

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

Friday, June 23, 2023 WELL WORK PERMIT Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC POST OFFICE BOX 12359

SPRING, TX 773914954

Re:

Permit approval for DAVID REINBEAU MSH 6H 47-051-02500-00-00

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 6H

Farm Name:

SHELLY A & DAVID W REIN

Horizontal 6A New Drill

U.S. WELL NUMBER: 47-051-02500-00-00

Date Issued: 6/23/2023

API	Number:	

PERMIT CONDITIONS

4705102500

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

CONDITIONS

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

WW-6B (04/15)

API NO. 47-009 OPERATOR WELL NO. David Reinbeau MSH 6H
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: SWN Production Co., LLC 494512924 051- Marsha 07-Union 486-Moundsville
1) Well Operator: SWN Production Co., LLC 494512924 051- Maisi 07- Smith 486-Modification Co., LLC 494512924 Operator ID County District Quadrangle
2) Operator's Well Number: David Reinbeau MSH 6H Well Pad Name: David Reinbeau MSH
3) Farm Name/Surface Owner: Shelly A & David W. Reinbeau Public Road Access: Sorghum Ridge Road
4) Elevation, current ground: 1251' Elevation, proposed post-construction: 1251'
5) Well Type (a) Gas x Oil Underground Storage
Other
(b)If Gas Shallow X Deep
Horizontal X
6) Existing Pad: Yes or No Yes
7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s): Target Formation- Marcellus, Down-Dip well to the North, Target Top TVD- 6462', Target Base TVD- 6518', Anticipated Thickness- 56', Associated Pressure- 423
8) Proposed Total Vertical Depth: 6507'
9) Formation at Total Vertical Depth: Marcellus
10) Proposed Total Measured Depth: 27841'
11) Proposed Horizontal Leg Length: 20591.51'
12) Approximate Fresh Water Strata Depths: 426'
13) Method to Determine Fresh Water Depths: Deepest Nearby Water Well
14) Approximate Saltwater Depths: 883'- Salinity Profile
15) Approximate Coal Seam Depths: 774' RECEIVED Office Of Oil and Gas
16) Approximate Depth to Possible Void (coal mine, karst, other): None that we are aware of. MAY 2 3 2023
17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? YesNo _X
(a) If Yes, provide Mine Info: Name:
Depth:
Seam:
Owner:

Contract withing

WW-6B (04/15) API NO. 47-_009__-

OPERATOR WELL NO. David Reinbeau MSH 6H

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#	110'	110'	CTS
Fresh Water	13 3/8"	New	J-55	54.4#	476'	476'	552 sx/CTS
Coal	See	Interm	Casing				
Intermediate	9 5/8"	New	J-55	36#	2069'	2069'	789 sx/CTS
Production	5 1/2"	New	P-110 HP	20#	27841'	27841'	Tail 5010sx/100' Inside Intermediate
Tubing							
Liners							

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:		



WW-6B (10/14) 4705102500

API NO. 47- 009

OPERATOR WELL NO. David Reinbeau MSH 6H

Well Pad Name: David Reinbeau MSH

19) Describe proposed well work, including the drilli	ing and plugging back of any pilot hole:
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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 units, horizontal separation units, water and oil storage tanks. Max press and anticipated max rate- 12,500 psi @ 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		
INTERVAL	SCHLUMBERGER PRODUCT NAME	BJ PRODUCT NAME	NEXTIER PRODUCT NAME	PRODUCT USE	CHEMICAL NAME	CAS-Number
SURFACE (FRESHWATER)	\searrow	INTEGRA SEAL	C1600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
ag et A -	\$001	A-7P	0110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
COAL PROTECTION	\mathbb{N}	INTEGRA SEAL	0600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
21.13.5	S001	A-7P	CJIIO	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
	D020	BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	0047	FP 28L	$>\!\!<$	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
INTERNEDIATE	$>\!\!<$	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
INTERMEDIATE	CernNet	\times	\times	LOST CIRC MATERIAL	COATED FIBERGLASS FIBERS	PROPRIETARY
	SUGAR	SUGAR	CJ795	CMT RETARDER	SUCROSE	57-50-1
	\$001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
	$\overline{}$		CI#	ACCELERATOR	SODIUM CHLORIDE	7440-23-5
	> <	55-NW	0880	SURFACTANT	NONIONIC SURFACTANT	6540-99-4
	DO47	FP 28L	$>\!\!<$	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
	$>\!\!<$	$\overline{}$	OX157011	SOLID ANTIFOAM AGENT	FULLERS EARTH(ATTAPULGITE)	8031-18-3
		>>	CJ540	HP FLUID LOSS ADDITIVE	ALIPHATICAMIDE POLYMER	PROPRIETARY
	0255	>>	$>\!\!<$	MED TEMP FLUID	POLYACRILIC POLYMER	PROPRIETARY
			CJ213	RETARDER	CHRYSTALLINE SILICA	14808-60-7
PRODUCTION	>>	FL-66	0501	LOW TEMP FLUID	POWDERED POLYSACCHARIDE	PROPRIETARY
		BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	D208	ASA-301	\times	VISCOSI FIER/ANTI-	REFINED POLYMER/ CHRYSTALLINE SILICA	PROPRIETARY
	D198	R-3		CEMENT RETARDER	LIGNIN	8068-51-6
	SUGAR	SUGAR	CJ795	CEMENT RETARDER	SUCROSE	57-50-1
	D065	>	\times	DISPERSANT	SODIUM POLYNAPHTHALENE SULFONATE	8068-51-6
	D800	>	X	CEMENT RETARDER (Mid-Temperature)	SODIUM LIGNOSULFONATE	8081-51-6 CENSO

Office Of Oil and Gas

MAY 23 2023

WV Department of Environmental Protection

Proposed Drilling Program Southwestern Energy Company Re-entry Rig: SDC 41 Well: **DAVID REINBEAU MSH 6** Prospect: Marcellus Shale Field: NORTH VICTORY FIELD WET State: Southwestern Energy' County: MARSHALL -80.661584 Longitude SHL (NAD83): 39.992731 Latitude BHL (NAD83): 39.936837 Latitude -80.638755 Longitude GL Elev: 1,251 ft MSL **KB Elev:** KB: 26 ft AGL 1,277 ft MSL 110 ' to 496 ' NO COAL VOID EXPECTED Air/Mist 496 ' to 2,089 PROD TOC @ 2,069 ' MD Air/Mist **TUBULAR DETAIL** Planned Interval **Casing Size** Grade Weight **Casing String** (Min) (Min) (in) From 2,089 to 5,740 20 94.0# J-55 0' 110 Conductor Air/Mist 0' 476 J-55 Surface 13.375 54.4# 2,069 J-55 0' Intermediate/Coal 9.625 36.0# 5.5 27,841 Production 20.0# P-110 HP 0' CEMENT DETAIL Sacks Class Density Conductor 140 19.3 Surface 552 A 15.6 15.6 Intermediate 789 A Production 5010 Α 14.5-15.0 TD at 5,740 ' Freshwater Depth - 426 'TVD 5,740 to 6,790 KOP at 5,740 'MD 12.0-12.5 ppg Coal Depth - 774 'TVD Saltwater Depth - 883 'TVD TVD - 6,507 ' TMD - 27,841 ' TD at 27,841 ' MD 6,507 ' TVD 6,373 ' TVD Target Center Onondaga 6,518 'TVD 6,790 'to 27,841' LP at 6,790 ' MD 12.5-13.5 ppg SHL Onondaga 6,384 'TVD Created by: Sebastian Ziaja on 04/10/2023

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WV Department of Environmental Protection

06/23/2023



1300 Fort Pierpont Dr. Ste 20: Mergantown, WV 28508 fel: 304 884 1610 Fax: 304 271 2497 www.swn.com

March 14, 2023

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

RE: Proposed New Well: David Reinbeau MSH 6H

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 Reinbeau's property, in Union District, Marshall County, West Virginia.

ellis aktas ration con e

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

Thank you.

Sincerely,

Dimany Twoay

Brittany Woody Staff Regulatory Specialist Southwestern Energy Production Company, LLC

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WW-9 (4/16)

API Number	47 -	059	
One	rator's	Well	No David Reinheau MSH 6H

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

	FLUIDS/ CUTTINGS DISFO	DSAL & RECLAMATION FI	ZAIN	
Operator Name SWN Production	n Co., LLC	OP Code	494512924	
Watershed (HUC 10) Holliday	ys Run of Wheeling Creek	Quadrangle Moundsville		
Do you anticipate using more	than 5,000 bbls of water to comple	ete the proposed well work?	Yes V No	
Will a pit be used? Yes	7 [7]			
If so, please describe	anticipated pit waste:			
Will a synthetic liner	be used in the pit? Yes	No If so, what ml.	?	25
Proposed Disposal M	lethod For Treated Pit Wastes:			
	nd Application			
	derground Injection (UIC Permit		lities	
	use (at API Number_ At the next anticp)
Off	Site Disposal (Supply form WW	-9 for disposal location)		
Oth	er (Explain recovery and solidifica	ition on site		
Will aloned loop austom be use	ed? If so, describe: Yes- See Atta	achment 3A		
	or this well (vertical and horizonta		ata Air drill to KOP, fluid drill with SO	SM from KOP to TD
			etc.	TO THE
and the second s	pe? Synthetic, petroleum, etc. Syr	nthetic Oil Base		
Additives to be used in drilling		00 50000		
Drill cuttings disposal method	? Leave in pit, landfill, removed of	offsite, etc. landfill		
-If left in pit and plan	to solidify what medium will be u	used? (cement, lime, sawdust))	
-Landfill or offsite na	me/permit number? Meadowfill SWF-	1032, Short Creek SWF-1034,Carbon L	imestone MSWL018781, Wetze	County 1021
	Ub-U8438, Brooke Co SW notice to the Office of Oil and G		or associated waste rei	ected at any
West Virginia solid waste faci	lity. The notice shall be provided	within 24 hours of rejection ar	nd the permittee shall al	so disclose
where it was properly disposed	i.			
on August 1, 2005, by the Offi provisions of the permit are el law or regulation can lead to e I certify under penal application form and all atta obtaining the information, I I penalties for submitting false i	Ity of law that I have personally achments thereto and that, based believe that the information is transformation, including the possibil	ginia Department of Environn any term or condition of the examined and am familiar w on my inquiry of those indue, accurate, and complete.	nental Protection. I und general permit and/or with the information su dividuals immediately I am aware that there	derstand that the other applicable bmitted on this responsible for
Company Official (Typed Na				WV Department of
Company Official Title Senio	or Regulatory Analyst		, , , , , , , , , , , , , , , , , , ,	Environmental Protectio
Subscribed and sworn before i	A TO THE RESERVE TO T		20_23_	
	3/10/2027	Note:	ary Public	JUSTIN BOOTH
My commission expires	5/1012027			State of West Virginia

Operator's Well No. David Reinbeau MSH 6H

roposed Revegetation Treatment: Acres Disturbed 18.42	Prevegetation pl	I
Limeas determined by pH test min.2 Tons/acre or to correct to pH10.4		
Fertilizer type 10-20-20		
Fertilizer amount 600/500 lbs/acre		
Mulch Hay/Straw Tons/acre		
Seed Mixtures	š	
Temporary	Perma	nent
Seed Type Ibs/acre Attachment 3C	Seed Type	lbs/acre
Attach: Maps(s) of road, location, pit and proposed area for land application (unler rovided). If water from the pit will be land applied, include dimensions (creage, of the land application area.	ss engineered plans included L x W x D) of the pit, and	ding this info have been dimensions (L x W), and
Maps(s) of road, location, pit and proposed area for land application (unler rovided). If water from the pit will be land applied, include dimensions (creage, of the land application area. hotocopied section of involved 7.5' topographic sheet.	ss engineered plans included Lx Wx D) of the pit, and	I dimensions (L x W), and
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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 a Shale Gas Separator, 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 highly weighted 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 haul off to an approved landfill site. (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 Separator 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)

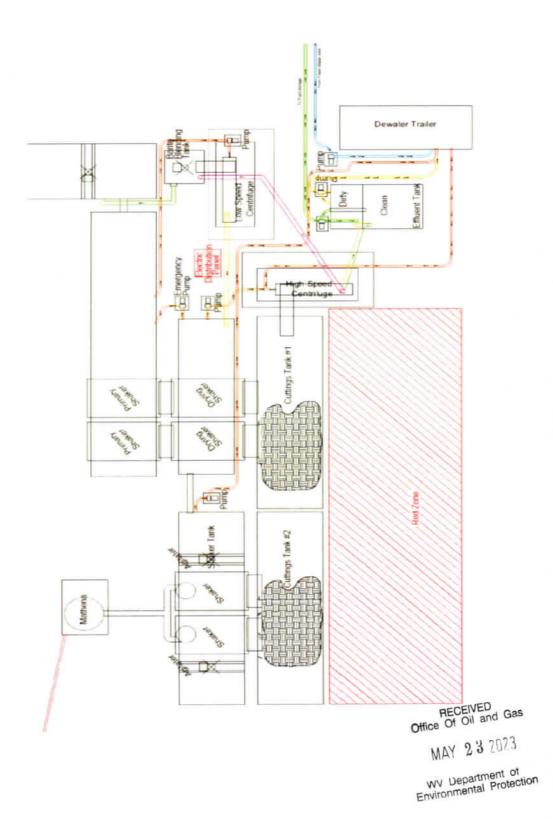
When drilling is converted to liquids drilling, the Shale Gas Separator and associated shaker tank are bypassed, and the liquids system is processed over the primary and drying shaker systems. Cuttings drop into the cuttings tank for additional processing. Any recoverable associated liquids attached 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 Drilling Mediums

Surface/Coal(if present)/Freshwater Intervals:

Air

Freshwater (if needed based on conditions)

Intermediate/Coal (if present):

Air

Production Hole:

Air

Synthetic Oil (Base Fluid for mud system)

Barite

Calcium Chloride

Lime

Organophilic Bentonite

Primary and Secondary Emulsifiers

Gilsonite

Calcium Carbonate

Friction Reducers

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Attachment 3C

WVD Seeding Specification

Southwestern Energy*



To Order Seed c	To Order Seed contact Lyndsi Eddy Flippo office 570-996-4271 cell 501-269-5451 lyndsi_eddy@swn.com	9-5451 lyndsi_eddy@swn.com (please allow 7 to 10 days for delivery)	for delivery)
NON-ORGANIC PROPERTIES		ORGANIC PROPERTIES	
Seed Mixture: ROW Mix	SWN Supplied	Seed Mixture: SWN Production Organic Mix	x SWN Supplied
Orchardgrass	40%	Organic Timothy	20%
Timothy	15%	Organic Red or White Clover	20%
Annual Ryegrass	15%	OR	
Brown Top Millet	2%	Organic Perennial Ryegrass	20%
Red Top	2%	Organic Red or White Clover	20%
Medium Red Clover	5% All legumes are	Annual @ 100lbe not not	Alone & short
White Clover	5% innoculated at 5x normal	April 16th- Oct. 14th	Appry @ zuolbs per acre
Birdsfoot Trefoil	5% rate		
Rough Bluegrass	%5	Organic Fertilizer @ 2001bs per Acre	Pelletized Lime @ 2 Tons per Acre
Apply @ 100lbs per acre	Apply @ 200lbs per acre Oct. 15th- April 15th PLUS		
April 16th- Oct. 14th	50lbs per acre of Winter Wheat	WETLANDS (delineated as jurisdictional wetlands)	nal wetlands)
SOIL AMENDMENTS		Seed Mixture: Wetland Mix	SWN Supplied
10-20-20 Fertilizer	*Apply @ 500lbs per Acre	VA Wild Ryegrass	20%
Pelletized Lime	Apply @ 2 Tons per Acre	Annual Ryegrass	20%
	"unless otherwise dictated by soil test results	Fowl Bluegrass	20%
Seeding Calculation Information:		Cosmos 'Sensation'	10%
1452' of 30' ROW/LOD is One Acre		Redtop	2%
		Golden Tickseed	2%
622' of 70' ROW/LOD is One Acre		Maryland Senna	%5
		Showy Tickseed	2%
Synopsist		Fox Sedge	2.5%
Every 622 linear feet in a 70' ROW/LOD, you	Every 622 linear feet in a 70' ROW/LOD, you should be using (2) 50lb bags of seed, (4) 50lb	Soft Rush	2.5%
bags of fertilizer and (80) 50lb bags of Lime (2x seed in winter months + 50lb Winter	(2x seed in winter months + 50lb Winter	Woolgrass	2.5%
Wheat/ac).		Swamp Verbena	2.5%
Special Considerations:		Apply @ 25lbs per acre	Apply @ 50lbs per acre
Andowner Special Considerations including CREP program participants require additional	EP program participants require additional	April 16th- Oct. 14th	Oct. 15th- April 15th
Relidance that is not given here. Discuss these requirements with SWN supervision at the beginning of the project to allow time for special seed delivery.	th SWN supervision at the	NO FERTILIZER OR LIME INSIDE WETLAND LIMITS	
23		YA	Rev 3/30/2022
	partr	23	
	nent!	2022	
	ot ectic	3	

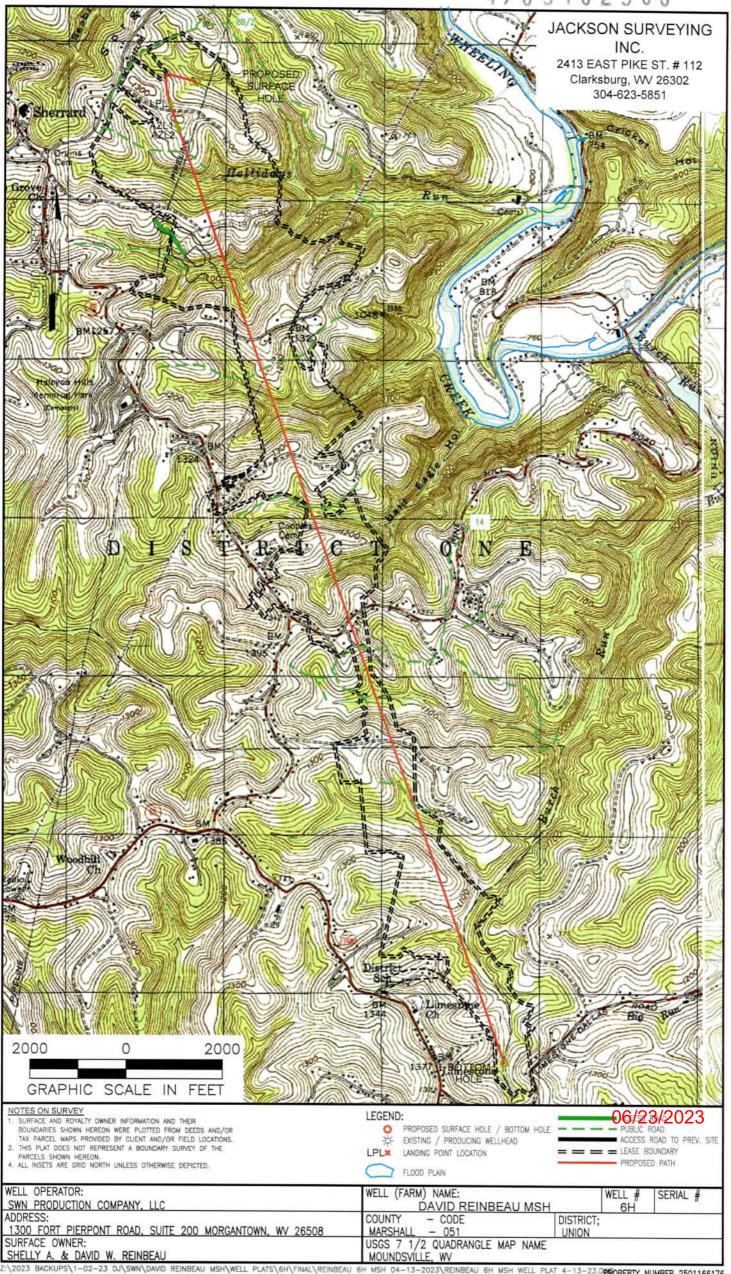
MARCELLUS WELL DRILLING PROCEDURES AND 4705102500 WELL SITE SAFETY PLAN

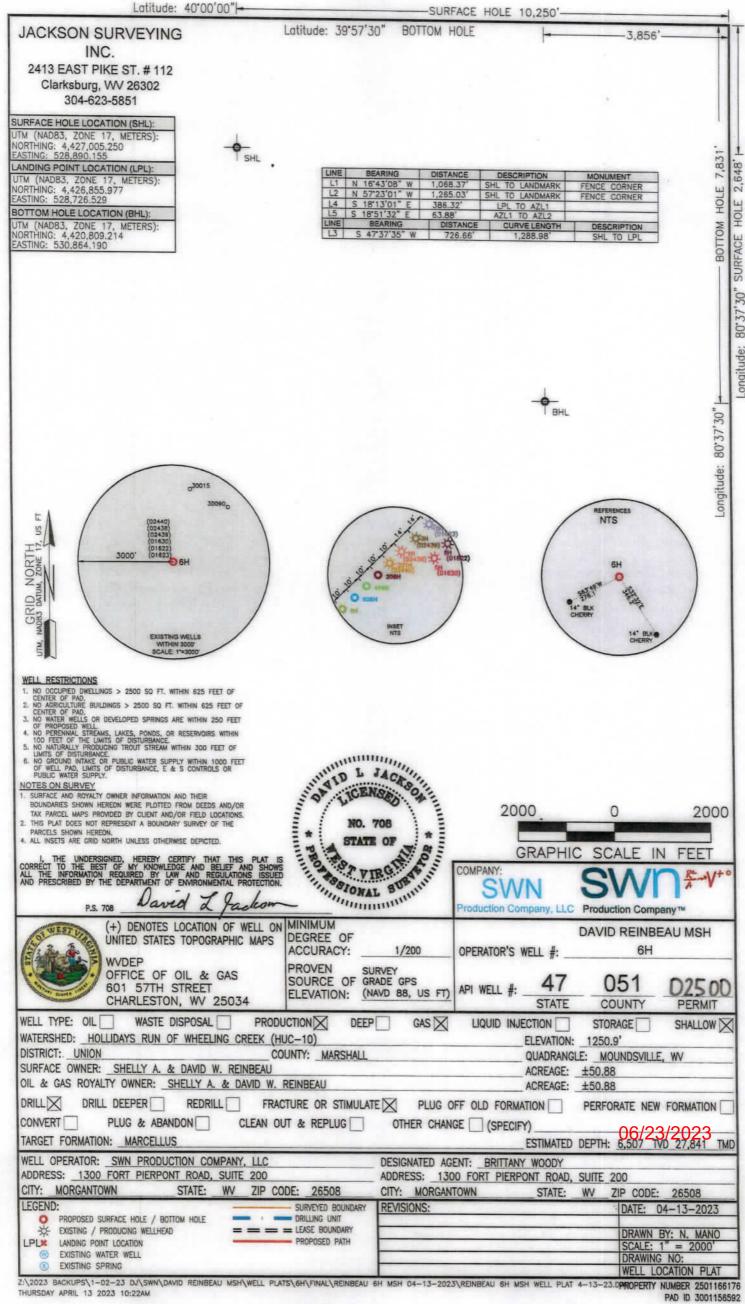


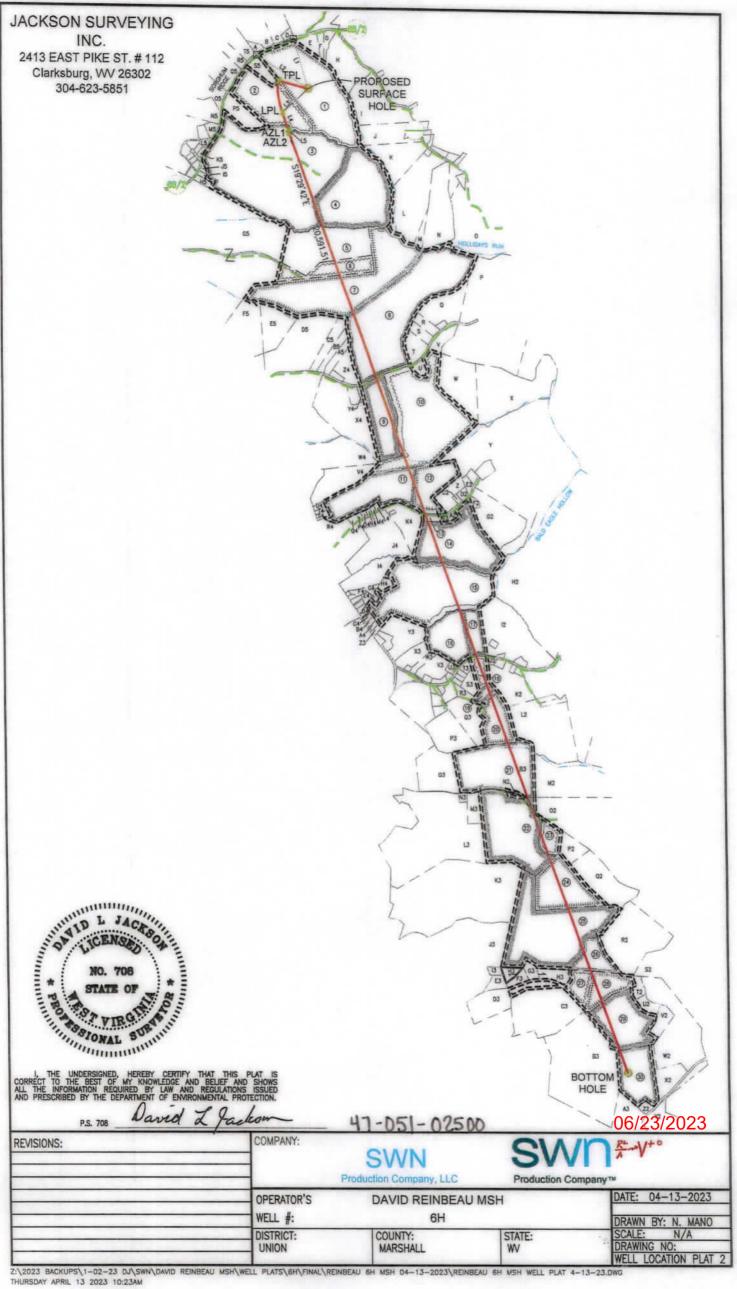
SWN Production Company, LLC 1300 Fort Pierpont Drive, Suite 201 Morgantown, West Virginia 26508

API NO. 47-XXX-XXXXX WELL NAME: David Reinbeau MSH 6H Moundsville QUAD Union DISTRICT MARSHALL COUNTY, WEST VIRGINIA

Submitted by:		
Name: Brittany Woody Suttany Woody	Date: <u>4/10/2023</u>	
Title: Senior Regulatory Analyst	SWN Production Co., LLC	
Approved by:		
Name: State Signed	Date: 4 24 2023	
Title: 0:1 das Inspector		
Approved by:		
Name:	Date:	TOTAL COS
Title:		Office Of Oil and Gas
SWN PRODUCTION COMPANY, LLC	- CONFIDENTIAL	WV Department of Environmental Protection







JACKSON SURVEYING INC.

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

	WELL BORE TRACTS	
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	REINBEAU SHELLY A & DAVID W (S/R)	13-8-29
TRACT	SURFACE OWNER (S)	TAX PARCEL
2	REINBEAU SHELLY A & DAVID W (S)	13-8-27
3	MCCOMBS JOHN A SR, THOMAS E & BETH (5)	13-8-26
4	MCCOMBS JOHN A SR, THOMAS E & BETH (S)	13-8-11
5	CONNER AMBER D & DAVID HANES JR (S)	13-8-14
6	CONNER AMBER D & DAVID HANES JR (S)	13-8-13
7	CONNER AMBER D & DAVID HANES JR (S)	13-8-12
8	ROCKY PEARL FARM LLC (S)	13-9-6
9	JONES NICHOLAS & EVELINE J (S)	13-9-8
10	EDISON MARK CET UX (S)	13-9-9
11	ELIAS GRANTTHOMAS ET UX (5)	13-9-32
12	BERTRAM BRIAN B & ADDIE L (5)	13-9-30
13	HUCK LAURA LEE & MARY L (S)	13-9-29.2
14	KELCH SCOTT EDWARD ET UX (5)	13-9-29.5
15	CHAMBERS DOROTHY - LIFE (S)	13-14-7
16	MCWHORTER LELAND & DEBORAH 2018 IRREVOCABLE TRUST (S)	13-14-10
17	BRIGGS ANDREW & MAXCINE (S)	13-14-11
18	BENSON CHAZ M (5)	13-14-28
19	D'CAGNA LINN L (S)	13-14-29.5
20	FOSTER AARON M & MARSHA ANN (S)	13-14-29.8
21	FOSTER CHARLES S ET UX (S)	13-14-38.1
22	SMITH EDWARD LEE II (S)	14-5-26
23	BLEDSOE DAVID R & KIMBERLY K (S)	14-5-26.1
24	BLEDSOE BILLY JAMES SR & NORA;	14-5-26.2
	LIFE - BLEDSOE TIMOTHY & BLEDSOE DAVID (5)	
25	HILLKAY FET AL (S)	14-5-28
26	GORAKSHYA-SEVA & ENV EDUTR OF AMERICA INC (S)	15-2-18.2
27	HILLKAY F ET AL (S)	14-5-30
28	GORAKSHYA-SEVA & ENV EDU TR OF AMERICA INC (S)	15-7-2
29	MILLER R CRAIG & DONITA D (5)	15-7-2.4
30	WEISNER GEORGE LET UX - TOD (S)	15-7-1.3

	30	WEISNER GEOR
	ADJOINING OWNERS TABLE	
RACT	SURFACE OWNER	TAX PARCEL
A	ALEXANDER LORRAINE	13-7-20
В	ALEXANDER LORRAINE	13-7-18.1
C	ALEXANDER LORRAINE	13-7-18
D	SAMPSON EDITH VIRGINIA EST	13-7-19
E	NARRISH KEVIN	13-8-30
F	SOUTH CHRISTOPHER R	13-8-31
G	KOSTELECSKYJOSEPHJJR & CAROLYN - TOD	13-8-31.1
H	KOSEM DEBBIE & KARL	13-8-32
1	ARCHEY RICK LET AL	13-8-1
1	LIBERTY JOHN ET UX	13-8-10
K	BIRKETT WILLIAM N III & CHASITY A	13-8-10.2
L	LILLEY CONSTANCE E - TOD	13-8-10.1
М	LILLEY CONSTANCE E - TOD	13-8-7.7
N	KINNEER JAMIE ET UX	13-8-7.9
0	KINNEER VERNON A JR & JAMIE	13-8-6
P	CUNNINGHAM GEORGE A	13-9-3
Q	CUNNINGHAM GEORGE A	13-9-5
R	LOY CHARLES E SR - TOD	13-9-5.2
5	WILSON RONALD A ET UX	13-9-5.3
T	LOY CHARLES E SR - TOD	13-9-5.1
U	EDISON MARK CET UX	
v	LOY CHARLES E SR - TOD	13-9-9.1
w	EDISON MARK CET UX	13-9-4
X	CUNNINGHAM BESSIE JANE	13-9-10
Ŷ		13-9-11
2	SHERMAN FAMILY TRUST	13-9-26
A2	BERTRAM BRIAN B & ADDIE	13-9-29
B2	HUCK MARY L & HUCK MIA MARIE	13-9-29.4
C2	ZUKOFF JACOB P ET UX	13-9-29.6
D2	FANKHAUSER TERRY NEAL ET UX	13-9-29.3
	FANKHAUSER TERRY NEAL ET UX	13-9-29.1
E2	GOMPERS SHANNON	13-9-28
F2	MYSLUWIECJOHN A & MARY ANN	13-9-27
G2	MYSLUWIEC JOHN A & MARY ANN	13-9-26.2
H2	THOMPSON MICHAEL C & CRYSTAL M	13-14-13
12	ROGERSON CHESTER ET AL - LIFE	13-14-12
J2	MOORE NANCY ROGERSON	13-14-27.3
K2	ROGERSON CHESTER ET AL - LIFE	13-14-27
L2	GRAY CAROLYN L	13-14-24
M2	GRAY CAROLYN L	13-14-24.2
N2	FOSTER CHARLES S ET UX	13-14-38.5
02	SMITH RICHARD A	14-5-27
P2	BLEDSOE DAVID R & KIMBERLY K	14-5-26.3
02	BLEDSOE BILLY J JR & CLARA M	14-5-26.4
R2	ECO VRINDABAN INC	15-2-18
52	HUNTT DAVID	15-2-18.1
T2	SAWYER ANGELA MARIE	15-7-2.6
U2	FRIED GABRIEL	15-7-2.3
V2	PHILLIPS MARIAN E	15-7-2.5
W2	MEBERG MARY P - TOD	15-7-2.2
X2	WIESNER GEORGE LET UX - TOD	15-7-2.1
Y2	SOFSKYEMILPJRETAL	15-7-6.4
72	ISKCON NEW VRINDABAN INC	15-7-1.4

	ADJOINING OWNERS TABLE	
TRACT	SURFACE OWNER	TAX PARCEI
A3	ISKCON NEW MATHURA VRINDABAN	15-7-1.2
B3	MOORE DAVID & SHIRLEY	14-5-77
C3	PETTIT DIANA LYNN	14-5-31.2
D3	HILL KAY F ET UX	14-5-32.4
E3	LILLEY ROGER W JR & TRICIA	14-5-32.6
F3	HILL HOWARD B EST	14-5-29.2
G3	HILL KAY F ET UX	14-5-29.1
НЗ	HILLKAYFETUX	14-5-29
13	LILLEY ROGER W ET UX	14-5-32.5
13	TATICH DANIEL EDWARD TRUST	14-5-36
КЗ	FRANCIS LISA JANE	14-5-37
L3	KOONTZ CARL JR ET AL	14-5-24
M3	FOSTER CAITLIN E	13-14-50
N3	WILSON ROBERT J & REBECCA S	14-5-24.6
O3	FOSTER CHARLES S & BREANNA	13-14-38.2
P3	HENRY G H & JANET FAMILY TRUST	13-14-29
Q3	SNIDER LINDA EUZABETH	13-14-29.11
R3	MASON CURTIS G ET UX	13-14-29.7
53	ANDERSON ROBERT P & BECKI L	13-14-29.6
T3	ANDERSON ROBERT P & BECKI L	13-14-29.1
U3	MCDIFFITT CLYDE J & KAREN - TOD	13-14-9.1
V3	GODDARD RUSSELL E	13-14-9.3
W3	COULTER JAMES G & SONDRA K	13-14-9.7
X3	ROVER PIPELINE LLC	13-14-9
Y3	ROVER PIPELINE LLC	13-14-8
23	BECKNER DAVID E & DEBORAH K	13-14-7.3
A4	LEWEY CHARLES L & MARGARET A	13-14-7.1
B4	DORAN BRIAN WET UX	13-14-7.4
C4	COTTRELL COLE T	13-14-7.5
D4	GIVENS BRUCE E ET UX	13-14-7.2
E4	CHAMBERS DOROTHY	13-14-6.2
F4	MURPHY MICHAEL A & BLACK AMYS	13-14-7.6
G4	FREEMAN RAYMOND CHRISTOPHER	13-14-4
H4	SUNDERHAUS TINA M & STEPHEN G	13-14-7.7
14	PARSONS JAY DET UX	13-14-1
J4	LILLEY KENNETH R & CARLOTTA J	13-9-31
K4	CUNNINGHAM JOHN F	13-9-29.7
L4	PHILLIPS JANET M	13-9-32.6
M4	PHILLIPSJANET M	13-9-32.8
N4	WRIGHT DAVID JAMES	13-9-32.4
04	CRAKE ROBERT J & SHELLEY S	13-9-32.7
P4	CRAKE ROBERT J & SHELLEY'S	13-9-32.3
Q4	ZUKOFF LISA B ET AL	13-9-32.2
R4	EAGLE LTD	13-9-32.1
54	CHAMBERS ROBIN L & DENICE E	13-9-33.2
T4	CHAMBERS ROBIN L & DENICE E	13-9-33.1
U4	MILLER KENNETH LEE - TOD	13-9-33
V4	METS PROPERTIES LLC	13-10-23
W4	METS PROPERTIES LLC	13-10-22
X4	JONES NICHOLAS & EVELINE J	13-10-21.8
Y4	JONES NICHOLAS & EVELINE J	13-10-21.7
Z4	GANTZER THOMAS P & JILL N	13-10-21.3

REVISIONS:	COMPANY:	SWN Production Company, LLC	The second second	/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	OPERATOR'S WELL #:	DAVID REINBEAU 6H	MSH	DATE: 04-13-2023 DRAWN BY: N. MANO
	DISTRICT: UNION	COUNTY: MARSHALL	STATE: WV	SCALE: N/A DRAWING NO: WELL LOCATION PLAT 3

JACKSON SURVEYING INC.

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

	ADJOINING OWNERS TABLE	
TRACT	SURFACE OWNER	TAX PARCEL
A5	RIGGLE STACY L	13-10-21.9
B5	MONTGOMERY TORIE	13-10-21.2
C5	MELNIK BRUCE A ET UX	13-10-21.1
D5	MELNIK BRUCE A ET UX	13-10-21
E5	CARTER KELLY J	13-10-20
F5	CARTER KELLY J	13-10-19
G5	HIERONIMUS C KEITH ET UX	13-8-15
H5	MCLAUGHLIN SHAWN & ELIZABETH	13-8-23
15	PERRY JOSEPH P JR	13-8-24
J5	THORN JACLYN A & JASON K	13-8-25
K5	CRAWFORD GARY J	13-7E-7
L5	JOSEPH WILLIAM F & SUSAN L	13-7E-8
M5	CAIN ROGER LII	13-7E-10
N5	MCCLINTOCK JOSIE & LARRY	13-7-22.4
05	SHEPHERD JAMES LEE II	13-7-23
P5	REINBEAU RONALD W & FRIEDA A - LIFE	13-7-22.2
Q5	REINBEAU DAVID W & SHELLY A	13-7-22.3
R5	REINBEAU DAVID W & SHELLY A	13-7-21.1
S5	BOWMAN MICHAEL ET UX	13-8-28
T5	BOWMAN MICHAEL J & CONSTANCE G	13-7-21

REVISIONS:	COMPANY:	SWN Production Company, LLC	SV Production 0	- 05 06/23/2023 / ↑ *** V*** Company™
	OPERATOR'S WELL #:	DAVID REINBEAU 6H	MSH	DATE: 04-13-2023
	DISTRICT: UNION	COUNTY: MARSHALL	STATE: WV	SCALE: N/A DRAWING NO: WELL LOCATION PLAT 4

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

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	Granton Lasson ata	C	D 1	
Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page

See Exhibit "A"

*Co-tenancy utilization - At least 75% of the royalty owners have consented to the lawful use or development of the oil or natural gas mineral property on the tract. The interests of the remaining co-tenants will be secured pursuant to the Co-tenancy Modernization and Majority Protection Act.

*Horizontal well unit utilization - Subject to unitization filing with the West Virginia Oil and Gas Conservation Commission.

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 Broughe	
Its:	Staff Landman	

13-0008-0029-0000	13-0008-0027-0000	13-0008-0026-0000																									
Shelly A. Reinbeau and David W. Reinbeau, her husband, Joint tenants, with right of survivorship	Shelly A. Reinbeau and David W. Reinbeau, her husband, joint tenants, with right of survivorship	Royalty Owner	Ivan McCombs, a/k/a Ivan W. McCombs and Alma Jean McCombs, as Joint tenants with the right of survivorship (Life Tenant), Agent, and John A. McCombs, Sr. and Marilyn Sue McCombs, husband and wife (as Remainderman); and Thomas E. McCombs and Beth Ellen McCombs, husband and wife, as Joint tenants with the right of survivorship (as Remainderman)	Allan G, Ketzell II a/K/a Allan G. Ketzell and Patricia L. Ketzell, husband and wife	Arrry W. Forrer, a/k/a Arrry W. Ratcliff Forrer, a divorced woman and not remarried	Ann Cox, a/IV/a Ann Cox Boyce, and Chris Boyce, husband and wife	Ashley Elizabeth Johnson, single	Betty Moore, I/k/a Betty Wilson and Allan C. Moore, wife and husband	Carol DeBerry, single woman	Carol M. Rainbow, a widow and not remarried	Carol V. Ridgely and Paul D. Ridgely, wife and husband	Catharine H. Stell a/k/a Catharine Hamner Stell a/k/a Catherine Jane Stell, a widow and not remarried	Ormiston, Trustee and Beneficiary of the M. Martha Ormiston Revocable Trust, and Co- Trustee and Beneficiary of the Joyce R. Farnsworth Revocable Trust dated April 30, 1998	Cynthia A. Thompson, married and doing business in her sole and separate right	David C. Farnsworth, married, dealing herein with his separate property	David Morgan Wilson, II, a married man dealing in his sole and separate property	Dawn Joyce Zimmerman, f/k/a Dawn Joyce Wilson, a married woman dealing in her sole and separate property	Diane R. Fuchs Nelms, a/K/a Diane R. Fuchs Nelms, a married woman dealing in her sole and separate property	Dorothy A. Magness, I/k/a Dorothy A. Clovis, I/k/a Annette Clovis, and Charles W. Magness. her husband	Douglas Jackson Coombs, a single man	George M. Clovis and inas Clovis, his wife	Gerard M Wilson a/k/a G. Michael Wilson, a married man dealing in his sole and separate property	Gilda R. Coombs, a/t/a Gilda T. Coombs, widow	Huntington National Bank of West Virginia, successor to First National Bank of Morgantown, Trustee of the David A. Wilson Trust, dating January 7, 1993	James F. Pfanstiel, Sr., a widower and not remarried James Shannon Coombs, II, a single man	Judith Ann Fuchs Isaly, a married woman dealing in her sole and separate property	Kay S. Leary, $a/k/a$ Kay C. Leary, and Henry B. Leary, her husband
Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	Chesapeake Appatachia, L.L.C. SWN Production Company, LLC	n/a	Chesapeake Appalachia, LLC SWN Production Company, LLC	SWN Production Company, LLC	SWN Production Company, LLC	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	SWN Production Company, LLC	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	SWN Production Company, LLC	SWN Production Company, LLC	SWN Production Company, LLC	, o	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	SWN Production Company, LLC	SWN Production Company, LLC	SWN Production Company, LLC	SWN Production Company, LLC	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	SWN Production Company, LLC	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	SWN Production Company, LLC	SWN Production Company, LLC Chesapeake Appalachia, LLC SWN Production Company, LLC	SWN Production Company, LLC	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC
14.00%	14.00%	n/a	18.00%	15.00%	15.00%	18.00%	18.00%	15.00%	18.00%	18.00%	18.00%	17.00%		18.00%	18.00%	17.00%	17.00%	18.00%	18.00%	18.00%	18.00%	17.00%	18.00%	18.00%	17.00% 18.00%	18.00%	18.00%
688/424 33/110	688/424 33/110	n/a	754/547 33/110	1089/186	1035/25	836/519	1152/409	1071/616	834/146 33/110	1104/558	827/24 33/110	1114/207		795/336 33/110	1148/428	1072/335	1073/241	1075/354	792/59 33/110	830/70	795/325 33/110	1103/433	795/312 33/110	1112/556	1097/425 795/302 33/110	1073/572	792/65
Leased/Owned by SWIN	0%	11,815556%																									

EXHIBIT "A"

Attached to and made a part of the State of West Virginia Oil and Gas Form, WV 6A-1, by SWN Production Company, LLC, as Operator
David Reinbeau MSH 6H

Marshall County, West Virginia

13-0008-0012-0000	12 0000 0012 0000	13-0008-0013-0000	13-0008-0014-0000		13-0008-0011-0000																														-) <u>-</u>) _	•	
Oavid Alonzo Conner Estate	WE TRIBED DIS. HIG.	WV Minorale for	WV Minerals, Inc.	Marilyn Sue McCombs, husband and wife (as Remainderman); and Thomas E. McCombs and Beth Ellen McCombs, husband and wife, as joint tenants with the right of survivorship (as Remainderman)	wan McCombs, a/k/a Ivan W. McCombs and Alma Jean McCombs, as joint tenants with the right of survivorship (Life Tenant), Agent; and John A. McCombs, Sr. and		Virginia Anne Yeater, a/k/a Virginia G. Yeater, a single woman	Thomas Michael Johnson, married, dealing herein with his separate property	Susan R. Glotfetty and Larry R. Glotfetty, her husband	Susan Amanda Cox, f/k/a Susan Amanda Cox Bailey	Stuart Krieg Hastings, a married man dealing in his sole and separate property	Stuart C. Dillon, married, dealing herein with his separate property	Stephanie A. Smith, a single woman	Sharon C. prechon and Jimothy W. Brechon, her husband	Sharon Brechen and Tenoriby Mr Brocker, has been been	Shannon Griffin Hamner and Michelle Marie Hamner, his wife	Sandra Lynn Marshall and John Marshall, wife and husband	nuti nastriĝs politivali, a marijed woman dealing in her sole and separate property	Russell Dand Johnson, Individually and as Beneficiary of the Joyce R. Farnsworth Revocable Trust dated April 30, 1998	Ronald Allen Kline and Mary Katherine Kline, his write	Robert Virgil Hastings, a married man dealing in his sole and separate property	Robert V. Fuchs and Linda's Fireby hursband and wife	Richard T. Ratcliff and Karen T. Ratcliff, husband and wife Robert Marwell Howard, a single man	Rebecca Hastings Severino, a married woman dealing in her sole and separate property. SWN Production Company, LLC	Raiph W. Gephart, Jr., a/k/a Raiph Gephart, Jr., a single man	Patricia A. Foreman, a/k/a Patricia C. Forman, a widow	Pamela Sue Woodrum, a single woman	wire Nancy Hastings Crow, a married woman dealing in her sole and separate property	Michael A. Gephart, $a/k/a$ Michael Allen Gephart and Velvet M. Gephart, husband and	Matthew S. Cox, a single man	Mary Kathryn Coombs Howard, divorced	property	Mary Elizabeth Fuchs Boston, a married woman dealing in her sole and separate	Marti Brown, single woman	Marshall Raymond Whiteaker, III, a single man	Kristen Kay Wilkerson and Kenneth L. Wilkerson, wife and husband Larry Gene Fuchs, a married man dealing in his sole and senarate property	Kenneth Raymond Fuchs, a married man dealing in his sole and separate property			David Spinhous PACE AC
ALL Resources, L.L.C. Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	SWN Production Company, LLC	Chesapeake Appalachia, L.L.C.		Chosapeake Appalachia, L.L.C.	SWN Production Company, LLC	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	SWN Production Company, LLC	SWN Production Company, LLC	Chesapcake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C. SWN Production Company 115	SWN Production Company, LLC	Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	SWN Production Company, £LC	SWN Production Company, LLC	SWN Production Company, LLC	SWN Production Company, LLC	SWN Production Company, LLC Chesapeake Appalachia, L.L.C.	rty SWN Production Company, LLC	SWN Production Company, LLC SWN Production Company, LLC	Chesapeake Appalachia, L.L.C.		SWN Production Company, LLC		SWN Production Company, LLC	Chesapeake Appalachia, L.L.C.		SWN Production Company, LLC	Chesapeake Appalachia, L.L.C.	SWN Production Company, LCC	SWN Production Company, LLC	SWN Production Company, LLC	SWN Production Company, LLC	Marshall County, West Virginia	Desid Briston and RE
15.00%	15.00%		15.00%		18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	15,00%	18 00%	18.00%	18.00%		18.00%	18.00%	15.00%	18.00%	18.00%	18.00% 15.00%		15.00% 18.00%	15.00%	15.00%	15.00% 18.00%		15.00%	15.00%	15 00%	18.00%	***************************************	18 00%	18.00%	15.00%	15.00%	15.00%	18 CO%		
677/458 21/425	788/196 33/110	33/110	788/196	nitke	754/547	33/110 1137/452	795/317	33/110 1151/80	791/329	1157/276	1040/222	35/110	791/341	791/335	39/110	33/110 800/6	827/18	1041/231	1151/86	1148/79	1072/345 1041/470	33/110	1035/30 795/331	1040/232	33/110 1061/310	1061/315 792/4		1041/475	1061/305	33/110	795/307	Ne treat	33/110	827/12	1077/45	1040/227	1076/348	1072/355		
0%	0%				0%																																			

698/174 756/332 30/532 33/110	18.75%	NPAR, LLC Chevron U.S.A. Inc. Chesapeake Appalachia, L.L.C.	Kay F. Hill and Beverly K. Hill, his wife	14-0005-0030-0000	27
n/a	n/a	n/a	Royalty Owner (subject to unitization filing dated May 19, 2023)	15-0002-0018-0002	26
698/154 756/332 47/1 51/256	18.75%	NPAR, LLC Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC	Kay F. Hill and Beverly K. Hill, his wife; and Kathleen T. Hill, a widow	14-0005-0028-0000	25
n/a	n/a	n/a	Royalty Owner (subject to unitization filing dated May 19, 2023)	14-0005-0026-0002	2.4
n/a	n/a	n/a	Royalty Owner (subject to unitization filing dated May 19, 2023)	14-0005-0026-0001	23
n/a	n/a	n/a	Royalty Owner (subject to unitization filing dated May 19, 2023)	14-0005-0026-0000	11
700/291 33/110	18.75%	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	Charles S. Foster and Brenda K. Foster, husband and wife	13-0014-0038-0001	2.1
24/180 24/180 756/332 30/532 33/110	18.75%	Trithergy Holdings, LLC NPAR; LLC Chevron U.S.A. Inc. Chesiapeake Appalachia, LLC SWN Production Company, LLC	Viiginia Ann buties, a widdow	13-0074-40753-0000	t
692/162 33/110	12.50%	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	Tony J. Lemmon and Linn E. Lemmon, husband and wife	13-0014-0029-0005	20 19
712/581 724/430 756/332 30/532 33/110	18.00%	TriEnergy Holdings, LLC NPAR, LLC Chevron U.S.A. Inc. Chesapeake Appalachia, LLC SWN Production Company, LLC	Alvin J. Denoon and Anna L. Denoon, his wife	13-0014-0028-0000	18
708/219 756/332 30/532 33/110	18.75%	NPAR, LLC Chevron U.S.A. Inc Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	Andrew Briggs and Maxcine Briggs, his wife	13-0014-0011-0000	1
717/408 24/430 25/332 756/332 30/532 33/110	18.00%	TriEnergy Holdings, LLC NPAB, LLC Chevron U.S.A. Inc. Chesapeake Appalachia, LLC SWN Production Company, LLC	Leland L. McWhorter and Deborah J. McWhorter, his wife	13-0014-0010-0000	5
688/493 33/110	12.50%	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	Harrison F. Chambers and Dorothy M. Chambers, husband and wife	13-0014-0007-0000	15
701/94 33/110	18.75%	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	Scott Edward Kelch and Susan Marie Kelch, husband and wife	13-0009-0029-0005	4
684/193 33/110	12.50%	Chesapeake Appalachia, LL.C. SWN Production Company, LLC	Mary L Huck, a widow	13-0009-0029-0002	13
682/58 33/110	12.50%	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	Brian B. Bertram and Addie L. Bertram, husband and wife	13-0009-0030-0000	12
1151/92	18.00%	SWN Production Company, LLC	Grant Thomas Elias and Rhonda Renae Elias, husband and wife	13-0009-0032-0000	11
678/508 33/110	18.00%	Chesapeake Appalachia, LL.C. SWN Production Company, LLC	Mark C. Edison and Lois Ann Edison, husband and wife	13-0009-0009-0000	10
688/556 33/110	12.50%		Ivan R. Dean and Eleanor M. Dean, Irrevocable Trust; and Ivan R. Dean and Eleanor M. Dean, individually as husband and wife	13-0009-0008-0000	ie
33/110	12.50%	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	KICHARD A. KIZ, SINGLE	13-0009-0006-0000	00

EXHIBIT "A"

Attached to and made a part of the State of West Virginia Oil and Gas Form, WV 6A-1, by SWN Production Company, LLC, as Operator David Reinbeau MSH 6H

Marshall County, West Virginia

Chesapeake Appalachia, LLC 12.50%
SWN Production Company, LLC
Chesapeake Appalachia, LLC. 12.50%
n/a
SWN Production Company, LLC
American Petroleum Partners Operating, LLC
18.00%
SWN Production Company, LLC
18.75%

Horizontal well unit utilization -Subject to unitization filing with the West Virginia Oil and Gas Conservation Commission

Co-tenancy utilization - At least 75% of the royalty owners have consented to the lawful use or development of the oil or natural gas mineral property on the tract. The interests of the remaining co-tenants will be secured pursuant to the Co-tenancy Modernization and Majority Protection Act.





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

May 17, 2023

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 6H in Marshall County, West Virginia, Drilling under Hanlin Hill Road, Crows Lane, Pine Hill Road, and Cherokee Lane.

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 Hanlin Hill Road, Crows Lane, Pine Hill Road, and Cherokee Lane. Please be advised that SWN has leased all mineral owners under said route as it relates to the above-referenced well and unit.

Thank you.

Sincerely,

Bailey Brougher

Bailey Brager

Staff Landman

SWN Production Company, LLC

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

Date of Notic	ce Certification: 512		API No. 47	7- 009 -	
	0 (0		Operator's	Well No. Dav	id Reinbeau MSH 6H
			Well Pad N	Name: David F	Reinbeau MSH
Notice has l				L.	
Pursuant to th	ne provisions in West Virginia Code	§ 22-6A, the Operator has pro-	vided the rec	uired parties	with the Notice Forms listed
below for the	tract of land as follows:				
State:	West Virginia	UTM NAD 83	Easting:	528,890.155	
County:	051- Marshall	U IM NAD 83	Northing:	4,427,005.250	
District:	Union	Public Road Acc	ess:	Sorghum Ridge	Road
Quadrangle:	Moundsville	Generally used fa	arm name:	David Reinbeau	
Watershed:	Hollidays Run of Wheeling Creek				
Virginia Code of this article	of subsection (b), section sixteen of \$22-6A-11(b), the applicant shall thave been completed by the applicant	tender proof of and certify to that.	he secretary	that the notice	wner; and Pursuant to West requirements of section ten
	West Virginia Code § 22-6A, the Operator has properly served the require		nis Notice Co	ertification	
*PLEASE CHE	ECK ALL THAT APPLY				OOG OFFICE USE ONLY
☐ 1. NOT	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIR SEISMIC ACTIVITY WAS			RECEIVED/ NOT REQUIRED
■ 2. NOT	TICE OF ENTRY FOR PLAT SURV	VEY or D NO PLAT SURVI	EY WAS CO	ONDUCTED	RECEIVED
■ 3. NOT	TICE OF INTENT TO DRILL or	NOTICE NOT REQUIR NOTICE OF ENTRY FOR E			RECEIVED/ NOT REQUIRED

Required Attachments:

■ 5. PUBLIC NOTICE

■ 6. NOTICE OF APPLICATION

4. NOTICE OF PLANNED OPERATION

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

☐ WRITTEN WAIVER BY SURFACE OWNER

(PLEASE ATTACH)

RECEIVED

RECEIVED

RECEIVED

By:

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.

Email:

Well Operator: SWN Production Co., LLC

Brittany Woody

Its: Senior Regulatory Analyst

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

Morgantown, WV 26508

Facsimile: 304-884-1690

Brittany Woody@swn.com

JUSTIN BOOTH Notary Public Official Seal State of West Virginia Comm. Expires Mar 10, 2027 Scenery Drive Morgantown WV 26505

Subscribed and sworn before me this Am day of April 2023

Notary Public

My Commission Expires 3/10/2027

Oil and Gas Privacy Notice:

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



WW-6A (9-13) 4705102500

API NO. 47- 009

OPERATOR WELL NO. David Reinbeau MSH 8H Well Pad Name: David Reinbeau MSH

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: 5 Date Permit Application Filed: 5 Notice of: ✓ PERMIT FOR ANY ☐ CERTIFICATE OF APPROVAL FOR THE WELL WORK CONSTRUCTION OF AN IMPOUNDMENT OR PIT Delivery method pursuant to West Virginia Code § 22-6A-10(b) ✓ REGISTERED PERSONAL ■ METHOD OF DELIVERY THAT REQUIRES A SERVICE MAIL RECEIPT OR SIGNATURE CONFIRMATION Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule. ☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Notice ☑ Well Plat Notice is hereby provided to: ☑ SURFACE OWNER(s) COAL OWNER OR LESSEE Name: David & Shelly Reinbeau Name: American Consolidated Natural Resources Address: 46226 National Road Address: 651 Sorghum Ridge Road Wheeling, WV 26003 St. Clairsville, OH 43950 ☐ COAL OPERATOR Name: Name: Address: ☐ SURFACE OWNER(s) (Road and/or Other Disturbance) ☑ SURFACE OWNER OF WATER WELL Name: AND/OR WATER PURVEYOR(s) Address: Name: None Name: Address: Address: ☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: Name: Address: Address: *Please attach additional forms if necessary

API NO. 47 009 0 5 1 0 2 5 0 0

OPERATOR WELL NO. David Reinbeau MSH 6H
Well Pad Name: David Reinbeau 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, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

WW-6A (8-13) API NO. 47-509 0 5 1 0 2 5 0 G
OPERATOR WELL NO. David Reinbeau MSH 6H
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:

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

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

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

WW-6A (8-13) API NO. 47-009 0-5 1 0 2 5 0 0
OPERATOR WELL NO. David Reinbeau MSH 6H
Well Pad Name: David Reinbeau MSH

Notice is hereby given by:

Well Operator: SWN Production Co., LLC

Telephone: 304-884-1610

Email: Brittany_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.

JUSTIN BOOTH
Notary Public Official Seal
State of West Virginia
My Comm. Expires Mar 10, 2027
141 Scenery Drive Morgantown WV 26505

Subscribed and sworn before me this 12th day of 145L, 2023

Notary Public

My Commission Expires 3/10/2027



WW-6A3 (1/12) Operator Well No. David Reinbeau

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

	Гime Re	quirement:	Notice shall be prov	ided at least SI	EVEN (7) day	ys but no more than	FORTY-FIVE (45) days prior to
Date of	Notice:	1/26/2022	Date of Plan	ned Entry: 2/	2/2022		
Deliver	y metho	d pursuant	to West Virginia Co	ode § 22-6A-10	0a		
□ РЕ	RSONA	L 🔳	REGISTERED	□ метн	OD OF DEL	IVERY THAT RE	OUIRES A
	RVICE	_	MAIL			ATURE CONFIR	
on to the but no n beneath owner o and Sed Secretar enable th	e surface nore than such trace f mineral iment Co y, which he surface	tract to cond forty-five d et that has fil ls underlying ontrol Manua statement sl e owner to o	duct any plat surveys ays prior to such ent led a declaration pur- g such tract in the co al and the statutes an hall include contact in obtain copies from the	s required pursi- ry to: (1) The s suant to section unty tax record d rules related information, in	uant to this ar surface owner thirty-six, and s. The notice to oil and gas	ticle. Such notice s of such tract; (2) t ticle six, chapter to e shall include a sta e exploration and pr	shall provide notice of planned entry hall be provided at least seven days o any owner or lessee of coal seams wenty-two of this code; and (3) any tement that copies of the state Erosion roduction may be obtained from the age on the Secretary's web site, to
_		provided to OWNER(s)	0:		■ COAI	OWNER OR LE	SSEE
		lley Reinbeau			Name: American Consolidated Natural Resources		
		GHUM RIDGE R	OAD		Address: 46226 National Road		
Wheeling, WV 26003		_	St. Clairsville, OH 43950				
Name: _							
Address						ERAL OWNER(s)	
NT						id & Shelley Reinbeau	
Address				•	Address: 5 Wheeling, WV	551 SORGHUM RIDGE RO	DAD
Address:		-		additional forms if neo	cessary		
Pursuan	t to West		ode § 22-6A-10(a), n and as follows:			e undersigned well	operator is planning entry to conduct
County:	_	arshall			Public Road A		Sorghum Ridge Road
District:		nion			Watershed:		Upper Ohio South
Quadran	_	oundsville			Generally use	d farm name:	David Reinbeau
may be	obtained on, WV	from the Sec 25304 (304	cretary, at the WV D	epartment of E of such docum	Environmenta ents or additi	l Protection headquonal information re	l and gas exploration and production parters, located at 601 57 th Street, SE, elated to horizontal drilling may be
Notice	is hereb	y given by	:				
Well Op		1971	TION COMPANY, LLC		Address:	1300 Fort Pierpont Dr., S	Suite 201
Telepho	ne:	304-884-1610				Morgantown, WV 26508	
Email:		Brittany_Woody@	@swn.com		Facsimile:	304-884-1690	

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WW-6A4 (1/12) Operator Well No. David Reinbonu MSH 6H

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.

	e Time Re of Notice:		Notice shall be p		FEN (10) days prior pplication Filed:	te fling a	permit application.	
Delive	ery metho	d pursuant to	o West Virgini	a Code § 22-6A-	16(b)			
	HAND		CERTIFIED M	IAIL				
Γ	DELIVER	Y	RETURN REC	EIPT REQUEST	ED			
receip drillin of this subsec	ot requested ag a horizon s subsection ction may	d or hand deli- ental well: Pro- en as of the da- be waived in	very, give the s ovided, That not te the notice was writing by the s	urface owner not otice given pursua as provided to the ourface owner. The	ice of its intent to ent ant to subsection (a), surface owner: <i>Pro</i> ne notice, if required,	ter upon the section te vided, how shall incl	an operator shall, by certified ne surface owner's land for the en of this article satisfies the rever. That the notice requires ude the name, address, teleph or's authorized representative.	requirements ments of this one number,
			to the SURF	ACE OWNER				
		helly Reinbeau			Name:			
Addre		ghum Ridge Road			Address:			
	Wheeling	g, WV 26003						
Pursu	ant to West rface own	by given: st Virginia Co er's land for the Vest Virginia	de § 22-6A-16 he purpose of d	(b), notice is here rilling a horizonta	ITM NAD 83	dersigned land as fo asting orthing:	well operator has an intent t ollows: 528,890.155 4,427,005.250	o enter upon
Distri	-	Inion			Public Road Access	_	Sorghum Ridge Road	
	-	Moundsville, WV			Generally used farm		David Reinbeau MSH	
Water	-		heeling Creek (HUC	2-10)	Generally used rain	i intine.		
Pursu facsin relate	ant to We nile numb d to horize	er and electro ontal drilling	code § 22-6A-1 onic mail addre may be obtaine	ess of the operate ed from the Secre	or and the operator's stary, at the WV Dep	authorize partment o	ress, telephone number, and ed representative. Additional of Environmental Protection hep-wv.gov/oil-and-gas/pages/o	information neadquarters,
Notic	e is here	by given by	9					
		SWN Production			Authorized Repre	esentative:	Justin Booth	
Addre	•	Tomas or a miles	ont Drive, Suite 201		Address:		1300 Fort Pierpont Drive, Suite 20	1
		Morgantown, W\	/ 26508				Morgantown, WV 26508	
Telep	hone:	304-884-1675			Telephone:		304-884-1675	
Email		Justin_Booth@s	swn.com		Email:		Justin_Booth@swn.com	
Facsi	mile:				Facsimile:			

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WW-6A5 (1/12) Operator Well No. David Rembersu MSH 6H

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

	e: 04/13/2023 Date Perm	nit Application Filed:	date of permit	
Delivery met	hod pursuant to West Virginia Coo	de § 22-6A-16(c)		
CERTIF	FIED MAIL	☐ HAND		
	RN RECEIPT REQUESTED	DELIVERY		
return receipt the planned of required to be drilling of a li damages to th (d) The notice of notice.	requested or hand delivery, give the operation. The notice required by the provided by subsection (b), section norizontal well; and (3) A proposed se surface affected by oil and gas ope es required by this section shall be gi	surface owner whose land his subsection shall include ten of this article to a surface use and compensations to the extent the diven to the surface owner.	d will be used for ide: (1) A copy face owner whos sation agreemer amages are com	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the at containing an offer of compensation for pensable under article six-b of this chapter, sted in the records of the sheriff at the time
	eby provided to the SURFACE OV s listed in the records of the sheriff at			
Name: David an		마스트 : : : : : : : : : : : : : : : : : : :		
Address: 651 S	Sorghum Ridge Road			
Wheel	ling, WV 26003			
Notice is here				
Pursuant to W		oose of drilling a horizont UTM NAD Public Road	al well on the tra 83 Easting: Northing:	well operator has developed a planned act of land as follows: 528,890.155 4,427,005.250 Sorghum Ridge Road David Reinbeau MSH
Pursuant to Wooperation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to Wood to be provide horizontal we surface affect information re-	Vest Virginia Code § 22-6A-16(c), no the surface owner's land for the purp West Virginia Marshall Union Moundsville, WV Hollidays Run of Wheeling Creek (HUC-10) Shall Include: Vest Virginia Code § 22-6A-16(c), the doby W. Va. Code § 22-6A-10(b) to the late of the la	Public Road Generally us nis notice shall include: (to a surface owner whose of drilling a horizont with the damages are contained from the Secretary of the surface obtained from the Secretary of the surface of the surfac	Easting: Northing: Access: sed farm name: Accepy of this se land will be sent containing an acceptance arrow at the WV (304-926-0450) 1300 Fort Pierpont Morgantown, WV 2	act of land as follows: 528,890,155 4,427,005,250 Sorghum Ridge Road David Reinbeau MSH code section; (2) The information required used in conjunction with the drilling of an offer of compensation for damages to the der article six-b of this chapter. Additional Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-Drive, Suite 201

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Gregory L. Bailey, P.E. Interim State Highway Engineer

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

May 18, 2023

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 6H 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 March 6, 2023. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Operations Engineer Central Office O&G Coordinator

Dary K. Clayton

Cc:

Brittany Woody Southwestern Energy

CH, OM, D-6

File

		Attachment VI Frac Additives	0 3 1 1	, -
Product Name	Product Use	Chemical Name	CAS Number	
AI-303 (U.S. Well Services)	Mixture	Ethylene glycol	107-21 1 104-55 2	
		Cinnamaldehyde	111-76 2	
		Butyl cellosolve 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	
	Blocide	Glutaraldehyde	111-30-8	
actron K-139 (Champion Technologies)	Blocide	Giutaraidenyde	111-50-0	
		Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	68424-85-1	
		Ethanol	64-17-5	
actron K-219 (Champion Technologies)	Biocide	Methanol	67-56-1	
actron K-219 (Champion Technologies)	biocide	Methalio	0, 50-1	
		Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	68424-85-1	
1 100	Times	Ceramic Proppant	66402-68-4	
arboNRT	Tracer		Proprietary	
C6486A (Naico Champion)	Scale Inhibitor	Amine Triphosphate Ethylene Glycol	107-21-1	
		V-Array and the second	7722-84-1	
C6734A (Champion Technologies)	Biocide	Hydrogen Peroxide	64-19-7	
		Acetic Acid Peroxyacetic Acid	79-21-0	
		18753175 AAAA (18355 5415 5		
cono-CI200 (SWN Well Services)	Corrosion Inhibitor	Methanol	67-56-1	
		Oxyalkylated fatty acid	68951-67-7	
		Fatty acids	61790-12-3	
		Modified thiourea polymer	68527-49-1	
		Water	7732-18-5	
		Hydrochloric acid	7647-01-0	
		Potassium acetate	127-08-2	
		Formaldehyde	50-00-0	
copol-FEAC (SWN Well Services)	Iron Control	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	
LOJET DR900 LPP (SWN Well Services)	Friction Reducer	Distillates (petroleum) hydrotreated light	64674-47-8	
		Ethylene Glycol	107-21-1	
		Alcohols, C12-16, Exoxylated propoxylated	68213-24-1	
		Fatty Alcohols ethoxylated	Proprietary	
		Water	7732-18-5	
OJET DRP 1130X (SWN Well Services)	Friction Reducer	Proprietary	Proprietary	
R-76 (Halliburton)	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8	
		Inorganic Salt	Proprietary	
YPTRON T-390 (Champion Technologies)	Scale Inhibitor	Methanol	67-56-1	
		Nonylphenol Ethoxylate	Proprietary	
Al-150E (Halliburton)	Corrosion Inhibitor	No hazardous substance	N/A	
CL (SWN Well Services)	Hydrocholic Acid	Hydrochloric Acid	7647-01-0	
CC (SWIT WEIL SELVICES)	Tryatounous runa	Water	7732-18-5	
P-65 MC (Halliburton)	Scale Inhibitor	Organic phosphonate	Proprietary	
- es inc (namearten)		Ammonium Chloride	12125-02-9	
PTI-FLEX (U.S. Well Services)	Viscosifying Agent	Distillates, petroleum, hydrotreated light	64742-47-8	
lexslick 930	Friction Reducer	Copolymer of 2-propenamide	Proprietary	
IEXSILK 550	Literal Meaner	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	
			Characteristic conference	
and the ora	Edition Reduces	Patroleum Distillate	54747-47-R	
exslick 953	Friction Reducer	Petroleum Distillate	64742-47-8 7647-14-5	
lexslick 953	Friction Reducer	Sodium Chloride	7647-14-5	
exslick 953	Friction Reducer	Sodium Chloride Ammonium Chloride	7647-14-5 12125-02-9	
		Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide	7647-14-5 12125-02-9 93-83-4	
	Friction Reducer	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate	7647-14-5 12125-02-9 93-83-4 64742-47-8	
		Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9	
		Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4	
		Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2	
lexslick 957	Friction Reducer	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5	
exslick 957		Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5	
lexslick 957	Friction Reducer	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5	
lexslick 957	Friction Reducer	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5	
lexslick 957 lexslick V996	Friction Reducer no data available	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copplymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5	
lexslick 957 lexslick V996	Friction Reducer	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum)	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5	
lexslick 957 lexslick V996 VFRA-2000 (U.S. Well Services)	Friction Reducer no data available Anionic Friction Reducer	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide	7647-14-5 12112-02-9 93-83-4 64742-47-8 121125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9	
exslick 957 exslick V996 /FRA-2000 (U.S. Well Services)	Friction Reducer no data available Anionic Friction Reducer Scale inhibitor	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid)	7647-14-5 12112-02-9 93-83-4 64742-47-8 121125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8	
exslick 957 exslick V996 /FRA-2000 (U.S. Well Services) exald 655 NM	Friction Reducer no data available Anionic Friction Reducer	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4	
exslick 957 exslick V996 /FRA-2000 (U.S. Well Services)	Friction Reducer no data available Anionic Friction Reducer Scale inhibitor	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 64742-47-8 9003-05 9 15827-30-8 69418-26-4 64742-47-8	
exslick 957 exslick V996 /FRA-2000 (U.S. Well Services)	Friction Reducer no data available Anionic Friction Reducer Scale inhibitor	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Distillates (petroleum), methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI)	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5	
exslick 957 exslick V996 /FRA-2000 (U.S. Well Services) exald 655 NM exslick 922	riction Reducer no data available Anionic Friction Reducer Scale inhibitor no data available	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 64742-47-8 9003-05 9 15827-30-8 69418-26-4 64742-47-8	
exslick 957 exslick V996 /FRA-2000 (U.S. Well Services) exald 655 NM exslick 922	Friction Reducer no data available Anionic Friction Reducer Scale inhibitor	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Distillates (petroleum), methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI)	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-05-9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4	
exslick 957 exslick V996 /FRA-2000 (U.S. Well Services) exald 655 NM exslick 922	riction Reducer no data available Anionic Friction Reducer Scale inhibitor no data available	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate	7647-14-5 12112-02-9 93-83-4 64742-47-8 121125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-05 9 15827-30-8 69418-26-4 64742-47-8 121125-02-9 93-83-4 55566-30-8 68424-85-1	
exslick 957 exslick V996 /FRA-2000 (U.S. Well Services) exslick 922	riction Reducer no data available Anionic Friction Reducer Scale inhibitor no data available	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8	
exslick 957 lexslick V996 /FRA-2000 (U.S. Well Services) lexald 655 NM lexslick 922 olcide 4Frac	riction Reducer no data available Anionic Friction Reducer Scale inhibitor no data available	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Distillates (petroleum), hydotreated light Copolymer of 2-propenaminde Distillates (petroleum) Propenoic acid, polymer with propenamide Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate	7647-14-5 12112-02-9 93-83-4 64742-47-8 121125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-05 9 15827-30-8 69418-26-4 64742-47-8 121125-02-9 93-83-4 55566-30-8 68424-85-1	
lexslick 957 JERNA-2000 (U.S. Well Services) JERNA-2000 (U.S. Well Services) JERNA-2000 (U.S. Well Services)	no data available Anionic Friction Reducer Scale inhibitor no data available Mixture	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8	
exslick 957 exslick V996 /FRA-2000 (U.S. Well Services) exald 655 NM exslick 922 plcide 4Frac	no data available Anionic Friction Reducer Scale inhibitor no data available Mixture	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Distillates (petroleum), hydotreated light Copolymer of 2-propenaminde Distillates (petroleum) Propenoic acid, polymer with propenamide Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8	
exslick 957 exslick V996 /FRA-2000 (U.S. Well Services) lexald 655 NM lexslick 922 olcide 4Frac olcide PS50A	no data available Anionic Friction Reducer Scale inhibitor no data available Mixture	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate	7647-14-5 12112-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8 68424-85-1 64-17-5 55566-30-8	
exslick 957 exslick V996 /FRA-2000 (U.S. Well Services) lexald 655 NM lexslick 922 olcide 4Frac olcide PS50A	no data available Anionic Friction Reducer Scale inhibitor no data available Mixture Biocidal product	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8	
exslick 957 exslick V996 /FRA-2000 (U.S. Well Services) lexald 655 NM lexslick 922 olcide 4Frac olcide PS50A	no data available Anionic Friction Reducer Scale inhibitor no data available Mixture Biocidal product	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-05 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8 68424-85-1 64-17-5 55566-30-8 397256-50-7 64742-47-8 Proprietary	
lexslick 957 lexslick V996 /FRA-2000 (U.S. Well Services) lexald 655 NM lexslick 922 olcide 4Frac olcide P550A D-2950	no data available Anionic Friction Reducer Scale Inhibitor no data available Mixture Biocidal product Friction Reducer	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Distillates (petroleum), hydotreated light Copolymer of 2-propenaminde Distillates (petroleum) Propenoic acid, polymer with propenamide Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1.2-ethanediyl) alpha-tridecylomegahydroxy-, branched	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06-9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8 68424-85-1 64-17-5 55566-30-8 397256-50-7 64742-47-8 Proprietary 69011-36-5	
lexslick 957 lexslick V996 /FRA-2000 (U.S. Well Services) lexald 655 NM lexslick 922 olcide 4Frac olcide P550A D-2950	no data available Anionic Friction Reducer Scale inhibitor no data available Mixture Biocidal product	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride (NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1.2-ethanediyl) alpha-tridecylomega-hydroxy-, branched Methanol	7647-14-5 12112-02-9 93-83-4 64742-47-8 121125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 121125-02-9 93-83-4 55566-30-8 68424-85-1 64-17-5 55566-30-8 397256-50-7 64742-47-8 Proprietary 69011-36-5 67-56-1	
lexslick 957 lexslick V996 VFRA-2000 (U.S. Well Services) lexald 655 NM lexslick 922 olcide 4Frac olcide P550A D-2950 egend LD-7750W	no data available Anionic Friction Reducer Scale inhibitor no data available Mixture Biocidal product Friction Reducer Scale Control	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1.2-ethanediyl) alphatridecylomegahydroxy-, branched Methanol Phosphonic Acid Salt	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8	
lexslick 957 lexslick V996 VFRA-2000 (U.S. Well Services) lexald 655 NM lexslick 922 olcide 4Frac olcide PS50A D-2950 egend LD-7750W VC MX 8-4743	no data available Anionic Friction Reducer Scale inhibitor no data available Mixture Biocidal product Friction Reducer Scale Control Specialty Product	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1.2-ethanediyl) alpha-tridecylomega-hydroxy-, branched Methanol Phosphonic Acid Salt Sodium Nitrate	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-05 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8 68424-85-1 64-17-5 55566-30-8 397256-50-7 64742-47-8 Proprietary 69011-36-5 67-56-1 Proprietary 7631-99-4	
lexslick 957 Plexslick V996 VFRA-2000 (U.S. Well Services) Plexslick 922 Plexslick 922 Folcide 4Frac Folcide PSS0A D-2950 Legend LD-7750W MC MX 8-4743 Ferriplex 80	no data available Anionic Friction Reducer Scale Inhibitor no data available Mixture Biocidal product Friction Reducer Scale Control Specialty Product Iron Control	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Distillates (petroleum), hydotreated light Copolymer of 2-propenaminde Distillates (petroleum) Propenoic acid, polymer with propenamide Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1.2-ethanediyl) alphatridecylomegahydroxy-, branched Methanol Phosphonic Acid Salt Sodium Hytrate Sodium erythorbate	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06-9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8 68424-85-1 64-17-5 55566-30-8 397256-50-7 64742-47-8 Proprietary 69011-36-5 67-55-1 Proprietary 7631-99-4 6381-77-7	
Plexslick 953 Plexslick 957 Plexslick V996 WFRA-2000 (U.S. Well Services) Plexslick 922 Folcide 4Frac Folcide PS50A LD-2950 Legend LD-7750W MC MX 8-4743 Ferriplex 80 Plexslick 95	no data available Anionic Friction Reducer Scale inhibitor no data available Mixture Biocidal product Friction Reducer Scale Control Specialty Product	Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1.2-ethanediyl) alpha-tridecylomega-hydroxy-, branched Methanol Phosphonic Acid Salt Sodium Nitrate	7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-05 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8 68424-85-1 64-17-5 55566-30-8 397256-50-7 64742-47-8 Proprietary 69011-36-5 67-56-1 Proprietary 7631-99-4	

As of 9/8/2022

OPERATOR: SWN Production Co., LLC	WELL NO: David Reinbeau MSH 6H
PAD NAME: David Reinbeau MSH	
REVIEWED BY:	_ SIGNATURE: DIHTMY MAY
WELL RESTRICT	IONS CHECKLIST
HORIZONTA	AL 6A WELL
Well Restrictions	* Pood Built 4/17/23
At Least 100 Feet from Pad and LOD Perennial Stream, Lake, Pond, Reserve	(including any E&S Control Feature) to any oir or Wetland; OR
DEP Waiver and Permit Condit	tions
At Least 300 Feet from Pad and LOD Naturally Producing Trout Stream; OF	(including any E&S Control Feature) to any
DEP Waiver and Permit Condit	tions
At Least 1000 Feet from Pad and LOD Groundwater Intake or Public Water S	O (including any E&S Control Feature) to any Supply; OR
DEP Waiver and Permit Condi	itions
At Least 250 Feet from an Existing W Drilled; OR	ater Well or Developed Spring to Well Being
Surface Owner Waiver and Re	corded with County Clerk, OR
DEP Variance and Permit Con	ditions
At Least 625 Feet from an Occupied I	Owelling Structure to Center of the Pad; OR
Surface Owner Waiver and Re	ecorded with County Clerk, OR
DEP Variance and Permit Con	ditions
At Least 625 Feet from Agricultural E of the Pad; OR	Buildings Larger than 2500 Square Feet to the Center
Surface Owner Waiver and Re	ecorded with County Clerk, OR
DEP Variance and Permit Con	nditions

PROPOSED CONSTRUCTION PLANS FOR SWN PRODUCTION COMPANY, LLC DAVID REINBEAU PAD EXPANSION

LOCAL EMERGENCY SERVICES

EMERGENCY ROOM

ROJECT LOCATION

MARSHALL COUNTY, WV NOVEMBER 2021

OVERAL PARA CHANGEN SEED PLAN

OVERAL GRADING A ESC PLAN

WELL PARE EXPANSION BASELER PLAN

WELL PARE EXPANSION A CALL VEIT PROFILES

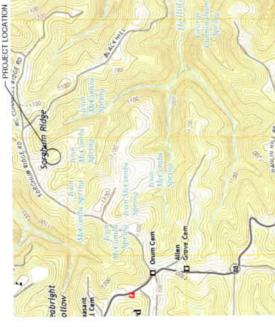
WELL PARE EXPANSION OF FORES

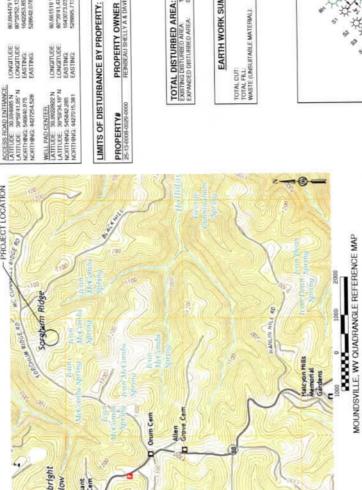
CALVERT PROFILES

CALVERT PROFILES

SHEET INDEX

GEOTECH DESIGN & DETAILS BORING LOGS





P SON TOOLET INCLUDES DICKNATION, PPE, STONE, FABICE, & COLLECTION DRAINS; P DOL TOO EET INCLUDES DICKNATION, PPE, STONE, ARBIEC, & COLLECTION DRAINS; MEDATT DOLEST UNCLUDES SICKNATION, PPE, STONE, & FARRIC)

MAEDIATE TOE KEY (INCLUDE PAD-CONTAINNENT BERM

SWN QUICK ESTIMATE

HEM DESCRIPTION

CATION & DENOBLIZATION (LIMETED TO 10% OF BASE BID)

TOTAL DISTURBED AREA: 18,42 ACRES EXISTING DISTURBED AREA: 17.43 ACRES EXPANDED DISTURBED AREA: 0.99 ACRES

EARTH WORK SUMMARY

TOTAL CUT: TOTAL FILL: WASTE (UNSUITABLE MATERIAL):

SOUTHWESTERN PRODUCTION COMPANY, LLC 300 FORT PIERPONT DRIVE, SUITE 201, MORGANTOWN, WY 26508 PHONE: (304) 684 - 1671 EMAE. JOHN, DUBOWSKIESWILCOM

ASCENT CONSULTING & ENGINEERING ZBSI DAVISSON RINR ROAD CLARKESULIN, WY 83011 PHONE (DRI) 933 - 3463 EMBL: ZACH@ASCENTYONSULTINGENGRHERS COM

ENVIRONMENTAL WETLANDS OR SURFACE WATER NEORMATION WAS DELINEATED BY ASCENT CONSULTING & ENGINEERING

TOPOGRAPHIC NECRMATION.

TOPOGRAPHIC NECRMATION ON THIS PLAN ARE MADES WEST VIRGINIA STATE PLANES, NORTH TONE, IN U.S. SURVEY FEET.

Southwestern Energy

ACRES DISTURBED
18.42

PROPERTY OWNER
RENBEAU SHELLY A & DAVID W

DESCHIPTION

DATE

(DEGREES/MINUTES SECONDS*)
(WV SP-80, FEET)
(UTM ZONE 17, METERS)

80.661519 W 80°3941,47° W 1643073,035 528895,713

(DECIMAL DEGREES) (DEGREES MINUTES' SECONDS") (WY SP-83, FEET) (UTM ZONE 17, METERS)

LOCATION COORDINATES



ASCEN Consulting & Engineeri

2441 EMS EMS CAPACIDATE CONTROL RUN PROPERTY OF THE CONTROL OF T 11/17/2021

WELL HEAD LAYOUT

CONSTRUCTION PLANS FOR SWN PRODUCTION COMPANY, LLC DAVID HENBEAU PAD EXPANSION SORGHUM RIDGE MARSHALL COUNTY, WV AS SHOWN MRN

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PLANS

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ATELAW TER 24-C) J CALL TWO	T VINGINIA.

IT'S THE LAW	MASS LITELTY OF WEST VHIGHE HOUSESESSES WEST VHICHMA STATE LAW RECLIEBES THAT YOU CAFEL TO RECLIEBES THAT YOU CAFEL TO BUSINESS CAFE DEFONDE YOU OF THE STATE OF WEST VHICHM

1) HEAD NORTH ON FORT PREPIONT DR. 0.3 MILES
2) TURN RIGHT CHOTON PREPIONT FOL. 40F FET
3) TURN RIGHT CHYLO VERSION TO 0.4 MILES
4) TURN LET TO MERGE ONTO HOR WITOWARD HTP.0.5 MILES
5) TAKE THE BOTT CHYLO HAY A WITOWARD WASHINGTON, 45.3 MILES
6) TAKE THE BOTT CHYLO HAY BY TOWARD WASHINGTON, 35.3 MILES
7) ARE RELET OT THE FORK TO CONTINUE ON 1.5 MILES
7) TAKE RELET TOWARD BETHER M. 2 MILES
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DRIVING DIRECTIONS

WWAND BETHER, O.S. MILES WHO WE SERVICE ON TO WE THE EPEM BLVD, BE FEET W BETHE FIEW BLVD, O.S. MILES WTO WE WE SERVICE SEEST FOL, 4.7 MILES TO SCHOOL MITTONE FOL. 0.8 MILES

06/23/2023

INTERNACIONAL COMPLETE (INCLUDES SLOPE PIPE, PIPE LEVEL SPREADER), INCLUDADO, ETC. PER DETAIL THICK REP AND SLAVE

40, ESTONE ER RUN UMESTONE FOR WELL PAD BASE (127)

SHER BUT LIMESTONE FOR WELLPAD (47)