

west virginia department of environmental protection

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

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

Friday, September 14, 2018 WELL WORK PERMIT Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC POST OFFICE BOX 12359

SPRING, TX 773914954

Re: Permit approval for SANDRA PARR BRK 8H 47-009-00259-00-00

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

Cii

Operator's Well Number: SANDRA PARR BRK 8H
Farm Name: ANTHONY BRUCE PARR, ET.

U.S. WELL NUMBER: 47-009-00259-00-00

Horizontal 6A New Drill Date Issued: 9/14/2018

PERMIT CONDITIONS

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

CONDITIONS

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

\P I	Number:	

4700900259

PERMIT CONDITIONS

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. 47-009	(4)	
	OPERATOR W	ELL NO.	Sandra Parr BRK 8H
	Well Pad Nan	ne: Sandra	Parr BRK Pad

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

1) Well Operat	tor: SWN F	Production C	o., LLC	494512924	009- Brooke	3-Buffalo	247-Bethany
				Operator ID	County	District	Quadrangle
2) Operator's \	Well Number	r: Sandra Pa	arr BRK	8H Well Pa	ad Name: Sandra	Parr BR	K Pad
3) Farm Name	/Surface Ow	ner: Anthony I	Bruce Parr	ETAL Public Ro	ad Access: Atchi	son Road	d
4) Elevation, c	urrent groun	d: 1276'	E	levation, proposed	d post-construction	n: 1276'	
5) Well Type	(a) Gas Other	х	_ Oil	Uno	derground Storage	-	
	(b)If Gas	Shallow	х	Deep			
		Horizontal	x		4-0	Qs.	
6) Existing Pac	d: Yes or No	Yes			_ (,)8	US.	7-14
	C .				and Expected Pre		
Target Formation	- Marcellus, Down-	Dip Well to the Sout	h Target Top	TVD- 6460', Target Base 1	VD- 6505', Anticipated Thi	ckness- 45', As	ssociated Pressure- 4228
8) Proposed To	otal Vertical	Depth: 648	7'				
9) Formation a	t Total Verti	cal Depth:	Marcellu	s			
10) Proposed 7	Γotal Measur	ed Depth:	13387'				
11) Proposed I	Horizontal L	eg Length:	6578.13				
12) Approxima	ate Fresh Wa	iter Strata De	pths:	336'			
13) Method to	Determine F	resh Water D	epths:	Nearby Spring			
14) Approxima	ate Saltwater	Depths: 75	9' TVD -	Salinity Profile			
15) Approxima	ate Coal Sear	m Depths: 6	13'				
16) Approxima	ate Depth to	Possible Voic	d (coal m	ine, karst, other):	None that we a	e aware	of.
17) Does Prop directly overly				Yes	No		RECEIVED to of Oil and Gas
(a) If Yes, pr	ovide Mine l	Info: Name:				\\\\\	V Department of
() E-		Depth				Enviro	onmental Protection
		Seam:					
		Owner	r:				

4700900259

WW-6B (04/15)

OPERATOR WELL NO. Sandra Parr BRK 8H
Well Pad Name: Sandra Parr BRK 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#	436'	436'	423 sx/CTS
Coal							
Intermediate	9 5/8"	New	J-55	36#	2026'	2026'	781 sx/CTS
Production	5 1/2"	New	HCP-110	20#	13387'	13387'	Lend 636ax/Tell 1690sx/100* Inside Inform
Tubing							
Liners							

C-BRO 5.7.4

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

PACKERS

Kind:	RECEIVED Office of Oil and Gas
Sizes:	JUN 0 8 2018
Depths Set:	WV Department of Environmental Protection

WW-6B (10/14) API NO. 47-009 7 0 0 9 0 0 2 5 9

OPERATOR WELL NO. Sandra Parr BRK 8H
Well Pad Name: Sandra Parr BRK Pad

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

Drill and stimulate any potential zones between and including the Benson to Marcellus. **If we should encounter a void place basket above and below void area- balance cement to bottom of void and grout from basket to surface or run external casing packer/cementing stage tool above void interval and perform 2 stage cementing operation dependent upon depth of void. Run casing not less than 20' below void nor more than 75' 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): 20.37
- 22) Area to be disturbed for well pad only, less access road (acres): 4.78
- 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:

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Office of Oil and Gas

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.

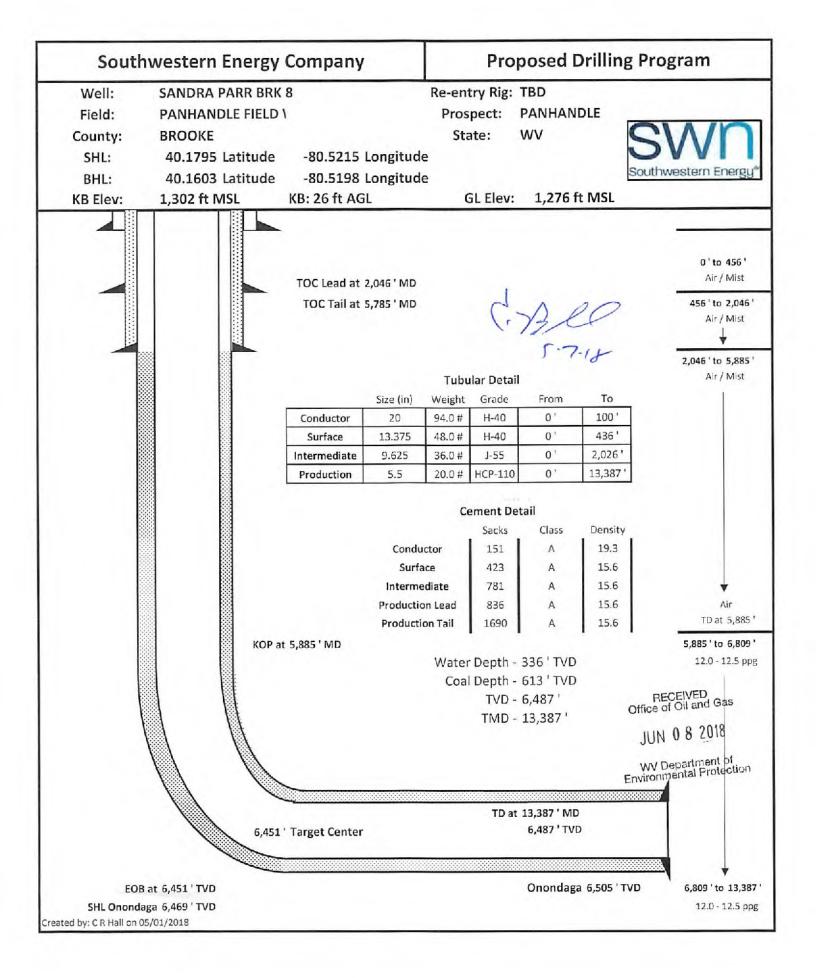
Schlumberger Cement Additives

	Product Name	Product Use	Chemical Name	CAS Number
Surface	S001	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
Kick Off Plug	D801	retarder	aromatic polymer derivative	propriatary
Kick	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	14808-60-7
ti.	D201	retarder	metal oxide	propriatary
ğ			sulphonated synthetic polymer	propriatary
Pro	D202	dispersant	formaldehyde (impurity)	propriatary
	700		polypropylene glycol	25322-69-4
	D046	antifoam	fullers earth (attapulgite)	8031-18-3
	D167	fluid loss	aliphatic amide polymer	propriatary
=			sodium polynaphthalene sulfonate	9008-63-3
Ė	D065	dispersant	sodium sulfate	7757-82-6
Production-Tail			chrystalline silica	14808-60-7
npa	D201	retarder	metal oxide	propriatary
Pre	D153	anti-settling	chrystalline silica	14808-60-7

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JUN 0 8 2018

WV Department of Environmental Protection





4700900259

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

June 4, 2018

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

RE: Proposed New Well Sandra Parr BRK 8H

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 Parr's property, in Buffalo District, Brooke County, West Virginia.

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

Thank you.

Sincerely,

Brittany Woody

Regulatory Analyst

Office of Oil and Gas

JUN 0 8 2018

Environmental Protection

R2 wV+°

WW-9 (2/15)

API Number 47 - 009

Operator's Well No. Sandra Parr BRK 8H

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) Buffalo Creek	Quadrangle Bethany
Do you anticipate using more than 5,000 bbls of water to complete the	ne 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	
	1ber 34-155-22403, 34-059-24037, 34-119-25778, 34-167-23662, 34-155-21789, 34-121-25993, 34-155-21893) , API# will be included with the WR-34/DDMR &/or permit addendum.)
Off Site Disposal (Supply form WW-9 fo	or disposal location)
Other (Explain flow back fluids will be put in	n steel tanks and reused or taken to a permitted disposal facility
Will closed loop system be used? If so, describe: Yes	
Drilling medium anticipated for this well (vertical and horizontal)?	Air, freshwater, oil based, etc. Air dell to KOE, Fuild dell with SEGEM from KOP to TE
-If oil based, what type? Synthetic, petroleum, etc. Synthetic	: Oil Base
Additives to be used in drilling medium? Attachment 3A	
Drill cuttings disposal method? Leave in pit, landfill, removed offsit	e, etc. landfill
-If left in pit and plan to solidify what medium will be used?	? (cement, lime, sawdust)
-Landfill or offsite name/permit number? Meadowfill SWF- 1032, Argen Langfill 10072, Apex Sanitary Langfill 06-084	Short Creek SWF-1034, Carbon Limestone MSWL018781, Wetzel County 1021 438, Brooke Co SVVF-T0T3, Valley T00280
Permittee shall provide written notice to the Office of Oil and Gas of West Virginia solid waste facility. The notice shall be provided within where it was properly disposed.	any load of drill cuttings or associated waste rejected at any
on August 1, 2005, by the Office of Oil and Gas of the West Virginia provisions of the permit are enforceable by law. Violations of any law or regulation can lead to enforcement action.	term or condition of the general permit and/or other applicable mined and am familiar with the information submitted on this my inquiry of those individuals immediately responsible for accurate, and complete. I am aware that there are significant
Company Official Signature	Office of Oil and Gas
Company Official (Typed Name) Dee Southall	JUN DR 22
Company Official Title Senior Regulatory Analyst	Environmental Protection
Subsegibed and sworn before me this 27th day of 000	IMUN , 20
Mittamu R Inhadu	Notary Public CFFICIAL
11/2/20	TO THE PARTY OF TH
My commission expires \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	J.O. COLUMN

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Operator's Well No. Sandra Parr BRK 8H

Proposed Revegetation Treatment: Acres Disturbed 20.37	Prevegetation pH
Lime is determined by pH test min. 2 Tons/acre or to correct to pH	4.78
Fertilizer type 10-20-20	
Fertilizer amount 600	s/acre
Mulch_ Hay/Straw 2.5 Tons/	acre
See	d Mixtures
Temporary	Permanent
Seed Type lbs/acre Attachment 3B	Seed Type lbs/acre
Drawing(s) of road, location, pit and proposed area for land approvided) Photocopied section of involved 7.5' topographic sheet.	plication (unless engineered plans including this info have
Drawing(s) of road, location, pit and proposed area for land approvided) Photocopied section of involved 7.5' topographic sheet. Plan Approved by:	
Attach: Drawing(s) of road, location, pit and proposed area for land ap provided) Photocopied section of involved 7.5' topographic sheet. Plan Approved by: Comments:	
Drawing(s) of road, location, pit and proposed area for land ap provided) Photocopicd section of involved 7.5' topographic sheet. Plan Approved by:	



WVD Seeding Specification



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

(please allow 7 to 10 days for delivery)

NON-ORGANIC PROPERTIES

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

SOIL AMENDMENTS

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

Seeding Calculation Information:

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

Synopsis:

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

Special Considerations:

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

ORGANIC PROPERTIES

Seed Mixture: SWN Production Orga	nic Mix	SWN Supplied
Organic Timothy	50%	4
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

WETLANDS (delineated as jurisdictional wetlands)

Organic Fertilizer @ 200lbs per Acre

Seed Mixture: Wetland Mix	SWN Supplied	
VA Wild Ryegrass	20%	
Annual Ryegrass	20%	
Fowl Bluegrass	20%	
Cosmos 'Sensation'	10%	
Redtop	5%	
Golden Tickseed	5%	
Maryland Senna	5%	
Showy Tickseed	5%	
Fox Sedge	2.5%	
Soft Rush	2.5%	
Woolgrass	2.5%	
Swamp Verbena	2.5%	
Apply @ 25lbs per acre	Apply @ 50lbs per acre	

April 16th- Oct. 14th

Apply @ 50lbs per acre Oct. 15th- April 15th

Pelletized Lime @ 2 Tons per Acre

NO FERTILIZER OR LIME INSIDE WETLAND LIMITS

4700000259

Attachment 3A

Drilling Mediums

Surface/Coal(if present)/Freshwater Intervals:

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

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: Sandra Parr BRK 8H
Bethany QUAD
Buffalo DISTRICT
Brooke COUNTY, WEST VIRGINIA

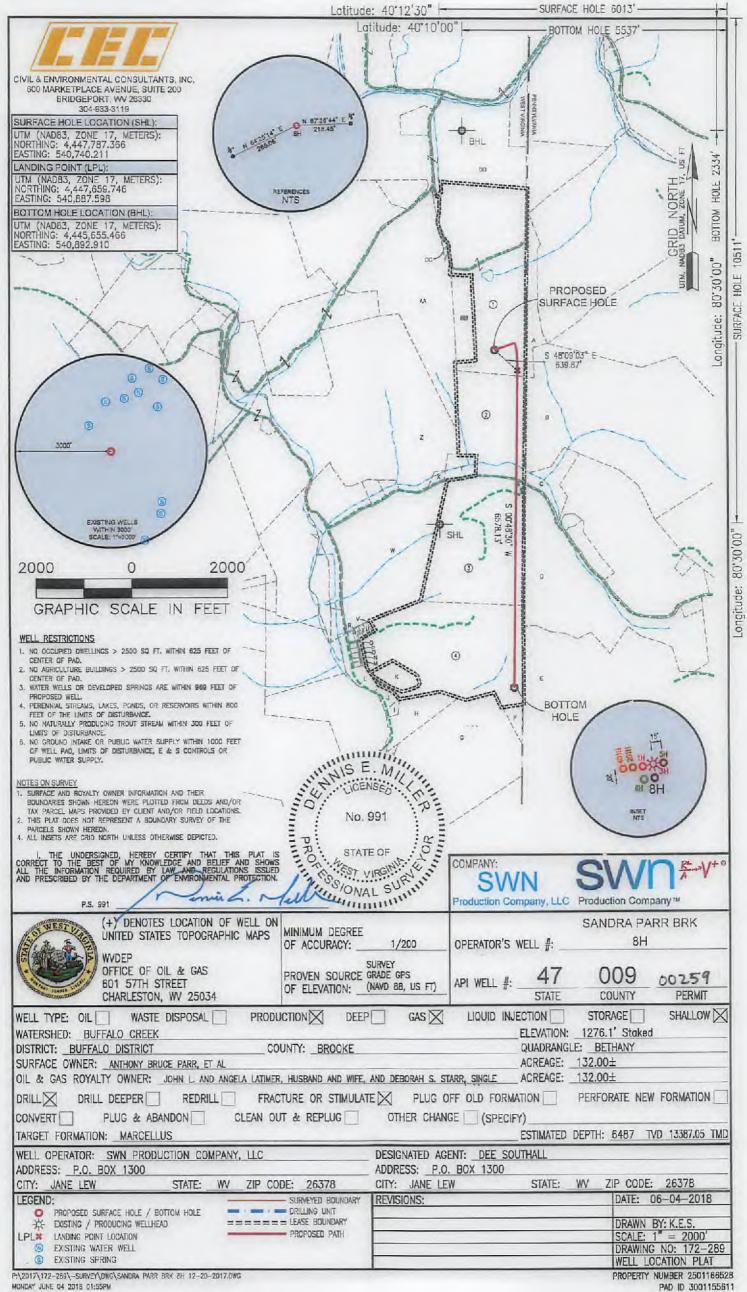
Submitted by:		
Dee Southall	Date:	12/27/2017
Senior Regulatory		
Title: Analyst	SWNP	roduction Co., LLC
Title: Dil to (2-1)	_ Date:	1-10-18
Approved by:		
	_ Date:	
Title:		

SWN PRODUCTION COMPANY, LLC - CONFIDENTIAL

Office of Oil and Gas

JUN 0 8 2018

Environmental Protection

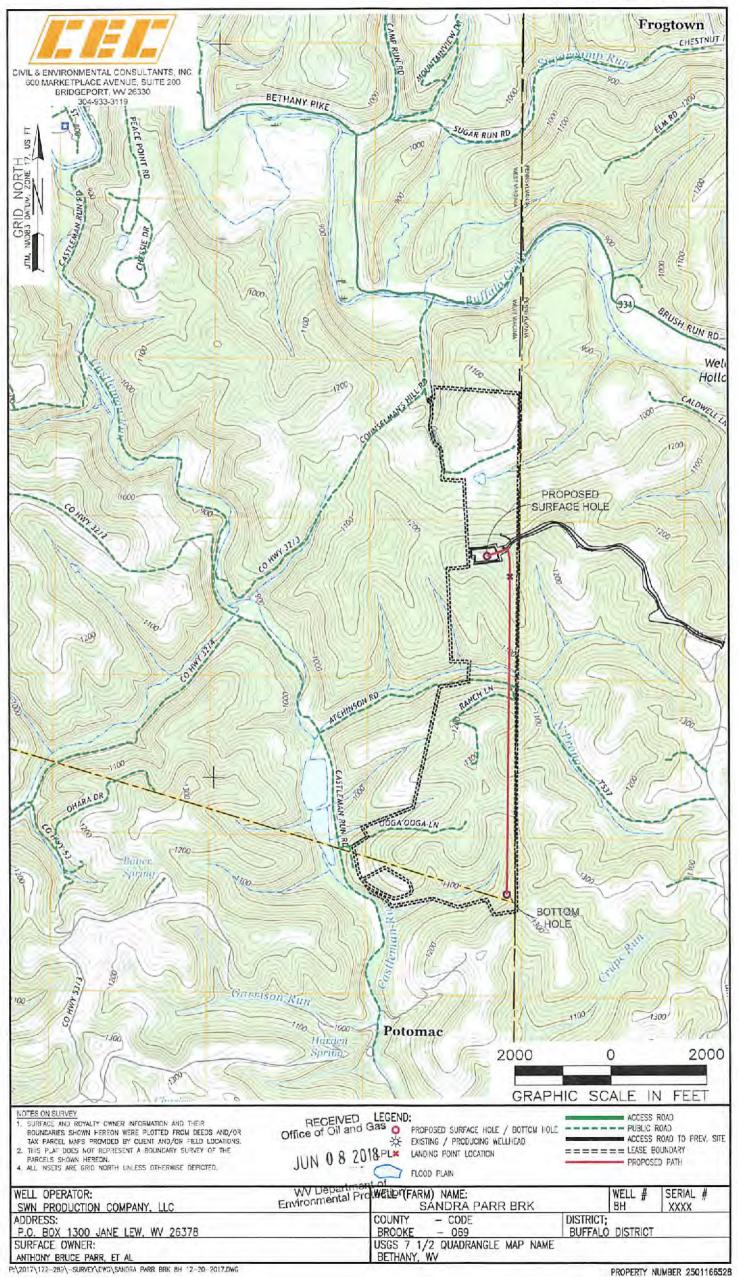




	WELL BORE TABLE FOR SURFACE OWNE	
TRACT	SURFACE OWNER	TAX PARCEL
1	JOHN L. AND ANGELA LATIMER, HUSBAND AND WIFE, AND DEBORAH S. STARR, SINGLE	03-B49-0005
2	THE RANCH SPORTSMANS CLUB, INC., BY NICK MUSTACHIO, PRESIDENT	03-B49-0010
3	THE RANCH SPORTSMANS CLUB, INC., BY NICK MUSTACHIO, PRESIDENT DAN BRAGG, A MARRIED MAN DEALING IN HER SOLE AND SEPARATE PROPERTY DAWN L. BARNES, A MARRIED WOMAN DEALING IN HER SOLE AND SEPARATE PROPERTY, AND HUSBAND, JAY BARNES STEPHANIE A . SITAR, FKA STEPHANIE A. WHITTLE, A MARRIED WOMAN DEALING IN HER SOLE AND SEPARATE PROPERTY, AND HUSBAND, STAN SITAR MASTER MINERAL HOLDINGS II, LP	03-B49-0011
4	EDWARD JOHN COVEY AND ROSEMARY ANN COVEY, HUSBAND AND WIFE, JTWROS	03-B54-0008

	ADJOINING OWNERS TABLE	
RACT	SURFACE OWNER	TAX PARCEL
A	ANTHONY BRUCE PARR, SANDRA L. PARR, RAYMOND LEE, NANCY J. PARR, MICHAEL MAHAN AND PAULA MAHAN	024-00-00-0007
В	ROBERT E. & JUDITH F. WRIGHT	023-00-00-0003-0
C	STEVE S. VOYTEK	230-023-00-00-0012-0
D	MARK S. & CAROL B. GRACY	023-00-00-0010-6
E	RITA V. JONES QTIP	016-00-00-0001-0
F	TIMOTHY ALAN RYAN	03-L60-0004
G	TIMOTHY ALAN RYAN	03-L60-0004
Н	DOROTHY D. TUSTIN	03-L3-0003
1	DANIEL P. SR & VICKIE S. TUSTIN	03-L3-0003.1
J	DANIEL P. SR & VICKIE S. TUSTIN	03-L3-0002.3
K	JOHN S. & N. FREEMAN	03-L3-0002.2
L	CHRISTOPHER J. & LELA G. COVEY	03-L3-0004
М	RICHARD P. FORSHEY	03-B54-0013
N	RICHARD P. FORSHEY	03-B54-0012
0	EDWARD JOHN & ROSEMARY ANN COVEY	03-B54-0011
P	EDWARD JOHN & ROSEMARY ANN COVEY	03-B54-0010
Q	EDWARD JOHN & ROSEMARY ANN COVEY	03-B54-0009
R	EVERETT L. CARMICHAEL	03-854-0003
S	SHERRY ROUSE	03-B54-0004
T	SHERRY ROUSE	03-B54-0005
U	GEO & MARTHA DAGUE	03-B54-0006
V	GEO & MARTHA DAGUE	03-B54-0007
W	ROBERT E. JONES	03-B49-0012
X	PERRY J. & KAREN J. JONES	03-B49-0009
Y	CHARLES N. MUSTAHIO	03-B49-0011
Z	W VA DEPT OF NATURAL RESOURCES	03-B49-0007
AA	JAMES WARREN & PATRICIA MCKEEN	03-B49-0003
BB	ANTHONY PARR, SANDRA PARR, RAYMOND PARR, NANCY PARR, LEONARD BOYCE AND KAREN BOYCE	03-B49-0004
CC	LELAND MACKEY	03-B44-0014.
DD	BETHANY COLLEGE	03-B44-0014

REVISIONS:	COMPANY:	SWN oduction Company, LLC	SVA Production Co	ompany ^{Tu}
	OPERATOR'S WELL #:	SANDRA PARR 8H	BRK	DATE: 06-04-2018 DRAWN BY: K.E.S.
	DISTRICT: BUFFALO DISTRICT	COUNTY: BROOKE	STATE: WV	SCALE: N/A DRAWING NO: 172-289 WELL LOCATION PLAT 2



WW-6A1 (5/13) Operator's Well No. Sandra Parr BRK 8H

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 Attached 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

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, of of a 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, L.L.C.
By:	
Its:	Staff Landman

EXHIBIT "A"

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC., Operator Sandra Parr BRK 8H

Brooke County, West Virginia

#	TMP	LESSOR	PSSEE 25	ROYALTY	BK/PG
1)	03-849-0005-0000	John L. and Angela Latimer, husband and wife, and Deborah S. Starr, single	Phillips Braduction Community		
		Start, single	Phillips Production Company	18.00%	9/85
1	1		Great Lakes Energy Partners, LLC		9/395
			Range Resources - Appalachia, L.L.C.	1	20/733
			Chesapeake Appalachia, L.L.C.		10/552
L-			SWN Production Company, L.L.C.		30/480
2)	03-849-0010-0000	The Ranch Sportsman's Club, Inc., by Nick Mustachio, President	Great Lakes Energy Partners, LLC	12.50%	9/839
			Range Resources - Appalachia, LLC		20/733
			Chesapeake Appalachia, L.L.C.		10/552
-	02 240 0044 0000		SWN Production Company, LLC		30/480
3)	03-B49-0011-0000	The Ranch Sportsman's Club, Inc., by Nick Mustachio, President	Great Lakes Energy Partners, LLC	12.50%	9/839
			Range Resources - Appalachia, LLC	}	20/733
			Chesapeake Appalachia, L.L.C.		10/552
			SWN Production Company, LLC		30/480
		Dan Bragg, a married man dealing in his sole and separate property	SWN Production Company, LLC	16.00%	35/257
		Dawn L. Barnes, a married woman dealing in her sole and separate proeprty, and husband, Jay Barnes	SWN Production Company, LLC	16.00%	35/262
		Stephanie A. Sitar, fka Stephanie A. Whittle, a married woman dealing in her sole and separate proeprty, and husband, Stan Sitar	SWN Production Company, LLC	16.00%	35/267
		Master Mineral Holdings II, LP	SWN Production Company, LLC	18.00%	35/150
4)	03-B54-0008-0000	Edward John Covey and Rosemary Ann Covey, husband and wife, JTWROS	SWN Production Company, LLC	18.00%	34/567
<u> </u>			<u>'</u>		



4700900259

SWN Production Company, LLC

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

May 4, 2018

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

RE: SWN's proposed New Well: Sandra Parr BRK 8H in Brooke County, West Virginia, Drilling under Atchinson Road & Ranch Lane.

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 Atchinson Road & Ranch Lane. 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,

Michael H. Wilder, RPL

Staff Landman

SWN Production Company, LLC

Office of Oil and Gas

JUN 0 8 2018

Environmental Protection

R2 nV+°

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

1 1 100

of this article have been completed by the applicant.

			API No. 4	7- 009 -
	-110/1-		Operator's	s Well No. Sandra Parr BRK 8H
			Well Pad I	Name: Sandra Parr BRK Pad
Notice has h	een given:			
Pursuant to th	e provisions in West Virginia Code § 22-6A, t	he Operator has pro	ovided the rec	quired parties with the Notice Forms listed
below for the	tract of land as follows:	manage and a second		
State:	West Virginia	UTM NAD 83	Easting:	540740.211
County:	009- Brooke	UTMINAD 83	Northing:	4,447,787.366
District:	Buffalo	Public Road Ac	cess:	Atchison Road
Quadrangle:	Bethany	Generally used	farm name:	Sandra Parr
Watershed:	Buffalo Creek			
prescribed by it has provide information re of giving the requirements	West Virginia Code § 22-6A-7(b), every per the secretary, shall be verified and shall conta- ed the owners of the surface described in sul- equired by subsections (b) and (c), section sixt surface owner notice of entry to survey purs of subsection (b), section sixteen of this arti- es § 22-6A-11(b), the applicant shall tender pro-	in the following in bdivisions (1), (2) een of this article; (suant to subsection cle were waived in	formation: (1 and (4), sub- ii) that the re (a), section writing by	4) A certification from the operator that (i) section (b), section ten of this article, the equirement was deemed satisfied as a result ten of this article six-a; or (iii) the notice the surface owner; and Pursuant to West

Pursuant to West Virginia Code § 22-6A, the Op that the Operator has properly served the require *PLEASE CHECK ALL THAT APPLY	perator has attached proof to this Notice Certification and parties with the following:	OOG OFFICE USE ONLY
☐ 1. NOTICE OF SEISMIC ACTIVITY or	NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	☐ RECEIVED/ NOT REQUIRED
2. NOTICE OF ENTRY FOR PLAT SURV	VEY or ☐ NO PLAT SURVEY WAS CONDUCTED	RECEIVED
3. NOTICE OF INTENT TO DRILL or	☐ NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or	RECEIVED/ NOT REQUIRED Office of Oil and
	☐ WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	JUN 0 8 201
4. NOTICE OF PLANNED OPERATION		RECEIVED TAI Protect
5. PUBLIC NOTICE		RECEIVED
■ 6. NOTICE OF APPLICATION		RECEIVED

Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West 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.

By:

Certification of Notice is hereby given:

Well Operator: SWN Production Co., LLC

Dee Southall

NOTARY SEAL SEAL

SHITTANY R WOODY

Its: Senior Regulatory Analyst

Telephone: 304-884-1610

Address: P.O. Box 1300

Jane Lew, WV 26378

Facsimile: 304-884-1690

Email: Dee_Southall@swn.com

Subscribed and sworn before me this H day of \ day of \ lumber

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 depprivacyofficer@wv.gov.

Office of Oil and Gas

JUN 0 8 2018

WV Department of Environmental Protection

WW-6A (9-13) API NO. 47-009 O 9 0 0 2 5 OPERATOR WELL NO. Sandra Parr BRK 8H Well Pad Name: Sandra Parr BRK Pad

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: Date Permit Application Filed: PERMIT FOR ANY ☐ CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT WELL WORK Delivery method pursuant to West Virginia Code § 22-6A-10(b) ✓ REGISTERED ☐ METHOD OF DELIVERY THAT REQUIRES A ☐ PERSONAL SERVICE RECEIPT OR SIGNATURE CONFIRMATION Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule. ☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Notice ☑ Well Plat Notice is hereby provided to: COAL OWNER OR LESSEE FI SURFACE OWNER(s) Name: Anthony Bruce Parr, ET AL Name: Windsor Coal Company Address: 120 Jamison Ln. Address: 1000 Consol Energy Drive Wellsburg, WV 26070 Canonsburg, PA 15317 COAL OPERATOR Name: Address: Name: Address: ☐ SURFACE OWNER(s) (Road and/or Other Disturbance) Environmental Protection Name: ☑ SURFACE OWNER OF WATER WELL Address: AND/OR WATER PURVEYOR(s) Name: See Attachment 13A Name: Address: Address: ☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: Name: Address: Address: *Please attach additional forms if necessary

WW-6A (8-13)

API NO. 47-009

OPERATOR WELL NO. Sandra Part BRK 8H Well Pad Name: Sandra Parr BRK 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 RECEIVED Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/G9-of Oil and Gas and-gas/pages/default.aspx. JUN 0 8 2018

Well Location Restrictions

Well Location Restrictions

Wy Department of W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from many or the property of water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry busbandry. 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

WV Department of Environmental Protection

WW-6A (8-13) API NO. 47-009 - OPERATOR WELL NO. Sandra Parr BRK 8H

Well Pad Name: Sandra Parr BRK 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 to the location or construction of the applicant's proposed well work to the Secretary at:

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

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

WW-6A (8-13) API NO. 47-009 9 0 0 2 5 9
OPERATOR WELL NO. Sandra Parr BRK 8H
Well Pad Name: Sandra Parr BRK Pad

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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



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WW-6A (8-13)

API NO. 47-009 -

OPERATOR WELL NO. Sandra Parr BRK 8H
Well Pad Name: Sandra Parr BRK Pad

Notice is hereby given by:

Well Operator: SWN Production Co., LLC

Telephone: 304-884-1610
Email: Dee_Southall@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 deprivacyofficer@wv.gov.

OFFICIAL SEAL

Notary Futbro. State of West Virginia

BRITTANY R WOODY

SCO2 Old Elkins Road

Bucknamen. WV 26201

My commission expires November 27, 2022

Subscribed and sworn before me this Aday of Dillmore 300

Notary Public

My Commission Expires

Office of Oil and Gas

JUN 0 8 2018

Environmental Protection

ATER SOURCE	#	
ZIP	260709733	
STATE	WV	
CITY	WELLSBURG	
ADDRESS	120 JAMISON LN	
OWNER /	MAHAN MICHAEL A & PAULA M; PARR ANTHONY, SANDRA ETAL	

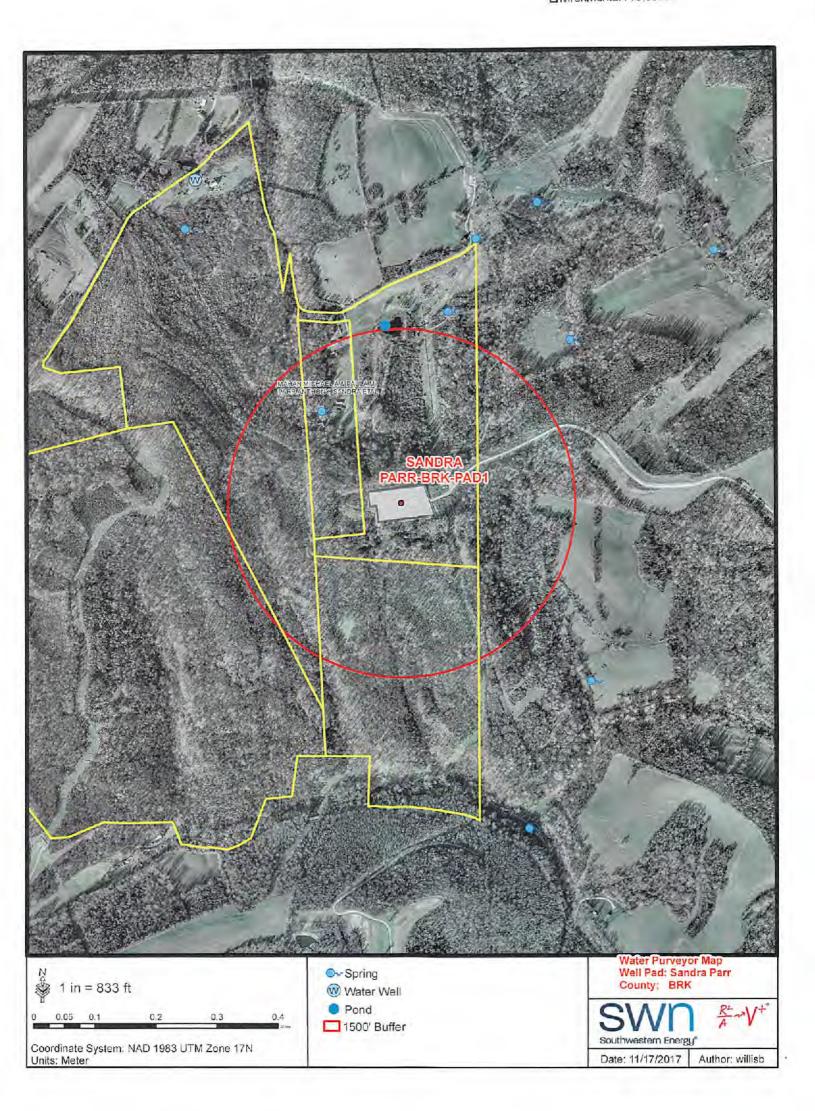
Office of Oil and Gas

JUN 0 8 2018

Environmental Protection

JUN 0 8 2018

WV Department of Environmental Protection



Operator Well No. Sandra Parr BRK

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

entry		un ement.		ided a	least SEVEN (7) d	ays but no more tha	n FORTY-FIVE (45) days prior to	
entry Date	of Notice: 11	1/2/2017	Date of Pla	nned F	ntry: 11/9/2017			
Deliv	ery method	pursuant (to West Virginia C	ode 8 :	2-6A-10a			
	PERSONAL	=	REGISTERED		METHOD OF DE			
5	SERVICE		MAIL		RECEIPT OR SIG	NATURE CONFIR	RMATION	
on to but no benea owner and S Secret enable	the surface to more than f ath such tract r of minerals dediment Con- tary, which s	ract to cond forty-five do that has fill underlying trol Manua tatement sh owner to o	duct any plat surveys ays prior to such ent ed a declaration pur g such tract in the co all and the statutes an hall include contact in obtain copies from the	s required try to: (suant to unty ta d rules information	ed pursuant to this a 1) The surface owner o section thirty-six, a ox records. The notice related to oil and ga ation, including the	article. Such notice are of such tract; (2) article six, chapter to shall include a start exploration and p	r shall provide notice of planned entry shall be provided at least seven days to any owner or lessee of coal seams twenty-two of this code; and (3) any atement that copies of the state Erosic production may be obtained from the age on the Secretary's web site, to	
	SURFACE O):		■ COA	I ONNIED OD I E	COOPE	
	: Sandra & Antho					L OWNER OR LE	SOSEE	
	2810 McKin			-		indsor Coal Company 1000 Consol Energy Drive		
	, WV 26035			-0	Canonsburg,			
Name	t:			-	ochor soung.	17,10011		
Addre	ess:			-	■ MIN	ERAL OWNER(s)		
						indra & Anthony Parr		
Name				-		2810 McKims Ridge Road		
Addre	ess:			-	Colliers, WV	26035		
				-	*please atta	ch additional forms if ne	ecessary	
Pursu: a plat	survey on the	Virginia Co e tract of la	ode § 22-6A-10(a), n and as follows:	otice i			l operator is planning entry to conduc	t
Pursua a plat State:	ant to West V survey on the West	Virginia Co e tract of la Virginia	ide § 22-6A-10(a), n and as follows:	otice i	Approx. Lati	tude & Longitude:	40.179524, -80.521620	t
Pursua a plat State: Count	ant to West \ survey on the West ty: Brook	Virginia Co e tract of la Virginia	ide § 22-6A-10(a), n and as follows:	otice i	Approx. Lati Public Road	tude & Longitude:	40.179524, -80.521620 Dry Ridge Road	t
Pursua a plat State: Count Distric	ant to West \ survey on the West ty: Brook	Virginia Co e tract of la Virginia ke sburg	ide § 22-6A-10(a), n and as follows:	otice i	Approx. Lati Public Road Watershed:	tude & Longitude:	40.179524, -80.521620	t
Pursua a plat State: Count Distric Quadr	ant to West \ survey on the West ty: Brook ct: Wells rangle: Bethe	Virginia Co e tract of la t Virginia ke sburg	and as follows:		Approx. Lati Public Road Watershed: Generally us	tude & Longitude: Access: ed farm name:	Dry Ridge Road Buffalo Creek Sandra Parr il and gas exploration and production uarters, located at 601 57th Street, SE, related to horizontal drilling may be Office of Oil ar	
Pursua a plat State: Count Distric Quadr Copie may b Charle obtain	ant to West \ survey on the West ty: Brook ct: Wells rangle: Bethe	Virginia Co e tract of la tvirginia ke sburg any Erosion ar com the Sec 5304 (304- Secretary b	and as follows: and Sediment Control cretary, at the WV D 926-0450). Copies by visiting www.dep		Approx. Lati Public Road Watershed: Generally us	tude & Longitude: Access: ed farm name:	Dry Ridge Road Buffalo Creek Sandra Parr il and gas exploration and production uarters, located at 601 57th Street, SE, related to horizontal drilling may be Office of Oil ar	
Pursua a plat State: Count District Quadr Copie may b Charle obtain	ant to West V survey on the West ty: Brook ct: Wells rangle: Beths as of the state be obtained fr eston, WV 2 and from the Sec is hereby	Virginia Co e tract of la tvirginia ke sburg any Erosion ar rom the Sec 5304 (304- Secretary b	and as follows: and Sediment Control cretary, at the WV D 926-0450). Copies by visiting www.dep		Approx. Lati Public Road Watershed: Generally us	tude & Longitude: Access: ed farm name:	Dry Ridge Road Buffalo Creek Sandra Parr il and gas exploration and production uarters, located at 601 57th Street, SE, related to horizontal drilling may be Office of Oil ar	ED Ga
Pursua a plat State: Count District Quadr Copie may b Charle obtain	ant to West V survey on the West ty: Brook ct: Wells rangle: Bethe es of the state the obtained fr the eston, WV 2 the defrom the State the is hereby Operator: state thone: 30	Virginia Co e tract of la tvirginia ke sburg any Erosion ar rom the Sec 5304 (304- Secretary b	and as follows: and Sediment Control cretary, at the WV D 926-0450). Copies by visiting www.dep		Approx. Lati Public Road Watershed: Generally use al and the statutes are the of Environment a documents or additional and east pages/	tude & Longitude: Access: ed farm name: nd rules related to o al Protection headq tional information r default.aspx.	Dry Ridge Road Buffalo Creek Sandra Parr il and gas exploration and production uarters, located at 601 57th Street, SE related to horizontal drilling may be Office of Oil ar JUN 0 8 26	ED Ga

WW-6A3 (1/12) Operator Well No. Sandra Parr BRK

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

	Requirement: No	tice shall be prov	ided at least	SEVEN (7) da	ys but no more tha	n FORTY-FIVE (45) days prio	r to
entry Date of Notice	e: 11/2/2017	Date of Plan	ned Entry	11/9/2017				
Jace of Fiotic	••	_ Date of Fiar	incu Entry.	7,10,24,1	_			
Delivery meth	od pursuant to	West Virginia Co	de § 22-6A-	10a				
☐ PERSON	IAL E R	EGISTERED	□ мет	THOD OF DEL	IVERY THAT RE	EOUIRES A		
SERVICE	E M	ÍAIL			NATURE CONFIR			
on to the surfact not no more the eneath such the wner of mine and Sediment decretary, whi	ce tract to conduct an forty-five days ract that has filed rals underlying su Control Manual a	at any plat surveys sprior to such ent a declaration pur- ach tract in the cound the statutes and l include contact i	required pur ry to: (1) The suant to secti unty tax reco d rules relate nformation,	rsuant to this are e surface owner on thirty-six, a ords. The notice d to oil and gas	ticle. Such notice of such tract; (2) rticle six, chapter to shall include a state of exploration and p	shall provide notice of shall be provided at let to any owner or lessed wenty-two of this codu atement that copies of production may be obtuage on the Secretary's	ast seven of e of coal se le; and (3) the state E ained from	lays cams any crosion the
lotice is here	by provided to:							
SURFAC	E OWNER(s)			☐ COA	L OWNER OR LE	SSEE		
Vame:								
.ddress:		-1011		Address:				
lame:				_				
ddress:				■ MINI	ERAL OWNER(s)			
				Name: Leo	nard & Karen Boyce 1162 Northview Road			
lame:				Address:	1162 Northview Road			
iddiess.				weilsburg, w	/ 26070 h additional forms if no			
plat survey o tate: county:	est Virginia Code n the tract of land West Virginia	l as follows:			ude & Longitude:	l operator is planning 40.179524, -80.521620 Dry Ridge Road Buffalo Creek		
uadrangle:	Bethany			Generally use	d farm name:	Sandra Parr		
nay be obtaine Charleston, W btained from	ed from the Secret	tary, at the WV D 6-0450). Copies	epartment of of such docu	Environmenta ments or additi	l Protection headq	il and gas exploration uarters, located at 601 elated to horizontal di	57 th Stree filling may Office	se, se, be
Vell Operator:		COMPANY, LLC		Address:	PO BOX 1300		11	oll and
elephone:	304-884-1610				JANE LEW, WV 26378		- UIV	U & 2n.
mail:	dee_southall@swn.co	om or brittany_woody@s	wn.com	Facsimile:			En WO	
	Privacy Notice:						Environmer	ital Protec
The Office of duties. Your p	Oil and Gas proce ersonal informati	esses your personation may be disclo	al information	n, such as name State agencie	e, address and teleps or third parties i	phone number, as part in the normal course	or our reg	ulatory

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.

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

Notice Time I entry Date of Notice			nned Entry:		s but no more that	n FORTY-FIV	E (45) days prior to		
Delivery meth	od pursuant	to West Virginia C	ode § 22-6A-	10a					
□ PERSON SERVICE	7.50	REGISTERED MAIL	☐ MET	HOD OF DEL	IVERY THAT PE ATURE CONFIR	EQUIRES A	10 z a 9		
on to the surfa but no more th beneath such to owner of mine and Sediment Secretary, whi	ce tract to cond an forty-five d ract that has fil rals underlying Control Manua ch statement sl ace owner to co	duct any plat surveys lays prior to such entaged a declaration pur- g such tract in the co- al and the statutes and hall include contact obtain copies from the	s required pur try to: (1) The suant to section ounty tax record rules related information, i	suant to this are surface owner on thirty-six, are rds. The notice d to oil and gas	ticle. Such notice so of such tract; (2) ticle six, chapter to shall include a street exploration and p	shall be provide to any owner of wenty-two of the atement that controlled	notice of planned entry ed at least seven days r lessee of coal seams his code; and (3) any pies of the state Erosion be obtained from the retary's web site, to		
_				П сол	OUDED ON LE	20000			
SURFAC					OWNER OR LE				
Name: Nancy Pa Address: 536 R			-	Name:Address:					
Foliansbee, WV 260			-	Address:					
Name:			-)	-6.3					
Address:			3	■ MINE	RAL OWNER(s)				
				Name: Name					
Name:			-	Address:	536 Rockdale Road				
Address:			_	Follansbee, W	1 PARTI				
			-	*please attac	additional forms if ne	ecessary			
Notice is her Pursuant to We a plat survey o State:	est Virginia Co	ode § 22-6A-10(a), n and as follows:	notice is hereb		e undersigned wel		anning entry to conduct		
County:	Brooke			Public Road A		40.179524, -80.52 Dry Ridge Road	1620		
District:	Mallahion			Watershed:	iccess.	Buffalo Creek			
Quadrangle:				Generally use	d farm name:	Sandra Parr			
may be obtaine Charleston, W	ed from the Se V 25304 (304	cretary, at the WV I	Department of of such docu	the statutes and Environmenta ments or additi	d rules related to o I Protection headq onal information r	uarters, located	oration and production l at 601 57 th Street, SE, ontal drilling may be		
Notice is her	eby given by	7:					On REG		
Well Operator		TION COMPANY, LLC		Address:	PO BOX 1300		Office of Oil and G		
Telephone:	304-884-1610				JANE LEW, WV 26378	i	JIM A		
Email:		wn.com or britteny_woody@s		Facsimile:			0014 0 8 2018		
Oil and Gas	Privacy Noti	ice:	al information	ı such as name	address and teles	phone number	Environmental Protection as part of our regulatory		

Operator Well No. Sandra Parr BRK

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

		Requirement:	Notice shall be prov	ided at least 5	SEVEN (7) da	ys but no more than	FORTY-FI	VE (45) days prior to
entry Date		e: 11/2/2017	Date of Pla	nned Entry:	11/9/2017			
			— to West Virginia C					
П	PERSO	NAT.	REGISTERED	П мет	HOD OF DEI	LIVERY THAT RE	OTHES A	
	SERVIC		MAIL			NATURE CONFIR		
			- J- C 22 CA 10(-)					
on to but no beneze owne and S Secre enabl	the surf to more to the such or of min dediment stary, where the sur	ace tract to conchan forty-five ditract that has filerals underlying Control Manualich statement sinface owner to control to control c	duct any plat survey lays prior to such en led a declaration pur g such tract in the co al and the statutes ar hall include contact obtain copies from the	s required pur try to: (1) The suant to section ounty tax record rules related information, i	suant to this a e surface owner on thirty-six, a rds. The notice d to oil and ga	rticle. Such notice s or of such tract; (2) the article six, chapter to be shall include a state of exploration and pro-	shall be provided to any owner wenty-two of atement that conduction may	notice of planned entry ded at least seven days or lessee of coal seams this code; and (3) any opies of the state Erosion y be obtained from the cretary's web site, to
Notic	e is her	eby provided t	o:					
	SURFAC	CE OWNER(s)			☐ COA	L OWNER OR LE	SSEE	
Addr	ess:			_	Address:			
Name					-			
Addr	ess:			3	■ MIN	ERAL OWNER(s)		
					Name: Joi		1	
Name					a man and and and a	3266 West Hampton Points	e Drive	
Addi	css			-		th Carolina 29501 th additional forms if ne	cessary	
Pursu a plat	ant to W	on the tract of l	ode § 22-6A-10(a), 1 and as follows:	notice is hereb				lanning entry to conduct
State: Coun		West Virginia			Approx. Latit	tude & Longitude:		
Distri					Watershed:	Access:	Dry Ridge Road Buffalo Creek	
		Bethany				ed farm name:	Sandra Parr	
Copie may l Charl	es of the	state Erosion a ned from the Se VV 25304 (304	cretary, at the WV I	Department of of such docu	the statutes an Environments ments or addit	nd rules related to oi al Protection headqu tional information re	and gas exp	loration and production d at 601 57 th Street, SE, zontal drilling may be
Med	as is be	ualbur adara - Ira						Office of Oil and Gas
	ce is ne Operato	reby given by	TION COMPANY, LLC		Address:	DO BOY 1000		of Oil and Gan
	hone:	304-884-1510	HON COMPANT, LLC	-	Addicss.	PO BOX 1300 JANE LEW, WV 26378		JUN 0 8 2018
Emai		1	wn.com or brittany woody@	swn.com	Facsimile:	WALLETY, WV 20070		MV 2 2018
			2				E	WV Department of Protection
Oil a	nd Gas	Privacy Not	ice:	1		Comment vision		Totection

WW-6A3 (1/12) Operator Well No. Sandra Parr BRK

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

	equirement:	Notice shall be prov	vided at least SEVEN (7) day	ys but no more than	FORTY-FIVE (45) days prior to
Date of Notice:	11/2/2017	Date of Plan	nned Entry: 11/9/2017		
Delivery metho	od pursuant	to West Virginia C	ode § 22-6A-10a		
☐ PERSON	AL 🔳	REGISTERED	☐ METHOD OF DEL	IVERY THAT RE	OUIRES A
SERVICE		MAIL	RECEIPT OR SIGN		
on to the surface but no more that beneath such tra owner of miner and Sediment C Secretary, whice enable the surface	e tract to cond in forty-five do act that has fil als underlying Control Manual h statement since owner to co	duct any plat surveys ays prior to such en- led a declaration pur g such tract in the co- al and the statutes an hall include contact obtain copies from the	s required pursuant to this are try to: (1) The surface owner suant to section thirty-six, are ounty tax records. The notice and rules related to oil and gas information, including the are	ticle. Such notice s r of such tract; (2) f rticle six, chapter to e shall include a sta s exploration and pr	shall provide notice of planned entry hall be provided at least seven days o any owner or lessee of coal seams wenty-two of this code; and (3) any attement that copies of the state Erosion roduction may be obtained from the ge on the Secretary's web site, to
Notice is hereb		0:	П		
	OWNER(s)			L OWNER OR LE	
Name:			_ Name:		
Name:					
Address:			■ MINI	ERAL OWNER(s)	
			Name: Det		
Name:			_ Address:	120 Walker Road	
Address:			Follansbee, W	V 26037 h additional forms if ne	24552001
43 402	3 - 2 -		prease arrac	n additional forms if no	cessary
a plat survey or	st Virginia Co the tract of I		7		operator is planning entry to conduct
	West Virginia Brocke		D.L.1: - D - 1	ude & Longitude:	40.179524, -80.521620
_				Access.	Dry Ridge Road Buffalo Creek
Quadrangle:	Bethany		Generally use	d farm name:	Sandra Parr
may be obtaine Charleston, WV	d from the Se 7 25304 (304 the Secretary lands by given by	cretary, at the WV I -926-0450). Copies by visiting <u>www.de</u> p	Department of Environmenta	l Protection headquional information r	il and gas exploration and production parters, located at 601 57 th Street, SE, elated to horizontal drilling may be
Telephone:	304-884-1610			JANE LEW, WV 26378	
Email:		wn.com or brittany_woody@	swn.com Facsimile:		_
			- Carrotte		

Oil and Gas Privacy Notice:

Operator Well No. Sandra Parr BRK

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 I entry	Requirement:	Notice shall be provi	ided at l	east SEVEN (7) da	ys but no more than	n FORTY-FIVE ((45) days prior to
	: 11/2/2017	Date of Plan	ned En	itry: 11/9/2017			
elivery meth	od pursuant t	o West Virginia Co	de § 22	2-6A-10a			
☐ PERSON	IAI 🗐	REGISTERED	П	METHOD OF DEI	IVEDV THAT DE	COLUDES	
SERVICE		MAIL		RECEIPT OR SIGN			
SERVICE		WAIL		RECEIF I OR SIGI	NATURE CONFIR	INATION	
on to the surfactor to more the seneath such to owner of mine and Sediment (Secretary, whi	ce tract to cond an forty-five d ract that has fil rals underlying Control Manua ch statement sh	de § 22-6A-10(a), Pluct any plat surveys ays prior to such entred a declaration purst, such tract in the could and the statutes and tall include contact in the declaration copies from the	require ry to: (1 suant to unty tax d rules i nformat	d pursuant to this at) The surface owne section thirty-six, at records. The notic related to oil and ga- tion, including the a	rticle. Such notice s r of such tract; (2) rticle six, chapter t e shall include a sta s exploration and p	shall be provided a to any owner or le- wenty-two of this atement that copies roduction may be	t least seven days see of coal seams code; and (3) any s of the state Erosion obtained from the
lotice is here	by provided to):					
SURFAC	E OWNER(s)			П сол	L OWNER OR LE	SSEE	
Name: Michael N		1					
Address: 120 Ja	amison Lane		-	Address			_
Vellsburg, WV 2607			-	Addicss.			_
				-		16	_
Address:				■ MINI	ERAL OWNER(s)	/	
				Name: Mic			
Name:				The second secon	120 Jamison Lane		_
Address:			-	Wellsburg, W			
				*please attac	h additional forms if ne	cessary	_
a plat survey o State:	est Virginia Co	de § 22-6A-10(a), no and as follows:	otice is	Approx. Latit	ude & Longitude:		
County:	Brooke			Public Road	Access:	Dry Ridge Road	
District:	Wellsburg			Watershed:		Buffalo Creek	
Quadrangle:	Bethany			_ Generally use	d farm name:	Sandra Parr	
nay be obtained	ed from the Sec V 25304 (304-	nd Sediment Control cretary, at the WV D .926-0450). Copies by visiting www.dep.	epartme of such	ent of Environmenta documents or addit /oil-and-gas/pages/	Il Protection headquional information r	uarters, located at	501 57 th Street, SE, Il drilling may be Office of SIVE
obtained from Notice is her	eby given by	•					
obtained from Notice is her Well Operator		ON COMPANY, LLC		Address:	PO BOX 1300		1/ 1/ 1/ 20
btained from				Address: Facsimile:	PO BOX 1300 JANE LEW, WV 26378		JUN 0 8 20 Environmental Profes

Operator Well No. Sandra Parr BRK

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

	Requirement:	Notice shall be prov	rided at least SEVEN (7) days bu	ut no more than	n FORTY-FIVI	E (45) days	prior to
Date of Noti	ice: 11/2/2017	Date of Plan	nned Entry: 11/9/2017					
Delivery me	thod pursuant	to West Virginia C	ode § 22-6A-10a					
☐ PERSO	NAI.	REGISTERED	☐ METHOD OF	DELIVE	RY THAT RE	OURES A		
SERVI		MAIL	RECEIPT OR					
on to the suri but no more beneath such owner of mir and Sedimen Secretary, when able the su	face tract to cond than forty-five d tract that has fil nerals underlying t Control Manua hich statement sharface owner to o	duct any plat surveys ays prior to such en- led a declaration pur g such tract in the co all and the statutes an hall include contact obtain copies from the	Prior to filing a permit as required pursuant to the try to: (1) The surface assume to section thirty-unty tax records. The dirules related to oil arinformation, including the secretary.	his article owner of s six, article notice sha nd gas exp	s. Such notice s such tract; (2) to six, chapter to all include a standoration and p	shall be provided to any owner or wenty-two of thi atement that cop roduction may b	I at least ser lessee of co is code; and ies of the st e obtained	ven days al seams (3) any ate Erosion from the
Notice is her	reby provided to	0:						
■ SURFA	CE OWNER(s)			COAL O	WNER OR LE	SSEE		
Name: Raymo	nd Parr		Nam	e:				
Address: 513 Follansbee, WV 2	Shady Lane		Addr	ess:				
THE THE PERSON NAMED IN CO.	V 1 (*)		4					
Address:					L OWNER(s)	1		
Name:				e: Raymond		/		
			_ Addr	ess: 513 St				
			*pleas		itional forms if ne	cessary	_	
Pursuant to V	on the tract of la West Virginia Brooke	ode § 22-6A-10(a), r and as follows:	Public R	Latitude o	& Longitude:			to conduct
Quadrangle:	Bethany		Generall	y used far	m name:	Sandra Parr		
may be obtai Charleston, V	ned from the Sec WV 25304 (304)	cretary, at the WV I -926-0450). Copies	Manual and the statut Department of Environs of such documents or wv.gov/oil-and-gas/pa	nental Pro additional	tection headquartion r	uarters, located a	at 601 57th S	Street, SE,
	ereby given by	:					Office o	ECEIVED of Oil and Gas
Well Operato	-	TION COMPANY, LLC	Addre	SS: PO	BOX 1300		no	and Gas
Telephone:	304-884-1610				E LEW, WV 26378		JUN	0 8 2018
Email:	dee_southall@sv	wn.com or brittany_woody@	swn.com Facsin	nile:			Enviro Dep	
Oil and Ga	s Privacy Noti	ice:					- wironmen	artment of tal Protection

WW-6A4 (1/12) Operator Well No. Sandra Parr BRK 8H

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 Notice	e: 05/03/2018 Date Per	rmit Application Filed:	ull
Delivery meth	ood pursuant to West Virginia Code §	22-6A-16(b)	1
☐ HAND	■ CERTIFIED MAIL		
DELIVE		QUESTED	
eceipt request rilling a horiz of this subsect ubsection may nd if available	ted or hand delivery, give the surface own zontal well: <i>Provided</i> , That notice given ion as of the date the notice was provided	ner notice of its intent to enter upon to pursuant to subsection (a), section to do to the surface owner: <i>Provided, howers</i> . The notice, if required, shall includdress of the operator and the operator	, an operator shall, by certified mail return the surface owner's land for the purpose of en of this article satisfies the requirements wever, That the notice requirements of this lude the name, address, telephone number, or's authorized representative.
lame: Anthony E		Name:	
Address: 120 Ja		Address:	
Wellsburg, WV 266	070		
the surface ow	est Virginia Code § 22-6A-16(b), notice ner's land for the purpose of drilling a ho	prizontal well on the tract of land as for	
Pursuant to W he surface ow State: County:	est Virginia Code § 22-6A-16(b), notice		
Pursuant to W he surface ow State: County: District:	est Virginia Code § 22-6A-16(b), notice mer's land for the purpose of drilling a ho West Virginia Brooke	orizontal well on the tract of land as for Easting: Northing:	bllows: 540,740.211 4,447,787.366
Pursuant to W	est Virginia Code § 22-6A-16(b), notice mer's land for the purpose of drilling a ho West Virginia Brooke Buffalo	orizontal well on the tract of land as for the	540,740.211 4,447,787.366 Atchinson Rd
Pursuant to W the surface ow State: County: District: Quadrangle: Watershed: This Notice S Pursuant to W facsimile num related to hori	est Virginia Code § 22-6A-16(b), notice mer's land for the purpose of drilling a howest Virginia Brooke Buffalo Bethany Buffalo Creek Shall Include: Vest Virginia Code § 22-6A-16(b), this iber and electronic mail address of the zontal drilling may be obtained from the	orizontal well on the tract of land as for	540,740.211 4,447,787.366 Atchinson Rd
Pursuant to Whe surface ow State: County: District: Quadrangle: Watershed: This Notice: Pursuant to Wacsimile numelated to horiocated at 601	est Virginia Code § 22-6A-16(b), notice mer's land for the purpose of drilling a howest Virginia Brooke Buffalo Bethany Buffalo Creek Shall Include: Vest Virginia Code § 22-6A-16(b), this iber and electronic mail address of the zontal drilling may be obtained from the	orizontal well on the tract of land as for	oflows: 540,740.211 4,447,787.366 Atchinson Rd Sendra Parr BRK ress, telephone number, and if available, ed representative. Additional information of Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx.
Pursuant to Whe surface ow State: County: District: Quadrangle: Watershed: This Notice: Pursuant to Wacsimile number related to horiocated at 601 Notice is her	est Virginia Code § 22-6A-16(b), notice mer's land for the purpose of drilling a howest Virginia Brooke Buffalo Bethany Buffalo Creek Shall Include: Vest Virginia Code § 22-6A-16(b), this iber and electronic mail address of the zontal drilling may be obtained from the 57th Street, SE, Charleston, WV 25304 (orizontal well on the tract of land as for	oflows: 540,740.211 4,447,787.366 Atchinson Rd Sendra Parr BRK ress, telephone number, and if available, ed representative. Additional information of Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx.
Pursuant to Whe surface ow State: County: District: Quadrangle: Watershed: Pursuant to Wacsimile number lated to horiocated at 601 Notice is her Well Operator	rest Virginia Code § 22-6A-16(b), notice mer's land for the purpose of drilling a howest Virginia Brooke Buffalo Bethany Buffalo Creek Shall Include: Vest Virginia Code § 22-6A-16(b), this iber and electronic mail address of the zontal drilling may be obtained from the 57th Street, SE, Charleston, WV 25304 (creby given by:	orizontal well on the tract of land as for UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: notice shall include the name, addroperator and the operator's authorize Secretary, at the WV Department of (304-926-0450) or by visiting www.de	oflows: 540,740.211 4,447,787.366 Atchinson Rd Sendra Parr BRK ress, telephone number, and if available, ed representative. Additional information of Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx.
Pursuant to Whe surface ow State: County: District: Quadrangle: Watershed: Pursuant to Wacsimile numelated to horiocated at 601 Notice is her Well Operator Address:	est Virginia Code § 22-6A-16(b), notice mer's land for the purpose of drilling a howest Virginia Brooke Buffalo Bethany Buffalo Creek Shall Include: Vest Virginia Code § 22-6A-16(b), this iber and electronic mail address of the zontal drilling may be obtained from the 57th Street, SE, Charleston, WV 25304 (creby given by: SWN Production Company, LLC	orizontal well on the tract of land as for Lasting: With NAD 83 Easting: Northing: Public Road Access: Generally used farm name: notice shall include the name, addroperator and the operator's authorize escretary, at the WV Department of 304-926-0450) or by visiting www.de Authorized Representative: Address:	of lows: 540,740.211 4,447,787.366 Atchinson Rd Sendra Parr BRK ress, telephone number, and if available, ed representative. Additional information of Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx. Mike Yates PO Box 1300, 179 Innovation Drivoffice of Oil and Jane Lew, WV 26378
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Pursuant to Withe surface ow State: County: District: Quadrangle: Watershed: This Notice Sursuant to Wifacsimile numerelated to horiousted at 601 Notice is her	rest Virginia Code § 22-6A-16(b), notice mer's land for the purpose of drilling a howest Virginia Brooke Buffalo Bethany Buffalo Creek Shall Include: Vest Virginia Code § 22-6A-16(b), this iber and electronic mail address of the zontal drilling may be obtained from the 57th Street, SE, Charleston, WV 25304 (creby given by: SWN Production Company, LLC PC Box 1300, 179 Innovation Drive Jane Lew, WV 26378	orizontal well on the tract of land as for Lasting: With NAD 83 Easting: Northing: Public Road Access: Generally used farm name: notice shall include the name, addroperator and the operator's authorize escretary, at the WV Department of 304-926-0450) or by visiting www.de Authorized Representative: Address:	of lows: 540,740.211 4,447,787.366 Atchinson Rd Sendra Parr BRK ress, telephone number, and if available, ed representative. Additional information of Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx. Mike Yates PO Box 1300, 179 Innovation Drivoffice of Oil and Jane Lew, WV 26378

Oil and Gas Privacy Notice:

WW-6A5 (1/12)

Operator Well No. Sandra Parr BRK 8H

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

Notice Ti Date of N		quirement: notice shall be provided to the provided by the pro		later than the filing plication Filed:		application.	
Delivery	metho	d pursuant to West Virginia Co	de § 22	2-6A-16(c)			
■ CE	RTIFIL	ED MAIL		HAND			
RE'	TURN	RECEIPT REQUESTED		DELIVERY			
return rec the planner required to drilling of damages t (d) The no of notice.	ed ope to be prof a hor to the so tices r	Va. Code § 22-6A-16(c), no late quested or hand delivery, give the ration. The notice required by revided by subsection (b), section izontal well; and (3) A proposed surface affected by oil and gas operequired by this section shall be go provided to the SURFACE OV	e surface this sub- ten of the surface erations iven to	e owner whose land osection shall include this article to a surfa- te use and compens to the extent the da the surface owner a	will be used for le: (1) A copy ace owner whos ation agreemen mages are comp	r the drilling of a of this code seet e land will be use t containing an opensable under ar	horizontal well notice of tion; (2) The information ed in conjunction with the offer of compensation for ticle six-b of this chapter.
		sted in the records of the sheriff a	t the tir	ne of notice): Name:			
Address:				Address			
Wellsburg, V				110000	-		
	on the	t Virginia Code § 22-6A-16(e), no e surface owner's land for the pur lest Virginia rooke		drilling a horizonta UTM NAD 8 Public Road A	well on the tra Easting: Northing: Access:		
Quadrang	le: B	ethany		Generally use	d farm name:	Sandra Parr BRK	
Watershee		uffalo Creek					
Pursuant to to be pro- horizontal surface af information	to West vided I I well; ffected on relaters, lo	Ill Include: It Virginia Code § 22-6A-16(c), the Virginia Code § 22-6A-10(b) by W. Va. Code § 22-6A-10(b) and (3) A proposed surface use a by oil and gas operations to the ted to horizontal drilling may be cated at 601 57th Street, SE, lt.aspx.	to a su and com extent obtain	orface owner whose opensation agreement the damages are conted from the Secret	land will be unit containing an impensable und ary, at the WV	offer of compen of article six-b o Department of l	on with the drilling of a sation for damages to the f this chapter. Additional Environmental Protection www.dep.wv.gov/oil-and-
Well Ope	rator:	SWN Production Company, LLC		Address:	PO Box 1300, 179 lr	nnovation Drive	Office of Oil and Gas
Telephone		304-517-6603			Jane Lew, WV 2637		lini o a
Email:		Michael_Yates@SWN.com		Facsimile:			JUN 0 8 2018
Oil and C	las Pri	ivacy Notice:					WV Department of Environmental Protection



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Jim Justice Governor

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

December 28, 2017

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 Sandra Parr Pad, Brooke County

Sandra Parr BRK 8H

Dear Mr. Martin,

The West Virginia Division of Highways has reviewed access to the subject site operated by Southwestern Energy for access to the State Road. The site is accessed from Pennsylvania by a private road not a part of the WVDOH road system.

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,

Lay t. Clayton JUN 0 8 2018

WV Department of Gary K. Clayton, P. Environmental Protection

Regional Maintenance Engineer

Central Office Oil &Gas Coordinator

Cc: Brittany Woody

Southwestern Energy

CH, OM, D-6

File

47009010259

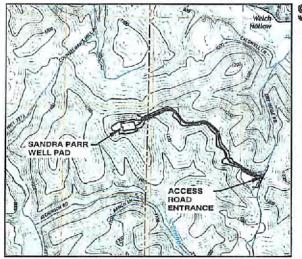
	FRAC A	DDITIVES	0 0 9 0
Product Name	Product Use	Chemical Name	CAS Number
		Hydrogen Peroxide	7722-84-1
EC6734A (Champion Technologies)	Biocide	Acetic Acid	64-19-7
		Peroxyacetic Acid	79-21-0
		Methanol	67-56-1
GYPTRON T-390 (Champion Technologies)	Scale Inhibitor	Nonylphenol Ethoxylate	Proprietary
		Glutaraldehyde	111-30-8
		Quaternary Ammonium Compounds, Benzyl-C12-	
Bactron K-139 (Champion Technologies)	Biocide	16-Alkyldimethyl, Chlorides	68424-85-1
		Ethanol	64-17-5
Bactron K-219 (Champion Technologies)	Biocide	Methanol	67-56-1
Bactron K-219 (champion rechnologies)	Biocide	Quaternary Ammonium Compounds, Benzyl-C12- 16-Alkyldimethyl, Chlorides	68424-85-1
EC6486A (Nalco Champion)	Scala Inhihitar	Amine Triphosphate	Proprietary
ECO400A (Naico Champion)	Scale Inhibitor	Ethylene Glycol	107-21-1
WERA_2000 (u.e. w-" e	Anionic Eriction Doduces	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
AI-303 (U.S. Well Services)	Mixture	Butyl cellosolve	111-76 2
AI-303 (0.5. Well Services)	Mixture	Formic acid	64-18 6
		Polyether	
		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
		Water	7732-18-5
		Hydrochloric acid	7647-01-0
		Potassium acetate Formaldehyde	127-08-2 50-00-0
Ecopol-FEAC (SWN Well Services)	Iron Control	Acetic Acid	64-19-7
Ecopoi-FEAC (SWN Well Services)	Iron Control	Citric Acid Water	77-92-9
			7732-18-5
HCL (SWN Well Services)	Hydrocholic Acid	Hydrochloric Acid Water	7647-01-0 7732-18 ^{25ic}
FLOJET DRP 1130X (SWN Well Services)	Friction Reducer	Proprietary	Proprietary
2227 (237 728 227 7623)	Theadil Neducel	Distillates (petroleum) hydrotreated light	64674-47-8
		Ethylene Glycol	107- <u>2</u> 1- 1
FLOJET DR900 LPP (SWN Well Services)	Friction Reducer	Alcohols, C12-16, Exoxylated propoxylated	68213-24-1
(2.37. 7.3. 3.3. 7.6.3)	The state of the s	Fatty Alcohols ethoxylated	Proprietary
		Water	7732-18-5
ED 76	Falation B. 1	Hydrotreated light petroleum distillate	64742-47-8
FR-76 (Halliburton)	Friction Reducer	Inorganic Salt	Proprietary
HAI-150E (Halliburton)	Corrosion Inhibitor	No hazardous substance	N/A
FDP-S1176-15 (Halliburton)	Cristian Badusas	Polyacylate	Proprietary
LDL-2TT/Q-T2 (Halliputtou)	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8
		Organic phosphonate	Proprietary
I P-65 MC (Halliburgary)	Scala Inhihitar	: Barrio pricoprioriate	
LP-65 MC (Halliburton)	Scale Inhibitor	Ammonium Chloride	12125-02-9

RECEIVED of Oil and Gas

N 0 8 2018

Department of mental Protection

0 0 0 N S 9



SANDRA PARR WELL PAD **RECLAMATION AS-BUILT**

BUFFALO DISTRICT BROOKE COUNTY, WEST VIRGINIA

SUBMITTAL & REVISION RECORD NO DATE DESCRIPTION

CONTROLL	WYDOH COMMENTS
2/07/2017	LIMITS OF DISTRUBANCE REVISION
	2/07/2017

LOD				
DESCRIPTION	ACRES			
ROAD DISTURBED AREA	15.59			
PAD DISTURBED AREA	4.78			
TOTAL	20.37			

LOD (REVISED)				
DESCRIPTION	ACRES			
ROAD DISTURBED AREA	15.59			
PAD DISTURBED AREA	4.78			
TOTAL	20.37			

ENGINEERING ESTIMATE O	F QUANT	TIES
WELL SITE PAD DATA [RE	CLAMAT	(NO
REMOVE SUMP	4	EA
BREACH BERM	4	EA
SEED & MULCH DISTURBED MATERIAL PILE	35	CY

131.	THE SHEET	
EP2.1	EVACUATION ROUTE / PREVAILING WIND	
EP2.2	EVACUATION ROUTE / PREVAILING WIND	
AS3.1	AS-BUILT OVERVIEW	
AS3.2	AS-BUILT	
AS3.3	AS-BUILT	
AS3.4	AS-BUILT	
AS3.5	AS-BUILT	
A53.6	AS-BUILT	
AS3.7	AS-BUILT	
ASR4.1	ACCESS ROAD PROFILE	
ASR4.2	ACCESS ROAD PROFILE	
ASR4.3	ACCESS ROAD PROFILE	
ASB4.4	ACCESS ROAD PROFILE	
ASR4.5	ACCESS ROAD PROFILE	
MRD5.1	RECLAMATION PLAN OVERVIEW	
MRD5.2	RECLAMATION PLAN	
MRD5.3	RECLAMATION PLAN	
MRD5.4	RECLAMATION PLAN	
MRD5.5	RECLAMATION PLAN	
MRD5.6	RECLAMATION PLAN	
MRD5.7	RECLAMATION PLAN	
MRD6,3	RECLAMATION DETAILS	
MRD8.4	RECLAMATION DETAILS	

RECLAMATION DETAILS

RECLAMATION DETAILS RECLAMATION DETAILS

SHEET INDEX TITLE SHEET

WELL NAME	NAD 83 WEST VIRGINIA NORTH ZONE		
Trees Ivalia	LATITUDE	LONGITUDE	
H3 (EXISTING)	40.179542	-80.521473	

MRD8.5

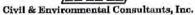
WELLSITE LOCATIONS	NAD 83 WEST VIRGINIA NORTH ZONE		
	LATITUDE	LONGITUDE	
BEGINNING OF MAIN ACCESS ROAD	40.174563	-80.503704	
MAIN ACCESS ROAD AT PAD	40.179560	-80.520766	
CENTER OF PAD	40.179497	-80.521581	
GATHERING AREA	40.175540	-80.506555	











600 Marketolace Ave - Suite 200 - Bridgeport, WV 26330 Ph: 304,933,3119 - Fax: 304,933,3327

RAWN BY:	www.cecinc.com			
	K.E.S.	CHECKED BY		
MATE	144V 0047	DIMO POALE		

SOUTHWESTERN PRODUCTION COMPANY SANDRA PARR WELL PAD **BUFFALO DISTRICT**

BROOKE COUNTY, WEST VIRGINIA SANDRA PARR RECLAMATION AS-BUILT

TITLE	SHEET
DEM	FIGURE NO

www.cecing.com			ITTLESTILL				
DRAWN BY:	K.E.S.	CHECKED BY:	JDR	APPROVED BY:	DEM	FIGURE NO.:	
DATE:	MAY 2017	DWG SCALE:	AS NOTED	PROJECT NO:	172-289	TS1_	
				-			



