



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

Thursday, November 21, 2019
WELL WORK PLUGGING PERMIT
Coal Bed Methane Well Plugging

POCAHONTAS GAS LLC
PO BOX 570

POUNDRING MILL, VA 24637

Re: Permit approval for 026102
47-047-02288-00-00

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: 026102
Farm Name: ALAWEST, INCORPORATED
U.S. WELL NUMBER: 47-047-02288-00-00
Coal Bed Methane Well Plugging
Date Issued: 11/21/2019

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.

1) Date _____, 20_____
2) Operator's Well No. 26102
3) API Well No. 47-47-02288

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 1492' Watershed Clear Fork
District Big Creek County McDonnell Quadrangle Davy

6) Well Operator Pocahontas Gas LLC 7) Designated Agent Chris Turner
Address PO Box 570 Address 1 Energy Drive
Pounding Mill, VA 24637 Jane Lew, W.V.
26378

8) Oil and Gas Inspector to be notified Name Gary Kennedy
Address 66 Old Church Lane
Pipestem, WV 25979
9) Plugging Contractor Name Noah Horn Well Drilling
Address PO Box 269
Vansant, VA 24631

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

see attached plugging procedures on next page

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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 *Gary Kennedy* Date 11/7/19

API 47-047-02288 Plugging Procedure**Well # 026102**

1. Pull 2-3/8" tubing and verify plugback TD with wireline. (Drill TD is 1208')
2. Trip 2-3/8" tubing back to fill level. Set plug of Class A 3% CaCl cement from established TD to approximately 1/2 the depth of the well bore. (Estimated 604') All tubing will be pulled and the cement plug will be allowed to set.
4. Run wireline to tag TOC. (Estimated 604')
5. Trip 2-3/8" tubing back to top of cement and pump 100' of 6% bentonite gel. Pull 3 joints of tubing out. Begin pumping Class A Neat cement from there to surface while pulling remaining 2-3/8" tubing. (6% gel 604'-504') (Neat cement 504'-surface)
6. Install 4-1/2" X 4' steel monument with API# and Date.

NOTES: A 100' gel spacer will be placed at approximately half the well depth.

All casing strings were cemented to surface during drilling operations.

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WR-35
Rev (5-01)

DATE June 20, 2007
API #: 47-4702288

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

Farm name: Alawest, Inc. Operator Well No.: 026102

LOCATION: Elevation: 1492.63 Quadrangle: Davy

District: Big Creek County: McDowell
Latitude: 630 Feet South of 37 Deg. 25 Min. 00 Sec.
Longitude 3,580 Feet West of 81 Deg. 42 Min. 30 Sec.

Company Address:

Company Address:	Casing & Tubing	Used In drilling	Left in well	Cement fill up Cu. Ft.
Dart Oil & Gas Corporation				
999 Executive Park Blvd, Suite 320	9 5/8"	31'	31'	Drive Pipe
Kingsport, TN 37660	7"	281'	281'	to Surface
Agent: Jackie Lee Hatfield	4 1/2"		1148'	to Surface
Inspector: Barry Stollings	2 3/8"		1110'	
Date Permit Issued: August 9, 2006				
Date Well Work Commenced: Nov 19, 2006				
Date Well Work Completed: April 04, 2007				
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary <input checked="" type="checkbox"/> Cable Rig <input checked="" type="checkbox"/>				
Total Depth (feet): 1208'				
Fresh Water Depth (ft.): 400'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

OPEN FLOW DATA: None available

Producing formation Pennsylvanian Coals Pay zone depth (ft) See Page 2 of WR-35

Gas: Initial open flow N/A MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

Second producing formation Pay zone depth (ft) Hours

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.)

SUPPLEMENTAL Page #3: THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed:

Edward K. Diminick

By: Edward K. Diminick, District Manager

Date: 6-21-07

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Office of Chief
JUN 25 2007
WV Department of
Environmental Protection

THE WELL LOG

Farm Name:
Operation's Well#:
API # :

Alawest, Inc.
026102
47-4702288

DRILLER'S LOG

Compiled by: Tom O'Neill, Geologist

Geologic Age	Formation	General Lithology	Color	Depth		Thickness	Remarks
				Top	Bottom		
Pennsylvanian	Lee	Sandstone, Shale, Coal		0	293		
Pennsylvanian	Lee	Coal		293	296.5	3.5	
Pennsylvanian	Lee	Sandstone & Shale		296.5	356.5		
Pennsylvanian	Lee	Coal & Shale		356.5	364		
Pennsylvanian	Lee	Sandstone & Shale		364	412.5		
Pennsylvanian	Lee	Coal		412.5	414.5	2.0'	
Pennsylvanian	Pocahontas	Sandstone & Shale		414.5	484.5		
Pennsylvanian	Pocahontas	Coal		484.5	485.5	1.0'	
Pennsylvanian	Pocahontas	Sandstone & Shale		485.5	603		
Pennsylvanian	Pocahontas	Coal		603	604.5	1.5'	
Pennsylvanian	Pocahontas	Sandstone & Shale		604.5	770.5		
Pennsylvanian	Pocahontas	Coal		770.5	773.5	3.0'	
Pennsylvanian	Pocahontas	Sandstone, Shale, Coal		773.5	893.5		
Pennsylvanian	Pocahontas	Coal		893.5	897	3.5	
Pennsylvanian	Pocahontas	Sandstone, Shale, Coal		897	998.5		
Pennsylvanian	Pocahontas	Coal		998.5	1000.5	2.0'	
Pennsylvanian	Pocahontas	Sandstone & Shale		1000.5	1200		

Permittee: Dart Oil & Gas Corporation
 By: Edward K. Diminick
 Edward K. Diminick, District Manager

(Company)
 (Signature)

State of West Virginia		
Department of Environmental Protection		
Office of Oil & Gas		
Well Operator's Report of Well Work		
API#	47-47-02288	Alawest 026102
WORK PERFORMED:	Perforated Intervals and Stimulation	
Perf Poco #1 999' - 1000.5' w/ 9 holes		
Sand frac w/ 9600# 20/40 Sand w/ 10# gel, 70Q foam & 148,000 SCF N₂		
Perf Poco # 3 893.5' - 896.5' w/ 18 holes		
Sand frac w/ 20,500# 20/40 Sand w/ 10# gel, 70Q foam & 237,000 SCF N₂		
Perf Poco # 4 770.5' - 773.5' w/ 15 holes		
Sand frac w/ 16,900# 20/40 Sand w/ 10# gel, 70Q foam & 238,000 SCF N₂		
Perf Poco # 7 603' - 604.5' w/ 9 holes		
Sand frac w/ 13,400# 20/40 Sand w/ 10# gel, 70Q foam & 138,000 SCF N₂		
Perf Fire Creek 412.5' - 414.5' & Beckley #1 363' - 364' w/ 18 holes total		
Sand frac w/ 21,500# 20/40 Sand w/ 10# gel, 70Q foam & 89,000 SCF N₂		

026102

47-047-02288 P

9 5/8" @ 31'

7" @ 281' CTS

4 1/2" @ 1148' CTS

2 3/8" @ 1110'

DTD @ 1208'

Bottom Perf 998.5' - 1000.5' Pocahontas Formation

JK

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Pe
Pe

Permittee:

Dart Oil & Gas Corporation

(Company)

47-047-02288P

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WW-4A
Revised 6-07

NOV 08 2019

1) Date: _____
2) Operator's Well Number 26102
3) API Well No.: 47 - 47 - 02288

WV Department of
Environmental Protection

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:

(a) Name Alamest, Inc
Address PO Box 920
WELEH, WV 24801

(b) Name _____
Address _____

(c) Name _____
Address _____

5) (a) Coal Operator

Name _____
Address _____

(b) Coal Owner(s) with Declaration

Name Alamest, Inc
Address PO Box 920
WELCH, WV 24801

(c) Coal Lessee with Declaration

Name _____
Address _____

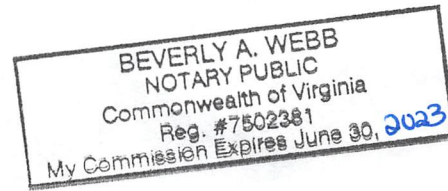
6) Inspector Gary Kennedy
Address 66 Old Church Lane
Piperston, WV 25979
Telephone 304-382-8402

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 Pouahontas Gas LLC
By: Mary Dena Mrs
Its: Asst. Secretary
Address PO Box 570
Pounding Mill, VA 24637
Telephone _____

Subscribed and sworn before me this 29th day of October, 2019
Benny Wehl Notary Public
My Commission Expires 6/30/2023

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.

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

API Number 47 - 47-02288
Operator's Well No. 26102

NOV 08 2019

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
WV Department of Environmental Protection
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Powhatan Gas LLC OP Code 494520858

Watershed (HUC) 180805070201 Quadrangle DANKY

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: _____

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)
- X 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: yes, steel flow back tanks *MLK*

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 Mary Beth McGlothlin

Company Official (Typed Name) Mary Beth McGlothlin

Company Official Title Asst. Secretary

Subscribed and sworn before me this 29th day of October

Brenda Well

My commission expires 6/30/2023

2019
BEVERLY A. WEBB
NOTARY PUBLIC
Commonwealth of Virginia
Reg. #7502381
My Commission Expires June 30, 2023

Operator's Well No. 26102

Proposed Revegetation Treatment: Acres Disturbed 2.0 Prevegetation pH 6.5

Lime based on pH Tons/acre or to correct to pH 7.0

Fertilizer type 10-20-20

Fertilizer amount 550 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre

Seed Type lbs/acre

<u>Orchard grass</u>	<u>25</u>
<u>Birdfoot trefoil</u>	<u>15</u>
<u>Lindo clover</u>	<u>10</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: [Signature]

Comments: _____

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Title: Inspector

Date: 11/7/19

Field Reviewed? (0) Yes () No

N/A

WW-9- GPP
Rev. 5/16

Page 1 of 2
API Number 47 - 47-02288P
Operator's Well No. 26102

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

Operator Name: Pocahontas Gas LLC
Watershed (HUC 10): 05070201 Quad: DAVY
Farm Name: Alamost, Inc

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

all produced fluids will be circulated and contained to a steel flow back tank. All fluids will then be transported and disposed of in an approved WC well.

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

A circulating head will be used in conjunction with a flow line to transfer fluids to temporary storage tank.

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

Closest water is Clear Fork 400 feet to north east. 3 miles to nearest WHP area.

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

N/A

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

N/A

N/A

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

All waste material will be properly disposed of in an approved UIC well.

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.

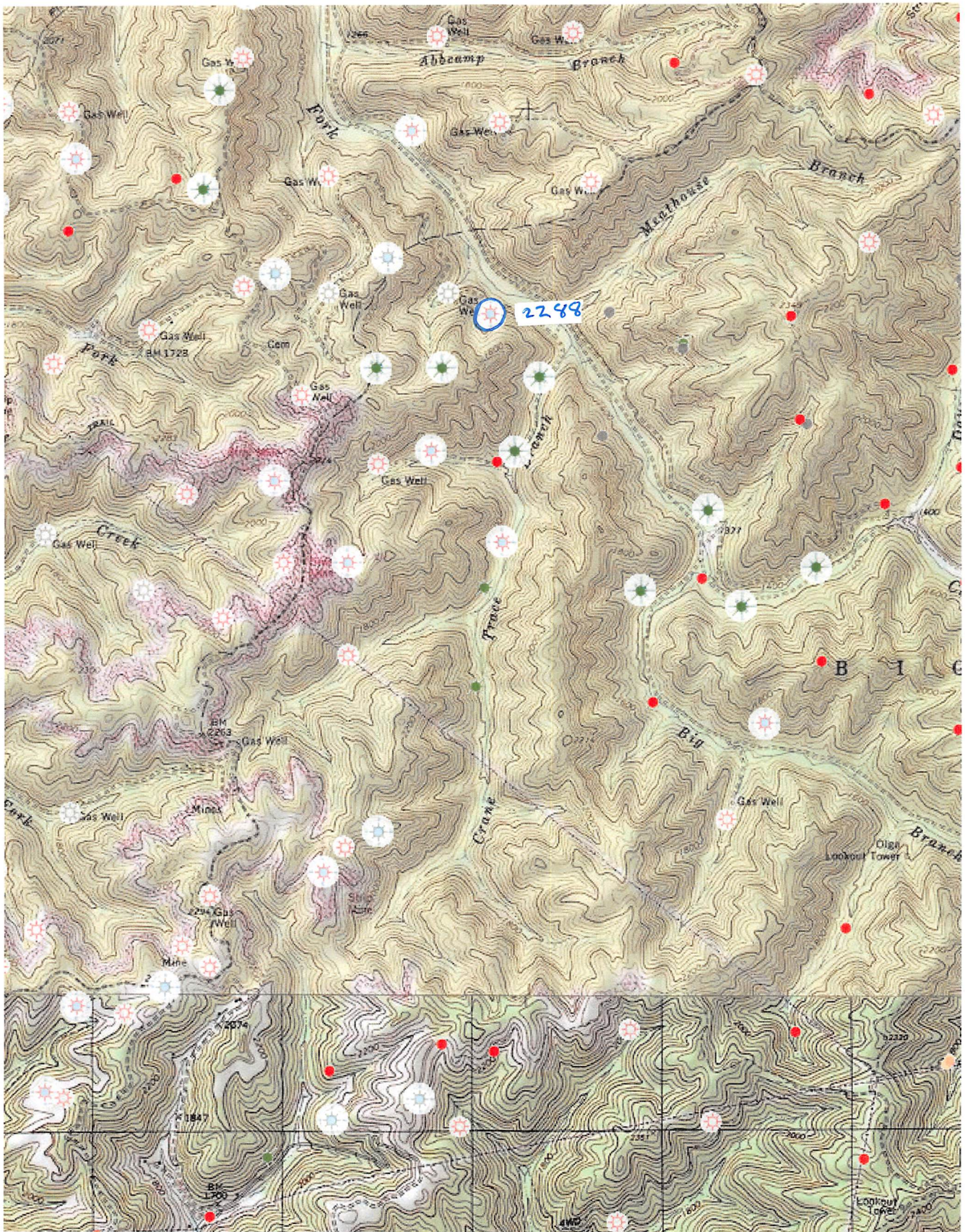
Hazard Training for all workers includes environmental compliance and groundwater protection review sections

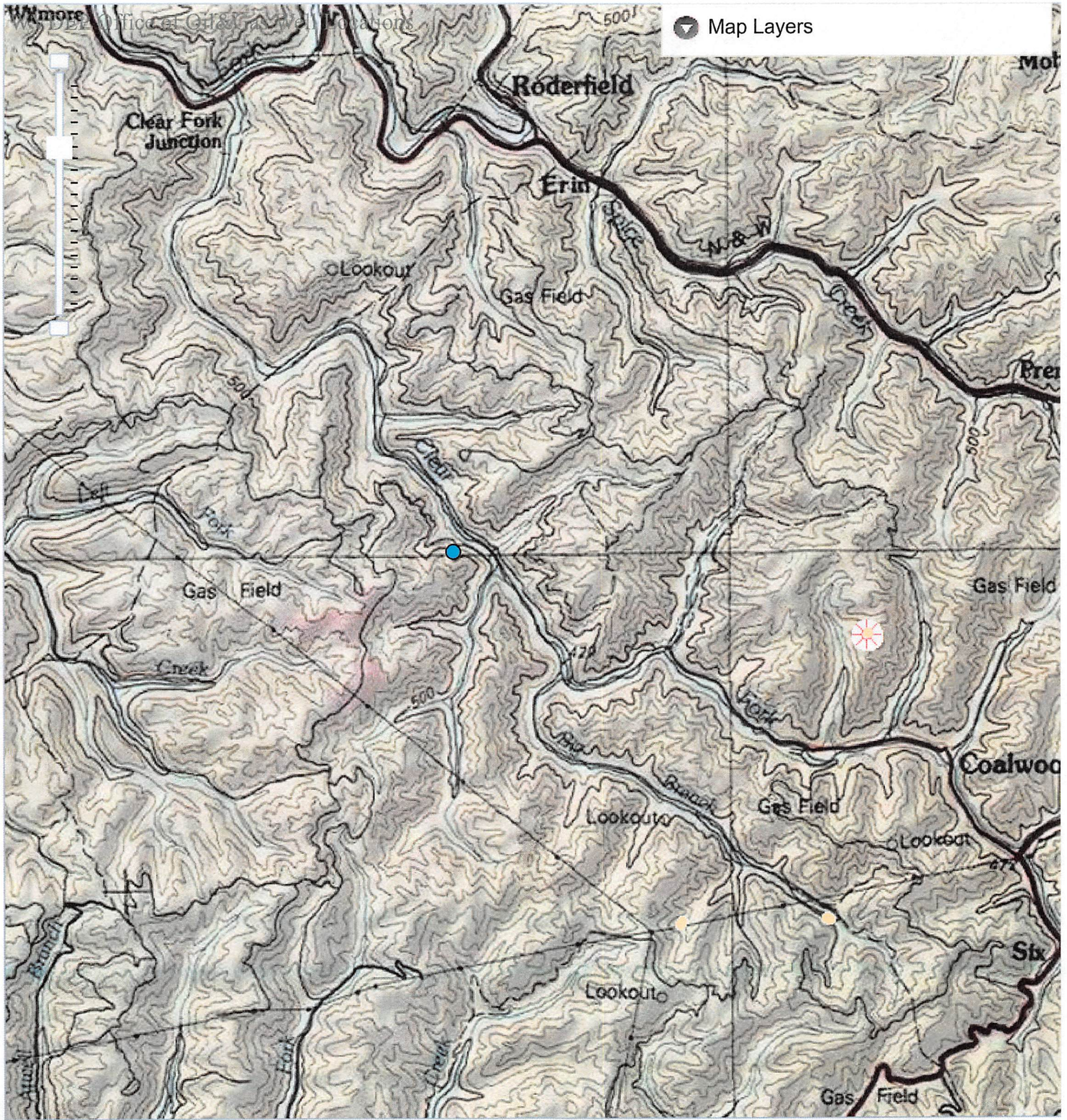
8. Provide provisions and frequency for inspections of all GPP elements and equipment.

All service providers and workers will inspect all equipment on a daily basis and before each work shift.

Signature: _____

Date: _____





Map Layers

Attribute Search		Result Table		Location Search		Legend		About	
#	API	Permit Type	Issued	Operator	Well Status	Well Type			
1	047-02288	Coalbed Methane	2006-8-9	POCAHONTAS GAS LLC	Active Well	Coal Bed Methane Well			

WW-7
8-30-06



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

API: 47-047-02288 WELL NO.: 26102
 FARM NAME: Alamast, Inc
 RESPONSIBLE PARTY NAME: Pocahontas Gas LLC
 COUNTY: McDonnell DISTRICT: Big Creek
 QUADRANGLE: DAVY
 SURFACE OWNER: Alamast, Inc.
 ROYALTY OWNER: Alamast, Inc.
 UTM GPS NORTHING: 4140258 m
 UTM GPS EASTING: 437137.06 m GPS ELEVATION: 1500'

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.

Mary Beard
Signature

manager
Title

10-29-19
Date

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