

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

API 47 - 103 - 03185 County WETZEL District PROCTOR
Quad WILEYVILLE Pad Name DANIEL DURIG WTZ PAD Field/Pool Name VICTORY
Farm name DANIEL DURIG (REMAINDERMAN), ARTHUR & SHIRLEY ANN DURIG (LE) Well Number DANIEL DURIG WTZ 101H
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 4,396,396.342 Easting 530,924.763
Landing Point of Curve Northing 4,396,461.740 Easting 530,898.574
Bottom Hole Northing 4,397,574.655 Easting 529,693.319

Elevation (ft) 1401.5' 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 07/21/2017 Date drilling commenced 11/15/2017 Date drilling ceased 12/21/2017
Date completion activities began 05/07/2018 Date completion activities ceased 08/23/2018 RECEIVED
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A Office of Oil and Gas
NOV 20 2018

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug WV Department of Environmental Protection

Freshwater depth(s) ft 427' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1,664' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1,167' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by: DMH
2-21-18

API 47- 103 - 03185

Farm name DANIEL DURIG (REMAINDERMAN), ARTHUR & SHIRLEY ANN DURIG (LE)

Well number DANIEL DURIG Wtz 101H

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	529'	NEW	J-55/54.50#		Y, 19 bbls
Coal	See Intermediate						
Intermediate 1	12.25	9.625	2,714'	NEW	J-55/36#		Y
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	13,030'	NEW	HCP-110/20#		Y
Tubing		2.375	7,600'	NEW	P-110/4.7#		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	485	15.60	1.19	577.15	SURFACE	8
Coal	See Intermediate						
Intermediate 1	CLASS A	1,053	15.60	1.18	1,242.54	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	2,174	15.60	1.18	2,565.32	SURFACE	24
Tubing							

Drillers TD (ft) 13,030' Loggers TD (ft) 13,030'

Deepest formation penetrated MARCELLUS Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) 6,630'

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

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 _____

API 47- 103 - 03185

Farm name DANIEL DURIG (REMAINDERMAN), ARTHUR & SHIRLEY ANN DURIG (LE)

Well number DANIEL DURIG WTZ 101H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>MARCELLUS</u>	<u>7,226'</u> TVD	<u>7,516'</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 4,351 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 9,171 mcfpd Oil 76 bpd NGL _____ bpd Water 63 bpd
 GAS MEASURED BY Estimated Orifice Pilot

<u>LITHOLOGY/ FORMATION</u>	<u>TOP</u>	<u>BOTTOM</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 RD City THE WOODLANDS State TX Zip 77380

Cementing Company SCHLUMBERGER WELL SERVICES
 Address 10101 WOODLOCH FOREST DR City THE WOODLANDS State TX Zip 77380

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

Please insert additional pages as applicable.

Completed by ELIZABETH GEE Telephone 832-796-7632
 Signature  Title STAFF REGULATORY ANALYST Date 11/19/2018

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**DANIEL DURIG WTZ 101H
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
1	4/6/2018	12,922	12,855	33
2	5/8/2018	12,822	12,750	33
3	5/8/2018	12,717	12,645	33
4	5/20/2018	12,612	12,540	33
5	5/21/2018	12,507	12,435	33
6	5/21/2018	12,402	12,330	33
7	5/22/2018	12,297	12,225	33
8	5/22/2018	12,192	12,120	33
9	5/23/2018	12,087	12,015	33
10	5/24/2018	11,982	11,910	33
11	5/24/2018	11,877	11,805	33
12	5/25/2018	11,772	11,700	33
13	5/26/2018	11,667	11,595	33
14	5/27/2018	11,562	11,490	33
15	5/28/2018	11,457	11,385	33
16	5/28/2018	11,352	11,280	33
17	5/29/2018	11,247	11,175	33
18	5/29/2018	11,142	11,070	33
19	5/30/2018	11,037	10,965	33
20	5/30/2018	10,932	10,860	33
21	5/31/2018	10,827	10,755	33
22	5/31/2018	10,722	10,650	33
23	6/1/2018	10,617	10,545	33
24	6/1/2018	10,512	10,440	33
25	6/1/2018	10,407	10,335	33
26	6/2/2018	10,302	10,230	33
27	6/2/2018	10,197	10,125	33
28	6/3/2018	10,092	10,020	33
29	6/3/2018	9,987	9,915	33
30	6/4/2018	9,882	9,810	33
31	6/5/2018	9,777	9,705	33
32	6/5/2018	9,672	9,600	33
33	6/6/2018	9,567	9,495	33
34	6/6/2018	9,462	9,390	33
35	6/8/2018	9,357	9,285	33
36	6/8/2018	9,252	9,180	33
37	6/9/2018	9,147	9,075	33
38	6/9/2018	9,042	8,970	33
39	6/10/2018	8,937	8,865	33
40	6/11/2018	8,832	8,760	33
41	6/11/2018	8,727	8,655	33
42	6/13/2018	8,622	8,550	33

DANIEL DURIG WTZ 101H
ATTACHMENT 1
PERF REPORT

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
43	6/14/2018	8,517	8,445	33
44	6/14/2018	8,412	8,340	33
45	6/15/2018	8,307	8,235	33
46	6/16/2018	8,202	8,130	33
47	6/17/2018	8,097	8,025	33
48	6/18/2018	7,992	7,920	33
49	6/18/2018	7,887	7,815	33
50	6/19/2018	7,782	7,710	33
51	6/21/2018	7,677	7,605	33

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DANIEL DURIG WTZ 101H
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	5/7/2018	75	7,731	8,012	4,317	200,780	4,107	0
2	5/8/2018	76	7,882	7,912	4,592	204,040	4,352	0
3	5/10/2018	22	6,590	6,184	7,576	116,577	10,190	0
4	5/20/2018	74	7,705	6,361	4,861	205,520	4,410	0
5	5/21/2018	78	7,883	7,327	4,860	222,490	4,020	0
6	5/22/2018	58	7,292	7,191	5,838	127,744	3,964	0
7	5/22/2018	75	7,881	7,214	4,908	204,200	6,769	0
8	5/23/2018	74	7,760	6,672	4,693	202,000	4,342	0
9	5/24/2018	73	7,502	6,191	4,958	213,595	4,016	0
10	5/24/2018	69	7,819	7,184	4,608	213,766	6,178	0
11	5/25/2018	79	7,768	6,822	4,635	202,700	3,900	0
12	5/26/2018	73	7,703	6,407	4,609	207,940	4,012	0
13	5/27/2018	59	7,023	6,679	5,109	178,767	4,247	0
14	5/27/2018	68	8,037	7,385	5,319	216,906	5,943	0
15	5/28/2018	78	7,381	6,951	4,832	217,760	4,115	0
16	5/29/2018	77	7,960	6,703	5,311	178,334	3,693	0
17	5/29/2018	78	7,716	6,668	4,880	225,806	3,959	0
18	5/30/2018	72	8,039	6,664	4,587	219,580	3,922	0
19	5/30/2018	73	8,013	6,551	4,792	201,340	3,689	0
20	5/31/2018	66	8,034	7,647	4,643	202,920	3,716	0
21	5/31/2018	75	8,056	8,537	4,704	201,300	3,265	0
22	6/1/2018	73	8,081	8,255	4,564	199,860	3,606	0
23	6/1/2018	76	7,576	8,171	4,802	199,240	3,297	0
24	6/1/2018	77	8,149	8,326	4,838	198,040	3,455	0
25	6/2/2018	73	8,116	8,190	4,664	202,660	3,583	0
26	6/2/2018	71	8,051	7,880	4,209	202,920	3,278	0
27	6/3/2018	75	7,982	8,222	4,506	198,700	3,374	0
28	6/3/2018	75	7,889	8,372	4,589	203,900	3,372	0
29	6/4/2018	69	7,821	8,301	4,703	203,340	3,497	0
30	6/4/2018	77	7,927	8,237	5,134	203,220	3,326	0
31	6/5/2018	80	7,712	8,258	4,117	196,420	3,448	0
32	6/6/2018	75	7,841	7,701	4,402	203,380	3,292	0
33	6/6/2018	83	7,726	7,704	4,487	204,280	3,399	0
34	6/7/2018	79	7,827	7,021	4,703	205,840	3,365	0
35	6/8/2018	81	7,553	7,608	4,857	202,120	3,294	0
36	6/8/2018	78	7,842	7,667	4,407	197,980	3,200	0
37	6/9/2018	83	7,820	6,790	4,271	201,320	3,280	0
38	6/10/2018	69	7,863	7,743	5,510	205,200	3,270	0
39	6/10/2018	76	7,691	6,344	4,349	206,460	3,335	0
40	6/11/2018	78	7,504	7,117	4,446	203,500	3,217	0
41	6/12/2018	75	7,766	8,575	4,678	204,160	3,114	0
42	6/13/2018	74	7,483	6,511	4,505	219,400	3,644	0
43	6/14/2018	79	7,772	6,796	4,747	212,720	3,577	0
44	6/15/2018	54	8,463	7,439	5,654	104,311	5,093	0
45	6/16/2018	71	7,614	8,144	5,187	208,300	3,425	0
46	6/17/2018	72	7,733	7,697	5,440	168,280	3,193	0
47	6/17/2018	78	7,016	6,277	4,529	205,020	3,312	0
48	6/18/2018	80	7,097	6,380	5,605	201,420	3,265	0
49	6/19/2018	80	7,481	7,571	4,945	204,960	3,497	0
50	6/21/2018	79	7,343	6,855	4,847	224,469	3,170	0
51	6/21/2018	76	7,630	7,102	4,351	210,960	3,160	0

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Attachment 3

Well Name: Daniel Durig WTZ 101H

47103031850000

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	427.00	427.00	
Top of Salt Water	1664.00	1664.00	NA	NA	
Pittsburgh Coal	1167.00	1167.00	1239.00	1239.00	
Pottsville (ss)	1239.00	1239.00	1259.00	1259.00	
Mauch Chunk (shale)	NA	NA	NA	NA	
Raven Cliff (ss)	1682.00	1682.00	1951.00	1951.00	
Maxton (ss)	1951.00	1951.00	NA	NA	
Greenbriar (ls)	NA	NA	NA	NA	
Big Injun (ss)	2325.00	2325.00	2911.00	2911.00	
Berea (siltstone)	2911.00	2911.00	6584.00	6584.00	
Rhinestreet (shale)	6584.00	6584.00	6984.00	6939.00	
Cashaqua (shale)	6984.00	6939.00	7035.00	6982.00	
Middlesex (shale)	7035.00	6982.00	7153.00	7075.00	
Burket (shale)	7153.00	7075.00	7199.00	7106.00	
Tully (ls)	7199.00	7106.00	7235.00	7128.00	
Mahantango (shale)	7235.00	7128.00	7516.00	7226.00	
Marcellus (shale)	7516.00	7226.00	NA	NA	GAS

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	5/7/2018
Job End Date:	6/21/2018
State:	West Virginia
County:	Wetzel
API Number:	47-103-03185-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	Daniel Durig WTZ 101
Latitude:	39.71687700
Longitude:	-80.63919900
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,225
Total Base Water Volume (gal):	8,211,294
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
Sand	SWN Well Services	Proppant					
				Listed Below			
BIOC11219A	Nalco	Biocide					
				Listed Below			

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Econo-CI200	SWN Well Services	Corrosion Inhibitor					
				Listed Below			
Ecopol-FEAC	SWN Well Services	Iron Control					
				Listed Below			
FLOJET DR 9000 LPP	SWN Well Services	Friction Reducer					
				Listed Below			
HCL	SWN Well Services	Solvent					
				Listed Below			
FLOJET DRP 1130 X	SWN Well Services	Friction Reducer					
				Listed Below			
SCAL16486A	Nalco	Scale Inhibitor					
				Listed Below			
Base Water	Operator	Base Fluid					
				Listed Below			

Items above are Trade Names with the exception of Base Water. Items below are the individual ingredients.

		Water	7732-18-5	100.00000	85.45468	Density = 8.345
		Crystalline Silica, quartz	14808-60-7	100.00000	12.67880	
		Water	7732-18-5	85.00000	1.50324	
		Hydrochloric Acid	7647-01-0	15.00000	0.25556	
		Petroleum Distillates, Hydrotreated	64742-47-8	45.00000	0.05372	

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			Methanol	67-56-1	60.00000	0.01523	
			Ethylene glycol	107-21-1	10.00000	0.01364	
			Benzyl-(C12-C16 Alky)- Dimethyl-Ammonium	68424-85-1	30.00000	0.00761	
			Acetic Acid	64-19-7	37.50000	0.00360	
			Chloride Glutaraldehyde	111-30-8	10.00000	0.00254	
			Alcohols, C12- C16,Ethoxylated propoxylated	68213-24-1	2.00000	0.00239	
			Fatty alcohols ethoxylated	Proprietary	2.00000	0.00239	
			Methanol	67-56-1	80.00000	0.00221	
			Citric Acid	77-92-9	22.50000	0.00216	
			Amine Triphosphate	Proprietary	30.00000	0.00170	
			Oxyalkylated fatty acid	68951-67-7	9.67400	0.00027	
			Fatty acids	61790-12-3	5.02700	0.00014	
			Modified thiourea polymer	68527-49-1	4.74600	0.00013	
			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)

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Via Federal Express

November 19, 2018

State of West Virginia
Department of Environmental Protection
Office of Oil & Gas
601 57th Street
Charleston, WV 25304

RE: SWN Production Company, LLC
Operator ID: 494512924
Regulatory Filings: WR-34, WR-35 and WR-36

To Whom It May Concern:

Please find enclosed forms WR-34 Discharge Monitoring Report and WR-35 Well Operator's Report of Well Work along with supporting documentation, for the wells listed below.

API	Well Name
47-103-03185	Daniel Durig WTZ 101H
47-103-03186	Daniel Durig WTZ 105H
47-103-03187	Daniel Durig WTZ 201H
47-103-03192	Daniel Durig WTZ 205H
47-103-03205	Daniel Durig WTZ 210H

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Also enclosed is form WR-36, Well Operator's Report of Initial Gas-Oil Ratio for the Daniel Durig WTZ 105H (API 47-103-03186).

If you have any questions or require additional information, please contact me via email at liz_gee@swn.com or telephone at (832) 796-7632.

Sincerely,

Elizabeth Gee
Staff Regulatory Analyst
SW Appalachia Division

/lg
Encl.

Latitude: 39°45'00"

SURFACE HOLE 3993'

BOTTOM HOLE 8018'

JACKSON SURVEYING

INC.

P.O. Box 1460
677 W. Main St.
Clarksburg, WV 26302
304-623-5851

SURFACE HOLE LOCATION (SHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,396,396.285
EASTING: 530,924.729

LANDING POINT (LPL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,396,449.888
EASTING: 530,908.447

BOTTOM HOLE LOCATION (BHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,397,576.272
EASTING: 529,690.061

SURFACE HOLE LOCATION (SHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,396,396.342
EASTING: 530,924.783

LANDING POINT (LPL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,396,461.740
EASTING: 530,898.574

BOTTOM HOLE LOCATION (BHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,397,574.655
EASTING: 529,693.319

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

WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS
Table with columns: TRACT, SURFACE OWNER (S) / ROYALTY OWNER (R), TAX PARCEL, ACRES

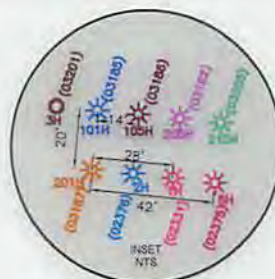
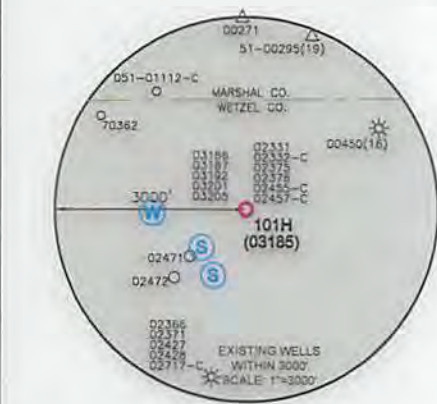


Table with columns: LINE, BEARING, DISTANCE, DESCRIPTION, MONUMENT



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 250 FEET OF PROPOSED WELL.
4. 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.
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. 708

David L. Jackson



2000 0 2000

GRAPHIC SCALE IN FEET

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)

DANIEL DURIG WTZ
OPERATOR'S WELL #: 101H
API WELL #: 47 STATE 103 COUNTY 03185 PERMIT

WELL TYPE: OIL [] WASTE DISPOSAL [] PRODUCTION [X] DEEP [] GAS [X] LIQUID INJECTION [] STORAGE [] SHALLOW [X]
WATERSHED: LAUREL RUN ELEVATION: 1401.5'
DISTRICT: PROCTOR COUNTY: WETZEL QUADRANGLE: WILEYVILLE, WV
SURFACE OWNER: DANIEL DURIG (REMAINDERMAN), ARTHUR & SHIRLEY ANN DURIG (LE) ACREAGE: ±151.58
OIL & GAS ROYALTY OWNER: O.C. YOHO AND MARY YOHO (ARTHUR T. DURIG AND SHIRLEY ANN DURIG (LIFE ESTATE), DANIEL DURIG (REMAINDERMAN) ACREAGE: ±151.58
DRILL [] DRILL DEEPER [] REDRILL [] FRACTURE OR STIMULATE [] PLUG OFF OLD FORMATION [] PERFORATE NEW FORMATION [X]
CONVERT [] PLUG & ABANDON [] CLEAN OUT & REPLUG [] OTHER CHANGE [X] (SPECIFY) ASDRILLED
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 7,238 TVD 13,030 TMD

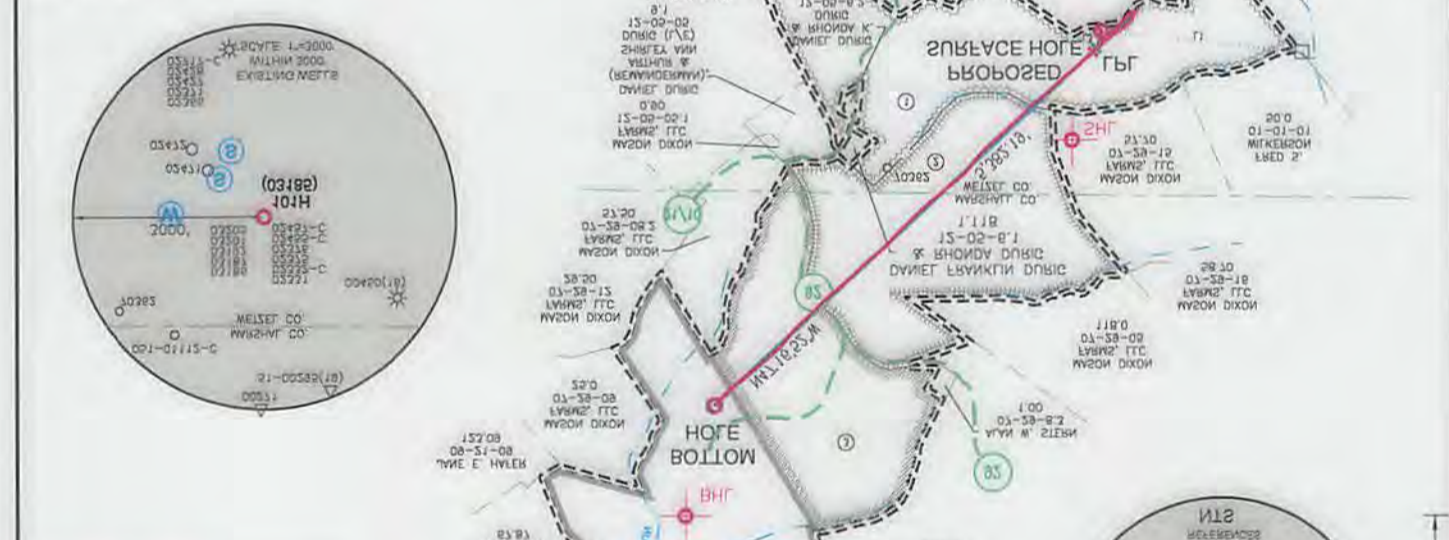
WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: BRITTANY WOODY
ADDRESS: P.O. BOX 1300 ADDRESS: P.O. BOX 1300
CITY: JANE LEW STATE: WV ZIP CODE: 26378 CITY: JANE LEW STATE: WV ZIP CODE: 26378

LEGEND:
PROPOSED SURFACE HOLE / BOTTOM HOLE
EXISTING / PRODUCING WELLHEAD
LPL: LANDING POINT LOCATION
EXISTING WATER WELL
EXISTING SPRING
SURVEYED BOUNDARY
DRILLING UNIT
LEASE BOUNDARY
ASDRILLED PATH
PROPOSED PATH
REVISIONS:
DATE: 10-11-2018
DRAWN BY: N. MANO
SCALE: 1" = 2000'
DRAWING NO:
WELL LOCATION PLAT

EXISTING 2B/1C EXISTING WATER MEET GUIDING BOIL POSITION EXISTING \ БРОДНИС МЕТНЕД БРОДНОЗ 2Б/1СЕ НОГЕ \ БОТТОМ НОГЕ ГЕБЕНД: СИТА: РАМЕ ГЕМ АДРЕС: Б'О' БОХ 1300 МЕТ ОБЕКАТОР: ЗМИ БРОДУКЦИОН КОМПАНИ' ГТС ТАРГЕТ ФОРМАЦИОН: МАРСЕЛТОС КОМБЕРТ <input type="checkbox"/> БГНС & АВАИДИОН <input type="checkbox"/> СТЕАН ОУП & ВЕРГНС <input type="checkbox"/> ОНЕР ЧАНСЕ <input checked="" type="checkbox"/> (ЗБЕСИЛ) V2DWITTED ДВИГ <input type="checkbox"/> ДВИГ ДЕБЕВ <input type="checkbox"/> БЕДВИГ <input type="checkbox"/> БРАСТУКЕ ОУП ШИМПАТЕ <input type="checkbox"/> БГНС ОУП ОУД ФОРМАЦИОН <input type="checkbox"/> БЕРЕКОРАТЕ НЕМ ФОРМАЦИОН <input checked="" type="checkbox"/> ОИГ & САЗ БОЛУГА ОМИЕР:О'С ЛОНО ИМД МВА ЛОНО (ВАННБ 1' ДУБИС ИМД ЗИГЕЛ ВМИ ДУБИС (ПРЕ ЕСТАТЕ)ДАИЕТ ДУБИС (БЕМВИДЕБМАН) АСБАСЕ:7121'28 ЗУБАСЕ ОМИЕР:ДАИЕТ ДУБИС (БЕМВИДЕБМАН) ВАННБ & ЗИГЕЛ ВМИ ДУБИС (ГЕ) АСБАСЕ:7121'28 ДИСТРИК: БРОСТОБ СОПИЛА: МЕЛСЕГ ОУАДРАНСЕ: МИГЕЛАНТЕ' МЛ МАТЕРШЕД: ГАНБЕТ ВПИ РЕГАЛИОН: 1401'2 МЕТ ТАБЕ: ОИГ <input type="checkbox"/> МАСТЕ ДИЗБОЗАТ <input type="checkbox"/> БРОДУКЦИОН <input checked="" type="checkbox"/> ДЕБ <input type="checkbox"/> САЗ <input checked="" type="checkbox"/> ПЛОИД ИНЕСИОН <input type="checkbox"/> ШТОРАСЕ <input type="checkbox"/> ЗНАТОН <input checked="" type="checkbox"/>	МЕТ ГОСАЦИОН БГАТ ДУБМИС ИО: ЗСАТЕ: 1, = 3000, ДУБМИ ВЛ: И' МАНО БЕЛЗИОНС: СИТА: РАМЕ ГЕМ АДРЕС: Б'О' БОХ 1300 ДЕСИНАТЕД АСЕНТ: БРИТАНИ МОУДИ ЕСТИМАТЕД ДЕБН: 1'538 ЛАД 12'030 ЛМД ДАТЕ: 10-11-2018
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CHARGESION' МЛ 20034 801 211H STREET OFFICE OF OIG & SAZ MADEB UNITED STATES GEOGRAPHIC MAPS (+) DENOTES LOCATION OF MEET ON	ЕГАЛИОН: (ИМАД 88' П2 Е1) ЗОНБСЕ ОУП БРОЛЕН АССУБАСА: 1/300 ДЕСБЕЕ ОУП МИНИМУМ	STATE COUNTY BEWMIT 74 103 03182 ОУБЕКАТОР,2 МЕТ #: 101H ДАИЕТ ДУБИС МЛС
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AND DESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION
 THE INFORMATION DESCRIBED BY LAW AND REGULATIONS ISSUED
 CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS
 THE UNDERSTANDING HEREBY CERTIFY THAT THIS PLAN IS
 1. NOT MADE BY ME OR UNDER MY SUPERVISION OTHERWISE SPECIFIED
 2. THAT I AM A LICENSED SURVEYOR
 3. THAT THIS PLAN DOES NOT REPRESENT A VIOLATION OF THE
 4. ANY OTHER LAWS OR REGULATIONS OF THE STATE OF MARYLAND
 5. THAT I AM NOT PROVIDING ANY INFORMATION THAT IS
 6. FALSE OR MISLEADING
 7. THAT I AM NOT PROVIDING ANY INFORMATION THAT IS
 8. FALSE OR MISLEADING
 9. THAT I AM NOT PROVIDING ANY INFORMATION THAT IS
 10. FALSE OR MISLEADING
 11. THAT I AM NOT PROVIDING ANY INFORMATION THAT IS
 12. FALSE OR MISLEADING
 13. THAT I AM NOT PROVIDING ANY INFORMATION THAT IS
 14. FALSE OR MISLEADING
 15. THAT I AM NOT PROVIDING ANY INFORMATION THAT IS
 16. FALSE OR MISLEADING
 17. THAT I AM NOT PROVIDING ANY INFORMATION THAT IS
 18. FALSE OR MISLEADING
 19. THAT I AM NOT PROVIDING ANY INFORMATION THAT IS
 20. FALSE OR MISLEADING



ЕГАЛИОН: 258'882'218 НОРТИОН: 1'381'214'882 ПЛМ (ИМАД, ЗОНЕ 13' МЕТЕРС): БОТТОМ НОГЕ ГОСАЦИОН (ВНГ):
ЕГАЛИОН: 270'888'134 НОРТИОН: 1'388'288'140 ПЛМ (ИМАД, ЗОНЕ 13' МЕТЕРС): ГАНДИНГ БОИЛ (ГБГ):
ЕГАЛИОН: 270'888'134 НОРТИОН: 1'388'288'140 ПЛМ (ИМАД, ЗОНЕ 13' МЕТЕРС): ЗУБАСЕ НОГЕ ГОСАЦИОН (ЗНГ):
ЕГАЛИОН: 270'888'134 НОРТИОН: 1'388'288'140 ПЛМ (ИМАД, ЗОНЕ 13' МЕТЕРС): БОТТОМ НОГЕ ГОСАЦИОН (ВНГ):
ЕГАЛИОН: 270'888'134 НОРТИОН: 1'388'288'140 ПЛМ (ИМАД, ЗОНЕ 13' МЕТЕРС): ГАНДИНГ БОИЛ (ГБГ):
ЕГАЛИОН: 270'888'134 НОРТИОН: 1'388'288'140 ПЛМ (ИМАД, ЗОНЕ 13' МЕТЕРС): ЗУБАСЕ НОГЕ ГОСАЦИОН (ЗНГ):
304-823-8821 Clarksburg, MD 20803 811 W Main St P.O. Box 160 INC. JACKSON SURVEYING

Г2	И 31.48.52, М	571.12,	1515.52,	ЗНГ 10 П2
ПНЕ	БЕВУИНС	ДИСТАНСЕ	СУБАСЕ ГЕНДН	ДЕСВЕРИЦИОН
Г3	И 43.21.20, Е	1204.71,	ЗНГ 10 ГАИДУМВК	ЕО' МАРКЕД ШЛОМЕ
Г4	И 82.51.00, Е	3040.08,	ЗНГ 10 ГАИДУМВК	ЕВЕСЕ СОБИЕР
ПНЕ	БЕВУИНС	ДИСТАНСЕ	ДЕСВЕРИЦИОН	МОШПМЕНТ

#	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-01	185.00
1	ДАКЕЛЮКТИ (БЕМВИДЕБМАН) (2)		
2	ДАИЕТ Е ШЕВН ДЕВОНАН Е БЕРИГ' ВЕАЕНГА 1	03-28-18	108.00
3	ДАИЕТ Е ШЕВН ДЕВОНАН Е БЕРИГ' ВЕАЕНГА 1	03-28-18	108.00
4	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
5	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
6	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
7	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
8	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
9	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
10	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
11	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
12	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
13	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
14	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
15	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
16	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
17	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
18	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
19	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00
20	МАНО ДИХОИ ЛАВАС' ГТС (2)	03-28-18	150.00

Grounding: 80.21.30.1
 SURFACE HOLE 1500'
 BOTTOM HOLE 8183'.