

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street SE Charleston, WV 25304 (304) 926-0450 (304) 926-0452 fax Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

July 28, 2015

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-900163, issued to SWN PRODUCTION COMPANY, LLC, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

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

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

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

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Operator's Well No: OV ROYALTY TRUST BRK 201H Farm Name: THE TRUST OF GENE VALENTIN

API Well Number: 47-900163

Permit Type: Horizontal 6A Well

Date Issued: 07/28/2015

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

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

API NO. 47- <u>69</u>	
OPERATOR WELL NO.	OV Royaly Total BRK 201H
Well Pad Name: OVR	walty Trust PAD

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

I) Well Operate	or: SWN	Production C	Co., LLC	494512924	009-Brooke	002-Cros	620- Stuebenville
				Operator ID	County	District	Quadrangle
2) Operator's W	Vell Numbe	r: OV Royalty	Trust BR	K 201H Well Pad	Name: OV R	oyalty Trus	t PAD
3) Farm Name/	Surface Ow	ner: The Trust	of Gene Va	lentine Public Roa	d Access: Brir	ker Road	
4) Elevation, cu	irrent groun	d: 1181'	Ele	evation, proposed	post-construction	on: 1181'	
5) Well Type	(a) Gas Other	×	_ Oil	Unde	erground Storag	ge	
	(b)If Gas	Shallow Horizontal	x	Deep			_
6) Existing Pad	: Yes or No	yes					
				pated Thickness a rgol Base TVD- 7132'	Anticipated Thick	ness- 50', Ass	ocialod Prossure- 4600
8) Proposed Tot	al Vertical	Depth: 5768	3'	_	REC	CEIVED Gas	
9) Formation at	Total Verti	cal Depth: _	Marcellus		Office	ີ. ວັນທີ	3
10) Proposed To	otal Measur	ed Depth: 1	14,595'		ען	1 8 0 50%	01
11) Proposed He	orizontal Lo	g Length: 7	7569'		٧	N Department Ironmental Pro	ection
12) Approximat	e Fresh Wa	ter Strata Dep	oths:	53'	Env	lionino	
13) Method to D 14) Approximat				ase of fresh wate	er		
15) Approximat	e Coal Sear	n Depths: 🚣	H3	730'-245			•
16) Approximat	e Depth to	Possible Void	(coal min	ne, karst, other): 👤	/ sid Expected	4413' Void	L Expected 230'-2
17) Does Propos directly overlyin				ns Yes	No	×	
(a) If Yes, prov	vide Minc I	nfo: Name:					
		Depth:					
		Seam:	•				·
		Owner:	:				

GCS 7/21/15 Page 1 of 3

API	NO. 47- <u></u> 9	

OPERATOR WELL NO. OV Royally Trust PAD
Well Pad Name: OV Royally Trust 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#	105'	105'	CTS
Fresh Water	13 3/8"	New	J-55	54.5#	345'	345'	409 sx/CTS
Coal	9 5/8"	New	J-55	40#	1549'	1549'	586 sx/CTS
Intermediate	7"	New	J-55	20#	If Needed	If Needed	If Needed/As Needed
Production	5 1/2"	New	HCP-110	20#	14,800'	14,800'	Lead 1072221 Ltd 1927ps/1007 dealth brand
Tubing	2 3/8'	New	P-110	4.7#	Approx. 5768'	Approx. 5768'	
Liners							

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

Office of Oil and Gas

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		<u>PACKERS</u>	WV Department of Environmental Protection
Kind:	10K Arrowset AS1-X		
Sizes:	5 1/2"		
Depths Set:			

WW-6B	
(10/14)	

API NO. 47- 09

OPERATOR WELL NO. OV Royally Trust BERK 201H Well Pad Name: OV Royalty Trust PAD

4700900163

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

Drill and stimulate any potential zones between and including the Benson to Marcellus. **If we should encounter a void place basket above and below void area- balance cement to bottom of void and grout from basket to surface. Run casing not less than 20' below void nor more than 50'-70' below void. (*If freshwater is encountered deeper than anticipated it must be protected, set casing 50'-70' below and cts.)

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

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

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 26.76
- 22) Area to be disturbed for well pad only, less access road (acres): 9.81
- 23) Describe centralizer placement for each casing string:

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

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

See Attachment ***

25) Proposed borehole conditioning procedures:

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

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JUN 09 2015

^{*}Note: Attach additional sheets as needed.

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)_Upper Of	nio South Qua	adrangle 247-Bethany
Elevation 1181	County_009-Brooke	District 1-Buffalo
Do you anticipate using more th Will a pit be used? Yes	an 5,000 bbls of water to complete the pr	
If so, please describe an	interpated pit waste.	n place at this time- cuttings will be taken to a permitted landfill.
	e used in the pit? Yes No✓	If so, what ml.?
	thod For Treated Pit Wastes:	
Land	Application	. 2D0072539/ 2D0413175/ 2D0610306/ 2D0610317
Reuse	e (at API Number at next anticipated well, API	# will be included with the WR-34/DDMR &/or permit addendum.
Off S	ite Disposal (Supply form WW-9 for dis	
Will closed loop system be used	? If so, describe: Yes	
Drilling medium anticipated for	this well (vertical and horizontal)? Air,	freshwater, oil based, etc. Air drill to KOP, Fluid offl with SOBM from KOP to TD
-If oil based, what type	? Synthetic, petroleum, etc.Synthetic Oil Ba	ase
Additives to be used in drilling i	nedium? see attached sheets	
Drill cuttings disposal method?	Leave in pit, landfill, removed offsite, et	tc. landfill
An annual management of the second se	o solidify what medium will be used? (co	
-Landfill or offsite nam Argen Langtill 10072, Ar	ne/permit number? meadow SWF-1032. SS Grading SWF-4902.	Northwestern SWF-1025, Short Creek 1034WV0106517/CID28726, Carbin Limestone 28726/CID28726 DE 3839U/CID3839U, PINE Grove 13688
on August 1, 2005, by the Office provisions of the permit are enf law or regulation can lead to enf I certify under penalty application form and all attack obtaining the information, I be penalties for submitting false information of the company Official Signature	e of Oil and Gas of the West Virginia De orceable by law. Violations of any term orcement action. To flaw that I have personally examine nments thereto and that, based on my dieve that the information is true, accuration, including the possibility of fin	s of the GENERAL WATER POLLUTION PERMIT issued epartment of Environmental Protection. I understand that the mor condition of the general permit and/or other applicable and am familiar with the information submitted on this inquiry of those individuals immediately responsible for trate, and complete. I am aware that there are significant the or imprisonment.
Company Official (Typed Name		bowi
Company Official Title_Regula	tory Supervisor	Received Office of Oil & Gas
Subscribed and sworn before me	e this 4th day of June	~ 71118
My commission expires	Ligardy day of your	OFFICIAL SEAL Notary Public, State of West Virgini BRITTANY R WOODY 3302 Old Elkins Road Buckhann 0 7/82/20

Proposed Revegetation Treatr	nent: Acres Disturbed	26.71	Prevegetation pH	
as determined by pH test	Tons/acre or to corr	ect to pH		
Fertilizer type				-
Fertilizer amount 60	00	lbs/acre		900163
Mulch Hay/Straw 2.5		Tons/acre	470	200
		Tons.ucre	of .	
		Seed Mixtures		
Ten	nporary		Permai	ient
Seed Type	lbs/acre		Seed Type	lbs/acre
White Grove	15	White G	Grove	15
Red Top	15	Red Top		15
Orchard Grass	20	Orchard	Grass	20
Drawing(s) of road, location, provided)			ngineered plans inc	luding this info have be
Attach: Drawing(s) of road, location, provided) Photocopied section of involv Plan Approved by:	ed 7.5' topographic shee		ngineered plans inc	luding this info have be
Drawing(s) of road, location, provided) Photocopied section of involv	ed 7.5' topographic shee	t.	ngineered plans inc	luding this info have be
Drawing(s) of road, location, provided) Photocopied section of involv Plan Approved by:	ed 7.5' topographic shee	t.	ngineered plans inc	Deceived
Drawing(s) of road, location, provided) Photocopied section of involv Plan Approved by:	ed 7.5' topographic shee	i. &	mgineered plans inc	

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el B 0	Cement Additives	***Ref: 2013-78	Chemical Name	\$₹
SLD C	Product Nama	Product Use	Chemical Name	CAS Number
	T		Fuller's earth (attapuigite)	8031-18-3
	D046	antifoam	Polypropylene glycol	25322-69-4
	D130	polyester flake - Icm	polyethylene terephthalate	25038-59-9
	S001	calcium chloride	calcium chloride	10043-52-4
ጽ	SPACER			
Surface	D130	polyester flake - lcm	polyethylene terephthalate	25038-59-9
<u>ສ</u>	D020	bentonite extender	bentonite	1302-78-9
		antifoam	Fuller's earth (attapuigite)	8031-18-3
	D046		Polypropylene glycol	25322-69-4
	D130	polyester flake - lcm	polyethylene terephthalate	25038-59-9
	D044	granulated salt	sodium chloride	7647-14-5
9	D153	Anti-Settling Agent	chrystalline silica	14808-60-7
Intermediate	SPACER		 	
Ĕ	D020	bentonite extender	bentonite	1302-78-9
<u>Ĕ</u>	D130	polyester flake - lcm	polyethylene terephthalate	25038-59-9
	D080	cement liquid dispersant	product classified as non-hazardous.	
	D801	mid-temp retarder	product classified as non-hazardous	
	D047	antifoam agent	polypropylene glycol	25322-69-4
	SPACER	 		
	B389	MUDPUSH* Express	Carbohydrate	proprietary
	D208	Antifoaming Agent	Silica Organic Polymer	proprietary
D	D031	barite	barium sulfate	7727-43-7
Kick Off Plug			fatty acid amine	proprietary
美			ethoxylated alcohol	proprietary
¥			glycerol	56-81-5
죠	B220	surfactant	2.2'-Iminodlethanol	111-42-2
	D167	UNIFLAC* S	aliphatic amide polymer	proprietary

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JUN 09 2015

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D154	low-temperature extender	non-crystalline silica	7631-86-9
_ D400	EasyBLOK	boric acid	10043-35-3
D046		Fuller's earth (attapulgite)	8031-18-3
의 10046	antifoam	Polypropylene glycol	25322-69-4
	basic caments enabler	chrystalline silica	14808-60-7
D201	basic cements enabler	metal oxide	proprietary
5 5000	low-temperature solid	sulphonated synthetic polymer	proprietary
Ž D202	dispersant	formaldehyde (impurity)	50-00-0
2040		Fuller's earth (attapulgite)	8031-18-3
D046	antifoam	Polypropylene glycol	25322-69-4
D167	UNIFLAC* S	aliphatic amide polymer	proprietary
D065	TIC* Dispersant	Sodium Polynaphthalene Sulfonate	9008-63-3
		Sodium Sulfate	7757-82-6
D004	basic cements enabler	chrystalline silica	14808-60-7
D201	basic cements enabler	metal oxide	proprietary
D153	Anti-Settling Agent	chrystalline silica	14808-60-7
SPACER			
B389	MUDPUSH* Express	Carbohydrate	proprietary
D206	Antifoaming Agent	Silica Organic Polymer	proprietary
D031	barite	barium sulfate	7727-43-7
		fatty acid amine	proprietary
		ethoxylated alcohol	proprietary
		glyceroi	56-81-5
B220	surfactant	2.2'-Iminodiethanol	111-42-2

Received Office of Oil & Gas % Concentration Used

D 204 BIMOC
0.2% BWOC
0.425 lb/cl/
0.125 lb/sk
2% BWOC
1 lb/bbl
20 lb/bbl
0.2% BWOC
0,125 lb/sk
10% BWOW
0.15% BWOC
20 lb/bbl
1 lb/bbl
0.05 gal/sk
0.01 gal/sk
0.02 gai/sk
1 lb/bbl
0.1 gal/bbl
310 lb/bbi
·
1 gal/bbl
1 Aeron
0.35% BWOC
U.3376 BVVCC

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6% BWOC	
0.8% BWOC	
	_
0.2% BWOC	
	_
0.2% BWOC	
0.3% BWOC	
0.2% BWOC	
0.35% BWOC	
0.25% BWOC	
0,2% BWOC	_
0.2% BWOC	
proprietary	
proprietary	_
7727-43-7	
proprietary	_
proprietary	_
56-81-5	
111-42-2	

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Marcellus Well Drilling Procedures And Site Safety Plan

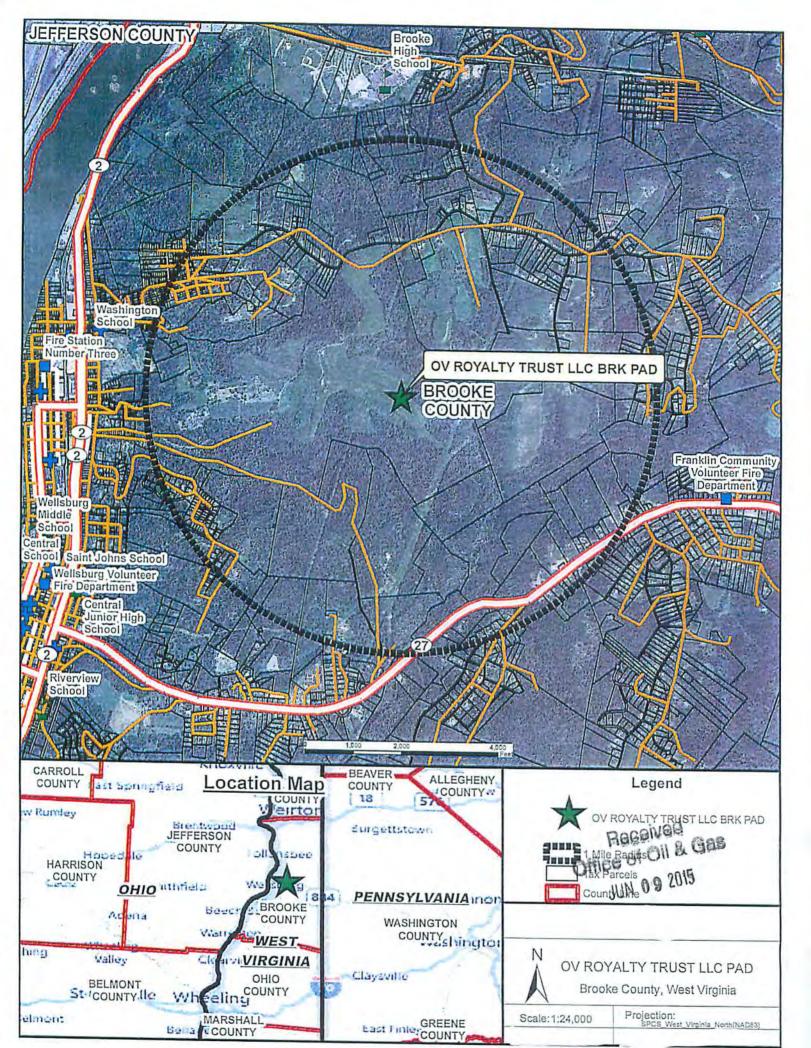
SWN Production Co., LLC

47 - 051 -Well name: OV Royalty Trust BRK 201H

Stuebenville East, Quad Cross Creek, District Brooke County, West Virginia

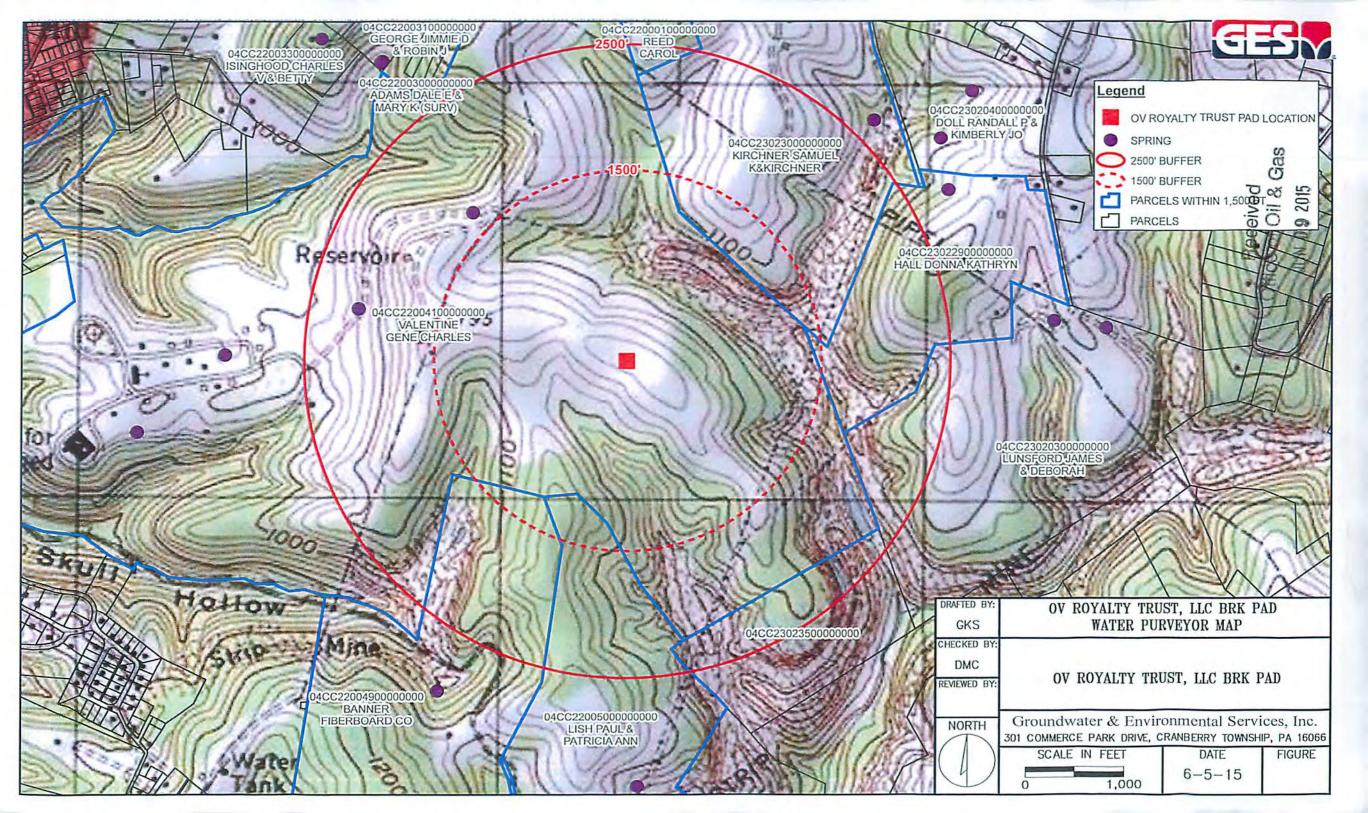
Submitted by: Danielle Southall	5/29/2015 Date:
Title Regulatory Supervisor	SWN Production Co., LLC
Approved by: Title: Oil & Gas Inspector	Date: 4 /3 /15
Approved by: Title: SWN Production Co., LLC – Confidential	Date:

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X:\GIS\Field Offices\Towanda\Mans\West Virginia\OV Royalty Pad Site mxd





REFERENCES TO PROPOSED HORIZON

ELLS SURFACE LOCAT

NTS

₩ ₩ 009-70353 609-80254



320 O'Bryan Lane • Van Buren, AR 72956 Office: 479,474.7916 • Fax: 479,474.2450 Surveying . handa-inc.com

LINE	DESCRIPTION	DISTANCE	DESCRIPTION	MONUMENT
LI	N 53"39"28" W	3218.72	SHL TO LANDMARK	FOUND IRON PIN
1.2	N 36'16'24" W	4023.51	SHL TO LANDMARK	FOUND IRON PIN
13	S 82'48'23" W	1823.91	SHL TO TPL	
1.4	N 20,18,03, M	7568,99"	TPL TO BHL	The state of the s
1.5	S 73"12"42" W	24.31"	SHL TO REF. PNT.	OV ROYALTY TRUST LLC BRK 3H WELL HEAD DO9-DD094
1.6	S 01'12'43" W	23.01	SHL TO REF. PNT.	OV ROYALTY TRUST LLC BRK 6H WELL HEAD 009-00138
L7	N 65'32'39" W	1914,66	SHL TO WATER WELL	
LB	N 78'31'28" W	2198.74	SHL TO SPRING	

NOTES ON SURVEY

1. COORDINATES SYSTEM IS UTM, NAO 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.

2. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY

CLIENT AND FIELD LOCATIONS.

THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN

NO DWELLINGS AND BUILDINGS WITHIN 525 FEET OF PROPOSED OF CENTER OF

PAD.

NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL

NO PERENNAL STREAMS, LAKES, PONGS, RESERVOIRS OR WETLANDS WITHIN 1000
FEET OF THE LIMITS OF DISTURBANCE.

NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE. BOTTOM REFERENCES OV ROYALTY TRUST LLC **BRK 201H** SI 15 0 Til 19 WW-6A1 LEGEND
(S) SURFACE OWNER
(R) ROYALTY OWNER
(TMP) TAX MAP PARCEL
NUMBER NTS LEASE NUMBER 10 94

TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES	LEASE NUMBER
2	CHARLES R BOOGS (S/R)	4-C22G-57		47-000692-000
3	CHARLES V ISINGHOOD & BETTY ISINGHOOD (S/R)	4-0022-32	13.00	47-000551-000
4	JOHN ISINGHOOD (S/R)	4-C22G-83	5.00	47-000445-000
5	CHARLES V ISINGHOOD & BETTY ISINGHOOD (S/R)	4-0022-33	5.74	47-000551-000
6	HETTY HANLON (S/R)	4-C22C-128	4.32	47-000313-000
2	CAROLYN FREEMAN (S/R)	4-CC22-40	5.83	47-000895-000
8	JOHN ISINGHOOD (S/R)	4-C22C-160	1.50	47-000446-000
9	LISA M DELANY & SHAWN A DELANY (S) DANIEL R VIRTUE & DIANE L VIRTUE (S) EARL PRICE (R) LINCIA ROSSER (R)	4-C22C-163	0.30	1-120107-002
10	LISA M DELANY & SHAWN A DELANEY (S) LINDA ROSSER (R)	4-C22C-163.01	2.72	1-120107-001
11	MYRILE COX NURMI & DTHERS (S) ARETTA MINA ULRICH KEADLE (R) CHARLES MELYIN ULRICH (R) DAVID NUBMI (R) MARES M SIMPSON II (R) M L BUCHANAN UR (R) PRISCILLA GAY BUCHGANAN (R) CHRISTINE ISABEL HARNEY (R) CHARLES M NURMI (R) HEATHER MARIE RUSCHMAN (R)	4-CC18-39	68.18	47-000780-001 1-329412-001 47-000780-005 47-000780-002 47-000780-003 47-000780-003 47-000780-006 47-000780-008
12	THOMAS M BOYD, RICHARD A BOYD, & DAVID S BOYD TRUSTEES IN TRUST (5) THOMAS J BOYD FAMILY TRUST (R)	4-CC18-58	27.38	47-001459-000
13	THOMAS M BOYD, RICHARD A BOYD, & DAVID S BOYD TRUSTEES IN TRUST (S) THOMAS J BOYD FAMILY TRUST (R)	4-CC18-62	59.82	47-001458-000

SWN PRODUCTION COMPANY, LLC OV ROYALTY TRUST

LLC BRK 201H"

SURFACE HOLE

ELEV: 1181.1'

SURFACE HOLE LOCATION (SHL): GEOGRAPHIC (NAD83): LATITUDE: 40.285749' LONGITUDE: -80.584320' UTM (NAD83, ZONE 17, FEET): NORTHING: 14,631,060.720 EASTING: 1,756,341.720 "TURNING POINT" LOCATION (TPL): TURNING POINT ECOATION (GEOGRAPHIC (NAD83): LATITUDE: 40.285145' LONGITUDE: -80.590812' UTM (NAD83, ZONE 17, FEET): NORTHING: 14,630,832,337 EASTING: 1,754,532,238 UTM (NAD83, ZONE 17, METERS): NORTHING: 4,459,486.615 EASTING: 534,782.496 BOTTOM HOLE LOCATION (BHL):

GEOGRAPHIC (NADB3): LATITUDE: 40.304668* LONGITUDE: -80.600120* UTM (NADB3, ZONE 17, FEET): NORTHING: 14,637,930.133 EASTING: 1,751,904.208 UTM (NAD83, ZONE 17, N NORTHING: 4,461,650.028 EASTING: 533,981.471

ORRELL R. BO SURVEYED BY TRIPLE H ENTERPRISES, WEST UNION, WV. No. 867 STATE OF VIRGINI PONONAL SUR

1)
HE TRUST OF GENE
VALENTINE (S/R)
1-324547-000 (L)
C22-41 (TMP)
494.38 ACRES

NTS 2000 GRAPHIC SCALE IN COMPANY SWN

I, THE UNDERSIGNED, HEREBY CERTIFY
THAT THIS PLAT IS CORRECT TO THE BEST OF
MY KNOWLEDGE AND BELIEF AND SHOWS ALL
THE INFORMATION REQUIRED BY LAW AND
REGULATIONS ISSUED AND PRESCRIBED BY THE
DEPARTMENT OF ENVIRONMENTAL PROTECTION. P.S. 667

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

WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034

OIL & GAS ROYALTY OWNER: THE TRUST OF GENE VALENTINE

DEGREE OF ACCURACY:

1/200 PROVEN

PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT) Production Company, LLC Production Company™ OV ROYALTY TRUST LLC BRK

201H OPERATOR'S WELL #:

47 09 00163 API WELL #: STATE COUNTY PERMIT

ELEVATION: 1181.1'

WELL TYPE: OIL WASTE DISPOSAL

DEEP

GAS X

LIQUID INJECTION

STORAGE

QUADRANGLE: STUEBENVILLE EAST WV.

SHALLOW X

2000

FEET

WATERSHED: BUFFALO CREEK DISTRICT: CROSS CREEK

COUNTY: BROOKE SURFACE OWNER: THE TRUST OF GENE VALENTINE

PRODUCTION

ACREAGE: ±494.38 ACREAGE: ±494.38

DRILLX CONVERT

PLUG & ABANDON

CLEAN OUT & REPLUG

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

TARGET FORMATION: MARCELLUS

OTHER CHANGE (SPECIFY)

ESTIMATED DEPTH: 5,768' TVD 14,595 TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC ADDRESS: P.O. BOX 1300

STATE: WV ZIP CODE: 26378 DESIGNATED AGENT: DEE SOUTHALL

ADDRESS: P.O. BOX 1300

CITY: JANE LEW STATE: WV ZIP CODE: 26378 REVISIONS:

CITY: JANE LEW LEGEND:

PROPOSED SURFACE HOLE / BOTTOM HOLE 0

EXISTING / PRODUCING WELLHEAD ABANDONED WELL

8 PLUGGED & ABANDONED WELL CUT CONDUCTOR

= = LEASE BOUNDARY 500' DHP BUFFER MARCELLUS DHP ABANDONED PATH

DATE: 05-06-2015 DRAWN BY: S. HUTSON SCALE: 1" = 2000' DRAWING NO: 58531 WELL LOCATION PLAT

Exhibit "A"

Attached hereto and made part of the State of West Virginia Oil and Gas Permit Form WW-6A1 by, SWN Production Company L.L.C. Operator

OV Royalty Trust L.L.C. 201H

Brooke County, West Virginia

Tract #	Tax Parcel	Lease Number	Lessor	Lessee	Royalty	BK/PG
	10	TOTAL STREET	Gene Charles Valentine Trust dated November 26,			
1)	4-CC22-41	1-324547-000	1986	Great Lakes Energy Partners L.L.C.	14.00%	10/121
			Great Lakes Energy Partners L.L.C.	Range Resources - Appalachia L.L.C.		20/733
			Range Resources - Appalachia L.L.C.	Chesapeake Appalachia L.L.C		10/552
			Chesapeake Appalachia L.L.C.	SWN Production Company L.L.C.		30/480
2)	4-C22G-57	47-000692-000	Charles R. Boggs	Chesapeake Appalachia, L.L.C.	18.00%	16/637
			Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.		30/480
3)	4-CC22-32	47-000551-000	Charles V Isinghood and Betty Isinghood	Chesapeake Appalachia, L.L.C.	18.00%	14/545
			Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.		30/480
1)	4-C22G-83	47-000446-000	John Isinghood	Chesapeake Appalachia, L.L.C.	18.00%	14/323
			Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.		30/480
5)	4-CC22-33	47-000551-000	Charles V. Isinghood and Betty Isinghood	Chesapeake Appalachia, L.L.C.	18.00%	14/545
			Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.		30/480
5)	4-C22C-128	47-000313-000	Betty Hanlon	Chesapeake Appalachia, L.L.C.	18.00%	14/340
			Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.		30/480
7)	4-CC22-40	47-000895-000	Carolyn Freeman	Chesapeake Appalachia, L.L.C.	12.50%	18/447
			Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.		30/480
3)	4-C22C-160	47-000446-000	John Isinghood	Chesapeake Appalachia L.L.C	18.00%	14/323
			Chesapeake Appalachia L.L.C.	SWN Production Company L.L.C.		30/480
9)	4-C22C-163	1-120107-002	Earl Price	SWN Production Company L.L.C.	18.00%	30/735
		1-120107-001	Linda Rosser	SWN Production Company, L.L.C.	18.00%	30/740
10)	4-C22C-163.01	1-120107-001	Linda Rosser	SWN Production Company L.L.C.	18.00%	30/740
11)	4-CC18-39	47-000780-001	Aretta Mina Ulrich Keadle	Cheaspeake Appalachia, L.L.C.	18.00%	17/125
	0		Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.		30/480
	JUN JUN	1-329412-001	Charles Melvin Ulrich	Chesapeake Appalachia, L.L.C.	14.00%	11/516
	20	000780-005	Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.		30/480
	7 0	&-000780-005	David Nurmi	Cheaspeake Appalachia, L.L.C.	18.00%	18/33
	JUN 09 2015	No	Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.	-	30/480
	23	47900780-002	James M. Simpson II	Chesapeake Appalachia, U.L.C.	18.00%	17/163
	5	0	Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.		30/480

Exhibit "A"

Attached hereto and made part of the State of West Virginia Oil and Gas Permit Form WW-6A1 by, SWN Production Company L.L.C. Operator

OV Royalty Trust L.L.C. 201H

Brooke County, West Virginia

Tract #	Tax Parcel	Lease Number Lessor	Lessee	Royalty	BK/PG
		47-000780-004 M L Buchanan, Jr.	Chesapeake Appalachia, L.L.C.	18.00%	18/732
		Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.		30/480
11)	4-CC18-39	47-000780-003 Priscilla Gay Buchanan	Chesapeake Appalachia, L.L.C.	18.00%	17/565
cont'd		Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.		30/480
		47-000780-007 Christine Isabel Harvey	Chesapeake Appalachia, L.L.C.	18.00%	21/735
		Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.		30/480
		47-000780-006 Charles M. Nurmi	Chesapeake Appalachia, L.L.C.	18.00%	21/731
		Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.		30/480
		47-000780-008 Heather Marie Ruschman	Chesapeake Appalachia, L.L.C.	18.00%	22/440
		Chesapeake Appalachia L.L.C.	SWN Production Company, L.L.C.		30/480
12)	CC18-58.00	47-001459-000 Thomas J. Boyd Trust	Chesapeake Appalachia L.L.C.	18.00%	12/187
		Chesapeake Appalachia L.L.C.	SWN Production Company L.L.C.		30/480
13)	4-CC18-62	47-001458-000 Thomas J. Boyd Family Trust	Chesapeake Appalachia L.L.C.	18.00%	21/193
		Chesapeake Appalachia L.L.C.	SWN Prodcution Company L.L.C.		30/480

Received Gas Office of Oil & Gas

4700900163



Jane Lew, WV 26378 PHONE: (832) 796-1610

May 27, 2015

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

RE: SWN's proposed OV Royalty Trust BRK 1H and the OV Royalty Trust BRK 201H in Ohio County, West Virginia, Drilling under Rabbit Hill Road and Brinker Road.

Dear Ms. Adkins:

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

Thank you.

Sincerely,

Tanner Quiring

Sr. Landman

SWN Production Company, LLC

PO Box 1300

Jane Lew, WV 26378

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

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

Date of Notic	ce Certification:	API No. 47-	69 -	
Series and administration	or aniemon.			toyalty Trust BRK 201H
		Well Pad Na		
Notice has b				
		22-6A, the Operator has provided the requ	ired parties v	with the Notice Forms listed
	tract of land as follows:			
State:	wv	IITM NAD 03	535334.027	
County:	009-Brooke	Northing:	4459556.227	
District:	1-Buffalo		Brinker Road	
Quadrangle:	247-Bethany		Linda Greathouse	9
Watershed:	Upper Ohio South	47000		
of giving the requirements Virginia Code	surface owner notice of entry to su of subsection (b), section sixteen o	ction sixteen of this article; (ii) that the requirvey pursuant to subsection (a), section tend this article were waived in writing by the ender proof of and certify to the secretary that.	n of this article ow	cle six-a; or (iii) the notice wner; and Pursuant to West
that the Ope	West Virginia Code § 22-6A, the Oprator has properly served the require CCK ALL THAT APPLY	erator has attached proof to this Notice Cer d parties with the following:	tification	OOG OFFICE USE ONLY
☐ 1. NOT	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRED BECAUS SEISMIC ACTIVITY WAS CONDUCTED		☐ RECEIVED/ NOT REQUIRED
☐ 2. NOT	TICE OF ENTRY FOR PLAT SURV	EY or NO PLAT SURVEY WAS CON	NDUCTED	☐ RECEIVED
■ 3. NOT	FICE OF INTENT TO DRILL or	☐ NOTICE NOT REQUIRED BECAUS NOTICE OF ENTRY FOR PLAT SURVE WAS CONDUCTED or	23.0	☐ RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER BY SURFACE (PLEASE ATTACH)	E OWNER	
■ 4. NOT	TICE OF PLANNED OPERATION			☐ RECEIVED
■ 5. PUB	LIC NOTICE			☐ RECEIVED
■ 6. NOT	TICE 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.

Certification of Notice is hereby given:

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

Well Operator: SWN Production Co., LLC By:

Dee Southall

Its: Regulatory Supervisor Telephone:

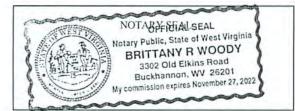
304-884-1610

Address: P.O. Box 1300

Jane Lew, WV 26378

Pacsimile: 304-471-2497

Dee Southall@swn.com



Subscribed and sworn before me this

My Commission Hxpires

Email:

Oil and Gas Privacy Notice:

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

4700900163

Received
Office of Oil & Gas
JUN 09 2015

WW-6A (9-13)

API NO. 47- 09

OPERATOR WELL NO. OV Royalty Trust BRK 201H

Well Pad Name: OV Royalty Trust 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 th	an the filing date of permit application.
Date of Notice: ON Date Permit Application Filed:	0/8/17
Notice of:	131
✓ PERMIT FOR ANY ☐ CERTIFICATE OF AP	PROVAL FOR THE
WELL WORK CONSTRUCTION OF	AN IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Code § 22-6A-1	0(b)
☐ PERSONAL ☐ REGISTERED ☐ METH	OD OF DELIVERY THAT REQUIRES A
	IPT OR SIGNATURE CONFIRMATION
the surface of the tract on which the well is or is proposed to be loc oil and gas leasehold being developed by the proposed well work, it described in the erosion and sediment control plan submitted pursu operator or lessee, in the event the tract of land on which the well p more coal seams; (4) The owners of record of the surface tract or tr well work, if the surface tract is to be used for the placement, const impoundment or pit as described in section nine of this article; (5) have a water well, spring or water supply source located within one provide water for consumption by humans or domestic animals; an proposed well work activity is to take place. (c)(1) If more than three subsection (b) of this section hold interests in the lands, the applica- records of the sheriff required to be maintained pursuant to section provision of this article to the contrary, notice to a lien holder is no	nt may serve the documents required upon the person described in the eight, article one, chapter eleven-a of this code. (2) Notwithstanding any t notice to a landowner, unless the lien holder is the landowner. W. Va. provide the Well Site Safety Plan ("WSSP") to the surface owner and any
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Notice	
SURFACE OWNER(s)	COAL OWNER OR LESSEE
Name: The Trust of Gene Valentine	Name: Windsor Coal Company
Address: PO Box 31	Address: 1000 Consol Energy Drive
Wellsburg, WV 26070	Canonsburg, PA 26059
Name:	COAL OPERATOR
Address:	Name;
	Address:
SURFACE OWNER(s) (Road and/or Other Disturbance)	
	SURFACE OWNER OF WATER WELL
TO TO THE PERSON OF THE PERSON	AND/OR WATER PURVEYOR(s)
Address:	Name: The Trust of Gene Valentine
N	
Name:	Address: PO Box 31 Vellsburg, WV 26070
Address:	
- CLIRE A CE OWNIER (-) (I I PE)	OPERATOR OF ANY NATURAL GAS STORAGE FIELD Name:
SURFACE OWNER(s) (Impoundments or Pits)	Name: Cil & Gas
Name:	Name: Receive Gas Address: Office of Oil & Gas
Address:	*Please attach additional forms if necessary IIIN 09 2015
	*Please attach additional forms if necessary IIIN U 9

API NO. 47-09

OPERATOR WELL NO. OV Royalty Trust BRK 201H
Well Pad Name: OV Royalty Trust 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 type.

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

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

Well Location Restrictions

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

WW-6A (8-13)

API NO. 47-09 OPERATOR WELL NO. OV ROYEDY TITULI BRK 201H Well Pad Name: OV Royalty Trust 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 the hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil of 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 preponderance of the evidence one of the following defenses: 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 parties 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

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. 47-09

OPERATOR WELL NO. DV Royalty Trust BRK 201H

Well Pad Name: OV Royalty Trust PAD

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

Office of Oil & Gas

API NO. 47-09

OPERATOR WELL NO. DV Royalty Trust BRK 201H

Well Pad Name: OV Royalty Trust PAD

Notice is hereby given by:

Well Operator: SWN Production Co., LLC

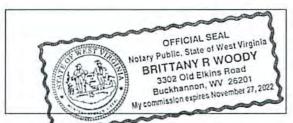
Telephone: 304-884-1610 Email: Dee_Southall@swn.com Address: P.O. Box 1300

Jane Lew, WV 26378

Facsimile: 304-471-2497

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.



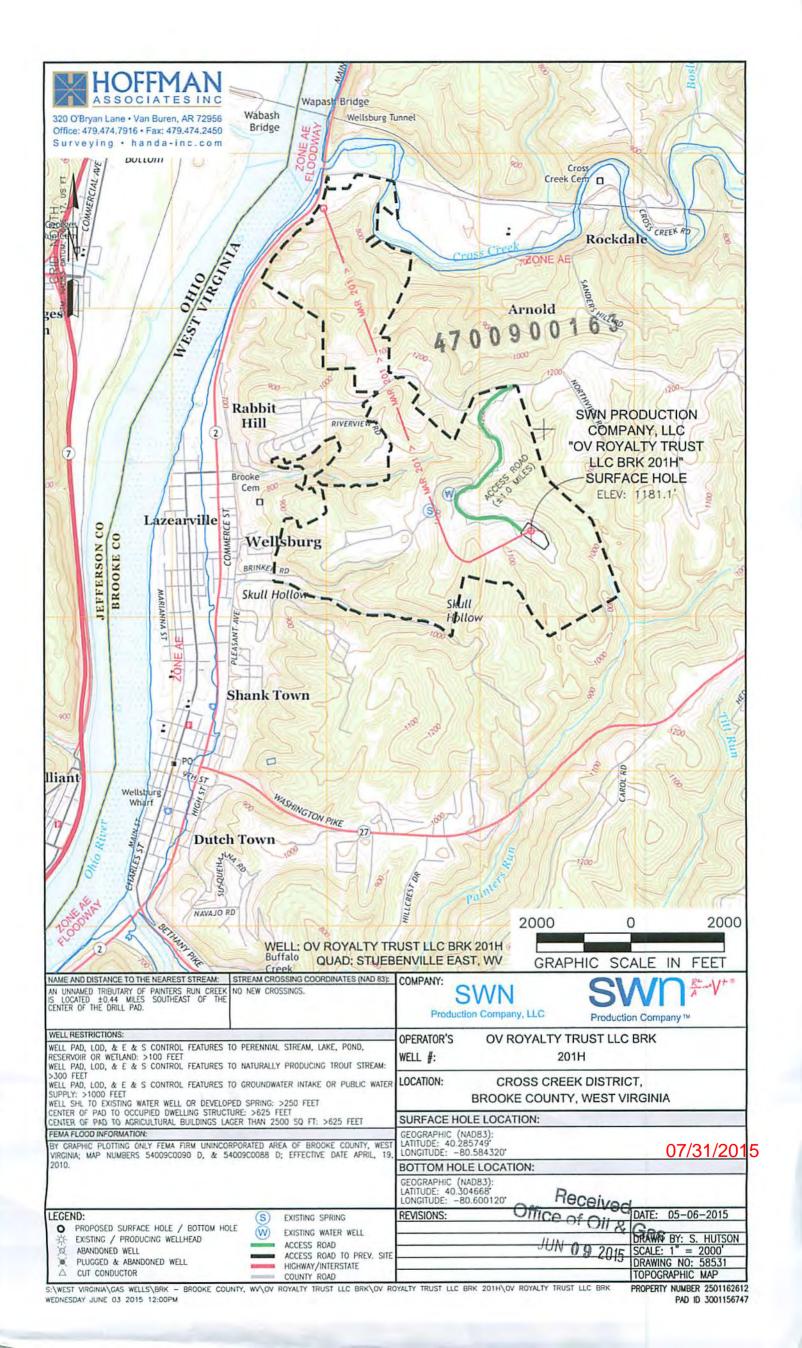
Subscribed and sworn before me this and day of June 2015.

Notary Public

My Commission Expires

4700900163

Received
Office of Oil & Gas
JUN 0 9 2015



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

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

Notice Time Date of Notic		Notice shall be p		st TEN (10) days prior to Application Filed:	filing a	permit a	application		
Delivery met	hod pursuant t	o West Virgini	a Code § 22-6.	A-16(b)					
☐ HAND DELIVE		CERTIFIED M RETURN REC		STED 47	70(090	01	6 7	
receipt request drilling a hore of this subsect subsection mand if availab	sted or hand delizontal well: Protion as of the day be waived in le, facsimile nur	very, give the si- povided, That note the notice was writing by the sinber and electron	urface owner notice given pursus provided to turface owner.	otice of its intent to enter suant to subsection (a), se he surface owner: <i>Provia</i> The notice, if required, sh ss of the operator and the	upon the ection te ded, how hall incl	, an oper he surface on of this wever, The lude the	ator shall, be owner's a article sath that the notiname, addr	land for the put tisfies the requirement ress, telephone	rpose of irements ts of this
	reby provided at of Gene Valentine	to the SUKF	ACE OWNE	Name:					
Address: PO			V	Address:					
Weilsburg, WV 2			_	Tiddress.					
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Notice is he Pursuant to V the surface ov State: County: District: Quadrangle:	reby given: Vest Virginia Co			ntal well on the tract of lan	nd as for ing: thing:	535334.0 4459556. Rabbit Hi	27 227	an intent to en	ter upon
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Oil and Gas Privacy Notice:

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WW-6A5 (1/12)

Operator Well No. OVRENSBY TRUST LLG ERROCH

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

Date of Notice	Requirement: notice shall be proce: 05/29/2015 Date Po	ovided no later than the filing dermit Application Filed:	ate of permit application.
Delivery me	thod pursuant to West Virginia	Code § 22-6A-16(c)	
CERTI	FIED MAIL	☐ HAND	
	RN RECEIPT REQUESTED	DELIVERY	
return receipt the planned of required to be drilling of a damages to th (d) The notice of notice. Notice is her	requested or hand delivery, give operation. The notice required by provided by subsection (b), section horizontal well; and (3) A propose surface affected by oil and gas described by this section shall be be provided to the SURFACE	the surface owner whose land by this subsection shall include ion ten of this article to a surface sed surface use and compensa operations to the extent the dan e given to the surface owner at OWNER(s)	e permit application, an operator shall, by certified mail will be used for the drilling of a horizontal well notice of e: (1) A copy of this code section; (2) The information be owner whose land will be used in conjunction with the tion agreement containing an offer of compensation for mages are compensable under article six-b of this chapter, the address listed in the records of the sheriff at the time
		ff at the time of notice):	
	s listed in the records of the sherif		
Name: The Trus	t of Gene Valentine	Name:	1 =
Name: The Trus Address: POE Wellsburg, WV 28	t of Gene Valentine (see 31) 1070 eby given:	Name: Address:	4700900163
Name: The Trus Address: POE Wellsburg, WV 26 Notice is her Pursuant to W operation on State: County: District: Quadrangle:	eby given: /est Virginia Code § 22-6A-16(c), the surface owner's land for the p West Virginia Brooke Cross Creek Steubenville East	Name:Address:, notice is hereby given that the	undersigned well operator has developed a planned well on the tract of land as follows: Easting: 535334.027 Northing: 4459556.227 CCESS: Rabbit Hill Road
Name: The Trus Address: POE Wellsburg, WV 26 Notice is her Pursuant to W operation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to W to be provide horizontal we surface affect information r	eby given: Vest Virginia Code § 22-6A-16(c), the surface owner's land for the p West Virginia Brooke Cross Creek Steubenville East Upper Ohio South Shall Include: Vest Virginia Code § 22-6A-16(c) and by W. Va. Code § 22-6A-10(l). Il; and (3) A proposed surface used by oil and gas operations to the lated to horizontal drilling may located at 601 57th Street, SE,	Name: Address: Address: , notice is hereby given that the purpose of drilling a horizontal UTM NAD 83 Public Road A Generally used this notice shall include: (1) A b) to a surface owner whose e and compensation agreement the extent the damages are combe obtained from the Secretar	undersigned well operator has developed a planned well on the tract of land as follows: Easting: 535334.027 Northing: 4459556.227 CCCSS: Rabbit Hill Road
Name: The Trus Address: POE Wellsburg, WV 26 Notice is her Pursuant to W operation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to W to be provide morizontal we surface affect information r headquarters, gas/pages/def	eby given: /est Virginia Code § 22-6A-16(c), the surface owner's land for the p West Virginia Brooke Cross Creek Steubenville East Upper Ohio South Chall Include: //est Virginia Code § 22-6A-16(c) ed by W. Va. Code § 22-6A-10(l) edl; and (3) A proposed surface used by oil and gas operations to the elated to horizontal drilling may located at 601 57th Street, SE, eault.aspx.	Name: Address: Address: , notice is hereby given that the purpose of drilling a horizontal UTM NAD 83 Public Road A Generally used this notice shall include: (1)A b) to a surface owner whose e and compensation agreement the extent the damages are combe obtained from the Secretar Charleston, WV 25304 (3)	well on the tract of land as follows: Easting: 535334.027 Northing: 4459556.227 CCCCSS: Rabbit Hill Road OV Royalty Trust, LLC a copy of this code section; (2) The information required land will be used in conjunction with the drilling of a containing an offer of compensation for damages to the appensable under article six-b of this chapter. Additional ry, at the WV Department of Environmental Protection
Name: The Trus Address: POE Wellsburg, WV 26 Wellsburg, WV 26 Notice is her Pursuant to W operation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to W to be provide norizontal we surface affect information r neadquarters,	eby given: /est Virginia Code § 22-6A-16(c), the surface owner's land for the p West Virginia Brooke Cross Creek Steubenville East Upper Ohio South Chall Include: //est Virginia Code § 22-6A-16(c) ed by W. Va. Code § 22-6A-10(l) edl; and (3) A proposed surface used by oil and gas operations to the elated to horizontal drilling may located at 601 57th Street, SE, eault.aspx.	Name: Address: Address: , notice is hereby given that the purpose of drilling a horizontal UTM NAD 83 Public Road A Generally used), this notice shall include: (1)A b) to a surface owner whose e and compensation agreement the extent the damages are combe obtained from the Secretar Charleston, WV 25304 (3) my, LLG Address:	well on the tract of land as follows: Easting: 535334.027 Northing: 4459556.227 Recess: Rabbit Hill Road OV Royalty Trust, LLC A copy of this code section; (2) The information required land will be used in conjunction with the drilling of a containing an offer of compensation for damages to the inpensable under article six-b of this chapter. Additional ry, at the WV Department of Environmental Protection 04-926-0450) or by visiting www.dep.wv.gov/oil-and-

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

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

June 1, 2015

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

4700900163

Subject: DOH Permit for the OV Royalty Trust LLC Pad, Brooke County OV Royalty Trust LLC BRK 201H

Dear Mr. Martin,

The West Virginia Division of Highways has transferred Permit #06-2011-0113 for the subject site to Southwestern Energy for access to the State Road for the well site located off of Brooke County Route 18 SLS.

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

Very Truly Yours,

Gary K. Clayton, P.E. Regional Maintenance Engineer

Central Office Oil &Gas Coordinator

Cc: Brittany Woody

Southwestern Energy CH, OM, D-6

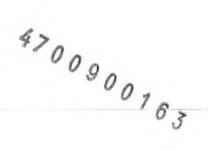
File

Supplier Name	Product Name	Product Use	Chemical Name	CAS Number
			Ethanol	000064-17-5
NALCO	EC6110A	Biocide	Glutaraldehyde (Pentanediol)	000111-30-8
ONESOURCE			Quaternary Ammonium Compounds	N/A-063
	EC6629A	Biocide	No Hazardous Components	NONE
	WBK-133 OXIDIZER	Breaker	Ammonium Persulfate	007727-54-0
			Ammonium Persulfate	007727-54-0
	WBK-134	Breaker	Crystalline Silica (Quartz Sand, Silicon Dioxide)	014808-60-7
	100000000	01 01 1 111	Proprietary Non Hazardous Salt	N/A-229
	WCS-631LC	Clay Stabilizer	Water	007732-18-5
	WFR-55LA	Friction Reducer	No Hazardous Components	NONE
	WGA-15L	Gel	Petroleum Distillate Hydrotreated Light	064742-47-8
WEATHERFORD			Potassium Carbonate	000584-08-7
	WPB-584-L	Buffer	Potassium Hydroxide	001310-58-3
	WXL-101LE	Corsslinker	No Hazardous Components	NONE
	WXL-101LM	Crosslinker	Petroleum Distillate Hydrotreated Light	064742-47-8
			Water	007732-18-5
			Ethylene Glycol	000107-21-1
	WXL-105L	Crosslinker	Boric Acid	010043-35-3
			Ethanolamine	000141-43-5
	B244 Green-Cide 25G	Biocide	Glutaraldehyde	111-30-8
	L071 Temporary Clay Stabilizer	Clay Stabilizer	Cholinium Chloride	67-48-1
	Breaker J218		Diammonium Peroxidisulphate	7727-54-0
SCHLUMBERGER	EB-Clean* J475 Breaker	Breaker	Diammonium Peroxidisulphate	7727-54-0
	Friction Reducer B315	Friction Reducer	Distillates (petroleum), Hydrotreated light Aliphatic Alcohol Glycol Ether	64742-47-8 Proprietary
	Friction Reducer J609	Nouvoi	Ammonium Sulfate	7783-20-2

4700900163

Office of Oil & Gas

Supplier Name	Product Name	Product Use	Chemical Name	CAS Number
	Water Gelling Agent J580	Gel	Carbohydrate Polymer	Proprietary
	Scale Inhibitor B317	Scale Inhibitor	Trisodium ortho phosphate Ethane-1, 2-diol	7601-54-9 107-21-1
SCHLUMBERGER	Borate Crosslinker J532	0	Aliphatic polyol Sodium tetraborate decahydrate	Proprietary 1303 96-4
	Crosslinker J610	Crosslinker	Aliphatic polyol Potassium hydroxide	Proprietary 1310 58-3



Supplier Name	Product Name	Product Use	Chemical Name	CAS Number
BAKER HUGHES	ALPHA 1427	Biocide	Didecyl Dimethyl Ammonium Chloride	007173-51-1
			Ethanol	000064-17-5
			Glutaraldehyde (Pentanediol)	000111-30-8
			Quaternary Ammonium Compound	068424-85-1
			Water	007732-18-5
	BF-7L	Buffer	Potassium Carbonate	000584-08-7
	ClayCare	Clay Stabilizer	Choline Chloride	000067-48-1
			Water	007732-18-5
	Enzyme G-I	Breaker	No Hazardous Components	NONE
	ENZYME G-NE	Breaker	No Hazardous Components	NONE
	FRW-18	Friction Reducer	Petroleum Distillate Hydrotreated Light	064742-47-8
	GW-3LDF	Gel	Petroleum Distillate Blend	N/A-014
			Polysaccharide Blend	N/A-021
	SCALETROL 720	Scale Inhibitor	Diethyleny Glycol 9 0	000111-46-6
			Ethylene Glycol	000107-21-1
	XLW-32	Crosslinker	Boric Acid	010043-35-3
			Methanol (Methyl Alcohol)	000067-56-1
FRAC TECH SERVICES	APB01 (AMMONIUM PERSUFATE BREAKER)	Breaker	Ammonium Persulfate	007727-54-0
	B05 (LOW PH BUFFER)	Buffer	Acetic acid	000064-19-7
	BXL03 Borate XL Delayed High Temp	Crosslinker	No Hazardous Components	NONE
	FRW-200	Friction Reducer	No Hazardous Components	NONE
	HVG01 (TURQUOISE-1 BULK)	Gelling Agent	Invaloueated Light	064742-47-8
	KCLS-4	Clay Stabilizer	No Hazardous Components	NONE
	LTB-1	Breaker	Ammonium Persulfate	N/A