



 west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Wednesday, May 1, 2019
 WELL WORK PLUGGING PERMIT
 Vertical Plugging

CORE APPALACHIA OPERATING LLC
 414 SUMMERS STREET

CHARLESTON, WV 25301

Re: Permit approval for 808647
 47-059-00569-00-00

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.

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. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, 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: 808647
 Farm Name: COTIGA DEV. CO.
 U.S. WELL NUMBER: 47-059-00569-00-00
 Vertical Plugging
 Date Issued: 5/1/2019

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.

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

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 / Liquid injection / Waste disposal /
(If "Gas, Production or Underground storage) Deep / Shallow

5) Location: Elevation 1220.98' Watershed Laurel Fork of Pigeon Creek
District Harvey County Mingo Quadrangle Myrtle

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 Allen Flowers Name Precision Drilling (BOSS)
Address 165 Grassy Lick Lane Address 3978 N Elmdale Road
Liberty, WV 25124 Olney, IL 62450

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

SEE ATTACHED SHEET

RECEIVED
Office of Oil and Gas

MAR 12 2019
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 3-12-2019

PLUGGING PROCEDURE

808647

MINGO COUNTY, WEST VIRGINIA

API# 47-059-00569

BY: DMC

DATE: 1/14/19

Current Status

10 3/4" 40# @ 21'

8 5/8" 24# @ 640'

7" 20# @ 2174' w/ bottom hole pkr

Shale: Shot 3004-4140'

TD @ 4140'

Fresh water @ 100'

Salt Water @ 1390'

Coal @ 100-104'

Gas Shows @ 2260 – 2270', 2410 – 2419'

Elevation 1214.39'

9/18/2018 Echometer FL @ 82'

Objective: Plug and abandon

- 1) Prepare road and location.
- 2) MIRU service rig and support equipment.
- 3) Blow well down. Check TD.
- 4) Spot 100' cement plug @ TD, ~ 2980 – 2880'.
* SPOT GEL TO ABOVE SHOT HOLE @ 2980'
WOC & TAG CEMENT, ADD IF NECESSARY.
- 5) Spot 6% gel from 2880 – 2300'
- 6) Spot 100' cement plug from 2300' – 2100'.
- 7) Spot 6% gel from 2100' – 1440'.
- 8) Spot 100' cement plug from 1440 – 1300'.
- 9) Spot 6% gel from 1300 – 1270'.
- 10) Cut 7" csg at free point and pull.
- 11) Spot 100' cement plug from 1270 – 1170'.
- 12) Spot 6% gel from 1170 – 690'.
- 13) Attempt to pull 8 5/8" csg. If unsuccessful, shoot or rip holes @ 100'.
- 14) Spot 100' cement plug from 690 – 590'.
- 15) Spot 6% gel from 590 – 100'.
- 16) Spot 100' cement plug from 100' – Surface.
- 17) Pull work string and top off w/cement.
- 18) Erect permanent monument (30" minimum height and 6" minimum diameter pipe) with API # (1/2" height numbering) and reclaim.

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

UNITED FUEL GAS COMPANY
COMPANY

808647
47-059-00501-19

SERIAL WELL NO. 8617

LEASE NO. 50052

MAP SQUARE 32-23

RECORD OF WELL NO. <u>8617</u> on the	CASING AND TUBING				TEST BEFORE SHOT
<u>Cotiga Dev. Co. #13</u> farm of <u>18,500.52</u> Acres	SIZE	WEIGHT	USED IN DRILLING	LEFT IN WELL	<u>0</u> /10 of Water in <u>1"</u> inc'
in <u>Harvey</u> District	<u>10-3/4"</u>	<u>10#</u>	<u>21'</u>	<u>21'</u>	/10 of Merc. in _____ inc'
<u>Mingo</u> County	<u>8-5/8"</u>	<u>21#</u>	<u>610'</u>	<u>610'</u>	Volume _____ Cu. f
State of: <u>West Virginia</u>	<u>7"</u>	<u>20#</u>	<u>2174'</u>	<u>2174'</u>	TEST AFTER SHOT
Field: <u>Central Division</u>					<u>6</u> /10 of Water in <u>2"</u> inc'
Rig Commenced <u>April 21,</u> 19 <u>58</u>					/10 of Merc. in _____ inc'
Rig Completed <u>April 26,</u> 19 <u>58</u>					Volume <u>103 MCF</u> _____ Cu. f
Drilling Commenced <u>April 26,</u> 19 <u>58</u>					<u>19</u> Hours After Sho
Drilling Completed <u>June 25,</u> 19 <u>58</u>					Rock Pressure <u>48 Hr. 423'</u>
Drilling to cost _____ per foot					Date Shot <u>6-17-58</u>
Contractor is: <u>Ray Brothers</u>					Size of Torpedo <u>11,800# Gal.</u>
Address: <u>Charleston, W. Va.</u>	SHUT IN				Oil Flowed _____ bbls. 1st 24 hrs
	Date <u>6-18-58</u>				Oil Pumped _____ bbls. 1st 24 hrs
Driller's Name <u>Monie Miller</u>	<u>7"</u> in. Casing	Tubing or Casing			
<u>Sattis Bennett</u>	Size of Packer <u>7"X8-5/8"</u>				Well abandoned and
	Kind of Packer <u>Bottom Hole</u>				Plugged _____ 19 _____
	1st Perf. Set _____ from _____				
Elevation: <u>1214.39'</u>	2nd Perf. Set _____ from _____				

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface	0	15	15	
Sand	15	45	30	
Slate	45	100	55	Water @ 100' - 2 BPH
Coal	100	104	4	
Slate	104	125	21	
Sand	125	160	35	
Slate	160	179	19	
Sand	179	215	66	
Slate	215	260	45	
Sand	260	290	30	
Slate	290	595	305	
Sand	595	652	57	
Slate & Shells	652	694	42	
Sand	694	812	118	
Slate	812	870	58	
Sand	870	890	20	
Slate	890	969	79	

SERIAL WELL NO. 8617LEASE NO. 50052808647 47-059-00569A
MAP SQUARE 05 03 2019

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Sand	969	1042	73	
Slate	1042	1180	138	
Lime	1180	1205	25	
Salt Sand	1205	1470	265	Water @ 1390' - Hole Full
Slate	1470	1484	14	
Sand	1484	1512	28	
Slate	1512	1523	11	
Sand	1523	1567	44	
Slate	1567	1605	38	
Sand	1605	1765	160	
Slate	1765	1860	95	
Sand	1860	2030	170	
Slate	2030	2038	8	
Lime	2038	2088	50	
Sand	2088	2116	28	
Slate	2116	2123	7	
Lime	2123	2137	14	
Slate	2137	2142	5	
Big Lime	2142	2157	15	
Slate	2157	2160	3	
Lime	2160	2325	165	Gas @ 2260'-2270' - 5/10 W-1"
Injun Sand	2325	2375	50	Oil-1 1/2 Barrels (6" Barrel)- 5 Hrs.
Crabby Lime	2375	2464	89	
Slate & Shells	2464	2927	463	
Brown Shale	2927	2955	28	
Berea Sand	2955	3004	49	
Dark Shale	3004	3060	56	
Slate & Shells	3060	3780	720	
lt. Brown Shale	3780	3870	90	
Dark Brown Shale	3870	4130	260	
Slate	4130	4140	10	When Drilling completed 0/10 W-1"
TOTAL DEPTH	4140'			

Revised
BL 00 & G

05/03/2019

June 17, 19 58

Mr. W. W. Farrell, Ass't. Superintendent

Well No. 8617 (Serial No.) on Cotiga Dev. Co. #13 Farm

Was shot this date with 11,800# Dupont Gelatin quarts

Number of Shells 118

Length of Shells 5'10"

Top of Shot 300'

Bottom of Shot 410'

Top of Dark Shale Sand 300' feet
(Name of Sand)

Bottom of Slate Sand 410' feet
(Name of Sand)

Total Depth of Well 410'

Results: 19 lbs. after shot - 6/10 W-2" - 103 MCF

Remarks:

Signed *[Signature]* District Supt.

NOTE - When a well is shot this form must be filled out and sent to the General Superintendent.

Provided by ODFG

47-052-05296
05/03/2019

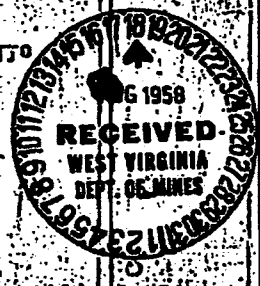


STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Quadrangle Holden
Form No. MN-569 **WELL RECORD**

Company United Fuel Gas Co.
Address P.O. Box 1273 Charleston 25, W. Va.
Farm Cotiga Development Co. #13 Acres 12,500.52
Location (waters) Laurel Fork of Pigeon Creek
Well No. 8647 Elev. 1214.39
District Harvey County Mingo
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by Cotiga Development Co.
123 South Broad Street Philadelphia 9, Pa. 19116
Drilling commenced April 26, 1958
Drilling completed June 15, 1958
Date Shot 6-17-58 From 300# br. 4140
With 11,800# DuPont Gelatin
Open Flow 6 months Water in 2 Incl. _____
_____ Merc. in _____ Incl. _____
Volume 200-300 - Br. Shale Co. Ft. _____
Rock Pressure 418 lbs. 48 hrs. _____
Oil _____ bbls. 1st 24 hrs. _____
WELL ACIDIZED _____
WELL FRACTURED _____
RESULT AFTER TREATMENT _____
ROCK PRESSURE AFTER TREATMENT _____
Fresh Water? 100 Feet _____ Salt Water? 1390 Feet _____

Formation	Color	Hard or Soft	Top	Bottom	Oil Gas or Water	Depth	Remarks
Surface			0	15	Water	100'	2 bailers per hour
Sand			15	45			
Slate			45	100			Hole full water 1390'
Coal			100	104			
Slate			104	125	Gas	2260-2270'	5/10 W 1" 24 M
Sand			125	160			
Slate			160	179	Oil	2260-2270'	- 30 feet in 5 hours
Sand			179	245			
Slate			245	260			Show gas 2410-2419'
Sand			260	290			3/10 W 1" 18 M
Slate			290	595			
Sand			595	652			Test before shot - not enough to gauge
Slate			652	660			Shot 6-17-58 with 11,800# DuPont Gelatin
Sand			660	662			from 300# 4140'
Slate			662	670			Test 1 hour after shot 18/10 Merc. 2"
Sand			670	670			660 M
Slate			670	969			Test 19 hours after shot 6/10 W 2" 103 M
Sand			969	1002			
Slate			1002	1160			
Sand			1160	1205			
Slate			1205	1270			
Sand			1270	1400			Shot in 6-17-58 in 7" casing
Slate			1400	1512			
Sand			1512	1523			
Slate			1523	1567			
Sand			1567	1605			
Slate			1605	1765			
Sand			1765	1860			
Slate			1860	2090			
Sand			2090	2090			



PROCESSED BY 0026

47-059-00569A

05/03/2019

Formation	Color	Hard or Soft	Top 10	Bottom (ft.)	Oil, Gas or Water	Depth Found	Remarks
Shale			3030	3033			
Shale			2938	2988			
Shale			2988	2116			
Shale			2116	2123			
Shale			2123	2137			
Shale			2137	2142			
Shale			2142	2157			
Shale			2157	2160			
Shale			2160	2325			
Shale			2325	2375			
Shale			2375	2444			
Shale			2444	2927			
Shale			2927	2955			
Shale			2955	3004			
Shale			3004	3040			
Shale			3040	3780			
Shale			3780	3870			
Shale			3870	4150			
Shale			4150	4160			
Total Depth			4160	4160			
Shale			500	500			
Shale			512	500			
Shale			730	512			
Shale			700	730			
Shale			752	700			
Shale			700	752			
Shale			700	700			
Shale			72	72			
Shale			0	72			



DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
 DIVISION OF GEOLOGICAL AND WATER RESOURCES
 APPROVED: UNITED FUEL GAS CO. Owner

By: *A. J. Murrell*
 (Title)
 Dept., Civil Engineering Department



1) Date: February 27, 2019
2) Operator's Well Number 808647 05/03/2019

3) API Well No.: 47 - 47-059 - 00569

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

<p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Cotiga Development Company</u> Address <u>P.O. Box 1956</u> <u>Williamson, WV 25661</u></p> <p>(b) Name _____ Address _____</p> <p>(c) Name _____ Address _____</p> <p>6) Inspector <u>Allen Flowers</u> Address <u>165 Grassy Lick Lane</u> <u>Liberty, WV 25124</u> Telephone <u>304-552-8308</u></p>	<p>5) (a) Coal Operator</p> <p>Name <u>See Attached Sheet for Coal Operators</u> Address _____</p> <p>(b) Coal Owner(s) with Declaration</p> <p>Name <u>Cotiga Development Company</u> Address <u>P.O. Box 1956</u> <u>Williamson, WV 25561</u></p> <p>(c) Coal Lessee with Declaration</p> <p>Name <u>See Attached Sheet for Coal Lessees</u> Address _____</p>
---	--

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: [Signature] Jessica Greathouse
 Its: Manager - HSE & Administration Services
 Address P.O. Box 6070
Charleston, WV 25362
 Telephone 304-353-5240

RECEIVED
Office of
MAR 6 2019
WV Department of
Environmental Protection

Subscribed and sworn before me this 5th day of March 2019
Phyllis A. Copley Notary Public
 My Commission Expires September 16, 2023

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.

05/03/2019

OFFICIAL SEAL
STATE OF WEST VIRGINIA
Phyllis A. Coley
Treasurer
Martinsburg, WV 26155
My Commission Expires September 16, 2022



Environmental Protection

808647

47-099-00569

Coal Lessees

1) Southeastern Land, LLC
81 Enterprise Drive
Debord, KY 41214

2) Lexington Coal Company
Attention: Dave Decker
123 Long Shoals Branch
Alum Creek, WV 25003

Coal Operators:

1) Southeastern Land, LLC
81 Enterprise Drive
Debord, KY 41214

2) Lexington Coal Company
Attention: Dave Decker
123 Long Shoals Branch
Alum Creek, WV 25003

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

47-059-00569P
05/03/2019

7015 0640 0005 7840 3114

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DEBORD, KY 41214

OFFICIAL USE

Certified Mail Fee	\$3.50
Extra Services & Fees (check box, add fee as appropriate)	\$2.80
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<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
Total Postage and Fees	\$7.60

0523 03
Postmark Here

03/05/2019

Sent To
808647 P&A
Southeastern Land, LLC
81 Enterprise Drive
Debord, KY 41214

PS Form 3800, June 2015

7015 0640 0005 7840 3107

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ALUM CREEK, WV 25003

OFFICIAL USE

Certified Mail Fee	\$3.50
Extra Services & Fees (check box, add fee as appropriate)	\$2.80
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<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
Total Postage and Fees	\$7.60

0523 03
MAR 5 2019
Postmark Here

03/05/2019

Sent To
808647 P&A
Lexington Coal Company
Attention: Dave Decker
123 Long Shoals Branch
Alum Creek, WV 25003

PS Form 3800, June 2015

7015 0640 0005 7840 3091

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CERTIFIED MAIL® RECEIPT
Domestic Mail Only

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WILLIAMSON, WV 25661

OFFICIAL USE

Certified Mail Fee	\$3.50
Extra Services & Fees (check box, add fee as appropriate)	\$2.80
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<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	\$1.45
Total Postage and Fees	\$7.75

0523 03
MAR 5 2019
Postmark Here

03/05/2019

Sent To
808647 P&A
Cotiga Development Company
P.O. Box 1956
Williamson, WV 25661

PS Form 3800, June 2015

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Office of Oil and Gas
MAR 8 2019
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) Laurel Fork of Pigeon Creek Quadrangle Myrtle

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.

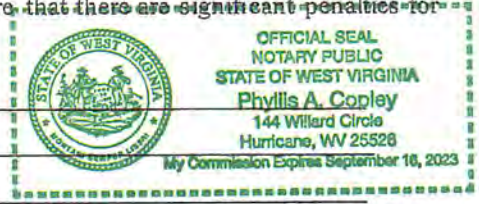
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations 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 [Signature]

Company Official (Typed Name) Jessica Greathouse

Company Official Title Manager - EHS and Administrative Services



Subscribed and sworn before me this 5th 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: [Signature]

Comments: _____

Title: In spect Date: 3-12-2019

Field Reviewed? Yes No

WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-059-00569 WELL NO.: 808647

FARM NAME: Cotiga Development Company #13

RESPONSIBLE PARTY NAME: Core Appalachia Operating, LLC

COUNTY: Mingo DISTRICT: Harvey

QUADRANGLE: Myrtle

SURFACE OWNER: Cotiga Development Company

ROYALTY OWNER: Cotiga Development Company

UTM GPS NORTHING: 4189178.28m

UTM GPS EASTING: 398410.89m GPS ELEVATION: 372.16m [1220.98']

RECEIVED
Office of Oil and Gas
MAR 8 2019

WV Department of
Environmental Protection

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:

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

Survey grade GPS : Post Processed Differential

Real-Time Differential

Mapping Grade GPS : Post Processed Differential

Real-Time Differential

- 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

2/27/19
Date