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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, November 1, 2019  
WELL WORK PLUGGING PERMIT  
Vertical Plugging

CORNERSTONE MINING, LLC  
200 CAPITOL STREET

CHARLESTON , WV 25301

Re: Permit approval for 11767  
47-055-00031-00-00

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: 11767  
Farm Name: POCA LAND CO.  
U.S. WELL NUMBER: 47-055-00031-00-00  
Vertical Plugging  
Date Issued: 11/1/2019

# 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.

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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.

1) Date August 26, 2019  
2) Operator's  
Well No. 494521673  
3) API Well No. 47-055 - 00031

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 X

5) Location: Elevation 2925 Watershed Crane Creek  
District Rock County Mercer Quadrangle Crumpler

6) Well Operator Cornerstone Mining, LLC 7) Designated Agent Derrick Kegley  
Address 150 Courthouse Rd, Suite 302 Address 150 Courthouse Rd, Suite 302  
Princeton, WV 24740 Princeton, WV 24740

8) Oil and Gas Inspector to be notified Name Gary Kennedy  
Address 66 Old Church Lane  
Pipestem, WV 25979  
9) Plugging Contractor Name Keystone Wireline Inc.  
Address 380 Southpointe Blvd, Suite 300  
Canonsburg, PA 15317

10) Work Order: The work order for the manner of plugging this well is as follows:  
Check tubing/casing pressures. Load hole with 6% gelled water. Run in hole and set CIBP at 4,950' (5' above top perf). Cut 4-1/2" casing at top of cement. Run cement bond log across 8-5/8" casing. Set cement plug from CIBP to 100' above casing cut. Set gel plug up to 2,800'. Set cement plug from 3,000' to 2,800'. Set gel plug up to 1,530' (100' below 8-5/8" casing). Set cement plug from 1,530' to 1,330. If possible, cut and remove 8-5/8" casing (based upon bond log). Set gel plug from 1,330' to 660'. ~~Set cement plug from from 1,330' to 660'.~~ Set cement plug from 660' to surface. Erect monument.

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

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Work order approved by inspector GARY KENNEDY Date OCT 31 2019

by phone

2/2/19

WV Department of  
Environmental Protection



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Rotary  Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas   
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind)

Quadrangle Bramwell

Permit No. MER-31

Company <u>Consolidated Gas Supply Corp.</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>Clarksburg, WV</u>				
Farm <u>Pocahontas Land Corp.</u> Acres <u>103.420</u>				
Location (waters) <u>Tolliver Br./Crane Creek</u>	Size			
Well No. <u>11767</u> Elev. <u>2907</u>	20-16			
District <u>Rock</u> County <u> Mercer</u>	Cond.			
The surface of tract is owned in fee by _____	<u>13-10" 11-3/4"</u>	<u>594</u>	<u>594</u>	To Surface
<u>Pocahontas Land Corp.</u>	<u>9 5/8</u>			
Address <u>Bluefield, WV</u>	<u>8 5/8</u>	<u>1430</u>	<u>1430</u>	310 SKS
Mineral rights are owned by <u>Same</u>	<u>7</u>			
Address _____	<u>5 1/2</u>	<u>5100</u>	<u>5100</u>	60 SKS
Drilling Commenced <u>8-4-74</u>	<u>4 1/2</u>			
Drilling Completed <u>8-19-74</u>	<u>3</u>			
Initial open flow _____ cu. ft. _____ bbls.	<u>2</u>			
Final production <u>382 M</u> cu. ft. per day _____ bbls.	Liners Used			
Well open <u>14 Days</u> hrs. before test <u>865#</u> RP.				

Well treatment details:

Attach copy of cementing record.

Fractured with 1,000 bbl. water, 58,000# sand, 500 gal. 15% HCL.

Perforations: 4955 - 70, 15 holes.

Coal was encountered at 58, 385, 556 Feet. 24, 36, 60 Inches

Fresh water \_\_\_\_\_ Feet Salt Water \_\_\_\_\_ Feet

Producing Sand Weir Depth 4955 - 70

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			0	58		
Coal			58	60		
Sand			60	80		
Shale			80	86		
Sand			86	101		
Sand & Shale			101	121		
Sand			121	161		
Sand & Shale			161	164		
Sand			164	191		
Sand & Shale			191	239		
Sand			239	255		
Sand & Shale			255	320		
Sand			320	335		
Sand & Shale			335	377		
Shale			377	385		
Coal			385	388		
Sand & Shale			388	432		
Sand			432	459		
Sand & Shale			459	556		
Coal			556	561		
Sand & Shale			561	579		
Sand			579	626		
Sand & Shale			626	965		
Sand			965	995		

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DEC 20 1974

Oil & Gas Division  
DEPT. OF MINES

(over)

\* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Shale - Red Rock			995	1026		
Sand			1026	1040		
Red Rock			1040	1179		
Sand - Red Rock			1179	1300		
Sand - Shale			1300	1448		
Shale			1448	1662		
Sand - Shale			1662	1699		
Ravencliff			1699	1796		
Sand - Shale			1796	1915		
Shale			1915	2159		
Red Rock			2159	2210		
Shale			2210	2245		
Sand - Shale			2245	2686		
U. Maxton			2686	2797		
Shale			2797	3052		
Maxton			3052	3072		
Shale			3072	3154		
L. Maxton			3154	3210		
Shale			3210	3377		
L. Lime			3377	3495		
Shale			3495	3580		
B. Lime			3580	4618		
Sand - Shale			4618	4849		
Siltstone			4849	4940		
Weir			4940	4990		
Shale			4990	5105		
Total Depth				5105		
<u>Electric Log</u>						
U. Maxton			2696	2781		
Maxton			3045	3073		
L. Maxton			3152	3202		
L. Lime			3374	3487		
B. Lime			3610	4655		
Weir			4942	4978		
Total Depth				5095		
K. B. Measurement 10' above G. L.						

Date December 18 19 74APPROVED Consolidated Gas Supply Corp. OwnerBy J. E. Dwyer Mgr. of Prod.  
(Title)

WW-4B

API No. 4705500031  
Farm Name \_\_\_\_\_  
Well No. 11767

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SEP 27 2019

WV Department of  
Environmental Protection

**INSTRUCTIONS TO COAL OPERATORS  
OWNERS AND LESSEE**

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less than five days after the day on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas.

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

NOTE: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner, or Lessee for plugging" prior to the issuance of this plugging permit.

**WAIVER**

The undersigned coal operator \_\_\_\_ / owner \_\_\_\_ / lessee \_\_\_\_ / of the coal under this well location has examined this proposed plugging work order. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: 9/20/19

By: *Richard A. Brewster*  
Its MANAGER

WW-4A  
Revised 6-07

1) Date: August 26, 2019  
2) Operator's Well Number  
494521673

3) API Well No.: 47 - 055 - 00031

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

<b>4) Surface Owner(s) to be served:</b>	<b>5) (a) Coal Operator</b>
(a) Name <u>Pocahontas Land Corp</u>	Name <u>Cornerstone Mining, LLC</u>
Address <u>800 Princeton Avenue</u>	Address <u>150 Courthouse Road, Suite 302</u>
<u>P.O. Box 1517</u>	<u>Princeton, WV 24740</u>
(b) Name <u>Bluefield, WV 24701</u>	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Met Resources, LLC</u>
(c) Name _____	Address <u>P.O. Box 5064</u>
Address _____	<u>Princeton, WV 24740</u>
(6) Inspector <u>Gary Kennedy</u>	(c) Coal Lessee with Declaration
Address <u>66 Old Church Lane</u>	Name <u>Cornerstone Mining, LLC</u>
<u>Pipestem, WV 25979</u>	Address <u>150 Courthouse Road, Suite 302</u>
Telephone <u>304.382.8402</u>	<u>Princeton, WV 24740</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.

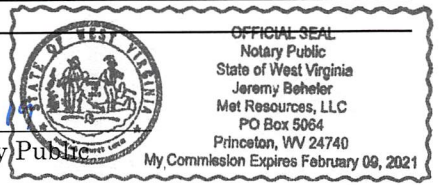
The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

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.

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**WV Department of**  
**Environmental Protection**

Well Operator: Cornerstone Mining, LLC  
 By: Derrick Kegley  
 Its: Land Agent  
 Address: 150 Courthouse Road, Suite 302  
Princeton, WV 24740  
 Telephone: 304.320.5576

Subscribed and sworn before me this 4<sup>th</sup> day of September 2019  
Jeremy Beheler  
My Commission Expires February 09 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](mailto:depprivacyofficer@wv.gov).

47-055-00031P

WW-9 (5/16) RECEIVED Office of Oil and Gas

API Number 47 - 055 - 00031 Operator's Well No.

SEP 27 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 Cornerstone Mining, LLC OP Code

Watershed (HUC 10) Crane Creek Quadrangle Crumpler

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

Will a pit be used? Yes No [checked]

If so, please describe anticipated pit waste: N/A

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

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

Will closed loop system be used? If so, describe: One tank for fresh water, one tank for returns

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

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

Additives to be used in drilling medium? None

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Fluids will be placed into thickening pond WV 006 5005

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

-Landfill or offsite name/permit number? WVDEP SMA - O-0136-83

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.

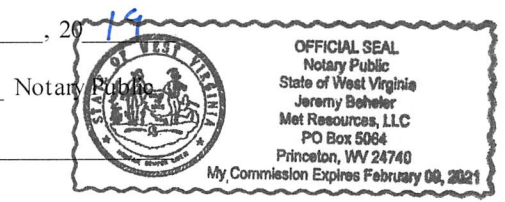
Company Official Signature [Signature]

Company Official (Typed Name) Derrick Kegley

Company Official Title Land Agent

Subscribed and sworn before me this 23rd day of September, 2019

[Signature]



My commission expires February 09, 2021



Proposed Revegetation Treatment: Acres Disturbed 0.5 Prevegetation pH 5.0

Lime 1 Tons/acre or to correct to pH 6.0

Fertilizer type 16-27-14

Fertilizer amount 450 lbs/acre

Mulch .75 Tons/acre

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Seed Mixtures

**Temporary**

**Permanent**

Seed Type lbs/acre

Seed Type lbs/acre

Orchard Grass 20 lbs/ac.

Alsike Clover 3 lbs./ac

Weeping Lovegrass 3 lbs/ac

Annual Rye Grass 8 lbs/ac

Medium Red Clover 10 lbs/ac

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: *Greg Kennedy*

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

Title: *Inspector* Date: *9/26/19*

Field Reviewed? ( *X* ) Yes ( ) No

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

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Operator Name: \_\_\_\_\_

Watershed (HUC 10): \_\_\_\_\_ Quad: \_\_\_\_\_

Farm Name: \_\_\_\_\_

- 1. List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater.

[Empty rectangular box for response to question 1]

- 2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.

[Empty rectangular box for response to question 2]

- 3. List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.

[Empty rectangular box for response to question 3]

- 4. Summarize all activities at your facility that are already regulated for groundwater protection.

[Empty rectangular box for response to question 4]

- 5. Discuss any existing groundwater quality data for your facility or an adjacent property.

[Empty rectangular box for text entry]

6. Provide a statement that no waste material will be used for deicing or fill material on the property.

Cornerstone will not use any waste materials generated from the plugging of well for deicing or fill materials on the property.

7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

[Empty rectangular box for text entry]

8. Provide provisions and frequency for inspections of all GPP elements and equipment.

[Empty rectangular box for text entry]

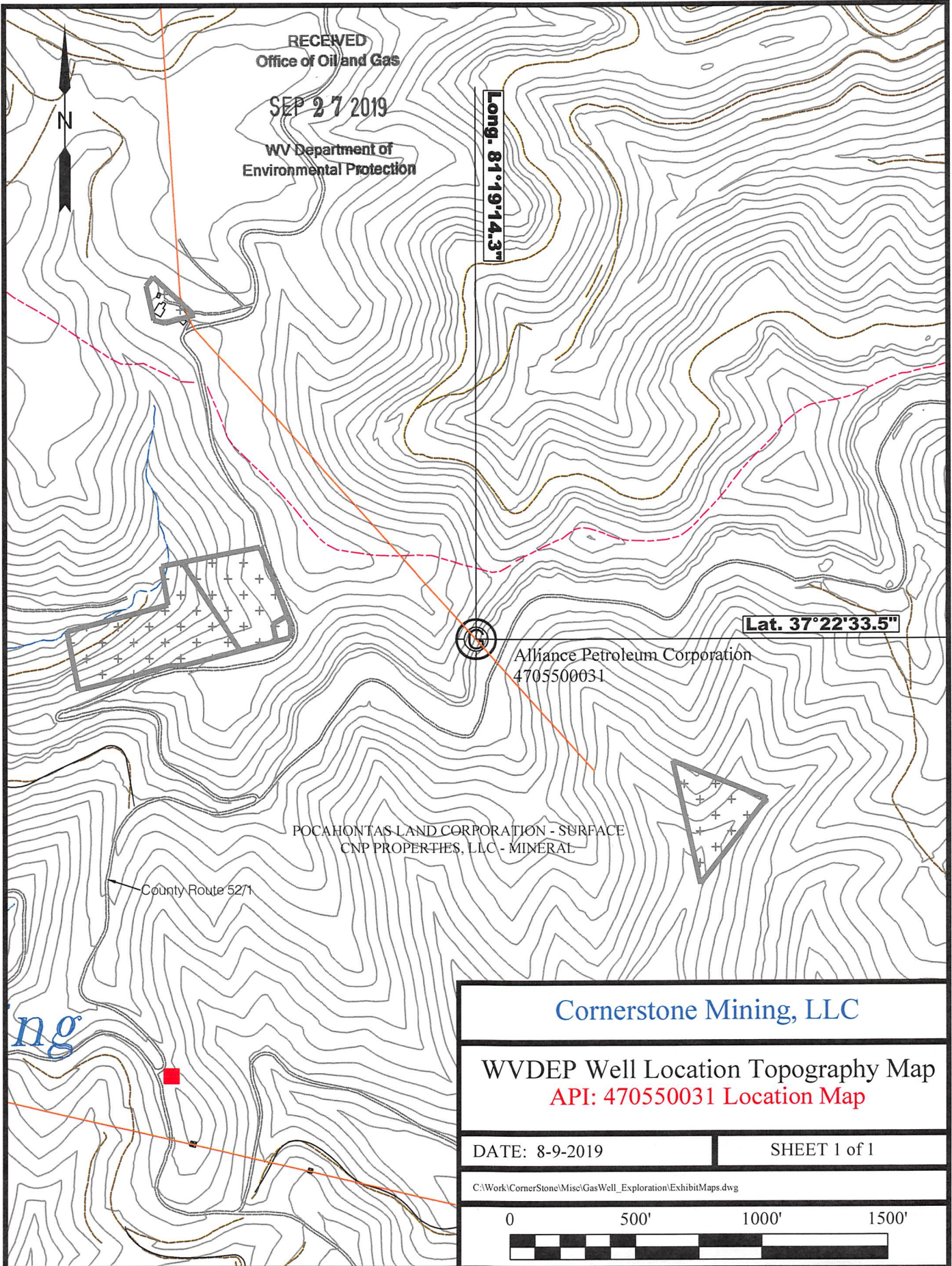
Signature: *[Handwritten Signature]*

Date: 9-23-19

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*HLK*

