM HOLE LOCATION (BHL):
GEOGRAPHIC (NAD83): LATITUDE: 40.248681° LONGITUDE: -80.565619°



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
- EXISTING LANDING POINT LOCATION
- PROPOSED SURFACE HOLE / BOTTOM HOLE
- PROPOSED LANDING POINT LOCATION
- ACCESS ROAD
- PUBLIC ROAD
- FLOOD PLAIN
- LEASE BOUNDARY
- ASDRILLED PATH
- PROPOSED PATH

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	WELL (FARM) NAME: WORTHLEY BRK		WELL # 5H	SERIAL # XXXX
ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201, MORGANTOWN, WV 26508	COUNTY: BROOKE	CODE: 009	DISTRICT: BUFFALO	API # 47-009-00340
SURFACE OWNER: KIMBERLY CARMAN WORTHLEY	USGS 7 1/2 QUADRANGLE MAP NAME: BETHANY; STEUBENVILLE EAST, WV			

BHL



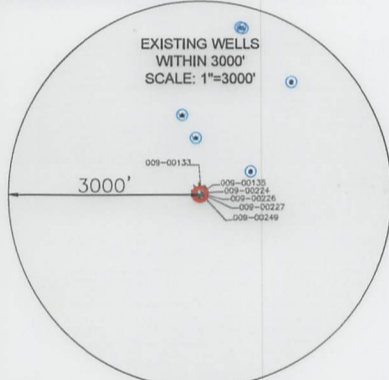
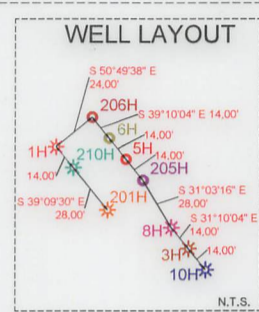
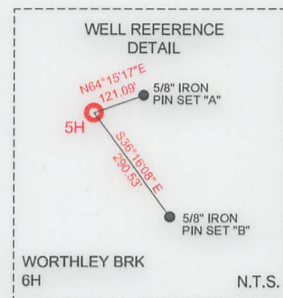
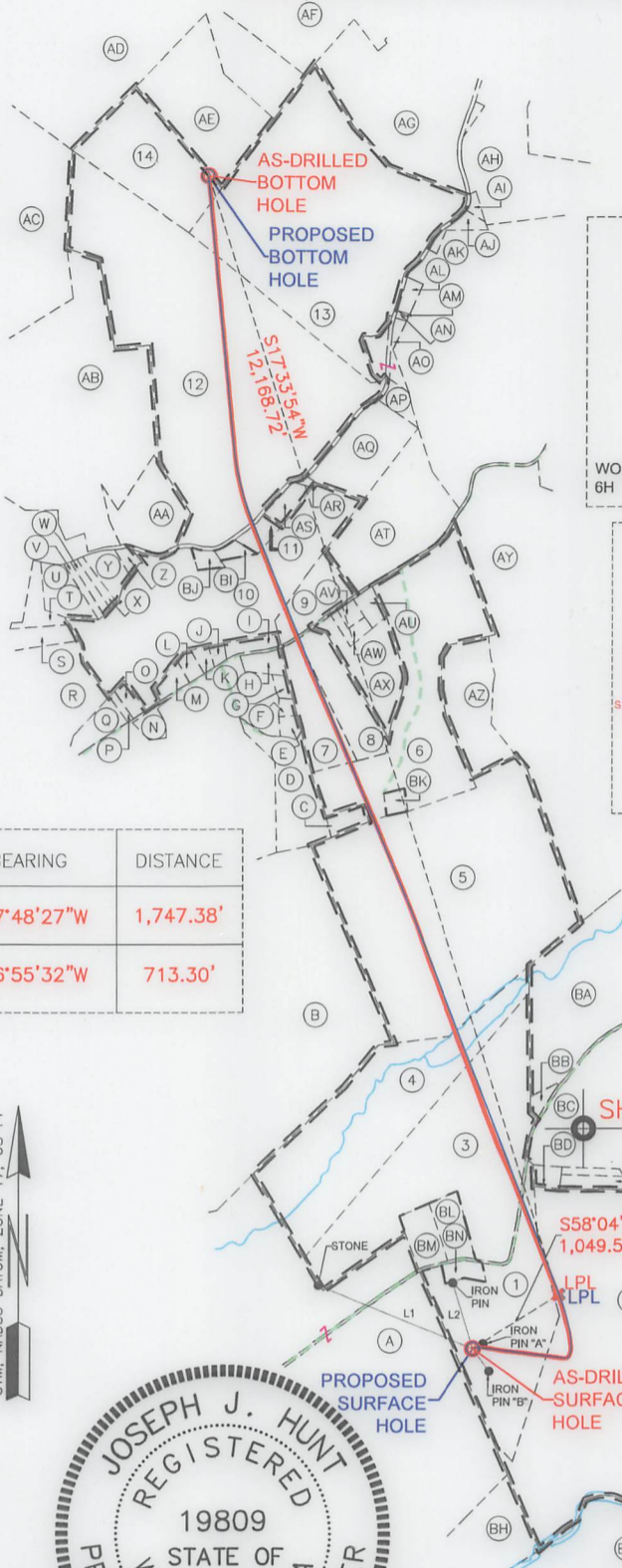
68011 Vineyard Road
St. Clairsville, Ohio 43950
740-695-6100

NOTES ON SURVEY

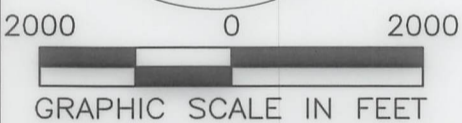
1. COORDINATE SYSTEM IS UTM NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
2. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
3. THIS PLAT DOES 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.

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4451760.64 EASTING: 537855.16
LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4451934.25 EASTING: 538123.70
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4455449.76 EASTING: 536945.70
SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4451760.59 EASTING: 537855.20
LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4451935.41 EASTING: 538127.39
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4455449.47 EASTING: 536943.81

LINE	BEARING	DISTANCE
L1	N67°48'27"W	1,747.38'
L2	N16°55'32"W	713.30'



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



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 *Joseph J. Hunt*

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

	WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034	MINIMUM DEGREE OF ACCURACY: 1/200	WORTHLEY BRK		
		PROVEN SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)	OPERATOR'S WELL #: 5H	API WELL #:	47
			STATE	COUNTY	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"/>	ELEVATION: 1156.9'
WATERSHED: UPPER OHIO SOUTH	QUADRANGLE: BETHANY, WV
DISTRICT: BUFFALO COUNTY: BROOKE	ACREAGE: ±40.0
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	
DRILL <input type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input type="checkbox"/> PLUG OFF OLD FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input type="checkbox"/>	
CONVERT <input type="checkbox"/> PLUG & ABANDON <input type="checkbox"/> CLEAN OUT & REPLUG <input type="checkbox"/> OTHER CHANGE <input checked="" type="checkbox"/> (SPECIFY) AS-DRILLED	02/28/2025
TARGET FORMATION: MARCELLUS	ESTIMATED DEPTH: 6,035' TVD 18,803' TMD

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

LEGEND:	REVISIONS:	DATE: 07-18-2024
● EXISTING BOTTOM HOLE	— ACCESS ROAD	API NO: 47-009-00340
★ EXISTING / PRODUCING WELLHEAD	— PUBLIC ROAD	DRAWN BY: Z. WOOD
LPL★ EXISTING LANDING POINT LOCATION	— FLOOD PLAIN	SCALE: 1" = 2000'
○ PROPOSED SURFACE HOLE / BOTTOM HOLE	— LEASE BOUNDARY	DRAWING NO: 2023-1649
LPL★ PROPOSED LANDING POINT LOCATION	— AS DRILLED PATH	WELL LOCATION PLAT
	— PROPOSED PATH	



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	WORTHLY KIMBERLY CARMEN; JEFFREY W HENSLER (LC)	3-B38-25
	STATE OF WEST VIRGINIA, DIVISION OF HIGHWAYS	BETHANY PIKE
3	HENSLER JEFFREY W	3-B38-27.1
4	HENSLER JEFFREY W	3-B38-28
5	SPORTSMANS FARMERS ASSN	3-B38-17
6	SPORTSMANS & FARMERS ASSN	3-B33-100
7	HUKILL TAMARA J	3-B33-97.2
8	KOSCEVIC MICHAEL THOMAS & SHERYL ANN (SURV)	3-B33-97.3
	STATE OF WEST VIRGINIA, DIVISION OF HIGHWAYS	MCADOO RIDGE ROAD
9	LANCASTER DELMAS O & ELFRIEDE	3-B33-95
10	YANO MICHAEL JAMES & JENNIFER LYNN (SURV)	3-B33-43
11	HENNIS FLOYD; LAROCHE LEONA; DISHER TANA	3-B33-38
	STATE OF WEST VIRGINIA, DIVISION OF HIGHWAYS	PIERCE RUN ROAD
12	WELLS GIST LAND CO., LLC	3-B33-40
13	WELLS GIST LAND CO., LLC	3-B33-29
14	WELLS GIST LAND CO., LLC	3-B33-23

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
AS	SMITH JON T & MARLENA L	3-B33-37
AT	CULBERTSON MELVIN & DORIS	3-B33-96
AU	EDGELL SCOTT L	3-B33-99
AV	LONG BRIAN T & JACINDA D	3-B33-98
AW	LONG BRIAN T & JACINDA D (SURV)	3-B33-97.4
AX	TANNER GEORGE A; SWEET BARBARA B (SURV)	3-B33-97.1
AY	CORBIN CHARLES R JR (TOD)	3-B33-102
AZ	SPORTSMANS FARMERS ASSN	3-B33-101
BA	OWEN MARK WEAVER & KREUTZ; VIRGINIA BEALL	3-B38-19
BB	STEWART KEVIN SCOTT & LISA KAY	3-B38-20
BC	OWEN MARK WEAVER & KREUTZ; VIRGINIA BEALL	3-B38-19
BD	ELSON LANCE M	3-B38-21
BE	VANCAMP NOLTE&GLADYS AS TRUS; OF 11/4/02 VANCAMP FAMILY TR	3-B38-23
BF	OWEN MARK W 1/2 INT: KRUETZ VIRGINIA BEALL 1/2 INT:	3-B38-24
BG	BETHANY COLLEGE	3-B43-66
BH	BETHANY COLLEGE	2-B43C-127
BI	HENNIS FLOYD;LAROCHE LEONA; DISHER TANA	3-B33-39
BJ	SIDERICH EVAN JTWS	3-B33-42
BK	SPORTSMAN & FARMERS ASSN	3-B38-16
BL	HENSLER JEFFREY WILLIAM	3-B38-29
BM	BROWN CHARLES F & DONNA	3-B38-30
BN	HENSLER JEFFREY	3-B38-26

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	BETHANY COLLEGE	3-B38-31
B	FEDAK MARK A & GEORGIA M (SURV)	3-B38-14
C	SPORTSMAN & FARMERS ASSN	3-B38-15
D	HUKILL DALE C JR & DELVIRA	3-B33-85
E	HUKILL TAMARA J	3-B33-116
F	HUKILL TAMARA J	3-B33-115
G	HUKILL TAMARA J	3-B33-85.1
H	HUKILL TAMARA J	3-B33-83
I	FRANCIS JOHN R	3-B33-82.1
J	FRANCIS NADINE NKA; NADINE RICHARDS	3-B33-82
K	FRANCIS NADINE	3-B33-81
L	ADAMS RICHARD L & CINDY L	3-B33-80
M	CHILCOTE DIANA DARLENE	3-B33-79
N	BERTELLI CARRIE A	3-B33-77.4
O	YANO MICHAEL J & JENNIFER	3-B33-78
P	KOPKO KEVIN P & GERRI L (SURV)	3-B33-78.1
Q	KOPKO KEVIN P & GERRI L (SURV)	3-B33-43.1
R	PELAEZ DEBRA KAY	3-B33-71
S	PELUCLETTE FAMILY TRUST	3-B33-53
T	PELUCLETTE FAMILY TRUST	3-B33-52
U	DEGARMO CARL & SOPHIA SURV	3-B33-49
V	MCLAUGHLIN LAWRENCE II (L EST-GROVER LEE HAUGHT)	3-B33-48
W	WELLS GIST LAND CO. LLC	3-B33-47
X	WELLS GIST LAND CO., LLC	3-B33-46
Y	CROSS NICKOLAS J & AMY L (SURV)	3-B33-45
Z	SNODGRASS STEVEN	3-B33-44
AA	WELLS GIST LAND CO., LLC	3-B33-35
AB	STARVAGGI IND	3-B33-41
AC	DEGARMO PATRICK	3-B33-20
AD	SULLIVAN DONNA M	3-B33-22
AE	WELLS GIST LAND CO., LLC	3-B33-24
AF	GRAHAM PATRICIA	3-B28-43
AG	STARVAGGI IND	3-B33-25
AH	STARVAGGI INDUSTRIES INC	3-B33-26
AI	MERWICK STELLA	3-B33-27
AJ	EATON THEODORE EDWIN	3-B33-28
AK	STEWART JAMES H & PAMELA JO	3-B33-31
AL	CUNNINGHAM SHARON A	3-B33-32
AM	CUNNINGHAM SHARON A	3-B33-33.1
AN	KEARNS SHAWN	3-B33-33
AO	CUNNINGHAM SHARON	3-B33-30
AP	WELLS GIST LAND CO., LLC	3-B33-34
AQ	WELLS GIST LAND CO., LLC	3-B33-35
AR	STONE CHAPEL CHURCH	3-B33-36

02/28/2025

REVISIONS:

COMPANY:		 	
OPERATOR'S		WORTHLEY BRK	
WELL #:		5H	
DISTRICT:	COUNTY:	STATE:	DATE:
BUFFALO	BROOKE	WV	07-18-2024
		API NO: 47-009-00340	
		DRAWN BY: Z. WOOD	
		SCALE: N/A	
		DRAWING NO: 2023-1649	
		WELL LOCATION PLAT	