



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

Tuesday, November 19, 2019
WELL WORK PLUGGING PERMIT
Coal Bed Methane Well Plugging

POCAHONTAS GAS LLC
PO BOX 570

POUNDING MILL, VA 24637

Re: Permit approval for 24602
47-047-02095-00-00

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: 24602
Farm Name: ALAWEST, INC.
U.S. WELL NUMBER: 47-047-02095-00-00
Coal Bed Methane Well Plugging
Date Issued: 11/19/2019

I

47-047-02095P

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. 24602
3) API Well No. 47-02095P

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 2031' Watershed Dry Fork
District Sandy River 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 Jame, Lew, WV
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

RECEIVED
Office of Oil and Gas
NOV 08 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 *Gary Kennedy* Date 4/7/19

API 47-047-02095 Plugging Procedure**Well # 024602**

1. Pull 2-3/8" tubing and verify plugback TD with wireline. (Drill TD is 1885')
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 942') All tubing will be pulled and the cement plug will be allowed to set.
4. Run wireline to tag TOC. (Estimated 942')
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 942'-842') (Neat cement 842'-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.

RECEIVED
Office of Oil and Gas

NOV 08 2019

WV Department of
Environmental Protection



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.: 024602
 LOCATION: Elevation: 2031.56 Quadrangle: Jaeger
 District: Sandy River County: McDowell
 Latitude: 11.330 Feet South of 37 Deg. 27 Min. 30 Sec.
 Longitude 14.080 Feet West of 81 Deg. 42 Min. 30 Sec.

Company Address:

<u>Dart Oil & Gas Corporation</u> <u>999 Executive Park Blvd, Suite 320</u> <u>Kingsport, TN 37660</u>	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	12 3/4"	21'	21'	DP
	8 5/8"	309'	309'	Surface
Agent: <u>Steven C. Hanley</u>	4 1/2"	1844'	1844'	Surface
Inspector: <u>Barry Stollings</u>				
Date Permit Issued: <u>October 13, 2005</u>				
Date Well Work Commenced: <u>January 02, 2006</u>				
Date Well Work Completed: <u>July 13, 2006</u>				
Verbal Plugging: <u>N/A</u>				
Date Permission granted on: <u>N/A</u>				
Rotary <input checked="" type="checkbox"/> Cable Rig				
Total Depth (feet): <u>1885'</u>				
Fresh Water Depth (ft.): <u>None</u>				
Salt Water Depth (ft.): <u>None</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.):				

OPEN FLOW DATA

Producing formation Pennsylvanian Coals Pay zone depth (ft) See back 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)
 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 #2: THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: Edward K Diminick
 Edward V Diminick District Manager

RECEIVED
 Office of Oil & Gas
 Office of Chief
 OCT 02 2006
 WV Department of
 Environmental Protection

MCDOW 2095

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

API # 47-47-02095

Well No. 024602

Date: 9/15/06

Perforated Intervals

Stimulation

Poco #1 1653-55 4SPF 8holes

**1,200# 20/40 Sd, 134 bbls water
Bk down 1956 psi, ISIP 2155 psi**

Poco #3 1533.5-36' & 1538-41'4SPF 14 holes

**15,100# 20/40 Sd, 216 bbls water
Bk down 2814 psi, ISIP 1632 psi**

Lower Fire Creek 1158.5-60' 4SPF 10 holes

**15,100# 20/40 Sd, 216 bbls water
Bk down 2814 psi, ISIP 1632 psi**

Fire Creek 1090-92' 4SPF 8 holes

**11,400# 20/40 Sd, 143,000 scf N2
Bk down 3085 psi, ISIP 2044 psi**

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

Alawest, Inc.
 024602
 47-4702095

DRILLER'S LOG

Compiled by: Shane, Huffman, Geologist

Geologic Age	Formation	General Lithology	Color	Depth		Thickness	Remarks
				Top	Bottom		
Pennsylvanian				0	377		
Pennsylvanian		Coal		377	378	1.0'	
Pennsylvanian		Sandstone, Shale, Coal		378	677		
Pennsylvanian	Sewell	Coal		677	678	1.0'	
Pennsylvanian		Sandstone, Shale, Coal		678	781		
Pennsylvanian	Welch	Coal		781	782	1.0'	
Pennsylvanian		Sandstone, Shale, Coal		782	1028		
Pennsylvanian	Beckley	Coal		1028	1029	1.0'	
Pennsylvanian		Sandstone & Shale		1029	1089.5		
Pennsylvanian	Fire Creek	Coal		1089.5	1092.5	3.0'	
Pennsylvanian		Shale & Siltstone		1092.5	1158.5		
Pennsylvanian	L. Fire Crk	Coal		1158.5	1160.5	2.0'	
Pennsylvanian		Sandstone & Shale		1160.5	1529		
Pennsylvanian	Poco #3	Coal & Shale		1529	1535	6.0'	
Pennsylvanian		Sandstone & Shale		1535	1652.5		
Pennsylvanian	Poco #1	Coal		1652.5	1655	2.5	
Pennsylvanian		Sandstone & Shale	Red & Green	1655	1885		

Permittee: Dart Oil & Gas Corporation (Company)

By: Edward K. Diminick (Signature)
 Edward K. Diminick, District Manager

024602

47-047-02095P

12 $\frac{3}{4}$ " @ 21'

8 $\frac{5}{8}$ " @ 309' CTS

4 $\frac{1}{2}$ " @ 1844' CTS

2 $\frac{3}{8}$ " @ 1800'

DTD @ 1885'

Fire Creek 1090'-92' 8holes

Lower Fire Creek 1158.5'-60' 10holes

Poca #3 1533.5'-36' + 1538'-41' 14holes

Poca #1 1653'-55' 8holes

MLK

RECEIVED
Office of Oil and Gas

NOV 08 2019

WV Department of
Environmental Protection

WW-4A
Revised 6-07

1) Date: _____
2) Operator's Well Number 24602
3) API Well No.: 47 - 47 - 02095

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>Alamost, Inc</u>	Name _____
Address <u>PO Box 920</u>	Address _____
<u>WELEH, WV 24801</u>	
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Alamost, Inc</u>
	Address <u>PO Box 920</u>
	<u>Welch, WV 24801</u>
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>Gary Kennedy</u>	(c) Coal Lessee with Declaration
Address <u>66 Old Church Lane</u>	Name _____
<u>Pippsan, WV 25979</u>	Address _____
Telephone <u>304-382-8402</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.

RECEIVED
Office of Oil and Gas

NOV 08 2019

WV Department of
Environmental Protection

Well Operator Powhontas Gas LLC
 By: Mary Beth Thies
 Its: Asst. Secretary
 Address PO Box 570
Pounding Mill, VA 24637
 Telephone _____

Subscribed and sworn before me this 29th day of October, 2019
Bunny White 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
(5/16)

47-047-02095 P

API Number 47 - 47-02095
Operator's Well No. 24602

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

Operator Name Pocahontas Gas LLC OP Code 494520858

Watershed (HUC) 1038 05070201 Quadrangle DAVY

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)
- 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

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 McClothlin

Company Official (Typed Name) Mary Beth McClothlin

Company Official Title Asst Secretary

RECEIVED
Office of Oil and Gas

Subscribed and sworn before me this 29th day of October, 20 19

Bunny White Notary Public

My commission expires 6/30/2023

NOV 08 2019

WV Department of
Environmental Protection

Operator's Well No. 24602

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

Orchard grass 25

Birdfoot trefoil 15

Lindo clover 10

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: _____

RECEIVED
Office of Oil and Gas

NOV 08 2019

WV Department of
Environmental Protection

Title: Inspector

Date: 11/7/19

Field Reviewed? Yes No

N/A

WW-9- GPP
Rev. 5/16Page 1 of 2
API Number 47 - 47-02095
Operator's Well No. 24602STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
GROUNDWATER PROTECTION PLANOperator Name: Pocahontas Gas LLC
Watershed (HUC 10): 05070201 Quad: DAVY
Farm Name: Alavest, 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 UIC 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

RECEIVED
Office of Oil and Gas

NOV 08 2019

WV Department of
Environmental Protection

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

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.

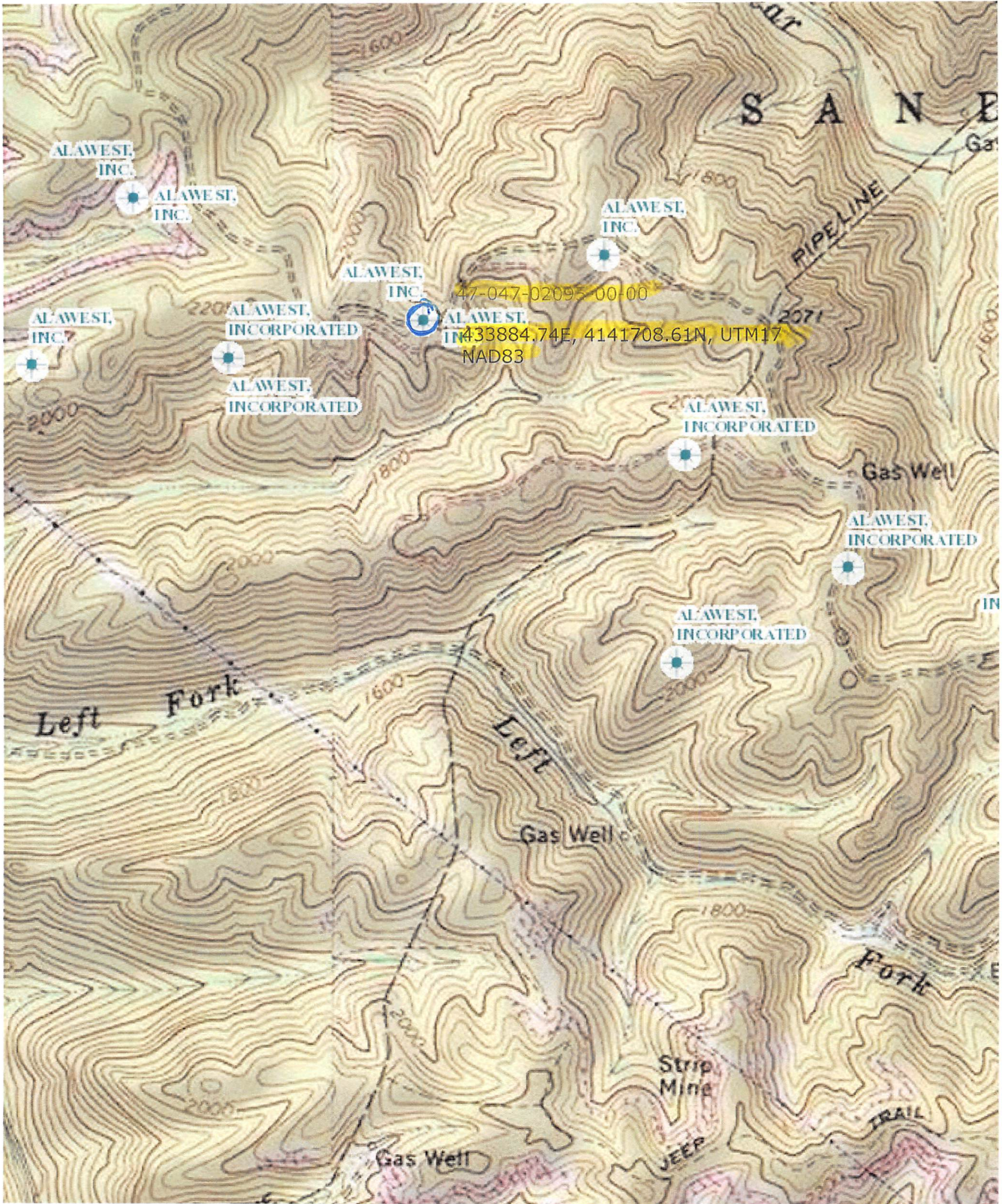
Signature: _____

Date: _____

RECEIVED
Office of Oil and Gas

NOV 08 2019

WV Department of
Environmental Protection





Attribute Search		Result Table		Location Search		Legend		About	
#	API	Permit Type	Issued	Operator	Well Status	Well Type			
1	047-02095	Coalbed Methane	2005-10-13	POCAHONTAS GAS LLC	Active Well	Coal Bed Methane Well			

[Handwritten signature]

WW-7
8-30-06



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

API: 47-047-02095 WELL NO.: 24602
 FARM NAME: Alamost, Inc
 RESPONSIBLE PARTY NAME: Pocahontas Gas LLC
 COUNTY: McDonnell DISTRICT: Sandy River
 QUADRANGLE: DAVY
 SURFACE OWNER: Alamost, Inc.
 ROYALTY OWNER: Alamost, Inc.
 UTM GPS NORTHING: 4141708.61m
 UTM GPS EASTING: 433984.74m GPS ELEVATION: 2034'

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

RECEIVED
Office of Oil and Gas

NOV 08 2019

WV Department of
Environmental Protection

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

Title

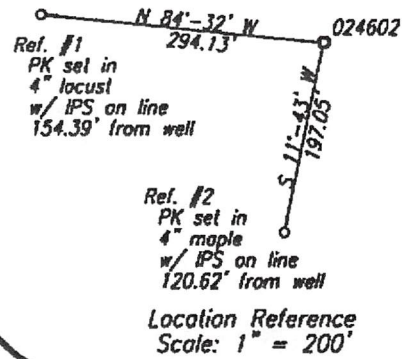
Date

May B. [Signature] manager 10-29-19

11,330'

Coordinates for Well Location 024602
West Virginia State Plane South Zone, NAD27
N 153,687.43 E 1,782,956.89
Alawest
N 51,910.74 E 96,403.51

LATITUDE 37° 27' 30"



LONGITUDE 81° 42' 30"

GRID NORTH

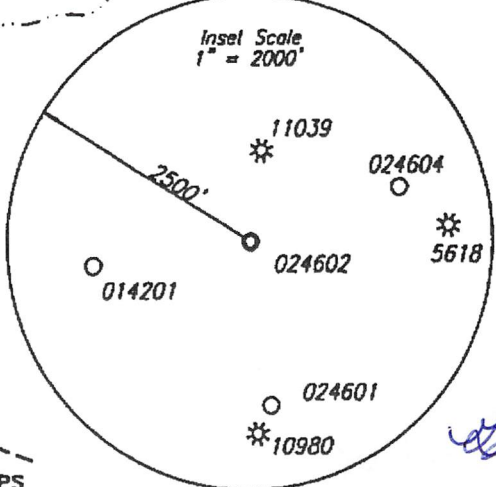
20" PIPELINE APPROX. LOC.

N 20° 00' 17" E 4049.06'

S 81° 58' W 3548.45'

S 48° 43' W 6518.88'

Lease No. 405-0001
Alawest, Inc.
26,869.84 Acres
- surface, coal, oil, gas & CBM



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1,000'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION NGS Sta. A 2
at Mercer County Airport

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT 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 DEPARTMENT OF ENVIRONMENTAL PROTECTION.
 (SIGNED) Glenn F. Phillips
 R.P.E. _____ L.L.S. 461



STATE OF WEST VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 OIL AND GAS DIVISION



DATE September 9, 2005
 OPERATOR'S WELL NO. 024602
 API WELL NO. 47-047-02095C
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 2,031.56 WATERSHED Left Fork of Crane Creek of Dry Fork River
 DISTRICT Sandy River COUNTY McDowell
 QUADRANGLE Davy
 SURFACE OWNER Alawest, Inc. ACREAGE 26,869.84
 OIL & GAS ROYALTY OWNER Alawest, Inc. LEASE ACREAGE 26,869.84 Acres

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON CLEAN OUT AND REPLUG
 TARGET FORMATION Pennsylvanian Coals ESTIMATED DEPTH 1,870'
 WELL OPERATOR Dart Oil & Gas Corporation DESIGNATED AGENT Steven Hanley
 ADDRESS 999 Executive Park Blvd., Suite 320 ADDRESS 707 Virginia St. E., Charleston, WV 25301

COUNTY NAME McDowell
PERMIT 2095C