

west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary www.dep.wv.gov

Friday, May 18, 2018 WELL WORK PERMIT Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC POST OFFICE BOX 12359

SPRING, TX 773914954

Re: Permit approval for TIMMY MINCH OHI 206H 47-069-00277-00-00

This well work permit 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 any additional specific 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 of 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.

Per 35 CSR 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) 926-0450.

James A. Martin

Chief

Operator's Well Number:

TIMMY MINCH OHI 206H Farm Name: TIMMY B. MINCH & AMY L. N

U.S. WELL NUMBER: 47-069-00277-00-00 Horizontal 6A New Drill

Date Issued: 5/18/2018

API Number:	

PERMIT CONDITIONS 4706900277

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

- 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. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
- 8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
- 9. 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.
- 10. 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.

API Number:	

PERMIT CONDITIONS

4706900277

11. 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.

WW-6B (04/15)

4706900277 API NO. 47-069 OPERATOR WELL NO. TENNY MANCH CON 2004 Well Pad Name: Timmy Minch PAD

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

l) Well Operator	r: SWN F	Production (Co., LLC	49451		069-Ohio		674-Wheeling
				Opera	tor ID	County	District	Quadrangle
2) Operator's We	ell Numbe	:: Timmy M	inch OH	206H	_ Well Pa	d Name: Tir	nmy Minch P	AD
3) Farm Name/S	urface Ow	ner: Timmy B.	Minch & Am	y L. Minch	Public Roa	ad Access: E	Brown Run Ro	pad
4) Elevation, cur	rrent groun	d: <u>1208'</u>	E	Elevation,	proposed	post-constru	ction: 1208'	
5) Well Type	(a) Gas	X	_ Oil _		Und	erground Sto	orage	
•	Other							
	(b)If Gas	Shallow	x		Deep			
		Horizontal	X		-	S	100	P4.23.17
6) Existing Pad:								7 125.17
7) Proposed Tar; Target Formation- M	get Format Accellus, Down-	ion(s), Depti Dip Well to the Soc	k(s), Anti ah, Target To	icipated 7 p TVD-6225	Thickness Target Base T	and Expected ND-6268°, Anticipa	d Pressure(s): nted Thickness-43', A	ussociated Pressure- 4074
8) Proposed Tot								
9) Formation at		-	Marcelli	us				
•		-	19421'					
10) Proposed To	otal Measu	red Depth:						
11) Proposed Ho	orizontal L	eg Length:	12,412.	59'				
12) Approximat	e Fresh Wa	ater Strata D	epths:	306'				
13) Method to D	Determine l	Fresh Water	Depths:	Nearby	Water W	ells; WR-35		
14) Approximat								
15) Approximat	te Coal Sea	m Depths:	473'	,				
16) Approximat	te Depth to	Possible Vo	id (coal	mine, kar	st, other):	Abandone	d Mine 473'	
17) Does Propos directly overlying				_	res	400	No X	
(a) If Yes, pro	vide Mine	Info: Nam	e:					
••		Dept	—— h:					
		Sean						
		Own						
		- ····						

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WW-6B (04/15) API NO. 47-069

OPERATOR WELL NO. Tirrary Minch ONI 208H
Well Pad Name: Tirrary Minch PAD

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	<u>Grade</u>	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20*	New	H-40	94#	100'	100'	CTS
Fresh Water	13 3/8*	New	H-40	48#	553'	553'	526 sx/CTS
Coal							
Intermediate	9 5/8"	New	J-55	36#	1854'	1854'	710 sx/CTS
Production	5 1/2"	New	HCP-110	20#	19421'	19421'	
Tubing							
Liners		74,0					

E. B. 84.23.10

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal 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	1.20/50% Excess
Production	5 1/2"	8 3/4"	0.361	12360	9500	Class A	1.20/50% Excess
Tubing							
Liners							

PACKERS

Kind:		
Sizes:		
Depths Set:		

Page 2 of 3	Office of Oil and Gas
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WW-6B (10/14) API NO. 47-069 OPERATOR WELL NO. TENNY Mech ON 2004
Well Pad Name: Timmy Minch 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.)
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): 13.0
22) Area to be disturbed for well pad only, less access road (acres): 4.8
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 ***
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.
*Note: Attach additional sheets as needed.
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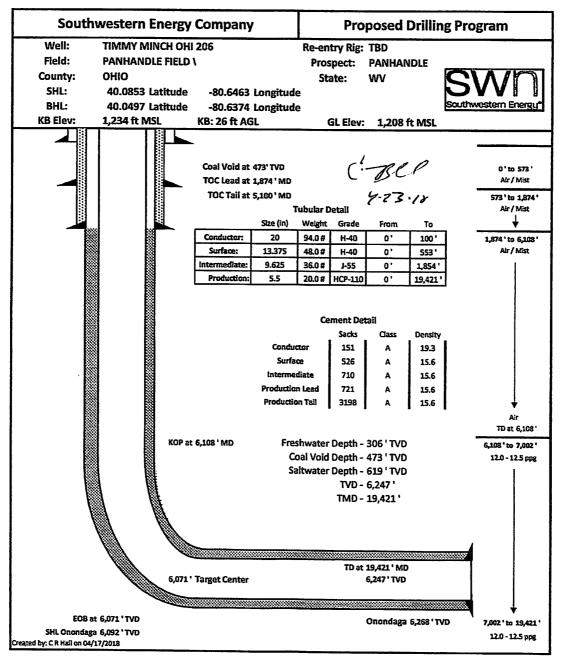
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Schlumberger Cement Additives

	Product Name	Product Use	Chemical Name	CAS Number
Surface	5001	accelerator	calcium chloride up to 3%	10043-52-4
Intermediate Surface	S001	accelerator	calcium chloride	10043-52-4
_	D080	dispersant	sodium polynaphthalene sulfonate	9008-63-3
3 0	D801	retarder	aromatic polymer derivative	propriatary
Kick Off Plug	D047	antifoam	polypropylene glycol	25322-69-4
	D167	fluid loss	aliphatic amide polymer	propriatary
	D154	extender	non-crystalline silica	7631-86-9
	D400	gas migration	boric acid	10043-35-3
			polypropylene glycol	25322-69-4
pe	D046	antifoam	fullers earth (attapulgite)	8031-18-3
Production-Lead			chrystalline silica	14808-60-7
2	D201	retarder	metal oxide	propriatary
a dire			sulphonated synthetic polymer	propriatary
7.	D202	dispersant	formaldehyde (impurity)	propriatary
			polypropylene glycol	25322-69-4
	D046	antifoam	fullers earth (attapulgite)	8031-18-3
	D167	fluid loss	aliphatic amide polymer	propriatary
=			sodium polynaphthalene sulfonate	9008-63-3
F.T.	D065	dispersant	sodium sulfate	7757-82-6
Production-Tall	Law		chrystalline silica	14808-60-7
app	D201	retarder	metal oxide	propriatary
Pre	D153	anti-settling	chrystalline silica	14808-60-7

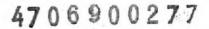
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MAY 18 2018



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APR 27 2018





SWN Production Company, LLC P O Box 12359 Spring, Texas 77391-2359 www.swn.com

January 23, 2018

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

RE: Proposed New Well Timmy Minch OHI 206H

Dear Ms. Adkins

SWN has reviewed the area of the above mentioned well and discovered no shallow wells within 500' of the lateral. This well is situated on the Minch's property, in Triadelphia District, Ohio 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

Office of Oil and Gas
FEB 1 3 2018

WV Department of Environmental Protection

R2 12V+"

WW-9 (4/16)

API Number 47 -	069	
Operator's	Well No	Timmy Minch OHI 206H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name SWN Production Co., LLC OP Code 494512924
Watershed (HUC 10) Browns Run of Peters Run of Little Wheeling Creek Quadrangle Wheeling
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No
If so, please describe anticipated pit waste:
Will a synthetic liner be used in the pit? Yes No If so, what ml.?
Proposed Disposal Method For Treated Pit Wastes:
Land Application
■ Underground Injection (UIC Permit Number 34-155-22403, 34-059-24067, 34-119-20776, 34-167-23962, 34-155-23706, 34-127-23906, 34-156-21893) ■ 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 drill to KOP, floid drill with SOBM from KOP to TO
-If oil based, what type? Synthetic, petroleum, etc. Synthetic Oil Base
Additives to be used in drilling medium? Attachment 3A
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? Meadowfill SWF-1032, Short Creek SWF-1034, Carbon Limestone MSWL018781, Wetzel County 1021 Arden Landfill 1UU/2, Apex Sanitary Landfill Ub-U8438, Brooke Co SVVF-1U13, Valley 1UU28U Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.
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 Engineerate Penalties for submitting false information, including the possibility of fine or imprisonment. Company Official Signature Company Official (Typed Name) Dee Southall
Company Official Title Senior Regulatory Analyst
Subscribed and sworn before me this 315t day of AMUAN , 20 18
Notary Public Notary Public
My commission expires \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \

Operator's Well No. Timmy Minch OHI 206H

Proposed Revegetation Treatment: Acres Disturbed	13	Prevegetation pl	f
Lime as determined by pH test min.2 Tons/acre or to corre	ect to pH 4.8		
Fertilizer type 10-20-20			
Fertilizer amount 600	lbs/acre		
Mulch_ Hay/Straw 2.5	Tons/acre		
	Seed Mixtures		
Temporary		Perma	nent
Seed Type Ibs/acre Attachment 3B		Seed Type	lbs/acre
Maps(s) of road, location, pit and proposed area for lar rovided). If water from the pit will be land applied, in	nd application (unless eng	gineered plans included x D) of the pit, and	ding this info have been dimensions (L x W), and
Attach: Maps(s) of road, location, pit and proposed area for land provided). If water from the pit will be land applied, in creage, of the land application area. Photocopied section of involved 7.5' topographic sheet	clude dimensions (L x W	x D) of the pit, and	dimensions (L x W), and
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Attachment 3A <u>Drilling Mediums</u>

Synthetic Oil

Brine

Barite

Calcium Chloride

Lime

Organophilic Bentonite

Primary and Secondary Emulsifiers

Gilsonite

Calcium Carbonate

Friction Reducers

Office of Oil and Gas
FEB 1 3 2018
WV Department of Environmental Protection



WVD Seeding Specification



To Order Seed contact Lyndsi Eddy Flippo office 570-996-4271 cell 501-269-5451 lyndsi_eddy@swn.com

(please allow 7 to 10 days for delivery)

NON-ORGANIC PROPERTIES

Seed Mixture: ROW Mix	SWI	N Supplied
Orchardgrass	40%	
Timothy	15%	
Annual Ryegrass	15%	
Brown Top Millet	5%	
Red Top	5%	
Medium Red Clover	5%	All legumes are
White Clover	5%	innoculated at 5x normal
Birdsfoot Trefoil	5%	rate
Rough Bluegrass	5%	
Apply @ 100lbs per acre April 16th- Oct. 14th		Apply @ 200lbs per acre Oct. 15th- April 15th PLUS bs per acre of Winter Wheat

SOIL AMENDMENTS

10-20-20 Fertilizer	*Apply @ 500lbs per Acre
Pelletized Lime	Apply @ 2 Tons per Acre
	*unless otherwise dictated by soil test results

Seeding Calculation Information:

1452' of 30' ROW/LOD is One Acre 871' of 50' ROW/LOD is One Acre 622' of 70' ROW/LOD is One Acre

Synopsis:

Every 622 linear feet in a 70' ROW/LOD, you should be using (2) 50lb bags of seed, (4) 50lb bags of fertilizer and (80) 50lb bags of Lime (2x seed in winter months + 50lb Winter Wheat/ac).

Special Considerations:

Landowner Special Considerations including CREP program participants require additional guidance that is not given here. Discuss these requirements with SWN supervision at the beginning of the project to allow time for special seed delivery.

ORGANIC PROPERTIES

Seed Mixture: SWN Production Organ	nic Mix	SWN Supplied
Organic Timothy	50%	
Organic Red or White Clover	50%	
OR		
Organic Perennial Ryegrass	50%	
Organic Red or White Clover	50%	
Apply @ 100lbs per acre		Apply @ 200lbs per acre
April 16th- Oct. 14th		Oct. 15th- April 15th

Organic Fertilizer @ 200lbs per Acre Pelletized Lime @ 2 Tons per Acre

WETLANDS (delineated as jurisdictional wetlands)

Seed Mixture: Wetland Mix	SWN Supplied	
VA Wild Ryegrass	20%	
Annual Ryegrass	20%	
Fowl Bluegrass	20%	
Cosmos 'Sensation'	10%	
Redtop	5%	-
Golden Tickseed	5%	2
Maryland Senna	5%	-
Showy Tickseed	5%	0
Fox Sedge	2.5%	0
Soft Rush	2.5%	00
Woolgrass	2.5%	0
Swamp Verbena	2.5%	0
Apply @ 25lbs per acre	Apply @ 50lbs per acre	N
April 16th- Oct. 14th	Oct. 15th- April 15th	V

NO FERTILIZER OR LIME INSIDE WETLAND LIMITS

MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN

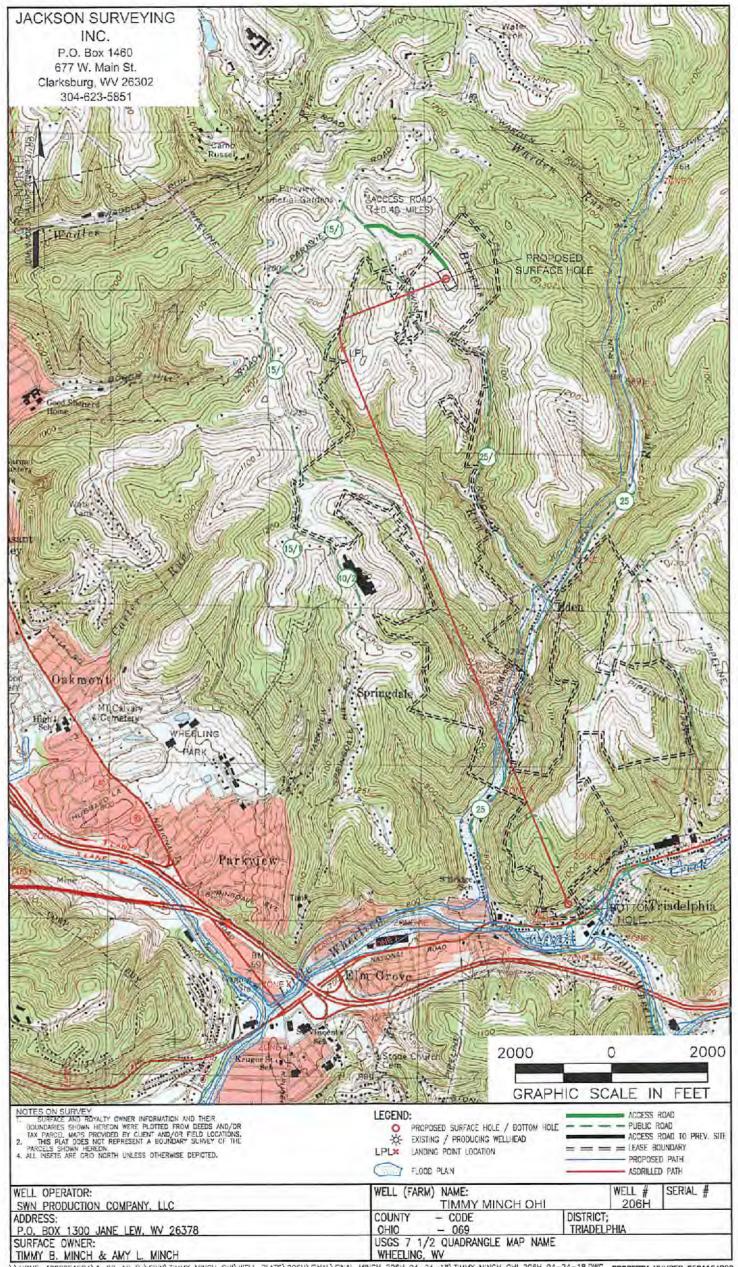


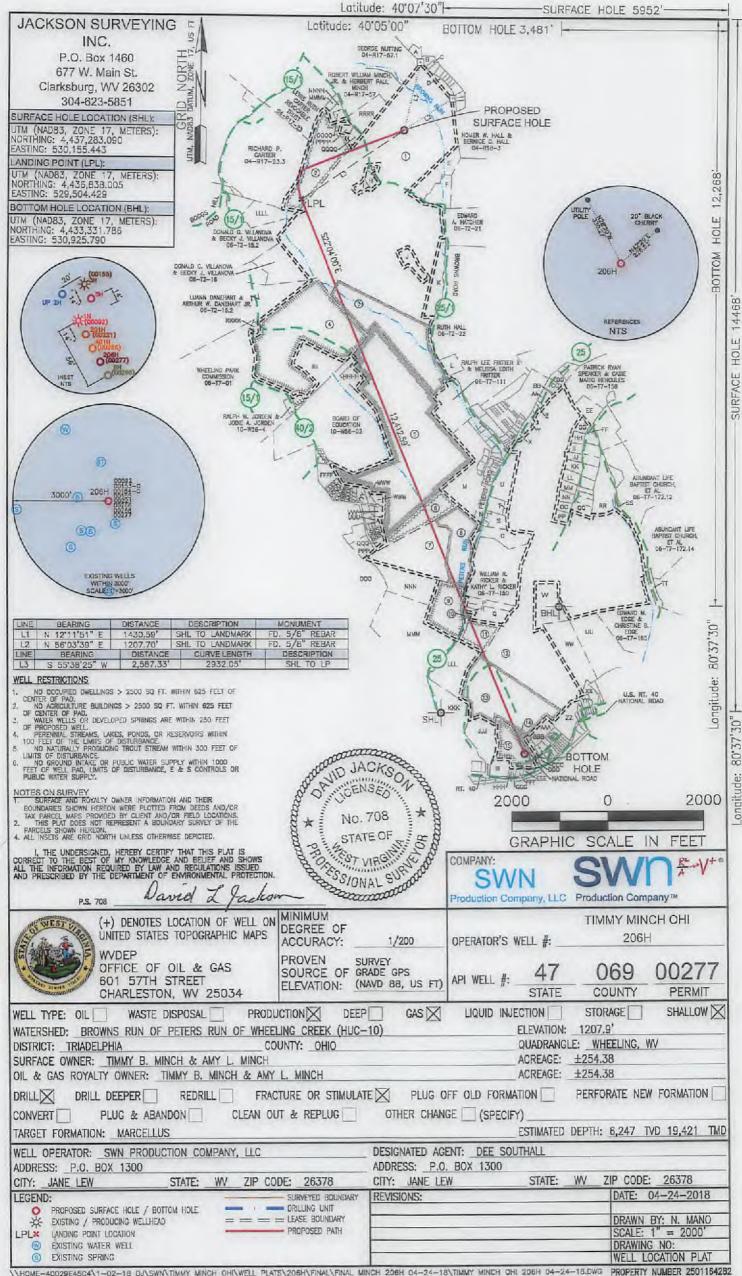
SWN Production Company, LLC 179 Innovation Drive Jane Lew, West Virginia 26378

API NO. 47-XXX-XXXXX
WELL NAME: Timmy Minch OHI 206H
Wheeling QUAD
Triadelphia DISTRICT
Ohio COUNTY, WEST VIRGINIA

Submitted by:			
Dee Southall	Date:	11/1/2017	
Senior Regulatory			
Title: Analyst	SWN P	roduction Co., LLC	
Approved by: Title: Oil & (4.) I must	Date:	11.15.n	
Approved by:			Office of Oil and Gas
	Date:	-	run -
Title:	-		WV Department of Environmental Protection

SWN PRODUCTION COMPANY, LLC - CONFIDENTIAL





JACKSON SURVEYING

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

	WELL BORE TABLE FOR SURFACE / ROYALTY OWN	IERS
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	TIMMY B. MINCH & AMY L. MINCH (S/R)	06-T2-18
TRACT	SURFACE OWNER	TAX PARCEL
2	CHARLES MONFRADI & DOLORES MONFRADI (S)	04-R17-58
3	WILLIAM A. ORUM & CYNTHIA ORUM (S)	06-T7-178
4	WHEELING PARK COMMISSION (S)	06-T7-95
5	FRANCIS L. BRADEN (S)	06-T7-97
6	JAMES D. MILLER, JR. &	06-T7-117.2
	CAROLINE KUHAR MILLER (S)	
7	JAMES D. MILLER, JR. &	06-T7-117.1
	CAROLINE KUHAR MILLER (S)	
8	JAMES D. MILLER, JR. &	06-T7-117
	CAROLINE KUHAR MILLER (S)	
9	PETERS RUN LAND COMPANY, INC. (S)	06-T7-118
10	DANIEL F. OCH (S)	06-T7-155
11	DANIEL F. OCH (S)	06-T7-156
12	JOHN J. CORBETT (S)	06-T7-163
13	JOHN J. CORBETT (S)	06-T12-5
14	MIDDLE CREEK GARAGE INC. (S)	07-TW1-19
15	MIDDLE CREEK GARAGE INC. (S)	07-TW1-20

1	ADJOINING OWNERS TABLE			ADJOINING OWNERS TABLE	
RACT	SURFACE OWNER	TAX PARCEL	TRACT	SURFACE OWNER	TAX PARCEL
A	JON BARRY & JAYMIE BARRY	04-R17D-3	W	GREGORY J. GEORGE & JENNIFER S GEORGE	06-T7-163.1
В	V.J. SOVINSKI & H.G. SOVINSKI	04-R17D-28	WW	MIDDLE CREEK GARAGE INC.	06-T7-166
C	J.G. DEEDS & M.K. GARRISON	04-R17D-30	XX	RANDY APOSTOLEC	07-TW1-1.1
D	L & B DEVELOPMENT, LLC	04-R17D-1	YY	WOODROW J. KNOLLINGER, JR.	07-TW1-3.2
E	RONALD J. POCKL	06-T2-20.1	ZZ	MIDDLE CREEK GARAGE INC.	07-TW1-9
F	MORGAN A. WOJCHOWSKI	06-T2-20	AAA	MIDDLE CREEK GARAGE INC.	06-T12-6
G	SHAWN A. HODGSON & LESLIE G. HODGSON	04-R17-62	BBB	KEVIN S. KOSEM & BRENDA A. KOSEM	07-TW2-11
Н	DANNY MINCH & GINA MINCH	04-R17-61	CCC	KEVIN S. KOSEM & BRENDA A. KOSEM	07-TW2-11.1
1	TIMMY B. MINCH & AMY L. MINCH	04-R17-63	DDD	KEVIN S. KOSEM & BRENDA A. KOSEM	07-TW2-11
J	JUNIPER LODGE, INC.	06-T2-19	EEE	GLORIA MILLIKEN	07-TW2-8
K	M.D. ORUM, W.B. ORUM, ELDER B. PENNINGTON	05-T2-19.1	FFF	DONALD L. SHAW	07-TW2-7
	& K.D. ORUM	12 1011	GGG	RICHARD PUSZ	07-TW2-6
L	MICHAEL D. ORUM & KENNETH D. ORUM	06-17-135.1	HHH		07-TW2-5
M	JAMES D. MILLER, JR. &	06-T7-112	100	WHEELING JATC	07-TW2-4
141	CAROLINE KUHAR MILLER	00-17-112	JJJ	BDDE PROPERTIES LLC	06-T12-4
N	YE OLDE COUNTRY CHURCH OF FAITH TRUSTEES	06 T7 440 0	KKK	THE PLAN OF A STATE OF THE STAT	06-T7-126.3
0	JOHN T. CRISWELL & C.A. CRISWELL	06-17-112.2	LLL	The state of the s	06-17-128.5 06-17-157
P	TERESA GELLNER HULS		-	JAY A. POWELL & LISA P. POWELL	
		06-T7-152	MMM		06-T7-119
Q	RICHARD J. FITZPATRICK, SHERRI L. FIRTZPATRICK,	06-T7-153	NNN		06-17-117.3
-	& THOMAS W. FITZPATRICK	00 77 45	000	PF 1865 11 11 12 12 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15	06-T7-125
R	KAYLA LENDON & JUSTIN LENDON	06-T7-154	PPP		06-17-67.1
5	JOHN T. CRISWELL & C.A. CRISWELL	06-T7-148.1			06-T7-67.16
T	GARY R. WALTER & SUSAN L. WALTER	06-T7-148	RRR	The same of the sa	
U	STEVEN A. MOORE & LISA K. MOORE	06-T7-148.2	SSS	WILLIAM O. LEWIS IV & CANDICE M. LEWIS	06-T7-67.19
V	REGIS G. WENZEL & J.R. WENZEL	06-T7G-4	TIT	THOMAS L. FOLMAR & DONNA LYNN FOLMAR	06-17-67.18
W	JAMES L. HEATH	06-T7G-3	UUU	110 01-00-00-001	06-17-67
X	DONALD N. HARRIS & J.A. HARRIS	06-T7-147.1	W	JASON B. BIRCH & JESSICA L. BIRCH	06-T7-97.2
Y	DONALD JEFFREY HARRIS	06-17-147	WWW	**************************************	06-T7-97.3
Z	DAVID J. SCHMID & E.T. SCHMID	06-T7-146	XXX	KENNETH SPENCER & STEPHANIE SPENCER	06-T7-67.6
AA	KATHERINE M. PAPADIMITRIOU	06-T7-145	YYY	GERALD BISCHOF & ROSETTA J. BISCHOF	06-17-67.7
BB	KATHERINE M. FIGARETTI & ANTHONY F. FIGARETTI	06-T7-143.1	ZZZ	DEEDRA DAVIS	06-T7-67.5
CC	KATHERINE M. FIGARETTI & ANTHONY F. FIGARETTI	06-T7-143	AAAA	RONALD A. ZANDRON & PATRICIA L. ZANDRON	06-T7-67.8
DD	GARY E. LAUDERMILT SR & MARY ANN LAUDERMILT	06-T7-142	BBBB	DALE A. FORESTER & CAROL ANN FORESTER	06-T7-67.9
EE	LYLE HEARN & KIMBERLIE HEARN	06-T7-173	CCCC	MARIO B. JULIAN & LOIS R. JULIAN	06-T7-67.13
FF	JOHN J. CORBETT	06-T7-163	DDDD	BENJAMIN ELLWOOD & DANIELLE ELLWOOD	06-T7-67.23
GG	AUGUST J. HANSON & LISA M. HANSON	06-T7-163.20	EEEE	CAYLA J. BLACK & MATTHEW D. BLACK	06-T7-67.10
HH	ROBERT W. GALBREATH & DEBRA J. GALBREATH	06-T7-163.11	FFFF	FRANCES L. BRADEN	06-17-67
11	THOMAS R. MORGAN & ANN Y. MORGAN	06-T7-163.5	GGGG	EARL BRADEN & F.L. BRADEN	10-W56-3
JJ	ROGER L. KENT JR. & MELINDA J. KENT	06-T7-163.15	НННН	DONALD A. BRADEN & RHONDA L. BRADEN	06-T7-97.1
KK	ROGER L. KENT JR. & MELINDA J. KENT	06-T7-163.18		BOARD OF EDUCATION OF OHIO COUNTY	10-W56-1
LL	TODD FULLERTON	06-T7-163.16		BOARD OF EDUCATION OF OHIO COUNTY	10-W56-4
MM	ROBERT M. TUCKER & REBECCA E. TUCKER	06-T7-163.12		WHEELING PARK COMMISSION	05-T2-17
NN	GREGORY A. GAUDINO & ANNETTE M. GAUDINO	06-T7-163.13		GLORIA KALB	06-T2-15.3
00	BUSAINA KHALIL	06-T7-163.7			04-R17-58.5
PP	BUSAINA KHALIL	06-T7-163.6	7	The state of the s	04-R17-58.4
00	JAMES SIMMS	06-T7-163.17	0.1022.74	THE CONTRACTOR OF THE PROPERTY	04-R17-58.3
RR	CHARLIE A. BLISS SR. & MARY E. BLISS	06-17-163.17	PPPP		04-R17-58.2
			QQQQ	Control of the Contro	04-R17-58.1
SS	CHARLIE A. BLISS SR. & MARY E. BLISS	06-T7-164.1	200000000000000000000000000000000000000	Thinks and interest and the state of the state of	
TT	WILLIAM JAY BRINKMEIER	06-T7-165.1	KIKIKK	ROBERT WILLIAM MINCH, JR & BARBARA JEAN MINCH	U4-R17-57.2
UU	OHIO VALLEY INDUSTRIAL & BUSINESS DEVELOPMENT CORPORATION	06-T7-166.1			

REVISIONS:	COMPANY:	SWN Production Company, LLC	SW Production Co	mpany™
	OPERATOR'S WELL #:	TIMMY MINCH OHI 206H		DATE: 04-24-2018 DRAWN BY: N. MANO
	DISTRICT: TRADELPHIA	COUNTY: OHIO	STATE: WV	SCALE: N/A DRAWING NO: WELL LOCATION PLAT 2

WW-6A1 (5/13)

Operator's Well No. Timmy Minch OHI 206H

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
S	ee Fyhihit	-		

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:	20ch	
Its:	Landman	
		Page 1 of

Exhibit "A" Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator Timmy Minch OHI 206H Ohio County, West Virginia

#	TAX ID	LESSOR	LESSEE	ROYALTY	BK/PG
1	06-T2-18	Howard L. Minch and Beverly G. Minch, his wife	Great Lakes Energy Partners, L.L.C.	12.5%	776/13
			Chesapeake Appalachia, L.L.C.	j .	808/418
			SWN Production Company, LLC		883/192
2	04-R17-58	Charles Monfradi and Dolores Monfradi, husband and	Chesapeake Appalachia, L.L.C.	18%	813/584
		wife	SWN Production Company, LLC		884/457
3	06-T7-178	William A. Orum and Cynthia E. Orum, a/k/a Cynthia	NPAR, LLC	18%	810/97
		Orum, his wife	Chevron U.S.A. Inc.		827/269
			Chesapeake Appalachia, L.L.C.		867/713
			SWN Production Company, LLC		885/320
4	06-T7-95		Chesapeake Appalachia, L.L.C.	18%	820/268
		Robert G. Baird, a married man dealing in his sole and	SWN Production Company, LLC		885/105
		separate property; Martha Jane Cage, a married			
		woman dealing in her sole and separate property;			
		Ronald Morris Baird, a married man dealing in his sole			
		and separate property; Pamela S. Keys, a married			
		woman dealing in her sole and separate property;			
		Jacquelyn Ann Jacobs, a married woman dealing in her			
		sole and separate property; Margery Ellen Kriner, a			
		married woman dealing in her sole and separate			
		property; and Jessie Ruth Caldwell, a married woman			
		dealing in her sole and separate property			
	Env				

Exhibit "A" Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator **Timmy Minch OHI 206H Ohio County, West Virginia**

#	TAX ID	LESSOR	LESSEE	ROYALTY	BK/PG
5	06-T7-97	Frances L. Braden, widow	Great Lakes Energy Partners, L.L.C.	14%	779/684
			Chesapeake Appalachia, L.L.C.		808/514
			SWN Production Company, LLC		883/192
6	06-T7-117.2	J.D. Miller & Nancy K. Miller, husband and wife	TriEnergy, Inc.	14%	788/682
			TriEnergy Holdings, LLC		791/171
			Chesapeake Appalachia, L.L.C.		798/653
			SWN Production Company, LLC		883/255
7	06-T7-117.1	J.D. Miller & Nancy K. Miller, husband and wife	TriEnergy, Inc.	14%	788/682
			TriEnergy Holdings, LLC		791/171
			Chesapeake Appalachia, L.L.C.		798/653
			SWN Production Company, LLC		883/255
8	06-T7-117	J.D. Miller & Nancy K. Miller, husband and wife	TriEnergy, Inc.	14%	788/682
			TriEnergy Holdings, LLC		791/171
			Chesapeake Appalachia, L.L.C.		798/653
			SWN Production Company, LLC		883/255
9	06-T7-118	Peters Run Land Company LLC	Fossil Creek Ohio, LLC	18%	873/534
			Gulfport Energy Corporation		893/392
			American Petroleum Partners Operating, LLC		909/775
			SWN Production Company, LLC		938/548
10	ш 06 <u>-</u> Т7-155	Daniel F. Och, a single man	Chesapeake Appalachia, L.L.C.	18%	817/778
	Offic AF wire		SWN Production Company, LLC		884/313

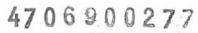
Exhibit "A"

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator

Timmy Minch OHI 206H

Ohio County, West Virginia

#	TAX ID	LESSOR	LESSEE	ROYALTY	BK/PG
11	06-T7-156	Daniel F. Och, a single man	Chesapeake Appalachia, L.L.C.	18%	817/778
			SWN Production Company, LLC		884/313
12	06-T7-163	John J. Corbett, a.k.a. John Joseph Corbett, single	NPAR, LLC	17%	802/181
			Chevron U.S.A. Inc.		827/254
			Chesapeake Appalachia, L.L.C.		858/359
			SWN Production Company, LLC		885/296
13	06-T12-5	John J. Corbett, a.k.a. John Joseph Corbett, single	NPAR, LLC	17%	802/181
			Chevron U.S.A. Inc.		827/254
			Chesapeake Appalachia, L.L.C.		858/359
			SWN Production Company, LLC		885/296
14	07-TW1-19	Constance M. Knollinger, a widow	SWN Production Company, LLC	14%	922/402
14	07-TW1-19	Douglas W. Knollinger, a married man dealing	SWN Production Company, LLC	14%	922/426
		in his sole and separate property			
14	07-TW1-19	Gary R. Knollinger, a married man dealing	SWN Production Company, LLC	14%	922/420
		in his sole and separate property			
14	07-TW1-19	Judith A. McGrail, a single woman	SWN Production Company, LLC	14%	922/414
14	07-TW1-19	Woodrow J. Knollinger, Status Unknown	SWN Production Company, LLC	14%	922/408
15	ਰੂ 07-TW1-20	Middle Creek Garage, Inc.,	Chesapeake Appalachia, L.L.C.	14%	800/7
	Pon AP	a West Virginia Corporation	SWN Production Company, LLC		883/255
	RECEING OF COMMENT	a West Virginia Corporation	SWIN Production Company, LLC		





SWN Production Company, LLC P O Box 12359 Spring, Texas 77391-2359 www.swn.com

April 25, 2018

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

RE: SWN's proposed New Well: Timmy Minch OHI 206H in Ohio County, West Virginia, Drilling under Parkview Road and Peters Run Road

Dear Ms. Adkins:

SWN Production Company, LLC ("SWN") is applying for a drilling permit for the above referenced well. The State of West Virginia has raised some concern as to SWN's right to drill under Parkview Road and Peters Run Road. Please be advised that SWN has leased all mineral owners under said route as it relates to the above-referenced well and unit.

Thank you.

Sincerely,

Bradley Wilson

Landman

SWN Production Company, LLC

PO Box 12359

Spring, TX 77391-2359

R2 NV+°

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

10000 Energy Drive Spring, TX 77389-4954

> RECEIVED Office of Oil and Gas

APR 27 2018

WW-6AC (1/12)

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

Date of Notice Certi			API No. 4	/- 069 -		
				Well No. Timmy Minch OHI 206H		
			Well Pad N	Name: Timmy Minch PAD		
Notice has been gi	ven:					
Pursuant to the provis	sions in West Virginia Code § 22-6A	, the Operator has pro	vided the rec	quired parties with the Notice Forms listed		
below for the tract of	land as follows:					
State: West Vi	rginia	- UTM NAD 83	Easting:	530155.443		
County: 069-Ohi	o	UTM NAD 63	Northing:	4437283.090		
District: Triadelp			Public Road Access: Brown Run Road			
Quadrangle: Wheelin			Timmy Minch			
Watershed: Browns						

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.

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	RECEIVED/ NOT REQUIRED
☐ WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	
4. NOTICE OF PLANNED OPERATION	RECEIVED
5. PUBLIC NOTICE	RECEIVED
■ 6. NOTICE OF APPLICATION	RECEIVED

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 Vioginia 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:

Well Operator: SWN Production Co., LLC

By: Dee Southall

Its: Senior Regulatory Analyst

Telephone: 304-884-1614

Address: PO Box 1300

Jane Lew, WV 26378

Facsimile: 304-884-1690

NOTARY SEAL
OFFICIAL SEAL

OFFICIAL SEAL
Notary Public, State of West Virginia
BRITTANY R WOODY
3302 Old Elkins Road
Guckhangen, WY 23201

y commission expires November 27, 2022

Subscribed and sworn before me this _____ day of _

Dee Southall@swn.com

Notary Public

My Commission Expires

Email:

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 deprivacyofficer@wv.gov.

Office of Oil and Gas

FEB 13 2018

WV Department of Environmental Protection

PINO. 47-0697 06 9 0 0 2 7 7

OPERATOR WELL NO. Timmy Minch OHI 206H Well Pad Name: Timmy Minch PAD

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

Date of Notice: Date Permit Application File	
Notice of:	ed: 18/18
☑ PERMIT FOR ANY ☐ CERTIFICATE OF	OF APPROVAL FOR THE
WELL WORK CONSTRUCTIO	N OF AN IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Code § 22	-6A-10(b)
☐ PERSONAL ☑ REGISTERED ☐	METHOD OF DELIVERY THAT REQUIRES A
SERVICE MAIL	RECEIPT OR SIGNATURE CONFIRMATION
sediment control plan required by section seven of this article the surface of the tract on which the well is or is proposed to oil and gas leasehold being developed by the proposed well described in the erosion and sediment control plan submitted operator or lessee, in the event the tract of land on which the more coal seams; (4) The owners of record of the surface trace well work, if the surface tract is to be used for the placement impoundment or pit as described in section nine of this article have a water well, spring or water supply source located with provide water for consumption by humans or domestic anim proposed well work activity is to take place. (c)(1) If more the subsection (b) of this section hold interests in the lands, the records of the sheriff required to be maintained pursuant to sprovision of this article to the contrary, notice to a lien hold? Code R. § 35-8-5.7.a requires, in part, that the operator shall	receipt or signature confirmation, copies of the application, the erosion and le, and the well plat to each of the following persons: (1) The owners of record of the be located; (2) The owners of record of the surface tract or tracts overlying the work, if the surface tract is to be used for roads or other land disturbance as a pursuant to subsection (c), section seven of this article; (3) The coal owner, we well proposed to be drilled is located [sic] is known to be underlain by one or lect or tracts overlying the oil and gas leasehold being developed by the proposed to the construction, enlargement, alteration, repair, removal or abandonment of any le; (5) Any surface owner or water purveyor who is known to the applicant to him one thousand five hundred feet of the center of the well pad which is used to als; and (6) The operator of any natural gas storage field within which the han three tenants in common or other co-owners of interests described in applicant may serve the documents required upon the person described in the section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any er is not notice to a landowner, unless the lien holder is the landowner. W. Va. Il 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:
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan ☑ SURFACE OWNER(s)	Notice ☑ Well Plat Notice is hereby provided to: ☑ COAL OWNER OR LESSEE
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan ☑ SURFACE OWNER(s) Name: Timmy B. & Amy L. Minch	Notice ☑ Well Plat Notice is hereby provided to: ☑ COAL OWNER OR LESSEE Name: Alliance Resources GP, LLC
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan ☑ SURFACE OWNER(s) Name: Timmy B. & Amy L. Minch Address: 260 Browns Run Road	Notice ☑ Well Plat Notice is hereby provided to: ☑ COAL OWNER OR LESSEE Name: Alliance Resources GP, LLC Address: 2596 Battle Run Road
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan ☑ SURFACE OWNER(s) Name: Timmy B. & Amy L. Minch Address: 260 Browns Run Road Wheeling, WV 26003	Notice ☑ Well Plat Notice is hereby provided to: ☑ COAL OWNER OR LESSEE Name: Alliance Resources GP, LLC Address: 2596 Battle Run Road Triadelphia, WV 26059
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan ☑ SURFACE OWNER(s) Name: Timmy B. & Amy L. Minch Address: 260 Browns Run Road Wheeling, WV 26003 Name:	Notice ☑ Well Plat Notice is hereby provided to: ☑ COAL OWNER OR LESSEE Name: Alliance Resources GP, LLC Address: 2596 Battle Run Road Triadelphia, WV 26059 ☐ COAL OPERATOR
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan ☑ SURFACE OWNER(s) Name: Timmy B. & Amy L. Minch Address: 260 Browns Run Road Wheeling, WV 26003	Notice ☑ Well Plat Notice is hereby provided to: ☑ COAL OWNER OR LESSEE Name: Alliance Resources GP, LLC Address: 2596 Battle Run Road Triadelphia, WV 26059 ☐ COAL OPERATOR Name:
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan ☑ SURFACE OWNER(s) Name: Timmy B. & Amy L. Minch Address: 260 Browns Run Road Wheeling, WV 26003 Name: Address:	Notice ☑ Well Plat Notice is hereby provided to: ☑ COAL OWNER OR LESSEE Name: Alliance Resources GP, LLC Address: 2596 Battle Run Road Triadelphia, WV 26059 ☐ COAL OPERATOR Name: Address:
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan ☑ SURFACE OWNER(s) Name: Timmy B. & Amy L. Minch Address: 260 Browns Run Road Wheeling, WV 26003 Name: Address: ☐ SURFACE OWNER(s) (Road and/or Other Disturbance)	Notice
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan ☑ SURFACE OWNER(s) Name: Timmy B. & Amy L. Minch Address: 260 Browns Run Road Wheeling, WV 26003 Name: Address: □ SURFACE OWNER(s) (Road and/or Other Disturbanc Name:	Notice ☑ Well Plat Notice is hereby provided to: ☑ COAL OWNER OR LESSEE Name: Alliance Resources GP, LLC Address: 2596 Battle Run Road
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☐ Application Notice ☐ WSSP Notice ☐ E&S Plan ☐ SURFACE OWNER(s) Name: Timmy B. & Amy L. Minch Address: 260 Browns Run Road Wheeling, WV 26003 Name:	Notice
☐ Application Notice ☐ WSSP Notice ☐ E&S Plan ☐ SURFACE OWNER(s) Name: Timmy B. & Amy L. Minch Address: 260 Browns Run Road Wheeling, WV 26003 Name: Address: ☐ SURFACE OWNER(s) (Road and/or Other Disturbane Name: Address: ☐ SURFACE OWNER(s) (Impoundments or Pits) Name:	Notice
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan ☑ SURFACE OWNER(s) Name: Timmy B. & Amy L. Minch Address: 260 Browns Run Road Wheeling, WV 26003 Name:	Notice

WW-6A (9-13) API NO. 47- 069 OPERATOR WELL NO. Timmy Minch OHI 208H
Well Pad Name: Timmy Minch 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: Notice Permit Application Filed:	0[8]18	
PERMIT FOR ANY CERTIFICATE OF A	PPROVAL FOR THE	
	F AN IMPOUNDMENT OR PIT	
Delivery method pursuant to West Virginia Code § 22-6A-	-10(b)	
☐ PERSONAL ☑ REGISTERED ☐ MET	THOD OF DELIVERY THAT REQUIRES A	
SERVICE MAIL REC	CEIPT OR SIGNATURE CONFIRMATION	
certificate of approval for the construction of an impoundment or registered mail or by any method of delivery that requires a receipt sediment control plan required by section seven of this article, and the surface of the tract on which the well is or is proposed to be lead to be a lead to be a surface of the tract on which the well is or is proposed well work described in the crosion and sediment control plan submitted purpoperator or lessee, in the event the tract of land on which the well more coal seams; (4) The owners of record of the surface tract or well work, if the surface tract is to be used for the placement, continuously work, if the surface tract is to be used for the placement, continuously work at the surface tract of the placement of this article; (5) have a water well, spring or water supply source located within or provide water for consumption by humans or domestic animals; a proposed well work activity is to take place. (c)(1) If more than the subsection (b) of this section hold interests in the lands, the application of the sheriff required to be maintained pursuant to section provision of this article to the contrary, notice to a lien holder is a Code R. § 35-8-5.7.a requires, in part, that the operator shall also water purveyor or surface owner subject to notice and water testing water purveyor or surface owner subject to notice and water testing the surface of the surface owner subject to notice and water testing water purveyor or surface owner subject to notice and water testing water purveyor or surface owner subject to notice and water testing water purveyor or surface owner subject to notice and water testing water purveyor or surface owner subject to notice and water testing water purveyor or surface owner subject to notice and water testing water purveyor or surface owner subject to notice and water testing water purveyor or surface owner subject to notice and water testing water testing the surface of the	pt or signature confirmation, copies of the application, the determinant of the well plat to each of the following persons: (1) The ocated; (2) The owners of record of the surface tract or the cottent of the surface tract is to be used for roads or other land suant to subsection (c), section seven of this article; (3) I proposed to be drilled is located [sic] is known to be undertacts overlying the oil and gas leasehold being development of the surface owner or water purveyor who is known to meat thousand five hundred feet of the center of the well pland (6) The operator of any natural gas storage field with three tenants in common or other co-owners of interests of cant may serve the documents required upon the person on eight, article one, chapter eleven-a of this code. (2) Not notice to a landowner, unless the lien holder is the later provide the Well Site Safety Plan ("WSSP") to the surface of the well surface of the Well Site Safety Plan ("WSSP") to the surface of the surface of the well surface of the well site Safety Plan ("WSSP") to the surface of the well surfa	the erosion and cowners of record of cracts overlying the disturbance as The coal owner, anderlain by one or ed by the proposed andonment of any the applicant to ad which is used to an which the described in described in the otwithstanding any andowner. W. Va.
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Noti ☐ SURFACE OWNER(s)	ce ☑ Well Plat Notice is hereby provided to: ☑ COAL OWNER OR LESSEE /	
Name:	Name: H3, LLC	
Address:	Address: Rt. 1 Box 605	3
	Milton, WV 25541	
Name:	☐ COAL OPERATOR	
Address:	Name:	
	Address:	
SURFACE OWNER(s) (Road and/or Other Disturbance)		3 1
Name:	SURFACE OWNER OF WATER WELL	
Address:	AND/OR WATER PURVEYOR(s)	
	Name: See Attachment #1	
Name:	Address:	
Address:		
	□ OPERATOR OF ANY NATURAL GAS STOL	RAGE FIELD
SURFACE OWNER(s) (Impoundments or Pits)		
Name:	Name:Address:	RECEIVE and Gas
Address:		- Olloo s
Address:	*Please attach additional forms if necessary	FEB 1 3 2018
		1 bet
		WV Department of Environmental Protection
		Ellana

WW-6A (8-13)

RECEIVED

06900277

1 3 2018

API NO. 47-069 OPERATOR WELL NO. Timmy Minch OHI 203-1 Well Pad Name: Timmy Minch PAD

WV Department of Environmental Protection

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 crosion 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/oiland-gas/pages/default.aspx.

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

WW-6A (8-13) API NO. 47-4706900277

OPERATOR WELL NO. Timmy Minch OHI 206H

Well Pad Name: Timmy Minch PAD

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 and location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas

Department of Environmental Protection

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

W Department of UN Department of Environmental Protection

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. 47-069 7 0 6 9 0 0 2 7 7

OPERATOR WELL NO. Timmy Minch OHI 206H
Well Pad Name: Timmy Minch 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.

Office of Oil and Gas

FEB 13 2018

WV Department of Environmental Protection

WW-6A (8-13)

4706900277

API NO. 47-069

OPERATOR WELL NO. Timmy Minch OHI 206H

Well Pad Name: Timmy Minch PAD

Notice is hereby given by:

Well Operator: SWN Production Co., LLC

Telephone: 304-884-1614
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

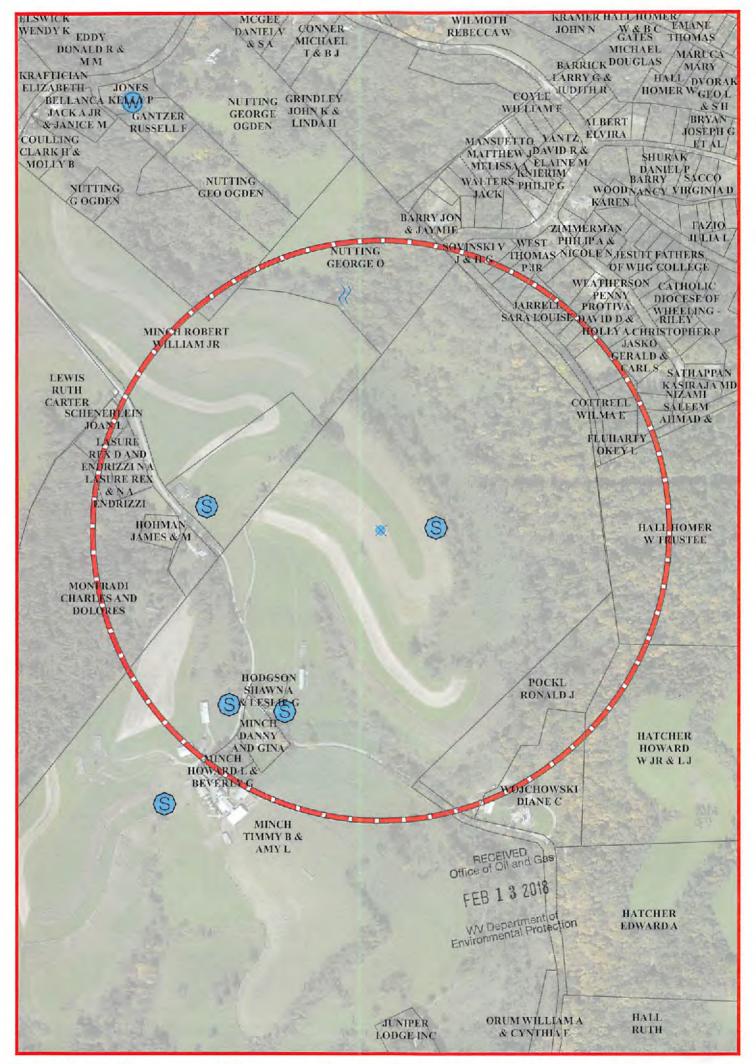
Subscribed and sworn before me this

Notar Public

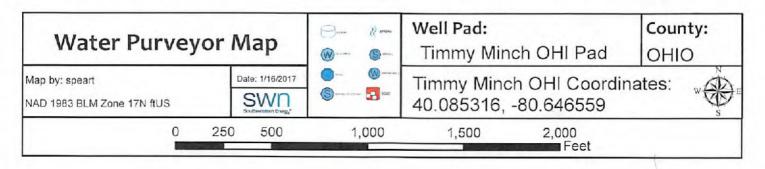
My Commission Expire

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FEB 1 3 2018



The intent of this map is for general reference only. Information on this map was created using the best available data at the time but is not guaranteed accurate.



Attachment 13A

Timmy Minch OHI Pad - Water Purveyors w/in 1500' Sources

Landowner

Address

Timmy & Amy Minch Robert William Minch Jr. 260 Browns Run Road, Wheeling WV 26003 3 springs.

265 Browns Run Road, Wheeling WV 26003 1 spring /

Office of Oil and Gas
FEB 1 3 2018

WW Department of Environmental Protection

WW-6A4 (1/12)

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: 11/08/2017 Date Permit Application Filed: Delivery method pursuant to West Virginia Code § 22-6A-16(b) CERTIFIED MAIL HAND RETURN RECEIPT REQUESTED DELIVERY 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: Timmy B. & Amy L. Minch Name: Address: 260 Browns Run Rd. Address: Wheeling, WV 26003 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: West Virginia Easting: 530,155.443 State: UTM NAD 83 County: Ohio Northing: 4,437,283.090 Browns Run District: Public Road Access: Triadelphia Quadrangle: Generally used farm name: Timmy Minch OHI Watershed: Browns Run of Peters Run of Little Wheeling Creek 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: Authorized Representative: Well Operator: SWN Production Company, LLC PO Box 1300, 179 Innovation DATECEIVED Address: Address: PO Box 1300, 179 Innovation Drive Jane Lew, WV 26378 Jane Lew, WV 26378 Telephone: Telephone: 304-517-6603 304-517-6603 Email: Email: Michael Yates@swn.com WV Department of Environmental Protection Michael Yates@swn.com

Oil and Gas Privacy Notice:

304-471-2497

Facsimile:

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.

Facsimile:

304-471-2497

47069002 Operator Well No. Timmy MI

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

Date of Notic	Requirement: notice shall be pro- re: 11/08/2017 Date Pe		lication Filed:	1/8/10	Y	
D 11		G 1 0 22	Z 1 1 2 C A	11		
Delivery met	hod pursuant to West Virginia (Code § 22	-6A-16(c)			
CERTII	FIED MAIL		IAND			
	RN RECEIPT REQUESTED	I	DELIVERY			
eturn receipt the planned of required to be drilling of a h damages to th d) The notice of notice. Notice is here at the address Name: Timmy B.		the surface y this sub on ten of t sed surface operations e given to OWNER(e owner whose land section shall include his article to a surface use and compens to the extent the dather surface owner a	will be used for de: (1) A copy ace owner whos ation agreement amages are com at the address lis	or the drilling of a of this code sect se land will be used to containing an opensable under ar	thorizontal well notice of tion; (2) The information ed in conjunction with the offer of compensation for ticle six-b of this chapter.
Notice is here Pursuant to Woperation on	eby given: est Virginia Code § 22-6A-16(c), the surface owner's land for the p			I well on the tra	ct of land as follo	
Notice is here Pursuant to W operation on State:	eby given: /est Virginia Code § 22-6A-16(c), the surface owner's land for the pro- West Virginia			l well on the tra Easting:	oct of land as follo 530,155,443	
Wheeling, WV 280 Notice is here Pursuant to W peration on State: County:	eby given: yest Virginia Code § 22-6A-16(e), the surface owner's land for the property of th		drilling a horizonta UTM NAD 8	I well on the tra Easting: Northing:	530,155,443 4,437,283.090	
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Wheeling, WV 280 Notice is here Pursuant to W Speration on State: County: District: Quadrangle:	eby given: yest Virginia Code § 22-6A-16(e), the surface owner's land for the pro- West Virginia Ohio	urpose of	drilling a horizonta UTM NAD 8 Public Road	I well on the tra Easting: Northing:	530,155,443 4,437,283.090	
pperation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to W o be provide norizontal we surface affect information re neadquarters, gas/pages/defi	eby given: Vest Virginia Code § 22-6A-16(e), the surface owner's land for the property of the surface land of the property of the surface land of the	Creek , this notice to a sure and come and come extent be obtain	drilling a horizonta UTM NAD 8 Public Road 2 Generally use ce shall include: (1) rface owner whose pensation agreementhe damages are celed from the Secret ston, WV 25304	I well on the tra Easting: Northing: Access: ed farm name: A copy of this eland will be int containing arompensable uncary, at the WV	act of land as follo 530,155,443 4,437,283,090 Browns Run Timmy Minch OHI code section; (2) ased in conjunction offer of compender article six-b of Department of I	The information required on with the drilling of a sation for damages to the f this chapter. Additional Environmental Protection www.dep.wv.gov/oil-and-
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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.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110 Charleston, West Virginia 25305-0430 • (304) 558-3505

Reissued May 18, 2018

Thomas J. Smith, P. E. Secretary of Transportation/ Commissioner of Highways

Jill M. Newman Deputy Commissioner

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 Timmy Minch Pad, Ohio County Timmy Minch OHI 206H

Dear Mr. Martin,

The West Virginia Division of Highways has transferred Permit #06-2011-0441 for the subject site to Southwestern Energy for access to the State Road for the well site located off of Ohio County Route 25/1 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.

Very Truly Yours,

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

Dany K. Clayton

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

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Office of Oil and Gas

MAY 18 2018

EC6734A (Champion Technologies) Biocide Cuaternary Armmonium Compounds, Benzyl-C12 16-Alkyldimethyl, Chlorides Biocide Biocide Biocide Biocide Cuaternary Armmonium Compounds, Benzyl-C12 16-Alkyldimethyl, Chlorides Anime Triphosphate Proprieta Ethylene Glyco Anime Triphosphate Proprieta Biocide Biocide Biocide Cuaternary Armmonium Compounds, Benzyl-C12 16-Alkyldimethyl, Chlorides Anime Triphosphate Proprieta Ethylene Glyco Anime Triphosphate Proprieta Biocide Biocide Anime Triphosphate Proprieta Biocide Biocide Anime T		T	DDITIVES				
Biocide Acetic Acid 64-19-7 Peroxyacetic Acid 79-21-0 Methanol 67-56-1 Nonylphenol Ethowylate Proprietat Glutaraldehyde Glutaraldehydehydehydehydehydehydehydehydehydehy	Product Name	Product Use	Chemical Name	CAS Numbe			
Peroxyacetic Acid 79-21-0			Hydrogen Peroxide	7722-84-1			
Scale Inhibitor Methanol For-56-1	EC6734A (Champion Technologies)	Biocide	Acetic Acid	64-19-7			
Scale Inhibitor Nonyiphenol Ethoxylate Proprietal Glutaraidehyde 111-30-8			Peroxyacetic Acid	64-19-7 79-21-0 67-56-1 Proprietary 111-30-8 68424-85-1			
Bactron K-139 (Champion Technologies) Biocide			Methanol	67-56-1			
Bactron K-139 (Champion Technologies) Biocide Cuaternary Ammonium Compounds, Benzyl-C12 Bi-Alkyddimethyl, Chlorides Biocide Cuaternary Ammonium Compounds, Benzyl-C12 Biocide Biocide Cuaternary Ammonium Compounds, Benzyl-C12 Biocide Anine Triphosphate Ethylene Glycol Biocide Biocide Anine Triphosphate Ethylene Glycol Biocide Biocide Anine Triphosphate Ethylene Glycol Biocide Biocide Biocide Anine Triphosphate Ethylene Glycol Biocide Biocide Biocide Anine Triphosphate Ethylene Glycol Biocide Biocide Anine Triphosphate Ethylene Glycol Biocide Biocide Anine Triphosphate Ethylene Glycol Biocide Biocide Biocide Anine Triphosphate Ethylene Glycol Biocide Biocide Biocide Anine Triphosphate Ethylene Glycol Biocide Biocide Biocide Biocide Anine Triphosphate Ethylene Glycol Biocide Biocide Biocide Biocide Anine Triphosphate Ethylene Glycol Biocide Biocide Biocide Biocide Biocide Biocide Biocide Biocide Anine Triphosphate Ethylene Glycol Biocide Biocide	GYPTRON T-390 (Champion Technologies)	Scale Inhibitor	Nonylphenol Ethoxylate	Proprietar			
Bactron K-139 (Champion Technologies) Biocide Cuaternary Ammonium Compounds, Benzyl-C12-E15-Alkyldimethyl, Chlorides EC6486A (Natoc Champion) Biocide Biocide Biocide Cuaternary Ammonium Compounds, Benzyl-C12-E15-Alkyldimethyl, Chlorides EC6486A (Natoc Champion) Biocide Biocide Cuaternary Ammonium Compounds, Benzyl-C12-E15-Alkyldimethyl, Chlorides Amine Triphosphate Proprieta Ethylene Glycol Bydrotreated light distillate (petroleum) Advanced Bight distillate (petroleum) Biocide Biocide Amine Triphosphate Proprieta Arine Triphosphate Proprieta Gid, polymer with propenamide Biocide Biocide Biocide Amine Triphosphate Proprieta Gid, polymer with propenamide Biocide Biocide Biocide Amine Triphosphate Proprieta Gid, polymer with propenamide Biocide Biocide Biocide Biocide Amine Triphosphate Proprieta Gid, polymer with propenamide Biocide Bi	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·				
Biocide	Bactron K-139 (Champion Technologies)	Biocide	Quaternary Ammonium Compounds, Benzyl-C12				
Biocide Quaternary Ammonium Compounds, Benzyl-C12- 16-Alkyldimethyl, Chlorides S8424-85- 16-Alkyldimethyl, Chlorides Froprietat Ethylene Glycol 107-21-1 Hydrotreated light distillate (petroleum) 67472-47- Propencia acid, polymer with propenanide 107-21-1 Hydrotreated light distillate (petroleum) 67472-47- Propencia acid, polymer with propenanide 107-21-1 Hydrotreated light distillate (petroleum) 107-21-1 Hydrotreated light petroleum distillate (petroleum) 107-21-				64-17-5			
ECG486A (Nalco Champion) Scale Inhibitor ECG486A (Nalco Champion) Scale Inhibitor Scale Inhibitor Scale Inhibitor Ethylene Glycol Hydrotreated light distillate (petroleum) Propencia caid, polymer with propenamide Ethylene glycol 107-21-1 Hydrotreated light distillate (petroleum) Propencia caid, polymer with propenamide Ethylene glycol 107-21-1 Cinnamaldehyde 104-52-5 Butyl cellosolve 111-76-2 Butyl cellosolve Formic acid 64-18-6 Polyether Proprietar Acetophenone, thiourea, formaldehyde polymer AP ONE (U.S. Well Services) Proprietar Acetophenone, thiourea, formaldehyde polymer AP ONE (U.S. Well Services) Viscosifying Agent Viscosifying Agent OPTI-FLEX (U.S. Well Services) Formaldehyde Corrosion Inhibitor Corrosion Inhibitor Econo-Ci200 (swn Well Services) Formaldehyde Corrosion Inhibitor Acetic Acid Corrosion Inhibitor Ecopol-FEAC (swn Well Services) Friction Reducer Friction	Pactron K 210 (cl.,, t., Tubulata)	Piocido	Methanol	67-56-1			
EC6486A (Nalco Champion) Scale Inhibitor Ethylene Glycol 107-21-1	Bactron K-219 (Champion Technologies)	Biocide		68424-85-			
Mixture	FC6486A (Males Champion)	Scale Inhibitor	Amine Triphosphate	Proprietar			
Al-303 (u.s. well services) AP ONE (u.s. wel	ECO400A (Naico Champion)	Scale Hillibitui	· · · · · · · · · · · · · · · · · · ·				
Al-303 (u.s. well Services) Al-303 (u.s. well Services) Al-303 (u.s. well Services) AP ONE (u.s. well Services) Breaker Are detophenone, thiourea, formaldehyde polymer (68527-49-40-47-47-47-47-47-47-47-47-47-47-47-47-47-	WERA-2000 (1) C 14(2) C	Anionic Friction Poducer	Hydrotreated light distillate (petroleum)	64742-47-			
Al-303 (u.s. well services) Al-303 (u.s. well services) Al-303 (u.s. well services) AP ONE (u.s. wel	VV FRA-ZUUU (U.S. Well Services)	Amonic Priction Reducer		9003-06 9			
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Al-303 (U.S. Well Services) AP ONE (U.S. Well Services) Breaker OPTI-FLEX (U.S. Well Services) Corrosion Inhibitor Corrosion In			Cinnamaldehyde	104-55 2			
AP ONE (u.s. well Services) AP ONE (u.s. wel	A1 202	8 At. de	Butyl cellosolve	111-76 2			
Acetophenone, thiourea, formaldehyde polymer 68527-49 AP ONE (u.s. well Services) OPTI-FLEX (u.s. well Services) Viscosifying Agent OPTI-FLEX (u.s. well Services) Viscosifying Agent Opti-FLEX (u.s. well Services) OP	AI-3U3 (U.S. Well Services)	iviixture	Formic acid	64-18 6			
AP ONE (u.s. well services) OPTI-FLEX (u.s. well services) Viscosifying Agent OPTI-FLEX (u.s. well services) Viscosifying Agent OPTI-FLEX (u.s. well services) Corrosion Inhibitor Corrosion In			Polyether	Proprietar			
AP ONE (u.s. Well Services) OPTI-FLEX (u.s. Well Services) Viscosifying Agent OPTI-FLEX (u.s. Well Services) Viscosifying Agent OPTI-FLEX (u.s. Well Services) Corrosion Inhibitor Corrosion In			Acetophenone, thiourea, formaldehyde polymer	68527-49			
OPTI-FLEX (U.S. well Services) Viscosifying Agent Distillates, petroleum, hydrotreated light Methanol 67-56-1 Oxyalkylated fatty acid 68951-67- Fatty acids 61790-12- Modified thiourea polymer 68527-49- Water 7732-18- Hydrochloric acid 7647-01- Potassium acetate 127-08-2 Formaldehyde 50-00-0 Acetic Acid 64-19-7 Citric Acid 77-92-9 Water 7732-18- HCL (swn well Services) Hydrocholic Acid Hydrochloric Acid Water 7732-18- FLOJET DRP 1130X (swn well Services) Friction Reducer FR-76 (Halliburton) Friction Reducer FR-76 (Halliburton) Friction Reducer FDP-S1176-15 (Halliburton) Friction Reducer Froprietar Hydrotreated light petroleum distillate Froprietar Floyacylate Froprietar Hydrotreated light petroleum distillate Froprietar Froprietar Hydrotreated light petroleum distillate Froprietar Froprietar Froprietar Hydrotreated light petroleum distillate Froprietar Froprietar Froprietar Froprietar Hydrotreated light petroleum distillate Froprietar Froprieta	AP ONE (U.S. Well Services)	Breaker		7727-54-0			
Methanol 67-56-1		Viscosifying Agent	Distillates, petroleum, hydrotreated light	64742-47-			
Econo-Cl200 (swn well Services) Corrosion Inhibitor Corrosion Inhibitor Corrosion Inhibitor Corrosion Inhibitor Corrosion Inhibitor Water Water 7732-18-1 Hydrochloric acid 7647-01-4 Potassium acetate 127-08-2 Formaldehyde 50-00-0 Acetic Acid 77-92-9 Water 7732-18-1 Citric Acid 77-92-9 Water 7732-18-1 Hydrochloric Acid Water 7732-18-1 Hydrochloric Acid Water 7732-18-1 FLOJET DRP 1130X (swn well Services) Friction Reducer Frictio		viscosiiying rigent	Methanol	67-56-1			
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Hydrochloric acid 77647-01- Potassium acetate 127-08-2 Formaldehyde 50-00-0 Acetic Acid 64-19-7 Citric Acid 77-92-9 Water 7732-18-1 Hydrochloric Acid 77-92-9 Water 7732-18-1 Hydrochloric Acid Water 7732-18-1 Hydrochloric Acid Water 7732-18-1 FLOJET DRP 1130X (swn well Services) Friction Reducer Proprietary Proprietary FLOJET DR900 LPP (swn Well Services) Friction Reducer Distillates (petroleum) hydrotreated light 64674-47- Ethylene Glycol 107-21-1 Alcohols, C12-16, Exoxylated propoxylated 68213-24- Fatty Alcohols ethoxylated Proprietary Water 7732-18-1 FR-76 (Halliburton) Friction Reducer Inorganic Salt Proprietary HAI-150E (Halliburton) Corrosion Inhibitor No hazardous substance N/A FDP-S1176-15 (Halliburton) Scale Inhibitor Organic phosphonate Proprietary Proprietary Hydrotreated light petroleum distillate 64742-47-			Modified thiourea polymer	68527-49-			
Potassium acetate 127-08-2 Formaldehyde 50-00-0 Acetic Acid 64-19-7 Acetic Acid 77-92-9 Water 7732-18-1 Water 7732-18-1 Water 7732-18-1 Hydrocholic Acid Water 7732-18-1 FLOJET DRP 1130X (swn well Services) Friction Reducer Proprietary Proprietar	ECONO-CIZUU (SWN Well Services)	Corrosion Inhibitor	Water	7732-18-5			
Formaldehyde 50-00-0 Acetic Acid 64-19-7 Acetic Acid 77-92-9 Water 7732-18-1 Hydrocholic Acid Water 7732-18-1 Hydrocholic Acid Water 7732-18-1 Hydrocholic Acid Water 7732-18-1 Hydrocholic Acid Water 7732-18-1 FLOJET DRP 1130X (SWN Well Services) Friction Reducer Proprietary Proprietary Friction Reducer Distillates (petroleum) hydrotreated light 64674-47-1 Ethylene Glycol 107-21-1 Alcohols, C12-16, Exoxylated propoxylated Fatty Alcohols ethoxylated Proprietary Water 7732-18-1 FR-76 (Halliburton) Friction Reducer Hydrotreated light petroleum distillate 64742-47-1 HAI-150E (Halliburton) Corrosion Inhibitor No hazardous substance N/A FDP-S1176-15 (Halliburton) Friction Reducer Hydrotreated light petroleum distillate 64742-47-1 FOP-S1176-15 (Halliburton) Friction Reducer Proprietary Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light petroleum distillate Hydrotreated light			Hydrochloric acid	7647-01-0			
Ecopol-FEAC (SWN Well Services) Iron Control Acetic Acid Citric Acid 77-92-9 Water 7732-18-1 Hydrocholic Acid Hydrocholic Acid Water 7732-18-1 Hydrocholic Acid Water 7732-18-1 Water 7732-18-1 Water 7732-18-1 FLOJET DRP 1130X (SWN Well Services) Friction Reducer Hydrotreated light petroleum distillate Friction Reducer Friction Reducer Hydrotreated light petroleum distillate Friction Reducer Friction			Potassium acetate	127-08-2			
Proposition			Formaldehyde	50-00-0			
HCL (SWN Well Services) Hydrocholic Acid Hydrochloric Acid Hydrochloric Acid Water 7732-18-1 Water 7732-18-1 Water 7732-18-1 FLOJET DRP 1130X (SWN Well Services) Friction Reducer Friction Reducer Friction Reducer Friction Reducer Friction Reducer FR-76 (Halliburton) Friction Reducer FPDP-S1176-15 (Halliburton) Friction Reducer FYOPTICE TORY Hydrotreated light petroleum distillate FR-76 (Halliburton) Friction Reducer Friction Red			Acetic Acid	64-19-7			
HCL (SWN Well Services) Hydrocholic Acid Hydrochloric Acid Hydrochloric Acid Water 7732-18-1 Water 7732-18-1 Water 7732-18-1 FLOJET DRP 1130X (SWN Well Services) Friction Reducer Friction Reducer Friction Reducer Friction Reducer Friction Reducer FR-76 (Halliburton) Friction Reducer FPDP-S1176-15 (Halliburton) Friction Reducer FYOPTICE TORY Hydrotreated light petroleum distillate FR-76 (Halliburton) Friction Reducer Friction Red	Ecopol-FEAC (SWN Well Services)	Iron Control	Citric Acid	77-92-9			
HCL (SWN Well Services) Hydrocholic Acid Water 7732-18- FLOJET DRP 1130X (SWN Well Services) Friction Reducer FR-76 (Halliburton) Friction Reducer Hydrotreated light petroleum distillate Friction Reducer Hydrotreated light petroleum distillate Froprietar Hydrotreated light petroleum distillate Froprietar Holpholitor No hazardous substance N/A Polyacylate Froprietar Hydrotreated light petroleum distillate Froprietar Hydrotreated light petroleum distillate Froprietar Polyacylate Froprietar Hydrotreated light petroleum distillate Froprietar Organic phosphonate Proprietar	,			7732-18-5			
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FLOJET DRP 1130X (SWN Well Services) Friction Reducer Friction R	HCL (SWN Well Services)	Hydrocholic Acid		7732-18-5			
FLOJET DR900 LPP (SWN Well Services) Friction Reducer Friction Reducer Friction Reducer FR-76 (Halliburton) Friction Reducer HAI-150E (Halliburton) Friction Reducer FDP-S1176-15 (Halliburton) Friction Reducer Friction	FLOJET DRP 1130X (SWN Well Services)	Friction Reducer	Proprietary				
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FLOJET DR900 LPP (SWN Well Services) Friction Reducer Alcohols, C12-16, Exoxylated propoxylated 68213-24- Fatty Alcohols ethoxylated Proprietal Water 7732-18- Hydrotreated light petroleum distillate 64742-47- Inorganic Salt Proprietal HAI-150E (Halliburton) Corrosion Inhibitor No hazardous substance N/A FDP-S1176-15 (Halliburton) Friction Reducer IP-65 MC (Halliburton) Scale Inhibitor Scale Inhibitor Organic phosphonate Proprietar							
FR-76 (Halliburton) Friction Reducer HAI-150E (Halliburton) FDP-S1176-15 (Halliburton) Friction Reducer	FLOJET DR900 LPP (SWN Well Services)		· · · · · · · · · · · · · · · · · · ·				
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FDP-S1176-15 (Halliburton) Friction Reducer Hydrotreated light petroleum distillate 64742-47- Organic phosphonate Proprietar				- ·			
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I P-65 MC (Valliburton) I Scale Inhibitor			l				
	LP-65 MC (Halliburton)	Scale Inhibitor	Ammonium Chloride	12125-02-			

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