



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

Monday, July 15, 2019
WELL WORK PLUGGING PERMIT
Vertical Plugging

CORE APPALACHIA OPERATING LLC
414 SUMMERS STREET

CHARLESTON, WV 25301

Re: Permit approval for 4200
47-043-00026-00-00

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

A blue ink signature of James A. Martin, written in a cursive style, is positioned to the right of his name and title.

Operator's Well Number: 4200
Farm Name: DOTSON, A. I.
U.S. WELL NUMBER: 47-043-00026-00-00
Vertical Plugging
Date Issued: 7/15/2019

Promoting a healthy environment.

I

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.

1) Date May 7, 2019
2) Operator's
Well No. 804200
3) API Well No. 47-043 - 00026

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 913.97' Watershed Left Fork Mud River
District Jefferson County Lincoln Quadrangle Griffithsville

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 Name Jeffery L. Smith
Address 5349 Karen Circle, Apartment #2101
Cross Lane, WV 25313
9) Plugging Contractor Name R & R Well Service
Address 42 Lynch Ridge
Walton, WV 25286

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

MAY 16 2019

WV Department of
Environmental Protection

OK *gmm*

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

Work order approved by inspector _____ Date _____

PLUGGING PROCEDURE

804200

LINCOLN COUNTY, WEST VIRGINIA

API# 47-043-00026

BY: DMC

DATE: 1/9/19

Current Status

8 1/4" @ 615'

6 5/8" @ 1,606'

3" @ ?' w/ pkr @ 2301'

TD @ 3,758'

Berea: Shot 2258-2268'

Fresh Water @ 100 – 120'

Salt Water @ 835'

Coal @ 60-62', 400-404', 579-583'

Gas Shows @ 1624-1626', 2257-2266', 3175', 3350', 3465', 3660'

Elevation 820'

4/16/2008 Swab Rig FL @ 357', Caving TD @ 2073'

Objective: Plug and abandon

- 1) Prepare road and location.
- 2) MIRU service rig and support equipment.
- 3) Blow well down. Check TD.
- 3a) FILL WELL BORE W/ 6% GEL TO ABOVE SHOT @ 2200'.
- 4) Attempt to pull 3" tbg and pkr. If unsuccessful, cut 3" tbg at free point and pull.
- 5) Spot 100' cement plug at TD, ~ 2300 – 2200'. WOC. TAG PLUG. ADD CEMENT IF NEEDED.
- 6) Spot 6% gel from 2200 – 1650'. - SET 100' CLASS A CEMENT PLUG FROM 1656'-1556'. WOC. TAG PLUG. ADD CEMENT IF NEEDED.
- 7) Cut 6 5/8" at free point and pull.
- 8) Spot 100' cement plug from : ACROSS CASING CUT
- 9) Spot 6% gel from CASING CUT PLUG TO 875'
- 10) Spot 100' cement plug from 875 – 775'. (ELEVATION)
- 11) Attempt to pull 8 1/4" csg. If unsuccessful, shoot or rip holes @ ~ 580, 500, 380,
- 12) Spot 6% gel from 380' TO 200'
- 13) Spot 200' cement plug from 200' TO 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.

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804200 P4A

47-043-00026P



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JUL 15 2019
WV Department of
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804200

47-043-00026 P

STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION

WELL RECORD

Permit No. LIN-26-D

Oil or Gas Well GAS

Company UNITED FUEL GAS COMPANY
Address Box 1273, Charleston 25, W. Va.
Farm A. I. Dotson Acres 300
Location (waters) Left Fork of Mud River
Well No. 4200 Elev. 820
District Jefferson County Lincoln
The surface of tract is owned in fee by Gilbert Dotson
Address Bulger, W. Va.
Mineral rights are owned by Same
Address
Drilling commenced June 26, 1930
Drilling completed August 14, 1930
Date Shot 8-18-30 From 2258 To 2268
With 30 Qts.

Table with 4 columns: Casing and Tubing, Used in Drilling, Left in Well, Packers. Includes rows for sizes 16, 18, 10, 8 1/2, 6 1/2, 5 3/16, 8, 2 and packer details like '3" X 5-3/16" X 16" Depth set 2301'.

Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume Gas Well Cu. Ft.
Rock Pressure lbs. hrs.
Oil bbls., 1st 24 hrs.
Fresh water 100-120 feet
Salt water 835 feet

CASING CEMENTED SIZE No. Ft.
COAL WAS ENCOUNTERED AT 60 FEET 24 INCHES
FEET INCHES 400 FEET 48 INCHES
FEET INCHES 579 FEET 48 INCHES

Main well log table with columns: Formation, Color, Hard or Soft, Top, Bottom, Oil, Gas or Water, Depth Found, Remarks. Lists geological layers from Surface to Slate (2285) and gas findings at 100-120 and 2257-2266 depths.

MAY 1944

Handwritten signature or initials

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Lime			2300	2301			
Total Depth			2301				
<u>DRILLED DEEPER</u>							
	Comm.	11-29-1943	Comp.	12-31-1943			
Original Total Depth				2301			
Lime			2301	2320			
Slate & Shells			2320	3360	Gas	3175	Show
Brown Shale			3360	3530	Gas	3350	
Lime			3530	3550	Gas	3465	
Brown Shale			3550	3747	Gas	3660	
White Slate			3747	3767			
Total Depth				3758			

Date March 20, 1944

APPROVED UNITED FUEL GAS COMPANY, Owner

By G.A. Cunningham
(Title)

1) Date: May 7, 2019
2) Operator's Well Number
604200
3) API Well No.: 47 - 47-043 - 00026

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>Michael Hale</u>	Name <u>None</u>
Address <u>13 Hale Road</u>	Address _____
<u>Alkol, WV 25501</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Michael Hale</u>
_____	Address <u>13 Hale Road</u>
_____	<u>Alkol, WV 25501</u>
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Jeffery L. Smith</u>	(c) Coal Lessee with Declaration
Address <u>5349 Karen Circle, Apartment # 2101</u>	Name <u>None</u>
<u>Cross Lanes, WV 25313</u>	Address _____
Telephone <u>681-313-6743</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: [Signature] 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 7th day of May 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.

47-043-000264
804200
API 47-043-00026

7017 1450 0002 3854 0245

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at www.usps.com ®.	
ALKOLE WV 25501	
OFFICIAL USE	
Certified Mail Fee	\$3.50
\$	\$2.80
Extra Services & Fees (check box, add fee as appropriate)	
<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	\$
Postage	\$1.30
\$	
Total Postage and Fees	\$7.60
\$	
Sent To	Michael Hale
Street and Apt. No., or PO Box No.	13 Hale Road
City, State, ZIP+4®	Alkole WV 25501
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

0523 03
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Postmark Here
05/07/2019
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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) Left Fork Mud River Quadrangle Griffithville

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



OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
Phyllis A. Copley
144 Willard Circle
Hurricane, WV 25528
My Commission Expires September 16, 2023

Subscribed and sworn before me this 7th day of May, 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	<u>40</u>	Red Fescue	<u>15</u>
Alsike	<u>5</u>	Alsike Clover	<u>5</u>
Annual Rye	<u>15</u>		

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

Diagram of Well 804200

API 47-043-00026

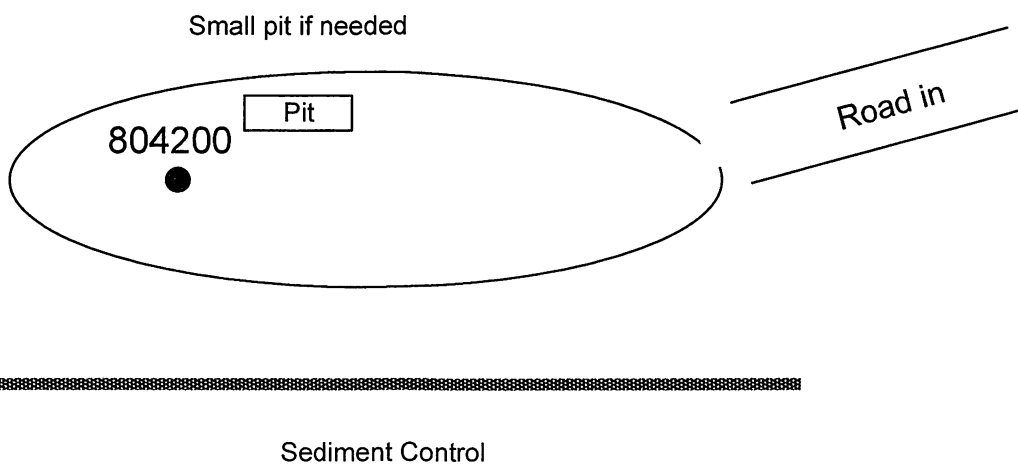
Field Office - Hamlin

County - Lincoln

126 P



Surface Owner:
Michael Hale



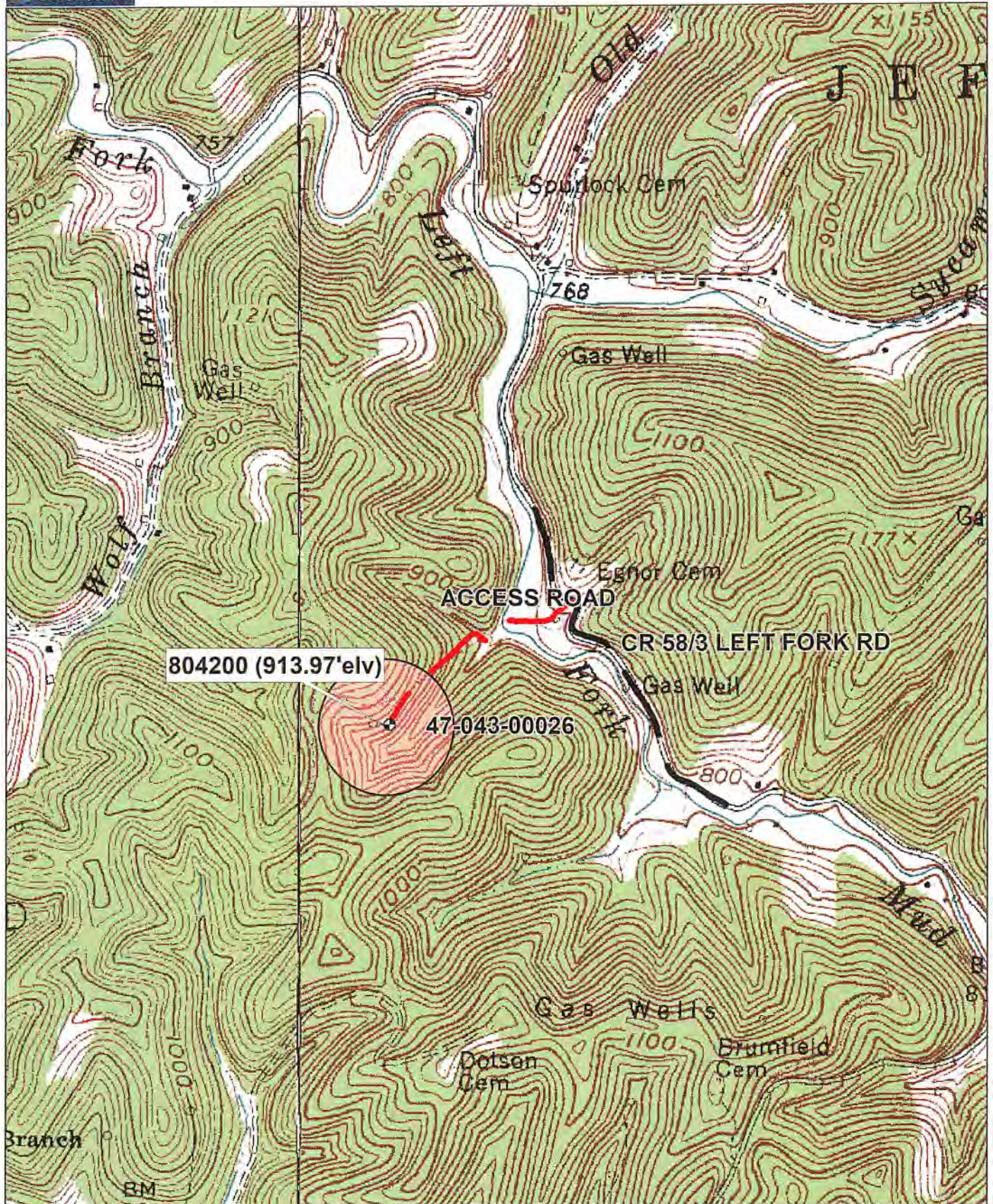
Note: No Land Application if pit is used

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Site Plan



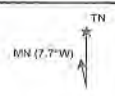
WELL 804200 P&A TOPO MAP

Office of Oil and Gas

Data use subject to license.

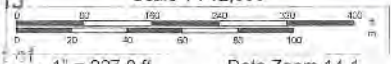
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MAY 16 2019

Scale 1 : 12,000



WV Department of Environmental Protection

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: 47-043-00026 WELL NO.: 804200
 FARM NAME: A.I Dotson
 RESPONSIBLE PARTY NAME: Core Appalachia Operating, LLC
 COUNTY: Lincoln DISTRICT: Jefferson
 QUADRANGLE: Griffithsville
 SURFACE OWNER: Michael Andrew Hale
 ROYALTY OWNER: Michael Andrew Hale
 UTM GPS NORTHING: 4221655.95m
 UTM GPS EASTING: 412585.18m GPS ELEVATION: 278.58m [913.97']

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.

Chris Adkins
Signature

EHS Specialist
Title

7/15/19
Date

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input coordinates

enter comma delimited coordinates. examples:
 38 15 30.1, -81 25 15.2 (lat, lon as degrees minutes seconds)
 38.123456, -81.123456 (lat, lon as decimal degrees)
 500000, 4100000 (UTM as easting, northing)
 1987654.32, 364123.45 (WV state plane as easting, northing)

38 08 18.38, -81 59 51.57

Lat/Lon NAD27

Convert zoom to point

output coordinates

412585.18,4221655.95

UTM NAD83 Zone 17N

Google Maps

history (for copy/paste/edit)

- 2,38.0621139,-82.3039194,LL
NAD27,385625.43,4213519.36,UTM17N NAD83(1986)
- 3,37.8925611,-82.3373083,LL
NAD27,382426.06,4194747.97,UTM17N NAD83(1986)
- 4,37.8442917,-82.1547750,LL
NAD27,398410.89,4189178.28,UTM17N NAD83(1986)
- 5,38.1507778,-82.2496972,LL
NAD27,390514.80,4223292.00,UTM17N NAD83(1986)
- 6,38.1324222,-82.0779139,LL
NAD27,405543.85,4221066.85,UTM17N NAD83(1986)
- 7,38.1315917,-82.3788472,LL

notes about datum conversions

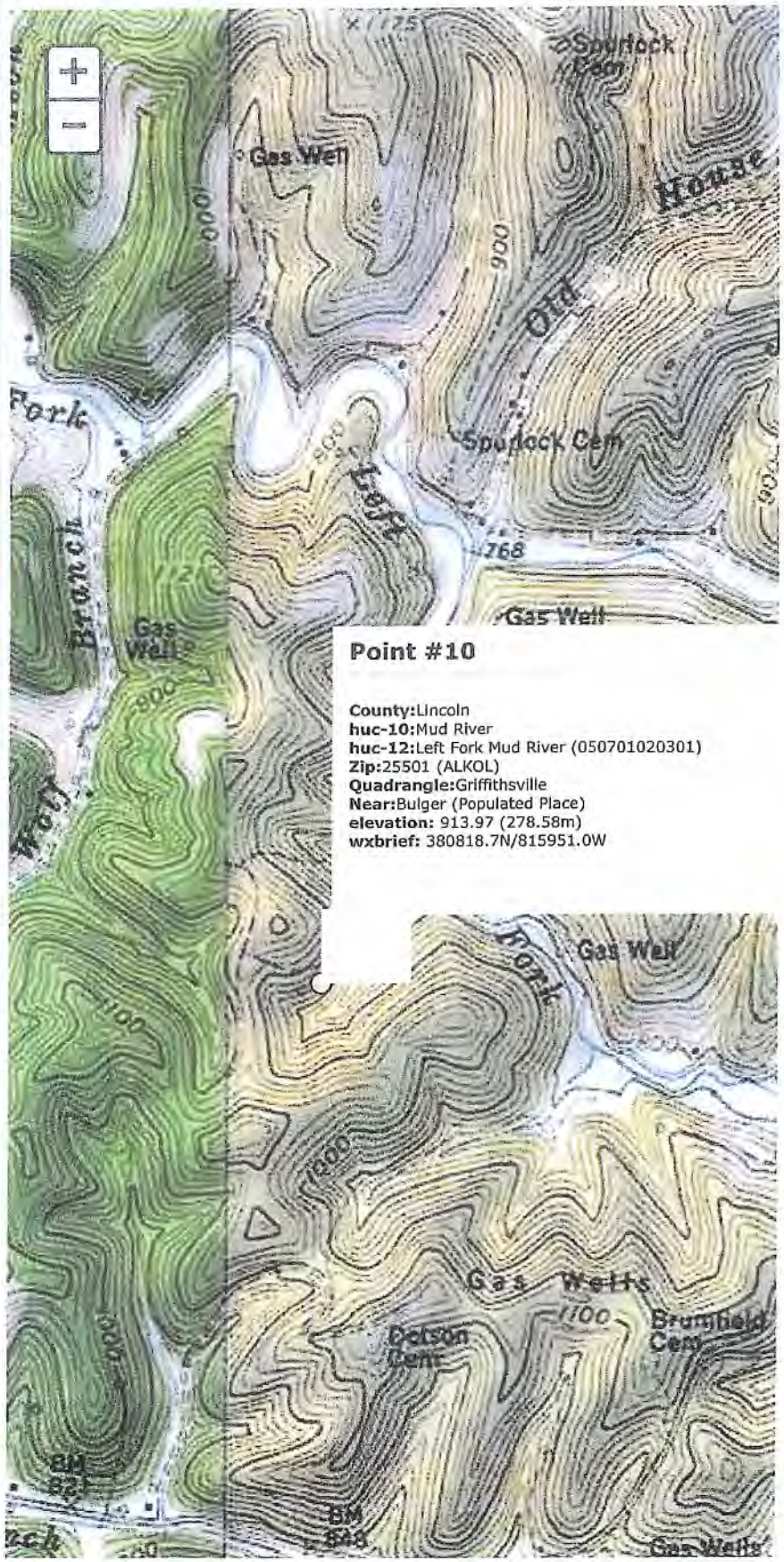
the original realization of WGS84 typically is on the order of 1 meter. This conversion uses the Esri transformation NAD_1927_To_WGS_1984_79_CONUS.

3. Conversions between NAD83 and WGS84. This converts between NAD83(2011) and WGS84(G1674), which is equivalent to ITRF08.

This conversion uses the Esri transformation WGS_1984_(ITRF08)_To_NAD_1983_2011.

4. Conversions that use the same datum. These

804200



Point #10

County:Lincoln
 huc-10:Mud River
 huc-12:Left Fork Mud River (050701020301)
 Zip:25501 (ALKOL)
 Quadrangle:Griffithsville
 Near:Bulger (Populated Place)
 elevation: 913.97 (278.58m)
 wxbrief: 380818.7N/815951.0W

clear markers street map image topo