



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

September 25, 2013

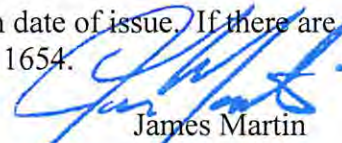
WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-4501558, 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.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.



James Martin
Chief

Operator's Well No: ECA/YAWKEY 16 R
Farm Name: BAILEY , RONNIE & SANDRA
API Well Number: 47-4501558
Permit Type: Plugging
Date Issued: 09/25/2013

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. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. 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.
3. Well work activities shall not constitute a hazard to the safety of persons.

4501558P

WW-4B
Rev. 2/01

1) Date July 30, 2013
2) Operator's
Well No. ECA/Yawkey #16
3) API Well No. 47-045 - 1558

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil ___/ Gas X/ Liquid injection ___/ Waste disposal ___/
(If "Gas, Production X or Underground storage ___) Deep ___/ Shallow ___

5) Location: Elevation 1969' Watershed Long Fork of Mill Creek
District Guyan County Logan Quadrangle Henlawson 7.5'

6) Well Operator Energy Corporation of America 7) Designated Agent Rodney A Winters
Address 501 56th St SE Address Same
Charleston, WV 25304

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Ralph Triplett Name R&R Well Service
Address 5539 McClellan Highway Address 42 Lynch Ridge
Branchland, WV 25506 Walton WV 25286

10) Work Order: The work order for the manner of plugging this well is as follows:
Cement Plug #1 will be set from 2200' to 2100'. Plug to be 21 sacks of Type 1 Cement.
Cement Plug #2 will be set from 100' to surface. Plug to be 20 sacks of Type 1 Cement.
Pull approximately 2,690' of 4.5" casing.
6% gel will be placed between all plugs.

ADD AN ADDITIONAL PLUG
ACROSS BEREA 3216' - 3316'.
gmm
OK
RDT
9/13/13

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector Ralph D. Triplett Date 09/13/13

09/27/2013

4501558P

WR-35

29 June 2006

API # 47-04501558

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

Farm name: Ronnie and Nancy Bailey

Operator Well No.: ECA/Yawkey 16

LOCATION: Elevation: 1969' Quadrangle: Henlawson 7.5'
District: Guyan County: Logan
Latitude: 37° 55' 00.2 "
Longitude: 81° 56' 20.8 "

Company: EASTERN AMERICAN ENERGY CORPORATION
501 56th Street
Charleston, WV 25328

Casing & Tubing	Used in Well	Left in Well	Cement Fill Up Cu. Ft.
13-3/8"	35'	35'	
9-5/8"	1014'	1014'	490 sxs
7"	2171'	2171'	240sxs
4-1/2"	4754'	4754'	140 sxs

Agent: John Paletti

Inspector: Ralph Triplett

Permit Issued: 2/25/04

Well work commenced: 9/16/05

Well work completed: 9/29/05

Verbal plugging

Permission granted on:

Rotary Cable Rig

Total Depth (feet): 4824'

Fresh water depths (ft): 80'

Salt-water depths (ft): 1650', 2340

Is coal being mined in area? (Y/N) No

Coal Depths (ft): 856'-866'

Open Flow Data

Gas: Initial open flow	<u>Na</u>	MCF/d	Oil: Initial open flow	<u>0</u>	Bbl/d
Final open flow	<u>Na</u>	MCF/d	Final open flow	<u>0</u>	Bbl/d
Time of open flow between initial and final tests					<u> </u> Day

Static rock pressure 357 psi (surface pressure) after 7 Months

1 st Producing Formation	<u> </u>	NA	Pay zone depth (ft)	<u> </u>
2 nd Producing Formation	<u> </u>		Pay zone depth (ft)	<u> </u>
3 rd Producing Formation	<u> </u>		Pay zone depth (ft)	<u> </u>
4 th Producing Formation	<u> </u>		Pay zone depth (ft)	<u> </u>

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

John Paletti, Agent
For: EASTERN AMERICAN ENERGY CORPORATION

By: Designated Agent
Date: 29 June 2006

JUL 21 2006

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Office of Oil & Gas
JUL 09 2006
Department of Protection

106 1558

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FORMATION COLOR, HARD OR SOFT	TOP FEET	BOTTOM FEET
Sub	0	10
Fill	10	20
Sand	20	39
Sandy Shale	39	240
Sand	240	260
Sandy Shale	260	350
Sandy Shale	350	700
Sand	700	829
Shale	829	856
Open Mine	856	866
Sandy Shale	866	995
Shale	995	1115
Red Rock	1115	1170
Sandy Shale	1170	1215
Black Shale	1215	1255
Sandy Shale	1255	1305
Shale	1305	1343
Sandy Shale	1343	1545
Sand	1545	1564
Sandy Shale	1564	1659
Shale	1659	1691
Sandy Shale	1691	1866
Red Rock	1866	1872
Sandy Shale	1872	1899
Red Rock/Shale	1899	2130
Sandy Shale	2130	2276
Middle Maxton	2276	2338
Shale	2338	2424
Lower Maxton	2424	2454
Shale	2454	2595
Little Lime	2595	2630
Big Lime	2630	2710
Sand Shale	2710	3170
Pocono	3170	3239
Sunbury	3239	3266
Berea	3266	3286
Sandy Shale	3286	3610
Shale	3610	4190
Shale/Sand	4190	4342
Lower Huron	4342	4720
Java	4720	4824
TD	4824	

REMARKS
Including indication of all fresh & salt
water, coal, oil & gas

Damp @ 80'
1 1/2" steam @1650'
2" stream @2340'

Gas Checks:
3350' - 189 Mcfd

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JUL 2 12:05 2013

WV Department
Environmental Protection

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JUL 10 2013
09/27/2013
WV Department of
Environmental Protection

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ECA/Yawkey 16 WR35

Cmnt locked up during 4.5" job, csging parted while drilling out, well producing naturally.

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09/27/2013
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16 WR35

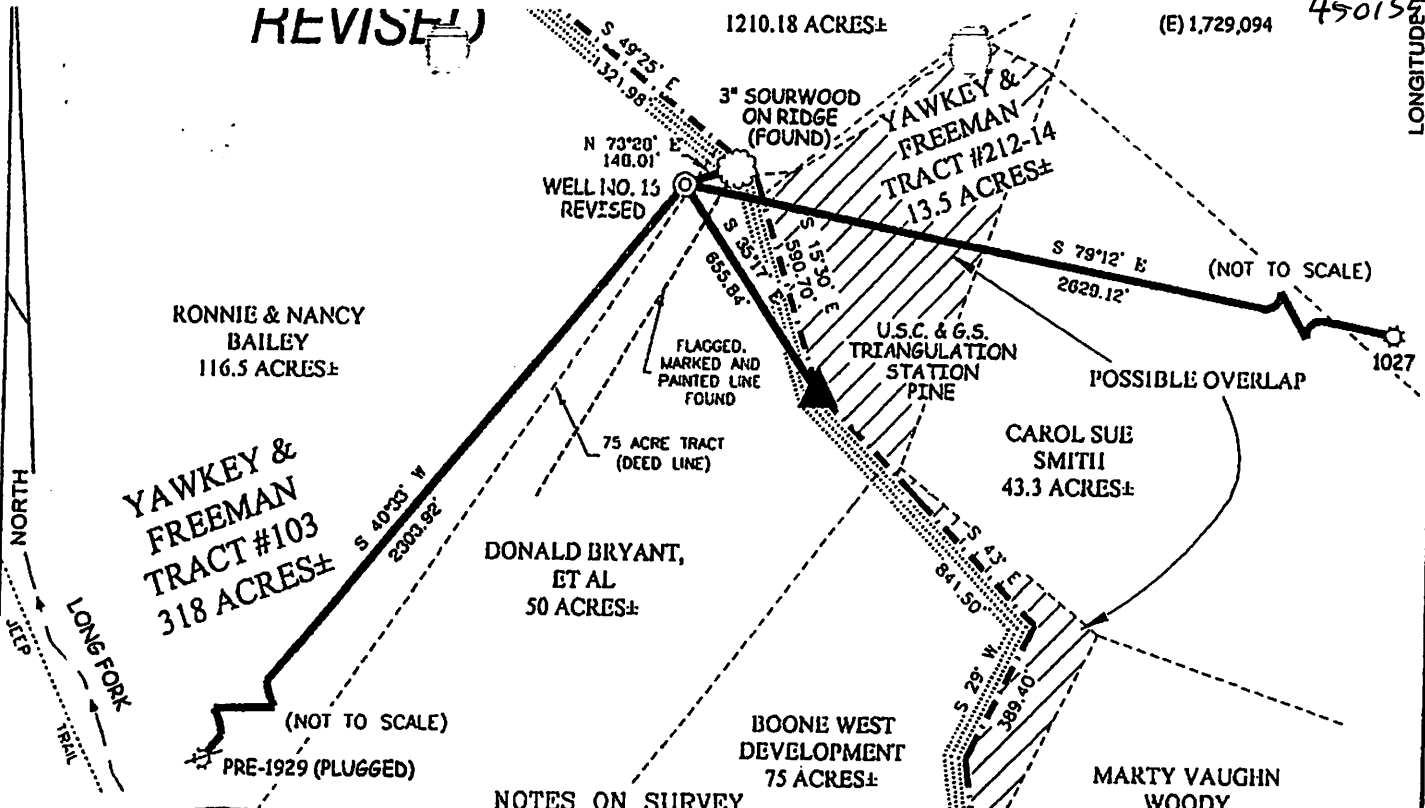
REVISED

1210.18 ACRES±

(E) 1,729,094

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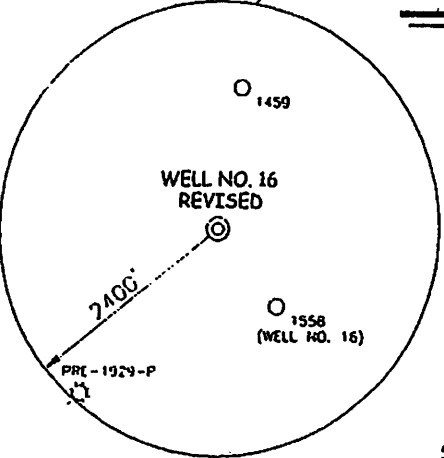
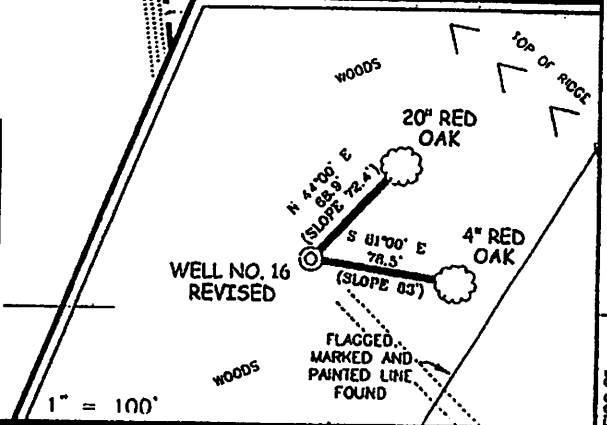
LONGITUDE



NOTES ON SURVEY

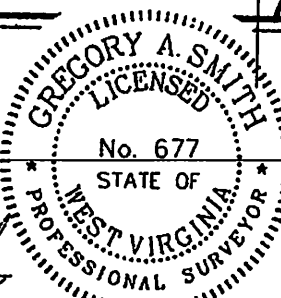
1. TIES TO WELLS AND CORNERS ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM SOUTH ZONE NAD '27.
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 2/25/03.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM BOONE COUNTY IN DEED BOOK W AT PAGE 95.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF BOONE COUNTY IN JANUARY, 2003.
5. WELL LAT./LONG. ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).

REFERENCES



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*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE JANUARY 13, 20 04
 OPERATORS WELL NO. ECAYAWKEY NO. 16 REVISED
 API WELL NO. 47 - 45 - 1558R
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 5062P16R (154-54)
 PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE) SCALE 1" = 500'

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

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "G.S." PRODUCTION X STORAGE SEP 05 2013 DEEP SHALLOW

LOCATION: ELEVATION 1,969' WATERSHED LONG FORK OF MILL CREEK DISTRICT GUYAN COUNTY LOGAN QUADRANGLE HENLAWSON 7.5'

SURFACE OWNER RONNIE AND NANCY BAILEY ACREAGE 116.5±
 ROYALTY OWNER YAWKEY & FREEMAN HEIRS & ASSIGNS LEASE ACREAGE 318±
 PROPOSED WORK: LEASE NO. 09/27/2013

COUNTY NAME

4501558 P

WW-4A
Revised 6-07

1) Date: 06/30/2013
2) Operator's Well Number
ECA/Yawkey #16

3) API Well No.: 47 - 045 - 1558

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

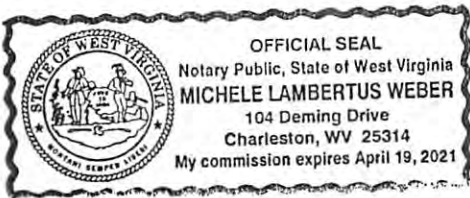
4) Surface Owner(s) to be served:	✓	5) (a) Coal Operator	
(a) Name	<u>Ronnie and Sandra Bailey</u>	Name	<u>Freal Mize</u>
Address	<u>Rt 2 Box 504</u> <u>Pecks Mill, WV 25547</u>	Address	<u>P.O. Box 271</u> <u>Julian WV, 25529</u>
(b) Name	_____	(b) Coal Owner(s) with Declaration	✓
Address	_____	Name	<u>Freal Mize</u>
(c) Name	_____	Address	<u>P.O. Box 271</u> <u>Julian WV, 25529</u>
Address	_____	Name	_____
6) Inspector	✓	(c) Coal Lessee with Declaration	
Address	<u>Ralph Triplett</u> <u>5539 McClellan Highway</u> <u>Branchland, WV 25506</u>	Name	_____
Telephone	<u>304-389-0350</u>	Address	_____

TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.



Well Operator Energy Corporation of America
 By: Rodney A Winters *(Signature)*
 Its: VP of Land
 Address 501 56th St SE
Charleston, WV 25304
 Telephone 304-925-6100

Subscribed and sworn before me this 28 day of August, 2013
Michele Lambertus Weber Notary Public
 My Commission Expires April 19, 2021

RECEIVED
Office of Oil & Gas

Oil and Gas Privacy Notice

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.

WV Department of Environmental Protection

09/27/2013

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

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name Energy Corporation of America OP Code 014980

Watershed Long Fork of Mill Creek Quadrangle Henlawson 7.5'

Elevation 1,969' County Logan District Guyan

Description of anticipated Pit Waste: Fresh Water and Gel

Will a synthetic liner be used in the pit? Yes 20 MIL.

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 _____)

Proposed Work For Which Pit Will Be Used:

- Drilling
- Workover
- Other (Explain _____)
- Swabbing
- Plugging

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

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature [Signature]

Company Official (Typed Name) Rodney A Winters

Company Official Title Vice President of Land

Subscribed and sworn before me this 28 day of August, 2013

Michele Lambertus Weber

Notary
Notary Public

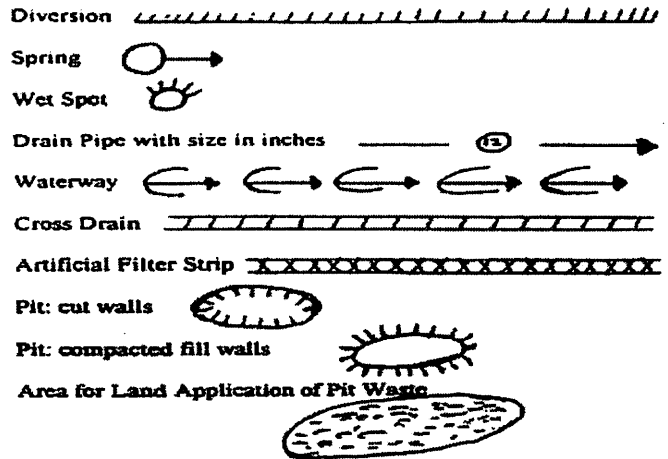
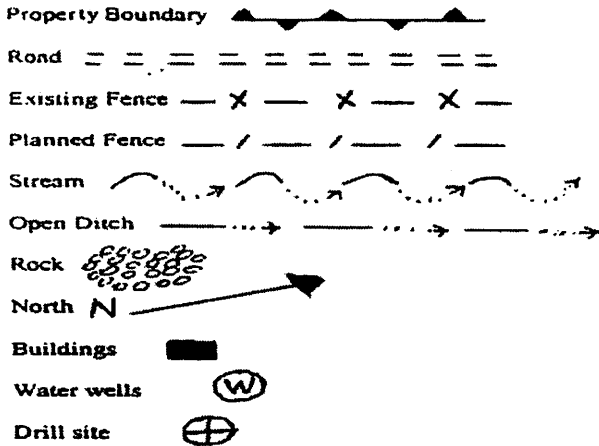
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SEP 05 2013

My commission expires April 19, 2021



09/27/2013

LEGEND



Proposed Revegetation Treatment: Acres Disturbed .5 Acres Prevegetation pH _____

Lime 2 Tons/acre or to correct to pH 6.5

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

Mulch Straw 2 Tons/acre

Seed Mixtures

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5

Attach:
 Drawing(s) of road, location, pit and proposed area for land application.
 Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: _____

Comments: _____

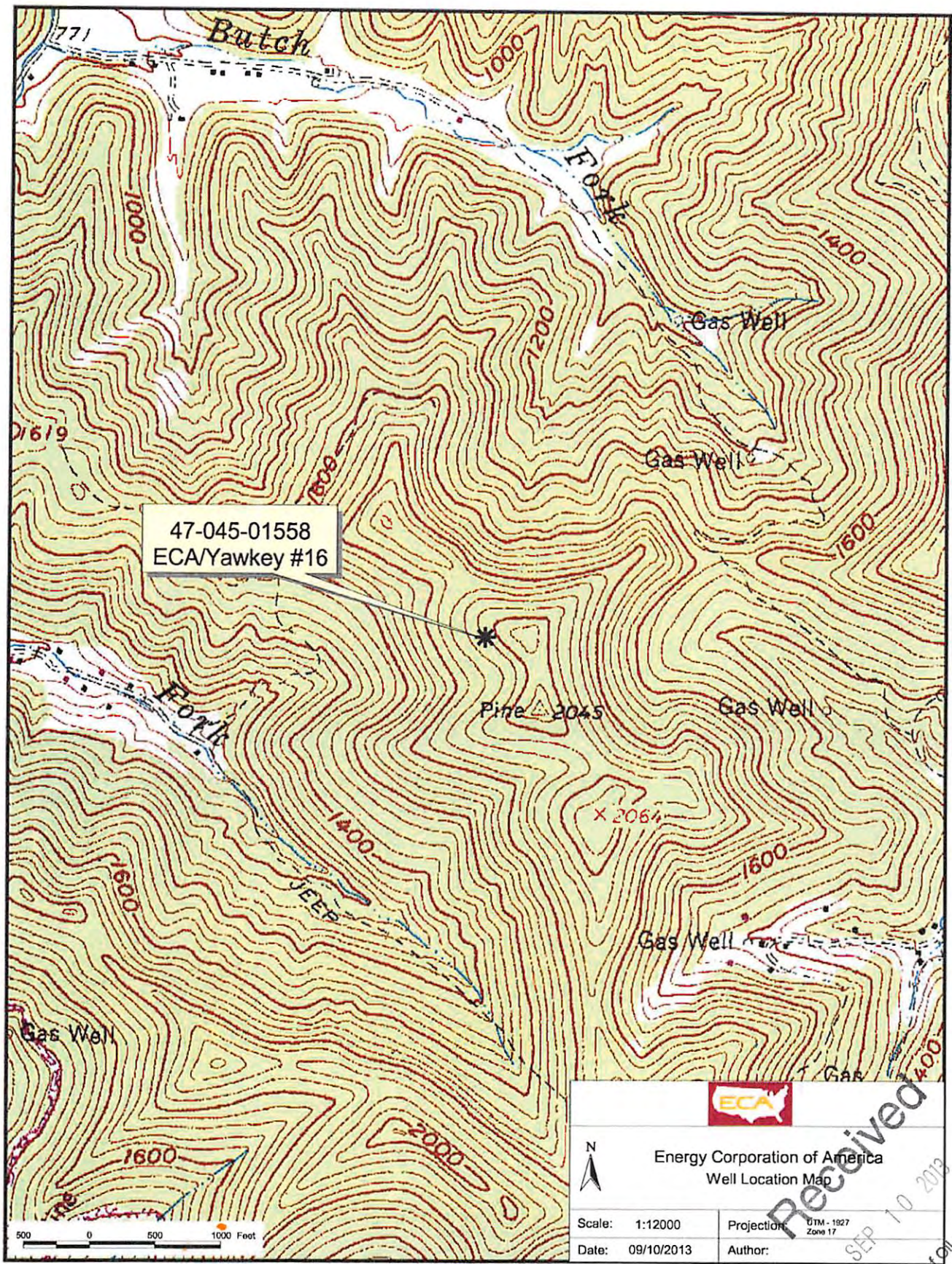
Title: _____ Date: _____

Field Reviewed? () Yes () No

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 Office of Oil & Gas

SEP 05 2013

WV Department of
 Environmental Protection
 09/27/2013



Received
 SEP 10 2013
 Office of Oil and Gas
 Wyoming Dept. of Environmental Protection

09/27/2013

WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-045-1558 WELL NO.: 16

FARM NAME: ECA/Yawkey

RESPONSIBLE PARTY NAME: Energy Corporation of America

COUNTY: Logan DISTRICT: Guyan

QUADRANGLE: Henlawson 7.5'

SURFACE OWNER: Ronnie and Sandra Bailey

ROYALTY OWNER: Yawkey Foundation II and Westvarendrag Inc.

UTM GPS NORTHING: 4,197,002.65

UTM GPS EASTING: 417,464.84 GPS ELEVATION: 609 1969 FT

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:

Survey grade GPS : Post Processed Differential
Real-Time Differential

Mapping Grade GPS : Post Processed Differential
Real-Time Differential

4. Letter size copy of the topography map showing the well location.

I the undersigned, hereby certify this data 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 Office of Oil and Gas.

Alvin Pottery
Signature

Drilling Engineer
Title

9-10-13
Date

Received
SEP 10 2013
Office of Oil and Gas
Department of Environmental Protection

09/27/2013

45 01558 A



Energy Corporation of America

501 56th Street. SE
Charleston, WV 25304
(304) 925-6100
Fax: (304) 925-9682

August 28, 2012

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Attn: Kay Holtsclaw
601 57th Street, S.E.
Charleston, WV 25304-2345

Check # 348005
\$700.⁰⁰

Re: Notice of Application to Plug and Abandon Well

Dear Ms. Holtsclaw:

Attached for your attention and handling, please find notice of application to Plug and Abandon the following well:

API No.	Well Name
47-045-01558	ECA-Yawkey #16

Please contact our offices if you have any questions regarding the documents.

Thank You,

Michele L. Weber
Land Analyst

Received

AUG 30 2013

Office of Oil and Gas
WV Dept. of Environmental Protection
Office of Oil & Gas

SEP 05 2013

WV Department of
Environmental Protection

09/27/2013