



west virginia department of environmental protection

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

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

May 05, 2014

WELL WORK PERMIT

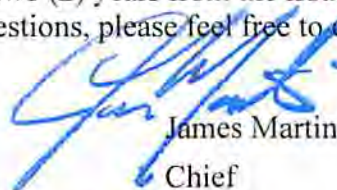
Vertical Well

This permit, API Well Number: 47-2105766, issued to ENERGY CORPORATION OF AMERICA, 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: RINEHART S-2
Farm Name: ERNEST L. ARBUCKLE FAMILY
API Well Number: 47-2105766
Permit Type: Vertical Well
Date Issued: 05/05/2014

PERMIT CONDITIONS

West Virginia Code § 22-6-11 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. 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 § 22-6-20, 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.
2. Pursuant to 35 CSR § 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
3. Pursuant to 35 CSR § 4-19.1.c, if the operator is unable to sample and analyze any water well or spring within one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
4. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
5. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours.
7. Well work activities shall not constitute a hazard to the safety of persons.

OK 3574690
650

WW - 2B
(Rev. 8/10)

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

3 372

1) Well Operator: Energy Corporation of America
Operator ID: 306345 County: Gilmer District: 3 Glenville 7.5
Quadrangle: 372

2) Operator's Well Number: Rinehart S-2 3) Elevation: 872'

4) Well Type: (a) Oil _____ or Gas _____
(b) If Gas: Production / Underground Storage _____
Deep _____ / Shallow _____

5) Proposed Target Formation(s): Speechley, Warren, Gordon, Big Injun, Big Lime Proposed Target Depth: 3130'

6) Proposed Total Depth: 3300' Feet Formation at Proposed Total Depth: Speechley

7) Approximate fresh water strata depths: 360', 466', 686'

8) Approximate salt water depths: None reported in offset wells

9) Approximate coal seam depths: None reported in offset wells

10) Approximate void depths, (coal, Karst, other): None reported in offset wells

11) Does land contain coal seams tributary to active mine? No

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)

Drill and complete a Vertical Well as follows: After setting and cementing surface casing string using Type 1 and or an approved light cement, operator will drill to approximately 3300' and run production casing. Multiple formations will be foam fraced depending well log analysis. Cement will be placed above the shallowest known producing horizon and will be verified by bond log.

13) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS			FOOTAGE	INTERVALS	CEMENT
	Size	Grade	Weight per ft			
Conductor	13 3/8"	LS,R3	43.6#	40'	40'	NA
Fresh Water	7"	LS,R3	16#	762'	762'	CTS
Coal						
Intermediate						
Production	4 1/2"	WT65, R3	9.5#	3300'	3300'	320
Tubing						
Liners						

Debra O'Hara
3-24-14
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Office of Oil and Gas
APR 01 2014

Packers: Kind: _____
Sizes: _____
Depths Set _____

WV Department of
Environmental Protection

WW-2A
(Rev. 6-07)

1.) Date: March 3, 2014
2.) Operator's Well Number Rinehart S-2
State 47- County - Permit -
3.) API Well No.: 47- -

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

4) Surface Owner(s) to be served:
(a) Name Ernest Arbuckle Family Trust
Address 1300 Chapline Street
Wheeling, WV 26003
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Bryan Harris
Address P.O. Box 157
Volga, WV 26238
Telephone 304-553-6087
5) (a) Coal Operator
Name _____
Address _____
(b) Coal Owner(s) with Declaration
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:

OR Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas

Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

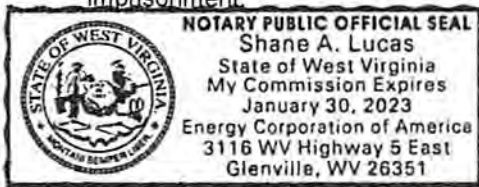
I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through on the above named parties by:

- Personal Service (Affidavit attached)
- Certified Mail (Postmarked postal receipt attached)
- Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 35 CSR 4, and I agree to the terms and conditions of any permit issued under this application.

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, 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 Energy Corporation of America
By: Rodney A. Winters
Its: Vice President of Land
Address 501 56th Street SE
Charleston, WV 25304
Telephone 304-925-6100

Subscribed and sworn before me this 31 day of MARCH, 2014

[Signature] Notary Public
My Commission Expires January 30, 2023

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Office of Oil and Gas

WV Department of
Environmental Protection
05/09/2014

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

7012 2920 0000 6497 3824

CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$ 1.61
Certified Fee	3.30
Return Receipt Fee (Endorsement Required)	2.70
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.61

Postmark
Here

Sent To **ARBUCKLE RINEHART S-1 S-2**
 Street, Apt. No.,
 or PO Box No.
 City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

ARBUCKLE ERNEST L FAMILY TRUST
 1300 CHAPLINE ST
 WHEELING, WV 26003

2. Article Number
(Transfer from service label)

7012 2920 0000 6497 3824

PS Form 3811, February 2004

COMPLETE THIS SECTION ON DELIVERY

A. Signature X Agent
 Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

RECEIVED
 Office of Oil and Gas
 APR 01 2014

Domestic Return Receipt

102595-02-M-1540

2105766



7012 2920 0000 6497 3824



Energy Corporation of America
501 56th Street
Charleston, West Virginia 25304

ERNEST ARBUCKLE FAMILY TRUST
1300 CHAPLINE ST
WHEELING, WV 26003

FIRST CLASS MAIL

Environmental Protection
APR 01 2014

2105766



7012 2920 0000 6497 3831



Energy Corporation of America
501 56th Street
Charleston, West Virginia 25304

BRYAN HARRIS
P.O. BOX 157
VOLGA, WV 26238

FIRST CLASS MAIL

ENERGY CORPORATION OF AMERICA
ATTENTION: BRYAN HARRIS
APR 01 2014
CUSTOMER SERVICE CENTER
FARMINGTON, WV 26031

2105766

7012 2920 0000 6497 3831

CERTIFIED MAIL™ RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$ 2.24
Certified Fee	3.30
Return Receipt Fee (Endorsement Required)	2.70
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.24

Postmark
Here

Sent To **BRYAN HARRIS RINGHART S-1 S-2**
 Street, Apt. No.; or PO Box No. **P.O. Box 157**
 City, State, ZIP+4 **Volga, WV 26238**

PS Form 3800, August 2006

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature X <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to:</p> <p style="text-align: center;">HARRIS, BRYAN P.O. BOX 157 VOLGA, WV</p>	<p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input checked="" type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>

2. Article Number (Transfer from service label) **7012 2920 0000 6497 3831**

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2105766

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6, Section 8(d)
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:

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Lloyd Rinehart	Charles Swisher	1/8	73/41
Farmout From Equitable Gas Co.	To EAE DBA ECA	1/8	81/375

**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

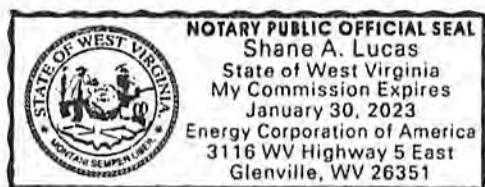
The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity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

Well Operator:
By: Its:

Energy Corporation of America
 Rodney A. Winters
 Vice President of Land

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 WV Department of Environmental Protection

State of West Virginia, County of Kanawha, to wit:
On this the 31st day of March, 2014, before me, the undersigned officer, personally appeared Rodney A. Winters, who acknowledged himself to be Vice President of Land of Energy Corporation of America, a West Virginia corporation, and that he is authorized to do so, executed the foregoing instrument for the purpose therein contained by signing the name of the corporation. In witness whereof, I hereunto set my hand and official seal. My commission expires January 30, 2023.



Notary Public

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 WV Department of Environmental Protection



Certificate

I, Natalie E. Tennant, Secretary of State of the State of West Virginia, hereby certify that

by the provisions of the West Virginia Code, Articles of Merger were received and filed, MERGING EASTERN AMERICAN ENERGY CORPORATION, A QUALIFIED WV ORGANIZATION, WITH AND INTO ENERGY CORPORATION OF AMERICA, A QUALIFIED WV ORGANIZATION.

Therefore, I hereby issue this

CERTIFICATE OF MERGER



Given under my hand and the Great Seal of the State of West Virginia on this day of December 22, 2009

Natalie E. Tennant

Secretary of State

WW-2B1
(5-12)

Well No. Rinehart S-2

West Virginia Department of Environmental Protection
Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

Be advised, you have the right to sample and analyze any water supply at your own expense.

Listed below is the laboratory chosen by operator to perform analysis, and contactor chosen to collect sample.

Certified Laboratory Name	<u>Reliance Labs</u>
Sampling Contractor	<u>Smith Land Surveying, Inc. - Environmental Division</u>

Well Operator	<u>Energy Corporation of America</u>
Address	<u>501 56th Street S.E.</u>
	<u>Charleston, WV 25304</u>
Telephone	<u>304-925-6100</u>

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site, the Chief may require the operator to test wells up to 2000 feet from the proposed site.

NOTE: There appears to be 4 +/- potable water sources within 1,500', therefore tests will be offered and samples taken as required.

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Environmental Protection

05/09/2014

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Office of Oil and Gas

MAY 5 2014

WV Department of
Environmental Protection



WELL INFORMATION AND POTENTIAL WATER WELL SAMPLE DATA SHEET

OPERATOR: Energy Corporation of America
LEASE NAME AND NUMBER: Rinehart Lease Well No. S-2

COMMENTS

The initial field and/or mapping review of the area surrounding the proposed well site revealed the below listed surface owner(s) that were potentially utilizing groundwater (potable) for Human Consumption or other purposes within 1500' of the proposed well site. (For location of each site see attached area map.)

INDIVIDUAL CONTACTED OR NOTIFIED

★ Site: 1 Spacing N/A Owner/Occupant: Gregory Smith
Address: P.O. Box 150 Glenville, WV 26351 Ph: (304) 462-5634
Field Contact Date: 4/26/14 Located: No Date Located: N/A Source: City Water
If No, declined by who Gregory Smith Letter/Notice Date: 1st N/A 2nd N/A Certified (3rd) N/A
Comments: Tax Map 1 Parcel 4
Signed letter of refusal WILL ALLOW TESTING IN POND
POND IS W/IN 2000' OF WELL

Site: 2 Spacing N/A Owner/Occupant: Monongahela Power Company
Address: 5001 Nasa Blvd. Fairmont, WV 26554 Ph: (800) 686-0022
Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown
If No, declined by who _____ Letter/Notice Date: 1st N/A 2nd N/A Certified (3rd) 4/7/14
Comments: Tax Map 1 Parcel 4.2 also Tax Map 9 Parcel 7.1 & Parcel 7.2
No office located on property.
Certified sent 4/7/14

Site: 3 Spacing N/A Owner/Occupant: Glenville Presbyterian Church
Address: 1172 WV Hwy 5 W Glenville, WV 26351 Ph: (304) 462-7239
Field Contact Date: 3/26/14 Located: No Date Located: N/A Source: City Water
If No, declined by who Charles Ringe Letter/Notice Date: 1st N/A 2nd N/A Certified (3rd) N/A
Comments: Tax Map 9 Parcel 7.5
Signed letter of refusal.

Site: 4 Spacing N/A Owner/Occupant: Ricardo Lee
Address: 1362 WV RT. 5 Glenville, WV 26351 Ph: (304) 462-7478
Field Contact Date: 3/27/14 Located: No Date Located: N/A Source: City Water
If No, declined by who Richard Lee Letter/Notice Date: 1st N/A 2nd N/A Certified (3rd) N/A
Comments: Tax Map 9 Parcel 4.2
Signed letter of refusal.

05/09/2014

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Office of Oil and Gas

MAY 5 2014

WV Department of
Environmental Protection

Site: 5 Spacing N/A Owner/Occupant: Charles & Naomi Salisbury
Address: 1404 WV Hwy 5 W Glenville, WV 26351 Ph: (304) 462-5843
Field Contact Date: 3/20/14 Located: No Date Located: N/A Source: City Water
If No, declined by who Charles Salisbury Letter/Notice Date: 1st N/A 2nd N/A Certified (3rd) N/A
Comments: Tax Map 9 Parcel 4
Signed letter of refusal

Site: 6 Spacing N/A Owner/Occupant: Arbuckle Family Trust
Address: 1300 Chapline St. Wheeling, WV 26003 Ph: _____
Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown
If No, declined by who _____ Letter/Notice Date: 1st N/A 2nd N/A Certified (3rd) 4/7/14
Comments: Tax Map 9 Parcel 6 and Parcel 7 No house located on property within the 1500' radius.
Certified sent 4/7/14

Site: 7 Spacing N/A Owner/Occupant: Reba Taylor
Address: 200 Valley Chapel Rd. Weston, WV 26452 Ph: (304) 269-1294
Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown
If No, declined by who _____ Letter/Notice Date: 1st N/A 2nd N/A Certified (3rd) 4/7/14
Comments: Tax Map 9 Parcel 5 No house located on property within the 1500' radius.
Certified sent 4/7/14

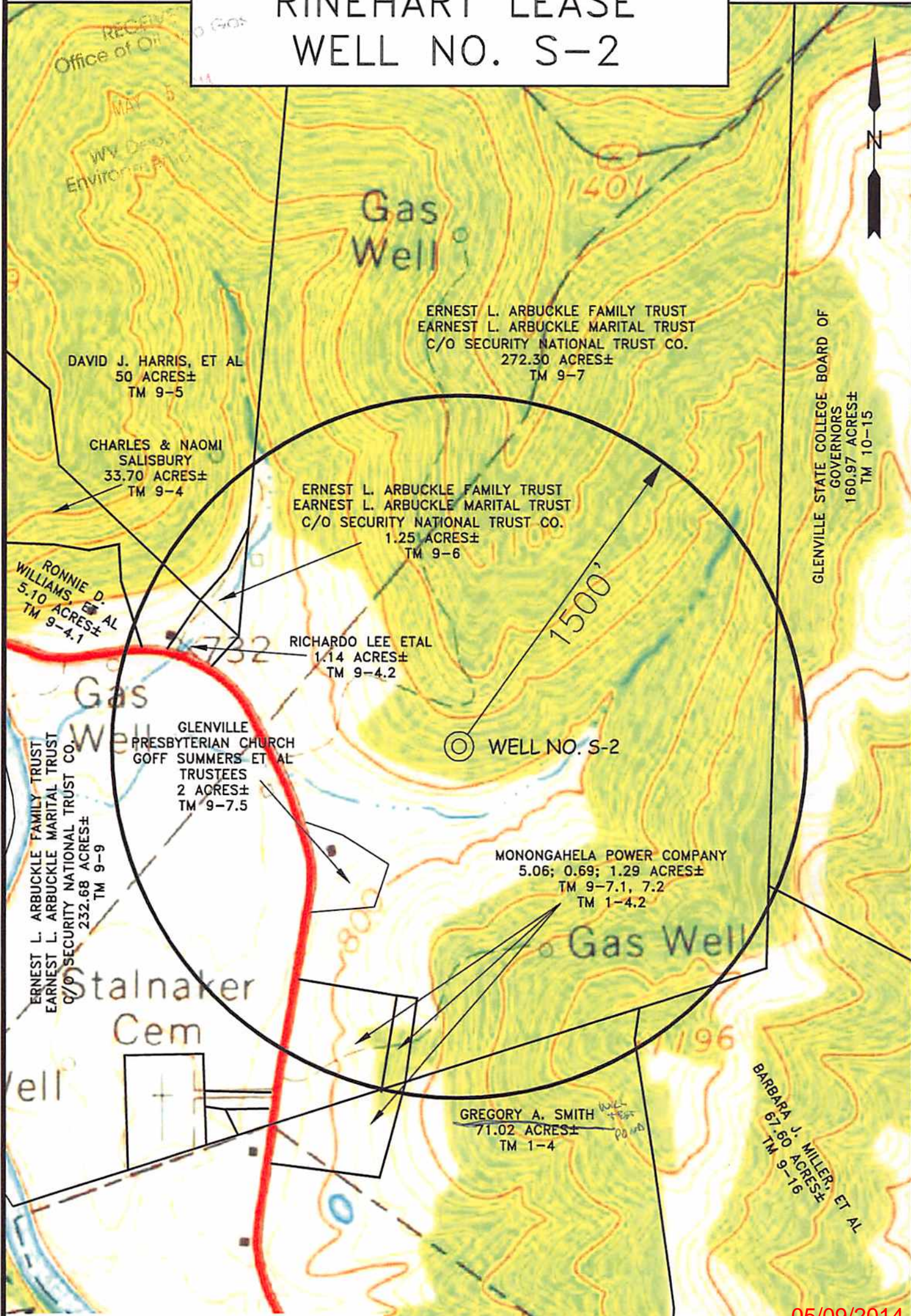
Site: 8 Spacing N/A Owner/Occupant: Barbara Miller
Address: 3013 Grass Run Rd. Normantown, WV 25267 Ph: (304) 462-5590
Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown
If No, declined by who Barbara Miller Letter/Notice Date: 1st N/A 2nd N/A Certified (3rd) 4/7/14
Comments: Tax Map 9 Parcel 16 No house located on property within the 1500' radius.
Signed letter of refusal

Site: 9 Spacing N/A Owner/Occupant: Glenville State College Board of Governors
Address: 200 High St. Glenville, WV 26351 Ph: (304) 462-7361
Field Contact Date: 4-9-14 Located: No Date Located: N/A Source: Unknown
If No, declined by who Richard Helfelmeier Letter/Notice Date: 1st N/A 2nd N/A Certified (3rd) N/A
Comments: Tax Map 10 Parcel 15 The College Farm.
Signed letter of refusal

Site: 10 Spacing _____ Owner/Occupant: _____
Address: _____ Ph: _____
Field Contact Date: _____ Located: _____ Date Located: _____ Source: _____
If No, declined by who _____ Letter/Notice Date: 1st _____ 2nd _____ Certified (3rd) _____
Comments: _____

05/09/2014

RINEHART LEASE WELL NO. S-2



SCALE: 1-INCH=500-FEET



NO WATER SAMPLES REQUESTED
WITHIN THE 1500' RADIUS

Professional Energy Consultants
A DIVISION OF SMITHLAND SURVEYING, INC.

SLS
SURVEYORS
ENGINEERS
ENVIRONMENTAL
PROJECT MGMT.

DRAWN BY: K.D.W. FILE NO.: 8154 DATE: 04/29/14 CADD FILE: 8154WSS-2TM.dwg

TOPO SECTION OF:
GLENVILLE, WV 7.5' QUAD.

DISTRICT	COUNTY	TAX MAP-PARCEL NO.
GLENVILLE	GILMER	9-7

OPERATOR:
ENERGY CORPORATION OF AMERICA
501 56TH STREET S.E.
CHARLESTON, WV 25304

WW-9
(5/13)

Page _____ of _____
API Number 47 - _____ - _____
Operator's Well No. Rinehart S-2

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Energy Corporation of America OP Code 306345

Watershed (HUC 10) Little Kanawha River Quadrangle Glenville 7.5

Elevation 860' County Gilmer District Glenville

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

Will a pit be used for drill cuttings? Yes x No _____

If so, please describe anticipated pit waste: Drill Cuttings

Will a synthetic liner be used in the pit? Yes x No _____ If so, what ml.? 30

Proposed Disposal Method For Treated Pit Wastes:

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

Will closed loop system be used? no

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. Air/ Water

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

Additives to be used in drilling medium? Soap, Klastay

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Leave in pit

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) cement / lime

-Landfill or offsite name/permit number? _____

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 _____

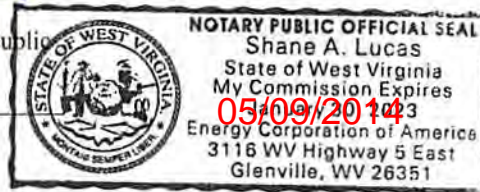
Company Official (Typed Name) Rodney A. Winters

Company Official Title Vice President of Land

Subscribed and sworn before me this 31 day of MARCH, 20 14

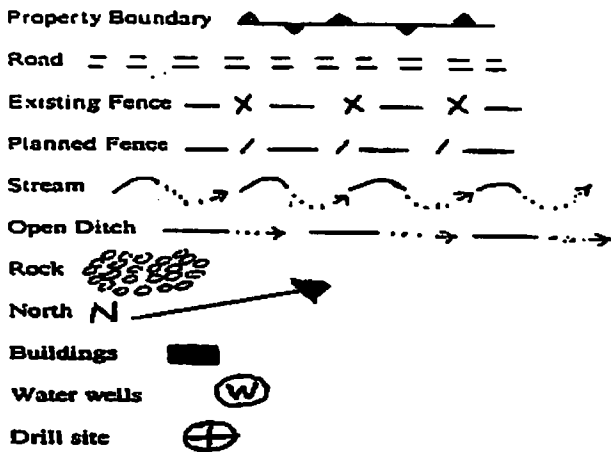
Notary Public

My commission expires January 30, 2023

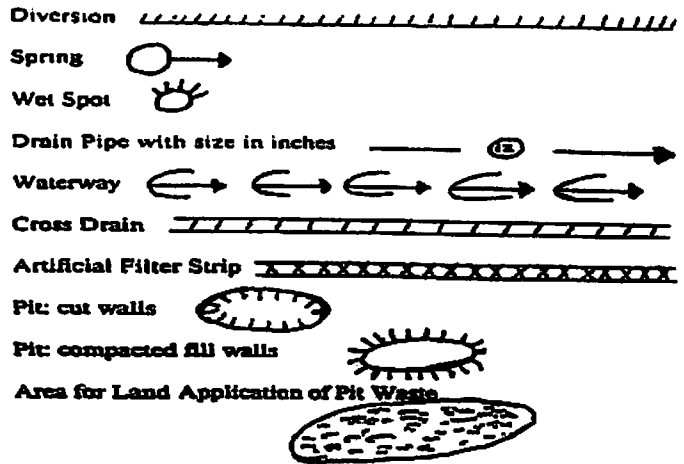


Form WW-9

Operator's Well No. RINEHART S-2



LEGEND



Proposed Revegetation Treatment: Acres Disturbed 1.6 ± Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 1/3 TON lbs/acre (500 lbs minimum)

Mulch HAY 2 Tons/acre

Seed Mixtures

Seed Type	Area I lbs/acre	Seed Type	Area II lbs/acre
KY-31	40	ORCHARD GRASS	15
ALSIKE CLOVER	5	ALSIKE CLOVER	5
ANNUAL RYE	15		

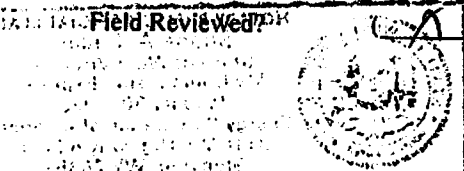
Attach:
Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

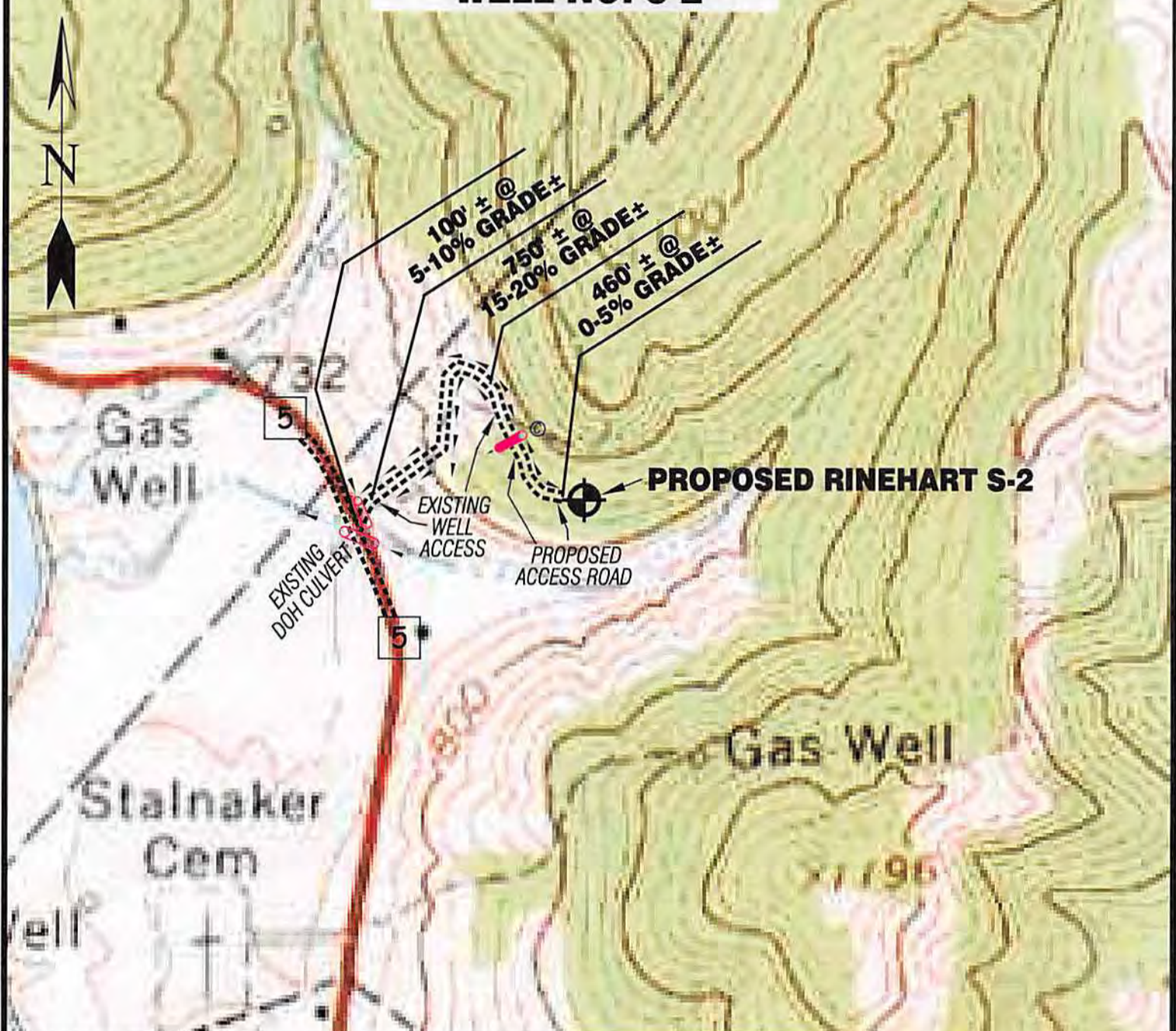
Plan Approved by: Dwight O'Hara

Comments: _____

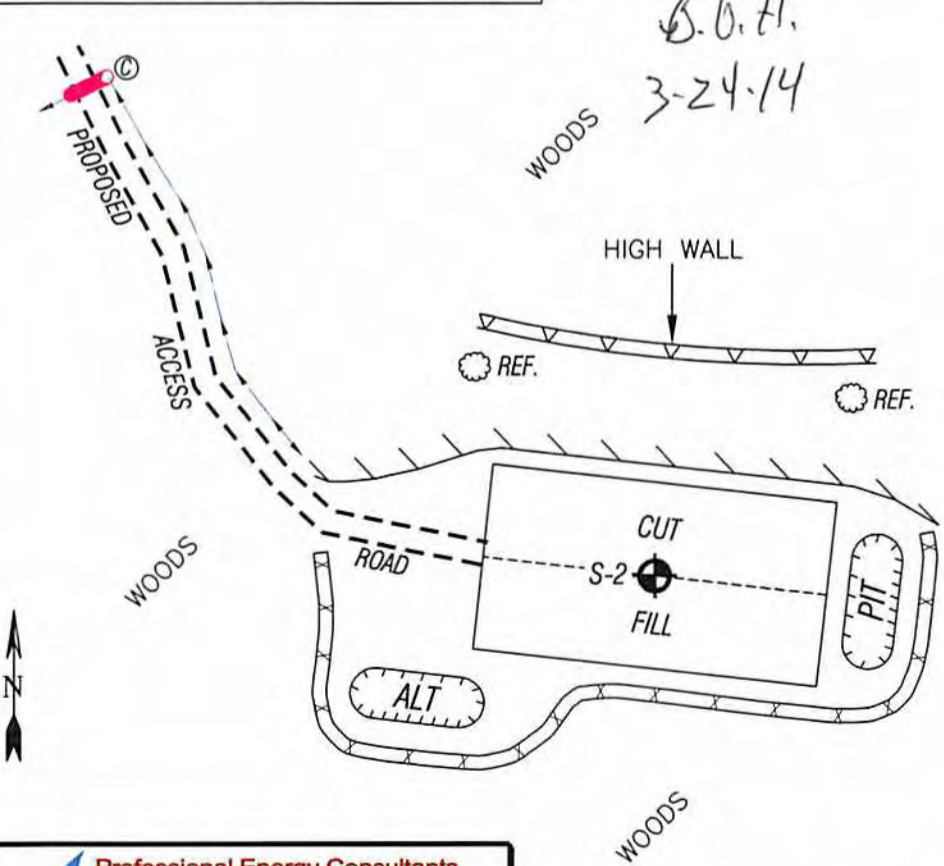
Title: Oil & Gas Inspector Date: 3-24-14



RINEHART LEASE WELL NO. S-2



Detail Sketch for Proposed Well Rinehart S-2



B.O.H.
3-24-14

SCALE: 1"=500'



ALL ROADS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH WV D.E.P. OIL AND GAS BMP MANUAL ENTRANCES AT COUNTY/STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH WV D.O.T. REGULATION. SEPARATE PERMITS MAY BE REQUIRED BY THE D.O.T.

SEDIMENT BASINS (TRAPS) AND APPROPRIATE EROSION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL CULVERT AND CROSS DRAIN INLETS AND OUTLETS AS REQUIRED IN THE WV D.E.P. OIL AND GAS BMP MANUAL. FIELD CONDITIONS (ROCK OUTCROPS AND BEDROCK) MAY PROHIBIT INLET TRAPS BEING INSTALLED. WHEN THESE CONDITIONS EXIST ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED AS NEEDED.

EARTHWORK CONTRACTORS ARE RESPONSIBLE FOR NOTIFICATION TO THE OPERATOR AND INSPECTOR PRIOR TO ANY DEVIATION FROM THIS PLAN.

TEMPORARY SEED & MULCH ALL SLOPES AFTER CONSTRUCTION OF LOCATION.

CUT & STACK ALL MARKETABLE TIMBER.
STACKED BRUSH MAY BE USED FOR SEDIMENT CONTROL.

APPLICATIONS FOR SEPARATE PLC PERMITS ON THE ACCESS ROAD STREAM CROSSINGS HAVE BEEN PREPARED (IF APPLIES).

- EXISTING CULVERT
- PROPOSED CULVERT
- PROPOSED STREAM CROSSING
- APPROXIMATE LIMITS OF DISTURBANCE

Not To Scale

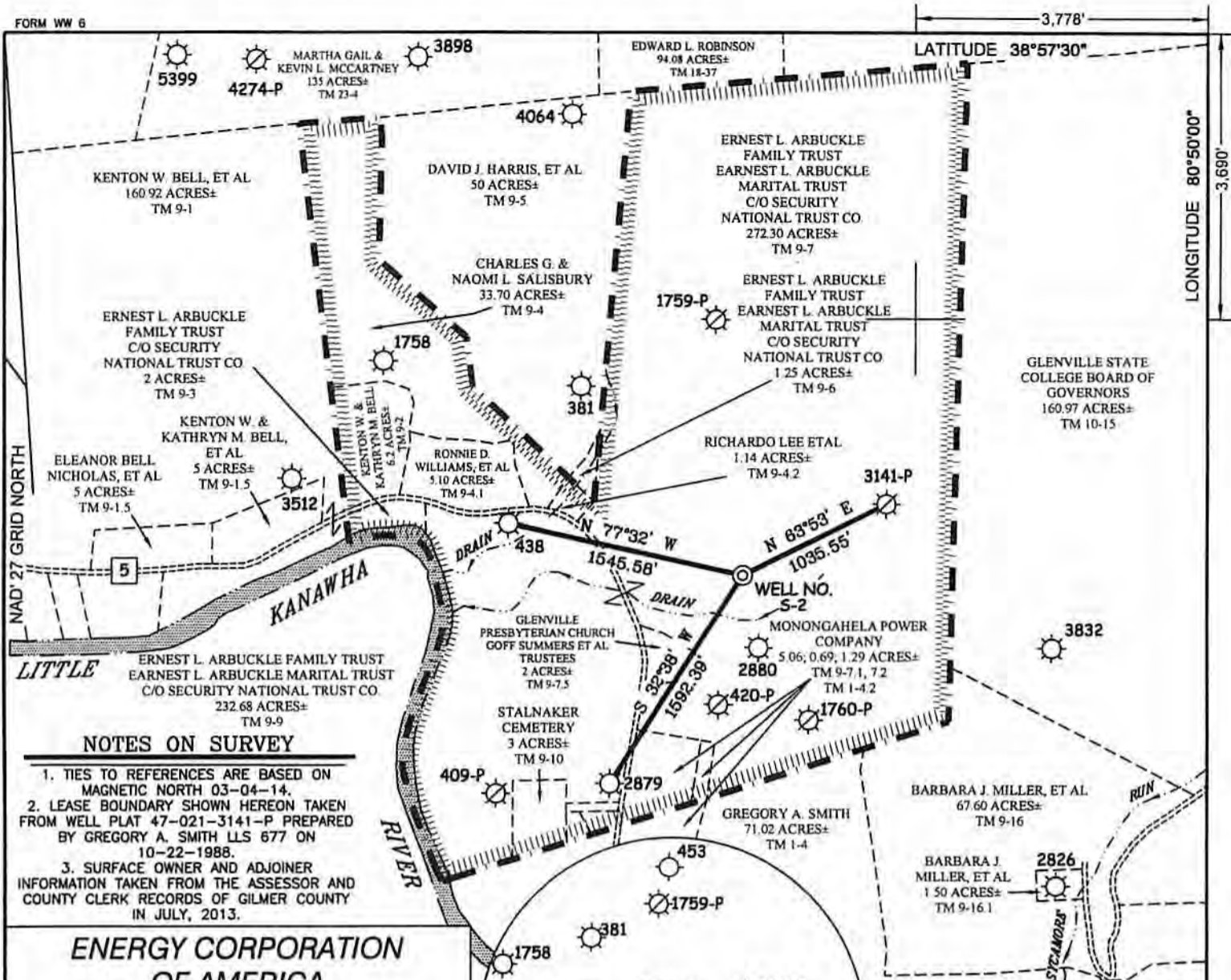
TOPO SECTION OF GLENVILLE 7.5' USGS TOPO QUADRANGLE

Professional Energy Consultants
A DIVISION OF SMITH LAND SURVEYING, INC.

SLS
SURVEYORS
ENGINEERS
ENVIRONMENTAL
PROJECT MGMT.

(304) 452-5634
WWW.SLSURVEYS.COM

DRAWN BY K.G.M.	FILE NO. 8154	DATE 03/19/14	CADD FILE: 8154RECS-2.dwg
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NOTES ON SURVEY

1. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 03-04-14.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM WELL PLAT 47-021-3141-P PREPARED BY GREGORY A. SMITH ULS 677 ON 10-22-1988.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF GILMER COUNTY IN JULY, 2013.

**ENERGY CORPORATION OF AMERICA
RINEHART LEASE
330 ACRES±
WELL NO. RINEHART S-2**

(S.P.C. SOUTH ZONE) (UTM(M) ZONE 17 SOUTH)
 NAD'27 S.P.C.(FT) N. 709,463 E. 2,043,626
 NAD'27 GEO. LAT.-(N) 38.94820 LONG.-(W) 80.84662
 NAD'83 UTM (M) N. 4,311,050 E. 513,306



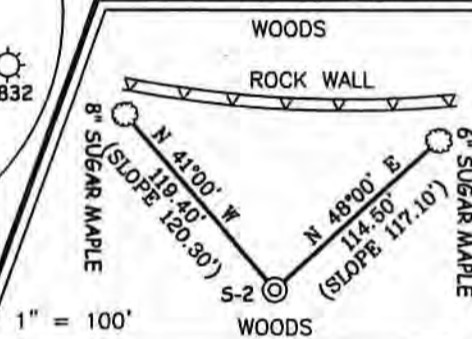
I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. 677

Gregory A. Smith



REFERENCES



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE MARCH 21, 20 14
 REVISED _____ 20 _____
 OPERATORS WELL NO. RINEHART S-2
 API WELL NO. 47 - 021 - 05766
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 8154PS-2 (497/22)
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS SUBMETER MAPPING GRADE SCALE 1" = 1000'

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

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ IF "GAS" PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

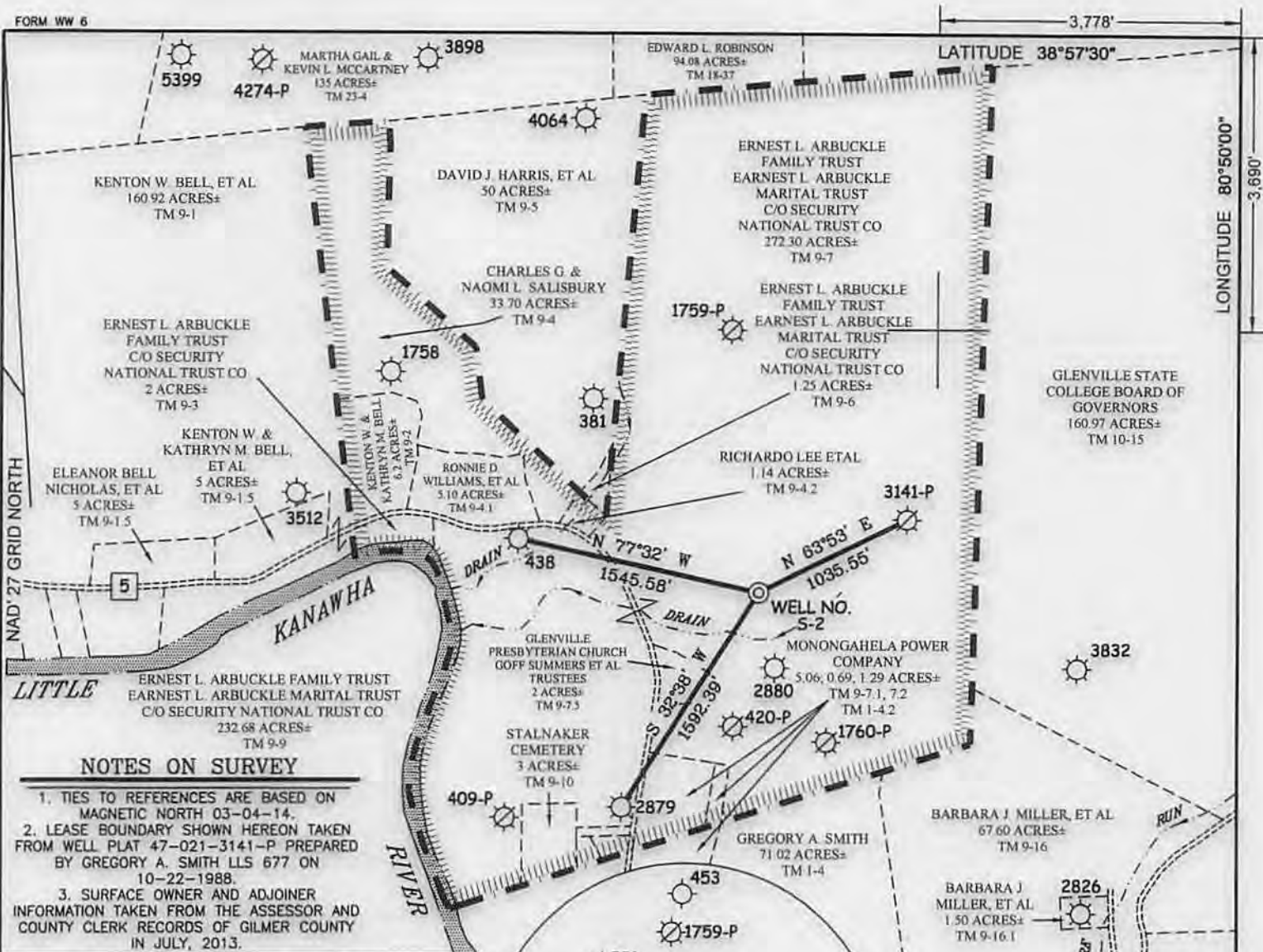
LOCATION: ELEVATION 860' WATERSHED LITTLE KANAWHA RIVER
 DISTRICT GLENVILLE COUNTY GILMER QUADRANGLE GLENVILLE 7.5'

SURFACE OWNER ERNEST L. ARBUCKLE FAMILY TRUST ACREAGE 272.30±
 ROYALTY OWNER ERNEST L. ARBUCKLE FAMILY TRUST ACREAGE 330± **05/09/2014**

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___ OTHER ___
 PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION SPEECHLEY
 ESTIMATED DEPTH 3,300'

WELL OPERATOR ENERGY CORPORATION OF AMERICA DESIGNATED AGENT RODNEY A. WINTERS
 ADDRESS 501 56TH STREET S.E. ADDRESS 501 56TH STREET S.E.
 CHARLESTON, WV 25304 CHARLESTON, WV 25304

COUNTY NAME PERMIT



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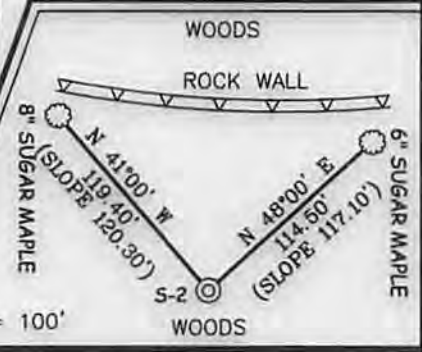


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P.S. 677 *Gregory A. Smith*



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 API WELL NO. 47 - 21 - 65766
 STATE WV COUNTY GL PERMIT _____

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 DIVISION OF ENVIRONMENTAL PROTECTION
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PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION SPEECHLEY ESTIMATED DEPTH 3,300'

WELL OPERATOR ENERGY CORPORATION OF AMERICA DESIGNATED AGENT RODNEY A. WINTERS
 ADDRESS 501 56TH STREET S.E. CHARLESTON, WV 25304 ADDRESS 501 56TH STREET S.E. CHARLESTON, WV 25304

COUNTY NAME PERMIT

05/09/2014

7-29-09

API # _____
 Operator: ECA
 Well #/Name: RINEHART S-2
 Reviewed By: _____
 End of Comment Period: _____

CHECK LIST FOR FILING A PERMIT

I. New Drill

X	WW-2B
X	WW-2B signed off by inspector
X	WW-2A
X	Certified Mail Receipts or affidavit of personal service
X	Surface Owner Waiver
X	Coal Owner/Lessee/Operator Waiver
X	WW-2A (1) including page and book and royalty percentage
X	WW-2B (1)
X	WW-9 (page 1 and 2)
X	Inspector Signature on WW-9
X	Reclamation Plan
X	Mylar Plat
X	Topography Map of the proposed location
X	Database for Coal Depths, Permits, Boundaries
X	Bond (On File with WVDEP)
X	A check for \$650.00 shallow well, \$900.00 Deep well
X	Workers Comp/Employ/Registered with the SOS. OK

RECEIVED
 Office of Oil and Gas
 APR 01 2014
 WV Department of
 Environmental Protection
 05/09/2014



SMITH LAND SURVEYING, INC.

P.O. BOX 150, GLENVILLE, WV 26351

(304) 462-5634 • FAX 462-5656

OPERATOR: Energy Corporation of America

LEASE NAME AND NUMBER: Rinehart Lease Well No. S-2

COMMENTS

The initial mapping review of the area surrounding the proposed well site revealed the below listed surface owner(s) that were potentially utilizing groundwater (potable) for Human Consumption or other purposes within 1500' of the proposed well site. The following landowners will be notified of the opportunity to request a water sample.

*Please note that the following information is subject to change upon field inspection.

INDIVIDUAL CONTACTED OR NOTIFIED

Owner/Occupant: Ernest L Arbuckle Family Trust

Address: 1300 Chapline St. Wheeling, WV 26003 Letter/Notice Date: _____

Comments: Tax Map 9 Parcel 6

Owner/Occupant: Ernest L Arbuckle Family Trust

Address: 1300 Chapline St. Wheeling, WV 26003 Letter/Notice Date: _____

Comments: Tax Map 9 Parcel 7

Owner/Occupant: Charles & Naomi Salisbury

Address: P.O. Box 97 Glenville, WV 26351 Letter/Notice Date: _____

Comments: Tax Map 9 Parcel 4

Owner/Occupant: Ronnie Williams

Address: 6239 US Hwy 33 E Glenville, WV 26351 Letter/Notice Date: _____

Comments: Tax Map 9 Parcel 4.1

Owner/Occupant: Ricardo & Gerry Lee

Address: 1362 WV Hwy 5 W Glenville, WV 26351 Letter/Notice Date: _____

Comments: Tax Map 9 Parcel 4.2

RECEIVED
Office of Oil and Gas

APR 01 2014

West Virginia Department of
Environmental Protection

05/09/2014

Owner/Occupant: David Harris
Address: 662 Skuse Rd. Osseo, MI 49266 Letter/Notice Date: _____
Comments: Tax Map 9 Parcel 5

Owner/Occupant: Monongahela Power Company
Address: 1310 Fairmont Ave. Fairmont, WV 26554 Letter/Notice Date: _____
Comments: Tax Map 9 Parcel 7.1

Owner/Occupant: Monongahela Power Company
Address: 1310 Fairmont Ave. Fairmont, WV 26554 Letter/Notice Date: _____
Comments: Tax Map 9 Parcel 7.2

Owner/Occupant: Glenville Presbyterian Church
Address: 1172 WV Hwy 5 W Glenville, WV 26351 Letter/Notice Date: _____
Comments: Tax Map 9 Parcel 7.5

Owner/Occupant: Barbara Miller
Address: 3013 Grass Run Rd. Normantown, WV 25267 Letter/Notice Date: _____
Comments: Tax Map 9 Parcel 16

Owner/Occupant: Town of Glenville
Address: _____ Letter/Notice Date: _____
Comments: Tax Map 1 Parcel 4.1

Owner/Occupant: Monongahela Power Company
Address: 1310 Fairmont Ave. Fairmont, WV 26554 Letter/Notice Date: _____
Comments: Tax Map 1 Parcel 4.2

Owner/Occupant: Gregory Smith
Address: P.O. Box 150 Glenville, WV 26351 Letter/Notice Date: _____
Comments: Tax Map 1 Parcel 4

Owner/Occupant: Glenville State College Board of Governors
Address: 200 High St. Glenville, WV 26351 Letter/Notice Date: _____
Comments: Tax Map 10 Parcel 16

Owner/Occupant: _____
Address: _____ Letter/Notice Date: _____
Comments: _____

Owner/Occupant: _____
Address: _____ Letter/Notice Date: _____
Comments: _____

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