

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

API 47-009-00240 County BROOKE District BUFFALO
Quad STEUBENVILLE EAST Pad Name VIOLET COSS BRK PAD Field/Pool Name PANHANDLE FIELD WET
Farm name LINDA COEN (LIFE ESTATE-VIOLET L COSS) Well Number VIOLET COSS BRK 6H
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 4,455,775.172 Easting 532,140.381
Landing Point of Curve Northing 4,456,346.438 Easting 531,575.875
Bottom Hole Northing 4,452,081.982 Easting 533,621.453

Elevation (ft) 1172.8' 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 11/02/2020 Date drilling commenced 11/20/2020 Date drilling ceased 12/10/2020
Date completion activities began 1/31/2021 Date completion activities ceased 3/06/2021
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 334 Open mine(s) (Y/N) depths N
Salt water depth(s) ft 507 Void(s) encountered (Y/N) depths N
Coal depth(s) ft 209 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:
B.S.
8/27/2021

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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	386	NEW	J-55/54.50#	174.8	Y, 25 BBLS
Coal							
Intermediate 1	12.25	9.625	1,630	NEW	J-55/36#		Y
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	22,906	NEW	P-110/20#		Y, 10 BBLS
Tubing		2.875	7,414	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 ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	CLASS A	GROUT TO SURFACE				SURFACE	24
Surface	CLASS A	584	15.60	1.20	700.8	SURFACE	8
Coal							
Intermediate 1	CLASS A	726	15.60	1.19	863.94	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	4,669	15.60	1.19	5,556.11	SURFACE	24
Tubing							

Drillers TD (ft) 22,906' Loggers TD (ft) 22,906'
 Deepest formation penetrated _____ Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5,810'

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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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

08/27/2021

API 47-009 - 00240

Farm name LINDA COEN (LIFE ESTATE-VIOLET L COSS)

Well number VIOLET COSS BRK 6H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	SEE	ATTACHMEN	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	ATTACHMEN	2				
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Please insert additional pages as applicable.

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08/27/2021

API 47- 009 - 00240 Farm name LINDA COEN (LIFE ESTATE-VIOLET L COSS) Well number VIOLET COSS BRK 6H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>			
MARCELLUS	5,620'	TVD	7,046'	MD
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1910 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 5,781 mcfpd Oil 1,176 bpd NGL _____ bpd Water 912 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 ROAD City THE WOODLANDS State TX Zip 77380

Cementing Company SCHLUMBERGER WELL SERVICES
Address 1080 US-33 City WESTON State WV Zip 26452

Stimulating Company SWN WELL SERVICES
Address PO BOX 12359 City SPRING State TX Zip 77391-2359

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Please insert additional pages as applicable.

Completed by BOBBY WILLIS Telephone 832-796-2884
Signature [Signature] Title SENIOR REGULATORY ANALYST Date 4/29/2021

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

08/27/2021

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	1/31/2021
Job End Date:	2/21/2021
State:	West Virginia
County:	Brooke
API Number:	47-009-00240-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	VIOLET COSS BRK 6
Latitude:	40.25181365
Longitude:	-80.62207985
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	5,759
Total Base Water Volume (gal):	26,591,312
Total Base Non Water Volume:	0

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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					
			Water	7732-18-5	100.00000	89.16299	Density = 8.345
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	85.00000	0.14460	

HCL	SWN Well Services	Solvent					
				Listed Below			
Plexaid 655WG	SWN Well Services	Scale Inhibitor					
				Listed Below			
Econo-CI200	SWN Well Services	Corrosion Inhibitor					
				Listed Below			
Ecopol-FEAC	SWN Well Services	Iron Control					
				Listed Below			
Sand	SWN Well Services	Proppant					
				Listed Below			
Tolicide PS 50A	SWN Well Services	Biocide					
				Listed Below			
SWN FRW-11LC	SWN Well Services	Friction Reducer					
				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	10.64229	
			Petroleum Distillates, Hydrotreated	64742-47-8	25.00000	0.02225	
			Hydrochloric Acid	7647-01-0	15.00000	0.01321	
			Tetrakis	55566-30-8	55.00000	0.00602	
			Glycerin	56-81-5	50.00000	0.00305	

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			Ammonium Chloride	12125-02-9	2.00000	0.00178	
			Oleic Acid Diethanolamide	93-83-4	1.50000	0.00133	
			Alcohols, C12-1, ethoxylated	68551-12-2	1.50000	0.00133	
			Diethylenetriamine penta	15827-60-8	10.00000	0.00061	
			Acetic Acid	64-19-7	37.50000	0.00018	
			Acrylic acid terpolymer	397256-50-7	1.00000	0.00011	
			Methanol	67-56-1	80.00000	0.00011	
			Citric Acid	77-92-9	22.50000	0.00011	
			Oxyalkylated fatty acid	68951-67-7	9.67400	0.00001	
			Fatty acids	61790-12-3	5.02700	0.00001	
			Modified thiourea polymer	68527-49-1	4.74600	0.00001	
			Potassium acetate	127-08-2	0.02200	0.00000	
			Formaldehyde	50-00-0	0.00400	0.00000	

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* 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)

**VIOLET COSS BRK 6H
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
1	1/21/2021	22,818	22,726	36
2	2/1/2021	22,692	22,514	36
3	2/1/2021	22,481	22,303	36
4	2/2/2021	22,270	22,092	36
5	2/2/2021	22,059	21,881	36
6	2/3/2021	21,848	21,670	36
7	2/3/2021	21,637	21,459	36
8	2/4/2021	21,426	21,249	36
9	2/4/2021	21,215	21,038	36
10	2/4/2021	21,004	20,827	36
11	2/5/2021	20,793	20,616	36
12	2/5/2021	20,583	20,405	36
13	2/5/2021	20,372	20,194	36
14	2/5/2021	20,161	19,983	36
15	2/5/2021	19,950	19,772	36
16	2/6/2021	19,741	19,561	36
17	2/6/2021	19,528	19,350	36
18	2/6/2021	19,317	19,142	36
19	2/6/2021	19,106	18,928	36
20	2/6/2021	18,895	18,717	36
21	2/7/2021	18,684	18,506	36
22	2/7/2021	18,473	18,295	36
23	2/8/2021	18,262	18,084	36
24	2/8/2021	18,051	17,873	36
25	2/8/2021	17,840	17,662	36
26	2/8/2021	17,629	17,452	36
27	2/8/2021	17,418	17,241	36
28	2/9/2021	17,207	17,030	36
29	2/9/2021	16,996	16,819	36
30	2/10/2021	16,786	16,608	36
31	2/10/2021	16,575	16,397	36
32	2/10/2021	16,364	16,186	36
33	2/10/2021	16,153	15,975	36
34	2/10/2021	15,942	15,764	36
35	2/11/2021	15,733	15,553	36
36	2/11/2021	15,520	15,342	36
37	2/11/2021	15,309	15,131	36
38	2/11/2021	15,098	14,920	36
39	2/12/2021	14,887	14,709	36
40	2/12/2021	14,676	14,498	36
41	2/12/2021	14,465	14,287	36
42	2/13/2021	14,254	14,076	36
43	2/13/2021	14,043	13,862	36

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ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
44	2/13/2021	13,832	13,654	36
45	2/13/2021	13,621	13,444	36
46	2/13/2021	13,410	13,233	36
47	2/13/2021	13,199	13,022	36
48	2/14/2021	12,991	12,811	36
49	2/14/2021	12,782	12,600	36
50	2/14/2021	12,567	12,389	36
51	2/14/2021	12,356	12,178	36
52	2/15/2021	12,147	11,967	72
53	2/15/2021	11,934	11,756	72
54	2/16/2021	11,723	11,545	36
55	2/16/2021	11,512	11,334	36
56	2/17/2021	11,301	11,123	36
57	2/17/2021	11,090	10,912	36
58	2/17/2021	10,879	10,701	36
59	2/17/2021	10,668	10,490	36
60	2/17/2021	10,457	10,285	36
61	2/17/2021	10,246	10,068	36
62	2/18/2021	10,035	9,857	36
63	2/18/2021	9,824	9,647	36
64	2/18/2021	9,613	9,436	36
65	2/19/2021	9,405	9,225	36
66	2/19/2021	9,191	9,014	36
67	2/19/2021	8,981	8,800	36
68	2/19/2021	8,773	8,592	36
69	2/19/2021	8,559	8,381	36
70	2/20/2021	8,348	8,170	36
71	2/20/2021	8,137	7,959	36
72	2/20/2021	7,926	7,748	36
73	2/20/2021	7,715	7,537	36
74	2/20/2021	7,504	7,331	36
75	2/20/2021	7,293	7,115	36

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**VIOLET COSS BRK 6H
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
1	1/31/2021	85.75	8,325	8,129	4,005	244,580	6,865	0
2	2/1/2021	91.4	8,152	4,921	4,482	357,880	9,221	0
3	2/1/2021	89.93	7,658	5,273	4,539	351,230	10,318	0
4	2/2/2021	92.7	8,028	5,290	4,985	355,660	8,978	0
5	2/3/2021	91.3	8,195	5,079	4,507	355,400	9,255	0
6	2/3/2021	91.3	8,196	5,785	4,364	354,750	9,144	0
7	2/3/2021	87.1	8,200	5,845	4,468	355,960	11,668	0
8	2/4/2021	84.13	8,075	6,045	4,436	354,560	9,409	0
9	2/4/2021	88.4	8,190	5,420	4,392	356,360	8,448	0
10	2/4/2021	86.91	8,101	6,325	4,358	354,640	9,278	0
11	2/5/2021	85.4	8,149	6,214	4,390	360,660	8,218	0
12	2/5/2021	87.9	8,050	5,895	4,391	359,000	8,586	0
13	2/5/2021	88.56	8,170	5,897	4,412	358,800	8,658	0
14	2/5/2021	88.3	8,183	5,922	4,410	352,640	8,035	0
15	2/5/2021	87.91	8,053	6,690	4,305	356,460	8,858	0
16	2/6/2021	88.6	8,160	5,420	4,354	357,960	8,151	0
17	2/6/2021	90.1	8,081	6,009	4,361	361,040	8,546	0
18	2/6/2021	88.25	8,001	5,939	4,411	357,440	9,936	0
19	2/6/2021	90.2	8,130	5,420	4,285	361,880	8,460	0
20	2/7/2021	90.9	7,899	6,201	4,122	359,180	8,480	0
21	2/7/2021	85.55	8,059	5,243	4,368	361,640	10,314	0
22	2/7/2021	87.78	8,219	5,809	4,214	319,620	8,222	0
23	2/8/2021	86.8	8,150	5,785	4,215	355,100	8,359	0
24	2/8/2021	93.1	8,158	4,841	4,356	362,120	8,882	0
25	2/8/2021	96.1	8,100	5,718	4,398	355,480	7,977	0
26	2/8/2021	93.4	7,897	6,102	4,256	355,720	8,126	0
27	2/8/2021	90.29	7,495	5,887	4,265	361,080	9,965	0
28	2/9/2021	97.1	8,064	5,122	4,197	358,300	8,357	0
29	2/9/2021	96.1	8,074	5,590	4,300	360,900	8,299	0
30	2/10/2021	95.9	8,055	5,451	4,449	358,120	8,307	0
31	2/10/2021	98.5	8,044	5,944	4,386	362,880	8,065	0
32	2/10/2021	97.6	7,946	5,520	4,394	357,820	8,358	0
33	2/10/2021	96.4	8,015	5,022	4,280	362,140	8,086	0
34	2/11/2021	97.1	7,988	5,835	4,467	355,960	8,190	0
35	2/11/2021	94.7	8,034	5,431	4,398	347,040	8,165	0
36	2/11/2021	98.5	7,871	5,113	4,331	350,420	8,039	0
37	2/11/2021	98.8	7,833	5,311	4,180	354,600	8,137	0
38	2/12/2021	88.4	7,398	6,001	4,273	356,720	8,078	0
39	2/12/2021	82.18	7,774	5,539	4,405	354,420	9,288	0
40	2/12/2021	93.9	7,647	6,031	4,498	354,560	7,938	0
41	2/12/2021	92	7,632	5,998	4,251	355,720	9,200	0
42	2/13/2021	79.08	7,942	6,031	4,049	359,820	8,953	0
43	2/13/2021	98	7,798	5,015	4,330	358,520	7,903	0
44	2/13/2021	96.17	7,563	4,512	4,373	355,880	8,632	0
45	2/13/2021	92.2	7,548	5,502	4,167	359,900	7,660	0
46	2/13/2021	93	7,315	5,296	4,048	358,400	7,906	0
47	2/14/2021	98.4	7,640	4,967	4,267	352,360	7,839	0
48	2/14/2021	89.55	7,971	4,660	4,379	360,020	9,748	0
49	2/14/2021	97.6	7,463	5,110	4,167	352,860	7,755	0
50	2/14/2021	91.2	7,767	5,788	4,234	356,940	7,910	0
51	2/15/2021	97.8	7,600	5,512	4,289	359,600	7,852	0
52	2/15/2021	93.64	7,674	4,206	4,478	355,840	9,674	0
53	2/16/2021	90.64	7,354	5,706	4,390	305,600	11,327	0

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9,748
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7,755
7,910
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7,852
9,674
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VIOLET COSS BRK 6H
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	2/16/2021	95.9	7,818	5,824	4,498	349,160	7,924	0
55	2/16/2021	98.4	7,150	5,521	4,374	358,880	7,887	0
56	2/17/2021	98	7,408	5,694	4,345	358,120	7,837	0
57	2/17/2021	100.1	7,407	5,378	4,342	362,920	8,058	0
58	2/17/2021	100	7,199	5,204	4,415	350,780	7,678	0
59	2/17/2021	98	7,058	5,219	4,235	344,280	7,701	0
60	2/17/2021	99.5	7,293	5,239	4,125	356,100	7,790	0
61	2/18/2021	99	7,226	5,732	4,311	351,860	7,708	0
62	2/18/2021	100.9	6,639	4,739	4,345	358,960	7,897	0
63	2/18/2021	100.8	6,900	4,913	4,151	353,500	7,838	0
64	2/18/2021	99.38	7,147	4,264	4,154	325,800	9,654	0
65	2/19/2021	100.9	6,815	4,878	4,378	354,320	7,967	0
66	2/19/2021	101	6,790	5,098	4,582	350,560	7,607	0
67	2/19/2021	100	7,017	5,068	4,276	354,300	7,762	0
68	2/19/2021	99	7,089	5,415	4,126	354,020	8,108	0
69	2/20/2021	98.4	7,098	4,821	4,147	355,040	7,971	0
70	2/20/2021	99	6,833	5,442	4,234	357,860	7,935	0
71	2/20/2021	100.2	6,486	4,206	4,425	358,400	7,657	0
72	2/20/2021	101	6,627	4,580	4,239	354,720	7,625	0
73	2/20/2021	97.4	6,533	4,719	4,024	352,420	7,553	0
74	2/20/2021	97.5	6,418	4,858	4,256	351,880	7,629	0
75	2/21/2021	95.56	6,241	5,502	4,020	349,960	7,902	0

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Well Name: Violet Coss BRK 6H

47009002400000

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	334.00	334.00	
Top of Salt Water	507.00	507.00	NA	NA	
Pittsburgh Coal	209.00	209.00	221.00	221.00	
Raven Cliff (ss)	697.00	697.00	1316.00	1316.00	
Big Injun (ss)	1316.00	1316.00	1477.00	1477.00	
Rhinestreet (shale)	6405.00	5135.00	6660.00	5368.00	
Cashaqua (shale)	6660.00	5368.00	6720.00	5418.00	
Middlesex (shale)	6720.00	5418.00	6807.00	5484.00	
Burket (shale)	6807.00	5484.00	6829.00	5500.00	
Tully (ls)	6829.00	5500.00	6899.00	5545.00	
Mahantango (shale)	6899.00	5545.00	7046.00	5620.00	
Marcellus (shale)	7046.00	5620.00	NA	NA	GAS

RECEIVED
 Office of Oil and Gas
 APR 30 2021
 WV Department of
 Environmental Protection

Longitude: 80°35'00" (SHL)

SURFACE HOLE 10815'

Longitude: 80°35'00" (BHL)

BOTTOM HOLE 6011'



CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
600 MARKETPLACE AVENUE, SUITE 200
BRIDGEPORT, WV 26330
304-933-3119

AS-DRILLED

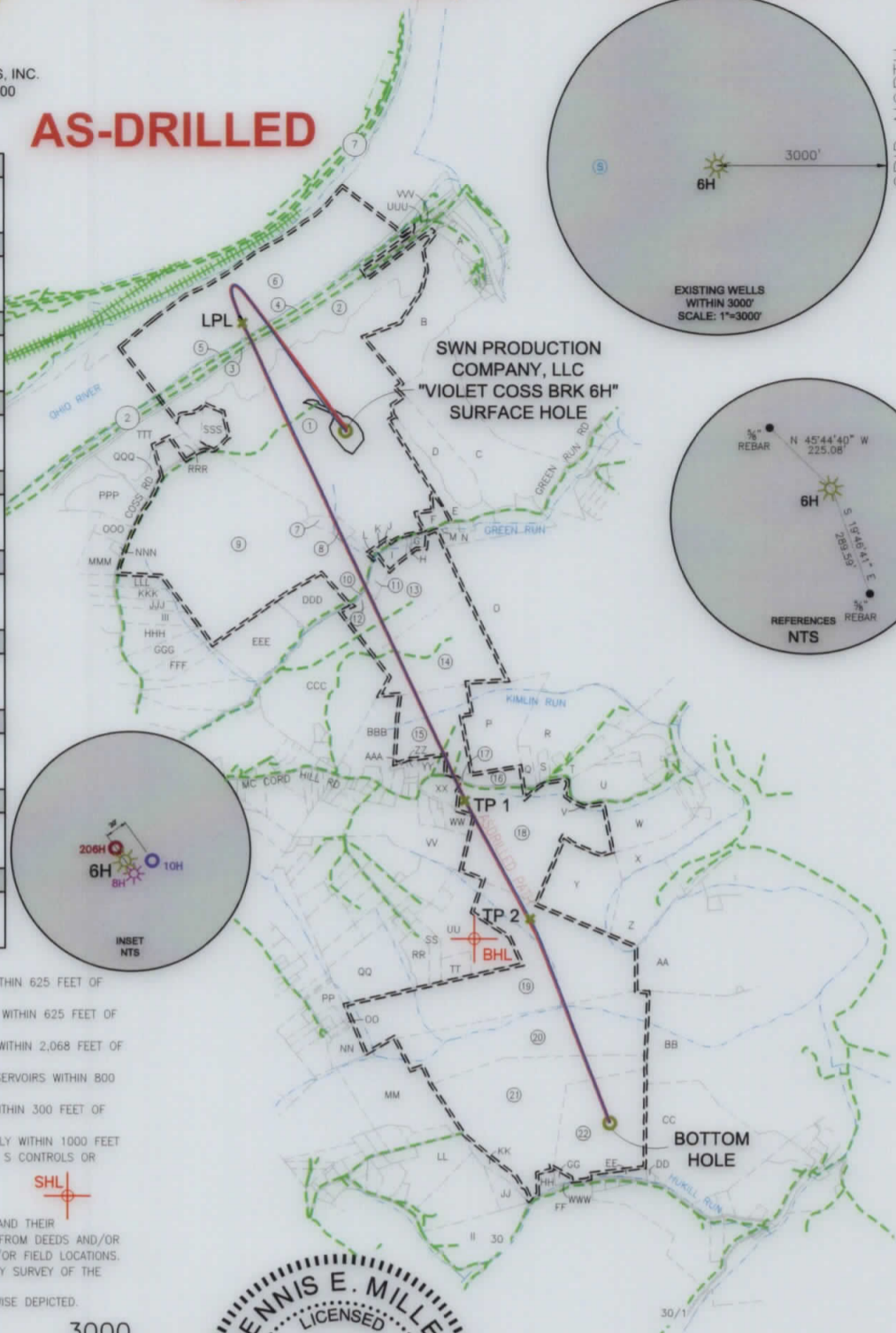
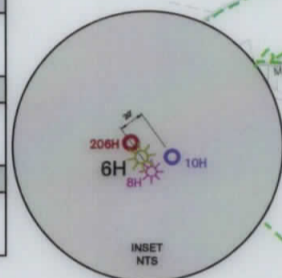
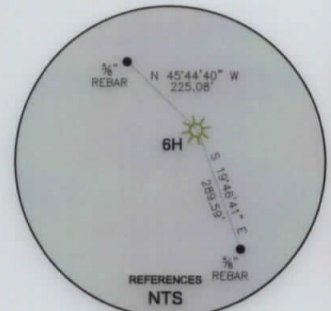
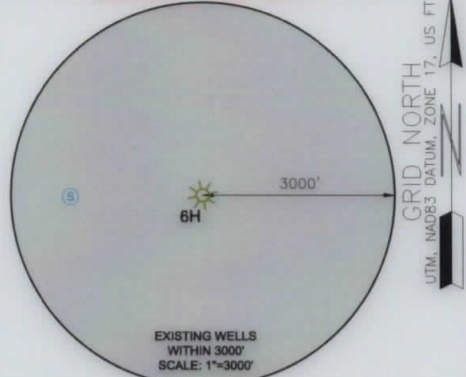


Table with 12 rows providing UTM coordinates (Northings and Eastings) for Surface Hole Location (SHL), Landing Point (LPL), Turning Point 1 (TP 1), Turning Point 2 (TP 2), and Bottom Hole Location (BHL).

WELL RESTRICTIONS

- List of 6 well restrictions including: 1. NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD. 2. NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD. 3. WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 2,068 FEET OF PROPOSED WELL.

NOTES ON SURVEY

- Notes on survey including: 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.

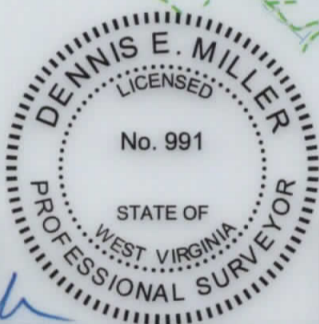
3000 0 3000



GRAPHIC SCALE IN FEET

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

P.S. 991



COMPANY: SWN Production Company, LLC

STATE OF WEST VIRGINIA seal and WVDEP address: 601 57TH STREET CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)

OPERATOR'S WELL #: VIOLET COSS BRK 6H
API WELL #: 47 STATE, 009 COUNTY, 00240 PERMIT

Well type and completion details: WELL TYPE: OIL, WASTE DISPOSAL, PRODUCTION, DEEP, GAS, LIQUID INJECTION, STORAGE, SHALLOW. WATERSHED: UPPER OHIO WHEELING. DISTRICT: BUFFALO. COUNTY: BROOKE. SURFACE OWNER: LINDA COEN (LIFE ESTATE-VIOLET L COSS). OIL & GAS ROYALTY OWNER: VIOLET L COSS. DRILL, DRILL DEEPER, REDRILL, FRACTURE OR STIMULATE, PLUG OFF OLD FORMATION, PERFORATE NEW FORMATION. CONVERT, PLUG & ABANDON, CLEAN OUT & REPLUG, OTHER CHANGE (ASDRILLED). TARGET FORMATION: MARCELLUS. ESTIMATED DEPTH: 5,872.86 TVD, 22,906 TMD.

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

Legend and Revisions table. Legend includes symbols for Proposed Surface Hole, Existing Wellhead, Landing Point, Existing Water Well, Existing Spring, Surveyed Boundary, Drilling Unit, Lease Boundary, Asdrilled Path, Proposed Path, and Turning Point. Revisions table includes Date (04-14-2021), Drawn By (K.E.S.), Scale (1" = 3000'), Drawing No (172-287), and Well Location Plat.

Latitude: 40°15'00" (BHL)
Latitude: 40°17'30" (SHL)
Latitude: 40°15'00" (BHL)
Latitude: 40°17'30" (SHL)
Latitude: 40°15'00" (BHL)
Latitude: 40°17'30" (SHL)



CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
600 MARKETPLACE AVENUE, SUITE 200
BRIDGEPORT, WV 26330
304-933-3119

WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS			
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES
1	EVERETT ALAN COEN, LORRIE ELLEN WOOLWINE, MELINDA WOOLWINE, MICHAEL TODD COEN (S&R)	3-B32-25	224.303
2	HFS LIMITED LIABILITY COMPANY	3-B27-12	67.95
3	WEST VIRGINIA DEPARTMENT OF HIGHWAYS	3-B27-11	
4	BROOKE CO. RT. 2		
5	CAMPBELL TRANSPORTATION COMPANY, INC.	3-B27-10	12.48
6	STATE OF WEST VIRGINIA		
7	HFS LIMITED LIABILITY COMPANY	3-B32-24	2.00
8	HFS LIMITED LIABILITY COMPANY	3-B32-23	2.00
9	COSS ROAD FARM, LLC	3-B31-114	183.23
10	GREEN RUN ROAD		
11	CAROLYN SUE WALNOHA	3-B32-17	4.00
12	MARY CATHERINE WALNOHA	3-B32-18	2.00
13	JOSEPH G. VINDERMAN, JR., JERRY VINDERMAN, DAVID G. VINDERMAN AND LINDA J.R. VINDERMAN, ARNOLD VINDERMAN, LAWRENCE VINDERMAN, GEORGE VINDERMAN, THERESA MCOUILLAN	3-B32-13	43.38
14	MASLO FARMS, LLC	3-B32-19	59.66
15	RALPH G. JOHNSTON; ROBERT JOHNSTON; KENNETH D. JOHNSTON, DANIEL JOHNSTON, ET AL	3-B32-180	39.862
16	JACK M. KLAGES, SR	3-B32-140.1	5.90
17	MC CORD HILL ROAD		
18	CITY OF WELLISBURG COMBINE WATER AND SEWER BOARD	3-B32-140.2	89.58
19	SCHIAPPA AND COMPANY INC	3-B37-22	145.963
20	SCHIAPPA AND COMPANY INC	3-B37-23	90.91
21	DEBRA F. CYPHERT; MATTHEW H. FAIR; SUSAN BRUFFY, RICHARD HENTHORN	3-B37-91	93.93
22	DEBRA F. CYPHERT; MATTHEW H. FAIR; SUSAN BRUFFY, RICHARD HENTHORN	3-B37-88	59.95

ADJOINING OWNERS TABLE			
TRACT	SURFACE OWNER	TAX PARCEL	ACRES
A	DANIEL P. LOMBARDI	3-B27K-211	6.62
B	NORMA JEAN LILLY, WIDOW	3-B27-17	45.72
C	GERTRUDE LOUISE MCSHANE ROBIE & PATRICK J. MCSHANE, TRUSTEE	3-B32-29	84.79
D	TONY J. CASTILLO; RICHARD R. OSTRANDER (S)	3-B32-28	20.83
E	TONY J. CASTILLO; RICHARD R. OSTRANDER (S)	3-B32-27	10
F	JAMES SCOTT GEAR	3-B32-26	3.11
G	WILLIAM & CAROLYN WALNOHA (S)	3-B32-14	1.34
H	JOHN PORTER & BRIGITTE ROGERS (S)	3-B32-15	0.568
I	DOROTHY L. STEVENS	3-B32-16	2.09
J	RUTH BERNADINE HART	3-B32-22.01	0.262
K	WALNOHA WILLIAM RUSSELL; HART RUTH; THARP MARY FRANC	3-B32-22	0.244
L	WILLIAM RUSSELL WALNOHA	3-B32-22.02	0.259
M	PENNY HAMILTON	3-B32-12	0.5
N	PENNY HAMILTON	3-B32-11	8.5
O	SCHIAPPA AND COMPANY INC.	3-B32-9	232.6
P	LILLIAN L MCCORD EST (S)	3-B32-185	36.42
Q	CHARLES M. & BARBARA J. TREDWAY	3-B32-186	3.0
R	ROBERT G. TREDWAY JR.	3-B32-188	42.01
S	KAREN L. REINACHER	3-B32-187	2.00
T	DONALD C. BURKHART	3-B32-191	7.24
U	JOSEPH P. LIZON III & ERIC REBECCA NIXON (S)	3-B32-192	19.40
V	CITY OF WELLISBURG COMBINE WATER AND SEWER BOARD	3-B32-192.2	0.619
W	REBECCA UHLLY	3-B32-139	27.805
X	KEVIN R. & SANDRA A. COLLINS (S)	3-B32-130	24.04
Y	KEVIN & BRIDGET KOSUT	3-B37-42	34.259
Z	JAMIE OHLER	3-B37-43	29.00
AA	MARK A. CHRISTMAN	3-B37-45	110.58
BB	WILLIAM E. & HAZEL E. JOHNSTON	3-B37-50	166.50
CC	ROBERT O. BONE	3-B37-81	81.99
DD	VEMURI HOME & GARDEN, LLC	3-B37-82	1.00
EE	BRIAN K. & GINA M. HANEY (SURV)	3-B37-77	50.75
FF	LINDA REEVES GREATHOUSE, VICKI HAMILTON	3-B37-87	322.84
GG	ROBERT BONE	3-B37-89	0.78

ADJOINING OWNERS TABLE			
TRACT	SURFACE OWNER	TAX PARCEL	ACRES
HH	JESSICA ANN KOREN AND ROBERT BONE	3-B37-90	2.014
II	CHRISTOPHER SCOTT MMILLER	3-B37-94	24.20
JJ	KENIN CHUMNEY	3-B37-93	5.91
KK	DONALD G. CONAWAY	3-B37-92	3.97
LL	WAYNE ALLEN RICHMOND	3-B37-96	19.67
MM	VICKIE C. & SHEENA R. LOUGHERY (S)	3-B37-103	40.00
NN	RALPH JR & CAROL J. WALNOHA	3-B37-34	6.787
OO	RALPH JR & CAROL J. WALNOHA	3-B37-33	0.80
PP	JAMES W. & LISA GIBSON (S)	3-B37-28	4.06
QQ	HARLEY J. LEMASTERS	3-B37-21	31.17
RR	THOMAS & CAROLYN CARBASHO (S)	3-B37-16	7.29
SS	THOMAS & CAROLYN CARBASHO (S)	3-B37-15	5.00
TT	JAMES W. & DENISE L. MYERS (S)	3-B37-14	5.00
UU	HARLEY J. LEMASTERS	3-B37-13	33.54
VV	BOYD NILA; MCCORD CLINTON; JOHN JOHN; REBA; JONES CA	3-B32-146	29.057
WW	NILA MCCORD BOYD	3-B32-142	5.09
XX	KENNETH D. JOHNSTON	3-B32-141	4.91
YY	KENNETH D. JOHNSTON	3-B32-184	3.85
ZZ	ROBERT A. JOHNSTON, RALPH G. JOHNSTON, JOYCE A. BRADY, BRIAN W. JOHNSTON, DANIEL L. JOHNSTON, KENNETH D. JOHNSTON	3-B32-179	1.17
AAA	LILLIAN L MCCORD	3-B32-178	0.709
BBB	MICHAEL & MELISSA BILAK	3-B32-174	21.83
CCC	MASLO FARMS LLC A PENNSYLVANIA LLC	3-B32-20	78.86
DDD	CHARLES D. BLACKBURN	3-B32-21	10.00
EEE	KEITH R. FRANCIS	3-B31-113	26.33
FFF	THOMAS & PAULINE SALEM	3-B31-138	7.73
GGG	RODGER & CONNIE SUMMERS	3-B31-137	11.35
HHH	JERRY C. & ANGEL L. MCCLELLAND	3-B31-136	9.18
III	CURTIS R. & DONNA J. BARONIO (S)	3-B31-135	7.32
JJJ	RONALD C. PARKS	3-B31-134	8.15
KKK	ROBERT J. SR. & MARGARET E. STEWART (S)	3-B31-133	7.88
LLL	ROBERT J. SR. & MARGARET E. STEWART (S)	3-B31-132	7.39
MMM	RAY WALNOHA	3-B31-115	9.27
NNN	AUDREY L. HOLDEN	3-B31-116	0.736
OOO	BARBARA A. TAYLOR	3-B31-117	5.0
PPP	COSS ROAD FARM, LLC	3-B31-118	17.18
QQQ	COSS ROAD FARM, LLC	3-B31-119	5.35
RRR	EDWARD MACIAK	3-B31-120	1.37
SSS	JAMES L. & SONDRAL K. ELLIOTT	3-B31-121	5.48
TTT	HFS LIMITED LIABILITY COMPANY	3-B31-1	23.87
UUU	CAMPBELL TRANSPORTATION COMPANY INC.	3-B27-8	0.41
VVV	GREG PROVENZANO	3-B27-9	0.09
WWW	JESSICA ANN KOREN & ROBERT BONE	3-B37-90.1	0.119

API WELL #: **47** **009** **00240**
STATE COUNTY PERMIT

08/27/2021

REVISIONS:	COMPANY:		
	OPERATOR'S	VIOLET COSS BRK	
	WELL #:	6H	
	DISTRICT:	COUNTY:	STATE:
	BUFFALO	BROOKE	WV
			DATE: 04-14-2021
			DRAWN BY: K.E.S.
			SCALE: N/A
			DRAWING NO: 172-287
			WELL LOCATION PLAT 2