



west virginia department of environmental protection

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

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

June 08, 2015

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-10303094, issued to AMERICAN ENERGY-MARCELLUS, LLC, 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

Operator's Well No: REILLY N GRN WZ 7H
Farm Name: J.S. BOOTH ESTATE & DALLISON
API Well Number: 47-10303094
Permit Type: Horizontal 6A Well
Date Issued: 06/08/2015

Promoting a healthy environment.

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.

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

1) Well Operator: American Energy- Marcellus 4945100500 Wetzel Green Center Point
Operator ID County District Quadrangle

2) Operator's Well Number: Reilly N GRN WZ 7H Well Pad Name: Reilly GRN WZ

3) Farm Name/Surface Owner: David Fluharty Public Road Access: Left-hand Fork Road (CR 13/8)

4) Elevation, current ground: 1500' Elevation, proposed post-construction: 1472.5'

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, Approximate TVD 7460', Anticipated thickness 50', Associated Gradient Pressure @ 1.1 psi/ft

8) Proposed Total Vertical Depth: 7460'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 15500'

11) Proposed Horizontal Leg Length: 7284'

12) Approximate Fresh Water Strata Depths: 690'

13) Method to Determine Fresh Water Depths: Based on drilling history in nearby wells

14) Approximate Saltwater Depths: 1526'

15) Approximate Coal Seam Depths: 1260'

16) Approximate Depth to Possible Void (coal mine, karst, other): None anticipated

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

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

[Handwritten signature]
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4710303094

WW-6B
(10/14)

API NO. 47- _____
 OPERATOR WELL NO. Reilly N GRN WZ 7H
 Well Pad Name: Reilly GRN WZ

18)

CASING AND TUBING PROGRAM

| TYPE | Size (in) | New or Used | Grade | Weight per ft. (lb/ft) | FOOTAGE: For Drilling (ft) | INTERVALS: Left in Well (ft) | CEMENT: Fill-up (Cu. Ft.)/CTS |
|--------------|-----------|-------------|-------|------------------------|----------------------------|------------------------------|-------------------------------|
| Conductor | 20" | New | J-55 | 94# | 100' | 100' | 330, CTS |
| Fresh Water | 13-3/8" | New | J-55 | 54.5# | 1350' | 1350' | 625, CTS |
| Coal | | | | | | | |
| Intermediate | 9-5/8" | New | J-55 | 40# | 3500' | 3500' | 1650, CTS |
| Production | 5-1/2" | New | P-110 | 20# | 15500' | 15500' | 4375 |
| Tubing | 2-3/8" | New | N-80 | 4.7# | N/A | 7460' | N/A |
| Liners | | | | | | | |

| TYPE | Size (in) | Wellbore Diameter (in) | Wall Thickness (in) | Burst Pressure (psi) | Max. Associated Surface Pressure (psi) | Cement Type | Cement Yield (cu. ft./k) |
|--------------|-----------|------------------------|---------------------|----------------------|--|------------------------|--------------------------|
| Conductor | 20" | 24" | .438 | 2110 | 50 | Class A | 1.2 |
| Fresh Water | 13-3/8" | 17-1/2" | .38 | 2740 | 600 | Class A | 1.2 |
| Coal | | | | | | | |
| Intermediate | 9-5/8" | 12-1/4" | .395 | 3950 | 1500 | Premium HV 50-50 Poz H | Tail 1.27, Lead 1.51 |
| Production | 5-1/2" | 8-3/4" | .361 | 12640 | 5000 | Premium HV 50-50 Poz H | Tail 1.27, Lead 1.51 |
| Tubing | 2-3/8" | 4.778" | .19 | 11100 | | | |
| Liners | | | | | | | |

PACKERS

| | | | | |
|-------------|--|--|--|--|
| Kind: | | | | |
| Sizes: | | | | |
| Depths Set: | | | | |

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

The well will be spud using a conductor rig. It will drill down 100' per the casing program. It will set 20" casing and circulate cement back to surface. The conductor rig will move off location, a rig capable of drilling to TD will move on and finish drilling the well. We will drill on air with a tri-cone bit to 1250' and set freshwater casing. We will then continue drilling vertically and setting casing per the attached casing program to TD.

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

We plan to hydraulically fracture/stimulate the well utilizing the "slickwater" frac technique. We will plug and perforate through cased hole and frac with an anticipated max pressure that will not exceed 10,000 psi.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 19.02

22) Area to be disturbed for well pad only, less access road (acres): 3.32

23) Describe centralizer placement for each casing string:

Conductor: N/A
Surface: Centralizer every 3 joints or 120'
Intermediate: Centralizer every 3 joints or 120'
Production: Run 1 spiral centralizer every 120' from the first 5.5" long joint to the top of the curve
Run 1 spiral centralizer every 200' from the top of the curve to surface

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

Conductor: Class A Cement (see attachment for complete description)
Surface: Class A Cement (see attachment for complete description)
Intermediate: Premium H/50-50 Poz H Cement (see attachment for complete description)
Productions: Premium H/50-50 Poz H Cement (see attachment for complete description)

Handwritten signature and date: 5/19/15

25) Proposed borehole conditioning procedures:

The wellbore will be properly circulated at TD of each section until as much of the residual drill cuttings have been removed from the wellbore as possible, residual drilling gas has been circulated out and until the mud and wellbore are both constant and stable. Mud properties will be adjusted as needed to stabilize wellbore. Circulating hole clean may vary from well to well and hole section to hole section.

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*Note: Attach additional sheets as needed.

Cement Additives for WW-6B

20" conductor: 15.6 ppg Class A + 3% CC + 0.25 lb/sk celloflake

13-3/8" Surface: 15.6 ppg Class A + 3% CC + 0.25 lb/sk celloflake

9-5/8" Intermediate: 15.3 ppg Class H + 5%KCL + 0.6% C-12 + 0.4% C-41P + 0.1% C-51 + 0.125 lb/sk celloflake

5-1/2" Production: Lead - 50/50 poz H 14.2 ppg + 0.5 %FL 17 +5% Gyp + 0.1%C41P + 0.15% C51 + 0.1% C20 Tail - Class H 15.6 ppg Acid Soluble --- 50% CaCO3 + 0.75% FI 17 + 0.1% C41P + 0.15%C45 +3pps gilsonite + 0.2% C20

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Cement Additives for WW-6B

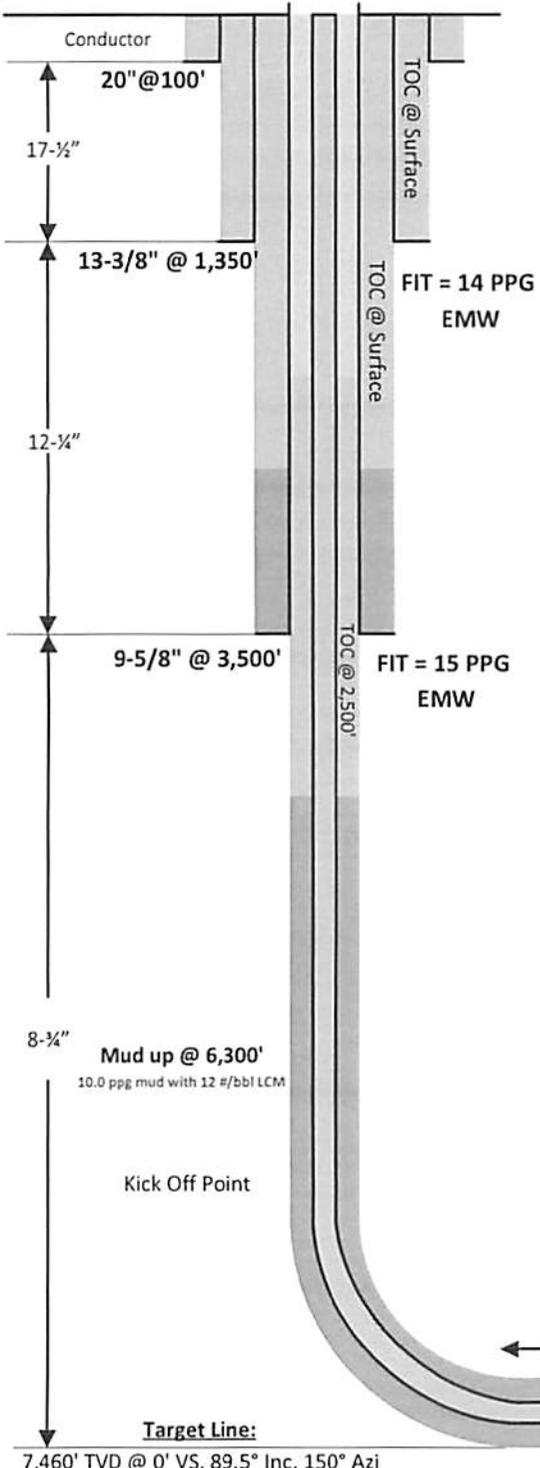
Class H Premium + 0.75% FI 17 + 0.1% C41P + 0.15% C45 + 3pps gilsonite + 0.2% C20 Additives are FL-17, C41-P, C-45, Gilsoite, and C-20

50/50 Poz H + 0.5 %FL 17 + 5% Gyp + 0.1% C41P + 0.15% C51 + 0.1% C20 Additives are FL-17, Gypsum, C41-P, C-51, and C-20

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| | | | | | |
|--|--|---------------|---------------------------|-------------|--------------------------------|
|  <p>AMERICAN ENERGY APPALACHIA</p> | Reilly GRN WZ | | | | |
| | County, State: Wetzel, West Virginia | | Township: Grant | Location: | Formation: Marcellus |
| | Coordinates: NAD 27 | SHL Lat/Long: | RKB / Elevation: | AFE DC/CWC: | |
| | BHL Lat/Long: | USDW: | Property #: | AFE #: | |
| Rig: | | Target Line: | | | |



| Interval | Hole size (in) | Size (in) | Weight #/ft | Grade | Conn. | Collapse (PSI) | Burst (PSI) | Depth (ft) | Cost \$/ft |
|--------------|----------------|-----------|-------------|-------|---------|----------------|-------------|------------|------------|
| Conductor | 26" | 20" | - | - | - | - | - | 100 | - |
| Surface | 17-1/2" | 13-3/8" | 54.5 | J-55 | BTC | 1,130 | 2,740 | 1,350 | 36 |
| Intermediate | 12-1/4" | 9-5/8" | 36 | J-55 | LTC | 2,020 | 3,520 | 3,500 | 22 |
| Production | 8-3/4" | 5-1/2" | 20 | P-110 | ULT-DQX | 11,110 | 12,640 | 16,000 | 22 |

| Interval | Slurry | Weight | Sxs | Yield | Excess | Cement Top |
|--------------|--------|----------|------|--------------|--------|------------|
| Surface | Lead | | | | 50% | Surface |
| | Tail | 15.6 ppg | 1200 | 1.20 cuft/sk | | |
| Intermediate | Lead | 13.5 ppg | 680 | 1.51 cuft/sk | 30% | 1000 |
| | Tail | 15.3 ppg | 820 | 1.27 cuft/sk | | |
| Production | Lead | 13.5 ppg | 650 | 1.51 cuft/sk | 10% | 2500 |
| | Tail | 15.3 ppg | 2200 | 1.27 cuft/sk | | |

| Formation | TVD | Sub Sea |
|-----------------|--------|---------|
| Freshwater | 690' | 810' |
| Pittsburgh Coal | 1,260' | 2,40' |
| Saltwater | 1,500' | |
| Big Injun | 2,560' | -1,060' |
| Big Injun Base | 2,760' | -1,260' |
| Berea | 3,100' | -1,600' |
| Gordon | 3,310' | -1,810' |
| Fifth Sand | 3,620' | -2,120' |
| Middlesex | 7,170' | -5,670' |
| Geneseo | 7,308' | -5,808' |
| Tully | 7,336' | -5,836' |
| Hamilton | 7,359' | -5,859' |
| Marcellus | 7,429' | -5,929' |
| Purcell | 7,433' | -5,933' |
| Lower Marcellus | 7,436' | -5,936' |
| Basal Marcellus | 7,457' | -5,957' |
| Onondaga | 7,480' | -5,980' |

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| AIR INTERVALS | | | | | SYNTHETIC OIL BASED MUD INTERVAL | | | | | | | | | |
|---------------|-----------------|-------------|----------------|-----------------|----------------------------------|------------------|----------------|--------------------|-----------------|----------|-----------------------------|-------|-------------|---------------|
| Interval | Depth (MD) | Rate (cfpm) | Water (bbl/hr) | Foamer (gal/hr) | Interval | Depth (MD) | Weight (#/gal) | Viscosity (sec/qt) | HTHP (ml/30min) | PV (cps) | YP (#/100 ft ²) | 6 RPM | WPS ppm | OWR % by vol |
| Surface | 0' - 1,350' | >5000 | 30-50 | 1/2 - 3/4 | Vertical | 6,300' - 6,800' | 10.0 - 10.5 | 50 - 60 | 4 - 6 | 18 - 24 | 10 - 12 | 6-9 | 150K - 180K | 75:25 - 70:30 |
| Intermediate | 1,350' - 3,510' | >5000 | 30-50 | 1/2 - 3/4 | Curve | 6,800' - 8,100' | 10.5 - 13.5 | 50 - 60 | 4 - 6 | 18 - 24 | 10 - 12 | 6-9 | | |
| Vert/Nudge | 3,510' - 6,300' | >5000 | 40-60 | 3/4 - 1 | Lateral | 8,100' - 16,000' | 13.5 - 13.7 | 50 - 60 | 4 - 6 | 18 - 24 | 10 - 12 | 6-9 | | |

WW-9
(9/13)

API Number 47 - 4710303094
Operator's Well No. Reilly N GRN WZ 7H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name American Energy - Marcellus, LLC OP Code 4945100500

Watershed (HUC 10) Fishing Creek Quadrangle Center Point

Elevation 1500' County Wetzel District Green

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: Closed loop system no pits will be used

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 see attached sheet titled UIC Wells and Landfills)
- Reuse (at API Number next anticipated well)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain)

Will closed loop system be used? If so, describe: yes; see attached sheet titled Closed loop typical description

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air, Freshwater mist, and Synthetic based oil

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

Additives to be used in drilling medium? see attached sheet titled drilling additives

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)

-Landfill or offsite name/permit number? see attached sheet titled UIC Wells and Landfills

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 [Signature]

Company Official (Typed Name) American Energy - Marcellus, LLC

Company Official Title Regulatory Technician

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Subscribed and sworn before me this 6 day of February, 20 15

[Signature] Notary Public

My commission expires 1/23/18



DmH
3-19-15

4710303094

Form WW-9

Operator's Well No. Reilly N GRN WZ 7H

American Energy - Marcellus, LLC

Proposed Revegetation Treatment: Acres Disturbed 19.02 Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.0

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch minimum of 2-3 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre

Seed Type lbs/acre

See attached

See attached

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: [Signature]

Comments: _____

Title: Oil & Gas Inspector

Date: 3-19-15

Field Reviewed? Yes No

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UIC WELLS and Landfills

| <u>Disposal Location</u> | <u>Type</u> | <u>Permit No.</u> |
|--------------------------|-------------|---------------------|
| Wetzel County Landfill – | Landfill | SWF-1021/WV010985 |
| Short Creek Landfill – | Landfill | SWP-1034/WV0109517 |
| Brooke County – | Landfill | SWF-1013/WV0109029 |
| Kemble - | UIC Well | 34-119-2-8780-00-00 |
| Elkhead- | UIC Well | 34-157-2-5511-00-00 |
| Kent Injection Well | UIC Well | 34-119-2-7350-00-00 |
| Moran Well | UIC Well | 34-089-2-4412-00-00 |

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Closed Loop Typical Description

A series of storage tanks that separate liquids and solids along with screen shakers, hydro cyclones, centrifuges and collection equipment (e.g., vacuum trucks, shale barges) may be on site. The wastes created are minimized and transferred off-site for disposal.

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Drilling Additives

Air mist system additives are commonly; Drilling Foam, Drilling Soap, and occasionally Shale Stabilizer (KCI).

Synthetic Oil Based Additives

The base oil is the main ingredient, and it will run approx. 70% of the fluid volume, water will make up about 25%, the remaining 5% by volume will include a mixture of the following:

| | |
|-----------------------|---------------------|
| ANCO Gel | Anco Mul OW |
| Cottonseed Hulls | Anco Mul P |
| D294 | Anco Mul S |
| Anco Bar | Anco Mul Thin |
| Petrogel 100 | Anco Thunder Plug |
| Claytone | Calcium Carbonate M |
| Lime | Cedar Fiber |
| Calcium Chloride | LCF Blend |
| Anco Trol | Mica Fine |
| Base Oil (Kensol 48H) | Walnut Shell Med |
| Anco Mul Mod | Anco Drill A |

4710303094

Temporary and Permanent Seed Mix

250 lbs. /acre

Mix Details

| | |
|---------------------|-----|
| Medium red clover | 4% |
| Alsike clover | 4% |
| Birds foot trefoil | 5% |
| Forage tall fescue | 45% |
| Forage perineal rye | 20% |
| Annual rye | 11% |
| Winter wheat | 10% |

Straw

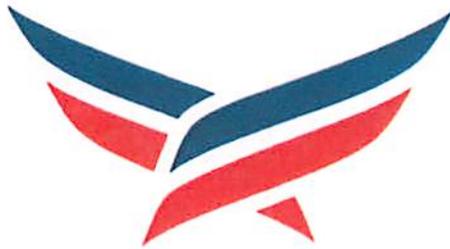
Winter – 3 ton per acre

Summer – 2 ton per acre

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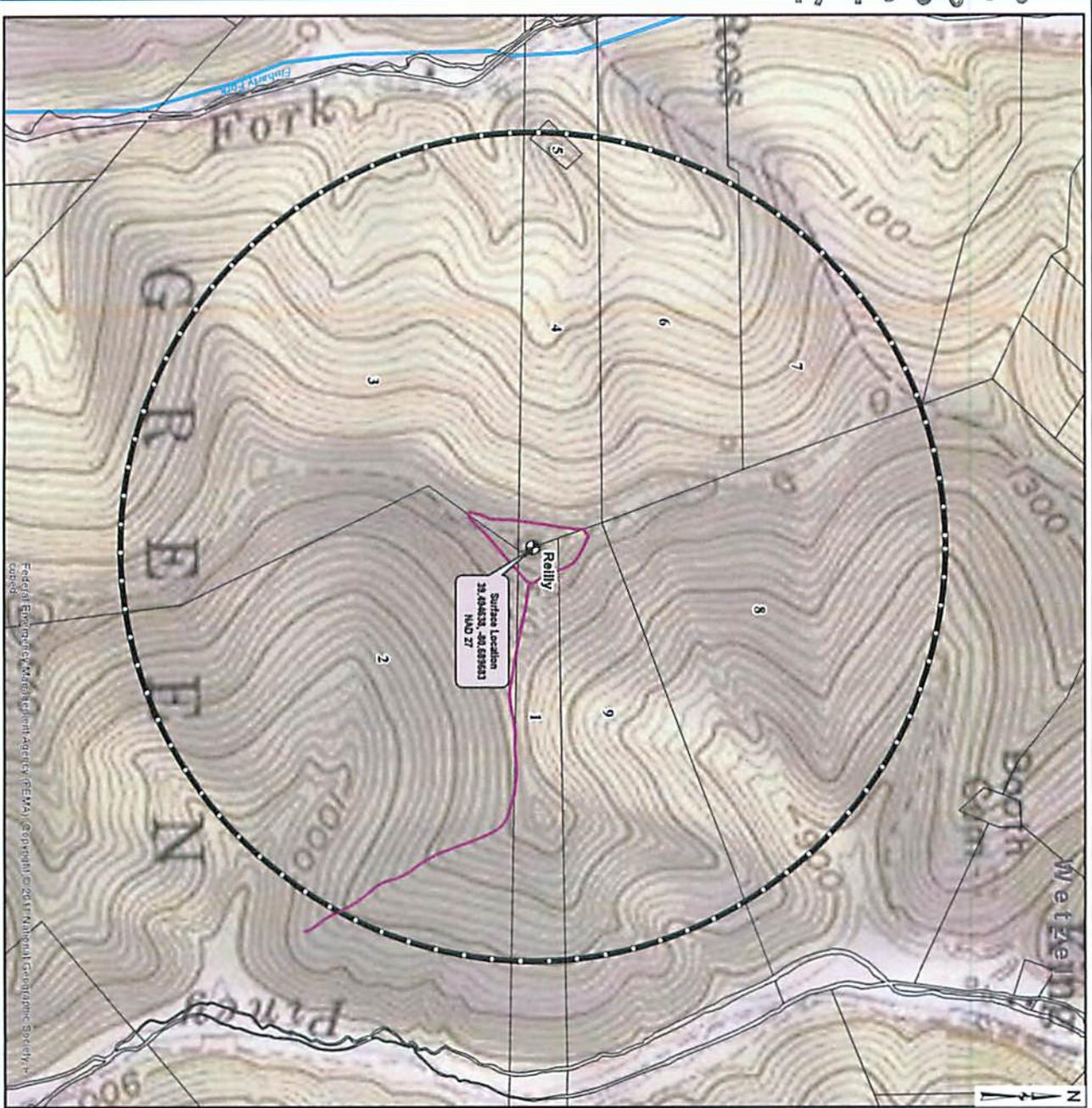
Reilly N GRN WZ 1H, 3H, 5H & 7H

Reilly S GRN WZ 2H, 4H, 6H & 8H Site Safety Plan



DMH
3-15-15

**AMERICAN ENERGY
MARCELLUS**



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- AEU Surface Location
- Well Pad
- Access Drive
- AEU Testing Radius (2007)
- Streams and Rivers
- 100 Year Flood Zones
- Wetzel County Parcel Lines
- WV County Lines

| PROPERTY ID | DATE ACQ. | PROPERTY DATA | STATUS |
|-------------|------------|---|----------|
| 1 | 02/28/2008 | 1.0000 AC | ACQUIRED |
| 2 | 02/28/2008 | STATE OF WEST VIRGINIA COAL & NATURAL GAS RESERVE TRACT | ACQUIRED |
| 3 | 02/28/2008 | STATE OF WEST VIRGINIA COAL & NATURAL GAS RESERVE TRACT | ACQUIRED |
| 4 | 02/28/2008 | STATE OF WEST VIRGINIA COAL & NATURAL GAS RESERVE TRACT | ACQUIRED |
| 5 | 02/28/2008 | STATE OF WEST VIRGINIA COAL & NATURAL GAS RESERVE TRACT | ACQUIRED |
| 6 | 02/28/2008 | STATE OF WEST VIRGINIA COAL & NATURAL GAS RESERVE TRACT | ACQUIRED |
| 7 | 02/28/2008 | STATE OF WEST VIRGINIA COAL & NATURAL GAS RESERVE TRACT | ACQUIRED |
| 8 | 02/28/2008 | STATE OF WEST VIRGINIA COAL & NATURAL GAS RESERVE TRACT | ACQUIRED |
| 9 | 02/28/2008 | STATE OF WEST VIRGINIA COAL & NATURAL GAS RESERVE TRACT | ACQUIRED |

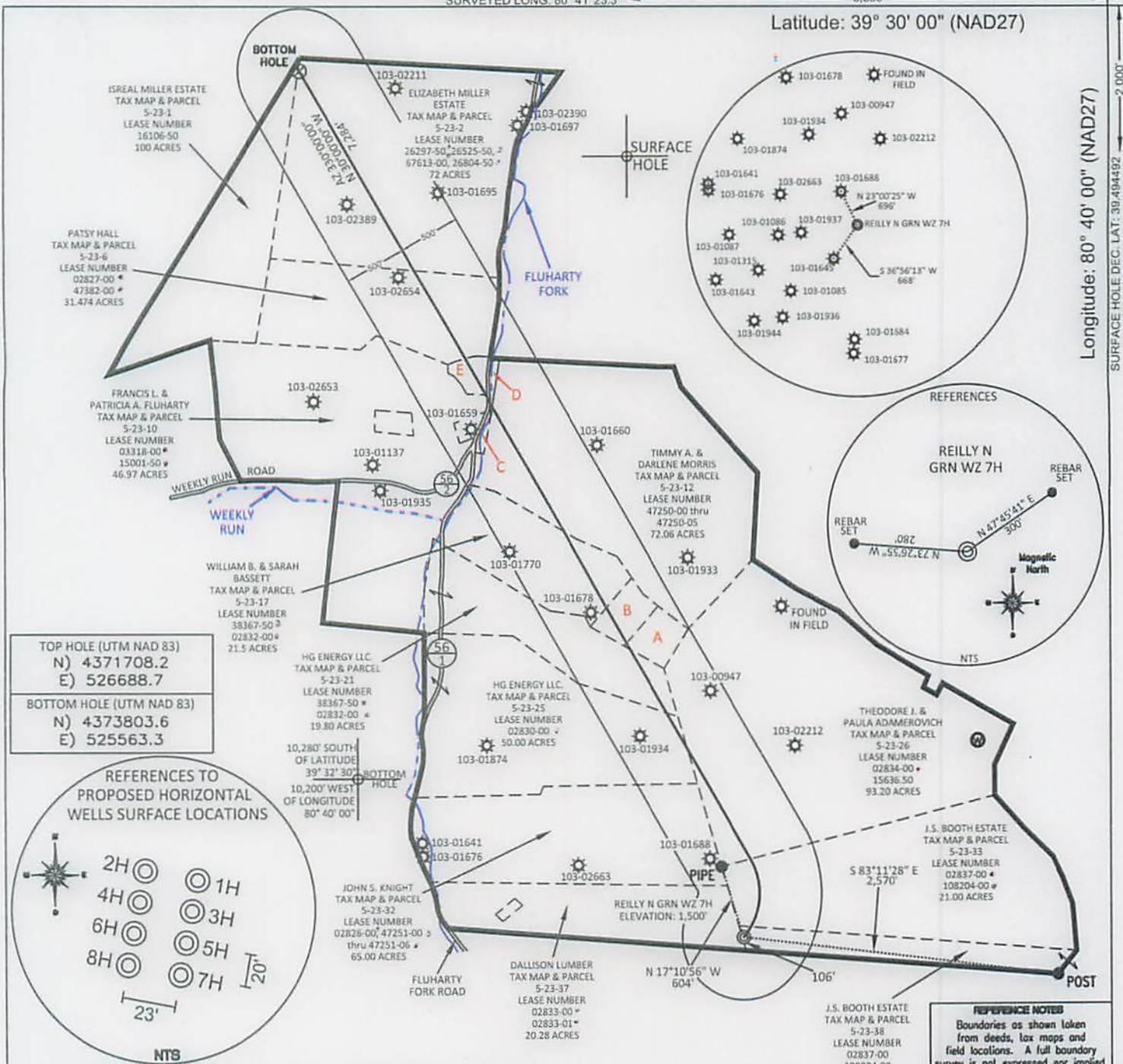
ISSUE: EXHIBIT
DATE: 01/19/15
JOB NO.: 751117
DRAWN: CHD
SHEET NO: 1



WATER SAMPLING FIELD MAP
REILLY WELL PAD
WETZEL COUNTY, WV

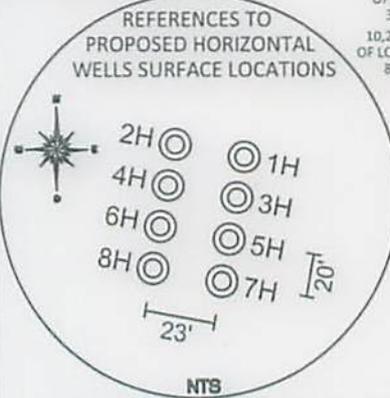


| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |
| | | |
| | | |
| | | |



TOP HOLE (UTM NAD 83)
N) 4371708.2
E) 526688.7

BOTTOM HOLE (UTM NAD 83)
N) 4373803.6
E) 525563.3



| PROPERTY OWNER | ACRES | LEASE NUMBER | PARCEL ID |
|--------------------------------------|-------|----------------------|-----------|
| A. WILLIAM B. & SARAH E. BASSETT | 3.50 | 38367-50, 02832-00 | 5-23-23 |
| B. WILLIAM B. & SARAH E. BASSETT | 4.00 | 38367-50, 02832-00 * | 5-23-22 |
| C. TIMMY & DARLENE MORRIS | .410 | 03318-00, 15001-50 * | 5-23-10.1 |
| D. FRANCIS L. & PATRICIA A. FLUHARTY | .440 | 02827-00, 47382-00 * | 5-23-12.1 |
| E. CAROLE S. STACKPOLE | 2.01 | 03318-00, 15001-50 * | 5-23-10.2 |

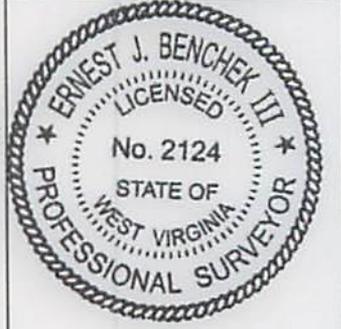
NO DWELLINGS FOUND WITHIN 650' OF THE CENTER OF THE WELL PAD
NO WATER WELLS FOUND WITHIN 250' OF THE CENTER OF WELL PAD

REFERENCE NOTES
Boundaries as shown taken from deeds, tax maps and field locations. A full boundary survey is not expressed nor implied. All bearings are based on true north. Ownership taken from public records Wetzel County, West Virginia NOVEMBER 2014
State Plane Coordinates & NAD 83 Lat/Long by differential submeter mapping grade GPS
Drafted by: EAM

FILE #: AE002
DRAWING #: 2477
SCALE: PLAT - 1" = 1200'
TICK MARK - 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SOURCE OF ELEVATION: SUBMETER MAPPING 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 DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: *[Signature]*
L.L.S. #2124: Ernest J. Benchek III



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25304
Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow
WATERSHED: FISHING CREEK
COUNTY/DISTRICT: WETZEL / GREEN
SURFACE OWNER: J.S. BOOTH ESTATE AND DALLISON LUMBER
OIL & GAS ROYALTY OWNER: JAMES K. BOOTH & JERRY MARTIN BOOTH
LEASE NUMBERS:

DATE: APRIL 22, 2015
OPERATOR'S WELL #: REILLY N GRN WZ 7H
API WELL #: 47 103 03694
STATE COUNTY PERMIT
ELEVATION: 1500'
QUADRANGLE: CENTER POINT, WV
ACREAGE: 41.28 +/-
ACREAGE: 644.64 +/-

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
PLUG OFF FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY):
TARGET FORMATION: MARCELLUS
ESTIMATED DEPTH: TVD: 7,460' TMD: 15,500'
WELL OPERATOR: American Energy-Marcellus LLC.
DESIGNATED AGENT: Eric B. Gillespie
ADDRESS: 3501 NW 63rd Street
ADDRESS: 103 Taryn Lane
CITY: Oklahoma City STATE: OK ZIP CODE: 73116
CITY: Cross Lanes STATE: WV ZIP CODE: 25313

**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 attached.

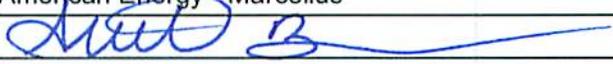
**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

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

Received
Office of Oil & Gas
FEB 13 2015

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

Well Operator: American Energy - Marcellus
 By: 
 Its: Regulatory Technician

WW-6A1

Operator's Well No. Reilly S GRN WZ 2H

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:

American Energy - Marcellus, LLC. is the successor in interest to East Resources, HG Energy, LLC., and Pennzoil Products Company. The chain of title is as follows:
Assignment in Deed Book 363, Page 384, dated April 9, 1998 from Pennzoil Products Company to Pennzoil Exploration and Production Company.
Certificate of Merger in Corporate Record Book 12, Page 179, dated December 2, 1998, Pennzoil Exploration and Production Company merged into PennzEnergy
Certificate of Merger in Corporate Record Book 12, Page 278, dated December 30, 1999, PennzEnergy Exploration and Production Company, LLC., merged into Devon
Assignment in Deed Book 370, Page 580, dated June 2000, from Devon Energy Production Company, LP, to East Resources, Inc.
Assignment in Lease Book 118A, Page 253, dated January 1, 2011, from East Resources, Inc. to HG Energy, LLC.
Assignment in Lease Book 153A, Page 238, dated August 1, 2014, from East Resources, Inc. and HG Energy, LLLC., to American Energy - Marcellus, LLC.

**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:

American Energy - Marcellus, LLC is the record title owner of the leases and/or fee interests identified herein. Listed below each lease is the applicable chain of title by which American Energy - Marcellus, LLC was vested with title thereto. Please note, throughout the chain of title, various mergers and name changes occurred between the referenced companies. In several instances, no documentation was filed in the county records evidencing such a merger or name change. In those cases, we've directed your attention to the records of the West Virginia Secretary of State, where said documentation can be found.

| Lease Number | Grantor, lessor, etc. | Grantee, lessee, etc. | Royalty | Book/Page |
|--|---|---|---------------------|--------------------------|
| 108204-00 | JERRY M. BOOTH | HG ENERGY LLC | 1/8 | 136A/882 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 12957-50 | S.P. AND L.J. LEMASTER | SOUTH PENN OIL COMPANY | 1/8 | 23/98 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 | |
| 13212-50 | RICHARD STACKPOLE | SOUTH PENN OIL COMPANY | 1/8 | 23/282 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 | |
| 15001-50 | RICHARD WILEY ET AL. | S. A. Smith | 1/8 | 48/524 |
| | S. A. Smith | South Penn Oil Company | Assignment | 48/11 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 | |
| East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 | |
| 15544-50 | GEO. V. AND JOSEPHINE M. REILLY | SOUTH PENN OIL COMPANY | 1/8 | 47/34 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 | |
| 15548-50 | F.L. HOGE | SOUTH PENN OIL COMPANY | 1/8 | 47/26 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 | |
| 15634-50 | IRENE J. REILLY ET AL AND U.N.ARNETT, JR., SPL COMR | SOUTH PENN OIL COMPANY | 1/8 | 47/193 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |

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| | | | | | |
|----------|---|---|----------------------|--------------------------|--|
| | PennEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 | |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 | |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 | |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 | |
| 15636-50 | JAMES A. AND M.E. BOOTH | SOUTH PENN OIL COMPANY | 1/8 | 47/198 | |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 | |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 | |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records | |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 | |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records | |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn | 319/397 & 322/577 | |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 | |
| | Pennzoil Exploration and Production Company | PennEnergy Exploration and Production, LLC. | Merger | 12/179 | |
| | PennEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 | |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 | |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 | |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 | |
| 15687-50 | M.H. AND C.C. PENICK | SOUTH PENN OIL COMPANY | 1/8 | 47/214 | |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 | |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 | |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records | |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 | |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records | |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn | 319/397 & 322/577 | |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 | |
| | Pennzoil Exploration and Production Company | PennEnergy Exploration and Production, LLC. | Merger | 12/179 | |
| | PennEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 | |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 | |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 | |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 | |
| 15688-50 | M.H. AND C.C. PENICK | SOUTH PENN OIL COMPANY | 1/8 | 47/216 | |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 | |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 | |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records | |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 | |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records | |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn | 319/397 & 322/577 | |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 | |
| | Pennzoil Exploration and Production Company | PennEnergy Exploration and Production, LLC. | Merger | 12/179 | |
| | PennEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 | |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 | |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 | |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 | |
| 16106-50 | ISRAEL AND ELIZABETH MILLER | SOUTH PENN OIL COMPANY | 1/8 | 49/52 | |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 | |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 | |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records | |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 | |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records | |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn | 319/397 & 322/577 | |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 | |
| | Pennzoil Exploration and Production Company | PennEnergy Exploration and Production, LLC. | Merger | 12/179 | |
| | PennEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 | |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 | |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 | |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 | |
| 24422-50 | HENRY AND MARY NOLAND | W.R. MCINTYRE | 1/8 | 46/93 | |
| | W. R. McIntyre | S. H. Brochunier | Assignment | 46/95 | |
| | S. H. Brochunier | Two Brothers Oil Company | Assignment | 49/232 | |
| | Two Brothers Oil Company | South Penn Oil Company | Assignment | 49/264 | |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 | |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 | |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records | |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 | |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records | |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn | 319/397 & 322/577 | |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 | |
| | Pennzoil Exploration and Production Company | PennEnergy Exploration and Production, LLC. | Merger | 12/179 | |
| | PennEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 | |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 | |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 | |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 | |
| 25040-50 | JOHN R. MCCOY ET AL | J.F. GUFFEY | 1/8 | 48/445 | |
| | J. F. Guffey | W. M. Graham | Assignment | 56/286 | |
| | W. M. Graham | W. H. Nimick | Assignment | 58/288 | |
| | W. H. Nimick | South Penn Oil Company | Assignment | 49/268 | |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 | |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 | |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records | |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 | |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records | |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn | 319/397 & 322/577 | |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 | |
| | Pennzoil Exploration and Production Company | PennEnergy Exploration and Production, LLC. | Merger | 12/179 | |
| | PennEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 | |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 | |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 | |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 | |
| 26297-50 | ISRAEL MILLER, GDN & SPL COMR | SOUTH PENN OIL COMPANY | 1/8 | 53/200 | |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 | |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 | |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records | |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 | |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records | |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn | 319/397 & 322/577 | |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 | |
| | Pennzoil Exploration and Production Company | PennEnergy Exploration and Production, LLC. | Merger | 12/179 | |
| | PennEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 | |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 | |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 | |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 | |

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|----------|--|---|----------------------|--------------------------|
| | East Resources, Inc | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 26525-50 | ELIZABETH MILLER ET AL | SOUTH PENN OIL COMPANY | 1/8 | 55/101 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 38367-50 | SEBA WILEY ET AL, JOHN C. WILEY, GDN & SPL COMR | SOUTH PENN OIL COMPANY | 1/8 | 63/503 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47250-02 | FAYE MOORE | Pennzoil Products Company | 1/8 | 65A/620 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47250-03 | JOHN HARLEN MOORE ET UX | Pennzoil Products Company | 1/8 | 65A/624 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47250-04 | JAMES B. MOORE | Pennzoil Products Company | 1/8 | 65A/628 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47250-05 | EDWARD H. MOORE ET UX | Pennzoil Products Company | 1/8 | 67A/570 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47251-00 | Rebecca V Ferreebe et vir | C. E. Beck | 1/8 | 58A/157 |
| | C. E. Beck | Pennzoil Company | Assignment | 58A/229 |
| | Pennzoil Company | Pennzoil Products Company | Assn & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, Inc | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47251-01 | Madeline Knight Sovil | C. E. Beck | 1/8 | 58A/173 |
| | C. E. Beck | Pennzoil Company | Assignment | 58A/229 |
| | Pennzoil Company | Pennzoil Products Company | Assn & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, Inc | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47251-02 | Robert R. Knight | C. E. Beck | 1/8 | 58A/165 |
| | C. E. Beck | Pennzoil Company | Assignment | 58A/229 |
| | Pennzoil Company | Pennzoil Products Company | Assn & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, Inc | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47251-03 | Hazel B. Ferreebe | C. E. Beck | 1/8 | 58A/153 |
| | C. E. Beck | Pennzoil Company | Assignment | 58A/229 |
| | Pennzoil Company | Pennzoil Products Company | Assn & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, Inc | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47251-04 | Helen K. Chapman | C. E. Beck | 1/8 | 58A/145 |
| | C. E. Beck | Pennzoil Company | Assignment | 58A/229 |
| | Pennzoil Company | Pennzoil Products Company | Assn & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |

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| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, Inc | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47251-05 | Mary Jane Davis et vir | Pennzoil Products Company | 1/8 | 58A/287 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47251-06 | Lottie McHenry | Pennzoil Products Company | 1/8 | 58A/339 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47271-00 | VESTA R. HOLBERT ET VIR | PENNZOIL PRODUCTS COMPANY | 1/8 | 58A/205 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47271-05 | RANDALL GRAY BY JANET MUNICH, POA | HG ENERGY LLC | 1/8 | 135-A/717 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47271-06 | NANCY L. MILLER | HG ENERGY LLC | 1/8 | 134-A/367 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47271-07 | CARL E. FLUHARTY, JR | HG ENERGY LLC | 1/8 | 133-A/579 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47271-08 | RICHARD F. MCCUMBER | HG ENERGY LLC | 1/8 | 136-A/146 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47271-09 | JOHN M. ANDRIKANICH | HG ENERGY LLC | 1/8 | 136-A/47 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 47271-10 | CARLA M. KELLER | HG ENERGY LLC | 1/8 | 136-A/50 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 57098-00 | WADSWORTH BROTHERS, INC | PENNZOIL COMPANY | 1/8 | 65-A/420 |
| | Pennzoil Company | Pennzoil Products Company | Assignment | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 57135-09 | BURL D. FLUHARTY ET UX | PENNZOIL COMPANY | 1/8 | 67-A/134 |
| | Pennzoil Company | Pennzoil Products Company | Assignment | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 57135-10 | FRANCIS H. STENDER ET UX | PENNZOIL COMPANY | 1/8 | 67-A/185 |
| | Pennzoil Company | Pennzoil Products Company | Assignment | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 57135-11 | PAUL J. HUFSCHEMITT ET UX | PENNZOIL COMPANY | 1/8 | 67-A/181 |
| | Pennzoil Company | Pennzoil Products Company | Assignment | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 57135-12 | EDNA MCVEY ET VIR | PENNZOIL COMPANY | 1/8 | 67-A/468 |
| | Pennzoil Company | Pennzoil Products Company | Assignment | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 57135-13 | JAMES F. HUFSCHEMITT ET UX | PENNZOIL COMPANY | 1/8 | 67-A/464 |
| | Pennzoil Company | Pennzoil Products Company | Assignment | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 57135-14 | VIVIAN POLING ET VIR | PENNZOIL COMPANY | 1/8 | 67-A/578 |
| | Pennzoil Company | Pennzoil Products Company | Assignment | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |

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| | PennEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 67613-00 | ESTHER PETERS, ETC. | PENNZOIL COMPANY | 1/8 | 67-A/625 |
| | Pennzoil Company | Pennzoil Products Company | Assignment | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 67614-00 | UNION NATIONAL BANK, TRUSTEE | PENNZOIL COMPANY | 1/8 | 67-A/661 |
| | Pennzoil Company | Pennzoil Products Company | Assignment | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 67615-00 | WADSWORTH BROTHERS, INC | PENNZOIL COMPANY | 1/8 | 68-A/58 |
| | Pennzoil Company | Pennzoil Products Company | Assignment | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 57197-01 | SHELIA L. GUY | HG ENERGY LLC | 1/8 | 133-A/378 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2830-00 | RICHARD WILEY ET AL | SOUTH PENN OIL COMPANY | 1/8 | 49/131 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 3318-00 | NELLIE AMOS ET AL | PENNZOIL COMPANY | 1/8 | 306/379 |
| | Pennzoil Company | Pennzoil Products Company | Assn & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2827-00 | GEO. M. WILEY ET AL | SOUTH PENN OIL COMPANY | 1/8 | 49/126 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2188-00 | LUCRETIA FLUHARTY ET AL | SOUTH PENN OIL COMPANY | 1/8 | 40/430 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 99433-00 | STEPHEN H. HARMAN | PENNZOIL COMPANY | 1/8 | 312/118 |
| | Pennzoil Company | Pennzoil Products Company | Assn & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2829-00 | JOHN C. WILEY ET AL | SOUTH PENN OIL COMPANY | 1/8 | 49/130 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn & Supp. Assn | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc | HG Energy, LLC | Assignment | 118A/253 |

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| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 80815-00 (TR 3) | EDWARD A. FLAHIWE, EXECUTOR OF ESTATE OF EDITH W. MCINTYRE | PENNZOIL PRODUCTS COMPANY | 1/8 | 235/749 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2836-00 | WILLIAM AND REBECCA WEEKLY | SOUTH PENN OIL COMPANY | 1/8 | 49/142 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2826-00 | I.B. AND MARY E. WILEY | SOUTH PENN OIL COMPANY | 1/8 | 49/124 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2834-00 | JAMES A. AND MARY E. BOOTH | SOUTH PENN OIL COMPANY | 1/8 | 49/139 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2837-00 | EPHRAIM AND MARGARET M. LEASURE | SOUTH PENN OIL COMPANY | 1/8 | 49/143 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 108046-00 | JANET K. HUGGINS | EAST RESOURCES, INC | 1/8 | 375/849 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 108054-00 | SANDRA J. BULLMAN | EAST RESOURCES, INC | 1/8 | 378/201 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 108012-00 | CHARLES M. FULTON POA FOR PATRICIA FULTON | EAST RESOURCES, INC. | 1/8 | 370/593 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2833-00 | DAVID AND SUSAN FLUHARTY | SOUTH PENN OIL COMPANY | 1/8 | 49/136 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC. | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2662-00 | WILLIAM AND MARY ARNETT | SOUTH PENN OIL COMPANY | 1/8 | 65/84 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
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| | PennzEnergy Exploration and Production, LLC. | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC. | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 3322-00 | JUDITH BLUE ET AL | PENNZOIL COMPANY | 1/8 | 306/415 |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |

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| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 90815-00 | EDWARD A. FLAHIVE, EXECUTOR OF ESTATE OF EDITH W. MCINTYRE | PENNZOIL COMPANY | 1/8 | 235/749 |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2820-00 | HENRY FLUHARTY | SOUTH PENN OIL COMPANY | 1/8 | 49/115 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2823-00 | D.M. AND MARY B. CUNNINGHAM | SOUTH PENN OIL COMPANY | 1/8 | 49/120 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 108012-01 | ISABELLE RUTHERFORD BY VIRGINIA LEE MILLER | HG ENERGY, LLC | 1/8 | 405/215 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2170-00 | S.P. AND L.J. LEMASTERS | SOUTH PENN OIL COMPANY | 1/8 | 33/71 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2188-01 | STEPHEN H. HARMAN | PENNZOIL PRODUCTS COMPANY | 1/8 | 322/114 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2833-01 | CHARLES MITCHELL | EAST RESOURCES, INC | 1/8 | 421/678 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2824-00 | A.W. WILEY ET AL | SOUTH PENN OIL COMPANY | 1/8 | 49/121 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 2832-00 | RICHARD WILEY ET AL | SOUTH PENN OIL COMPANY | 1/8 | 49/134 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 246/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 108046-00 | Janet K. Huggins | EAST RESOURCES, INC | 1/8 | 375/849 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 451/475 |
| 47382-00 | Kenneth Edward McHenry et ux | C. E. Beck | 1/8 | 58A/407 |
| | C. E. Beck | Pennzoil Company | Assignment | 58A/483 |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |

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| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |
| 26804-50 | R. H. Miller | James Strosnider | 1/8 | 53/245 |
| | James Strosnider | South Penn Oil Company | Assignment | 58A/483 |
| | South Penn Oil Company | South Penn Natural Gas Company | Assignment | 33A/455 |
| | South Penn Natural Gas Company | South Penn Oil Company | Assignment | 215/478 |
| | South Penn Oil Company | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil United, Inc. | Assignment | 248/491 |
| | Pennzoil United, Inc. | Pennzoil Company | Cert. of Name Change | WV Sec. of State records |
| | Pennzoil Company | Pennzoil Products Company | Assn. & Supp. Assn. | 319/397 & 322/577 |
| | Pennzoil Products Company | Pennzoil Exploration and Production Company | Assignment | 363/384 |
| | Pennzoil Exploration and Production Company | PennzEnergy Exploration and Production, LLC | Merger | 12/179 |
| | PennzEnergy Exploration and Production, LLC | Devon Energy Production Company, LP | Merger | 12/278 |
| | Devon Energy Production Company, LP | East Resources, Inc. | Assignment | 370/580 |
| | East Resources, Inc. | HG Energy, LLC | Assignment | 118A/253 |
| | East Resources, Inc and HG Energy, LLC | American Energy - Marcellus, LLC | Assignment | 153A/238 |

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WV Department of
Environmental Protection



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AMERICAN ENERGY
MARCELLUS

January 29, 2015

West Virginia Department of Environmental Protection
Chief, Office of Oil & Gas
Attn: Mr. James Martin
601 57th Street
Charleston, West Virginia 25304

Re: Application for a Permit to Drill
Reilly N GRN WZ 7H

Dear Mr. Martin,

American Energy – Marcellus, LLC has the right to drill, extract and produce the minerals from any roads crossed by the proposed laterals for the Reilly N GRN WZ 7H well by virtue of the lease identified on page WW-6A1 of the accompanying permit application.

No action on your part is required. If you have any questions or concerns, please feel free to contact me.

Best Regards,

Ariel Bravo
Regulatory Technician
ariel.bravo@aep-lp.com
Cell 405-403-4803
Office 405-607-5529

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Office of Oil & Gas

FEB 13 2015

4710303094

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

Date of Notice Certification: 1/22/15

API No. 47- _____
Operator's Well No. Reilly N GRN WZ 7H
Well Pad Name: Reilly GRN WZ

Notice has been given:

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

| | | |
|---------------------------------|---|----------------------------|
| State: <u>West Virginia</u> | UTM NAD 83 | Eastings: <u>526688.7</u> |
| County: <u>Wetzel</u> | | Northing: <u>4371708.2</u> |
| District: <u>Green</u> | Public Road Access: <u>Lefthand Fork Road (C.R. 13/8)</u> | |
| Quadrangle: <u>Center Point</u> | Generally used farm name: _____ | |
| Watershed: <u>Fishing Creek</u> | | |

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

| | |
|--|---|
| <p>Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or</p> <p style="padding-left: 100px;"><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p> | <p style="text-align: center;">OOG OFFICE USE ONLY</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> |
|--|---|

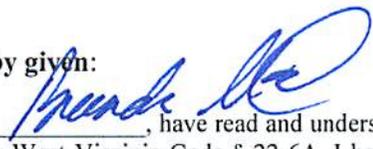
Required Attachments:

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

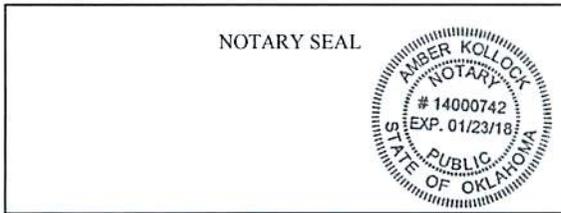
received
Office of Oil & Gas

FEB 13 2015

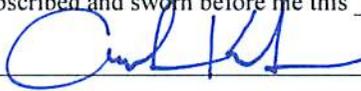
Certification of Notice is hereby given:

THEREFORE, I Brandon McKinley , 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>American Energy - Marcellus, LLC.</u> | Address: | <u>3501 N.W. 63rd St</u> |
| By: | <u>Brandon McKinley</u> | | <u>Oklahoma City, OK 73116</u> |
| Its: | <u>Manager - Regulatory</u> | Facsimile: | <u>405-418-8040</u> |
| Telephone: | <u>405-607-5427</u> | Email: | <u>brandon.mckinley@aep-lp.com</u> |



Subscribed and sworn before me this 13 day of January, 2015



Notary Public

My Commission Expires 1/23/18

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 APPLICATION

Notice Time Requirement: notice shall be provided no later than the filing date of permit application.

Date of Notice: 1/22/2015 Date Permit Application Filed: 2/5/2015

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: Please see attached.
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)

Name: _____
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Impoundments or Pits)

Name: _____
Address: _____

COAL OWNER OR LESSEE

Name: Please see attached.
Address: _____

COAL OPERATOR

Name: _____
Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)

Name: Please see attached.
Address: _____

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: _____
Address: _____

*Please attach additional forms if necessary.

Received
Office of Oil & Gas

FEB 13 2015

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

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Office of Oil & Gas
Feb 19 2013

WW-6A
(8-13)

4710303094
API NO. 47-10303094
OPERATOR WELL NO. Reilly N GRN WZ 7H
Well Pad Name: Reilly GRN WZ

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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Office of Oil & Gas
FEB 13 2015

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

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

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FEB 13 2015

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WW-6A
(8-13)

API NO. 47- _____
OPERATOR WELL NO. Reilly N GRN WZ 7H
Well Pad Name: Reilly GRN WZ



Notice is hereby given by:

Well Operator: American Energy - Marcellus, LLC
Telephone: 405-607-5529
Email: ariel.bravo@aep-lp.com

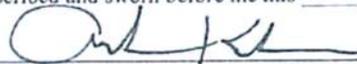
Address: 301 NW 63rd, Suite 600
Oklahoma City, OK 73116
Facsimile: 405-607-5868

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 of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

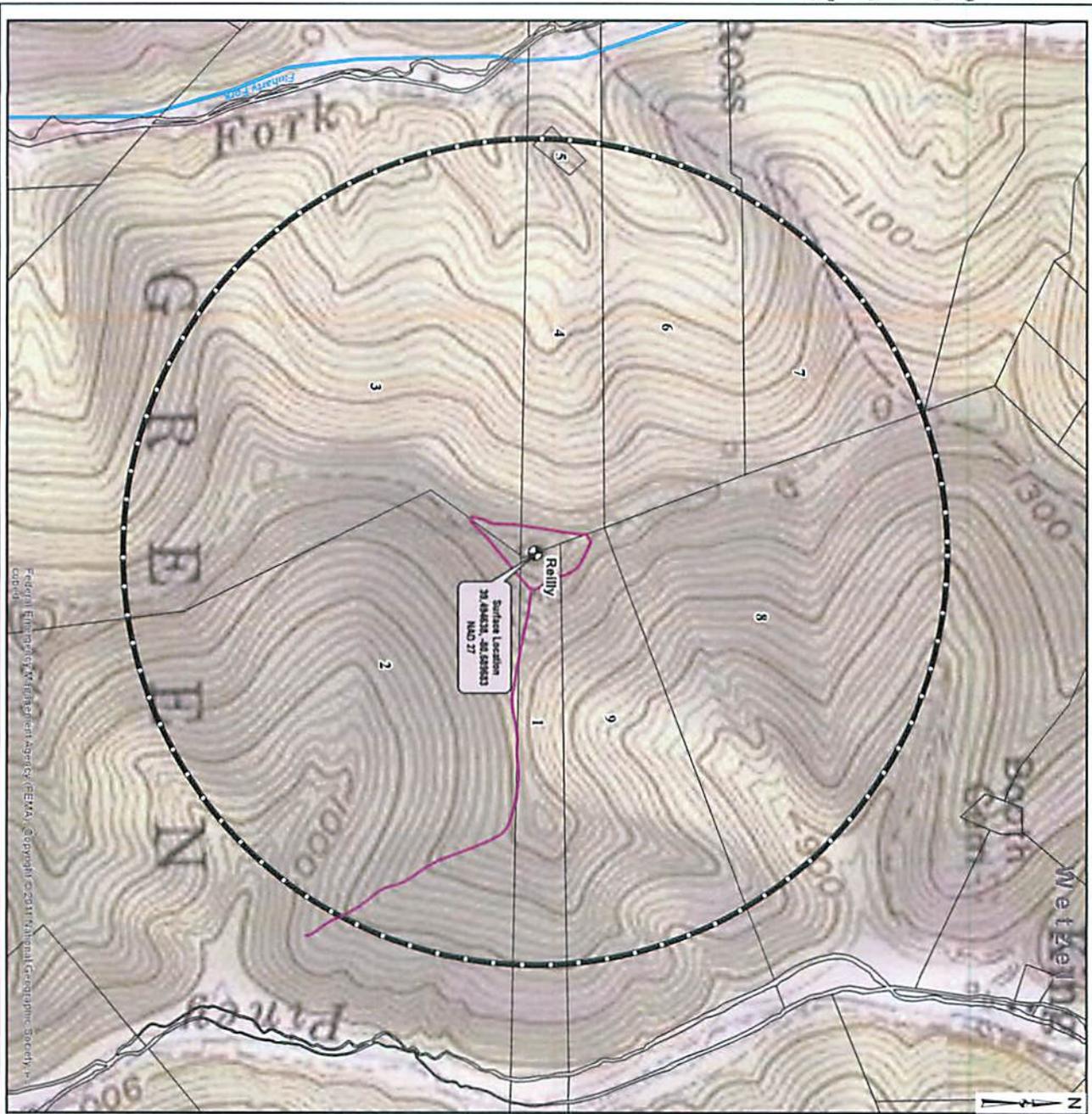


Subscribed and sworn before me this 3 day of February, 2015.

 Notary Public

My Commission Expires 1/23/2018

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FEB 13 2015



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- AEU Surface Location
- Well Pad
- Access Drive
- AEU Testing Radius (2000')
- Streams and Rivers
- 100 Year Flood Zones
- Wetzel County Parcel Line
- WV County Lines

| NO. | DATE | DESCRIPTION |
|-----|----------|----------------------|
| 1 | 01/18/15 | ISSUE FOR PERMITTING |
| 2 | 01/18/15 | ISSUE FOR PERMITTING |
| 3 | 01/18/15 | ISSUE FOR PERMITTING |
| 4 | 01/18/15 | ISSUE FOR PERMITTING |
| 5 | 01/18/15 | ISSUE FOR PERMITTING |
| 6 | 01/18/15 | ISSUE FOR PERMITTING |
| 7 | 01/18/15 | ISSUE FOR PERMITTING |
| 8 | 01/18/15 | ISSUE FOR PERMITTING |
| 9 | 01/18/15 | ISSUE FOR PERMITTING |

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| | |
|-----------|----------|
| DATE | 01/18/15 |
| JOB NO. | 251111 |
| DRAWN | CHD |
| SHEET NO. | 1 |



WATER SAMPLING FIELD MAP

REILLY WELL PAD
WETZEL COUNTY, WV



| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |
| | | |
| | | |

4710303094

WW-6A Notice of Application
 Reilly N GRN WZ 1H, 3H, 5H & 7H
 Reilly S GRN WZ 2H, 4H, 6H & 8H

Surface owners

| Name | Address | City | State | ZIP |
|--|------------------------------------|-------------|-------|-------|
| Dallison Lumber, Inc. | HC 79 BOX 50 | Jacksonburg | WV | 26377 |
| J.S. Booth Estate | 223 GARDNER AVE | WEIRTON | WV | 26062 |
| State of WV Public LD Corp Dept. of Comm, LBR & Envir. DNR | Capitol Complex, Bldg. 6, Room 525 | Charleston | WV | 25301 |
| State of WV Public LD Corp Dept. of Comm, LBR & Envir. DNR | Capitol Complex, Bldg. 6, Room 525 | Charleston | WV | 25301 |

Coal owners

| Name | Address | City | State | ZIP |
|--|------------------------------------|------------|-------|-------|
| Flame Duo Inc. | 231 Davis Street | Bridgeport | WV | 26330 |
| Richards Resources | RT 3 Box 79-B | Salem | WV | 26426 |
| State of WV Public LD Corp Dept. of Comm, LBR & Envir. DNR | Capitol Complex, Bldg. 6, Room 525 | Charleston | WV | 25301 |

Water Owners/Purveyors

| Name | Address | City | State | ZIP |
|--|------------------------------------|------------------|-------|-------|
| Dallison Lumber, Inc. | HC 79 BOX 50 | Jacksonburg | WV | 26377 |
| J.S. Booth Estate | 223 Gardner Ave | Weirton | WV | 26062 |
| State of WV Public LD Corp Dept. of Comm, LBR & Envir. DNR | Capitol Complex, Bldg. 6, Room 525 | Charleston | WV | 25301 |
| Theodore & Paula Adamerovich | 131 Charles Houck Rd | Latrobe | PA | 15650 |
| Ricky & Katrilla Fluharty | HC 60 Box 293 | Pine Grove | WV | 26419 |
| John S. Knight | 1668 Hillside Terrace | Akron | OH | 44305 |
| Fluharty Cemetery | Cemetery Road | New Martinsville | WV | 26155 |

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 Office of Oil & Gas
 FEB 13 2015

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

Notice Time Requirement: Notice shall be provided at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to entry

Date of Notice: 1/22/2015 **Date of Planned Entry:** 2/5/2015

Delivery method pursuant to West Virginia Code § 22-6A-10a

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

Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

Notice is hereby provided to:

SURFACE OWNER(s)

Name: Please see attached.

Address: _____

Name: _____

Address: _____

Name: _____

Address: _____

COAL OWNER OR LESSEE

Name: Please see attached.

Address: _____

MINERAL OWNER(s)

Name: Please see attached.

Address: _____

*please attach additional forms if necessary

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

| | | | |
|-------------|----------------------|-------------------------------|--------------------------------------|
| State: | <u>West Virginia</u> | Approx. Latitude & Longitude: | <u>N4371708.3/ E526688.7</u> |
| County: | <u>Wetzel</u> | Public Road Access: | <u>Left-hand Fork Road (CR 13/8)</u> |
| District: | <u>Green</u> | Watershed: | <u>Fishing Creek</u> |
| Quadrangle: | <u>Center Point</u> | Generally used farm name: | <u>David Fluharty</u> |

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production 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). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator: American Energy - Marcellus, LLC

Telephone: 405-607-5529

Email: ariel.bravo@aep-lp.com

Address: 301 NW 63rd St, Suite 600
Oklahoma City, OK 73116

Facsimile: 405-607-5868

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FEB 13 2015

Oil and Gas Privacy Notice:

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

WW-6A3 Notice of Entry for Plat Survey
 Reilly N GRN WZ 1H, 3H, 5H & 7H
 Reilly S GRN WZ 2H, 4H, 6H & 8H

Surface owners

| Name | Address | City | State | ZIP |
|--|------------------------------------|-------------|-------|-------|
| Dallison Lumber, Inc. | HC 79 BOX 50 | Jacksonburg | WV | 26377 |
| J.S. Booth Estate | 223 GARDNER AVE | WEIRTON | WV | 26062 |
| State of WV Public LD Corp Dept. of Comm, LBR & Envir. DNR | Capitol Complex, Bldg. 6, Room 525 | Charleston | WV | 25301 |
| State of WV Public LD Corp Dept. of Comm, LBR & Envir. DNR | Capitol Complex, Bldg. 6, Room 525 | Charleston | WV | 25301 |

Coal owners

| Name | Address | City | State | ZIP |
|--|------------------------------------|------------|-------|-------|
| Flame Duo Inc. | 231 Davis Street | Bridgeport | WV | 26330 |
| Richards Resources | RT 3 Box 79-B | Salem | WV | 26426 |
| State of WV Public LD Corp Dept. of Comm, LBR & Envir. DNR | Capitol Complex, Bldg. 6, Room 525 | Charleston | WV | 25301 |

Mineral Owners

| Name | Address | City | State | ZIP |
|-----------------------|----------------------|-----------------|-------|-------|
| Dallison Lumber, Inc. | HC 79 BOX 50 | Jacksonburg | WV | 26377 |
| Diane McKay Gilliam | 206 Rowledge Road | Charlottesville | VA | 22903 |
| Douglas A. Broome | PO Box 186 | Glenville | WV | 26351 |
| Ed Broome, Inc. | 4622 WV Hwy 5 E | Glenville | WV | 26351 |
| J.S. Booth Estate | 223 Gardner Ave | Weirton | WV | 26062 |
| Jerry Booth | 125 Hiddenwood Acres | Wellsburg | WV | 26070 |

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| | | | | |
|---|---------------------------------------|------------------|----|-------|
| John S. Knight | 1997 King Drive | Stow | OH | 44224 |
| Mary F. Mutschelknaus | P.O. Box 351 | Salem | WV | 26426 |
| Shiben Estates, Inc. | 269 Main Street | New Martinsville | WV | 26155 |
| State of WV Public LD Corp Dept. of Comm, LBR & Envir. DNR | Capitol Complex, Bldg. 6, Room 525 | Charleston | WV | 25301 |

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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: 01/22/2015 Date Permit Application Filed: 02/05/201

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

- CERTIFIED MAIL RETURN RECEIPT REQUESTED
- HAND DELIVERY

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

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

Name: Please see attached.
Address: _____

Name: _____
Address: _____

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>526688.7</u> |
| County: <u>Wetzel</u> | Northing: <u>4371708.2</u> |
| District: <u>Green</u> | Public Road Access: <u>Left-hand Fork Road (CR 13/B)</u> |
| Quadrangle: <u>Center Point</u> | Generally used farm name: <u>David Fluharty</u> |
| Watershed: <u>Fishing 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: American Energy - Marcellus, LLC
Telephone: 405-607-5529
Email: ariel.bravo@aep-tp.com

Address: 301 NW 63rd, Suite 600
Oklahoma City, OK 73116
Facsimile: 405-607-5868

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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FEB 13 2015

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WW-6A5 Notice of Planned Operations
Reilly N GRN WZ 1H, 3H, 5H & 7H
Reilly S GRN WZ 2H, 4H, 6H & 8H

Surface owners

| Name | Address | City | State | ZIP |
|--|------------------------------------|-------------|-------|-------|
| Dallison Lumber, Inc. | HC 79 BOX 50 | Jacksonburg | WV | 26377 |
| J.S. Booth Estate | 223 GARDNER AVE | WEIRTON | WV | 26062 |
| State of WV Public LD Corp Dept. of Comm, LBR & Envir. DNR | Capitol Complex, Bldg. 6, Room 525 | Charleston | WV | 25301 |
| State of WV Public LD Corp Dept. of Comm, LBR & Envir. DNR | Capitol Complex, Bldg. 6, Room 525 | Charleston | WV | 25301 |

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Office of Oil & Gas
FEB 13 2015



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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Earl Ray Tomblin
Governor

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

February 6, 2015

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

Subject: DOH Permit for the site Reilly North (503) Pad, Tyler County

Reilly N GRN WZ 1H
Reilly N GRN WZ 7H

Reilly N GRN WZ 3H

Reilly N GRN WZ 5H

Dear Mr. Martin,

This well site will be accessed from a DOH permit 06-2014-0834 which has been applied for by American Energy – Marcellus, LLC for access to the State Road. The well site is located off of Tyler County Route 13/8.

This operator has signed a Statewide Oil and Gas Road Maintenance Bonding Agreement and provided the required bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

Gary K. Clayton, P.E.
Regional Maintenance Engineer
Central Office O&G Coordinator

Cc: Eric Bruckman
American Energy - Marcellus, LLC.
CH, OM, D-6
File

Received
Office of Oil & Gas
FEB 13 2015

4710303094

****CELLS WITH BLUE BACKGROUND ARE THE ONLY CELLS TO BE EDITED****

| | |
|----------------------------------|--------------|
| Fracture Start Date/Time: | |
| Fracture End Date/Time: | |
| State: | WV |
| County: | Wetzel |
| API Number: | |
| Operator Number: | |
| Well Name: | Relby GRN WZ |
| Federal Well: | No |
| Longitude: | |
| Latitude: | |
| Long/Lat Projection: | NAD17 |
| True Vertical Depth (TVD): | |
| Total Clean Fluid Volume* (gal): | 8,553,174 |



| Additive | Specific Gravity | Additive Quantity | Mass (lbs) |
|--------------------------|------------------|-------------------|------------|
| Water | 1.00 | 8,553,174 | 71,426,237 |
| Sand (Proppant) | 2.65 | 8,135,700 | 21,557,700 |
| Hydrochloric Acid (15%) | 1.07 | 43,500 | 46,641.8 |
| Hydrochloric Acid (7.5%) | 1.04 | 0 | 0 |
| PROHIB II | 0.97 | 44 | 35.6 |
| FRA 407 | 1.05 | 9,405 | 9,872.3 |
| BIO CLEAR 2000 | 1.24 | 0 | 0 |
| PRO SCALE CLEAR 112 | 1.19 | 0 | 0 |
| PRO FLO 102 M | 0.94 | 1,695 | 28,985 |
| PRO GEL 4.01 | 1.02 | 6,716 | 57,168 |
| PRO BREAKER 4 | 1.26 | 30 | 31.2 |
| BXL-10C | 1.27 | 0 | 0 |
| PRO DRB-11 | 1.81 | 0 | 0 |
| BUFFER 1 | 1.13 | 0 | 0 |
| PMV BREAK | 1.70 | 0 | 0 |

Total Slurry Mass (Lbs)
98,070,697

Ingredients Section:

| Trade Name | Supplier | Purpose | Ingredients | Chemical Abstract Service Number (CAS #) | Maximum Ingredient Concentration in Additive (% by mass)** | Mass per Component (LBS) | Maximum Ingredient Concentration in HF Fluid (% by mass)** | Comments |
|-------------------------|------------------------|---------------------|---|--|--|--------------------------|--|----------|
| Water | Company 1 | Carrier/Basis Fluid | Water | 7732-18-5 | 100.00% | 71,426,237 | 81.42121% | |
| Sand (Proppant) | PSC | Proppant | Silica, Substrate | | 100.00% | 8,135,700 | 16.16963% | |
| Hydrochloric Acid (15%) | Producers Service Corp | Acidulant | Hydrochloric Acid | 7647-01-0 | 100.00% | 43,542 | 0.00071% | |
| PROHIB II | Producers Service Corp | Inhibitor | Dimethylacetamide, bis(dimethylamino) ether, diisobutyl 7-Butoxyethanol | 55607-25-3 111-76-2 | 40.00% 20.00% | 142 | 0.00018% | |
| | | | Ethylene Glycol | 107-21-1 | 20.00% | 77 | 0.00009% | |
| | | | Methyl Alcohol | 67-56-1 | 20.00% | 77 | 0.00009% | |
| | | | Nonyl Phenol Ethoxylate, Branched | 12-5087-87-0 | 15.00% | 23 | 0.00007% | |
| | | | Primary Alcohol | 107-19-7 | 15.00% | 23 | 0.00007% | |
| | | | Caecyl dimethylacetamide | 61708-83-0 | 2.50% | 0 | 0.00001% | |
| FRA 407 | Producers Service Corp | Friction Reducer | Water | 7732-18-5 | Proprietary | 81,426,237 | 81.42121% | |
| | | | Petroleum Distillates | 64742-47-8 | 40.00% | 33,489 | 0.04372% | |
| | | | Polyacrylamide salt | Proprietary | 10.00% | 25,257 | 0.03129% | |
| | | | Sodium Chloride | 7647-14-5 | 5.00% | 4,176 | 0.00522% | |
| | | | Ammonium Chloride | 12125-02-9 | 5.00% | 4,176 | 0.00522% | |
| | | | Ethoxylate Alcohol | Proprietary | 5.00% | 4,176 | 0.00522% | |
| | | | Tall oil | Proprietary | 2.00% | 1,670 | 0.00209% | |
| | | | Proprietary Ingredient | Proprietary | 1.00% | 835 | 0.00104% | |
| PRO FLO 102 M | Producers Service Corp | Surfactant | Water | 7732-18-5 | Proprietary | 81,426,237 | 81.42121% | |
| | | | Methyl Alcohol | 67-56-1 | 60.00% | 17,391 | 0.02172% | |
| | | | N-Undecyl-2-pyrrolidone | 5687-96-9 | 5.00% | 1,449 | 0.00181% | |
| | | | Water | 7732-18-5 | Proprietary | 81,426,237 | 81.42121% | |
| PRO BREAKER 4 | Producers Service Corp | Breaker | Ethoxylate Alcohol | Proprietary | Proprietary | 81,426,237 | 81.42121% | |
| | | | Ethylene Glycol | 107-21-1 | 40.00% | 125 | 0.00016% | |
| | | | Sucrose | 57-20-1 | 40.00% | 125 | 0.00016% | |
| | | | Polyether Polyol | 9003-11-6 | 1.00% | 7 | 0.00000% | |
| | | | Sodium Bicarbonate | 144-35-4 | 1.00% | 7 | 0.00000% | |
| | | | Hexamethylenetetramine | 100-97-0 | 1.00% | 7 | 0.00000% | |
| | | | Proprietary Ingredient | Proprietary | 1.00% | 7 | 0.00000% | |
| | | | Proprietary Ingredient | Proprietary | 1.00% | 7 | 0.00000% | |
| | | | Proprietary Ingredient | Proprietary | 1.00% | 7 | 0.00000% | |
| PRO GEL 4.01 | Producers Service Corp | Gelling Agent | Water | 7732-18-5 | Proprietary | 81,426,237 | 81.42121% | |
| | | | Distillates (Petroleum), Hydrocracked Light | 64742-47-8 | 65.00% | 17,158 | 0.04641% | |
| | | | Novolac Resin, Ethoxylate | 9016-45-9 | 5.00% | 2,838 | 0.00357% | |
| | | | Gum Gum | 9006-31-0 | 50.00% | 28,583 | 0.03579% | |
| | | | Nonionic Surfactant | 60826-78-4 | 5.00% | 2,838 | 0.00357% | |

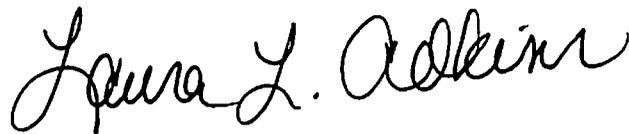
*Total Water Volume sources may include fresh water, produced water, and/or recycled water
 ** Information is based on the maximum potential for concentration and thus the total may be over 100%

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration's (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to 29 CFR 1910.1200(i) and Appendix D.

June 4, 2015

Regarding the fill material being removed from Mr. Jerry Booth's property in Wetzel County, WV while constructing American Energy Marcellus' Reilly GRN WTZ Pad, James Martin, Chief of the WVDEP Office of Oil and Gas, spoke with Mr. Jerry Booth via phone asking if Mr. Booth was aware that the material was being taken from his property and used elsewhere. Mr. Booth acknowledged that he is aware of the material being taken from his property and used elsewhere and that he is completely amenable.

Laura Adkins
OOG Permit Reviewer

A handwritten signature in black ink that reads "Laura L. Adkins". The signature is written in a cursive, flowing style.