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**west virginia** department of environmental protection

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

April 21, 2014

**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-9100880, issued to ICG TYGART VALLEY, LLC, 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 all 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. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.

James Martin  
Chief

Operator's Well No: HUGNS/LUZADER#1  
Farm Name: HUGGINS, DOLORIS & THOMAS  
**API Well Number: 47-9100880**  
**Permit Type: Plugging**  
Date Issued: 04/21/2014

**Promoting a healthy environment.**

## 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.

9100880P

WW-4B  
Rev. 2/01

1) Date February 12, 2014  
2) Operator's  
Well No. Huggins-Luzadder #1  
3) API Well No. 47-91 - 00880

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 \_\_\_/ Liquid injection \_\_\_/ Waste disposal \_\_\_/  
(If "Gas, Production \_\_\_ or Underground storage \_\_\_) Deep \_\_\_/ Shallow X

5) Location: Elevation 1613 Watershed Rocky Branch of Three Fork Creek  
District Knottsville County Taylor Quadrangle Thornton (638)

6) Well Operator ICG Tygart Valley, LLC 7) Designated Agent Charles E. Duckworth  
Address 2708 Cranberry Square Address 1200 Tygart Drive  
Morgantown, WV 26508 Grafton, WV 26354

8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name Kenneth Greynolds Name Coastal Drilling East, LLC  
Address 613 Broad Run Road Address 130 Meadows Ridge Road  
Jane Lew, WV 26378 Mt. Morris, PA 15349

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

SEE EXHIBIT NOS. 1 and 2

Received

MAR 24 2014

Office of Oil and Gas  
WV Dept. 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 *Kenneth Greynolds* Date 3-21-14

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EXHIBIT NO. 1

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From the experience and technology developed since 1970 in plugging oil and gas wells for mining through, ICG Tygart Valley, LLC will utilize the following method to plug all future wells.

**SOLID PLUG METHOD**

- a) If active well: clean out to total depth and plug back according to state regulations to a minimum of 200 feet below lowest minable coal seam.
- b) If abandoned well: clean out to first plug 200 feet below lowest minable coal seam.
- c) Circulate through tubing or drill steel an expanding cement plug from a minimum of 200 feet below minable coal seam to a point 100 feet above minable coal.

Circulate through <sup>CEMENT</sup> tubing or drill steel from 100 feet above coal seam to surface.

A monument will be installed with API No. and stating "solid plug".

Received

MAR 24 2014



ICG TYGART, LLC  
(SOLID PLUG METHOD)

API 47- 091- 00880

WELL Huggins – Lazadder 1 WELL PLUGGING

### BACKGROUND INFORMATION

From well records provided by the WV DEP- Office of Oil and Gas, it appears that the above referenced well was drilled and completed in 1993. The WR-35 indicates that 1020.00 feet of 8 5/8" casing was set and cemented with 235 sacks of cement. This amount of cement should have circulated to the surface.

The well record also indicates that 5263.00 feet of 4 ½ " casing was set with 515 sacks of cement. Since, so much cement was used and hydrostatic pressure would have been a concern, it is reasonable to assume that a lighter weight cement than Class A Portland was used. It was, and still is common to use cement with yields above 2.00 cubic feet per sack to cement production strings set to this depth. It then follows that the top of cement (TOC) around the 4 ½" casing is probably above the 8 5/8" casing seat. Therefore, when you free-point or bond log the 4 ½" casing, the subsequent 4 ½" casing cut will probably be above the 8 5/8" casing seat. This could be problematic and OO&G wants to make you aware of this possibility.

If the above scenario becomes evident and changes to the plugging procedure are needed, notify Kenneth Greynolds, Oil and Gas Inspector by phone at 304-206-6613.

Jeff McLaughlin, 04/21/2014

WV DEP, Office of Oil and Gas

EXHIBIT NO. 2

CLEANOUT/PLUGGING PLAN

- Day 1 - Move to site, rig up, mix mud, drill rathole.
- Day 2 - Finish drilling rathole, start picking up 2 3/8" drill pipe and cleanout well with a 3 3/4" bit to total depth (T.D.).
- Day 3 - Continue to pick up 2 3/8" drill pipe and cleanout to T.D. Trip out of the hole (T.O.H) with 2 3/8" drill pipe.
- Day 4 - Run cement bond log on 4 1/2" casing, (calculations reached from the cement information taken from the report indicate the estimated top of the cement on the outside of the 4 1/2" is 3,191'), ~~perforate/cut 4 1/2" casing every 100' from 5,137' to 3,291'. Total shots needed 120.~~ ?
- Day 5 - Trip in hole (T.I.H) with 2 3/8" drill pipe to T.D. Cement hole from 5,239' back to ~~3,191'~~ <sup>1500'</sup> with ~~160~~ <sup>8</sup> sacks of Class A Cement with a gas blocker additive. Circulate hole, condition mud, T.O.H. ABOVE PERFS
- Day 6 - T.I.H with 3 3/4" bit to tag top of cement plug. T.O.H, T.I.H with 4 1/2" pressure pipe cutter, cut 4 1/2" casing just above top of bonded casing at ~~3,185'~~. Lay down 2 3/8" drill pipe. TO C BONDED TO 4 1/2" WILL PROBABLY ABOVE 8 5/8" CASING SEAT. MAKE SURE PERFORATIONS ARE COARSE
- Day 7 - Continue to lay down 2 3/8" drill pipe. Rig up 4 1/2" casing spear. Hook to 4 1/2" casing at the surface, release slips from wellhead and attempt work 4 1/2" casing free to ~~3,185'~~ CUT. Lay down 4 1/2" casing.
- Day 8 - Rig up 7 7/8" bit. Pick up drill collars and drill pipe, start cleaning hole to top of remaining 4 1/2" casing at ~~3,185'~~ CUT.
- Day 9 - Continue to clean hole with 7 7/8" bit to top of remaining 4 1/2" casing at ~~3,185'~~ CUT. Circulate hole. T.O.H with 7 7/8" bit. T.I.H with open ended 3 1/2" drill pipe. 1,070'
- Day 10 - Cement hole from 3,191' to within 50' of bottom of 8 5/8" casing at ~~1,031'~~ with 1,000 gallons of mud flush and 500 sacks of Class A cement with 4% gel. Circulate hole and condition mud. T.O.H Log hole (Caliper, Natural Gamma, Directional and Bond logs). Calculations reached from the cement information taken from the report indicates that the 8 5/8" casing was cemented to surface.
- Day 11 - T.I.H with 8 5/8" pressure pipe cutter. Cut 8 5/8" casing every 100' from 891' to 381' (6 cuts total). T.O.H with 8 5/8" cutter. T.I.H with 8 5/8" section mill. Section mill 30' window in 8 5/8" casing through coal seam.
- Day 12 - Continue to section mill 8 5/8" casing through coal seam.
- Day 13 - Finish section milling 8 5/8" casing. T.O.H with 8 5/8" section mill. T.I.H with 7 7/8" bit.
- Day 14 - Clean hole with 7 7/8" bit to top of cement plug at 1,031'. Circulate hole at ~~1,031'~~ <sup>1,020'</sup>. T.O.H with 7 7/8" bit. Run caliper log to verify window and cuts in 8 5/8" casing. Lay down drill collars and fishing tools. Prepare to cement hole to surface.

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MAR 24 2014

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EXHIBIT NO. 2

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**CLEANOUT/PLUGGING PLAN**

- **Day 15** – Cement hole from <sup>1070'</sup>~~1,031'~~ to surface using <sup>?</sup>~~180~~ sacks of Class A cement with 4% gel and 120 sacks of Thixotropic cement with green dye. Clean out mud tank. Rig down equipment and prepare to move rig to next site.

Received

MAR 24 2014

Office of Oil and Gas  
WV Dept. of Environmental Protection

PROVIDED BY O&G

9100880P



17-Jun-93

API # 47- 91-00880

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: HUGGINS, DOLORIS & THOMAS Operator Well No.: HUGNS/LUZADER#1  
LOCATION: Elevation: 1,614.00 Quadrangle: THORNTON  
District: KNOTTSVILLE County: TAYLOR  
Latitude: 4700 Feet South of 39 Deg. 20Min. Sec.  
Longitude 2125 Feet West of 79 Deg. 57 Min. 30 Sec.

Company: PETROLEUM DEVELOPMENT COR  
P. O. BOX 26  
BRIDGEPORT, WV 26330-0026

Agent: ERIC R. STEARNS

Inspector: PHILLIP TRACY  
Permit Issued: 06/17/93  
Well work Commenced: 06/21/93  
Well work Completed: 06/26/93  
Verbal Plugging  
Permission granted on:  
Rotary  Cable \_\_\_\_\_ Rig  
Total Depth (feet) 5226'  
Fresh water depths (ft) \_\_\_\_\_  
Salt water depths (ft) \_\_\_\_\_  
Is coal being mined in area (Y/N) ? N  
Coal Depths (ft): 35-40; 111-115; 585-590

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	22'		
8 5/8"	1020'	1020'	235 skn
4 1/2"	5263'	5263'	515 skn

OPEN FLOW DATA

Producing formation Elk/Barnoon Pay zone depth (ft) 511-5166  
Gas: Initial open flow 26 MCF/d Oil: Initial open flow 0 Bbl/  
Final open flow 474 MCF/d Final open flow 0 Bbl/  
Time of open flow between initial and final tests 4 Hour  
Static rock Pressure 550 psig (surface pressure) after 22 Hour  
Second producing formation Fourth Sand Pay zone depth (ft) 2510.5-22  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/  
Final open flow co-mingled MCF/d Final open flow \_\_\_\_\_ Bbl/  
Time of open flow between initial and final tests \_\_\_\_\_ Hour  
Static rock Pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ Hour

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATE INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Reviewed TMG  
Recorded \_\_\_\_\_

For: PETROLEUM DEVELOPMENT CORP.

By: Eric R. Stearns  
Date: July 22, 1993

RECEIVED  
Office of Oil & Gas  
APR 14 2009  
WV Department of Environmental Protection

7 MAY 1993

HUGGINS - LUZZADER #1

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1st	Elk Benson	7 @ (5164' - 5166')	100	800	500	91
		3 @ (5074' - 5075')				
		3 @ (4533' - 4534')				
2nd	Fourth Sand	13 @ (2519' - 2522')	50	400	500	52

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
KB - GL	0	10	
sand, shale, RR	10	1417	1/2" stream H2O @ 400'
Little Lime	1417	1421	Coal 35'-40', 111'-115'
sand, shale	1421	1457	Coal 585'-590'
Big Lime	1457	1567	
sand, shale	1567	1569	gas chk @ 1575' no show
Big Injun	1569	1642	
sand, shale	1642	1754	gas chk @ 1731' no show
Weir	1754	1793	
sand, shale	1793	1938	
Cantz	1938	1952	
sand, shale	1952	1782	
50 ft	1782	2032	
sand, shale	2032	2078	gas chk @ 2044' no show
30 ft	2078	2114	gas chk @ 2107' no show
sand, shale	2114	2308	gas chk @ 2293' no show
4th	2308	2520	gas chk @ 2448' no show
sand, shale	2520	2536	
5th	2536	2578	
sand, shale	2578	2584	
Bayard	2584	2611	
sand, shale	2611	2711	gas chk @ 2697' no show
Elizabeth	2711	2720	
sand, shale	2720	2901	
Speeschly	2901	3328	
sand, shale	3328	3360	
Balltown	3360	3760	gas chk @ 3508' no show
sand, shale	3760	3803	
Bradford	3803	3923	
sand, shale	3923	4195	gas chk @ 4007' no show
Riley	4195	4445	gas chk @ 4380' 2/10 -1" w/water
sand, shale	4445	4498	
Benson	4498	4563	gas chk @ 4473' 6/10 -1" w/water
sand, shale	4563	4626	gas chk @ 4567' 2/10 -1" w/water
1st Elk	4626	4778	
sand, shale	4778	4878	
2nd Elk	4878	4974	gas chk @ 5004' no show
sand, shale	4974	5040	gas chk @ 5098' no show
3rd Elk	5040	5195	gas chk @ 5192' no show

91-0880-F

9100880P

HUGGINS - LUZZADER #1

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1st	Elk Benson	7 @(5164'-5166') 3 @(5074'-5075') 3 @(4533'-4534')	100	800	500	91
2nd	Fourth Sand	13 @(2519'-2522')	50	400	500	52

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET
KB - GL	0	10
sand, shale, RR	10	1417
Little Lime	1417	1421
sand, shale	1421	1457
Big Lime	1457	1567
sand, shale	1567	1569
Big Injun	1569	1642
sand, shale	1642	1754
Weir	1754	1793
sand, shale	1793	1938
Gantz	1938	1952
sand, shale	1952	1782
50 ft	1782	2032
sand, shale	2032	2078
30 ft	2078	2114
sand, shale	2114	2308
4th	2308	2520
sand, shale	2520	2536
5th	2536	2578
sand, shale	2578	2584
Bayard	2584	2611
sand, shale	2611	2711
Elizabeth	2711	2720
sand, shale	2720	2901
Speechly	2901	3328
sand, shale	3328	3360
Balltown	3360	3760
sand, shale	3760	3803
Bradford	3803	3923
sand, shale	3923	4195
Riley	4195	4445
sand, shale	4445	4498
Benson	4498	4563
sand, shale	4563	4626
1st Elk	4626	4778
sand, shale	4778	4878
2nd Elk	4878	4974
sand, shale	4974	5040
3rd Elk	5040	5195

REMARKS: FRESH & SALT WATER, COAL, OIL & GAS

1/2" stream H2O @ 400'  
Coal 35'-40', 111'-115'  
Coal 585'-590'

gas chk @ 1575' no show

gas chk @ 1731' no show

gas chk @ 2044' no show  
gas chk @ 2107' no show  
gas chk @ 2293' no show  
gas chk @ 2448' no show

gas chk @ 2697' no show

gas chk @ 3508' no show

gas chk @ 4007' no show  
gas chk @ 4380' 2/10 -1"w/water

gas chk @ 4473' 6/10 -1"w/water  
gas chk @ 4567' 2/10 -1"w/water

gas chk @ 5004' no show  
gas chk @ 5098' no show  
gas chk @ 5192' no show

Drillers TD  
Logger TD  
gas chk @ collars 6/10 1w/water

Received

MAR 24 2014

WW-4A  
Revised 6-07

1) Date: February 12, 2014  
2) Operator's Well Number  
Huggins-Luzadder #1  
3) API Well No.: 47 - 91 - 00880

**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>Delores Gail Huggins</u> <i>W</i>	Name <u>CoalQuest Development, LLC</u> <i>W</i>
Address <u>2659 Ridgedale Road</u>	Address <u>2708 Cranberry Square</u>
<u>Morgantown, West Virginia 26508</u>	<u>Morgantown, West Virginia 26508</u>
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name _____
	Address _____
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>Kenneth Greynolds</u>	(c) Coal Lessee with Declaration
Address <u>613 Broad Run Road</u>	Name _____
<u>Jane Lew, West Virginia 26378</u>	Address _____
Telephone <u>(304) 206-6613</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  
MAR 24 2014  
Office of Oil and Gas  
WV Dept. of Environmental Protection

Well Operator	<u>ICG Tygart Valley, LLC</u>
By:	<u>Charles E. Duckworth</u> <i>[Signature]</i>
Its:	<u>Designated Agent</u>
Address	<u>2708 Cranberry Square</u>
	<u>Morgantown, West Virginia 26508</u>
Telephone	<u>(304) 594-1616</u>

Subscribed and sworn before me this 18 day of February  
*[Signature]*  
My Commission Expires December 22, 2019



**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).

**SURFACE OWNER WAIVER**

9100880P

Operator's Well  
Number

Huggins-Luzadder #1

**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 57<sup>th</sup> 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.

Received

**VOLUNTARY STATEMENT OF NO OBJECTION**

MAR 24 2014

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,

Delores B. Huggins Date 3/11/14 Name \_\_\_\_\_  
Signature By \_\_\_\_\_  
Its \_\_\_\_\_

\_\_\_\_\_  
Signature Date

API No.	47-91-00880
Farm Name	Huggins-Luzadder et al
Well No.	Huggins-Luzadder #1

**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.

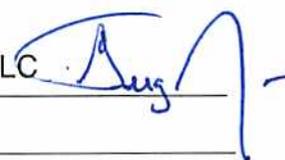
This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, 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 X / 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: 2/18/14

CoalQuest Development, LLC   
 By: Greg Nair  
 Its Power of Attorney

Received

MAR 24 2014

**POWER OF ATTORNEY**

**COALQUEST DEVELOPMENT LLC  
TO  
GREG NAIR**

**Dated: January 1, 2014**

**Expires: December 31, 2014**

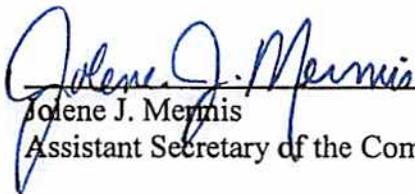
**KNOW ALL MEN BY THESE PRESENTS:** That CoalQuest Development LLC ("Company"), a limited liability company organized and existing under the laws of the State of Delaware, acting by and through James E. Florczak, its duly authorized Vice President and Treasurer, has and does hereby appoint Greg Nair its true and lawful Attorney-in-Fact with power and authority, for and on behalf, and in the name of the Company, during the period herein specified, and subject to the restrictions and limitations set forth in this Power, to execute, acknowledge and deliver in the ordinary and regular course of the Company's business, applications for mining, environmental, safety, and health permits, permit transfers, or permit bond releases or bond adjustments, amendments, supplements or modifications to such permits, certificates, gas well plugging applications, shallow well drilling permit applications, or other instruments directly related to such amendments, supplements or modifications, monthly production reports, air quality, water quality or other environmental reports, quarterly discharge monitoring reports and any other like or similar reports required to be filed with any local, state or federal governmental agency.

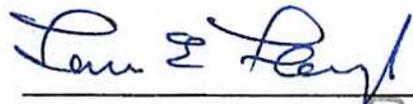
The Attorney herein appointed shall be authorized to act pursuant to this Power from the date hereof only so long as such Attorney shall remain an employee of Arch Coal, Inc. or any subsidiary thereof, or until December 31, 2014, or until such earlier time as this instrument has been revoked, annulled, rescinded or set aside by an instrument of revocation filed with the Secretary of the Company, whichever first occurs.

IN WITNESS WHEREOF, the Company has caused this Power of Attorney to be executed on its behalf, and its seal to be hereunto affixed and attested as of the day and year first above written, by the undersigned, James E. Florczak, duly authorized Vice President and Treasurer of the Company, and Jolene J. Mermis, duly elected Assistant Secretary of the Company.

Attest:

COALQUEST DEVELOPMENT LLC

  
\_\_\_\_\_  
Jolene J. Mermis  
Assistant Secretary of the Company

  
\_\_\_\_\_  
James E. Florczak  
Vice President and Treasurer

Received

MAR 24 2014

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

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM  
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name ICG Tygart Valley, LLC OP Code \_\_\_\_\_

Watershed Rocky Branch of Three Fork Creek Quadrangle Thornton (638)

Elevation 1613 County Taylor District Knottsville

Description of anticipated Pit Waste: N/A

Will a synthetic liner be used in the pit? N/A

Proposed Disposal Method For Treated Pit Wastes:

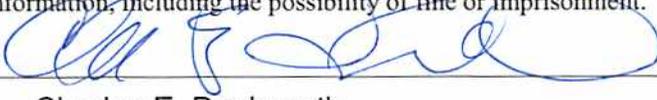
- Land Application
- Underground Injection ( UIC Permit Number \_\_\_\_\_ )
- Reuse (at API Number \_\_\_\_\_ )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Tanks - See attached letter)

Proposed Work For Which Pit Will Be Used:

- Drilling
- Workover
- Other (Explain \_\_\_\_\_)
- Swabbing
- Plugging

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, 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.

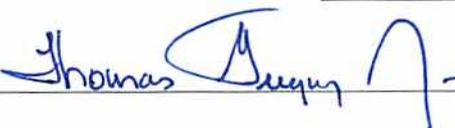
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is 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  **Received**

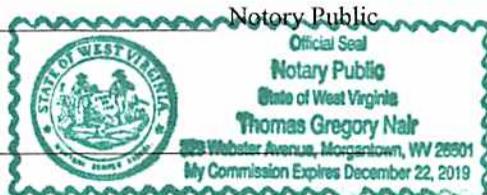
Company Official (Typed Name) Charles E. Duckworth

Company Official Title Designated Agent **MAR 24 2014**

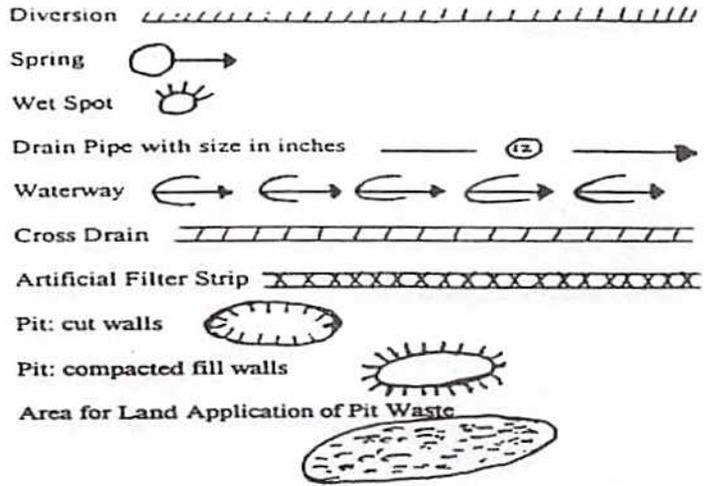
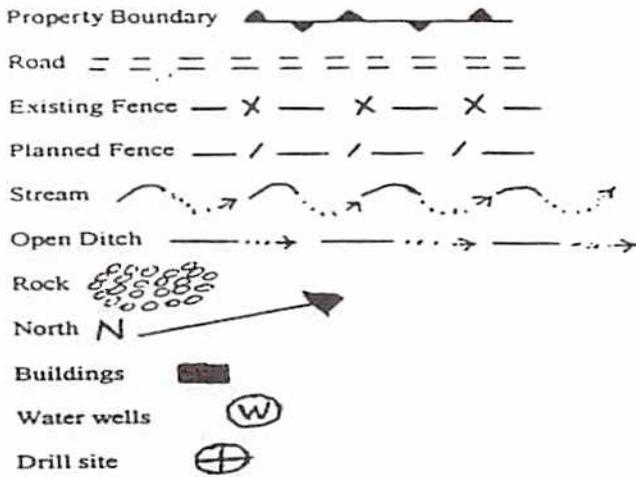
Subscribed and sworn before me this 18 day of February, 2014 Office of Oil and Gas  
Dept. of Environmental Protection



My commission expires DECEMBER 22, 2019



**LEGEND**



Proposed Revegetation Treatment: Acres Disturbed 1.00 Prevegetation pH \_\_\_\_\_

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 500 lbs/acre (500 lbs minimum)

Mulch Hay Bales Tons/acre

Seed Mixtures

Seed Type	Area I	lbs/acre	Seed Type	Area II	lbs/acre
Orchard Grass		12	Orchard Grass		12
Landino Clover		3	Landino Clover		3
Timothy		10	Timothy		10

Attach:  
Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

See attached

Plan Approved by: *Amelia Reynolds*

Comments: RECLAIM, RESEED + MULCH AS SOON AS POSSIBLE

Received

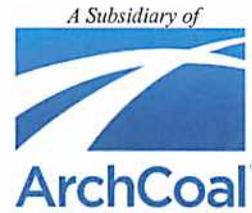
Title: OIL + GAS INSPECTION

Date: 3-21-14

MAR 24 2014

Field Reviewed? ( ) Yes ( X ) No

9100880P



# ICG TYGART VALLEY, LLC

2708 Cranberry Square, Morgantown, West Virginia 26508

February 12, 2014

WV Department of Environmental Protection  
Office of Oil and Gas  
601 – 57<sup>th</sup> Street, S.E.  
Charleston, West Virginia 25304

To Whom It May Concern:

As per the WV Department of Environmental Protection, Office of Oil and Gas request, ICG Tygart Valley, LLC, submits the following procedures utilizing pit waste.

Upon submitting a well work application (without a general permit for Oil and Gas Pit Waste Discharge Application), ICG Tygart Valley, LLC, will construct no pits, but instead will use mud tanks to contain all drilling muds.

Once the well is completed, that material (minus the cave material) will be trucked to the next well to be plugged or to DEP impoundment facilities O-2017-06.

Sincerely,

Charles E. Duckworth  
Designated Agent

Received

MAR 24 2014

Office of Oil and Gas  
WV Dept. of Environmental Protection

ICG TYGART VALLEY, LLC

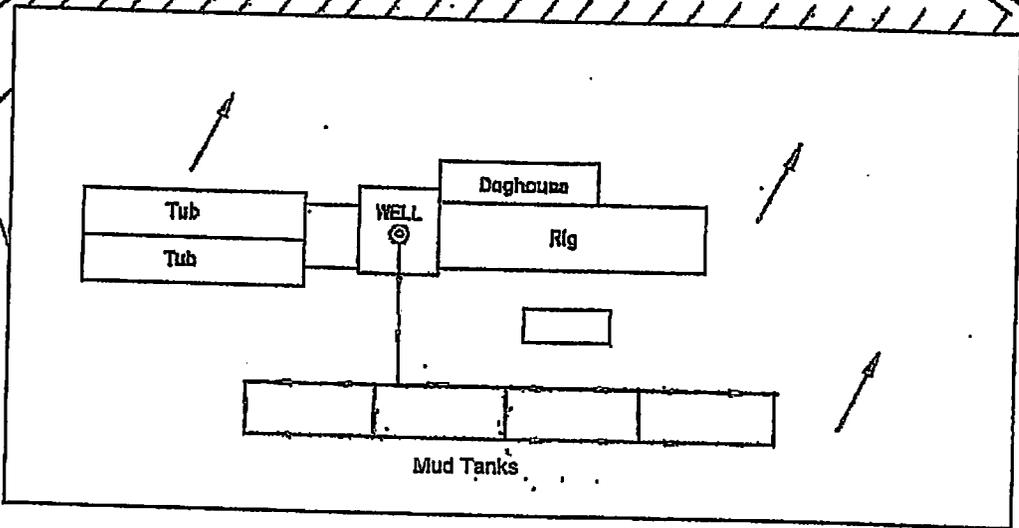
Typical Drawing  
Of Well Plugging Site  
Plan

Diversion Ditch (as Needed)

GUT

Cut Mulched if Slope  
Less than 1 to 1

Sediment  
Catch Basin



Sediment  
Catch Basin

Compacted and Layed

Hay Bales  
or  
Sediment Fence

FILL

Original Ground Keywayed

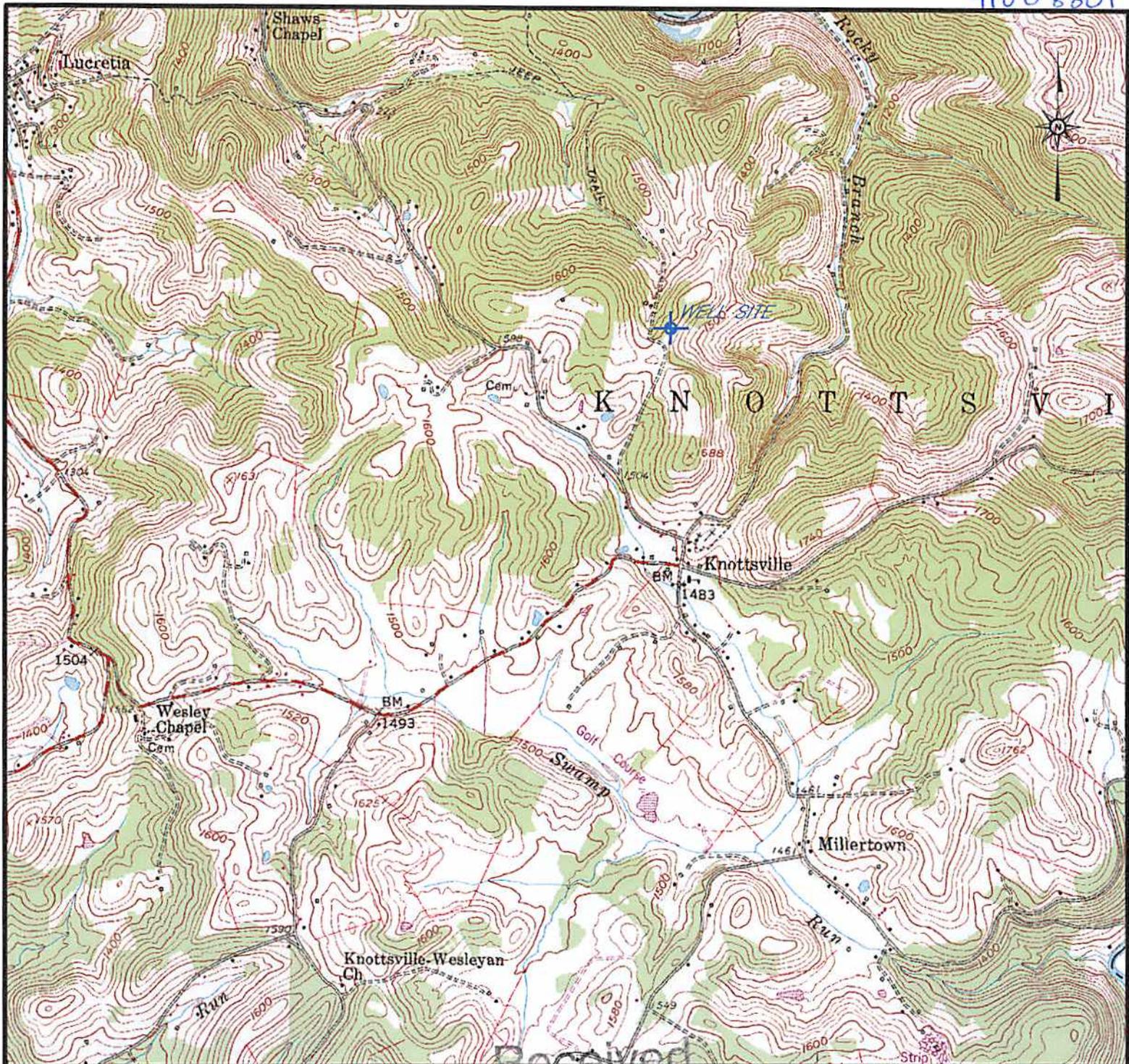
Received

MAR 24 2014

Office of Oil and Gas  
WV Dept. of Environmental Protection

9100880P

9100880P



LATITUDE: 39-19-13 N  
 LONGITUDE: 79-57-57 W  
 NEAREST WATERCOURSE: 800' SE to Unnamed drain of Rocky Branch of Three Forks Creek  
 NEAREST TOWN: 3,000' South to Knottsville

MAR 24 2014

*James Huggins 3-21-14*

OPERATOR'S WELL NO. Huggins-Luzadder  
 API WELL NO. No. 1  
 47 - 091 - 00880  
 STATE COUNTY PERMIT

Office of Oil and Gas  
 WV Dept. of Environmental Protection

REVISED BY:	DATE:	<b>API WELL NO. 47-091-00880</b> <b>Huggins-Luzadder No. 1</b>	
		<b>ICG TYGART VALLEY, LLC</b>	
DRAWN BY:	<i>Tom A. Hill</i>	SCALE:	1" = 2000'
DIRECTORY:	DWG TYGTYG #1 WV OIL & GAS PERMIT MAPS	DATE ORIGINATED:	JUNE 2013
DRAWING NO.:	47-091- huggins_luzadder # 131p	PLOTTING SIZES	

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1614 WATERSHED Rocky Branch of Three Fork Creek  
 DISTRICT Knottsville COUNTY Taylor  
 QUADRANGLE Thornton 7 1/2'  
 SURFACE OWNER: Dolores Gail Huggins ACREAGE 36.775  
 OIL & GAS ROYALTY OWNER: Huggins & Luzadder et al LEASE ACREAGE 73.5  
 LEASE NO. 472500  
 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 Benson ESTIMATED DEPTH 5000'  
 WELL OPERATOR ICG Tygart Valley, LLC DESIGNATED AGENT Charles E. Duckworth  
 ADDRESS 2708 Cranberry Square, Morgantown, WV 26508 ADDRESS 1200 Tygart Drive, Grafton, WV 26508



Appalachia - Northern Region  
 2708 Cranberry Square, Morgantown, WV 26508  
 Phone: 304-594-1616 Fax: 304-594-3708

9100880P

WW-7  
8-30-06



West Virginia Department of Environmental Protection  
Office of Oil and Gas

**WELL LOCATION FORM: GPS**

API: 47-091-0880 WELL NO.: Huggins-Luzadder #1

FARM NAME: Huggins-Luzadder #1

RESPONSIBLE PARTY NAME: ICG Tygart Valley, LLC

COUNTY: Taylor DISTRICT: Knottsville

QUADRANGLE: Thornton

SURFACE OWNER: Delores Gail Huggins

ROYALTY OWNER: Huggins-Luzadder et al

UTM GPS NORTHING: 4352863.059

UTM GPS EASTING: 589146.890 GPS ELEVATION: 1613.534

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:

- Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
- Accuracy to Datum – 3.05 meters
- Data Collection Method:

Survey grade GPS  : Post Processed Differential \_\_\_\_\_

Real-Time Differential

Mapping Grade GPS \_\_\_\_\_ : Post Processed Differential \_\_\_\_\_

Real-Time Differential \_\_\_\_\_

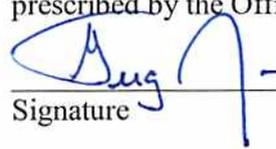
Received

MAR 24 2014

Office of Oil and Gas  
WV Dept. of Environmental Protection

- 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

Attorney-in-fact  
Title

February 12, 2014  
Date