

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

Thursday, June 7, 2018 WELL WORK PERMIT Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC POST OFFICE BOX 12359

SPRING, TX 773914954

Re: Permit approval for DALLAS HALL OHI 5H 47-069-00273-00-00

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

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

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0450.

James A. Martin Chief

Operator's Well Number: Farm Name: U.S. WELL NUMBER: Horizontal 6A Date Issued: 6/7/2018

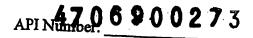
Promoting a healthy environment.

PERMIT CONDITIONS 47069.00273

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. <u>Failure to adhere to the specified permit</u> 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 (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 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.



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, sending an email to DEPOOGNotify@wv.gov.

API NO. 47-069

(04/15)			OP	ERATOR WEL	L NO. Datas Hall CHI SH
			W	ell Pad Name	Dallas Hall OHI Pad
DEPARTMENT OF EN	VIRONMENTA	WEST VIRGINI L PROTECTION ERMIT APPLIC	, OFFICE OF (DIL AND G	AS
1) Well Operator: SWN Produ	iction Co., LLC	494512924	069-Ohio	3-Liberty	247-Bethany
		Operator ID	County	District	Quadrangle
2) Operator's Well Number: Da	llas Hall OHI 5H	Weli P	ad Name: Dalla	as Hall OHI	Pad
3) Farm Name/Surface Owner:	Agnes L. Hall	Public Ro	ad Access: G	C & P Road	j
4) Elevation, current ground:	1275' E	levation, propose	i post-construct	ion: 1275'	
5) Well Type (a) Gas X	Oil		derground Stora		
Other					
(b)If Gas Sha	llow X	Deep			
Hor	izontal X		d	10	
6) Existing Pad: Yes or No Yes			_ (` <i>\</i> }		20.17
7) Proposed Target Formation(s) Target Formation- Marcellus, Target 1	, Depth(s), Antic	cipated Thickness et Base TVD- 6159, A	and Expected F	ressure(s): - 33', Associate	ed Pressure- 3981.9 psi
8) Proposed Total Vertical Dept	n: 6148'				
9) Formation at Total Vertical D		s			······································
10) Proposed Total Measured De					
11) Proposed Horizontal Leg Le	ngth: 8163'				
12) Approximate Fresh Water St	rata Depths:	410'			
13) Method to Determine Fresh	Water Depths:	water well			
14) Approximate Saltwater Dept	hs: <u>601' SWN s</u>	salinity profile			
15) Approximate Coal Seam Dep	oths: 446'				
16) Approximate Depth to Possi	ble Void (coal m	ine, karst, other):	Possible Void	446'.	
 Does Proposed well location directly overlying or adjacent to 	contain coal sea an active mine?	ms Yes	No	<u>x</u>	
(a) If Yes, provide Mine Info:	Name:				
	Depth:			**************************************	
	Seam:				
	Owner:				

WW-6B

(04/15)

Page 1 of 3

RECEIVED Office of Oil and Gas

JAN 3 0 2018

WV Department of Environmental Protection

06/08/2018

API NO. 47- 069 -

OPERATOR WELL NO. Dallas Hall OHI 5H Well Pad Name: Dallas Hall OHI Pad

WW-6B (04/15)

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	<u>New</u> <u>or</u> <u>Used</u>	Grade	<u>Weight per ft.</u> (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: <u>Fill-up</u> (Cu. Ft.)/CTS
Conductor	20"	New	H-40	94#	100'	100'	CTS
Fresh Water	13 3/8"	New	H-40	48#	520'	520'	496 sx/CTS
Coal	9 5/8"	New	J-55	36#	1920'	1920'	732 sx/CTS
Intermediate	7"	New	J-55	20#	If Needed	If Needed	If Needed/As Needed
Production	5 1/2"	New	HCP-110	20#	14,703'	14,703'	lead 798 sx Tail 2042 sx inside intermedia
Tubing	2 3/8"	New	HCP-110	4.7#	Approx. 6148'	Approx. 6148'	
Liners							

				CX	20 12	F19-17	
TYPE	<u>Size (in)</u>	<u>Wellbore</u> Diameter (in)	<u>Wall</u> <u>Thickness</u> <u>(in)</u>	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	<u>Cement</u> <u>Type</u>	<u>Cement</u> <u>Yield</u> (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	
Production	5 1/2"	8 3/4"	0.361	12360	9500	Class A	
Tubing	2 3/8"	4.778"	0.190			0.00071	
Liners							

RECEIVED Office of Oil and Gas

JAN 3 0 2018

PACKERS

WV Department of Environmental Protection

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

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 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): 22.60

22) Area to be disturbed for well pad only, less access road (acres): 8.54

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 ***

RECEIVED Office of Oil and Gas

JAN 3 0 2018

WV Department of Environmental Protection

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.



	Product Name	Product Use	Chemical Name	CAS Number
Surface	5001	accelerator	calcium chloride up to 3%	10043-52-4
Intermediate	5001	accelerator	calcium chloride	10043-52-4
+	D080	dispersant	sodium polynaphthalene sulfonate	9008-63-3
O M	D801	retarder	aromatic polymer derivative	propriatary
Kick Off Plug	D047	antifoam	polypropylene glycol	25322-69-4
	D167	fluid loss	aliphatic amide polymer	propriatary
	D154	extender	non-crystalline silica	7631-86-9
	D400	gas migration	boric acid	10043-35-3
			polypropylene glycol	25322-69-4
pe	D045	antifoam	fullers earth (attapulgite)	8031-18-3
Production-Lead			chrystalline silica	14808-60-7
tion	D201	retarder	metal oxide	propriatary
que	1000		sulphonated synthetic polymer	propriatary
Pro	D202	dispersant	formaldehyde (impurity)	propriatary
			polypropylene glycol	25322-69-4
	D046	antifoam	fullers earth (attapulgite)	8031-18-3
	D167	fluid loss	aliphatic amide polymer	propriatary
III			sodium polynaphthalene sulfonate	9008-63-3
1-6	D065	dispersant	sodium sulfate	7757-82-6
Production-Tall	and a second		chrystalline silica	14808-60-7
npo	D201	retarder	metal oxide	propriatary
L.	D153	anti-settling	chrystalline silica	14808-60-7

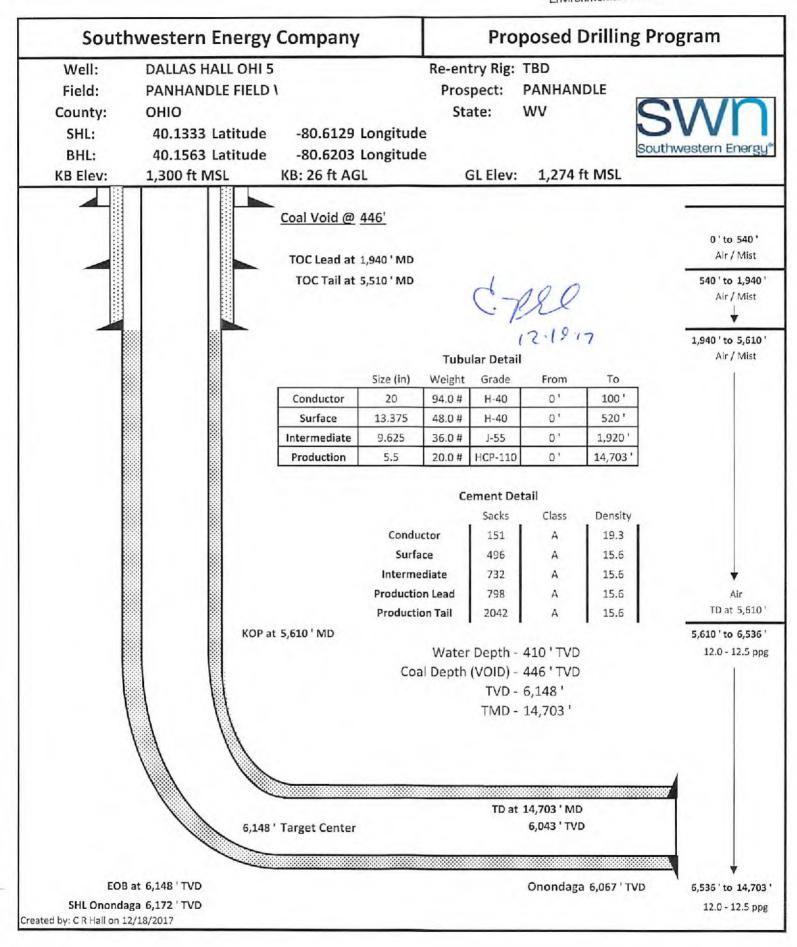
Schlumberger Cement Additives

06/08/2018

RECEIVED Office of Oil and Gas

JAN 3 0 2018

WV Department of Environmental Protection



06/08/2018



706900273 SWN Production Company, LLC 179 Innovation Drive Jane Lew, WV 26378 Tel: 304 884 1610 Fax: 304 471 2497 www.swn.com

December 14, 2017

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

RE: Proposed New Well Dallas Hall OHI 5H

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 Hall's property, in Liberty District, Ohio County, West Virginia.

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

Thank you Sincerely

Dee Southall Senior Regulatory Analyst Southwestern Energy Production Company, LLC

RECEIVED Office of Oil and Gas

JAN 3 0 2018

WV Department of Environmental Protection



WV	V-9
(4/1	6)

API Number 47 - 69 - 4706 900273

Operator's Well No. Dallas Hall OHI 5H

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 Ohio South	Quadrangle Bethany
Do you anticipate using more than 5,000 bbls of water to complete	ete the proposed well work? Yes 🖌 No
Will a pit be used? Yes No	
If so, please describe anticipated pit waste:	
Will a synthetic liner be used in the pit? Yes	No If so, what ml.?
Proposed Disposal Method For Treated Pit Wastes:	
Land Application	
	Number
Reuse (at API Number_at next anticipate Off Site Disposal (Supply form WW)	d well, API# will be included with the WR-34/DDMR &/or permit addendum.
	put in steel tanks and reused or taken to a permitted disposal facility
Will closed loop system be used? If so, describe: Yes	
Drilling medium anticipated for this well (vertical and horizonta	I)? Air, freshwater, oil based, etcAir drill to KOP, fluid and with SDBM from KOP to TD
-If oil based, what type? Synthetic, petroleum, etc. Syn	thetic Oil Base
Additives to be used in drilling medium? Attachment 3A	
Drill cuttings disposal method? Leave in pit, landfill, removed of	offsite, etclandfill
-If left in pit and plan to solidify what medium will be u	ised? (cement, lime, sawdust)
Arden Landtill 10072, Apex Sanitary Landtill Ub- Permittee shall provide written notice to the Office of Oil and G	1032, Short Creek SWF-1034,Carbon Limestone MSWL018781, Wetzel County 1021 U8438, Brooke Co SVVF-1013, Valley 100280 as of any load of drill cuttings or associated waste rejected at any within 24 hours of rejection and the permittee shall also disclose
on August 1, 2005, by the Office of Oil and Gas of the West Vir provisions of the permit are enforceable by law. Violations of law or regulation can lead to enforcement action. I certify under penalty of law that I have personally application form and all attachments thereto and that, based	Office of Oil and Gas
	JAN 3 0 2018
Company Official (Typed Name) Dee Southall Company Official Title Senior Regulatory Analyst	WV Department of
Company Official Title_Senior Regulatory Analysi	WV Department of Environmental Protection
Subscribed and sworn before me this Jand day of C Buttany & Woodly My commission expires What	OFFICIAL SEAL Notary Public, State of Wast Virginia BRITTANY R WOODY 3502 Old Elkins Road Buskhamnor, WV 26201 Wy commuscial say real Notary Public

Form	W	W.	.9

SWN Production Co., LLC

Lime <u>as determined by pH test min. 2</u> To Fertilizer type <u>10-20-20</u>	ons/acre or to correct to pH 8.54		
Fertilizer type 10-20-20			
Fertilizer amount 600	lbs/acre		
Mulch Hay/Straw 2.5	Tons/acre		
	Seed Mixtures		
Tempora	ry	Perma	nent
Seed Type	bs/acre	Seed Type	lbs/acre
Attachment 3B			

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by:	7 12.19.17	
Comments:		
		RECEIVED Office of Oil and Gas
		IAN 3 0 2018
		WV Department of Environmental Protection
_{Fitle:} Oil & Gas Inspector	Date: 12.19.17	
Field Reviewed? (Yes (() No	

06/08/2018

Attachment 3A

Drilling Mediums

Synthetic Oil Brine Barite Calcium Chloride Lime Organophilic Bentonite Primary and Secondary Emulsifiers Gilsonite Calcium Carbonate Friction Reducers

> RECEIVED Office of Oil and Gas

JAN 3 0 2018

WV Department of Environmental Protection M ~ SU 0 0 (3) 0 0 m.

1

WVD Seeding Southwestern Energy To Order Seed contact Lyndsi Eddy Flippo office 570-996-4271 cell 501-NON-ORGANIC PROPERTIES Seed Mixture: ROW Mix **SWN Supplied** Orchardgrass 40% Timothy 15% Annual Ryegrass 15% Brown Top Millet 5%

Medium Red Clover 5% All legumes are innoculated at 5x normal 5% rate Birdsfoot Trefoil 5% Rough Bluegrass 5% Apply @ 200lbs per acre Apply @ 100lbs per acre Oct. 15th- April 15th PLUS April 16th- Oct. 14th 50lbs per acre of Winter Wheat

5%

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:

Red Top

White Clover

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.

451 lyndsi_eddy@swn.com (please allow 7 to 10	days for deliv	ery)
ORGANIC PROPERTIES		ctio
Seed Mixture: SWN Production Organi	c Mix	Office of Oil and Office of Oi
Organic Timothy	50%	and Du S
Organic Red or White Clover	50%	HECEIVED Mice of Oil and JAN 3 0 1
OR		BOHO N. DEG
Organic Perennial Ryegrass	50%	JA UN
Organic Red or White Clover	50%	E u
Apply @ 100lbs per acre		Apply @ 200lbs per acre
April 16th- Oct. 14th		Oct. 15th- April 15th
Organic Fertilizer @ 200lbs per Acre WETLANDS (delineated as jurisdic	tional w	Pelletized Lime @ 2 Tons per Acre etlands)
	the state of the s	
WETLANDS (delineated as jurisdic	the state of the s	etlands)
WETLANDS (delineated as jurisdic Seed Mixture: Wetland Mix VA Wild Ryegrass Annual Ryegrass	SWN	etlands)
WETLANDS (delineated as jurisdic Seed Mixture: Wetland Mix VA Wild Ryegrass	SWN 20%	etlands)
WETLANDS (delineated as jurisdic Seed Mixture: Wetland Mix VA Wild Ryegrass Annual Ryegrass	SWN 20% 20%	etlands)
WETLANDS (delineated as jurisdic Seed Mixture: Wetland Mix VA Wild Ryegrass Annual Ryegrass Fowl Bluegrass	SWN 20% 20% 20%	etlands)
WETLANDS (delineated as jurisdic Seed Mixture: Wetland Mix VA Wild Ryegrass Annual Ryegrass Fowl Bluegrass Cosmos 'Sensation' Redtop Golden Tickseed	SWN 20% 20% 20% 10%	etlands)
WETLANDS (delineated as jurisdic Seed Mixture: Wetland Mix VA Wild Ryegrass Annual Ryegrass Fowl Bluegrass Cosmos 'Sensation' Redtop Golden Tickseed Maryland Senna	SWN 20% 20% 20% 10% 5%	etlands)
WETLANDS (delineated as jurisdic Seed Mixture: Wetland Mix VA Wild Ryegrass Annual Ryegrass Fowl Bluegrass Cosmos 'Sensation' Redtop Golden Tickseed Maryland Senna Showy Tickseed	SWN 20% 20% 10% 5% 5%	etlands)
WETLANDS (delineated as jurisdic Seed Mixture: Wetland Mix VA Wild Ryegrass Annual Ryegrass Fowl Bluegrass Cosmos 'Sensation' Redtop Golden Tickseed Maryland Senna Showy Tickseed Fox Sedge	SWN 20% 20% 10% 5% 5% 5%	etlands)
WETLANDS (delineated as jurisdic Seed Mixture: Wetland Mix VA Wild Ryegrass Annual Ryegrass Fowl Bluegrass Cosmos 'Sensation' Redtop Golden Tickseed Maryland Senna Showy Tickseed	SWN 20% 20% 10% 5% 5% 5% 5%	etlands)
WETLANDS (delineated as jurisdic Seed Mixture: Wetland Mix VA Wild Ryegrass Annual Ryegrass Fowl Bluegrass Cosmos 'Sensation' Redtop Golden Tickseed Maryland Senna Showy Tickseed Fox Sedge	SWN 20% 20% 10% 5% 5% 5% 5% 2.5%	etlands)

NO FERTILIZER OR LIME INSIDE WETLAND LIMITS

MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN

	SV		
	179 Innova	n Company, LLC ation Drive t Virginia 26378	
WELL NAI B Lit	ME: Da ethany perty D	XXX-XXXXX allas Hall OHI y QUAD DISTRICT WEST VIRGIN	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Submitted by: Dee Southall Senior Regulatory Title: Analyst	∑ Date: SWN P	_12/18/2017 Production Co., LLC	
Approved by:	_ Date:	12-19-17	
<u> </u>	<u>-</u>		
Approved by:			
	_ Date:		
Title:	-		RECEIVED Office of Oil and

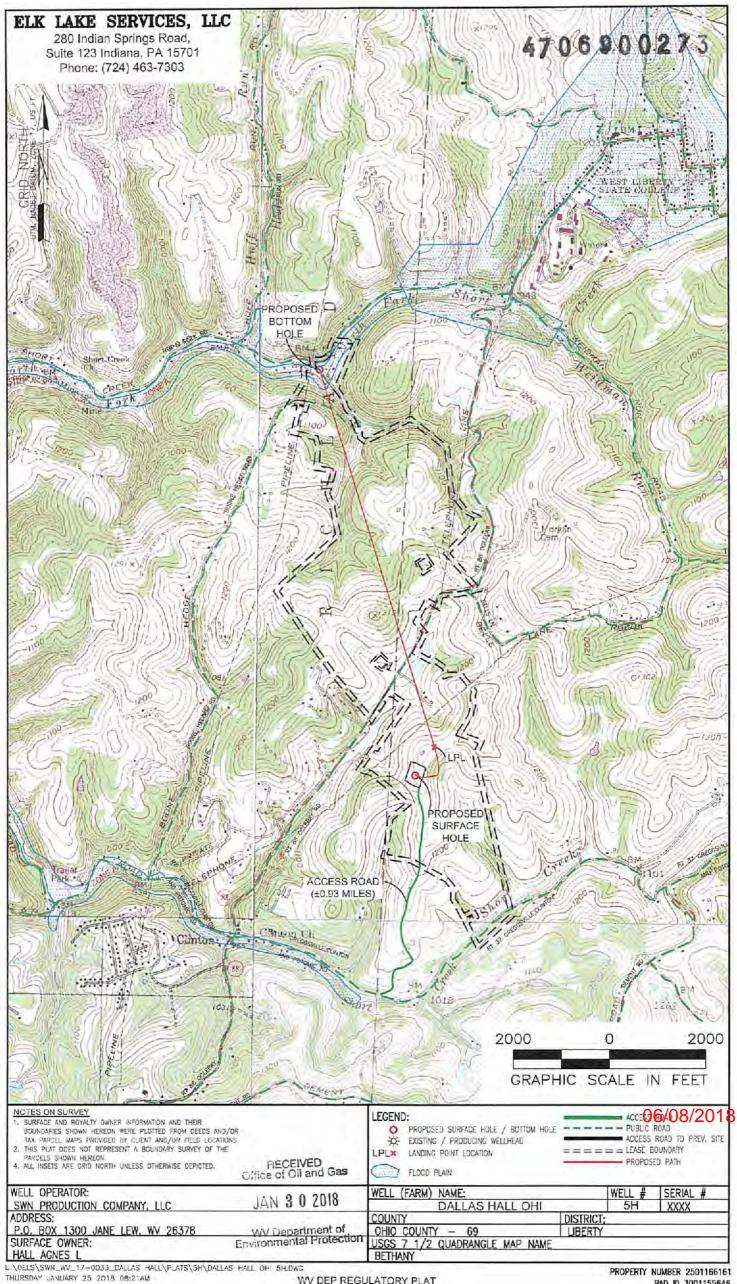
SWN PRODUCTION COMPANY, LLC - CONFIDENTIAL

385

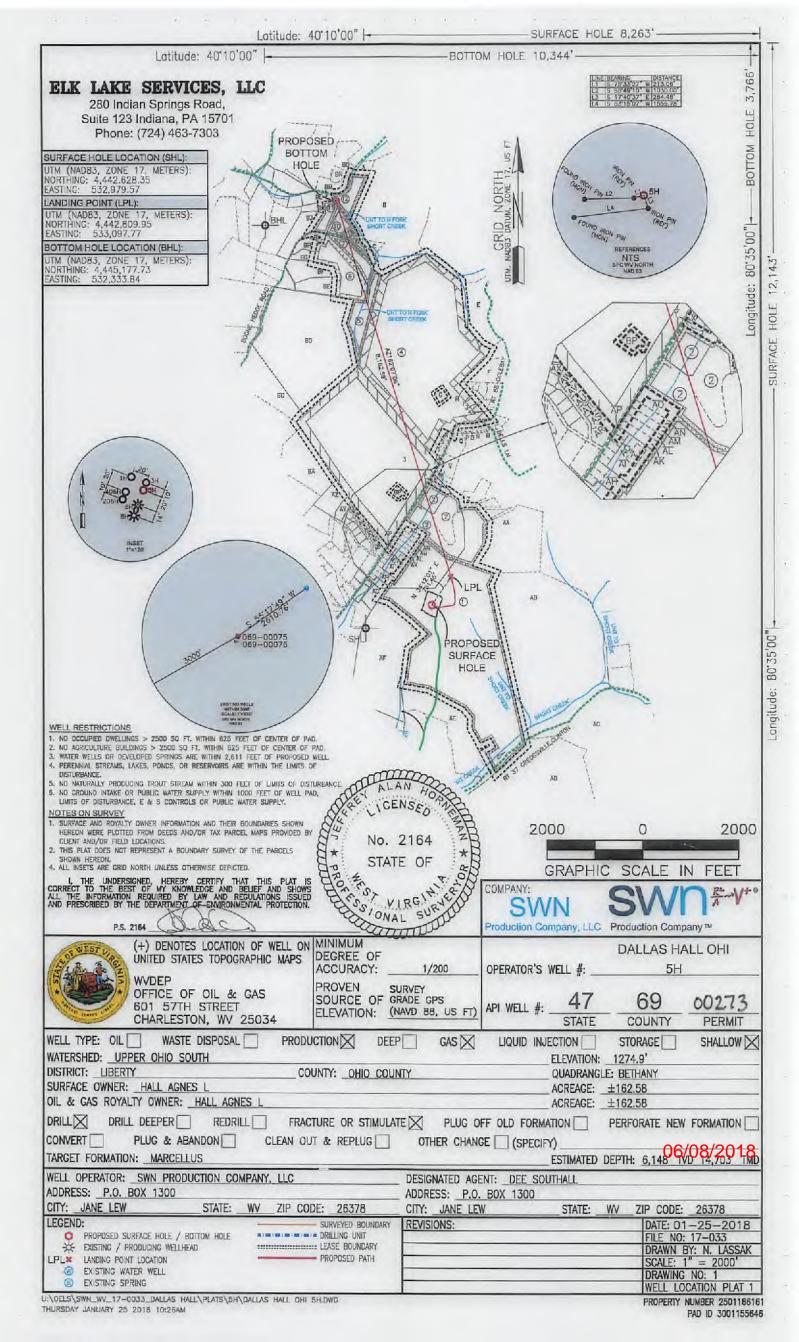
JAN 3 0 2018

WV Department of Environmental Protection

06/08/2018



PROPERTY NUMBER 2501166161 PAD ID 3001155646



ELK LAKE SERVICES, LLC

280 Indian Springs Road, Suite 123 Indiana, PA 15701 Phone: (724) 463-7303

TRACT	SURFACE OWNER / ROYALTY OWNER	TAX PARCEL	ACRES
1	AGNES L. HALL	3-L7-0019	162.58
TRACT	SURFACE OWNER	TAX PARCEL	ACRES
2	DAVID M. & BETH R. WEAVER	3-L4-15	35.74
3	LILLIAN W BROWN TRUST	3-L4-1-1	123.28
4	PAUL & DEBORAH MCKAY	3-L4-1	159.147
5	PAUL & DEBORAH MCKAY	4-R9-51	12.325
6	JOHN C. RATCLIFFE	4-R9-22-20	16.66
7	JOHN C. RATCLIFFE	4-R9-22-21	5.35
8	JOHN P GRIFFITH	4-R9-24	2.34
9	CARLA DIETRICH	4-R9-21	0.82
10	CARLA DIETRICH	4-R9-21-1	3.84
11	LARRY & TERRY BOYNES	4-R9-22-9	4.24
12	ADAM J SHUBA	4-R6-35	7.19

RACT	ADJOINING OWNERS TABLE SURFACE OWNER	TANDADOT	ACRES
	CALVARY BAPTIST CHURCH	TAX PARCEL 4-R6-35-1	2.0
A			
B	ELIZABETH HONECKER	3-L1-42	98.28
C	FRANK W PATTERSON	4-R9-23-1	1.58
D	ELIZABETH R. HONECKER	3-L4-124	50.84
E	PAUL & DEBORAH MCKAY	3-L4-123	15.57
F	RACHEL ANN SINCAVICH	3-L4-2	10.69
G	PAUL M MCKAY	3-L4-1-6	1.03
H	DOUGLAS FARMER	3-L4-2-1	1.07
1	REGINA L FARMER	3-1.4-2-7	1.29
1	DONALD & LINDA FRAZIER	3-L4-2-2	1.05
K	THOMAS & HOLLY WILEY	3-14-2-4	1.61
L	ARLIE & BOND MCCARDLE	3-L4-105-17	1.19
M	MICHAEL WINIESDORFER	3-L4-55	0.49
N	WILLIAM & S C HOGAN	3-L4-28	0.64
0	RICHARD & PK CROW	3-14-27	0.61
P	RICHARD & PK HOGAN	3-14-25	0.42
0	FRANK & ISABEL HARRAR	3-14-4	3.65
		and the second se	
R	THOMAS HARDMAN	3-L4-1-4	1.02
S	JOHN & MICHELLE POWELL	3-L4-1-5	1.00
T	REBECCA L BLAKE	3-L4-1-2	1.00
U	REBECCA L BLAKE	3-14-1-7	0.65
V	PAUL & DEBORAH MCKAY	3-L4-10-1	3.15
W	PAUL & DEBORAH MCKAY	3-L4-10	0.86
X	JAMES & ANN ROSE	3-L4-12	1.01
Y	JAMES & ANN ROSE	3-L4-14	0.43
Z	DAVID & BETH WEAVER	3-14-13	0.49
AA	DAVID & CATHERINE EVANS	3-L4-13-1	28.29
AB	MARY HELEN CLISER	3-17-2	119.91
AC	JAMES & JUNE JONES	3-L7-18	4.15
AD	GEORGE & ANITA WHITAKER	3-17-27	186.30
AE	DALLA & AGNES HALL	3-17-20	35.44
AF	DALLAS & AGNES HALL	and the second state of th	
		3-L7-52	62.96
AG	JOHN & TA PYLE	4-R12B-1-1	4.82
AH	STEVE KELLAS	4-R12B-1-5	1.06
Al	MATHEW GOSSEIT	4-R12B-1	3.63
AJ	DENNIS & DANACA GUMAER	4-R12B-1-6	0.84
AK	GEORGE STROMATOS	3-14-24	3.05
AL	GEORGE STROMATOS	3-L4-24-1	3.05
AM	GEORGE STROMATOS	03-L4-24-2	3.05
AN	DAVID & LINDA RUTHERS	3-L4-22	0.97
AO	CRYSTAL OPIC	3-L4-20	1.96
AP	ERIC BLEND	4-R12B-2	0.35
AQ	ANN E REAM	4-R12B-7	0.35
AR	JAMES & KAREN FRIO	4-R9-47	1.32
AS	BRIAN & JOHN HICKEY	4-R9-45	0.76
AT	DAVID & TERRI SONNEFELD	4-R9-45	0.63
AU	DAVID & TERRI SONNEFELD	4-R9-44	0.63
AV	ROBERT BECK	4-R9-43	0.63
AW	MARK & JL PISSOS	4-89-42	0.63
AX	GARY & CM LATOS	4-R9-41	0.59
AY	CLARK & SHARON PAJAK	4-R9-41	
AZ	CLARK & SHARON PAJAK		2.09
BA	RCK2 GROUP ATT: KATHLEEN FITZSIMMONS	4-R9-28	5.0
		4	27.91
BB	LA DONNA MARTIN EVANS	4-R9-3-5	65.14
BC	WESBANCO TRUST & INVESTMENT	4-R9-16-1	18.43
BD	CLAIRE M CAVENEY	4-R9-3	87.98
BE	MARK & DAWN SWINGER	4-R9-22-15	-
BF	GEORGE & CAROL WOOD	4-R9-22-16	
BG	JOHN & KATHY RATCLIFF	4-R9-22-17	
BH	JEFFERY & GINGER TAYLOR	4-R9-22-18	
BI	JEFFERY & G TAYLOR	4-R9-20	1.50
BJ	RODNEY & RHONDA HALEY	4-R9-22-8	8.12
BK	VELMA TAGGART	4-R9-18	0.57
BL	ROBERT & JENNIFER JEWELL	4-R6-40	2.88
BM	RALPH & GRACE ROBINSON		
BN		4-R6-27	3.92
	RANDALL CRABTREE	4-R6-27-4	1.85
BO	CHARLES ROBINSON	4-R6-27-2	5.49

REVISIONS:	COMPANY:	SWN Production Company, LLC	SN Production C	06/08/2018
	OPERATOR'S WELL #:	DALLAS HALL 5H		DATE: 01-25-2018 FILE NO: 17-033 DRAWN BY: N. LASSAK
	DISTRICT: LIBERTY	COUNTY: OHIO COUNTY	STATE: WV	SCALE: N/A DRAWING NO: 1 WELL LOCATION PLAT 1

U:\OELS\SWN_WV_17-0033_DALLAS HALL\PLATS\5H\DALLAS HALL OHI 5H.DWG THURSDAY JANUARY 25 2018 08:20AM

PROPERTY NUMBER 2501166161 PAD ID 3001155646 WW-6A1 (5/13) Operator's Well No. Dallas Hall OHI 5H

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 -

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

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

Lease Name or				
Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page

See Exhibit

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

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

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

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

Well Operator:	SWN Production Company, LLC.	
By:	BOUL	
Its:	Landman	
	Page 1 of	Office of
		JAN 3

CEIVED Oil and Gas

JAN 3 0 2018

WV Department of Environmental Protection

		Dallas Hall O Ohio County, We			
	TAX ID	LESSOR	LESSEE	ROYALTY	BK/PG
1	03-L7-19	Dallas J. Hall and Agnes L. Hall, husband and wife	Chesapeake Appalachia, L.L.C.	18.5%	811/34
			SWN Production Company, LLC		884/61
2	03-L4-15	Shirley M. Weaver and George S. Weaver,	Chesapeake Appalachia, LLC.	18%	823/165
		wife and husband	SWN Production Company, LLC		885/632
3	03-L4-1.1	Robert O. Rogers, a married man dealing in his	SWN Production Company, LLC	18%	902/502
		sole and separate property			
3	03-14-1.1	Rome H. Brown and Lillian W. Brown, his wife	Great Lakes Energy Partners, L.L.C.	15.5%	768/508
			Chesapeake Appalachia, L.L.C.		808/434
			SWN Production Company, LLC		883/527
3	03-14-1.1	Obio Valley Medical Center, Inc.; The Parks	SWN Production Company, LLC	18%	908/708
		System Trust Fund of Wheeling; Children's Home			
		of Wheeling, Inc.; Elmhurst, the House of			
		Friendship, Inc.; Vance Memorial Presbyterian			
		Church; Young Women's Christian Association			
		of Wheeling, W. Va., Inc.			
3	03-14-1.1	Wheeling Young Men's Christian Association	SWN Production Company, LLC	18%	926/299
4	03-14-1	Douglas McKay, a widower,	Fortuna Energy Inc.	12.5%	772/521
		and Paul McKay and Deborah A. McKay,	Range Resources - Appalachia, LLC		786/400
		husband and wife	Chesapeake Appalachia, L.L.C.		808/493
			SWN Production Company, LLC		683/539
5	04-R9-51	Douglas McKay, a widower,	Fortuna Energy Inc.	12.5%	772/521
		and Paul McKay and Deborah A. McKay,	Range Resources - Appalachia, LLC		785/406
		husband and wife	Chesapeake Appalachia, L.L.C.		808/493
			SWN Production Company, LLC		883/539
<u>. </u>	04-R9-22.20	John C. Ratcliffe and Kathy J. Ratcliffe,	Chesapeake Appalachia, LL.C.	18%	814/650
		husband and wife	SWN Production Company, LLC		884/205
/	04-R9-22.21	John C. Ratcliffe and Kathy J. Ratcliffe,	Chesapeaka Appalachia, L.L.C.	18%	814/735
		husband and wife	SWN Production Company, LLC		884/205
3	04-R9-24	Mark T. Griffith, a single man	Chesapeake Appalachia, L.L.C.	16%	843/374
			SWN Production Company, U.C		885/37
<u> </u>	04-R9-24	Mercy M. Griffith, a widow	Chesapeake Appalachia, LL.C.	16%	843/379
			SWN Production Company, LLC		885/37
1_	04-R9-21	Phillip E. Coss and Shirley A. Coss,	Chesapeake Appalachia, L.L.C.	18%	814/231
		husband and wife	SWN Production Company, LLC	_	884/469
0	04-R9-21.1	Phillip E. Coss and Shirley A. Coss,	Chesapeake Appalachia, L.L.C.	18%	814/82
		husband and wife	SWN Production Company, LLC		884/469
1	04-R9-22.9	Larry Boynes and Terry Boynes,	Chesapeake Appalachia, L.L.C.	18%	814/86
		husband and wife	SWN Production Company, LLC		884/457
2	04-R6-35	Betty H. Burkhart, a widow,	Chesapeake Appalachia, L.L.C.	18%	825/448

WV Department of Environmental Protection

Office of Oil and Gas

Dallas Hall XE Unit 3 of 3 4706900273



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

January 25, 2018

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

RE: SWN's proposed New Well: Dallas Hall OHI 5H in Ohio County, West Virginia, Drilling under Boone Hedge Road, and RT 88 Oglebay 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 Boone Hedge Road, and RT 88 Oglebay 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, 1Ch

Bradley Landman SWN Production Company, LLC PO Box 12359 Spring, TX 77391-2359

Office of Oil and Gas

JAN 3 0 2018

WV Department of Environmental Protection

K- W+

The Right People doing the Right Things, wisely investing the cash flow from our underlying Assets, will create Value+⁸

10000 Energy Drive Spring, TX 77389-4954 WW-6AC (1/12)

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS <u>NOTICE CERTIFICATION</u>

Date of Notice Certification:

API No. 47- 069	-
Operator's Well No.	Dallas Hall OHI 5H
Well Pad Name: Da	allas Hall OHI Pad

Notice has been given:

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

State:	West Virginia	UTM NAD 83 East	ing:	532979	
County:	069-Ohio	Nort	thing:	4442628	
District: Quadrangle: Watershed:	Liberty	Public Road Access:		G C & P Road	
	Bethany	Generally used farm na	ame:	Dallas Hall	
	Upper Ohio South				

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

Pursuant to West Virginia Code § 22-6A, the Operator ha that the Operator has properly served the required parties *PLEASE CHECK ALL THAT APPLY	
□ 1. NOTICE OF SEISMIC ACTIVITY or ■ NO SEISM	TICE NOT REQUIRED BECAUSE NO IC ACTIVITY WAS CONDUCTED
2. NOTICE OF ENTRY FOR PLAT SURVEY or	NO PLAT SURVEY WAS CONDUCTED RECEIVED
NOTIC	TICE NOT REQUIRED BECAUSE E OF ENTRY FOR PLAT SURVEY ONDUCTED or
	RITTEN WAIVER BY SURFACE OWNER PLEASE ATTACH)
■ 4. NOTICE OF PLANNED OPERATION	RECEIVED Office of Oil and Gas
5. PUBLIC NOTICE	JAN 3 0 2018 RECEIVED
6. NOTICE OF APPLICATION	WV Department of Environmental Protection

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

Well Operator:	SWN Production Co., LLC	Address:	P.O. Box 1300	
By:	Dee Southal		Jane Lew, WV 26378	
Its:	Senior Regulatory Analyst	Facsimile:	304-884-1690	
Telephone:	304-884-1614	Email:	Dee_Southall@swn.com	
	OFFICIAL SEAL Notary Public. State of West Virginia BRITTANY R WOODY 3302 Old Ethins Read	bscribed and swo BALLLUMU y Commission(E:	orn before me this and day of AMUMY 2015. K WOODLY Notary Public xpires 11 2017	

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 <u>depprivacyofficer@wv.gov</u>.

RECEIVED Office of Oil and Gas

JAN 3 0 2018

WV Department of Environmental Protection

WW-6A	
(9-13)	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS <u>NOTICE OF APPLICATION</u>

1 1 2

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

	e of Notice: 12413 ice of:	Date Permit Applicat	ion Filed: 12418
7	PERMIT FOR ANY WELL WORK		CATE OF APPROVAL FOR THE UCTION OF AN IMPOUNDMENT OR PIT
Deli	ivery method pursua	nt to West Virginia Co	de § 22-6A-10(b)
	PERSONAL SERVICE	REGISTERED MAIL	METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION
certi regis sedi the s oil a desc oper	ficate of approval for the stered mail or by any ment control plan requi- surface of the tract on v and gas leasehold being ribed in the erosion and rator or lessee, in the ev	he construction of an imp lethod of delivery that req ired by section seven of the which the well is or is pro- developed by the proposed sediment control plan servent the tract of land on w	In the filing date of the application, the applicant for a permit for any well work or for a boundment or pit as required by this article shall deliver, by personal service or by uires a receipt or signature confirmation, copies of the application, the erosion and his article, and the well plat to each of the following persons: (1) The owners of record of posed to be located; (2) The owners of record of the surface tract or tracts overlying the ed well work, if the surface tract is to be used for roads or other land disturbance as ubmitted pursuant to subsection (c), section seven of this article; (3) The coal owner, which the well proposed to be drilled is located [sic] is known to be underlain by one or

more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

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

SURFACE OWNER(s)	1	COAL OWNER OR LESSEE	
Name: Dallas J. Hall	4		<u></u>
Address: 1953 G C and P Road		Address: 2596 Battle Run Road	
Triadelphia, WV 26059		Triadelphia, WV 26059	
Name:		COAL OPERATOR	RECENTER
Address:		Name:	Office of Oil and Gas
		Address:	Gas
SURFACE OWNER(s) (Road and/or Other Dist	urbance)		JAN 3 0 2018
Name:		SURFACE OWNER OF WATER WELL	
Address:		AND/OR WATER PURVEYOR(s)	Environment of
		Name: none	WV Department of Environmental Protection
Name:		Address:	
Address:			
		OPERATOR OF ANY NATURAL GAS STO	RAGE FIELD
□ SURFACE OWNER(s) (Impoundments or Pits)		Name:	
Name:		Address:	
Address:			
		*Please attach additional forms if necessary	

WW-6A	
(9-13)	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS <u>NOTICE OF APPLICATION</u>

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

Date	e of Notice:	Date Permit Application	1 Filed:
Not	ice of:		
Ø	PERMIT FOR ANY WELL WORK		TE OF APPROVAL FOR THE CTION OF AN IMPOUNDMENT OR PIT
Deli	very method pursual	nt to West Virginia Code	§ 22-6A-10(b)
	PERSONAL [SERVICE	REGISTERED MAIL	METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION
certi regis sedin the s oil a desc oper more well impo have	ficate of approval for the tered mail or by any ment control plan requi- urface of the tract on we and gas leasehold being ribed in the erosion and ator or lessee, in the ev- e coal seams; (4) The or- work, if the surface tra- bundment or pit as desc- a water well, spring or	the construction of an impou- ethod of delivery that requir ired by section seven of this which the well is or is proposed developed by the proposed d sediment control plan subm ent the tract of land on whice where of record of the surface to be used for the place with a section nine of this water supply source located	the filing date of the application, the applicant for a permit for any well work or for a ndment or pit as required by this article shall deliver, by personal service or by es a receipt or signature confirmation, copies of the application, the erosion and article, and the well plat to each of the following persons: (1) The owners of record of sed to be located; (2) The owners of record of the surface tract or tracts overlying the well work, if the surface tract is to be used for roads or other land disturbance as nitted pursuant to subsection (c), section seven of this article; (3) The coal owner, sh the well proposed to be drilled is located [sic] is known to be underlain by one or ce tract or tracts overlying the oil and gas leasehold being developed by the proposed ement, construction, enlargement, alteration, repair, removal or abandonment of any article; (5) Any surface owner or water purveyor who is known to the applicant to d within one thousand five hundred feet of the center of the well pad which is used to animals; and (6) The operator of any natural gas storage field within which the

proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

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

□ SURFACE OWNER(s) Name:	COAL OWNER OR LESSEE	Office of Oil and Gas
Address:	Address: 1000 Consol Energy Drive	Gas (A)
	Canonsburg, PA 15317	JAN 3 0 2018
Name:	COAL OPERATOR	° 2010
Address:	Name: Env	WV Department of ronmental Protection
	Address:	Protection
□ SURFACE OWNER(s) (Road and/or Other Disturbance)		
Name:	□ SURFACE OWNER OF WATER WELL	
Address:	AND/OR WATER PURVEYOR(s)	
	Name:	
Name:	Address:	
Address:		
	OPERATOR OF ANY NATURAL GAS STOR	AGE FIELD
□ SURFACE OWNER(s) (Impoundments or Pits)	Name:	
Name:	Address:	2.0.0
Address:		
NUM WATER	*Please attach additional forms if necessary	

WW-6A	
(9-13)	

API NO. 47-069	- 00275
OPERATOR WEL	L NO. Dallas Hall OHI 5H
Well Pad Name: D	alias Hali OHI Pad

1/30

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS <u>NOTICE OF APPLICATION</u>

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

	e of Notice: ice of:	Date Permit Application	on Filed:
7	PERMIT FOR ANY WELL WORK		ATE OF APPROVAL FOR THE JCTION OF AN IMPOUNDMENT OR PIT
Deli	very method pursua	nt to West Virginia Cod	le § 22-6A-10(b)
	PERSONAL SERVICE	REGISTERED MAIL	METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION
certi regis sedin the s oil a desc	ficate of approval for the stered mail or by any me ment control plan require surface of the tract on w and gas leasehold being ribed in the erosion and	the construction of an impo- ethod of delivery that required by section seven of this which the well is or is prop- developed by the proposed a sediment control plan sub-	the filing date of the application, the applicant for a permit for any well work or for a bundment or pit as required by this article shall deliver, by personal service or by sires a receipt or signature confirmation, copies of the application, the erosion and is article, and the well plat to each of the following persons: (1) The owners of record of osed to be located; (2) The owners of record of the surface tract or tracts overlying the d well work, if the surface tract is to be used for roads or other land disturbance as binitted pursuant to subsection (c), section seven of this article; (3) The coal owner, sich the well proposed to be drilled is located [sic] is known to be underlain by one or

described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

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

SURFACE OWNER(s)	COAL OWNER OR LESSEE	
Name: Dallas J. Hall	Name: Alliance Resources, GP LLC. Attn: Evan Midler	
Address: 1953 G C and P Road	Address: 2596 Battle Run Road	
Triadelphia, WV 26059	Triadelphia, WV 26059	
Name:	COAL OPERATOR	
Address:	Name:	
	Address:	RECEIVED
USURFACE OWNER(s) (Road and/or Other Disturbance)		Office of Oil and Gas
Name:	SURFACE OWNER OF WATER WELL	
Address:	AND/OR WATER PURVEYOR(s)	APR 26 2018
	Name: See Attachment	2010
Name:	Address:	MAL Desar (
Address:		WV Department of Environmental Protection
	OPERATOR OF ANY NATURAL GAS STOR	AGE FIELD
□ SURFACE OWNER(s) (Impoundments or Pits)	Name:	
Name:	Address:	
Address:		l.
	*Please attach additional forms if necessary	

WW-6A (8-13)

000273 RECEIVED Office of Oil and Gas API NO. 47

OPERATOR WELL NO. Dallas Hall CHI 5H

JAN 3 0 2018 Well Pad Name: Dallas Hall OHI Pad

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

This Notice Shall Include:

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

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

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

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

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

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12. Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items WW-6A (8-13) Well Pad Name: Dallas Hall OHI Pad

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

WV Department of Environmental Protection

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

WW-6A (8-13) API NO. 47-069 -OPERATOR WELL NO. Dallas Hall OHI 5H Well Pad Name: Dallas Hall OHI Pad

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

Disclaimer: All comments received will be placed on our web site http://www.dep.wv.gov/oil-and-gas/Horizontal-

<u>Permits/Pages/default.aspx</u> 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.

RECEIVED Office of Oil and Gas

JAN 3 0 2018

WV Department of Environmental Protection

WW ZA	4706900273 API NO. 47-069 -
WW-6A	
(8-13)	OPERATOR WELL NO. Dallas Hall OHI 5H
	Well Pad Name: Dallas Hall OHI Pad
Notice is hereby given by:	
Well Operator: SWN Production Co., LLC	Address: P.O. Box 1300
Telephone: 304-884 1614	Jane Lew, WV 26378
Email: Dee_Southall@swn.com	Facsimile: 304-884-1690

Oil and Gas Privacy Notice:

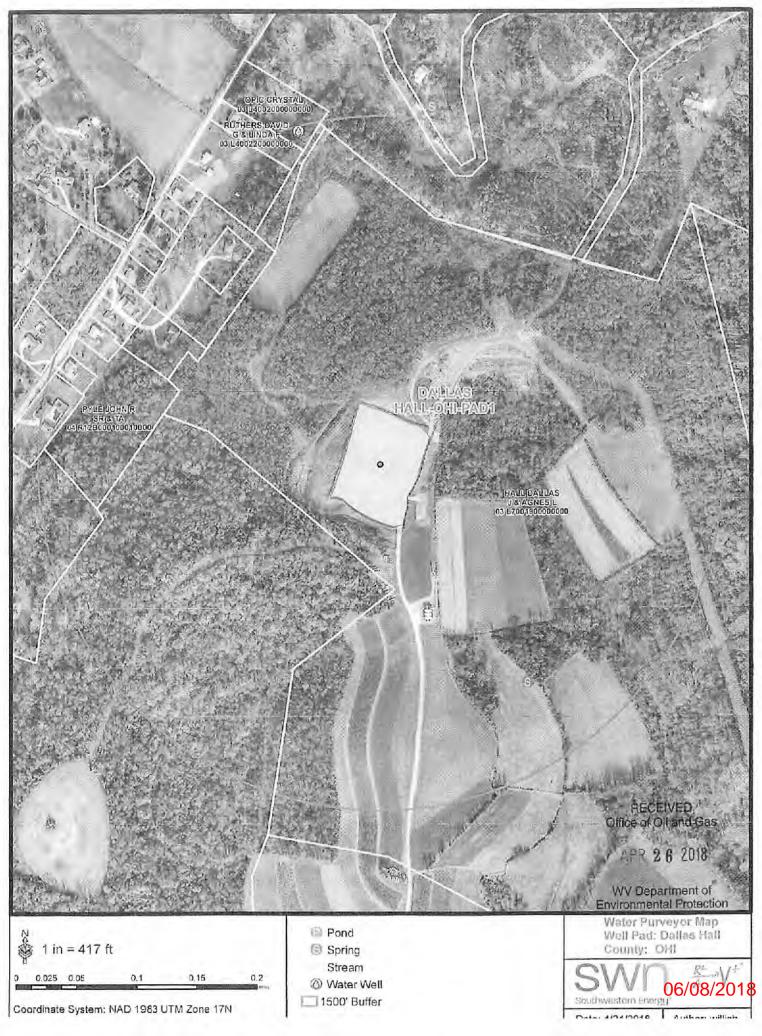
The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory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

OFFICIAL SEAL Notary Public, State of West Virginia BRITTANY R WOODY 3302 Old Elkins Road Buckhanton, WV 25201 Ny commission expires November 27, 2022	Subscribed and sworn before me this <u>Jan</u> day of <u>January</u> <u>JOIS</u> . Bittany R Norary Public My Commission Expires <u>NATA</u>

RECEIVED Office of Oil and Gas

JAN 3 0 2018

WV Department of Environmental Protection



PARCEL ID	OWNER	ADIDRESS	CITY STATE ZIP	WATERSOURCES
03 L700190000000	HALL DALLAS J & AGNES L	1953 G C AND P RD	TRIADELPHIA WV 26059	1
04 R12B000100010000	PYLE JOHN R SR & T A	4042 OGLEBAY DR	WHEELING WV 26003	1
03 L4002200000000	RUTHERS DAVID G & LINDA F	4196 OGLEBAY DR	WHEELING WV 26003	1
03 L4002000000000	OPIC CRYSTAL	112 AVALON EST	WHEELING WV 26003	1

.

.

RECEIVED Office of Oil and Gas

APR 26 2018

WV Department of Environmental Protection

06/08/2018

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 Requirement:	otice shall be provided at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to	a
entry		
Date of Notice: 11/6/17	Date of Planned Entry: 11/13/2017	

Delivery method pursuant to West Virginia Code § 22-6A-10a

PERSONAL	
SERVICE	

REGISTERED MAIL METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

Notice is hereby provided to:

SURFACE OWNER(s)	COAL OWNER OR LESSEE
Name: Dallas J. Hall & Agnes L. Hall	Name: Alliance Resources GP, LLC Attn: Evan Midler
Address: 1953 G C and P Road	Address: 2596 Battle Run Road
Triadelphia, WV 26059-1317	Triadelphia, WV 26059
Name:	
Address:	MINERAL OWNER(s)
	Name: Dallas J. Hall & Agnes L. Hall
Name:	Address: 1953 G C and P Road
Address:	Triadelphia, WV 26059-1317
	*please attach additional forms if necessary

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State:	West Virginia	Approx. Latitude & Longitude:	40.133412, -80.612901	
County:	Ohio	Public Road Access:	Bethany Pike	
District:	Liberty	Watershed:	Short Creek	
Quadrangle:	Bethany	Generally used farm name:	Dallas Hall OHI Pad	

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production 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). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is here Well Operator:		Address:	PO BOX 1300	JAN 3 0 2018
Telephone:	304-884-1610		JANE LEW, WV 26378	WV Department of Environmental Protection
Email:	dee_southall@swn.com or brittany_woody@swn.com	Facsimile:		Environmental Proteonal

Oil and Gas Privacy Notice:

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

WW-6A3 (1/12)

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

Notice Time Requirement: Notice shall be provided at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to entry
Date of Notice: 11/6/2017 Date of Planned Entry: 11/13/2017

Delivery method pursuant to West Virginia Code § 22-6A-10a

PERSONAL	REGISTERED	METHOD OF DELIVERY THAT REQUIRES A
SERVICE	MAIL	RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

Notice is hereby provided to:

SURFACE OWNER(s)	COAL OWNER OR LESSEE
Name: Dallas J. Hall & Agnes L. Hall	Name: Windsor Coal Company
Address: 1953 G C and P Road	Address: 1000 Consol Energy Drive
Triadelphia, WV 26059-1317	Canonsburg, PA 15317-6506
Name:	
Address:	MINERAL OWNER(s)
	Name: Dallas J. Hall & Agnes L. Hall
Name:	Address: 1953 G C and P Road
Address:	Triadelphia, WV 26059-1317
	*please attach additional forms if necessary

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State:	West Virginia	Approx. Latitude & Longitude:	40,133412, -80.612901	
County:	Ohio	Public Road Access:	Bethany Pike	
District:	Liberty	Watershed:	Short Creek	
Quadrangle:	Bethany	Generally used farm name:	Dallas Hall OHI Pad	

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production 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). Copies of such documents or additional information related to horizontal drift ECENED, obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is here	by given by:			JAN 3 0 2010
	SWN PRODUCTION COMPANY, LLC	Address:	PO BOX 1300	WV Department of
Telephone:	304-884-1510		JANE LEW, WV 26378	Environmental Protection
Email:	dee_southall@swn.com or brittany_woody@swn.com	Facsimile:		
Latituti.	des sources and an internet of a meanly moorely wearly	-		

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@wy.gov.

IAN 9 0 2010

Operator Well No. Dallas Hall OHI 5H

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

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

Notice Time Requirement: Notice shall be provided at least TEN (10) days prior to filing a permit application.
Date of Notice: 11/27/2017 Date Permit Application Filed:

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

HAND	CERTIFIED MAIL
DELIVERY	RETURN RECEIPT REQUESTED

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

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

Name: Dallas J Hall		Name:	_
Address: 1953 G C and P Rd	_ /	Address:	
Triadelphia, WV 26059	_ /		
		-	

Notice is hereby given:

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

State:	West Virginia	UTM NAD 83 Easting	g: 532,979.581	
County:	Ohio	Northi	ng: 4,442,628.373	
District:	Liberty	Public Road Access:	G C and P Road	
Quadrangle:	Bethany	Generally used farm nan	e: Dallas Hall OHI	
Watershed:	Upper Ohio South			

This Notice Shall Include:

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

Notice is hereby given by:

Well Operator:	SWN Production Company, LLC	Authorized Representative:	Mike Yates
Address:	PO Box 1300, 179 Innovation Drive	Address:	Mike Yates PO Box 1300, 179 Innovation (Dave) Oil and Gas
	Jane Lew, WV 26378		Jane Lew, WV 26378 JAN 3 0 2018
Telephone:	304-517-6603	Telephone:	304-517-6603 JAN 3 0 2010
Email:	Michael_Yates@swn.com	Email:	Michael_Yates@swn.com 304-471-2497 WV Department of Environmental Protection
Facsimile:	304-471-2497	Facsimile:	304-471-2497 Environmental Protection

Oil and Gas Privacy Notice:

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

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application.
Date of Notice: 11/27/2017
Date Permit Application Filed:

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

CERTIFIED MAIL	HAND	
RETURN RECEIPT REQUESTED	DELIVERY	

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

Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice):

Name: Dallas Hall	Name:	
Address: 1953 G C and P Rd	Address:	
Triadelphia, WV 26059		

Notice is hereby given:

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

State:	West Virginia	East	ing:	532,979.581	
County:	Ohio	UTM NAD 83 Nort	hing:	4,442,628.373	
District: Quadrangle:	Liberty	Public Road Access:	Public Road Access:		
	Bethany	Generally used farm name:		Dallas Hall OHI	
Watershed:	Upper Ohio South				

This Notice Shall Include:

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

Well Operator:	SWN Production Company, LLC	Address:	PO Box 1300, 179 Innovation Drive	RECEIVED Office of Oil and Gas	
Telephone:	304-517-6603		Jane Lew, WV 26378	JAN 3 0 2018	
Email:	Michael_Yates@swn.com	Facsimile:	304-471-2497	JAN O COID	
			-		

Oil and Gas Privacy Notice:

WV Department of Environmental Protection

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 <u>deprivacyofficer@wv.gov</u>.



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 20, 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 Dallas Hall Pad OHI 5H Well Site, Ohio County

Dear Mr. Martin,

The West Virginia Division of Highways has transferred #06-2011-0067 to the application for permit to Southwestern Energy for access to the State Road for the well site located off of Ohio County Route 37 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

Gary K. Clayton Regional Maintenance Engineer RECEIVED Central Office Oil & Gas Coordinato^{il and} Gas

JAN 3 0 2018

WV Department of Environmental Protection

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

	FRAC A	DDITIVES		
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	
SYPTRON T-390 (Champion Technologies)	Scale Inhibitor			
		Nonylphenol Ethoxylate	Proprietary	
		Glutaraldehyde	111-30-8	
Bactron K-139 (Champion Technologies)	Biocide	Quaternary Ammonium Compounds, Benzyl-C12-	68424-85-1	
		16-Alkyldimethyl, Chlorides		
		Ethanol	64-17-5	
Pactrop K 210 (character Tarbaclasia)	Biocide	Methanol	67-56-1	
Bactron K-219 (Champion Technologies)	ווועפ	Quaternary Ammonium Compounds, Benzyl-C12-	68424-85-1	
		16-Alkyldimethyl, Chlorides	00729-03-1	
	Scale Inhibitor	Amine Triphosphate	Proprietary	
EC6486A (Nalco Champion)		Ethylene Glycol	107-21-1	
		Hydrotreated light distillate (petroleum)	64742-47-8	
WFRA-2000 (U.S. Well Services)	Anionic Friction Reducer	Propenoic acid, polymer with propenamide	9003-06 9	
<u> </u>		Ethylene glycol	107-21 1	
		Cinnamaldehyde	104-55 2	
		Butyl cellosolve	111-76 2	
AI-303 (U.S. Well Services)	Mixture	Formic acid	64-18 6	
		Polyether	Proprietary	
		Acetophenone, thiourea, formaldehyde polymer	68527-49 1	
AP ONE (U.S. Well Services)	Breaker	Ammonium persulfate	7727-54-0	
		Distillates, petroleum, hydrotreated light	64742-47-8	
OPTI-FLEX (U.S. Well Services)	Viscosifying Agent	Methanol	67-56-1	
		Oxyalkylated fatty acid	68951-67-7	
		Fatty acids	61790-12-3	
		Modified thiourea polymer	68527-49-1	
Econo-Cl200 (SWN Well Services)	Corrosion Inhibitor	Water	7732-18-5	
		Hydrochloric acid	7647.04.0	
		Potassium acetate	127-09-2	TECEIVED.
		Formaldehyde	50-00-2	RECEIVED ice of Oil and O
· · · · · · · · · · · · · · · · · · ·		Acetic Acid	64 10 7	
			04-13-7	11 A NI 3 V -
Ecopol-FEAC (SWN Well Services)	Iron Control	Citric Acid Water	77-92-9 7732-18-5 7647-01-0 ^{E0} 7732-18-5	nonartme
			1132-18-5	wronmental P
HCL (SWN Well Services)	Hydrocholic Acid	Hydrochloric Acid	7647-01-05	
	-	Water	1102 200	
FLOJET DRP 1130X (SWN Well Services)	Friction Reducer	Proprietary	Proprietary	
		Distillates (petroleum) hydrotreated light	64674-47-8	
	Friction Reducer	Ethylene Glycol	107-21-1	
FLOJET DR900 LPP (SWN Well Services)		Alcohols, C12-16, Exoxylated propoxylated	68213-24-1	
		Fatty Alcohols ethoxylated	Proprietary	
		Water	7732-18-5	
FR-76 (Halliburton)	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8	
		Inorganic Salt	Proprietary	
HAI-150E (Halliburton)	Corrosion Inhibitor	No hazardous substance	N/A	
FDP-S1176-15 (Halliburton)	Friction Reducer	Polyacylate	Proprietary	
		Hydrotreated light petroleum distillate	64742-47-8	
	Coole Inhibiter	Organic phosphonate	Proprietary	
LP-65 MC (Halliburton)	Scale Inhibitor	Ammonium Chloride	12125-02-9 06/0	

