



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

May 18, 2015

WELL WORK PERMIT

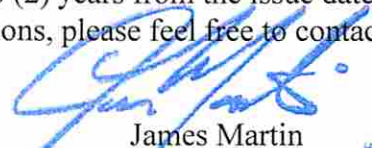
Horizontal 6A Well

This permit, API Well Number: 47-9502242, 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: BLIZZARD 4H
Farm Name: BLIZZARDM ROGER D. & SPENC
API Well Number: 47-9502242
Permit Type: Horizontal 6A Well
Date Issued: 05/18/2015

Promoting a healthy environment.

05/22/2015

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
(9/13)

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

1) Well Operator: Statoil USA Onshore Properties Inc. 494505083 Tyler Ellsworth Shirley-Sec. 1
Operator ID County District Quadrangle

2) Operator's Well Number: Blizzard 4H Well Pad Name: Blizzard

3) Farm Name/Surface Owner: Blizzard Farm/Roger D. Blizzard & Ruth E. Spencer Public Road Access: Gorrells Run Road

4) Elevation, current ground: 1008' Elevation, proposed post-construction: 1003'

5) Well Type (a) Gas Oil Underground Storage
Other

(b) If Gas Shallow Deep
Horizontal

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Associated Pressure(s):
Marcellus, Formation Top 6453 TVD, 30' thick, 4195 psi, *Intermediate Casing MASP 2300 psi

8) Proposed Total Vertical Depth: 6511' TVD

9) Formation at Total Vertical Depth: Marcellus Shale

10) Proposed Total Measured Depth: 12,829' MD

11) Proposed Horizontal Leg Length: 6318'

12) Approximate Fresh Water Strata Depths: 388' TVD

13) Method to Determine Fresh Water Depths: offset well data

14) Approximate Saltwater Depths: 1100' TVD

15) Approximate Coal Seam Depths: 202', 232'

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

Handwritten signature/initials in blue ink.

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

WW-6B
(9/13)

18) CASING AND TUBING PROGRAM

<u>TYPE</u>	<u>Size</u>	<u>New or Used</u>	<u>Grade</u>	<u>Weight per ft. (lb/ft)</u>	<u>FOOTAGE: For Drilling</u>	<u>INTERVALS: Left in Well</u>	<u>CEMENT: Fill-up (Cu. Ft.)</u>
Conductor	20"	New	H-40	94#	100'	100'	Cmt to surface-150 cu ft
Fresh Water	13.375"	New	J-55	54.4#	500'	500'	Cmt to surface-373 cuft
Coal							
Intermediate	9.625"	New	J-55	36#	2400'	2400'	Cmt to surface-815 cuft
Production	5.5"	New	P-110	20#	12829'	12829'	Cmt to 1400'-2670' cuft
Tubing							
Liners							

<u>TYPE</u>	<u>Size</u>	<u>Wellbore Diameter</u>	<u>Wall Thickness</u>	<u>Burst Pressure</u>	<u>Cement Type</u>	<u>Cement Yield (cu. ft./k)</u>
Conductor	20"	26"	.438"	1530 psi	Class A	1.3 cu ft/sk
Fresh Water	13.375"	17.5"	.380"	2730 psi	Class A	1.29 cu ft/sk
Coal						
Intermediate	9.625"	12.25"	.352"	*3520 psi	Class A	1.29 cu ft/sk
Production	5.5	8.5"	.361"	12640 psi	Class A	2.42 cu ft/sk
Tubing						
Liners						

PACKERS

Kind:				
Sizes:				
Depths Set:				

AS
5/14/15

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): 16.8 acres

22) Area to be disturbed for well pad only, less access road (acres): 8.4 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.

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 100ft. A 17 1/2" surface hole will be drilled with fresh water to approximately 500' 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 1/4" intermediate hole section will be drilled with 5% KCL Polymer (WBM) and a conventional mud motor to approximately 2400' 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 1/2" vertical hole section will be to planned kick-off point using 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 12829' md/6511 vd using SBM and conventional mud motors. A 5 1/2" 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 Dispersant, 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.

Pilot – Densified Cement Plug – Class A cmt, 0-1% bwoc dispersant, 0-1% bwoc defoamer, 0-1% bwoc retarder

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25) Proposed borehole conditioning procedures:

Surface – Drilled with fresh water to section total depth. Prior to tripping, hole will be 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.

Production - Drilled with 12.5-13.0 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 wet both casing and formation.

Pilot – Drilled with 8.6 – 12.0 ppg SBM to section total depth. The hole will be circulated, and 20 bbl high vis pills pumped as needed, until shakers run free of cuttings.

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CEMENT ADDITIVES

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 Dispersant, 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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Marcellus - Drilling Well Schematic

Well Name: <u>BLIZZARD 4H</u>	GLE (ft): <u>1,004</u>	TVD (ft): <u>6,511</u>
Field Name: <u>Marcellus</u>	DF (ft): <u>22</u>	TMD (ft): <u>12,829</u>
County: <u>Tyler Co., WV</u>	BHL: X = <u>14337174.5</u> Y = <u>1684044.2</u>	Profile: <u>Horizontal</u>
API #: <u>0</u>	SHL: X = <u>14343446.6</u> Y = <u>1682366.0</u>	AFE No.: <u>PERMITTING</u>

Formations & Csg Points	Depth, ft			Form. Temp. (F)	Pore Press. (EMW)	Frac Gradient (EMW)	Planned MW	Measure Depth (ft)	Program	Details	
	MD	TVD	SS								
Conductor	100	100	926	-	-	-	-	100		20" Conductor	
										17-1/2" Surface	
Pittsburgh Coal		0					8.6		Profile: Vertical Bit Type: 17-1/2" Tri-Cone BHA: Rotary Assembly Mud: 8.6 ppg Fresh Water Surveys: n/a Logging: n/a Casing: 13.375 54.5 J-55 BTC at 500' MD/500' TVD 1 centralizer w/ stop collar 10 ft above float shoe. One Single Bow every joint to 100ft below surface. Centralizers: Cement: 15.8 ppg Tail slurry w/ TOC @ Surface Potential Drilling Problems: Stuck Pipe, Floating, Collision.		
Red Clay		0									
Approximate Fresh Water Strata ~388'											
Casing Point	500	500	526	65	-	-	8.6	500			
											12-1/4" Intermediate
							9.1			FIT/LOT: 14.0 ppg EMW Profile: Vertical Bit Type: 12-1/4" Kymera 0 BHA: 8in 6-7 Lobe 4.0 Stg 1.5 ABH (0.17 rpg/620 Diff) 0 Mud: 9.1 ppg 5% KCl Surveys: Gyro SS, MWD - EM Pulse Logging: n/a Casing/Liner: 9.625 36 J-55 BTC at ' MD/' TVD Csg Hanger: Mandrel Hanger 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. Centralizers: Cement: 15.8 ppg Tail slurry w/ TOC @ Surface Potential Drilling Problems: Hole Cleaning, Poor ROP, Buckling.	
1st Salt Sand		451									
2nd Salt Sand		0									
3rd Salt Sand		0									
Maxton Sand		0									
Keener Sand		0						TOC @ 1400' MD			
Big Lime		0									
Big Injun		2,286									
Berea Sand		2,618					9.1				
Casing Point	2,400	2,400	-1,374	82	-	>18.0		2,400			8-1/2" Production
Gordon Sand		3,033					8.6		FIT/LOT: 15.8 ppg EMW Profile: 8-1/2" PDC 0 Bit Type: 8-1/2" PDC 0 BHA: 6.75in 6/7 lobe 5.0 stg 1.95 FBH .29 rpg 715 DIFF 0 Mud: 12 ppg SBM Surveys: MWD - EM Pulse w/ 30ft surveys in curve, 100ft surveys in lateral Logging: GR Casing/Liner: 5.5 20 P110EC VAM TOP HT at ft MD/ ft TVD Csg Hanger: Mandrel Hanger 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. Centralizers: Cement: 15 ppg Tail slurry w/ TOC @ 1400' MD' Potential Drilling Problems: Bit Preservation, Hole Cleaning, . Notes / Comments:		
Java		5,072					8.6				
Angola		0					8.6				
Rhinestreet		0					8.6				
Cashaqua		0					8.6				
Middlesex		0					8.6				
KOP	5,935	5,923					12.0				
West River		6,343					12.0				
Genesco		6,412					12.0				
Marcellus		6,453					12.0				
Cherry Valley		6,477					12.0				
Landing point	6,834	6,496					12.0				
Onondaga		6,510					12.0				

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TMD: 12,829
TVD: 6,511
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Cement Outside Casing

Last Revision Date: 12/11/2014
Revised by: TB Gilbert
Note: Depths are referenced to RKB
Note: Not Drawn to Scale

WW-9
(9/13)

API Number 47 - _____
Operator's Well No. Blizzard 4H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Statoil USA Onshore Properties Inc. OP Code 494505083

Watershed (HUC 10) Gorrell Run - Middle Island Creek Quadrangle Shirley - Sec. 1

Elevation 1008' County Tyler District Ellsworth

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.? _____

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

- _____ Land Application
- Underground Injection (UIC Permit Number Green Hunter API 3A-121-23195
- _____ Reuse (at API Number _____)
- _____ Off Site Disposal (Supply form WW-9 for disposal location)
- _____ Other (Explain _____)

MDC
1-8-15

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? emulsifier, 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

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*

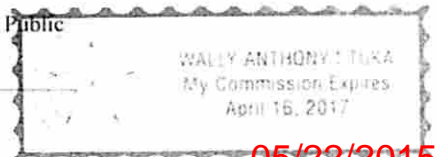
Company Official (Typed Name) Bekki Winfree

Company Official Title Sr. Regulatory Advisor

Subscribed and sworn before me this 11 day of December, 20 14

Wally Anthony Tuxa Notary Public

My commission expires April 16, 2017



05/22/2015

WW-9
(9/13)

API Number 47 - _____ - _____
Operator's Well No. Blizzard 4H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Statoil USA Onshore Properties Inc. OP Code 494505083

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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.? _____

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

*MAC
1-8-15*

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? emulsifier, food grade, barite, surfactant, calcium carbonate, gilsonite, lubricant, graphite, lime

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Company Official Signature *Bekki Winfree*

Company Official (Typed Name) Bekki Winfree

Company Official Title Sr. Regulatory Advisor

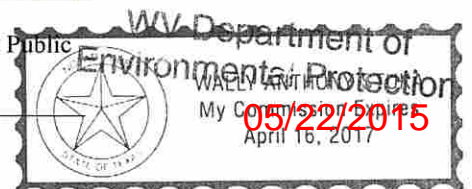
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Office of Oil and Gas

Subscribed and sworn before me this 11 day of December, 20 14

FEB 20 2015

Wally Anthony Notary Public

My commission expires April 16, 2017



4709502242

Form WW-9

Operator's Well No. Blizzard 4H

Statoil USA Onshore Properties Inc.

Proposed Revegetation Treatment: Acres Disturbed 12.4 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 Doff

Comments: Preseed & Mulch any disturbed areas per WVDEP regulations. Maintain or upgrade E-N-S as necessary

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Office of Oil and Gas

Title: Oil & Gas Inspector

Date: 1-8-15

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Field Reviewed? Yes No

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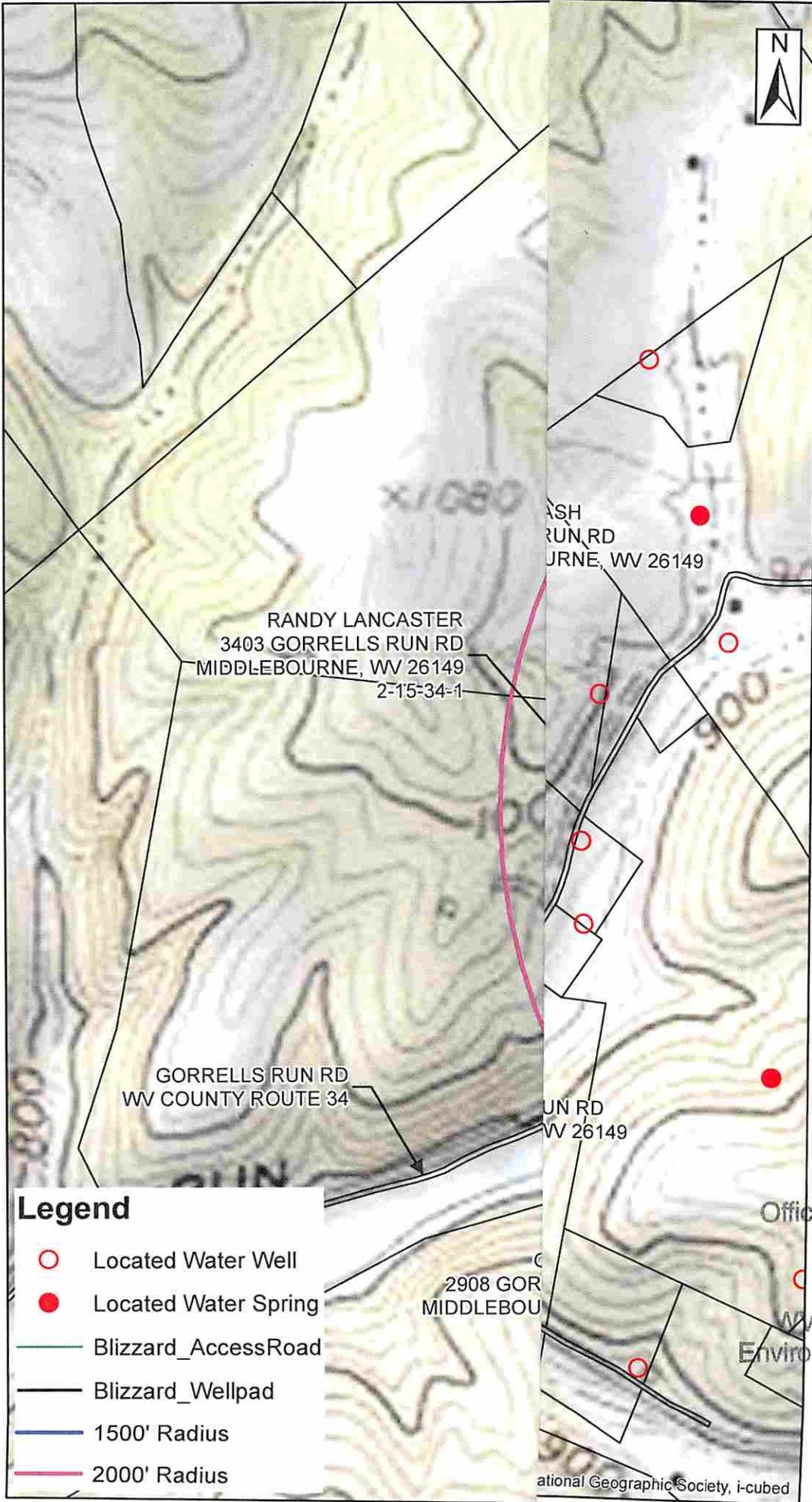
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Blizzard Pad – Site Safety Plan

Statoil USA Onshore Properties, Inc.

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Michael
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Environment and Natural Resources
05/22/2015



Larson Design Group®

Date 11/7/2014

Designer RTC

Project No. 8790-003-18

Scale 1 inch = 500 feet

Legend

- Located Water Well
- Located Water Spring
- Blizzard_AccessRoad
- Blizzard_Wellpad
- 1500' Radius
- 2000' Radius

Blizzard Water Well Map

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Blizzard
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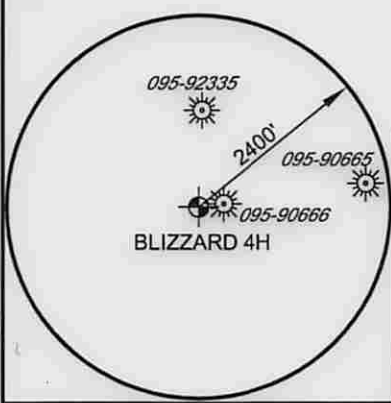
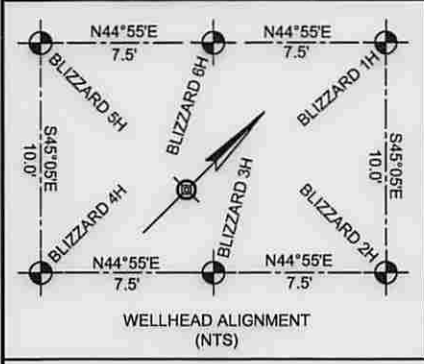
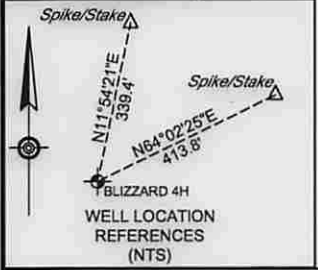
05/22/2015

SURFACE HOLE LOCATION	
UTM 17 - NAD 83	N - 4372109.03
	E - 512800.64
WV SPC NORTH NAD83	
N - 366549.91	E - 1587246.99
LANDING POINT LOCATION	
UTM 17 - NAD 83	N - 4371943.32
	E - 512773.59
WV SPC NORTH NAD83	
N - 366007.61	E - 1587149.13
BOTTOM HOLE LOCATION	
UTM 17 - NAD 83	N - 4370197.30
	E - 513312.14
WV SPC NORTH NAD83	
N - 360248.54	E - 1588820.75

- 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 THAN 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



PROPERTY TIES

L1 - S73°28'05"W 908.5'

L2 - N50°03'32"E 1625.8'

BLIZZARD 4H MINERAL OWNERSHIP

421	- SOMERSET MINERALS, LP, ET AL
418	- ROGER D. AND DARLENE F. BLIZZARD, ET AL
417	- VIRGINIA DIANNE THOMPSON, ET AL
131	- JAMES R. AND SANDRA I. SWAN, ET AL
54	- HAESSLY LAND AND TIMBER CO., LLC
84	- JUDITH M. ROGERS, ET AL

LEGEND OF PROPERTIES

A - BLIZZARD	2-21-8,	3.747Ac
B - BENNETT,	2-21-7,	1.75 Ac

FILE NO. 8790-003-18

DRAWN BY DMS

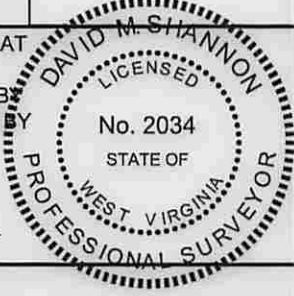
SCALE 1 INCH = 2000 FEET

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



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

LDG Larson Design Group

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

DATE 4-16-2015

OPERATORS WELL NO. BLIZZARD 4H

API WELL NO. 47 095 02242

STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL

IF "GAS", PRODUCTION STORAGE DEEP SHALLOW

LOCATION: WATERSHED GORRELL RUN - MIDDLE ISLAND CREEK ELEVATION 1004'

COUNTY/DISTRICT TYLER / ELLSWORTH QUADRANGLE SHIRLEY - SEC. 1

SURFACE OWNER ROGER D. BLIZZARD & RUTH E. SPENCER ACREAGE 90.17 ± **05/22/2015**

OIL & GAS ROYALTY OWNER SEE TABLE ABOVE ACREAGE 388.59±

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 6516'

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

WW-6A1
(5/13)

Operator's Well No. Blizzard 4H

**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
----------------------	-----------------------	-----------------------	---------	-----------

(Please 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

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

Well Operator: Statoil USA Onshore Properties Inc.
By: Bekki Winfree *Bekki Winfree*
Its: Prin Cons D&W Tech

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

Blizzard #4H

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

TRACT #421

Lease Name or Number	Grantor, Lessor	Grantee, Lessee	Royalty	Book / Page
000161517-018	Brenda Lea Yoho	PetroEdge Energy, LLC	At least 1/8	402/718
000161517-017	William Baker	PetroEdge Energy, LLC	At least 1/8	402/715
N/A	PetroEdge Energy, LLC	Statoil USA Onshore Properties Inc.	Assignment	419/247

TRACT #418

Lease Name or Number	Grantor, Lessor	Grantee, Lessee	Royalty	Book / Page
000161517-003	Roger D. Blizzard and Darlene F. Blizzard, husband and wife	PetroEdge Energy, LLC	At least 1/8	399/242
N/A	PetroEdge Energy, LLC	Statoil USA Onshore Properties Inc.	Assignment	406/147
000161517-001	Carol Craig Rich	PetroEdge Energy, LLC	At least 1/8	411/463
N/A	PetroEdge Energy, LLC	Statoil USA Onshore Properties Inc.	Assignment	436/1

TRACT #417

Lease Name or Number	Grantor, Lessor	Grantee, Lessee	Royalty	Book / Page
000161517-010	Virginia Dianne Thompson	PetroEdge Energy, LLC	At least 1/8	418/312
000161517-001	Carol Craig Rich	PetroEdge Energy, LLC	At least 1/8	411/463
N/A	PetroEdge Energy, LLC	Statoil USA Onshore Properties Inc.	Assignment	436/1

TRACT #131

<u>Lease Name or Number</u>	<u>Grantor, Lessor</u>	<u>Grantee, Lessee</u>	<u>Royalty</u>	<u>Book / Page</u>
000115562-002	James R. and Sandra I. Swan, Co-Trustees of the Swan Living Trust, dated May 10, 2004	PetroEdge Energy, LLC	At least 1/8	400/694
000115562-003	Nita Powell, a widow	PetroEdge Energy, LLC	At least 1/8	401/249
N/A	PetroEdge Energy, LLC	Statoil USA Onshore Properties Inc.	Assignment	408/66

TRACT #54

<u>Lease Name or Number</u>	<u>Grantor, Lessor</u>	<u>Grantee, Lessee</u>	<u>Royalty</u>	<u>Book / Page</u>
	Haessly Land & Timber LLC (Lease dated 9/26/2014 – currently being filed of record – attached herein)	Statoil USA Onshore Properties, Inc.	At least 1/8	462/202

TRACT #84

<u>Lease Name or Number</u>	<u>Grantor, Lessor</u>	<u>Grantee, Lessee</u>	<u>Royalty</u>	<u>Book / Page</u>
000143450-005	Judith M. Rogers, a widow	PetroEdge Energy, LLC	At least 1/8	423/53
000143450-009	Leslie C. Townsend, a single woman	PetroEdge Energy, LLC	At least 1/8	425/64
N/A	PetroEdge Energy, LLC	Statoil USA Onshore Properties Inc.	Assignment	436/1

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

January 14, 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. 421
Title of Lawrence O. Price, et al.
to 95.88 acres oil and gas
waters of Elk Fork, Ellsworth District
Tyler County, West Virginia
Tax Map #15 parcel 33 and Tax Map #21 parcels 9 and 10

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, as of the 14th day of January, 2015.

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

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4709502242

RADCLIFF PLLC

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

Patrickradcliff@hotmail.com
304-295-6027

Date: February 19, 2015

Statoil North America, Inc.
2103 City West Boulevard/Suite 800
Houston, TX 77042
Attn: Joshua S. Ozment, Senior Landman
MAR LAN OPR

RE: **Index 418**
3.747 acres, **Tax Map No. 21 Parcel 8**
Ellsworth District, Tyler County, WV

TITLE OPINION CONCERNING STATE ROADS

Dear Statoil:

This Title Opinion Concerning State Roads pertains to the title to the oil and gas within and under any road which is shown to traverse or border the above referenced 3.747 acre tract, Tax Map No. 21 Parcel 8. I do hereby certify that I have made a personal examination of the documents of record in the Office of the Clerk of the County Commission of Tyler County, WV, and based upon such examination I report the following state of title:

There are no documents of record containing a conveyance or transfer of the oil and gas within and underlying the subject tract to the State of West Virginia. Based solely upon the omission of any such conveyance, I conclude that the State of West Virginia has no title to the oil and gas within and under the subject tract.

This Title Opinion Concerning State Roads is limited to matters appearing of record from March 20, 1861 to February 1, 2015 and is further subject to such limitations, defects, comments and other matters which will be set forth the Original Drilling Title Opinion to be prepared by the undersigned.

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Patrick N. Radcliff
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41 195
4709502242

MILLER LAW OFFICES, PLLC

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

*Also Admitted in Ohio

January 30, 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: **Tract Index No. 417**
Title of Charles M. Spencer, et al.
To 1.318 acres oil and gas
Waters of Gorrells Run, Ellsworth District
Tyler County, West Virginia
Tax Map #2-21, parcel 8.1

ORIGINAL DRILLING TITLE OPINION

DESCRIPTION OF LANDS

Tract: Tax Map #2-21, parcel 8.1, containing 1.318 acres, more or less, located in Ellsworth District, Tyler County, West Virginia, and being the same lands described in that certain Deed of record in Deed Book 397, at page 36, in Tyler County, West Virginia.

The land referred to in this document is situated on the waters of Gorrells Run, Ellsworth District, in the County of Tyler, State of West Virginia, and is described as follows:

BEGINNING at a point in the center of Gorrells Run Road and the point being the North East corner of the 3.747 acre field parcel, then with the center of Gorrells Run Road as shown on Drawing No. 2005-10806 which is made part of this description, S. 65 15 E. 43.96 feet to a point in the center of the above said road, then S. 68 52 feet to a point below the above said road, then with the said road, then with and binding on Blizzard's and Spencer's 5 acres for two lines, S. 13 03 W. 99.00 feet to a point, then S. 25 42 W. 197.97 feet to a point on the North edge of Gorrells Run at the mouth of the North-South Run, then, with Gorrells Run, N. 62 29 W. 198.04 feet to a point in Gorrells Run at the South East corner of the 3.747 acre field parcel, then, with and binding on the new division line which is the

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BP Mineral Holdings II LLC (.08436198 x .15) [L1] [L2]	.00000000	.01265430
Waco Oil & Gas Company, Inc. (.00781250 x .15) [L1] [L2]	.00000000	.00117188
Ann L. Zirkle (.07812500 x .15) [L7]	.00000000	.01171875
Dianne S. Thompson and Charles Wayne Thompson, as Trustees of the Virginia D. Thompson Living Trust (.12500000 x .15) [L6]	.00000000	.01875000
Ernest M. Smith (.05729167 x .15) [L14]	.00000000	.00859375
Donald A. Smith (.05729167 x .15) [L13]	.00000000	.00859375
Christine E. Smith (.02864583 x .15) [L4]	.00000000	.00429687
Lisa Sparks Young (.02864583 x .15) [L5]	.00000000	.00429687
Robert C. Craig (.03125000 x .17) [L8]	.00000000	.00531250
Carol Craig Rich (.03125000 x .17) [L9]	.00000000	.00531250
Flicky Homan (.02083333 x .17) [L10]	.00000000	.00354167
William Thomas Harvey (.02083333 x .17) [L11]	.00000000	.00354167
Pami Lynn Kranston (.02083333 x .17) [L12]	.00000000	.00354167
TOTAL	1.00000000	1.00000000

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State of West Virginia Ownership Under Public Roads

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Based on the materials examined in the Clerk's office, the State of West Virginia is not vested with an interest in ~~oil and gas~~ ^{oil and gas}, executive rights, or royalty under any public ~~Environmental Protection~~ ^{Environmental Protection} within the boundary of the subject tract. I arrived at this conclusion after reviewing the parcel on the tax map and noticing no county roads or turnpikes traversing it. Furthermore, there are no

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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.

INSTRUMENTS AFFECTING THE MINERAL ESTATE

Unless otherwise noted, all references to Books, Pages and Instrument Numbers in this Opinion shall refer to those located in the office of the Clerk of the County Commission of Tyler County, West Virginia.

OIL AND GAS ESTATE:

OIL AND GAS LEASES

L1.

OIL AND GAS LEASE

DATE: August 27, 2009
 FILED: September 1, 2009 (Memorandum Only)
 RECORDED: Deed Book 369, at page 300 (Memorandum Only)
 LESSOR: BRC Appalachian Minerals I LLC
 LESSEE: BRC Working Interest Company, L.L.C.
 LANDS DESCRIBED: The Subject Property, being part of 102 acres, located in Ellsworth District, Tyler County, West Virginia
 INTEREST COVERED: 25.00% oil and gas interest underlying the Subject Lands
 PRIMARY TERM: 6 years
 RENEWAL: The Lessee has the right to extend the primary term in accordance with the terms of the lease
 ROYALTY: 15.0%
 POOLING: Yes
 NOTE: The tract is misidentified on the Exhibit as being located exclusively at Tax Map 15, p/o 31 and 33. In addition, the parties extended the primary term of the lease until October 16, 2015 in Deed Book 369, at page 648.

L2.

OIL AND GAS LEASE

DATE: August 27, 2009
 FILED: September 1, 2009 (Memorandum Only)
 RECORDED: Deed Book 369, at page 648 (Memorandum Only)
 LESSOR: BRC Appalachian Minerals I LLC
 LESSEE: BRC Working Interest Company, L.L.C.
 LANDS DESCRIBED: The Subject Property, being part of 102 acres, located in Ellsworth District, Tyler County, West Virginia

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05/22/2015

December 15, 2014

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

Attention: Joshua S. Ozment
Senior Landman

Re: Tract **Index No. 131** - Prospect No. 20140127.6
Blizzard #2 S Unit - **Tax Parcel No. 2-21-14**
Swan Living Trust, et al 67.91 acres
Ellsworth District
Tyler County, West Virginia

ORIGINAL DRILLING TITLE OPINION

DESCRIPTION OF LANDS

Tax Parcel No. 2-21-14, containing 67.91 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 January 13, 2012, from Gregory F. Taylor, Mark E. Taylor, Carla M. Babe and Jack E. Taylor to Carl E. Taylor and wife, Elsie M. Taylor, recorded in Book 391, Page 181, 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 June 5, 1843 to October 8, 2014, to vest as follows:

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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.

INSTRUMENTS AFFECTING THE MINERAL ESTATE

Unless otherwise noted, all references to Books, Pages and Instrument Numbers in this Opinion shall refer to the public records of the Office of the Recorder of the county in which the Subject Lands are situated.

OIL AND GAS ESTATE:

OIL AND GAS LEASES

L1

OIL AND GAS LEASE

DATE: May 9, 2011
 FILED: June 24, 2011 (Memorandum Only)
 RECORDED: Book 384, Page 462 (Memorandum Only)
 LESSOR: Kathryn Martin Snodgrass and William Snodgrass, her husband
 LESSEE: PetroEdge Energy LLC
 LANDS DESCRIBED: The Subject Lands, being Tax Parcel No. 2-21-14, located in Ellsworth District, Tyler County, West Virginia
 INTEREST COVERED: None. See Objection and Requirement No. 5 below.
 PRIMARY TERM: 5 years
 RENEWAL: None
 ROYALTY: One-eighth (1/8)
 EXAMINER'S NOTE: See Objection and Requirement No. 5 below.

L2

OIL AND GAS LEASE

DATE: August 20, 2012
 FILED: September 19, 2012 (Memorandum Only)
 RECORDED: Book 400, Page 694 (Memorandum Only)
 LESSOR: James R. Swan and Sandra I. Swan, Co-Trustees of The Swan Living Trust, dated May 10, 2004
 LESSEE: PetroEdge Energy LLC
 LANDS DESCRIBED: The Subject Lands, being Tax Parcel No. 2-21-14, located in Ellsworth District, Tyler County, West Virginia
 INTEREST COVERED: 13/16 oil and gas interest under **RECEIVED** **Office of Oil and Gas** **FEB 20 2015** Subject Lands INsofar ONLY as said lands cover and include all depths and formations from the stratigraphic equivalent of 250'

WV Department of
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05/22/2015

RADCLIFF PLLC

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

patrickradcliff@hotmail.com
304-295-6027

Date: October 17, 2014

Statoil North America, Inc.
2103 City West Boulevard/Suite 800
Houston, TX 77042
Attn: Joshua S. Ozment, Senior Landman
MAR LAN OPR

TYLER
INDEX # 54

RE: Haessly Land and Timber, LLC
75.25 acres, Ellsworth District
Tyler County, WV
Index 54, p/o Tax Map 21 Parcel 53

FINAL TITLE OPINION

Dear Statoil:

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, I hereby certify that I have examined the title upon the above-referenced property and report the following state of title:

I. LEASEHOLD ESTATE

A. DESCRIPTION OF SUBJECT LEASES

1. Unrecorded Memorandum of Oil and Gas Lease dated September 26, 2014, by and between Haessly Land and Timber, LLC, Lessor, and Statoil USA Onshore Properties, Inc, a corporation, Lessee, upon a tract said to contain 75.25 acres, situate in Ellsworth District and further described as being Map 21, part of Parcel 53 and further described as property conveyed to the lessor by Deed of record in Deed Book 3378 at page 101A.

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E. LIENS AND ENCUMBRANCES

1. 2014 Real Property taxes are paid. 2015 Real property taxes are a lien upon the oil and gas although not yet due, ascertainable and payable. The subject lease is subject to said lien which has priority over all other liens or transfers of or upon the oil and gas interest.

F. INTERESTS OF STATE OF WVA IN ROADS AND EASEMENTS

1. According to the county tax maps, there appear to be no county roads or roads which could be identified as turnpikes traversing or bordering the subject tracts.
2. There are no conveyances of record to the State of West Virginia or the County Commission (formerly Court) for roads or other easements from the owners of the oil and gas during the period of this search.
3. Therefore, the State holds no interest in the oil and gas underlying the subject property which would affect the subject lease.

NOTE: However, the tax maps indicate that a road, identified as Route 18 lies close to and southwest of the subject tracts and is accessible by a private right of way. It is believed that this Route 18 was formerly known as the Sistersville to Salem Turnpike.

Upon consultation with legal staff of the West Virginia Department of Transportation, it appears that the position of the State of West Virginia is that any country road taken into the state highway system by the 1933 act of the legislature and subsequent acts to include 1963 or any road labeled by the Department as an "Ancient Turnpike", includes the minerals underlying said road. However, a final determination cannot be made until all necessary information is presented to it.

Accordingly, if Statoil intends to drill under said road, it is recommended that a request for determination be made to the West Virginia Department of Transportation by email addressed as follows: brenda.c.ellis@wv.gov cc brenda.c.ellis@wv.gov containing relevant information such as road name and location. The contact person for the Department is Eric B. Hudnall, ph. 304-558-0444.

The identification of the ownership of the minerals, including the oil and gas, underlying said road is subject to the determination made by the West Virginia Department of Transportation or as ultimately determined by a court of law.

G. RIGHTS OF WAY

The following rights of way were granted by owners of the surface but could affect oil and gas operations:

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MILLER LAW OFFICES, PLLC

KENNETH R. MILLER
 KENNETH ALEXANDER MILLER II*

*Also Admitted in Ohio

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

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

November 14, 2014

Statoil Gulf Services, LLC
 Attn: Joshua S. Ozment, Senior Landman
 MAR LAN OPR
 2103 City West Blvd, Suite 800
 Houston, TX 77042

INDEX # 84

Re: Title of James H. Hill Residuary Trust, et al.
 to 144.2625 acres oil and gas
 waters of Elk Fork, Ellsworth District
 Tyler County, West Virginia
 Tax Map #22, parcel 42

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 and Sheriff's Office of Tyler County, West Virginia relative to the captioned tract, as of the 1st day of May, 2014. Said records were delivered to me by your agents and are subject to those disclosures and omissions in the indices and documents of record. Additionally, the opinions recited herein are based upon the assumption of the genuineness of the instruments examined, including signatures and notarial certificates.

My examination includes an inquiry into the following matters of record affecting title to this tract, to wit: adverse conveyances, unreleased deeds of trust, judgment liens, executions, lis pendens, mechanics liens, delinquent taxes for the past five years, federal and state tax liens and any liens arising from levies by municipal, county or state governments which appear in the general lien index in said Clerk's office. Real property taxes for the current taxable year have also been subject to inquiry and are reported, subject to the accuracy of the information provided by the aforesaid County Sheriff's Office.

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This certificate is subject to the following matters of record which are encumbrances upon the subject tract or defects in title.

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(a) There are easements and rights of way of record.

(b) Rights of entry and development by the coal owners.

(c) Conveyances in the chain of title could have resulted in overlaps, discrepancies in acreage or other encroachments upon the subject tract which might affect the use or enjoyment thereof. To the extent possible these matters should be investigated through physical inspection and survey.

(d) The use of this tract by the surface owners is subject to the rights reserved by predecessors in title as to the minerals, subject to certain exceptions contained in the actual documents comprising the chain of title and applicable statutes enacted in this regard.

(e) This certificate is made subject to what would be shown by a complete physical inspection of the premises and an accurate survey and assumes proper access to said property.

All real estate taxes for the previous five years have been examined for delinquencies and the records of the lands sold for delinquent real estate taxes indicate no unredeemed sales of said property.

Subject to the foregoing, I hereby certify that I have examined the title upon the above-referenced property and report the following state of title:

SCHEDULE A

1. The estate or interest in the land described or referred to in this document is: Fee Simple.

2. Title to the estate or interest is vested as follows:

State of West Virginia Ownership Under Public Roads

Based on the materials examined in the County Clerk's office, the State of West Virginia is not vested with an interest in the subject oil and gas, executive rights, or royalty under any public roads located within the boundary of the subject tract.

(a) **SURFACE:**

22.22222% (2/9) of the surface overlying the 144.26 acre oil and gas tract is owned by Elsie Lorna McIntyre Hill, Trustee for

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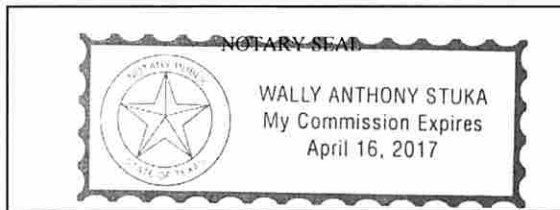
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WV Department of
Environmental Protection

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:	<u>Statoil USA Onshore Properties Inc.</u>	Address:	<u>2103 City West Boulevard, Suite 800</u>
By:	<u>Bekki Winfree/ <i>Bekki Winfree</i></u>		<u>Houston, TX 77042</u>
Its:	<u>Sr. Regulatory Advisor</u>	Facsimile:	<u>713-918-8290</u>
Telephone:	<u>713-485-2640</u>	Email:	<u>BEKW@Statoil.com</u>



Subscribed and sworn before me this 5 day of January 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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WV Department of
Environmental Protection
05/22/2015

WW-6A
(9-13)

API NO. 47- _____ - _____
OPERATOR WELL NO. _____
Well Pad Name: Blizzard 4H

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: 12/15/2014 **Date Permit Application Filed:** 01/05/2015

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: Roger Dale Blizzard
 Address: 3135 Gorrells Run Road
Middlebourne, WV 26149
 Name: Ruth Spencer
 Address: 3085 Gorrells Run Road
Middlebourne, WV 26149

COAL OWNER OR LESSEE
 Name: Roger Dale Blizzard
 Address: 3135 Gorrells Run Road
Middlebourne, WV 26149

COAL OPERATOR
 Name: _____
 Address: _____

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

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
 Name: Randy Lancaster
 Address: 3403 Gorrells Run Road
Middlebourne, WV 26149

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

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

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 NATURAL GAS STORAGE FIELD
 FEB 20 2015

*Please attach additional forms if necessary
 WV Department of
 Environmental Protection

WW-6A
(8-13)

API NO. 47- _____ - _____
OPERATOR WELL NO. _____
Well Pad Name: Blizzard 4H

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

Well Location Restrictions

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

05/22/2015

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(8-13)

API NO. 47- _____ - _____
OPERATOR WELL NO. _____
Well Pad Name: Blizzard 4H

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

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WV Department of
Environmental Protection

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

05/22/2015

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.

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WV Department of
Environmental Protection

05/22/2015

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API NO. 47- _____
OPERATOR WELL NO. _____
Well Pad Name: Blizzard 4H

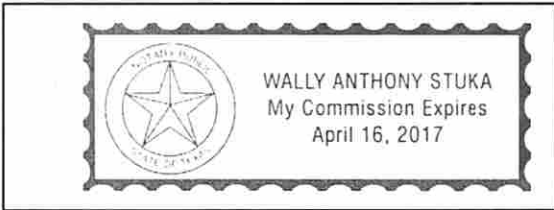
Notice is hereby given by:

Well Operator: Statoil USA Onshore *Wally Anthony Stuka*
Telephone: 713-918-8200
Email: BEKW@Statoil.com

Address: 2103 CityWest Blvd., Building 4, Suite 800
Houston, Texas 77042
Facsimile: 913-918-8290

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.



Subscribed and sworn before me this 5 day of January 2015.

Wally Anthony Stuka Notary Public

My Commission Expires April 16, 2017

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WV Department of
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05/22/2015

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Blizzard 4H WW-6A

Additional Coal Owner:

Ruth Spencer
3085 Gorrells Run Road
Middlebourne, WV 26149



Additional Surface Owner of Water Well and/or Water Purveyor(s):

Gary Bennett
2908 Gorrells Run Road
Middlebourne, WV 26149



Ruth Spencer
3085 Gorrells Run Road
Middlebourne, WV 26149



Roger Blizzard
3135 Gorrells Run Road
Middlebourne, WV 26149



Christy Kile
3226 Gorrells Run Road
Middlebourne, WV 26149

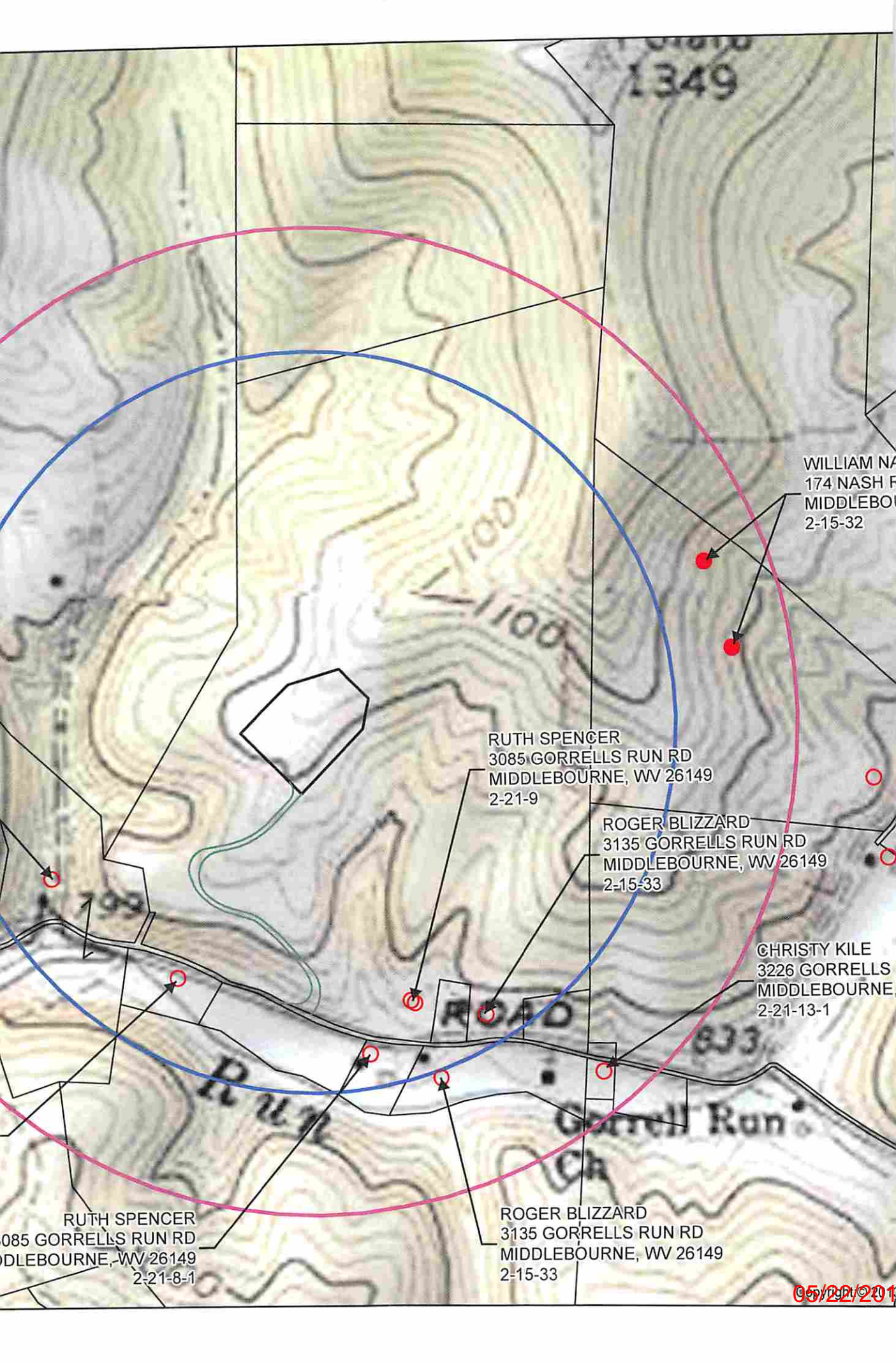


William Nash
174 Nash Run Road
Middlebourne, WV 26149



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WILLIAM NA
174 NASH F
MIDDLEBO
2-15-32

RUTH SPENCER
3085 GORRELLS RUN RD
MIDDLEBOURNE, WV 26149
2-21-9

ROGER BLIZZARD
3135 GORRELLS RUN RD
MIDDLEBOURNE, WV 26149
2-15-33

CHRISTY KILE
3226 GORRELLS
MIDDLEBOURNE
2-21-13-1

RUTH SPENCER
3085 GORRELLS RUN RD
MIDDLEBOURNE, WV 26149
2-21-8-1

ROGER BLIZZARD
3135 GORRELLS RUN RD
MIDDLEBOURNE, WV 26149
2-15-33

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

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

Notice Time Requirement: Notice shall be provided at least **TEN (10)** days prior to filing a permit application.

Date of Notice: 12/15/2015 **Date Permit Application Filed:** 01/05/2015

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

HAND DELIVERY CERTIFIED MAIL RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: Roger Dale Blizzard
Address: 3135 Gorrells Run Road
Middlebourne, WV 26149

Name: Ruth Spencer
Address: 3085 Gorrells Run Road
Middlebourne, WV 26149

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: West Virginia UTM NAD 83 Easting: -512800.64
County: Tyler Northing: -4372109.03
District: Ellsworth Public Road Access: County Road 34
Quadrangle: Shirley - Sec. 1 Generally used farm name: Blizzard Farm
Watershed: Gorrell Run - Middle Island Creek

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. 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.

Notice is hereby given by:

Well Operator: Statoil USA Onshore
Address: 2103 CityWest Blvd. Building 4, Suite 800
Houston, Texas 77042
Telephone: 713-918-8200
Email: BEKW@Statoil.com
Facsimile: 713-918-8290

Authorized Representative: Bekki Moore
Address: 2103 CityWest Blvd. Building 4, Suite 800
Houston, TX 77042
Telephone: 713-918-8200
Email: BEKW@Statoil.com
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.

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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: 12/15/2014 **Date Permit Application Filed:** 01/05/2015

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

CERTIFIED MAIL HAND
RETURN RECEIPT REQUESTED 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: Roger Dale Blizzard
Address: 3135 Gorrells Run Road
Middlebourne, WV 26149

Name: Ruth E. Spencer
Address: 3085 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:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>-512800.64</u>
County:	<u>Tyler</u>		Northing:	<u>-4372109.03</u>
District:	<u>Ellsworth</u>	Public Road Access:	<u>County Road 34</u>	
Quadrangle:	<u>Shirley - Sec. 1</u>	Generally used farm name:	<u>Blizzard Farm</u>	
Watershed:	<u>Gorrell Run - Middle Island Creek</u>			

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
Telephone: 713-918-8200
Email: BEKW@Statoil.com

Address: 2103 CityWest Blvd. Building 4, Suite 800
Houston, Texas 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.

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Office of Oil and Gas
FEB 20 2015
WV Department of
Environmental Protection

4709502242



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

October 30, 2014

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 Blizzard Pad Tyler County
Blizzard 4H

Dear Mr. Martin,

The West Virginia Division of Highways has issued Permit # 06 -2014-0557 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,

A handwritten signature in blue ink that reads "Gary K. Clayton".

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

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

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Frac Additives

BIO CLEAR 2000

Components	CAS#
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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05/22/2015

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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Office of Oil and Gas

FEB 20 2015

WV Department of
Environmental Protection



APPROVED
WVDEP OOG
1/21/2015

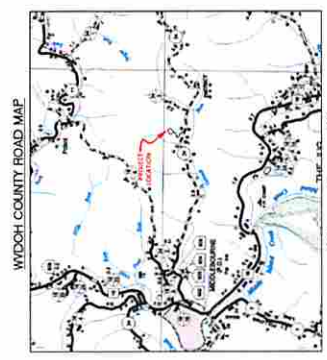
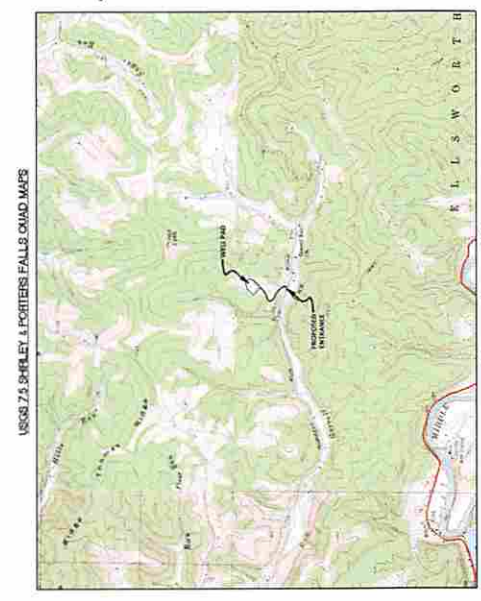
BLIZZARD (WV-18) WELL PAD

SITE DESIGN AND CONSTRUCTION PLANS

EROSION AND SEDIMENT CONTROL PLANS

ELLSWORTH DISTRICT, TYLER COUNTY, WEST VIRGINIA
MIDDLE ISLAND CREEK WATERSHED

Electronic Version of These Plans May Be Viewed at: Q:\OIL GAS\SAY FILES\REVIEWS



APR9502216
API#9502231
API#9502242

LOCAL COORDINATES
ACCESS ROAD ENTRANCE
LATITUDE: 39 452423 LONGITUDE: -80 051066 (NAD 83)
N 437787.74 E 918997.22 (UTM ZONE 17 46T05 46D 83)

CENTER OF WELL PAD
LATITUDE: 39 488853 LONGITUDE: -80 060815 (NAD 83)
N 437275.64 E 918988.41 (UTM ZONE 17 46T05 46D 83)

GENERAL DESCRIPTION
THE ACCESS ROAD(S), WELL PAD, AND WATER CONTAINMENT PAD ARE BEING CONSTRUCTED TO AND IN THE DEVELOPMENT OF INDIVIDUAL OIL AND GAS WELLS.

MISCELLANEOUS
THE UTILITY OF WEST VIRGINIA FOR THE LOCATING OF UTILITIES PRIOR TO THIS PROJECT DESIGN. PHONE: 8004915337

IN ADDITION, MISS UTILITY WILL BE CONTACTED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION FOR THIS PROJECT.

ENTRANCE PERMIT
STATION WILL OBTAIN AN ENVIRONMENTAL ZONING PERMIT FROM MISS UTILITY FROM THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL DESIGN OF HIGHWAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

LANDSCAPE/VEGETATION
THESE ARE BEING PERFORMED BETWEEN APRIL 15 TO APRIL 16, 2014 BY LARSON DESIGN GROUP TO PLANT THE SITE FOR WATERS AND WETLANDS THAT ARE MOST LIKELY WITHIN THE REGULATORY JURISDICTION OF THE U.S. ARMY CORPS OF ENGINEERS (USACE) AND/OR THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL DESIGN. THESE ARE BEING PERFORMED BY LARSON DESIGN GROUP AND SUMMARIZED IN THE FIELD NOTES. THE MAPS DO NOT, IN ANY WAY, REPRESENT A JURISDICTIONAL DETERMINATION OF THE U.S. ARMY CORPS OF ENGINEERS OR THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL DESIGN. IT IS STRONGLY RECOMMENDED THAT THE AFORESAID AGENCIES BE CONTACTED IN AN EFFORT TO OBTAIN NECESSARY PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION. THESE PERMITS INCLUDE THE NECESSARY PERMITS FROM THE FEDERAL AND/OR STATE REGULATORY AGENCIES PRIOR TO ANY PROPOSED IMPACTS TO WATERS OF THE U.S., INCLUDING WETLAND FILLS AND STREAM CROSSINGS.

GEOLOGICAL/GEOTECHNICAL
A GEOLOGICAL INVESTIGATION OF THE PROPOSED SITE WAS PERFORMED BY LARSON DESIGN GROUP, INC. IN APRIL 2014. THE RESULTS OF THIS INVESTIGATION ARE SUMMARIZED IN THE FIELD NOTES. THE INFORMATION AND RECOMMENDATIONS FROM THIS REPORT WERE USED IN THE PREPARATION OF THESE PLANS. PLEASE READ THE GEOLOGICAL INVESTIGATION REPORT FOR THIS SITE PRIOR TO COMMENCING CONSTRUCTION.

REGULATORY AGENCIES
STATION
2105 CITY WEST BLVD., SUITE 800
KINGSTON, WV 26159
PHONE: (733) 916-8200

CLIENT
CENT LOUIS - MANAGER, CIVIL CONSTRUCTION
OFFICE: (733) 916-8171

DESIGNER/ARCHITECT
LARSON DESIGN GROUP, INC.
2105 CITY WEST BLVD., SUITE 800
KINGSTON, WV 26159
OFFICE: (733) 916-8603 CELL: (570) 220-7482

DESIGNER'S NOTES
1. THESE ARE NO NATURALLY OCCURRING STREAMS, WETLANDS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE WELL PAD AND LOD.

2. THERE ARE NO NATURALLY OCCURRING TROUT STREAMS WITHIN 250 FEET OF THE WELL PAD AND LOD.

3. THERE ARE NO CROWFOOTER INTAKE OR PUBLIC WATER SUPPLY FACILITIES WITHIN 1000 FEET OF THE WELL PAD AND LOD.

4. THERE ARE NO APPARENT EXISTING WATER WELLS OR EXHAUSTED SPRINGS WITHIN 250 FEET OF THE WELL PAD AND LOD.

5. THERE ARE NO OCCUPIED DWELLING STRUCTURES WITHIN 525 FEET OF THE CENTER OF THE WELL PAD (WELLS) BEING DRILLED.

6. THERE ARE NO AGRICULTURAL BUILDINGS LARGER THAN 2,500 SQUARE FEET WITHIN 525 FEET OF THE CENTER OF THE WELL PAD.

SHEET INDEX

- 1 COVER SHEET
- 2-3 CONSTRUCTION AND EAS CONTROL NOTES
- 4 EXISTING CONDITIONS
- 5 OVERALL PLAN SHEET INDEX & VOLUMES
- 6 EROSION & SEDIMENTATION CONTROL PLAN
- 7 WELL PAD GRADING PLAN AND CONTAINMENT PLAN
- 8 FACILITY LAYOUT
- 9-13 ACCESS ROAD SECTIONS
- 14 WELL PAD SECTIONS AND GEOTECHNICAL DETAILS
- 15-17 CONSTRUCTION DETAILS
- 18-19 RECLAMATION PLANS

STREAM NAME	STREAM CROSSING CLASS	STREAM CROSSING METHOD	STREAM CROSSING LENGTH (FT)	TOTAL PERMANENT IMPACT (LF)
ST-1	INTERMITTENT	EAS CONTROLS	47	-
ST-2	INTERMITTENT	CLAYDIE BRIDGE	68	-
ST-3	EPHEMERAL	CULVERT INSTALLATION	76	-

PROPOSED WELL NAME	PROPOSED WELL TYPE	PROPOSED WELL DEPTH (FT)	PROPOSED WELL DIAMETER (IN)	PROPOSED WELL LOCATION (Easting, Northing)	PROPOSED WELL DEPTH (FT)	PROPOSED WELL DIAMETER (IN)	PROPOSED WELL LOCATION (Easting, Northing)
1H	N	15	6	508297.03	512001.84	15	508297.03
2H	N	15	6	508297.03	512001.84	15	508297.03
3H	N	15	6	508297.03	512001.84	15	508297.03
4H	N	15	6	508297.03	512001.84	15	508297.03
5H	N	15	6	508297.03	512001.84	15	508297.03

MISS Utility of West Virginia
1-800-245-4848
West Virginia State Law
(Section XIV, Chapter 24-C)
Requires that you call two business days before you dig in the state of West Virginia!
IT'S THE LAW!

GENERAL DESCRIPTION OF THE PROJECT AND THE INFORMATION ATTACHED HEREIN TO HAVE BEEN PREPARED IN ACCORDANCE WITH THE WEST VIRGINIA CODE OF STATE RULES, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS (OSR 30-6)

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05/22/2015



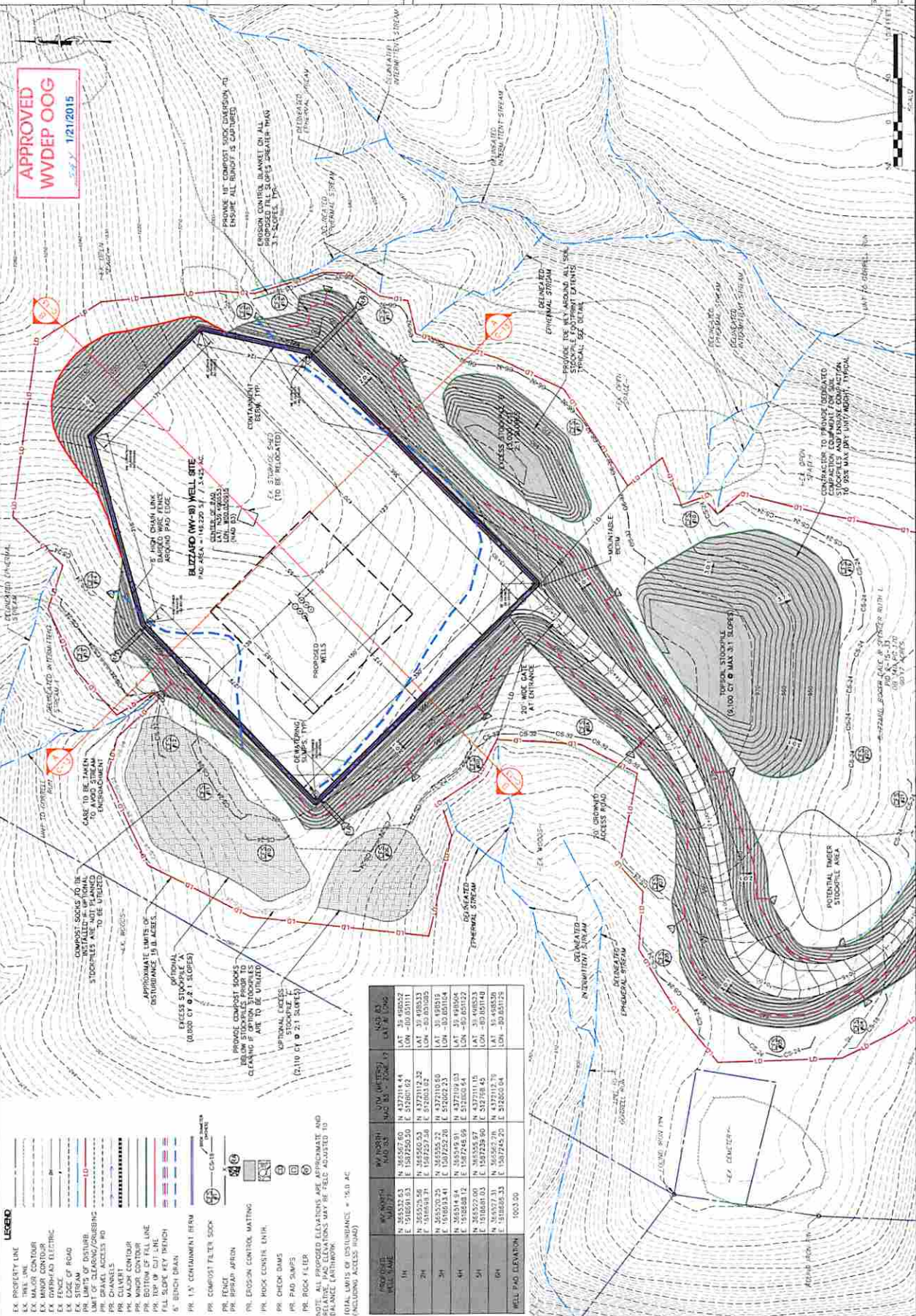
NO.	DATE	BY	DESCRIPTION
1	1/19/2015	WV	WELL PAID ELEVATION
2	1/27/2015	WV	WELL PAID ELEVATION
3	2/10/2015	WV	WELL PAID ELEVATION

STATION
 2103 CITY WEST BLVD., SUITE 800
 HOUSTON, TX 77062
 PHONE 713.918.0200

BLUMBROUGH DISTRICT, TYLER COUNTY, WEST VIRGINIA
BLIZZARD (WV-18) WELL SITE
 EROSION & SEDIMENTATION CONTROL PLAN

Stetson
 2505 Commerce Center
 Lexington, KY 40502
 PHONE 606.277.2540 FAX 606.277.3245
 WWW.STETSONENGINEERING.COM

7 OF 19
 PROJECT NO. 2300-100-18



- LEGEND**
- EX PROPERTY LINE
 - EX MAJOR CONTOUR
 - EX MINOR CONTOUR
 - EX DITCH/ROAD ELECTRIC
 - EX EDGE OF ROAD
 - EX STREAM
 - EX LIMITS OF DISTURB
 - EX CHANNELS
 - PR GRAVEL ACCESS ROAD
 - PR CULVERT
 - PR MINOR CONTOUR
 - PR MINOR CONTOUR
 - PR BOTTOM OF FALL LINE
 - PR TOP OF CUT LINE
 - ELL SLOPE KEY (FRENCH)
 - ELL SLOPE KEY (DRAIN)
 - PR 1.5' CONFINEMENT FIRM
 - PR COMPOST TELEFLEX SOCK
 - PR FENCE
 - PR BERING ASPEN
 - PR EROSION CONTROL MATTING
 - PR EROSION CONTROL MATTING
 - PR CHECK DAMS
 - PR PAID SLUMPS
 - PR ROCK FLEDER
 - PR 10' WIDE GATE AT ENTRANCE
 - PR 20' WIDE GATE AT ENTRANCE
 - PR 30' WIDE GATE AT ENTRANCE
 - PR 40' WIDE GATE AT ENTRANCE
 - PR 50' WIDE GATE AT ENTRANCE
 - PR 60' WIDE GATE AT ENTRANCE
 - PR 70' WIDE GATE AT ENTRANCE
 - PR 80' WIDE GATE AT ENTRANCE
 - PR 90' WIDE GATE AT ENTRANCE
 - PR 100' WIDE GATE AT ENTRANCE

WELL NAME	AC NORTH	WV NORTH	WV WEST	NAD 83	NAD 83
	1000.00	1000.00	1000.00	EASTING	NORTHING
1H	N 355350.53	N 355295.60	N 437211.44	E 161000.00	E 161000.00
2H	N 355350.53	N 355295.60	N 437211.44	E 161000.00	E 161000.00
3H	N 355350.53	N 355295.60	N 437211.44	E 161000.00	E 161000.00
4H	N 355350.53	N 355295.60	N 437211.44	E 161000.00	E 161000.00
5H	N 355350.53	N 355295.60	N 437211.44	E 161000.00	E 161000.00
6H	N 355350.53	N 355295.60	N 437211.44	E 161000.00	E 161000.00
7H	N 355350.53	N 355295.60	N 437211.44	E 161000.00	E 161000.00
8H	N 355350.53	N 355295.60	N 437211.44	E 161000.00	E 161000.00
9H	N 355350.53	N 355295.60	N 437211.44	E 161000.00	E 161000.00
10H	N 355350.53	N 355295.60	N 437211.44	E 161000.00	E 161000.00

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05/22/2015