

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 penalities 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) Ope					
Wel	l No.	Thomps	on 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/ GasX / Liquid	d injection/ Waste disposal/
	(If "Gas, Production X or Und	derground storage) Deep/ Shallow
5)	Location: Elevation 868'	Watershed Pigeon Roost Branch of Lick Creek of Little Coal River
5.7	District Scott	County Boone Quadrangle_
		Dada ay A Winter
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	9) Plugging Contractor Name Steve Duckworth Well Service
	Address 121 Brierhill Drive	Address P.O. Box 6871
	Beckley, WV 25801	Charleston, WV 25362
	Decision, VVV 20001	Charleston, VV 2002
1		face. Plug to be 25 sacks of Type 1 Cement. g. As much casing as possible will be pulled. gs. Received
		ABC 3.0 2013
		Office of Oil and Gas WV Dept. of Environmental Protection
	fication must be given to the district of can commence.	il and gas inspector 24 hours before permitted
Work	c order approved by inspector	SEP 0 5 2013
725		WV Degramment of

1) Date July 3	0	,	20 13
2) Operator	's		
Well No.	Thomps	on Arbella #3	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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	District Scott	County_Boone Quadrangle
5)	Well Operator Energy Corporation of America	7) Designated Agent Rodney A Winters
	Address 501 56th St SE	Address Same
	Charleston, WV 35304	
3)	Oil and Gas Inspector to be notified	9) Plugging Contractor
	Name Ross Eller	Name Steve Duckworth Well Service
	Address 121 Brierhill Drive	Address P.O. Box 6871
	Beckley, WV 25801	Charleston, WV 25362

Please see next page for details.

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

Work order approved by inspector

Date

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Thompson Arbella #3 Plugging Plan

Drilling Info:

County: Boone

ELEV. 868

Lat: 38.06327801 Long: -81.8919669

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 gts on 01/25/1930

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 1301 - 10301 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 50 BELOW OUT SO ABOUR CUT. 100' cement plug at that point.
 - 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.

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WV Department of 81/4 CASING, IF NEEDED **Environmental Protection**

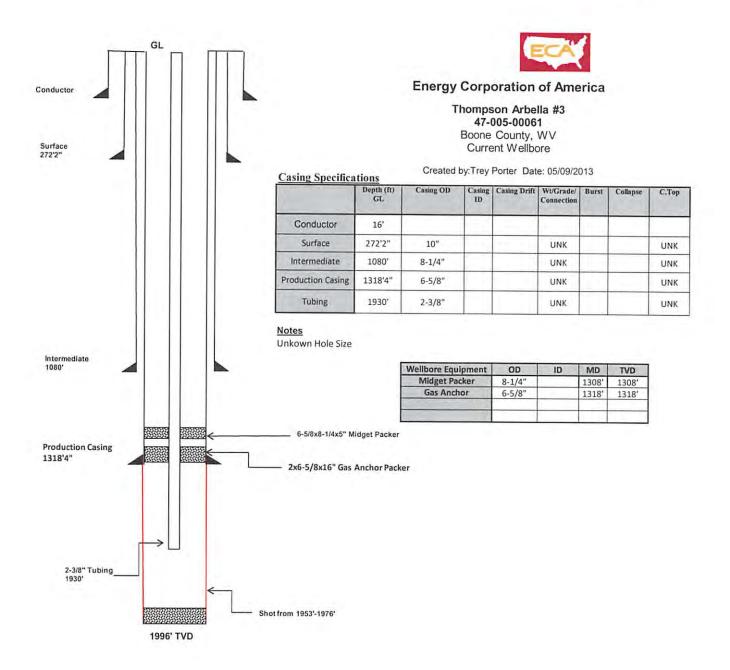
FROM 600' - 500' GEL TO 450' THEN CEMENT PLUG ABOUE SALT WATER 450' - 350' GEL FROM

Thompson Arbella #3 Plugging Plan Attachment

Plugging Plan:

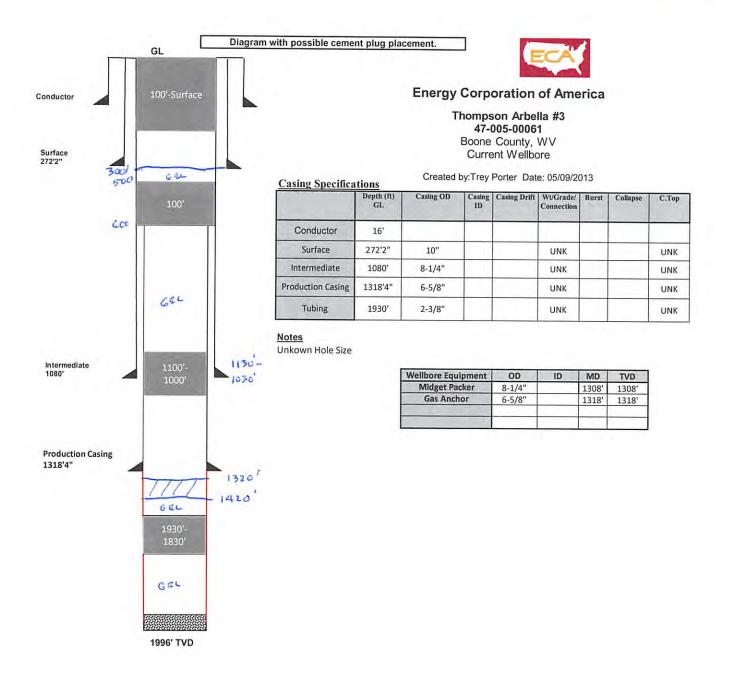
- 1. Notify inspector Ross Eller @ 304-932-6844
- 2. TOOH with tubing. TIH with tubing to 1930'.
- 3. Through the 2 3/8" tubing, pump the bottom wellbore plug from 1930' 1830'.
- 4. Gel hole from 1830' to 1420'. Pump 100' cement plug from 1420' to 1320' to cover Gas Shows.
- 5. Pump a minimum of 6% gel 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 ½" intermediate casing if possible and set 100' cement plug across casing seat from 1130' to 1030'. If not possible, cut and pull 8 ½" 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.



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Oil and Gas Section

PRELIMINARY DATA SHEET NO. I

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	The oil and gas	s privileges are he	ld under lease by the	above named compar	y, and this well	is drilled unde
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WW-4A	
Revised	6-07

1) Date:	06/30/2013	
2) Operator	's Well Number	
Energy Corporation	n of America	
Energy Corporatio	IT OF AMERICA	

005

3) API Well No.: 47 -

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

5)	(a) Coal Operator	
V	Name Robin Land Company, L	rc /
		1152
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	Address	
V		n
	Address	
t to plug and abandon a the location described een mailed by registere	well with the Chief of the Office of Oil and Gas, Wo on the attached Application and depicted on the atta d or certified mail or delivered by hand to the pers	est Virginia Department of Environmental ched Form WW-6. Copies of this Notice,
W-II O	Energy Corporation of America	/
		1 . 1/
Well Operator		1.11
By:	Rodney A Winters	W
By: Its:	Rodney A Winters VP of Land	M
By:	Rodney A Winters VP of Land 501 56th St SE	
By: Its: Address	Rodney A Winters VP of Land	Received
By: Its: Address Telephone	Rodney A Winters VP of Land 501 56th St SE Charleston, WV 25304 304-925-6100 lay of Apount 2013	Received
By: Its: Address Telephone	Rodney A Winters VP of Land 501 56th St SE Charleston, WV 25304 304-925-6100 Appunt, 2013 Notary Pu	Received
By: Its: Address Telephone	Rodney A Winters VP of Land 501 56th St SE Charleston, WV 25304 304-925-6100 lay of Apount 2013	Received blic Office of Oil and Gas
	Abandon a Well on ork order; and nowing the well locate the ments is that you have reany action at all. of the West Virginia Co to plug and abandon at the location described the mailed by registere	nowing the well location on Form WW-6. ments is that you have rights regarding the application which are summarize

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 depprivacyoffier@wv.gov.



WW-9 Rev. 5/08

	Page 1	of 4	
API Number 47 -	005	- 00061	
Operator's Well N	O. Thomps	son Arbella #3	

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 I	Branch of Lick Creek of Little Coal River Quadrar	ngle Mud	
Elevation 868'	County_Boone	District_Scott	
Description of anticipated	Pit Waste: Fresh Water and Gel		
Will a synthetic liner be u	sed in the pit? Yes 2	O MIL.	
Proposed Disposal Metho			
X	Land Application		
	Underground Injection (UIC Permit Number_)
	Reuse (at API Number)
	Off Site Dispposal (Supply form WW-9 for disp	oosal location)	
	Other (Explain		
Proposed Work For Whic		VALUE OF THE PARTY	
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obtaining the information penalties for submitting fa Company Official Signatu Company Official (Types	_{d Name)} Rodney A Winters	te, and complete. I am aware that the or imprisonment.	eived
Company Official Title_	Vice President of Land	Rec	2110
	Λ	With the state of	30 5015
Subscribed and sworn bef	ore me this 28 day of Augus	t, 20 <u>[3</u>	and Gas
Micheli Lei	nberusWeber	Notary Office Notory Publicany Dept. of	e of Oil and Gas Environmental Protection
My commission expires_	April 19,2021	OFFICIAL SEAL Notary Public, State of West MICHELE LAMBERTUS 104 Deming Drive Charleston, WY 243 My commission expires April	Virginia VEBER
		SEP	172013

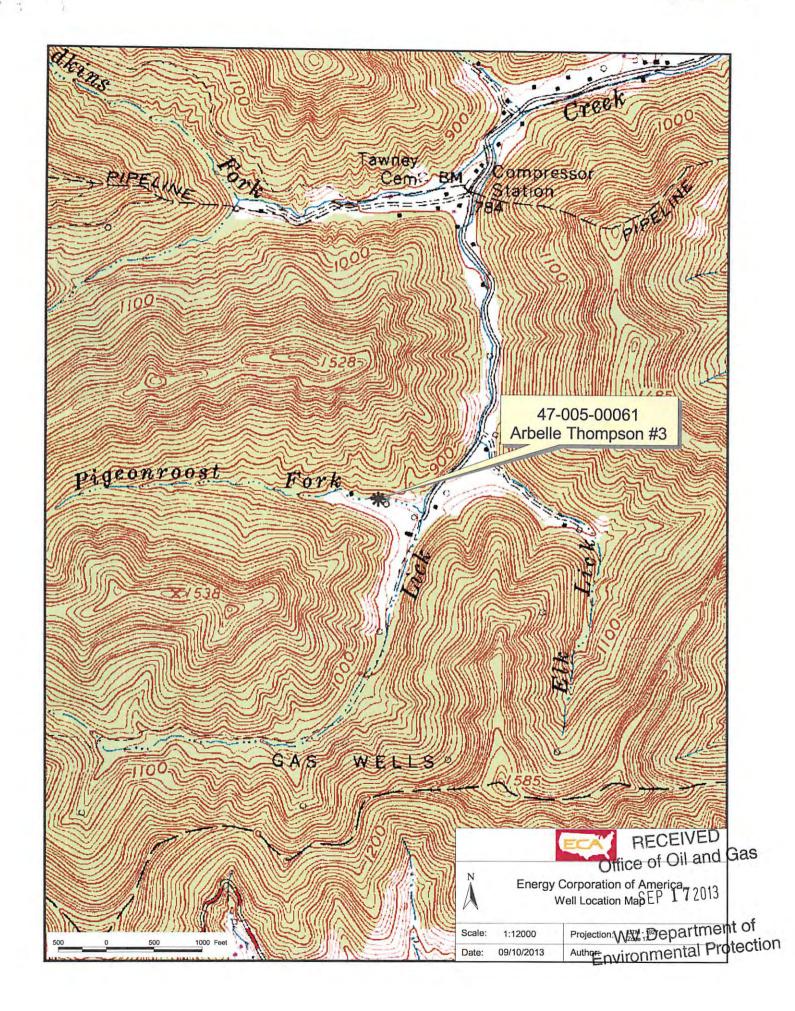
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Planned Fence /	-/-/-	Drain Pipe with size in inches	— @ — →
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SEP 172013

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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	
QUADRANGLE: Mud	
SURFACE OWNER: Robin Land Con	npany
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 preparing a new well location plat for a plugging perabove well. The Office of Oil and Gas will not accept the following requirements: 1. Datum: NAD 1983, Zone: 17 North, Coheight above mean sea level (MSL) – m 2. Accuracy to Datum – 3.05 meters 3. Data Collection Method: Survey grade GPS: Post Processed Difference	ermit or assigned API number on the ept GPS coordinates that do not meet ordinate Units: meters, Altitude: eters.
Real-Time Differentia	
Mapping Grade GPS X : Post Processed Dif	
I the undersigned, hereby certify this data is correct belief and shows all the information required by law prescribed by the Office of Oil and Gas.	p showing the well location office of Oil and Gas to the best of my knowledge and and the regulations issued and SEP 172013
Oly others Drilling &	9-12-WW Department of



· he !

Energy Corporation of America

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

Check # 348005

\$ 700,00

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

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

ichli Weber

Land Analyst

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SEP 0 5 2013

Environme = Projection

WV Department of

Office of Oil and Gas
WV Dept. of Environmental Protection