

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

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Office of Oil and Gas

NOV 01 2021

WV Department of
Environmental Protection

API 47-051-02370 County MARSHALL District LIBERTY
Quad CAMERON 7 1/2, WV Pad Name GLADYS BRIGGS MSH PAD Field/Pool Name VICTORY FIELD WET
Farm name GLADYS R. BRIGGS ESTATE Well Number GLADYS BRIGGS MSH 5H
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 4,401,989.890 Easting 532,906.795
Landing Point of Curve Northing 4,402,292.408 Easting 533,242.950
Bottom Hole Northing 4,405,342.285 Easting 530,869.468

Elevation (ft) 1,382.7 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 3/29/2021 Date drilling commenced 5/04/2021 Date drilling ceased 5/17/2021
Date completion activities began 7/28/2021 Date completion activities ceased 9/01/2021
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 733 Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1221 Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1087 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed

Reviewed by:
[Signature]
11/20/2021

API 47-051 - 02370 Farm name GLADYS R. BRIGGS ESTATE Well number GLADYS BRIGGS MSH 5H

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	802	NEW	J-55/54.50#		Y, 20 BBLS
Coal	SEE INTERMEDIATE						
Intermediate 1	12.25	9.625	2,702	NEW	J-55/36#		Y, 55 BBLS
Intermediate 2	12.25	9.625					
Intermediate 3							
Production	8.75/8.50	5.5	20,505	NEW	P-110 HP/20#		Y
Tubing		2.375		NEW	L-80/4.7#		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	909	15.60	1.19	1,081.71	SURFACE	8
Coal	SEE INTERMEDIATE						
Intermediate 1	CLASS A	1,134	16.00	1.13	1,281.42	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	4,276	14.50	1.17	5,002.92	SURFACE	24
Tubing							

Drillers TD (ft) 20,505' Loggers TD (ft) 20,505'
 Deepest formation penetrated _____ Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 8,563'

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 _____ NOV 11 2021

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____ WV Department of Environmental Protection

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

API 47-051 - 02370 Farm name GLADYS R. BRIGGS ESTATE Well number GLADYS BRIGGS MSH 5H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	SEE	ATTACHMENT	1		

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
		SEE	ATTACHMENT	2				

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Environmental Protection

Please insert additional pages as applicable.

12/03/2021

API 47- 051 - 02370 Farm name GLADYS R. BRIGGS ESTATE Well number GLADYS BRIGGS MSH 5H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>MARCELLUS</u>	<u>7,119'</u> TVD	<u>7,548'</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump
 SHUT-IN PRESSURE Surface 1956 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs
 OPEN FLOW Gas 23,549 mcfpd Oil 314 bpd NGL _____ bpd Water 636 bpd GAS MEASURED BY Estimated Orifice Pilot

<u>LITHOLOGY/ FORMATION</u>	<u>TOP</u>		<u>BOTTOM</u>		<u>DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H₂S, ETC)</u>
	<u>DEPTH IN FT NAME TVD</u>	<u>DEPTH IN FT TVD</u>	<u>DEPTH IN FT MD</u>	<u>DEPTH IN FT MD</u>	
	<u>0</u>		<u>0</u>		
	<u>SEE</u>	<u>ATTACHMENT</u>	<u>3</u>		

Please insert additional pages as applicable.

Drilling Contractor SWN DRILLING COMPANY
 Address PO BOX 12359 City SPRING State TX Zip 77391-2359
 Logging Company BAKER HUGHES
 Address 9110 GROGANS MILL ROAD City THE WOODLANDS State TX Zip 77380
 Cementing Company SCHLUMBERGER WELLS 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

Please insert additional pages as applicable.

Completed by BOBBY WILLIS Telephone 832-796-2884
 Signature _____ Title SENIOR REGULATORY SPECIALIST Date 10/29/2021

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

12/03/2021

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	7/28/2021
Job End Date:	8/22/2021
State:	West Virginia
County:	Marshall
API Number:	47-051-02370-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	GLADYS BRIGGS MSH 5
Latitude:	39.76720088
Longitude:	-80.61579469
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,145
Total Base Water Volume (gal):	22,212,464
Total Base Non Water Volume:	0



Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Base Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	90.53825	Density = 8.345
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	85.00000	0.23221	

Plexaid 655	SWN Well Services	Scale Inhibitor					
				Listed Below			
PLEXSLICK 930	SWN Well Services	Friction Reducer					
				Listed Below			
Tolicide 4Frac	SWN Well Services	Biocide					
				Listed Below			
Sand	SWN Well Services	Proppant					
				Listed Below			
HCL	SWN Well Services	Solvent					
				Listed Below			
Econo-CI200	SWN Well Services	Corrosion Inhibitor					
				Listed Below			
Ecopol-FEAC	SWN Well Services	Iron Control					
				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	9.14208	
			Hydrochloric Acid	7647-01-0	15.00000	0.02676	
			Petroleum Distillates, Hydrotreated	64742-47-8	20.00000	0.02488	
			copolymer of 2-propenamamide	69418-26-4	20.00000	0.02488	

			Tetrakis	55566-30-8	45.00000	0.00481
			Alcohols, C12-1, ethoxylated	68551-12-2	1.50000	0.00187
			Oleic Acid Diethanolamide	93-83-4	1.50000	0.00187
			Quaternary ammonium compounds	68424-85-1	7.50000	0.00080
			Diethylenetriamine penta	15827-60-8	10.00000	0.00050
			Acetic Acid	64-19-7	37.50000	0.00035
			Ethanol	64-17-5	2.50000	0.00027
			Methanol	67-56-1	80.00000	0.00022
			Citric Acid	77-92-9	22.50000	0.00021
			Oxyalkylated fatty acid	68951-67-7	9.67400	0.00003
			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

* 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)

GLADYS BRIGGS MSH 5H

ATTACHMENT 1

PERF REPORT

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
1	7/28/2021	20,422	20,331	36
2	7/29/2021	20,297	20,120	36
3	7/30/2021	20,087	19,909	36
4	7/30/2021	19,876	19,699	36
5	7/30/2021	19,666	19,488	36
6	7/31/2021	19,455	19,278	36
7	7/31/2021	19,245	19,068	36
8	7/31/2021	19,035	18,857	36
9	8/1/2021	18,824	18,647	36
10	8/1/2021	18,608	18,431	36
11	8/1/2021	18,397	18,220	36
12	8/1/2021	18,184	18,008	36
13	8/2/2021	17,972	17,797	36
14	8/2/2021	17,764	17,586	36
15	8/3/2021	17,553	17,375	36
16	8/3/2021	17,346	17,164	36
17	8/3/2021	17,129	16,953	36
18	8/4/2021	16,920	16,742	36
19	8/4/2021	16,709	16,531	36
20	8/5/2021	16,496	16,320	36
21	8/5/2021	16,287	16,109	36
22	8/5/2021	16,076	15,898	36
23	8/5/2021	15,865	15,687	36
24	8/6/2021	15,654	15,476	36
25	8/6/2021	15,442	15,265	36
26	8/6/2021	15,231	15,053	36
27	8/7/2021	15,020	14,842	36
28	8/7/2021	14,809	14,631	36
29	8/7/2021	14,598	14,420	36
30	8/8/2021	14,387	14,209	36
31	8/8/2021	14,176	13,998	36
32	8/8/2021	13,965	13,787	36
33	8/9/2021	13,754	13,576	36
34	8/9/2021	13,543	13,365	36
35	8/9/2021	13,332	13,154	36
36	8/10/2021	13,121	12,943	36
37	8/10/2021	12,910	12,732	36
38	8/11/2021	12,699	12,521	36
39	8/11/2021	12,487	12,310	36
40	8/12/2021	12,276	12,099	36
41	8/12/2021	12,065	11,887	36
42	8/13/2021	11,854	11,676	36
43	8/13/2021	11,643	11,465	36
44	8/13/2021	11,432	11,254	36
45	8/14/2021	11,221	11,043	36
46	8/14/2021	11,010	10,832	36
47	8/14/2021	10,799	10,621	36
48	8/15/2021	10,588	10,410	36
49	8/16/2021	10,374	10,199	36
50	8/16/2021	10,166	9,984	36
51	8/17/2021	9,955	9,777	36
52	8/18/2021	9,744	9,566	36
53	8/18/2021	9,533	9,355	36
54	8/18/2021	9,321	9,144	36
55	8/19/2021	9,110	8,933	36
56	8/19/2021	8,899	8,721	36
57	8/19/2021	8,688	8,510	36
58	8/20/2021	8,477	8,299	36
59	8/21/2021	8,266	8,088	36
60	8/21/2021	8,055	7,877	36

GLADYS BRIGGS MSH 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/othe
1	7/28/2021	71	8,788	8,154	4,500	182,540	8,104	0
2	7/29/2021	84.17	8,516	6,768	4,594	316,150	11,047	0
3	7/30/2021	87.11	8,767	5,854	5,338	310,920	9,248	0
4	7/30/2021	87.69	8,641	6,751	5,049	317,640	10,622	0
5	7/30/2021	93.09	8,651	6,721	4,325	312,180	10,760	0
6	7/31/2021	82.56	8,867	6,951	5,045	312,220	8,910	0
7	7/31/2021	92.67	8,682	6,530	4,855	313,040	8,951	0
8	7/31/2021	85.67	8,643	6,765	4,855	312,520	9,083	0
9	8/1/2021	90.78	8,740	6,447	4,878	310,660	9,103	0
10	8/1/2021	88.44	8,392	6,715	6,850	308,840	8,768	0
11	8/1/2021	82.44	8,806	6,980	4,361	314,980	9,471	0
12	8/2/2021	93.33	8,980	5,710	5,479	315,680	8,839	0
13	8/2/2021	90.22	8,850	6,782	5,238	314,220	9,095	0
14	8/2/2021	92.33	8,427	6,359	4,734	266,120	8,105	0
15	8/3/2021	87.56	8,365	5,968	4,649	313,680	9,083	0
16	8/3/2021	94.33	8,787	6,479	4,964	312,200	8,760	0
17	8/3/2021	97	8,549	6,385	4,550	312,280	8,849	0
18	8/4/2021	96.22	8,401	6,438	4,262	318,120	8,745	0
19	8/4/2021	90.6	7,851	6,601	4,625	314,620	10,037	0
20	8/5/2021	86.44	8,410	6,480	4,641	309,420	8,755	0
21	8/5/2021	95.78	8,461	6,316	4,612	314,740	8,889	0
22	8/5/2021	85	8,252	5,511	4,525	314,080	9,000	0
23	8/5/2021	86	8,217	6,075	4,714	320,520	8,805	0
24	8/6/2021	82.78	8,275	3,989	4,647	310,100	8,739	0
25	8/6/2021	97.33	8,541	6,208	4,523	314,820	8,823	0
26	8/7/2021	81	8,371	6,095	4,926	314,760	8,942	0
27	8/7/2021	95.11	8,518	6,124	4,362	311,640	9,494	0
28	8/7/2021	97.22	8,078	5,906	4,625	320,860	8,658	0
29	8/7/2021	91	8,162	6,025	4,742	316,660	8,793	0
30	8/8/2021	94.67	8,026	6,231	4,469	313,540	8,537	0
31	8/8/2021	91	8,123	6,055	5,136	314,800	8,621	0
32	8/9/2021	92.67	7,957	6,021	4,586	312,490	8,591	0
33	8/9/2021	99.78	7,979	6,442	4,754	316,020	8,529	0
34	8/9/2021	94.56	8,165	5,850	4,382	311,020	8,519	0
35	8/10/2021	99.11	7,990	6,437	4,956	313,300	9,001	0
36	8/10/2021	93.78	8,166	5,987	4,868	308,700	8,345	0
37	8/11/2021	96.11	7,907	5,645	4,455	310,400	8,567	0
38	8/11/2021	99.67	7,894	5,870	4,847	310,380	9,310	0
39	8/12/2021	91.33	8,132	6,302	4,864	311,940	8,559	0
40	8/12/2021	99.99	7,861	5,334	4,892	318,920	8,677	0
41	8/13/2021	93.78	7,824	6,001	4,707	321,360	8,497	0
42	8/13/2021	97.41	7,962	5,831	4,649	314,560	8,607	0
43	8/13/2021	98.89	8,064	6,227	4,469	318,510	8,681	0
44	8/13/2021	95	7,558	6,081	4,148	310,070	8,069	0
45	8/14/2021	99	8,087	5,956	4,693	323,320	9,013	0
46	8/14/2021	95.33	7,705	5,831	4,670	305,980	7,992	0
47	8/15/2021	99.99	7,808	6,221	4,253	316,050	8,566	0
48	8/16/2021	93.22	7,236	5,743	4,542	305,200	8,390	0
49	8/16/2021	92.33	7,439	5,800	4,418	311,660	8,245	0
50	8/17/2021	87.56	7,366	5,755	4,197	320,240	8,324	0
51	8/18/2021	93.67	7,343	5,658	4,644	320,130	8,388	0
52	8/18/2021	96.67	7,574	5,530	4,570	320,320	8,456	0
53	8/18/2021	99.44	7,483	5,411	4,388	316,560	8,503	0
54	8/18/2021	97.78	7,650	6,121	4,497	320,760	9,108	0
55	8/19/2021	97.22	7,709	5,997	4,361	319,060	8,513	0
56	8/19/2021	96.89	7,285	6,102	4,558	317,000	8,467	0
57	8/20/2021	98.78	7,399	5,925	4,326	323,400	8,541	0
58	8/21/2021	97.11	7,382	6,506	4,690	317,280	8,464	0
59	8/21/2021	99	7,330	5,760	4,917	328,620	8,382	0
60	8/22/2021	97.22	7,425	6,102	5,029	319,200	8,902	0



Well Name: **Gladys Briggs MSH 5H**

47051023700000

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	733.00	733.00	
Top of Salt Water	1221.00	1221.00	NA	NA	
Pittsburgh Coal	1087.00	1087.00	1092.00	1092.00	
Pottsville (ss)	1212.00	1212.00	1224.00	1224.00	
Raven Cliff (ss)	1587.00	1587.00	1727.00	1727.00	
Maxton (ss)	1981.00	1981.00	2221.00	2221.00	
Big Injun (ss)	2221.00	2221.00	2482.00	2481.00	
Rhinestreet (shale)	6646.00	6455.00	6972.00	6759.00	
Cashaqua (shale)	6972.00	6759.00	7110.00	6876.00	
Middlesex (shale)	7110.00	6876.00	7231.00	6966.00	
Burket (shale)	7231.00	6966.00	7270.00	6991.00	
Tully (ls)	7270.00	6991.00	7313.00	7017.00	
Mahantango (shale)	7313.00	7017.00	7548.00	7119.00	
Marcellus (shale)	7548.00	7119.00	NA	NA	GAS

Latitude: 39°47'30"

SURFACE HOLE 9122'

Latitude: 39°50'00"

BOTTOM HOLE 4,051'

JACKSON SURVEYING

INC.

2413 EAST PIKE ST. # 112

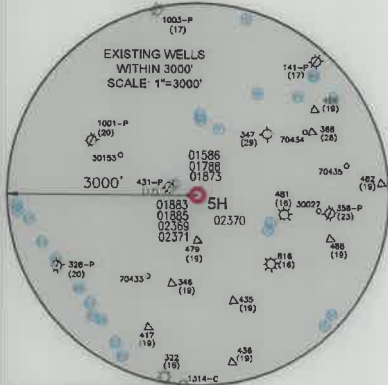
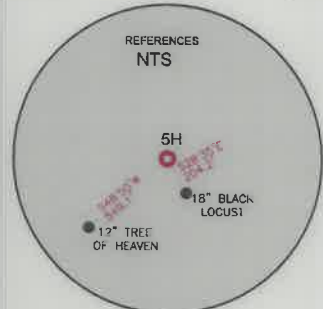
Clarksburg, WV 26302

304-623-5851

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	S 61°26'26" W	797.84'	SHL TO LANDMARK	CORNER FENCE POST
L2	N 59°21'34" E	1874.73'	SHL TO LANDMARK	FD. 1/2" REBAR
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L3	N 48°00'54" E	1483.71'	2208.86'	SHL TO LPL
L4	N 38°06'19" W	367.62'	367.63'	AZL1 TO AZL2

SURFACE HOLE LOCATION (SHL):		SURFACE HOLE LOCATION (SHL):	
UTM (NAD83, ZONE 17, METERS):		UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,401,989.890		NORTHING: 4,401,989.727	
EASTING: 532,906.795		EASTING: 532,906.878	
LANDING POINT LOCATION (LPL):		LANDING POINT LOCATION (LPL):	
UTM (NAD83, ZONE 17, METERS):		UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,402,292.408		NORTHING: 4,402,282.366	
EASTING: 533,242.950		EASTING: 533,256.317	
AZIMUTH POINT LOCATION (AZL1):		AZIMUTH POINT LOCATION (AZL1):	
UTM (NAD83, ZONE 17, METERS):		UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,404,352.790		NORTHING: 4,404,344.592	
EASTING: 531,487.747		EASTING: 531,501.973	
AZIMUTH POINT LOCATION (AZL2):		AZIMUTH POINT LOCATION (AZL2):	
UTM (NAD83, ZONE 17, METERS):		UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,404,440.959		NORTHING: 4,404,444.956	
EASTING: 531,418.599		EASTING: 531,428.248	
BOTTOM HOLE LOCATION (BHL):		BOTTOM HOLE LOCATION (BHL):	
UTM (NAD83, ZONE 17, METERS):		UTM (NAD83, ZONE 17, METERS):	
NORTHING: 4,405,342.285		NORTHING: 4,405,337.945	
EASTING: 530,869.468		EASTING: 530,865.789	

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



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. NO WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
4. NO PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 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.

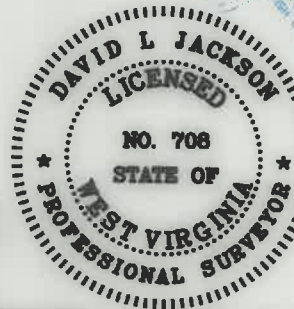
NOTES ON SURVEY

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.
3. 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. 708

David L Jackson



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 SURVEY SOURCE OF ELEVATION: GRADE GPS (NAVD 88, US FT)

GLADYS BRIGGS MSH

OPERATOR'S WELL #: 5H

API WELL #: 47 051 02370

STATE COUNTY PERMIT

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

WATERSHED: FISH CREEK (HUC-10) ELEVATION: 1382.7'

DISTRICT: LIBERTY COUNTY: MARSHALL QUADRANGLE: CAMERON 7 1/2', WV

SURFACE OWNER: GLADYS R. BRIGGS ESTATE ACREAGE: ±121.429

OIL & GAS ROYALTY OWNER: GLADYS R. BRIGGS ESTATE ACREAGE: ±121.429

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

CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY) ASDRILLED

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 12/03/2021 TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508



DESIGNATED AGENT: BRITTANY WOODY ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

LEGEND:	REVISIONS:	DATE:
○ PROPOSED SURFACE HOLE / BOTTOM HOLE	— SURVEYED BOUNDARY	10-25-2021
★ EXISTING / PRODUCING WELLHEAD	— DRILLING UNIT	
LPL ★ LANDING POINT LOCATION	== LEASE BOUNDARY	
⊕ EXISTING WATER WELL	— ASDRILLED PATH	
⊕ EXISTING SPRING	— PROPOSED PATH	
	AZL ★ AZIMUTH POINT LOCATION	

JACKSON SURVEYING
 INC.
 2413 EAST PIKE ST. # 112
 Clarksburg, WV 26302
 304-623-5851

WELL BORE TRACTS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	BRIGGS GLADYS R EST (S/R)	07-16-02
TRACT	SURFACE OWNER (S)	TAX PARCEL
2	YEATER PRESTON & HEATHER L (S)	07-16-29.4
3	YEATER PRESTON A ET UX (S)	07-16-16.1
4	CONSOL MINING COMPANY LLC ATTN: LAND ADMIN/PROPERTY TAX (S)	07-10-08
5	BUZZARD DONALD G ET UX (S)	07-10-07
6	CLARK CHARLES R & WHIPKEY MARILYN V (S)	07-10-11
7	CLARK CHARLES R & WHIPKEY MARILYN V (S)	07-10-05
8	ANDERSON ALVIN RICKEY ET AL (S)	07-10-06
9	STERN DONALD G ET AL (S)	07-10-6.1
10	CLARK CHARLES R S)	07-10-01
11	KASSERMAN RONALD WM (S)	07-08-09
12	FIFE HOWARD C - LIFE - DOWNING STEVEN D (S)	07-08-9.1
13	STERN BLAINE E JR (S)	07-08-12
14	DOBBS JOHN ALFRED & LEORA - LIFE (S)	07-08-04
15	KERNS DANNY R & FRANCES V ESTS (S)	07-08-02
16	CONSOLIDATION COAL COMPANY MURRAY ENERGY C/O LAND DEPT (S)	09-12-14

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	BRIGGS JACK J	07-16-05
B	MASON DIXON FARMS LLC	07-16-06
C	MASON DIXON FARMS LLC	07-17-19.1
D	MASON DIXON FARMS LLC	07-17-19
E	SIMMS ROBERT S & SHELIA D	07-17-18
F	MCCULLEY BETTY TAYLOR ET VIR	07-17-17
G	MCCULLEY BETTY TAYLOR ET VIR	07-17-14
H	MCCULLEY BETTY TAYLOR ET VIR	07-09-34
I	MCCULLEY BETTY TAYLOR ET VIR	07-09-33
J	BERNAS JOSEPH C	07-09-32
K	BUZZARD DONALD G ET UX	07-09-28
L	ASTON PAUL & SUSAN	07-09-26
M	NOUILLET BENJAMIN R & CARLA J	07-10-1.1
N	CLARK CHARLES R & WHIPKEY MARILYN V	07-09-28.2
O	HINERMAN MARK P & SHELLI W DANNER	07-09-25
P	DOBBS GARY L	07-09-24
Q	ASTON PAUL & SUSAN	07-09-21
R	DOBBS JOHN ALFRED & LEORA - LIFE	07-09-23
S	DOBBS JOHN ALFRED & LEORA - LIFE	07-08-08
T	DOBBS JOHN ALFRED & LEORA - LIFE	07-08-05
U	WHIPKEY DAVID & CAROL TRUSTR; KELLEY ELIZABETH J; HAGIN RANDOLPH EUGENE	09-12-17
V	WHIPKEY DAVID L & DAVID MATTHEW	09-12-12
W	WHIPKEY DAVID L & DAVID MATTHEW	09-12-15
X	LATTER DAY SAINTS CHURCH	09-09-15
Y	KERNS DANNY R & FRANCES V ESTS	09-09-14
Z	KERNS DANNY R & FRANCES V ESTS	09-09-13
A2	KERNS DANNY R & FRANCES V ESTS	07-08-01
B2	KERNS DANNY R & FRANCES V ESTS	07-01-03
C2	CONSOLIDATION COAL COMPANY MURRAY ENERGY C/O LAND DEPT	07-01-04
D2	EVANS KAREN S & MATTHEWS JUDY M	07-01-05
E2	BURRIS GEO A ET AL	07-08-14
F2	STERN BLAINE E JR	07-08-13
G2	STERN BLAINE E JR	07-08-11
H2	GRAHAM WAYNE E JR ET UX	07-07-04
I2	CLARK CHARLES R & WHIPKEY MARILYN V	07-10-04
J2	SCHWING RICKY	07-10-02
K2	STERN PAUL F	07-10-03
L2	CLARK CHARLES R & WHIPKEY MARILYN V	07-10-4.1
M2	CLARK CHARLES R & WHIPKEY MARILYN V	07-10-12
N2	DOBBS GARY RAY ET AL	07-10-18
O2	CLARK JAMES M	07-10-09
P2	LEMASTERS VINCENT E	07-10-24
Q2	YEATER THELMA - LIFE	07-16-29
R2	YEATER PRESTON A ET UX	07-16-29.2
S2	BRIGGS GLADYS R EST	07-16-03
T2	BRIGGS JACK	07-16-2.1
U2	BRIGGS PATTY K	07-16-2.2

REVISIONS:	COMPANY:	 		
	OPERATOR'S	GLADYS BRIGGS MSH	API #:	DATE: 10-25-2021
	WELL #:	5H	047-051-02370	DRAWN BY: N. MANO
	DISTRICT:	COUNTY:	STATE:	SCALE: N/A
	LIBERTY	MARSHALL	WV	DRAWING NO:
				WELL LOCATION PLAT 2

12/03/2021