

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

Wednesday, April 24, 2019 WELL WORK PERMIT Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC POST OFFICE BOX 12359

SPRING, TX 773914954

Re:

Permit approval for CHARLES FRYE UD OHI 7H

47-069-00299-00-00

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: CHARLES FRYE UD OHI 7H

Farm Name:

DOROTHY V. FRYE

U.S. WELL NUMBER: 47-069-00299-00-00

Horizontal 6A New Drill

Date Issued: 4/24/2019

Promoting a healthy environment.

API Number:	<u> </u>
	04/26/2019

PERMIT CONDITIONS

4706900299

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.

CO	R	T	יונ	ΓT	n	N	Z
-	ж	V.L	78.	L	u		100

- 1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
- 2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
- 4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
- 5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
- 7. 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:	04/26/2019
-------------	------------

PERMIT CONDITIONS 4706900299

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)

API NO. 47-069		
OPERATOR	WELL NO.	Charles Frye UD OHI 7H
Well Pad N	ame: Charle	s Frye OHI Pad

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

1) Well Operator	:: SWN P	roduction Co	., LLC	494512924	069-Ohio	6-Triade	48-Valley Grove
				Operator ID	County	District C)uadrangle
2) Operator's Wo	ell Number	: Charles Fry	e UD O	HI 7H Well Pad	Name: Charle	es Frye OHI	Pad
3) Farm Name/S	urface Owr	1CT: Dorothy Frye, Ar	ny Frye, & Ca	Public Road	d Access: McC	Cutcheon Ro	ad
4) Elevation, cur	rent ground	I: 1267'	Ele	evation, proposed j	post-construction	on: 1267'	
•		x	Oil		rground Storag		
	Other -		4		· ·		
((b)If Gas	Shallow 2	<	Deep			
		Horizontal 2	<				
6) Existing Pad:	Yes or No	Yes					
				pated Thickness as VD- 6401', Target Base TV	•	• •	sociated Pressure- 4174
8) Proposed Tota	ıl Vertical I	Depth: 6408'					
9) Formation at 1	Total Vertic	cal Depth: Bu	ırket				
10) Proposed Tot	tal Measure	ed Depth: 12	,413'				
11) Proposed Ho	rizontal Le	g Length: 55	99.51'				
12) Approximate	Fresh Wat	er Strata Deptl	ns:	548'			
13) Method to De	etermine Fr	resh Water Dep	oths: N	learby Water Wel	II & Salinity Pro	ofile	
l4) Approximate	Saltwater 1	Depths: <u>774'</u>	Salinit	y Profile Analysis			
15) Approximate	Coal Seam	Depths: 633	i'				
16) Approximate	Depth to P	Possible Void (coal min	ne, karst, other): _F	Possible Void	333'	
17) Does Propose directly overlying				ns Yes <u>×</u>	No		
(a) If Yes, prov	ide Mine Ir	ıfo: Name:	Valley	/ Camp No. 3 Mir	ne	RE	CEIVED
•		Depth:	602'				Oil and Gas
		Seam:	Pittsb	urgh		APR	8 2019
		Owner:	Valley	/ Camp Coal		WV Der	artment of
						Environmer	ital Protection

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

OPERATOR WELL NO. Charles Frye UD OHI 7H Well Pad Name: Charles Frye OHI Pad

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	H-40	94#	100'	100'	CTS
Fresh Water	13 3/8"	New	H-40	48#	706'	706'	658 sx/CTS
Coal	See	Surface	Casing				
Intermediate	9 5/8"	New	J-55	36#	2086'	2086'	790 sx/CTS
Production	5 1/2"	New	HCP-110	20#	12413'	12413'	lead 670sx Tail 1642sx inside intermediate
Tubing							
Liners							

C. Bleir.19

ТҮРЕ	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	See	Surface	Casing				
Intermediate	9 5/8"	12 1/4"	0.395	3950	1768	Class A	1.19/50% 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:	Office of Oil and Gas
	1 9 2019

WV Department of Environmental Protection

WW-6B (10/14)

47069 04/26/2019

OPERATOR WELL NO. Charles Frye UD OHI 7H
Well Pad Name: Charles Frye OHI Pad

19)) Describe	proposed	well wor	k, including	the drilling	g and plug	ging back	of any pilot hole:

Drill and stimulate any potential zones between and including the Benson to Burket Shale. **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 @ 100 barrels a minute.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 13.6
- 22) Area to be disturbed for well pad only, less access road (acres): 12.0
- 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 and continuing until operator is satisfied with borehole conditions.

WV Department of Environmental Protection

*Note: Attach additional sheets as needed.

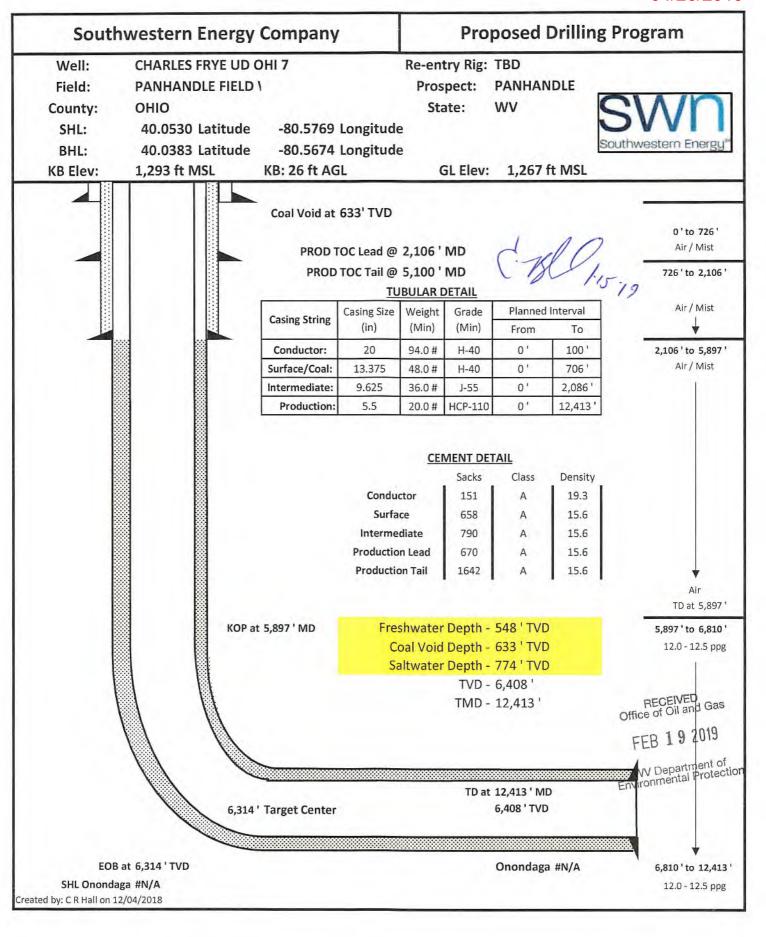
Schlumberger Cement Additives

	Product Name	Product Use	Chemical Name	CAS Number
Surface	5001	accelerator	calcium chloride up to 3%	10043-52-4
Intermediate Surface	5001	accelerator	calcium chloride	10043-52-4
_	D080	dispersant	sodium polynaphthalene sulfonate	9008-63-3
0 8	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
ad	D046	antifoam	fullers earth (attapulgite)	8031-18-3
Production-Lead		chrystalline silica retarder metal oxide		14808-60-7
ig:	D201			propriatary
npo			sulphonated synthetic polymer	propriatary
P.	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
=	4.4		sodium polynaphthalene sulfonate	9008-63-3
I-	D065	dispersant	sodium sulfate	7757-82-6
Production-Tall	2223		chrystalline silica	14808-60-7
npo	D201	retarder	metal oxide	propriatary
ď	D153	anti-settling	chrystalline silica	14808-60-7

Rev. 5/18/2018

Office of OFFER Gas
FEB 19 2019
WV Department of Environmental Protection

04/26/2019





January 2, 2019

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

RE: Proposed New Well Charles Frye UD OHI 7H

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 Frye's property, in Triadelphia District, Ohio County, West Virginia.

If you have any questions or desire additional information, please me at 304-884-1613

Thank you.

Sincerely,

Brittany Woody

Regulatory Analyst

Office of Oil and Gas
FEB 1 9 2019

WV Department of Environmental Protection

API Number 47 -	069	
Operator's	Well No	Charles Frve UD OHI 7H

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) Marlow Run of Middle Wheeling Creek of Wheeling Creek Quadrangle Valley Grove
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No
Will a pit be used? Yes No 🗸
If so, please describe anticipated pit waste:
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, 34-059-24987, 34-119-28776, 34-155-23795, 34-125-23895, 34-155-23805, 34-155-23805, 34-155-23805, 34-155-23805, 34-155-23805, 34-155-23805, 34-155-23805, 34-
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- See Attachment 3A
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc.
-If oil based, what type? Synthetic, petroleum, etc. Synthetic Oil Base
-If oil based, what type? Synthetic, petroleum, etc. Synthetic Oil Base Additives to be used in drilling medium? Attachment 3B
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. andfill
44.
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) Environmental Protect -Landfill or offsite name/permit number? Meadowfill SWF- 1032, Short Creek SWF-1034, Carbon Limestone MSWL018781, Wetzel County 1021
-Landfill or offsite name/permit number? Meadowfill SWF- 1032, Short Creek SWF-1034, Carbon Limestone MSWL018781, Wetzel County 1021 Arden Landfill 100/2, Apex Sanitary Landfill 0b-08438, Brooke Co SWF-1013, Valley 100280
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 significant penalties for submitting false information, including the possibility of fine or imprisonment. Company Official Signature NOTARY PUBLIC OFFICIAL SEAL JESSICA L. VANGIL DER State of West Virginia My Comm. Expires Jul 20, 2020 SWN Production Company, LLC 179 Innovation Dr. Jane Lew. WY 2637
175 milovation Dr. dalle Law, WV 2007
Subscribed and sworn before me this 2nd day of January, 20 19
Cessica L. Van Yilder Notary Public
My commission expires 20, 2020

Operator's Well No. Charles Frye UD OHI 7H

Proposed Revegetation Treatment: Acres Disturbed 13.6	Prevegetation pH
Lime as determined by pH test min. 2 Tons/acre or to correct to	
	рн _12.0
Fertilizer type 10-20-20	H. Alexandr
Fertilizer amount 600	_lbs/acre
Mulch_ Hay/Straw 2.5Ton	ns/acre
<u>s</u>	Seed Mixtures
Temporary	Permanent
Seed Type Ibs/acre Attachment 3C	Seed Type lbs/acre
Attachment 30	
	*
Photocopied section of involved 7.5' topographic sheet.	-19
Comments:	
.,,,,,,,	
	Offi
	Offi FE
	1 5
	1 5
	Offin FE Environa
	1 5
	Environn
_{itle:} Oil and Gas Inspector	



Attachment 3A

CLOSED LOOP SYSTEM

The closed loop system is designed to eliminate the use of reserve pits by providing a higher level of solids control processing and using steel pits for capture of drill cuttings. The cuttings are then processed to achieve landfill requirements before hauling to approved landfills. The liquids are processed to recycle into the active mud system or to transfer to onsite temporary storage as needed.

The closed loop system consists of several sets of a shale gas separator (often called a 'methana'), several banks of solids shakers, high speed centrifuges (1 or 2) used to process the fluid portion of the mud system to remove low gravity solids, low speed centrifuge used for barite recovery in high weight liquid drilling systems, a dewatering system (for air intervals and if freshwater mud systems are in use) used to further clean liquids by flocculation and additional mechanical separation, associated open top tanks for processing liquids and capturing solids for disposal, and transfer pumps to move fluids through the processes. There is an area adjacent to the cuttings tanks (Red Zone) where a track hole is utilized to recover the processed cuttings for loading into containers for hauloff. (See attached schematic of a generic closed loop system layout)

Below are discussions of the processes used when drilling the air interval or liquids interval.

AIR DRILLING INTERVALS

During air drilling operations, flow from the rig will pass down the flowline to the Shale Gas Separater (sometimes called a methane) where gas and liquids/solids are separated. Gas is sent to the flare scrubber tank and is flared at the flare stack. Solids and fluids pass across a shaker system to separate solids from liquids. Solids pass into the cuttings tanks where they are captured for drying and hauloff to an approved landfill site. Liquids fall into a shaker tank and are collected by a centrifugal pump to be processed by the high speed centrifuge to further separate liquids and solids. Solids are then dumped into the cuttings tank for drying and hauloff. Liquids are further processed to remove additional low gravity solids before being reused or transferred to onsite storage.

LIQUIDS DRILLING (FRESHWATER, BRINE, SOBM)

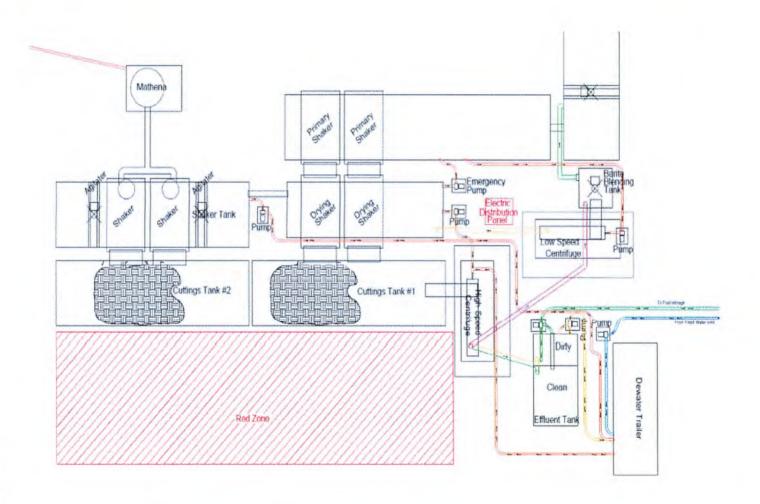
When drilling is converted to liquids drilling, the shale gas separator and associated shaker tank are bypassed, and the liquids system is processed over the primary and drying shaker systems. Cuttings drop into the cuttings tank for additional processing. Any recoverable associated liquids attached to the cutting are recovered out the tank and processed through the low gravity (high speed) and barite recovery centrifuges (low speed) to further remove low gravity solids and to recover barite for reuse in Office of Oil and Gas

FEB 1 9 2019

WV Department of Environmental Protection

Solids Control Layout







Attachment 3B

Drilling Mediums

Air

Freshwater (if needed based on conditions)

Intermediate/Coal (if present):

Air

Brine (In Gas Storage areas)

Organophilic Bentonite

Production Hole:

Air

Synthetic Oil (Base Fluid for mud system)

Barite

Calcium Chloride

Lime

Organophilic Bentonite

Primary and Secondary Emulsifiers

Gilsonite

Calcium Carbonate

Friction Reducers





WVD Seeding Specification



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

Oct. 15th- April 15th PLUS

50lbs per acre of Winter Wheat

(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 norma
Birdsfoot Trefoil	5%	rate
Rough Bluegrass	5%	
Apply @ 100lbs per acre		Apply @ 200lbs per acre

SOIL AMENDMENTS	
10-20-20 Fertilizer	*Apply @ 500lbs per Acre
Pelletized Lime	Apply @ 2 Tons per Acre
the state of the s	*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

April 16th- Oct. 14th

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	ic 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

Seed Mixture: Wetland Mix	SWN Supplied	
VA Wild Ryegrass	20%	
Annual Ryegrass	20%	
Fowl Bluegrass	20%	
Cosmos 'Sensation'	10%	
Redtop	5%	1
Golden Tickseed	5%	J
Maryland Senna	5%	0
Showy Tickseed	5%	0
Fox Sedge	2.5%	0
Soft Rush	2.5%	0
Woolgrass	2.5%	0
Swamp Verbena	2.5%	N
Apply @ 25lbs per acre	Apply @ 50lbs per acre	
April 16th- Oct. 14th	Oct. 15th- April 15th	0
O NO FERTILIZER OR I	LIME INSIDE WETLAND LIMITS	0

Rev. 5/22/2018

4706900299

MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN

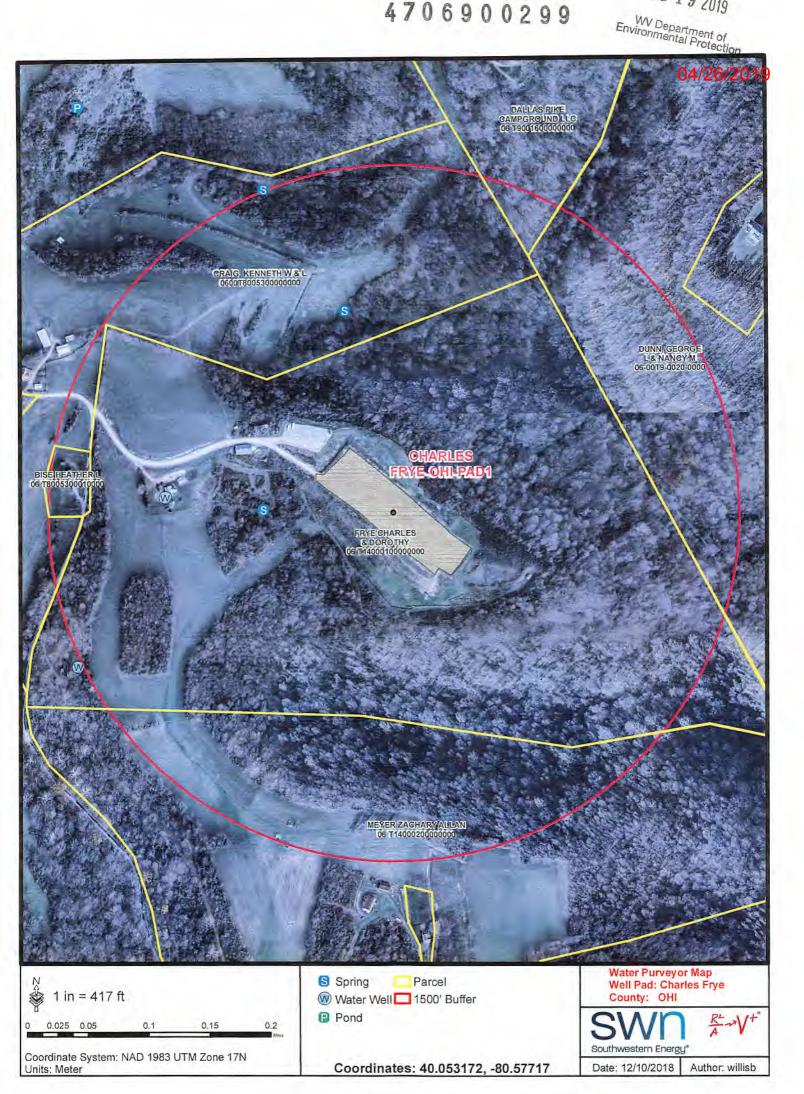


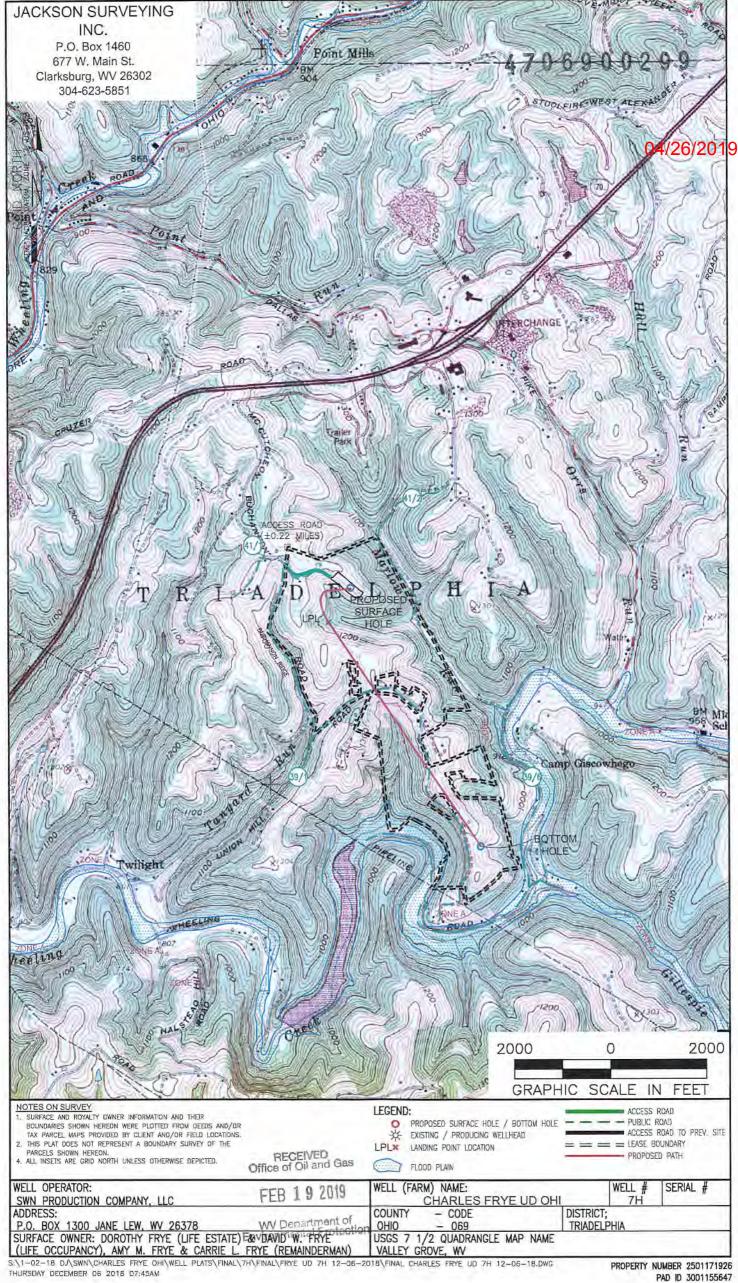
SWN Production Company, LLC 179 Innovation Drive Jane Lew, West Virginia 26378

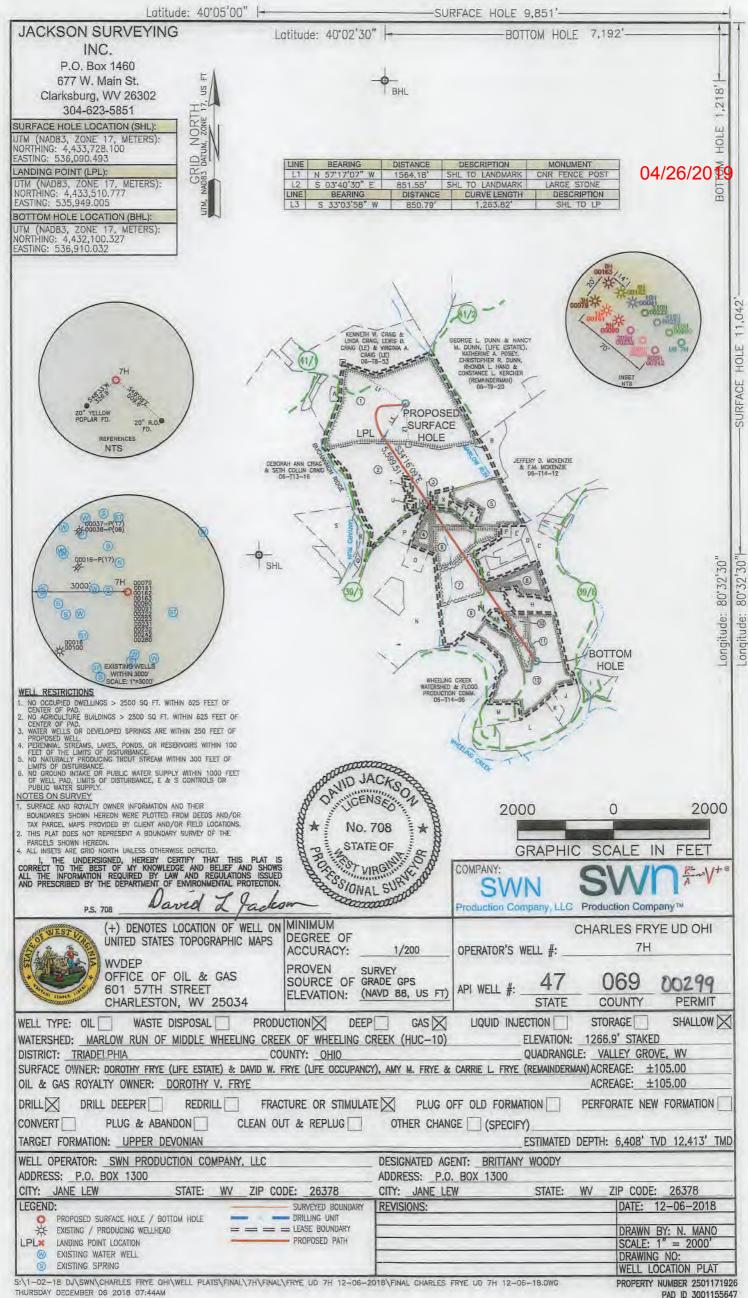
API NO. 47-XXX-XXXXX
WELL NAME: Charles Frye UD OHI 7H
Valley Grove QUAD
Triadelphia DISTRICT
Ohio County WEST VIRGINIA

Submitted by:		40/40/0040	
Brittany Woody Buttany Mody	Date:	12/12/2018	
Title: Regulatory Analyst	SWN F	Production Co., LLC	
Approved by: Title: Oil + Go Ingetor	Date:	1:15-19	
Approved by:			
	Date:		Offic RECEN
Title:			Office of Oil and Gas
SWN PRODUCTION COMPANY, L	LC – C	ONFIDENTIAL	Environmental Proteon

4706900299







JACKSON SURVEYING

INC.

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

04/26/2019

	WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS					
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL				
1	1 DOROTHY V. FRYE (LIFE ESTATE), AMY M. FRYE & CORRIE L. FRYE (REMAINDERMEN) (S)/DOROTHY V. FRYE (R)					
TRACT	SURFACE OWNER	TAX PARCEL				
2	ZACHARY ALLAN MEYER (S)	06-T14-2				
3	_					
4						
5						
6						
7						
8						
9						
10	JOHN E. BOPP, JR. & CHRISTY M. BOPP (S)	06-T14-10.4				
11	LOIS K. HINERMAN (S)	06-T14-10.5				
12	CHRISTY M. BOPP (S)	06-T14-10				

	ADJOINING OWNERS TABLE				
TRACT	SURFACE OWNER	TAX PARCEL			
A	HEATHER L. BISE	06-T8-53.1			
В	MATTHEW J. CROFT & SADIE L. CROFT	06-T14-61			
С	BETH ANN STEPHEN, ET AL	06-T14-15			
D	RICHARD J. LUZADER	06-T14-11.1			
E	KARI A. SHAFFER & SHANE R. SHAFFER	06-T14-11.10			
F	KEITH A. LUZADER	06-T14-11.6			
G	NICOLE L. JASON	06-T14-11.3			
Н	KIRK D. LUZADER & JUDY L. LUZADER	06-T14-11.4			
1	DANA E. CLOVIS & R.J. CLOVIS	06-T14-19			
J	JOHN E. WEITZEL & T.M. WEITZEL	06-T14-09			
K	JOHN M. WEITZEL & ANGELA L. WEITZEL	06-T14-9.1			
L					
М	CHARLES T. HOHMAN & MARY S. HOHMAN, L/E & HEIDI S. HOHMAN & JODIE K. HOHMAN	06-T14-10.3			
N	NELLIE M. FISHER, (LIFE EST.) DEBORAH A. CRAIG	06-T14-05			
0	O SETH C. CRAIG				
P	ROBERT F. LEECH & DEBORAH A. LEECH	06-T14-04			
Q	ROBERT E. CROW, JR.	06-T13-17.1			
R	KRISTOPHER TARRANT & KRISTI TARRANT	06-T13-17			
S	WM. A. LANGMYER & M.J. LANGMYER	06-T13-17.2			
T	ZACHARY ALLAN MEYER	06-T14-2.2			
U	MARY KATHY MEYER, (LIFE ESTATE), ZACHARY ALLAN MEYER	06-T14-2.3			
V	DONALD L. MOFFITT, JR. & L.L. MOFFITT	06-T14-3.5			
W	DONALD L. MOFFITT, JR. & L.L. MOFFITT	06-T14-3.1			
X	DONALD L. MOFFITT, JR. & L.L. MOFFITT	06-T14-3.3			
Y	REGINA A. CONKLIN & HENRY M. CONKLIN	06-T14-3.4			
Z	DAVID R. MOFFITT & L.J. MOFFITT	06-T14-3.2			
AA	JASON R. HINERMAN & HEATHER S. HINERMAN	06-T14-10.2			

REVISIONS:	COMPANY:	SWN Production Company, LLC	SW Production Cor	npany™
	OPERATOR'S WELL #:	CHARLES FRYE UI	D OHI	DATE: 12-06-2018 DRAWN BY: N. MANO
	DISTRICT: TRIADELPHIA	COUNTY: OHIO	STATE: WV	SCALE: N/A DRAWING NO: WELL LOCATION PLAT

WW-6A1 (5/13) Operator's Well No. Chad Glauser UD OHI 7H

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

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

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number

Grantor, Lessor, etc.

Grantee, Lessee, etc.

Royalty

Book/Page

SEE EXHIBIT "A"

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

FEB 1 9 2019
Environmental Protection

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:

Its: Travis Hill, Staff Landman

APR 8 2019

WV Department of Environmental Protection

EXHIBIT "A"

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, W-6A1, by SWN Production Company, LLC, Operator
Charles Frye UD OHI 7H
Ohio County, West Virginia

#	TMP	LESSOR	LESSEE	ROYALTY	BK/PG
1)	06-T14-1	Dorothy V. Frye, widow	Great Lakes Energy Partners, L.L.C.	12.500%	775/335
			Chesapeake Appalachia, L.L.C.		808/375
			SWN Production Company, LLC		883/204
2)	06-T14-2	Zachary Meyer and Jennifer Meyer, husband and wife	Chesapeake Appalachia, L.L.C.	14.00%	799/217
			SWN Production Company, LLC		885/524
3)	06-T14-2.1	John Edward Voscavitch, a/k/a John E. Voscavitch, and Deborah	Chesapeake Appalachia, L.L.C.	18.00%	825/360
		Ann Voscavitch, a/k/a Deborah A. Voscavitch, a/k/a Deborah Voscavitch, husband and wife	SWN Production Company, LLC	Service Servic	885/140
4)	06-T14-4.1	Robert F. Leech and Deborah A. Leech, husband and wife	TriEnergy Holdings, L.L.C.	14.50%	802/168
			NPAR, L.L.C.		825/767
			Chevron U.S.A., Inc.		827/254
			Chesapeake Appalachia, L.L.C.		867/713
- 4			SWN Production Company, LLC		885/308
5)	06-T14-3	David R. Moffitt and Linda J. Moffitt, husband and wife	TriEnergy, Inc.	12.50%	788/686
		•	TriEnergy Holdings, L.L.C.		791/171
			Chesapeake Appalachia, L.L.C.		798/653
			SWN Production Company, LLC		885/524
6)	06-T14-11	Justus Luzader, Jr.	Chesapeake Appalachia, L.L.C.	12.50%	787/665
			SWN Production Company, LLC		885/470
7)	06-T14-11.9	Justus Luzader, Jr.	Chesapeake Appalachia, L.L.C.	12.50%	787/665
<u>مر</u>	*** ** * * * *		SWN Production Company, LLC		885/470
8)	06-T14-11.2	Kirk D. Luzader and Judy L. Luzader, husband and wife	Chesapeake Appalachia, L.L.C.	12.50%	787/670
	12 - 12 - 11 - 1		SWN Production Company, LLC		885/470
9)	06-T14-11.8	Justus Luzader, Jr.	Chesapeake Appalachia, L.L.C.	12.50%	787/665
			SWN Production Company, LLC		885/470

6

0

RECEIVED
Office of Oil and Gas

EXHIBIT "A"

Attached to and made a part of the State of West Virginia Oll and Gas Permit Form, W-6A1, by SWN Production Company, LLC, Operator Charles Frye UD OHI 7H Ohio County, West Virginia

10)	06-T14-10.4	John E. Bopp, Jr., and Christy M. Bopp, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	829/136 884/229
11)	06-T14-10.5	Lois K. Hinerman, a widow	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	824/307 885/140
12)	06-T14-10	Christy M. Bopp, a single woman	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	12.50%	793/494 885/512

RECEIVED
Office of Oil and Gas

WV Department of Environmental Protection APR 8 2019





SWN Production Company, LLC 179 Innovation Drive Jane Lew, WV 26378 Tel: 304 884 1610 Fax: 304 471 2497 www.swn.com

December 4, 2018

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

RE: SWN's proposed New Well: Charles Frye UD OHI 7H in Ohio County, West Virginia, Drilling under Union Hill 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 Union Hill 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,

Travis Hill, CPL Senior Landman

SWN Production Company, LLC

PO Box 12359

Spring, TX 77391-2359

Office of Oil and Gas
FEB 19 2019

WV Department of Environmental Protection

R2 wV+°

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



RECEIVED

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

		HOTTEL CERTIFICATION			
Date of Notic	ce Certification: 2/14/19	Al	PI No. 47- 06	i9 -	
Date of Noti	te Certification.				les Frye UD OHI 7H
			ell Pad Nam		
Notice has I	been given:				
	ne provisions in West Virginia Code	\$ 22-6A, the Operator has provide	ed the require	d parties w	with the Notice Forms listed
	tract of land as follows:	a and the observed two brotter		- France	
State:	WV	EE EE	asting: 536	,090.493	
County:	069-Ohio	UTM NAD 83	orthing: 4,43	33,728.100	
District:	Triadelphia	Public Road Access	: Mc	Cutcheon Roa	d
Quadrangle:	Valley Grove	Generally used farm	name: Cha	rles Frye OHI	
Watershed:	Marlow Run of Middle Wheeling Creek of Whee	ling Creek			
equirements Virginia Code of this article	surface owner notice of entry to su of subsection (b), section sixteen of § 22-6A-11(b), the applicant shall thave been completed by the applicant west Virginia Code § 22-6A, the Operation of the section of the surface of the section of the secti	f this article were waived in wr ender proof of and certify to the s at.	riting by the secretary that	surface ow the notice	vner; and Pursuant to West
	rator has properly served the require CCK ALL THAT APPLY	d parties with the following:			OOG OFFICE USE ONLY
☐ 1. NOT	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRED SEISMIC ACTIVITY WAS CO			RECEIVED/ NOT REQUIRED
■ 2. NO	TICE OF ENTRY FOR PLAT SURV	YEY or ☐ NO PLAT SURVEY	WAS CONE	UCTED	RECEIVED
■ 3. NO	FICE OF INTENT TO DRILL or	NOTICE NOT REQUIRED NOTICE OF ENTRY FOR PLAN WAS CONDUCTED or			RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER BY (PLEASE ATTACH)	SURFACE (OWNER	
■ 4. NO	TICE OF PLANNED OPERATION			13	RECEIVED
5 PUE	RLIC NOTICE				RECEIVED

Required Attachments:

■ 6. NOTICE OF APPLICATION

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

Certification of Notice is hereby given:

THEREFORE, I Brittany Woody , have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator: SWN Production Co., LLC

By: Brittany Woody

Its: Regulatory Analyst

Telephone: 304-884-1610

Address: P.O. Box 1300

Jane Lew, WV 26378

Facsimile: 304-884-1690

Email: Brittany_Woody@swn.com

NOTARY PUBLIC OFFICIAL SEAL
JESSICA L. VANGILDER
State of West Virginia
My Comm. Expires Jul 20, 2020
SWN Production Company, LLC

179 Innovation Dr. Jane Lew, WV 26378

Subscribed and sworn before me this

Notary Public

My Commission Expires

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

WV Department of Environmental Protection

API NO. 47- 069 - 04/26/2019 9

OPERATOR WELL NO. Charles Frye OHI Pad

Well Pad Name: Charles Frye OHI 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 ming date of permit application.
Date of Notice: AMM Date Permit Application Filed: ?	x finite
	PPROVAL FOR THE
WELL WORK CONSTRUCTION O	F AN IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Code § 22-6A-	-10(b)
	THOD OF DELIVERY THAT REQUIRES A CEIPT OR SIGNATURE CONFIRMATION
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 level and gas leasehold being developed by the proposed well work described in the erosion 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, corrimpoundment or pit as described in section nine of this article; (5 have a water well, spring or water supply source located within o 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 appliance of the sheriff required to be maintained pursuant to section provision of this article to the contrary, notice to a lien holder is re-	of the signature confirmation, copies of the application, the erosion and define well plat to each of the following persons: (1) The owners of record of ocated; (2) The owners of record of the surface tract or tracts overlying the confirmation in the surface tract is to be used for roads or other land disturbance as suant to subsection (c), section seven of this article; (3) The coal owner, all proposed to be drilled is located [sic] is known to be underlain by one or tracts overlying the oil and gas leasehold being developed by the proposed astruction, enlargement, alteration, repair, removal or abandonment of any and Any surface owner or water purveyor who is known to the applicant to not thousand five hundred feet of the center of the well pad which is used to and (6) The operator of any natural gas storage field within which the aree tenants in common or other co-owners of interests described in cant may serve the documents required upon the person described in the on eight, article one, chapter eleven-a of this code. (2) Notwithstanding any not notice to a landowner, unless the lien holder is the landowner. W. Va. of provided the Well Site Safety Plan ("WSSP") to the surface owner and any may as provided in section 15 of this rule.
☐ Application Notice ☐ WSSP Notice ☐ E&S Plan Noti	ce Well Plat Notice is hereby provided to:
☑ SURFACE OWNER(s)	COAL OWNER OR LESSEE
Name: Amy M. & Corrie L. Frye	Name: Alliance Resources GP, LLC
Address: 782 McCutcheon Road	Address: 2596 Battle Run Road
Triadelphia, WV 26059	Triadelhpia, WV 26059
Name:	☐ COAL OPERATOR
Address:	Name:
	Address:
☐ SURFACE OWNER(s) (Road and/or Other Disturbance)	
Name:	☑ SURFACE OWNER OF WATER WELL
Address:	AND/OR WATER PURVEYOR(s)
	Name: See Attachment #13
Name:	Address:
Address:	30 Sept 1497
(0.000, 0.750)	☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD
SURFACE OWNER(s) (Impoundments or Pits)	Name:
Name:	Address:
Address:	
	*Please attach additional forms if necessary Office of Oil and Gas
	EED 10

FEB 1 9 2019

Em Department of

API NO. 47- 069 OPERATOR WELL NO. Charles F

Well Pad Name: Charles Frye OHI Pad

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

API NO. 47-069

OPERATOR WELL NO. Charles Frye UD OHI 7F

Well Pad Name: Charles Frye OHI 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 as to the RECEIVED
Office of Oil and Gas location or construction of the applicant's proposed well work to the Secretary at:

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

FEB 1 9 2019

WV 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.

API NO. 47-069

OPERATOR WELL NO. Charles Fr.

Well Pad Name: Charles Frye OHI 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

- (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.

RECEIVED Office of Oil and Gas

WV Department of Environmental Protection

API NO. 47-069

OPERATOR WELL NO.

Well Pad Name: Charles Frye OHI Pad

Notice is hereby given by:

Well Operator: SWN Production Co., LLC

Telephone: 304-884-1610 Email: Brittany_Woody@swn.com

Address: P.O. Box 1300 Jane Lew, WV 26378 Facsimile: 304-884-1690

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.

NOTARY PUBLIC OFFICIAL SEAL JESSICA L. VANGILDER State of West Virginia Comm. Expires Jul 20, 2020 SWN Production Company, LLC 179 Innovation Dr. Jane Lew, WV 26378

Subscribed and sworn before me this Notary Public

My Commission Expires

RECEIVED Office of Oil and Gas

FEB 1 9 2019

WV Department of Environmental Protection

4706900299

ATTACHMENT 13

PARCEL_ID	OWNER	ADDRESS	CITY_STATE_ZIP	WATERSOURCE
06 T14000100000000	FRYE CHARLES & DOROTHY	849 MCCUTCHEON RD	TRIADELPHIA WV 26059	2,
0600T8005300000000	CRAIG, KENNETH W & L	844 MCCUTCHEON RD	TRIADELPHIA WV 26060	2

Office of Gas

FLB 19 2019

WV Department of Environmental Protection

WW-6A3 (1/12)

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF ENTRY FOR PLAT SURVEY

Notice Time entry Date of Notice			ed at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to
Delivery met	nou pursuant	to West Virginia C	e § 22-6A-10a
☐ PERSON	NAL	REGISTERED	☐ METHOD OF DELIVERY THAT REQUIRES A
SERVIC	E	MAIL	RECEIPT OR SIGNATURE CONFIRMATION
on to the surfa but no more the beneath such to owner of mind and Sediment Secretary, when able the sur	ace tract to cond nan forty-five d tract that has fil erals underlying Control Manua ich statement sl face owner to o	duct any plat survey ays prior to such en led a declaration put g such tract in the co al and the statutes ar hall include contact obtain copies from the	or to filing a permit application, the operator shall provide notice of planned entry equired pursuant to this article. Such notice shall be provided at least seven days to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams ant to section thirty-six, article six, chapter twenty-two of this code; and (3) any ty tax records. The notice shall include a statement that copies of the state Erosion rules related to oil and gas exploration and production may be obtained from the formation, including the address for a web page on the Secretary's web site, to secretary.
	eby provided to	0:	
	CE OWNER(s)	/	COAL OWNER OR LESSEE
Name: Dorothy		\	Name: Alliance Resources GP, LLC Attn: Evan Midler
Address: 849 N Triadelphia, WV 26		V	Address: 2596 Battle Run Road
Name:	039		Triadelphia, WV 26059
Address:			MINERAL OWNER(s)
riddiess.			Control of the Contro
Name:			Name: Derothy Frye Address: 849 McCutcheon Road Triadelphia, WV 26059
Address:			Triadelphia, WV 26059
			*please attach additional forms if necessary FEB 1 9 2019
Notice is her Pursuant to W a plat survey of State:	reby given: Test Virginia Co on the tract of la West Virginia	ode § 22-6A-10(a), i and as follows:	WV Department of Environmental Pent of ce is hereby given that the undersigned well operator is planning entry to conclude: Approx. Latitude & Longitude: 40.053160, -80.577143
County:	Ohio		Public Road Access: McCutcheon Road
District:	Triadelphia		Watershed: Middle Wheeling Creek
Quadrangle:	Valley Grove		Generally used farm name: Charles Frye
may be obtain Charleston, W obtained from Notice is her	ed from the Sec V 25304 (304- the Secretary b reby given by	cretary, at the WV I -926-0450). Copies by visiting <u>www.der</u> :	fanual and the statutes and rules related to oil and gas exploration and production artment of Environmental Protection headquarters, located at 601 57 th Street, SE, such documents or additional information related to horizontal drilling may be v.gov/oil-and-gas/pages/default.aspx.
Well Operator	SWN PRODUCT	TON COMPANY, LLC	Address: PO BOX 1300
Control of the Contro			TANKS LEW WAY DOORD
Telephone: Email:	304-884-1610		JANE LEW, WV 26378

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.

WW-6A3 (1/12)

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF ENTRY FOR PLAT SURVEY

entry Date of Notice	e: 2/12/2018	Date of Plan	ed Entry: 2/19/2018
Delivery meth	od pursuant to	West Virginia C	e § 22-6A-10a
PERSON SERVICE		EGISTERED IAIL	☐ METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION
on to the surfa- but no more the beneath such to owner of mine and Sediment of Secretary, while enable the surfa-	ce tract to conduct an forty-five day ract that has filed rals underlying successful Manual ach statement shalace owner to obtain	et any plat surveys s prior to such ent a declaration pur uch tract in the co and the statutes an	or to filing a permit application, the operator shall provide notice of planned entry equired pursuant to this article. Such notice shall be provided at least seven days to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams ant to section thirty-six, article six, chapter twenty-two of this code; and (3) any ty tax records. The notice shall include a statement that copies of the state Erosion rules related to oil and gas exploration and production may be obtained from the formation, including the address for a web page on the Secretary's web site, to secretary.
	by provided to:		
■ SURFAC			☐ COAL OWNER OR LESSEE
Name: Amy M. F			Name:
Address: 782 M			Address:
Triadelphia, WV 260			
Name:			
Address:			☐ MINERAL OWNER(s)
Name:			Name:Address:
Address			Address:
			*please attach additional forms if necessary
Notice is her	ehy given		
		8 22-6A-10(a) n	ice is hereby given that the undersigned well operator is planning entry to conduct
a plat survey o	n the tract of land	l as follows:	to note by given that the analysighed well operator is planning entry to conduct
	West Virginia		Approx. Latitude & Longitude: 40.053160, -80.577143
County:	Ohio		Dublic Dead Assessment
District:	Triadelphia		
Quadrangle:	Valley Grove		Generally used farm name: Charles Frye
may be obtaine Charleston, W	ed from the Secre V 25304 (304-92	tary, at the WV D 26-0450). Copies	fanual and the statutes and rules related to oil and gas exploration and production partment of Environmental Protection headquarters, located at 601 57 th Street, SE, such documents or additional information related to horizontal drilling may be v.gov/oil-and-gas/pages/default.aspx.
	eby given by:		AND THE RESERVE AND THE RESERV
Well Operator:	-	COMPANY, LLC	Address: PO BOX 1300
	304-884-1610		100 E 1 E 10 100 1 2027 9
Telephone: Email:	304-004-1010		JANE LEW, WV 26378 .com Facsimile: 304-884-1690

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.

Operator Well No. che 4/26/2019

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.

Date of Noti	Requiremen ce: 12/19/2018		Date Permit	Application Filed.	1111	
Delivery me	thod pursuan	t to West Virgini	a Code § 22-6/	A-16(b)		
☐ HAND		CERTIFIED M	ÍAIL			
DELIVI			CEIPT REQUES	STED		
receipt reque drilling a hor of this subsec subsection m	sted or hand d izontal well: ction as of the ay be waived	elivery, give the s Provided, That no date the notice was in writing by the s	surface owner no otice given purs as provided to the surface owner.	ior to filing a permit application of the first intent to enter upon to uant to subsection (a), section the surface owner: <i>Provided, ho</i> The notice, if required, shall income of the operator and the operator	the surface owner's land for en of this article satisfies th wever, That the notice requi- lude the name, address, tele	r the purpose of ne requirements irements of this ephone number,
		ed to the SURF	ACE OWNE			
Name: Amy M.			1	Name:		
Address: 782 Triadelphia, WV	McCutcheon Road		V	Address:		
Pursuant to V the surface or	reby given: Vest Virginia			reby given that the undersigned tal well on the tract of land as f		nt to enter upon
Pursuant to V the surface of State: County:	ereby given: Vest Virginia wner's land fo West Virginia Ohio			utal well on the tract of land as f UTM NAD 83 Easting: Northing:	536,090.493 4,433,728.100	nt to enter upon
Pursuant to V the surface of State: County: District:	ereby given: Vest Virginia wner's land fo West Virginia Ohio Triadelphia	r the purpose of d		utal well on the tract of land as for UTM NAD 83 Public Road Access: Easting: Northing:	ollows: 536,090.493 4,433,728.100 McCutcheon Rd.	nt to enter upon
Pursuant to V the surface of State: County: District: Quadrangle:	ereby given: Vest Virginia wner's land fo West Virginia Ohio Triadelphia Valley Grove, V	r the purpose of d	rilling a horizon	utal well on the tract of land as f UTM NAD 83 Easting: Northing:	536,090.493 4,433,728.100	nt to enter upon
Pursuant to V the surface of State: County: District: Quadrangle: Watershed: This Notice Pursuant to V facsimile nur related to hor	ereby given: Vest Virginia wner's land fo West Virginia Ohio Triadelphia Valley Grove, V Marlow Run of let Shall Inclu West Virginia mber and electrizontal drillin	www. Middle Wheeling Creek de: Code § 22-6A- etronic mail addre	(HUC-10) (HC-10) (HC-10) (HC-10)	utal well on the tract of land as for UTM NAD 83 Public Road Access: Easting: Northing:	ollows: 536,090.493 4,433,728.100 McCutcheon Rd. Charles Frye OHI ress, telephone number, are ded representative. Addition of Environmental Protection	nd if available, nal information n headquarters,
Pursuant to Verthe surface of State: County: District: Quadrangle: Watershed: This Notice Pursuant to Vertice facsimile nurrelated to hoo located at 600000000000000000000000000000000000	vest Virginia wner's land fo West Virginia Ohio Triadelphia Valley Grove, V Marlow Run of I Shall Inclu West Virginia mber and electrizontal drilling 1 57th Street, Sereby given le	www. Middle Wheeling Creek de: Code § 22-6A- stronic mail addresses may be obtained E, Charleston, W	(HUC-10) (HC-10) (HC-10) (HC-10)	tal well on the tract of land as for UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: ee shall include the name, add tor and the operator's authorize retary, at the WV Department of 226-0450) or by visiting www.d	ollows: 536,090.493 4,433,728.100 McCutcheon Rd. Charles Frye OHI aress, telephone number, are ded representative. Addition of Environmental Protection ep.wv.gov/oil-and-gas/page	nd if available, nal information n headquarters,
Pursuant to Vene surface of State: County: District: Quadrangle: Watershed: This Notice Pursuant to Vene facsimile number and to book to be contacted at 60. Notice is he well Operator	vest Virginia wner's land fo West Virginia Ohio Triadelphia Valley Grove, V Marlow Run of le Shall Inclu West Virginia mber and elec rizontal drillir 1 57 th Street, S reby given le	www. Middle Wheeling Creek de: Code § 22-6A- etronic mail addre g may be obtaine EE, Charleston, W Dy: etion Company, LLC	(HUC-10) (HC-10) (HC-10) (HC-10)	tal well on the tract of land as for UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: te shall include the name, add tor and the operator's authorize retary, at the WV Department of 226-0450) or by visiting www.d	ollows: 536,090.493 4,433,728.100 McCutcheon Rd. Charles Frye OHI aress, telephone number, are ded representative. Addition of Environmental Protection ep.wv.gov/oil-and-gas/page	nd if available, nal information n headquarters, es/default.aspx.
Pursuant to Vene surface of State: County: District: Quadrangle: Watershed: This Notice Pursuant to Vene facsimile number and to book to be contacted at 60. Notice is he well Operator	reby given: Vest Virginia wner's land fo West Virginia Ohio Triadelphia Valley Grove, V Marlow Run of I Shall Inclu West Virginia mber and electrizontal drillir I 57 th Street, S reby given I SWN Product 1300 Fort Pi	www. Middle Wheeling Creek de: Code § 22-6A- etronic mail addre g may be obtaine E, Charleston, W Dy: etion Company, LLC erpont Drive, Suite 201	(HUC-10) (HC-10) (HC-10) (HC-10)	tal well on the tract of land as for UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: ee shall include the name, add tor and the operator's authorize retary, at the WV Department of 226-0450) or by visiting www.d	ollows: 536,090.493 4,433,728.100 McCutcheon Rd. Charles Frye OHI aress, telephone number, are red representative. Addition of Environmental Protection of Environmental	nd if available, nal information n headquarters, es/default.aspx.
Pursuant to Value surface of State: County: District: Quadrangle: Watershed: This Notice Pursuant to Value facsimile nurelated to hoo located at 60 located at 60 located States and State	reby given: Vest Virginia Wher's land for West Virginia Ohio Triadelphia Valley Grove, V Marlow Run of I Shall Inclu West Virginia wher and electrizontal drilling I 57th Street, Sereby given I SWN Production of the Street of the Swn Production of the Morgantown,	www. Middle Wheeling Creek de: Code § 22-6A- stronic mail address g may be obtained E, Charleston, W Dy: ction Company, LLC erpont Drive, Suite 201 WW 26508	(HUC-10) (HC-10) (HC-10) (HC-10)	tal well on the tract of land as for UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: the shall include the name, add tor and the operator's authorize retary, at the WV Department of 226-0450) or by visiting www.department of 226-0450. Authorized Representative Address:	ollows: 536,090.493 4,433,728.100 McCutcheon Rd. Charles Frye OHI aress, telephone number, are red representative. Addition of Environmental Protection ep.wv.gov/oil-and-gas/page Justin Booth 1300 Fort Pierpont Drive, Suite Morgantown, WV 26508	nd if available, nal information n headquarters, es/default.aspx.
Pursuant to V the surface of State: County: District: Quadrangle: Watershed: This Notice Pursuant to V facsimile nur related to hoo located at 6000 Notice is he Well Operate Address: Telephone:	vest Virginia wner's land fo West Virginia Ohio Triadelphia Valley Grove, V Marlow Run of I Shall Inclu West Virginia mber and electrizontal drillin 1 57 th Street, S reby given I SWN Product 1300 Fort Pi Morgantown, 304-884-161	www. Middle Wheeling Creek de: Code § 22-6A- ctronic mail addre g may be obtaine E, Charleston, W Dy: ction Company, LLC erpont Drive, Suite 201 WW 26508	(HUC-10) (HC-10) (HC-10) (HC-10)	tal well on the tract of land as for UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: te shall include the name, add tor and the operator's authorized retary, at the WV Department of 226-0450) or by visiting www.d Authorized Representative Address: Telephone:	ollows: 536,090.493 4,433,728.100 McCutcheon Rd. Charles Frye OHI aress, telephone number, are ded representative. Addition of Environmental Protection ep.wv.gov/oil-and-gas/page Justin Booth 1300 Fort Pierpont Drive, Suite Morgantown, WV 26508 304-884-1610	nd if available, nal information n headquarters, es/default.aspx.
Pursuant to Verthe surface of State: County: District: Quadrangle: Watershed: This Notice Pursuant to Vertice facsimile nurrelated to hoo located at 60. Notice is he Well Operator Address:	reby given: Vest Virginia Wher's land for West Virginia Ohio Triadelphia Valley Grove, V Marlow Run of I Shall Inclu West Virginia wher and electrizontal drilling I 57th Street, Sereby given I SWN Production of the Street of the Swn Production of the Morgantown,	www. Widdle Wheeling Creek de: Code § 22-6A- ctronic mail addre g may be obtaine E, Charleston, W Dy: ction Company, LLC erpont Drive, Suite 201 WW 26508 0 @swn.com	(HUC-10) (HC-10) (HC-10) (HC-10)	tal well on the tract of land as for UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: the shall include the name, add tor and the operator's authorize retary, at the WV Department of 226-0450) or by visiting www.department of 226-0450. Authorized Representative Address:	ollows: 536,090.493 4,433,728.100 McCutcheon Rd. Charles Frye OHI aress, telephone number, are ded representative. Addition of Environmental Protection ep.wv.gov/oil-and-gas/page Justin Booth 1300 Fort Pierpont Drive, Suite Morgantown, WV 26508 304-884-1610 Justin_Booth@swn.com	nd if available, nal information n headquarters, es/default.aspx.

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.

04/26/2019

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 Date of Noti				TEN (10) days prior to filing a	permit application.	
Delivery me	thod pursuant to	West Virginia	Code § 22-6A	-16(b)		
☐ HAND		CERTIFIED MA	AIL			
DELIVI	ERY R	RETURN RECE	EIPT REQUES	TED		
receipt reque drilling a hor of this subsec subsection m and if availab	sted or hand deliver izontal well: Pro- ction as of the date ay be waived in w	ery, give the survided, That notice the notice was writing by the surber and electron	rface owner no ice given pursu provided to the rface owner. In ic mail addres	or to filing a permit application, tice of its intent to enter upon the part to subsection (a), section to e surface owner: <i>Provided</i> , how the notice, if required, shall include the operator and the operator (s):	he surface owner's len of this article sati wever, That the notice lude the name, addre	and for the purpose of sfies the requirements se requirements of this ss, telephone number,
	Frye & David W. Frye	4.4.4	/	Name:		
Address: 849	McCutcheon Rd.		V	Address:		
Triadelphia, WV	26059					
State: County: District:	vner's land for the purpose of dril West Virginia Ohio Triadelphia		UTM NAD 83 Easting: 8	536,090.493 4,433,728.100 McCutcheon Rd.		
Quadrangle:	Valley Grove, WV		-	Generally used farm name:	Charles Frye OHI	
Watershed:	Marlow Run of Middle	Wheeling Creek (H	IUC-10)			
Pursuant to V facsimile nur related to hor	nber and electron izontal drilling m	ic mail address ay be obtained	of the operat	e shall include the name, addr or and the operator's authorize etary, at the WV Department of 26-0450) or by visiting <u>www.de</u>	ed representative. A	dditional information otection headquarters,
	reby given by:					
	r: SWN Production C	Company, LLC		Authorized Representative:	Justin Booth	
Address:	1300 Fort Pierpont	t Drive, Suite 201		Address:	1300 Fort Pierpont Dri	ve, Suite 201
	Morgantown, WV 2	:6508			Morgantown, WV 2650	8
Telephone:	304-884-1610			Telephone:	304-884-1610	Office of Oil and Gas
Email:	Justin_Booth@swr	n.com		Email:	Justin_Booth@swn.co	m FFD - Wild Gas
Facsimile:	304-471-2497			Facsimile:	304-471-2497	LEB 1 9 2019
Oil and Gas	Privacy Notice	4			En	WV Department of

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.

WW-6A5 (1/12)

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

Delivery me	hod pursuant to West Virginia	Code § 22-6A-16(c)		
CERTI	FIED MAIL	☐ HAND		
	RN RECEIPT REQUESTED	DELIVERY		
return receipt the planned of required to be drilling of a damages to the (d) The notice of notice.	requested or hand delivery, give operation. The notice required by provided by subsection (b), section region (c), section (c), and (c) are surface affected by oil and gas the required by this section shall be	ater than the date for filing the permithe surface owner whose land will be by this subsection shall include: (1) A conten of this article to a surface owner sed surface use and compensation agreeperations to the extent the damages are given to the surface owner at the additional contents.	used for the drilling a copy of this code or whose land will be reement containing re compensable und	g of a horizontal well notice of e section; (2) The information be used in conjunction with the an offer of compensation for the article six-b of this chapter.
	eby provided to the SURFACE of slisted in the records of the sherif			
		Bernet and the Control of the Contro		
	Frye & David W. Frye	Name:		
Name: Dorothy	Frye & David W. Frye // Cutcheon Rd.	Name: Address:		
Name: Dorothy Address: 849 1 Triadelphia, WV 2 Notice is her Pursuant to W	MCutcheon Rd. 6059 eby given: Vest Virginia Code § 22-6A-16(c),	Address:		
Name: Dorothy Address: 849 Triadelphia, WV 2 Notice is her Pursuant to W operation on State:	MCutcheon Rd. 6059 eby given: Vest Virginia Code § 22-6A-16(c),	notice is hereby given that the unders urpose of drilling a horizontal well on East	the tract of land as	follows:
Name: Dorothy Address: 849 Triadelphia, WV 2 Notice is her Pursuant to W operation on State: County;	eby given: /est Virginia Code § 22-6A-16(c), the surface owner's land for the p	notice is hereby given that the unders urpose of drilling a horizontal well on East	the tract of land as ing: 536,090.493	follows:
Name: Dorothy Address: 849 1 Triadelphia, WV 2 Notice is her Pursuant to W	Moutcheon Rd. 6059 eby given: Fest Virginia Code § 22-6A-16(c), the surface owner's land for the p West Virginia Ohio	Address: notice is hereby given that the unders urpose of drilling a horizontal well on East North	the tract of land as ing: 536,090.493 thing: 4,433,728.100 McCutcheon R	follows:
Name: Dorothy Address: 8491 Triadelphia, WV 2 Notice is her Pursuant to W operation on State: County: District:	Moutcheon Rd. 6059 eby given: Fest Virginia Code § 22-6A-16(c), the surface owner's land for the p West Virginia Ohio Triadelphia	notice is hereby given that the unders urpose of drilling a horizontal well on UTM NAD 83 Public Road Access: Generally used farm n	the tract of land as ing: 536,090.493 thing: 4,433,728.100 McCutcheon R	follows:
Name: Dorothy Address: 849 i Triadelphia, WV 2 Notice is her Pursuant to W operation on State: County; District: Quadrangle: Watershed: This Notice S Pursuant to W to be provide horizontal we surface affect information r	Reby given: Vest Virginia Code § 22-6A-16(c), the surface owner's land for the public Virginia Ohio Triadelphia Valley Grove, WV Marlow Run of Middle Wheeling Creek (HUC-16) Ghall Include: Vest Virginia Code § 22-6A-16(c), the surface was a compared to the public Virginia Code § 22-6A-10(t), the public Virginia Code § 22-6A-10(t), and (3) A proposed surface was a compared to horizontal drilling may located at 601 57th Street, SE,	notice is hereby given that the unders urpose of drilling a horizontal well on UTM NAD 83 Public Road Access: Generally used farm n	the tract of land as ing: 536,090.493 thing: 4,433,728.100 McCutcheon R Charles Frye O of this code section ill be used in conjuning an offer of corple under article six ne WV Department	(2) The information required unction with the drilling of a mpensation for damages to the c-b of this chapter. Additional to of Environmental Protection
Name: Dorothy Address: 849 i Triadelphia, WV 2 Notice is her Pursuant to W operation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to W to be provide horizontal we surface affect information r headquarters,	ACutcheon Rd. Acutch	notice is hereby given that the undersurpose of drilling a horizontal well on UTM NAD 83 Public Road Access: Generally used farm notice shall include: (1)A copy of a surface owner whose land with and compensation agreement contains the extent the damages are compensation be obtained from the Secretary, at the Charleston, WV 25304 (304-926)	the tract of land as ing: 536,090.493 thing: 4,433,728.100 McCutcheon R Charles Frye O of this code section ill be used in conjuning an offer of corple under article six ne WV Department	g; (2) The information required unction with the drilling of a mpensation for damages to the c-b of this chapter. Additional tof Environmental Protection ing www.dep.wv.gov/oil-and-
Name: Dorothy Address: 849 1 Triadelphia, WV 2 Notice is her Pursuant to W operation on State: County; District: Quadrangle: Watershed: This Notice S Pursuant to W to be provide horizontal we surface affect information r headquarters, gas/pages/def	ACutcheon Rd. Acutch	Address:	the tract of land as ing: 536,090.493 thing: 4,433,728.100 McCutcheon R Charles Frye C of this code section ill be used in conjuning an offer of corple under article six ne WV Department -0450) or by visiting the traction of the code	(2) The information required unction with the drilling of a mpensation for damages to the c-b of this chapter. Additional to of Environmental Protection

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.

WW-6A5 (1/12) Operator Well No. 04/26/2019

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

	e: 12/19/2018 Date Per	mit Application Filed:		аррисацов. ——
Delivery met	hod pursuant to West Virginia C	ode § 22-6A-16(c)		
■ CERTI	FIED MAIL	☐ HAND		
700	RN RECEIPT REQUESTED	DELIVERY		
return receipt the planned of required to be drilling of a damages to th (d) The notice of notice.	requested or hand delivery, give the operation. The notice required by a provided by subsection (b), section horizontal well; and (3) A propose the surface affected by oil and gas of	ne surface owner whose lan this subsection shall inclu in ten of this article to a surface ed surface use and compen perations to the extent the d given to the surface owner	d will be used for de: (1) A copy ace owner whos sation agreement amages are com	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information see land will be used in conjunction with the at containing an offer of compensation for pensable under article six-b of this chapter. Sted in the records of the sheriff at the time
(at the addres	s listed in the records of the sheriff	at the time of notice):		
Name: Amy M.		Name:		
Address: 7821		Addres	s:	
	the surface owner's land for the pu West Virginia Ohio		l well on the tra	well operator has developed a planned act of land as follows: 536,090.493 4,433,728.100
District:	Triadelphia	Public Road		McCutcheon Rd.
Quadrangle:	Valley Grove, WV	Generally us	ed farm name:	Charles Frye OHI
The second secon			ou runtin municipal	Online Try of the
Watershed:	Marlow Run of Middle Wheeling Creek (HUC-1	0)	ou ruin numo.	onalize Type on
This Notice S Pursuant to V to be provide horizontal we surface affect information r	Shall Include: Jest Virginia Code § 22-6A-16(c), and by W. Va. Code § 22-6A-10(b) and (3) A proposed surface use led by oil and gas operations to the elated to horizontal drilling may be located at 601 57th Street, SE,	this notice shall include: (1 to a surface owner whose and compensation agreement e extent the damages are composed to the secretary of the se)A copy of this e land will be unt containing arompensable und tary, at the WV	code section; (2) The information required used in conjunction with the drilling of a noffer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection or by visiting <a href="https://www.dep.wv.gov/oil-and-driver-additional-driver-additio</td></tr><tr><td>This Notice S
Pursuant to V
to be provide
horizontal we
surface affect
information r
headquarters,
gas/pages/def</td><td>Shall Include: Vest Virginia Code § 22-6A-16(c), and by W. Va. Code § 22-6A-10(b) and (3) A proposed surface use ed by oil and gas operations to the elated to horizontal drilling may be located at 601 57th Street, SE, ault.aspx.</td><td>this notice shall include: (1 to a surface owner whose and compensation agreeme extent the damages are core obtained from the Secre Charleston, WV 25304</td><td>A copy of this land will be under the containing arompensable under the WV (304-926-0450)</td><td>code section; (2) The information required used in conjunction with the drilling of a noffer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection or by visiting <a href=" https:="" oil-and-drilling-addition-left-size-state-addition-addition-left-size-state-addition-left-size-state-addition-addition-left-size-state-addition-a<="" td="" www.dep.wv.gov="">
This Notice S Pursuant to V to be provide horizontal we surface affect information r headquarters, gas/pages/def Well Operato	Shall Include: Vest Virginia Code § 22-6A-16(c), and by W. Va. Code § 22-6A-10(b) and (3) A proposed surface use ed by oil and gas operations to the elated to horizontal drilling may be located at 601 57th Street, SE, ault.aspx.	this notice shall include: (1 to a surface owner whose and compensation agreement e extent the damages are composed to the secretary of the se)A copy of this e land will be unt containing arompensable und tary, at the WV (304-926-0450)	code section; (2) The information required used in conjunction with the drilling of a noffer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-prive , Suite 201
This Notice 5 Pursuant to V to be provide horizontal we surface affect information r headquarters, gas/pages/def	Shall Include: Jest Virginia Code § 22-6A-16(c), and by W. Va. Code § 22-6A-10(b) Il; and (3) A proposed surface use led by oil and gas operations to the leated to horizontal drilling may be located at 601 57th Street, SE, ault.aspx. T: SWN Production Company, LLC	this notice shall include: (1 to a surface owner whose and compensation agreeme extent the damages are core obtained from the Secre Charleston, WV 25304	A copy of this land will be under the containing arompensable under the WV (304-926-0450)	code section; (2) The information required used in conjunction with the drilling of a noffer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-prive , Suite 201

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.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

December 4, 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 Charles Frye Pad OHI 7H Well Site, Ohio County

Dear Mr. Martin.

The West Virginia Division of Highways has issued permit 06-2011-0061 to Southwestern Energy for access to the State Road for the well site located off of Ohio County Route 41/1 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

Regional Maintenance Engineer Environmental Protection

Cc:

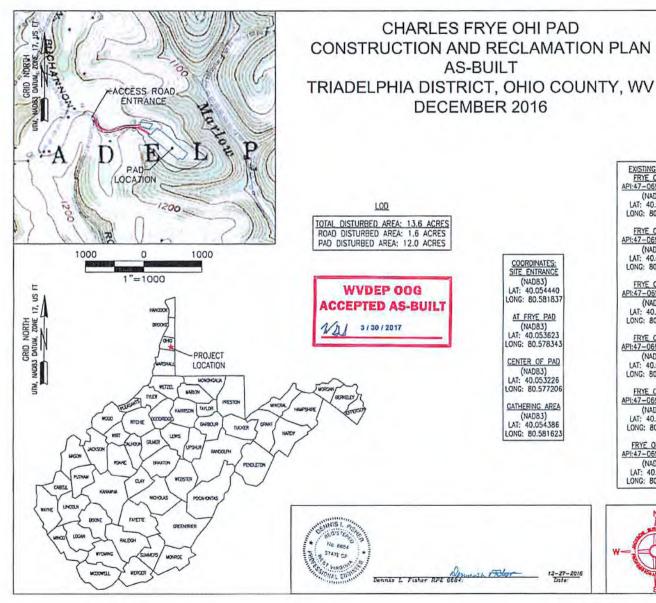
Brittany Woody

Southwestern Energy

CH, OM, D-6

File

			Rev 6/21/2018
Product Name	Product Use	Characteristic FFD 7 c	CAC Normala an
		Hydrogen Perexide V Department of Acetic Acid	7722-84-1
EC6734A (Champion Technologies)	Biocide	Acetic Acid Acetic Acid	64-19-7
		Peroxyacetic Acid	79-21-0
		Methanol	04/9/6/9/019
GYPTRON T-390 (Champion Technologies)	Scale Inhibitor	Nonylphenol Ethoxylate	Proprietary
		Glutaraldehyde	111-30-8
Bactron K-139 (Champion Technologies)	Biocide	Quaternary Ammonium Compounds, Benzyl-C12- 16-Alkyldimethyl, Chlorides	68424-85-1
		Ethanol	64-17-5
Bactron K-219 (Champion Technologies)	Biocide	Methanol	67-56-1
Bactron K-213 (Champion recimologies)	blocide	Quaternary Ammonium Compounds, Benzyl-C12- 16-Alkyldimethyl, Chlorides	68424-85-1
ECGARGA (III.)	Scale Inhibitor	Amine Triphosphate	Proprietary
EC6486A (Nalco Champion)	Scale innibitor	Ethylene Glycol	107-21-1
MERA 2000 (4.5 mg/s - 1	Anionic Friction Reducer	Hydrotreated light distillate (petroleum)	64742-47-8
WFRA-2000 (U.S. Well Services)	Anionic Friction Reducer	Propenoic acid, polymer with propenamide	9003-06 9
		Ethylene glycol	107-21 1
		Cinnamaldehyde	104-55 2
A1 202 w. c	Mistura	Butyl cellosolve	111-76 2
AI-303 (U.S. Well Services)	Mixture	Formic acid	64-18 6
		Polyether	Proprietary
		Acetophenone, thiourea, formaldehyde polymer	68527-49 1
AP ONE (U.S. Well Services)	Breaker	Ammonium persulfate	7727-54-0
OPTI-FLEX (U.S. Well Services)	Viscosifying Agent	Distillates, petroleum, hydrotreated light	64742-47-8
		Methanol	67-56-1
		Oxyalkylated fatty acid	68951-67-7
		Fatty acids	61790-12-3
Econo-Cl200 (SWN Well Services)	Corrosion Inhibitor	Modified thiourea polymer	68527-49-1
ECONO-CIZOO (SWIN Well Services)	COTTOSION INHIBITOR	Water	7732-18-5
		Hydrochloric acid	7647-01-0
		Potassium acetate	127-08-2
		Formaldehyde	50-00-0
		Acetic Acid	64-19-7
Ecopol-FEAC (SWN Well Services)	Iron Control	Citric Acid	77-92-9
		Water	7732-18-5
HCL (SWN Well Services)	Hydrocholic Acid	Hydrochloric Acid	7647-01-0
	·	Water	7732-18-5
FLOJET DRP 1130X (SWN Well Services)	Friction Reducer	Proprietary	Proprietary
		Distillates (petroleum) hydrotreated light	64674-47-8
		Ethylene Glycol	107-21-1
FLOJET DR900 LPP (SWN Well Services)	Friction Reducer	Alcohols, C12-16, Exoxylated propoxylated	68213-24-1
		Fatty Alcohols ethoxylated	Proprietary
		Water	7732-18-5
FR-76 (Halliburton)	Friction Reducer	Hydrotreated light petroleum distillate Inorganic Salt	64742-47-8
HAI-150E (Halliburton)	Correcion Inhibita	No hazardous substance	Proprietary
HAILTONE (Hailiburton)	Corrosion Inhibitor		N/A
FDP-S1176-15 (Halliburton)	Friction Reducer	Polyacylate Hydrotreated light petroleum distillate	Proprietary 64742-47-8
LP-65 MC (Halliburton)	Scale Inhibitor	Organic phosphonate Ammonium Chloride	Proprietary 12125-02-9
CarboNRT	Tracer	Ceramic Proppant	66402-68-4



AS3.2 ASBUILT ASJ.4 ASBUILT ASSA-1 CONSTRUCTION AND RECLAMATION ACCESS ROAD PROFILE MRD5.1 RECLAMATION PLAN OVERVIEW MRD5.2 RECLAMATION PLAN MRD5.3 RECLAMATION PLAN MR05.4 RECLAMATION PLAN MRD6.3 DETAILS EXISTING WELLS: FRYE OHI 1H API:47-069-00161H (NAD83) LAT: 40.053102 LONG: 80.577108 REVISION FRYE OHI 3H API:47-069-00079H (NAD83) LAT: 40.053125 LONG: 80.577146 FRYE OHI 5H API:47-059-00090H (NAD83) LAT: 40.053077 LONG: 80.577070 FRYE OHI 6H API:47-069-00162H (NAD83) LAT: 40.053144 LONG: 80.577062 FRYE OH! 8H API:47-069-00163H (NAD83) LAT: 40.053169 LONG: 80.577101

SHEET INDEX 151. HITLE SHEET

ASJ. 1 ASBUILT OVERVIEW

EP2.1 EVACUATION ROUTE/ PREVAILING WIND EP2.2 EVACUATION ROUTE/ PREVAILING WIND



DATE





FRYE OHI 10H API:47-069-00091H (NAD83)

LAT: 40.053121

LONG: 80.577025

Jackson Surveying Inc.

TITLE SHEET TS.1

SOUTHWESTERN PRODUCTION COMPANY LLC. CHARLES FRYE OHI PAD TRIADELPHIA DISTRICT, OHIO COUNTY, WV DECEMBER 27, 2016

