

### 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.wy.gov

Tuesday, October 11, 2022 WELL WORK PERMIT Horizontal 6A / New Drill

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

Re: Permit approval for BW EDGE MSH 1H 47-051-02471-00-00

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: BW EDGE MSH 1H

Farm Name: WILLIAM F EDUGE JR & BA

U.S. WELL NUMBER: 47-051-02471-00-00

Horizontal 6A New Drill Date Issued: 10/11/2022

| API Number: |  |
|-------------|--|
|             |  |

### PERMIT CONDITIONS

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

### **CONDITIONS**

- 1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
- 2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
- 4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
- 5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled Water Well Regulations, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
- 7. 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. 47-051                   |  |
|----------------------------------|--|
| OPERATOR WELL NO. BW Edge MSH 1H |  |
| Well Pad Name: BW Edge MSH       |  |

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

| 1) Well Operat                     | tor: SWN I                         | Production C                            | o., LLC                    | 4945         | 12924                    | 051-Mar      | shal 6-San  | d 🖁 674-Wheeling                                    |
|------------------------------------|------------------------------------|---|----------------------------|--------------|--------------------------|--------------|-------------|---|
| •                                  |                                    |   |                            | Ope          | rator ID                 | County       | Distri      | ct Quadrangle                                       |
| 2) Operator's V                    | Well Numbe                         | r: BW Edge                              | MSH 1H                     |              | Well P                   | ad Name: E   | BW Edge M   | SH  |
| 3) Farm Name                       | /Surface Ow                        | ner: William F. Edge, Jr.               | & Barbara Edge- Tod        | & David Edge | Public Re                | oad Access:  | Big Wheeli  | ing Creek Road                                      |
| 4) Elevation, c                    | urrent groun                       | d: 1254'                                | E                          | levation     | ı, propose               | d post-const | ruction: 12 | 54'   |
| 5) Well Type                       | (a) Gas                            | X                                       | Oil _                      |              | Un                       | derground S  | storage     |   |
|                                    | Other                              |   |                            |              |                          |              |             |   |
|                                    | (b)If Gas                          | Shallow                                 | <u>x</u>                   |              | _ Deep                   |              | Offic PECE  | 5n  |
|                                    |                                    | Horizontal                              | X                          |              | <del>_</del>             |              | Office of O | IVED<br><sup>il and</sup> Gae                       |
| 6) Existing Pac                    | d: Yes or No                       | Yes                                     |                            |              |                          |              | SEP 8       | 2022  |
| 7) Proposed Ta<br>Target Formation | arget Format<br>n- Marcellus, Up-D | cion(s), Depth<br>ip well to the North, | (s), Antic<br>Target Top 1 | ipated       | Thickness ), Target Base | s and Expect |             | S):<br>Post on Associated Pressure- 41<br>Totection |
| 8) Proposed To                     |                                    |   |                            |              |                          |              |             |   |
| 9) Formation a                     |                                    |   | Marcellu                   | S            |                          |              |             |   |
| 10) Proposed 7                     | Total Measu                        | red Depth:                              | 15645'                     |              |                          |              |             |   |
| 11) Proposed I                     | Horizontal L                       | eg Length:                              | 3313.82'                   |              |                          |              |             |   |
| 12) Approxima                      | ate Fresh Wa                       | ater Strata De <sub>l</sub>             | oths:                      | 615'         |                          |              |             |   |
| 13) Method to                      | Determine I                        | Fresh Water D                           | epths:                     | Nearby       | Water V                  | Vell         |             |   |
| 14) Approxima                      | ate Saltwater                      | Depths: 13                              | 86' Salini                 | ty Prof      | ile Analys               | is           |             |   |
| 15) Approxima                      | ate Coal Sea                       | m Depths: 7                             | 41'                        |              |                          |              |             |   |
| 16) Approxima                      | ate Depth to                       | Possible Void                           | l (coal m                  | ine, ka      | st, other):              | None that    | we are awa  | are of.   |
| 17) Does Propedirectly overly      |                                    |   |                            |              | <i>l</i> es              |              | No X        |   |
|                                    |                                    |   |                            | •            |                          |              | _ * ``      |   |
| (a) If Yes, pro                    | ovide Mine                         |   |                            |              |                          | ·            |             |   |
|                                    |                                    | Depth:                                  |                            |              |                          |              |             |   |
|                                    |                                    | Seam:                                   | -                          |              |                          |              |             |   |
| Strain                             | der Gower                          | Owner                                   | :                          |              |                          |              |             |   |
| 9/06/2                             | •                                  |   |                            |              |                          |              |             |   |

| WW-6B   |
|---------|
| (04/15) |

API NO. 47-\_051\_\_ -OPERATOR WELL NO. BW Edge MSH 1H

Well Pad Name: BW Edge MSH

### 18) <u>CASING AND TUBING PROGRAM</u>

| TYPE         | Size<br>(in) | New<br>or<br>Used | Grade    | Weight per ft.<br>(lb/ft) | FOOTAGE: For<br>Drilling (ft) | INTERVALS:<br>Left in Well<br>(ft) | CEMENT:<br>Fill-up<br>(Cu. Ft.)/CTS   |
|--------------|--------------|-------------------|----------|---------------------------|-------------------------------|------------------------------------|---------------------------------------|
| Conductor    | 20"          | New               | J-55     | 94#                       | 126'                          | 126'                               | CTS                                   |
| Fresh Water  | 13 3/8"      | New               | H-40     | 48#                       | 800'                          | 800'                               | 748 sx/CTS                            |
| Coal         | See          | Surface           | Casing   |                           |                               |                                    |                                       |
| Intermediate | 9 5/8"       | New               | J-55     | 36#                       | 2056'                         | 2056'                              | 871 sx/CTS                            |
| Production   | 5 1/2"       | New               | P-110 HP | 20#                       | 15645'                        | 15645'                             | Tail 1804sx/ 100' Inside Intermediate |
| Tubing       |              |                   |          |                           |                               |                                    |                                       |
| Liners       |              |                   |          |                           |                               |                                    |                                       |

| ТҮРЕ         | Size (in) | Wellbore<br>Diameter (in) | Wall<br>Thickness<br>(in) | Burst Pressure (psi) | Anticipated  Max. Internal  Pressulations of the second of | Cement<br>Type        | <u>Cement</u> <u>Yield</u> (cu. ft./k) |
|--------------|-----------|---------------------------|---------------------------|----------------------|--|-----------------------|--|
| Conductor    | 20"       | 30"                       | 0.25                      | 2120                 | 83 <sub>FP</sub>   | 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       | Surface                   | Casing                    |                      | 633<br>WV Depart<br>Environmental  | ment of<br>Protection |  |
| Intermediate | 9 5/8"    | 12 1/4"                   | 0.352                     | 3520                 | 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: |  |  |

4705102471

WW-6B (10/14)

API NO. 47- 051

OPERATOR WELL NO. BW Edge MSH 1H

Well Pad Name: BW Edge MSH

| 19) Describe proposed well work, including the drilling and plugging back of | of any phot noie: |
|--|-------------------|
|--|-------------------|

Drill and stimulate any potential zones between and including the Benson to Marcellus. \*\*If we should encounter a void place basket above and below void area- balance cement to bottom of void and grout from basket to surface or run external casing packer/cementing stage tool above void interval and perform 2 stage cementing operation dependent upon depth of void. Run casing not less than 20' below void nor more than 75' below void. (\*If freshwater is encountered deeper than anticipated it must be protected, set casing 50' below and cts.)

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

Well will be perforated within the target formation and stimulated with a slurry of water, sand, and chemical additives at a high rate. This will be performed in stages with the plug and perf method along the wellbore until the entire lateral has been stimulated within the target formation. All stage plugs are then drilled out and the well is flowed back to surface. In some instances, additional toe prep may be performed by pumping additional water in the toe of the well prior to perforating and pumping Stage 1 to ensure that the toe guns/toe sleeves are fully open prior to pumping stage 1. The well is produced through surface facilities consisting of high pressure production unites, horizontal separation units, water and oil storage tanks. Max press and anticipated max rate- 12,500 psi @ 100 barrels a minute.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 13.88
- 22) Area to be disturbed for well pad only, less access road (acres): 6.58
- 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 \*\*\*

SEP 8 2022

Environmental Protection

25) Proposed borehole conditioning procedures:

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

\*Note: Attach additional sheets as needed.

# 4705102471

|                       |                         |                       | CEMENT A                   | ADDITIVES                           |   |             |
|-----------------------|-------------------------|-----------------------|----------------------------|-------------------------------------|---|-------------|
|                       | SCHLUMBERGER<br>PRODUCT | BJ<br>PRODUCT<br>NAME | NEXTIER<br>PRODUCT<br>NAME | PRODUCT USE                         | CHEMICAL NAME                           | CAS-Number  |
| SURFACE               | NAME                    | INTEGRA<br>SEAL       | CJ600                      | LOST CIRC MATERIAL                  | CELLOPHANE FLAKES                       | 9005-81-6   |
| (FRESHWATER) up to 3% | S001                    | A-7P                  | CJ110                      | ACCELERATOR                         | CALCIUM CHLORIDE                        | 10043-52-4  |
| COAL<br>PROTECTION    |                         | INTEGRA<br>SEAL       | CJ600                      | LOST CIRC MATERIAL                  | CELLOPHANE FLAKES                       | 9005-81-6   |
| up to 3%              | S001                    | A-7P                  | CJ110                      | ACCELERATOR                         | CALCIUM CHLORIDE                        | 10043-52-4  |
|                       | D020                    | BENTONITE             | CJ020                      | EXTENDER                            | BENTONITE                               | 1302-78-9   |
|                       | D047                    | FP 28L                | $\times$                   | LIQUID ANTIFOAM<br>AGENT            | POLYPROPYLENE<br>GLYCOL                 | 25322-69-4  |
| INTERMEDIATE          |                         | INTEGRA<br>SEAL       | CJ600                      | LOST CIRC MATERIAL                  | CELLOPHANE FLAKES                       | 9005-81-6   |
| INTERIMEDIATE         | CemNet                  |                       | $\times$                   | LOST CIRC MATERIAL                  | COATED FIBERGLASS FIBERS                | PROPRIETARY |
|                       | SUGAR                   | SUGAR                 | CJ795                      | CMT RETARDER                        | SUCROSE                                 | 57-50-1     |
|                       | S001                    | A-7P                  | CJ110                      | ACCELERATOR                         | CALCIUM CHLORIDE                        | 10043-52-4  |
|                       | 3002                    |                       | CJ111                      | ACCELERATOR                         | SODIUM CHLORIDE                         | 7440-23-5   |
|                       |                         | SS-11W                | C1880                      | SURFACTANT                          | NONIONIC<br>SURFACTANT                  | 6540-99-4   |
|                       | D047                    | FP 28L                | X                          | LIQUID ANTIFOAM<br>AGENT            | POLYPROPYLENE<br>GLYCOL                 | 25322-69-4  |
|                       |                         |                       | CJX157011                  | SOLID ANTIFOAM<br>AGENT             | FULLERS EARTH(ATTAPULGITE)              | 8031-18-3   |
|                       |                         |                       | CJ540                      | HP FLUID LOSS<br>ADDITIVE           | ALIPHATIC AMIDE POLYMER                 | PROPRIETARY |
| PRODUCTION            | D255                    |                       | $\times$                   | MED TEMP FLUID LOSS ADDITIVE        | POLYACRILIC<br>POLYMER                  | PROPRIETARY |
|                       |                         |                       | CJ213                      | RETARDER                            | CHRYSTALLINE SILICA                     | 14808-60-7  |
|                       |                         | FL-66                 | CJ501                      | LOW TEMP FLUID<br>LOSS ADD          | POWDERED POLYSACCHARIDE                 | PROPRIETARY |
|                       |                         | BENTONITE             | CJ020                      | EXTENDER                            | BENTONITE                               | 1302-78-9   |
|                       | D208                    | ASA-301               | X                          | VISCOSIFIER/ANTI-<br>SETTLING AGENT | REFINED POLYMER/<br>CHRYSTALLINE SILICA | PROPRIETARY |
|                       | D198                    | R-3                   |                            | CEMENT RETARDER                     | LIGNIN                                  | 8068-51-6   |
|                       | SUGAR                   | SUGAR                 | CJ795                      | CEMENT RETARDER                     | SUCROSE                                 | 57-50-1     |



### **Proposed Drilling Program** Southwestern Energy Company Re-entry Rig: **SDC 40** Well: **BW EDGE MSH 1** Marcellus Shale Prospect: Field: PANHANDLE FIELD WET WV MARSHALL State: County: SHL: 40.0065 Latitude -80.6275 Longitude BHL: 40.0269 Latitude -80.6441 Longitude 1,254 ft MSL **KB Elev:** 1,280 ft MSL KB: 26 ft AGL GL Elev: NO COAL VOID EXPECTED 126 to 820 Air/Mist PROD TOC Lead @ 2,045 ' MD PROD TOC Tail @ 5,570 ' MD 820 to 2,076 Air/Mist **TUBULAR DETAIL** Planned Interval Weight Casing Size Grade (Min) **Casing String** (Min) (in) From To Conductor 20 94.0# J-55 0 126 2.076 to 5.670 Air/Mist 0' 800 Surface/Coal H-40 13.375 48.0# Intermediate 9.625 36.0# J-55 0' 2,056 Production 5.5 20.0# P-110 HP 0' 15,645 CEMENT DETAIL Sacks Class Density 19.3 Conductor: 151 Surface: 748 A 15.6 Intermediate: 871 A 15.6-16.0 Production: 1804 A 14.5-15.0 KOP at 5,670 'Mbe of Oil and Gas TD at 5,670 ' Freshwater Depth - 615 'TVD 5,670 to 7,001 ' 12.5-13.0 ppg Coal Depth - 741 'TVD Environmental Protection Saltwater Depth - 1,386 'TVD TVD - 6,386 ' TMD - 15,645 ' TD at 15,645 'MD 6,386 'TVD 6,386 ' Target Center EOB at 7,001 'MD Onondaga 6,401 'TVD 7,001 'to 15,645' SHL Onondaga 6,401 'TVD 13.5-13.8ppg Created by: CR Hall on 09/02/2022 Strader Gover 9/06/2022



4705102471

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

August 31, 2022

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

RE: Proposed New Well: B W Edge MSH 1H

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 Edge's property, in Sand Hill District, Marshall County, West Virginia.

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

Thank you.

Sincerely,

Brittany Woody

Brittany Woody

Senior Regulatory Analyst

Southwestern Energy Production Company, LLC

SEP 8 2022
Environmental protection



WW-9 (4/16)

| API Number 47 - | 051     | -             |
|-----------------|---------|---------------|
| Omanutant       | Wall Ma | DW Care MOUTH |

# Operator's Well No. BW Edge MSH 1H STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

| FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN   |  |
|--|--|
| perator Name SWN Production Co., LLC OP Code 494512924   |  |
| Vatershed (HUC 10) Grandstaff Run of Wheeling Creek Quadrangle Wheeling  |  |
| o you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No  |  |
| If so, please describe anticipated pit waste:  |  |
| Will a synthetic liner be used in the pit? Yes No If so, what ml.?   |  |
| Proposed Disposal Method For Treated Pit Wastes:   |  |
| Land Application Underground Injection (UIC Permit Number Various Approved Facilities  Reuse (at API Number At the next anticpiated well Off Site Disposal (Supply form WW-9 for disposal location) Other (Explain recovery and solidification on site  SEP Sep Attachment 3A Sep Sep Attachment 3A Sep  | )  |
| /ill closed loop system be used? If so, describe: Yes- See Attachment 3A   |  |
| rilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based.  | SOBM from KOP to TD  |
| rilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, the rolling medium anticipated for this well (vertical and horizontal)? Synthetic Oil Base   |  |
| dditives to be used in drilling medium? Attachment 3B  |  |
| rill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. landfill  |  |
| -If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust)   |  |
| -Landfill or offsite name/permit number? Meadowfill SWF- 1032, Short Creek SWF-1034, Carbon Limestone MSWL018781, Wet Apex Sanitary Landfill Ub-U8438, Brooke to SVVF-TUT3,  | zel County 1021  |
| ermittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste revest Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall where it was properly disposed.   |  |
| I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I use revisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/one we regulation can lead to enforcement action.  I certify under penalty of law that I have personally examined and am familiar with the information application form and all attachments thereto and that, based on my inquiry of those individuals immediately betaining the information, I believe that the information is true, accurate, and complete. I am aware that the enalties for submitting false information, including the possibility of fine or imprisonment. | nderstand that the<br>r other applicable<br>submitted on this<br>y responsible for |
| Company Official (Typed Name) Brittany Woody   | 306  |
| ompany Official Title Senior Regulatory Analyst  | Simps  |
|  | My Comm.<br>on Avenue  |
| 1.6  | Sta  |
| ubscribed and sworn before me this 15 day of August , 20 22  | e n e y  |
| ubscribed and sworn before me this 15 day of August , 20 22  Notary Public   | State of West Virginia My Comm. Expires Oct 1, 2 Simpson Avenue Clarksburg WV 2    |

Operator's Well No. BW Edge MSH 1H

| Proposed Revegetation Treatment: Acres Disturbed   | 13.88                  | Prevegetation pH                         | [                             |
|--|------------------------|--|-------------------------------|
| Lime as determined by pH test min.2 Tons/acre or to corre  |                        |  |                               |
| Fertilizer type 10-20-20   |                        |  |                               |
| Fertilizer amount 600/500  | lbs/acre               |  |                               |
| Mulch_ Hay/Straw   | Tons/acre              |  |                               |
|  | Seed Mixtures          |  |                               |
| Temporary  |                        | Perma                                    | nent                          |
| Seed Type lbs/acre Attachment 3B   |                        | Seed Type                                | lbs/acre                      |
|  |                        |  |                               |
| Maps(s) of road, location, pit and proposed area for later provided). If water from the pit will be land applied, in acreage, of the land application area.  Photocopied section of involved 7.5' topographic shee                                       | nclude dimensions (L x | Office of Oil an                         | dimensions (L x W), and d Gas |
| Attach: Maps(s) of road, location, pit and proposed area for later provided). If water from the pit will be land applied, in acreage, of the land application area.  Photocopied section of involved 7.5' topographic shee  Plan Approved by:  Comments: | nclude dimensions (L x | W x D) of the pit, and  Office of Oil an | dimensions (L x W), and d Gas |
| Maps(s) of road, location, pit and proposed area for later provided). If water from the pit will be land applied, in acreage, of the land application area.  Photocopied section of involved 7.5' topographic shee                                       | nclude dimensions (L x | Office of Oil an                         | dimensions (L x W), and d Gas |
| Maps(s) of road, location, pit and proposed area for later provided). If water from the pit will be land applied, in acreage, of the land application area.  Photocopied section of involved 7.5' topographic shee                                       | nclude dimensions (L x | Office of Oil an                         | dimensions (L x W), and d Gas |

Strade Cower 60WER 8/10/22

### Attachment 3A

### **CLOSED LOOP SYSTEM**

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

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

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

### AIR DRILLING INTERVALS

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

SEP

SEP  $G_{as}$ 

### LIQUIDS DRILLING (FRESHWATER, BRINE, SOBM)

When drilling is converted to liquids drilling, the shale gas separator and the shale 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.

### 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

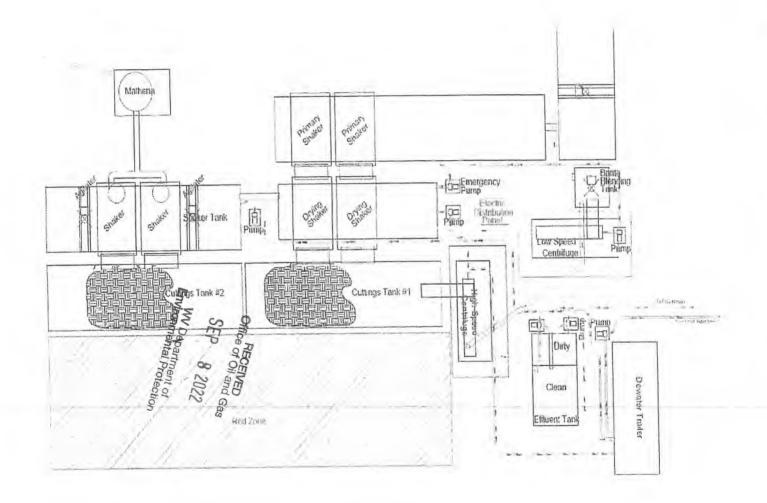
Calcium Carbonate

**Friction Reducers** 











### **WVD Seeding Specification**



To Order Seed contact Lyndsi Eddy Füppo office 570-996-4271 cell 301-209-5451 iyudsi\_eddy@swn.com

(please allow 7 og 10 days for delivery)

| Seed Mixture: ROW Mix                            | SWI | V Supplied  |
|--|-----|---|
| Seed Mixture: KOW Mix                            |     | топрисс   |
| Orchardgrass                                     | 40% |   |
| Timothy  | 15% |   |
| Annual Ryegrass                                  | 15% |   |
| Brown Top Millet                                 | 5%  |   |
| Red Top  | 5%  |   |
| Medium Red Clover                                | 5%  | All legumes are   |
| White Clover                                     | 5%  | innoculated at 5x normal  |
| Birdsfoot Trefoil                                | 5%  | rate  |
| Rough Bluegrass                                  | 5%  |   |
| Apply @ 100lbs per acre<br>April 16th- Oct. 14th | 50  | Apply @ 200lbs per acre<br>Oct. 15th- April 15th PLUS<br>lbs per acre of Winter Wheat |

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

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

### Syrion I

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

### Special Considerations:

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

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

| eed Mixture: Wetland Mix                        | SWN Supplied                                    |
|---|---|
| A Wild Ryegrass                                 | 20%   |
| nnual Ryegrass                                  | 20%   |
| owl Bluegrass                                   | 2.0%  |
| losmos 'Sensation'                              | 10%   |
| 35  | 5%  |
| Soft Rush                                       | 5%  |
| Vlaryland Senna 원일 기계                           | 5%  |
| Showy Tickseed                                  | 5%  |
| ox Sedge  | 2.5%  |
| Soft Rush                                       | 2,5%  |
| Woolgrass &                                     | 2.5%  |
| Swamp Verbena                                   | 2.5%  |
| Apply @ 25lbs per acre<br>April 16th- Oct. 14th | Apply @ 50lbs per acre<br>Oct, 15th- April 15th |

# MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN

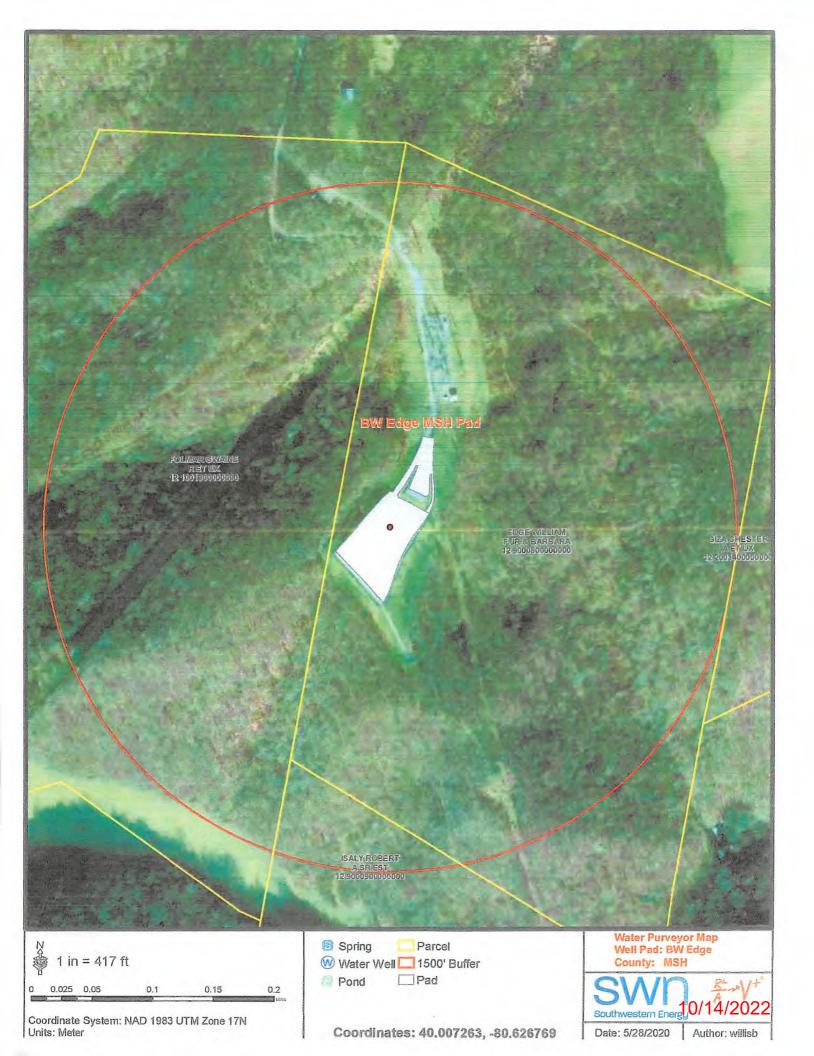


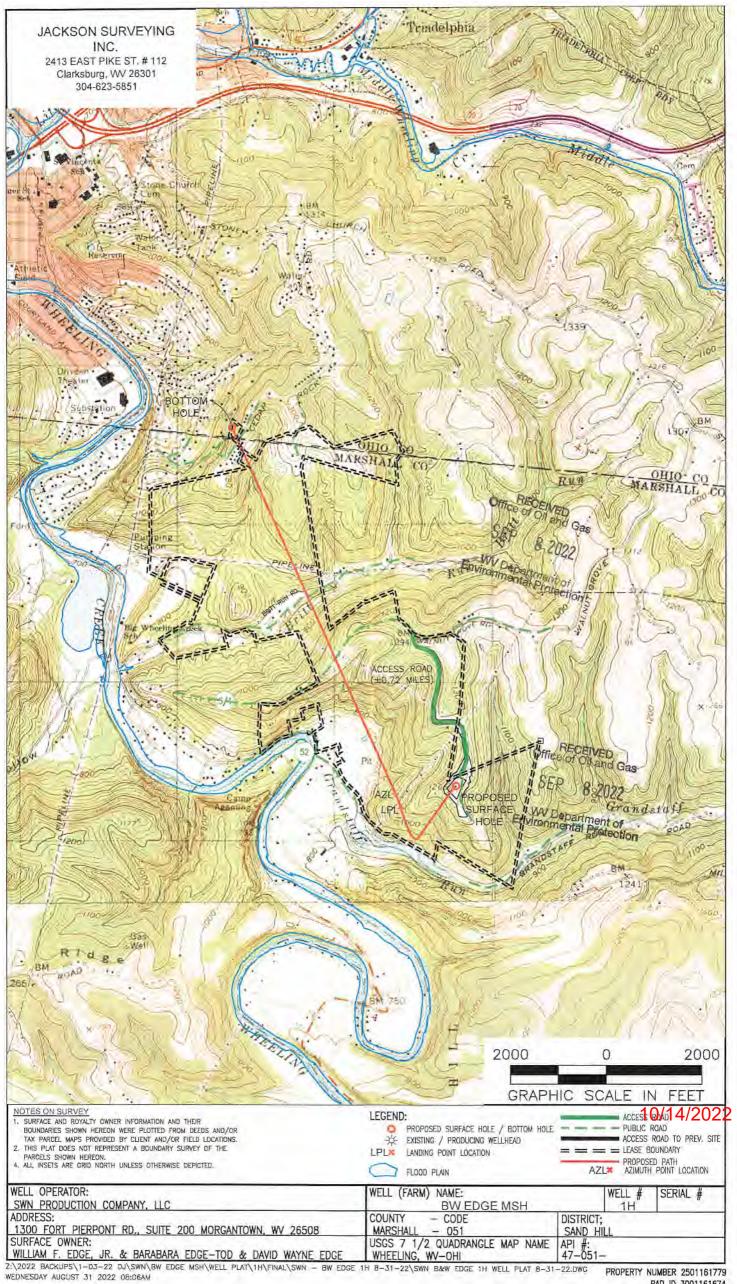
SWN Production Company, LLC 1300 Fort Pierpont Drive, Suite 201 Morgantown, West Virginia 26508

# API NO. 47-XXX-XXXXX WELL NAME: BW Edge MSH 1H Wheeling QUAD Sand Hill DISTRICT MARSHALL COUNTY, WEST VIRGINIA

| Submitted by:                      | SEP 8 2022                               |
|------------------------------------|--|
| Name: Brittany Woody Suttany Woody | Date: 8/2/2022  Environmental Protection |
| Title: Senior Regulatory Analyst   | SWN Production Co., LLC                  |
| Approved by:                       |  |
| Name: STRADER GOWER                | Date: 8 10 22                            |
| Title: Dily Gas Inspector          | _  |
| Approved by:                       |  |
| Name:                              | Date:                                    |
| Title:                             |  |
|                                    |  |

SWN PRODUCTION COMPANY, LLC - CONFIDENTIAL

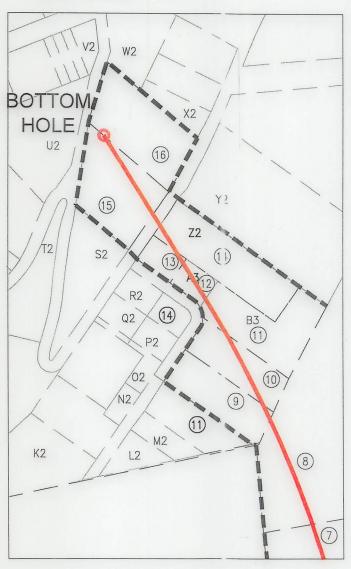




JACKSON SURVEYING INC.

2413 EAST PIKE ST. # 112 Clarksburg, WV 26301 304-623-5851

# DETAIL "A"



I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND REGULATIONS ISSUED

P.S. 708

No. 708

STATILOF

STATILO

David L Jackson 200000 10/14/2022

| REVISIONS: | COMPANY:               | SWN<br>Production Company, LLC | SVI Production Company | Rt W+0                                      |
|------------|------------------------|--------------------------------|------------------------|---|
|            | OPERATOR'S<br>WELL #:  | BW EDGE MSH<br>1H              | API #:<br>47-051-02471 | DATE: 08-31-2022  DRAWN BY: N. MANO         |
|            | DISTRICT:<br>SAND HILL | C OUNTY:                       | STATE:<br>WV           | SCALE: N/A DRAWING NO: WELL LOCATION PLAT 2 |

### JACKSON SURVEYING

INC. 2413 EAST PIKE ST. # 112 Clarksburg, WV 26301 304-623-5851

| 1     | WELL BORE TRA                         | TS                    |            |   |
|-------|---------------------------------------|-----------------------|------------|---|
| TRACT | SURFACE OWNER (S) / ROYAL             | Y OWNER (R)           | TAX PARCEL | Ī |
| 1     | EDGE WILLIAM JR & BARBARA ANN - TOD 8 | DAVID WAYNE EDGE (S)/ | 12-9-8     | Ī |
|       | FLETCHER JOSEPHINE                    |                       |            | - |
| TRACT | SURFACE OWNER                         | 5)                    | TAX PARCEL | n |
| 2     | FOLMAR EDITH A TRUS                   | r(s)                  | 12-1-19    | - |
| 3     | ADASE GEORGE & LAUF                   | E(S)                  | 12-1-28    | - |
| 4     | ADASE GEORGE & LAUI                   | E(S)                  | 12-1-29    | _ |
| 5     | SCHELLHASE MARK A ET                  | JX (S)                | 12-1-18    |   |
| 6     | LEASURE ANNA (S                       |                       | 12-1-30    | - |
| 7     | COFFIELD MICHAEL L & TYL              | NER(S)                | 12-1-10    |   |
| 8     | HARTMAN WALTER LET                    | JX (S)                | 12-1-10.1  | ٦ |
| 9     | SNYDER LONNIE A (                     | 1)                    | 12-1A-83   | Ī |
| 10    | SNYDER LONNIE A (                     | 1)                    | 12-1A-83.2 | 7 |
| 11    | STALEY DAVID A ET U                   | (S)                   | 12-1A-77   |   |
| 12    | DAUGHERTY JERRY RAY E                 | UX(S)                 | 12-1A-78   |   |
| 13    | MORRISON WILLIAM JE                   | UX(S)                 | 12-1A-79   |   |
| 14    | MORRISON WILLIAM JE                   | UX(S)                 | 12-1A-16   |   |
| 15    | PAETZOLD DOUGLAS GREIG AND KAT        | RYN ELIZABETH (S)     | 6-T178-319 |   |
| 16    | JDS INVESTMENTS LLC                   | (S)                   | 6-T17F-1   | Ī |

|       | ADJOINING OWNERS                    |                |             |
|-------|-------------------------------------|----------------|-------------|
| TRACT | SURFACE OWNER                       |                | TAX PARCE   |
| A     | WHEELING POWER COA                  |                | 12-9-8.1    |
| В     | GIZA ALEXANDER C & CHRIS            |                | 12-1-16     |
| С     | GIZA ALEXANDER C & CHRIS            |                | 12-2-14     |
| D     | ISALY ROBERT A SR I                 | ST .           | 12-2-13     |
| E     | G F P CORP                          | -              | 12-2-12     |
| F     | GRAY JOHN ALVII                     | -              | 12-9-11     |
| G     | ISALY ROBERT A SR I                 | TE TE          | 12-9-9      |
| Н     | WHEELING CREEK WATERSH              | ED COMM        | 12-9-6.1    |
| 1     | HADSELL SANDRA                      |                | 12-1-20     |
| J     | DUFF JAMES E & BROOKE               | LCAPP          | 12-1-22.1   |
| K     | DUFF JAMES E & BROOKE               | LCAPP          | 12-1-22     |
| L     | FRAZIER GREGORY SCOT                | - TOD          | 12-1-23     |
| M     | FRAZIER GREGORY SCOT                | - TOD          | 12-1-27.1   |
| N     | PALMER ADAM F                       |                | 12-1-27.2   |
| 0     | PALMER ADAM R                       |                | 12-1-26     |
| Р     | MAAS BRIAN J & AMY C                | TRUST          | 13-3-10     |
| Q     | SAVAGE CHARLES JAC                  |                | 12-1-29.1   |
| R     | GRAY JOHN A ET U                    |                | 12-1-28.2   |
| S     | ALLEN MARK G & CHE                  |                |             |
| T     |                                     |                | 12-1-28.1   |
| U     | WHARTON PETER R E                   |                | 12-1-34     |
| V     | ESTEP DOUGLAS J & LIND/             |                | 12-1-33.1   |
| w     | MERCER DARICK B & RE                | YEE A          | 12-1-32     |
|       | KUNTZ JOHN H                        |                | 12-1-31     |
| X     | CONSOLIDATION COAL COMPANY          |                | 12-1-10.2   |
| Y     | MARPLE JEFFREY J & BAF              |                | 12-1-32.1   |
| Z     | HIGGINS CONSTANCE I                 | - LIFE         | 12-1-7.3    |
| A2    | RUNKLE SHERRY I                     |                | 12-1-7.2    |
| B2    | SLIGAR KAREN SCHENK &               |                | 12-1-5.2    |
| C2    | SLIGAR KAREN SCHE                   | IK             | 12-1-5      |
| D2    | HAMILTON MARY SCHENK                | ≩ GARY P       | 12-1-5.4    |
| E2    | WETMORE BROOKE L & F                | RIAN B         | 12-1-5.5    |
| F2    | ROMAGNOLI JUDY                      | 1              | 12-1A-23    |
| G2    | ROMAGNOLI JUDY                      | 1              | 12-1A-22    |
| H2    | FRANK WILLIAM EMMET                 | ETUX           | 12-1A-19.1  |
| 12    | WARNICK RONALD & E                  | THER           | 12-1A-19    |
| J2    | BLUST HAROLD F                      |                | 12-1A-18.2  |
| K2    | BLUST HAROLD F                      |                | 12-1A-87    |
| L2    | SNYDER JOHN J ET I                  | X              | 12-1A-85    |
| M2    | SNYDER JOHN J ET I                  | X              | 12-1A-84    |
| N2    | NICKERSON TERRY L -                 | TOD            | 12-1A-86    |
| 02    | NICKERSON TERRY -                   |                | 12-1A-90    |
| P2    | GRAHAM KEVIN LSR & A                |                | 12-1A-82    |
| Q2    | GRAHAM KEVIN LSR & AI               |                | 12-1A-91    |
| R2    | ROSS KIMIKO                         |                | 12-1A-80    |
| S2    | GRAHAM KEVIN E SR & ANDREA E        | J'RDIEN CDAHAM | 12-1A-15    |
| T2    | BOURNE MEREDITI                     |                | 12-1A-18    |
| U2    | BERISFORD THEODO                    |                | 6-T17B-309  |
| V2    | BERISFORD THEODO                    |                | 6-T17B-307  |
| W2    |                                     |                |             |
|       | BERISFORD THEODO                    |                | 6-T17B-317  |
| X2    | PAETZOLD DOUGLAS O                  |                | 6-T17B-318. |
| Y2    | DIANA WALTER & K PAYNE (1/2); ALBEI |                | 6-T17B-32:  |
| Z2    | MORRISON WILLIAM J                  |                | 12-1A-16    |
| A3    | DAUGHERTY JERRY RAY                 |                | 12-1A-78    |
| B3    | STALEY DAVID A ET                   |                | 12-1A-77    |
| C3    | CAMPBELL DEBRA                      |                | 6-T17B-320  |
| D3    | HARTMAN WALTER LAND                 |                | 6-T17-17    |
| E3    | HOLMES DANIEL P & LA                |                | 6-T17-17.2  |
| F3    | COMSTOCK YUKIK                      |                | 6-T17-17.3  |
| G3    | HALL JOSEPH D & AN                  |                | 6-T17-17.4  |
| НЗ    | HARTMAN WALTER LAND                 |                | 6-T17-17.1  |
| 13    | LAPINSKY LEONAR                     | I E            | 6-T17-15    |
| 13    | BEALL GREGORY W & JI                | LANN           | 6-T17-9.3   |
| КЗ    | CARLSON JAMES                       |                | 6-T17-13    |
| L3    | LENZ PATRICK J                      |                | 12-1-46     |
| M3    | COFFIELD MICHAEL L & T              |                | 12-1-13     |
| N3    | BARTOLOVICH STEPH                   |                | 12-1-11     |
| 03    | COFFIELD MICHAEL & 7                |                | 12-1-47     |
| РЗ    | BARTOLOVICH STEPH                   |                | 12-1-18.4   |
| Q3    | SCHELLHASE MARK A & A               |                | 12-1-18.3   |
| R3    | SCHELLHASE MARK A & A               |                | 12-1-18.5   |
| S3    | SCHELLHASE MARK A & A               |                | 12-1-15.4   |

10/14/2022

| REVISIONS: | COMPANY:               | SWN<br>Production Company, LLC | SWI Production Company         | RL-aV+0                                     |
|------------|------------------------|--------------------------------|--------------------------------|---|
|            | OPERATOR'S WELL #:     | BW EDGE MSH<br>1H              | API #:<br>47-051- <b>0247(</b> | DATE: 08-31-2022  DRAWN BY: N. MANO         |
|            | DISTRICT:<br>SAND HILL | C DUNTY:<br>MARSHALL           | STATE:<br>WV                   | SCALE: N/A DRAWING NO: WELL LOCATION PLAT 3 |

| WW-6A1 |  |
|--------|--|
| (5/13) |  |

| Operator's Well No. | BW Edge MSH 1H |
|---------------------|----------------|
|                     |                |

### 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<br>Number | Grantor, Lessor, etc. | Grantee, Lessee, etc. | Royalty | Book/Page |
|-------------------------|-----------------------|-----------------------|---------|-----------|
|-------------------------|-----------------------|-----------------------|---------|-----------|

See Exhibit "A"

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

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

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

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

| Well Operator: | SWN Production Company, LLC.  |  |
|----------------|-------------------------------|--|
| By:            | AU                            |  |
| Its:           | Staff Landman - SW Appalachia |  |
|                |                               |  |

Page 1 of \_\_\_\_

### **EXHIBIT "A"**

# Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator BW Edge MSH 1H

### Marshall and Ohio Counties, West Virginia

| #  | TMP               | LESSOR  | LESSEE  | ROYALTY | BK/PG                                   |
|----|-------------------|---|---|---------|---|
| 1) | 12-0009-0008-0000 | Josephine Fletcher f/k/a Josephine Fisher, a married  | NPAR, LLC   | 20.00%  | 707/584                                 |
|    |                   | woman acting in her sole and separate property  | Chevron U.S.A. Inc.   |         | 756/332                                 |
|    |                   |   | Chesapeake Appalachia, L.L.C.                                   |         | 30/532                                  |
|    |                   |   | SWN Production Company, LLC                                     |         | 33/110                                  |
| 2) | 12-0001-0019-0000 | Edith Adell Folmar, a widow   | SWN Production Company, L.L.C.                                  | 18.00%  | 932/525                                 |
| 3) | 12-0001-0028-0000 | George R. Adase and Laurie Adase, his wife  | TriEnergy Holdings, LLC   | 17.00%  | 696/206                                 |
|    |                   |   | NPAR, LLC   |         | 24/180                                  |
|    |                   |   | Chevron U.S.A. Inc.   |         | 756/332                                 |
|    |                   |   | Chesapeake Appalachia, L.L.C.                                   |         | 30/532                                  |
|    |                   |   | SWN Production Company, LLC                                     |         | 33/110                                  |
| 4) | 12-0001-0029-0000 | George R. Adase and Laurie Adase, his wife  | TriEnergy Holdings, LLC   | 17.00%  | 696/206                                 |
|    |                   |   | NPAR, LLC   |         | 24/180                                  |
|    |                   |   | Chevron U.S.A. Inc.   |         | 756/332                                 |
|    |                   |   | Chesapeake Appalachia, L.L.C.                                   |         | 30/532                                  |
|    |                   |   | SWN Production Company, LLC                                     |         | 33/110                                  |
|    |                   | American Foundation for the Blind, Inc., a New York   | Chesapeake Appalachia, L.L.C.                                   | 18.00%  | 846/518                                 |
|    |                   | corporation, by Rick Bozeman, Assistant Treasurer   | SWN Production Company, LLC                                     |         | 35/32                                   |
|    |                   | Children's Hospital and Healthcare Services Foundation, a Virginia corporation by Chris Broughton-Spruill, President, as agent for Crippled Children's Hospital | SWN Production Company, L.L.C.                                  | 18.00%  | 866/590                                 |
| 5) | 12-0001-0018-0000 | Mark A. Schellhase and Andrea K. Schellhase, husband and  | Chesaneako Annalachia III C                                     | 18.00%  | 721/468                                 |
| ~, | 12 0001 0010 0000 | wife  | SWN Production Company, LLC                                     | 18.00%  | 33/110                                  |
| 6) | 12-0001-0030-0000 | Carole Ann Smith and Donald Smith, Wife and Husband,  | SWN Production Company, L.L.C.                                  | 18.00%  | 860/325                                 |
|    |                   | and Carole Ann Smith as Trustee for Ernie Leasure under   | • •   |         |   |
|    |                   | the Last Will and Testament of Ruth Marie Leasure   | Chesapeake Appala R. L.C. OFFICE SWN Production Company, ECC 25 |         |   |
|    |                   | Janice E. Stift and Ralph Stift, Jr., Wife and Husband  | Chesapeake Appala இது, L.L.C. இற்<br>SWN Production Co          | 18.00%  | 843/94<br>35/32                         |
|    |                   | Nancy Marie Norman and Arch Norman, Wife and Husband  | Chesapeake Appalactes L.L.                                      | 18.00%  | 843/106                                 |
|    |                   |   | SWN Production Company, LLE 2                                   |         | 35/32                                   |
|    |                   | ***************************************   | Ö   |         | *************************************** |

|         |  | Paula Jean Walton and Gerald Walton, Wife and Husband                 | Chesapeake Appalachia, L.L.C.              | 18.00%                                  | 843/100 |
|---------|--|---|--|---|---------|
|         |  |   | SWN Production Company, LLC                |   | 35/32   |
| ļ       |  | Patricia Eileen Ritchea, divorced and unremarried                     | Chesapeake Appalachia, L.L.C.              | 18.00%                                  | 843/112 |
|         |  |   | SWN Production Company, LLC                | *************************************** | 35/32   |
|         | •  | Iluminada A. Leasure, widow   | SWN Production Company, L.L.C.             | 18.00%                                  | 866/227 |
|         |  | James Elwood Leasure, Divorced and unremarried                        | Chesapeake Appalachia, L.L.C.              | 18.00%                                  | 843/136 |
|         | m g  |   | SWN Production Company, LLC                |   | 35/32   |
|         | SEP 8 2022 SEP 8 2022 SEP Representation of the control of the con | Martha L. Greaves and Thomas A. Greaves, Husband and Wife             | SWN Production Company, L.L.C.             | 18.00%                                  | 852/609 |
|         |  | Harold Joseph Brock and Joanna Brock, Husband and Wife                | Chesapeake Appalachia, L.L.C.              | 18.00%                                  | 843/118 |
| 1       | and and  |   | SWN Production Company, LLC                |   | 35/32   |
| 1       | NED Gas<br>8 2022<br>8 2022  | Bernice Virginia Brock, Widow   | Chesapeake Appalachia, L.L.C.              | 18.00%                                  | 843/124 |
|         |  | <u> </u>  | SWN Production Company, LLC                |   | 35/32   |
| 1       | ğ  | Robert A. Brock and Wilma Brock, Husband and Wife                     | Chesapeake Appalachia, L.L.C.              | 18.00%                                  | 843/130 |
|         | •  |   | SWN Production Company, LLC                |   | 35/32   |
| ł       |  | Ronald Walton, Jr., Divorced and unremarried                          | Chesapeake Appalachia, L.L.C.              | 18.00%                                  | 843/142 |
|         |  |   | SWN Production Company, LLC                |   | 35/32   |
| 1       |  | Linda Michelle Sturm and Earl F. Sturm, III, Wife and                 | Chesapeake Appalachia, L.L.C.              | 18.00%                                  | 843/148 |
| İ       |  | Husband   | SWN Production Company, LLC                |   | 35/32   |
| 7)      | 12-0001-0010-0000  | Michael L. Coffield and Tylene R. Coffield, husband and               | TH Exploration, LLC                        | 18.00%                                  | 896/367 |
|         |  | wife  | SWN Production Company, LLC                |   | 36/488  |
| 8)      | 12-0001-0010-0001  | Walter Lewis Hartman & Gloria Louise Hartman, h&w                     | Chesapeake Appalachia, L.L.C.              | 12.50%                                  | 688/622 |
| 1       |  |   | SWN Production Company, LLC                |   | 33/110  |
| (9)     | 12-001A-0083-0000  | Lonnie A. Snyder, a single man  | American Petroleum Partners Operating, LLC | 18.00%                                  | 949/429 |
|         | <u> </u>   |   | SWN Production Company, LLC                |   | 45/381  |
| 10)     | 12-001A-0083-0002  | Lonnie A. Snyder, a single man  | American Petroleum Partners Operating, LLC | 18.00%                                  | 949/429 |
|         |  |   | SWN Production Company, LLC                |   | 45/381  |
| 111)    | 12-001A-0077-0000  | David A. Staley and Tracey Staley, his wife                           | American Petroleum Partners Operating, LLC | 18.00%                                  | 932/163 |
| <u></u> |  |   | SWN Production Company, LLC                |   | 45/381  |
| 12)     | 12-001A-0078-0000  | Jerry Ray Daugherty and Melinda L. Daugherty, husband                 | American Petroleum Partners Operating, LLC | 18.00%                                  | 932/155 |
|         |  | and wife, as Joint Tenants with the right of survivorship             | SWN Production Company, LLC                |   | 45/381  |
| 13)     | 12-001A-0079-0000  | William J. Morrison and Marciann Morrision, his wife, as              | American Petroleum Partners Operating, LLC | 18.00%                                  | 932/167 |
|         |  | joint tenants with right of survivorship and not as tenants in common | SWN Production Company, LLC                |   | 45/381  |

| 14) 12 | 2-001A-)016-0000 | William J. Morrison and Marciann Morrision, his wife, as    | American Petroleum Partners Operating, LLC | 18.00% | 932/167        |
|--------|------------------|---|--|--------|----------------|
|        |                  | joint tenants with right of survivorship and not as tenants | SWN Production Company, LLC                |        | 45/381         |
|        | in de-           | in common   |  |        |                |
| 15) 6- | T17B-0319-0000   | Douglas G. Paetzold and Kathryn E. Paetzold, husband and    | SWN Production Company, L.L.C.             | 18.00% | 9 <b>80/16</b> |
|        |                  | wife  |  |        |                |
| 16) 6- | T17F-0001-0000   | JDS Investments, LLC  | SWN Production Company, L.L.C.             | 18.00% | 978/658        |

Office of Oil and Gas
SEP 8 2022
WW Department of Environmental Protection



SWN Production Company, LLC

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

August 2, 2022

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

RE: SWN's proposed New Well: BW Edge MSH 1H in Marshall County, West Virginia, Drilling under Cedar Rock Road, Britt Run Road, and Walnut Grove Road.

Dear Mr. Brewer:

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

Thank you.

Sincerely,

Andrew Rielly Staff Landman

SWN Production Company, LLC

RECEIVED Office of Oil and Gas

SEP 8 2022

WV Department of Environmental Protection

R2 NV+°

The Right People doing the Right Things, wisely investing the cash flow from our underlying Assets, will create value > 22

Date of Notice Certification:

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

**API No.** 47- 051 -

|   |  |  | Operator's   | Well No. BW E  | dge MSH 1H   |
|---|--|--|--|--|--|
|   |  | •  | Well Pad N   | lame: BW Edg   | e MSH  |
|   | e provisions in West Virginia Code §   | 22-6A, the Operator has provi  | ided the req   | uired parties w  | vith the Notice Forms listed   |
| State:  | tract of land as follows:<br>West Virginia   | 1  | Factings   | 531,792.744  |  |
| County:   | 051-Marshall   |  | Easting:<br>Northing:  | 4,428,550.458  | · · · · · · · · · · · · · · · · · · ·  |
| District:   | Sand Hill  | Public Road Acces  |  | Big Wheeling Cre   | ek Road  |
| Quadrangle:   | Wheeling   | Generally used far   |  | BW Edge MSH  |  |
| Watershed:  | Grandstaff Run of Wheeling Creek   |  |  |  |  |
| prescribed by<br>it has provide<br>information re<br>of giving the<br>requirements<br>Virginia Code | West Virginia Code § 22-6A-7(b), ethe secretary, shall be verified and shed the owners of the surface describequired by subsections (b) and (c), sec surface owner notice of entry to sur of subsection (b), section sixteen of ethe § 22-6A-11(b), the applicant shall the have been completed by the applicant | hall contain the following informed in subdivisions (1), (2) and ction sixteen of this article; (ii) wey pursuant to subsection (at this article were waived in wonder proof of and certify to the | rmation: (14 and (4), substitute the real of that the real), section to writing by | 4) A certification (b), section (b), section (c), section | on from the operator that (in ction ten of this article, the deemed satisfied as a result cle six-a; or (iii) the notice wher; and Pursuant to Wes |
| that the Oper   | West Virginia Code § 22-6A, the Operator has properly served the required ECK ALL THAT APPLY   |  | is Notice C  | ertification   | OOG OFFICE USE<br>ONLY   |
| ☐ 1. NOT  | TICE OF SEISMIC ACTIVITY or  | ■ NOTICE NOT REQUIR SEISMIC ACTIVITY WAS   | ED <b>RECEM</b><br>ffice of Oil a<br>CONDUC  | BENO<br>and Gas<br>TED   | ☐ RECEIVED/<br>NOT REQUIRED  |
| ■ 2. NO   | TICE OF ENTRY FOR PLAT SURV  |  |  | **.  | RECEIVED   |
| ■ 3. NO   | TICE OF INTENT TO DRILL or   | ☐ NOTICE NOT REQUERNOTICE OF ENTRY FOR P WAS CONDUCTED or  |  | Refection  | RECEIVED/<br>NOT REQUIRED  |
|   |  | ☐ WRITTEN WAIVER B<br>(PLEASE ATTACH)  | Y SURFA  | CE OWNER   |  |
| ■ 4. NO   | TICE OF PLANNED OPERATION  |  |  |  | RECEIVED   |
| ■ 5. PUB  | BLIC NOTICE  |  |  |  | RECEIVED   |
| ■ 6. NO   | TICE OF APPLICATION  |  |  |  | □ RECEIVED   |
|   |  |  |  |  |  |

### **Required Attachments:**

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

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.

Well Operator: SWN Production Co., LLC

Brittany Woody

Its: Senior Regulatory?

Telephone: 304-884-1610

Address: 1300 Fort Pierpont Dr., Suite 201

Morgantown, WV 26508

Facsimile: 304-884-1690

Email: Brittany\_Woody@swn.com

NOTARE PLANT Public Official Seal State of West Virginia My Comm. Expires Oct 1, 2024 306 Simpson Avenue Clarksburg WV 26301

Subscribed and sworn before me this 15 day

Notary Public

My Commission Expires\_

Oil and Gas Privacy Notice:

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

Office of Oil and Gas

SEP 8 2022

WV Department of Environmental Protection WW-6A (9-13) API NO, 47- 051 OPERATOR WELL NO. BW Edge MSH 1H
Well Pad Name: BW Edge MSH

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

| Date   | of Notice:   |  | provided no later that<br>oplication Filed:  | the filing date of permit applic   | eation.  |   |
|--|--|--|--|--|--|---|
| Noti   | ce of:   |  |  | 1  |  |   |
| <b>V</b>   | PERMIT FOR AN<br>WELL WORK   |  | RTIFICATE OF APPI  | ROVAL FOR THE<br>IN IMPOUNDMENT OR PIT   |  |   |
| Deli   | very method pursu  | ant to West Virgi  | nia Code § 22-6A-10(   | (b)  |  |   |
| П  | BEBEONIN   | [] protesters  | ъ Пъсти  | OD OF DELIVERY THAT BEO  | I IIDEG A  |   |
| Ц  | PERSONAL<br>SERVICE  | ✓ REGISTERE<br>MAIL  |  | OD OF DELIVERY THAT REQ<br>PT OR SIGNATURE CONFIRM   |  |   |
| the si<br>oil ardescriptore<br>operation operation o | urface of the tract on and gas leasehold being ribed in the erosion a stor or lessee, in the erosion as a tor or lessee, in the erosion as a tor or lessee, in the erosion as a tor or lessee, in the erosion as a work, if the surface to the torn as a water well, spring ide water for consumptions wat | which the well is on<br>ag developed by the<br>nd sediment control<br>event the tract of lan<br>owners of record of<br>ract is to be used for<br>scribed in section ni<br>or water supply sour<br>ption by humans or<br>ity is to take place. (<br>ion hold interests in<br>irred to be maintained<br>the contrary, notice<br>uires, in part, that the | r is proposed to be local proposed well work, if plan submitted pursuant do no which the well profit the surface tract or train the placement, construine of this article; (5) A rece located within one to domestic animals; and co)(1) If more than three to the lands, the applicant ed pursuant to section extends to a lien holder is not the operator shall also proposed to a lien holder is not a | ne well plat to each of the following ted; (2) The owners of record of the the surface tract is to be used for rent to subsection (c), section seven to posed to be drilled is located [siccts overlying the oil and gas leaseh uction, enlargement, alteration, reparty surface owner or water purveyed thousand five hundred feet of the conformation of | e surface traced and so of this article is known to old being do air, removal or who is known to storage fie where of the grane of integration of this code, and holder is WSSP" Hpt | ect or tracts overlying the reland disturbance as e; (3) The coal owner, to be underlain by one or eveloped by the proposed or abandonment of any own to the applicant to well pad which is used to did within which the erests described in operson described in the (2) Notwithstanding any the landowner. W. Va. |
|  |  |  |  | ☑ Well Plat Notice is hereby   | orn  | 9 2022  |
| 100  | JRFACE OWNER(  |  | 1  |  |  |   |
| ☑ SL   | a. Barbara Ann & William   |  |  | COAL OWNER OR LESSEE   | WV De  |   |
| ☑ SU<br>Nam  | e: Barbara Ann & William<br>ress: 1116 Virginia Stree  | F. Edge  | /  | COAL OWNER OR LESSEE Name: C/O Leatherwood, Inc. Attn: Cas Address: 1000 Consol Energy Drive   | WV De<br>Environme<br>Saunders   |   |
| ☑ SU<br>Nam<br>Add   | e: Barbara Ann & William<br>ress: 1116 Virginia Stree<br>is Ferry, OH 43935  | F. Edge  |  | COAL OWNER OR LESSEE Name: C/O Leatherwood, Inc. Attn: Cas Address: 1000 Consol Energy Drive Canonsburg, PA 15317  | WV De<br>Environme<br>ey saunders  |   |
| ☑ SU<br>Nam<br>Addi<br>Martin  | ress: 1116 Virginia Stree  | F. Edge  |  | Address: 1000 Consol Energy Drive  | WV Da<br>Environme<br>ey saunders  |   |
| SUNAM<br>Nam<br>Addi<br>Martin   | ress: 1116 Virginia Stree<br>s Ferry, OH 43935   | F. Edge  |  | Canonsburg, PA 15317  COAL OPERATOR  |  | pariment of<br>ntal Protection  |
| SUNam<br>Addi<br>Martin<br>Nam<br>Addi   | ress: 1116 Virginia Stree<br>is Ferry, OH 43935<br>e; David Wayne Edge   | F. Edge  |  | Canonsburg, PA 15317  COAL OPERATOR  Name:   |  | pariment of<br>Intal Protection   |
| SUNAM<br>Addi<br>Martin<br>Nam<br>Addi<br>Whee   | ress: 1116 Virginia Stree<br>is Ferry, OH 43935<br>ie: David Wayne Edge<br>ress: 27 Pine Lane<br>ling, WV 26003  | F. Edge<br>t   | ner Disturbance)   | Canonsburg, PA 15317  COAL OPERATOR  |  | partment of<br>Intal Protection   |
| ☑ SU<br>Nam<br>Addi<br>Martin<br>Nam<br>Addi<br>Whee   | ress: 1116 Virginia Streets Ferry, OH 43935  Pe: David Wayne Edge ress: 27 Pine Lane ling, WV 26003  URFACE OWNER(:  | F. Edge<br>t<br>s) (Road and/or Oth  |  | Canonsburg, PA 15317  COAL OPERATOR  Name:  Address:   |  | periment of<br>intal Protection   |
| ☑ SU<br>Nam<br>Addi<br>Martin<br>Nam<br>Addi<br>Whee<br>□ SU   | ress: 1116 Virginia Stree<br>is Ferry, OH 43935<br>ie: David Wayne Edge<br>ress: 27 Pine Lane<br>ling, WV 26003<br>JRFACE OWNER(:  | F. Edge<br>t<br>s) (Road and/or Oth  |  | Canonsburg, PA 15317  COAL OPERATOR  Name: Address:  | TER WELI   | periment of<br>intal Protection   |
| ☑ SU<br>Nam<br>Addi<br>Martin<br>Nam<br>Addi<br>Whee<br>□ SU   | ress: 1116 Virginia Stree is Ferry, OH 43935 ie; David Wayne Edge ress: 27 Pine Lane ling, WV 26003 JRFACE OWNER(see: ress:  | F. Edge<br>t<br>s) (Road and/or Oth  |  | Canonsburg, PA 15317  COAL OPERATOR  Name:  Address:  SURFACE OWNER OF WA  AND/OR WATER PURVEYOR   | TER WELI   | periment of<br>intal Protection   |
| ☑ SU<br>Nam<br>Addi<br>Martin<br>Nam<br>Addi<br>Whee<br>□ SU<br>Nam  | ress: 1116 Virginia Stree is Ferry, OH 43935 ie: David Wayne Edge ress: 27 Pine Lane ling, WV 26003 JRFACE OWNER(se: ress:   | F. Edge<br>t<br>s) (Road and/or Oth  |  | Canonsburg, PA 15317  COAL OPERATOR  Name:  Address:  SURFACE OWNER OF WA  AND/OR WATER PURVEYOR   | TER WELI   | periment of<br>intal Protection   |
| ☑ SU<br>Nam<br>Addi<br>Martin<br>Nam<br>Addi<br>Whee<br>□ SU<br>Nam<br>Addi  | ress: 1116 Virginia Stree is Ferry, OH 43935 ie: David Wayne Edge ress: 27 Pine Lane ling, WV 26003 JRFACE OWNER(se: ress:   | F. Edge<br>t<br>s) (Road and/or Oth  |  | Canonsburg, PA 15317  COAL OPERATOR  Name:  Address:  SURFACE OWNER OF WA  AND/OR WATER PURVEYOR   | TER WELI   | partment of<br>intal Protection   |
| ☑ SU<br>Nam<br>Addi<br>Martin<br>Nam<br>Addi<br>Whee<br>□ SU<br>Nam<br>Addi  | ress: 1116 Virginia Stree is Ferry, OH 43935 ie: David Wayne Edge ress: 27 Pine Lane ling, WV 26003 JRFACE OWNER(se: ress:   | F. Edge<br>t<br>s) (Road and/or Oth  |  | Address: 1000 Consol Energy Drive Canonsburg, PA 15317  COAL OPERATOR Name: Address:  SURFACE OWNER OF WA AND/OR WATER PURVEYOR Name: None Address:  | TER WELI<br>R(s)   | periment of<br>intal Protection   |
| ☑ SU<br>Nam<br>Addi<br>Martin<br>Nam<br>Addi<br>Whee<br>☑ SU<br>Nam<br>Addi  | ress: 1116 Virginia Stree is Ferry, OH 43935 ie: David Wayne Edge ress: 27 Pine Lane ling, WV 26003 JRFACE OWNER(se: ress:   | F. Edge<br>t<br>s) (Road and/or Oth  |  | Address: 1000 Consol Energy Drive Canonsburg, PA 15317  COAL OPERATOR Name: Address:  SURFACE OWNER OF WA AND/OR WATER PURVEYOR Name: None Address:  | TER WELI<br>R(s)<br>JRAL GAS   | partment of intal Protection  |
| SU SU Nama Addi Martin Nama Addi Whee SU Nama Addi Nama Addi SU SU Nama Addi SU  | ress: 1116 Virginia Stree is Ferry, OH 43935 ie; David Wayne Edge ress: 27 Pine Lane ling, WV 26003 JRFACE OWNER(see: ress:  | F. Edge t s) (Road and/or Oth  | or Pits)   | Address: 1000 Consol Energy Drive Canonsburg, PA 15317  COAL OPERATOR Name: Address:  SURFACE OWNER OF WA AND/OR WATER PURVEYOR Name: None Address:  | TER WELI<br>R(s)<br>JRAL GAS   | ouriment of intal Protection  |
| SUNAMA Addi Martin Nam Addi Whee SUNAMA Addi Nam Addi SUNAMA ADDI        | ress: 1116 Virginia Stree is Ferry, OH 43935 ie: David Wayne Edge ress: 27 Pine Lane ling, WV 26003 JRFACE OWNER(see: ress:  | F. Edge t s) (Road and/or Others) (Impoundments of   | or Pits)   | Address: 1000 Consol Energy Drive Canonsburg, PA 15317  COAL OPERATOR Name: Address:  SURFACE OWNER OF WA AND/OR WATER PURVEYOR Name: None Address:  | TER WELI<br>R(s)<br>JRAL GAS   | ouriment of intal Protection  |

WW-6A (9-13) API NO. 47- 051 OPERATOR WELL NO. BW Edge MSH 1H
Well Pad Name: BW Edge MSH

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

| Not   | ice Time Requiren   | nent: notice shall be   | provided no later that  | the filing date of permit app  | olication.   |  |
|---|---|---|---|--|--|--|
|   | 017   |   | <u> </u>  | 1  |  |  |
| Dat   | e of Notice:  | Date Permit Ap  | plication Filed: 🖳  |  |  |  |
| Not   | ice of:   |   | 1   |  |  |  |
|   |   |   |   |  |  |  |
| 1   | PERMIT FOR AN   | NY 🔲 CER  | RTIFICATE OF APP  | ROVAL FOR THE  |  |  |
|   | WELL WORK   | COI   | NSTRUCTION OF A   | AN IMPOUNDMENT OR PIT  |  |  |
|   | 310000 (13,634)   |   |   |  |  |  |
| Deli  | ivery method purs   | uant to West Virgin   | ia Code § 22-6A-10  | (b)  |  |  |
| П   | PERSONAL  | ☑ REGISTEREI  | о 🛘 метно   | OD OF DELIVERY THAT RE   | EOUIRES A  |  |
|   | SERVICE   | MAIL  |   | PT OR SIGNATURE CONFIL   |  |  |
|   | SERVICE   | WIAIL   | KECEI   | FI OR SIGNATURE CONFIL   | CIVIATION  |  |
| desco<br>oper<br>mor<br>well<br>impo<br>have<br>prov<br>prop<br>subs<br>reco<br>prov<br>Cod | cribed in the crosion rator or lessee, in the coal seams; (4) The work, if the surface oundment or pit as do a water well, spring yide water for consurposed well work activated to 6 the sheriff receivision of this article to R. § 35-8-5.7.a re | and sediment control a event the tract of land e owners of record of tract is to be used for escribed in section ning or water supply sour applies to take place. (Oction hold interests in quired to be maintained to the contrary, notice quires, in part, that the | plan submitted pursual<br>d on which the well prother surface tract or traction the placement, construction of this article; (5) A cellocated within one to domestic animals; and color of the lands, the applicant d pursuant to section et to a lien holder is not to operator shall also prother than the construction of the lands, the applicant d pursuant to section et to a lien holder is not to operator shall also prother than the lands. | the surface tract is to be used for the surface tract is to be used for the subsection (c), section severage oposed to be drilled is located [sects overlying the oil and gas least uction, enlargement, alteration, may surface owner or water purvet thousand five hundred feet of the (6) The operator of any natural section is the country of the documents required the track in common or other country and serve the documents required the track and the surface one, chapter eleventotice to a landowner, unless the toylide the Well Site Safety Plan | en of this article; (3) sic] is known to be a schold being developeration, removal or all eyor who is known to be center of the well gas storage field with cowners of interests ired upon the person a of this code. (2) the lien holder is the suffers of the suffe | The coal owner, underlain by one or ped by the proposed bandonment of any to the applicant to pad which is used to thin which the described in the Notwithstanding any landowner, W. Va. |
|   |   |   |   | □ Well Plat Notice is here!     □ COAL OWNER OR LESS.     Name; ACNR, Inc.     Address: 6126 Energy Road   | 0~-  | CEIVED Oil and Gas 8 2022  |
| DIS.  | URFACE OWNER  | (s)   | 1   | D COAL OWNER OR LESS   | EE E WVD   | -022   |
|   | ne: Edith Folmer  | (5)   | 1   | Name: ACNR, Inc.   | Twironments  | rtment of  |
|   | lress: 244 Grandstaff La  | ine   |   | Address: 6126 Energy Road  |  | Protection   |
|   | eling, WV 26003   |   |   | Moundsville, WV 26041  |  |  |
| Nan   | ne: Wheeling Power Con  | npany   |   | COAL OPERATOR  |  |  |
|   | ress: 1 Riverside Place   |   |   | Name:  |  |  |
|   | mbus, OH 43215  |   |   | Address:   |  | -  |
| _   |   | (s) (Road and/or Oth  | er Disturbance)   | Tradition.   |  | _  |
| _   |   | (a) (money arms of con-   |   | SURFACE OWNER OF W   | ATER WELL  | _  |
|   |   |   |   | AND/OR WATER PURVEY  |  |  |
| Juc   |   |   |   |  |  |  |
| Nan   |   |   |   | Name:  |  | -  |
| Add   | lress:  |   |   | Address:   |  | _  |
| 1140  | 11000.  |   |   | ☐ OPERATOR OF ANY NA   | TURAL GAS STO  | DRAGE FIELD  |
| T \$1   | LIREACE OWNER   | (s) (Impoundments o   | r Pits)   |  |  |  |
|   |   |   |   | Name:Address:  |  | 7  |
| Ada   | lrece.  | 71-71-21  |   | Addiess.   |  | _  |
| Auc   | 11655,  |   |   | *Please attach additional form   | an if management   | -  |
| _   |   |   |   | riease attach additional forn  | is if necessary  |  |

OPERATOR WELL NO. BW Edge MSH 1H Well Pad Name: BW Edge 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.

Office of Oil and General acceptable of Environmental Additional information related to horizontal drilling may be obtained from the Secretary, at the WV personnent of Environmental

Additional information related to horizontal drilling may be obtained from the Secretary, at the WVEYepartment of Environment 
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

API NO. 47-051

OPERATOR WELL NO. BW Edge MSH 1H

Well Pad Name: BW Edge 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 of the proposed with the secretary as to the location or construction of the applicant's proposed well work within thirty days of the proposed well work within the proposed well well as the proposed well as the proposed well w application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the secretary of the secreta location or construction of the applicant's proposed well work to the Secretary at: Environmental protection

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

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

WW-6A (8-13)

API NO. 47-051 OPERATOR WELL NO. BW Edge MSH 1H
Well Pad Name: BW Edge MSH

Time Limits and Methods for Filing Comments.

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

Pursuant to West Virginia Code § 22-6A-11(e)(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 <a href="http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx">http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx</a> 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. 47-0517 0 5 1 0 2 4 7 1
OPERATOR WELL NO. BW Edge MSH 1H
Well Pad Name: BW Edge 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 <a href="mailto:deprivacyofficer@wv.gov">deprivacyofficer@wv.gov</a>.

JEANETTE M. GUTTLIEP
Notary Public Official Seal
State of West Virginia
My Comm. Expires Oct 1, 2024
306 Simpson Avenue Clarksburg WV 26301

Subscribed and sworn before me this 15 day of August 2022

Notary Public

My Commission Expires /D/01/2024

Office of Oil and Gas
SEP 8 2022

WV Department of Environmental Protection

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

| Notice Time<br>entry<br>Date of Notic   |  |  | ed at least SEVEN (/) days but no more than FORTY-FIVE (45) days prior to  |
|---|--|--|--|
|   |  |  |  |
| Delivery me   | thod pursuant  | to West Virginia C   | e § 22-6A-10a  |
| ☐ PERSO   | NAL 🔳  | REGISTERED   | ☐ METHOD OF DELIVERY THAT REQUIRES A   |
| SERVIC  | Œ  | MAIL   | RECEIPT OR SIGNATURE CONFIRMATION  |
| on to the surf<br>but no more to<br>beneath such<br>owner of min<br>and Sedimen<br>Secretary, whenable the su | ace tract to con-<br>han forty-five of<br>tract that has fi-<br>erals underlying<br>t Control Manu-<br>nich statement surface owner to o | duct any plat survey<br>lays prior to such en-<br>led a declaration pur-<br>g such tract in the co-<br>al and the statutes ar-<br>hall include contact<br>obtain copies from the | or to filing a permit application, the operator shall provide notice of planned entry equired pursuant to this article. Such notice shall be provided at least seven days to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams ant to section thirty-six, article six, chapter twenty-two of this code; and (3) any ty tax records. The notice shall include a statement that copies of the state Erosion rules related to oil and gas exploration and production may be obtained from the formation, including the address for a web page on the Secretary's web site, to secretary. |
|   | eby provided t   | 0:   |  |
|   | CE OWNER(s)  | ,  | COAL OWNER OR LESSEE   |
|   | Ann & William F. Edg   | ge /   | Name: ACNR, Inc.   |
| Address: 111  |  |  | Address: 6126 Energy Road  |
| Martins Ferry, OH   |  |  | Moundsville, WV 26041  |
| Name: David V   |  |  | TO LOND AL OND TOWN  |
| Address: 27 F<br>Wheeling, WV 260   |  |  | MINERAL OWNER(s)   |
| Name: Edith Fo  |  |  | Name: Erold O. & Josephine Fletcher  Address: 7115 Estepa Drive  Tujunga, CA 91042  *please attach additional forms if necessary SEP   |
| Address: 244  |  |  | Address: 7115 Estepa Drive   |
| Wheeling, WV 260  |  |  | Tujunga, CA 91042 *please attach additional forms it necessary SFP   |
| Notice is he<br>Pursuant to V<br>a plat survey<br>State:  | reby given:<br>Vest Virginia Co<br>on the tract of I<br>West Virginia  | ode § 22-6A-10(a), r<br>and as follows:  | Environ Peparation of the conduct ice is hereby given that the undersigned well operator of the conduct Approx. Latitude & Longitude: 40.015294, -80.630   |
| County:   | Marshall   |  | Public Road Access: Big Wheeling Creek Road  |
| District:   | Sand Hill  |  | Watershed: Upper Ohio South  |
| Quadrangle:   | Wheeling   |  | Generally used farm name: B & W Edge MSH   |
| may be obtain<br>Charleston, Vobtained fron   | ned from the Se<br>VV 25304 (304)<br>the Secretary<br>reby given by  | cretary, at the WV I<br>-926-0450). Copies<br>by visiting <u>www.der</u>   | fanual and the statutes and rules related to oil and gas exploration and production partment of Environmental Protection headquarters, located at 601 57 <sup>th</sup> Street, SE, such documents or additional information related to horizontal drilling may be v.gov/oil-and-gas/pages/default.aspx.  Address: 1300 Fort Pierpont Dr., Suite 201  |
| Telephone:  | 304-884-1610   |  |  |
| Email:  | Brittany Woody   | alemn com  | Morgantown, WV 26508 Facsimile: 304-884-1690   |
|   | Dirtially woody  | South-coll.  | i destinite. Someomical  |

### 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 <a href="mailto:deprivacyofficer@wv.gov">deprivacyofficer@wv.gov</a>.

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

| entry  Date of Notice:   | 6/29/2022  | Date of Plan  | nned Entry: 7/06/2022   | man FORT 1-FIVE (45) days prior to   |
|--|--|---|---|--|
| Delivery metho   | od pursuant t  | to West Virginia C  | ode § 22-6A-10a   |  |
| ☐ PERSONA<br>SERVICE   |  | REGISTERED<br>MAIL  | ☐ METHOD OF DELIVERY THAT RECEIPT OR SIGNATURE CON  |  |
| on to the surface<br>but no more that<br>beneath such tra<br>owner of minera<br>and Sediment C<br>Secretary, which | e tract to cond<br>n forty-five d<br>act that has fil<br>als underlying<br>ontrol Manua<br>h statement sl<br>ce owner to c | duct any plat survey ays prior to such ended a declaration pure such tract in the coal and the statutes are hall include contact obtain copies from the | d rules related to oil and gas exploration as<br>information, including the address for a we  | ice shall be provided at least seven days (2) to any owner or lessee of coal seams ter twenty-two of this code; and (3) any a statement that copies of the state Erosion and production may be obtained from the |
| SURFACE  |  | 0:  | COAL OWNER OR   | LESSEE /   |
| Name: Wheeling P   | ower Company   |   | Name: C/O Leatherwood, Inc. A   |  |
| Address: 1 Rivers  |  |   | Address: 1000 Consol Energy   | Drive  |
| Columbus, OH 43125   | 9  |   | Canonsburg, PA 15317  |  |
| Name:  |  |   | The same of our man   | PEC-   |
| Address:   |  |   |   |  |
| Name:  |  |   | Name:   | SEP 8 2022   |
| Address:   | -  |   | Address:  | SEP 8 2022   |
|  |  |   | *please attach additional forms   | if necessary WV Department of Protection   |
|  |  |   | Frence attach additional forms  | Environmental Pent of  |
| Notice is here   | by given:  |   |   | Protection   |
|  |  | ode § 22-6A-10(a), r  | otice is hereby given that the undersigned  |  |
| a plat survey on   |  |   |   |  |
| State: v   | Vest Virginia  |   | Approx. Latitude & Longitu  | de: 40.015294, -80.630   |
| A Laboratory   | /arshall   |   | Public Road Access:   | Big Wheeling Creek Road  |
|  | nai siiaii   |   |   |  |
| District:  | Sand Hill  |   | Watershed:  | Upper Ohio South   |
| District:  |  |   | Watershed: Generally used farm name:  | Upper Ohio South B & W Edge MSH  |
| District: s<br>Quadrangle: w<br>Copies of the st<br>may be obtained<br>Charleston, WV                              | Sand Hill Wheeling ate Erosion at from the Se 7 25304 (304   | cretary, at the WV I<br>-926-0450). Copies  |   | B & W Edge MSH  to oil and gas exploration and production adquarters, located at 601 57 <sup>th</sup> Street, SE,  |
| District: s Quadrangle: w Copies of the stamay be obtained Charleston, WV obtained from the                        | Sand Hill Wheeling  ate Erosion at d from the Se 7 25304 (304 he Secretary I   | cretary, at the WV I<br>-926-0450). Copies<br>by visiting <u>www.der</u>  | Generally used farm name:  I Manual and the statutes and rules related Department of Environmental Protection he of such documents or additional informati  | B & W Edge MSH  to oil and gas exploration and production adquarters, located at 601 57 <sup>th</sup> Street, SE,  |
| District: s Quadrangle: w Copies of the st may be obtained Charleston, WV obtained from th  Notice is here         | ate Erosion and from the Se 25304 (304 he Secretary by   | cretary, at the WV I -926-0450). Copies by visiting <u>www.der</u> 7:   | Generally used farm name:  I Manual and the statutes and rules related Department of Environmental Protection he of such documents or additional information.wv.gov/oil-and-gas/pages/default.aspx.   | B & W Edge MSH  to oil and gas exploration and production adquarters, located at 601 57 <sup>th</sup> Street, SE, on related to horizontal drilling may be   |
| District: s Quadrangle: w  Copies of the st may be obtained Charleston, WV   | ate Erosion and from the Se 25304 (304 he Secretary by   | cretary, at the WV I<br>-926-0450). Copies<br>by visiting <u>www.der</u>  | Generally used farm name:  Manual and the statutes and rules related pepartment of Environmental Protection he of such documents or additional informations of the control | B & W Edge MSH  to oil and gas exploration and production adquarters, located at 601 57 <sup>th</sup> Street, SE, on related to horizontal drilling may be   |

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

| Date of Notice:  | equirement: Notice shall be provided at  | nit Application Filed:   | F-17-12-11-11-11-11-11-11-11-11-11-11-11-11-   |
|--|--|--|--|
|  | Date Fern  | in Application Flied.  |  |
| Delivery metho   | d pursuant to West Virginia Code § 22  | 2-6A-16(b)   |  |
| a carreary amendo  | - Parameter (1997)   |  |  |
| ☐ HAND   | CERTIFIED MAIL   |  |  |
| DELIVER'   | Y RETURN RECEIPT REQ   | UESTED   |  |
| receipt requested<br>drilling a horizon<br>of this subsection<br>subsection may                            | d or hand delivery, give the surface owner out of the delivery, give the surface owner out of the date the notice was provided.  | er notice of its intent to enter upon to<br>oursuant to subsection (a), section to<br>to the surface owner: <i>Provided</i> , hower. The notice, if required, shall incl | an operator shall, by certified mail return<br>the surface owner's land for the purpose of<br>en of this article satisfies the requirements<br>vever, That the notice requirements of this<br>lude the name, address, telephone number,<br>or's authorized representative. |
| Notice is here   | by provided to the SURFACE OW  | NER(s):  |  |
| Name: Edith Fol  |  | Name:  |  |
| Address: 244 Gra   | ndstaff Lane   | Address:   |  |
| Wheeling   | J. WV 26003  |  |  |
| County: N  | Vest Virginia<br>darshall<br>land Hill   | UTM NAD 83 Easting: Northing: Public Road Access:  | 531,792.744<br>4,428,550.458<br>Walnut Grove Rd.   |
| Quadrangle: V  | Vheeling, WV-OH  | Generally used farm name:  | B&W Edge MSH   |
|  | randstaff Run of Wheeling Creek (HUC-10)   | =  |  |
|  | hall Include:  |  |  |
| facsimile number<br>related to horize  | est Virginia Code § 22-6A-16(b), this rear and electronic mail address of the openal drilling may be obtained from the   | perator and the operator's authorize<br>Secretary, at the WV Department of   | ress, telephone munitor, and if available, ed representative. Addingful information of Environmental Protection leadquarters, ep. wv. gov/oil-and-gasona20s/default.aspx.  |
| Pursuant to We<br>facsimile numb<br>related to horizo<br>located at 601 5                                  | est Virginia Code § 22-6A-16(b), this reer and electronic mail address of the opental drilling may be obtained from the 7 <sup>th</sup> Street, SE, Charleston, WV 25304 (3  | perator and the operator's authorize<br>Secretary, at the WV Department of   | ed representative. Additional information of Environmental Protection Readquarters.  |
| Pursuant to We facsimile number related to horize located at 601 5  Notice is here                         | est Virginia Code § 22-6A-16(b), this reer and electronic mail address of the opental drilling may be obtained from the 7 <sup>th</sup> Street, SE, Charleston, WV 25304 (3  | perator and the operator's authorize<br>Secretary, at the WV Department of   | ed representative. Additional information of Environmental Protection Readquarters.  |
| Pursuant to We facsimile numb related to horizo located at 601 5  Notice is here Well Operator:            | est Virginia Code § 22-6A-16(b), this reer and electronic mail address of the opental drilling may be obtained from the 7 <sup>th</sup> Street, SE, Charleston, WV 25304 (3 by given by:   | perator and the operator's authoriz<br>Secretary, at the WV Department of<br>04-926-0450) or by visiting <u>www.de</u>   | ed representative. Addingto information of Environmental Protection leadquarters, ep. wv. gov/oil-and-gastha20s/default.aspx.  Environmental pent of   |
| Pursuant to We facsimile numb related to horizo located at 601 5  Notice is here Well Operator:            | est Virginia Code § 22-6A-16(b), this representation of the operation of t | perator and the operator's authoriz<br>Secretary, at the WV Department of<br>04-926-0450) or by visiting www.de<br>Authorized Representative:                            | ed representative. Addinated information of Environmental Protection leadquarters, ep. wv.gov/qil-and-gasona20s/default.aspx.  Environmental Protection  Justin Booth  |
| Pursuant to We facsimile number related to horize located at 601 5  Notice is here Well Operator: Address: | est Virginia Code § 22-6A-16(b), this representation of the operation of t | perator and the operator's authoriz<br>Secretary, at the WV Department of<br>04-926-0450) or by visiting www.de<br>Authorized Representative:                            | ed representative. Addingtol information of Environmental Protection Readquarters, ep. wv. gov/oil-and-gas-ba2os/default.aspx.  Environmental Protection  Justin Booth  1300 Fort Pierpont Rd., Suite 200  |
| Pursuant to We facsimile numb related to horize located at 601 5  Notice is here                           | est Virginia Code § 22-6A-16(b), this reer and electronic mail address of the oriental drilling may be obtained from the 7th Street, SE, Charleston, WV 25304 (3 by given by:  SWN Production Company, LLC  1300 Fort Pierpont Rd., Suite 200  Morgantown, WV 26508  | perator and the operator's authoriz Secretary, at the WV Department of 04-926-0450) or by visiting www.de  Authorized Representative: Address:                           | ed representative. Additional information of Environmental Protection leadquarters, ep. wv. gov/oil-and-gastna20s/default.aspx.  Environmental Protection  Justin Booth  1300 Fort Pierpont Rd., Suite 200  Morgantown, WV 26508   |

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| Notice Time I<br>Date of Notice   |   | at least TEN (10) days prior to filing a ermit Application Filed:  | permit application.   |
|---|---|--|---|
| Delivery metl   | ood pursuant to West Virginia Code §  | § 22-6A-16(b)  | ,   |
| ☐ HAND  | ■ CERTIFIED MAIL  |  |   |
| DELIVE  | RY RETURN RECEIPT RI  | EQUESTED   |   |
| receipt reques<br>drilling a horiz<br>of this subsect<br>subsection ma<br>and if ayailabl | ted or hand delivery, give the surface or<br>zontal well: <i>Provided</i> , That notice give<br>ion as of the date the notice was provid<br>by be waived in writing by the surface or | wher notice of its intent to enter upon the pursuant to subsection (a), section teled to the surface owner: <i>Provided, how</i> when the notice, if required, shall included address of the operator and the operator | an operator shall, by certified mail return the surface owner's land for the purpose of an of this article satisfies the requirements vever. That the notice requirements of this ude the name, adverse, telephone number, or sauthorized representative. |
| o feered and  | Wayne Edge  | Name:  | 8 2022  |
| Address: 27 Pir   |   | Address:   | WV Departitions   |
| Wheel   | ing, WV 26003   | 7  | WV Departmental Projection  |
| State:<br>County:<br>District:  | West Virginia Marshall Sand Hill  | horizontal well on the tract of land as fo  UTM NAD 83  Easting: Northing: Public Road Access:   | 531,792.744<br>4,428,550.458<br>Walnut Grove Rd.  |
| Quadrangle:   | Wheeling, WV-OH   | Generally used farm name:  | B&W Edge MSH  |
| Watershed:  | Grandstaff Run of Wheeling Creek (HUC-10)   | Generally used farm name.  | Davi Logo Mori  |
| Pursuant to W<br>facsimile num<br>related to hori   | ber and electronic mail address of the<br>zontal drilling may be obtained from t  | e operator and the operator's authorize<br>the Secretary, at the WV Department of  | ess, telephone number, and if available, ed representative. Additional information f Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx.   |
|   | eby given by:   | A de la se   |   |
| Well Operator   |   | Authorized Representative:   | Justin Booth  |
| Address:  | 1300 Fort Pierpont Rd., Suite 200   | Address:   | 1300 Fort Pierpont Rd., Suite 200   |
| Tolonhanas  | Morgantown, WV 26508  | Tolord   | Morgantown, WV 26508  |
| Telephone:<br>Email:  | 304-884-1675  | Telephone:   | 304-884-1675  |
| Email:<br>Facsimile:  | justin_booth@swn.com  | Email: Facsimile:  | justin_booth@swn.com  |
| acommic.  |   | racsimile:   | \ <del></del>   |

### Oil and Gas Privacy Notice:

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

| Notice Time<br>Date of Notic  | Requirement: Notice shall be provided to: 2. 08/03/2022 Date P   | at least TEN (10) days prior to fiting a ermit Application Filed:   | permit ap  | oplication.   |
|---|--|---|--|---|
| Delivery met  | hod pursuant to West Virginia Code   | § 22-6A-16(b)   |  |   |
| ☐ HAND  | ■ CERTIFIED MAIL   |   |  |   |
| DELIVI  |  | FOLIECTED   |  |   |
| DELIVE  | KETUKN KECEIFT KI  | EQUESTED  |  |   |
| receipt reque<br>drilling a hor<br>of this subsection mand if availab | V. Va. Code § 22-6A-16(b), at least ten of sted or hand delivery, give the surface of izontal well: <i>Provided</i> , That notice give the surface of izontal well: <i>Provided</i> , That notice give the surface of the waived in writing by the surface of the facsimile number and electronic mails are provided to the SURFACE Of | wher notice of its intent to enter upon the pursuant to subsection (a), section to led to the surface owner: <i>Provided</i> , how wher. The notice, if required, shall included address of the operator and the operator | he surface<br>en of this a<br>vever, Tha<br>lude the na<br>or's author | owner's land for the purpose of<br>article satisfies the requirements<br>at the notice requirements of this |
|   | reby provided to the SURFACE O   | Name:   | SEP  | 0.00  |
| Address: 1116   |  |   |  | 0 2022  |
|   | ns Ferry, OH 43935   | Fig. 5  | WY Dep   | artment of tal Protection,  |
| State:  | wner's land for the purpose of drilling a West Virginia  | Easting:  | 531,792.74   |   |
| County:   | Marshall   | Northing:   | 4,428,550.4  | 458   |
| District:   | Sand Hill  | Public Road Access:   | Walnut Gro   | ve Rd.  |
| Quadrangle:   | Wheeling, WV-OH  | Generally used farm name:   | B&W Edge   | MSH   |
| Watershed:  | Grandstaff Run of Wheeling Creek (HUC-10)  |   |  |   |
| Pursuant to 'facsimile nur related to hor                             | Shall Include: West Virginia Code § 22-6A-16(b), the other and electronic mail address of the rizontal drilling may be obtained from the street, SE, Charleston, WV 25304  | e operator and the operator's authorize<br>the Secretary, at the WV Department of   | ed represe<br>f Environ  | entative. Additional information imental Protection headquarters.   |
| Notice is he  | reby given by:   |   |  |   |
| Well Operato  |  | Authorized Representative:  | Justin Bo  | ooth  |
| Address:  | 1300 Fort Pierpont Rd., Suite 200  | Address:  | -  | rt Pierpont Rd., Suite 200  |
|   | Morgantown, WV 26508   |   | -  | own, WV 26508   |
| Telephone:  | 304-884-1675   | Telephone:  | 304-884-   |   |
| Email:  | justin_booth@swn.com   | Email:  | -  | ooth@swn.com  |
| Facsimile:  |  | Facsimile:  |  |   |
|   |  |   | _  |   |

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| Notice Time<br>Date of Noti                                     |  | ded at least TEN (10) days prior to filing a te Permit Application Filed:  | permit application.   |
|---|--|--|---|
| Delivery me   | thod pursuant to West Virginia Co  | de § 22-6A-16(b)   |   |
| 2011, 21, 111,  | and provide the first transfer   |  |   |
| ☐ HAND  | CERTIFIED MAIL   |  |   |
| DELIV   | ERY RETURN RECEIP  | T REQUESTED  | **  |
| receipt reque<br>drilling a ho<br>of this subse<br>subsection n | sted or hand delivery, give the surfact<br>rizontal well: Provided, That notice<br>ction as of the date the notice was pro-<br>tay be waived in writing by the surfact   | se owner notice of its intent to enter upon to<br>given pursuant to subsection (a), section to<br>ovided to the surface owner: <i>Provided</i> , how | , an operator shall, by certified mail return<br>he surface owner's land for the purpose of<br>en of this article satisfies the requirements<br>wever, That the notice requirements of this<br>lude the name, address, telephone number,<br>or's authorized representative. |
| Notice is h   | ereby provided to the SURFACI  | E OWNER(s):  |   |
|   | eling Power Company  | Name:  |   |
| Address: 1R   | iverside Place   | Address:   | Office Of Oil and Gas   |
| Col   | umbus, OH 43125  |  | Of Oil and  |
| Pursuant to the surface of State:                               | West Virginia Code § 22-6A-16(b). n<br>wner's land for the purpose of drilling<br>West Virginia  | g a horizontal well on the tract of land as for UTM NAD 83   | well support of the pass an intent to enter upon ollows:  531,792.744   |
| County:   | Marshall   | Northing:  | 4,428,550.458   |
| District:   | Sand Hill  | Public Road Access:  | Walnut Grove Rd.  |
| Quadrangle:   | Wheeling, WV-OH  | Generally used farm name:  | B&W Edge MSH  |
| Watershed   | Grandstaff Run of Wheeling Creek (HUC-10)  | · · · · · · · · · · · · · · · · · · ·  |   |
| Pursuant to<br>facsimile nu<br>related to he                    | mber and electronic mail address of<br>rizontal drilling may be obtained fro   | f the operator and the operator's authorized the Secretary, at the WV Department of  | ress, telephone number, and if available, ted representative. Additional information of Environmental Protection headquarters, ep. wv. gov/oil-and-gas/pages/default.aspx.  |
| Notice is h   | ereby given by:  |  |   |
| Well Operat   |  | Authorized Representative  | : Justin Booth  |
| Address:  | 1300 Fort Pierpont Rd., Suite 200  | Address:   | 1300 Fort Pierpont Rd., Suite 200   |
|   | Morgantown, WV 26508   |  | Morgantown, WV 26508  |
| Telephone:  | 304-884-1675   | Telephone:   | 304-884-1675  |
| Email:  | justin_booth@swn.com   | Email:   | justin_booth@swn.com  |
| Facsimile:  |  | Facsimile:   | -   |
|   | A CONTRACTOR OF THE PARTY OF TH |  |   |

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

|   | me Requirement: no<br>lotice: 08/03/2022  | Date Permit   | no later than the filing Application Filed:   | date of permit   | application.   |
|---|---|---|---|--|--|
| Delivery  | method pursuant to  | West Virginia Code §  | § 22-6A-16(c)   |  |  |
| ■ CE  | RTIFIED MAIL  |   | HAND  |  |  |
| RE  | TURN RECEIPT RE   | QUESTED   | DELIVERY  |  |  |
| return rec<br>the plann<br>required t<br>drilling of<br>damages           | eipt requested or hand<br>ed operation. The name of the provided by sub-<br>of a horizontal well; a<br>to the surface affected<br>otices required by this | d delivery, give the sur-<br>otice required by this<br>section (b), section ten-<br>and (3) A proposed sur-<br>d by oil and gas operati | face owner whose land<br>subsection shall inclu<br>of this article to a surf-<br>face use and compens<br>ons to the extent the da | d will be used for<br>de: (1) A copy<br>ace owner whos<br>sation agreement<br>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 |
| or nonce.   |   |   |   |  | Office of OII  |
|   |   | the SURFACE OWN   |   |  | SED  |
|   | dress listed in the reco<br>Barbara Ann & William Edge  | ords of the sheriff at the  | e time of notice):  Name:   |  | 8 2000   |
|   | 1116 Virginia Street  | -/-   | Addres  | R*   | Environmental Protection   |
|   | Martins Ferry, OH 43935   |   | ridares   | o  | mental pro   |
| operation<br>State:   |   | le § 22-6A-16(c), notice<br>or's land for the purpose   |   | I well on the tra  | well operator has developed a planned act of land as follows:  531,792.744  4,428,550,458  |
| County:<br>District:  | Sand Hill   |   | Public Road   |  | Walnut Grove Rd.   |
| Quadrang  |   |   |   | ed farm name:  | B&W Edge MSH   |
| Watershe  |   | eeling Creek (HUC-10)   | Generally us  | ou surm name.  |  |
| Pursuant<br>to be pro<br>horizonta<br>surface a<br>informati<br>headquare | ovided by W. Va. Co<br>I well; and (3) A prop<br>ffected by oil and ga-<br>on related to horizon  | ode § 22-6A-10(b) to a<br>posed surface use and of<br>s operations to the extental drilling may be ob-                                  | surface owner whose<br>compensation agreeme<br>ent the damages are of<br>tained from the Secre                                    | e land will be not containing an ompensable und tary, at the WV                              | code section; (2) The information required used in conjunction with the drilling of a n offer of compensation for damages to the der article six-b of this chapter. Additional Department of Environmental Protection or by visiting   |

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

| Notice Time<br>Date of Notic  | Requirement: notice shall be provided to: 08/03/2022 Date Permit   | no later than the filing Application Filed:   | date of permit  | applicat  | tion.   |   |
|---|--|---|---|---|---|---|
| Delivery met  | hod pursuant to West Virginia Code   | § 22-6A-16(c)   |   |   |   |   |
| ■ CERTI   | FIED MAIL  | HAND  |   |   |   |   |
| The second course   | RN RECEIPT REQUESTED   | DELIVERY  |   |   |   |   |
| return receipt the planned of required to be drilling of a l damages to th (d) The notice of notice.  Notice is her (at the address Name: David Address: 27 Pi Whee | eby given:   | rface owner whose land subsection shall include to of this article to a surface use and compensions to the extent the denote the surface owner with the denoted by the surface owner with the denoted by the surface owner with the surface owner | d will be used for de: (1) A copy face owner whose setion agreement amages are compatithe address list. | or the dril of this contain se land we the contain pensable sted in the Office of SEP | lling of a horizontal well code section; (2) The infill be used in conjunction and an offer of compensuate raticle six-b of this records of the sheriff at CEIVED foll and Gas  8 2022  artment of tal Protection | notice of<br>formation<br>a with the<br>seation for<br>s chapter,<br>t the time |
|   | est Virginia Code § 22-6A-16(c), notice the surface owner's fand for the purpos  |   |   |   |   | nnea  |
| State:  | West Virginia  | - UTM NAD   | Easting:  | 531,792.7   | 744   |   |
| County:   | Marshall   |   | Northing:   | 4,428,550   |   |   |
| District:   | Sand Hill  | Public Road   |   | Walnut G  | rove Rd.  |   |
| Quadrangle:<br>Watershed:   | Wheeling, WV-OH Grandstaff Run of Wheeling Creek (HUC-10)  | Generally us  | ed farm name:   | B&W Edg   | ge MSH  |   |
| Pursuant to V<br>to be provide<br>horizontal we<br>surface affect<br>information r  | Shall Include: Vest Virginia Code § 22-6A-16(c), this ed by W. Va. Code § 22-6A-10(b) to ell; and (3) A proposed surface use and ted by oil and gas operations to the exelated to horizontal drilling may be of located at 601 57th Street, SE, Chault aspx. | a surface owner whos<br>compensation agreement<br>tent the damages are contained from the Secre   | e land will be u<br>ent containing an<br>ompensable und<br>tary, at the WV                              | used in on<br>offer of<br>ler article<br>Departs                                      | conjunction with the dril<br>f compensation for damage<br>e six-b of this chapter. A<br>ment of Environmental F   | ling of a<br>ges to the<br>additional<br>Protection                             |
| Well Operato  | I'. SWN Production Company, LLC  | Address:  | 1300 Fort Pierpont F  | Dal Cruite 20   | 20  |   |
|   | - STIN Froduction Company, LLO   | 11001055.   | radu Fort Pierpont P  | No., Suite 20   | N/  |   |
| Telephone:  | 304-884-1675   |   | Morgantown, WAY 28  | 3508  |   |   |
| Telephone:<br>Email:  | 304-884-1675<br>justin_booth@swn.com   | Facsimile:  | Morgantown, WV 26   | 5508  |   |   |

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DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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

| Date of Notic  | Requirement: notice shall be procedure: 08/03/2022 Date I  | Permit Applicati   | on Filed:  | 4/1  | _  |  |  |   |
|--|--|--|--|--|--|--|--|---|
| Dallaraum mat  | hod pursuant to West Virginia  | Code 8 22-64-1   | 6(c)   | 1,   |  |  |  |   |
| benvery mei  | mod pursuant to west vinginia  | Code g 22-oz-1   | o(c)   |  |  |  |  |   |
| CERTI  | FIED MAIL  | ☐ HAND   | )  |  |  |  |  |   |
|  | RN RECEIPT REQUESTED   | DELIV  | VERY   |  |  |  |  |   |
| return receipt<br>the planned of<br>required to be<br>drilling of a lidamages to the<br>(d) The notice<br>of notice.   | W. Va. Code § 22-6A-16(c), no requested or hand delivery, give operation. The notice required provided by subsection (b), sechorizontal well; and (3) A propose surface affected by oil and gas es required by this section shall be the provided to the SURFACE   | e the surface own-<br>by this subsection<br>stion ten of this ar-<br>osed surface use<br>s operations to the<br>be given to the su | er whose land<br>n shall inclu-<br>ticle to a surf-<br>and compense<br>extent the da   | I will be used fo<br>de: (1) A copy<br>ace owner whos<br>sation agreemen<br>amages are comp  | r the drop of this e land votes to contain the contain | illing of code second will be us ning an auder a   | a horizon<br>ction; (2)<br>sed in cor<br>offer of<br>article six   | ntal well notice. The information with compensation to of this chap   |
|  | s listed in the records of the sher  |  | notice):   |  |  |  |  |   |
| A Committee of the Comm | Folmer   |  | Name:  |  |  |  |  | 4.  |
|  |  |  |  |  |  |  |  |   |
| Address: 244   | Grandstaff Lane  | 1  | Addres   | S:   |  |  |  |   |
| Whee   | lling, WV 26003  | e), notice is hereb  |  |  | well ope   | erator ha  | s develop  | ed a planned  |
| Notice is her<br>Pursuant to Woperation on<br>State:<br>County:  | reby given: Vest Virginia Code § 22-6A-16(continuous the surface owner's land for the West Virginia Marshall   | purpose of drillin   | y given that the grant of the g | ne undersigned value tra<br>di well on the tra<br>Basting:<br>Northing:  | 531,792<br>4,428,55  | id as foi<br>.744<br>50,458  |  | ed a planned  |
| Notice is her Pursuant to Woperation on State: County: District:   | eby given: Vest Virginia Code § 22-6A-16(continuous the surface owner's land for the West Virginia  Marshall Sand Hill   | purpose of drillin   | y given that the gallonizontal UTM NAD 8   | ne undersigned value tra<br>de well on the tra<br>Basting:<br>Northing:<br>Access:   | 531,792<br>4,428,55<br>Walnut 0  | id as fol<br>.744<br>50.458<br>Grove Rd.   |  | ed a planned  |
| Notice is her<br>Pursuant to Woperation on<br>State:<br>County:<br>District:<br>Quadrangle:  | reby given: Vest Virginia Code § 22-6A-16(continuous the surface owner's land for the West Virginia Marshall   | purpose of drillin   | y given that the gallonizontal UTM NAD 8   | ne undersigned value tra<br>di well on the tra<br>Basting:<br>Northing:  | 531,792<br>4,428,55  | id as fol<br>.744<br>50.458<br>Grove Rd.   |  | ed a planned  |
| Notice is her Pursuant to Woperation on State: County: District: Quadrangle: Watershed:  This Notice Sepursuant to We provide norizontal we surface affect information readquarters, gas/pages/def   | reby given: Vest Virginia Code § 22-6A-16(continuous time surface owner's land for the West Virginia  Marshall  Sand Hill  Wheeling, WV-OH  Grandstaff Run of Wheeling Creek (HUC-1)  Shall Include: Vest Virginia Code § 22-6A-16(continuous to land (3) A proposed surface unted by oil and gas operations to related to horizontal drilling marking located at 601 57th Street, SE fault.aspx.  | o)  c), this notice sha (b) to a surface use and compensa the extent the day be obtained fro                                       | y given that the grade of the property of the  | ne undersigned value on the tra Basting: Northing: Access: ed farm name:  A copy of this estand will be unt containing an ompensable und tary, at the WV (304-926-0450)  | 531,792 4,428,55 Walnut C B&W Ed  code secured in offer of er article Depart or by   | d as fol<br>744<br>50.458<br>Grove Rd.<br>Ige MSH<br>ction; (2<br>conjunct<br>f compete six-b<br>mont of | ) The info<br>tion with<br>insation fo<br>of this ch   | ormation required the drilling of damages to papter. Addition the control of the |
| Notice is her Pursuant to Woperation on State: County: District: Quadrangle: Watershed:  This Notice Sepursuant to Vero be provided norizontal we surface affect information readquarters, gas/pages/def   | reby given: Vest Virginia Code § 22-6A-16(continuous time surface owner's land for the West Virginia  Marshall  Sand Hill  Wheeling, WV-OH  Grandstaff Run of Wheeling Creek (HUC-1)  Shall Include: Vest Virginia Code § 22-6A-16(continuous to land (3) A proposed surface unted by oil and gas operations to related to horizontal drilling marking located at 601 57th Street, SE fault.aspx.  | o)  c), this notice sha (b) to a surface use and compensa the extent the day be obtained fro                                       | y given that the grade of the second of the  | ne undersigned value on the tra<br>Easting:<br>Northing:<br>Access:<br>ed farm name:<br>Accepy of this estand will be understand and the transfer and the transfer and transfer | Street of lar 531,792 4,428,55 Walnut Code see seed in offer of by the code seed in the code of large of by the code seed in the code of large of by the code of large of larg | d as fol<br>744<br>50.458<br>Grove Rd.<br>Ige MSH<br>ction; (2<br>conjunct<br>f compete six-b<br>mont of | ) The info<br>tion with<br>insation fo<br>of this ch   | ormation required the drilling of damages to papter. Addition the control of the |
| Notice is her Pursuant to Woperation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to V to be provide horizontal we surface affect information r   | eby given: Vest Virginia Code § 22-6A-16(continuous time surface owner's fand for the West Virginia  Marshall  Sand Hill  Wheeling, WV-OH  Grandstaff Run of Wheeling Creek (HUC-1)  Shall Include: Vest Virginia Code § 22-6A-16(continuous to the surface of the su | o)  c), this notice sha (b) to a surface use and compensa the extent the day be obtained fro                                       | y given that the grade of the second of the  | ne undersigned value on the tra Basting: Northing: Access: ed farm name:  A copy of this estand will be unt containing an ompensable und tary, at the WV (304-926-0450)  | Street of lar 531,792 4,428,55 Walnut Code see seed in offer of by the code seed in the code of large of by the code seed in the code of large of by the code of large of larg | d as fol<br>744<br>50.458<br>Grove Rd.<br>Ige MSH<br>ction; (2<br>conjunct<br>f compete six-b<br>mont of | ) The infetion with insation for this converse with the converse c | ormation required the drilling of damages to papter. Addition the control of the |

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

| Date of Notic  | ce: 08/03/2022   | Date Permit A  | o later than the filing thate<br>pplication Filed:   | or permit  | application.   |
|--|--|--|--|--|--|
| Delivery met   | thod pursuant to W   | est Virginia Code §  | 22-6A-16(c)  |  |  |
| ■ CERTI  | FIED MAIL  | П  | HAND   |  |  |
|  | RN RECEIPT REQU  | ESTED  | DELIVERY   |  |  |
| return receipt<br>the planned of<br>required to be<br>drilling of a li-<br>damages to the<br>(d) The notice<br>of notice.  | requested or hand dependence. The notice provided by subsection well; and the surface affected by es required by this section.   | elivery, give the surfice required by this stion (b), section ten of (3) A proposed surficient and gas operation shall be given                                      | ace owner whose land will<br>ubsection shall include: (<br>of this article to a surface of<br>ace use and compensation<br>ons to the extent the damage<br>to the surface owner at the  | I be used for<br>1) A copy<br>owner whose<br>agreement<br>tes are comp   | 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   |
| Notice is her  | eby provided to the<br>s listed in the record  | SURFACE OWNE<br>of the sheriff at the  | R(s)<br>time of notice):   |  |  |
|  | eling Power Company  | or the shorting at the   | Name:  |  | Office OF OII and Gas  |
| Address: 1 Riv   | verside Place  |  | Address:   |  | Olived   |
|  | nbus, OH 43125   |  |  |  | SFD "Gas   |
|  | eby given:   | 22-6A-16(c) notice   | is hereby given that the un  | Envi   | 0 70-  |
| Notice is her<br>Pursuant to W   | eby given; Vest Virginia Code § the surface owner's West Virginia Marshall Sand Hill Wheeling, WV-OH Grandstaff Run of Wheelir   | land for the purpose   | of drilling a horizontal we  UTM NAD 83  | ll on the tra<br>Easting:<br>Northing:<br>ess:   | No Clepania 2022   |
| Notice is her Pursuant to Woperation on State: County: District: Quadrangle: Watershed:  This Notice Sepursuant to Wood be provided to be provided to the prov | West Virginia  Marshall  Sand Hill  Wheeling, WV-OH  Grandstaff Run of Wheelin  Shall Include:  Vest Virginia Code § ed by W. Va. Code ell; and (3) A propos ted by oil and gas of related to horizontal located at 601 57 <sup>th</sup> ault aspx.                              | g Creek (HUC-10)  22-6A-16(c), this no § 22-6A-10(b) to a ed surface use and coperations to the extendrilling may be obtained. Street, SE, Char                      | Of drilling a horizontal we UTM NAD 83  Public Road Acce Generally used fa orice shall include: (1)A consurface owner whose land ompensation agreement control the damages are compensed from the Secretary, leston, WV 25304 (304-Address: 1300-1300) | If on the fra Easting: Northing: sss: rm name: opy of this d will be u ontaining an ensable und at the WV -926-0450) | well of each man developed a planned as Policy ws.  531,792.744  4,428,550,458  Walnut Grove Rd.  B&W Edge MSH  code section; (2) The information required used in conjunction with the drilling of an offer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection for by visiting www.dep.wv.gov/oil-and-Rd., Suite 200 |
| Notice is her Pursuant to Woperation on State: County: District: Quadrangle: Watershed:  This Notice Sepursuant to Woo be provided the provided provided | West Virginia  Marshall  Sand Hill  Wheeling, WV-OH  Grandstaff Run of Wheeling  West Virginia Code §  Shall Include:  Vest Virginia Code §  ed by W. Va. Code  ell; and (3) A propose  ted by oil and gas of  related to horizontal  located at 601 57 <sup>th</sup> ault aspx. | g Creek (HUC-10)  22-6A-16(c), this now \$ 22-6A-10(b) to a set surface use and concertains to the extended drilling may be obtained by the street, SE, Charany, LLC | Of drilling a horizontal we UTM NAD 83  Public Road Acce Generally used fa orice shall include: (1)A consurface owner whose land ompensation agreement control the damages are compensed from the Secretary, leston, WV 25304 (304-Address: 1300-1300) | If on the fra Easting: Northing: ess: rm name: opy of this d will be u ontaining ar ensable und at the WV -926-0450) | well of each mass developed a planned as follows:  531,792.744  4,428,550.458  Walnut Grove Rd.  B&W Edge MSH  code section; (2) The information required used in conjunction with the drilling of a n offer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection for by visiting www.dep.wv.gov/oil-and-Rd., Suite 200 |

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 <a href="mailto:depprivacyofficer@wv.gov">depprivacyofficer@wv.gov</a>.



### WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

**Division of Highways** 

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

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

August 2, 2022

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

Subject: DOH Permit for the B&W Edge Pad, Marshall County B&W Edge 1H -Well Site

Dear Mr. Martin,

D. Alan Reed, P.E.

State Highway Engineer

This well site will be accessed from a DOH permit #06-2015-0140 which has been issued to Southwestern Energy for access to the State Road for a well site located off Marshall County Route 5/1 SLS MP 0.90.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated October 1, 2018. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

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

File

### Attachment VI Frac Additives

| The state of the s | Michigan Planting  | Ethylene glycol   | 107-21 1  |
|--|--|---|---|
| AI-303 (U.S. Well Services)  | Mixture  | Cinnamaldehyde  | 104-55 2  |
| · · · · · · · · · · · · · · · · · · ·  |  | Butyl cellosolve  | 111-76 2  |
| and the second s |  | Formic acid   | 64-18 6   |
| والمراجع والموام والمحتبين أأران والرازي   | and a section of the section of  | Polyether   | Proprietary   |
| and the second second  |  | Acetophenone, thiourea, formaldehyde polymer  | 68527-49 1  |
|  |  | Ammonium persulfate   | 7727-54-0   |
| AP ONE (Ú.S. Well Services)  | Breaker  |   | 111-30-8  |
| Bactron K-139 (Champion Technologies)  | Biocide  | Glutaraldehyde  |   |
|  |  | A   | 68424-85-1  |
| The second secon |  | Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol   | 64-17-5   |
|  |  |   | 67-56-1   |
| Bactron K-219 (Champion Technologies)  | Biocide  | Methanol  |   |
|  |  | Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides   | 68424-85-1  |
|  |  |   | 66402-68-4  |
| CarboNRT   | Tracer   | Ceramic Proppant  |   |
| C6486A (Nalco Champion)  | Scale Inhibitor  | Amine Triphosphate  | Proprietary   |
| A STATE OF THE STA |  | Ethylene Glycol   | 107-21-1  |
| C6734A (Champion Technologies)   | Biocide  | Hydrogen Peroxide   | 7722-84-1   |
| Section in the second section of the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section of the second section is a second section of the section  |  | Acetic Acid   | 64-19-7   |
| The second secon |  | Peroxyacetic Acid   | 79-21-0   |
| cono-CI200 (SWN Well Services)   | Corrosion Inhibitor  | Methanol  | 67-56-1   |
| Control of the second of the control |  | Oxyalkylated fatty acid   | 68951-67-7  |
| en <del>et</del> en al en  |  | Fatty acids   | 61790-12-3  |
| The second section is a second section of the second section of the second section is a second section of the second section of the second section is a second section of the second section of the second section is a second section of the s | The state of the s | Modified thiourea polymer   | 68527-49-1  |
| AND THE RESIDENCE OF THE PROPERTY OF THE PROPE | The second of the second secon | Water   | 7732-18-5   |
| And the second s | a production with the second contract of the   | Hydrochloric acid   | 7647-01-0   |
|  | And the second   | Potassium acetate   | 127-08-2  |
| Commission Commission Commission of Commission Commissi | AND A CONTRACT OF THE REAL PROPERTY AND ADDRESS.   | Formaldehyde  | 50-00-0   |
| Ecopol-FEAC (SWN Well Services)  | iron Control   | Acetic Acid Offic RECEN   | 64-19-7   |
|  | Company of the second s | Citric Acid   | 77-92-9   |
| **************************************   |  | Formaldehyde  Acetic Acid Citric Acid Water  SED  | 7732-18-5   |
| DP-S1176-15 (Halliburton)  | Friction Reducer   | Polyacylate OEP   | Proprietary   |
| P. CTTA-TO Profitment rout   | A Company of the Comp | Polyacylate  Hydrotreated light petroleum distillate  Distillates (petroleum) hydrotreatel Minipepartment of Alcohols, C12-16, Exoxylated propoxylated  Alcohols ethoxylated  | 64742-47-8  |
| LOJET DR900 LPP (SWN Well Services)  | Friction Reducer   | Distillates (petroleum) hydrotreate Mint  | 64674-47-8  |
| FOIE! DIGOO FLA (24414 Mell 261 Alces)   | A licelett treated   | Ethylene Glycol Environme Partment  | 107-21-1  |
|  | The property of the second section of the second section of the second section of the second section s | Alcohols, C12-16, Exoxylated propoxylated Protection  | 68213-24-1  |
|  | And the second of the second of  | Fatty Alcohols ethoxylated  | Proprietary   |
| and the second s | transfer of the state of the second of   | Water   | 7732-18-5 .   |
| LOJET DRP 1130X (SWN Well Services)  | Friction Reducer   | Proprietary   | Proprietary   |
|  |  | Hydrotreated light petroleum distillate   | 64742-47-8  |
| R-76 (Halliburton)   | Friction Reducer   | Inorganic Salt  | Proprietary   |
|  |  |   | 67-56-1   |
| SYPTRON T-390 (Champion Technologies)  | Scale Inhibitor  | Methanol Nonylphenol Ethoxylate   | Proprietary   |
|  |  | No hazardous substance  | N/A   |
| HAI-150E (Halliburton)   | Corrosion inhibitor  |   | 7647-01-0   |
| ICL (SWN Well Services)  | Hydrocholic Acid   | Hydrachloric Acid   | 7732-18-5   |
| i i  |  | Water   | Proprietary   |
| LP-65 MC (Halliburton)   | Scale Inhibitor  | Organic phosphonate Ammonium Chloride   | 12125-02-9  |
|  |  |   | 64742-47-8  |
|  | Viscosifying Agent   | Distillates, petroleum, hydrotreated light  |   |
| OPTI-FLEX (U.S. Well Services)   |  |   |   |
|  | Friction Reducer   | Copolymer of 2-propenamide  | Proprietary   |
|  | Friction Reducer   | Hydrotreated Distillate   | 64742-47-8  |
|  | Friction Reducer   | Hydrotreated Distillate<br>Sodium Chloride  | 64742-47-8<br>7647-14-5   |
| OPTI-FLEX (U.S. Well Services) Plexslick 930   | Friction Reducer   | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated  | 64742-47-8<br>7647-14-5<br>68551-12-2   |
|  | Friction Reducer   | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide  | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4  |
|  |  | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride  | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9  |
| Plexslick 930  | Friction Reducer   | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate   | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8  |
| Plexslick 930  |  | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride   | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5   |
| lexslick 930   |  | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride   | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9   |
| Plexslick 930  | Friction Reducer   | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide   | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9<br>93-83-4  |
| Plexslick 930  |  | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate  | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9<br>93-83-4<br>64742-47-8  |
| Plexslick 930  | Friction Reducer   | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Ammonium Chloride Ammonium Chloride  | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9  |
| Plexslick 930  | Friction Reducer   | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Armonium Chloride Petroleum Distillate Sodium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Oleic Acid Diethanolamide  | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4   |
| ·lexslick 930  | Friction Reducer   | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated   | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>68551-12-2   |
| Plexslick 930 Plexslick 953 Plexslick 957  | Friction Reducer Friction Reducer  | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Armmonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water  | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>68551-12-2<br>7732-15-5  |
| Plexslick 930 Plexslick 953 Plexslick 957  | Friction Reducer   | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum)   | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-88-4<br>68551-12-2<br>7732-15-5<br>64742-47-8  |
| lexslick 930  lexslick 953  lexslick 957   | Friction Reducer Friction Reducer Anionic Friction Reducer   | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide  | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>68551-12-2<br>7732-15-5<br>64742-47-8<br>9003-06 9  |
| Plexslick 930  Plexslick 953  Plexslick 957  WFRA-2000 (U.S. Well Services)  | Friction Reducer  Friction Reducer  Anionic Friction Reducer  Scale Inhibitor  | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid)   | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>68551-12-2<br>7732-15-5<br>64742-47-8<br>9003-06-9<br>15827-30-8  |
| Plexslick 930  Plexslick 953  Plexslick 957  WFRA-2000 (U.S. Well Services)  | Friction Reducer Friction Reducer Anionic Friction Reducer   | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde   | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>68551-12-2<br>7732-15-5<br>64742-47-8<br>9003-06 9<br>15827-30-8<br>69418-26-4   |
| Plexslick 930  Plexslick 953  Plexslick 957  WFRA-2000 (U.S. Well Services)  | Friction Reducer  Friction Reducer  Anionic Friction Reducer  Scale Inhibitor  | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light  | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>68551-12-2<br>7732-15-5<br>64742-47-8<br>9003-06 9<br>15827-30-8<br>69418-26-4<br>64742-47-8   |
| lexslick 930  lexslick 953  lexslick 957  VFRA-2000 (U.S. Well Services)   | Friction Reducer  Friction Reducer  Anionic Friction Reducer  Scale Inhibitor  | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water 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)  | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>68551-12-2<br>7732-15-5<br>64742-47-8<br>9003-06 9<br>15827-30-8<br>69418-26-4<br>64742-47-8<br>12125-02-9   |
| lexslick 930  Plexslick 953  Plexslick 957  VFRA-2000 (U.S. Well Services)  Plexald 655 NM  Plexslick 922  | Friction Reducer  Friction Reducer  Anionic Friction Reducer  Scale Inhibitor no data available  | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water 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   | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>68551-12-2<br>7732-15-5<br>64742-47-8<br>9003-06 9<br>15827-30-8<br>69418-26-4<br>64742-47-8<br>12125-02-9<br>93-83-4  |
| Plexslick 930  Plexslick 953  Plexslick 957  MFRA-2000 (U.S. Well Services)  Plexslick 922   | Friction Reducer  Friction Reducer  Anionic Friction Reducer  Scale Inhibitor  | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water 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 Tetrakis (hydroxymethyl) phosphonium sulphate   | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>68551-12-2<br>7732-15-5<br>64742-47-8<br>9003-06 9<br>15827-30-8<br>69418-26-4<br>64742-47-8<br>12125-02-9   |
|  | Friction Reducer  Friction Reducer  Anionic Friction Reducer  Scale Inhibitor no data available  | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water 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 Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate  | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>68551-12-2<br>7732-15-5<br>64742-47-8<br>9003-06 9<br>15827-30-8<br>69418-26-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>55566-30-8   |
| Plexslick 930  Plexslick 953  Plexslick 957  WFRA-2000 (U.S. Well Services)  Plexald 655 NM  Plexslick 922   | Friction Reducer  Friction Reducer  Anionic Friction Reducer  Scale Inhibitor  no data available  Biocidal product   | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water 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 Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups   | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>68551-12-2<br>7732-15-5<br>64742-47-8<br>9003-06-9<br>15827-30-8<br>69418-26-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>55566-30-8                                |
| Plexslick 930 Plexslick 953 Plexslick 957  WFRA-2000 (U.S. Well Services) Plexslick 922 Folicide PSSOA   | Friction Reducer  Friction Reducer  Anionic Friction Reducer  Scale Inhibitor no data available  | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water 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)Cl) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate   | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>68551-12-2<br>7732-15-5<br>64742-47-8<br>9003-06 9<br>15827-30-8<br>69418-26-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>55566-30-8<br>397256-50-7<br>64742-47-8   |
| Plexslick 930 Plexslick 953 Plexslick 957  WFRA-2000 (U.S. Well Services) Plexslick 922 Folicide PSSOA   | Friction Reducer  Friction Reducer  Anionic Friction Reducer  Scale Inhibitor  no data available  Biocidal product   | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water 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 Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups   | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>68551-12-2<br>7732-15-5<br>64742-47-8<br>9003-06-9<br>15827-30-8<br>69418-26-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>55566-30-8                                |
| Plexslick 930 Plexslick 953 Plexslick 957  WFRA-2000 (U.S. Well Services) Plexslick 922  | Friction Reducer  Friction Reducer  Anionic Friction Reducer  Scale Inhibitor  no data available  Biocidal product   | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water 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)Cl) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate   | 64742-47-8<br>7647-14-5<br>68551-12-2<br>93-83-4<br>12125-02-9<br>64742-47-8<br>7647-14-5<br>12125-02-9<br>93-83-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>68551-12-2<br>7732-15-5<br>64742-47-8<br>9003-06 9<br>15827-30-8<br>69418-26-4<br>64742-47-8<br>12125-02-9<br>93-83-4<br>55566-30-8<br>397256-50-7<br>64742-47-8 |
| Plexslick 930 Plexslick 953 Plexslick 957  WFRA-2000 (U.S. Well Services) Plexslick 922 Folicide PSSOA   | Friction Reducer  Friction Reducer  Anionic Friction Reducer  Scale Inhibitor  no data available  Biocidal product   | Hydrotreated Distillate Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydrotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol  | 64742-47-8 7647-14-5 68551-12-2 93-83-4 12125-02-9 93-83-4 64742-47-8 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 397256-50-7 64742-47-8 Proprietary 69011-36-5 67-56-1   |
| Plexslick 930 Plexslick 953 Plexslick 957  WFRA-2000 (U.S. Well Services) Plexald 655 NM Plexslick 922 Folcide PSS0A   | Friction Reducer  Friction Reducer  Anionic Friction Reducer  Scale Inhibitor no data available  Biocidal product  Friction Reducer  | Hydrotreated Distillate Sodium Chloride Alcohols, C.12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C.12-16, Exoxylated Water 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)Cl) Oleic Acid Diethnolamide 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-tridecyl-omega-hydroxy-, branched | 64742-47-8 7647-14-5 68551-12-2 93-83-4 12125-02-9 64742-47-8 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 397256-50-7 64742-47-8 Proprietary  |

14/2022

WVDEP OOG ACCEPTED AS-BUILT

11/29/2017

## **AS-BUILT SITE PLAN B&W EDGE MSH PAD** SAND HILL DISTRICT, MARSHALL COUNTY, WV



84:

AS SHOWN NO. SCALE: DWG. NC

PAD MSH

COVER SHEET FOR

EDGE BRW

PROJECT -LOCATION PENNSYLVANIA MARY! AND VIRGINIA KENTUCKY

COUNTY MAP

# GR. 8/1 WALNUT

LOCATION MAP

CALL BEFORE YOU DIG!

800.245,4848

AT LEAST 46 HOURS, BUT NOT NORE THAN 10 MORIGING DAYS (EXCLUDING WEDGENES AND HOUDAYS), PRICE TO TO STARTING ANY EARTH LISTEN WEBANIC ADMINIS, ALL CONTRACTORS INVOLVED IN THESE ACTIVITIES SHALL CONTRACTORS FOR WEST WINGHAM AT 811 OF 1-800-245-4648.

OPERATOR SYM PRODUCTION CO., LLC ATTH: DEE SOUTHALL P.O. BOX 1300 JANE LEW, YW 26378 (832) 796-1614

# SITE DATA

TOTAL DISTURBED AREA: 13.88 ACRES ROAD DISTURBED AREA: 7.30 ACRES PAD DISTURBED AREA: 6.58 ACRES ACRES ACRES ROAD LENGTH: 3.800' ACRES ROAD AVERAGE WIDTH: 18' WELL PAD ELEVATION: 1254.0'

### WELL API NUMBERS

CELLAR CELLAR CELLAR DIAMETER DEPTH MATERIAL 8 FT CMP 8 FT CMP WELL NUMBER API 051-01845 API 051-01843 NUMBER AS-BUILT 5H

### LIST OF DRAWINGS

MRD8.1-MRD6.3. . DETAILS

TS1.1 . . . . . . COVER SHEET EP2.1 . . . . . . EVACUATION ROUTE/ PREVAILING WINDS EP2.1 EVACUATION ROUTE/ PREVAUING WINDS
EP2.2 EVACUATION ROUTE/ PREVAUING WINDS
AS3.1 ... AS-BUILT OVERALL SITE PLAN
AS3.2—AS3.5 ... AS-BUILT SITE PLAN — WELL PAD
CRAA.1—CRAA.2 ... ACCESS ROAD PROPILE CRA4.3 . . . . . WELL PAD CROSS SECTIONS MRP5.1 . . . . OVERALL RECLAMATION PLAN MRP5.2-MRP5.5 . . RECLAMATION PLAN

TS1.1

