



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

October 18, 2013

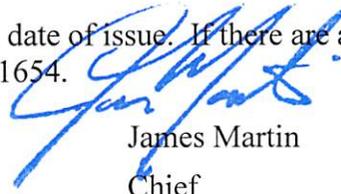
WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-500061, 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: 3
Farm Name: THOMPSON, ARBELLA
API Well Number: 47-500061
Permit Type: Plugging
Date Issued: 10/18/2013

Promoting a healthy environment.

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.

1) Date July 30, 2013
2) Operator's
Well No. Thompson Arbella #3
3) API Well No. 47-005 - 00061

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 868' Watershed Pigeon Roost Branch of Lick Creek of Little Coal River
District Scott County Boone Quadrangle _____

6) Well Operator Energy Corporation of America 7) Designated Agent Rodney A Winters
Address 501 56th St SE Address Same
Charleston, WV 35304

8) Oil and Gas Inspector to be notified Name Ross Eller
Address 121 Brierhill Drive
Beckley, WV 25801
9) Plugging Contractor Name Steve Duckworth Well Service
Address P.O. Box 6871
Charleston, WV 25362

10) Work Order: The work order for the manner of plugging this well is as follows:
Cement Plug #1 will be set from 1930' to 1830'. Plug to be 18 sacks of Type 1 Cement.
Cement Plug #2 will be set from 1100' to 1000'. Plug to be 18 sacks of Type 1 Cement.
Cement Plug #3 will be set from casing cut up 100'. Plug to be 25 sacks of Type 1 Cement.
Cement Plug #4 will be set from 100' to surface. Plug to be 25 sacks of Type 1 Cement.
Free point will be ran to find top of casing. As much casing as possible will be pulled.
6% gel will be placed between all plugs.

Received

AUG 30 2013

Office of Oil and Gas
WV Dept. of Environmental Protection

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

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Office of Oil & Gas

Work order approved by inspector _____ Date SEP 05 2013

WV Department of
Environmental Protection

1) Date July 30, 2013
2) Operator's
Well No. Thompson Arbella #3
3) API Well No. 47-005 - 00061

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

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Address P.O. Box 6871
Charleston, WV 25362

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Please see next page for details.

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SEP 17 2013
WV Department of
Environmental Protection

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

Work order approved by inspector  Date 9/16/13

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SEP 17 2013

Thompson Arbella #3 Plugging Plan

Drilling Info:

County: Boone
Lat: 38.06327801
Long: -81.8919669

ELEV. 868'

Start Date: 12/03/1929

Conductor: Ran 16' of conductor pipe.

Surface: Ran 272'2" of 10" casing with unknown weight and unknown height of cement.

Intermediate: Ran 1080' of 8-1/4" casing with unknown weight and unknown height of cement.

Production: Ran 1318'4" of 6-5/8" production casing with unknown weight and unknown height of cement.

Fresh Water: 404' - 440' SALT WATER 601'

Gas Shows: 1335', 1375' 1950', 1962'

Oil Shows: None Reported

Salt Sand Top: 760

Coal: None Reported

Completion Info:

Ran 1930' of 2-3/8" tubing with an unknown weight, grade, and connection

Placed a 6-5/8"x8-1/4"x5" Midget Packer at a MD-TVD of 1308'

Placed a 2x6-5/8x16" Gas Anchor Packer at a MD-TVD of 1318'

* Shot from 1953'-1976' with 90 qts on 01/25/1930

Plugging Plan:

★ REFER TO ATTACHMENT

1. Notify Inspector Ross Eller @ 304-932-6844, 24 hr prior to commencing operations.
2. TOOH with tubing. TIH with tubing to 1930'.
- ✓ 3. Through the 2-3/8" tubing pump the bottom wellbore plug from 1930'-1830'.
4. Pump at least a 6% gel in between all plugs. While tripping out of hole place a cement plug from 1100'-1000'. TOOH. Lay down tubing.
5. Determine the TOC of the 6-5/8" production casing. Cut casing at the TOC point and place a 100' cement plug at that point. 50' BELOW CUT 50' ABOVE CUT.
6. Place the surface plug from 100'-0'.
7. Finish TOOH. Weld on monument with API number and reclaim.
8. Reclaim location according to WV DEP Specifications.

1130' - 1030'

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* TRY TO PULL 8 1/4" CASING, IF NEEDED CUT & PULL 8 1/4" CASING WITH CEMENT PLUG ACROSS CUT 50' BELOW AND 50' ABOVE CUT.

* CEMENT PLUG ABOVE SALT WATER FROM 600' - 500' GEL TO 450' THEN FRESH WATER PLUG FROM 450' - 350' GEL FROM 350' - 270' TRY TO REMOVE 10" CASING

Thompson Arbella #3 Plugging Plan Attachment

Plugging Plan:

1. Notify inspector Ross Eller @ 304-932-6844
2. TOOH with tubing. TIH with tubing to 1930'.
3. Through the 2 3/8" tubing, pump the bottom wellbore plug from 1930' – 1830'.
4. Gel hole from 1830' to 1420'. Pump 100' cement plug from 1420' to 1320' to cover Gas Shows.
5. Pump a minimum of 6% gel between all plugs. Cut and pull 6 5/8" production casing.
6. Set 100' cement plug across 6 5/8" casing cut.
7. Pull 8 ¼" intermediate casing if possible and set 100' cement plug across casing seat from 1130' to 1030'. If not possible, cut and pull 8 ¼" casing from freepoint and set a 100' cement plug across cut.
8. Set 100' cement plug from 600' to 500', just above salt water zone.
9. Try to pull 10" freshwater casing if it is not cemented. Set cement plug from 300' to surface.
10. If 10" casing cannot be pulled, set cement plug from 300' to surface.
11. Weld on monument with API number and reclaim.
12. Reclaim location according to WV DEP Specifications.

WELLBORE MUST HAVE A MINIMUM OF 6% GEL SPACERS BETWEEN ALL CEMENT PLUGS.

500061A



Energy Corporation of America

Thompson Arbella #3
 47-005-00061
 Boone County, WV
 Current Wellbore

Created by: Trey Porter Date: 05/09/2013

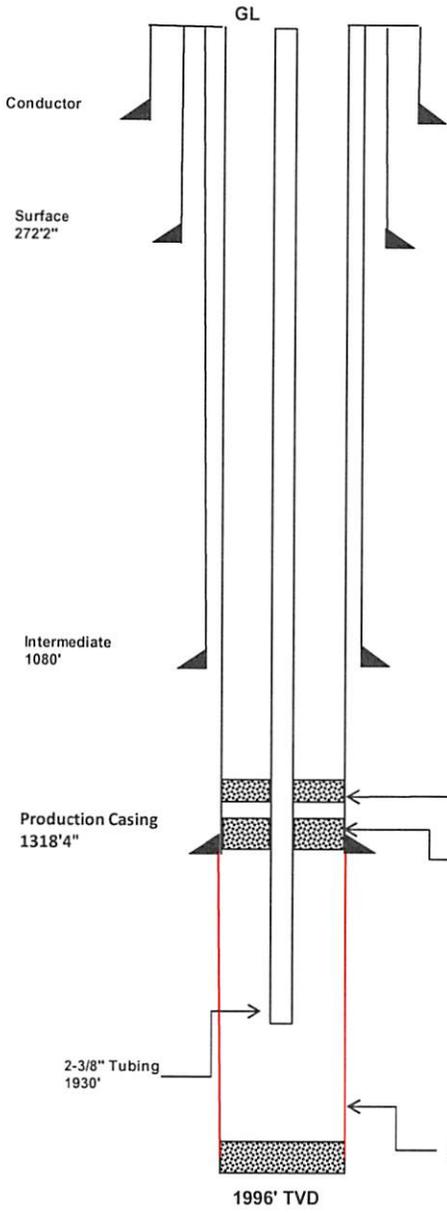
Casing Specifications

	Depth (ft) GL	Casing OD	Casing ID	Casing Drift	W/Grade/ Connection	Burst	Collapse	C.Top
Conductor	16'							
Surface	272'2"	10"			UNK			UNK
Intermediate	1080'	8-1/4"			UNK			UNK
Production Casing	1318'4"	6-5/8"			UNK			UNK
Tubing	1930'	2-3/8"			UNK			UNK

Notes

Unkown Hole Size

Wellbore Equipment	OD	ID	MD	TVD
Midget Packer	8-1/4"		1308'	1308'
Gas Anchor	6-5/8"		1318'	1318'



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Diagram with possible cement plug placement.



Energy Corporation of America

Thompson Arbella #3
 47-005-00061
 Boone County, WV
 Current Wellbore

Created by: Trey Porter Date: 05/09/2013

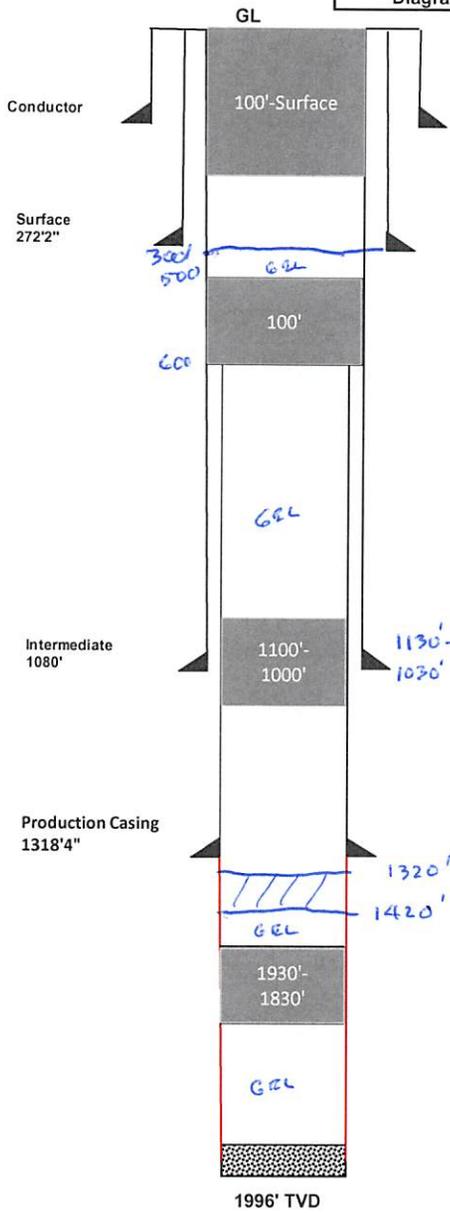
Casing Specifications

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Conductor	16'							
Surface	272'2"	10"			UNK			UNK
Intermediate	1080'	8-1/4"			UNK			UNK
Production Casing	1318'4"	6-5/8"			UNK			UNK
Tubing	1930'	2-3/8"			UNK			UNK

Notes

Unkown Hole Size

Wellbore Equipment	OD	ID	MD	TVD
Midget Packer	8-1/4"		1308'	1308'
Gas Anchor	6-5/8"		1318'	1318'



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Oil and Gas Section

PRELIMINARY DATA SHEET NO. 1

File No. Boo-61

Well No. 3

South Penn Oil

Company, of P. O. Drawer 1255, Pittsburgh, Pa.

on title Arbella Thompson

containing 250 acres. Location:

Scott

District, in

Boone

County, West Virginia

The surface of the above tract is owned in fee by _____
of _____ address, and the mineral rights are owned by _____
of _____

The oil and gas privileges are held under lease by the above named company, and this well is drilled under permit No. _____ issued by the West Virginia Department of Mines, Oil and Gas Section, _____ 19 _____

Elevation of surface at top of well, _____ Spirit Barometric.

The number of feet of the different sized casings used in the well.

feet	size	Wood conductor
<u>272' 2"</u> feet	<u>10"</u> size, csg.	feet _____ sized csg.
<u>1080</u> feet	<u>8 1/2"</u> size, csg.	feet _____ sized csg.
<u>1318' 4"</u> feet	<u>6 5/8"</u> size, csg.	feet _____ sized csg.

packer of 6 5/8" x 3 1/2" x 5" size, set at 1308

packer of _____ size, set at _____

in casing perforated at _____ feet to _____ feet

in casing perforated at _____ feet to _____ feet

Coal was encountered at NONE feet; thickness _____ inches, and at _____ feet; thickness _____ inches; and at _____ feet; thickness _____ inches

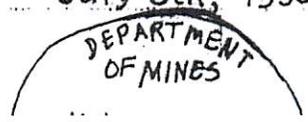
minerals were _____ as follows: (Give details) _____

Received

AUG 30 2013

Office of Oil and Gas
WV Dept. of Environmental Protection

July 8th, 1930



Date

SOUTH PENN OIL COMPANY

Owner

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Environmental Protection

Pittsburgh, Pa.

FORMATION RECORD 500061A

Name	Color	Oil, Gas or Water	1	2	Total Depth
Sand		Fresh Water	570	660	
		Salty Water		440	
				601	
Salt Sand			766	1090	
Big Line		Gas show	1296	1475	
		Gas		1533	
				1575	
Big Injun			1475	1510	
Berea			1950	1976	
		Gas	1950	1964	
		Gas	1962	1963	
TOTAL DEPTH					1996

1410
8-17-13

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WV Dept. of Environmental Protection

Well was first shot in 1953-1976 feet; depth at feet

440 salt 601 feet

Well was shot in July 17, 1930
SOUTHERN OIL COMPANY
Superintendent
Owner

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SEP 17 2013
WV Department of Environmental Protection

SOUTH PENN OIL COMPANY

Location date: Nov 6

Arbella Thompson Well No. 9

Freeman District

Lease No. 75710

area, 256

Scott

District Township

Boone

County, W.Va.

N

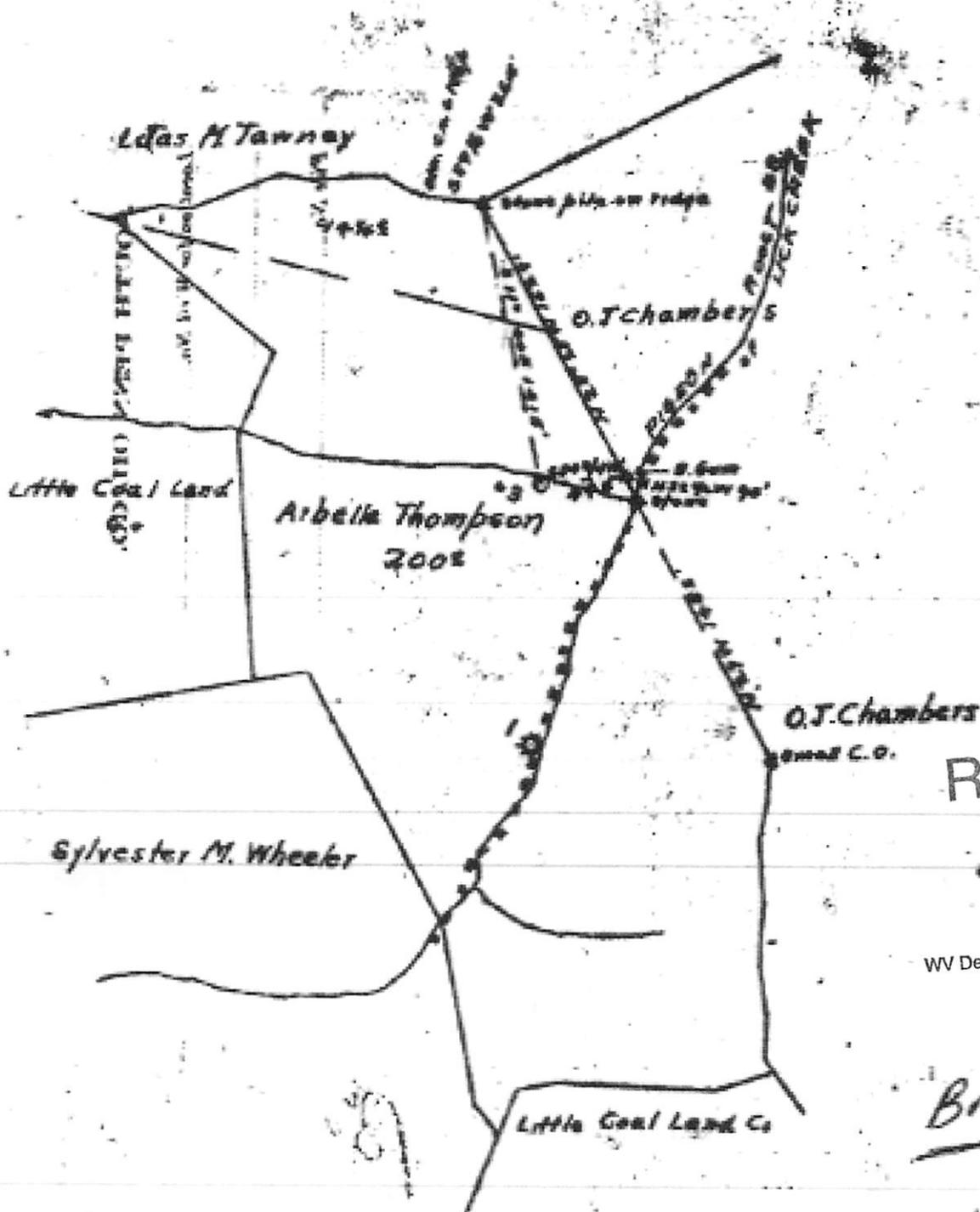
E

194

79

Scale: 1 inch = 800'

Elevation Contour Feet Ground Elev 248.45



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Office of Oil and Gas
WV Dept. of Environmental Protection

Bro-61

I, the undersigned hereby certify that this map is true and correct and shows all the information required by Oil & Gas Law, Acts of 1921.

Return To: Howard (200) East Elm St Bldg

Paul's Friction

Special Instructions

Location

Location used out by

Location used out by

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Office of Oil and Gas

Change of location approved by

File approved for index

Location used out by

Sign's Date

SEP 10 2013

Lease No.

WV Dept. of Environmental Protection

500061A

WW-4A
Revised 6-07

1) Date: 06/30/2013
2) Operator's Well Number
Energy Corporation of America

3) API Well No.: 47 - 005 - 00061

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	Robin Land Company	Name	Robin Land Company, LLC ✓
Address	500 Lee St Charleston, WV 25301	Address	500 Lee Street 900 Charleston, WV 25301
(b) Name		(b) Coal Owner(s) with Declaration	✓
Address		Name	Robin Land Company, LLC
(c) Name		Address	500 Lee Street 900 Charleston, WV 25301
Address		Name	
		Address	
6) Inspector	✓	(c) Coal Lessee with Declaration	
Address	Ross Eller	Name	
	121 Brierhill Drive	Address	
	Beckley, WV 25801		
Telephone	304-932-6844		

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
 Its: VP of Land
 Address: 501 56th St SE
 Charleston, WV 25304
 Telephone: 304-925-6100

Rodney A Winters

Received

Subscribed and sworn before me this 28 day of August, 2013 AUG 30 2013
Michele Lambertus Weber Notary Public
 My Commission Expires April 19, 2021

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.

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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 Pigeon Roost Branch of Lick Creek of Little Coal River Quadrangle Mud

Elevation 868' County Boone District Scott

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

Received

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

Michele Lambertus Weber

Notary

Office of Oil and Gas
Dept. of Environmental Protection

My commission expires April 19, 2021

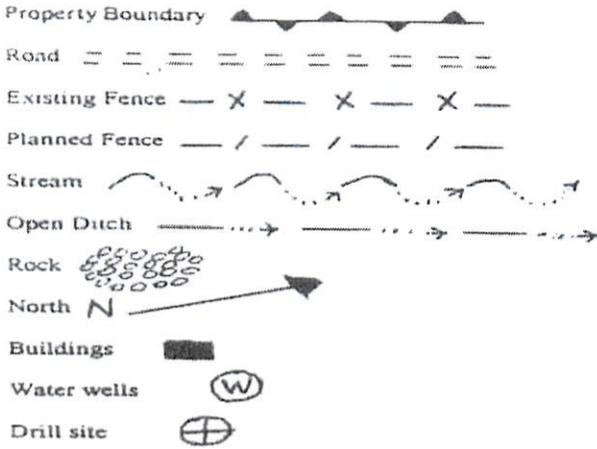


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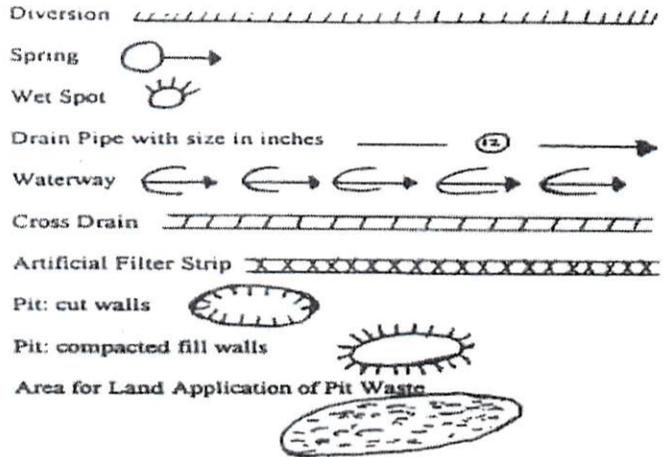
SEP 17 2013

WV Department of Environmental Protection

COPY



LEGEND



Proposed Revegetation Treatment: Acres Disturbed .5 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

Seed Type	Area I lbs/acre	Area II lbs/acre
Tall Fescue	40	40
Ladino Clover	5	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: [Signature]
Comments: _____

Title: Oil & Gas Insp Date: 9/12/13
Field Reviewed? () Yes () No

Received

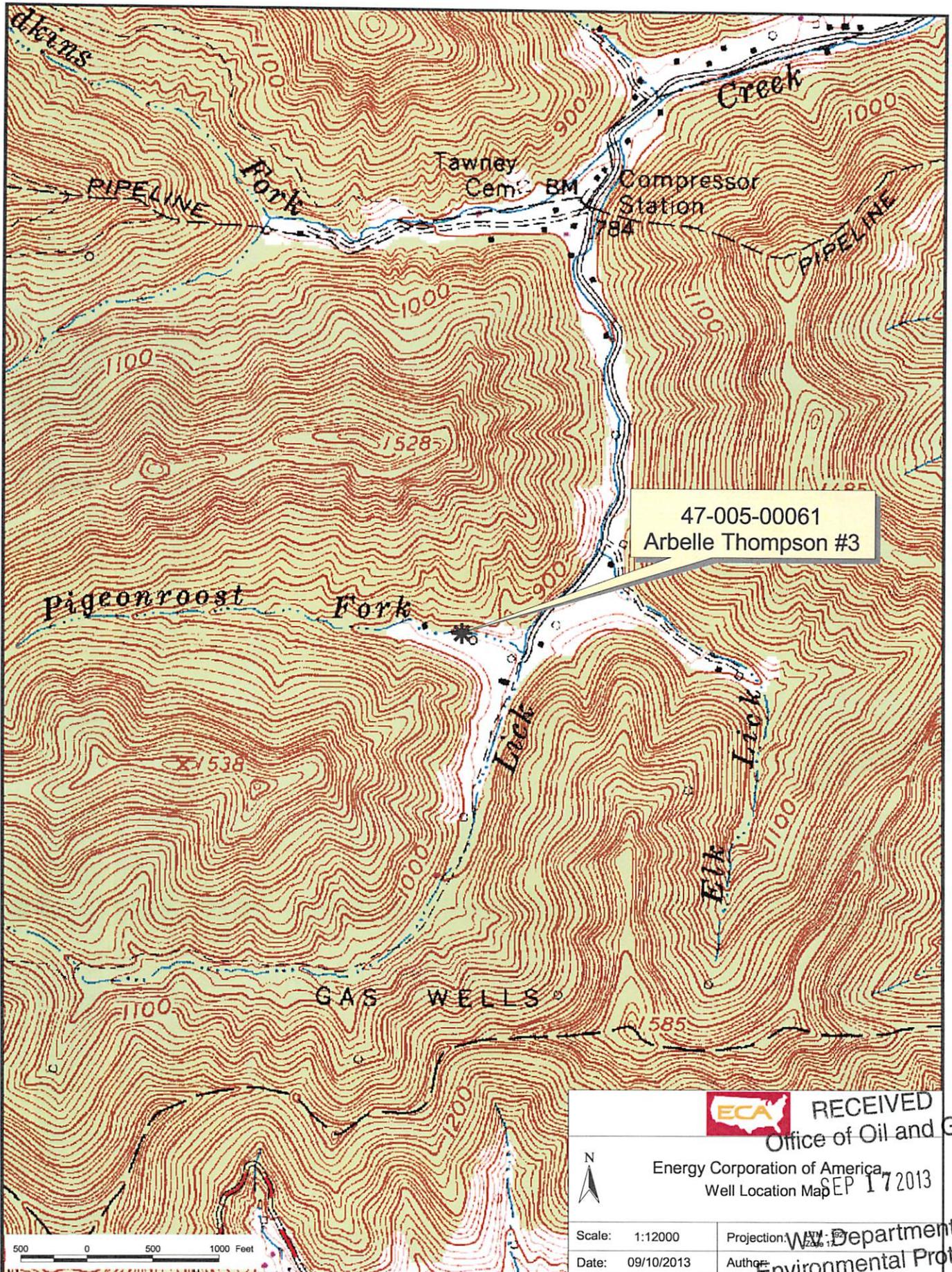
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47-005-00061
 Arbelle Thompson #3



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Energy Corporation of America
 Well Location Map

SEP 17 2013

Scale: 1:12000

Projection: WGS 84

Date: 09/10/2013

Author:

West Virginia Department of Environmental Protection

500061P

WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas
WELL LOCATION FORM: GPS

API: 47-005-00061 WELL NO.: 3

FARM NAME: Thompson Arbella

RESPONSIBLE PARTY NAME: Energy Corporation of America

COUNTY: Boone DISTRICT: Scott

QUADRANGLE: Mud

SURFACE OWNER: Robin Land Company

ROYALTY OWNER: W.C. Thompson & Sharon M Riley

UTM GPS NORTHING: 4,213,222.37

UTM GPS EASTING: 421,767.77 GPS ELEVATION: 242m. 868 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.

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Office of Oil and Gas

SEP 17 2013

Alan Pothues
Signature

Drilling Engineer
Title

9-10-13
Date

West Virginia Department of Environmental Protection

500061 P



Energy Corporation of America

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

August 28, 2012

Check # 348005
\$ 700.00

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

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
47-005-00061	Arbella Thompson #3

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

Thank You,

Michele L. Weber
Land Analyst

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