



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, August 28, 2018
WELL WORK PLUGGING PERMIT
Coal Bed Methane Well Plugging

GOFF CONNECTOR LLC
417 THORN ST., SUITE 300

SEWICKLEY, PA 15143

Re: Permit approval for COALQUEST 19
47-033-05077-00-00

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: COALQUEST 19
Farm Name: GRAFTON COAL COMPANY
U.S. WELL NUMBER: 47-033-05077-00-00
Coal Bed Methane Well Plugging
Date Issued: 8/28/2018

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.

WW-4B
Rev. 2/01

1) Date 7-26, 2018
2) Operator's
Well No. Coalquest #19
3) API Well No. 47-033 - 05077

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 1353.3 Watershed Pigtail Run
District Simpson County Harrison Quadrangle Brownton
jbender@fullstreamek.com
- 6) Well Operator Goff Connector LLC 7) Designated Agent Jon Bender
Address 417 Thorn Street, Suite 300 Address 4598 Compressor Station Rd
Sewickley, PA 15143 Bruceton Mills, WV 26525
- 8) Oil and Gas Inspector to be notified
Name Sam Ward
Address P.O. Box 2327
Buckhannon, WV 26201
- 9) Plugging Contractor
Name Plants and Goodwin Inc.
Address 1034 PA-44
Shinglehouse, PA 16748

10) Work Order: The work order for the manner of plugging this well is as follows:
See attached PA Procedure - Coalquest #19

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

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AUG 10 2018

Work order approved by inspector [Signature] Date 8/9/2018 WV Department of Environmental Protection

Proposed Plugging Procedure – CoalQuest #19, (47-033-05077),
 Farm name: Grafton Coal Co., Brownton Quadrangle, Simpson
 District, Harrison Co., West Virginia

1. MI 100 BBL open top tank or 500 BBL frac tank to handle circulations/returns.
2. Lay 2" line from wellhead to tank.
3. RU mud pump and 110 Bbl water truck filled with **FRESH WATER**. Pump **FRESH WATER** down 7" casing to attempt to kill the well and stop flow of gas. **DO NOT EXCEED 300 psi on pump.**
4. Blow well down to circulation tank. Monitor around wellhead for H₂S levels. *If H₂S level > 10 PPM then halt work & take appropriate OSHA measures to safely & adequately handle this issue.*
5. MIRU service rig
6. **Note: OH TD +/- 896' & 2 7/8", 6.5 #/ft (?) tubing set @ 838'. Also, 13 3/8" csg set @ 32', 9 5/8" csg set @ 321', & 7", 17#/ft csg set @ 805'. (See pg 7 of WVDEP documents for specific details but all the casings left in the well, except the 13 3/8" should be cemented to surface).**
7. Pull sucker rods and down hole pump
8. POOH with 2 7/8" tbg & lay down.
9. RU wireline and set CIBP @ +/- 800' **MAKE SURE WATER LEVEL IS UP INTO 7" CASING.**
10. RIH with 1 1/2" service rig work string to 800'
11. Pump **158 sacks of Class A cement from 800' to surface** (Note: Calculated cement volumes based on capacity of 7" casing from top to bottom. Capacity 7", 17#/ft casing = .2331 ft³/ft). *gwm*
12. POOH with remainder of 1 1/2" work string & top off cement fall back.
13. Cut casing off & set plugging monument. **PER WV STATE CODE.**
14. RDMO service rig.

SDW

8/9/2018

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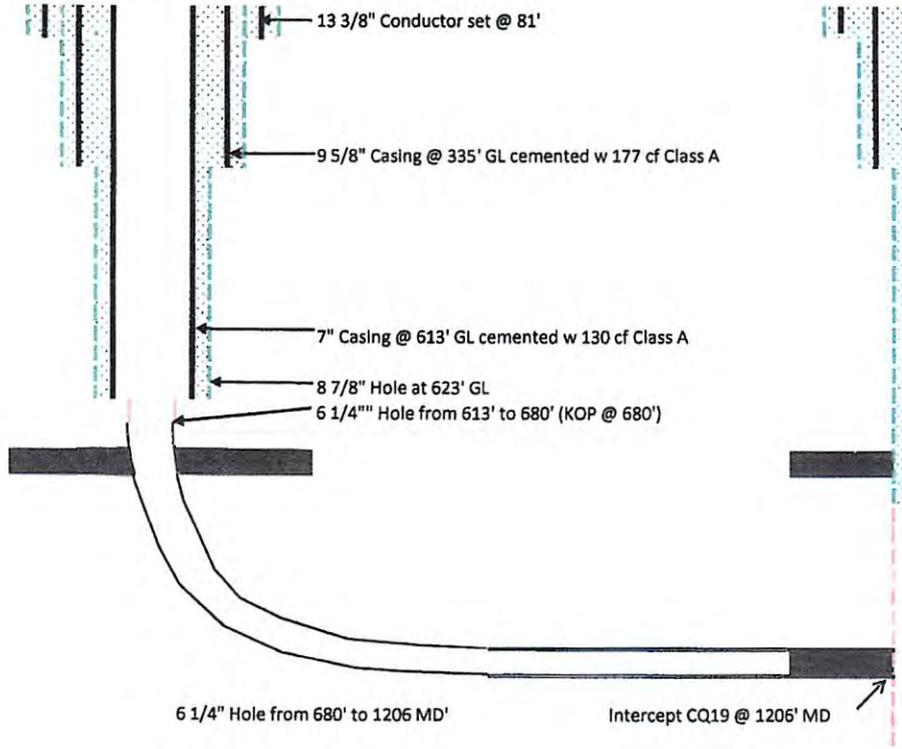
AUG 10 2018

WV Department of
Environmental Protection

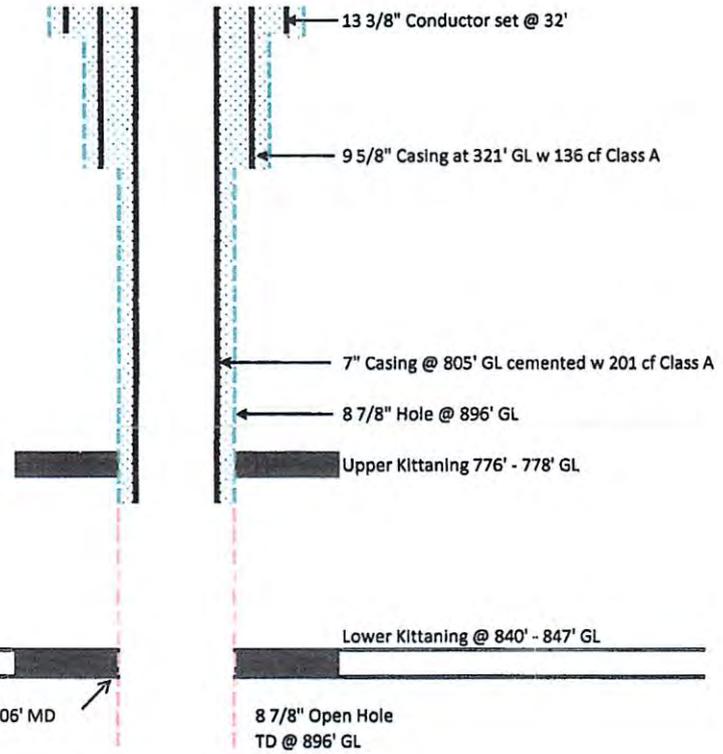
33-05077CP

Coal Quest 19 Wellbore Diagrams

Coal Quest 19AR
47-033-05147



Coal Quest 19
47-033-05077



33-05077CP

Leg #	Starting Depth	Ending Depth	Total Footage
Vertical of #19	0.00	800.00	800.00
Vertical of #19 A-R	0.00	625.00	625.00
Curve	625.00	1206.00	581.00
Coalquest #19 A-R	1195.00	5980.00	4785.00
1	4956.00	6420.00	1464.00
2	4671.00	6270.00	1599.00
3	4144.00	6498.00	2354.00
4	3859.00	6520.00	2661.00
5	3447.00	4536.00	1089.00
6	2464.00	3090.00	626.00
6A	2178.00	6185.00	4007.00
7	1798.00	5398.00	3600.00
8	2922.00	5706.00	2784.00
9	1039.28	4390.00	3350.72
9A	3634.00	4542.00	908.00
10	2083.00	2448.00	365.00
10A	1449.00	4946.00	3497.00
11	1318.00	4678.00	3360.00
12	1825.00	4586.00	2761.00

Comments

#19 Vertical well only end of pipe
 #19 A-R Vertical portion end of pipe

Leave vertical well bore at 625, intersection of #19 well vertical bore at 1206'
 This is referred to as the main leg and appears to be the main leg of the 19 A-R,
 states main leg ties into curve at 1179'

Coalquest #19	Total Footage	800.00
Coalquest #19 A-R	Total Footage	35631.72

This does not include the difference of the end of the main bore and last
 kickoff which is an additional 1,024'. This does include the #A footages

33-05077CP

WR-35
Rev (8-10)

DATE: 03/29/2011
API#: 47-033-05077

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

Well Operator's Report of Well Work

Farm name: Grafton Coal Company

Operator Well No: CoalQuest 19

LOCATION: Elevation: 1,353'

Quadrangle: Brownston

District: Simpson

County: Harrison

Latitude: 5880 Feet South of 39 Deg. 15 Min. 00 Sec.

Longitude: 3250 Feet West of 80 Deg. 10 Min. 00 Sec.

Company: Vitruvian Exploration, LLC

Address: 4 Waterway Square, Ste. 400 The Woodlands, TX. 77380	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	13-3/8"	32'	32'	N/A
	9-5/8"	321'	321'	136
Agent:	7"	805'	805'	201
Inspector:	2-7/8"		838'	N/A
Date Permit Issued: 06/25/2008				
Date Well Work Commenced: 07/27/2008				
Date Well Work Completed: 08/07/2008				
Verbal Plugging:				
Date Permission granted on:				
Rotary X Cable Rig				
Total Vertical Depth (ft): 896'				
Total Measured Depth (ft): 896'				
Fresh Water Depth (ft.): 153'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? Y				
Coal Depths (ft.):				
Void(s) encountered (N/Y) Depth(s) N				

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APR 05 2011
WV Department of
Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Lower Kittanning Pay zone depth (ft) _____
Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow _____ MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure _____ psig (surface pressure) after 48 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow _____ MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments 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.

[Signature]
Signature

3/31/2011
Date

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Office of Oil and Gas
AUG 10 2018
WV Department of
Environmental Protection
08/31/2018

WW-4A
Revised 6-07

1) Date: 7-26-2018
2) Operator's Well Number
Coalquest #19

3) API Well No.: 47 - 033 - 05077

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

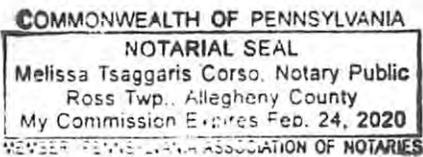
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>GCStream LLC</u>	Name <u>Brushy Fork Resources, LLC</u>
Address <u>417 Thorn Street, Suite 301</u>	Address <u>4010 MacCorkle Ave. SE</u>
<u>Sewickley, PA 15143</u>	<u>Charleston, WV 25304</u>
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Harbour LLC</u>
(c) Name _____	Address <u>300 Capitol Street, Suite 1401</u>
Address _____	<u>Charleston, WV 25301</u>
(6) Inspector <u>Samuel Ward</u>	(c) Coal Lessee with Declaration
Address <u>P.O. Box 2327</u>	Name <u>Brushy Fork Resources, LLC</u>
<u>Buckhannon, WV 26201</u>	Address <u>4010 MacCorkle Ave. SE</u>
Telephone <u>304-389-7583</u>	<u>Charleston, WV 25304</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 Goff Connector LLC
 By: Mike Hopkins *[Signature]*
 Its: Chief Operating Officer
 Address 417 Thorn Street, Suite 300
Sewickley, PA 15143
 Telephone 412-528-0404

Subscribed and sworn before me this 6th day of August, 2018
[Signature] Notary Public
 My Commission Expires 02/24/2020

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 its regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the 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.

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 Department of Environmental Protection
 0 2018
 COMMONWEALTH OF PENNSYLVANIA
 NOTARIAL SEAL
 Melissa Tsaggaris Corso, Notary Public
 Ross Twp., Allegheny County
 My Commission Expires Feb. 24, 2020
 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

08/31/2018

SURFACE OWNER WAIVER

Operator's Well
Number

Coalquest #19

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

**NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:**

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have **FIVE (5) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON
ETC.

FOR EXECUTION BY A CORPORATION,
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Office of Oil and Gas
AUG 10 2018

MT Suggs
Signature

Date 08/06/2018
By
Its

Name GCStream LLC
By Mike Hopkins
Its COO
WV Department of Environmental Protection
Date

Signature [Signature] Date 8-6-18
08/31/2018

WW-9
(5/16)

API Number 47 - 033 - 05077
Operator's Well No. COALQUEST 19

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

Operator Name Goff Connector LLC OP Code 494521348

Watershed (HUC 10) Pigtail Run Quadrangle Brownton

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: NA - Frac Tanks will be used

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

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 Reserved Environmental Services - WMGR123-SW005 - 1119 US 119, Mt. Pleasant, PA 15666)

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8/9/2018

Will closed loop system be used? If so, describe: NA

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

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

Additives to be used in drilling medium? NA

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Na

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

-Landfill or offsite name/permit number? NA

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) Mike Hopkins

Company Official Title Chief Operating Officer

Subscribed and sworn before me this 6th day of August, 2018

[Signature] Notary Public

My commission expires 02/24/2020

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0 2018
Department of
Environmental Protection
08/31/2018

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Melissa Tsaggas
Ross Typographer
My Commission Expires Feb. 24, 2020
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Form WW-9

Operator's Well No. Calquest # 19

Proposed Revegetation Treatment: Acres Disturbed .25 Prevegetation pH 7.51

Lime 3 Tons/acre or to correct to pH _____

Fertilizer type 10-20-20

Fertilizer amount 246 lbs/acre

Mulch 3 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Annual Ryegrass	40	Perennial Ryegrass Lading	50
		Clover	5
		Red Top	5

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: S. D. W. [Signature]

Comments: _____

Title: OOG Inspector

Date: 8/9/2018

Field Reviewed? () Yes (X) No

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08/31/2018

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

Operator Name: Goff Connector LLC
Watershed (HUC 10): Pigtail Run Quad: Brownston
Farm Name: Grafton Coal Company

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

NA

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

NA

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

NA

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

NA

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

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08/31/2018

NA

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

NA

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.

NA

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

NA

Signature: _____

Date: _____

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08/31/2018

WW-7
8-30-06



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

API: 47-033-05077 WELL NO.: Coalquest #19
 FARM NAME: Grafton Coal Company
 RESPONSIBLE PARTY NAME: Jon M Bender
 COUNTY: Harrison DISTRICT: Simpson
 QUADRANGLE: Brownton
 SURFACE OWNER: GCStream LLC
 ROYALTY OWNER: see attached
 UTM GPS NORTHING: 4343063.681
 UTM GPS EASTING: 570914.637 GPS ELEVATION: 412.648

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.

Signature

Director, Marcellus Operations

Title

8/9/2018

Date

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