

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

API 47103035780000 County WETZEL District PROCTOR
Quad WILLEYVILLE, WV Pad Name WILLIAM RITCHEA-WTZ-PAD1 Field/Pool Name VICTORY FIELD WET
Farm Name WILLIAM D. RITCHEA & SHIRLEY E. RITCHEA Well Number WILLIAM RITCHEA WTZ 405H
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 4,391,135.16 Easting 529,217.77
Bottom Hole Northing 4,391,298.00 Easting 530,545.30
Northing 4,392,625.14 Easting 528,717.95

Elevation (ft) 1563' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviate Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrill Re-Work Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other
Type of Completion Single Multiple Fluids 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
See attached Mud Summary Report

Date permit issued 2023-05-08 Date drilling commenced 2023-06-05 Date drilling ceased 2023-06-17
Date Completion activities began 2023-08-17 Date Completion activities ceased 2023-09-24
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 541' Oprn mine(s) (Y/N) depths N
Salt water depth(s) ft 1,556' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1,533' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

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APPROVED

Reviewed by: [Signature]
1-31-24

03/01/2024

API 47103035780000 Farm name WILLIAM D. RITCHEA & SHIRLEY E. RITCHEA Well number WILLIAM RITCHEA WTZ 405H

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	24.000	20.000	136	NEW	94.00	J-55		Y	
Surface	17.500	13.375	593	NEW	54.50	J-55		Y/	60 BBLS
Coal									
Intermediate 1	12.250	9.625	3280	NEW	36.00	J-55		Y/	54 BBLS
Intermediate 2									
Intermediate 3									
Production	8.500	5.500	17192	NEW	20.00	P-110 HP		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 ²)	Cement Top (MD)	WOC (hrs)
Conductor	CLASS A	GROUT TO SURFACE				SURFACE	24
Surface	CLASS A	709	15.6	1.19	843.71	SURFACE	8
Coal							
Intermediate 1	CLASS A	1215	15.6	1.18	1,433.70	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	2864	15.6	1.29	3,694.56	1,256	8
Tubing							

Drillers TD (ft) 17,194 Loggers TD (ft) 17,194
 Deepest formation penetrated MARCELLUS Plug back to (ft) 17,102
 Plug back procedure N/A

Kick off depth (ft) 8,415' 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: **40** CENTRALIZERS - EVERY THIRD JOINT OF CASING
 PRODUCTION: **397** 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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API 47103035780000 Farm name WILLIAM D. RITCHEA & SHIRLEY E. RITCHEA Well number WILLIAM RITCHEA WTZ 405H

PRODUCING FORMATION(S)	DEPTHS	
<u>MARCELLUS</u>	<u>7,063</u> TVD	<u>9,534'</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3,415 psi Bottom Hole _____ psi DURATION OF TEST (hrs) _____

OPEN FLOW GAS 22,808 mcpd OIL 7 bpd NGL _____ bpd WATER 819 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					

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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 SPECIALIST Date 12.13.2023

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Attach copy of FRACFOCUS Registry

Denise Grantham

03/01/2024

**WILLIAM RITCHEA WTZ 405H
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
1	7/31/2023	17,102	17,005	36
2	8/18/2023	16,971	16,793	36
3	8/18/2023	16,760	16,582	36
4	8/18/2023	16,549	16,371	36
5	8/19/2023	16,337	16,159	36
6	8/19/2023	16,126	15,948	36
7	8/20/2023	15,915	15,737	36
8	8/20/2023	15,704	15,526	36
9	8/20/2023	15,492	15,314	36
10	8/20/2023	15,281	15,103	36
11	8/21/2023	15,070	14,892	36
12	8/21/2023	14,859	14,681	36
13	8/21/2023	14,647	14,469	36
14	8/21/2023	14,436	14,258	36
15	8/22/2023	14,225	14,047	36
16	8/22/2023	14,014	13,836	36
17	8/22/2023	13,802	13,624	36
18	8/22/2023	13,591	13,413	36
19	8/23/2023	13,380	13,202	36
20	8/24/2023	13,169	12,991	36
21	8/24/2023	12,958	12,780	36
22	8/24/2023	12,746	12,568	36
23	8/25/2023	12,535	12,357	36
24	8/25/2023	12,324	12,146	36
25	8/26/2023	12,113	11,935	36
26	8/26/2023	11,901	11,723	36
27	8/26/2023	11,690	11,512	36
28	8/27/2023	11,479	11,301	36
29	8/27/2023	11,268	11,090	36
30	8/28/2023	11,056	10,878	36
31	8/28/2023	10,845	10,667	36
32	8/29/2023	10,634	10,456	36
33	8/30/2023	10,423	10,245	36
34	8/30/2023	10,212	10,033	36
35	8/30/2023	10,000	9,822	36
36	8/31/2023	9,789	9,611	36

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WILLIAM RICHA WTZ 405H
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	8/17/2023	74.5	7,284	8,828	4,214	192,500	5,932	0
2	8/18/2023	71.7	7,596	5,410	4,321	315,000	9,022	0
3	8/18/2023	73.1	7,729	5,124	4,214	315,000	9,163	0
4	8/19/2023	85.1	7,948	4,844	4,582	315,000	8,939	0
5	8/19/2023	82.7	8,647	5,853	4,315	315,000	8,278	0
6	8/19/2023	98.7	9,023	6,220	4,658	315,000	9,008	0
7	8/20/2023	89.3	8,638	6,524	4,218	315,000	8,983	0
8	8/20/2023	92.9	8,774	6,427	5,038	315,000	8,919	0
9	8/20/2023	97.7	9,312	6,555	4,825	315,000	8,949	0
10	8/20/2023	99	9,170	6,009	4,458	315,000	8,817	0
11	8/21/2023	99	8,967	5,447	4,205	315,000	8,153	0
12	8/21/2023	92.9	8,766	5,780	4,625	315,000	8,309	0
13	8/21/2023	89.7	9,035	7,314	4,820	315,000	8,086	0
14	8/21/2023	98	8,522	6,177	4,600	315,000	7,895	0
15	8/22/2023	98.9	8,699	6,533	4,561	315,000	7,626	0
16	8/22/2023	86.4	8,653	6,954	4,545	315,000	7,866	0
17	8/22/2023	79.6	7,932	5,936	3,985	315,000	7,660	0
18	8/23/2023	89.2	8,403	6,064	4,215	315,000	8,047	0
19	8/23/2023	95.8	9,057	6,309	5,214	315,000	7,903	0
20	8/24/2023	95.7	8,703	6,200	4,832	315,000	8,049	0
21	8/24/2023	90.8	8,568	5,980	4,300	315,000	7,822	0
22	8/25/2023	94.1	8,392	6,106	4,850	315,000	8,172	0
23	8/25/2023	98.9	8,546	5,946	4,852	315,000	7,669	0
24	8/26/2023	98.9	8,371	5,808	4,685	315,000	7,811	0
25	8/26/2023	83	7,139	5,875	4,300	314,200	8,272	0
26	8/26/2023	93.6	8,320	5,634	4,300	315,000	7,740	0
27	8/27/2023	94.1	7,732	5,903	4,200	315,000	7,538	0
28	8/27/2023	98.7	7,517	5,781	4,002	313,190	7,876	0
29	8/28/2023	99.1	7,981	5,259	4,258	312,040	7,603	0
30	8/28/2023	80.7	7,052	6,100	4,500	315,000	8,546	0
31	8/29/2023	92.3	7,968	6,040	4,752	312,220	8,496	0
32	8/29/2023	99.2	8,294	6,009	4,425	313,400	8,536	0
33	8/30/2023	93.6	7,682	5,173	4,685	314,620	8,943	0
34	8/30/2023	84	7,379	5,836	5,022	315,000	8,988	0
35	8/31/2023	85.5	7,424	5,981	4,877	315,000	8,814	0
36	8/31/2023	79.6	7,497	6,168	4,763	313,440	9,230	0

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Well Name: William Ritchea WTZ 405H 47103035780000

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	541.00	541.00	
Top of Salt Water	1556.00	1556.00	NA	NA	
Pittsburgh Coal	1533.00	1502.00	1541.00	1509.00	
Raven Cliff (ss)	2110.00	1989.00	2762.00	2523.00	
Maxton (ss)	2762.00	2523.00	2867.00	2610.00	
Big Injun (ss)	2947.00	2677.00	3696.00	3276.00	
Berea (siltstone)	3696.00	3276.00	3726.00	3299.00	
Rhinstreet (shale)	8645.00	7011.00	8928.00	7241.00	
Cashaqua (shale)	8928.00	7241.00	9095.00	7370.00	
Middlesex (shale)	9095.00	7370.00	9234.00	7464.00	
Burket (shale)	9234.00	7464.00	9282.00	7493.00	
Tully (ls)	9282.00	7493.00	9326.00	7518.00	
Mahantango (shale)	9326.00	7518.00	9534.00	7603.00	
Marcellus (shale)	9534.00	7603.00	NA	NA	GAS

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	8/17/2023
Job End Date:	8/31/2023
State:	West Virginia
County:	Wetzel
API Number:	47-103-03578-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	WILLIAM RITCHEA WTZ 405
Latitude:	39.66952111
Longitude:	-80.65904889
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,634
Total Base Water Volume (gal):	12,467,520
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	89.96140	Density = 8.345
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.25971	

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				Water	7732-18-5	85.00000	0.25971	
				Water	7732-18-5	45.00000	0.25971	
Tolicide 4Frac	SWN Well Services	Biocide			Listed Below			
Sand	SWN Well Services	Proppant			Listed Below			
Plexslick V996	SWN Well Services	Friction Reducer			Listed Below			
HCL	SWN Well Services	Solvent			Listed Below			
FSTI-CI-02	SWN Well Services	Corrosion Inhibitor			Listed Below			
Plexaid 655NM	SWN Well Services	Scale Inhibitor			Listed Below			
Ferriplex 80	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	9.68914	
				Hydrochloric Acid	7647-01-0	15.00000	0.03961	

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Latitude: 39°42'30" SURFACE HOLE 9,664'

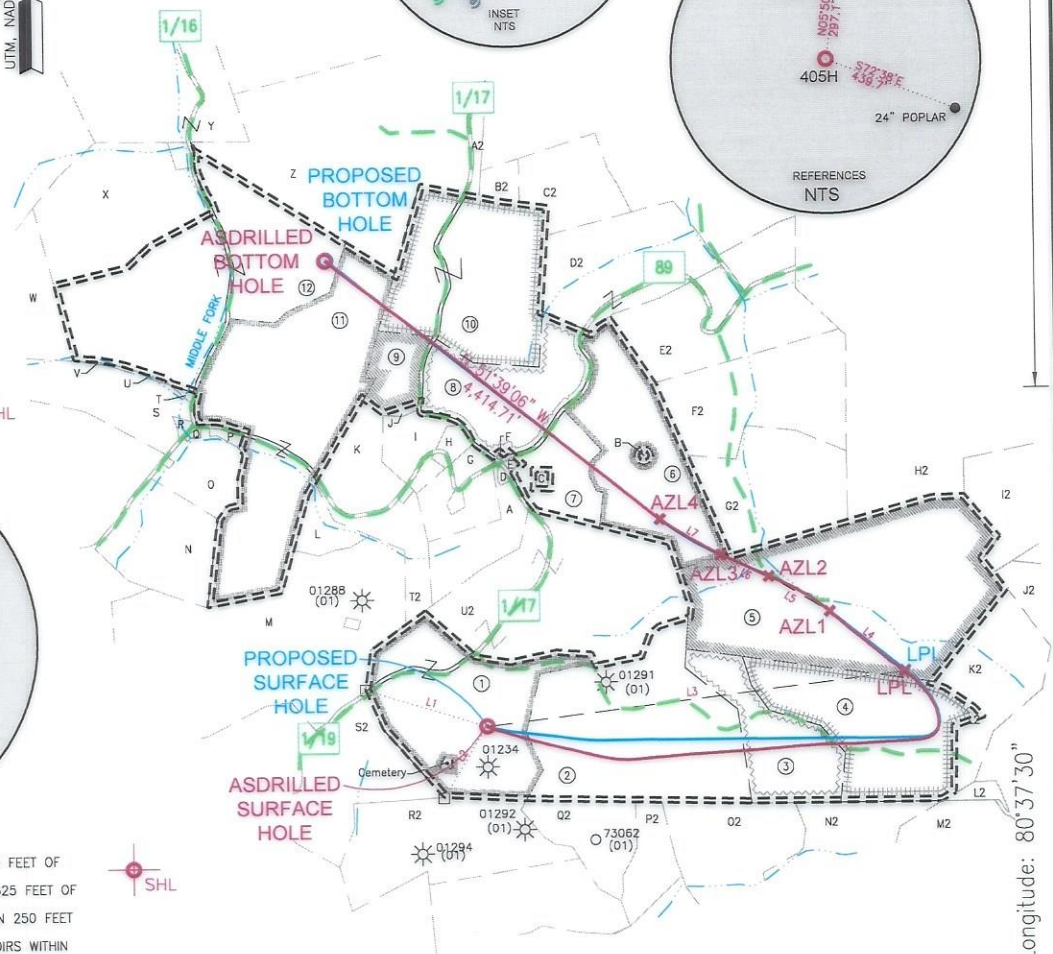
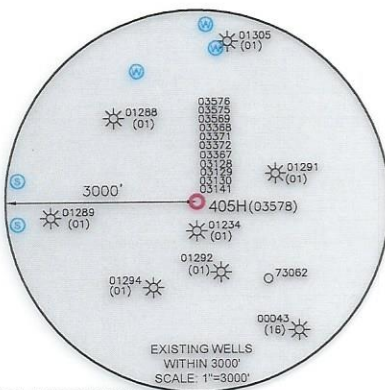
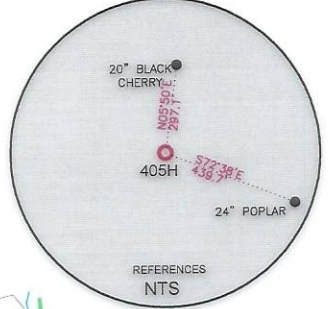
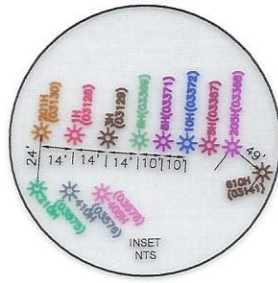
BOTTOM HOLE 11,285'

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

Table with columns: LINE, BEARING, DISTANCE, DESCRIPTION, MONUMENT. Contains survey data for lines L1 through L7.

Location data tables for SHL, LPL, and BHL including UTM coordinates (NORTHING, EASTING).

Location data tables for SHL, LPL, and BHL including UTM coordinates (NORTHING, EASTING).



WELL RESTRICTIONS

- List of 7 well restrictions including distance requirements from buildings, streams, and other wells.

NOTES ON SURVEY

- Notes on survey including statements about boundary accuracy and the surveyor's certification.



COMPANY: SWN SWN Production Company, LLC Production Company, LLC

Form fields for well identification: (+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS, WVDEP OFFICE OF OIL & GAS, MINIMUM DEGREE OF ACCURACY: 1/200, OPERATOR'S WELL #: 405H, API WELL #: 47, 103, 03578.

Form fields for well type and location: WELL TYPE: OIL, WASTE DISPOSAL, PRODUCTION, DEEP, GAS, LIQUID INJECTION, STORAGE, SHALLOW; WATERSHED: FISH CREEK (HUC-10); DISTRICT: PROCTOR; COUNTY: WETZEL; SURFACE OWNER: WILLIAM D. RITCHEA & SHIRLEY E. RITCHEA; OIL & GAS ROYALTY OWNER: WILLIAM D. RITCHEA & SHIRLEY E. RITCHEA; 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: 7,630'.

Form fields for well operator and agent: 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.



Form fields for legend and revisions: LEGEND: SURVEYED BOUNDARY, DRILLING UNIT, LEASE BOUNDARY, ASDRILLED PATH, PROPOSED PATH; REVISIONS; DATE: 07-10-2023; DRAWN BY: N. MANO; SCALE: 1" = 2000'; DRAWING NO.; WELL LOCATION PLAT.

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	RITCHEA WILLIAM D & SHIRLEY E (S/R)	12-15-21
TRACT	SURFACE OWNER (S)	
2	CHRISTY MICHAEL M JR ETAL & HALL SUSAN (S)	12-15-22
3	HEETER HAROLD JR ETAL (S)	12-15-23
4	FERRELL HANNAH RAINE; FERRELL JOSEPH ROSS (S)	12-15-24
5	LEMASTERS DOLLY G EST (S)	12-15-19
6	HAESSLY LAND AND TIMBER LLC (S)	12-15-05
7	HAESSLY LAND AND TIMBER LLC (S)	12-15-17
8	HAESSLY LAND AND TIMBER LLC (S)	12-15-04
9	HUGGINS JOSEPH DEAN; HUGGINS BOBBIE SUE (S)	12-15-1
10	HUGGINS JOSEPH DEAN; HUGGINS BOBBIE SUE (S)	12-10-31
11	RITCHEA WILLIAM D & SHIRLEY E (S)	12-14-09
12	GODDARD WAYNE (S)	12-09-46

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	RITCHEA GARY A & ALICIA L	12-15-15
B	CALVERT CECIL B HRS	12-15-5.1
C	CALVERT CEMETERY	12-15-17.1
D	RITCHEA GARY	12-15-15.1
E	STILES MARILYN DIANE; STILES JESSIE GLENN	12-15-16
F	RITCHEA JAMES L	12-15-4.1
G	STILES MARILYN DIANE; STILES JESSIE GLENN	12-15-14.2
H	URBANEK SCOTT J & URBANEK CHRYSTAL A	12-15-03
I	LEMASTERS TONY & ROBIN	12-15-02
J	LEMASTERS TONY & ROBIN	12-15-1.1
K	LEMASTERS TONY & ROBIN	12-15-13.2
L	RITCHEA WILLIAM D & SHIRLEY E	12-15-34
M	PITOSCIA WILLIAM R	12-14-16
N	LASURE MICHAEL E & VELVA C	12-14-06
O	HUGGINS WAYNE & SANDRA	12-14-09.1
P	LEMASTERS TONY R & ROBIN M	12-14-09.2
Q	HUGGINS WAYNE & SANDRA	12-14-08
R	HUGGINS WAYNE & SANDRA M	12-14-07
S	HUGGINS WAYNE & SANDRA M	12-09-46.1
T	GODDARD WAYNE	12-09-46.4
U	HUGGINS WAYNE & SANDRA M	12-09-46.2
V	GODDARD WAYNE	12-09-46.3
W	KEENEY NORMAN E JR & NANCY M	12-09-45
X	WOODSTUFF JOYCE K	12-09-44
Y	GODDARD WAYNE L	12-09-33
Z	HAESSLY HARDWOOD LUMBER CO	12-10-23
A2	RITCHEA MARY L & JAMES L	12-10-24
B2	HUGGINS JOSEPH DEAN; HUGGINS BOBBIE SUE	12-10-25
C2	SWN PRODUCTION COMPANY LLC	12-10-26
D2	HAESSLY LAND AND TIMBER LLC	12-10-32
E2	HAESSLY LAND AND TIMBER LLC	12-10-33
F2	HAESSLY LAND AND TIMBER LLC	12-15-06
G2	HAESSLY LAND AND TIMBER LLC	12-15-07
H2	DREYER JOSEPH C	12-15-08
I2	HAESSLY LAND AND TIMBER LLC	12-15-10
J2	WYKERT ERIC D & CEE JAE; WOOD JAMES G & TAMELA P	01-07-21
K2	FERRELL HANNAH RAINE; FERRELL JOSEPH ROSS	01-07-29
L2	WYKERT WAYNE & ASHLEY	01-10-14
M2	WOOD GLENN & TAMELA P	01-10-09
N2	YOHO KIMBERLY & KEITH ALLEN	12-15-29
O2	BROWN SANDY K	12-15-28
P2	BROWN SANDY K	12-15-27
Q2	CHRISTY MICHAEL M JR ETAL; HALL SUSAN	12-15-26
R2	CHRISTY MICHAEL M JR ETAL; HALL SUSAN	12-15-25
S2	PITOSCIA WILLIAM R	12-14-27
T2	URBANEK SCOTT J & CHRYSTAL A	12-15-13
U2	LEMASTERS H C HRS & MANKER CHARLES V REVOC LIVING TR	12-15-18

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REVISIONS:	COMPANY:		
			
	OPERATOR'S	WILLIAM RITCHEA WTZ	API #:
	WELL #:	405H	47-103-03578
	DISTRICT:	PROCTOR	COUNTY:
			WETZEL
			STATE:
			WV
			DATE: 07-10-2023
			DRAWN BY: N. MANO
			SCALE: N/A
			DRAWING NO:
			WELL LOCATION PLAT 2

NO DISCHARGE

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Discharge Monitoring Report
Oil and Gas General Permit

Company Name: SWN PRODUCTION COMPANY, LLC
API No: 47-103-03578 County: WETZEL
District: PROCTOR Well No: WILLIAM RITCHEA WTZ 405H
Farm Name: WILLIAM D. RITCHEA & SHIRLEY E. RITCHEA

Discharge Date/s From:(MMDDYY) _____ To: (MMDDYY) _____
Discharge Times. From: _____ To: _____

Total Volume to be Disposed from this facility (gallons): _____

Disposal Option(s) Utilized (write volumes in gallons): _____

- (1) Land Application: _____ (Include a topographical map of the Area.)
- (2) UIC: _____ Permit No. _____
- (3) Offsite Disposal: _____ Site Location: _____
- (4) Reuse: _____ Alternate Permit Number: _____
- (5) Centralized Facility: _____ Permit No. _____
- (6) Other method: _____ (Include an explanation)

Follow Instructions below to determine your treatment category:

Optional Pretreatment test: _____ Cl- mg/l _____ DO mg/l

1. Do you have permission to use expedited treatment from the Director or his representative?
(Y/N) _____ If yes, who? _____ and place a four (4) on line 7.
If not go to line 2
2. Was Frac Fluid or flowback put into the pit? (Y/N) _____ If yes, go to line 5. If not, go to line 3.
3. Do you have a chloride value pretreatment (see above)? (Y/N) _____ If yes, go to line 4
If not, go to line 5.
4. Is the Chloride level less than 5000 mg/l? (Y/N) _____ If yes, then enter a one (1) on line 7.
5. Do you have a pretreatment value for DO? (See above) (Y/N) _____ If yes, go to line 6
If not, enter a three (3) in line 7.
6. Is the DO level greater than 2.5 mg/l?(Y/N) _____ If yes, enter a two (2) on line 7. If not, enter a three (3) on line 7.
7. _____ is the category of your pit. Use the Appropriate section.
8. Comments on Pit condition: _____

Name of Principal Exec. Officer: _____
Title of Officer: _____
Date Completed: _____

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Dennis Grantham 12.13.23
Signature of a Principal Exec. Officer or Authorized agent.

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APPROVED

03/01/2024

Category 1
Sampling Results

API No : _____

Parameter	Predischarge		Discharge		Units
	Limits	Reported	Limits	Reported	
pH	6-10	_____	6-10	_____	S.U
Settling Time	5	_____	N/A	N/A	Days
Fe	6	_____	6	_____	mg/l
D.O.	2.5	_____	2.5	_____	mg/l
Settleable Sol.	0.5	_____	0.5	_____	mg/l
Cl	5,000	_____	5,000	_____	mg/l
Oil	Trace	_____	Trace	_____	Obs.
TOC**		_____	Monitor	_____	mg/l
Oil and Grease		_____	Monitor	_____	mg/l
Total Al***		_____	Monitor	_____	mg/l
TSS		_____	Monitor	_____	mg/l
Total Mn	Monitor	_____	Monitor	_____	mg/l
Volume		_____	Monitor	_____	Gal
Flow		_____	Monitor	_____	Gal/min
Disposal Area		_____	Monitor	_____	Acres

*** Al is only reported if the pH is above 9.0

Category 2
Sampling Results

API No : _____

Parameter	Predischarge		Discharge		Units
	Limits	Reported	Limits	Reported	
pH	6-10	_____	6-10	_____	S.U
Settling Time	10	_____	N/A	N/A	Days
Fe	6	_____	6	_____	mg/l
D.O.	2.5	_____	2.5	_____	mg/l
Settleable Sol.	0.5	_____	0.5	_____	mg/l
Cl*	12,500	_____	12,500	_____	mg/l
Oil	Trace	_____	Trace	_____	Obs.
TOC**		_____	Monitor	_____	mg/l
Oil and Grease		_____	Monitor	_____	mg/l
Total Al***		_____	Monitor	_____	mg/l
TSS		_____	Monitor	_____	mg/l
Total Mn	Monitor	_____	Monitor	_____	mg/l
Volume		_____	Monitor	_____	Gal
Flow		_____	Monitor	_____	Gal/min
Disposal Area		_____	Monitor	_____	Acres

* Can be 25,000 with inspector's approval,

(Inspector's signature): _____

Date: _____

** Include a description of your aeration technique.

Aeration Code: _____

*** Al is only reported if the pH is above 9.0

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Category 3
Sampling Results
API No : _____

Parameter	Predischarge		Discharge		Units
	Limits	Reported	Limits	Reported	
pH	6-10	_____	6-10	_____	S.U
Settling Time	20	_____	N/A	N/A	Days
Fe	6	_____	6	_____	mg/l
D.O.	2.5	_____	2.5	_____	mg/l
Settleable Sol.	0.5	_____	0.5	_____	mg/l
Cl*	12,500	_____	12,500	_____	mg/l
Oil	Trace	_____	Trace	_____	Obs.
TOC**		_____	Monitor	_____	mg/l
Oil and Grease		_____	Monitor	_____	mg/l
Total Al***		_____	Monitor	_____	mg/l
TSS		_____	Monitor	_____	mg/l
Total Mn	Monitor	_____	Monitor	_____	mg/l
Volume		_____	Monitor	_____	Gal
Flow		_____	Monitor	_____	Gal/min
Disposal Area		_____	Monitor	_____	Acres

* Can be 25,000 with inspector's approval,

(Inspector's signature): _____ Date: _____
 ** Include a description of your aeration technique. Aeration Code: _____
 *** Al is only reported if the pH is above 9.0.

Category 4
Sampling Results
API No: _____

Parameter	Predischarge		Discharge		Units
	Limits	Reported	Limits	Reported	
pH	6-10	_____	6-10	_____	S.U
Settling Time	1	_____	N/A	N/A	Days
Fe	Monitor	_____	Monitor	_____	mg/l
D.O.	Monitor	_____	Monitor	_____	mg/l
Settleable Sol.	Monitor	_____	Monitor	_____	mg/l
Cl*	12,500	_____	12,500	_____	mg/l
Oil	Trace	_____	Trace	_____	Obs.
TOC**		_____	Monitor	_____	mg/l
Oil and Grease		_____	Monitor	_____	mg/l
TSS		_____	Monitor	_____	mg/l
Total Mn	Monitor	_____	Monitor	_____	mg/l
Volume		_____	Monitor	_____	Gal
Flow		_____	Monitor	_____	Gal/min
Activated Carbon (0.175)		_____	N/A	N/A	lb/B1
Date Site Reclaimed	N/A	N/A			10 days from dis.
Disposal Area		_____	Monitor	_____	Acres

* Can be 25,000 with inspector's approval,

(Inspector's signature):  _____ Date: _____

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10 days from dis.