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: 47-10303095, 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
Chief

Operator's Well No: REILLY S GRN WZ 8H
Farm Name: J.S. BOOTH ESTATE & DALLISON
API Well Number: 47-10303095
Permit Type: Horizontal 6A Well
Date Issued: 06/08/2015

Promoting a healthy environment.

API Number: 103-03095

PERMIT CONDITIONS

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

CONDITIONS

1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.

2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.

3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.

4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.

5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations,* 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.

6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.

7. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.

8. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

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

WW-6B
(10/14)

API NO. 47- 47 10 3 03 0 95
OPERATOR WELL NO. Reilly S GRN WZ 8H
Well Pad Name: Reilly GRN WZ

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 S GRN WZ 8H 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 X Oil X Underground Storage _____
Other _____
(b)If Gas Shallow X Deep _____
Horizontal X

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: 15200'

11) Proposed Horizontal Leg Length: 7488'

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 X

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

5/19/15

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MAY 18 2015

WV Department of
Environmental Protection

47 10 303 095

WW-6B
(10/14)

API NO. 47-_____-_____
OPERATOR WELL NO. Reilly S GRN WZ 8H
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#	15200'	15200'	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 H/ 50-50 Poz H	Tail 1.27, Lead 1.51
Production	5-1/2"	8-3/4"	.361	12640	5000	Premium H/ 50-50 Poz H	Tail 1.27, Lead 1.51
Tubing	2-3/8"	4.778"	.19	11100			
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

5/9/15

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47 10 3 03 0 95

WW-6B
(10/14)

API NO. 47-_____-_____
OPERATOR WELL NO. Reilly S GRN WZ 8H
Well Pad Name: Reilly GRN WZ

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)

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.

4710303095

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% Fl 17 + 0.1% C41P + 0.15%C45 +3pps gilsonite + 0.2% C20**

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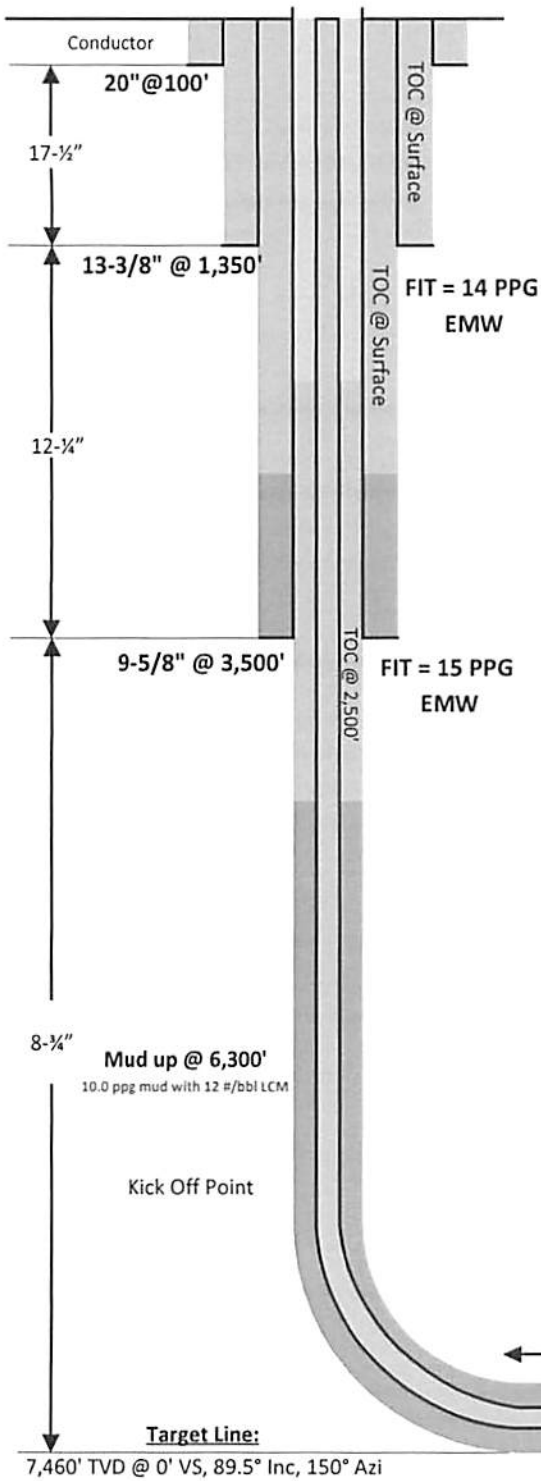
AMERICAN ENERGY APPALACHIA

Reilly GRN WZ 47 103 03095

County, State:	Township:	Location:	Formation:
Wetzel, West Virginia	Grant		Marcellus

Coordinates:	SHL Lat/Long:	RKB / Elevation:	AFE DC/CWC:	
NAD 27	BHL Lat/Long:		USDW:	Property #:
Rig:	Target Line:			AFE #:



Casing Design

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

Cement Design

Interval	Slurry	Weight	Sxs	Yeild	Excess	Cement Top
Surface	Lead				50%	
	Tail	15.6 ppg	1200	1.20 cuft/sk		Surface
Intermediate	Lead	13.5 ppg	680	1.51 cuft/sk	30%	Surface
	Tail	15.3 ppg	820	1.27 cuft/sk		1000
Production	Lead	13.5 ppg	650	1.51 cuft/sk	10%	2500
	Tail	15.3 ppg	2200	1.27 cuft/sk		6300

Geological Information

Formation	TVD	Sub Sea
Freshwater	690'	810'
Pittsburgh Coal	1,260'	240'
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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FEB 13 2015

Drilling Fluids Information

AIR INTERVALS

Interval	Depth (MD)	Rate (cfpm)	Water (bbl/hr)	Foamer (gal/hr)
Surface	0' - 1,350'	>5000	30-50	1/2 -3/4
Intermediate	1,350' - 3,510'	>5000	30-50	1/2 -3/4
Vert/Nudge	3,510' - 6,300'	>5000	40-60	3/4 - 1

SYNTHETIC OIL BASED MUD INTERVAL

Interval	Depth (MD)	Weight (#/gal)	Viscosity (sec/qt)	HTHP (ml/30min)	PV (cps)	YP (#/100 ft²)	6 RPM	WPS ppm	OWR % by vol
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
Curve	6,800' - 8,100'	10.5 - 13.5	50 - 60	4 - 6	18 - 24	10 - 12	6-9		
Lateral	8,100' - 16,000'	13.5 - 13.7	50 -60	4 - 6	18 - 24	10 - 12	6-9		

4710303095

WW-9
(9/13)

API Number 47 - _____ - _____
Operator's Well No. Reilly S GRN WZ 8H

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 _____

DMH
3-19-15

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, Freswater 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 _____

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

Company Official Title Regulatory Technician

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Office of Oil & Gas
MAR 27 2015

Subscribed and sworn before me this 10 day of February, 20 15

_____ Notary Public

My commission expires 1/23/18

AMBER KOLLOCK NOTARY # 14000742 EXP. 01/23/18 PUBLIC STATE OF OKLAHOMA

4710303095

Form WW-9

Operator's Well No. Reilly S GRN WZ 8H

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: _____

Comments: _____

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Office of Oil & Gas
MAR 27 2015

Title: Oil & Gas Inspector Date: 3-19-15

Field Reviewed? (✓) Yes ( ) No

4710303095

UIC WELLS and Landfills

Disposal Location	Type	Permit No.
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 minimizes and transfer red off-site for disposal.

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Drilling Additives

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

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

4710303095

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
3-19-15

AMERICAN ENERGY
MARCELLUS

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MAR 27 2015

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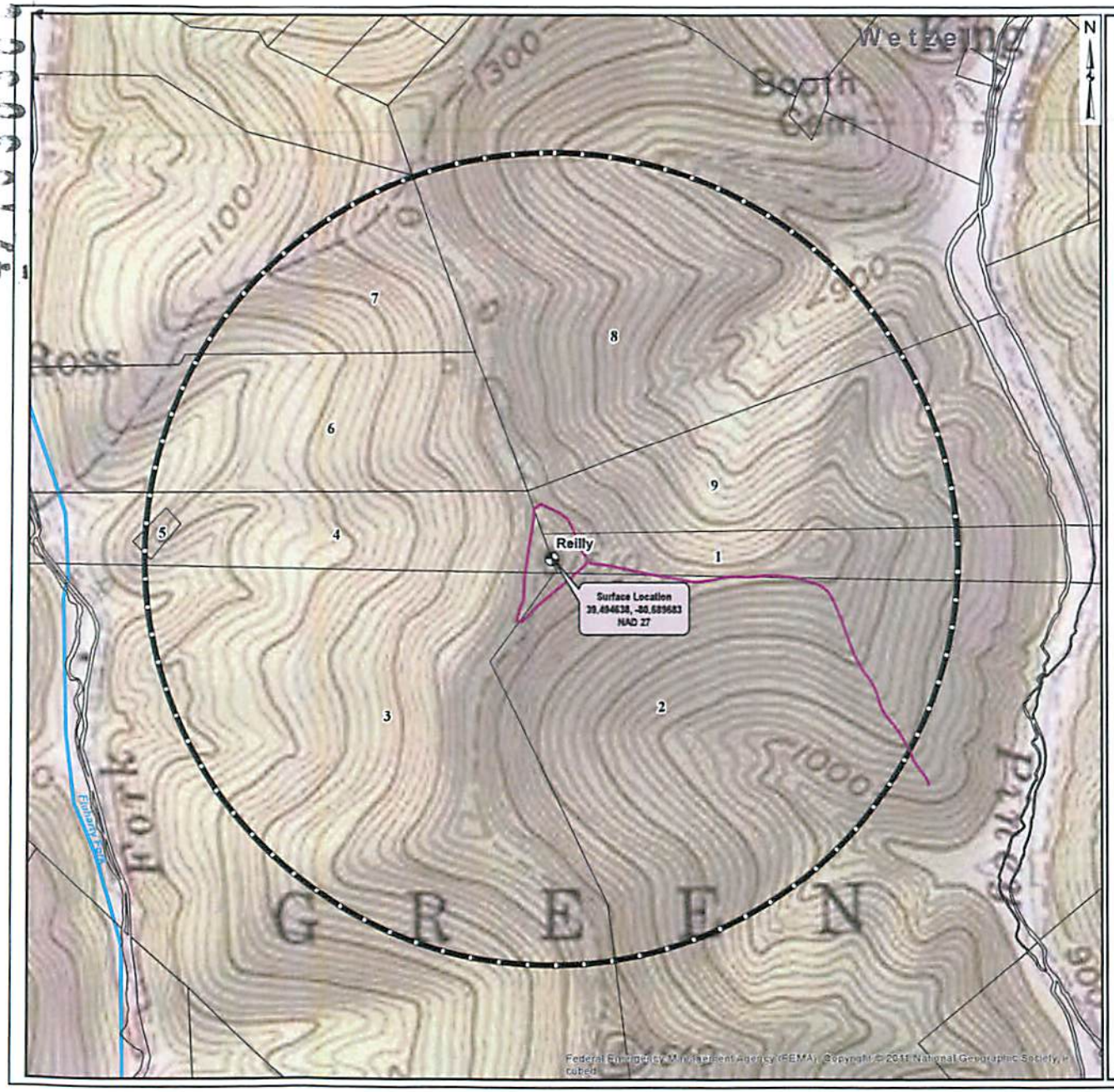
FEB 13 2015



PROPERTY DATA			
PROPERTY ID	PARCEL NO.	OWNER	OWNER ADDRESS
1	05 2300380000	J. BOOTH EST	223 GARDNER AVE MIDDLETON WV
2	05 2300020000	STATE OF WV PUBLIC LD CORP & DEPT OF COMMERCE & DN	CHARLESTON WV
3	05 2300010000	STATE OF WV PUBLIC LD CORP & DEPT OF COMMERCE & FR	CHARLESTON WV
4	05 2300370003051	DALLISON LUMBER	HC 75 BOX 50 JACKSONBURG WV
5	05 2300360000	FLOHARTY CEMETERY	
6	05 2300320000	JOHN S. KNIGHT	1668 HILLSIDE TERRACE ELKINS DN
7	05 2300250000	RICKY & KATHILLA FLOHARTY	HC 68 BOX 293 PINE GROVE WV
8	05 2300260000	THEODORE & PAULA WAMBOLDT	131 CHARLES HOUCK RD LATROBE PA
9	05 2300330000	J. BOOTH EST	223 GARDNER AVE MIDDLETON WV

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

250 0 250 500
Feet

Federal Emergency Management Agency (FEMA). Copyright © 2011 National Geographic Society, i-cubed

REVISIONS		
NO.	DATE	DESCRIPTION

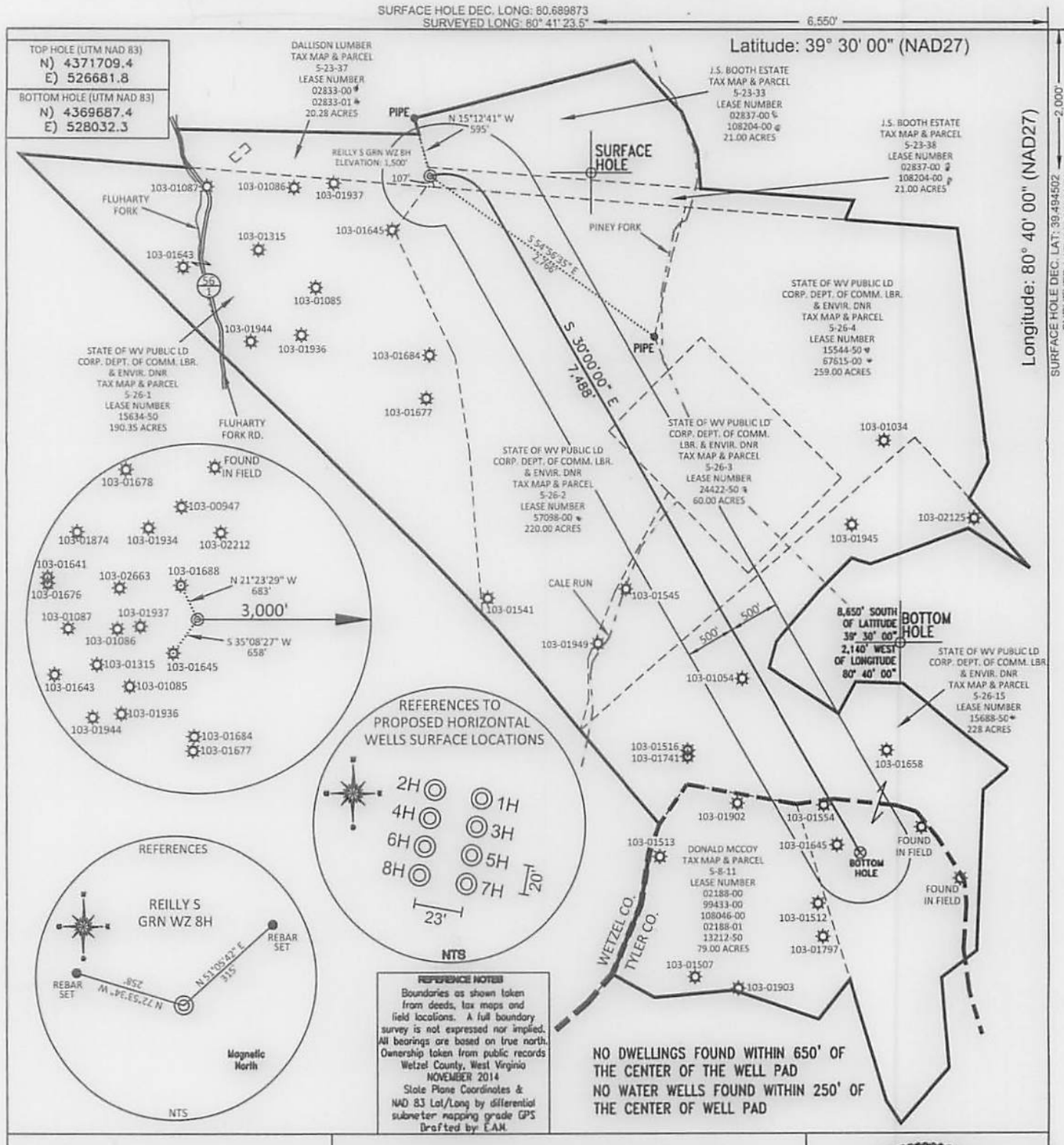
AMERICAN ENERGY UTICA

WATER SAMPLING FIELD MAP

REILLY WELL PAD
WETZEL COUNTY, WV

cesa
CREATION TO COMPLETION
www.cesaonline.com
Engineering · Architecture · Surveying · Construction Mgt · Environmental

ISSUE:	EXHIBIT
DATE:	01.19.15
JOB NO.:	751111
DRAWN	CHD
SHEET NO.	1



FILE #: AE002

DRAWING #: 2469

SCALE: PLAT - 1" = 1400'
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: _____

L.L.S. #2124 : Ernest J. Benchek III

ERNEST J. BENCHEK III
LICENSED
No. 2124
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

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

WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25304

DATE: APRIL 22, 2015

OPERATOR'S WELL #: REILLY S GRN WZ 8H

API WELL #: 47 (STATE) 103 (COUNTY) 03095H6A (PERMIT)

Well Type: ☐ Oil ☐ Waste Diposal ☐ Production ☐ Deep
☒ Gas ☐ Liquid Injection ☐ Storage ☒ Shallow

WATERSHED: FISHING CREEK

ELEVATION: 1500'

COUNTY/DISTRICT: WETZEL / GREEN

QUADRANGLE: CENTER POINT, WV

SURFACE OWNER: J.S. BOOTH ESTATE AND DALLISON LUMBER

ACREAGE: 41.28 +/-

OIL & GAS ROYALTY OWNER: JAMES K. BOOTH & JERRY MARTIN BOOTH

ACREAGE: 1,019.63 +/-

LEASE NUMBERS: _____

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: 15,200'

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

47 10303095

WW-6A1
(5/13)

Operator's Well No. Reilly S GRN WZ 8H

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

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

Received
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FEB 13 2015

WW-6A1

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

INFORMATION SUPPIED 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 depcited 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.

WW-6A1 Operator's Well No. Reilly S GRN WZ 8H

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 evidincing 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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	46/524
	S. A. Smith	South Penn Oil Company	Assignment	46/11
	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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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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	PennzEnergy Exploration and Production,LLC.	Devon Energy Production Company, LP	Merger	12/278
	Devon Energy Production Company, LP	East Recources, Inc.	Assignment	370/580
	East Recources, 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	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 Recources, Inc.	Assignment	370/580
	East Recources, 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	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 Recources, Inc.	Assignment	370/580
	East Recources, 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	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 Recources, Inc.	Assignment	370/580
	East Recources, 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	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 Recources, Inc.	Assignment	370/580
	East Recources, 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	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 Recources, Inc.	Assignment	370/580
	East Recources, 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	56/288
	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	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 Recources, Inc.	Assignment	370/580
	East Recources, 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	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 Recources, Inc.	Assignment	370/580

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	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Ferrebee 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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. Ferrebee	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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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. HUFSCHMITT 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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. HUFSCHMITT 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 Recources, Inc.	Assignment	370/580
	East Recources, 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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	Devon Energy Production Company, LP	East Recources, Inc.	Assignment	370/580
	East Recources, Inc.	HG Energy, LLC.	Assignment	118A/253
	East Resources, Inc and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
57135-15	PAUL J. SHIBEN, ETC	PENNZOIL COMPANY	1/8	67-A/629
	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 Recources, Inc.	Assignment	370/580
	East Recources, Inc.	HG Energy, LLC.	Assignment	118A/253
	East Resources, Inc and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
57135-16	BERNARD VINCENT STENDER ET UX	PENNZOIL COMPANY	1/8	68-A/623
	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 Recources, Inc.	Assignment	370/580
	East Recources, Inc.	HG Energy, LLC.	Assignment	118A/253
	East Resources, Inc and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
57135-04	JOSEPH BURL STENDER ET UX	PENNZOIL COMPANY	1/8	67-A/146
	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 Recources, Inc.	Assignment	370/580
	East Recources, Inc.	HG Energy, LLC.	Assignment	118A/253
	East Resources, Inc and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
57135-05	ESTHER MITCHELL ET VIR	PENNZOIL COMPANY	1/8	67-A/142
	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 Recources, Inc.	Assignment	370/580
	East Recources, Inc.	HG Energy, LLC.	Assignment	118A/253
	East Resources, Inc and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
57135-06	HELENA K. HUFSCHMITT	PENNZOIL COMPANY	1/8	67-A/138
	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 Recources, Inc.	Assignment	370/580
	East Recources, Inc.	HG Energy, LLC.	Assignment	118A/253
	East Resources, Inc and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
57135-07	LOUISE BRABHAM ET VIR	PENNZOIL COMPANY	1/8	67-A/118
	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 Recources, Inc.	Assignment	370/580
	East Recources, Inc.	HG Energy, LLC.	Assignment	118A/253
	East Resources, Inc and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
57135-08	VIRGINIA EDDY ET VIR	PENNZOIL COMPANY	1/8	67-A/130
	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 Recources, Inc.	Assignment	370/580
	East Recources, Inc.	HG Energy, LLC.	Assignment	118A/253
	East Resources, Inc and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
57135-00	DALE FLUHARTY ET UX	PENNZOIL COMPANY	1/8	66-A/583
	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 Recources, Inc.	Assignment	370/580
	East Recources, Inc.	HG Energy, LLC.	Assignment	118A/253
	East Resources, Inc and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
57135-01	HELENA M. STENDER BROWN ET VIR	PENNZOIL COMPANY	1/8	67-A/122
	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 Recources, Inc.	Assignment	370/580
	East Recources, Inc.	HG Energy, LLC.	Assignment	118A/253
	East Resources, Inc and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
57135-02	LENORE TALLMAN ET VIR	PENNZOIL COMPANY	1/8	67-A/150
	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 Recources, Inc.	Assignment	370/580
	East Recources, Inc.	HG Energy, LLC.	Assignment	118A/253
	East Resources, Inc and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
57135-03	MILDRED CHANCEY ET VIR	PENNZOIL COMPANY	1/8	67-A/126
	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 Recources, Inc.	Assignment	370/580
	East Recources, Inc.	HG Energy, LLC.	Assignment	118A/253
	East Resources, Inc and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
57197-00	KERMIT MCINTYRE ET AL	PENNZOIL COMPANY	1/8	67-A/91
	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

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	PennzEnergy Exploration and Production,LLC.	Devon Energy Production Company, LP	Merger	12/278
	Devon Energy Production Company, LP	East Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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
90815-00 (TR 3)	EDWARD A. FLAHIVE, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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
	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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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 Recources, Inc.	Assignment	370/580
	East Recources, 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	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 Recources, Inc.	Assignment	370/580
	East Recources, 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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WW-6AC
(1/12)

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

4710303095

Date of Notice Certification: 1/22/15

API No. 47- _____ - _____
Operator's Well No. Reilly S GRN WZ 8H
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:	West Virginia	UTM NAD 83	Easting:	526681.8
County:	Wetzel		Northing:	4371709.4
District:	Green	Public Road Access:		Lefthand Fork Road (C.R. 13/8)
Quadrangle:	Center Point	Generally used farm name:		
Watershed:	Fishing Creek			

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

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following: *PLEASE CHECK ALL THAT APPLY	OOG OFFICE USE ONLY
☐ 1. NOTICE OF SEISMIC ACTIVITY or ☑ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	☐ RECEIVED/ NOT REQUIRED
☑ 2. NOTICE OF ENTRY FOR PLAT SURVEY or ☐ NO PLAT SURVEY WAS CONDUCTED	☐ RECEIVED
☐ 3. NOTICE OF INTENT TO DRILL or ☑ NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or ☐ WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	☐ RECEIVED/ NOT REQUIRED
☑ 4. NOTICE OF PLANNED OPERATION	☐ RECEIVED
☑ 5. PUBLIC NOTICE	☐ RECEIVED
☑ 6. NOTICE OF APPLICATION	☐ RECEIVED

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

Received
Office of Oil & Gas
FEB 13 2015

WW-6AC
(1/12)

4710303095

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

NOTARY SEAL — AMBER KOLLOCK NOTARY PUBLIC # 14000742 EXP. 01/23/18 STATE OF OKLAHOMA

Subscribed and sworn before me this 13 day of Jan, 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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Office of Oil & Gas
FEB 13 2015

WW-6A
(9-13)

API NO. 47- 47 10 3 03 0 9 5
OPERATOR WELL NO. Reilly S GRN WZ 8H
Well Pad Name: Reilly GRN WZ

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

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FEB 13 2015

WW-6A
(8-13)

API NO. 47- 47 10303095
OPERATOR WELL NO. Reilly S GRN WZ 8H
Well Pad Name: Reilly GRN WZ

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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API NO. 47- 47 10 30 30 95
OPERATOR WELL NO. Reilly S GRN WZ 8H
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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Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

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WW-6A
(8-13)

API NO. 47-_____-_____
OPERATOR WELL NO. Reilly S GRN WZ 8H
Well Pad Name: Reilly GRN WZ

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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WW-6A
(8-13)

API NO. 47- _____ -
OPERATOR WELL NO. Reilly S GRN WZ 8H
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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

AMBER KOLLOCK NOTARY # 14000742 EXP. 01/23/18 PUBLIC STATE OF OKLAHOMA

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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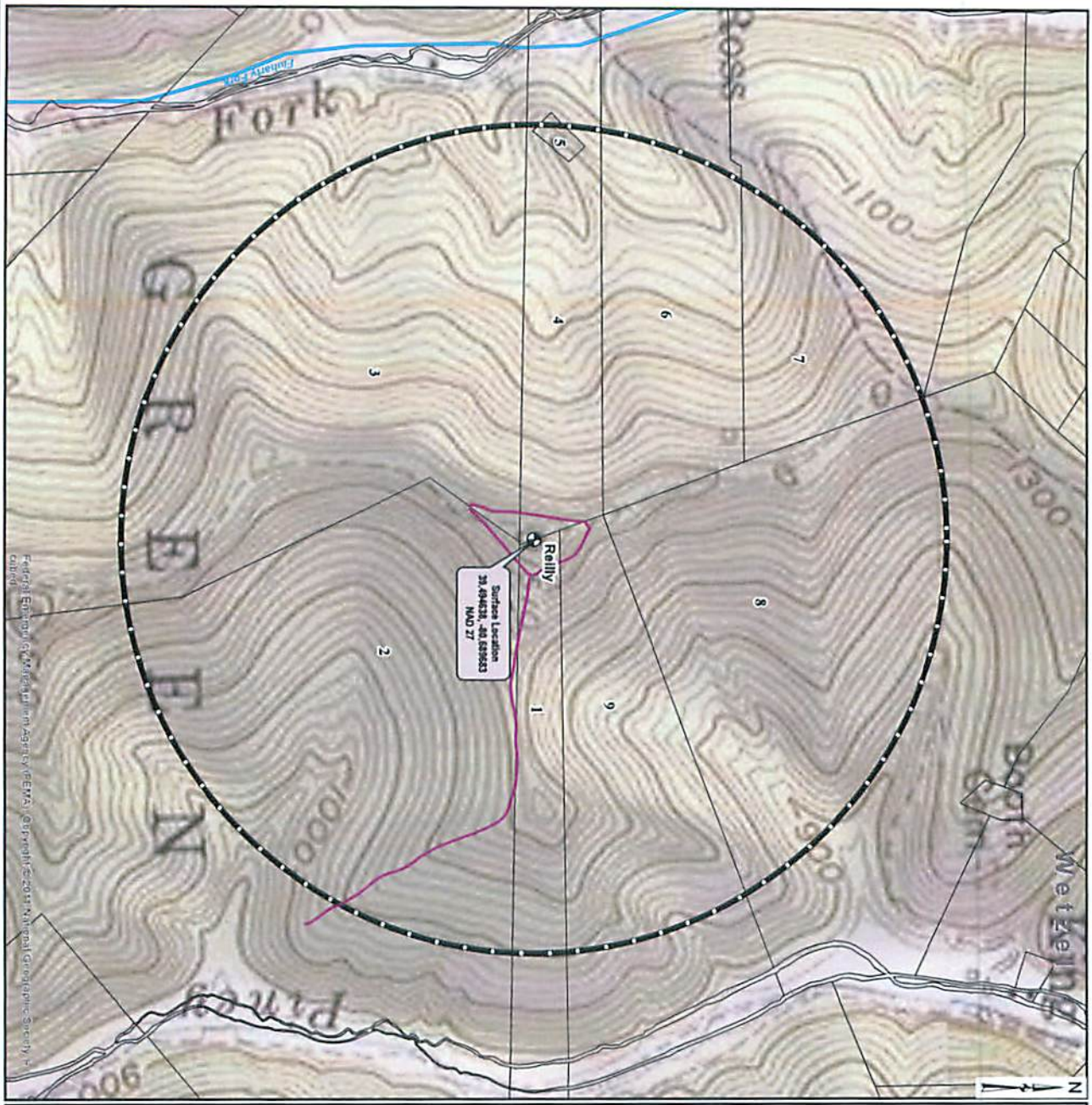

PROPERTY ID	PARCEL NO.	PROPERTY DATA OWNER	OWNER ADDRESS
1	05 2400180000	J. BOOTH ET	223 GARDNER AVE MORGANTOWN, WV
2	05 2400290000	STATE OF WV PUBLIC LEISURE & SUPPLY COMMISSION & EN	CHARLESTON WV
3	05 2400310000	STATE OF WV PUBLIC LEISURE & SUPPLY COMMISSION & EN	CHARLESTON WV
4	05 1100170000	DAN ROBIN HAMES	PO BOX 55 JACKSONBURG WV
5	05 2400340000	RUSHA PYCHERTON	2048 HILLSIDE TERRACE
6	05 2400370000	JOHN L KNIGHT	RR 4 BOX 331 PENNSBORO, WV
7	05 2400320000	BECKY & DENNIS FUTCHMAN	PO BOX 331 PENNSBORO, WV
8	05 2400350000	THEODORE & PAULA RAMSBOTTOM	1111 LAKESIDE LN MORGANTOWN, WV
9	05 2400180000	J. BOOTH ET	223 GARDNER AVE MORGANTOWN, WV

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

250 0 250 500 Feet

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FEB 13 2015

ISSUE	
EXHIBIT	
DATE:	01.19.15
JOB NO:	75111T
DRAWN:	CHD
SHEET NO.	1

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WATER SAMPLING FIELD MAP

REILLY WELL PAD
WETZEL COUNTY, WV

AMERICAN ENERGY
UTICA

REVISIONS		
NO.	DATE	DESCRIPTION

4710303095

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
Theordore & 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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FEB 13 2015

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WW-6A3
(1/12)

Operator Well No. Reilly S GRN WZ 8H

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:	West Virginia	Approx. Latitude & Longitude:	N 4371709.4/ E 526681.8
County:	Wetzel	Public Road Access:	Left-hand Fork Road (CR 13/8)
District:	Green	Watershed:	Fishing Creek
Quadrangle:	Center Point	Generally used farm name:	David Fluharty

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	Address:	301 NW 63rd St, Suite 600
Telephone:	405-607-5529		Oklahoma City, OK 73116
Email:	ariel.bravo@aep-lp.com	Facsimile:	405-607-5868

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FEB 13 2015
WV Department of Environmental Protection

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

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WW-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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WW-6A5
(1/12)

Operator Well No. Reilly S GRN WZ 8H

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:** 02/05/0201

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:	West Virginia	UTM NAD 83 Easting:	526681.8
County:	Wetzel	Northing:	4371709.4
District:	Green	Public Road Access:	Left-hand Fork Road (CR 13/8)
Quadrangle:	Center Point	Generally used farm name:	David Fluharty
Watershed:	Fishing Creek		

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	Address:	301 NW 63rd, Suite 600
Telephone:	405-607-5529		Oklahoma City, OK 73116
Email:	ariel.bravo@aep-lp.com	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.

Received
Office of Oil & Gas
FEB 13 2015

4710303095

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

Received
Office of Oil & Gas
FEB 13 2015

4710303095

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 South (503) Pad, Tyler County

Reilly S GRN WZ 2H Reilly S GRN WZ 4H Reilly S GRN WZ 6H
Reilly S GRN WZ 8H

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

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

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:	Reilly GRN WZ
Federal Well:	No
Longitude:	
Latitude:	
Long/Lat Projection:	NAD27
True Vertical Depth (TVD):	
Total Clean Fluid Volume* (gal):	8,553,174

FracFocus Chemical Disclosure Registry

(e.g. XX-XXX-XXXXX-0000)

anga America's Natural Gas Alliance

Additive	Specific Gravity	Additive Quantity	Mass (lbs)	
Water	1.00	8,553,174	71,376,237	gal
Sand (Proppant)	2.65	8,135,700	8,135,700	lb
Hydrochloric Acid (15%)	1.07	43,500	388,418	gal
Hydrochloric Acid (7.5%)	1.04	0	0	gal
PROHIB II	0.92	44	336	gal
FRA 407	1.05	9,505	83,523	gal
BIO CLEAR 2000	1.24	0	0	gal
PRO SCALE CLEAR 112	1.19	0	0	gal
PRO FLO 102 M	0.94	3,695	28,985	gal
PRO GEL 4.0L	1.02	6,716	57,166	gal
PRO BREAKER 4	1.26	30	312	gal
BXL-10C	1.27	0	0	gal
PRO DFB-1T	1.31	0	0	gal
BUFFER 1	2.13	0	0	lb
POLY BREAK	1.20	0	0	gal
				gal
				gal
				gal
				gal
		Total Slurry Mass (Lbs)	80,979,697	

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 Base Fluid	Water	7732-18-5	100.00%	71,376,237	88.14152%	
Sand (Proppant)	PSC	Proppant	Silica Substrate		100.00%	8,135,700	10.04663%	
Hydrochloric Acid (15%)	Producers Service Corp	Acidizing	Hydrochloric Acid	7647-01-0	10.00%	10,842	0.04851%	
PROHIB II	Producers Service Corp	Inhibitor	Dimethylformamide, bis(chloroethyl) ether, diquaternary	68607-28-3	40.00%	142	0.00018%	
			2-Butoxyethanol	111-76-2	20.00%	71	0.00009%	
			Ethylene Glycol	107-21-1	20.00%	71	0.00009%	
			Methyl Alcohol	67-56-1	20.00%	71	0.00009%	
			Nonyl Phenol Ethoxylate, Branched	127087-87-0	15.00%	53	0.00007%	
			Propargyl Alcohol	107-19-7	15.00%	53	0.00007%	
			Coco alkyldimethylamine	61788-93-0	2.50%	9	0.00001%	
			Water	7732-18-5	Proprietary	#VALUE!	#VALUE!	
FRA 407	Producers Service Corp	Friction Reducer	Petroleum Distillate	64742-47-8	40.00%	33,409	0.04172%	
			Polyacrylamide salt	Proprietary	30.00%	25,057	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%	
			Water	7732-18-5	Proprietary	#VALUE!	#VALUE!	
PRO FLO 102 M	Producers Service Corp	Surfactant	Methyl Alcohol	67-56-1	60.00%	17,391	0.02172%	
			N-dodecyl-2-pyrrolidone	2687-96-9	5.00%	1,449	0.00181%	
			Water	7732-18-5	Proprietary	#VALUE!	#VALUE!	
			Ethoxylate Alcohol	Proprietary	Proprietary	#VALUE!	#VALUE!	
PRO BREAKER 4	Producers Service Corp	Breaker	Ethylene Glycol	107-21-1	40.00%	125	0.00016%	
			Sucrose	57-50-1	40.00%	125	0.00016%	
			Polyether Polyol	9003-11-6	1.00%	3	0.00000%	
			Sodium Bicarbonate	144-55-8	1.00%	3	0.00000%	
			Hexamethylenetetramine	100-97-0	1.00%	3	0.00000%	
			Proprietary Ingredient	Proprietary	1.00%	3	0.00000%	
			Proprietary Ingredient	Proprietary	1.00%	3	0.00000%	
			Proprietary Ingredient	Proprietary	1.00%	3	0.00000%	
			Water	7732-18-5	Proprietary	#VALUE!	#VALUE!	
PRO GEL 4.0L	Producers Service Corp	Gelling Agent	Distillates (Petroleum), hydrotreated light	64742-47-8	65.00%	37,158	0.04641%	
			Nonylphenol Ethoxylate	9016-45-9	5.00%	2,858	0.00357%	
			Guar Gum	9000-30-0	50.00%	28,581	0.03570%	
			Nonionic Surfactant	68920-66-1	5.00%	2,858	0.00357%	

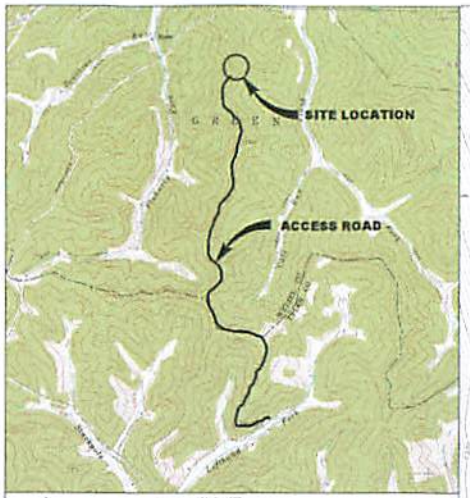
*Total Water Volume sources may include fresh water, produced water, and/or recycled water

** 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.

47 10303095

103-03085



APPROVED
WVDEP OOG
5-29-2015

JOHN S. KNIGHT
TAX MAP & PARCEL
5-23-32
65.00 ACRES

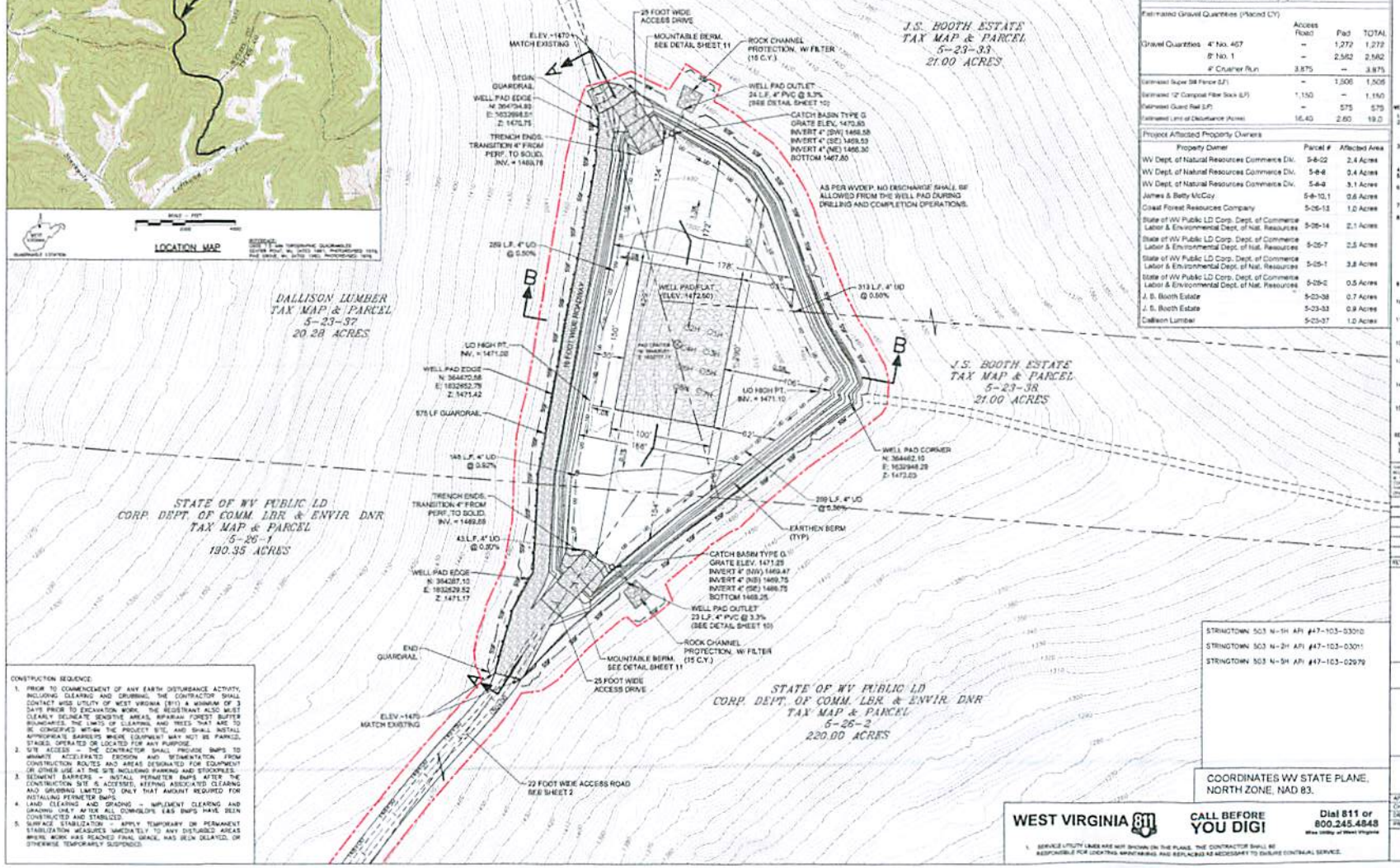
J.S. BOOTH ESTATE
TAX MAP & PARCEL
5-23-33
21.00 ACRES

DALLISON LUMBER
TAX MAP & PARCEL
5-23-37
20.28 ACRES

J.S. BOOTH ESTATE
TAX MAP & PARCEL
5-23-38
21.00 ACRES

STATE OF WV PUBLIC LD
CORP. DEPT. OF COMM. LBR. & ENVIR. DNR
TAX MAP & PARCEL
5-26-1
190.35 ACRES

STATE OF WV PUBLIC LD
CORP. DEPT. OF COMM. LBR. & ENVIR. DNR
TAX MAP & PARCEL
5-26-2
220.00 ACRES



Estimated Gross Material Balance (Bank CY)			
Final Developments - Gravel Option			
	Cut	Fill	Stockpile
Access Road	8,691	4,997	
Pad	64,905	469	
Totals	73,596	5,466	68,130
Topsoil (Pad)			3,579
Est. Stockpile Volume (Bank CY)			3,579
Est. Swell Factor	(20%)		716
Est. Stockpile Volume (Loose CY)			4,295

Notes:
1. Material balance for est. gross earthwork quantities only.
2. Topsoil est. volume based on 12 inches average depth.
3. Material balance and aggregate quantities based on estimates and may not be representative of actual quantities.
4. Estimates do not reflect contractor pay volumes.

Estimated Gravel Quantities (Placed CY)			
	Access Road	Pad	TOTAL
Gravel Quantities 4" No. 467	–	1,272	1,272
8" No. 1	–	2,582	2,582
4" Crusher Run	3,875	–	3,875
Estimated Super Silt Fence (LF)	–	1,506	1,506
Estimated 12" Compost Filter Sock (LF)	1,150	–	1,150
Estimated Guard Rail (LF)	–	575	575
Estimated Limit of Disturbance (Acres)	16.40	2.60	19.0

Project Affected Property Owners		
Property Owner	Parcel #	Affected Area
WV Dept. of Natural Resources Commerce Div.	5-8-22	2.4 Acres
WV Dept. of Natural Resources Commerce Div.	5-8-8	0.4 Acres
WV Dept. of Natural Resources Commerce Div.	5-8-9	9.1 Acres
James & Betty McCoy	5-8-10.1	0.6 Acres
Coast Forest Resources Company	5-26-13	1.0 Acres
State of WV Public LD Corp. Dept. of Commerce Labor & Environmental Dept. of Nat. Resources	5-26-14	2.1 Acres
State of WV Public LD Corp. Dept. of Commerce Labor & Environmental Dept. of Nat. Resources	5-26-7	2.5 Acres
State of WV Public LD Corp. Dept. of Commerce Labor & Environmental Dept. of Nat. Resources	5-26-1	3.8 Acres
State of WV Public LD Corp. Dept. of Commerce Labor & Environmental Dept. of Nat. Resources	5-26-2	0.5 Acres
J. B. Booth Estate	5-23-38	0.7 Acres
J. B. Booth Estate	5-23-33	0.9 Acres
Dallison Lumber	5-23-37	1.0 Acres

SHEET SET LIST	
SHT. NO.	DESCRIPTION
1 - 7	SITE DEVELOPMENT PLANS
8	WELL PAD SECTIONS
9	CONSTRUCTION NOTES
10 - 12	CONSTRUCTION DETAILS
13 - 14	SURVEY POINT PLANS
15	SITE RECLAMATION PLAN
G - 3	KEYWAY AND BENCHING DETAIL (CTL ENGR., INC.)
1	CONST. ENTRANCE (E.L. ROBINSON ENGINEERING)
1 - 3	CONST. ENTRANCE (E.L. ROBINSON ENGINEERING)

LEGEND
- WELL HEAD
- SSF — SUPER SILT FENCE
- UD — 4" PERFORATED PVC UNDERDRAIN
- APPROXIMATE LIMITS OF DISTURBANCE
- APPROXIMATE PROPERTY LINE
- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- PROPOSED FINAL GRADE INDEX CONTOUR
- PROPOSED FINAL GRADE INTERMEDIATE CONTOUR
- A A — SECTION (SEE SHEET 8)

WEST VIRGINIA GENERAL NOTES:
1. REFERENCE THIS SHEET WITH THE CONSTRUCTION NOTES AND DETAILS.
2. SITE TO BE CONSTRUCTED IN ACCORDANCE WITH WELL OR DRILLING PERMIT. CONTRACTOR RESPONSIBLE TO OBTAIN ALL OTHER ANCILLARY PERMITS/APPROVALS REQUIRED TO CONSTRUCT SITE INCLUDING BUT NOT LIMITED TO FEDERAL, STATE, AND LOCAL REQUIREMENTS.
3. GEOTECHNICAL ENGINEERING FOR THIS PROJECT WAS COMPLETED BY CTL ENGINEERING, INC. NOTES TO BIDDING USED SHALL ADHERE TO 2014 FOR PAD AREA CONSTRUCTION. FOLLOW ATTACHED CTL ENGINEERING, INC. DETAIL SHEET AT END OF SET FOR PROPER BENCHING REQUIRED AND TOE KEY CONSTRUCTION.
4. ESTABLISH EROSION AND SEDIMENTATION CONTROL BMPS PRIOR TO EARTHWORK.
5. TOPSOIL AND STOCKPILE AVAILABLE TOPSOIL FROM WITHIN THE LIMIT OF DISTURBANCE.
6. NO EARTHWORK OR FILL SHALL BE PLACED ON FROZEN MATERIAL. FILL MATERIAL SHALL BE FREE OF ORGANICS, LARGE ROCKS, FROZEN SOIL OR OTHER OBJECTIONABLE MATERIAL.
7. CUT/FILL SLOPES SHALL BE CONSTRUCTED TO A MAXIMUM SLOPE OF 3H:1V UNLESS NOTED OTHERWISE.
8. FILL MATERIAL WILL BE PLACED IN LIFTS OR LAYERS OVER THE LENGTH OF THE FILL. LIFT THICKNESS OF THE SOIL SHALL BE NO THAN AS THE SURFACE ROADWAY ENCASED MATERIAL WILL PERMIT, TYPICALLY, 6 - 12 INCHES THICK. THE SIZE OF ROCK LIFTS SHALL NOT EXCEED 36 INCHES. THE ROCK SHALL NOT BE GREATER IN ANY DIMENSION THAN 24 INCHES. COMPACTION SHALL BE OBTAINED BY COMPACTION EQUIPMENT, SHEEP'S FOOT OR PAD ROLLER, DEPENDING ON MATERIAL WITH COMPACTION TO VISIBLE NON-MOVEMENT OF THE EMBANKMENT MATERIAL. COMPACTION EFFORT SHALL NOT EXCEED OPTIMUM MOISTURE LIMITS. EACH LIFT SHALL BE COMPACTED TO A STANDARD PROCTOR DENSITY OF AT LEAST 95% WITHOUT RETAINING THE NEXT LIFT. NO TESTING SHALL BE PERFORMED AT A RATE OF 2 TESTS/ACRE/LIFT.
9. FINAL PAD SUBGRADE (SOIL) TO BE PROOF ROLLED TO ENSURE COMPETENCY. PLACE GRAVEL OVER QUESTIONABLE IF SUBGRADE IS SOIL UNIT QUESTIONABLE IF SUBGRADE IS COMPETENT BEDROCK.
10. THE CATCH BASIN/COLLECTION SUMP SHALL BE A TYPE G INLET STRUCTURE AS FOUND IN THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS STANDARD DETAIL, STANDARD SHEET SB6-G OR EQUIVALENT.
11. THE BERM PERIMETER PIPING SHALL CONSIST OF SMOOTH WALLED 4 INCH PERFORATED PVC PIPE. THE PIPE SHALL HAVE A MINIMUM OF 12 INCH OF SOIL COVER. OUTLET PROTECTION SHALL BE USED TO PREVENT EROSION FROM THE DISCHARGE.
12. CONTRACTOR TO CONSTRUCT ACCESS ROAD IN ACCORDANCE WITH DETAILS PROVIDED. ADDITIONAL COVER MATERIAL PLACEMENT REQUIRED IN AREA OF UTILITY LINES.
13. CONTRACTOR SHALL COORDINATE MATERIAL MANAGEMENT DESIGNS CUT/FILL, STOCKPILES, GRAVEL SOURCE(S) WITH AMERICAN ENERGY-MARCELLUS, LLC PRIOR TO MOBILIZATION. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER EROSION AND SEDIMENT CONTROLS, BOTH ON SITE AND OFF SITE.
14. ALL SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS ARE STABILIZED AND THE VEGETATIVE GROUND COVER HAS ACHIEVED A UNIFORM 70% GROWTH. ANY AREA NOT ACHIEVING A 70% VEGETATIVE COVER SHALL BE RESEEDED AND MULCHED WITHIN 24 HOURS OF DETECTION.
15. SECONDARY CONTAINMENT WILL BE PROVIDED DURING DRILLING PROCESS. A LINER AND MAT SYSTEM WITH BERM WILL BE INSTALLED PRIOR TO DRILLING AND BAKER INDEED SECONDARY CONTAINMENT WILL BE DISPOSED OFF-SITE IN ACCORDANCE WITH WV REGULATIONS.

REFERENCE:
1. TOPOGRAPHY PROVIDED BY HG ENERGY LLC 08/2013
2. PROPERTY INFORMATION PROVIDED BY HG ENERGY LLC 12/23/2013 AND AEP 05/20/2015.

REVISION	DATE	DESCRIPTION
	05/22/2015	REVISIONS PER WVDEP COMMENTS
5	12/29/2014	REMOVE FILL AREA 1
4	10/16/2014	UPDATE PAD TO AEU SPECIFICATIONS
3	05/2014	REVISIONS PER WVDEP ACCESS ROAD COMMENTS
2	03/2014	REVISIONS PER WVDEP COMMENTS
1	01/27/2014	GENERAL EDITS

GRAPHIC SCALE 1" = 50'

STRINGTOWN 503 N-1H API #47-103-03010
STRINGTOWN 503 N-2H API #47-103-03011
STRINGTOWN 503 N-5H API #47-103-02979

COORDINATES WV STATE PLANE, NORTH ZONE, NAD 83.

CONSTRUCTION SEQUENCE:
1. PRIOR TO COMMENCEMENT OF ANY EARTH DISTURBANCE ACTIVITY, INCLUDING CLEARING AND GRUBBING, THE CONTRACTOR SHALL CONTACT MISS UTILITY OF WEST VIRGINIA (811) A MINIMUM OF 3 DAYS PRIOR TO EXCAVATION WORK. THE REGISTRANT ALSO MUST CLEARLY DELINEATE SENSITIVE AREAS, RIPARIAN FOREST BUFFER BOUNDARIES, THE LIMITS OF CLEARING AND TREES THAT ARE TO BE CONSERVED WITHIN THE PROJECT SITE, AND SHALL INSTALL APPROPRIATE BARRIERS WHERE EQUIPMENT MAY NOT BE PARKED, STAGED, OPERATED OR LOCATED FOR ANY PURPOSE.
2. SITE ACCESS – THE CONTRACTOR SHALL PROVIDE BMPS TO MINIMIZE ACCELERATED EROSION AND SEDIMENTATION FROM CONSTRUCTION ROUTES AND AREAS DESIGNATED FOR EQUIPMENT OR OTHER USE AT THE SITE INCLUDING PARKING AND STOCKPILES.
3. SEDIMENT BARRIERS – INSTALL PERIMETER BMPS AFTER THE CONSTRUCTION SITE IS ACCESSED, KEEPING ASSOCIATED CLEARING AND GRUBBING LIMITED TO ONLY THAT AMOUNT REQUIRED FOR INSTALLING PERIMETER BMPS.
4. LAND CLEARING AND GRADING – IMPLEMENT CLEARING AND GRADING ONLY AFTER ALL DOWNSLOPE E&S BMPS HAVE BEEN CONSTRUCTED AND STABILIZED.
5. SURFACE STABILIZATION – APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY TO ANY DISTURBED AREAS WHERE WORK HAS REACHED FINAL GRADE, HAS BEEN DELAYED, OR OTHERWISE TEMPORARILY SUSPENDED.

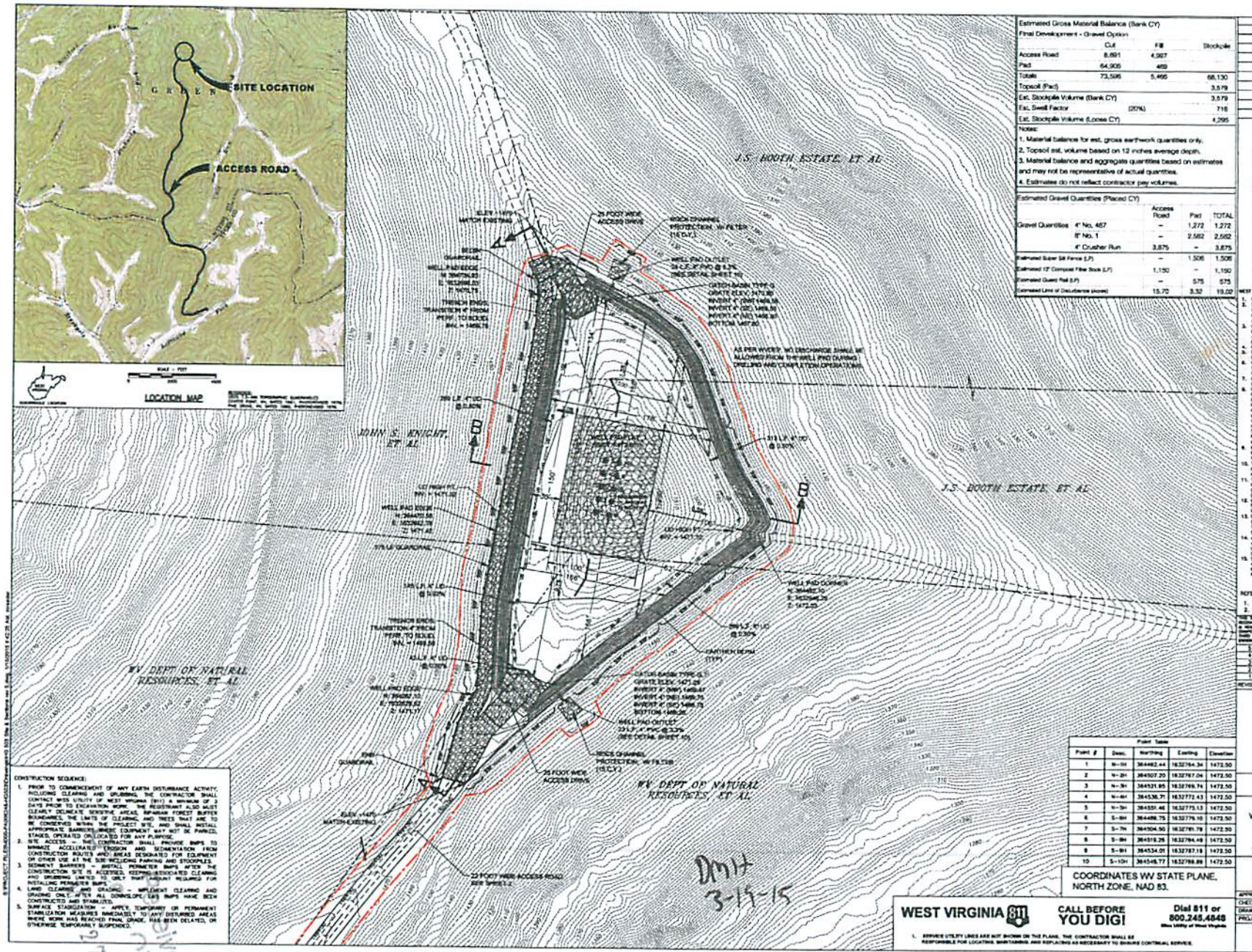
WEST VIRGINIA 811 — CALL BEFORE YOU DIG! Dial 811 or 800.245.4848
1. SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING, AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE.

SITE DEVELOPMENT PLAN
WITH EROSION AND SEDIMENTATION CONTROLS
WILEY AND REILLY S/N GRN WZ PAD
GREEN AND McELROY DISTRICTS
WETZEL AND TYLER COUNTIES, WEST VIRGINIA

PREPARED FOR
AMERICAN ENERGY-MARCELLUS, LLC
OKLAHOMA CITY, OKLAHOMA

APPROVED	MEP 01/05/2014
CHECKED	MEP 01/05/2014
DRAWN	MFM 01/05/2014
PROJECT No.	4000-PA006248
DRAWING NUMBER	PA006248-01 SHEET 1

Penn E&R
Environmental & Remediation, Inc.
111 RYAN COURT, PITTSBURGH, PA 15205
412-722-1223



Estimated Gross Material Balance (Bank CY)			
Final Development - Gravel Option			
	Cut	Fill	Stockpile
Access Road	8,691	4,987	
Pad	64,905	469	
Totals	73,596	5,466	68,130
Topsoil (Pad)			3,579
Est. Stockpile Volume (Bank CY)			3,579
Est. Swell Factor	(20%)		716
Est. Stockpile Volume (Loose CY)			4,295

Notes:
1. Material balance for est. gross earthwork quantities only.
2. Topsoil est. volume based on 12 inches average depth.
3. Material balance and aggregate quantities based on estimates and may not be representative of actual quantities.
4. Estimates do not reflect contractor pay volumes.

Estimated Gravel Quantities (Placed CY)				
		Access Road	Pad	TOTAL
Gravel Quantities	4" No. 467	–	1,272	1,272
	8" No. 1	–	2,582	2,582
	4" Crusher Run	3,875	–	3,875
Estimated Super Silt Fence (LF)		–	1,506	1,506
Estimated 12" Compost Filter Sock (LF)		1,150	–	1,150
Estimated Guard Rail (LF)		–	575	575
Estimated Limit of Disturbance (acres)		15.72	3.32	19.05

SHEET SET LIST	
SHT. NO.	DESCRIPTION
1 - 7	SITE DEVELOPMENT PLANS
8	WELL PAD SECTIONS
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1	CONST. ENTRANCE (E.L. ROBINSON ENGINEERING)
1 - 3	CONST. ENTRANCE (E.L. ROBINSON ENGINEERING)

LEGEND

- WELL HEAD
- SSF — SUPER SILT FENCE
- UD — 4" PERFORATED PVC UNDERDRAIN
- APPROXIMATE LIMITS OF DISTURBANCE
- APPROXIMATE PROPERTY LINE
- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- PROPOSED FINAL GRADE INDEX CONTOUR
- PROPOSED FINAL GRADE INTERMEDIATE CONTOUR
- A A — SECTION (SEE SHEET 8)

WEST VIRGINIA GENERAL NOTES:

1. REFERENCE THIS SHEET WITH THE CONSTRUCTION NOTES AND DETAILS.
2. SITE TO BE CONSTRUCTED IN ACCORDANCE WITH WELL DRILLING PERMIT. CONTRACTOR RESPONSIBLE TO OBTAIN ALL OTHER ANCILLARY PERMITS/APPROVALS REQUIRED TO CONSTRUCT SITE INCLUDING BUT NOT LIMITED TO FEDERAL, STATE, AND LOCAL REQUIREMENTS.
3. GEORECHNICAL ENGINEERING FOR THIS PROJECT WAS COMPLETED BY CTL ENGINEERING. REFER TO BORING LOGS DATED AUGUST 19, 2014 FOR PAD AREA CONSTRUCTION. FOLLOW ATTACHED CTL ENGINEERING, INC. DETAIL SHEET AT TOP OF CUT FOR PROPER BENCHING PROCEDURES AND KEY DEPTH DETERMINATION.
4. ESTABLISH EROSION AND SEDIMENTATION CONTROL BMPS PRIOR TO EARTHWORK.
5. REMOVE AND STOCKPILE AVAILABLE TOPSOIL WITHIN THE LIMIT OF DISTURBANCE.
6. NO EMBANKMENT FILL SHALL BE PLACED ON FROZEN MATERIAL. FILL MATERIAL SHALL BE FREE OF ORGANICS, LARGE ROCKS, FROZEN SOIL OR OTHER OBJECTIONABLE MATERIAL.
7. CUT/FILL SLOPES SHALL BE CONSTRUCTED TO A MAXIMUM SLOPE OF 2H:1V UNLESS NOTED OTHERWISE.
8. FILL MATERIAL WILL BE PLACED IN LIFTS OR LAYERS OVER THE LENGTH OF THE FILL. LIFT THICKNESS FOR SOIL SHALL BE 12 INCHES AND THE SUITABLE RANDOM EXCAVATED MATERIAL WILL PERMIT. TYPICALLY SHALE AND ROCK WILL BE USED IN LIFTS SHALL NOT EXCEED 24 INCHES. THE ROCK SHALL NOT BE GREATER IN LIFT THICKNESS THAN 24 INCHES. COMPACTION SHALL BE ACCOMPLISHED BY COMPACTION EQUIPMENT, SHEEP'S FOOT OR PAD ROLLER, DEPENDING ON MATERIAL WITH 2 PASSES OF THE EQUIPMENT. MOISTURE CONTENT SHALL BE MAINTAINED. COMPACTION EFFORT SHALL NOT EXCEED OPTIMUM MOISTURE LIMITS. EACH LIFT SHALL BE COMPACTED TO A UNIFORM PERCENTAGE DENSITY OF AT LEAST 95% BEFORE BEGINNING THE NEXT LIFT. QC TESTING SHALL BE PERFORMED AT A RATE OF 2 TESTS/ACRE/LIFT.
9. FINAL PAD SUBGRADE (TOE) TO BE PROOF ROLLED TO ENSURE COMPETENCY. PLACE GRAVEL OVER SEPARATE IF SUBGRADE IS SOIL, UNIT MOISTENS IF SUBGRADE IS COMPETENT MATERIAL.
10. THE CATCH BASIN/COLLECTION SUMP SHALL BE A TYPE G INLET STRUCTURE AS FOUND IN THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS STANDARD SHEET SB-4 OR EQUIVALENT.
11. THE WELL PROTECTION PIPING SHALL CONSIST OF SMOOTH WALLED 4 INCH PERFORATED PVC PIPE. THE PIPE SHALL UNDER A MINIMUM OF 12 INCH OF SOIL COVER. OUTLET PROTECTION SHALL BE USED TO PREVENT EROSION FROM THE DISCHARGE.
12. CONTRACTOR TO CONSTRUCT ACCESS ROAD IN ACCORDANCE WITH DETAILS PROVIDED. ADDITIONAL COVER MATERIAL PLACEMENT REQUIRED IN AREA OF UTILITY LINES.
13. CONTRACTOR SHALL COORDINATE MATERIAL MANAGEMENT (EXCESS CUT/FILL STOCKPILES, GRAVEL SOURCING) WITH AMERICAN ENERGY-MARCELLUS, LLC PRIOR TO MOBILIZATION. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER EROSION AND SEDIMENT CONTROLS, BOTH ON SITE AND OFF SITE.
14. ALL EARTHEN CONTROL MEASURES SHALL BE INSTALLED IN PLACE UNTIL DISTURBED AREAS ARE STABILIZED AND THE VEGETATIVE GROUND COVER HAS ACHIEVED A MINIMUM OF 70% COVERAGE. ANY AREAS NOT ACHIEVING A 70% ACCEPTABLE COVER SHALL BE REWORKED AND REVEGETATED WITHIN 24 HOURS OF DETECTION.
15. TEMPORARY CONTAINMENT FOR PRODUCED FLUIDS SHALL BE PROVIDED AS LINER AND WAT SYSTEM WITH BERM WALL BE INSTALLED PRIOR TO DRILLING AND WILL TEX. ANY RESIDUAL SECONDARY CONTAINMENT WILL BE DISPOSED OFFSITE IN ACCORDANCE WITH WV REGULATIONS.

REFERENCE:

1. TOPOGRAPHY PROVIDED BY HG ENERGY LLC 08/2013
2. PROPERTY INFORMATION PROVIDED BY HG ENERGY LLC 12/23/2013

THE SURVEY & TOPOGRAPHIC INFORMATION SHOWN ON THIS SHEET WAS PERFORMED BY THE UNDERSIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE WEST VIRGINIA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS. TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE POSITIONAL TOLERANCE ACHIEVED AND SHOWN HEREON WAS WITHIN THE LIMITS OF ERROR AS ESTABLISHED BY THE STANDARDS OF PRACTICE FOR A CLASS A SURVEY.

REVISION	DATE	DESCRIPTION
5	12/19/2014	REMOVE FILL AREA 1
4	10/16/2014	UPDATE PAD TO AEU SPECIFICATIONS
3	09/2014	RESPONSE PER WVDEP ACCESS ROAD COMMENTS
2	09/2014	REVISIONS PER WVDEP COMMENTS
1	01/27/2014	GENERAL EDITS

Point Table				
Point #	Desc.	Northing	Easting	Elevation
1	N-1st	364462.44	1632764.34	1472.50
2	N-2nd	364507.20	1632767.04	1472.50
3	N-3rd	364521.95	1632769.74	1472.50
4	N-4st	364536.71	1632772.43	1472.50
5	N-5th	364551.46	1632775.13	1472.50
6	S-6th	364488.75	1632776.10	1472.50
7	S-7th	364504.50	1632781.78	1472.50
8	S-8th	364519.25	1632784.48	1472.50
9	S-9th	364534.01	1632787.18	1472.50
10	S-10th	364548.77	1632788.88	1472.50

COORDINATES WV STATE PLANE, NORTH ZONE, NAD 83.

CONSTRUCTION SEQUENCE:

1. PRIOR TO COMMENCEMENT OF ANY EARTH DISTURBANCE ACTIVITY, INCLUDING CLEARING AND GRUBBING, THE CONTRACTOR SHALL CONTACT MISS UTILITY OF WEST VIRGINIA (811) A MINIMUM OF 3 DAYS PRIOR TO EXCAVATION WORK. THE REGISTRANT ALSO MUST CLEARLY DELINEATE SENSITIVE AREAS, MINIMUM FOREST BUFFER BOUNDARIES, THE LIMITS OF CLEARING, AND TREES THAT ARE TO BE CONSERVED WITHIN THE PROJECT SITE, AND SHALL INSTALL APPROPRIATE BARRIERS WHERE EQUIPMENT MAY NOT BE PARKED, STAKED, OPERATED OR LOCATED FOR ANY PURPOSE.
2. SITE ACCESS – THE CONTRACTOR SHALL PROVIDE BMPS TO MINIMIZE ACCELERATED EROSION AND SEDIMENTATION FROM CONSTRUCTION ROUTES AND AREAS DESIGNATED FOR EQUIPMENT OR OTHER USE AT THE SITE INCLUDING PARKING AND STOCKPILES.
3. SEDIMENT BARRIERS – INSTALL PERIMETER BMPS AFTER THE CONSTRUCTION SITE IS ACCESSED, KEEPING ASSOCIATED CLEARING AND GRUBBING LIMITED TO ONLY THAT AMOUNT REQUIRED FOR INSTALLING PERIMETER BMPS.
4. LAND CLEARING AND GRADING – IMPLEMENT CLEARING AND GRADING ONLY AFTER ALL DOWNSLOPE BMPS HAVE BEEN CONSTRUCTED AND STABILIZED.
5. SURFACE STABILIZATION – APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY TO ANY DISTURBED AREAS WHERE WORK HAS REACHED FINAL GRADE, HAS BEEN DELAYED, OR OTHERWISE TEMPORARILY SUSPENDED.

WEST VIRGINIA 811 — CALL BEFORE YOU DIG! — Dial 811 or 800.245.4848

1. SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING, AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE.

GRAPHIC SCALE 1"=50'

SITE DEVELOPMENT PLAN
WITH EROSION AND SEDIMENTATION CONTROLS
REILLY S/N GRN WZ PAD
GREEN AND McELROY DISTRICTS
WETZEL AND TYLER COUNTIES, WEST VIRGINIA

PREPARED FOR
AMERICAN ENERGY-MARCELLUS, LLC
OKLAHOMA CITY, OKLAHOMA

APPROVED	MEP 01/03/2014	
CHECKED	MEP 01/03/2014	
DRAWN	MFR 01/03/2014	
PROJECT No.	4090-PA006248	

DRAWING NUMBER
PA006248-01
SHEET 1

Penn E&R
Environmental & Remediation, Inc.
111 RYAN COURT, PITTSBURGH, PA 15205
412-722-1222

DMH 3-19-15

Received Oil & Gas
MAR 19 2015

4710303095

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 completely amenable.

Laura Adkins
OOG Permit Reviewer