



**west virginia** department of environmental protection

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

June 23, 2014

**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-9100484, 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: CNGD1553  
Farm Name: LUSHER, PAMELA JO & VALERIE  
**API Well Number: 47-9100484**  
**Permit Type: Plugging**  
Date Issued: 06/23/2014

**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.

- 1) Date June 12, 2014
- 2) Operator's  
Well No. CNGD 1553
- 3) API Well No. 47-91 - 00484

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 1341.8 Watershed Three Fork Creek  
District Knottsville County Taylor Quadrangle Grafton (378)

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 PLUGGING PLAN

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 6-18-14

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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 tubing or drill steel from 100 feet above coal seam to surface.

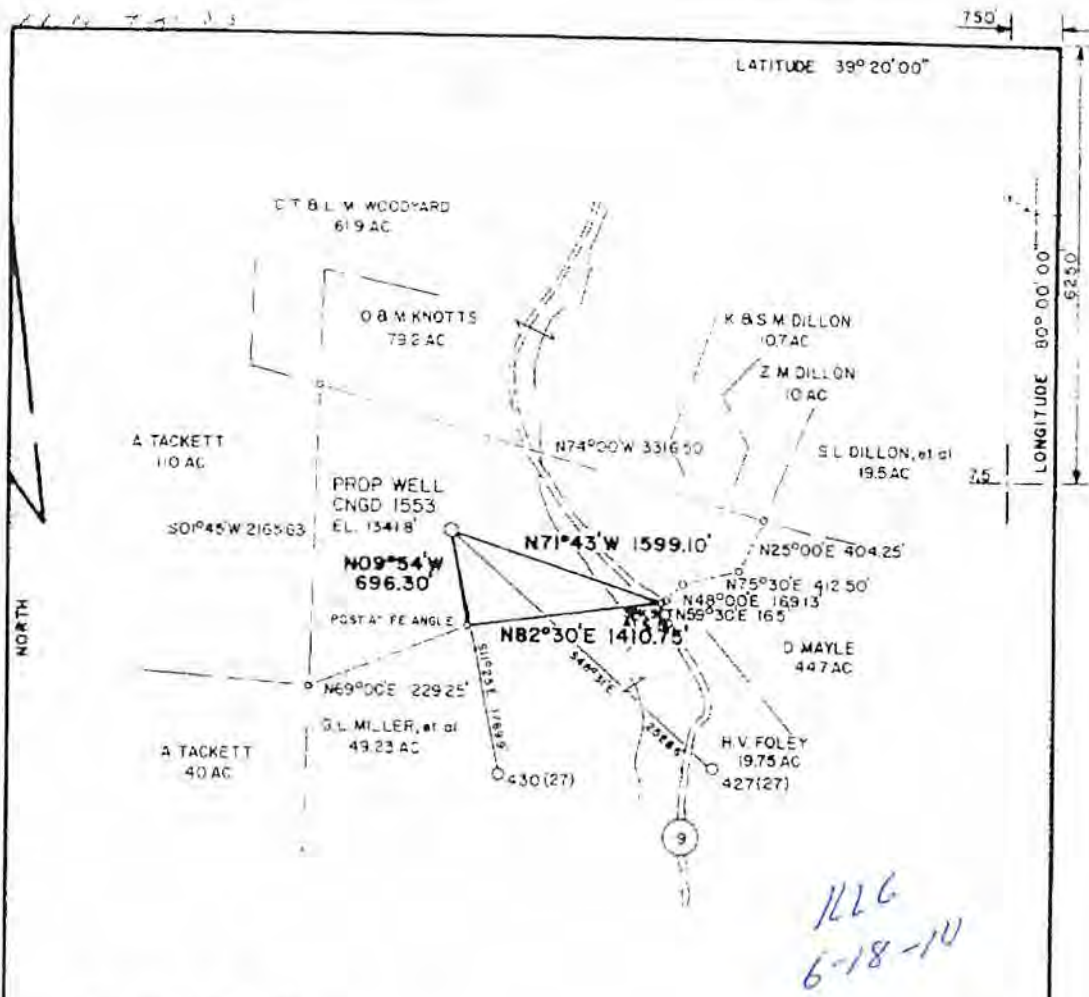
A monument will be installed with API No. and stating "solid plug".

## Plugging Plan – Well #1553

- **Cleanout existing 8 5/8" casing from the surface to top of second cement plug at 2010'.**
- **Log Hole from 2010' to surface (caliper, collar locator, gamma and bond log).**
- **Cement bottom hole from 2010' to 850' (400' below Lower Kittaning Coal Seam) with 343 sacks of Class A Cement. Estimated coal depth 445' – 450'. Wait on cement 8 hours. Tag top of bottom hole plug at 850'.**
- **Section Mill 25' window (435' – 460') in 8 5/8" casing through Lower Kittaning Coal Seam.**
- **Clean hole back to top of bottom hole plug at 850'. Log hole to verify window placement in 8 5/8" casing.**
- **Cement hole from 850' to surface with 150 sacks of Thixotropic Cement and 103 sacks of Class A Cement.**
- **Install 7" well marker at the surface.**



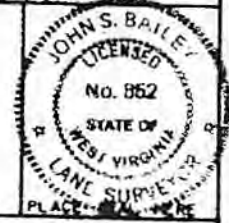
9100484



REFERENCE TIE LINES  
 PROP WELL TO 36" 4SH N66°24'E 220.5  
 PROP WELL TO 18" MAPLE S54°21'E 299.4

FILE NO MSES85-619  
 DRAWN BY TAL  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1" IN 200'  
 PROVEN SOURCE OF ELEVATION BM 800' NE OF LOCATION  
EL 1243'

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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 MINES.  
 (SIGNED) John S. Bailey  
 R P E LLS 652



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6  
 (8-76)



Department of Mines  
 Oil & Gas Division

DATE FEBRUARY 6, 19 85  
 OPERATOR'S WELL NO. CNGD 1553  
 API WELL NO. 47-091-0484-P  
 STATE COUNTY PERMIT

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS", PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION ELEVATION 1341.8 WATER SHED THREE FORK CREEK  
 DISTRICT KNOTTSTVILLE COUNTY TAYLOR  
 QUADRANGLE GRAFTON 7.5 1960 (1976)  
 SURFACE OWNER VICTOR S. JR & CAROL L. CLARKSON ACREAGE 88.6  
 OIL & GAS ROYALTY OWNER VICTOR S. CLARKSON, et ux. LEASE ACREAGE 89  
 LEASE NO. 74765  
 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 HAYERT ESTIMATED DEPTH 5500'  
 WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS  
 ADDRESS ONE PARK RIDGE CENTER ADDRESS CROSSWIND CORPORATE PARK  
P.O. BOX 15746 ROUTE 2 BOX 598  
PITTSBURGH, PA 15244 BRIDGEPORT, WV 26330

TAYLOR 0484-P

9100484P

FORM WH-4 (B) PERMIT COPY  
7/85



1) Date: April 10, 19 87  
2) Operator's Well No. CNGD 1553  
3) API Well No. 47 091 0484-P  
State County Permit

**RECEIVED**  
APR 24 1987

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY, OIL AND GAS DIVISION

APPLICATION FOR A PERMIT TO PLUG AND ABANDON A WELL

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

4) WELL TYPE: A Oil  Gas  Liquid injection  Waste disposal   
 B If "Gas" Producer  Underground storage  Deep  Shallow

5) LOCATION: Elevation: 1741.8 Wellhead: Three Fork Creek  
 District: Knottville County: Taylor Quadrangle: Grafton

6) WELL OPERATOR: MG Development Co. CODE 10110  
Charles H. Harte P.O. Box 15246  
Pittsburgh, PA 15244

7) DESIGNATED AGENT: Gary Nicholas  
 Address: Crosswind Corporate Park  
Rt. 2, Box 698, Bridgeport, WV 26330

8) OIL & GAS INSPECTOR TO BE NOTIFIED: Donald Ellis  
 Address: 2804 Crab Apple Lane  
Fairmont, WV 26554

9) PLUGGING CONTRACTOR: Sam Jack Drilling Co.  
 Address: P.O. Box 48  
Buckhannon, WV 26201

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

1. Run 4-1/2" casing to TD (4084)
2. Squaze perfs (3953-3977) and (2978-2282) w/158 sks standard cement
3. Wait one hour on cement
4. Run 4-1/2" casing at free-point **100' CEMENT PLUG 1600-1700 30 sks**
5. Circulate hole w/61 gal
6. Pull one joint and cement 200" w/59 sks standard cement
7. Spot 61 gal to 1130
8. Set 100' plug 30' below 8-5/8" w/30 sks standard cement
9. Spot 61 gal to surface
10. Install a vented monument. **WITH API#**

OFFICE USE ONLY  
PLUGGING PERMIT

Permit number: 47-091-0484-P

Date: April 30, 19 87

This permit covering the well operator and well location shown below is evidence of permission granted to plug in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector 24 hours before actual permitted work has commenced.

The permitted work is as described in the Notice and Application filed, subject to any modification and conditions on the reverse hereof.

Permit expires April 30, 1989 unless plugging is commenced prior to that date and prosecuted with due diligence

Boop: <input checked="" type="checkbox"/>	Agent: <input checked="" type="checkbox"/>	Plat: <input type="checkbox"/>	Casing: <input checked="" type="checkbox"/>	WRSP: <input checked="" type="checkbox"/>	OTHER: <input type="checkbox"/>
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*T. C. H.*

Director, Division of Oil and Gas

NOTE: Keep one copy of this permit posted at the plugging location.

See the reverse side of the APPLICANT'S COPY for instructions to the well operator

10017







IV-35  
(Rev 8-81)

RECEIVED

JUL 10 1985  
OIL & GAS DIV.  
DEPT. OF MINES

State of West Virginia

Department of Mines  
Oil and Gas Division

Date Nov 31 1985  
Operator's  
Well No. CNGD WV 1553  
Farm Clarkson Unit  
API No. 47 - 091 - 0484

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil  / Gas  / Liquid Injection  / Waste Disposal   
(If "Gas," Production  / Underground Storage  / Deep  / Shallow )  
LOCATION: Elevation: 1341.8 Watershed Three Fork Creek  
District: Knottville County Taylor Quadrangle Grafton 2.5'

COMPANY CNG Development Company  
ADDRESS P. O. Box 15746  
Pittsburgh, PA 15244  
DESIGNATED AGENT Gary A. Nicholas  
ADDRESS Rt. 2 Box 698  
Bridgport, WV 26130  
SURFACE OWNER Victor G. Jr. & Carol L. Clarkson  
ADDRESS Rt. 2 Box 12  
Ravenswood, WV 26164  
MINERAL RIGHTS OWNER Victor G. Clarkson, et. ux  
ADDRESS Rt. 2 Box 12  
Ravenswood, WV 26164  
OIL AND GAS INSPECTOR FOR THIS WORK  
Donald Ellis ADDRESS 2604 Crabapple Lane  
Fairmont, WV 26554

PERMIT ISSUED April 29, 1985  
DRILLING COMMENCED May 13, 1985  
DRILLING COMPLETED May 18, 1985  
IF APPLICABLE: PLUGGING OF DRY HOLE OR  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED  
ON \_\_\_\_\_

Casing Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. ft.
20-16 Cord.			
13-10"			
9 5/8			
8 5/8	969	969	To Surf.
7			
5 1/2			
4 1/2	4145	4145	600 50/50
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Haverty Depth 5500 feet  
Depth of completed well 4360 feet Rotary  / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh 225 feet; Salt \_\_\_\_\_ feet  
Coal seam depths: 25 - 26 Is coal being mined in the area? No  
259 - 261

OPEN FLOW DATA  
Producing formation Riley Speechley Pay zone depth 3953 - 3977  
2978 - 2982 feet  
Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 119 Mcf/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ hours  
Static rock pressure 450 psig (surface measurement) after 24 hours shut in  
(If applicable due to multiple completion--)  
Second producing formation \_\_\_\_\_ Pay zone depth \_\_\_\_\_ feet  
Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow \_\_\_\_\_ Mcf/d Oil: Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ hours  
Static rock pressure \_\_\_\_\_ psig (surface measurement) after \_\_\_\_\_ hours shut in

(Continue on reverse side)

TAY  
0484

FORM IV-35  
(REVERSE)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Superior ran Corilog and Perforated Riley 3953 - 3956 (7 holes), 3960 (1 hole), 3971 (1 hole) and 3977 (1 hole) (.39) RSC Select Fire.  
Halliburton Water Frac 15# Gel Riley - Break 2500, Avg TPSI 3025, Avg Rate 27 BPM, HHP used 2002, ISI 1700, 5 min 1550, used 60,000# 20/40 Sand & 500 gals MOD 202.

Superior Perforated Speechley 2978 - 2982, 10 holes (.39) HSC  
Halliburton Water Frac 15# Gel Speechley - Break 1980, Avg TPSI 2983, Avg Rate 25 BPM, HHP used 1828, ISI 1990, 5 min 1490, used 35,000# 20/40 Sand & 500 gals 15% MCL.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
KB - GL			0	10	Water - 1/2" stream @ 25' 1/2" stream @ 220'
Soil & Sand			10	25	
Coal			25	26	
Shale			26	27	
Coal			27	29	
Sand & Shale			29	259	
Coal			259	261	
Sand, Shale & RR			261	1240	
Big Lime & Injun			1240	1435	
Sand, Shale & RR			1435	3970	
Riley			3970	4000	
Sand & Shale			4000	4185	
Benson			4185	4220	
Sand & Shale			4220	4360	
<u>LOG TOPS</u>					
B. Lime/B. Injun			1232	1414	
Pocono			1526	1569	
50'			1766	1882	
4th/4th A			2108	2198	
5th/L. 5th			2230	2364	
Speechley			2876	2930	
Balltown			2974	3196	
Bradford			3410	3524	
Riley			3821	3984	
Benson			4172	4190	

(Attach separate sheets as necessary)

CNG DEVELOPMENT COMPANY  
Well Operator

By: *[Signature]*

Date: May 31, 1985

Note: Regulation 2.02(i) provides as follows:  
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including sand, encountered in the drilling of a well."

1) Date: June 12, 2014  
2) Operator's Well Number  
CNGD 1553

3) API Well No.: 47 - 91 - 00484

**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>Pamela Jo Lusher</u> ✓	Name <u>CoalQuest Development, LLC</u> ✓
Address <u>2480 James River Tpke</u>	Address <u>2708 Cranberry Square</u>
<u>Ona, West Virginia 25545</u>	<u>Morgantown, West Virginia 26508</u>
(b) Name <u>Valerie E. Moore</u> ✓	(b) Coal Owner(s) with Declaration
Address <u>c/o Pamela Jo Lusher 2480 James River Tpke</u>	Name _____
<u>Ona, West Virginia 25545</u>	Address _____
(c) Name <u>Richard Daniel Clark</u> ✓	Name _____
Address <u>c/o Pamela Jo Lusher 2480 James River Tpke</u>	Address _____
<u>Ona, West Virginia 25545</u>	Address _____
6) Inspector <u>Kenneth Greynolds</u>	(c) Coal Lessee with Declaration
Address <u>613 Broad Run Road</u>	Name _____
<u>Jane Lew, WV 26378</u>	Address _____
Telephone <u>(304) 206-6613</u>	Address _____

**TO THE PERSONS NAMED ABOVE:** You should have received this Form and the following documents:

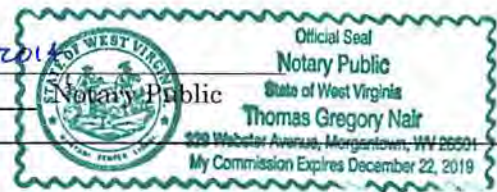
- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

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 ICG Tygart Valley, LLC  
 By: Charles E. Duckworth   
 Its: Designated Agent  
 Address 2708 Cranberry Square  
Morgantown, West Virginia 26508  
 Telephone (304) 594-1616

Subscribed and sworn before me this 12th day of June, 2014  
Thomas Gregory Nair  
 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 [depprivacyoffier@wv.gov](mailto:depprivacyoffier@wv.gov).

**SURFACE OWNER WAIVER**

Operator's Well  
Number

CNGD 1553

**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.

**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. *Include Memorandum of Agreement 16 June 14*  
**FOR EXECUTION BY A NATURAL PERSON** **FOR EXECUTION BY A CORPORATION,**  
ETC.

*Richard D. ...* Date 6-17-14 Name \_\_\_\_\_  
Signature \_\_\_\_\_ By \_\_\_\_\_  
Its \_\_\_\_\_ Date \_\_\_\_\_

Signature Date

**SURFACE OWNER WAIVER**

Operator's Well  
Number

CNGD 1553

**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.

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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

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- 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..."

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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. *Includes Memorandum of Agreement 16 June 2014*

FOR EXECUTION BY A NATURAL PERSON  
ETC.

FOR EXECUTION BY A CORPORATION,

*Valarie Moore (B.A.H.)* Date *16 June 2014* Name \_\_\_\_\_  
 Signature By \_\_\_\_\_  
 Its Date \_\_\_\_\_

Signature

Date

9100484P

**SURFACE OWNER WAIVER**

Operator's Well  
Number

CNGD 1553

**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.

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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.

**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. *Includes Memorandum of Agreement 16 June 2014*

FOR EXECUTION BY A NATURAL PERSON  
ETC.

FOR EXECUTION BY A CORPORATION,

*Pamela Jo Lusher*

Signature

Date

*14*  
*6/17/13*

Name

By

Its

*Pamela Jo Lusher*

Date

Signature

Date



**POWER OF ATTORNEY**  
**ICG TYGART VALLEY, LLC**  
**TO**  
**GREG NAIR**

**Dated: January 1, 2014**

**Expires: December 31, 2014**

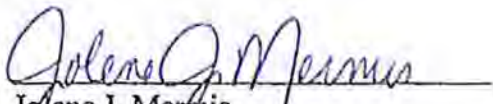
KNOW ALL MEN BY THESE PRESENTS: That ICG Tygart Valley, LLC, a limited liability company organized and existing under the laws of the State of Delaware (the "Company"), acting by and through James E. Florczak, its duly authorized Vice President and Treasurer, has and does hereby appoint Greg Nair its true and lawful Attorney-in-Fact with power and authority, for and on behalf, and in the name of the Company, during the period specified above, and subject to the restrictions and limitations set forth in this Power of Attorney to execute 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 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.

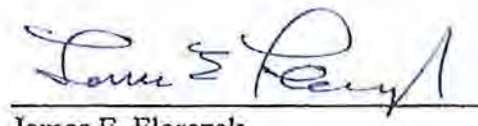
The Attorney herein appointed shall be authorized to act pursuant to this Power from the date hereof only so long as such Attorney shall remain an employee of Arch Coal, Inc. or any subsidiary thereof, or until December 31, 2014, or until such earlier time as this instrument has been revoked, annulled, 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:

ICG TYGART VALLEY, LLC

  
Jolene J. Mermis  
Assistant Secretary of the Company

  
James E. Florczak  
Vice President and Treasurer

API No. 47-91-00484P  
 Farm Name Victor G. Clarkson, et al  
 Well No. CNGD 1553

**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: 6/12/14

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



**POWER OF ATTORNEY**

**COALQUEST DEVELOPMENT LLC  
TO  
GREG NAIR**

**Dated: January 1, 2014**

**Expires: December 31, 2014**

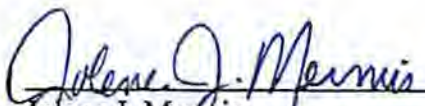
**KNOW ALL MEN BY THESE PRESENTS:** That CoalQuest Development LLC ("Company"), a limited liability company organized and existing under the laws of the State of Delaware, acting by and through James E. Florczak, its duly authorized Vice President and Treasurer, has and does hereby appoint Greg Nair 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

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 Three Fork Creek Quadrangle Grafton (378)

Elevation 1341.8 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 *Charles E. Duckworth*

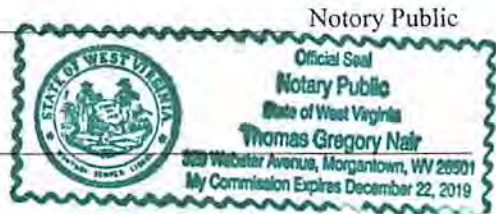
Company Official (Typed Name) Charles E. Duckworth

Company Official Title Designated Agent

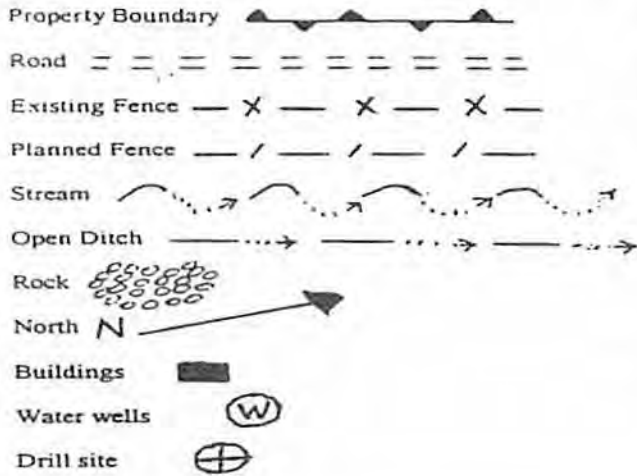
Subscribed and sworn before me this 12 day of June, 2014

*Thomas Gregory Nair*

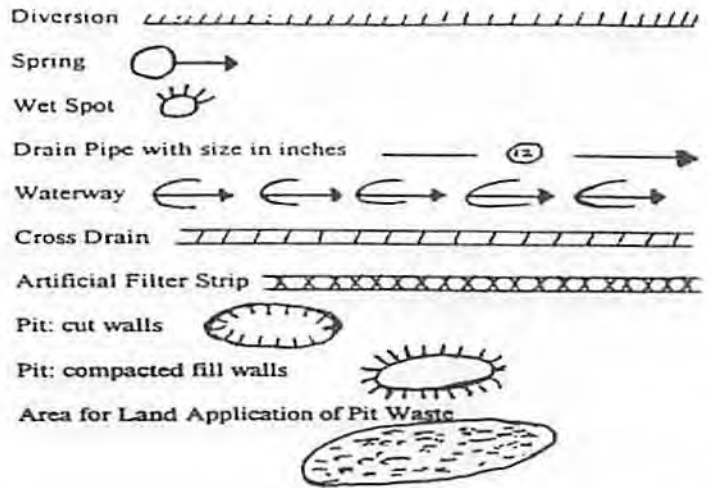
My commission expires December 22, 2019







**LEGEND**



Proposed Revegetation Treatment: Acres Disturbed 1.50/2.0 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: [Signature]

Comments: RECLAIM AS SOON AS REASONABLY POSSIBLE

Title: OIL & GAS INSPECTION Date: 6-18-14

Field Reviewed? ( ) Yes (  ) No

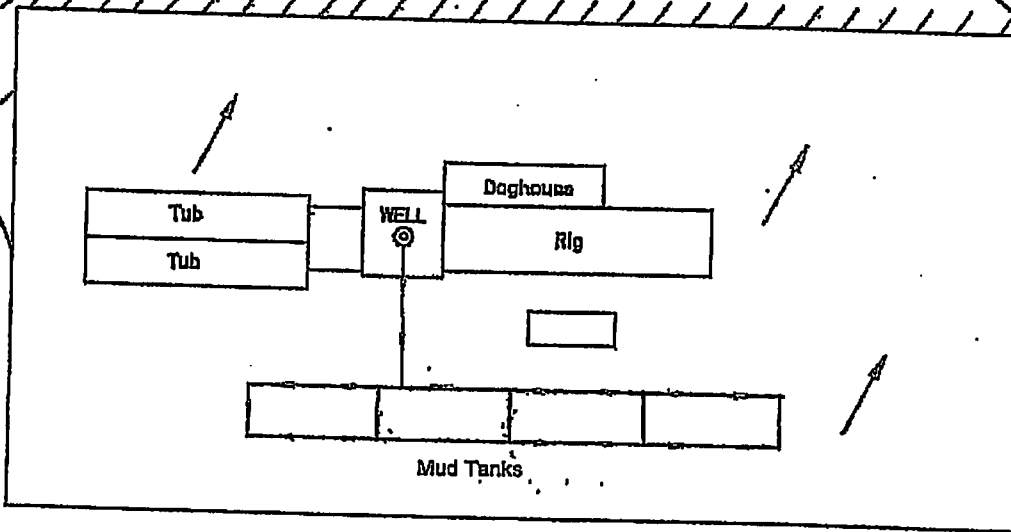
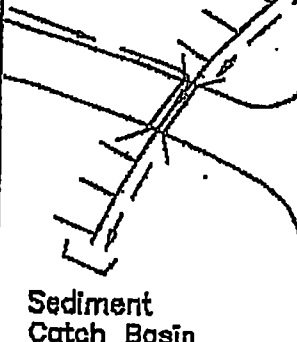
ICG TYGART VALLEY, LLC

Typical Drawing  
Of Well Plugging Site  
Plan

Diversion Ditch (as Needed)

CUT

Cut Mulched if Slope  
Less than 1 to 1



Sediment Catch Basin

Hay Bales  
or  
Sediment Fence

Compacted and Layed

FILL

Original Ground Keywayed

9100484P



9100484A



# ICG TYGART VALLEY, LLC

2708 Cranberry Square, Morgantown, West Virginia 26508

June 2, 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.

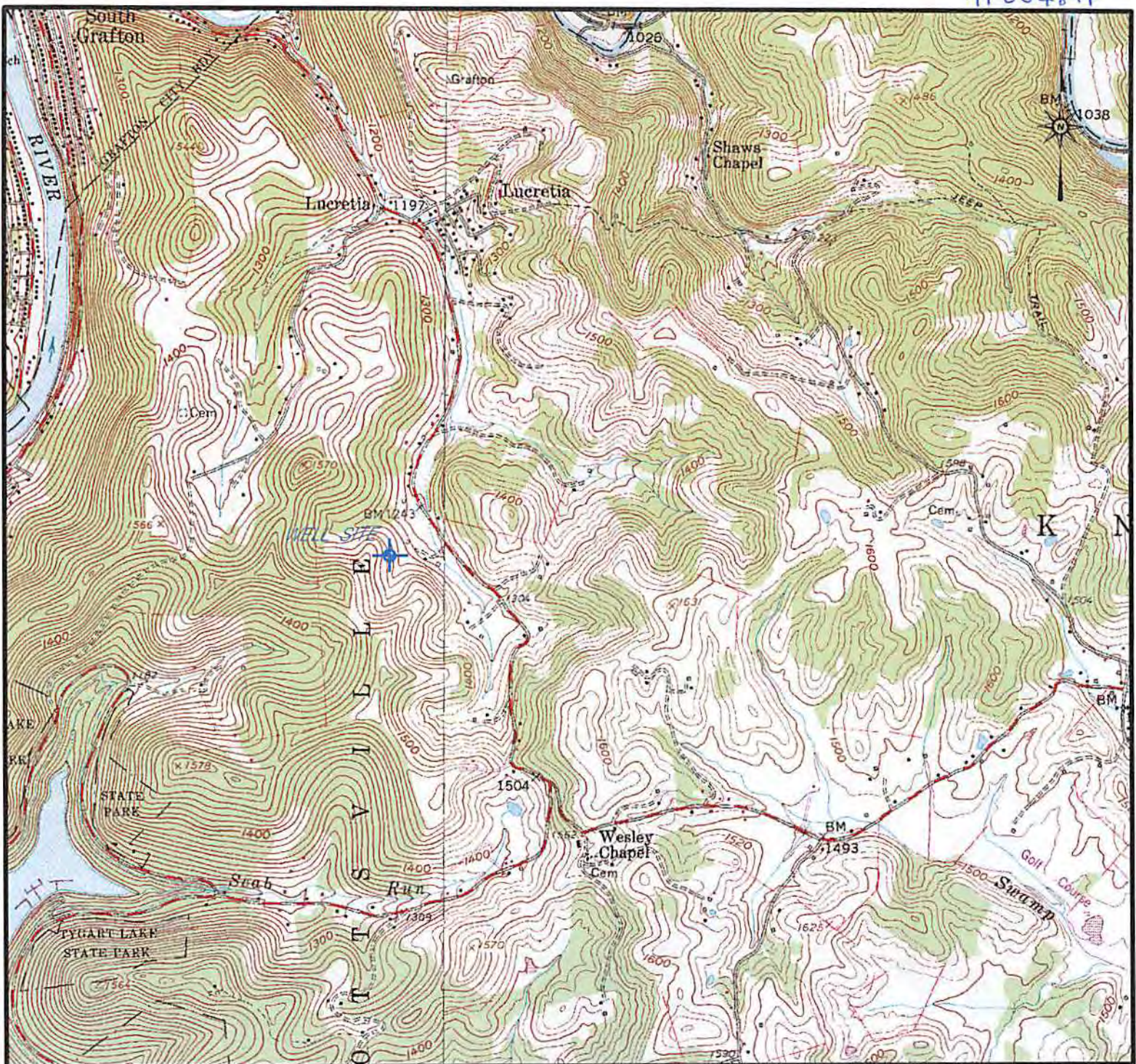
Upon submitting a well work application (without a general permit for Oil and Gas Pit Waste Discharge Application), ICG Tygart Valley, LLC, will construct no pits, but instead will use mud tanks to contain all drilling muds.

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





LATITUDE: 39° 18' 53"  
 LONGITUDE: 80° 00' 10"  
 NEAREST WATERCOURSE: Three Fork Creek  
 NEAREST TOWN: Knottsville

OPERATOR'S WELL NO. CNGD 1553  
 API WELL NO. 47 - 091 - 0484-P  
 STATE COUNTY PERMIT

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1341.8 WATERSHED Three Fork Creek  
 DISTRICT Knottsville COUNTY Taylor  
 QUADRANGLE Thornton 7 1/2'

SURFACE OWNER: Victor G. Jr. & Carol L. Clarkson ACREAGE 83.6  
 OIL & GAS ROYALTY OWNER Victor G. Clarkson, et ux LEASE ACREAGE 89

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 Haverly ESTIMATED DEPTH 5500'  
 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

REVISED BY:	DATE:	<b>API WELL NO. 47-091-0484-P</b>	
		<b>CNGD 1553</b>	
		<b>ICG TYGART VALLEY, LLC</b>	
		DRAWN BY: <u>Tom Allen</u>	SCALE: 1" = 2000'
		DIRECTORY: <u>DWG TIG 01</u>	DATE ORIGINATED: <u>JUNE 2013</u>
		<u>WV OIL &amp; GAS PERMIT MAPS</u>	
		DRAWING NO.: <u>47-091-0484-P.dwg</u>	<u>PLOTTING SCALES</u>



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



WW-7  
8-30-06



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

API: 47-091-0484 WELL NO.: CNGD 1553

FARM NAME: Victor G. Clarkson, et al

RESPONSIBLE PARTY NAME: ICG Tygart Valley, LLC

COUNTY: Taylor DISTRICT: Knottsville

QUADRANGLE: Grafton

SURFACE OWNER: Pamela Jo & Valerie Lusher

ROYALTY OWNER: Victor G. Clarkson, et al

UTM GPS NORTHING: 4352356.734

UTM GPS EASTING: 585983.432 GPS ELEVATION: 1349.34

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 \_\_\_\_\_

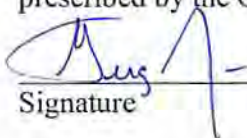
Real-Time Differential

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

Power of Attorney

June 12, 2014

Title

Date