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west virginia department of environmental protection

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Office of Oil and Gas  
601 57<sup>th</sup> Street, S.E.  
Charleston, WV 25304  
(304) 926-0450  
fax: (304) 926-0452

Austin Caperton, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Friday, July 12, 2019  
WELL WORK PERMIT  
Vertical / Plugging

CORE APPALACHIA OPERATING LLC  
414 SUMMERS STREET

CHARLESTON, WV 25301

Re: Permit approval for 808441  
47-043-01211-00-00

This well work permit 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 any additional specific 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 of 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.

Per 35 CSR 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- 0450.

James A. Martin  
Chief

Operator's Well Number: 808441  
Farm Name: TCO MIN TR 1  
U.S. WELL NUMBER: 47-043-01211-00-00  
Vertical Plugging  
Date Issued: 7/12/2019

## 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.

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### CONDITIONS

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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.
4. This well is under a consent order and must be plugged under the terms of that agreement.

1) Date March 6, 2019  
2) Operator's  
Well No. 808441  
3) API Well No. 47-043 - 01211

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 \_\_\_\_ or Underground storage \_\_\_\_ ) Deep \_\_\_\_ / Shallow X

5) Location: Elevation 1118.46' Watershed East Fork of Fourteenmile Creek  
District Laurel Hill County Lincoln Quadrangle Ranger

6) Well Operator Core Appalachia Operating, LLC 7) Designated Agent Jessica Greathouse  
Address P.O. Box 6070 Address P.O. Box 6070  
Charleston, WV 25362 Charleston, WV 25362

8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name Jeffrey L. Smith Name R & R Well Service  
Address 5349 Karen Circle, Apartment # 2101 Address 42 Lynch Ridge  
Cross Lane, WV 25313 Walton, WV 25286

10) Work Order: The work order for the manner of plugging this well is as follows:

SEE ATTACHED SHEET

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Office of Oil and Gas  
MAR 8 2019  
WV Department of  
Environmental Protection

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

OK *gamm*

Work order approved by inspector \_\_\_\_\_ Date \_\_\_\_\_

PLUGGING PROCEDURE  
 808441  
 LINCOLN COUNTY, WEST VIRGINIA  
 API# 47-043-01211

BY: DMC  
 DATE: 1/14/19

Current Status

10 3/4" @ 7"  
 8 5/8" @ 598'  
 7" @ 1726'  
 3 1/2" @ 3630' w/ Hookwall pkr 3 1/2 x 7 @ 2070'  
 Shale: 2470'-3675'  
 TD @ 3675'  
 Fresh Water @ 230', 695'  
 Salt Water @ 1045'  
 Coal @ 295-297', 395-397', 585-588'  
 Gas Shows 2477', 3400', 3480'  
 Elevation 1110.67'  
 11/28/2017 Echometer FL @ 900'

**Objective: Plug and abandon**

- 1) Prepare road and location.
- 2) PJSA. MIRU service rig and support equipment.
- 3) Blow well down. Check TD.
- 4) Cut 3 1/2" at free point and pull. *WHILE SPOTTING GEL TO ABOVE SHOT HOLE @ 2450'*
- 5) Spot 100' cement plug @ TD, ~ 2400' TO 2200' *WOC, T.H. ADD MORE CEMENT IF NECESSARY.*
- 6) Spot 6% gel from 2200' TO 1775'.
- 7) Cut 7" at free point and pull. *SET 100' CEMENT PLUG ACROSS 7" CASING CUT.*
- 8) Spot 100' cement plug from 1775 - 1675'.
- 9) Spot 6% gel from 1675 - 1150'.
- 10) Spot 150' cement plug from 1150 - 1000'. *ELEVATION PLUG.*
- 11) *SPOT 6% GEL FROM 1000' TO 500'*

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- 12) Attempt to pull 8 5/8" csg. If unsuccessful, shoot or rip holes @ *550', 450', 350', 250' & 200'.*
- 13) Spot 600' cement plug from 600' - Surface.
- 14) Pull work string and top off w/cement.
- 15) Erect permanent monument (30" minimum height and 6" minimum diameter pipe) with API # (1/2" height numbering) and reclaim.





808441  
47-043-01211 P

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

Quadrangle Midkiff

WELL RECORD

Permit No. LIN-1211

Oil or Gas Well Gas

Company United Fuel Gas Company  
Address P. O. Box 1273; Charleston 25, W. Va.  
Farm United Fuel Gas Co. Min. Tr. #1 Acres 19,210.61  
Location (waters) East Fork of 14 Mile Creek  
Well No. 8441 Elev. 1110.67  
District Harts Creek County Lincoln  
The surface of tract is owned in fee by \_\_\_\_\_  
Address \_\_\_\_\_  
Mineral rights are owned by United Fuel Gas Co.  
Address Charleston, W. Va.  
Drilling commenced June 21, 1956  
Drilling completed September 8, 1956  
Date Shot 9-10-56 From 2470 To 3675  
With 8,600# Gelatin  
Open Flow 28/10ths Water in 2 Inch  
/10ths Merc. in \_\_\_\_\_ Inch  
Volume 223,000 - Br. Shale Cu. Ft.  
Rock Pressure 265 lbs. 48 hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
Fresh water 230 feet 695 feet  
Salt water 1045' feet \_\_\_\_\_ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13			<u>Hook Wall</u>
10 <u>3/4</u>		<u>7"</u>	Size of
<del>8</del> <u>5/8</u>		<u>598'</u>	<u>3 1/2" x 7"</u>
<del>7</del>		<u>1726</u>	Depth set
<u>5 3/16</u>			<u>2070'</u>
<u>3 1/2</u>		<u>3630</u>	Perf. top
<u>2</u>			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_

COAL WAS ENCOUNTERED AT 295 FEET 24 INCHES  
395 FEET 24 INCHES 462 FEET 24 INCHES  
585 FEET 36 INCHES \_\_\_\_\_ FEET \_\_\_\_\_ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Yellow Clay			0	15	Water 230'	1 1/2	bailers per hour
Blue Sand			15	22			
Blue Slate			22	40	Water 695'	2-8"	bailers per hour
Grey Sand			40	122			
Blue Slate			122	155	Hole full water	1045'	
Grey Sand			155	281			
Blue Slate			281	295	Gas 2477'	2/10 W 1" 15 M	
Coal			295	297			
Blue Slate			297	363	Gas 3400'	1/10 W 1" 11 M	
Sand			363	380			
Blue Slate			380	395	Gas 3480'	2/10 W 1" 15 M	
Coal			395	397			
Blue Slate			397	427	Test before shot	2/10 W 1" 15 M	
Lime Shell			427	442	Shot 9-10-56	with 8,600# Gelatin from	
Blue Slate			442	462	<u>2470-3675'</u>		
Coal			462	464	Test 1 hour after shot	106/10 W 2" 434 1	
Blue Slate			464	475	Test 20 hours after shot	28/10 W 2" 2231	
Grey Sand			475	532			
Blue Slate			532	585			
Coal			585	588			
Slate			588	608	FINAL OPEN FLOW - 223 M - Br. Shale		
Sand			608	630	48 Hr. R.P. 265#		
Slate			630	695			
Grey Sand			695	715			
Black Slate			715	800	Shut in 9-12-56 in 3 1/2" tubing.		
Grey Sand			800	845			
Blue Slate & Shells			845	965			
Salt Sand			965	1205			
Blue Slate			1205	1209			
Salt Sand			1209	1312			
Blue Slate			1312	1330			
Slate & Lime Shells			1330	1450			
Grey Sand			1450	1515			
Slate & Shells			1515	1575			
Maxon Sand			1575	1620			



808441

47-043-01211 P

Formation	Color	Hard or Soft	Top 4	Bottom	Oil, Gas or Water	Depth Found	Remarks
Slate & Shells			1620	1659			
Little Lime			1659	1697			
Pencil Cave			1697	1703			
Big Lime			1703	1893			
Injun Sand			1893	1905			
Red Injun Sand			1905	1925			
Slate & Shells			1925	2070			
Shell			2070	2132			
Slate			2132	2142			
Lime Shell			2142	2192			
Slate & Shell			2192	2450			
Brown Shale			2450	2472			
Berea Sand			2472	2490			
Slate & Shells			2490	3338			
Brown Shale			3338	3655			
Gray Slate			3655	3675			
Total Depth			3675'	SLM			

Date November 29, 1956

APPROVED UNITED FUEL GAS COMPANY, Owner

By S. R. Ferrell  
(Title)

Supt., Civil Engineering Department



WW-4A  
Revised 6-07

1) Date: March 6, 2019  
2) Operator's Well Number  
808441

3) API Well No.: 47 - 043 - 01211

**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>Larry G. Noe, et als, C/O Larry G. Noe</u>	Name <u>None</u>
Address <u>3917 McClellan Highway</u>	Address _____
<u>Branchland, WV 25506</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Southern Region Industrial, Inc.</u>
_____	Address <u>Three Commercial Place</u>
_____	<u>Norfolk, VA 23510</u>
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Jeffrey L. Smith</u>	(c) Coal Lessee with Declaration
Address <u>5349 Karen Circle, Apartment # 2101</u>	Name <u>Argus Energy, LLC</u>
<u>Cross Lanes, WV 25313</u>	Address <u>81 Enterprise Drive</u>
Telephone <u>681-313-6743</u>	<u>Debord, KY 41214</u>

**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.

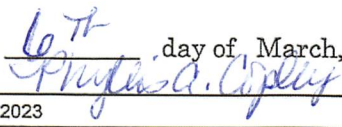
The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

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 Core Appalachia Operating, LLC  
 By:  Jessica Greathouse  
 Its: Manager - EHS & Administration Services  
 Address P.O. Box 6070  
Charleston, WV 25362  
 Telephone 304-353-5240

Subscribed and sworn before me this 6<sup>th</sup> day of March, 2019

My Commission Expires September 16, 2023



Notary Public

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MAR 8 2019

**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](mailto:depprivacyofficer@wv.gov).

WV Department of  
Environmental Protection

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS  
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Core Appalachia Operating, LLC OP Code 494518671

Watershed (HUC 10) East Fork of Fourteenmile Creek Quadrangle Ranger

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

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: Plugging returns/Cement - Will utilize above ground tanks

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? 20

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection ( UIC Permit Number \_\_\_\_\_ )
- Reuse (at API Number \_\_\_\_\_ )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Any fluid recovered will be hauled to a Core tank battery and disposed of properly)

Will closed loop system be used? If so, describe: \_\_\_\_\_

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc.

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

Additives to be used in drilling medium? \_\_\_\_\_

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


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

-Landfill or offsite name/permit number? \_\_\_\_\_

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, 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) Jessica Greathouse

Company Official Title Manager - EHS and Administrative Services

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Office of Oil and Gas

MAR 8 2019

WV Department of  
Environmental Protection

Subscribed and sworn before me this 6th day of March, 2019

Phyllis A. Copley Notary Public

My commission expires September 16, 2023



Proposed Revegetation Treatment: Acres Disturbed 1 +/- Prevegetation pH \_\_\_\_\_

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20 or equivalent

Fertilizer amount \_\_\_\_\_ lbs/acre

Mulch 2 Tons/acre

**Seed Mixtures**

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Red Fescue	40	Red Fescue	15
Alsike	5	Alsike Clover	5
Annual Rye	15		

**Attach:**

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Field Reviewed? ( ) Yes

( ) No

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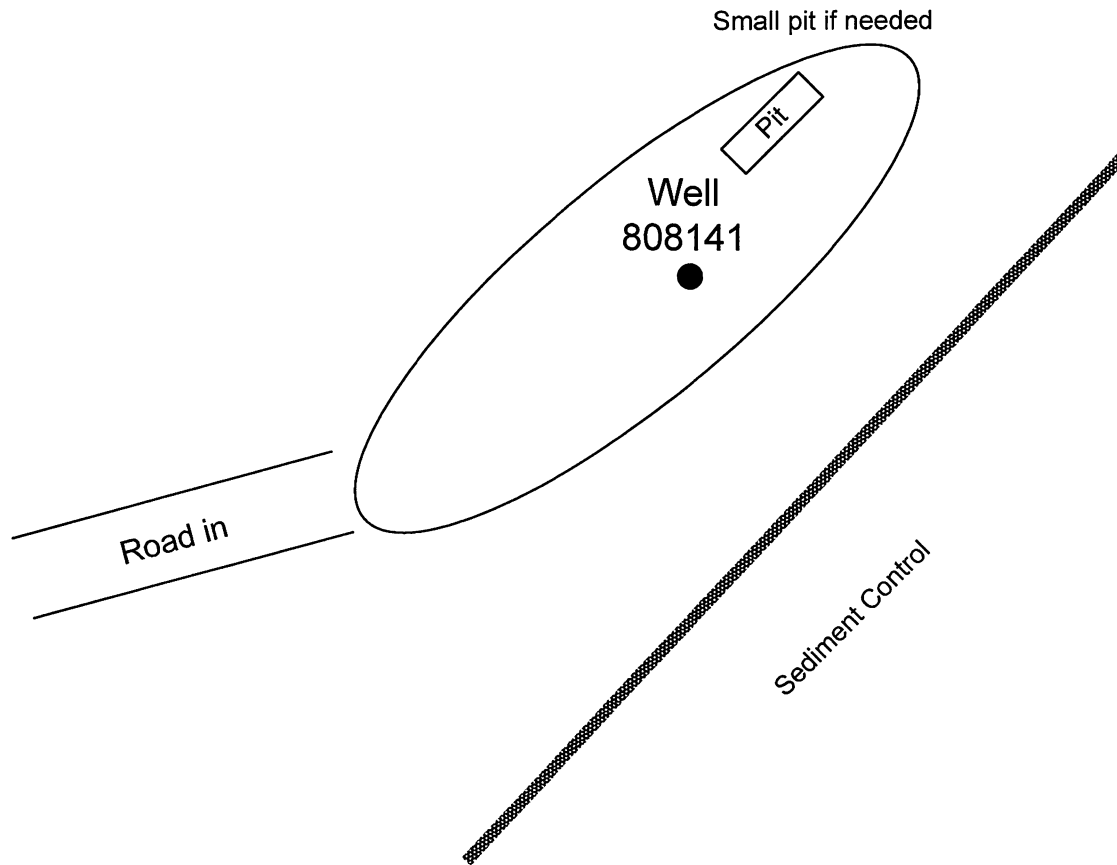
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Diagram of Well 808141  
API 47-043-01211  
Field Office - Hamlin  
County - Lincoln



Surface Owner:  
Larry G. Noe et al

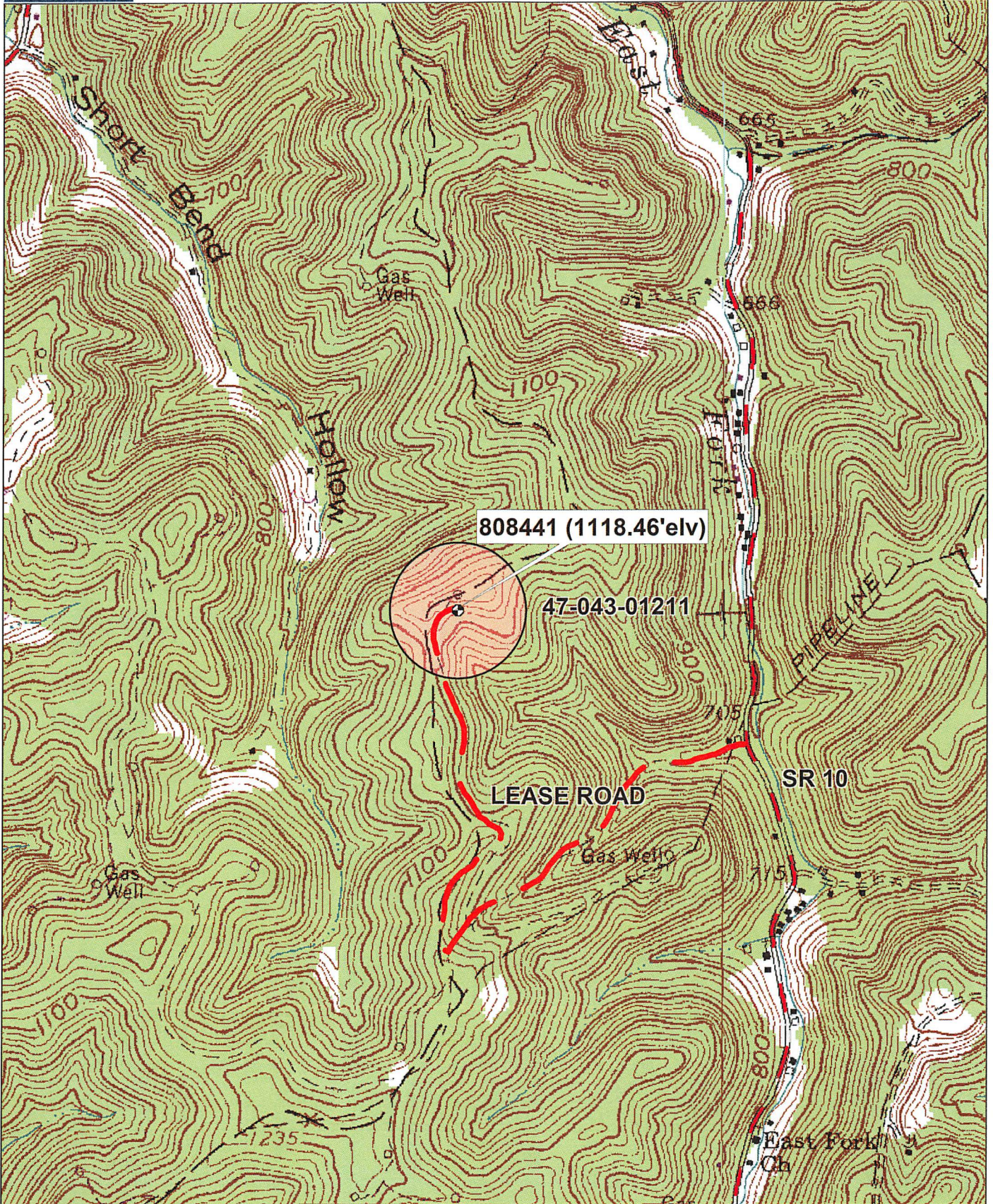


Note: No Land Application if pit is used

# Site Plan

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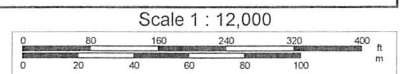
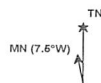


# WELL 808441 P&A TOPO MAP

Data use subject to license.

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www.delorme.com



Data Zoom 14-1



WW-7  
8-30-06



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

API: 47-043-01211 WELL NO.: 808441

FARM NAME: TCO MIN TR 1

RESPONSIBLE PARTY NAME: Core Appalachia Operating, LLC

COUNTY: Lincoln DISTRICT: Laurel Hill

QUADRANGLE: Ranger

SURFACE OWNER: Larry G. Noe, etal

ROYALTY OWNER: Core Appalachia Production, LLC

UTM GPS NORTHING: 4215727.44m

UTM GPS EASTING: 397100.57m GPS ELEVATION: 340.91m [1118.46' elv]

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.

*[Signature]*  
Signature

EHS Specialist  
Title

3/6/19  
Date

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47-043-01211F

Well  
808441

47-043-01211

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<input type="checkbox"/> Certified Mail Restricted Delivery	\$ 0.00
<input type="checkbox"/> Adult Signature Required	\$ 0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$ 0.00
Postage	\$ 1.30
<b>Total Price</b>	<b>\$ 7.60</b>

Sent To: **808441 P&A**  
**Larry G. Noe, et als**  
**C/O Larry G. Noe**  
**3917 McClellan Highway**  
**Branchland, WV 25506**

Postmark Here: 0523 04  
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**DEBORD, KY 41214**

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<input type="checkbox"/> Return Receipt (electronic)	\$ 0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$ 0.00
<input type="checkbox"/> Adult Signature Required	\$ 0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$ 0.00
Postage	\$ 1.30
<b>Total Price</b>	<b>\$ 7.60</b>

Sent To: **808441 P&A**  
**Argus Energy, LLC**  
**81 Enterprise Drive**  
**Debord, KY 41214**

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Certified Mail Fee	\$ 3.50
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<input type="checkbox"/> Return Receipt (electronic)	\$ 0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$ 0.00
<input type="checkbox"/> Adult Signature Required	\$ 0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$ 0.00
Postage	\$ 1.30
<b>Total Price</b>	<b>\$ 7.60</b>

Sent To: **808441 P&A**  
**Southern Region Industrial, Inc.**  
**Three Commercial Drive**  
**Norfolk, VA 23510**

Postmark Here: 0523 04  
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