

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 Jim Justice , Governor Austin Caperton , Cabinet Secretary www.dep.wv.gov

Thursday, July 20, 2017 WELL WORK PERMIT Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC POST OFFICE BOX 12359

SPRING, TX 773914954

Re: Permit approval for CHARLES FRYE OHI 405H

47-069-00231-00-00

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

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

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

James A. Martin Chief

Operator's Well Number: CHARLES FRYE OHI 405H

Farm Name: FRYE, DOROTHY V.

U.S. WELL NUMBER: 47-069-00231-00-00

Horizontal 6A / New Drill

Date Issued: 7/20/2017

Promoting a healthy environment.

API Number: 47-069-0073/

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.

| API Number: | 047 -069 -007 | 31 |
|-------------|---------------|----|
| | | |

| PERMIT | CONDITIONS |
|---------------|-------------------|

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, 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. 47-069 OPERATOR WELL NO, Charles Frye OHI 405H
Well Pad Name: Charles Frye OHI Pad

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

| 1) Well Operator: SWN Produ | ection Co., LLC | 494512924 | 069-Ohio | 6- Triade 648-Valley Grove |
|--|--------------------------------------|---------------------|-------------------|-------------------------------------|
| | | Operator ID | County | District Quadrangle |
| 2) Operator's Well Number: Ch | arles Frye OHI | 405H Well P | ad Name: Cha | rles Frye OHI Pad |
| 3) Farm Name/Surface Owner: | Dorothy Frye & David | W. Frye Public Ro | oad Access: Ma | arlow Run Road |
| 4) Elevation, current ground: | 1266.8' EI | levation, propose | d post-construc | tion: 1266.8' |
| 5) Well Type (a) Gas X Other | Oil _ | Un | derground Stor | age |
| | u V 3 | Deep | | |
| | llow X | Deep Deep | | |
| 6) Existing Pad: Yes or No No | izoniai 🗡 | | | Sl04.20.17 |
| 7) Proposed Target Formation(s) |), Depth(s), Antic | ipated Thickness | and Expected I | |
| 8) Proposed Total Vertical Depti | 722622 | J | , and parco minin | 1000 04, Associated 1 1000die- 4240 |
| 9) Formation at Total Vertical D | | 5 | | |
| 10) Proposed Total Measured De | | | | |
| 11) Proposed Horizontal Leg Le | ngth: 9326.75' | | | |
| 12) Approximate Fresh Water St | rata Depths: | 548' | | |
| 13) Method to Determine Fresh | Water Depths: | nearby water we | lls | |
| 14) Approximate Saltwater Dept | | | | |
| 15) Approximate Coal Seam Dep | oths: 628' | | | |
| 16) Approximate Depth to Possi | ble Void (coal mi | ine, karst, other): | None that we | are aware of. |
| 17) Does Proposed well location directly overlying or adjacent to | contain coal sear an active mine? | ms Yes | N | o X |
| (a) If Yes, provide Mine Info: | Name: | | | |
| | Depth: | | | |
| | Seam: | | | |
| | Owner: | | | |
| | | | | |

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OPERATOR WELL NO. Charles Frye OHI 405H Well Pad Name: Charles Frye OHI Pad

18)

CASING AND TUBING PROGRAM

| TYPE | Size (in) | New or Used | Grade | Weight per ft. (lb/ft) | FOOTAGE: For Drilling (ft) | INTERVALS: Left in Well (ft) | CEMENT: Fill-up (Cu. Ft.)/CTS |
|--------------|--------------|-------------------|---------|---------------------------|-------------------------------|------------------------------------|---|
| Conductor | 20" | New | H-40 | 94# | 100' | 100' | CTS |
| Fresh Water | 13 3/8" | New | H-40 | 48# | 648' | 648' | 608 sx/CTS |
| Coal | 9 5/8" | New | J-55 | 36# | 2077' | 2077' | 783 sx/CTS |
| Intermediate | 7" | New | J-55 | 20# | If Needed | If Needed | If Needed/As Needed |
| Production | 5 1/2" | New | HCP-110 | 20# | 16761' | 16761' | tust 554cs 7at 2277cs inside intermedia |
| Tubing | 2 3/8" | New | HCP-110 | 4.7# | Approx. 6528' | Approx. 6528' | |
| Liners | | | | | | | 7 |

| 1 | 160 | 4 : 2 17 |
|---|-----|----------|
| 1 | Die | 1.20.17 |

| TYPE | Size (in) | Wellbore Diameter (in) | Wall Thickness (in) | Burst Pressure (psi) | Anticipated Max. Internal Pressure (psi) | Cement Type | Cement Yield (cu. ft./k) |
|--------------|-----------|---------------------------|---------------------------|-------------------------|--|----------------|--------------------------------|
| Conductor | 20" | 30" | 0.25 | 2120 | 81 | Class A | 1.19/50% Excess |
| Fresh Water | 13 3/8" | 17.5" | 0.380 | 2740 | 633 | Class A | 1.19/50% Excess |
| Coal | 9 5/8" | 12 1/4" | 0.395 | 3950 | 1768 | Class A | 1.19/50% Excess |
| Intermediate | 7" | 8 3/4" | 0.317 | 4360 | 3250 | Class A | 1.20/50% Excess |
| Production | 5 1/2" | 8 3/4" | 0.361 | 12360 | 9500 | Class A | 1.20/50% Excess |
| Tubing | 2 3/8" | 4.778" | 0.190 | Approx 8193' | Approx 8193' | | |
| Liners | | | | | 11 | | |
| | | | | | | | |

PACKERS

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

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API NO. 47- 069

OPERATOR WELL NO. Charles Frye OHI 405H

Well Pad Name: Charles Frye OHI Pad

| 19) | Describe p | oroposed | well v | vork, i | ncluding | the dri | lling an | ıd plu | gging | back o | fany | pilot hole: |
|-----|------------|----------|--------|---------|----------|---------|----------|--------|-------|--------|------|-------------|
|-----|------------|----------|--------|---------|----------|---------|----------|--------|-------|--------|------|-------------|

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

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

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

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 13.6
- 22) Area to be disturbed for well pad only, less access road (acres): 12.0
- 23) Describe centralizer placement for each casing string:

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

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

See Attachment ***

25) Proposed borehole conditioning procedures:

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

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WV Department of Environmental Protection

*Note: Attach additional sheets as needed.

Schlumberger Cement Additives

| | Product Name Product Use Chemical Name CAS Number | | | | | |
|----------------------|---|---------------|----------------------------------|-------------|--|--|
| | Product Name | Product Use | Chemical Name | CAS Number | | |
| Surface | 5001 | accelerator | calcium chloride | 10043-52-4 | | |
| Intermediate Surface | 5001 | accelerator | calcium chloride | 10043-52-4 | | |
| | D080 | dispersant | sodium polynaphthalene sulfonate | 9008-63-3 | | |
| و ا | D801 | retarder | aromatic polymer derivative | propriatary | | |
| Kick Off Plug | D047 | antifoam | polypropylene glycol | 25322-69-4 | | |
| | D167 | fluid loss | aliphatic amide polymer | propriatary | | |
| | D154 | extender | non-crystalline silica | 7631-86-9 | | |
| ŀ | D400 | gas migration | boric acid | 10043-35-3 | | |
| | | | polypropylene glycol | 25322-69-4 | | |
| pag | D046 | antifoam | fullers earth (attapulgite) | 8031-18-3 | | |
| Production-Lead | | | chrystalline silica | 14808-60-7 | | |
| rto Lto | D201 | retarder | metal oxide | propriatary | | |
| 듛 | 1 | | sulphonated synthetic polymer | propriatary | | |
| L A | D202 | dispersant | formaldehyde (impurity) | propriatary | | |
| | | | polypropylene glycol | 25322-69-4 | | |
| | D046 | antifoam | fullers earth (attapulgite) | 8031-18-3 | | |
| | D167 | fluid loss | aliphatic amide polymer | propriatary | | |
| <u>=</u> | | 1 | sodium polynaphthalene sulfonate | 9008-63-3 | | |
| F | D065 | dispersant | sodium sulfate | 7757-82-6 | | |
| Ę | | _ | chrystalline silica | 14808-60-7 | | |
| Production-Tall | D201 | retarder | metal oxide | propriatary | | |
| _ & | D153 | anti-settling | chrystalline silica | 14808-60-7 | | |

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

January 9, 2017

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

RE: Proposed New Well Charles Frye OHI 405H

Dear Ms. Adkins

SWN has reviewed the area of the above mentioned well and discovered no shallow wells within 500' of the lateral. This well is situated on the Frye's property, in Triadelphia District, Ohio County, West Virginia.

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

Thank you.

Sincerely,

Dee Southall

Regulatory Supervisor

Southwestern Energy Production Company, LLC

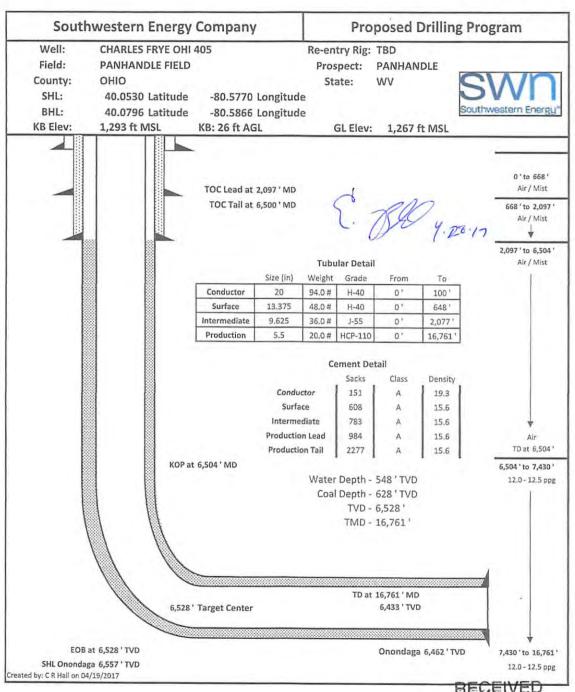
PO Box 1300

Jane Lew, WV 26378

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APR 2 6 2017

API Number 47 - 69

Operator's Well No. Charles Frye OHI 405H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

| Operator Name SWN Production Company, LLC OP Co | de 494512924 |
|---|--|
| Watershed (HUC 10) Marlow Run of Middle Wheeling Creek Quadrangle Valley Gr | ove |
| Do you anticipate using more than 5,000 bbls of water to complete the proposed well work | ? Yes V No |
| Will a pit be used? Yes No ✓ | |
| If so, please describe anticipated pit waste:closed loop system in place at this time-co | uttings will be taken to a permitted landfill |
| 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 |) |
| Reuse (at API Number_at next anticipated well, API # will be included with the Off Site Disposal (Supply form WW-9 for disposal location) | e WR-34/DDMR &/or permit addendum |
| Other (Explain flow back fluids will be put in steel tanks and reused | or taken to a permitted disposal facility |
| | |
| Will closed loop system be used? If so, describe: yes | Aif |
| Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil bas | ed, etc. at drill to KOP, fluid drill with SOBM from KOP to TD |
| -If oil based, what type? Synthetic, petroleum, etc. synthetic oil base | |
| Additives to be used in drilling medium? see attached sheets | |
| Orill cuttings disposal method? Leave in pit, landfill, removed offsite, etclandfill | |
| -If left in pit and plan to solidify what medium will be used? (cement, lime, sawd | ust) |
| -Landfill or offsite name/permit number? meadow SWF-1032, SS grading SWF-4932, Northwestern SWF-1025, Short Arden Landfill 100/2, American U2-12954, Country vvide 38390/CID | Croek 1034/W0109517/CiD28726, Carbon Limeston 28726-CiD28726 |
| Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cutting West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection where it was properly disposed. | ngs or associated waste rejected at any |
| I certify that I understand and agree to the terms and conditions of the GENERAL on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environgerovisions of the permit are enforceable by law. Violations of any term or condition of the law or regulation can lead to enforcement action. I certify under penalty of law that L have personally examined and am familia application form and all attachments thereto and that, based on my inquiry of those obtaining the information, I believe that the information is true, accurate, and complete penalties for submitting false information, including the possibility of fine or imprisonment Company Official Signature Company Official Title Regulatory Supervisor | onmental Protection. I understand that the he general permit and/or other applicable r with the information submitted on this individuals immediately responsible for e. I am aware that there are significant |
| Company Official Title Regulatory Euperweet | PECENTER |
| Ath January | RECEIVED Office of Oil and |
| Subscribed and sworn before me this day of day of | , 20 16 Of Oil and Gas |
| Duttany K Woody | lotary Public APR 2 6 F. HVANY F |
| 1 11/20/201 | 3302 Old El |
| My commission expires 11 d. 11 11 11 11 11 11 11 11 11 11 11 11 11 | WV Department of |
| | Environmental Piore 21/2 |

Drilling Mediums

Brine
Barite
Calcium Chloride
Lime
Organophilic Bentonite
Primary and Secondary Emulsifiers
Gilsonite
Calcium Carbonate

Synthetic Oil

Friction Reducers

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WV Department of Environmental ครั้งโลก 7

Operator's Well No. Charles Frye OHI 405H

| Proposed Revegetation Treatment: Acres Disturbed _ | 13.6 | Prevegetation p | Н |
|---|------------------------|--------------------------|--|
| Limeas determined by pH test min. 2 Tons/acre or to corre | ect to pH 12.0 | | |
| Fertilizer type 10-20-20 | | | |
| Fertilizer amount 600 | lbs/acre | | |
| Mulch_Hay/Straw 2.5 | Tons/acre | | |
| | Seed Mixtures | | |
| Temporary | | Perm | anent |
| Seed Type Ibs/acre **See Attachment | | Seed Type | lbs/acre |
| | | | |
| Attach: Maps(s) of road, location, pit and proposed area for lar provided). If water from the pit will be land applied, in creage, of the land application area. Photocopied section of involved 7.5' topographic sheet | t. | x W x D) of the pit, and | d dimensions (L x W), and ar |
| Maps(s) of road, location, pit and proposed area for lar provided). If water from the pit will be land applied, in acreage, of the land application area. | nclude dimensions (L) | x W x D) of the pit, and | ding this info have been d dimensions (L x W), and ar |
| Maps(s) of road, location, pit and proposed area for lar rovided). If water from the pit will be land applied, in creage, of the land application area. Photocopied section of involved 7.5' topographic sheet clan Approved by: | t. | x W x D) of the pit, and | d dimensions (L x W), and ar |
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| Maps(s) of road, location, pit and proposed area for lar provided). If water from the pit will be land applied, in creage, of the land application area. Photocopied section of involved 7.5' topographic sheet Plan Approved by: | t. | x W x D) of the pit, and | d dimensions (L x W), and ar |



WVD Seeding Specification



(please allow 7 to 10 days for delivery)

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

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

| ı | Control of the last | Contract of the last | PERSONAL VIOLENCE OF STREET, S |
|---|---------------------|----------------------|--|
| | 1452' | of 30' RC | W/LOD is One Acre |
| | 871' | of 50' RC | W/LOD is One Acre |
| | 622' | of 70' RC | W/LOD is One Acre |

Seeding Calculation Information

COU ABACAIDS ACAIT

m Synopsis:

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

Special Considerations:

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

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

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

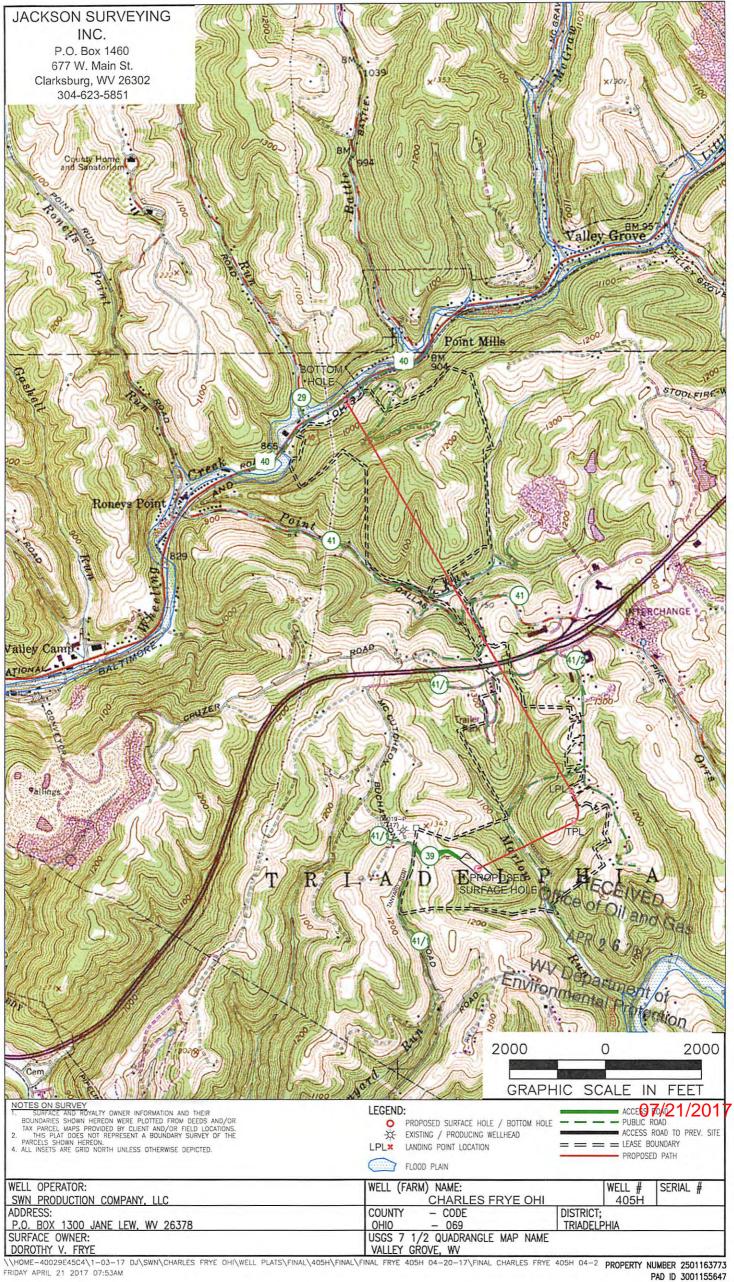
MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN

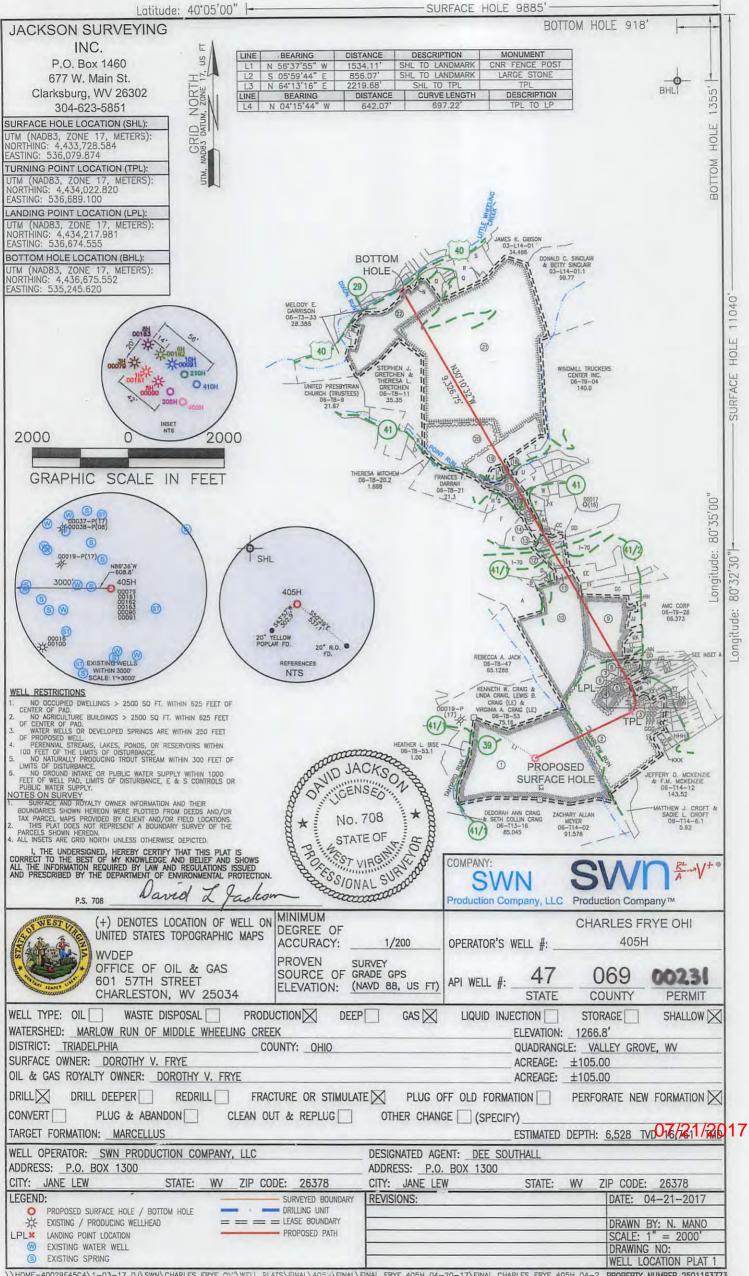


SWN Production Company, LLC 179 Innovation Drive Jane Lew, West Virginia 26378

API NO. 47-XXX-XXXXX
WELL NAME: Charles Frye OHI 405H
Valley Grove QUAD
Triadelphia DISTRICT
Ohio COUNTY, WEST VIRGINIA

| Submitted by: | | |
|------------------------------|-------|--------------------|
| Dee Southall | Date: | 1/9/2016 |
| Title: Regulatory Supervisor | SWN P | roduction Co., LLC |
| Approved by: | Date: | 1.26-17 |
| Title: Oil + Cas Ingent | | |
| Approved by: | | |
| | Date: | 3- |
| Title: | | |
| SWN PRODUCTION COMPANY, | LLC | |

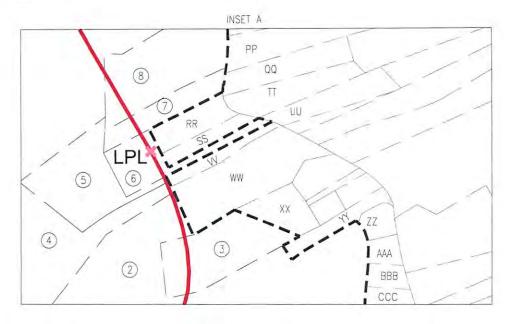




JACKSON SURVEYING

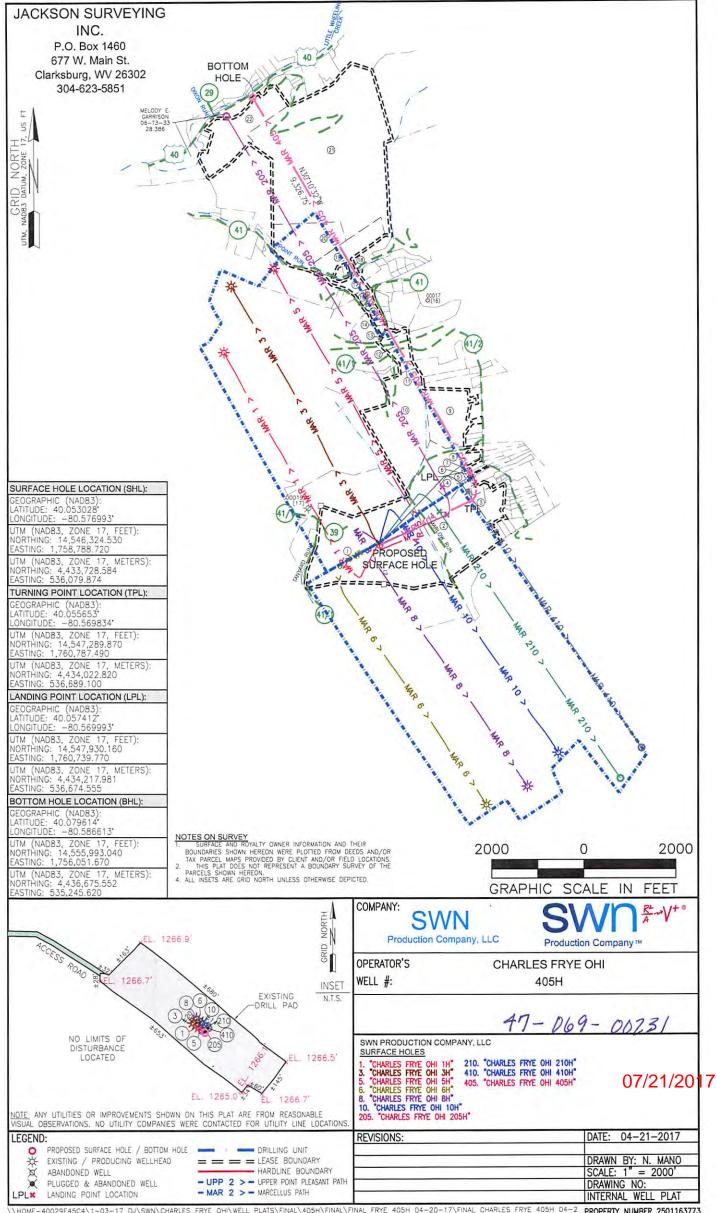
INC.

P.O. Box 1460 677 W. Main St. Clarksburg, WV 26302 304-623-5851



| | WELL BORE TABLE FOR SURFACE / ROYALTY | OWNERS | | | ADJOINING OWNERS TABLE | | |
|-------|---|-------------|---------|-------|---|-------------|--------|
| FRACT | SURFACE OWNER (S) / ROYALTY OWNER (R) | TAX PARCEL | ACRES | TRACT | SURFACE OWNER | TAX PARCEL | ACRE |
| 1 | DOROTHY V. FRYE (S/R) | 06-T14-01 | 105.00 | S | RICHARD HENRY & REBECCA HENRY | 06-T3-26 | 3.58 |
| FRACT | SURFACE OWNER | TAX PARCEL | ACRES | T | RANDAL ALAN HOWARD | 06-T8-16 | 5.68 |
| 2 | GEORGE L. DUNN & NANCY M. DUNN (S) | 06-T9-20 | 78.076 | U | EARL THOMAS BEABOUT JR. | 06-T9-1.2 | 2.185 |
| 3 | CHRISTOPHER R. DUNN & TANAKA H. DUNN (S) | 06-T9-20.46 | 1.86 | V | ALLEN L. GELLNER & D.M. GELLNER | 06-T9-01 | 3.173 |
| 4 | SARAH ANN PORTER (S) | 06-T9-20.44 | 4.545 | W | LINDA M. ORR & ROBERT BRADY | 06-T9-13.11 | 1.508 |
| 5 | PHILLIP MARQUART & KERSTEN MARQUART (S) | 06-T9-20.45 | 1.88 | X | THOMAS D. STRICKLIN | 06-T9-13.7 | 0.532 |
| 6 | NICOLE SEIFERT & JAMIE SEIFERT (S) | 06-79-20.51 | 1.015 | Y | THOMAS D. STRICKLIN | 06-T9-13.6 | 1.82 |
| 7 | PATRICA R. KIRCHNER (S) | 06-T9-20.39 | 1.0 | Z | ROGER FADER | 06-T9-13.5 | 0.479 |
| 8 | PATRICA R. KIRCHNER & DONNA K. DUNN (S) | 06-T9-20.18 | 2.46 | AA | DOUGLAS BLANCO & AUDREY BLANCO | 06-T9-12 | 0.535 |
| 9 | DOROTHY MAE SAMPSON (S) | 06-T9-17 | 23.56 | BB | FREDERICK H. TUSTIN & CARLA J. FREDRICK | 06-T9-15.4 | 0.442 |
| 10 | DALLAS PIKE CAMPGROUND INC. (S) | 06-T9-16 | 53.119 | CC | WENDY JO ELDRIDGE & J.L. ELDRIDGE | 06-T9-15.7 | 0.534 |
| 11 | DALLAS PIKE CAMPGROUND INC. (S) | 06-T9-15 | 1.877 | DD | GOKUL INC. OF WV | 06-T9-14 | 5.563 |
| | DALLAS PIKE CAMPGROUND INC. & | | | EE | LINDA M. ORR & ROBERT BRADY | 06-T9-13 | 7.88 |
| 12 | FREDERICK H. TUSTIN (S) | 1-70 | | FF | PHILIP VERCELLOTTI & F.J. VERCELLOTTI | 06-T9-17.7 | 2.2326 |
| 13 | FREDERICK H. TUSTIN (S) | 06-T9-15.1 | 1.646 | GG | CHEROKEE TRADING POST, INC. | 06-T9-17.6 | 4,484 |
| 14 | EDWARD D. GARRISON (S) | 06-T9-11 | 2.02 | НН | VAN A. SAMPSON & B.M. SAMPSON | 06-T9-17.8 | 1.0 |
| 15 | MARGARET TUSTIN GREENWALD KLUG (S) | 06-T9-09 | 1.00 | 11 | DOROTHY M. SAMPSON | 06-T9-17.5 | 0.17 |
| 16 | ALICIA A. COAD & CHRISTOPHER T. BURGESS (S) | 06-T9-08 | 3.26 | JJ | DOROTHY M. SAMPSON | 06-T9-18 | 0.80 |
| 17 | KENNETH M. PARKER (S) | 06-T8-22 | 6.93 | KK | BRIDGET D. MURRAY & DAVID S. MURRAY | 06-T9-17,4 | 1.21 |
| 18 | MARY F. MCGRATH (S) | 06-T8-15.1 | 1.17 | LL | FLOYD L. WENSEL & M. WENSEL | 06-T9-17.3 | 0.88 |
| 19 | JOEL GEORGE MCFARLAND, BRIAN N. MILAN &: | 06-T8-13 | 13.75 | MM | BRIAN D. DOLENCE & DONNA J. DOLENCE | 06-T9-17.1 | 1.04 |
| | DON EARL MCFARLAND (S) | 2007 07 72 | A 301 X | NN | LEONA L. KIRCHNER | 06-T9-20.22 | 0.35 |
| 20 | JOEL GEORGE MCFARLAND, BRIAN N. MILAN & | 06-T8-12 | 27.5 | 00 | EVELYN BETH DEGENNARO C/O | 06-T9-20.3 | 2.01 |
| 0.1 | DON EARL MCFARLAND (S) | | | PP | WESBANCO TRUST DEPT. | 06-T9-20.17 | 1.74 |
| 21 | KEVIN S. KOSEM & BRENDA A. KOSEM (S) | 06-13-27 | 164.525 | | JEREMY A. DAVIS & AUTUMN L. DAVIS | | |
| 22 | CLYDE E. MCCORD LIFE ESTATE & MELODY E. | 06-T3-20 | 45.00 | QQ | JAMES E. DUNN & D.M. DUNN | 06-T9-20.16 | |
| | GARRISON REMAINDERMAN (S) | | | RR | WILLIAM C. SCHUETZ | 06-T9-20.6 | 0.638 |
| | ADJOINING OWNERS TABLE | | | SS | WILLIAM C. SCHUETZ & SANDRA SCHUETZ | 06-T9-20.5 | 0.0391 |
| TRACT | SURFACE OWNER | TAX PARCEL | ACRES | TT | JAMES E. DUNN & D.M. DUNN | 06-T9-20.8 | 0.805 |
| Α | DALLAS PIKE CAMPGROUND LLC | 06-T9-16.4 | 16.730 | UU | DAVID A. WILLIAMS & JANIE G. WILLIAMS | 06-T9-20.11 | |
| В | WARREN A. GRIFFITH & S.M. GRIFFITH | 06-T9-15.3 | 0.721 | W | SARAH ANN PORTER | 06-T9-20.41 | - |
| C | MICHAEL J. JOHNSON | 06-T9-15.6 | 0.657 | WW | NANCY DUNN | 06-T9-20.2 | 1.823 |
| D | MICHAEL J. JOHNSON | 06-T9-15.2 | 0.486 | XX | CONSTANCE L. KERCHER | 06-T9-20.49 | 0.746 |
| E | JAMIE DENHAM | 06-T9-10 | 5.673 | YY | GEORGE L. DUNN & NANCY M. DUNN | 06-T9-20.50 | |
| F | JOHN E. STANTON & D.M. STANTON | 06-T8-28 | 8.544 | ZZ | JAMES L. ABERCROMBIE & DIANA L. ABERCROMBIE | 06-T9-20.30 | |
| G | LARRY J. DONATO | 06-T8-23.1 | 1.07 | AAA | JAMES L. ABERCROMBIE & DIANA L. ABERCROMBIE | 06-T9-20.29 | |
| Н | LARRY J. DONATO | 06-T8-23 | 1.39 | BBB | ROBERT J. ALOE | 06-T9-20.23 | - |
| T | JOEL P. ORTH | 06-T8-15 | 0.51 | CCC | DANIEL L. WHEELER | 06-T9-20.31 | |
| J | LOIS V. ORTH C/O DONNA ROBERSON | 06-T8-14 | 0.84 | DDD | DANIEL L. WHEELER | 06-T9-20.26 | |
| K | DEBORAH J. WIECHMAN & R.J. WIECHMAN | 06-T8-11.1 | 1.00 | EEE | DANIEL L. WHEELER | 06-T9-20.37 | 6.146 |
| L | GERALD T. MOORE & ANNA M. MOORE | 06-T3-20.3 | 0.89 | FFF | BRENT A. HILL & PATTY J. HILL | 06-T9-20.47 | |
| M | FRED E. WILDERN III & CONNIE L. WILDERN | 06-T3-20.2 | 0.41 | GGG | BRENT A. HILL & PATTY J. HILL | 06-T9-20.32 | |
| N | PAUL R. TEMPLIN SR. & CAROL G. TEMPLIN | 06-T3-20.1 | 1.5 | ннн | DONALD W. PEGG & J.L. PEGG | 06-T9-20.1 | 1.848 |
| 0 | ROBERT W. MCCORD JR. & DIANNA L. MCCORD | 06-T3-21 | 3.448 | 111 | GARY FLANEGIN | 06-T9-20.20 | |
| P | KENNETH J. BERNIER & L.R. BERNIER | 06-T3-24 | 2.47 | 777 | MICHAEL W. NASH & C.J. NASH | 06-T9-20.19 | |
| Q | JAMES E. HALL & R.R. HALL | 06-T3-25 | 4.0 | KKK | LISA A. OLIVER | 06-T9-20.21 | 0.8468 |
| R | WILMA E. BROCK & ROBERT A. BROCK | 06-T3-26.1 | 0.62 | | | | |

| | | | 47 | -069-00231 |
|------------|--------------------------|--------------------------------|--------------------|---|
| REVISIONS: | COMPANY: | SWN Production Company, LLC | SV Production C | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ |
| | OPERATOR'S WELL #: | CHARLES FRYE OF 405H | 11 | DATE: 04-21-2017 DRAWN BY: N. MANO |
| | DISTRICT: TRIADELPHIA | COUNTY: OHIO | STATE: WV | SCALE: N/A DRAWING NO: WELL LOCATION PLAT 2 |



WW-6A1 (5/13)

| Operator's Well No. | Charles Frye OHI 405H |
|---------------------|-----------------------|
|---------------------|-----------------------|

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

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

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

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

See Exhibit

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 | |
|----------------|------------------------|----------|
| By: | Re | |
| Its: | Staff Landman | |
| | | RECEIVED |

Office of Oil and Gas

APR 2 6 2017

WV Departmental Protection

| 6-T3-20 19-20.46 19-20.44 19-20.45 19-20.51 | Dorothy V. Frye George L. Dunn and Nancy M. Dunn Christopher R. Dunn and Tanaka H. Dunn Sarah Ann Porter Phillip J. Marquart and Kersten L. Marquart Nicole Seifert & Jamie Seifert | 105 78.076 1.86 4.545 | 730226-000 725414-000 730451/000 728433-000 728393-000 | Dorothy V. Frye George L. Dunn and Nancy M. Dunn Christopher R. Dunn and Tanaka H. Dunn Sarah Ann Porter Phillip J. Marquart and Kersten L. Marquart | Great Lakes Energy Partners Chesapeake Appalachia, LLC SWN Production Company, LLC Chesapeake Appalachia, LLC SWN Production Company, LLC Chesapeake Appalachia, LLC Chesapeake Appalachia, LLC SWN Production Company, LLC Chesapeake Appalachia, LLC Chesapeake Appalachia, LLC Chesapeake Appalachia, LLC | 12.50% 14.00% 18.00% 18.00% | 775/ 808/ 883/ 795/ 885/ 815/ 807/ 883/ 808/ |
|---|--|---|--|--|--|--|--|
| T9-20.44 T9-20.45 T9-20.51 | Christopher R. Dunn and Tanaka H. Dunn Sarah Ann Porter Phillip J. Marquart and Kersten L. Marquart | 1.86 4.545 | 730451/000 728433-000 | Christopher R. Dunn and Tanaka H. Dunn Sarah Ann Porter | SWN Production Company, LLC Chesapeake Appalachia, LLC SWN Production Company, LLC Chesapeake Appalachia, LLC Chesapeake Appalachia, LLC SWN Production Company, LLC Chesapeake Appalachia, LLC | 18.00% | 883/ 795/ 885/ 815/ 883/ 807/ 883/ |
| T9-20.44 T9-20.45 T9-20.51 | Christopher R. Dunn and Tanaka H. Dunn Sarah Ann Porter Phillip J. Marquart and Kersten L. Marquart | 1.86 4.545 | 730451/000 728433-000 | Christopher R. Dunn and Tanaka H. Dunn Sarah Ann Porter | SWN Production Company, LLC Chesapeake Appalachia, LLC Chesapeake Appalachia, LLC SWN Production Company, LLC Chesapeake Appalachia, LLC | 18.00% | 885/ 815/ 883/ 807/ 883/ |
| T9-20.44 T9-20.45 | Sarah Ann Porter Phillip J. Marquart and Kersten L. Marquart | 4.545 | 728433-000 | Sarah Ann Porter | Chesapeake Appalachia, LLC SWN Production Company, LLC Chesapeake Appalachia, LLC | 18.00% | 883/ 807/ 883/ |
| T9-20.45 T9-20.51 | Phillip J. Marquart and Kersten L. Marquart | | | | SWN Production Company, LLC Chesapeake Appalachia, LLC | | 883/ |
| Т9-20.51 | | 1.88 | 728393-000 | Phillip J. Marquart and Kersten L. Marquart | | 18.00% | |
| | Nicole Seifert & Jamie Seifert | | | | SWN Production Company, LLC | i i | 883, |
| т9-20.39 | | 1.015 | 731212-000 | Herbert Lynn Richardson and Clara Elleen Richardson, husband and wife | Chesapeake Appalachia, LLC SWN Production Company, LLC | 18.00% | 814/ 883/ |
| | Patricia R. Kirchner | 1 | 729599-000 | Patricia R. Kirchner | Chesapeake Appalachia LLC SWN Production Company | 18.00% | 810/ 883/ |
| T9-20.18 | Donna K. Dunn and Patricia R. Kirchner | 2.46 | 729600-000 | Donna K. Ounn and Patricia R. Kirchner | Chesapeake Appalachia LLC SWN Production Company | 18.00% | 810/ 883/ |
| | | | | | Chevron USA Inc Chesapeake Appalachia LLC | | 834 867, |
| 6-19-17 | Dorothy Mae Sampson | 23.56 | 734116-000 | Dorothy Mae Sampson | SWN Production Company Chesapeake Appalachia LLC | 16.00% | 884, 811, |
| 6-T9-16 | Dallas Pike Campground Inc | 53.119 | 730332-000 | Dallas Pike Campground, LLC | SWN Production Company Chesapeake Appalachia LLC | 18.00% | 883/ 812/ |
| 6-T9-15 | Dallas Pike Campground Inc | 1.877 | 730323-000 | Dallas Pike Campground, LLC | SWN Production Company | 18.00% | 883, |
| | Dallas Pike Campground Inc | | 730323-000 738684-000 | Dalias Pike Campground Inc | Chesapeake Appalachia LLC SWN Production Company | 18.00% | 812, 852, 883, 885, |
| 1-70 | Frederick H. Tustin | | | Frederick H. Tustin | Chesapeake Appalachia LLC | 18.00% | 852, |
| -79-15.1 | Frederick H. Tustin | 1.646 | 738684-000 | Frederick H. Tustin | | 18.00% | 885, |
| 6-79-11 | Edward D. Garrison | 2.02 | 744890-000 | Edward D. Garrison | SWN Production Company | 16.00% | 882, 885, |
| 6-Т9-9 | Margaret Tustin Geenwald Klug | 1 | 738676-000 | Margaret Tustin Geenwald Klug | 5WN Production Company | 18.00% | 852/ 885/ |
| | Alicia A. Coad and Brent Nixon | 3.26 | 735749-000 | Michael J. Fynmore, Alicia A. Coad AKA Alicia, A. Fynmore | Chesapeake Appalachia LLC SWN Production Company | 18.00% | 821 884/ |
| 6-78- Q | Kenneth M. Parker | 6.93 | 731231-000 | Kenneth M. Parker | Chesapeake Appalachia LLC SWN Production Company | 18.00% | 816/ 883/ |
| | Mary F. McGrath | 1.17 | 738588-000 | Mary F. McGrath | Chesapeake Appalachia LLC SWN Production Company | 18.00% | 853/ 885/ |
| 6 6 6 | 1-79-16 1-70 19-15.1 1-79-11 6-79-9 | Dallas Pike Campground Inc Frederick H. Tustin T9-15.1 Frederick H. Tustin Frederick H. Tustin Edward D. Garrison Margaret Tustin Geenwald Klug 6-T9-8 Alicia A. Cood and Brent Nixon Kenneth M. Parker Mary F. McGrath | T3-16 Dallas Pike Campground Inc 1.877 -T3-15 Dallas Pike Campground Inc 1.877 -T3-15 Dallas Pike Campground Inc 1.877 -T3-16 Dallas Pike Campground Inc 1.877 -T3-17 Dallas Pike Campground Inc 1.877 -T3-18 Frederick H. Tustin 1.646 -T3-19 Frederick H. Tustin 1.646 -T3-11 Edward D. Garrison 2.02 -T3-19 Margaret Tustin Geenwald Klug 1 -T3-19 Alicia A. Coad and Brent Nixon 3.26 -T3-19 Mary F. McGrath 1.17 -T3-19 Mary F. McGrath 1.17 -T3-19 Dallas Pike Campground Inc 1.877 -T3-19 Salas Pike Campground Inc 1.877 -T3-19 Dallas Pike Ca | T9-16 Dallas Pike Campground Inc 53.119 730332-000 T9-15 Dallas Pike Campground Inc 1.877 730323-000 Dallas Pike Campground Inc 730323-000 Dallas Pike Campground Inc 730323-000 T9-15.1 Frederick H. Tustin 1.646 738684-000 T9-15.1 Frederick H. Tustin 1.646 738684-000 T9-17.1 Edward D. Garrison 2.02 744890-000 6-T9-9 Margaret Tustin Geenwald Klug 1 738676-000 6-T9-8 Alicia A. Coad and Brent Nixon 3.26 735749-000 T8-10 Mary F. McGrath 1.17 738588-000 | T39-15 Dallas Pike Campground Inc T39-15 T39-15 Dallas Pike Campground Inc T39-15 T39-15 T39-15 T59-15 T59 | Chesapeake Appalachia LLC SWN Production Company Dallas Pike Campground Inc Dallas Pike Campground Inc Dallas Pike Campground Inc Dallas Pike Campground Inc Frederick H. Tustin Dallas Pike Campground Inc SWN Production Company Dallas Pike Campground, LLC SWN Productio | T9-17 Dorothy Mae Sampson 23.56 73416-000 Dorothy Mae Sampson Chespeake Appalachia LLC SWN Production Company 16.00% |

| | | | | | The state of the s | | | |
|----|---------|---|---------|------------|--|----------------------------|--------|---------|
| 19 | | | | 1 | 1 | Chesapeake Appalachia LLC | 1 | 817/600 |
| 1 | 6-T8-13 | Joel George McFarland | 13.75 | 735690-001 | Joel George McFarland | SWN Production Company | 18.00% | 884/325 |
| 19 | | | | | | Chesapeake Appalachia LLC | | 817/596 |
| | 6-T8-13 | Brian N Milan | 13.75 | 735690-002 | Brian N Milan | SWN Production Company | 18.00% | 884/325 |
| 19 | ··· | | | | | Chesapeake Appalachia LLC | | 817/604 |
| - | 6-T8-13 | Don Earl McFarland | 13.75 | 735690-003 | Don Earl McFarland | SWN Production Company | 18.00% | 884/325 |
| 20 | | | | | | Chesapeake Appalachia LLC | | 817/745 |
| | 6-T8-12 | Joel George McFarland | 27.5 | 735672-001 | Joel George McFarland | SWN Production Company | 18.00% | 884/325 |
| 20 | | | | | | Chesapeake Appalachia LLC | | 817/783 |
| | 6-T8-12 | Brian N Milan | 27.5 | 735672-002 | Brian N Milan | SWN Production Company | 18.00% | 884/325 |
| 20 | | | | | | Chesapeake Appalachia LLC | | 817/608 |
| | 6-T8-12 | Don Earl McFarland | 27.5 | 735672-003 | Don Earl McFarland | SWN Production Company | 18.00% | 884/325 |
| 21 | | | | | | Chevron USA Inc | | 834/30 |
| | | i l | | | | Chesapeake Appalachia LLC | | 858/359 |
| 1 | 6-T3-27 | Kevin S. Kosem and Brenda A. Kosem | 164.525 | 733529-000 | Kevin S. Kosem and Brenda A. Kosem | SWN Production Company LLC | 16.00% | 885/296 |
| 22 | | | | | | Chesapeake Appalachia LLC | | 791/37 |
| | 6-T3-20 | Clyde E. McCord Life Estate and Meldoy E. Garrison Remainderman | 45 | 725099-000 | Clyde E. McCord Life Estate and Meldoy E. Garrison Remainderman | SWN Production Company | 12.50% | 885/500 |

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Office of Oil and Gas



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

March 10, 2017

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

RE: SWN's proposed New Well: Charles Frye OHI 605H in Ohio County, West Virginia, Drilling under McCutcheon Road, 3554 I-70, Valley Grove Road, Cruzer Road, Dallas Pike, Co Hwy 39/6, and Middle Creek Road.

Dear Ms. Adkins:

SWN Production Company, LLC ("SWN") is applying for a drilling permit for the above referenced well. The State of West Virginia has raised some concern as to SWN's right to drill under McCutcheon Road, 3554 I-70, Valley Grove Road, Cruzer Road, Dallas Pike, Co Hwy 39/6, and Middle Creek 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,

Robert Walter Staff Landman

SWN Production Company, LLC

PO Box 12359

Spring, TX 77391-2359

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Office of Oil and Gas

APR 2 6 2017

The Right People Bold Weight Things wisely Investing the cash flow from 60/1 underlying Assets, will create Value+607/21/2017

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

| Date of Noti | ce Certification: 7 15 17 | | API No. 47- 069 - Operator's Well No. Charles Frye OHI 405H | | |
|---------------|--|----------------------------|---|---|--|
| | | | Well Pad | | |
| Notice has | been given: | | Trem I no. | Table . | |
| | 0 | 2-6A, the Operator has pro | vided the red | quired parties with the Notice Forms listed | |
| below for the | tract of land as follows: | Too her all annea mae bea | | qui su parties mai une nouee i orinis ristee | |
| State: | West Virginia | LITTA CALLED OR | Easting: | 536079.874 | |
| County: | 069-Ohio | UTM NAD 83 | Northing: | 4433728.584 | |
| District: | Triadelphia | Public Road Access: | | Marlow Run Road | |
| Quadrangle: | Valley Grove | Generally used t | farm name: | Charles Frye | |
| Watershed: | Marlow Run of Middle Wheeling Creek | | | | |
| | | | | | |
| | | | | is section shall be on a form as may be | |
| | | | | 4) A certification from the operator that (i) | |
| if has provid | ed the owners of the surface described | in subdivisions (1), (2) | and (4), subs | section (b), section ten of this article, the | |

of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

| Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following: | |
|---|---------------------------|
| *PLEASE CHECK ALL THAT APPLY | OOG OFFICE USE ONLY |
| ☐ 1. NOTICE OF SEISMIC ACTIVITY OF ☐ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED | RECEIVED/ NOT REQUIRED |
| 2. NOTICE OF ENTRY FOR PLAT SURVEY or NO PLAT SURVEY WAS CONDUCTED | ☐ RECEIVED |
| ■ 3. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or | RECEIVED/ NOT REQUIRED |
| ☐ WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH) | |
| 4. NOTICE OF PLANNED OPERATION | RECEIVED |
| 5. PUBLIC NOTICE | RECEIVED |
| 6. NOTICE 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 Virtegal Advertisement with publication date verification or the associated Affidavit of Publication. The attaclic Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code \$ 226A3 as 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. the return receipt card or other postal receipt for certified mailing.

Certification of Notice is hereby given:

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

Well Operator: SWN Production Co., LLC

By: Dee Southall

Its: Regulatory Supervisor

Telephone: 304-884-1614

Address: P.O. Box 12359
Spring, TX 77391-4954
Facsimile:

Email: Dee_Southall@swn.com

NOTARY SEAL
OFFICIAL SEAL
Notary Public. State of West Virginia
BRITTANY R WOODY
3302 Old Elkins Road
Buckhannon. WV 26201
My commission expires November 27, 2022

Subscribed and sworn before me this

day of Willi

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 deepprivacyofficer@wv.gov.

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Office of Oil and Gas

APR 2 6 2017

WV Department of
Environmental Protection/2017

API NO. 47- 069 047-069-00231

OPERATOR WELL NO. Charles Frye OHI 405H

Well Pad Name: Charles Frye OHI Pad

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

| Notice Time Requirement: notice shall be provided | no later than the filing date of permit application. |
|--|--|
| Date of Notice Date Permit Application | a Filed: ALASIN |
| Notice of: | |
| Totale of. | |
| ✓ PERMIT FOR ANY ☐ CERTIFICA | TE OF APPROVAL FOR THE |
| 교회가 가입하다 내내지는 이 가입니다면 하는데 하는데 그 사람들이 아니라 하나 나를 하는데 하는데 하다 하는데 | CTION OF AN IMPOUNDMENT OR PIT |
| WEEL WORL | STIGN OF THE WIND CONDINENT OR TH |
| Delivery method pursuant to West Virginia Code | § 22-6A-10(b) |
| ☐ PERSONAL ☐ REGISTERED | ☐ METHOD OF DELIVERY THAT REQUIRES A |
| SERVICE MAIL | RECEIPT OR SIGNATURE CONFIRMATION |
| sediment control plan required by section seven of this the surface of the tract on which the well is or is proposed of and gas leasehold being developed by the proposed described in the erosion and sediment control plan subroperator or lessee, in the event the tract of land on whice more coal seams; (4) The owners of record of the surface well work, if the surface tract is to be used for the place impoundment or pit as described in section nine of this have a water well, spring or water supply source located provide water for consumption by humans or domestic proposed well work activity is to take place. (c)(1) If m subsection (b) of this section hold interests in the lands records of the sheriff required to be maintained pursuar provision of this article to the contrary, notice to a lient Code R. § 35-8-5.7.a requires, in part, that the operator water purveyor or surface owner subject to notice and very surface owner subjec | |
| ☑ Application Notice ☑ WSSP Notice ☑ E&S I ☑ SURFACE OWNER(s) | Plan Notice ☑ Well Plat Notice is hereby provided to: ☑ COAL OWNER OR LESSEE |
| Name: Dorothy V. Frye | Name: Alliance Resources GP, LLC % Elizabeth Acost |
| Address: 849 McCutcheon Road | Address: 2596 Battle Run Road |
| Triadelphia, WV 26059 | Triadelphia, WV 26059 |
| Name: | ☐ COAL OPERATOR |
| Address: | Name: |
| - SUPERIOR OUR PROVIDE COMPANY OF THE PROVIDE | Address: |
| SURFACE OWNER(s) (Road and/or Other Distur | |
| Name: | ☑ SURFACE OWNER OF WATER WELL |
| Address: | AND/OR WATER PURVEYOR(s) Name: See Attachment #1 |
| Name: | |
| Name: | Address: |
| Address: | DODED A TOD OF ANY MATURAL GAS STORAGE FIELD |
| SURFACE OWNER(s) (Impoundments or Pits) | OPERATOR OF ANY NATURAL GAS STORAGE FIELD Name: Office of Oil and Gas *Please stack additional forms if page Acts. |
| | Address: |
| Name: | Address. |
| Address: | *Please attach additional forms if necessary |
| | *Please attach additional forms if neces 2 6 2017 |
| | WV Department of Environmental Protection / 2017 |
| | *\text{\tin}}}}}}}}}}}}}}}\endremty\end{end}}}}}}}}}}} |

047-069-00231

API NO. 47- 069

OPERATOR WELL NO. Charles Frye OHI 405H

Well Pad Name: Charles Frye OHI Pad

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

Well Location Restrictions

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

047-069-00231 API NO. 47-069

OPERATOR WELL NO. Charles Frye OHI 405H Well Pad Name: Charles Frye OHI Pad

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

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

OPERATOR WELL NO. Charles Frye OHI 405H

Well Pad Name: Charles Frye OHI Pad

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

RECEIVED
Office of Oil and Gas

APR 2 6 2017

WV Department of
Environmental Proteon/1/2017

API NO. 47-069

047-069-00231

OPERATOR WELL NO. Charles Frye OHI 405H

Well Pad Name: Charles Frye OHI Pad

Notice is hereby given by:

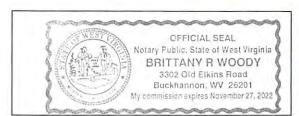
Well Operator: SWN Production Co., LLC Telephone: 304-884-1614
Email: Dee_Southall@swn.com

Address: P.O. Box 1300 Jane Lew, WV 26378

Facsimile:

Oil and Gas Privacy Notice:

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



Subscribed and sworn before me this ______ day of ______ day of ______ Notare rublic

Charles Frye OHI Pad - Water Purveyors w/in 1500'

Charles & Dorothy Frye

Landowner

W & L Kenneth Craig

Address

844 MCCUTCHEON RD, TRIADELPHIA WV 26059 2 springs 849 MCCUTCHEON RD, TRIADELPHIA WV 26059 1 well / 1 spring

Sources

RECEIVED Office of Oil and Gas APR 2 6 2017 WV Departmental Protection

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

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

| Notice Time Date of Notice | Requirement: Notice shall be provided at e: 01/11/2017 Date Peri | least TEN (10) days prior to filing a mit Application Filed: | permit application. | |
|--|---|--|---|--|
| Delivery met | hod pursuant to West Virginia Code § 2 | 2-6A-16(b) | | |
| ☐ HAND | OF OFFICIED MAIL | | | |
| | ■ CERTIFIED MAIL | | | |
| DELIVE | RETURN RECEIPT REQ | UESTED | | |
| receipt request drilling a hort of this subsect subsection ma | V. Va. Code § 22-6A-16(b), at least ten day sted or hand delivery, give the surface own izontal well: <i>Provided</i> . That notice given tion as of the date the notice was provided by be waived in writing by the surface own le, facsimile number and electronic mail action. | er notice of its intent to enter upon the pursuant to subsection (a), section to to the surface owner: <i>Provided, hower</i> . The notice, if required, shall incline | ne surface owner's land for the purpose of n of this article satisfies the requirements vever, That the notice requirements of this ude the name, address, telephone number, | |
| | reby provided to the SURFACE QW | NER(s): | | |
| The state of the s | Frye & David W. Frye | | | |
| Address: 849 | | Address: | | |
| Triadelphia, WV | 26059 | | | |
| the surface ov State: County: | vner's land for the purpose of drilling a hor West Virginia Ohio | izontal well on the tract of land as fo UTM NAD 83 Easting: Northing: | llows: 536,079.874 4,433,728.584 | |
| District: | Triadelphia | | Marlow Run Charles Frye OHI | |
| Quadrangle: | Valley Grove, WV | Generally used farm name: | | |
| Watershed: | Marlow Run of Middle Wheeling Creek | Generally used farm hame. | Chance 1 Typ Of II | |
| This Notice Pursuant to V facsimile nun related to hor | Shall Include: West Virginia Code § 22-6A-16(b), this observant electronic mail address of the object and drilling may be obtained from the 57th Street, SE, Charleston, WV 25304 (3) | perator and the operator's authorize Secretary, at the WV Department o | ed representative. Additional information f Environmental Protection headquarters, | |
| Notice is he | reby given by: | | | |
| | r: SWN Production Company, LLC | Authorized Representative: | Mike Yates | |
| Address: | PO Box 1300, 179 Innovation Drive | Address: | PO Box 1300, 179 Innovation Drive | |
| | Jane Lew, WV 26378 | | Jane Lew, WV 26378 | |
| Telephone: | 304-517-6603 | Telephone: | 304-517-6603 | |
| Email: | Michael_Yates@swn.com | Email: | Michael_Yates@swn.com | |
| Facsimile: | 304-471-2497 | Facsimile: | 304-471-2497 | |
| Oil and Cos | Privacy Notice | | BECEIVED | |

The Office of Oil and Gas processes your personal information, such as name, address and telephone further 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. On the contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

WW-6A5 (1/12)

Operator Well No. Charles Frye OHI 405H

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

| Notice Time I Date of Notic | Requirement: notice shall be provided e: 01/11/2017 Date Permit | no later than the filing Application Filed: | date of permit | application. |
|--|---|--|--|--|
| Delivery metl | nod pursuant to West Virginia Code | § 22-6A-16(c) | | |
| CERTIF | TIED MAIL |] HAND | | |
| | N RECEIPT REQUESTED | DELIVERY | | |
| return receipt the planned o required to be drilling of a h damages to the | requested or hand delivery, give the su peration. The notice required by this provided by subsection (b), section ten orizontal well; and (3) A proposed su e surface affected by oil and gas operat | rface owner whose land subsection shall include of this article to a surfar arface use and compensions to the extent the da | will be used for de: (1) A copy ace owner whos ation agreement mages 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 |
| | by provided to the SURFACE OWN | | | |
| | listed in the records of the sheriff at th | / Name: | | |
| Address: 849 M | | Address |): | |
| Triadelphia, WV 26 | | 466.00 | | |
| | est Virginia Code § 22-6A-16(c), notic the surface owner's land for the purpos West Virginia | | l well on the tra | |
| District: | Triadelphia | Public Road | | Marlow Run |
| Quadrangle: | Valley Grove, WV | Generally use | ed farm name: | Charles Frye OHI |
| Watershed: | Marlow Run of Middle Wheeling Creek | | | |
| to be provided horizontal well surface affects information re | est Virginia Code § 22-6A-16(c), this d by W. Va. Code § 22-6A-10(b) to all; and (3) A proposed surface use and ed by oil and gas operations to the extended to horizontal drilling may be oblocated at 601 57 th Street, SE, Characteristics | a surface owner whose compensation agreement tent the damages are contained from the Secret | land will be un nt containing ar ompensable und ary, at the WV | code section; (2) The information required used in conjunction with the drilling of a noffer of compensation for damages to the der article six-b of this chapter. Additional Department of Environmental Protection or by visiting |

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 Ast 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.

WV Department of Environmental Prote**o**ชเอลา/2017



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

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

Earl Ray Tomblin Governor

January 9, 2017

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

Subject: DOH Permit for the Charles Frye Pad OHI 405H Well Site, Ohio County

Dear Mr. Martin,

47-069-00231

The West Virginia Division of Highways has issued permit 06-2011-0061 to Southwestern Energy for access to the State Road for the well site located off of Ohio County Route 41/1 SLS.

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

Very Truly Yours,

Gary K. Clayton

Regional Maintenance Engineer

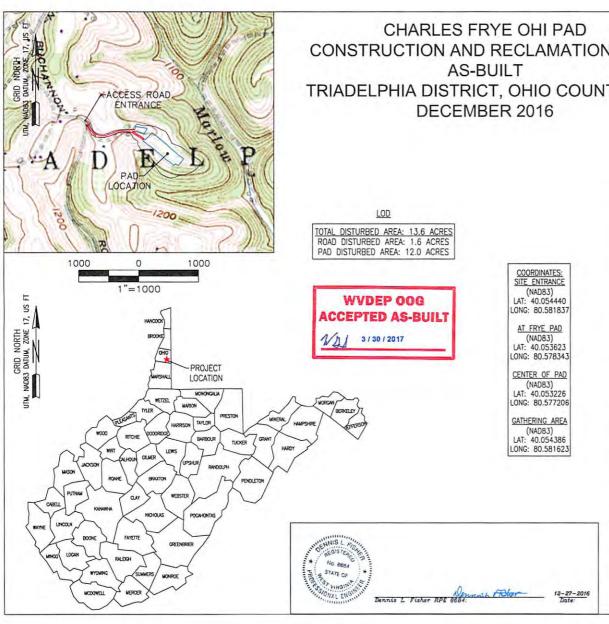
Central Office Oil &Gas Coordinator

RECEIVED Office of Oil and Gas

APR 2 6 2017
WV Department of Environmental Protection

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

| Product Name | Product Use | Chemical Name | CAS Numbe | |
|--|------------------------|---|-------------|--|
| | Biocide | Hydrogen Peroxide | 7722-84-1 | |
| EC6734A (Champion Technologies) | | Acetic Acid | 64-19-7 | |
| | | Peroxyacetic Acid | 79-21-0 | |
| GYPTRON T-390 (Champion | Scale Inhibitor | Methanol | 67-56-1 | |
| Technologies) | | Nonylphenol Ethoxylate | Proprietary | |
| | Biocide | Glutaraldehyde | 111-30-8 | |
| Bactron K-139 (Champion Technologies) | | Quaternary Ammonium Compounds, Benzyl-C12- 16-Alkyldimethyl, Chlorides | 68424-85-1 | |
| | | Ethanol | 64-17-5 | |
| Bactron K-219 (Champion | Biocide | Methanol | 67-56-1 | |
| Technologies) | | Quaternary Ammonium Compounds, Benzyl-C12- 16-Alkyldimethyl, Chlorides | 68424-85-1 | |
| | | Methanol | 67-56-1 | |
| A264 (Schlumberger) | Corrosion | Aliphatic Acids | Proprietary | |
| AZO+ (Schlumberger) | Inhibitor | Prop-2-yn-1-ol | 107-19-7 | |
| | | Aliphatic Alcohols, Ethoxylated #1 | Proprietary | |
| Married CA OF | Disable | Water | 7732-18-5 | |
| Myacide GA 25 (Schlumberger) | Biocide | Glutaral | 111-30-8 | |
| | T 100 TO 1 | Trisodium Ortho Phosphate | 7601-54-9 | |
| cale Inhibitor B317 (Schlumberger) | Scale Inhibitor | Ethane-1,2-diol | 107-21-1 | |
| H215 (Schlumberger) | Hydrochloric Acid | Hydrochloric Acid | 7647-01-0 | |
| J218 (Schlumberger) | Breaker | | | |
| EB-Clean* J475 (Schlumberger) | Breaker | Diammonium Peroxidisulphate | 7727-54-0 | |
| Water Gelling Agent J580 (Schlumberger) | Gel | Carbohydrate Polymer | Proprietary | |
| Friction Reducer J609W | Friction Reducer | Ammonium Sulfate | 7783-20-2 | |
| (Schlumberger) | | Urea | 57-13-6 | |
| Carantinton IC10 or control | O | Potassium Hydroxide | 1310-58-3 | |
| Crosslinker J610 (Schlumberger) | Crosslinker | Aliphatic Polyol | Proprietary | |
| Iron Stabilizer L58 (Schlumberger) | Iron Stabilizer | Sodium Erythorbate | 6381-77-7 | |
| 40/70-Mesh Sand S012 (Schlumberger) | Sand | Crystalline Silica | 14808-60-7 | |
| Sand S100 (Schlumberger) | Sand | Crystalline Silica | 14808-60-7 | |
| EC6486A (Nalco Champion) | Scale Inhibitor | Amine Triphosphate | Proprietary | |
| | | Ethylene Glycol | 107-21-1 | |
| SSA-2 (Halliburton) | Sand | Crystalline Silica | 14808-60-7 | |
| FR-76 (Halliburton) | Friction | Inorganic salt | 64742-47-8 | |
| | Reducer | Hydrotreated light petroleum distillate | | |
| LCA-1 (Halliburton) | | Hydrotreated light petroleum distillate | Proprietary | |
| SP BREAKER (Halliburton) | Breaker | Sodium Persulfate | 7775-27-1 | |
| HAI-150E (Halliburton) | Corrosion Inhibitor | Methanol Aliphatic Acids Prop-2-yn-1-ol | NA | |
| | | Aliphatic Alcohols, Ethoxylated #1 | | |
| Hydrochloric Acid 10-30% (Halliburton) | | Hydrochloric Acid | 7647-01-0 | |
| WG-36 Gelling Agent (Halliburton) | Gel | Polysaccharide | 9000-30-0 | |
| BC-140C (Halliburton) | Crosslinker | | NA | |



CONSTRUCTION AND RECLAMATION PLAN TRIADELPHIA DISTRICT, OHIO COUNTY, WV

> EXISTING WELLS: FRYE OHI 1H API:47-069-00161H (NAD83) LAT: 40.053102 LONG: 80.577108

FRYE OHI 3H API:47-069-00079H (NAD83) LAT: 40.053125 LONG: 80.577146

FRYE OHI 5H API:47-069-00090H (NAD83) LAT: 40.053077 LONG: 80.577070

FRYE OHI 6H API:47-069-00162H (NAD83) LAT: 40.053144 LONG: 80.577062

FRYE OHI 8H API:47-069-00163H (NAD83) LAT: 40.053169 LONG: 80.577101

FRYE OHI 10H API:47-069-00091H (NAD83) LAT: 40.053121 LONG: 80.577025

TS1. TITLE SHEET EP2.1 EVACUATION ROUTE/ PREVAILING WIND

EP2.2 EVACUATION ROUTE/ PREVAILING WIND

AS3.1 ASBUILT OVERVIEW AS3.2 ASBUILT

AS3.3 ASBUILT AS3 4 ASBUILT

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ASR4.1 CONSTRUCTION AND RECLAMATION ACCESS ROAD PROFILE MRD5.1 RECLAMATION PLAN OVERVIEW

MRD5.2 RECLAMATION PLAN

MRD5.3 RECLAMATION PLAN MRD5.4 RECLAMATION PLAN

MRD6.3 DETAILS

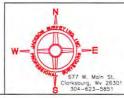
MRD6.4 DETAILS

REVISION

DATE



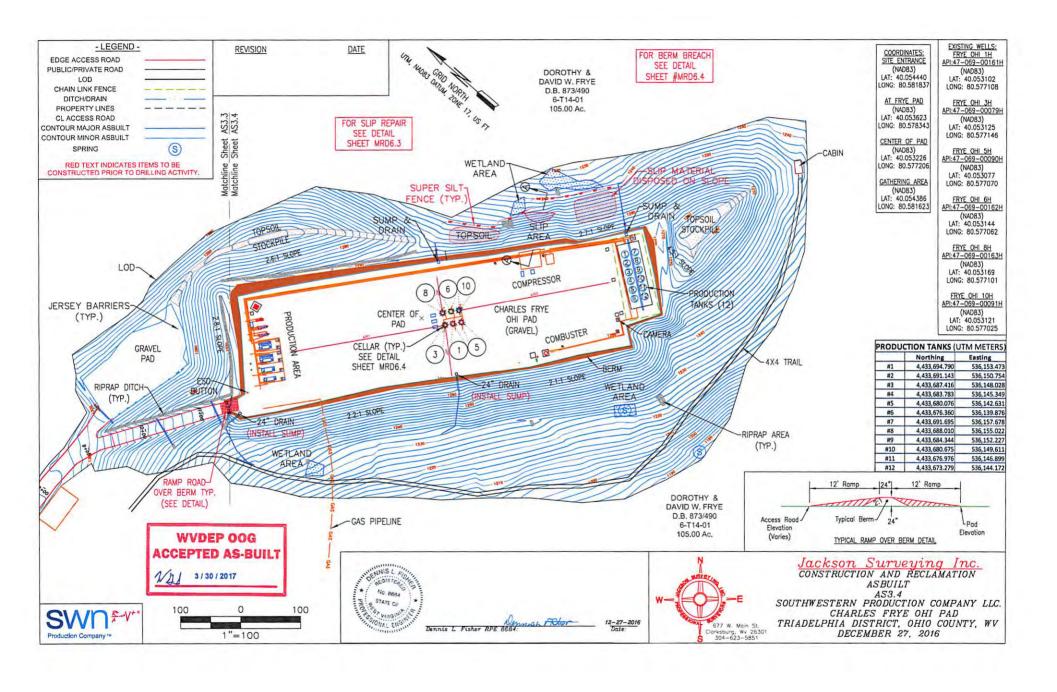




Jackson Surveying Inc.

TITLE SHEET TS.1

SOUTHWESTERN PRODUCTION COMPANY LLC. CHARLES FRYE OHI PAD TRIADELPHIA DISTRICT, OHIO COUNTY, WV DECEMBER 27, 2016



YE OHI PAD RECLAMATION PLAN JILT F, OHIO COUNTY, WV ER 2016

COORDINATES:
SITE ENTRANCE
(NAD83)
LAT: 40.054440
LONG: 80.581837

AT FRYE PAD
(NAD83)
LAT: 40.053623
LONG: 80.578343

CENTER OF PAD
(NAD83)
LAT: 40.053226

LONG: 80.577206

GATHERING AREA

(NAD83)

LAT: 40.054386

LONG: 80.581623

EXISTING WELLS: FRYE OHI 1H API:47-069-00161H (NAD83) LAT: 40.053102 LONG: 80.577108 FRYE OHI 3H API:47-069-00079H (NAD83) LAT: 40.053125 LONG: 80.577146 FRYE OHI 5H API:47-069-00090H (NAD83) LAT: 40.053077 LONG: 80.577070 FRYE OHI 6H API:47-069-00162H (NAD83) LAT: 40.053144 LONG: 80.577062 FRYE OHI 8H API:47-069-00163H (NAD83) LAT: 40.053169 LONG: 80.577101 FRYE OHI 10H API:47-069-00091H (NAD83) LAT: 40.053121 LONG: 80.577025

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CALL BEFORE Dial 811 or YOU DIG! 800.245.4848

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