**west virginia** department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

June 30, 2015

**WELL WORK PERMIT**

**Horizontal 6A Well**

This permit, API Well Number: 47-9502268, issued to STATOIL USA ONSHORE PROPERTIES, INC., 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 all 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 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.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-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) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: MURNER 2H
Farm Name: MURNER, JOSEPH & ROSELLA
**API Well Number: 47-9502268**
**Permit Type: Horizontal 6A Well**
Date Issued: 06/30/2015

API Number: 9502268

# 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 fifty (50) 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. 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.

8. 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.

9. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

WW-6B
(10/14)

API NO. 47-_____-_____
OPERATOR WELL NO. 2H
Well Pad Name: Murner

4709502268

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

| 1) Well Operator: | Statoil USA Onshore Prope | 494505083 | Tyler | Ellsworth | Porter Falls-Sec 8 |
|---|---|---|---|---|---|
| | | Operator ID | County | District | Quadrangle |

2) Operator's Well Number: 2H Well Pad Name: Murner

3) Farm Name/Surface Owner: Murner/Joseph Murner & Rosella Murner Public Road Access: CR 34

4) Elevation, current ground: 1279' Elevation, proposed post-construction: 1266'

5) Well Type (a) Gas X Oil _____ Underground Storage _____
Other _____
(b)If Gas Shallow X Deep _____
Horizontal X

6) Existing Pad: Yes or No No

Michael Doff 3/30/15

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Associated Pressure(s):
Marcellus, Formation Top 6721' TVD, 52' thick, 4394 psi

8) Proposed Total Vertical Depth: 6759'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 14,136'

11) Proposed Horizontal Leg Length: 6954'

12) Approximate Fresh Water Strata Depths: 348' TVD

13) Method to Determine Fresh Water Depths: 1980 study "Freshwater & Saline Groundwater Study of WV" by James Foster

14) Approximate Saltwater Depths: 708' TVD

15) Approximate Coal Seam Depths: 461', 501'

16) Approximate Depth to Possible Void (coal mine, karst, other): NA

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes _____ No X

(a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: _____

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WW-6B
(10/14)

API NO. 47-_____-_____
OPERATOR WELL NO. 2H
Well Pad Name: Mumer

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# | 120' | 120' | Cement to Surface-150 cuft |
| Fresh Water | 13.375" | New | J-55 | 54.4# | 400' | 400' | Cement to surface-404 cuft |
| Coal | NA | --- | --- | --- | --- | --- | --- |
| Intermediate | 9.625" | New | J-55 | 36# | 2361' | 2361' | Cement to surface- 967 cuft |
| Production | 5.5" | New | P-110 | 20# | 14136' | 14136' | Cement to 1361'-3261 cuft |
| Tubing | 2.375" | New | L-80 | 4.7# | --- | --- | --- |
| Liners | NA | --- | --- | --- | --- | --- | --- |

MDG
3/30/15

| TYPE | Size (in) | Wellbore Diameter (in) | Wall Thickness (in) | Burst Pressure (psi) | Max. Associated Surface Pressure (psi) | Cement Type | Cement Yield (cu. ft./k) |
|---|---|---|---|---|---|---|---|
| Conductor | 20" | 26" | .438" | 1530 psi | --- | Class A | 1.3 cuft/sk |
| Fresh Water | 13.375" | 17.5" | .380" | 2730 psi | 291 | Class A | 2.31 cuft/sk |
| Coal | NA | --- | --- | --- | --- | --- | --- |
| Intermediate | 9.625" | 12.25" | .352" | 3520 psi | 1899 | Class A | 2.31 cuft/sk |
| Production | 5.5" | 8.5" | .361 | 12640 psi | 10000 | Class A | 1.37 cuft/sk |
| Tubing | 2.375" | 5.5" | .19" | 11200 psi | 3325 | --- | --- |
| Liners | NA | --- | --- | --- | --- | --- | --- |

**PACKERS**

| | | | | |
|---|---|---|---|---|
| Kind: | HES Versa-Set Retrievable Packer | | | |
| Sizes: | 2.375" x 5.5" | | | |
| Depths Set: | 5700' | | | |

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19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

See Attached

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

Well will fractured through the plug-n-perf method with +/- 25 fracturing stages per well. Each fracturing treatment will have 400,000 lbs of sand mixed in 7500 Bbls. of fresh water. The fracturing rate will be between 80 and 100 bpm at a pressure lower than a maximum pressure of 10,000 psi.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 15.1 acres

22) Area to be disturbed for well pad only, less access road (acres): 2.01 acres & .90 acres

23) Describe centralizer placement for each casing string:

See Attached

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

See Attached

25) Proposed borehole conditioning procedures:

See Attached

*Note: Attach additional sheets as needed.

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19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

20" conductor will be pre-set prior to start of operations and cemented in place to surface at approximately 120ft. A 17 ½" surface hole will be drilled with fresh water to approximately **400'md/tvd.** 13 3/8" surface casing will be installed and cemented to surface in order to isolate fresh water zones and provide a competent shoe for well control while drilling deeper horizons. A 12 ¼" intermediate hole section will be drilled with 5% KCL Polymer (WBM) and a conventional mud motor to approximately **2361'md/tvd** through the base of the Big Injun formation. 9 5/8" Intermediate casing will be installed and cemented to surface in order to isolate the Red Beds and Big Injun formation from lower hydrocarbon bearing zones while providing a competent shoe for well control. An 8 ½" vertical hole section will be to planned kick-off point using Synthetic Based Mud (SBM) and a conventional mud motor. The wellbore will be deviated from vertical and landed horizontally in the Marcellus Target horizon, and extended laterally to total depth of **14,136'md/ 6,759'vd** using SBM and conventional mud motors. A 5 ½" production casing will be installed and cemented so estimated top of cement is at least 300ft inside the previous casing shoe. The Drilling Rig will then be released to the next well.

23) Describe centralizer placement for each casing string:

Surface - 1 centralizer w/ stop collar 10 ft above float shoe. One Single Bow every joint to 100ft below surface.

Intermediate – 1 centralizer w/ stop collar 10 ft above float shoe. 1 centralizer w/ stop collar 10 ft above float collar. 1 centralizer every joint for the first 15 joints. One centralizer every 3 jnts to 100ft below surface.

Production - 1 centralizer w/ stop collar 10ft above shoe. 1 centralizer 10ft above float collar. 1 centralizer every joint (floating) until KOP. 1 centralizer every 3 joints (floating) until 200ft inside intermediate shoe. 1 centralizer 50ft below mandrel hanger.

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

Surface - Class A + 3% CaCl2

Intermediate - Class A cmt, 0.05% Retarder, 0.25% Defoamer, 1% Accelerator, 0.25% Dispersant, 0.65% Retarder, 9.10 gal/sk Fresh Water.

Production - Class A cmt, 10% bwow Dispersent, 0.6% bwoc Fluid Loss, 0.4% bwoc Retarder, 0.1% bwoc Free water control agent, 0.25% bwoc Defoamer, 0.1% bwoc Fluid Loss, 6.32 gal/sk Fresh Water.

25) Proposed borehole conditioning procedures:

Surface – Drilled with fresh water to section total depth. Prior to tripping, hole will circulated clean of cuttings and back-reamed if necessary.

Intermediate – Drilled with 9.0 ppg 5% KCL Polymer Water Based Mud (WBM) to section total depth. At section total depth, pump 40bbl viscous pill and circulate hole clean.

WW-6B – Murner 2H

Production - Drilled with 12.0-12.5 ppg Synthetic Based Mud (SBM) to section total depth. At section total depth pump 2-3 20bbl heavy weighted pill sweeps to transport excess cutting from the hole until clean. Pump rates will be maintained in excess of 600 GPM, and rotation in excess of 100 RPM to assist cuttings transport. A 60 bbl tuned weighted spacer will be pumped ahead of the cement to assist in mud cake removal and water wett both casing and formation.

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# CEMENT ADDITIVES

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Surface - Class A + 3% CaCl2

Intermediate - Class A cmt, 0.05% Retarder, 0.25% Defoamer, 1% Accelerator, 0.25% Dispersant, 0.65% Retarder, 9.10 gal/sk Fresh Water.

Production - Class A cmt, 10% bwow Dispersent, 0.6% bwoc Fluid Loss, 0.4% bwoc Retarder, 0.1% bwoc Free water control agent, 0.25% bwoc Defoamer, 0.1% bwoc Fluid Loss, 6.32 gal/sk Fresh Water.

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# Statoil — Marcellus - Drilling Well Schematic

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Well Name: | Murner 2H | | | GLE (ft): | 1,266 | TVD(ft): | 6,759 |
| Field Name: | Marcellus | | | DF(ft): | 22 | TMD(ft): | 14,136 |
| County: | Tyler, WV | BHL: | X = 1689447.84 | Y= | 14351980.95 | Profile: | Horizontal |
| API #: | 0 | SHL: | X = 1691061.80 | Y= | 14344582.67 | AFE No.: | n/a |

| Formations & Csg Points | Depth, ft MD | TVD | SS | Form. Temp. (F) | Pore Press. (EMW) | Frac Gradient (EMW) | Planned MW |
|---|---|---|---|---|---|---|---|
| *Conductor* | *120* | *120* | *1,168* | - | - | - | - |
| *Casing Point* | *400* | *400* | *888* | *65* | - | - | *Air/ Mist* |
| Approximate fresh water strata ~348' | | | | | | | |
| Washington Coal | 461 | 461 | *827* | - | - | - | |
| Waynesburg A Coa | 501 | 501 | *787* | - | - | - | |
| Washington Coal | 708 | 708 | *580* | - | - | - | Air/Mist |
| | | | | - | - | - | Air/Mist |
| | | | | | | | Air/Mist |
| Big Injun (Base) | 2,261 | 2,261 | *-973* | | | | Air/Mist |
| *Casing Point* | *2,361* | *2,361* | *-1,073* | *82* | - | *>18.0* | *Air/Mist* |
| Weir | 2,443 | 2,443 | *-1,155* | | | | Air/Mist |
| Berea | 2,634 | 2,634 | *-1,346* | | | | Air/Mist |
| Gordon Stray | 2,857 | 2,857 | *-1,569* | | | | Air/Mist |
| Gordon | 2,889 | 2,889 | *-1,601* | | | | Air/Mist |
| Fourth Sand | 2,919 | 2,919 | *-1,631* | | | | Air/Mist |
| Warren | 3,555 | 3,555 | *-2,267* | | | | Air/Mist |
| Java | 4,814 | 4,814 | *-3,526* | | | | Air/Mist |
| Undiff. Shales | 4,846 | 4,846 | *-3,558* | | | | Air/Mist |
| | | | | | | | Air/Mist |
| KOP1 | 6,031 | 6,003 | *-5,030* | | - | - | 12.0 - 12.5 |
| Middlesex | | 6,540 | *-5,252* | | - | - | 12.0 - 12.5 |
| West River | | 6,570 | *-5,282* | | - | - | 12.0 - 12.5 |
| Geneseo | | 6,639 | *-5,351* | | - | - | 12.0 - 12.5 |
| Tully | | 6,669 | *-5,381* | | - | - | 12.0 - 12.5 |
| Hamilton | | 6,679 | *-5,391* | | - | - | 12.0 - 12.5 |
| Marcellus | | 6,721 | *-5,433* | 150 | - | - | - |
| CherryValley | | 6,749 | *-5,461* | 150 | - | - | 12.0 - 12.5 |
| **Tgt Landing Point** | **7,184** | **6,759** | *-5,471* | 150 | | | 12.0 - 12.5 |
| | | | | | - | - | - |
| Onondaga | | 6,773 | *-5,485* | - | - | - | - |

Measure Depth (ft): 120; 400; TOC 1,361

## Program — Details

### 20" Conductor

### 17 1/2" Surface

| | |
|---|---|
| **Profile:** | Vertical |
| **Bit Type:** | 17-1/2" SMITH MSi716 |
| **BHA:** | 9 5/8" Motor with Shocksub |
| **Mud:** | Water |
| **Surveys:** | n/a |
| **Logging:** | n/a |
| **Casing:** | 13.375in 54.5 # J-55 BTC set @ ~ 400 MD/400 TVD |
| **Centralizers:** | 1 centralizer w/ stop collar 10 ft above float shoe. One Single Bow every joint to 100ft below surface. |
| **Cement:** | 15.8 ppg BondCem gas tight single slurry tail design to surface |
| **Potential Drilling Problems:** | |

FIT/LOT: 14.0 ppg EMW

### 12 1/4" Intermediate

| | |
|---|---|
| **Profile:** | Nudge and hold for anticollission |
| **Bit Type:** | 12-1/4" SMITH TCI F37YACPS (IADC:547Y) |
| **BHA:** | 8" Directional Assy 7:8 Lobe 2.0 Stg .07 rpg 1.83ABH (0.10 rpg/375 Diff) |
| **Mud:** | Air/Mist |
| **Surveys:** | Gyro MS, MWD EM Pulse |
| **Logging:** | n/a |
| **Casing/Liner:** | 9.625in 36# J55 BTC set at 2361MD/ 2361TVD. |
| **Liner Hanger:** | n/a |
| **Centralizers:** | 1 centek centralizer w/ stop collar 10 ft above float shoe. 1 centek centralizer w/ stop collar 10 ft above float collar. 1 centralizer every joint for the first 15 joints. One centralizer every 3 jnts to 100ft below surface. |
| **Cement:** | 15.8 ppg. BondCem gas tight, single slurry tail design to surface |
| **Potential Drilling Problems:** | Slow ROP, DBR bit matrix |

FIT/LOT: 16.6 ppg EMW

### 8 1/2" Production

| | |
|---|---|
| **Profile:** | KO from Vertical, Land HZ |
| **Bit Type:** | 8-1/2" SMITH TCI F47YAPS (IADC: 617Y) - Vert)<br>8 1/2" Smith SDAi513 (curve & lateral) |
| **BHA:** | Directional Assembly (Steerable Motor) + EM w/ GR<br>6.75in 7:8 Lobe, 2.9 Stg (0.17rpg, 560 Diff) - Vert<br>6.75in 6:7 Lobe, 5.0 Stg (1.95 deg Fixed, 0.29 rpg, 715 Diff) - HZ |
| **Mud:** | Air/Mist down to KOP and SBM C&L |
| **Surveys:** | MWD EM Pulse |
| **Logging:** | n/a |
| **Casing/Liner:** | 5.5in 20# P110EC Vam Top HT to 0' to TD @ 14136 ft MD |
| **Csg Hanger:** | Fluted mandrel hanger |
| **Centralizers:** | 1 centek centralizer w/ stop collar 10ft above shoe. 1 centek centralizer 10ft above float collar. 1 centek centralizer every joint (floating) until KOP. 1 centek centralizer every 3 joints (floating) until 200ft inside intermediate shoe. 1 centek centralizer 50ft below mandrel hanger. |
| **Cement:** | 15.0 ppg Gas tight, single slurry tail design to1361MD |
| **Potential Drilling Problems:** | Wellbore instability in lateral w/ MW < 11.5 ppg |
| **Notes / Comments:** | |

TMD: 14,136
TVD: 6,759

WW-9
(2/15)

API Number 47 - _____ - _____
Operator's Well No. Murner 2H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

4709502268

Operator Name Statoil USA Onshore Properties Inc. OP Code 494505083

Watershed (HUC 10) Elk Fork Quadrangle Porter Falls - Sec 8

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes ☑ No ☐

Will a pit be used? Yes ☐ No ☑

If so, please describe anticipated pit waste: _____

Will a synthetic liner be used in the pit? Yes ☐ No ☐ If so, what ml.? _____ MDG 3/30/15

Proposed Disposal Method For Treated ~~Pit~~ Wastes:

_____ Land Application
■ Underground Injection ( UIC Permit Number Green Hunter API 34-121-23I95 )
_____ Reuse (at API Number _____ )
_____ Off Site Disposal (Supply form WW-9 for disposal location)
_____ Other (Explain _____

Will closed loop system be used? If so, describe: Yes

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air/Fresh water-vert sec/oil based mud horiz sec

-If oil based, what type? Synthetic, petroleum, etc. Synthetic

Additives to be used in drilling medium? emulisifier, food grade, barite, surfactant, calcium carbonate, gilsonite, lubricant, graphite, lime

Drill 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) NA

-Landfill or offsite name/permit number? Wetzel County Landfill

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto 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 or imprisonment.

Company Official Signature Bekki Winfree

Company Official (Typed Name) Bekki Winfree

Company Official Title Sr. Regulatory Advisor

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Office of Oil & Gas
MAY 21 2015

Subscribed and sworn before me this 12 day of March, 20 15

Wally Anthony Stuka Notary Public

My commission expires April 16, 2017

WALLY ANTHONY STUKA
My Commission Expires
April 16, 2017

Form WW-9

Operator's Well No. Murner 2H

Statoil USA Onshore Properties Inc.

4709502268

Proposed Revegetation Treatment: Acres Disturbed 11.57 Prevegetation pH Unknown

Lime 3 Tons/acre or to correct to pH 6

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch 2 Tons/acre

**Seed Mixtures**

| Temporary | | Permanent | |
|---|---|---|---|
| Seed Type | lbs/acre | Seed Type | lbs/acre |
| Winter Rye | 168 lbs/acre | Tall Fescue or Orchard Grass | 40 lbs/acre |
| Annual Ryegrass | 40 lbs/acre | Ladino Clover | 3 lbs/acre |
| | | Redtop | 3 lbs/acre |

Attach:
Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Michael Hoff

Comments: Preseed & mulch any disturbed areas per WVDEP regulations. Maintain & upgrade E.&S as necessary

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Office of Oil & Gas
MAY 21 2015

Title: Oil & Gas Inspector Date: 3/30/15

Field Reviewed? (✓) Yes ( ) No

4709502268

Statoil

# Murner Pad – Site Safety Plan

## Statoil USA Onshore Properties, Inc.

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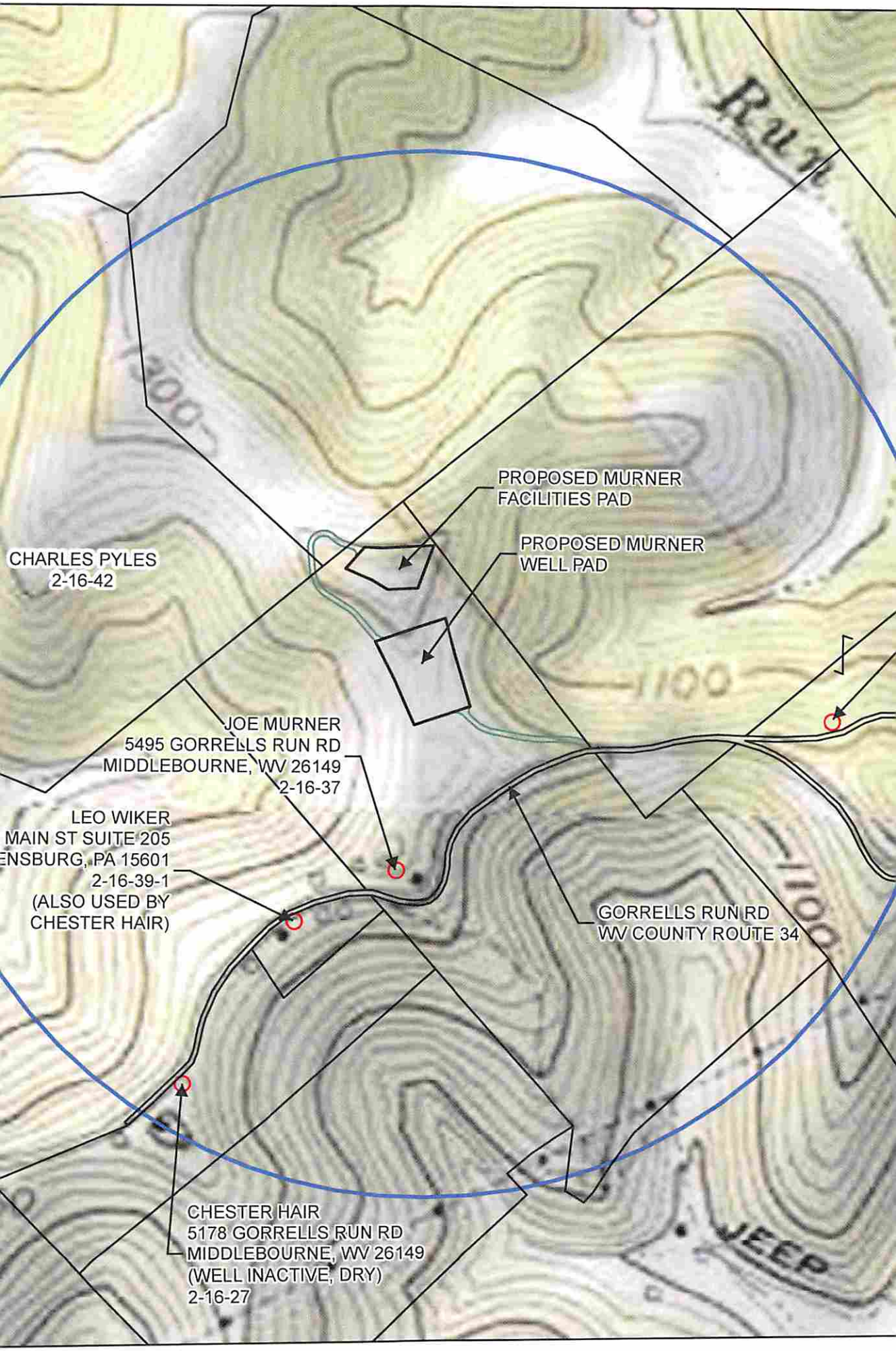
MAY 21 2015

Michael Dell
3/30/2015


PROPOSED MURNER
FACILITIES PAD
PROPOSED MURNER
WELL PAD
CHARLES PYLES
2-16-42
JOE MURNER
5495 GORRELLS RUN RD
MIDDLEBOURNE, WV 26149
2-16-37
LEO WIKER
MAIN ST SUITE 205
ENSBURG, PA 15601
2-16-39-1
(ALSO USED BY
CHESTER HAIR)
GORRELLS RUN RD
WV COUNTY ROUTE 34
CHESTER HAIR
5178 GORRELLS RUN RD
MIDDLEBOURNE, WV 26149
(WELL INACTIVE, DRY)
2-16-27
1100
1100
JEEP

d

FORM WW-6

| SURFACE HOLE LOCATION | |
|---|---|
| UTM 17 - NAD 83 | |
| N - 4372455.38 | |
| E - 515451.11 | |
| WV SPC NORTH NAD83 | |
| N - 367541.26 | |
| E - 1595963.47 | |
| **LANDING POINT LOCATION** | |
| UTM 17 - NAD 83 | |
| N - 4372686.86 | |
| E - 515587.34 | |
| WV SPC NORTH NAD83 | |
| N - 368293.38 | |
| E - 1596423.16 | |
| **BOTTOM HOLE LOCATION** | |
| UTM 17 - NAD 83 | |
| N - 4374710.39 | |
| E - 514959.26 | |
| WV SPC NORTH NAD83 | |
| N - 374967.98 | |
| E - 1594472.98 | |

8122'

LATITUDE: 39 ° 32 ' 30 "

LONGITUDE: 80 ° 47 ' 30 "

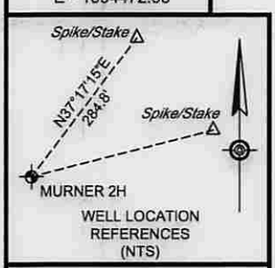
14642'

NOTES

1. THERE ARE NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' OF THE PROPOSED WELL.
2. PROPOSED PAD, LOD, OR E&S CONTROL FEATURE IS GREATER THAN 100' FROM PERENNIAL STREAM, WETLAND, POND, RESERVOIR OR LAKE.
3. THERE ARE NO NATIVE TROUT STREAMS WITHIN 300' OF PROPOSED PAD, LOD, OR E&S CONTROL FEATURE.
4. PROPOSED PAD, LOD, OR E&S CONTROL FEATURE IS GREATER THAT 1000' FROM SURFACE OR GROUND-WATER INTAKE OF PUBLIC WATER SUPPLY.
5. CENTER OF PAD IS 625 FEET FROM OCCUPIED DWELLING STRUCTURE AND AGRICULTURAL BUILDINGS LARGER THAN 2500 SQUARE FEET.
6. IT IS NOT THE INTENTION OF THIS PLAT TO REPRESENT A COMPLETE BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON. BOUNDARIES AS SHOWN TAKEN FROM RECORD DEED DESCRIPTIONS, TAX MAPS, AND SUPPLEMENTAL FIELD SURVEY.
7. OWNERSHIP DATA GATHERED FROM COUNTY PUBLIC TAX AND DEED RECORDS.
8. BEARINGS SHOWN ARE BASED ON WEST VIRGINIA SPC NORTH, NAD 83 DATUM

LEGEND

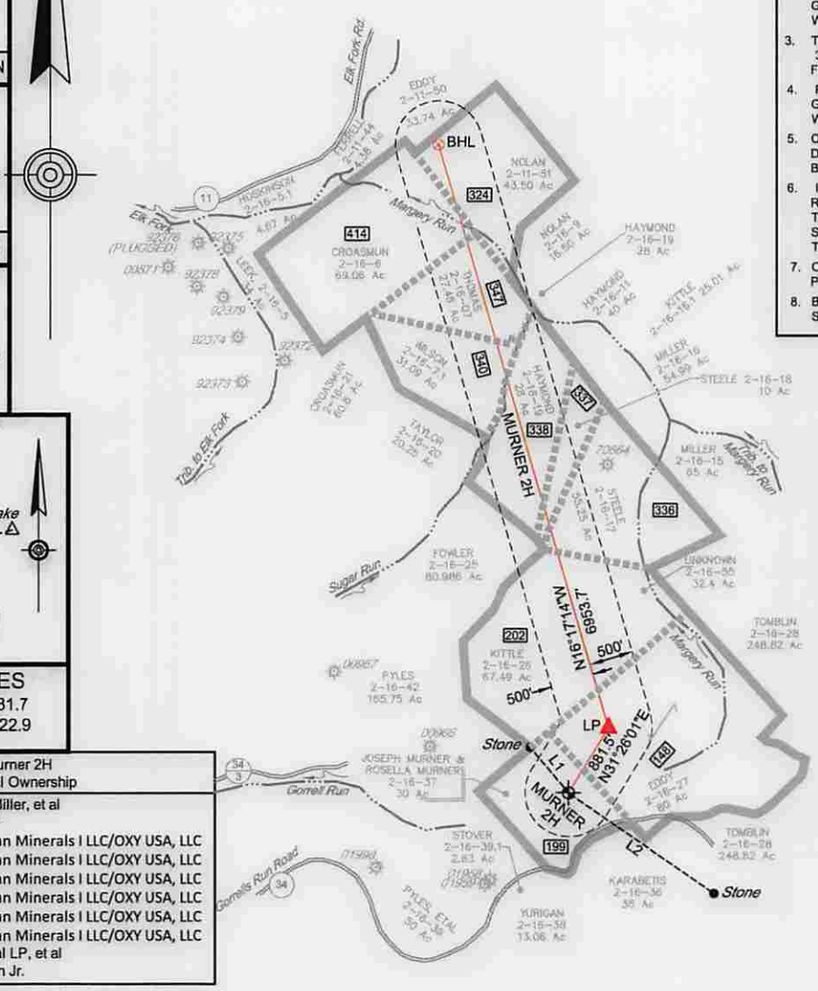
- OUTER LEASE BOUNDARY.
- INTERIOR LEASE BOUNDARY
- SURFACE TRACT LINES
- WELL REFERENCE LINES
- COUNTY ROADS
- PUBLIC ROADS
- BLUE-LINE STREAMS
- MINERAL OWNER
- PROPOSED WELL
- EXISTING WELL
- LANDING POINT
- BOTTOM HOLE




WELL LOCATION REFERENCES (NTS)

**PROPERTY TIES**

L1 - N40°01'W 681.7
L2 - S55°27'E 2022.9




**Murner 2H**
**Mineral Ownership**

| | |
|---|---|
| 199 | - Mark Quinton Miller, et al |
| 148 | - Gilbert F. Eddy |
| 202 | - BRC Appalachian Minerals I LLC/OXY USA, LLC |
| 336 | - BRC Appalachian Minerals I LLC/OXY USA, LLC |
| 337 | - BRC Appalachian Minerals I LLC/OXY USA, LLC |
| 338 | - BRC Appalachian Minerals I LLC/OXY USA, LLC |
| 340 | - BRC Appalachian Minerals I LLC/OXY USA, LLC |
| 347 | - BRC Appalachian Minerals I LLC/OXY USA, LLC |
| 414 | - Ridgetop Capital LP, et al |
| 324 | - Aubrey O. Nolan Jr. |

FILE NO. 8790-003-8

DRAWN BY DMS

SCALE 1 INCH = 2000 FEET

MIN DEGREE OF ACCURACY 1 IN 2500

PROVEN SOURCE OF ELEVATION SURVEY GRADE GPS

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 THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION

David M. Shannon
P.S. #2034

DAVID M. SHANNON LICENSED No. 2034 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

LDG

W.V.D.E.P.
OFFICE OF OIL AND GAS
601 57TH STREET
CHARLESTON, WV 25304

DATE 6-25-2015

OPERATORS WELL NO. MURNER 2H

API WELL NO.

47 STATE | 095 COUNTY | 02268 H6A PERMIT

WELL TYPE: OIL ☐ GAS ☒ LIQUID INJECTION ☐ WASTE DISPOSAL ☐

IF "GAS", PRODUCTION ☒ STORAGE ☐ DEEP ☐ SHALLOW ☒

LOCATION: WATERSHED ELK FORK ELEVATION 1266

COUNTY/DISTRICT TYLER / ELLSWORTH QUADRANGLE PORTERS FALLS - SEC 8

SURFACE OWNER JOSEPH MURNER & ROSELLA MURNER ACREAGE 30

OIL & GAS ROYALTY OWNER SEE TABLE ABOVE ACREAGE 441.9± Ac

PROPOSED WORK: DRILL ☒ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATE ☒

PLUG OFF OLD FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG & ABANDON ☐

CLEAN OUT & REPLUG ☐ OTHER CHANGE ☐ (SPECIFY) _____

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH 6759

WELL OPERATOR: STATOIL USA ONSHORE PROPERTIES, INC. DESIGNATED AGENT RICHARD PYLES

ADDRESS 2103 CITYWEST BOULEVARD / SUITE 800 ADDRESS 803 NASH ROAD

HOUSTON TX, 77042 MIDDLEBOURNE, WV 26149

COUNTY NAME PERMIT

P:\8790\8790-003-8 MURNER (WV-8)\DATA\SURVEY\SURVEYS\MURNER FINAL WELL PLAT.DWG

WW-6A1
(5/13)

Operator's Well No. Murner 2H

4709502268

**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 Attachment for Details) | | | | |

**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.

Received
Office of Oil & Gas
MAY 21 2015

Well Operator: Statoil USA Onshore Properties Inc.
By: Isabel Quinn
Its: Sr. Regulatory Advisor

4709502268

RECEIVED
Office of Oil and Gas
JUN 29 2015
WV Department of
Environmental Protection

# Form WW-6A-1 - Preliminary Information: (Attachment)

## Murner 2H

***NOTE: All Mineral / Unit Tracts are identified on the Well Plat in Order from Top Hole to Bottom Hole.***

### TRACT #199

| Lease Name or Number | Grantor, Lessor | Grantee, Lessee | Royalty | Book/Page |
|---|---|---|---|---|
| 000144006027 | Mark Quinton Miller | Statoil USA Onshore Properties Inc. | At least 1/8th | 460/407 |
| 000144006011 | Catherine Lynn Marlowe | Statoil USA Onshore Properties Inc. | At least 1/8th | 449/412 |

### TRACT #148

| Lease Name or Number | Grantor, Lessor | Grantee, Lessee | Royalty | Book/Page |
|---|---|---|---|---|
| 000115629000 | Gilbert F Eddy | Petroedge Energy LLC | At least 1/8th | 387/113 |
| Assignment | Petroedge Energy LLC | Statoil USA Onshore Properties Inc. | NA | 406/147 |

### TRACT #202

| Lease Name or Number | Grantor, Lessor | Grantee, Lessee | Royalty | Book/Page |
|---|---|---|---|---|
| 000096849000 | BRC Appalachian Minerals I LLC/OXY USA, Inc | BRC Working Interest Company LLC | At least 1/8th | 369/300 |
| Assignment | BRC Working Interest Company LLC | Chesapeake Appalachia LLC | NA | 369/784 |
| Assignment | Chesapeake Appalachia LLC | Statoil USA Onshore Properties Inc | NA | 378/764 |

*Somerset Minerals LP, BP Mineral Holdings II, LLC, and OXY USA, LLC interests all encompassed by the above lease.

### TRACT #336

| Lease Name or Number | Grantor, Lessor | Grantee, Lessee | Royalty | Book/Page |
|---|---|---|---|---|
| 000096849000 | BRC Appalachian Minerals I LLC/OXY USA, Inc | BRC Working Interest Company LLC | At least 1/8th | 369/300 |
| Assignment | BRC Working Interest Company LLC | Chesapeake Appalachia LLC | NA | 369/784 |
| Assignment | Chesapeake Appalachia LLC | Statoil USA Onshore Properties Inc | NA | 378/764 |

*Somerset Minerals LP, BP Mineral Holdings II, LLC, and OXY USA, LLC interests all encompassed by the above lease.

4709502268

## TRACT #337

| Lease Name or Number | Grantor, Lessor | Grantee, Lessee | Royalty | Book/Page |
|---|---|---|---|---|
| 000096849000 | BRC Appalachian Minerals I LLC/OXY USA, Inc | BRC Working Interest Company LLC | At least 1/8th | 369/300 |
| Assignment | BRC Working Interest Company LLC | Chesapeake Appalachia LLC | NA | 369/784 |
| Assignment | Chesapeake Appalachia LLC | Statoil USA Onshore Properties Inc | NA | 378/764 |

*Somerset Minerals LP, BP Mineral Holdings II, LLC, and OXY USA, LLC interests all encompassed by the above lease.

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Office of Oil and Gas
JUN 29 2015
WV Department of
Environmental Protection

## TRACT #338

| Lease Name or Number | Grantor, Lessor | Grantee, Lessee | Royalty | Book/Page |
|---|---|---|---|---|
| 000096849000 | BRC Appalachian Minerals I LLC/OXY USA, Inc | BRC Working Interest Company LLC | At least 1/8th | 369/300 |
| Assignment | BRC Working Interest Company LLC | Chesapeake Appalachia LLC | NA | 369/784 |
| Assignment | Chesapeake Appalachia LLC | Statoil USA Onshore Properties Inc | NA | 378/764 |

*Somerset Minerals LP, BP Mineral Holdings II, LLC, and OXY USA, LLC interests all encompassed by the above lease.

## TRACT #340

| Lease Name or Number | Grantor, Lessor | Grantee, Lessee | Royalty | Book/Page |
|---|---|---|---|---|
| 000096849000 | BRC Appalachian Minerals I LLC/OXY USA, Inc | BRC Working Interest Company LLC | At least 1/8th | 369/300 |
| Assignment | BRC Working Interest Company LLC | Chesapeake Appalachia LLC | NA | 369/784 |
| Assignment | Chesapeake Appalachia LLC | Statoil USA Onshore Properties Inc | NA | 378/764 |

*Somerset Minerals LP, BP Mineral Holdings II, LLC, and OXY USA, LLC interests all encompassed by the above lease.

## TRACT #347

| Lease Name or Number | Grantor, Lessor | Grantee, Lessee | Royalty | Book/Page |
|---|---|---|---|---|
| 000096849000 | BRC Appalachian Minerals I LLC/OXY USA, Inc | BRC Working Interest Company LLC | At least 1/8th | 369/300 |
| Assignment | BRC Working Interest Company LLC | Chesapeake Appalachia LLC | NA | 369/784 |
| Assignment | Chesapeake Appalachia LLC | Statoil USA Onshore Properties Inc | NA | 378/764 |

*Somerset Minerals LP, BP Mineral Holdings II, LLC, and OXY USA, LLC interests all encompassed by the above lease.

## TRACT #414

| Lease Name or Number | Grantor, Lessor | Grantee, Lessee | Royalty | Book/Page |
|---|---|---|---|---|
| Pending | Ridgetop Capital LP | Petroedge Energy LLC | At least 1/8th | 420/643 |
| Assignment | Petroedge Energy LLC | Statoil USA Onshore Properties Inc | At least 1/8th | 406/147 |

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Office of Oil and Gas
JUN 29 2015
WV Department of
Environmental Protection

4709502268

## TRACT #324

| Lease Name or Number | Grantor, Lessor | Grantee, Lessee | Royalty | Book/Page |
|---|---|---|---|---|
| 000021178000 | Mark A Russell et ux | Chesapeake Appalachia LLC | At least 1/8th | 363/340 |
| Assignment | Chesapeake Appalachia LLC | Statoil USA Onshore Properties Inc | NA | 369/531 |
| Deed | Mark A Russell et ux | Aubrey O Nolan Jr. | NA | 420/621 |

# MURNER 2H ROAD CROSSING LETTERS

Statoil Tract Index #199

Statoil Tract Index #148

Statoil Tract Index #202

Statoil Tract Index #336

Statoil Tract Index #337

Statoil Tract Index #338

Statoil Tract Index #340

Statoil Tract Index #347

Statoil Tract Index #414

Statoil Tract Index #324

4709502268

Received
Office of Oil & Gas
MAY 21 2015

# MILLER LAW OFFICES, PLLC

KENNETH R. MILLER
KENNETH ALEXANDER MILLER II*

*Also Admitted in Ohio

ATTORNEYS AT LAW
936 EAST PARK AVENUE, SUITE 2
POST OFFICE BOX 2116
FAIRMONT, WEST VIRGINIA 26554
millerlawofficeswv@gmail.com
millerlawofficeswv.com

304-366-0822
FAX: 304-366-0825


4709502268

April 9, 2015

Statoil USA Onshore Properties, Inc.
Attn: Joshua S. Ozment, Senior Landman
MAR LAN OPR
2103 City West Blvd, Suite 800
Houston, TX 77042

Re: Road Crossing Letters Requirement
Title Index No. 199
Title of Joseph Murner, et al.
to 30 acres oil and gas
waters of Elk Fork, Ellsworth District
Tyler County, West Virginia
Tax Map #16, parcel 37

Dear Mr. Ozment:

Pursuant to your request, I hereby certify I have made a personal examination of the records contained in the office of the Clerk of the County Commission of Tyler County, West Virginia relative to the captioned tract.

**State of West Virginia Ownership Under Public Roads**

Based on the materials examined in the Clerk's office, the State of West Virginia is not vested with an interest in the subject oil and gas, executive right, or royalty under any public roads located within the boundary of the subject tract. I did not locate any conveyances of record to the State of West Virginia or the County Commission for roads from the owners of the oil and gas. However, the Department of Transportation might have a different opinion so it is likely wise to contact it prior to drilling under roads, if any, that overlie the subject oil and gas.

Respectfully submitted,

Received
Office of Oil & Gas
MAY 21 2015

Alex Miller

BURNETT & THOMASON
ATTORNEYS & COUNSELORS AT LAW

OIL, GAS & MINERAL LAW

6017 W. MAIN STREET
FRISCO, TEXAS 75034
TEL: 214.417.2880
FAX: 972.418.1931
www.btenergylaw.com

March 13, 2015

Statoil North America, Inc.
2103 CityWest Boulevard, Suite 800
Houston, TX 77042

Attention: Joshua S. Ozment
Senior Landman

Re: Tract Index No. 148
Tax Parcel No. 2-16-27
Gilbert F. Eddy 92.25 acres
Ellsworth District
Tyler County, West Virginia

## ORIGINAL DRILLING TITLE OPINION

## DESCRIPTION OF LANDS

Tax Parcel No. 2-16-27, containing 92.25 acres, more or less, out of Ellsworth District in Tyler County, West Virginia, and being the same land described as Tract 2 through Tract 5 in a Deed, dated June 23, 1987, from Wesley B. Walker to Charlton B. Smith, Jr., and Gilbert F. Eddy, recorded in Book 268, Page 144, Office of the Clerk of the County Commission, Tyler County, West Virginia.

The above lands are hereinafter referred to as the Subject Lands, and a map depicting the approximate location of the Subject Lands is attached to this Opinion as Exhibit "A."

## OWNERSHIP

Based upon our examination of the materials referenced below in Exhibit "B," and subject to the comments, objections, requirements, and limitations hereinafter set forth, we find title to the Subject Lands, for the period of time from January 12, 1846 to August 19, 2014, to vest as follows:

Received
Office of Oil & Gas
MAY 21 2015

b. WORKING INTEREST AND NET REVENUE INTEREST

i. **SAVE AND EXCEPT all depths from below 500 feet above the top of the Geneseo formation at the stratigraphic equivalent of 6,386 feet as found in the AB Resources PA. LLC gamma ray Log for the Francis #1 (47-051-1190) well located in Clay District, Marshall County, West Virginia.**

| OWNER | WORKING INTEREST | NRI |
|---|---|---|
| David E. Bowyer<br>12088 Middle Island Road<br>Alma, West Virginia 26320<br>(1.0) [L1 & ASN2]<br>Less burdens of:<br>(1.0 x 15%) [L1] | 1.00000000 | 0.85000000 |
| Gilbert F. Eddy<br>(1.0 x 15%) [L1] | 0.00000000 | 0.15000000 |
| **TOTAL** | **1.00000000** | **1.00000000** |

ii. **INSOFAR ONLY as said lands cover and include all depths from below 500 feet above the top of the Geneseo formation at the stratigraphic equivalent of 6,386 feet as found in the AB Resources PA. LLC gamma ray Log for the Francis #1 (47-051-1190) well located in Clay District, Marshall County, West Virginia.**

| OWNER | WORKING INTEREST | NRI |
|---|---|---|
| Statoil USA Onshore Properties Inc.<br>2103 CityWest Boulevard, Suite 800<br>Houston, Texas 77042<br>(1.0) [L1 & ASN1]<br>Less burdens of:<br>(1.0 x 15%) [L1] | 1.00000000 | 0.85000000 |
| Gilbert F. Eddy<br>(1.0 x 15%) [L1] | 0.00000000 | 0.15000000 |
| **TOTAL** | **1.00000000** | **1.00000000** |

## STATE OF WEST VIRGINIA OWNERSHIP UNDER PUBLIC ROADS

Based on the Materials Examined, the State of West Virginia is not vested with any interest in the oil and gas executive rights and mineral fee and the oil and gas royalty in and under any public roads located within the boundary of the Subject Lands.

Received
Office of Oil & Gas
MAY 21 2015

# MILLER LAW OFFICES, PLLC

KENNETH R. MILLER
KENNETH ALEXANDER MILLER II*

*Also Admitted in Ohio

ATTORNEYS AT LAW
936 EAST PARK AVENUE, SUITE 2
POST OFFICE BOX 2116
FAIRMONT, WEST VIRGINIA 26554
millerlawofficeswv@gmail.com
millerlawofficeswv.com

304-366-0822
FAX: 304-366-0825


4709502268

April 9, 2015

Statoil USA Onshore Properties, Inc.
Attn: Joshua S. Ozment, Senior Landman
MAR LAN OPR
2103 City West Blvd, Suite 800
Houston, TX 77042

Re: Road Crossing Letters Requirement
Title Index No. 202
Title of OXY USA, Inc., et al.
to 67.49 acres oil and gas
waters of Margery Run, Ellsworth District
Tyler County, West Virginia
Tax Map #16, parcel 26

Dear Mr. Ozment:

Pursuant to your request, I hereby certify I have made a personal examination of the records contained in the office of the Clerk of the County Commission of Tyler County, West Virginia relative to the captioned tract.

**State of West Virginia Ownership Under Public Roads**

Based on the materials examined in the Clerk's office, the State of West Virginia is not vested with an interest in the subject oil and gas, executive right, or royalty under any public roads located within the boundary of the subject tract. I did not locate any conveyances of record to the State of West Virginia or the County Commission for roads from the owners of the oil and gas. However, the Department of Transportation might have a different opinion so it is likely wise to contact it prior to drilling under roads, if any, that overlie the subject oil and gas.

Respectfully submitted,

Received
Office of Oil & Gas
MAY 21 2015

Alex Miller

# MILLER LAW OFFICES, PLLC

KENNETH R. MILLER
KENNETH ALEXANDER MILLER II*

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millerlawofficeswv.com

304-366-0822
FAX: 304-366-0825


4709502268

April 9, 2015

Statoil USA Onshore Properties, Inc.
Attn: Joshua S. Ozment, Senior Landman
MAR LAN OPR
2103 City West Blvd, Suite 800
Houston, TX 77042

Re: Road Crossing Letters Requirement
Title Index No. 336
Title of OXY USA, Inc., et al.
to 55.13 acres oil and gas
waters of Elk Fork, Ellsworth District
Tyler County, West Virginia
Tax Map #16, parcel 17

Dear Mr. Ozment:

Pursuant to your request, I hereby certify I have made a personal examination of the records contained in the office of the Clerk of the County Commission of Tyler County, West Virginia relative to the captioned tract.

**State of West Virginia Ownership Under Public Roads**

Based on the materials examined in the Clerk's office, the State of West Virginia is not vested with an interest in the subject oil and gas, executive right, or royalty under any public roads located within the boundary of the subject tract. I did not locate any conveyances of record to the State of West Virginia or the County Commission for roads from the owners of the oil and gas. However, the Department of Transportation might have a different opinion so it is likely wise to contact it prior to drilling under roads, if any, that overlie the subject oil and gas.

Respectfully submitted,

Received
Office of Oil & Gas
MAY 21 2015

Alex Miller

# MILLER LAW OFFICES, PLLC

KENNETH R. MILLER
KENNETH ALEXANDER MILLER II*

*Also Admitted in Ohio

ATTORNEYS AT LAW
936 EAST PARK AVENUE, SUITE 2
POST OFFICE BOX 2116
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millerlawofficeswv@gmail.com
millerlawofficeswv.com

304-366-0822
FAX 304-366-0823

4709502268

April 9, 2015

Statoil USA Onshore Properties, Inc.
Attn: Joshua S. Ozment, Senior Landman
MAR LAN OPR
2103 City West Blvd, Suite 800
Houston, TX 77042

Re: Road Crossing Letters Requirement
Title Index No. 337
Title of OXY USA, Inc., et al.
to 10 acres oil and gas
waters of Elk Fork, Ellsworth District
Tyler County, West Virginia
Tax Map #16, parcel 18

Dear Mr. Ozment:

Pursuant to your request, I hereby certify I have made a personal examination of the records contained in the office of the Clerk of the County Commission of Tyler County, West Virginia relative to the captioned tract.

**State of West Virginia Ownership Under Public Roads**

Based on the materials examined in the Clerk's office, the State of West Virginia is not vested with an interest in the subject oil and gas, executive right, or royalty under any public roads located within the boundary of the subject tract. I did not locate any conveyances of record to the State of West Virginia or the County Commission for roads from the owners of the oil and gas. However, the Department of Transportation might have a different opinion so it is likely wise to contact it prior to drilling under roads, if any, that overlie the subject oil and gas.

Respectfully submitted,

Received
Office of Oil & Gas
MAY 21 2015

Alex Miller

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millerlawofficeswv@gmail.com
millerlawofficeswv.com

304-366-0822
FAX: 304-366-0825


April 9, 2015

Statoil USA Onshore Properties, Inc.
Attn: Joshua S. Ozment, Senior Landman
MAR LAN OPR
2103 City West Blvd, Suite 800
Houston, TX 77042

Re: Road Crossing Letters Requirement
Title Index No. 338
Title of OXY USA, Inc., et al.
to 39.25 acres oil and gas
waters of Elk Fork, Ellsworth District
Tyler County, West Virginia
Tax Map #16, parcel 19

Dear Mr. Ozment:

Pursuant to your request, I hereby certify I have made a personal examination of the records contained in the office of the Clerk of the County Commission of Tyler County, West Virginia relative to the captioned tract.

**State of West Virginia Ownership Under Public Roads**

Based on the materials examined in the Clerk's office, the State of West Virginia is not vested with an interest in the subject oil and gas, executive right, or royalty under any public roads located within the boundary of the subject tract. I did not locate any conveyances of record to the State of West Virginia or the County Commission for roads from the owners of the oil and gas. However, the Department of Transportation might have a different opinion so it is likely wise to contact it prior to drilling under roads, if any, that overlie the subject oil and gas.

Respectfully submitted,

Alex Miller


Received
Office of Oil & Gas
MAY 21 2015

# MILLER LAW OFFICES, PLLC

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KENNETH ALEXANDER MILLER II*

*Also Admitted in Ohio

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millerlawofficeswv@gmail.com
millerlawofficeswv.com

304-366-0822
FAX: 304-366-0825


April 9, 2015

4709102268

Statoil USA Onshore Properties, Inc.
Attn: Joshua S. Ozment, Senior Landman
MAR LAN OPR
2103 City West Blvd, Suite 800
Houston, TX 77042

Re: Road Crossing Letters Requirement
Title Index No. 340
Title of OXY USA, Inc., et al.
to 31.094 acres oil and gas
waters of Margery Run, Ellsworth District
Tyler County, West Virginia
Tax Map #16, parcel 7.1

Dear Mr. Ozment:

Pursuant to your request, I hereby certify I have made a personal examination of the records contained in the office of the Clerk of the County Commission of Tyler County, West Virginia relative to the captioned tract.

**State of West Virginia Ownership Under Public Roads**

Based on the materials examined in the Clerk's office, the State of West Virginia is not vested with an interest in the subject oil and gas, executive right, or royalty under any public roads located within the boundary of the subject tract. I did not locate any conveyances of record to the State of West Virginia or the County Commission for roads from the owners of the oil and gas. However, the Department of Transportation might have a different opinion so it is likely wise to contact it prior to drilling under roads, if any, that overlie the subject oil and gas.

Respectfully submitted,

Alex Miller


Received
Office of Oil & Gas
MAY 21 2015

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304-366-0822
FAX: 304-366-0825

millerlawofficeswv@gmail.com
millerlawofficeswv.com


4709502208

April 9, 2015

Statoil USA Onshore Properties, Inc.
Attn: Joshua S. Ozment, Senior Landman
MAR LAN OPR
2103 City West Blvd, Suite 800
Houston, TX 77042

Re: Road Crossing Letters Requirement
Title Index No. 347
Title of OXY USA, Inc., et al.
to 26.464 acres oil and gas
waters of Margery Run, Ellsworth District
Tyler County, West Virginia
Tax Map #16, parcel 7

Dear Mr. Ozment:

Pursuant to your request, I hereby certify I have made a personal examination of the records contained in the office of the Clerk of the County Commission of Tyler County, West Virginia relative to the captioned tract.

**State of West Virginia Ownership Under Public Roads**

Based on the materials examined in the Clerk's office, the State of West Virginia is not vested with an interest in the subject oil and gas, executive right, or royalty under any public roads located within the boundary of the subject tract. I did not locate any conveyances of record to the State of West Virginia or the County Commission for roads from the owners of the oil and gas. However, the Department of Transportation might have a different opinion so it is likely wise to contact it prior to drilling under roads, if any, that overlie the subject oil and gas.

Respectfully submitted,

Received
Office of Oil & Gas
MAY 21 2015

Alex Miller

(26 pgs)

4709502268

BURNETT & THOMASON
ATTORNEYS & COUNSELORS AT LAW

OIL, GAS & MINERAL LAW

6017 W. MAIN STREET
FRISCO, TEXAS 75034
TEL: 214.417.2880
FAX: 972.418.1931
www.btenergylaw.com

July 3, 2014

Tyler # 414

Statoil North America, Inc.
2103 CityWest Boulevard, Suite 800
Houston, TX 77042

Attention: Mr. Joshua S. Ozment

Re: Henry L. Croasmun, et al 69.06 Acre Tract out of Ellsworth District in Tyler County, West Virginia (Tax Parcel No. 2-16-6)

## ORIGINAL DRILLING TITLE OPINION

## DESCRIPTION OF LANDS

Tax Parcel No. 2-16-6, containing 69.06 acres, more or less, out of Ellsworth District in Tyler County, West Virginia, and being the same land described as the First Tract in a Deed, dated June 30, 1998, from Larry G. Rice and wife, Freda M. Rice, to Henry Louis Croasmun and wife, Joreen B. Croasmun, recorded in Book 323, Page 695, Office of the Clerk of the County Commission, Tyler County, West Virginia, hereinafter referred to as the "Subject Lands." The Subject Lands are shown on the plat attached hereto as Exhibit "A."

## MATERIALS EXAMINED

1. Title Runsheet, prepared by S. A. Property Research, L.L.C.'s field landman for Statoil North America, Inc., covering the Subject Lands for the period from April 25, 1889 through and including March 6, 2014 in Tyler County, West Virginia (the "Title Runsheet");

2. The public records of Tyler County, West Virginia ("Records") for the period from April 25, 1889 through and including March 6, 2014, but only insofar as the same includes those documents set forth on the above described Title Runsheet as they pertain to the Subject Lands;

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## OWNERSHIP

Based upon our examination of the materials referenced above, and subject to the comments, requirements, and limitations hereinafter set forth, we find title to the Subject Lands vests, as of March 6, 2014, as follows:

## STATE OF WEST VIRGINIA OWNERSHIP UNDER PUBLIC ROADS

Based on the Materials Examined, the State of West Virginia is not vested with any interest in the oil and gas executive rights and mineral fee and the oil and gas royalty in and under any public roads located within the boundary of the Subject Lands.

## SURFACE OWNERSHIP

| | | |
|---|---|---|
| 1. | Henry L. Croasmun (100%) | 1.00000000 |
| | Total Surface Ownership: | 1.00000000 |

## OIL AND GAS EXECUTIVE RIGHTS AND MINERAL FEE

| | | |
|---|---|---|
| 1. | Henry L. Croasmun (1/3) | 0.33333334 |
| 2. | Ridgetop Capital, LP (1/3) | 0.33333333 |
| 3. | Ridgetop Capital II, LP (1/3) | 0.33333333 |
| | Total Oil and Gas Executive Rights and Mineral Fee Ownership: | 1.00000000 |

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RADCLIFF PLLC

Patrick N. Radcliff
Attorney at Law
1211 10th St.
Vienna, WV 26105

Patrickradcliff@hotmail.com
304-295-6027

4709502168

Date: April 28, 2015

Statoil USA Onshore Properties, Inc.
Central Accounts Payable
2103 City West Boulevard, Suite 800
Houston, TX 77042

ATTN: Jared Guynes
Senior Landman

RE: Tract Index No. 324
Tax parcel No. (2) Map 11 Parcel 51
43.5 Acres
Ellsworth District
Tyler County, WV

## ORIGINAL DRILLING TITLE OPINION

I do hereby certify that I have made a personal examination of copies of records contained in the Office of the Clerk of the County Commission of Tyler County, West Virginia, and the Sheriff's Office of Tyler County, West Virginia, which records were delivered to me by your agents, and I have personally examined the indexes to such records maintained by said Clerk's Office and based upon such examination, assuming the accuracy of said copies and subject to the accuracy of the indexes to such records and further subject to the matters set forth herein and to any state of facts not appearing of record, and except as to matters shown herein to have been reported by the abstractor, I hereby certify that I have examined the title upon the above-referenced property and report the following state of title:

## DESCRIPTION OF LANDS

Tax Parcel No. 11-51, containing 43.5 acres, more or less, located in Ellsworth District, Tyler County, West Virginia, and more particularly described in deed dated May 22, 2006 of record in Deed Book 350 at page 772, made by Floyd Wayne Reed, Jr.to Mark A. Russell, as follows:

Beginning at a stone on bank of Margery Run; thence N. 40 W. 110 poles to a stone; thence N. 50-1/2 E. 133 poles to a stone; thence S. 40 E. 86 poles to a stone; thence S. 45-1/2 W. 46 poles to a dogwood and white oak; thence E. 17-1/2 S. 36 poles to the beginning, containing 43 ½ acres, more or less. **(Please note the description does not close)** See Exhibit "A"

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**This description is subject to an accurate survey**

| | |
|---|---|
| SECONDARY TERM | The lease shall continue beyond the primary term for "and as long thereafter as operations for oil and gas are being conducted on the premises or oil and gas is found in paying quantities thereon, or any formation underlying the herein leased land is used for storage of gas as provided under paragraph 7 hereof. |
| ASSIGNMENTS | Assigned by A. L. Key, widow to Royal Resources Corporation, 201 DB 261, dated June 8, 1973. |
| NOTES | **Existing production under this lease upon any portion of the said 165 acre tract would continue the lease as to the subject tract.** |

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**Older Oil and Gas Lease OL4.**

| | |
|---|---|
| DATE | March 12, 1982 |
| FILED | March 15, 1982 |
| RECORDED | 237 DB 579 |
| LESSORS | Merle Eastham |
| LESSEE | W.A. Suter |
| LANDS DESCRIBED | The subject tract described as a tract of 44 acres, Bounded on the North by Etta Lemasters; on The East by Merle Eastham; on the South by Harry M. Carroll; and on the West by Thomas Cunningham. TR 96/504 |
| INTEREST COVERED | 100% |
| PRIMARY TERM | 2 years |
| SECONDARY TERM | The lease shall continue beyond the primary term for "and as long thereafter as operations for oil and gas are being conducted on the premises or oil and gas is found in paying quantities thereon, or any formation underlying the herein leased land is used for storage of gas as provided under paragraph 7 hereof. |
| ASSIGNMENTS | Assigned by William. A. Suter to Rimrock Production Corp., 238 DB 287, dated March 22, 1982. |

**NOTE: It is assumed that William A. Suter is the same person as W. A. Suter.**

**Interests of State of State of WVA in Roads and Easements**

There are no conveyances of record to the State of West Virginia for roads or other easements from the owners of the oil and gas during the period of this search and therefore, the State holds no interest in the oil and gas underlying the subject property which would affect the subject lease

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WW-6AC
(1/12)

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

**Date of Notice Certification:** 05/19/2015

**API No. 47-** 47 095 02268
**Operator's Well No.** 2H
**Well Pad Name:** Murner

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

| | | | |
|---|---|---|---|
| State: | West Virginia | UTM NAD 83 Easting: | 515451.11 m |
| County: | Tyler | Northing: | 4372451.38 m |
| District: | Ellsworth | Public Road Access: | CR 34 |
| Quadrangle: | Porter Falls - Sec 8 | Generally used farm name: | Murner Farm |
| Watershed: | Elk Fork | | |

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

| Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:<br>*PLEASE CHECK ALL THAT APPLY | OOG OFFICE USE ONLY |
|---|---|
| ☐ 1. NOTICE OF SEISMIC ACTIVITY or ☒ 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<br>☐ WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH) | ☐ RECEIVED/ NOT REQUIRED |
| ☒ 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 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.

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47095 [illegible] 38

**Certification of Notice is hereby given:**

THEREFORE, I Bekki Winfree, 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: | Statoil USA Onshore Properties Inc. | Address: | 2103 City West Boulevard, Suite 800 |
| By: | Bekki Winfree/ | | Houston, TX 77042 |
| Its: | Sr. Regulatory Advisor | Facsimile: | 713-918-8290 |
| Telephone: | 713-918-8200 | Email: | BEKW@Statoil.com |

NOTARY SEAL
WALLY ANTHONY STUKA
My Commission Expires
April 16, 2017

Subscribed and sworn before me this 19 day of May 2015.

Wally Anthony Stuka Notary Public

My Commission Expires April 16, 2017

**Oil and Gas Privacy Notice:**

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

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WW-6A
(9-13)

API NO. 47- _____ - _____
OPERATOR WELL NO. Murner 2H
Well Pad Name: Murner

4709502268

**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:** 03/18/2015 **Date Permit Application Filed:** 5/20/15

**Notice of:**

☑ PERMIT FOR ANY WELL WORK ☐ CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

**Delivery method pursuant to West Virginia Code § 22-6A-10(b)**

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

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

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

☑ SURFACE OWNER(s)
Name: Joseph Murner
Address: 5495 Gorrells Run Road
Middlebourne, WV 26149
Name: Rosella Murner
Address: 5495 Gorrells Run Road
Middlebourne, WV 26149

☐ SURFACE OWNER(s) (Road and/or Other Disturbance)
Name: _____
Address: _____
Name: _____
Address: _____

☐ SURFACE OWNER(s) (Impoundments or Pits)
Name: _____
Address: _____

☑ COAL OWNER OR LESSEE
Name: See attached.
Address: _____

☐ COAL OPERATOR
Name: _____
Address: _____

☑ SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name: See attached.
Address: _____

☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD
Name: _____
Address: _____

*Please attach additional forms if necessary

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(8-13)

API NO. 47-_____-_____
OPERATOR WELL NO. Murner 2H
Well Pad Name: Murner

4709502268

**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 in 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. Report 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

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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.

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**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

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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.**

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(8-13)

API NO. 47-_____-_____
OPERATOR WELL NO. Murner 2H
Well Pad Name: Murner

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**Time Limits and Methods for Filing Comments.**

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

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

**Comment Requirements**

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

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

**Permit Denial or Condition**

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

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

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

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

Received
Office of Oil & Gas
MAY 21 2015

WW-6A
(8-13)

API NO. 47-_____-_____
OPERATOR WELL NO. Mumer 2H
Well Pad Name: Mumer

**Notice is hereby given by:**

Well Operator: STATOIL USA ONSHORE PROPERTIES INC.
Telephone: 713-918-8200
Email: BEKW@Statoil.com

Address: 2103 CITYWEST BLVD.
SUITE 800 HOUSTON, TX 77042
Facsimile: 713-918-8290

4709502268

**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.

NOTARY PUBLIC
STATE OF TEXAS
WALLY ANTHONY STUKA
My Commission Expires
April 16, 2017

Subscribed and sworn before me this 19 day of May, 2015.

Wally Anthony Stuka Notary Public

My Commission Expires April 16, 2017

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Office of Oil & Gas
MAY 21 2015

**Murner 2H WW-6A Notice of Application**

4709502268

**Coal Owner(s):**

Catherine Lynn Marlowe
423 Old Buggy Trail
Hillsbough, NC 27278

Dorothy Hylton
14715 Evans Road
Evans, WV 25241

Dorla Livingston
14715 Evans Road
Evans, WV 25241

Darrell Wayne McIntyre
143 Foxwood Drive
Lexington, NC 27295

Sharon McIntyre
143 Foxwood Drive
Lexington, NC 27295

Hubert Walker
P. O. Box 4083
Alving, Texas 77512

William T. McIntyre
8700 Lowell Road
Pomfret, MD 20675

Verlin Dixon
24383 Forrestview Drive
Columbia Station, Ohio 44711

Ronald Dixon
113 Walnut Street
Evans, WV 25241

Blondene Van Slice
564 Evergreen Hills Road
Cottageville, WV 25239

Monty E. McIntyre
Route 1, Box 171
Ravenswood, WV 26164

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Melody Ann Holstein
2701 Fairlawn Avenue #12
Dunbar, WV 26064

Larry Wisnewski
914 Chittum Lane
Charleston, WV 05309

Donald E. McIntyre
2707 Virginia Avenue
Hurricane, WV 25526

Cleona G. Null
P. O. Box 1048
Ripley, WV 25271

Shawn Castle
P. O. Box 1063
Ripley, WV 25271

Ted McClanahan
1204 Staats Mill Road
Ripley, WV 25276

Stephen Milam
42 South 4th Street
Rittman, Ohio 44270

Tammy White
406 Wildwood Drive
Millwood, WV 25262

Delores J. McIntyre
1546 Kanawha Blvd. East Apt. 917
Charleston, WV 25311

Lessia Gayle Malloy
191 Cross No Road
Doyline, LA 71023

Gary Estep
2019 Mt. Vernon
Hurricane, WV 25526

Michael Alan McIntyre
2457 North Drake, Apt. B
Chicago, Illinois 60647

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Cloma Thomas Meredith
768 Pleasant Valley
Moorehead, Kentucky 40351

Joseph and Rosella Murner
5495 Gorrells Run Road
Middlebourne, WV 26149

**Surface Owner(s) of Water Wells**

Kenneth C Baker & Kay F. Hain C/O Bruce Hain
1874 North Lakeman Dr,
Bellbrook, OH 45305-1205

Gilbert F. Eddy
5761 Gorrells Run Rd
Middlebourne, WV 26149

Chester Hair
5178 Gorrells Run Rd
Middlebourne, WV 26149-9758

George P & Aspasia Karabetis
6900 Columbia Rd,
Baltimore, MD 21220-1065

Harlan D & Barbara Kittle
58 Mary St
New Martinsville, WV 26188-2556

Rosella Murner
5495 Gorrells Run Rd
Middlebourne, WV 26149-7715

Gay I Pyles
1098 Nash Run Rd
Middlebourne, WV 26149-7732

Richard D & Cathy J Pyles & Dustin A Hendershot
803 Nash Run Rd
Middlebourne, WV 26149

Kenneth Tomblin & Lori & Michael C/O Ben Tomblin
5913 Greencrest Dr,
Hamilton, OH 45011-2223

Unknown Owner
PO Box 2,

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MAY 21 2015

4709502268

Middlebourne, WV 26149-0002

Leo W Wiker & John S. Wiker C/O William J Wiker
231 S Main St,
Suite 205,
Greensburg, PA 15601-3115

Joseph Yurigan
625 Bush Rd
New Alexandria, PA 15670-2527

Joseph J. Yurigan
625 Bush Rd
New Alexandria, PA 15670-2527

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MAY 21 2015

4709502268

Debra McIntyre Simmons Reed
12445 Kaywood Street NW
Massillon, Ohio 44647

Susan Ertel
2516 Young Drive
Haymarket, VA 20169

Linda Lee McIntyre
25 Heather Way
Millwood, WV 25262

Randy Joe McIntyre
P. O. Box 302
Cottageville, WV 25239

Carolyn White
8352 Ripley Road
Cottageville, WV 25239

Scottie Johnson
1926 Ambler Ridge Road
Walton, WV 25286

Annette Cummings
388 Keener Acres
Lincolnton, NC 28092

Gregory Johnson
4546 East Nevada Avenue
Fresno, CA 93702

Phyllis Summers
154 Gradview Road
Daniels, WV 25832

Meredith F. Cuddy
12055 178th Street
Summersfield, Florida 33491

Charles Edward Fink
805 Country Lane
Allen, Texas 75002

Janis Louanne Shaw
475 Lewis Road
Ontario, CA 44903

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MAY 21 2015

4709502268

Richard Michael Fischmann
827 Bloomfield Avenue
Akron, Ohio 44313

Michael Richard Fischmann
1361 Getz Street
Akron, Ohio 44301

Betty Williams
5112 Morningside Circle
Parkersburg, WV 26101

Charisse Straight
138 Greenwood Road
Fairfield Glade, TN 38558

Betty Kay Johnson
118 North Fourth Street
McConnelsville, Ohio 43756

Helen Claire Cullison
760 Janice Lane
Pickerington, Ohio 43147

Stephen C. R. Stephens
245 Linaburg Lane #1835
Berryville, VA 22611

Michael M. Stephens
98 Woodstone Road
Davisville, WV 26142

Terry Stephens Zeman
5483 Twin Beach Road #3161
Port Clinton, Ohio 43452

Meredyth Ann Meredith
2215 Black Oak Place
Riverside, CA 92506

Marcus Meredith
2215 Black Oak Place
Riverside, CA 92506

Nancy Meredith
4109 9th Avenue
Vienna, WV 26105

WW-6A5
(1/12)

Operator Well No. Murner 2H

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

**Notice Time Requirement:** notice shall be provided no later than the **filing date of permit application.**
**Date of Notice:** 03/24/2015 **Date Permit Application Filed:** 5/20/15

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

☑ CERTIFIED MAIL RETURN RECEIPT REQUESTED ☐ HAND DELIVERY

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

**Notice is hereby provided to the SURFACE OWNER(s)**
(at the address listed in the records of the sheriff at the time of notice):

Name: Joseph Murner
Address: 5495 Gorrells Run Road
Middlebourne, WV 26149

Name: Rosella Murner
Address: 5495 Gorrells Run Road
Middlebourne, WV 26149

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

State: West Virginia
County: Tyler
District: Ellsworth
Quadrangle: Porters Falls - Sec 8
Watershed: Elk Fork

UTM NAD 83 Easting: 515451.11
Northing: 4372455.38
Public Road Access: CR 34
Generally used farm name: Murner Farm

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

Well Operator: STATOIL USA ONSHORE PROPERTIES INC.
Telephone: 713-918-8200
Email: BEKW@Statoil.com

Address: 2103 CITYWEST BLVD. STE. 800 HOUSTON, TX 77042
Facsimile: 713-918-8290

**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.

Received
Office of Oil & Gas
MAY 21 2015

4709502268

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

# Division of Highways

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

Earl Ray Tomblin
Governor

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

May 18, 2015

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 Murner Pad Tyler County
Murner 2H

Dear Mr. Martin,

The West Virginia Division of Highways has issued Permit # 06 -2014-0551 for the subject site to Statoil USA Onshore Properties Inc. for access to the State Road for the well site located off of Tyler County Route 34 SLS.

The 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 January 3, 2012.

Very Truly Yours,

Gary K. Clayton

Gary K. Clayton, P.E.
Regional Maintenance Engineer
Central Office Oil &Gas Coordinator

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Office of Oil & Gas
MAY 21 2015

Cc: Jarad Guynes
Statoil USA Onshore Properties Inc.
CH, OM, D-6
File

# Frac Additives

4709502268

| | Components | CAS# |
|---|---|---|
| BIO CLEAR 2000 | | |
| | Polyethylene Glycol | 25322-68-3 |
| | 2,2-dibromo-3-nitrilopropionamide | 10222-01-2 |
| BUFFER | | |
| | Sulfamic Acid | 5329-14-6 |
| ACID | | |
| | Hydrochloric Acid | 7647-01-0 |
| BREAKER | | |
| | Sucrose | 57-50-1 |
| | Ethylene Glycol | 107-21-1 |
| INHIBITOR | | |
| | Ethoxylated Nonylphenol | 68412-54-4 |
| | Dimethylcocoamine | 68607-28-3 |
| | Ethylene Glycol | 107-21-1 |
| | Glycol Ethers | 111-76-2 |
| | Methanol | 67-56-1 |
| | Propargyl Alcohol | 107-19-7 |
| SCALE INHIBITOR | | |
| | Ethylene Glycol | 107-21-1 |

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| | | |
|---|---|---|
| FRICTION REDUCER | | |
| | Sodium Chloride | 7647-14-5 |
| | Ammonium Chloride | 12125-02-9 |
| | Petroleum Distillates | 64742-47-8 |
| | Alcohols, C12-16, Ethoxylated | 68551-12-2 |
| SAND | | |
| | Crystalline Silica (quartz) | 14808-60-7 |
| | Aluminum Oxide | 1344-28-1 |
| | Iron Oxide | 1309-37-1 |
| | Titanium Oxide | 13463-67-7 |
| GEL | | |
| | Gelling Agent & Hydrocarbons | 64742-96-7 |

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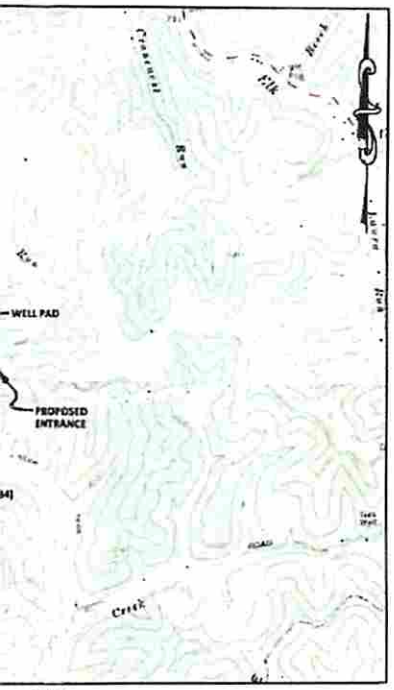
MAY 21 2015

# ) WELL PAD

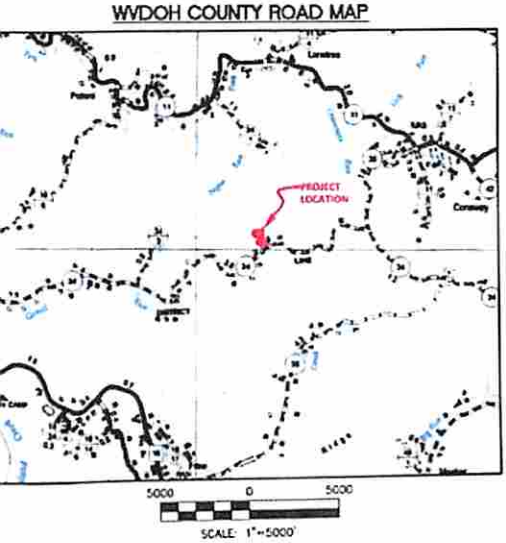
## STRUCTION PLANS
## T CONTROL PLANS

COUNTY, WEST VIRGINIA
Y RUN WATERSHEDS

FALLS QUAD MAPS




WVDOH COUNTY ROAD MAP




DESIGN CERTIFICATION
THE DRAWINGS, CONSTRUCTION NOTES, AND REFERENCE DIAGRAMS ATTACHED HERETO HAVE BEEN PREPARED IN ACCORDANCE WITH THE WEST VIRGINIA CODE OF STATE RULES, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS CRS 35-8.

SHEET INDEX


| | |
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| 1 | COVER SHEET |
| 2-3 | CONSTRUCTION AND E&S CONTROL NOTES |
| 4 | EXISTING CONDITIONS |
| 5 | EROSION & SEDIMENTATION CONTROL PLAN |
| 6 | DRILL PAD AND FACILITIES PAD GRADING PLAN |
| 7 | FACILITIES LAYOUT |
| 8 | ACCESS ROAD PROFILES |
| 9-10 | ACCESS ROAD CROSS SECTIONS |
| 11 | DRILL PAD & FACILITIES PAD CROSS SECTIONS |
| 12-15 | CONSTRUCTION DETAILS |
| 16 | RECLAMATION PLAN |


Michael Doff
3/30/15

| PROPOSED WELL NAME | WV NORTH NAD 27 | WV NORTH NAD 83 | UTM (METERS) NAD 83 - ZONE 17 | NAD 83 LAT & LONG |
|---|---|---|---|---|
| 1H | N 367513.19<br>E 1627402.24 | N 367548.38<br>E 1595961.11 | N 4372457.54<br>E 515450.36 | LAT 39-30-5.76<br>LON -80-49-13.068 |
| 2H | N 367506.06<br>E 1627404.60 | N 367541.26<br>E 1595963.46 | N 4372455.38<br>E 515451.11 | LAT 39-30-5.691<br>LON -80-49-13.036 |
| 3H | N 367495.80<br>E 1627397.48 | N 367531.00<br>E 1595956.32 | N 4372452.22<br>E 515448.99 | LAT 39-30-5.590<br>LON -80-49-13.126 |
| 4H | N 367498.94<br>E 1627406.95 | N 367534.14<br>E 1595965.82 | N 4372453.23<br>E 515453.23 | LAT 39-30-5.622<br>LON -80-49-13.003 |
| 5H | N 367491.78<br>E 1627409.31 | N 367527.01<br>E 1595968.17 | N 4372451.07<br>E 515452.62 | LAT 39-30-5.551<br>LON -80-49-12.975 |
| 6H | N 367488.68<br>E 1627399.81 | N 367523.87<br>E 1595958.67 | N 4372450.06<br>E 515449.74 | LAT 39-30-5.518<br>LON -80-49-13.093 |
| 7H | N 367502.92<br>E 1627395.10 | N 367538.12<br>E 1595953.96 | N 4372454.38<br>E 515448.24 | LAT 39-30-5.659<br>LON -80-49-13.159 |
| 8H | N 367510.05<br>E 1627392.74 | N 367545.24<br>E 1595951.61 | N 4372456.54<br>E 515447.48 | LAT 39-30-5.727<br>LON -80-49-13.187 |
| 9H | N 367517.17<br>E 1627390.39 | N 367552.37<br>E 1595949.26 | N 4372458.70<br>E 515446.73 | LAT 39-30-5.799<br>LON -80-49-13.220 |
| 10H | N 367520.31<br>E 1627399.89 | N 367555.51<br>E 1595958.75 | N 4372459.70<br>E 515449.61 | LAT 39-30-5.832<br>LON -80-49-13.098 |
| WELL PAD ELEVATION | 1266 | | | |

Larson Design Group

BRYAN M. PAULING
REGISTERED
20057
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER

| NO. | DATE | COMMENTS | BY | CHKD |
|---|---|---|---|---|
| 0 | 1/28/15 | CONSTRUCTION PLANS | NJR | BMP |

ISSUE / REVISIONS

COVER SHEET
MURNER (WV-8) WELL SITE
ELLSWORTH DISTRICT, TYLER COUNTY, WEST VIRGINIA


Larson Design Group • Architects Engineers Surveyors
2505 Cranberry Square
Morgantown, WV 26508
PHONE 304.777.2940 TOLL FREE 877.323.6603
FAX 570.323.9902 • www.larsondesigngroup.com

Statoil
STATOIL
2103 CITY WEST BLVD., SUITE 800
HOUSTON, TX 77042
PHONE 713.918.8200


SHEET NO.: 1 OF 16
PROJECT NO.: 8790-003-08