

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

Harold D. Ward, Cabinet Secretary www.dep.wv.gov

Wednesday, April 6, 2022 WELL WORK PERMIT Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC POST OFFICE BOX 12359 SPRING, TX 773914954

Permit approval for DAVID REINBEAU MSH 3H Re: 47-051-02439-00-00

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.

Operator's Well Number: DAVID REINBEAU MSH 3H Farm Name: SHELLY A & DAVID W RED

U.S. WELL NUMBER: 47-051-02439-00-00

Horizontal 6A New Drill Date Issued: 4/6/2022

API Number:	

PERMIT CONDITIONS

4705102439

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 conditions may result in enforcement action.</u>

CONDITIONS

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

API Number:	
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PERMIT CONDITIONS 4705102439

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

OPERATOR WELL NO. David Reinbeau MSH 3H
Well Pad Name: David Reinbeau MSH

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

1) Well Operator: S	SWN Production Co., LL	C 494512924	051-MArsha	07-Union	486-Moundsville
		Operator ID	County	District	Quadrangle
2) Operator's Well N	Number: David Reinbeau	MSH 3H Well P	ad Name: David	d Reinbeau	MSH
3) Farm Name/Surface	ce Owner: Shelly A & David W	Reinbeau Public Re	oad Access: Soi	ghum Ridge	e Road
4) Elevation, current	ground: 1251'	Elevation, propose	d post-construct	ion: 1251'	
5) Well Type (a) C Othe		Un	derground Stora	ge	
(b)If	Gas Shallow x	Deep	-		
6) Existing Pad: Yes	Horizontal X Yes		MOK	2/23/20	L
7) Proposed Target F	or in tion(s), Depth(s), An		and Expected P	ressure(s):	
8) Proposed Total Ve	ertical Depth: 6356'				
9) Formation at Total	- The same of the	lus			
10) Proposed Total N	Measured Depth: 14223'				
11) Proposed Horizo	ental Leg Length: 7471.4	4'			
12) Approximate Fre	esh Water Strata Depths:	426'			
13) Method to Deterr	mine Fresh Water Depths:	Deepest nearby	water well		
14) Approximate Sal	twater Depths: 883' Sali	nity Profile			
15) Approximate Co	al Seam Depths: 765'				
16) Approximate De	pth to Possible Void (coal	mine, karst, other):	None that we	are aware o	of.
	vell location contain coal s adjacent to an active mine		No	x	
(a) If Yes, provide	Mine Info: Name:				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Depth:				
	Seam:				
	Scarn.			100,000	EIVED

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WW-6B (04/15) API NO. 47- OPERATOR WELL NO. Devid Reinbeau MSH 3H
Well Pad Name: David Reinbeau MSH

4705102439

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

1) Well Operator: SWN Production	
	Operator ID County District Quadrangle
2) Operator's Well Number: David	Reinbeau MSH 3H Well Pad Name: David Reinbeau MSH
3) Farm Name/Surface Owner: Shell	y A. & David W. Reinbeau Public Road Access: Sorghum Ridge Road
4) Elevation, current ground: 125	Elevation, proposed post-construction: 1251'
5) Well Type (a) Gas X	Oil Underground Storage
Other	<u>-</u>
(b)If Gas Shallov	<u>X</u> Deep
Horizon	ntal X
6) Existing Pad: Yes or No Yes	
7) Proposed Target Formation(s), D Target Formation-Marcellus, Up-Dip well to the North, Targ	epth(s), Anticipated Thickness and Expected Pressure(s): et Top TVD- 6314', Target Base TVD- 6367, Anticipated Thickness- 53', Associated Pressure- 4139
8) Proposed Total Vertical Depth:	6356'
9) Formation at Total Vertical Dept	h: Marcellus
10) Proposed Total Measured Depth	14223'
11) Proposed Horizontal Leg Lengt	n: 7471.44'
12) Approximate Fresh Water Strate	Depths: 426'
13) Method to Determine Fresh Wa	ter Depths: Deepest nearby water well
14) Approximate Saltwater Depths:	<u> </u>
15) Approximate Coal Seam Depths	765'
16) Approximate Depth to Possible	Void (coal mine, karst, other): None that we are aware of.
17) Does Proposed well location codirectly overlying or adjacent to an	
(a) If Yes, provide Mine Info: N	ame: Ohio County Mine
D	epth: 765'
	Pittsburgh
0	wner: American Consolidated Natural Resources

WW-6B (04/15) API NO. 47- 051 OPERATOR WELL NO. David Reinbeau MSH 3H
Well Pad Name: David Reinbeau MSH

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	J-55	94#	126'	126'	CTS
Fresh Water	13 3/8"	New	H-40	48#	506'	506'	541 sx/CTS
Coal	See	Interm	Casing				
Intermediate	9 5/8"	New	J-55	36#	2080'	2080'	982 sx/CTS
Production	5 1/2"	New	P-110 HP	20#	14223'	14223'	Tail 4358sxf 100' Inside Intermediate
Tubing							
Liners							

Mak 2/23/2022

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	30"	0.25	2120	81	Class A	1.20/30% Excess
Fresh Water	13 3/8"	17.5"	0.380	2730	633	Class A	1.20/30% Excess
Coal	See	Interm	Casing				
Intermediate	9 5/8"	12 1/4"	0.395	3950	1768	Class A	1.19/40% Excess
Production	5 1/2"	8 3/4"-8 1/2"	0.361	14360	10500	Class A	1.19/5% Excess
Tubing							
Liners							

PACKERS

Kind:	
Sizes:	
Depths Set:	DECEMEN
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WW-6B (10/14)

4705102439

OPERATOR WELL NO. David ReInbeau MSH 3H

Well Pad Name: David Reinbeau MSH

19)) Describe	proposed well	l work, includin	g the drilling and	d plugging bac	k 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. In some instances, additional toe prep may be performed by pumping additional water in the toe of the well prior to perforating and pumping Stage 1 to ensure that the toe guns/toe sleeves are fully open prior to pumping stage 1. The well is produced through surface facilities consisting of high pressure production unites, horizontal 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): 18.42

22) Area to be disturbed for well pad only, less access road (acres): 10.4

23) Describe centralizer placement for each casing string:

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

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

See Attachment ***

25) Proposed borehole conditioning procedures:

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

*Note: Attach additional sheets as needed.

			CEMENT A	ADDITIVES	470510	2439
INTERVAL	SCHLUMBERGER PRODUCT NAME	BJ PRODUCT NAME	NEXTIER PRODUCT NAME	PRODUCT USE	CHEMICAL NAME	CAS-Number
SURFACE (FRESHWATER)	><	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
up to 3%	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
COAL PROTECTION	> <	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
up to 3%	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
	D020	BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	D047	FP 28L	><	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
INTERMEDIATE	><	INTEGRA SEAL	C1600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
	CemNet	><	><	LOST CIRC MATERIAL	COATED FIBERGLASS FIBERS	PROPRIETARY
	SUGAR	SUGAR	CJ795	CMT RETARDER	SUCROSE	57-50-1
	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
		>	CJ111	ACCELERATOR	SODIUM CHLORIDE	7440-23-5
	>	SS-11W	CJ880	SURFACTANT	NONIONIC SURFACTANT	6540-99-4
	D047	FP 28L	X	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
	><	> <	CJX157011	SOLID ANTIFOAM AGENT	FULLERS EARTH(ATTAPULGITE)	8031-18-3
	><	> <	CJ540	HP FLUID LOSS ADDITIVE	ALIPHATIC AMIDE POLYMER	PROPRIETARY
PRODUCTION	D255	\supset	\times	MED TEMP FLUID LOSS ADDITIVE	POLYACRILIC POLYMER	PROPRIETARY
			CJ213	RETARDER	CHRYSTALLINE SILICA	14808-60-7
		FL-66	CJ501	LOW TEMP FLUID LOSS ADD	POWDERED POLYSACCHARIDE	PROPRIETARY
		BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	D208	ASA-301	X	VISCOSIFIER/ANTI- SETTLING AGENT	REFINED POLYMER/ CHRYSTALLINE SILICA	PROPRIETARY
	D198	R-3		CEMENT RETARDER	LIGNIN	8068-51-6
	SUGAR	SUGAR	CJ795	CEMENT RETARDER	SUCROSE	57-50-1

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Proposed Drilling Program Southwestern Energy Company DAVID REINBEAU MSH 3 Re-entry Rig: TBD Well: Marcellus Shale Prospect: Field: NORTH VICTORY FIELD WET WV State: MARSHALL County: SHL: 39,9929 Latitude -80.6614 Longitude 40.0142 Latitude BHL: -80.6705 Longitude KB: 26 ft AGL GL Elev: 1,251 ft MSL KB Elev: 1.277 ft MSL No COAL VOID Anticipated 126 to 526 Air/Mist PROD TOC Lead @ 2,300 ' MD PROD TOC Tail @ 5,508 ' MD 526 to 2,100' Air/Mist TUBULAR DETAIL Casing Size Weight Grade Planned Interval **Casing String** 10.5# Brine Mud (Min) (in) (Min) To From 2,100 to 5,608 20 94.0# J-55 0 . 126' Conductor Air/Mist 506 13.375 48.0# H-40 0' Surface 0 2.080 Intm/Coal 9.625 36.0# J-55 Production 5.5 20.0# P-110 HP 0' 14,223 CEMENT DETAIL Sacks Class Density Conductor: 151 19.3 Surface: 541 A 15.6 Intermediate: 982 A 15.6-16 Production: 4358 14.5-15.0 A Air TD at 5,608 Freshwater Depth - 426 'TVD 5,608 to 6,748 KOP at 5,608 ' MD 12.0-12.5 ppg Coal Depth - 785 'TVD Saltwater Depth - 883 'TVD TVD - 6,356 ' TMD - 14,223 ' TD at 14,223 'MD 6,285 'TVD 6,356 ' Target Center RECEIVED Office of "Il any Gas Onondaga 6,297 ' TVD MAR 6,748 to 14,223 EOB at 6,748 'MD SHL Onondaga 6,368 'TVD WV Department of Created by: C R Hall on 02/15/2022 Environmental Protecti



SWN Production Company, LLC 1300 Fort Pierpont Dr, Ste 201 Morgantown, WV 26508 Tel: 304 884 1610 Fax: 304 471 2497 www.swn.com

February 28, 2022

Mr. Charles Brewer Office of Oil & Gas 601 57th Street Charleston, WV 25304

RE: Proposed New Well: David Reinbeau MSH 3H

Dear Mr. Brewer:

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 David Reinbeau MSH property, in Union District, Marshall County, West Virginia.

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

Thank you.

Sincerely,

Brittany Woody

Senior Regulatory Analyst

Southwestern Energy Production Company, LLC

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WV Department of Environmental Protection

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The Right People The Right People Wisely Investing the cash flow from our underlying Assats, will create Value+®

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)_Hollidays Run of Wheeling Creek	Quadrangle Moundsville
Do you anticipate using more than 5,000 bbls of water to complete	the proposed well work? Yes V 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	o If so, what ml.?
Proposed Disposal Method For Treated Pit Wastes:	
Land Application	
Underground Injection (UIC Permit Nu	ımber_ Various Approved Facilities)
Reuse (at API Number At the next anticpiate	d well
Off Site Disposal (Supply form WW-9 f	
Other (Explain recovery and solidification	i on site
Will closed loop system be used? If so, describe: Yes- See Attachr	
Drilling medium anticipated for this well (vertical and horizontal)?	Air, freshwater, oil based, etc. At the to KOP, hold drill with SOBM from KOP to TD
-If oil based, what type? Synthetic, petroleum, etc. Synthetic	tic Oil Base
Additives to be used in drilling medium? Attachment 3B	
Drill cuttings disposal method? Leave in pit, landfill, removed offs	site, etc. landfill
-If left in pit and plan to solidify what medium will be used	d? (cement, lime, sawdust)
	32, Short Creek SWF-1034, Carbon Limestone MSWL018781, Wetzel County 1021
Apex Sanitary Landill ub-08438, Brooke Co SWF-	-าบา3,
Permittee shall provide written notice to the Office of Oil and Gas of West Virginia solid waste facility. The notice shall be provided with where it was properly disposed.	
where it was properly disposed.	
on August 1, 2005, by the Office of Oil and Gas of the West Virgin provisions of the permit are enforceable by law. Violations of any law or regulation can lead to enforcement action.	y term or condition of the general permit and/or other applicable amined and am familiar with the information submitted on this my inquiry of those individuals immediately responsible for accurate, and complete. I am aware that there are significant
() = 55	MAD A 9 2022
Company Official (Typed Name) Brittany Woody Company Official Title Senior Regulatory Analyst	MAR 0.3 2022
Company Official Title Como regulatory Analyst	WV Department of
+4	Environmental Protection
Subscribed and sworn before me this day of	bruary, 2022
Wil Cent	Notary Bublis
My commission expires 8/21/2024	Notary Public REID CROFT Notary Public Official Seal State of West Virginia My Comm. (***/1918**) (***/1918**)
	47 Sparrow Lane Morgantown W 25

Operator's Well No. David Reinbeau MSH 3H

roposed Revegetation Treatment: Acres Disturbed	18.42	Prevegetation pl	H
Lime as determined by pH test min.2 Tons/acre or to corr			
Fertilizer type 10-20-20			
Fertilizer amount 600/500	lbs/acre		
Mulch_ Hay/Straw	Tons/acre		
Whiteh			
	Seed Mixtures		
Temporary		Perma	nent
Seed Type Ibs/acre Attachment 3C		Seed Type	lbs/acre
	_		
	_		
laps(s) of road, location, pit and proposed area for la			
laps(s) of road, location, pit and proposed area for lar rovided). If water from the pit will be land applied, in creage, of the land application area.	nclude dimensions (L		
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Attach: Maps(s) of road, location, pit and proposed area for lar rovided). If water from the pit will be land applied, in creage, of the land application area. Thotocopied section of involved 7.5' topographic shee land Approved by: Leapure Comments:	t.	x W x D) of the pit, and	d dimensions (L x W), and area in

Attachment 3A

CLOSED LOOP SYSTEM

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

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

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

AIR DRILLING INTERVALS

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

LIQUIDS DRILLING (FRESHWATER, BRINE, SOBM)

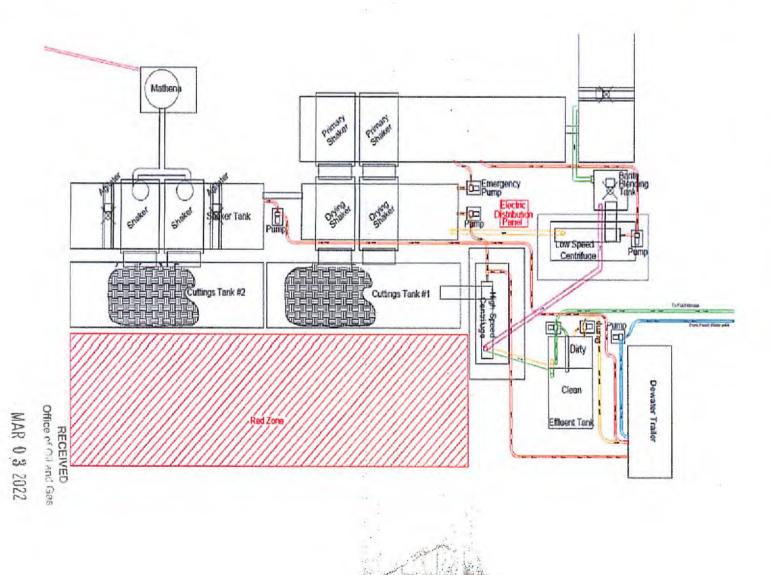
When drilling is converted to liquids drilling, the shale gas separator and associated shaker tank are bypassed, and the liquids system is processed over the primary and drying shaker systems. Cuttings drop into the cuttings tank for additional processing. Any recoverable associated liquids attached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

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Solids Control Layout





Attachment 3B <u>Drilling Mediums</u>

Surface/Coal(if present)/Freshwater Intervals:

Air

Freshwater (if needed based on conditions)

Intermediate/Coal (if present):

Air

Production Hole:

thetic Oil (Base Fluid for mud system)

Sarite •

Chloride

Lime

Organophilic Bentonite

Primary and Secondary Emulsifiers

Gilsonite

Calcium Carbonate

Friction Reducers

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WVD Seeding Specification



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

(please allow 7 to 10 days for delivery)

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

SOIL AMENDMENTS	V.A.	
10-20-20 Fertilizer	*Apply @ 500lbs per Acre	
Pelletized Lime	Apply @ 2 Tons per Acre	
	*unless otherwise dictated by soil test resul	ts

Seeding Calculation Information:

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

Synopsis:

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

Special Considerations:

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

ORGANIC PROPERTIES		
Seed Mixture: SWN Production Organic	: Mix	SWN Supplied
Organic Timothy	50%	
Organic Red or White Clover	50%	
OR		
Organic Perennial Ryegrass	50%	
Organic Red or White Clover	50%	
Apply @ 100lbs per acre		Apply @ 200lbs per acre
April 16th- Oct. 14th		Oct. 15th- April 15th
Organic Fertilizer @ 200lbs per Acre		Pelletized Lime @ 2 Tons per Acre

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

MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN

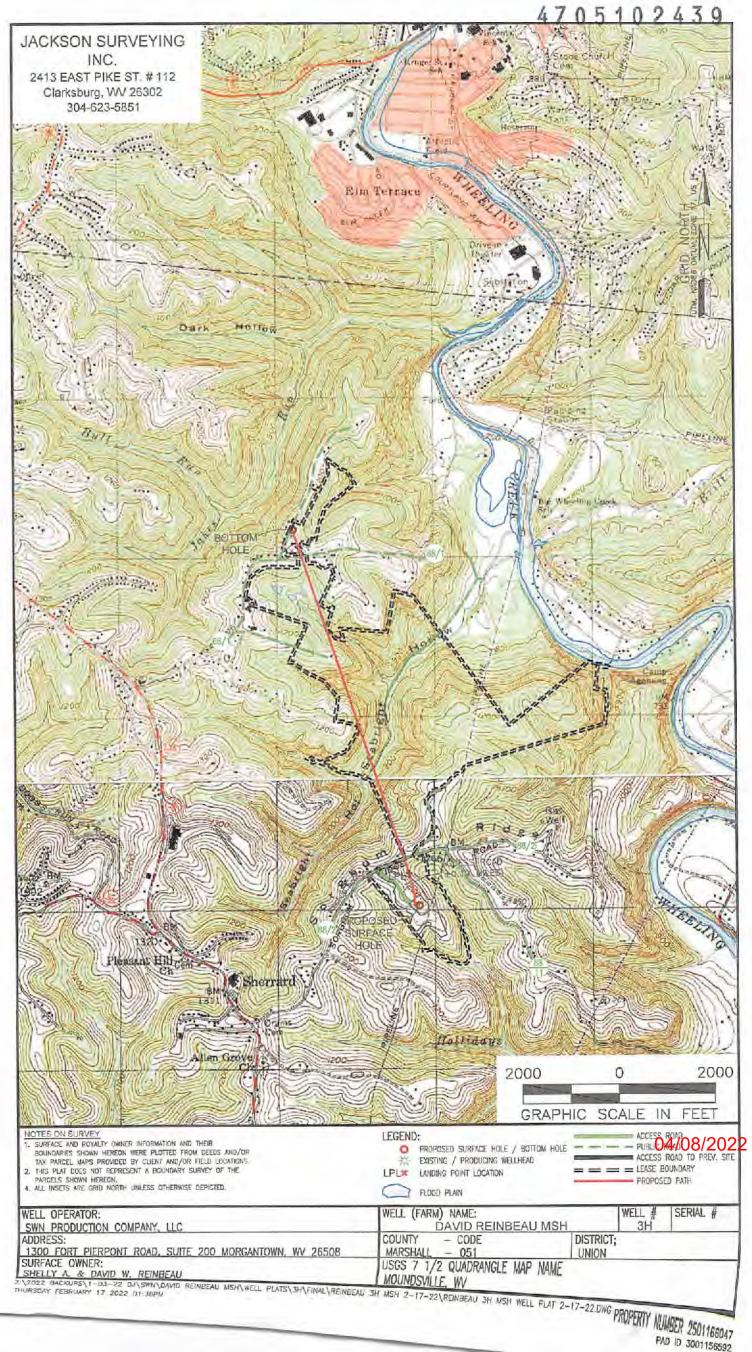


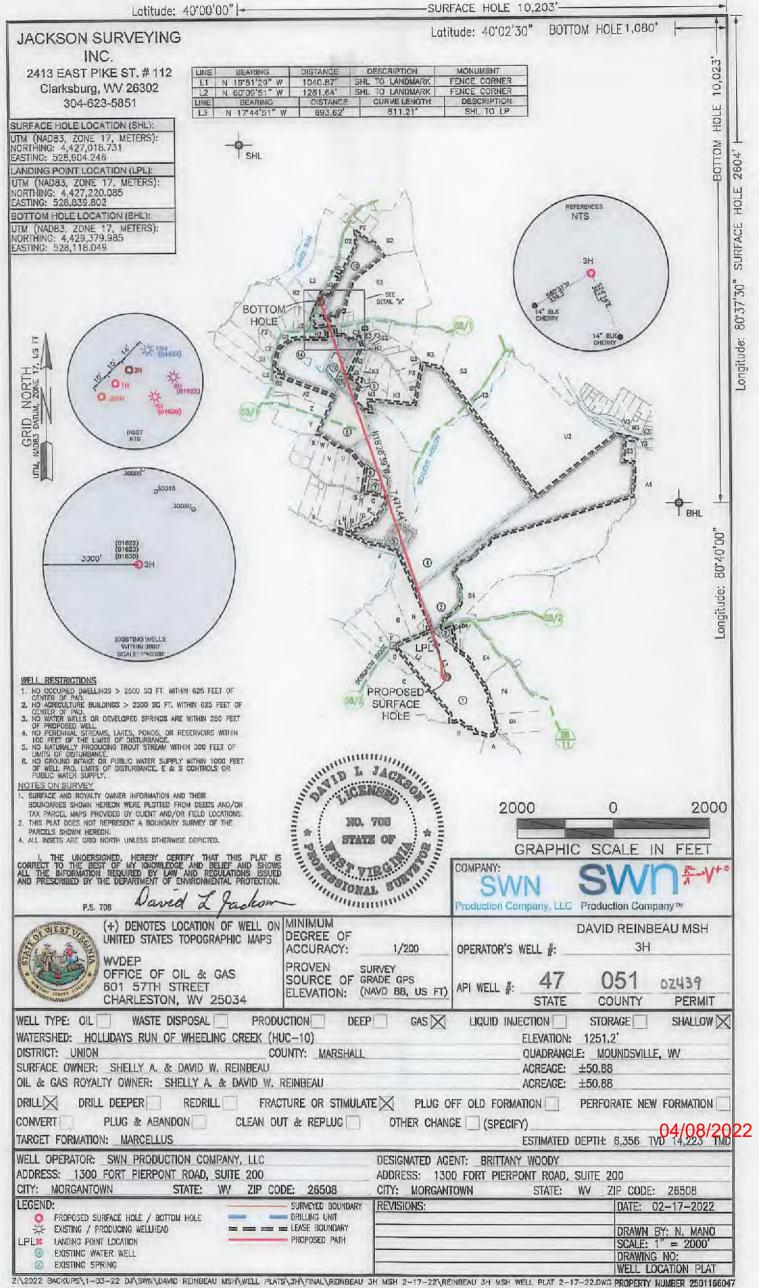
SWN Production Company, LLC 1300 Fort Pierpont Drive, Suite 201 Morgantown, West Virginia 26508

API NO. 47-XXX-XXXXX WELL NAME: David Reinbeau MSH 3H Moundsville QUAD Union DISTRICT MARSHALL COUNTY, WEST VIRGINIA

Submitted by:		
Name: Brittany Woody Suttony Woody	Date: <u>2/14/2022</u>	
Title: Senior Regulatory Analyst	SWN Production Co., LLC	
Approved by: Name: Lanu July Title: Tuspectu.	Date: 2 23 2022	
Approved by:		
Name:	Date:	RECEIVED Office of Oil and Gas
Title:		MAR 0 3 2022

SWN PRODUCTION COMPANY, LLC - CONFIDENTIAL

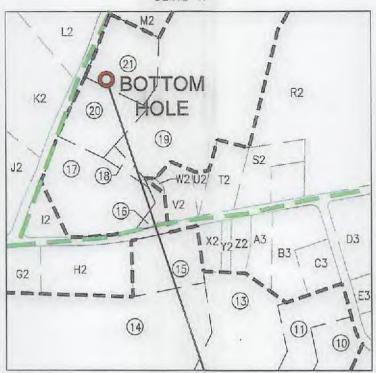




JACKSON SURVEYING INC.

2413 EAST PIKE ST. # 112 Clarksburg, WV 26302 304-623-5851

DETAIL "A"



	WER BORE TRACTS	
TRACT	SURFACE DWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	REINBEAU SHELLY A & DAVID W (S/R)	13-8-29
TRACT	SURFACE OWNER (S)	TAX PARCEL
2	NARRISH KEVIN (S)	13-8-30
3	BONACCI BRIAN F (S)	13-3-5.1
4	COULLING LOUISES ET AL (S)	13-3-3
5	OHIO COUNTY COAL RESOURCES INC (S)	13-3-3.1
6	GEHO STANLEY R & BETH B (S)	13-4-22.16
7	GEHO STANLEY R & BETH B (S)	13-4-22.7
8	MCGUIRE PHILIP C (S)	13-4-21.4
9	YOUNGER DONALD A & MOORE TERESA R (S)	13-2-94
10	DAY JOHN U EST & MERCER CHRISTINE (5)	13-2-95
11	CHAPPELEAR THOMAS C & PAULA A (S)	13-2-95.1
12	GARVIN CORRINE A EST (S)	13-2-97
13	GARVIN LEILA N & DONALD A (5)	13-2-96
14	GARVIN CORRINE A EST (S)	13-2-98
15	MERCER RICK (S)	13-2-81.1
16	RANSOM DONNA K & DAVID W -TRUSTS (S)	13-2-30.9
17	RANSOM DONNA K & DAVID W -TRUSTS (S)	13-2-30.2
18	RANSOM DONNA K & DAVID W -TRUSTS (S)	13-2-30.5
19	DOUGHERTY LOIS J (S)	13-2-30.8
20	DOUGHERTY KAREN E (S)	13-2-30.3
21	SCHLIEPER DAVID J & LYNDSEY B (5)	13-2-30.4

Town in

NO. 708
STATE OF
VIRG

04/08/2022

David L Jackson COMPANY: REVISIONS: SWN Production Company, LLC Production Company™ DATE: 02-17-2022 OPERATOR'S DAVID REINBEAU MSH WELL #: 47-051-02439 DRAWN BY: N. MANO SCALE: N/A DRAWING NO: DISTRICT: COUNTY: MARSHALL STATE: UNION WV WELL LOCATION PLAT 2

Z:\2022 BACKUPS\1-03-22 DJ\SWN\DAVID REINBEAU MSH\WELL PLATS\3H\FINAL\REINBEAU 3H MSH 2-17-22\REINBEAU 3H MSH WELL PLAT 2-17-22.DWG
THURSDAY FEBRUARY 17 2022 02:12PM

JACKSON SURVEYING INC.

2413 EAST PIKE ST. # 112 Clarksburg, WV 26302 304-623-5851

	ADJOINING OWNERS TABLE	1
TRACT	SURFACE OWNER	TAX PARCEL
A	MCCOMBS JOHN A SR, THOMAS E & BETH	13-8-11
В	MCCOMBS JOHN A SR, THOMAS E & BETH	13-8-26
С	REINBEAU SHELLY A & DAVID W	13-8-27
D	BOWMAN MICHAEL ET UX	13-8-28
E	BOWMAN MICHAEL J & CONSTANCE G	13-7-21
F	ALEXANDER LORRAINE	13-7-20
G	ALEXANDER LORRAINE	13-7-18.1
Н	ALEXANDER LORRAINE	13-7-18
1	SAMPSON EDITH VIRGINIA EST	13-7-19
1	WARD CYNTHIA J & DALE P	13-4-23.5
K	WEST VALUE JAMES ET AL	13-4-22
L	BRINKMEIER BRUCE & TAMARA	13-4-22.14
M	BRINKMEIER BRUCE & TAMARA	13-4-22.15
N	WALTON EARL RICHARD JR & BRANDICE C	13-4-22.21
0	WALTON EARL RICHARD JR & BRANDICE C	13-4-22.23
P	GAMES FRED & MARY V	13-4-22.19
Q	GAMES FRED & MARY V	13-4-22.18
R	GAMES MARY VIRGINIA - TOD	13-4-22.22
S	WALTON EARL RICHARD JR & BRANDICE C	13-4-22.20
T	WEST VALUE JAMES ET AL	13-4-22
U	HILL CAROL LYNN & FORDYCE BRIAN W	13-4-22.8
V	MANNING JOHN B & KIMBERLY R	13-4-22.13
w	GAMES FRED & MARY V	13-4-22.17
X	GAMES MARY VIRGINIA - TOD	13-4-22.25
Υ	MCGUIRE PHILLP C	13-4-21.9
Z	GARVIN CORRINE A EST	13-2-101
A2	GARVIN CORRINE A EST	13-2-100
B2	GARVIN CORRINE A EST	13-2-99
C2	GARVIN CORRINE A EST	13-2-70
D2	GARVIN CORRINE A EST	13-2-71
E2	MUSTACHIO EMILY A & GARVIN GRANT W	13-2-72
F2	GARVIN JOHN A & KAREN L	13-2-73
G2	GARVIN DOROTHY MAE EST	13-2-81
H2	GARVIN JOHN	13-2-81.2
12	RANSOM DAVID W & DONNA K	13-2-80
12	MILLER GEORGE W FT AL	13-2-79
K2	BURKE RICHARD & FITZPATRICK DEBRA	13-2-31.2
12	BURKE RICHARD & FITZPATRICK DEBRA	12-1-31.1
M2	INGRAM ROBERT HOWARD III ET UX	13-2-30.6
N2	DOUGHERTY MICHAEL C	13-2-30.7
02	DOUGHERTY MICHAEL C	13-2-30.10
P2	LONG RICHARD E ET UX	13-2-30.10
Q2	LONG RICHARD E ET UX	13-2-34

	ADJOINING OWNERS TABLE	a blancon
TRACT	SURFACE OWNER	TAX PARCE
R2	WILLIS CHARLES ROBERT ET AL	13-2-29
52	INGRAM ROBERT HIII & LISA ANN	13-2-29.4
T2	DOUGHERTY LOIS J	13-2-30.1
U2	DOUGHERTY LOIS J	13-2-30.14
V2	HANKET COURTNEY T	13-2-30.11
W2	RANSOM DONNA K & DAVID W	13-2-30.12
X2	MERCER RICK	13-2-82.1
Y2	MERCER RICK	13-2-82.2
Z2	BILINSKY HARRY EST & PALMER JOSEPH J	13-2-82
A3	MERCER RICK W	13-2-83
B3	STOEHR JOHN ROBERT ET UX	13-2-83.1
C3	REDD JOHN N ET UX	13-2-84
D3	GARVIN JOHN ARTHUR	13-2-85
E3	DENNING MICHAELJ ET UX	13-2-86
F3	HENRY VICTORIA A	13-2-86.1
G3	HENRY VICTORIA A	13-2-86.2
НЗ	FLANAGAN JAMES A & BETY'S	13-2-94.2
13	YOUNGER DONALD A & MOORE TERESA R	13-2-94.4
J3	YOUNGER DONALD A & MOORE TERESA R	13-2-94.6
КЗ	YOUNGER DONALD A & MOORE TERESA R	13-2-94.3
L3	BANE RYAN	13-2-93
M3	WIEDEBUSCH ROBERT & CINDY	13-2-93.1
N3	WIEDEBUSCH ROBERT & CINDY	13-2-91
03	GAUGHAN MICHAEL WM	13-2-90.1
P3	GAUGHAN MICHAEL WILLIAM ET UX	13-2-90
Q3	ABELJAMES R & SHERI L	13-2-89
R3	ISER RONALD J ET UX	13-2-88
S3	WHITE HORSE FARM LLC	13-3-2
T3	COULUNG LOUISES ET AL	13-3-5.3
U3	COULLING LOUISES	13-3-5
V3	DAWSON THOMAS A ET AL	12-18-21.1
W3	MCADAMS ROBERT E & JODY L	12-18-27.1
Х3	MATTUCCI MARK A	12-1B-28
Y3	MAAS BRIAN J & AMY C - TRUST	13-3-8
23	MAAS BRIAN J & AMY C - TRUST	13-3-10
A4	HARTJOHN J & RENEE A	13-3-11
B4	BONACCI FRANK A	13-3-5.5
C4	SOUTH CHRISTOPHER C	13-8-31
D4	KOSTELECSKY JOSEPH J JR & CAROLYN - TOD	13-8-31.1
E4	FUNK CHARLES D ET UX	13-8-32
F4	LOY EUGENE EST ET AL	13-8-01
G4	LIBERTY JOHN ET UX	13-8-10

REVISIONS:

COMPANY:

SWN

Production Company. LLC

Production Company.

OPERATOR'S DAVID REINBEAU MSH

WELL #: 47-051-02431 3H

DRAWN BY: N. MANO

DISTRICT:
UNION

DISTRICT:
UNION

MARSHALL

WV

DRAWING NO:
WELL LOCATION PLAT 3

Z:\2022 BACKUPS\1-03-22 DJ\SWN\DAVID REINBEAU MSH\WELL PLATS\3H\FINAL\REINBEAU 3H MSH 2-17-22\REINBEAU 3H MSH WELL PLAT 2-17-22.DWG
THURSDAY FEBRUARY 17 2022 02:13PM

WW-6A1 (5/13) Operator's Well No. DAVID REINBEAU MSH 3H

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

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

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

Lease Name or Number

Grantor, Lessor, etc.

Grantee, Lessee, etc.

Royalty

Book/Page

See Exhibit "A"



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

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

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

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:	Bailey Brougher	
Its:	Senior Landman	
	Office of Oil and Gare	
	MAR 0 3 2022	Page 1 of

EXHIBIT "A"

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator David Reinbeau MSH 3H

Marshall County, West Virginia

#	TMP	LESSOR	LESSEE	ROYALTY	BK/PG
1)	13-0008-0029-0000	Sheily A. Reinbeau and David W. Reinbeau, her husband, joint tenants, with right of survivorship	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	17.00%	688/424 33/110
2)	13-0008-0030-0000	Thomas P. Zahnow and Holly J. Zahnow, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	697/101 33/110
3)	13-0003-0005-0001	Orville Young L.L.C.	SWN Production Company, LLC	18.00%	868/394
		Brian F. Bonacci, a single man	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	764/390 33/110
		Frank A. Bonacci, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	764/396 33/110
4)	13-0003-0003-0000	Orville Young L.L.C.	SWN Production Company, LLC	18.00%	868/394
		Louise S. Coulling, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	767/445 33/110
		Heidi Bruhn, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	767/455 33/110
		Mary Schenk Hamilton and Gary P. Hamilton, wife and husband	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	767/466 33/110
		Karen Schenk Sligar and Terry B. Sligar, wife and husband	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	768/203 33/110
		White Horse Farm, LLC	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	771/373 33/110
		Frank A. Bonacci, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	782/385 33/110
		Brian F. Bonacci, a single man	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	782/393 33/110
5)	13-0003-0003-0001	SWN Production Company, LLC (Company Owned Minerals)	12.50%	1128/370 (Mineral Deed)
6)	13-0004-0022-0016	James Riley West and Phyllis Jean West, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	12.50%	676/329 33/110
		Fred Games and Mary Virginia Games, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	12.50%	676/334 33/110

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7) 13-0004-0	022-0007	James Riley West, widower	Chesapeake Appalachia, L.L.C.	18.00%	721/375
			SWN Production Company, LLC		33/110
8) 13-0004-0	021-0004	Philip C. McGuire and Janice R. McGuire, husband and wife	Chesapeake Appalachia, L.L.C.	18.00%	834/193
			SWN Production Company, LLC		33/110
9) 13-0002-0	094-0000	John Arthur Garvin and Karen L. Garvin, husband and wife	Chesapeake Appalachia, L.L.C.	14.00%	681/598
			SWN Production Company, LLC		33/110
		Calvin Carter Garvin, a married man doing business in his	Chesapeake Appalachia, L.L.C.	14.00%	682/118
		sole and separate property	SWN Production Company, LLC		33/110
		Hadden Paul Garvin, Jr., single	Chesapeake Appalachia, L.L.C.	14.00%	681/119
			SWN Production Company, LLC		33/110
		Leila Catherine Garvin Linder, aka Catherine Linder, and Dr.	Chesapeake Appalachia, L.LC.	18.00%	799/269
		Steven Linder, wife and husband	SWN Production Company, LLC		33/110
		Heather Blackmar, a married woman dealing in her sole	Chesapeake Appalachia, L.L.C.	18.00%	799/635
		and separate property	SWN Production Company, LLC		33/110
		Gary W. Garvin, single	Chesapeake Appalachia, L.L.C.	12.50%	691/646
			SWN Production Company, LLC		33/110
		Philip Spencer Bowen, Jr., widower	Chesapeake Appalachia, L.L.C.	18.00%	799/641
			SWN Production Company, LLC		33/110
		Donald Alexander Garvin, widower	Chesapeake Appalachia, L.L.C.	18.75%	710/34
			SWN Production Company, LLC		33/110
10) 13-0002-0	095-0000	John Arthur Garvin and Karen L. Garvin, husband and wife	Chesapeake Appalachia, L.L.C.	14.00%	681/598
			SWN Production Company, LLC		33/110
		Calvin Carter Garvin, a married man doing business in his	Chesapeake Appalachia, L.L.C.	14.00%	682/118
		sole and separate property	SWN Production Company, LLC		33/110
		Hadden Paul Garvin, Jr., single	Chesapeake Appalachia, L.L.C.	14.00%	681/119
			SWN Production Company, LLC		33/110
		Leila Catherine Garvin Linder, aka Catherine Linder, and Dr.	Chesapeake Appalachia, L.L.C.	18.00%	799/269
		Steven Linder, wife and husband	SWN Production Company, LLC		33/110
		Heather Blackmar, a married woman dealing in her sole	Chesapeake Appalachia, L.L.C.	18.00%	799/635
		and separate property	SWN Production Company, LLC		33/110
		Gary W. Garvin, single	Chesapeake Appalachia, L.L.C.	12.50%	691/646
			SWN Production Company, LLC		33/110
		Philip Spencer Bowen, Jr., widower	Chesapeake Appalachia, L.L.C.	18.00%	799/641
			SWN Production Company, LLC		33/110

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	Donald Alexander Garvin, widower	Chesapeake Appalachia, L.L.C.	18.75%	710/34
		SWN Production Company, LLC		33/110
11) 13-0002-0095-0001	John Arthur Garvin and Karen L. Garvin, husband and wife	Chesapeake Appalachia, L.L.C.	14.00%	681/598
		SWN Production Company, LLC		33/110
	Calvin Carter Garvin, a married man doing business in his	Chesapeake Appalachia, L.L.C.	14.00%	682/118
	sole and separate property	SWN Production Company, LLC		33/110
	Hadden Paul Gangin, Jr., single	Chesapeake Appalachia, L.L.C.	14.00%	681/119
		SWN Production Company, LLC		33/110
	Leila Catherine Con Linder, aka Catherine Linder, and Dr.	Chesapeake Appalachia, L.L.C.	18.00%	799/269
	Steven Linder, wigel ad husband	SWN Production Company, LLC		33/110
	Heather Blackman married woman dealing in her sole	Chesapeake Appalachia, L.L.C.	18.00%	799/635
	and separate property	SWN Production Company, LLC		33/110
	Gary W. Garvin, single	Chesapeake Appalachia, L.L.C.	12.50%	691/646
		SWN Production Company, LLC		33/110
	Philip Spencer Bowen, It; with ver	Chesapeake Appalachia, L.L.C.	18.00%	799/641
		SWN Production Company, LLC		33/110
	Donald Alexander Garvin, widower	Chesapeake Appalachia, L.L.C.	18.75%	710/34
		SWN Production Company, LLC		33/110
2) 13-0002-0097-0000	John Arthur Garvin and Karen L. Garvin, husband and wife	Chesapeake Appalachia, L.L.C.	14.00%	681/598
	•	SWN Production Company, LLC		33/110
	Calvin Carter Garvin, a married man doing business in his	Chesapeake Appalachia, L.L.C.	14.00%	682/118
	sole and separate property	SWN Production Company, LLC		33/110
	Hadden Paul Garvin, Jr., single	Chesapeake Appalachia, L.L.C.	14.00%	681/119
		SWN Production Company, LLC		33/110
	Lella Catherine Garvin Linder, aka Catherine Linder, and Dr.	Chesapeake Appalachia, L.L.C.	18.00%	799/269
	Steven Linder, wife and husband	SWN Production Company, LLC		33/110
	Heather Blackmar, a married woman dealing in her sole	Chesapeake Appalachia, L.L.C.	18.00%	799/635
	and separate property	SWN Production Company, LLC		33/110
	Gary W. Garvin, single	Chesapeake Appalachia, L.L.C.	12.50%	691/646
		SWN Production Company, LLC		33/110
	Philip Spencer Bowen, Jr., widower	Chesapeake Appalachia, L.L.C.	18.00%	799/641
		SWN Production Company, LLC		33/110

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	Donald Alexander Garvin, widower	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	710/34 33/110
13) 13-0002-0096-0000	John Arthur Garvin and Karen L. Garvin, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	681/598 33/110
	Calvin Carter Garvin, a married man doing business in his sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	682/118 33/110
	Hadden Paul Garvin, Jr., single	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	681/119 33/110
	Leila Catherine Garvin Linder, aka Catherine Linder, and Dr. Steven Linder, wife and husband	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	799/269 33/110
	Heather Blackmar, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	799/635 33/110
	Gary W. Garvin, single	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	12.50%	691/646 33/110
	Philip Spencer Bowen, Jr., widower	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	799/641 33/110
	Donald Alexander Garvin, widower	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	710/34 33/110
14) 13-0002-0098-0000	John Arthur Garvin and Karen L. Garvin, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	681/598 33/110
	Calvin Carter Garvin, a married man doing business in his sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	682/118 33/110
	Hadden Paul Garvin, Jr., single	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	681/119 33/110
	Leila Catherine Garvin Linder, aka Catherine Linder, and Dr. Steven Linder, wife and husband	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	799/269 33/110
	Heather Blackmar, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	799/635 33/110
	Gary W. Garvin, single	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	12.50%	691/646 33/110
	Philip Spencer Bowen, Jr., widower	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	799/641 33/110

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MAR 0,3 2022

		Donald Alexander Garvin, widower	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	710/34 33/110
15)	13-0002-0081-0001	John Arthur Garvin and Karen L. Garvin, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	681/598 33/110
		Calvin Carter Garvin, a married man doing business in his sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	682/118 33/110
		Hadden Paul Garvin, Jr., single	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	681/119 33/110
		Leila Catherine Garvin Linder, aka Catherine Linder, and Dr. Steven Linder, wife and husband	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	799/269 33/110
		Heather Blackmar, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	799/635 33/110
		Gary W. Garvin, single	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	12.50%	691/646 33/110
		Philip Spencer Bowen, Jr., widower	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	799/641 33/110
		Donald Alexander Garvin, widower	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	710/34 33/110
16)	13-0002-0030-0009	Donna K. Ransom and David W. Ransom, her husband	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	12.50%	699/417 33/110
17)	13-0002-0030-0002	Donna Kay Ransom, a/k/a Donna K. Ransom, and David W. Ransom, her husband	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	12.50%	701/346 33/110
18)	13-0002-0030-0005	Donna Kay Ransom, a/k/a Donna K. Ransom, and David W. Ransom, her husband	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	12.50%	701/346 33/110
19)	13-0002-0030-0008	Lois J. Dougherty and Frederick A. Dougherty, wife and husband	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	677/211 33/110
20)	13-0002-0030-0003	Wayne T. Dougherty and Karen E. Dougherty, his wife	TriEnergy Holdings, LLC NPAR, LLC Chevron U.S.A. Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	16.00%	694/264 23/80 756/332 30/532 33/110

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21)	13-0002-0030-0004	Robert H. Ingram, III and Lisa Ann Ingram, f/k/a Lisa Ann	TriEnergy Holdings, LLC	16.00%	696/166
		Dougherty, his wife	NPAR, LLC		23/80
			Chevron U.S.A. Inc.		756/332
			Chesapeake Appalachia, L.L.C.		30/532
			SWN Production Company, LLC		33/110
			• •		

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SWN Production Company, LLC 1300 Fart Pierpont Dr, Ste 201 Margantown, WV 26508 Tel: 304 884 1610 Fax: 304 471 2497 www.swn.com

February 16, 2022

Mr. Charles Brewer WV DEP Office of Oil & Gas 601 57th St., SE Charleston, WV 25304

RE: SWN's proposed New Well: David Reinbeau MSH 3H in Marshall County, West Virginia, Drilling under Sorghum Ridge Road, Garvins Road, and Ravenscraft Road.

Dear Mr. Brewer:

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 Sorghum Ridge Road, Garvins Road, and Ravenscraft 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,

Bailey Brougher Senior Landman

SWN Production Company, LLC

Bailey Brogler

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

	ce Certification:	API N	0. 47- 051 -	
		Opera	tor's Well No. David	d Reinbeau MSH 3H
		Well I	Pad Name: David R	teinbeau MSH
Notice has	been given:			
		§ 22-6A, the Operator has provided the	ne required parties v	vith the Notice Forms listed
	tract of land as follows:		7 100005 1 a sa	
State:	West Virginia	UTM NAD 83 Eastin		
County:	051-MArshall	Public Road Access:	ing: 4427018.731 Sorghum Ridge F	Dand
District: Quadrangle:	Union Moundsville	Generally used farm nam		Noau
Watershed:	Hollidays Run of Wheeling Creek	Generally used farm han	IIC. Lavid Kellibadu	
watersned.	Troiling Trail of Triffooling Order			
prescribed by it has provid information r of giving the requirements Virginia Cod	the secretary, shall be verified and sed the owners of the surface described the owners of the surface described by subsections (b) and (c), so surface owner notice of entry to surface owner notice of subsection (b), section sixteen of	every permit application filed under hall contain the following information bed in subdivisions (1), (2) and (4), ection sixteen of this article; (ii) that the prival pursuant to subsection (a), see if this article were waived in writing ender proof of and certify to the secre- tic.	n: (14) A certificati subsection (b), see the requirement was tion ten of this arti g by the surface ov	on from the operator that (inction ten of this article, the deemed satisfied as a result cle six-a; or (iii) the notice wher; and Pursuant to Wes
Pursuant to	West Virginia Code 8 22-6A the Or	perator has attached proof to this Not	ice Certification	
		retuted this intitience proof to this i to	Tee Collinson	
	erator has properly served the require	d parties with the following:		
that the Ope	erator has properly served the require ECK ALL THAT APPLY	d parties with the following:		OOG OFFICE USE ONLY
that the Ope	ECK ALL THAT APPLY	d parties with the following: NOTICE NOT REQUIRED BE SEISMIC ACTIVITY WAS CON	ECAUSE NO	
that the Ope	ECK ALL THAT APPLY TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRED BE	ECAUSE NO DUCTED	ONLY □ RECEIVED/
*PLEASE CH	ECK ALL THAT APPLY TICE OF SEISMIC ACTIVITY or TICE OF ENTRY FOR PLAT SURV	NOTICE NOT REQUIRED BE SEISMIC ACTIVITY WAS CON	ECAUSE NO DUCTED AS CONDUCTED ECAUSE	ONLY RECEIVED/ NOT REQUIRED
*PLEASE CH	ECK ALL THAT APPLY TICE OF SEISMIC ACTIVITY or TICE OF ENTRY FOR PLAT SURV	■ NOTICE NOT REQUIRED BE SEISMIC ACTIVITY WAS CONFIDER OF NO PLAT SURVEY WAS NOTICE NOT REQUIRED BE NOTICE OF ENTRY FOR PLATS	ECAUSE NO DUCTED AS CONDUCTED ECAUSE SURVEY	ONLY RECEIVED/ NOT REQUIRED RECEIVED/
*PLEASE CH	ECK ALL THAT APPLY TICE OF SEISMIC ACTIVITY or TICE OF ENTRY FOR PLAT SURV	■ NOTICE NOT REQUIRED BE SEISMIC ACTIVITY WAS CONFORD OF LAT SURVEY WAS DOTICE NOT REQUIRED BE NOTICE OF ENTRY FOR PLATS WAS CONDUCTED OF WRITTEN WAIVER BY SUR	ECAUSE NO DUCTED AS CONDUCTED ECAUSE SURVEY	ONLY RECEIVED/ NOT REQUIRED RECEIVED/
*PLEASE CHI 1. NO 2. NO 3. NO	ECK ALL THAT APPLY TICE OF SEISMIC ACTIVITY OF TICE OF ENTRY FOR PLAT SURV	■ NOTICE NOT REQUIRED BE SEISMIC ACTIVITY WAS CONFORD OF LAT SURVEY WAS DOTICE NOT REQUIRED BE NOTICE OF ENTRY FOR PLATS WAS CONDUCTED OF WRITTEN WAIVER BY SUR	ECAUSE NO DUCTED AS CONDUCTED ECAUSE SURVEY	ONLY RECEIVED/ NOT REQUIRED RECEIVED/ NOT REQUIRED

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 personnel of Notice affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

MAR 0 3 2022

By:

4705102439 6705102439

Certification of Notice is hereby given:

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

Well Operator: SWN Production Co., LLC

Brittany Woody

Its: Senior Regulatory Analy

Telephone: 304-884-1610 Address: 1300 Fort Pierpont Dr., Suite 201

Morgantown, WV 26508

304-884-1690 Facsimile:

Email: Brittany Woody@swn.com

REID CROFT Notary Public Official Seal State of West Virginia Comm. Expires Aug 21, 2024 Sparrow Lane Morgantown WV 26508

Subscribed and sworn before me this 17

Notary Public

My Commission Expires

8/21/2024

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.

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MAR 0 3 2022

WW-6A (9-13)

API NO. 4405/ 0.5 10 2 4 3 9 OPERATOR WELL NO. David Reinbrau MSH SH Well Pad Name: David Reinbrau MSH

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

Not	ice Time Requiren	nent; notice shall be prov	ided no later than the filing date of permit application.
	e of Notice: ice of:	Date Permit Applica	ition Filed:
Ø	PERMIT FOR AT		ICATE OF APPROVAL FOR THE RUCTION OF AN IMPOUNDMENT OR PIT
Del	ivery method purs	uant to West Virginia C	ode § 22-6A-10(b)
	PERSONAL	☑ REGISTERED	☐ METHOD OF DELIVERY THAT REQUIRES A
6	SERVICE	MAIL	RECEIPT OR SIGNATURE CONFIRMATION
sedii the soil a descoper more well imperatory provide	ment control plan re- surface of the tract of and gas leasehold be- beribed in the erosion rator or lessee, in the e coal seams; (4) The l work, if the surface oundment or pit as de- e a water well, spring yide water for consul- posed well work acti- section (b) of this sec- tords of the sheriff rec- vision of this article to e R. § 35-8-5.7 a re- er purveyor or surface	quired by section seven of a which the well is or is prong developed by the proposand sediment control plans are event the tract of land on a cowners of record of the stract is to be used for the pescribed in section nine of a or water supply source loon point of the period of the total puriod to be maintained pure of the contrary, notice to a liquired, in part, that the oper cowner subject to notice a	equires a receipt or signature confirmation, copies of the application, the crosion and this article, and the well plat to each of the following persons: (1) The owners of record of oposed to be located; (2) The owners of record of the surface tract or tracts overlying the sed well work, if the surface tract is to be used for roads or other land disturbance as submitted 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 urface tract or tracts overlying the oil and gas leasehold being developed by the proposed placement, construction, enlargement, alteration, repair, removal or abandonment of any this article; (5) Any surface owner or water purveyor who is known to the applicant to eated within one thousand five hundred feet of the center of the well pad which is used to eated within one thousand five hundred feet of the center of the well pad which is used to estic animals; and (6) The operator of any natural gas storage field within which the lift more than three tenants in common or other co-owners of interests described in ands, the applicant may serve the documents required upon the person described in the suant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. rator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any and water testing as provided in section 15 of this rule.
	URFACE OWNER	Color and Color School Color	□ COAL OWNER OR LESSEE
	ne; David & Shally Reinb		Name: American Consolidated Natural Resources
Add	ress: 651 Sorghum Rid	ge Road	Address: 45226 National Road
Whee	eling, WV 26003		St. Clairsville, OH 43950
Nan	ne:		☐ COAL OPERATOR
Add	ress:		
-			Address:
		(s) (Road and/or Other Di	
Nan			
Add	lress:		AND/OR WATER PURVEYOR(s)
			Name: None
Nan	1e:		Address;
Add	iress:		DODGE LTOR OF ANY MATTER AT CAR CASO AMERICAN
ПSI	URFACE OWNER	(s) (Impoundments or Pits	OPERATOR OF ANY NATURAL GAS SREPEWED/TELD Name: Office of Oil and Gas Att
Nan		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Address:
Add	ress:		
_			*Please attach additional forms if necessary

OPERATOR WELL NO. Gavid Reinbess MSH SH Well Pad Name: David Reinbess MSH

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/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 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, figuranted shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section mething 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 MARefrigit@102 as 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 Decomber 31, 2012 report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal and the problems and the compounds generated by the drilling of horizontal and the compounds are the compounds. 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. 47-051 OPERATOR WELL NO. David Reinbesu MSH 3H Well Pad Name: David Reinbeau MSH

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

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Office of Oil and Gas

WV Department of

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) 4705102439

OPERATOR WELL NO. David Reinbedu MSH 3H

Well Pad Name: David Reinbeau MSH

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.

ermit Denial or Condition

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

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

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

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

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WW-6A (8-13) 4705102439

OPERATOR WELL NO. David Reinboau MSH 3H
Well Pad Name: David Reinbeau MSH

Notice is hereby given by:

Well Operator: SWN Production Co., LLC

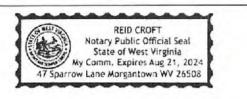
Telephone: 304-884-1610 Email: Britteny_Woody@swn.com Address: 1300 Fort Pierpont Dr., Suite 201

Morgantown, WV 26508

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.



Subscribed and sworn before me this 17 day of Feb., 2022.

Notary Public

My Commission Expires 8/21/2024

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MAR 0 3 2022

WW-6A3 (1/12)

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

Notice Time I entry	Requirement:	Notice shall be prov	rided at least SEVEN (7)	days but no more tha	in FORTY-FIVE (45) days prior to		
Date of Notice	e: 1/26/2022	Date of Plan	nned Entry: 2/2/2022				
Delivery metl	hod pursuant	to West Virginia C	ode § 22-6A-10a				
☐ PERSON	NAL	REGISTERED	☐ METHOD OF D	ELIVERY THAT RI	EQUIRES A		
SERVICE		MAIL		GNATURE CONFIR			
on to the surfa but no more th beneath such t owner of mine and Sediment Secretary, whi enable the surfa	ce tract to cond nan forty-five d tract that has fil erals underlying Control Manua ich statement sl face owner to co	duct any plat survey, lays prior to such en led a declaration pur g such tract in the co al and the statutes ar hall include contact obtain copies from th	s required pursuant to this try to: (1) The surface ow suant to section thirty-six ounty tax records. The no id rules related to oil and information, including th	s article. Such notice ner of such tract; (2) , article six, chapter t tice shall include a st gas exploration and p	r shall provide notice of planned entry shall be provided at least seven days to any owner or lessee of coal seams twenty-two of this code; and (3) any atement that copies of the state Erosion production may be obtained from the age on the Secretary's web site, to		
	by provided to	0:	■ a	AL OUNIER OF LE	CARTE		
	E OWNER(s)			AL OWNER OR LE			
Name: David & S	ORGHUM RIDGE R	OAD		American Consolidated Natur	rai Resources		
Wheeling, WV 2600	3	OND	- 100000	Address: 46226 National Road St. Clairsville, OH 43950			
Address:			■ MI	■ MINERAL OWNER(s)			
				Name: David & Shelley Reinbeau			
Name:			Addres	Address: 651 SORGHUM RIDGE ROAD			
Address:				Wheeling, WV 26003			
			*please a	tach additional forms if no	ecessary		
a plat survey o State: County:	est Virginia Co	ode § 22-6A-10(a), r and as follows:	Approx. La Public Roa	ntitude & Longitude: d Access:	I operator is planning entry to conduct 39,994960, -80,664920 Sorghum Ridge Road		
District:	Union		Watershed		Upper Ohio South		
Quadrangle:	Moundsville		Generally	ised farm name:	David Reinbeau		
may be obtain Charleston, W	ed from the Sec V 25304 (304	cretary, at the WV I -926-0450). Copies	Department of Environme	ntal Protection headq ditional information i	oil and gas exploration and production quarters, located at 601 57th Street, SE, related to horizontal drilling may be RECEIVELY		
Notice is her	eby given by	4			MAR 0 3 2022		
Well Operator	: SWN PRODUCT	FION COMPANY, LLC	Address	1300 Fort Pierpont Dr.,	Suite 201		
Telephone:	304-864-1610			Morgantown, WV 2650	8 WV Department of		
Email:	Brittany_Woody@	@swn.com	Facsimil	304-884-1690	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 deprivacyofficer@wv.gov.

WW-6A4 (1/12)

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

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

Notice Time Date of Notice		ded at least TEN (10) days prior to filing a te Permit Application Filed:	permit application.
Delivery met	hod pursuant to West Virginia Co	de § 22-6A-16(b)	
☐ HAND	■ CERTIFIED MAIL		
DELIVE			
receipt reque drilling a hor of this subsec- subsection mand if availab	sted or hand delivery, give the surfaction as of the date the notice was properties between the surfaction as of the date the notice was properties by the surfaction by the surfaction with the surfaction of the	ten days prior to filing a permit application, the owner notice of its intent to enter upon the given pursuant to subsection (a), section to ovided to the surface owner: <i>Provided</i> , hower owner. The notice, if required, shall included address of the operator and the operator.	the surface owner's land for the purpose of en of this article satisfies the requirements wever, That the notice requirements of this lude the name, address, telephone number,
	d Shelly Reinbeau	Name:	
Address: 651	Sorghum Ridge Road	Address:	
Whe	eling, WV 26003		
		otice is hereby given that the undersigned g a horizontal well on the tract of land as for the tract of land as for the land a	
Watershed:	Hollidays Run of Wheeling Creek (HUC-10)		
Pursuant to Y facsimile nur related to hor	nber and electronic mail address of izontal drilling may be obtained fro	this notice shall include the name, addr the operator and the operator's authorize om the Secretary, at the WV Department of 304 (304-926-0450) or by visiting <u>www.de</u>	ed representative. Additional information of Environmental Protection headquarters,
Notice is he	reby given by:		
	: SWN Production Company, LLC	Authorized Representative:	
Address:	P.O. Box 1300	Address:	1300 Fort Pierpont Drive, Suite 26 CEIVED
	Jane Lew, WV 26378		Morgantown, WV 26508
Telephone:	304-884-1675	Telephone:	304-884-1675 MAR 0 9 2022
Email:	Justin_Booth@swn.com	Email:	Justin_Booth@swn.com
Facsimile:		Facsimile:	WV Department of
	5 - x 7		Environmental Protection
00 10	75 1 1 1 1 1 1		LIMIO III O

Oil and Gas Privacy Notice:

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

WW-6A5 (1/12)

4705102439 Operator Well No. David Rein Deau MS-13H

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

Notice Time Date of Notic	Requirement: notice shall re: 02/15/2022 D	be provided no l ate Permit App		date of permit	application.	
Delivery met	hod pursuant to West Vir	ginia Code § 22	-6A-16(c)			
■ CERTII	FIED MAIL		HAND			
	RN RECEIPT REQUESTER		DELIVERY			
Pursuant to Wreturn receipt the planned of required to be drilling of a lidamages to the (d) The notice of notice. Notice is here (at the address: Name: David an Address: 651 s Wheel Pursuant to W	V. Va. Code § 22-6A-16(c) requested or hand delivery peration. The notice requested by subsection (b) norizontal well; and (3) A se surface affected by oil and are required by this section seeby provided to the SURF is listed in the records of the d Shelly Reinbeau sorghum Ridge Road ling, WV 26003	no later than to give the surface ired by this subto, section ten of a proposed surface d gas operations hall be given to sheriff at the time-16(c), notice is	he date for filing the owner whose land section shall include this article to a surface use and compens to the extent the dathe surface owner at the surface owner at the of notice): Name: Address hereby given that the drilling a horizontal	I will be used for de: (1) A copy ace owner whose action agreement umages are compute the address list.	or the drilling of this code the land will be the containing the c	
County:	Marshall		UTM NAD 8	Northing:	528,904.246	
District:	Union		Public Road	Access:	Sorghum Ridge	Road
Quadrangle:	Moundsville, WV		Generally use	ed farm name:	David Reinbeau	MSH
Watershed: This Notice S	Hollidays Run of Wheeling Creek (H	UG-10)				
Pursuant to W to be provide horizontal we surface affect information re	est Virginia Code § 22-6A d by W. Va. Code § 22-6 ll; and (3) A proposed surfi- ed by oil and gas operation elated to horizontal drilling located at 601 57 th Street	A-10(b) to a sure use and common to the extent g may be obtain	rface owner whose pensation agreementhe damages are co- ed from the Secret	e land will be un nt containing ar ompensable und ary, at the WV	used in conju n offer of com ler article six- Department	(2) The information required notion with the drilling of a spensation for damages to the both this chapter. Additional of Environmental Protection www.dep.wv.gov/oil-and-RECEIVED Office of Oil and Gree
Well Operator	SWN Production Company, LLC		Address:	P.O. Box 1300		1110 0 0 000
Telephone:	304-884-1675			Jane Lew, WV 2637	8	MAR 0.3 7072
Email:	Justin_Booth@swn.com		Facsimile:			41033-2-3
	- Company of Management					WV Department of
Oil and Gas	Privacy Notice:					Environmental Protester

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



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION Division of Highways

D. Alan Reed, P.E. State Highway Engineer 1900 Kanawha Boulevard East • Building Five • Room 110 Charleston, West Virginia 25305-0430 • (304) 558-3505

Jimmy Wriston, P. E. Secretary of Transportation Commissioner of Highways

February 15, 2022

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 David Reinbeau Pad, Marshall County

David Reinbeau MSH 3H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2013-0029 which has been issued to Southwestern Energy for access to the State Road for a well site located off Marshall County Route 88/2 SLS MP 0.84.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE 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 October 1, 2018. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Gary K. Clayton, P.E.

Gary K. Clayton

Regional Maintenance EngineeRECEIVED
Central Office O&G Coordinator of Oil and Gas

MAR 0 3 2022

WV Department of Environmental Protection

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

Samueles	Physical	WALLEY OF A CONTRACTOR OF THE	
Product Name	Product Use	Chemical Name	CAS Number
N-303 (U.S. Well Services)	Mixture	Ethylene glycol	107-21 1
		Cinnamaldehyde	104-55 2
		Butyl cellosolve	111-76 2
		Formic acid	64-18 6
		Polyether	Proprietary
		Acetophenone, thiourea, formaldehyde polymer	68527-49 1
P ONE (U.S. Well Services)	Breaker	Ammonium persulfate	7727-54-0
actron K-139 (Champion Technologies)	Biocide	Glutaraldehyde	111-30-8
[11111
		Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlo	orides 68424-85-1
		Ethanol	64-17-5
actron K-219 (Champion Technologies)	Blocide	Methanol	67-56-1
		Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlo	orides 68424-85-1
arboNRT	Tracer	Ceramic Proppant	66402-68-4
C6486A (Nalco Champion)	Scale Inhibitor	Amine Triphosphate	Proprietary
consult (naice champion)	Scale (IIIIID) to	Ethylene Glycol	107-21-1
STOAN (Chamatan Tanbantanian)	milital		
6734A (Champion Technologies)	Biocide	Hydrogen Peroxide	7722-84-1
		Acetic Acid	64-19-7
		Peroxyacetic Acid	79-21-0
ono-CI200 (5WN Well Services)	Corrosion Inhibitor	Methanol	67-56-1
		Oxyalkylated fatty acid	68951-67-7
		Fatty acids	61790-12-3
		Modified thioures polymer	68527-49-1
		Water	7732-18-5
		Hydrochloric acid	7647-01-0
		Potassium acetate	
			127-08-2
V Da Schlager State Co.	Vincent Co.	Formaldehyde	50-00-0
copol-FEAC (SWN Well Services)	Iron Contro	Acetic Acid	64-19-7
		Citric Acid	77-92-9
		Water	7732-18-5
DP-S1176-15 (Halliburton)	Friction Reducer	Polyacylate	Proprietary
		Hydrotreated light petroleum distillate	64742-47-8
OJET DR900 LPP (SWN Well Services)	Friction Reducer	Distillates (petroleum) hydrotreated light	64674-47-8
The state of the state of	, , , , , , , , , , , , , , , , , , ,	Ethylene Glycol	107-21-1
		Alcohols, C12-15, Exoxylated propoxylated	68213-24-1
		Fatty Alcohols ethoxylated	Proprietary
		Water	7732-18-5
OJET DRP 1130X (SWN Well Services)	Friction Reducer	Proprietary	Proprietary
76 (Halliburton)	Friction Reducer	Hydrotreated light petroleum distillate	54742-47-8
		Inorganic Salt	Proprietary
PTRON T-390 (Champion Technologies)	Scale Inhibitor	Methanol	57-56-1
(and the second	millener	Nonylphenol Ethoxylate	Proprietary
N-150E (Halliburton)	Corresion Inhibitor	No hazardous substance	
			N/A
L (SWN Well Services)	Hydrocholic Acid	Hydrochloric Acid	7647-01-0
		Water	7732-18-5
-65 MC (Halliburton)	Scale Inhibitor	Organic phosphonate	Proprietary
		Ammonium Chloride	12125-02-9
TI-FLEX (U.5. Well Services)	Viscosifying Agent	Distillates, petroleum, hydrotreated light	64742-47-8
exslick 930	Friction Reducer	Copolymer of 2-propenamide	Proprietary
		Hydrotreated Distillate	64742-47-8
		Sodium Chloride	7647-14-5
		Alcohols, C12-16, Exoxylated	68551-12-2
		Oleic Acid Diethanolamide	93-83-4
		Ammonium Chloride	12125-02-9
exslick 953	Friction Reducer	Petroleum Distillate	64742-47-8
		Sodium Chloride	7647-14-5
		Ammonium Chloride	12125-02-9
		N,N-bis (2-hydroxyethyl) oleamide	93-83-4
xslick 957	Friction Reducer	Petroleum Distillate	64742-47-8
		Ammonium Chloride	12125-02-9
		Oleic Acid Diethanolamide	93-83-4
		Alcohols, C12-16, Exoxylated Water	68551-12-2
			7732-15-5
the specific in the	The state of the s		64742-47-8
RA-2000 (U.S. Well Services)	Anionic Friction Reducer		
		Propencic acid, polymer with propenamice	REPREDATED
xaid 655 NM	Anionic Friction Reducer Scale Inhibitor		DECEMBED
xaid 655 NM		Propendic acid, polymer with propenamide	DECREOARED
exaid 655 NM	Scale Inhibitor	Propencic acid, polymer with propenamice Diethylenetriamine pents (methylene phosphonic acid)	Office 1582318984 Gar 69418-26-4
exaid 655 NM	Scale Inhibitor	Propencic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde	Office 1582318984 Gar 69418-26-4
exaid 655 NM	Scale Inhibitor	Propencic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light	PROPAGE Office 158251986 Gov 69-18-26-4 MAR218-31-2022
exaid 655 NM exslick 922	Scale Inhibitor no data available	Propencic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Armonium chloride ((NH4)CI) Oleic Acid Diethnolamide	Office 15827;199.Rd Gov 69-18-26-4 MAR216-38-92022 93-83-4
exaid 655 NM exslick 922	Scale Inhibitor	Propencic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate	DECAMAND Office 158731946 Ger 65418-26-4 64742-47-8 MAR216-38-92022 93-83-4 55556-30-8
exaid 655 NM exslick 922 olcide PSSOA	Scale Inhibitor no data available	Propencic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfona	DEFORMATION Office 158 2319 and Ger 69418-26-4 MAR 218-38-9 0022 93-83-4 55556-30-8 ate WV Department of
exaid 655 NM exslick 922 olcide PS50A	Scale Inhibitor ne data available Biocidal product	Propencic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Armonium chiroide ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfona groups	DEFORMS D Office 158 319 and Ger 65418-26-4 64742-47-8 MARATE 31-92022 93-83-4 55556-30-8 the WV Department of
exaid 655 NM exslick 922 Icide PS50A	Scale Inhibitor no data available	Propencic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Armonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfona groups Hydrotreated light petroleum distillate	DEFORMAND Office 158 2312 and Ger 69418-26-4 MAR 16-31-9 0022 93-83-4 55566-30-8 ite WV Department of Environ 18 1556 19 7 rote of 64742-47-8
exaid 655 NM exslick 922	Scale Inhibitor ne data available Biocidal product	Propencic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Armonium chiroide ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfona groups	DEFORMS D Office 158 319 and Ger 65418-26-4 64742-47-8 MARATE 31-92022 93-83-4 55556-30-8 the WV Department of
exsid 655 NM exslick 922 Icide PSSOA	Scale Inhibitor ne data available Biocidal product	Propencic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfona groups Hydrotreated light petroleum distillate Ethoxylated alcohol	DEPOINSED Office 158 73 19 8 hd Ger 65418-26-4 64742-47-8 MARY 15-32-9 022 93-83-4 55556-30-8 tic WV Department of 64742-47-8 Proprietary
exaid 655 NM exslick 922 Icide PS50A 2950	Scale Inhibitor no data available Biocidal product Friction Reducer	Propencic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Armonium chioride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfona groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1.2-ethanediyl) alphatridecylomegahydroxy-, branched	DEPOINTED Office 158 73 19 8h Ger 69418-26-4 64742-47-8 MAR 16-32-9 072 93-83-4 55556-30-8 ote WV Department of Environ 18 1555 19 Protect 64742-47-8 Proprietary 69011-35-5
exaid 655 NM exslick 922 Icide PS50A	Scale Inhibitor ne data available Biocidal product	Propencic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfona groups Hydrotreated light petroleum distillate Ethoxylated alcohol	DEPOMED Office 158731988 Gen 69418-26-4 64742-47-8 MAR216-31-92022 93-83-4 55556-30-8 tite WV Department of environ 8245649 Protect 64742-47-8 Proprietary

SHEET INDEX

COVER GENERAL NOTES GENERAL NOTES
EXISTING CONDITIONS
BORE HOLE LOCATIONS
OVERALL GRADING & ESC PLAN WELL PAD SUBGRADE PLAN WOLL DAD BASELINE PLAN

WELL PAO BASELINE PROFILE WILL PAO BASELINE CROSS SECTIONS STORM SYSTEM PROFILE 9-12 13 14-27 DETAILS GEOTECH DESIGN & DETAILS

BORING LOGS RECLAMATION PLAN

4/4/2022

APPROVED WVDFP OOG

SWN QUICK ESTIMATE		
ITEM DESCRIPTION	UNT	QUANTITY
NOSE ZATION & DEMOGRATION (LIMITED TO \$5: 06 8ASE BID)	1.5	1
ESLANING & GRUSSING	AC	1.0
EARTHWORK	CY	99,500
LINGUT ARILS MATERIAL	CV	2,000
SOIL TOE LEV S DEEP (INCLUDES EXCAVATION, PIPC, STONE, FABRIC, & COLLECTION DRAINS) [STONE BY SWY]	LF	580
SOIL TOP KEY & DEEP (INCLUDES EXCAVATION, PIPE, STONE, FABRIC, & COLLECTION DRAINS) - (STONE BY SWY)	LF.	180
INTERMEDIATE FOR PLY (APPROX. PL. 1280) (INCLUDES EXCAVATION, MPC, STONE, & FABRIC). (STONE BY SWA)	The .	475
WELL PAD CONTAINMENT SERM	17	1,165
SELDING & MULCHING INICLIDES FERTILIZERY	24.	3.0
READ MAINTENANCE	15	1
1 ST CRUSHITA BURN LUMESTONS FOR WELL FAD (4") - (9) ACCUMPLTON (V. STONE II PURCHASTO AND DELIVERED BY SWIN)	TN	1,790
PASHTO NO. 15TONS FOR WILL PRO-(PLACEMENT CROX, STONE IS PURCHASED AND DELIVERORITS WIT)	TN	4,260
E" CRUSHER RUN LIMISTONE FOR WELL FAG I 12" - IPLACEMENT ONLY, STONE IS FURO ASED AND DELIVERED BY SPINT	TN	21,390
N COMPOST RIVEN SOCK	LF	405
12° COMPOST HUTEP SOCK	U	2,465
15" HOPE STORM PIPE HINCL CONNECTIONS/JOHNTS!	UF	287
DEWATERINGSUMM, COMMETTE (INC.). SLOPE PIRE, PIRE LEVEL SPREADERS, BOLLANDS, ETC. PER DETAIL I - (STONE RESIDEN)	Fal	5
VESSET EXPERIMEND DEVIATERING SOUNT, COMPLETE (MICL SLOPE PITE, PITE LEVEL SPREADERS, BOLLANDS, ETC. PER DETAIL). (STONE RY SWI	. IA	1
STORM PIPE OUTLET PROTECTION - PLACEMENT ONLY - ISTON F MY SWIN	St	900
12" THICK RIP RAP SUMP AT PAD ENTRANCE (STITINE BY SWIT)	59	#10
ONANGC SAFETY FENCE	U	120
Add Afternate		
AASHTO NO. 1 STONE FOR FARM FIELD ACCESS (5" - IPLACEMENT ONLY, STONE IS PURCHASED AND DOLIVERED BY SWIN)	TN	275
ET & BT WEIGHT ARM PENCH LINCULES CEMIC OF EXISTING PINCE)	1.6	1,550

DRIVING DIRECTIONS

- HEAD NORTH ON FORT PIERPONT OR, 0.3 MILES

- HEAD WIGHT HO ON POINT PROPOSED TO JUST SMILES TURN HORT ONTO CHEAT RO, OS MILES TURN HEFT TO MERGE ONTO HOR WITOWARD 173,0,5 MILES MERGE ONTO HOR W. ST. MILES TAKET HE EXIT ONTO 1-79 H TOWARD WASHINGTON, AS,3 MILES TAKET HE EXIT ONTO 1-79 H TOWARD WASHINGTON, 50.9 MILES TAKET HE EXIT ONTO 1-79 H TOWARD WASHINGTON, 50.9 MILES TAKET HE EXIT ONTO 1-70 WASHINGTON, 50.9 MILES TAKET HE EXIT ONTO 1-70 WASHINGTON, 50.9 MILES TAKET HE STORY ONTO 1-70 WASHINGTON, 50.9 MILES WASHINGTON HOR WASHINGTON, 50.9 MILES WASHINGTON HOR WASHINGTON HOR WASHINGTON HOR WASHINGTON, 50.9 MILES WASHINGTON HOR WASHINGTON H
- TAKE THE EATH OF THE FORK TO CONTINUE ON HITOWAY ASSEMBLY AS MEET LEFT AT THE FORK TO CONTINUE ON HITOW, I.S MILES TAKE EXIT 2 TOWARD BETHIFM, O.2 MILES
 KEEP LEFT AND MERGE ONTO W BETHIEREM BLVD, 81 FEET MERGE ONTO W BETHIEREM BLVD, 6.5 MILES

- 12) TURN RIGHT ONTO WY-86 SPRINGECREST RD, 4.7 MILES 13) TURN LEFT ONTO SORGHUM RIGGE RD, 0.8 MILES

SWN PRODUCTION COMPANY. LLC PROPOSED CONSTRUCTION PLANS FOR DAVID REINBEAU PAD EXPANSION MARSHALL COUNTY, WV **MARCH 2022**

PROJECT LOCATION AM EIDGE SD Spraham Ridge eabright ollow McCombi 1 Cem d Drum Cem Allen Hollidat Parkette. Spenin Halcyon Hills Memorial December 4 Secure

MOUNDSVILLE, WV QUADRANGLE REFERENCE MAP

PROJECT COORDINATOR

JOHN DUBLINGS OF THE SOUTH OF THE SOU MORGANTOWN, WV 26508 PHONE: (304) 884 - 1571

EMAIL: JOHN DUBOWSKIRSWN COM

ERIC SHORT, PROJECT MANAGER ASCENT CONSULTING & ENGINEERING

2341 DAVISSON RUN BOAD CLARKSBERD WY 25331 PHONE: GOO! 333 - 3453 EMAI: ERIC@ASCENTCONSLETINGENGREERS.COM

PROJECT MANAGER
ZACHARY ASSARO,
ASCENT CONSULTING & ENGINEERING
Z361 DAVISSON RUN ROAD CLARKSBURG, WV 26301 EMAIL PACHBASCENTOCKSULTINGENGINEERS DOM

ENVIRONMENTAL:
WETLANDS OR SURFACE WATER
INFORMATION WAS DELINEATED BY
ASCENT CONSULTING & ENGINEERING
DATED SEPTEMBER 2021

TOPOGRAPHIC INFORMATION: HORIZONTAL POSITIONS SHOWN ON THE PLAN ARE NADES WEST VIRIOMA STATE PLANES, NORTH ZONE, IN U.S. SURVEY FEET.

LOCAL EMERGENCY SERVICES

NAME NAMES		
AMBULANCE	911	
HOSPITAL EMERGENCY ROOM	(304) 845 - 3211	
FIRE DEPARTMENT	911	
POLICE DEPARTMENT	911	
DESCRIPTION CONTROL CONTES	Jacob 292 - 1292	

LOCATION COORDINATES

ACCESS ROAD ENTRANCE:

WELL PAD CENTER:

LATITUDE: 39-992222 N LATITUDE: 39-5934,16" N NORTHING: 545842,285 NORTHING: 4427015,381

LATITUDE: 39.994985 N LATITUDE: 39.59/41,95° N NORTHING: 546640,975 NORTHING: 4427254,528

LONGITUDE

LONGITUDE

EASTING

LONGITUDE: EASTING: EASTING:

80 601519 W 80:601519 W 80*39*41.47* W 1643073.035 528695.713

80.664479 W

164 2057 857

80"38"52.13" W

WY SPAT FEET) UTM ZONE 17, METERS

DEGINAL DEGREES)
DEGREES MINUTES' SECOND:
(WY SP-83, FEET)
(UTM ZONE 17, METERS)

DECIMAL DEGREES)

LIMITS OF DISTURBANCE BY PROPERTY:

PROPERTY#

PROPERTY OWNER

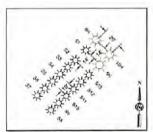
ACRES DISTURBED

TOTAL DISTURBED AREA: 18,42 ACRES 17.43 ACRES EXPANDED DISTURBED AREA

EARTH WORK SUMMARY

TOTAL CUT; TOTAL FILL WASTE (LINSUITABLE MATERIAL):

39,500 CY 39,500 CY 2.000 CY



WELL HEAD LAYOUT

WEST VIRGINIA 81 YOU DIG!

MISS LITILITY OF WEST VIRGINIA
1-800245-1898
WEST VIRGINIA STATE LAW
(SPETION XIV CHAPTER 24-C)
REQUIRES THAT YOU CALL TWO

PROJECT LOCATION

LOCATION	MAP	Not	to	SE

*****	OF SECURITION AND ADDRESS.

2/24/2022 ADDENDEM 81 DATE DESCRIPTION







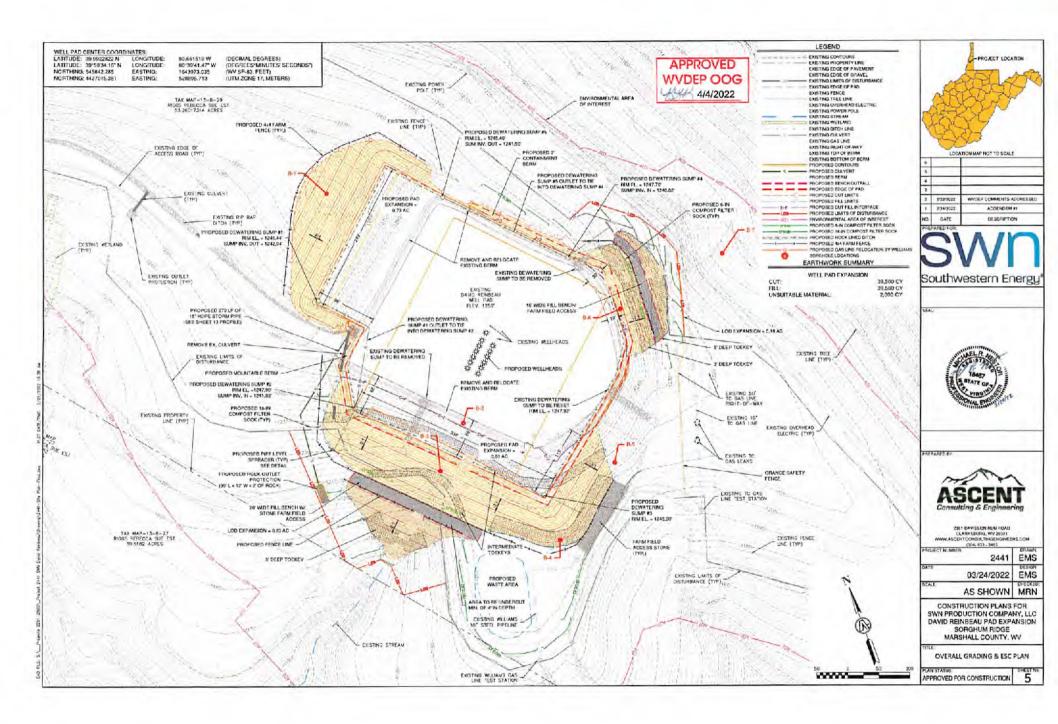
CLAPKSBURG, WV 26501 WW.ASCENTCONEULTINGENGREEPS COM

(304) 933 - 3493			
PROJECT NUMBER	2441	EMS	
DATE	03/24/2022	EMS	
SCALE	AS SHOWN	CHECKED	

CONSTRUCTION PLANS FOR SWN PRODUCTION COMPANY, LLC DAVID REINBEAU PAD EXPANSION SORGHUM RIDGE MARSHALL COUNTY, WV

COVER SHEET

APPROVED FOR CONSTRUCTION



SHEET INDEX

COVER GENERAL NOTES EXISTING CONDITIONS FORE HOLE LOCATIONS OVERALL GRADING & ESC PLAN WELL PAD EXPANSION SUBGRADE PLAN WELL PAD EXPANSION BASELINE PLAN WELL PAD EXPANSION & CULVERT PROFILES WELL PAIR EXPANSION CROSS SECTIONS CULVERT PROFILES 13 GEOTECH DESIGN & DETAILS BORING LOGS

SWN QUICK ESTIMATE				
TEM DESCRIPTION	UNIT	CUANTITY		
MOBILIZATION & DEMOSILIZATION (UMITED TO 10% OF EASE BID)	LS	1		
CONSTRUCTION LAYOUT	LS	1		
CLEARING & GRUEBING	AC	4.0		
EARTHWORK	Cf	39,500		
UNSUITABLE MATERIAL .	- CT =	2,000		
5" DEEP SOIL TO EXCEY (INCLUDES EXCAVATION, PIPE, STONE, FABRIC, & COLLECTION DRAINS)	tr.	350		
S'DESP SOIL TOEKEY (INCLUDES EXCAVATION, PIPE, STONE, FARING, & COLLECTION CRAINS)	U	1200		
INTERMEDIATE TO EKEY (INCLUDES EXCAYATION, PIPE, STONE, & FABRIC)	u	675		
WELL PAD CONTAINMENT BERM	T.	1,165		
SEEDING & MULCHING (INCLUDES FERTILIZER)	AC.	2.50		
ROAD MAINTENANCE	B	1		
1.5" CRUSHER RUN LIMESTONE FOR WELL PAD (4")	TH	3,732		
RASHTD NO. 1 STONE	TN	4.257		
5° CRUSHER BUN LIMESTONE FOR WELL PAD BASE [12"]	TN	11,345		
15' COMPOST FILTER SOCK	LF	1,205		
II" COMPOST FILTER SOCA	UF	465		
15" HOPECULVERT	LF .	270		
FARM FRICE	UF	210		
DEWATERING SUMP, COMPLETE INCLUDES SLOPE PIPE, PIPE IEVEL SPREADERS, BOLLARDS, ETC. PER DETAIL)	EA.			
12" THICK RIP-RAP SUMP	57	150		
ALTER ATTENDED OF DEPART	62	304		

DRIVING DIRECTIONS

- HEAD NORTH ON FORT PIERPONT DR, 0.3 MILES
- TURN RIGHT ONTO N PIERPONT RD, 482 FEET TURN RIGHT ONTO CHEAT RD, 0.5 MILES
- TURN LEFT TO MERGE ONTO 1-65 W TOWARD 1-79,0.5 MILES MERGE ONTO MER W, 6,1 MILES
- TAKE THE EXIT ONTO 1-70 IN TOWARD WASHINGTON, 45.3 MILES TAKE THE EXIT ONTO 1-70 WIL-79 IN TOWARD WASHINGTON, 50.8 MILES
- KEEP LEFT AT THE FORK TO CONTINUE ON 1-470 W. 1.5 MILES TAKE EXIT 2 TOWARD BETHLEM, 0.2 MILES
- 2) TARBERTE ZOVARIO BETHLEM, OL MILES

 1) KEEP LEFT AND MERGE ONTO W BETHLEMEN BLVD, DE PEET

 1) MERGE ONTO W BETHLEMEN BLVD, DE MILES

 2) TURN RIGHT ONTO WAS SIRRIDGE FEET HP, 4.7 MILES

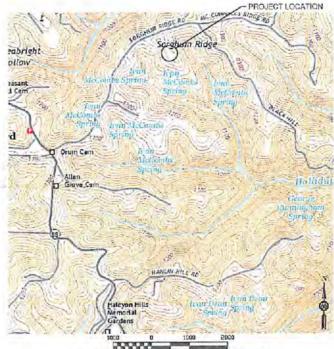
 13) TURN LEFT ONTO SORGHUM BIDGE FID 4.7 MILES

Office of Oil and Gas

MAR 0 3 2022

WV Department of Environmental Protection

SWN PRODUCTION COMPANY, LLC PROPOSED CONSTRUCTION PLANS FOR DAVID REINBEAU PAD EXPANSION MARSHALL COUNTY, WV **NOVEMBER 2021**



MOUNDSVILLE, WY QUADRANGLE REFERENCE MAP

PROJECT COORDINATORS JOHN DUBOWSKI, CONSTRUCTION SUPERINTENDENT SOUTHWESTERN PRODUCTION COMPANY, LLC 1300 FORT PRERPONT DRIVE, SUITE 201.

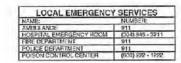
MORGANTOWN, WV 26508 PHONE: (304) 884 • 1671 EMAIL: JOHN_DUBOWSKIESWN.COM

ERIC SHORT, PROJECT MANAGER
ASCENT CONSULTING & ENGINEERING CLARKSBURG, WV 26301 PHONE: (104) 933 - 3463 EMAIL: ERIC@ASCENTCONSULTINGENGINEERS.COM ASCENT CONSULTING & ENGINEERING 2361 DAVISSON BUN BOAD EMAIL: ZACH@ASCENTOONSULTINGENGINEERS.COM

ENVIRONMENTAL: WETLANDS OR SURFACE WATER INFORMATION WAS DELINEATED BY ASCENT CONSULTING & ENGINEERING DATED SEPTEMBER 2021

PHONE: (304) 533 - 3463

HIGHIZONTAL POSITIONS SHOWN ON THIS PLAN ARE NADBO WEST VIRGINIA STATE PLANES, NORTH



LOCATION COORDINATES

ACCESS ROAD ENTRANCE: LATITUDE: 30:004085 N LATITUDE: 30:59/41,55" N NORTHING SARRAN 925

LATITUDE: 30'50'34.16" N

NORTHING: 545842.295 NORTHING: 4427015.381

LONGITUDE: 82,654479 W LONGITUDE: 82*39 52.13* W **FASTING** 1842253.852

BT BE 15 to W LONGITUDE LONGITUDE: 80°39'41,47" W 1643073.035

TOTAL DISTURBED AREA: 18,42 ACRES

EARTH WORK SUMMARY

39,500 CY

IDECIMAL DEGGEESS DEGREES'MINUTES' SECONDS' WVSP-83 FFFTI

(DEGREES MINUTES SECONDS (WV SP-83, FEET)

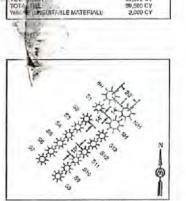
(DECIMAL DEGREES)

LIMITS OF DISTURBANCE BY PROPERTY:

EXPANDED DISTLIBBED AREA:

EASTING:

PROPERTY OWNER HEINDEAU SHELLY A & DAVID W ACRES DISTURBED



WELL HEAD LAYOUT



MISS UTILITY OF WEST VIRGINIA WEST VIRGINA STATE LAW
(SEDTION XIV. CHAPTER 94-C)
REQUIRES THAT YOU CALL TWO PLISINESS DAYS REFORE YOU DIG IN THE STATE OF WEST VINGINIA.



NO,	DATE	DESCRIPTION
1		
2		
3		
4		
5		
9		







2361 DAVISSON HUN ROAD CLARKSSURG, WV 25301 WWW.ASCENTCONSULTINGENGINEERS.CCM

	PROJECT NUM	9ER 2441	EMS
	DATE	11/17/2021	EMS
7	SCALE:	AS SHOWN	MAN

CONSTRUCTION PLANS FOR SWN PRODUCTION COMPANY, LLC DAVID BEINBEAU PAD EXPANSION SORGHUM RIDGE MARSHALL COUNTY, WV

COVER SHEET

APPROVED FOR PERMITS

Mfk 2/25/2022