west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

February 03, 2016

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-10303143, issued to SWN PRODUCTION COMPANY, LLC, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: BLATT WTZ 1H
Farm Name: BLATT, TAMI, KEVIN, MICHAEL
API Well Number: 47-10303143
Permit Type: Horizontal 6A Well
Date Issued: 02/03/2016

Promoting a healthy environment.

API Number: _____

PERMIT CONDITIONS 4710303143

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.

2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.

3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.

4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.

5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations,* 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.

6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.

7. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.

8. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

9. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

Southwestern Energy®
PO Box 1300
Jane Lew, WV 26378
PHONE: (832) 796-1610

November 30, 2015

CERTIFIED VIA UPS

4710305143

Ms. Laura Adkins
Office of Oil & Gas
601 57th Street
Charleston, WV 25304

RE: Proposed New Well Blatt UD-B WTZ 7H, Blatt WTZ 1H, and Blatt WTZ 3H

Dear Ms. Adkins:

Enclosed please find the Well Work Permit Applications for the above captioned wells. These wells are situated on the Blatt property, in Proctor District, Wetzel County, West Virginia.

If you have any questions or desire additional information, please me at 304-884-1614

Thank you.

Sincerely,

Dee Southall
Regulatory Supervisor
Southwestern Energy Production Company, LLC
PO Box 1300
Jane Lew, WV 26378

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Environmental Protection

The Right People doing the Right Things, wisely Investing the cash flow from our underlying Assets, will create Value+

WW-6B
(10/14)

API NO. 47- 103 -
OPERATOR WELL NO. Blatt WTZ 1H
Well Pad Name: Blatt Pad

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: SWN Production Co., LLC

Operator ID	County	District	Quadrangle
494512924	103-Wetzel	7-Proctor	681-Wileyville

2) Operator's Well Number: Blatt WTZ 1H Well Pad Name: Blatt Pad

3) Farm Name/Surface Owner: Terri Blatt, Kevin L. Blatt, Michael J. Blatt & Jackie Blatt Public Road Access: St. Joseph Baker Hill

4) Elevation, current ground: 1282' Elevation, proposed post-construction: 1282'

5) Well Type (a) Gas x Oil ____ Underground Storage ____
Other ____
(b)If Gas Shallow x Deep ____
Horizontal x

6) Existing Pad: Yes or No Yes

DMH
11-20-15

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Associated Pressure(s):
Target Formation- Marcellus, Target Top TVD-~~7060'~~ 7040' BW, Target Base TVD-~~7048'~~ 7068' BW, Anticipated Thickness- 48', Associated Pressure-4590

8) Proposed Total Vertical Depth: 7060'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: ~~14528'~~ 14538' BW

11) Proposed Horizontal Leg Length: 6800'

12) Approximate Fresh Water Strata Depths: 256'

13) Method to Determine Fresh Water Depths: based off nearby water wells

14) Approximate Saltwater Depths: 1650'

15) Approximate Coal Seam Depths: 1119'

16) Approximate Depth to Possible Void (coal mine, karst, other): None that we are aware of.

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes ____ No X

(a) If Yes, provide Mine Info: Name: ____
Depth: ____
Seam: ____
Owner: ____

WW-6B
(10/14)

API NO. 47- 103 -
OPERATOR WELL NO. Blatt WTZ 1H
Well Pad Name: Blatt Pad

18) **CASING AND TUBING PROGRAM**

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	J-55	94#	100'	100'	CTS
Fresh Water	13 3/8"	New	H-40	48#	356'	356'	337 sx/CTS
Coal	9 5/8"	New	J-55	36#	2583'	2583'	1007 sx/CTS
Intermediate	7"	New	P-110	20#	If Needed	If Needed	If Needed/As Needed
Production	5 1/2"	New	HCP-110	20#	14,538'	14,538'	Lead 891sx tail 1539sx/100' inside int
Tubing	2 3/8'	New	P-110	4.7#	Approx. 7060'	Approx. 7060'	
Liners							

DMH
11-20-15

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Max. Associated Surface Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	30"	0.25	2120	81	Class A	1.19/50% Excess
Fresh Water	13 3/8"	17.5"	0.380	2740	633	Class A	1.19/50% Excess
Coal	9 5/8"	12 1/4"	0.395	3950	1768	Class A	1.19/50% Excess
Intermediate	7"	8 3/4"	0.317	4360	3250	Class A	1.20/15% Excess
Production	5 1/2"	8 3/4"	0.361	12360	9500	Class A	1.20/15% Excess
Tubing	2 3/8"	4.778"	0.190				
Liners							

4710300143

PACKERS

Kind:	10K Arrowset AS1-X			
Sizes:	5 1/2"			
Depths Set:				

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WW-6B
(10/14)

API NO. 47- 103 -
OPERATOR WELL NO. Blatt WTZ 1H
Well Pad Name: Blatt Pad

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill and stimulate any potential zones between and including the Benson to Marcellus. **If we should encounter a void place basket above and below void area- balance cement to bottom of void and grout from basket to surface. Run casing not less than 20' below void nor more than 50' below void. (*If freshwater is encountered deeper than anticipated it must be protected, set casing 50' below and cts.)

DmH
11-20-15

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Well will be perforated within the target formation and stimulated with a slurry of water, sand, and chemical additives at a high rate. This will be performed in stages with the plug and perf method along the wellbore until the entire lateral has been stimulated within the target formation. All stage plugs are then drilled out and the well is flowed back to surface. The well is produced through surface facilities consisting of high pressure production unites, vertical separation units, water and oil storage tanks. Max press and anticipated max rate- 9000 lbs @ 80 barrels a minute.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 12.9

22) Area to be disturbed for well pad only, less access road (acres): 6.4

23) Describe centralizer placement for each casing string:

All casing strings will be ran with a centralizer at a minimum of 1 per every 3 joints of casing.

24) Describe all cement additives associated with each cement type:

See Attachment ***

4710303143

25) Proposed borehole conditioning procedures:

All boreholes will be conditioned with circulation and rotation for a minimum of one bottoms up and continuing until operator is satisfied with borehole conditions.

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*Note: Attach additional sheets as needed.

Schlumberger Cement Additives

	Product Name	Product Use	Chemical Name	CAS Number
Surface	S001	accelerator	calcium chloride	10043-52-4
Intermediate	S001	accelerator	calcium chloride	10043-52-4
Kick Off Plug	D080	dispersant	sodium polynaphthalene sulfonate	9008-63-3
	D801	retarder	aromatic polymer derivative	propriatary
	D047	antifoam	polypropylene glycol	25322-69-4
Production-Lead	D167	fluid loss	aliphatic amide polymer	propriatary
	D154	extender	non-crystalline silica	7631-86-9
	D400	gas migration	boric acid	10043-35-3
	D046	antifoam	polypropylene glycol	25322-69-4
			fullers earth (attapulgite)	8031-18-3
	D201	retarder	chrystalline silica	14808-60-7
			metal oxide	propriatary
	D202	dispersant	sulphonated synthetic polymer	propriatary
			formaldehyde (impurity)	propriatary
Production-Tail	D046	antifoam	polypropylene glycol	25322-69-4
			fullers earth (attapulgite)	8031-18-3
	D167	fluid loss	aliphatic amide polymer	propriatary
	D065	dispersant	sodium polynaphthalene sulfonate	9008-63-3
			sodium sulfate	7757-82-6
	D201	retarder	chrystalline silica	14808-60-7
			metal oxide	propriatary
	D153	anti-settling	chrystalline silica	14808-60-7

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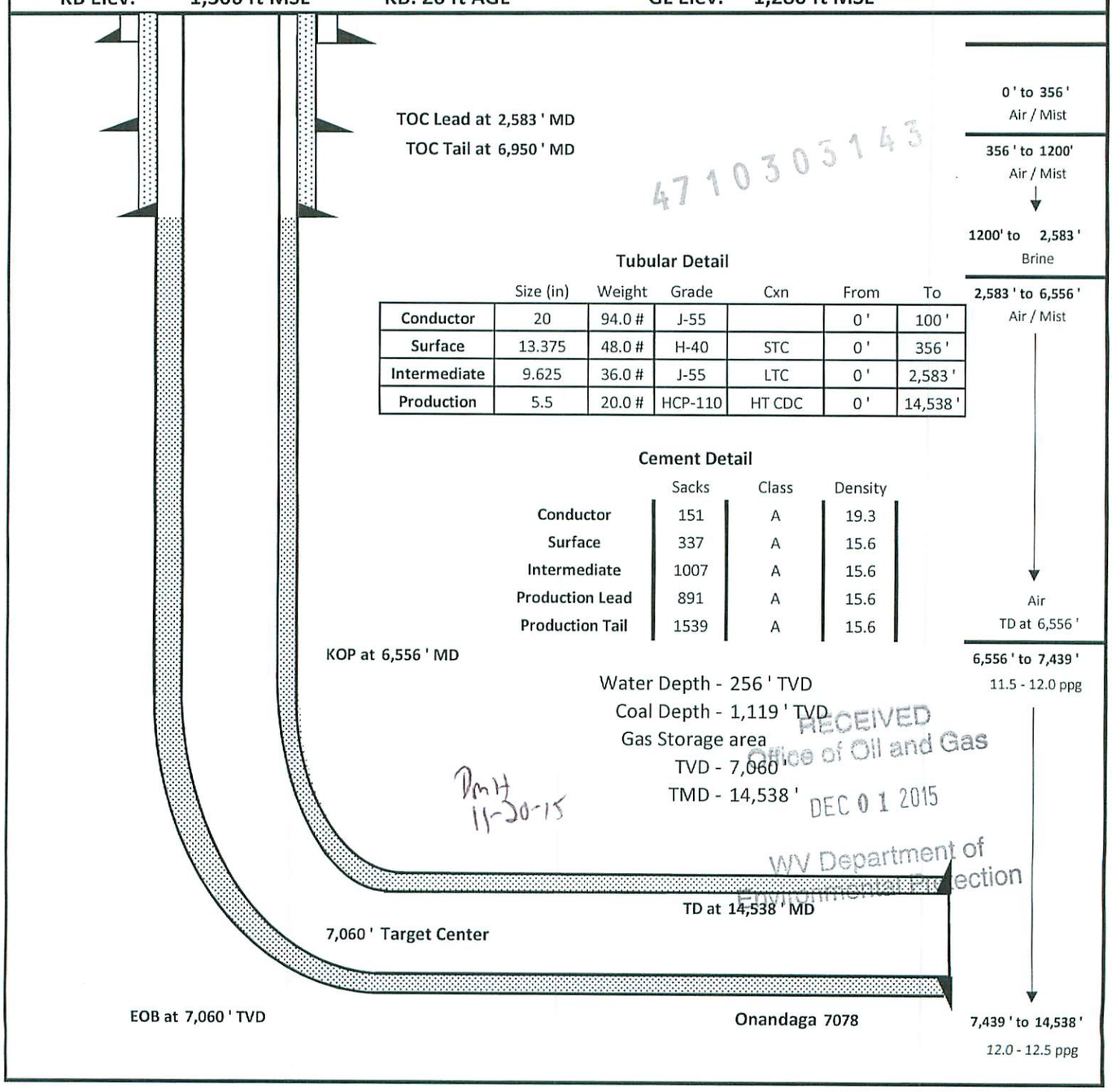
Southwestern Energy Company	Proposed Drilling Program

Well:	BLATT WTZ 1	Re-entry Rig:	TBD
Field:	VICTORY FIELD	Prospect:	VICTORY
County:	WETZEL	State:	WV
SHL:	39.7160 Latitude -80.6882 Longitude		
BHL:	39.7292 Latitude -80.7101 Longitude		
KB Elev:	1,306 ft MSL KB: 26 ft AGL	GL Elev:	1,280 ft MSL



Tubular Detail

	Size (in)	Weight	Grade	Cxn	From	To
Conductor	20	94.0 #	J-55		0 '	100 '
Surface	13.375	48.0 #	H-40	STC	0 '	356 '
Intermediate	9.625	36.0 #	J-55	LTC	0 '	2,583 '
Production	5.5	20.0 #	HCP-110	HT CDC	0 '	14,538 '

Cement Detail

	Sacks	Class	Density
Conductor	151	A	19.3
Surface	337	A	15.6
Intermediate	1007	A	15.6
Production Lead	891	A	15.6
Production Tail	1539	A	15.6

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PMH
11-30-15

WW-9
(9/13)

API Number 47 - 103 - _____
Operator's Well No. Blatt WTZ 1H

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

4710305143

Operator Name SWN Production Co., LLC OP Code 49447757

Watershed (HUC 10) Blake Fork of Upper Ohio River 2 Quadrangle 681-Wileyville

Elevation 1282' County 103-Wetzel District 7-Proctor

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes ☑ No ☐

Will a pit be used? Yes ☐ No ☑

If so, please describe anticipated pit waste: closed loop system in place at this time- cuttings will be taken to a permitted landfill.

Will a synthetic liner be used in the pit? Yes ☐ No ☑ If so, what ml.? _____

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11-20-15

Proposed Disposal Method For Treated Pit Wastes:

- ____ Land Application
- ■ Underground Injection (UIC Permit Number 2D0072539/ 2D0413175/ 2D0610306/ 2D0610317)
- ■ Reuse (at API Number at next anticipated well, API# will be included with the WR-34/DDMR &/or permit addendum.)
- ____ Off Site Disposal (Supply form WW-9 for disposal location)
- ■ Other (Explain flow back fluids will be put in steel tanks and reused or taken to a permitted disposal facility.

Will closed loop system be used? If so, describe: Yes

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air and salt saturate mud

-If oil based, what type? Synthetic, petroleum, etc. Synthetic Oil Base

Additives to be used in drilling medium? see attached sheets

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. landfill

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) _____

-Landfill or offsite name/permit number? meadow SWF- 1032, SS Grading SWF- 4902, Northwestern SWF- 1025, Short Creek 1034/WV0109517/CID28726, Carbon Limestone 28726/CID28726
Arden Landfill 10072, American 02-12954, Country Wide 38390/CID38390, Pine Grove 13688

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto 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 or imprisonment.

Company Official Signature [signature]

Company Official (Typed Name) Dee Southall

Company Official Title Regulatory Supervisor

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Subscribed and sworn before me this 13th day of November, 2015

Brittany R Woody
Notary Public

My commission expires 11/27/22

OFFICIAL SEAL
Notary Public, State of West Virginia
BRITTANY R WOODY
3300 Old Elkins Road
Buckhannon, WV 26201
My commission expires November 27, 2022

Form WW-9

Operator's Well No. Blatt WTZ 1H

SWN Production Co., LLC

Proposed Revegetation Treatment: Acres Disturbed 12.9 Prevegetation pH _____

Lime _____ (as determined by pH test min. 2) Tons/acre or to correct to pH 6.4

Fertilizer type 10-20-20

Fertilizer amount 600 lbs/acre

Mulch Hay/Straw 2.5 Tons/acre

4710305148

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
White Grove	15	White Grove	15
Red Top	15	Red Top	15
Orchard Grass	20	Orchard Grass	20

Attach:
Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: _____

Comments: _____

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Title: Oil and Gas Inspector Date: 11-20-15

Field Reviewed? (✓) Yes ( ) No

Marcellus Well Drilling Procedures
And Site Safety Plan

SWN Production Co., LLC

47 - 103 -
Well name: Blatt WTZ 1H
Wileyville, Quad
Proctor, District
Wetzel County, West Virginia

4710303143

Submitted by:

Danielle Southall Date: 11-13-2015

Title Regulatory Supervisor SWN Production Co., LLC

Approved by:

Date: 11-20-15

Title: Oil + Gas Inspector

Approved by:

Date:

Title:

SWN Production Co., LLC – Confidential

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SWN Southwestern Energy

BAKER HUGHES

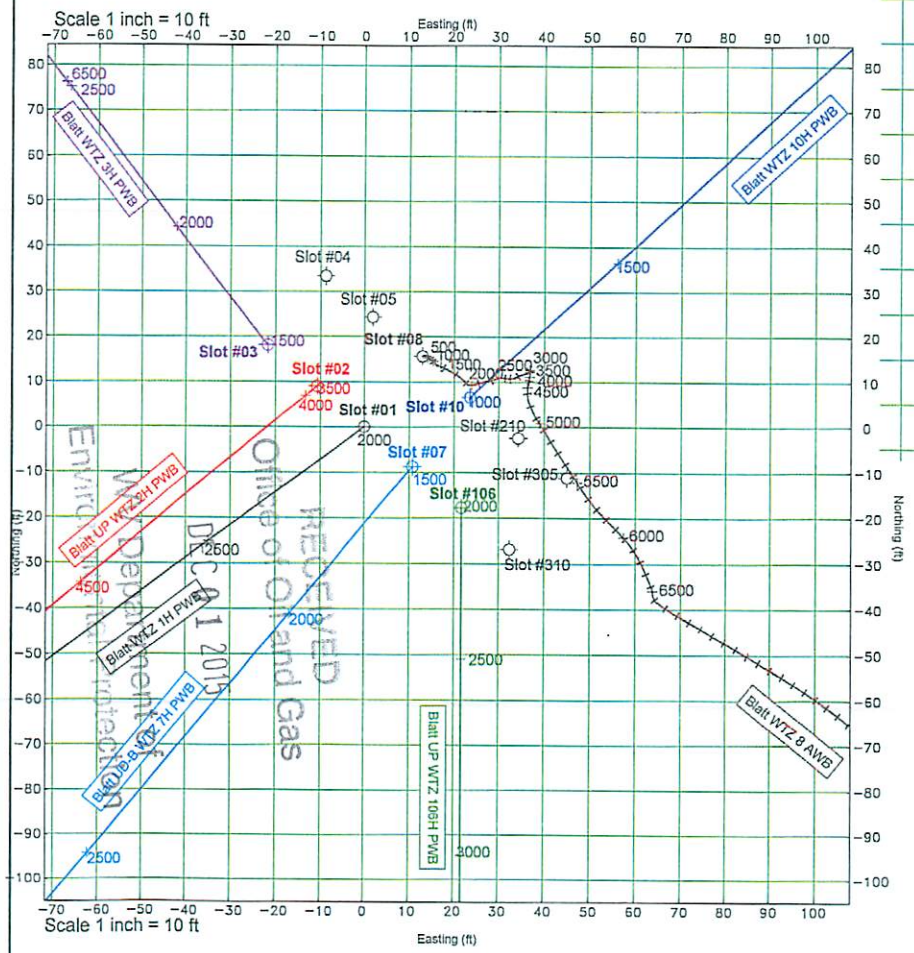
SOUTHWESTERN ENERGY

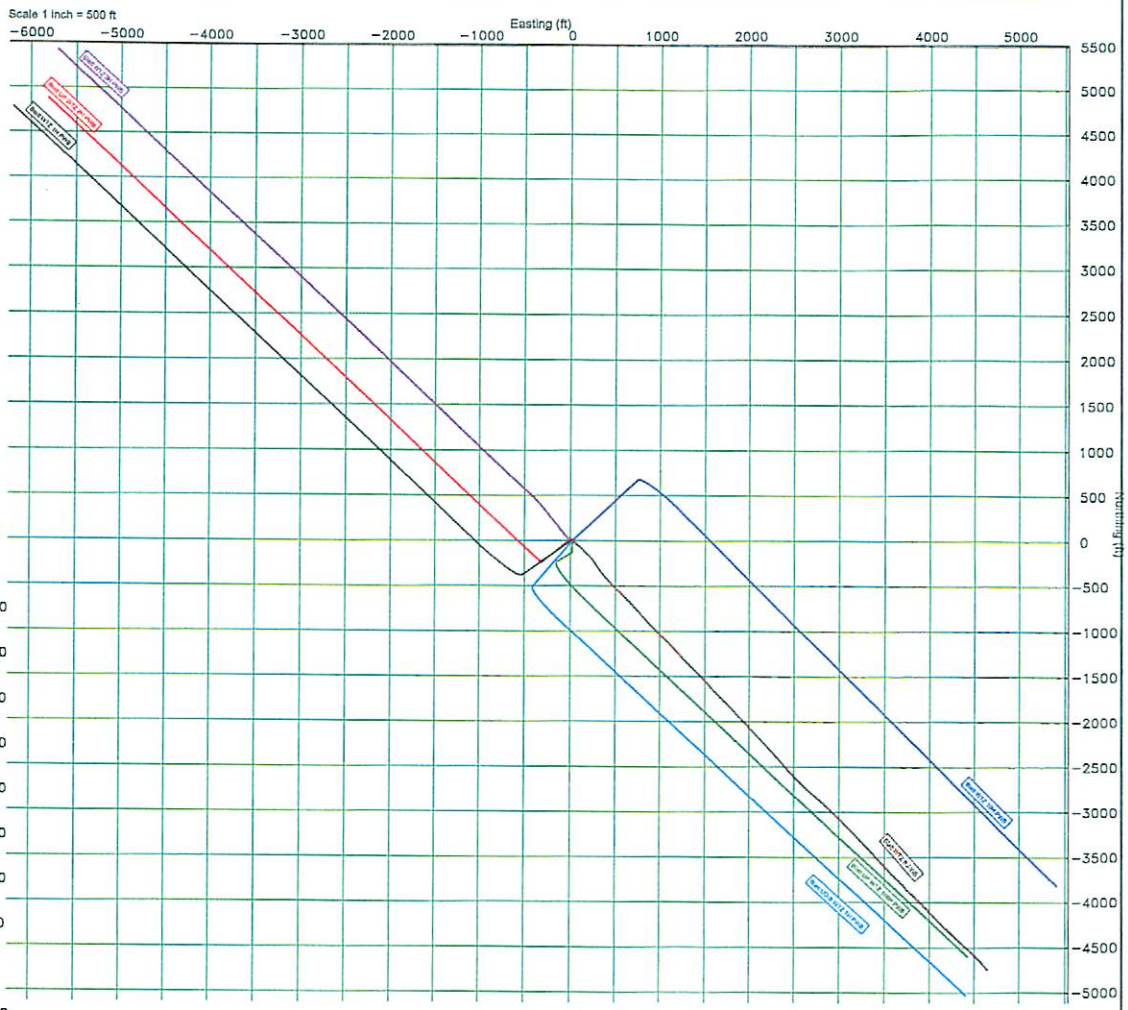
Location:	Wetzel County, WV	Slot:	Slot #01
Field:	Wetzel	Well:	Blatt WTZ 1H
Facility:	Blatt WTZ Pad	Wellbore:	Blatt WTZ 1H PWB

Well Data

Slot	Well	Wellbore	Wellpath
Slot #01	Blatt WTZ 1H	Blatt WTZ 1H PWB	Blatt WTZ 1H PWP Ex-03
Slot #02	Blatt UP WTZ 2H	Blatt UP WTZ 2H PWB	Blatt UP WTZ 2H PWP Ex-01
Slot #03	Blatt WTZ 3H	Blatt WTZ 3H PWB	Blatt WTZ 3H PWP Ex-05
Slot #07	Blatt UD-B WTZ 7H	Blatt UD-B WTZ 7H PWB	Blatt UD-B WTZ 7H PWP Ex-03
Slot #08	Blatt WTZ 8	Blatt WTZ 8 AWB	Blatt WTZ 8 AWP
Slot #10	Blatt WTZ 10H	Blatt WTZ 10H PWB	Blatt WTZ 10H PWP Ex-01
Slot #106	Blatt UP WTZ 106H	Blatt UP WTZ 106H PWB	Blatt UP WTZ 106H PWP Ex-01

Plot reference wellpath is Blatt WTZ 1H PWP Ex-03	
True vertical depths are referenced to Rig on Slot #03 (RT)	Grid System: NAD83 / UTM Zone 17 North, US feet
Measured depths are referenced to Rig on Slot #03 (RT)	North Reference: Grid north
Rig on Slot #03 (RT) to Mean Sea Level: 1302 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: Slot #01): -1280 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: alvayes on 10/14/2015





Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Blatt WTZ Pad			1728103.520	14423463.500	39°42'57.510"N	80°41'17.441"W
Slot Name	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Slot #01	0.00	0.00	1728103.520	14423463.500	39°42'57.510"N	80°41'17.441"W
Slot #02	9.07	-10.72	1728092.804	14423472.570	39°42'57.600"N	80°41'17.578"W
Slot #03	18.14	-21.72	1728081.805	14423481.635	39°42'57.690"N	80°41'17.718"W
Slot #07	-8.70	10.72	1728114.238	14423454.802	39°42'57.424"N	80°41'17.304"W
Slot #08	15.71	12.89	1728116.403	14423479.206	39°42'57.665"N	80°41'17.275"W
Slot #10	6.64	23.61	1728127.120	14423470.140	39°42'57.575"N	80°41'17.138"W
Slot #106	-17.77	21.73	1728125.237	14423445.737	39°42'57.334"N	80°41'17.164"W
Rig on Slot #03 (RT) to Mud line (Facility - Blatt WTZ Pad)					22ft	
Mean Sea Level to Mud line (Facility - Blatt WTZ Pad)					-1280ft	
Rig on Slot #03 (RT) to Mean Sea Level					1302ft	

Received
Office of Oil and Gas
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WV Department of Environmental Protection

SURFACE HOLE 6,049'

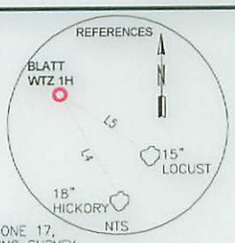
Latitude: 39°45'00" N

Longitude: -80°40'00" W

12,394'

SURFACE HOLE

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



LINE	DESCRIPTION	DISTANCE	DESCRIPTION
L1	N87°31'46"E	1,401.50'	FD. 5/8"REBAR TO SHL
L2	N39°42'50"W	937.97'	FD. 1/2"REBAR TO SHL
L3	S87°25'29"W	995.74'	SHL TO LP1
L4	S29°08'03"E	199.31'	SHL TO 18" HICKORY
L5	S55°00'46"E	172.42'	SHL TO 15" LOCUST

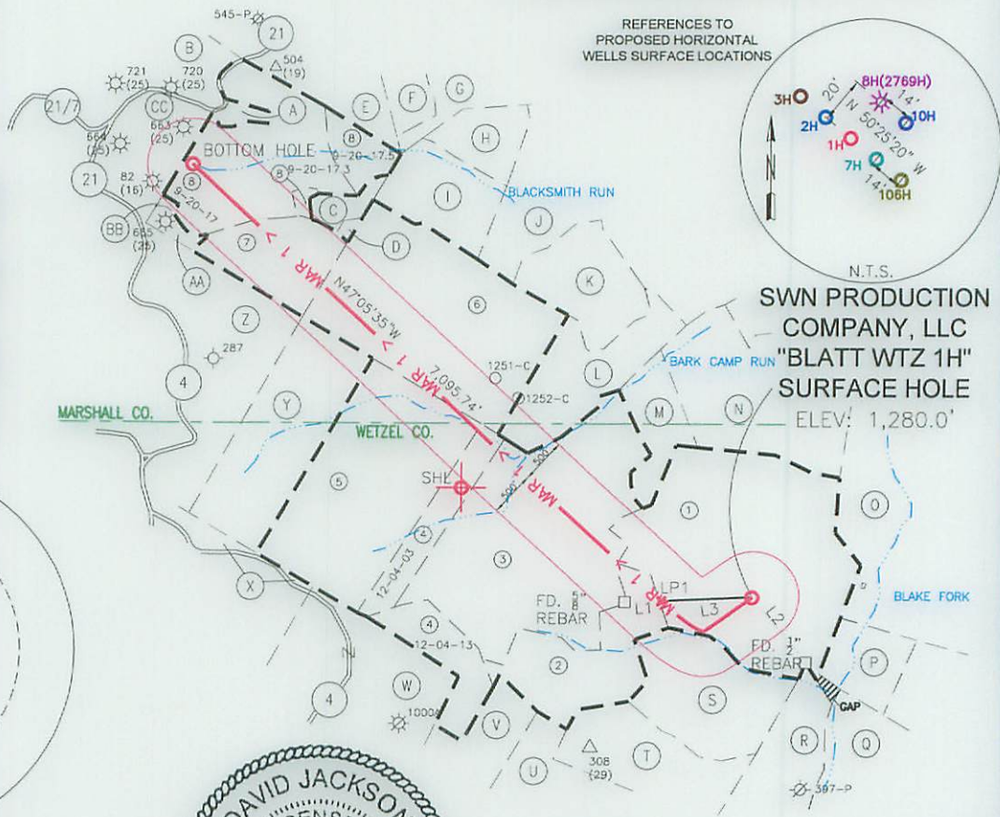
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES
1	TAMI BLATT, KEVIN L. BLATT, TRUSTEE OF THE BLATT FAMILY IRREVOCABLE TRUST, MICHAEL J. BLATT & JANICE BLATT (S)/ TAMI BLATT, KEVIN L. BLATT, TRUSTEE OF THE BLATT FAMILY IRREVOCABLE TRUST, MICHAEL J. BLATT & JANICE BLATT (R)	12-04-05	108.00
2	ANTHONY C. BLATT & REBECCA F. BLATT (S)/ ANTHONY C. BLATT & REBECCA F. BLATT (R)	12-04-14	37.00
3	TAMI BLATT, KEVIN L. BLATT, TRUSTEE OF THE BLATT FAMILY IRREVOCABLE TRUST, MICHAEL J. BLATT & JANICE BLATT (S)/ TAMI BLATT, KEVIN L. BLATT, TRUSTEE OF THE BLATT FAMILY IRREVOCABLE TRUST, MICHAEL J. BLATT & JANICE BLATT (R)	12-04-04	106.26
4	TAMI BLATT, KEVIN L. BLATT, TRUSTEE OF THE BLATT FAMILY IRREVOCABLE TRUST, MICHAEL J. BLATT & JANICE BLATT (S)/ TAMI BLATT, KEVIN L. BLATT, TRUSTEE OF THE BLATT FAMILY IRREVOCABLE TRUST, MICHAEL J. BLATT & JANICE BLATT (R)	12-04-03 12-04-13	16.83 22.14
5	PAUL FOX & CYNTHIA FOX (S)/ ALBERT F. ESTEP IRREVOCABLE TRUST (R)	12-04-02	74.75
6	THOMAS JOHN FOX (S)/ THOMAS JOHN FOX, CATHERINE MONTGOMERY, E. CAROL KENNEDY, THERESA HUNT (R)	9-22-10	91.21
7	STEPHEN L. MILLER (S)/ STEPHEN L. MILLER (R)	9-20-17.4	24.27
8	COLETTA A. KLUG REVOCABLE LIVING TRUST (S), COLETTA A. KLUG REVOCABLE LIVING TRUST (S), DAVID P. WEIGAND (S)/ COLETTA A. KLUG REVOCABLE LIVING TRUST (R)	9-20-17 9-20-17.3 9-20-17.5	53.71 1.34 9.61

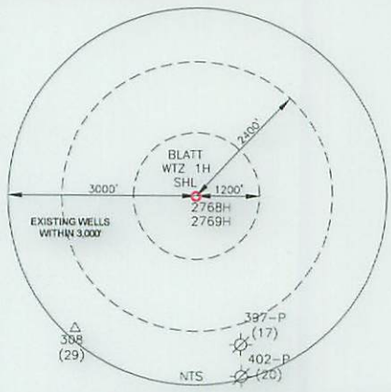
NOTES ON SURVEY

1. COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
2. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
3. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OF CENTER OF PAD.
5. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
6. NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
7. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
8. ALL WELLS WITHIN 500' OF THE HORIZONAL LEG ARE SHOWN ON THIS PLAT BASED UPON INFORMATION TAKEN FROM DEP MAPPING, WELL PLATS AND AERIAL PHOTOS.

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

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,396,280.467 EASTING: 526,727.006
"LANDING POINT" LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,396,266.831 EASTING: 526,423.812
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,397,739.280 EASTING: 524,839.660





2000 0 2000

GRAPHIC SCALE IN FEET

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

P.S. 708 David L Jackson

DAVID JACKSON LICENSED No. 708 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

COMPANY: SWN Production Company, LLC — SWN Production Company™

(+) 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)

OPERATOR'S WELL #: BLATT WTZ 1H

API WELL #: 47 (STATE) 103 (COUNTY) 3143 HGA (PERMIT)

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

WATERSHED: BLAKE FORK OF UPPER OHIO RIVER 2 ELEVATION: 1280.0'

DISTRICT: PROCTOR COUNTY: WETZEL QUADRANGLE: WILEYVILLE 7 1/2'

SURFACE OWNER: TAMI BLATT, KEVIN L. BLATT (TRUSTEE IRR TRUST), MICHAEL J. BLATT & JANICE BLATT ACREAGE: 108.00

OIL & GAS ROYALTY OWNER: TAMI BLATT, KEVIN L. BLATT (TRUSTEE IRR TRUST), MICHAEL J. BLATT & JANICE BLATT ACREAGE: 108.00

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

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

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 7,060' TVD 14,538' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: DEE SOUTHALL
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
- ABANDONED WELL
- PLUGGED & ABANDONED WELL
- CUT CONDUCTOR
- LEASE BOUNDARY
- 500' DHP BUFFER
- MAR 1 > MARCELLUS DHP
- ABANDONED PATH

REVISIONS:	
	DATE: 11-12-2015
	DRAWN BY: N. MANO
	SCALE: 1" = 2000'
	DRAWING NO:
	WELL LOCATION PLAT

\\D7W3HRL1\1-04-16 DJ\SWN\BLATT\UTM NAD83 FT 6-26-15\1H\BLATT WTZ 1H 1-20-2016\BLATT WTZ 1H 1-20-2016.DWG
WEDNESDAY JANUARY 20 2016 12:05PM

PROPERTY NUMBER 2501163561
PAD ID 3001156342

PROPERTY NUMBER 3001128245
API ID 3001128245

//D:\SHARP\1/1-04-18 DJ/SWN/BRATT/TLW HARS 11 8-25-12/H/BRATT WV2 HR 1-30-2018/BRATT WV2 HR 1-30-2018.DWG
WEDNESDAY JANUARY 30 2018 12:05PM

WELL LOCATION PLAT	
DRAWING NO:	
SCALE: 1" = 2000'	
DRAWN BY: J. MANO	
DATE: 11-15-2012	

REVISIONS:

LEGEND:

- CUT CONDUCTOR
- PLUGGED & ABANDONED WELL
- ABANDONED WELL
- EXISTING \ PRODUCING WELLHEAD
- PROPOSED SURFACE HOLE \ BOTTOM HOLE
- ABANDONED PATH
- MARCELLUS DHD
- 200' DHD BUFFER
- LEASE BOUNDARY

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

TARGET FORMATION: MARCELLUS — ESTIMATED DEPTH: 7,080' TVD 14,238' TMD

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

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

OIL & GAS ROYALTY OWNER: TAMI BRATT, KEVIN L. BRATT (TRUSTEE IRR TRUST), MICHAEL L. BRATT & JANICE BRATT — ACREAGE: 108.00

SURFACE OWNER: TAMI BRATT, KEVIN L. BRATT (TRUSTEE IRR TRUST), MICHAEL L. BRATT & JANICE BRATT — ACREAGE: 108.00

DISTRICT: PROCTOR — COUNTY: WETZEL — QUADRANGLE: MILLERSVILLE 7 1\2,

WATERSHED: BLAKE FORK OF UPPER OHIO RIVER 5 — ELEVATION: 1280.0'

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

OPERATOR'S WELL #: BRATT TWZ HR		API WELL #: 47	103 31913 HZR
		STATE	COUNTY	PERMIT

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

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25304

UNITED STATES TOPOGRAPHIC MAPS
(+) DENOTES LOCATION OF WELL ON

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 THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 807

DAVID JACKSON — LICENSED — PROFESSIONAL SURVEYOR — STATE OF WEST VIRGINIA — NO. 807

COMPANY: SWN Production Company, LLC — SWN Production Company™

GRAPHIC SCALE IN FEET
2000 0 2000

SURFACE HOLE
"BRATT TWZ HR"
SWN PRODUCTION COMPANY, LLC
ELEV: 1,080.0'

SURFACE HOLE LOCATION (SHL):
UTM (NAD83 ZONE 17 METERS):
NORTHING: 4,396,082.087
EASTING: 524,838.080
„LANDING POINT" LOCATION (LP):
UTM (NAD83 ZONE 17 METERS):
NORTHING: 4,396,080.784
EASTING: 524,772.008
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83 ZONE 17 METERS):
NORTHING: 4,396,326.834
EASTING: 524,428.815

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

NOTES ON SURVEY

1. COORDINATES STATE PLANE NAD 83 DATUM ZONE 17 US FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
2. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND\OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
3. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OR CENTER OF PAD.
5. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
6. NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
7. NO INTERMITTENT PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
8. ALL WELLS WITHIN 200' OF THE HORIZONTAL LEG ARE SHOWN ON THIS PLAT BASED UPON INFORMATION TAKEN FROM DEP MAPPING WELL PLATS AND AERIAL PHOTOS.

JACKSON SURVEYING INC.
P.O. Box 1460
677 W. Main St.
Clarksburg, WV 26302
304-623-2887

LINE	DESCRIPTION	DISTANCE	DESCRIPTION
L1	N87°37'48"E	1,107.20'	FD. 5/8" REBAR TO SHL
L2	N38°45'20"W	623.78'	FD. 1/2" REBAR TO SHL
L3	S66°32'56"W	866.24'	SHL TO LP1
L4	S50°08'03"E	1,661.31'	SHL TO 18" HICKORY
L5	S55°00'48"E	1,123.45'	SHL TO 12" LOCUST

TMP#	SURFACE OWNER (S)\ ROYALTY OWNER (R)	TAX PARCEL	ACRES
1	TAMI BRATT, KEVIN L. BRATT, TRUSTEE OF THE BRATT FAMILY IRREVOCABLE TRUST, MICHAEL L. BRATT & JANICE BRATT (S)\ TAMI BRATT, KEVIN L. BRATT & JANICE BRATT (R)	20-04-20	108.00
2	TAMI BRATT, KEVIN L. BRATT, TRUSTEE OF THE BRATT FAMILY IRREVOCABLE TRUST, MICHAEL L. BRATT & JANICE BRATT (S)\ TAMI BRATT, KEVIN L. BRATT & JANICE BRATT (R)	20-04-40	62.00
3	ANTHONY C. BRATT & REBECCA E. BRATT (S)\ ANTHONY C. BRATT & REBECCA E. BRATT (R)	14-04-14	72.00
4	TAMI BRATT, KEVIN L. BRATT, TRUSTEE OF THE BRATT FAMILY IRREVOCABLE TRUST, MICHAEL L. BRATT & JANICE BRATT (S)\ TAMI BRATT, KEVIN L. BRATT & JANICE BRATT (R)	20-04-12	14.55
5	HOANG "JOHN" TOY (S)\ HOANG "JOHN" TOY & CANDACE TOY (S)\ ALBERT F. TESTA IRREVOCABLE TRUST (R)	15-04-05	24.52
6	CATHERINE MONTGOMERY E. CASOR KENNEDY, THERESA HUM (R)	01-22-6	13.16
7	STEPHEN L. MILLER (S)\ STEPHEN L. MILLER (R)	02-17-6	24.52
8	CORETTA A. KING REVOCABLE LIVING TRUST (S), DAVID P. MERIDIAN (S)\ CORETTA A. KING REVOCABLE LIVING TRUST (R)	02-17-6.2	1.24
	CORETTA A. KING REVOCABLE LIVING TRUST (S), CORETTA A. KING REVOCABLE LIVING TRUST (R)	02-17-6	12.22

WELLS SURFACE LOCATIONS PROPOSED HORIZONTAL REFERENCES TO

LATITUDE: 39°47'00" N

SURFACE HOLE 6,049'

SURFACE HOLE 7,239'

W 80°40'00"

47-103-03143 H6A

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

TRACT	ADJOINING SURFACE OWNER (S)	TAX PARCEL	ACRES
A	AGNES & CATHERINE KLUG (S)	09-20-20	1.50
B	DAVID E. STINE ET UX (S)	09-20-21	3.25
C	MICHAEL A. URBANEK (S)	09-20-17.2	5.00
D	MICHAEL A. URBANEK (S)	09-20-17.1	1.00
E	DAVID PAUL WEIGAND (S)	09-20-09	48.13
F	DAVID PAUL WEIGAND (S)	09-20-12.1	41.29
G	MARY JOSEPHINE NICE (S)	09-20-13	85.50
H	DAVID PAUL WEIGAND (S)	09-20-15	16.24
I	ELEANOR T. & JAMES B. MILLER (S)	09-20-16	22.00
J	ROBERT F. VILLERS (S)	09-21-1	111.51
K	KIMBERLY C. HOFFMAN (S)	09-21-1.1	27.29
L	KIMBERLY C. HOFFMAN & PAUL G. FOX (S)	09-21-21	25.00
M	KIMBERLY C. HOFFMAN (S)	12-04-40	30.00
N	ZACHARY M. BLAIR (S)	09-21-20	84.55
O	RHODA C. & CLEO M. SIVERT (S)	12-04-06	101.30
P	RHODA C. & CLEO M. SIVERT (S)	12-04-16	16.75
Q	JAMES L. BITHELL & CHRISTOPHER P. BITHELL (S)	12-04-26	180.53
R	JOSEPH & MINNIE SHIBEN ESTATES. (S)	12-04-25	38.75
S	ANTHONY C. & REBECCA F. BLATT (S)	12-04-15	38.00
T	PAUL G. & CYNTHIA G. FOX (S)	12-04-24	50.00
U	EILEEN KLUG ET AL (S)	12-04-23	76.95
V	EILEEN KLUG ET AL (S)	12-04-22	48.00
W	PATSY L. DULANEY (S)	12-04-12	52.00
X	DELORES ZOMBOTTI (S)	12-03-11.2	4.34
Y	PAUL & CYNTHIA FOX (S)	12-04-01	56.00
Z	ROBERT WILLIAM BONNETTE ET UX (S)	09-22-08	126.53
AA	GLENDA J. MILLER (S)	09-20-18	2.75
BB	HILLARY G. MILLER (S)	09-20-19	1.00
CC	EILEEN J KLUG ET AL (S)	09-20-22	70.24

REVISIONS:

COMPANY: SWN Production Company, LLC — SWN Production Company™

OPERATOR'S WELL #: BLATT WTZ 1H

LOCATION: PROCTOR DISTRICT, WETZEL COUNTY, WEST VIRGINIA

DATE: 11-12-2015
DRAWN BY: N. MANO
SCALE: N/A
DRAWING NO: ADJOINING OWNERS

\\D7W3HRL1\1-04-16 DJ\SWN\BLATT\UTM NAD83 FT 6-26-15\1H\BLATT WTZ 1H 1-20-2016\BLATT WTZ 1H 1-20-2016.DWG
WEDNESDAY JANUARY 20 2016 12:06PM

PROPERTY NUMBER 2501163561
PAD ID 3001156342

47-103-03143 H6A

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

TRACT	ADJOINING SURFACE OWNER (S)	TAX PARCEL	ACRES
A	AGNES & CATHERINE KLUG (S)	09-20-20	1.50
B	DAVID E. STINE ET UX (S)	09-20-21	3.25
C	MICHAEL A. URBANEK (S)	09-20-17.2	5.00
D	MICHAEL A. URBANEK (S)	09-20-17.1	1.00
E	DAVID PAUL WEIGAND (S)	09-20-09	48.13
F	DAVID PAUL WEIGAND (S)	09-20-12.1	41.29
G	MARY JOSEPHINE NICE (S)	09-20-13	85.50
H	DAVID PAUL WEIGAND (S)	09-20-15	16.24
I	ELEANOR T. & JAMES B. MILLER (S)	09-20-16	22.00
J	ROBERT F. VILLERS (S)	09-21-1	111.51
K	KIMBERLY C. HOFFMAN (S)	09-21-1.1	27.29
L	KIMBERLY C. HOFFMAN & PAUL G. FOX (S)	09-21-21	25.00
M	KIMBERLY C. HOFFMAN (S)	12-04-40	30.00
N	ZACHARY M. BLAIR (S)	09-21-20	84.55
O	RHODA C. & CLEO M. SIVERT (S)	12-04-06	101.30
P	RHODA C. & CLEO M. SIVERT (S)	12-04-16	16.75
Q	JAMES L. BITHELL & CHRISTOPHER P. BITHELL (S)	12-04-26	180.53
R	JOSEPH & MINNIE SHIBEN ESTATES. (S)	12-04-25	38.75
S	ANTHONY C. & REBECCA F. BLATT (S)	12-04-15	38.00
T	PAUL G. & CYNTHIA G. FOX (S)	12-04-24	50.00
U	EILEEN KLUG ET AL (S)	12-04-23	76.95
V	EILEEN KLUG ET AL (S)	12-04-22	48.00
W	PATSY L. DULANEY (S)	12-04-12	52.00
X	DELORES ZOMBOTTI (S)	12-03-11.2	4.34
Y	PAUL & CYNTHIA FOX (S)	12-04-01	56.00
Z	ROBERT WILLIAM BONNETTE ET UX (S)	09-22-08	126.53
AA	GLENDA J. MILLER (S)	09-20-18	2.75
BB	HILLARY G. MILLER (S)	09-20-19	1.00
CC	EILEEN J KLUG ET AL (S)	09-20-22	70.24

REVISIONS:

COMPANY: SWN Production Company, LLC

SWN Production Company™

OPERATOR'S: BLATT WTZ

WELL #: 1H

LOCATION: PROCTOR DISTRICT, WETZEL COUNTY, WEST VIRGINIA

DATE: 11-12-2015

DRAWN BY: N. MANO

SCALE: N/A

DRAWING NO:

ADJOINING OWNERS

PROPERTY NUMBER 2501163561

PAD ID 3001156342

//D7W3HRL1/1-04-16 DJ/SWN/BLATT/UTM NAD83 FT 6-26-15/1H/BLATT WTZ 1H 1-20-2016/BLATT WTZ 1H 1-20-2016.DWG

WEDNESDAY JANUARY 20 2016 12:06PM

WW-6A1
(5/13)

Operator's Well No. BLATT WTZ 1H

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

(1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;

(2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
See Exhibit "A"				

RECEIVED
Office of Oil and Gas

DEC 01 2015

WV Department of
Environmental Protection

Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: SWN Production Company, LLC.
By: [signature]
Its: Landman

1H

Tract #	TMP	Surface Owner	Deeded Acreage	Vesting BK/PG	Mineral Deeds	Lease #	Lessor	Lessee	Royalty	BK/PG
				DB 366/638						
		Tami Blatt		DB 366/642						
		Kevin L. Blatt, Trustee of the Blatt Family		DB 366/650						
		Irrevocable Trust		DB 366/646						
1)	12-4-5	Michael J. Blatt and Janice Blatt	108.00	DB 428/844		1-254825-000	Edward Blatt, et al	Manufacturers Light & Heat Company	12.50%	45A/310
					DB 366/638					
	Mineral Owner	Tami Blatt			DB 366/642		Manufacturers Light & Heat Company	Columbia Gas Transmission	N/A	263/194
		Kevin L. Blatt, Trustee of the Blatt Family			DB 366/650					
	Mineral Owner	Irrevocable Trust			DB 366/646		Columbia Gas Transmission	Chesapeake Appalachia LLC	N/A	663/592
	Mineral Owner	Michael J. Blatt and Janice Blatt			DB 428/844		Chesapeake Appalachia LLC	SWN Production Company LLC	N/A	33/110
2)	12-4-14	Anthony C. Blatt and Rebecca F. Blatt	37.00	DB 398/189		1-254766-000	B.G. Weigand	Manufacturers Light & Heat Company	12.50%	45A/287
					DB 398/189					
	Mineral Owner	Anthony C. Blatt and Rebecca F. Blatt			DB 276/420		Manufacturers Light & Heat Company	Columbia Gas Transmission	N/A	263/194
							Columbia Gas Transmission	Chesapeake Appalachia LLC	N/A	663/592
							Chesapeake Appalachia LLC	SWN Production Company LLC	N/A	33/110
				DB 366/638						
		Tami Blatt		DB 366/642						
		Kevin L. Blatt, Trustee of the Blatt Family		DB 366/650						
		Irrevocable Trust		DB 366/646						
3)	12-4-4	Michael J. Blatt and Janice Blatt	106.26	DB 428/844		1-254905-000	Edward Blatt, et al	Manufacturers Light & Heat Company	12.50%	44A/220
				DB 366/638						
		Tami Blatt		DB 366/642						
		Kevin L. Blatt, Trustee of the Blatt Family		DB 366/650						
		Irrevocable Trust		DB 366/646						
4)	12-4-3	Michael J. Blatt and Janice Blatt	16.83	DB 428/844			Manufacturers Light & Heat Company	Columbia Gas Transmission	N/A	263/194
				DB 366/638						
		Tami Blatt		DB 366/642						
		Kevin L. Blatt, Trustee of the Blatt Family		DB 366/650						
		Irrevocable Trust		DB 366/646						
	12-4-13	Michael J. Blatt and Janice Blatt	22.14	DB 428/844			Columbia Gas Transmission	Chesapeake Appalachia LLC	N/A	663/592
					DB 366/638					
	Mineral Owner	Tami Blatt			DB 366/642		Chesapeake Appalachia LLC	SWN Production Company LLC	N/A	33/110
		Kevin L. Blatt, Trustee of the Blatt Family			DB 366/650					
	Mineral Owner	Irrevocable Trust			DB 366/646					
	Mineral Owner	Michael J. Blatt and Janice Blatt			DB 428/844					
5)	12-4-2	Paul Fox & Cynthia Fox	74.75	DB 323/72		1-254904-000	C. F. Herrick	Manufacturers Light & Heat Company	12.50%	44A/213
	Mineral Owner	Albert F. Estep Irrevocable Trust			DB 423/984		Manufacturers Light & Heat Company	Columbia Gas Transmission	N/A	263/194
							Columbia Gas Transmission	Chesapeake Appalachia LLC	N/A	663/592
							Chesapeake Appalachia LLC	SWN Production Company LLC	N/A	33/110
6)	9-22-10	Thomas John Fox	91.21	DB 635/454		1-254806-000	Clarence Hohman & Clara Hohman	Manufacturers Light & Heat Company	12.50%	353/129
	Mineral Owner	Thomas John Fox			DB 635/454		Manufacturers Light & Heat Company	Columbia Gas Transmission	N/A	263/194
	Mineral Owner	Catherine Montgomery			APP 124/563		Columbia Gas Transmission	Chesapeake Appalachia LLC	N/A	663/592
	Mineral Owner	E. Carol Kennedy			WB 57/530		Chesapeake Appalachia LLC	SWN Production Company LLC	N/A	33/110
	Mineral Owner	Theresa Hunt			APP 124/563					
7)	9-20-17.4	Stephen L. Miller	24.27	DB 547/418		1-282020-000	Stephen L. Miller	Chesapeake Appalachia LLC	12.50%	684/92
	Mineral Owner	Stephen L. Miller			DB 547/418		Chesapeake Appalachia LLC	SWN Production Company LLC	N/A	33/110

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8)	9-20-17	Coletta A. Klug Revocable Living Trust	53.71	DB 660/441	1-288006-000	Coletta A. Klug Revocable Living Trust	Chesapeake Appalachia LLC	12.50%	691/112
	9-20-17.3	Coletta A. Klug Revocable Living Trust	1.34	DB 660/441		Chesapeake Appalachia LLC	SWN Production Company LLC	N/A	33/110
	9-20-17.5	David P. Weigand	9.61	DB 570/43					
	Mineral Owner	Coletta A. Klug Revocable Living Trust			DB 660/441				
					ADJOINING TRACTS				
A)	9-20-17.5	David P. Weigand	9.61	DB 570/43					
B)	9-20-17.2	Michael A. Urbanek	5.00	DB 626/670					
C)	9-20-17.3	Coletta A. Klug Revocable Living Trust	1.34	DB 660/441					
D)	9-20-17.1	Michael A. Urbanek	1.00	DB 626/670					
E)	9-20-9	David P. Weigand	48.13	DB 501/139					
F)	9-20-12.1	David P. Weigand	41.29	DB 445/252					
G)	9-20-13	Mary Josephine Nice	85.50	DB 652/111					
H)	9-20-15	David P. Weigand	16.24	DB 240/371					
I)	9-20-16	Eleanor T. Miller & James B. Miller	22.00	WB 71/211					
J)	9-21-1	Robert F. Villers	111.51	DB 652/105					
K)	9-21-1.1	Kimberly C. Hoffman	27.29	DB 611/563					
L)	9-21-21	Paul G. Fox & Kimberly C. Hoffman	28.02	DB 577/560					
M)	12-4-40	Kimberly C. Hoffman	30.00	DB 420/899					
N)	9-21-20	Zachary M. Blair	84.55	DB 617/284					
O)	12-4-6	Rhoda C. Sivert & Cleo M. Sivert	101.30	DB 340/434					
P)	12-4-16	Rhoda C. Sivert & Cleo M. Sivert	16.75	DB 340/434					
Q)	12-4-26	James L. Bithell & Christopher P. Bithell	180.53	DB 428/338					
R)	12-4-25	Joseph & Minnie Shiben Estates	38.75	DB 158/48					
				DB 398/189					
S)	12-4-15	Anthony C. Blatt and Rebecca F. Blatt	38.00	DB 276/420					
T)	12-4-24	Paul Fox & Cynthia Fox	50.00	DB 396/514					
U)	12-4-23	Eileen J. Klug et al	76.95	DB 423/149					
V)	12-4-22	Eileen J. Klug et al	48.00	DB 423/149					
				DB 366/638					
		Tami Blatt		DB 366/642					
		Kevin L. Blatt, Trustee of the Blatt Family		DB 366/650					
		Irrevocable Trust		DB 366/646					
W)	12-4-13	Michael J. Blatt and Janice Blatt	22.14	DB 428/844					
X)	12-4-12	Patsy L. Dulaney	52.00	DB 431/720					
Y)	12-3-11.2	Dolores A. Zombotti	4.34	DB 328/113					
Z)	12-4-10	Paul Fox & Cynthia Fox	56.00	DB 323/72					
AA)	9-22-8	Robert William Bonnette et ux	126.53	DB 573/80					
BB)	9-20-18	Glenda J. Miller	2.75	WB 83/242					
CC)	9-20-19	Hillary G. Miller	1.00	WB 66/658					
DD)	9-20-22	Eileen J. Klug et al	70.24	DB 727/604					
EE)	9-20-20	Agnes Klug and Catherine Klug	1.50	DB 832/510					
FF)	9-20-21	David E. Stine et ux	3.25	DB 575/625					

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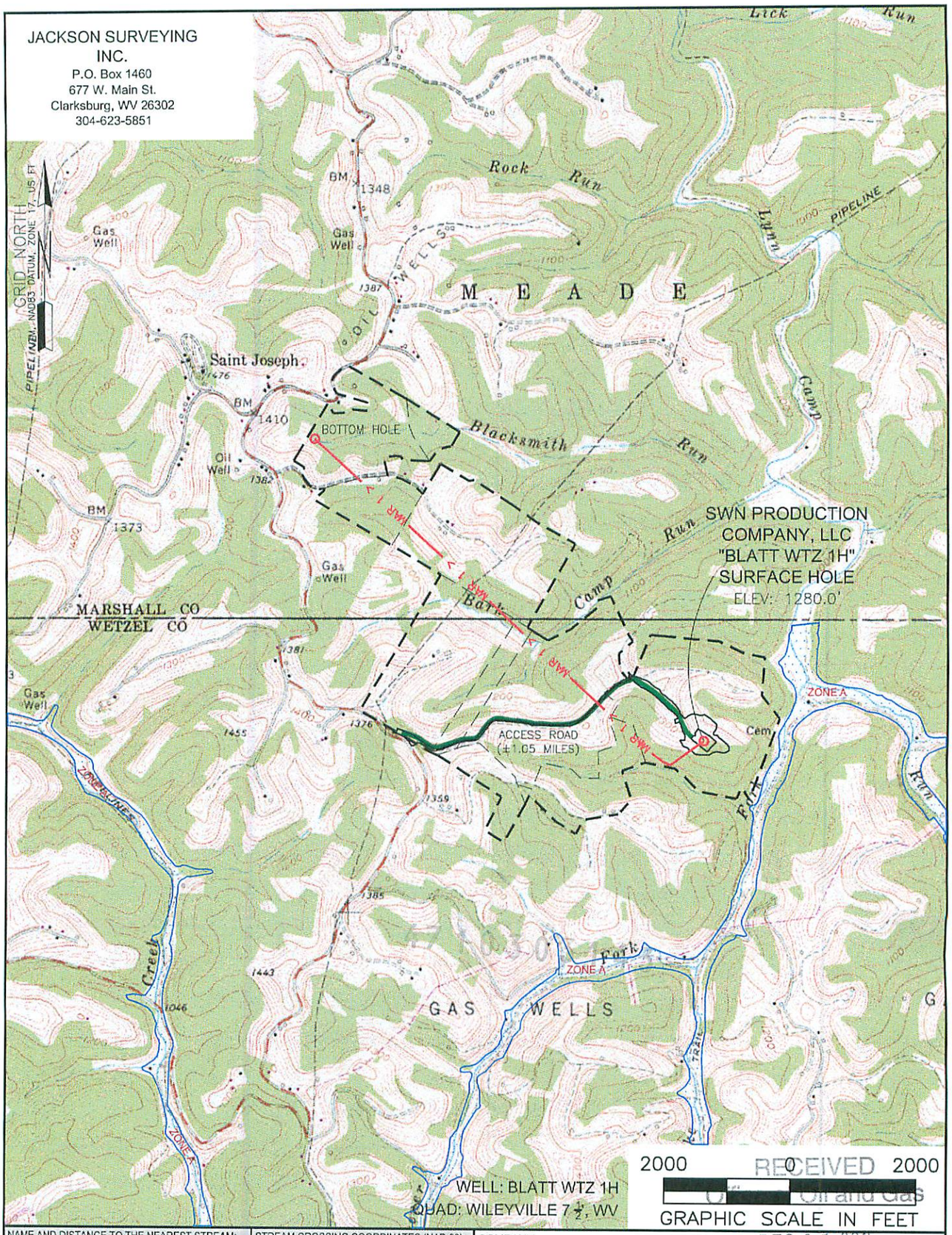
JACKSON SURVEYING INC.
P.O. Box 1460
677 W. Main St.
Clarksburg, WV 26302
304-623-5851



WELL: BLATT WTZ 1H
QUAD: WILEYVILLE 7 ½, WV

NAME AND DISTANCE TO THE NEAREST STREAM:	STREAM CROSSING COORDINATES (NAD 83):
BLAKE FORK IS LOCATED ±0.23 MILES SE OF THE CENTER OF THE DRILL PAD.	NO NEW CROSSINGS.

WELL RESTRICTIONS:

WELL PAD, LOD, & E & S CONTROL FEATURES TO PERENNIAL STREAM, LAKE, POND, RESERVOIR OR WETLAND: >100 FEET
WELL PAD, LOD, & E & S CONTROL FEATURES TO NATURALLY PRODUCING TROUT STREAM: >300 FEET
WELL PAD, LOD, & E & S CONTROL FEATURES TO GROUNDWATER INTAKE OR PUBLIC WATER SUPPLY: >1000 FEET
WELL SHL TO EXISTING WATER WELL OR DEVELOPED SPRING: >250 FEET
CENTER OF PAD TO OCCUPIED DWELLING STRUCTURE: >625 FEET
CENTER OF PAD TO AGRICULTURAL BUILDINGS LARGER THAN 2500 SQ FT: >625 FEET

FEMA FLOOD INFORMATION:

BY GRAPHIC PLOTTING ONLY FEMA FIRM INCORPORATED AREA OF WETZEL COUNTY, WEST VIRGINIA; MAP NUMBER 54103C0075 C; EFFECTIVE DATE: SEPTEMBER 25, 2009.
NO FEMA MAP AVAILABLE FOR MARSHALL COUNTY SECTION.

COMPANY: SWN Production Company, LLC

OPERATOR'S WELL #: BLATT WTZ 1H

LOCATION: PROCTOR DISTRICT, WETZEL COUNTY, WEST VIRGINIA

SURFACE HOLE LOCATION:
GEOGRAPHIC (NAD83):
LATITUDE: 39.715975°
LONGITUDE: −80.688178°

BOTTOM HOLE LOCATION:
GEOGRAPHIC (NAD83):
LATITUDE: 39.729176°
LONGITUDE: −80.710142°

LEGEND:
- PROPOSED SURFACE HOLE / BOTTOM HOLE
- EXISTING / PRODUCING WELLHEAD
- ABANDONED WELL
- PLUGGED & ABANDONED WELL
- CUT CONDUCTOR
- EXISTING SPRING
- EXISTING WATER WELL
- ACCESS ROAD
- ACCESS ROAD TO PREV. SITE
- HIGHWAY/INTERSTATE
- COUNTY ROAD

REVISIONS:

DATE: 11-12-2015
DRAWN BY: N. MANO
SCALE: 1" = 2000'
DRAWING NO:
TOPOGRAPHIC MAP

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\\D7W3HRL1\1-05-15 DJ E\SOUTHWESTERN ENERGY\BLATT\UTM NAD83 FT 6-26-15\1H\BLATT WTZ 1H 11-12-2015\BLATT WTZ 1H 11-12-2015.DWG
THURSDAY NOVEMBER 12 2015 12:53PM

PROPERTY NUMBER 2501163561
PAD ID 3001156342

WW-6AC
(1/12)

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE CERTIFICATION

Date of Notice Certification: 11/30/15

API No. 47- 103 -
Operator's Well No. Blatt WTZ 1H
Well Pad Name: Blatt Pad

Notice has been given:
Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State:	WV	UTM NAD 83	Easting:	526727.006
County:	103-Wetzel		Northing:	4396280.467
District:	7-Proctor	Public Road Access:		St. Joseph Baker Hill
Quadrangle:	681-Wileyville	Generally used farm name:		Blatt
Watershed:	Blake Fork of Upper Ohio River 2			

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

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Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following: *PLEASE CHECK ALL THAT APPLY		OOG OFFICE USE ONLY
☐ 1. NOTICE OF SEISMIC ACTIVITY	or ☒ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	☐ RECEIVED/ NOT REQUIRED
☒ 2. NOTICE OF ENTRY FOR PLAT SURVEY	or ☐ NO PLAT SURVEY WAS CONDUCTED	☐ RECEIVED
☒ 3. NOTICE OF INTENT TO DRILL	or ☐ NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or ☐ WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	☐ RECEIVED/ NOT REQUIRED
☒ 4. NOTICE OF PLANNED OPERATION		☐ RECEIVED
☒ 5. PUBLIC NOTICE		☐ RECEIVED
☒ 6. NOTICE OF APPLICATION		☐ RECEIVED

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Required Attachments:
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

WW-6AC
(1/12)

Certification of Notice is hereby given:

THEREFORE, I _____, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all 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.

Well Operator:	SWN Production Co., LLC	Address:	P.O. Box 1300
By:	Dee Southall		Jane Lew, WV 26378
Its:	Regulatory Supervisor	Facsimile:	
Telephone:	832-796-1614	Email:	Dee_Southall@swn.com

OFFICIAL SEAL
NOTARY PUBLIC
State of West Virginia
BRITTANY R WOODY
3302 Old Elkins Road
Buckhannon, WV 26201
My commission expires November 27, 2022

Subscribed and sworn before me this 13th day of November, 2015

Brittany R Woody Notary Public

My Commission Expires 11/27/22

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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WW-6A
(9-13)

API NO. 47- 103 -
OPERATOR WELL NO. Blatt WTZ 1H
Well Pad Name: Blatt Pad

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**

Date of Notice: 11/30/15 **Date Permit Application Filed:** 11/30/15

Notice of:

☑ PERMIT FOR ANY WELL WORK

☐ CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

☐ PERSONAL SERVICE

☑ REGISTERED MAIL

☐ METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Notice ☑ Well Plat Notice is hereby provided to:

☑ SURFACE OWNER(s)
Name: Lawrence & Irene Blatt
Address: 760 Northeast Ave
Tallmadge, OH 44278
Name: Michael & Janice Blatt
Address: 820 South Munroe Road
Tallmade OH 44278

☐ SURFACE OWNER(s) (Road and/or Other Disturbance)
Name:
Address:
Name:
Address:

☐ SURFACE OWNER(s) (Impoundments or Pits)
Name:
Address:

☑ COAL OWNER OR LESSEE
Name: CNX Center %Leatherwood
Address: 1000 Consol Energy Drive
Canonsburg, PA 15317

☐ COAL OPERATOR
Name:
Address:

☑ SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name: None
Address:

☑ OPERATOR OF ANY NATURAL GAS STORAGE FIELD
Name:
Address:

*Please attach additional forms if necessary

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WW-6A
(9-13)

API NO. 47- 103 -
OPERATOR WELL NO. Blatt WTZ 1H
Well Pad Name: Blatt Pad

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**

Date of Notice: 11/25/15 **Date Permit Application Filed:** 11/30/15

Notice of:

☑ PERMIT FOR ANY WELL WORK

☐ CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

☐ PERSONAL SERVICE

☑ REGISTERED MAIL

☐ METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Notice ☑ Well Plat Notice is hereby provided to:

☑ SURFACE OWNER(s)
Name: Tami Blatt
Address: 760 Northeast Ave
Tallmadge, OH 44278
Name: Patsdy Dulany & Dennis Romanoski
Address: 1303 2nd Street
Moundsville, WV 26041

☐ SURFACE OWNER(s) (Road and/or Other Disturbance)
Name:
Address:
Name:
Address:

☐ SURFACE OWNER(s) (Impoundments or Pits)
Name:
Address:

☑ COAL OWNER OR LESSEE
Name:
Address:

☐ COAL OPERATOR
Name:
Address:

☑ SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name:
Address:

☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD
Name:
Address:

*Please attach additional forms if necessary

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WW-6A
(8-13)

API NO. 47- 103 -
OPERATOR WELL NO. Blatt WTZ 1H
Well Pad Name: Blatt Pad

Notice is hereby given:
Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

This Notice Shall Include:
Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

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Well Location Restrictions
Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

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examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

Water Well Testing:
Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

Water Testing Laboratories:
Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

Written Comment:
Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

4710305143

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

WW-6A
(8-13)

API NO. 47- 103 -
OPERATOR WELL NO. Blatt WTZ 1H
Well Pad Name: Blatt Pad

Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

Comment Requirements

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

(1) The proposed well work will constitute a hazard to the safety of persons;
(2) The plan for soil erosion and sediment control is not adequate or effective;
(3) Damage would occur to publicly owned lands or resources; or
(4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

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Environmental Protection

WW-6A
(8-13)

API NO. 47- 103 -
OPERATOR WELL NO. Blatt WTZ 1H
Well Pad Name: Blatt Pad

Notice is hereby given by:

Well Operator: SWN Production Co., LLC
Telephone: 304-884-1613
Email: Dee_Southall@swn.com

Address: P.O. Box 1300
Jane Lew, WV 26378
Facsimile:

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

OFFICIAL SEAL
Notary Public, State of West Virginia
BRITTANY R WOODY
3302 Old Elkins Road
Buckhannon, WV 26201
My commission expires November 27, 2022

Subscribed and sworn before me this 13th day of November 2015

Brittany R Woody Notary Public

My Commission Expires 11/27/22

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WV Department of
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WW-6A4
(1/12)

Operator Well No. Blatt WTZ 1H

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time Requirement: Notice shall be provided at least **TEN (10)** days prior to filing a permit application.
Date of Notice: 11/16/2015 **Date Permit Application Filed:** 11/30/15

Delivery method pursuant to West Virginia Code § 22-6A-16(b)

☐ HAND DELIVERY ☒ CERTIFIED MAIL RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided,* That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however,* That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: Tami M. Blatt
Address: 1298 East Avenue
Tallmadge, OH 44278

Name:
Address:

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	West Virginia	UTM NAD 83	Easting:	526,727.006
County:	Wetzel		Northing:	4,396,280.467
District:	Proctor	Public Road Access:		Bark Camp Run
Quadrangle:	Wileyville	Generally used farm name:		
Watershed:	Blake Fork of Upper Ohio River 2			

4710303143

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator:	SWN Production Company, LLC	Authorized Representative:	Micah Feather
Address:	PO Box 1300, 179 Innovation Drive	Address:	PO Box 1300, 179 Innovation Drive
	Jane Lew, WV 26378		Jane Lew, WV 26378
Telephone:	304-884-1611	Telephone:	304-884-1611
Email:	Micah_Feather@swn.com	Email:	Micah_Feather@swn.com
Facsimile:		Facsimile:	

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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WV Department of
Environmental Protection

WW-6A4
(1/12)

Operator Well No. Blatt WTZ 1H

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time Requirement: Notice shall be provided at least **TEN (10)** days prior to filing a permit application.
Date of Notice: 11/16/2015 **Date Permit Application Filed:** 11/30/15

Delivery method pursuant to West Virginia Code § 22-6A-16(b)

☐ HAND DELIVERY ☒ CERTIFIED MAIL RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided,* That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however,* That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: Michael J. Blatt and Janice M. Blatt
Address: 820 South Munroe Road
Tallmadge, OH 44278

Name:
Address:

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	West Virginia	UTM NAD 83	Easting:	526,727.006
County:	Wetzel		Northing:	4,396,280.467
District:	Proctor	Public Road Access:		Bark Camp Run
Quadrangle:	Wileyville	Generally used farm name:		
Watershed:	Blake Fork of Upper Ohio River 2			

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

4710305143

Notice is hereby given by:

Well Operator:	SWN Production Company, LLC	Authorized Representative:	Micah Feather
Address:	PO Box 1300, 179 Innovation Drive	Address:	PO Box 1300, 179 Innovation Drive
	Jane Lew, WV 26378		Jane Lew, WV 26378
Telephone:	304-884-1611	Telephone:	304-884-1611
Email:	Micah_Feather@swn.com	Email:	Micah_Feather@swn.com
Facsimile:		Facsimile:	

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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WW-6A4
(1/12)

Operator Well No. Blatt WTZ 1H

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time Requirement: Notice shall be provided at least **TEN (10)** days prior to filing a permit application.
Date of Notice: 11/16/2015 **Date Permit Application Filed:** 11/30/15

Delivery method pursuant to West Virginia Code § 22-6A-16(b)

☐ HAND DELIVERY ☒ CERTIFIED MAIL RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided,* That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however,* That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: Blatt Family Irrevocable Trust - Kevin L. Blatt, Trustee
Address: 760 North Court Avenue
Tallmadge, OH 44278

Name:
Address:

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: West Virginia
County: Wetzel
District: Proctor
Quadrangle: Wileyville
Watershed: Blake Fork of Upper Ohio River 2

UTM NAD 83 Easting: 526,727.006
Northing: 4,396,280.467
Public Road Access: Bark Camp Run
Generally used farm name:

47 10305143

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator: SWN Production Company, LLC
Address: PO Box 1300, 179 Innovation Drive
Jane Lew, WV 26378
Telephone: 304-884-1611
Email: Micah_Feather@swn.com
Facsimile:

Authorized Representative: Micah Feather
Address: PO Box 1300, 179 Innovation Drive
Jane Lew, WV 26378
Telephone: 304-884-1611
Email: Micah_Feather@swn.com
Facsimile:

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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WW-6A5
(1/12)

Operator Well No. Blatt WTZ 1H

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF PLANNED OPERATION

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**
Date of Notice: 11/16/2015 **Date Permit Application Filed:** 11/30/15

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

☒ CERTIFIED MAIL RETURN RECEIPT REQUESTED ☐ HAND DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

4710305143

Notice is hereby provided to the SURFACE OWNER(s)
(at the address listed in the records of the sheriff at the time of notice):

Name: Tami M. Blatt
Address: 1298 East Avenue
Tallmadge, OH 44278

Name:
Address:

Notice is hereby given:
Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: West Virginia
County: Wetzel
District: Proctor
Quadrangle: Willeyville
Watershed: Blake Fork of Upper Ohio River 2

UTM NAD 83 Easting: 526,727.006
Northing: 4,396,280.467
Public Road Access: Bark Camp Run
Generally used farm name:

This Notice Shall Include:
Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1)A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Operator: SWN Production Company, LLC
Telephone: 304-884-1611
Email: Micah_Feather@swn.com

Address: PO Box 1300, 179 Innovation Drive
Jane Lew, WV 26378
Facsimile:

Oil and Gas Privacy Notice:
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DEC 01 2015
WV Department of Environmental Protection

WW-6A5
(1/12)

Operator Well No. Blatt WTZ 1H

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF PLANNED OPERATION

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**
Date of Notice: 11/16/2015 **Date Permit Application Filed:** 11/30/15

4710305143

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

☒ CERTIFIED MAIL RETURN RECEIPT REQUESTED ☐ HAND DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

Notice is hereby provided to the SURFACE OWNER(s)
(at the address listed in the records of the sheriff at the time of notice):

Name: Michael J. Blatt and Janice M. Blatt
Address: 820 South Munroe Road
Tallmadge, OH 44278

Name:
Address:

Notice is hereby given:
Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: West Virginia
County: Wetzel
District: Proctor
Quadrangle: Willeyville
Watershed: Blake Fork of Upper Ohio River 2

UTM NAD 83 Easting: 526,727.006
Northing: 4,396,280.467
Public Road Access: Bark Camp Run
Generally used farm name:

This Notice Shall Include:
Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1)A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Operator: SWN Production Company, LLC
Telephone: 304-884-1611
Email: Micah_Feather@swn.com

Address: PO Box 1300, 179 Innovation Drive
Jane Lew, WV 26378
Facsimile:

Oil and Gas Privacy Notice:
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WW-6A5
(1/12)

Operator Well No. Blatt WTZ 1H

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF PLANNED OPERATION

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**
Date of Notice: 11/16/2015 **Date Permit Application Filed:** 11/30/15

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

☒ CERTIFIED MAIL RETURN RECEIPT REQUESTED ☐ HAND DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

Notice is hereby provided to the SURFACE OWNER(s)
(at the address listed in the records of the sheriff at the time of notice):

Name: Blatt Family Irrevocable Trust - Kevin L. Blatt, Trustee
Address: 760 North Court Avenue
Tallmadge, OH 44278

Name:
Address:

4710303143

Notice is hereby given:
Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: West Virginia
County: Wetzel
District: Proctor
Quadrangle: Willeyville
Watershed: Blake Fork of Upper Ohio River 2

UTM NAD 83 Easting: 526,727.006
Northing: 4,396,280.467
Public Road Access: Bark Camp Run
Generally used farm name:

This Notice Shall Include:
Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1)A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Operator: SWN Production Company, LLC
Telephone: 304-884-1611
Email: Micah_Feather@swn.com

Address: PO Box 1300, 179 Innovation Drive
Jane Lew, WV 26378
Facsimile:

Oil and Gas Privacy Notice:
The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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Office of Oil and Gas
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WV Department of
Environmental Protection

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Earl Ray Tomblin
Governor

Paul A. Mattox, Jr., P. E.
Secretary of Transportation/
Commissioner of Highways

November 17, 2015

James A. Martin, Chief
Office of Oil and Gas
Department of Environmental Protection
601 57th Street, SE
Charleston, WV 25304

Subject: DOH Permit for the Blatt Pad WTZ 1H Well Site, Wetzel County

Dear Mr. Martin,

The West Virginia Division of Highways has transferred permit 06-2012-0264 to Southwestern Energy for access to the State Road for the well site located off of Wetzel County Route 4 SLS.

The operator has signed an OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

4710303143

Very Truly Yours,

Gary K. Clayton

Gary K. Clayton
Regional Maintenance Engineer
Central Office Oil &Gas Coordinator

Cc: Brittany Woody
Southwestern Energy
CH, OM, D-6
File

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DEC 01 2015
WV Department of
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Supplier Name	Product Name	Product Use	Chemical Name	CAS Number
NALCO ONESOURCE	EC6110A	Biocide	Ethanol	000064-17-5
			Glutaraldehyde (Pentanediol)	000111-30-8
			Quaternary Ammonium Compounds	N/A-063
	EC6629A	Biocide	No Hazardous Components	NONE
WEATHERFORD	WBK-133 OXIDIZER	Breaker	Ammonium Persulfate	007727-54-0
	WBK-134	Breaker	Ammonium Persulfate	007727-54-0
			Crystalline Silica (Quartz Sand, Silicon Dioxide)	014808-60-7
	WCS-631LC	Clay Stabilizer	Proprietary Non Hazardous Salt	N/A-229
			Water	007732-18-5
	WFR-55LA	Friction Reducer	No Hazardous Components	NONE
	WGA-15L	Gel	Petroleum Distillate Hydrotreated Light	064742-47-8
	WPB-584-L	Buffer	Potassium Carbonate	000584-08-7
			Potassium Hydroxide	001310-58-3
	WXL-101LE	Corsslinker	No Hazardous Components	NONE
	WXL-101LM	Crosslinker	Petroleum Distillate Hydrotreated Light	064742-47-8
	WXL-105L	Crosslinker	Water	007732-18-5
			Ethylene Glycol	000107-21-1
			Boric Acid	010043-35-3
			Ethanolamine	000141-43-5
SCHLUMBERGER	B244 Green-Cide 25G	Biocide	Glutaraldehyde	111-30-8
	L071 Temporary Clay Stabilizer	Clay Stabilizer	Cholinium Chloride	67-48-1
	Breaker J218	Breaker	Diammonium Peroxidisulphate	7727-54-0
	EB-Clean* J475 Breaker		Diammonium Peroxidisulphate	7727-54-0
	Friction Reducer B315	Friction Reducer	Distillates (petroleum), Hydrotreated light Aliphatic Alcohol Glycol Ether	64742-47-8 Proprietary
	Friction Reducer J609		Ammonium Sulfate	7783-20-2

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Supplier Name	Product Name	Product Use	Chemical Name	CAS Number
SCHLUMBERGER	Water Gelling Agent J580	Gel	Carbohydrate Polymer	Proprietary
	Scale Inhibitor B317	Scale Inhibitor	Trisodium ortho phosphate Ethane-1, 2-diol	7601-54-9 107-21-1
	Borate Crosslinker J532	Crosslinker	Aliphatic polyol Sodium tetraborate decahydrate	Proprietary 1303-96-4
	Crosslinker J610		Aliphatic polyol Potassium hydroxide	Proprietary 1310-58-3

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Supplier Name	Product Name	Product Use	Chemical Name	CAS Number
BAKER HUGHES	ALPHA 1427	Biocide	Didecyl Dimethyl Ammonium Chloride	007173-51-1
			Ethanol	000064-17-5
			Glutaraldehyde (Pentanediol)	000111-30-8
			Quaternary Ammonium Compound	068424-85-1
			Water	007732-18-5
	BF-7L	Buffer	Potassium Carbonate	000584-08-7
	ClayCare	Clay Stabilizer	Choline Chloride	000067-48-1
			Water	007732-18-5
	Enzyme G-I	Breaker	No Hazardous Components	NONE
	ENZYME G-NE	Breaker	No Hazardous Components	NONE
	FRW-18	Friction Reducer	Petroleum Distillate Hydrotreated Light	064742-47-8
	GW-3LDF	Gel	Petroleum Distillate Blend	N/A-014
			Polysaccharide Blend	N/A-021
	SCALETROL 720	Scale Inhibitor	Diethylene Glycol	000111-46-6
			Ethylene Glycol	000107-21-1
	XLW-32	Crosslinker	Boric Acid	010043-35-3
			Methanol (Methyl Alcohol)	000067-56-1
FRAC TECH SERVICES	APB01 (AMMONIUM PERSUFATE BREAKER)	Breaker	Ammonium Persulfate	007727-54-0
	B05 (LOW PH BUFFER)	Buffer	Acetic acid	000064-19-7
	BXL03 Borate XL Delayed High Temp	Crosslinker	No Hazardous Components	NONE
	FRW-200	Friction Reducer	No Hazardous Components	NONE
	HVG01 (TURQUOISE-1 BULK)	Gelling Agent	Petroleum Distillate Hydrotreated Light	064742-47-8
	KCLS-4	Clay Stabilizer	No Hazardous Components	NONE
	LTB-1	Breaker	Ammonium Persulfate	N/A

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Environmental Protection

TZ PAD
RECLAMATION PLAN
JILT
VETZEL COUNTY, WV
ER 2015

SHEET INDEX

TS1. TITLE SHEET
EP2.1 EVACUATION ROUTE/ PREVAILING WIND
EP2.2 EVACUATION ROUTE/ PREVAILING WIND
AS3.1 ASBUILT OVERVIEW
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AS3.3 ASBUILT
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AS3.5 ASBUILT
AS3.6 ASBUILT
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AS3.8 ASBUILT
AS3.9 ASBUILT
AS3.10 ASBUILT
ASR4.1 CONSTRUCTION AND RECLAMATION ACCESS ROAD PROFILE
MRD5.1 RECLAMATION PLAN OVERVIEW
MRD5.2 RECLAMATION PLAN
MRD5.3 RECLAMATION PLAN
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MRD5.5 RECLAMATION PLAN
MRD5.6 RECLAMATION PLAN
MRD5.7 RECLAMATION PLAN
MRD5.8 RECLAMATION PLAN
MRD5.9 RECLAMATION PLAN
MRD5.10 RECLAMATION PLAN
MRD6.3 RECLAMATION DETAILS

BLATT WTZ PAD (LIMITS OF DISTURBANCE)	
PATSY L. DULANEY D.B. 431/720 52 Ac. TM 4/12	Road= 28,035 Sq. Ft.
PAUL & CYNTHIA FOX D.B. 323/72 74.75 Ac. TM 4/2	Road= 4,005 Sq. Ft.
BLATT ET AL D.B. 428/844 16.83 Ac. TM 4/3	Road=21,105 Sq. Ft.
BLATT ET AL D.B. 428/844 22.14 Ac. TM 4/13	Road=3,975 Sq. Ft.
BLATT ET AL D.B. 428/844 106.26 Ac. TM 4/4	Road=51,040 Sq. Ft.
KIMBERLY C. HOFFMAN D.B. 420/899 30 Ac. TM 4/40	Road=85 Sq. Ft.
BLATT ET AL D.B. 428/844 108 Ac. TM 4/5	Road=174,610 Sq. Ft. Pad=277,800 Sq. Ft.

MODIFIED LOD= 12.9 ACRES

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swn $\frac{R^2}{A} \rightarrow V^+$ ®
Production Company™

DMH
11-20-15

11-20-2015
Date:

N
W E
S
JACKSON SURVEYING, INC. PROFESSIONAL SURVEYORS
677 W. Main St.
Clarksburg, Wv 26301
304-623-5851

Jackson Surveying Inc.
TITLE SHEET
TS.1
SOUTHWESTERN PRODUCTION COMPANY LLC.
BLATT WTZ PAD
PROCTOR DISTRICT, WETZEL COUNTY, WV
NOVEMBER 20, 2015

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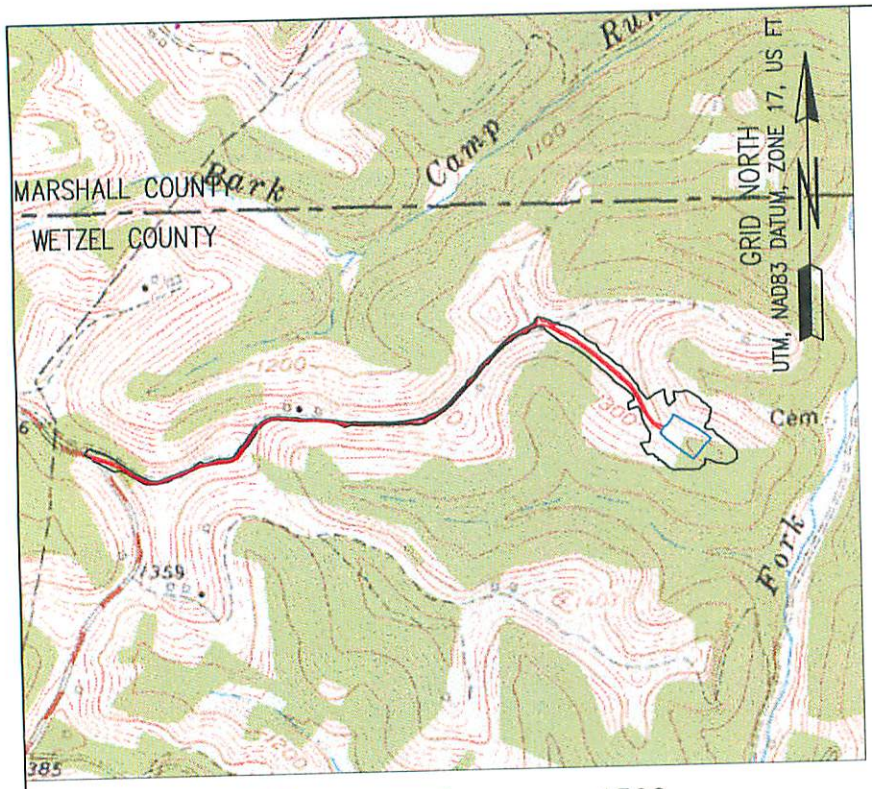
DEC 01 2015
WV Department of
Environmental Protection

BLATT W
CONSTRUCTION AND
AS-BU
PROCTOR DISTRICT, W
NOVEMB



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COORDINATES:

SITE ENTRANCE
(NAD83)
LAT: 39.715969
LONG: 80.705275

AT BLATT PAD
(NAD83)
LAT: 39.716225
LONG: 80.688826

CENTER OF PAD
(NAD83)
LAT: 39.716043
LONG: 80.688163

GATHERING AREA
(NAD83)
LAT: 39.715306
LONG: 80.703007

EXISTING WELL:
BLATT WTZ 8H
(NAD83)
LAT: 39.716018
LONG: 80.688133

PROPOSED WELL:
BLATT WTZ 1H
(NAD83)
LAT: 39.715975
LONG: 80.688178

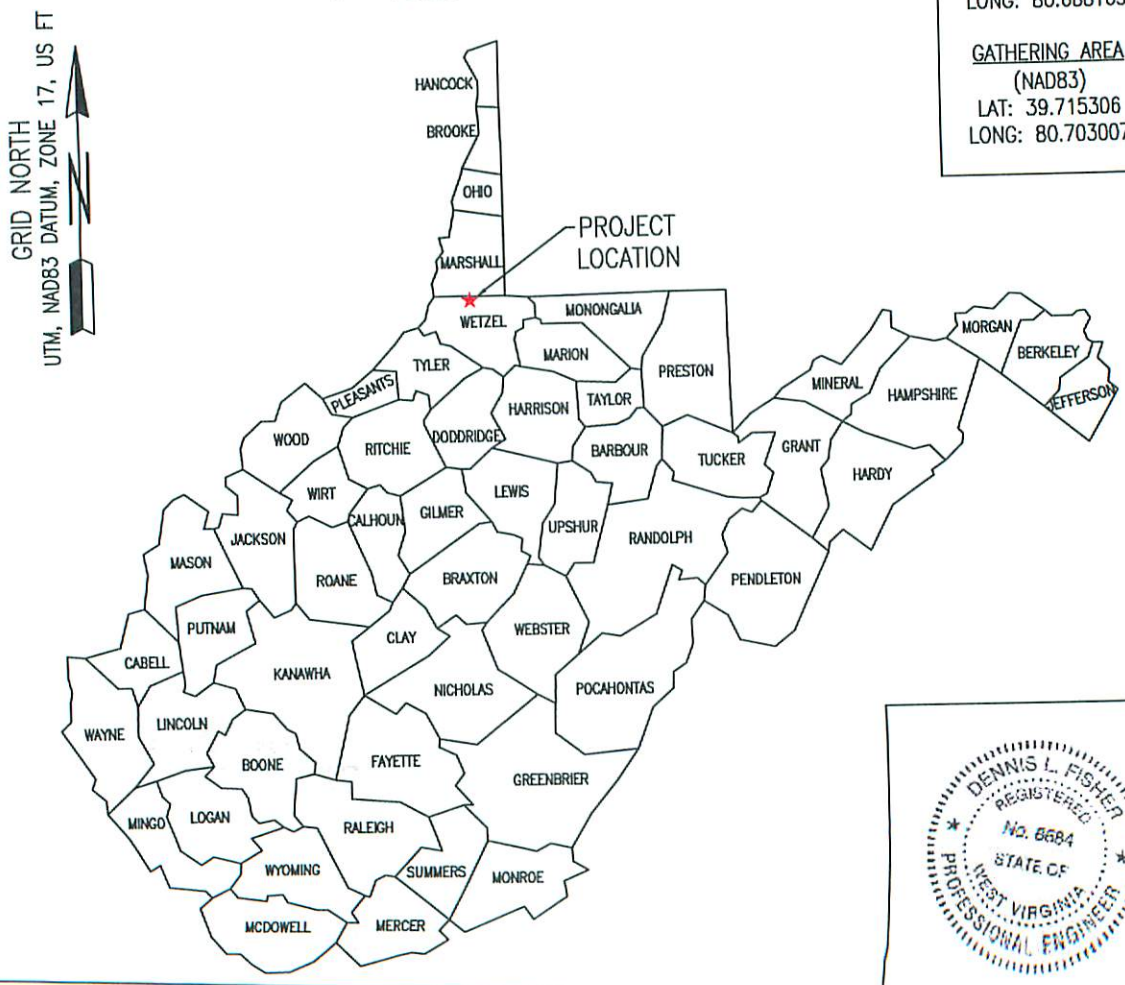
PROPOSED WELL:
BLATT WTZ 2H
(NAD83)
LAT: 39.716000
LONG: 80.688216

PROPOSED WELL:
BLATT WTZ 3H
(NAD83)
LAT: 39.716025
LONG: 80.688255

PROPOSED WELL:
BLATT WTZ 7H
(NAD83)
LAT: 39.715951
LONG: 80.688140

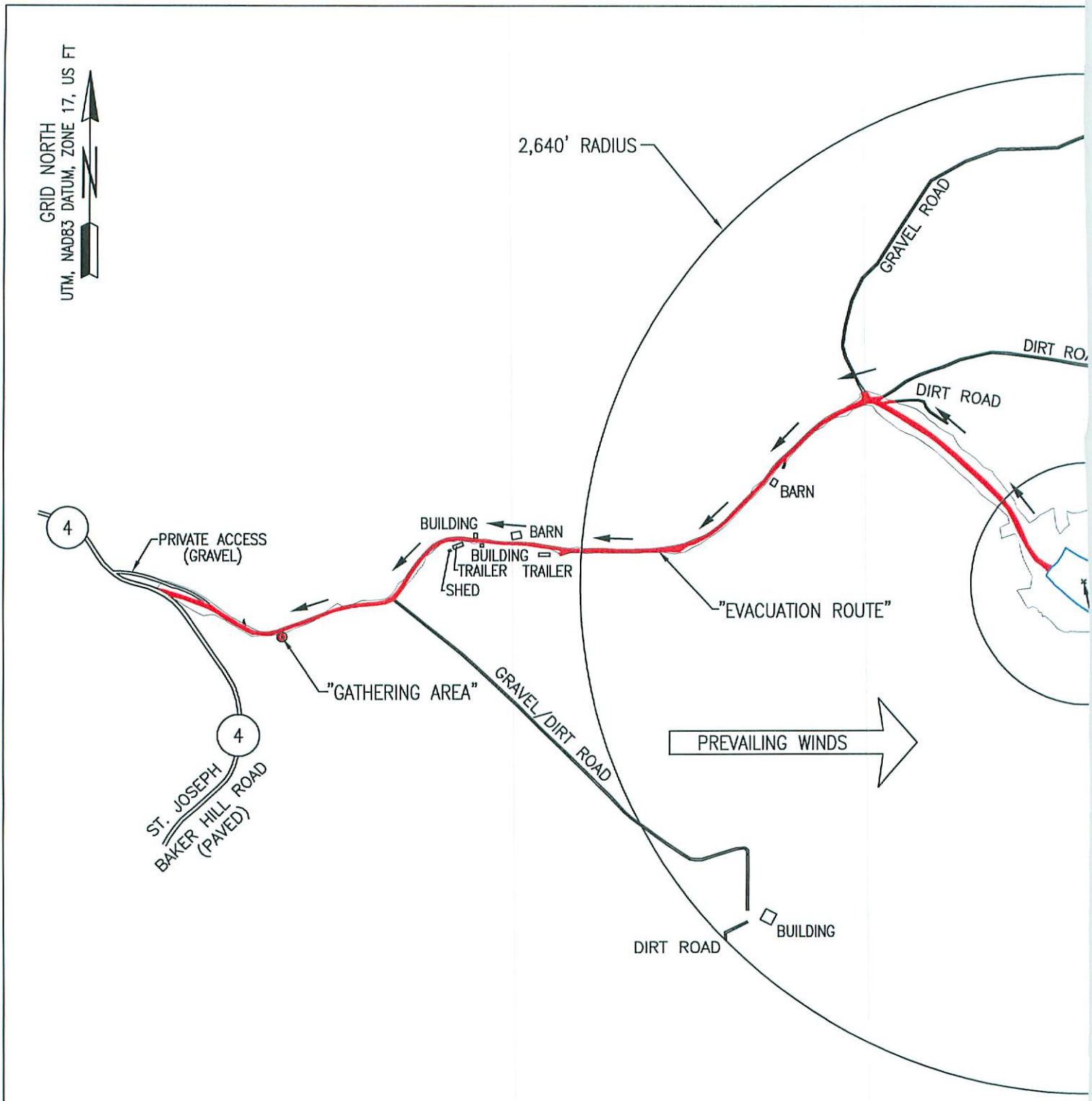
PROPOSED WELL:
BLATT WTZ 10H
(NAD83)
LAT: 39.715993
LONG: 80.688094

PROPOSED WELL:
BLATT WTZ 106H
(NAD83)
LAT: 39.715926
LONG: 80.68810



DENNIS L. FISHER
REGISTERED
No. 8684
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER

Dennis L. Fisher RPE 8684



SWN Production Company™

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1"=700

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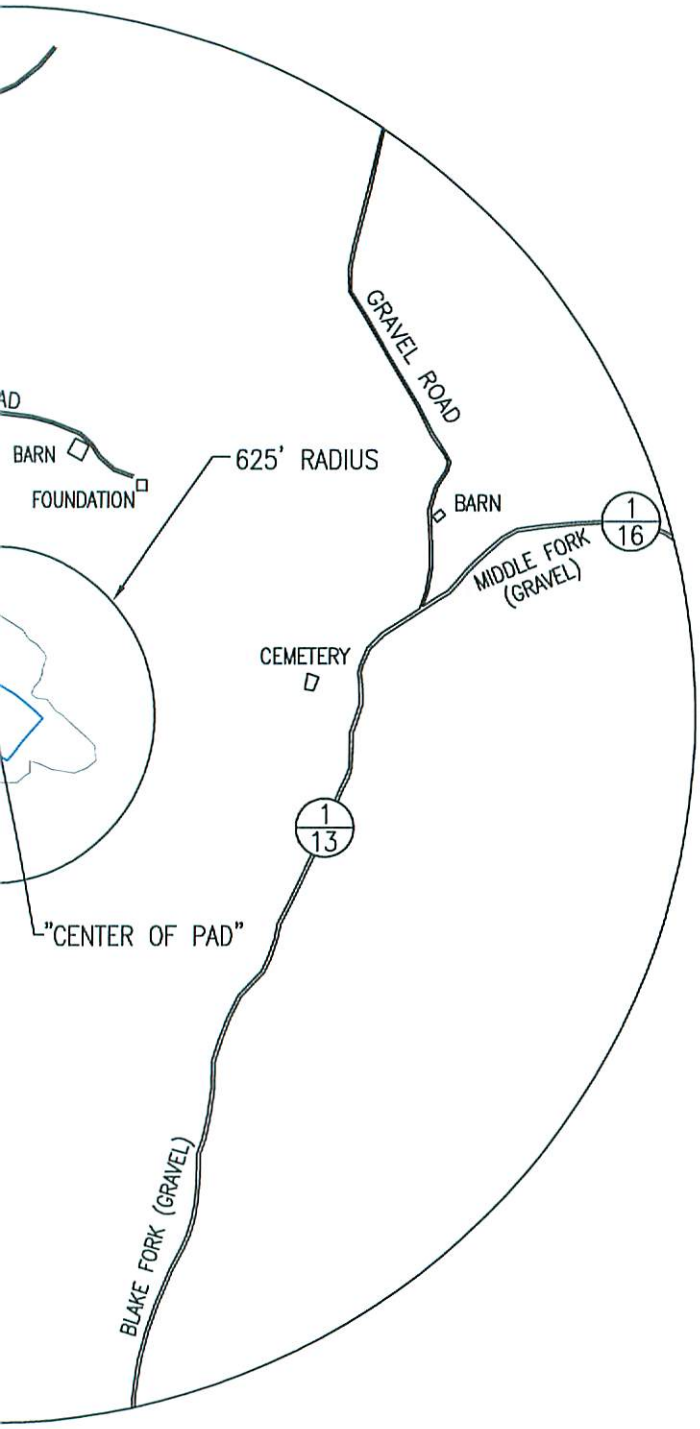

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LONG: 80.688094

PROPOSED WELL:
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(NAD83)
LAT: 39.715926
LONG: 80.688101

REVISION	DATE

11-24-2015
Date:

N
W
E
S
JACKSON SURVEYING INC.
PROFESSIONAL SURVEYORS

677 W. Main St.
Clarksburg, Wv 26301
304-623-5851

Jackson Surveying Inc.

EVACUATION ROUTE/PREVAILING WINDS
EP2.1
SOUTHWESTERN PRODUCTION COMPANY, LLC.
BLATT WTZ PAD
PROCTOR DISTRICT, WETZEL COUNTY, WV
NOVEMBER 20, 2015

RECEIVED
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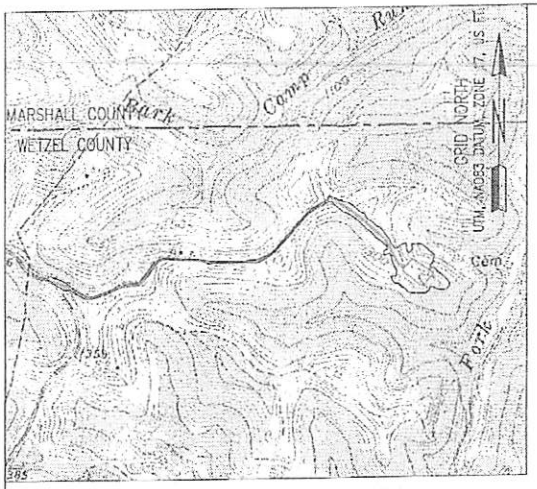
BLATT WTZ PAD
CONSTRUCTION AND RECLAMATION PLAN
AS-BUILT
PROCTOR DISTRICT, WETZEL COUNTY, WV
NOVEMBER 2015



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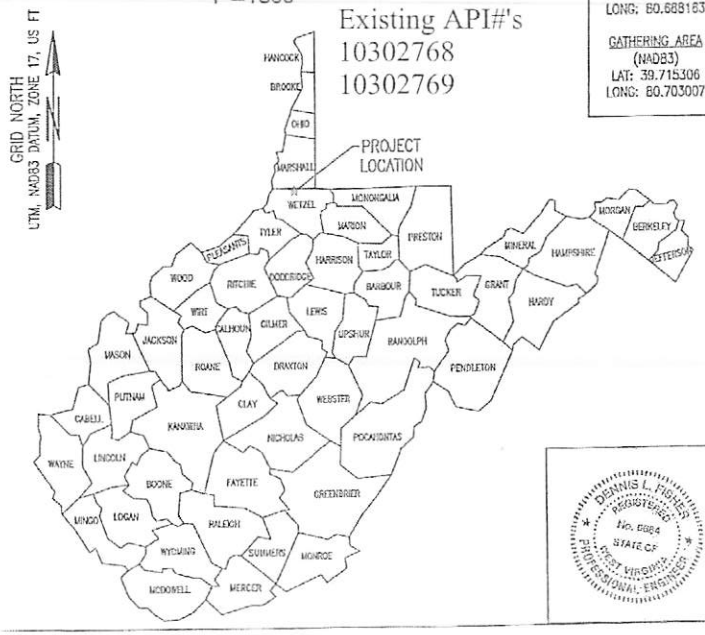

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MRD5.7 RECLAMATION PLAN
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MRD5.9 RECLAMATION PLAN
MRD5.10 RECLAMATION PLAN
MRD6.3 RECLAMATION DETAILS

WVDEP OOG
ACCEPTED AS-BUILT
12 / 16 / 2015

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swn Production Company™

DPH 11-20-15

DENNIS L. FISHER REGISTERED No. 6884 STATE OF WEST VIRGINIA PROFESSIONAL ENGINEER

Dennis L. Fisher RPE 6884 — 11-20-2015 Date:

N W E S

677 W. Main St.
Clarksburg, WV 26301
304-623-5851

Jackson Surveying Inc.

TITLE SHEET
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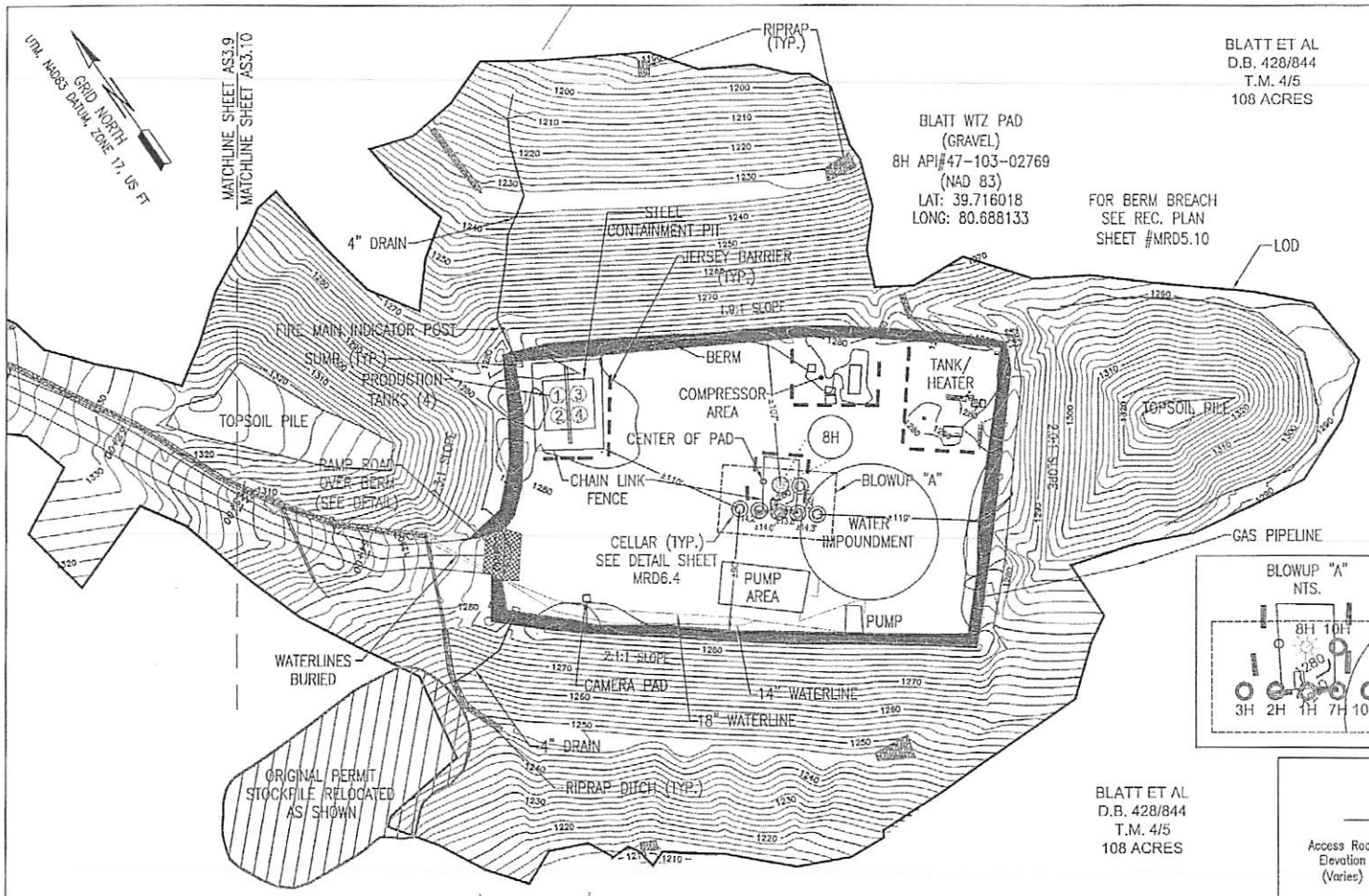
SOUTHWESTERN PRODUCTION COMPANY LLC.
BLATT WTZ PAD
PROCTOR DISTRICT, WETZEL COUNTY, WV
NOVEMBER 20, 2015



- LEGEND -

EDGE ACCESS ROAD	
PUBLIC/PRIVATE ROAD	
MODIFIED LOD	
FENCE	
PROPERTY LINES	
OVERHEAD UTILITIES	
CL ACCESS ROAD	
GAS LINE	
DITCH	
MINOR CONTOUR AS-BUILT	
MAJOR CONTOUR AS-BUILT	
8" COMPOST FILTER SOCK	

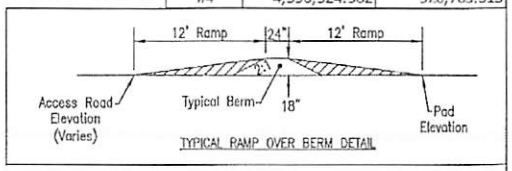
RED TEXT INDICATES ITEMS TO BE CONSTRUCTED PRIOR TO DRILLING ACTIVITY.

WVDEP OOG
ACCEPTED AS-BUILT
12 / 16 / 2015

REVISION	DATE
CHANGES PER DEP	11-24-2015
CHANGES PER DEP	12-15-2015

PRODUCTION TANKS (UTM METERS)

	Northing	Easting
#1	4,396,330.658	526,701.882
#2	4,396,326.812	526,699.464
#3	4,396,328.228	526,705.739
#4	4,396,324.382	526,703.315



swn Production Company™

80 0 80
1"=80

DENNIS L. FISHER
REGISTERED
No. 8684
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER

Dennis L. Fisher RPE 8684: 12-15-2015 Date:

N W E S
JACKSON SURVEYING INC. PROFESSIONAL SURVEYORS
677 W. Main St.
Clarksburg, Wv 26301
304-623-5851

Jackson Surveying Inc.
CONSTRUCTION AND RECLAMATION
ASBUILT
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BLATT WTZ PAD
PROCTOR DISTRICT, WETZEL COUNTY, WV
NOVEMBER 20, 2015