

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

API 47 - 051 - 02427 County MARSHALL District LIBERTY
Quad CAMERON Pad Name CHARLES JAMISON MSH-PAD-1 Field/Pool Name NORTH VICTORY FIELD WET
Farm name SWN PRODUCTION COMPANY, LLC Well Number CHARLES JAMISON MSH 810H
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 4,404,736.545 Easting 533,609.998
Landing Point of Curve Northing 4,405,660.066 Easting 534,378.651
Bottom Hole Northing 4,401,177.857 Easting 537,252.841

Elevation (ft) 1,337.2' 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

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Date permit issued 1/21/2022 Date drilling commenced 5/5/2022 Date drilling ceased 6/2/2022
Date completion activities began 7/30/2022 Date completion activities ceased 8/31/2022
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 322' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1,195' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1,088' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

APPROVED

Reviewed by:
[Signature]
01/20/2023
01/04/23

API 47- 051 - 02427 Farm name SWN PRODUCTION COMPANY, LLC Well number CHARLES JAMISON MSH 810H

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	396	NEW	J-55/54.5#		Y; 31 BBLS
Coal							
Intermediate 1	12.25	9.625	2,801	NEW	J-55/36#		Y; 53 BBLS
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	26,410	NEW	P-110 HP/20#		N
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 ³)	Cement Top (MD)	WOC (hrs)
Conductor	CLASS A	GROUT TO SURFACE				SURFACE	24
Surface	CLASS A	440	15.60	1.21		SURFACE	8
Coal							
Intermediate 1	CLASS A	367 / 773	15.60 / 16.00	1.18 / 1.12		SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	4624	15.00	1.29		7,500	24
Tubing							

Drillers TD (ft) 26,410' Loggers TD (ft) 26,410'
 Deepest formation penetrated MARCELLUS Plug back to (ft) 26,321'
 Plug back procedure N/A

Kick off depth (ft) 6,328' TVD

Check all wireline logs run caliper density deviated/directional induction 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: 6 CENTRALIZERS - EVERY THIRD JOINT OF CASING
 INTERMEDIATE: 38 CENTRALIZERS - EVERY THIRD JOINT OF CASING
 PRODUCTION: 533CENTRALIZERS - 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 _____

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PRODUCING FORMATION(S)	DEPTHS	
<u>MARCELLUS</u>	<u>7,103'</u> TVD	<u>8,711'</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1847 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 35,216 mcfpd Oil 122 bpd NGL _____ bpd Water 588 bpd GAS MEASURED BY Estimated 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 (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	<u>0</u>		<u>0</u>		
	<u>SEE</u>	<u>ATTACHMENT</u>	<u>3</u>		

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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 77391-2359

Please insert additional pages as applicable.

Completed by DENISE GRANTHAM Telephone 832.796.6139
Signature Denise Grantham Title REGULATORY ANALYST Date 12.14.2022

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	7/30/2022
Job End Date:	8/30/2022
State:	West Virginia
County:	Marshall
API Number:	47-051-02427-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	CHARLES JAMISON MSH 810
Latitude:	39.79192173
Longitude:	-80.60743141
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,159
Total Base Water Volume (gal):	31,907,022
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	90.75933	Density = 8.345
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	85.00000	0.26514	

			Water	7732-18-5	45.00000	0.26514	
			Water	7732-18-5	100.00000	0.26514	
Tolicide 4Frac	SWN Well Services	Biocide					
				Listed Below			
Plexslick 930	SWN Well Services	Friction Reducer					
				Listed Below			
FSTI-CI-02	SWN Well Services	Corrosion Inhibitor					
				Listed Below			
Sand	SWN Well Services	Proppant					
				Listed Below			
HCL	SWN Well Services	Solvent					
				Listed Below			
Ferriplex 80	SWN Well Services	Iron Control					
				Listed Below			
Plexaid 655NM	SWN Well Services	Scale Inhibitor					
				Listed Below			

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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	8.89540	
			Hydrochloric Acid	7647-01-0	15.00000	0.03739	

			Tetrakis(Hydroxymethyl) Phosphonium Sulfate	55566-30-8	45.00000	0.00508	
			Sodium Erythorbate	6381-77-7	100.00000	0.00133	
			Quaternary ammonium compounds	68424-85-1	7.50000	0.00085	
			Ethanol	64-17-5	2.50000	0.00028	
			Ethylene glycol	107-21-1	40.00000	0.00015	
			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	
			2-Butoxyethanol	111-76-2	5.00000	0.00002	
			Isopropyl alcohol	67-63-0	5.00000	0.00002	
			Triethyl phosphate	78-40-0	5.00000	0.00002	
			1-Decanol	112-30-1	5.00000	0.00002	
			1-Octanol	111-87-5	5.00000	0.00002	
			benzyl chloridequaternized	72480-70-7	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)

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Well Name:

Charles Jamison MSH 810H

47051024270000

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	322.00	322.00	
Top of Salt Water	1195.00	1195.00	NA	NA	
Pittsburgh Coal	1088.00	1088.00	1097.00	1097.00	
Pottsville (ss)	1193.00	1193.00	1214.00	1214.00	
Raven Cliff (ss)	1647.00	1637.00	1780.00	1764.00	
Maxton (ss)	2069.00	2042.00	2280.00	2241.00	
Big Injun (ss)	2280.00	2241.00	2545.00	2480.00	
Berea (siltstone)	2942.00	2831.00	2971.00	2857.00	
Rhinestreet (shale)	7715.00	6449.00	8257.00	6861.00	
Middlesex (shale)	8257.00	6861.00	8394.00	6952.00	
Burket (shale)	8394.00	6952.00	8435.00	6976.00	
Tully (ls)	8435.00	6976.00	8474.00	6999.00	
Mahantango (shale)	8474.00	6999.00	8711.00	7103.00	
Marcellus (shale)	8711.00	7103.00	NA	NA	GAS

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CHARLES JAMISON MSH 810H
ATTACHMENT 1
PERF REPORT

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
1	7/30/2022	26,321	26,226	36
2	7/31/2022	26,192	26,015	36
3	7/31/2022	25,982	25,804	36
4	7/31/2022	25,771	25,594	36
5	7/31/2022	25,561	25,383	36
6	8/1/2022	25,350	25,173	36
7	8/1/2022	25,140	24,962	36
8	8/2/2022	24,929	24,752	36
9	8/3/2022	24,719	24,541	36
10	8/3/2022	24,508	24,331	36
11	8/4/2022	24,298	24,120	36
12	8/4/2022	24,087	23,910	36
13	8/5/2022	23,877	23,699	36
14	8/5/2022	23,666	23,489	36
15	8/6/2022	23,456	23,279	36
16	8/6/2022	23,245	23,068	36
17	8/6/2022	23,035	22,858	36
18	8/6/2022	22,824	22,647	36
19	8/7/2022	22,614	22,437	36
20	8/7/2022	22,404	22,226	36
21	8/7/2022	22,193	22,016	36
22	8/8/2022	21,983	21,805	36
23	8/8/2022	21,772	21,595	36
24	8/8/2022	21,562	21,384	36
25	8/9/2022	21,351	21,174	36
26	8/9/2022	21,141	20,963	36
27	8/10/2022	20,930	20,753	36
28	8/10/2022	20,720	20,542	36
29	8/10/2022	20,509	20,332	36
30	8/10/2022	20,299	20,121	36
31	8/11/2022	20,088	19,911	36
32	8/11/2022	19,878	19,701	36
33	8/15/2022	19,667	19,490	36
34	8/15/2022	19,457	19,280	36
35	8/16/2022	19,246	19,069	36
36	8/16/2022	19,036	18,859	36
37	8/17/2022	18,826	18,648	36
38	8/17/2022	18,615	18,438	36
39	8/18/2022	18,405	18,227	36
40	8/18/2022	18,194	18,017	36
41	8/18/2022	17,984	17,806	36
42	8/18/2022	17,777	17,596	36
43	8/18/2022	17,563	17,385	36

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ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
44	8/19/2022	17,352	17,175	36
45	8/19/2022	17,142	16,964	36
46	8/19/2022	16,931	16,754	36
47	8/19/2022	16,721	16,543	36
48	8/20/2022	16,510	16,333	36
49	8/20/2022	16,300	16,123	36
50	8/20/2022	16,089	15,912	36
51	8/20/2022	15,879	15,702	36
52	8/21/2022	15,669	15,491	36
53	8/21/2022	15,458	15,281	36
54	8/22/2022	15,248	15,070	36
55	8/22/2022	15,037	14,860	36
56	8/22/2022	14,827	14,651	36
57	8/22/2022	14,616	14,439	36
58	8/22/2022	14,406	14,228	36
59	8/23/2022	14,195	14,018	36
60	8/23/2022	13,985	13,807	36
61	8/23/2022	13,774	13,597	36
62	8/24/2022	13,564	13,386	36
63	8/25/2022	13,353	13,176	36
64	8/25/2022	13,143	12,965	36
65	8/26/2022	12,932	12,755	36
66	8/26/2022	12,722	12,545	36
67	8/26/2022	12,511	12,334	36
68	8/26/2022	12,301	12,124	36
69	8/26/2022	12,091	11,913	36
70	8/27/2022	11,880	11,703	36
71	8/27/2022	11,670	11,492	36
72	8/27/2022	11,459	11,282	36
73	8/27/2022	11,249	11,071	36
74	8/28/2022	11,038	10,861	36
75	8/28/2022	10,828	10,650	36
76	8/28/2022	10,617	10,440	36
77	8/28/2022	10,407	10,229	36
78	8/28/2022	10,196	10,019	36
79	8/29/2022	9,986	9,808	36
80	8/29/2022	9,775	9,598	36
81	8/30/2022	9,565	9,387	36
82	8/30/2022	9,354	9,177	36
83	8/30/2022	9,144	8,967	36
84	8/30/2022	8,933	8,756	36
85	8/27/2022	11,903	11,726	36
86	8/27/2022	11,693	11,515	36

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STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
87	8/27/2022	11,482	11,305	36
88	8/27/2022	11,272	11,095	36
89	8/28/2022	11,062	10,884	36
90	8/28/2022	10,851	10,674	36
91	8/28/2022	10,641	10,464	36
92	8/28/2022	10,431	10,254	36
93	8/28/2022	10,221	10,043	36
94	8/29/2022	10,010	9,833	36
95	8/29/2022	9,800	9,623	36
96	8/29/2022	9,590	9,412	36
97	8/30/2022	9,379	9,202	36
98	8/30/2022	9,169	8,992	36
99	8/30/2022	8,959	8,781	36
100	8/30/2022	8,748	8,571	36

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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	7/30/2022	84.5	9,474	8,147	4,012	180,750	6,410	0
2	7/31/2022	85.8	9,627	6,705	5,012	312,400	11,004	0
3	7/31/2022	88.2	9,923	5,999	5,101	291,250	10,328	0
4	7/31/2022	87.9	9,544	6,593	5,545	305,420	10,289	0
5	8/1/2022	88.6	9,764	6,273	5,229	308,600	10,669	0
6	8/1/2022	91.1	10,117	5,800	5,930	313,250	10,609	0
7	8/1/2022	75	8,315	6,703	5,057	309,130	11,172	0
8	8/2/2022	80.1	8,528	6,386	5,423	309,150	11,507	0
9	8/3/2022	89.8	9,476	6,665	6,002	311,940	11,533	0
10	8/3/2022	87.1	9,237	7,003	5,018	310,880	10,016	0
11	8/4/2022	90	9,258	7,036	5,466	308,630	9,720	0
12	8/5/2022	97.3	9,826	6,985	5,187	312,140	10,716	0
13	8/5/2022	98	9,810	6,854	5,205	312,180	9,700	0
14	8/5/2022	99.4	9,968	6,297	5,612	310,110	9,560	0
15	8/6/2022	93.7	9,366	7,166	5,977	302,870	9,910	0
16	8/6/2022	93	9,471	6,855	5,222	311,420	9,662	0
17	8/6/2022	82.4	8,919	6,118	5,825	312,120	10,947	0
18	8/6/2022	72	9,013	6,728	6,022	312,810	10,456	0
19	8/7/2022	98	9,728	6,560	5,026	311,760	9,706	0
20	8/7/2022	83.7	9,299	5,878	6,123	319,700	9,930	0
21	8/8/2022	82	8,837	6,940	5,902	307,720	9,941	0
22	8/8/2022	83.2	8,859	7,021	4,833	309,590	9,787	0
23	8/8/2022	85.8	8,537	6,935	5,067	311,270	10,918	0
24	8/8/2022	81.8	8,766	6,208	5,988	308,000	10,123	0
25	8/9/2022	94.4	9,253	6,819	5,339	307,340	11,156	0
26	8/9/2022	71.3	8,541	6,245	4,905	313,380	10,951	0
27	8/10/2022	89.1	9,123	5,618	5,166	307,350	9,446	0
28	8/10/2022	91.7	8,875	5,935	5,126	315,590	9,323	0
29	8/10/2022	90.8	8,725	5,928	5,052	311,290	9,064	0
30	8/10/2022	99.1	9,605	7,102	4,740	311,460	9,661	0
31	8/11/2022	90.5	8,899	5,926	5,115	309,810	9,171	0
32	8/11/2022	83.7	8,451	6,161	5,115	312,520	10,361	0
33	8/15/2022	89.2	9,077	6,774	4,231	309,400	11,822	0
34	8/16/2022	91.3	9,208	6,643	9,453	309,840	9,109	0
35	8/16/2022	83.6	9,460	5,740	5,428	309,330	9,922	0
36	8/17/2022	78.3	8,922	6,033	6,159	316,090	8,778	0
37	8/17/2022	80.4	8,274	6,636	5,813	315,140	10,422	0
38	8/17/2022	82.7	8,665	5,892	5,682	313,660	10,455	0
39	8/18/2022	94.4	9,021	6,400	5,640	313,600	9,143	0
40	8/18/2022	94.6	8,656	5,862	5,231	310,170	8,822	0
41	8/18/2022	97.8	8,507	7,013	4,785	308,600	8,793	0
42	8/18/2022	98.4	8,641	5,369	5,411	310,720	8,352	0
43	8/18/2022	96.6	8,942	7,102	5,712	302,450	8,328	0
44	8/19/2022	96.5	8,594	6,690	6,318	312,340	8,407	0
45	8/19/2022	98.9	9,192	5,640	4,611	316,240	8,486	0
46	8/19/2022	98.9	8,969	6,240	5,039	313,720	8,327	0
47	8/19/2022	76.8	6,975	6,350	6,139	318,150	11,185	0
48	8/20/2022	98.3	9,016	6,233	5,527	311,490	8,232	0
49	8/20/2022	91.2	8,498	5,655	5,234	311,780	9,168	0
50	8/20/2022	97.6	8,633	5,872	5,667	316,300	8,215	0
51	8/21/2022	93.7	8,638	5,280	5,230	317,780	8,876	0
52	8/21/2022	89.8	8,002	6,144	5,685	311,060	9,056	0
53	8/21/2022	94.3	8,703	6,174	5,181	314,530	8,393	0

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CHARLES JAMISON MSH 810H
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	8/22/2022	85.9	7,729	6,512	5,649	312,680	9,951	0
55	8/22/2022	98	9,023	6,253	5,230	315,350	8,121	0
56	8/22/2022	96.9	8,983	6,569	5,524	312,520	8,229	0
57	8/22/2022	98.7	8,639	6,642	5,285	306,860	8,185	0
58	8/23/2022	98	8,878	5,485	4,612	299,200	7,997	0
59	8/23/2022	83.5	7,594	6,593	4,965	317,370	8,333	0
60	8/23/2022	98.8	8,778	6,208	5,139	311,530	8,000	0
61	8/24/2022	99.4	8,776	6,868	5,348	315,210	8,068	0
62	8/25/2022	99	8,396	7,628	5,230	315,480	8,033	0
63	8/25/2022	98.4	8,314	5,672	5,132	309,590	7,872	0
64	8/25/2022	99.5	8,392	5,463	5,254	311,190	7,754	0
65	8/26/2022	99.5	8,651	6,911	5,840	314,040	7,624	0
66	8/26/2022	93.1	8,109	6,590	5,495	311,220	8,306	0
67	8/26/2022	98.9	8,790	6,750	5,123	320,450	7,812	0
68	8/26/2022	99	8,477	6,775	5,155	319,730	7,380	0
69	8/27/2022	97.3	8,476	6,488	5,655	319,850	7,445	0
70	8/27/2022	99.5	8,261	6,802	5,284	322,890	7,678	0
71	8/27/2022	99	8,189	6,623	5,023	314,210	7,478	0
72	8/27/2022	99	8,198	6,965	5,374	318,640	7,716	0
73	8/27/2022	99	8,143	6,692	5,460	318,930	7,660	0
74	8/28/2022	99	7,995	6,789	5,280	319,140	7,790	0
75	8/28/2022	99	7,765	6,330	5,779	313,040	7,658	0
76	8/28/2022	98.7	7,631	5,550	5,227	314,150	7,791	0
77	8/28/2022	97.3	7,778	6,101	5,578	310,300	7,606	0
78	8/28/2022	99	7,772	6,385	5,180	313,980	7,662	0
79	8/29/2022	92.8	7,363	6,213	5,009	315,500	7,438	0
80	8/29/2022	80.7	7,151	6,606	5,658	314,700	9,275	0
81	8/30/2022	96.9	7,775	6,714	5,433	316,490	7,712	0
82	8/30/2022	93.8	7,455	6,430	5,652	311,230	8,321	0
83	8/30/2022	99	7,528	6,318	5,098	314,920	7,466	0
84	8/30/2022	99.9	7,395	6,005	4,780	312,150	8,155	0
85	8/27/2022	96.4	7,978	6,210	5,351	314,320	7,654	0
86	8/27/2022	98.9	8,244	9,105	5,420	317,140	7,809	0
87	8/27/2022	99.5	8,104	6,602	5,110	313,480	7,624	0
88	8/28/2022	99.5	8,019	6,286	4,951	318,490	7,769	0
89	8/28/2022	96.9	7,839	6,264	5,320	317,740	8,271	0
90	8/28/2022	99	7,917	5,450	5,026	318,100	7,713	0
91	8/28/2022	98	7,417	6,359	5,330	311,300	7,582	0
92	8/28/2022	99.5	100	6,411	5,800	318,750	7,707	0
93	8/29/2022	99	100	6,444	5,994	317,310	7,479	0
94	8/29/2022	99.5	7,599	6,620	5,410	314,028	7,487	0
95	8/29/2022	92	7,867	6,718	4,869	314,090	7,203	0
96	8/30/2022	99.5	7,949	6,659	5,580	315,660	7,808	0
97	8/30/2022	95.8	7,366	6,330	5,371	313,818	9,487	0
98	8/30/2022	98.8	7,908	6,888	4,632	312,490	7,733	0
99	8/30/2022	99	7,618	6,712	5,632	311,600	7,515	0
100	8/30/2022	98.3	7,411	6,699	5,823	307,840	7,441	0

RECEIVED
Office of Oil and Gas

DEC 15 2022

WV Department of
Environmental Protection 01/20/2023

Latitude: 39°50'00" (SHL)

SURFACE HOLE 6,775'

BOTTOM HOLE 6,588'

Latitude: 39°47'30" (BHL)



CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
120 GENESIS BOULEVARD
BRIDGEPORT, WV 26330
304-933-3119

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

PROPOSED SURFACE HOLE
ASDRILLED SURFACE HOLE

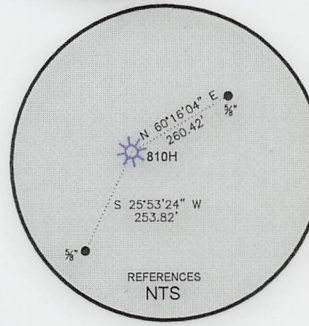
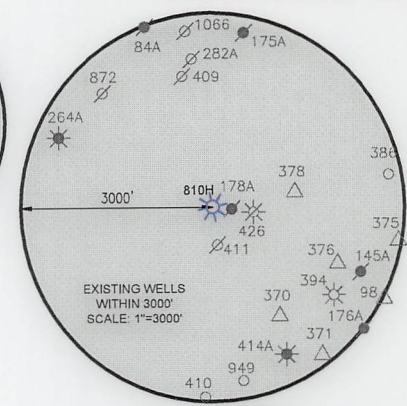
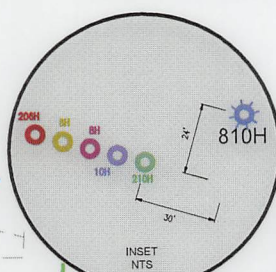
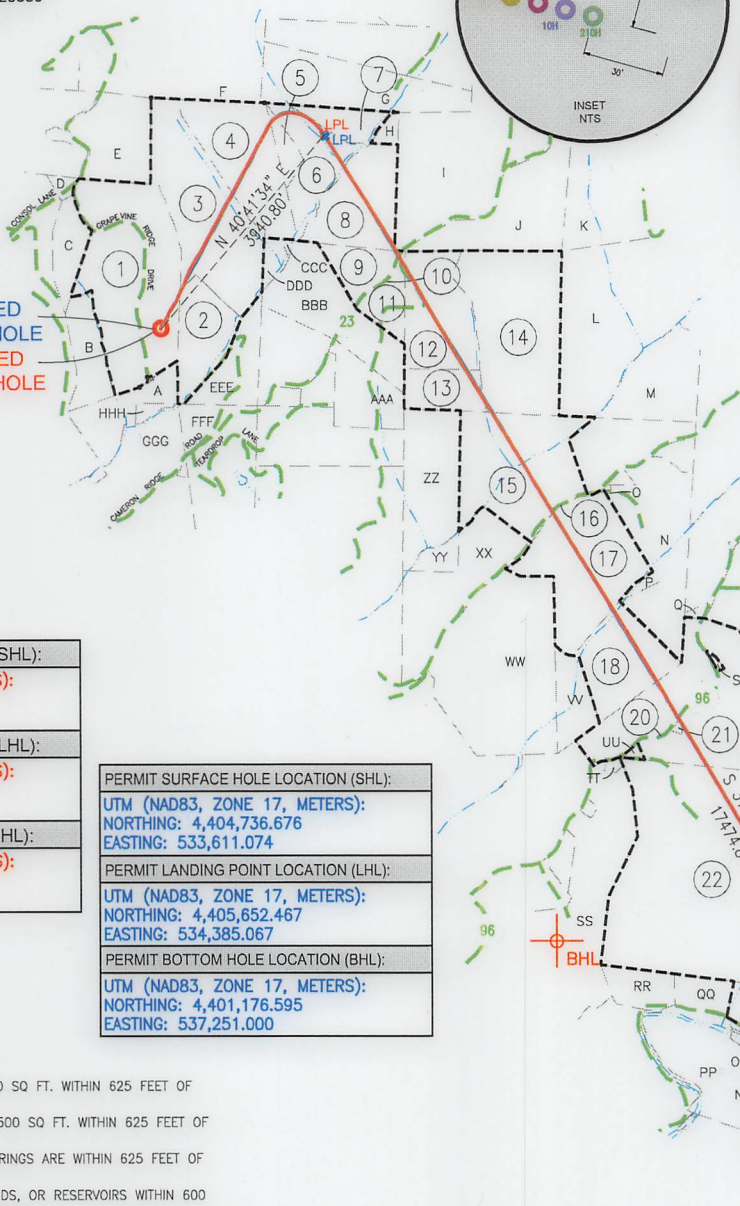


Table with 4 rows: SURFACE HOLE LOCATION (SHL), LANDING POINT LOCATION (LHL), BOTTOM HOLE LOCATION (BHL) with UTM coordinates.

Table with 4 rows: PERMIT SURFACE HOLE LOCATION (SHL), PERMIT LANDING POINT LOCATION (LHL), PERMIT BOTTOM HOLE LOCATION (BHL) with UTM coordinates.

WELL RESTRICTIONS

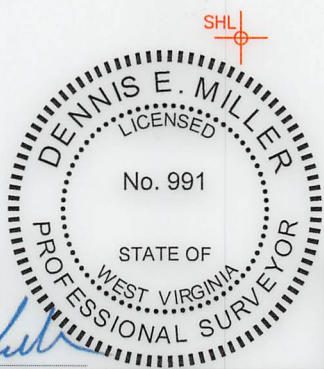
- 1. NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
2. NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
3. WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 625 FEET OF PROPOSED WELL.
4. PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 600 FEET OF THE LIMITS OF DISTURBANCE.
5. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
6. 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

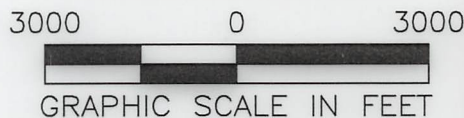
- 1. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
2. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

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



AS-DRILLED



COMPANY: SWN Production Company, LLC

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25034

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

CHARLES JAMISON MSH
OPERATOR'S WELL #: 810H
API WELL #: 47 051 02427
STATE COUNTY PERMIT

WELL TYPE: OIL [] WASTE DISPOSAL [] PRODUCTION [X] DEEP [] GAS [X] LIQUID INJECTION [] STORAGE [] SHALLOW [X]
WATERSHED: MAGGOTY RUN
DISTRICT: LIBERTY DISTRICT COUNTY: MARSHALL
SURFACE OWNER: CHARLES AND JEAN JAMISON
OIL & GAS ROYALTY OWNER: CHARLES AND JEAN JAMISON
DRILL [] DRILL DEEPER [] REDRILL [] FRACTURE OR STIMULATE [] PLUG OFF OLD FORMATION [] PERFORATE NEW FORMATION []
CONVERT [] PLUG & ABANDON [] CLEAN OUT & REPLUG [] OTHER CHANGE [X] (SPECIFY) ASDRILLED
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 7,330.55 TVD 26,410.00 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:
PROPOSED SURFACE HOLE / BOTTOM HOLE
EXISTING / PRODUCING WELLHEAD
LANDING POINT LOCATION
EXISTING WATER WELL
EXISTING SPRING
SURVEYED BOUNDARY
DRILLING UNIT
LEASE BOUNDARY
ASDRILLED PATH
PROPOSED PATH

REVISIONS:
DATE: 08-05-2022
DRAWN BY: K.E.S.
SCALE: 1" = 3000'
DRAWING NO: 170-426
WELL LOCATION PLAT



CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
120 GENESIS BOULEVARD
BRIDGEPORT, WV 26330
304-933-3119



WELL BORE TABLE FOR SURFACE OWNERS		
TRACT	SURFACE OWNER	TAX PARCEL
1	CHARLES AND JEAN JAMISON	07-007-0006
2	GAIL ZWICK - LIFE	07-007-0012
3	KENNETH WAYNE STEELE REVOCABLE LIVING TRUST AGREEMENT	07-007-0011
4	ANTHONY M. SKRYPEK	07-007-0010
5	ANTHONY M. SKRYPEK	07-006-0004
6	ANTHONY M. SKRYPEK	07-006-0005
7	ANTHONY M. SKRYPEK	07-006-0003
8	CNX LAND, LLC	07-006-0006
9	CNX LAND, LLC	07-006-0009
10	CO. RT. 23 ROW (CAMERON RIDGE ROAD)	
11	MARSHALL COUNTY COAL COMPANY	07-006-0009.1
12	MARVIN AND SHIRLEY BYARD	07-006-0013
13	MARVIN AND SHIRLEY BYARD	07-006-0014
14	CNX LAND, LLC	07-006-0014.1
15	CNX LAND, LLC	07-011-0008
16	FISH RIDGE ROAD ROW	
17	DOUGLAS AND DEANA MCCOMBS	07-011-0007
18	AMANDA MARIE LINDSEY, ANDREW DAVID MCCURDY AND TIMOTHY S. MCCURDY	07-011-0006
19	ELLEN MARIE QUIGLEY AND DIANA MATHEWS	07-011-0017
20	CO. RT. 96 ROW	
21	DIANA LYNN MATHEWS	07-011-0017.3
22	HINKLE FAMILY TRUST	07-015-0001
23	DAVID W. HUMMEL JR. AND MELANIE A. HUMMEL	07-015-0001.1
24	DAVID W. HUMMEL JR. AND MELANIE A. HUMMEL	07-015-0017
25	TREVOR L. NEELY	07-015-0012.1
26	CODY MILLER	07-015-0012
27	CHAD R. AND BETSY J. WILLIAMS	07-015-0010.2

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	TIMOTHY R. CAIN	07-007-0006.1
B	TIMOTHY R. CAIN	07-007-0006.2
C	MARSHALL COUNTY COAL RESOURCES INC.	07-007-0006.3
D	MARSHALL COUNTY COAL RESOURCES INC.	07-007-0007
E	KENNETH WAYNE STEELE REVOCABLE LIVING TRUST AGREEMENT	07-007-0008.1
F	JEAN JAMISON	07-007-0009.1
G	ANTHONY M. SKRYPEK	07-006-0002
H	ANTHONY M. SKRYPEK	07-006-0006.1
I	WANDA L. ALLMAN, ET AL	07-006-0015
J	MARKWEST LIBERTY MIDSTREAM AND RESOURCES, LLC.	07-006-0015.1
K	CNX LAND, LLC	07-006-0018
L	BARBARA J. REID AND SANDRA CUMPSTON	07-006-0019
M	DONALD M. QUIGLEY	07-011-0011
N	LARRY C. WILLIAMS, ET UX	07-011-0009
O	DOUGLAS AND DEANA MCCOMBS	07-011-0009.1
P	LARRY C. WILLIAMS, ET UX	07-011-0007.1
Q	RICKY JAY BERESFORD JR., ET UX	07-011-0015.1
R	DONALD MACK QUIGLEY, ET UX	07-011-0018
S	DONALD M. AND ROBIN QUIGLEY	07-011-0017.2
T	DOUGLAS R. AND REBECCA J. MCCOMBS	07-011-0019
U	APPALACHIA MIDSTREAM SERVICES, LLC	07-015-0006
V	DAVID W. HUMMEL JR. AND MELANIE A. HUMMEL	07-015-0004
W	DAVID W. HUMMEL JR. AND MELANIE A. HUMMEL	07-015-0003
X	DAVID W. HUMMEL JR. AND MELANIE A. HUMMEL	07-015-0002
Y	VERA S. CAIN - LIFE	07-015-0007
Z	CLYDE F. HARRINGTON	07-015-0011
AA	AARON LEE AND BONNIE BARR	07-015-0010.1
BB	DONALD T. STUHMER AND KIMBERLY A. SCHMITT	07-015-0010
CC	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS	07-015-0013
DD	STATE ROAD COMMISSION	07-020-0027.1
EE	VICTOR J. SEIFERT, ET UX	07-020-0027
FF	AMMON A. BURLEY, ET UX	07-020-0026
GG	MOUNTAIN VIEW REALTY, LLC.	07-020-0025
HH	MOUNTAIN VIEW REALTY, LLC.	07-015-0014
II	BEAU V. MARTIN AND AMELIA D. YOUNG	07-015-0015.1
JJ	MOUNTAIN VIEW REALTY, LLC.	07-015-0015
KK	MOUNTAIN VIEW REALTY, LLC.	07-015-0016
LL	JANEEN L. CZOLBA	07-015-0014.1
MM	WILLIAM H. AND GAIL K. PORTER	07-015-0017.3
NN	WILLIAM H. AND GAIL K. PORTER	07-015-0017.1
OO	WILLIAM H. AND GAIL K. PORTER	07-015-0017.2
PP	CYNTHIA ANTILL, JOANNE M. HATZELL, CLAUDE R. STEPHENS, JR. AND EDWARD K. STEPHENS	07-020-0023
QQ	HINKLE FAMILY TRUST	07-015-0019
RR	DANIEL W. DEVER, DAVID S. DEVER, GREGORY T. DEVER, JOHN A. DEVER, LAWRENCE A. DEVER AND DEBORAH KAY KINCAID	07-020-0022
SS	ELLEN MARIE QUIGLEY	07-016-0036
TT	ANDREW MCCURDY, ET UX	07-016-0036.2
UU	ANDREW DAVID MCCURDY	07-011-0017.1
VV	ELLEN MARIE QUIGLEY	07-011-0005
WW	SCOTT C. MARLING AND JESSICA L. PARRY	07-011-0004
XX	CNX LAND, LLC	07-011-0003
YY	CNX LAND, LLC	07-011-0002
ZZ	ROBIN E. AND DONALD QUIGLEY	07-011-0001
AAA	CNX LAND, LLC	07-006-0012
BBB	CNX LAND, LLC	07-006-0010
CCC	GAIL L. ZWICK - LIFE	07-006-0007
DDD	GAIL L. ZWICK - LIFE	07-006-0008
EEE	GAIL L. ZWICK - LIFE	07-007-0014
FFF	MARSHALL COUNTY COAL RESOURCES INC.	07-010-0019
GGG	JAN CAROL DOBBS, TRUSTEE OF THE G AND JAN DOBBS FAMILY TRUST	07-010-0012
HHH	CHARLES AND JEAN JAMISON	07-007-0013

01/20/2023

AS-DRILLED

API WELL #: 47 051 02427
STATE COUNTY PERMIT

REVISIONS:	COMPANY:		 	
	OPERATOR'S		DATE: 08-05-2022	
	WELL #:		DRAWN BY: K.E.S.	
	DISTRICT:		SCALE: N/A	
	LIBERTY DISTRICT		DRAWING NO: 170-426	
	COUNTY:		WELL LOCATION PLAT 2	
	MARSHALL			
	STATE:			
	WV			